

VillaMar
Community Development District

Meeting Agenda

November 1, 2022

AGENDA

VillaMar

Community Development District

219 E. Livingston St., Orlando, Florida 32801

Phone: 407-841-5524 – Fax: 407-839-1526

October 25, 2022

**Board of Supervisors
VillaMar
Community Development District**

Dear Board Members:

A meeting of the Board of Supervisors of the **VillaMar Community Development District** will be held **Tuesday, November 1, 2022 at 11:00 AM** at the **Holiday Inn—Winter Haven, 200 Cypress Gardens Blvd., Winter Haven, FL 33880.**

Zoom Video Join Link: <https://us06web.zoom.us/j/88146441262>

Call-In Information: 1-646-876-9923

Meeting ID: 881 4644 1262

Following is the advance agenda for the meeting:

Board of Supervisors Meeting

1. Roll Call
2. Public Comment Period (¹Speakers will fill out a card and submit it to the District Manager prior to the beginning of the meeting)
3. Organizational Matters
 - A. Swearing in of Appointed Supervisor Milton Andrade
4. Approval of Minutes of the September 22, 2022 Board of Supervisors Meeting
5. Public Hearing
 - A. Public Hearing on the Adoption of Parking and Towing Enforcement Policies and Rules for the District
 - i. Consideration of Resolution 2023-01 Adopting Parking and Towing Enforcement Policies and Rules for the District
 - ii. Consideration of Towing Services Agreement
6. Consideration of Engagement Letter for Fiscal Year 2022 Audit Services from Berger, Toombs, Elam, Gaines & Frank
7. Ratification of Release and Termination of Easements
8. Ratification of Construction Contract for Thompson Nursery Road Phase 1 and Phase 2 Improvements
9. Ratification of Developer's Affidavit and Agreement Regarding Procurement of Construction Contract (Thompson Nursery Road Extension Phases 1 & 2)

¹ Comments will be limited to three (3) minutes

10. Discussion of Resident Concern Regarding Fencing/Restricted Access to the Playground and Mailbox Areas
11. Review and Ranking of Proposals Received for Phase 6 RFP (due 11/9/2022)
12. Staff Reports
 - A. Attorney
 - B. Engineer
 - C. Field Manager's Report
 - D. District Manager's Report
 - i. Approval of Check Register
 - ii. Balance Sheet & Income Statement
13. Other Business
14. Supervisors Requests and Audience Comments
15. Continuation of Meeting

MINUTES

**MINUTES OF MEETING
VILLAMAR
COMMUNITY DEVELOPMENT DISTRICT**

The regular meeting of the Board of Supervisors of the VillaMar Community Development District was held on Thursday, **September 22, 2022** at 9:58 a.m. at the Holiday Inn – Winter Haven, 200 Cypress Gardens Blvd., Winter Haven, Florida.

Present and constituting a quorum:

Rennie Heath
Lauren Schwenk
Eric Lavoie

Chairman
Vice Chairman
Assistant Secretary

Also, present were:

Jill Burns
Lauren Gentry
Marshall Tindall

District Manager, GMS
District Counsel, KE Law Group
Field Manager, GMS

The following is a summary of the discussions and actions taken at the September 22, 2022 VillaMar Community Development District's Regular Board of Supervisor's Meeting.

FIRST ORDER OF BUSINESS

Roll Call

Ms. Burns called the meeting to order and noted there were three Supervisors present constituting a quorum.

SECOND ORDER OF BUSINESS

Public Comment Period

Ms. Burns stated that there were no members of the public present.

**THIRD ORDER OF BUSINESS
2022 Board of Supervisors Meeting**

Approval of Minutes of the August 18,

Ms. Burns presented the August 18, 2022 Board of Supervisors meeting. She asked if there were any corrections, comments, or changes to the minutes. Hearing none, she asked for a motion of approval.

On MOTION by Ms. Schwenk, seconded by Mr. Lavoie, with all in favor, the Minutes of the August 18, 2022 Board of Supervisors Meeting, were approved.

FOURTH ORDER OF BUSINESS

Consideration of Assignment of Infrastructure and Impact Fee Credit Agreement (Thompson Nursery Road Extension Phase 1/Segment 3)

Ms. Gentry stated this is an agreement if approved today, that will be considered by the county on the upcoming meeting agenda. Mr. Heath questioned the agreement wording. They tabled this until Roy could be reached for input. Circling back to this topic the Board agreed to make the motion authorizing the Chair to sign subject to verification.

At the end of the meeting, Ms. Gentry stated she received clarification from Roy, and he explained the CDD is not in the business of holding and selling credits, so this clarifies the CDD's obligation would end with assigning it to the Developer.

On MOTION by Mr. Heath, seconded by Mr. Lavoie, with all in favor, The Assignment of Infrastructure and Impact Fee Credit Agreement (Thompson Nursery Road Extension Phase 1/Segment 3), was approved, subject to verification.

FIFTH ORDER OF BUSINESS

Consideration of Construction Funding Agreement (Thompson Nursey Road)

Ms. Burns noted this is the funding agreement and will be authorized subject to verification from Roy on the wording.

On MOTION by Ms. Schwenk, seconded by Mr. Heath, with all in favor, Construction Funding Agreement (Thompson Nursey Road) in substantial form and Authorization for Mr. Heath to sign once Mr. Van Wyk reviews, was approved.

SIXTH ORDER OF BUSINESS

Discussion Regarding Street Parking Complaints

Ms. Burns stated there have been a handful of complaints on street parking. She noted Marshall did a review of the areas and suggested a public hearing could be scheduled for November on parking rules. Ms. Burns confirmed the Board wanted odd side parking, no commercial vehicles, and no overnight vehicles. The Board requested Marshall provide a map to

show the phases completed that show no parking zones and corners. It was asked if there were mailbox parking. Notices will be sent for a hearing at the November meeting.

SEVENTH ORDER OF BUSINESS**CLOSED SESSION of Board Discussion
Regarding Security**

Ms. Burns stated this session will be closed regarding security. She added 2 options were provided for security during peak hours and includes a mobile control. The 2nd option is 2 days/week. Ms. Burns stated this will start October 1 for the new fiscal year. Ms. Burns noted there was \$33,800 included in the budget for security. District Counsel will prepare agreement.

On MOTION by Ms. Schwenk, seconded by Mr. Lavoie, with all in favor, the Proposal for Option 2 for Security, was approved.

EIGHTH ORDER OF BUSINESS**Consideration of Notice of RFP for Phase
6 Construction Services – ADDED**

Ms. Burns stated the RFP for Phase 6 pickup date would be Friday, September 30, 2022. These will be due October 17, 2022 and the bids due Monday, October 31, 2022.

On MOTION by Mr. Heath, seconded by Mr. Lavoie, with all in favor, Authorization for Staff to Issue the RFP for Phase 6 Construction Services, was approved.

NINTH ORDER OF BUSINESS**Staff Reports****A. Attorney**

Ms. Gentry had nothing to report. She was waiting for paragraph 5 clarification on the Assignment Agreement agenda item.

B. Engineer

Ms. Burns stated that the District Engineer was not on the line today.

C. Field Manager's Report

Mr. Tindall reviewed the Field Manager's Report to include pool light issues, playground shade installation, key card issues, erosion, pond water level and drainage issues are being reviewed.

i. Consideration of Proposal for Replacement Pool Lights from Resort Pools

Mr. Tindall reviewed the proposal for replacement pool lights. Possibility of lightning strikes were discussed. He discussed the issue with pool closing and the possibility of liability issues. Ms. Burns noted there was \$2,500 in the budget for current year for contingency and \$400 has been spent at this point. Under amenity and maintenance repair there is more dollars.

On MOTION by Ms. Schwenk, seconded by Mr. Lavoie, with all in favor, the Proposal for Replacement Pool Lights from Resort Pool, was approved.

D. District Manager's Report**i. Approval of the Check Register**

Ms. Burns presented the check register which totaled \$27,444.69. She asked for any questions or comments. Hearing none, asked for a motion to approve.

On MOTION by Mr. Heath, seconded by Mr. Lavoie, with all in favor, the Check Register, was approved.

ii. Balance Sheet and Income Statement

Ms. Burns presented the unaudited financials. There was no Board action for this item.

iii. Ratification of Kearney CO #12

Ms. Burns presented the change order that has already been approved.

On MOTION by Mr. Heath, seconded by Mr. Lavoie, with all in favor, Kearney CO #12, was ratified.

**iv. Next Meeting Starts New Fiscal Year 2023 Schedule (1st Tuesday @ 11:00 AM)
– Next Meeting: Tuesday, October 4, 2022**

Ms. Burns stated the upcoming meeting could be cancelled if the Board agreed. They were in agreement to cancel.

TENTH ORDER OF BUSINESS**Other Business**

There being no other business, the next item followed.

ELEVENTH ORDER OF BUSINESS

**Supervisors Requests and Audience
Comments**

Ms. Burns asked if there were any Supervisor's requests. Hearing none,

TWELFTH ORDER OF BUSINESS

Adjournment

On MOTION by Mr. Heath, seconded by Ms. Schwenk, with all in favor, the meeting was adjourned.
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Secretary/Assistant Secretary

Chairman/Vice Chairman

SECTION V

SECTION A

SECTION 1

RESOLUTION 2023-01

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE VILLAMAR COMMUNITY DEVELOPMENT DISTRICT ADOPTING RULES RELATING TO OVERNIGHT PARKING AND PARKING ENFORCEMENT; AND PROVIDING FOR SEVERABILITY AND AN EFFECTIVE DATE.

WHEREAS, the VillaMar Community Development District (the “District”) is a local unit of special-purpose government created and existing pursuant to Chapter 190, *Florida Statutes*, being situated in the City of Winter Haven, Florida; and

WHEREAS, Chapter 190, *Florida Statutes*, authorizes the District to adopt resolutions as may be necessary for the conduct of district business; and

WHEREAS, the Board of Supervisors of the District (“Board”) is authorized by Sections 190.011(5) and 190.035, *Florida Statutes*, to adopt rules, orders, policies, rates, fees and charges pursuant to Chapter 120, *Florida Statutes*; and

WHEREAS, the District desires to adopt *Rules Relating to Overnight Parking and Parking Enforcement* (“Rules”), attached hereto as **Exhibit A** and incorporated herein, pursuant to the provisions of Sections 190.011(5) and 190.035 and Chapter 120, *Florida Statutes*; and

WHEREAS, the District has properly noticed for rule development and rulemaking regarding the Rules and a public hearing was held at a meeting of the Board on November 1, 2022; and

WHEREAS, the Board finds that it is in the best interests of the District to adopt by resolution the Rules for immediate use and application.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF THE VILLAMAR COMMUNITY DEVELOPMENT DISTRICT:

SECTION 1. The recitals stated above are true and correct and by this reference are incorporated herein.

SECTION 2. The District hereby adopts the Rules, attached hereto as **Exhibit A**.

SECTION 3. If any provision of this Resolution or the Rules is held to be illegal or invalid, the other provisions shall remain in full force and effect.

SECTION 4. This Resolution shall become effective upon its passage and shall remain in effect unless rescinded or repealed.

[Continue onto next page]

PASSED AND ADOPTED this 1st day of November, 2022.

ATTEST:

**VILLAMAR COMMUNITY
DEVELOPMENT DISTRICT**

Secretary/Assistant Secretary

Chairperson, Board of Supervisors

Exhibit A: Rules Relating to Overnight Parking and Parking Enforcement

**VILLAMAR COMMUNITY DEVELOPMENT DISTRICT
RULES RELATING TO PARKING AND PARKING ENFORCEMENT**

In accordance with Chapter 190, *Florida Statutes*, and on November 1, 2022, at a duly noticed public meeting, the Board of Supervisors of the VillaMar Community Development District (“District”) adopted the following policy to govern parking and parking enforcement on certain District property (the “Policy”). This Policy repeals and supersedes all prior rules and/or policies governing the same subject matter.

SECTION 1. INTRODUCTION. The District finds that parked Commercial Vehicles, Vehicles, Vessels and Recreational Vehicles (hereinafter defined) on certain of its property (hereinafter defined) cause hazards and danger to the health, safety and welfare of District residents, paid users and the public. This Policy is intended to provide the District’s residents and paid users with a means to remove such Commercial Vehicles, Vehicles, Vessels and Recreational Vehicles from District designated Tow-Away Zones consistent with this Policy and as indicated on **Exhibit A** attached hereto.

SECTION 2. DEFINITIONS.

- A.** *Commercial Vehicle.* Any mobile item which normally uses wheels, whether motorized or not, that (i) is titled, registered or leased to a company and not an individual person, or (ii) is used for business purposes even if titled, registered or leased to an individual person.
- B.** *Vehicle.* Any mobile item which normally uses wheels, whether motorized or not.
- C.** *Vessel.* Every description of watercraft, barge, or airboat used or capable of being used as a means of transportation on water.
- D.** *Recreational Vehicle.* A vehicle designed for recreational use, which includes motor homes, campers and trailers relative to same.
- E.** *Parked.* A Vehicle, Vessel or Recreational Vehicle left unattended by its owner or user.
- F.** *Tow-Away Zone.* District property in which parking is prohibited and in which the District is authorized to initiate a towing and/or removal action.
- G.** *Overnight.* Between the hours of 10:00 p.m. and 6:00 a.m. daily.

SECTION 3. DESIGNATED PARKING AREAS. Parking is permitted in designated parking areas, as indicated by asphalt markings for parking spaces. On-street parking is only authorized on the odd-numbered side of the street (as indicated by address numbers). On-street parking is expressly prohibited on the even-numbered side of the street (as indicated by address numbers). **Any Vehicle parked on District Property, including District roads, if any, must do so in compliance with all laws, ordinances, and codes.**

SECTION 4. ESTABLISHMENT OF TOW-AWAY ZONES. The even-numbered side of the street (as indicated by address numbers) and those areas within the District's boundaries depicted in **Exhibit A**, which is incorporated herein by reference, are hereby established as "Tow-Away Zones" for all Vehicles, including Commercial Vehicles, Vessels, Recreational Vehicles as set forth in Section 5 herein ("**Tow-Away Zone**").

SECTION 5. EXCEPTIONS.

- A. ON-STREET PARKING EXCEPTIONS.** Abandoned and/or broken down Vehicles are not permitted to be parked on-street at any time and are subject to towing at the Owner's expense. Commercial Vehicles, Recreational Vehicles, and Vessels are not permitted to be parked on-street Overnight and shall be subject to towing at Owner's expense.
- B. PARKING DURING AMENITY HOURS.** Vehicles may park in the designated parking areas of amenity facilities depicted in **Exhibits A and B** during the open hours of operations of such amenity facilities, including any District-authorized special events occurring outside of regular hours of operation. Otherwise, no Overnight parking is permitted at the amenity facilities.
- C. VENDORS/CONTRACTORS.** The District Manager or his/her designee may authorize vendors/consultants in writing to park company vehicles in order to facilitate District business. All vehicles so authorized must be identified by a Parking Pass issued by the District.
- D. DELIVERY VEHICLES AND GOVERNMENTAL VEHICLES.** Delivery vehicles, including but not limited to, U.S.P.S., U.P.S., Fed Ex, moving company vehicles, and lawn maintenance vendors may park on District property while actively engaged in the operation of such businesses. Vehicles owned and operated by any governmental unit may also park on District Property while carrying out official duties.

SECTION 6. TOWING/REMOVAL PROCEDURES.

- A. SIGNAGE AND LANGUAGE REQUIREMENTS.** Notice of the Tow-Away Zones shall be approved by the District's Board of Supervisors and shall be posted on District property in the manner set forth in Section 715.07, *Florida Statutes*. Such signage is to be placed in conspicuous locations, in accordance with Section 715.07, *Florida Statutes*.
- B. TOWING/REMOVAL AUTHORITY.** To effect towing/removal of a Commercial Vehicle, Vehicle, Vessel or Recreational Vehicle, the District Manager or his/her designee must verify that the subject Commercial Vehicle, Vehicle, Vessel or Recreational Vehicle was not authorized to park under this rule in the Overnight Parking Areas and then must contact a firm authorized by Florida law to tow/remove Commercial Vehicle, Vehicles, Vessels and Recreational Vehicles for the removal of such unauthorized vehicle at the owner's expense. The Commercial Vehicle, Vehicle, Vessel or Recreational Vehicle shall be towed/removed by the firm in accordance with Florida law, specifically the provisions set forth in Section 715.07, *Florida Statutes*. Notwithstanding the foregoing, a towing service retained by the District may tow/remove any vehicle parked in the Tow-Away Zone.

- C. **AGREEMENT WITH AUTHORIZED TOWING SERVICE.** The District's Board of Supervisors is hereby authorized to enter into and maintain an agreement with a firm authorized by Florida law to tow/remove unauthorized vehicles and in accordance with Florida law and with the policies set forth herein.

SECTION 7. PARKING AT YOUR OWN RISK. Vehicles, Vessels or Recreational Vehicles may be parked on District property pursuant to this rule, provided however that the District assumes no liability for any theft, vandalism and/ or damage that might occur to personal property and/or to such vehicles.

SECTION 8. AMENDMENTS; DESIGNATION OF ADDITIONAL TOW-AWAY ZONES. The Board in its sole discretion may amend these Rules Related to Parking and Parking Enforcement from time to time to designate new Tow-Away Zones as the District acquires additional common areas. Such designations of new Tow-Away Zones are subject to proper signage and notice prior to enforcement of these rules on such new Tow-Away Zones.

EXHIBIT A – *Tow-Away Zones (highlighted areas)*

Effective date: November 1, 2022

EXHIBIT A
Tow Away Zones

[Insert Map of Tow-Away Zones]

Parking and Tow Zones

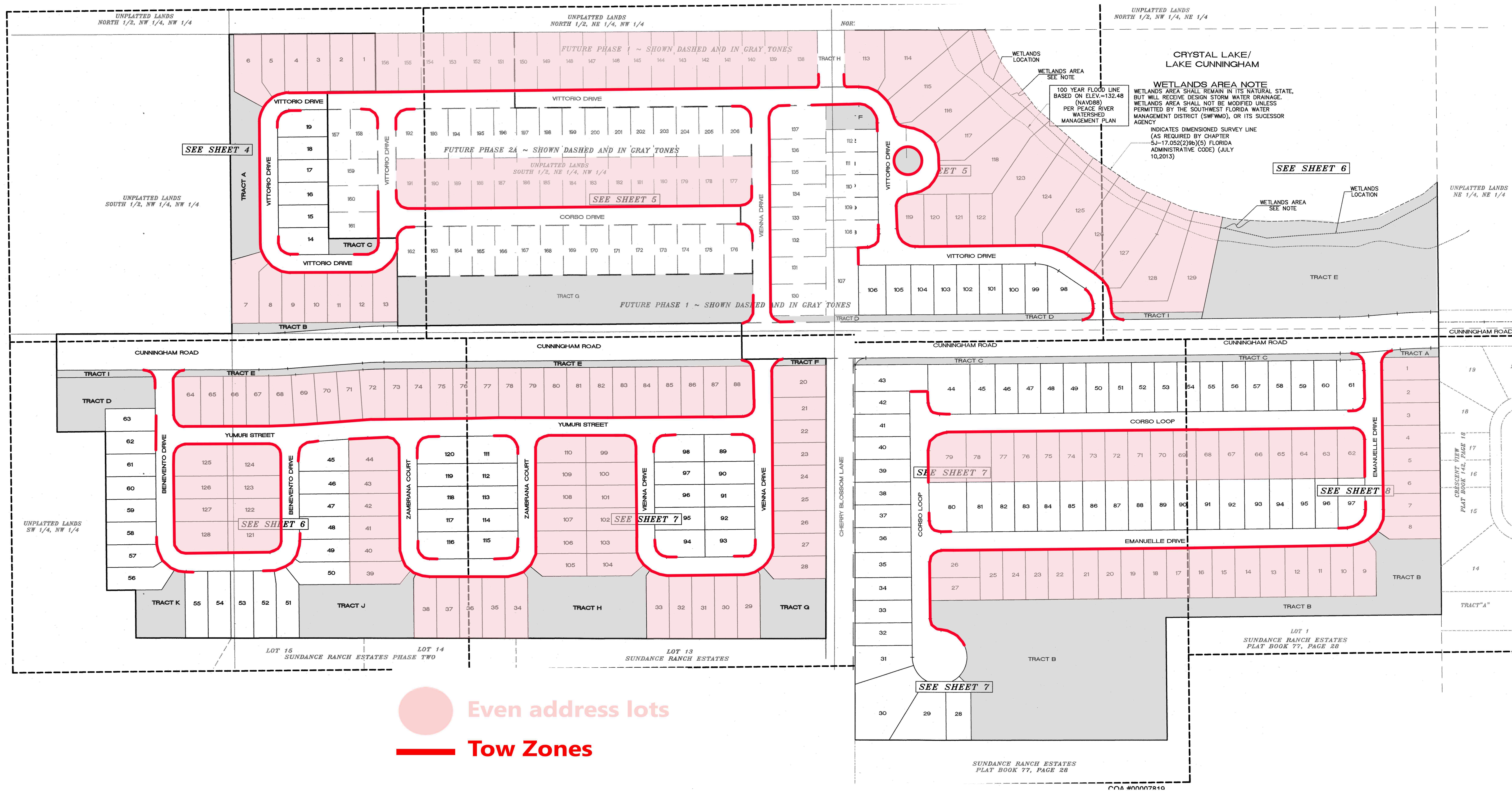
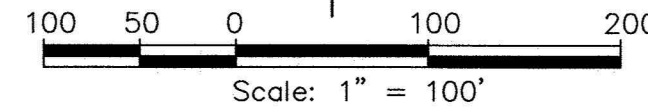


EXHIBIT B - *Map of Overnight Parking Areas*

Amenity Area

****WITH PRE-APPROVED PARKING PASSES ONLY****

*Item will be
provided under
separate cover.*

SECTION 2

**AGREEMENT BETWEEN THE VILLAMAR COMMUNITY DEVELOPMENT
DISTRICT AND S&S TOWING & RECOVERY LLC
FOR TOWING SERVICES**

THIS AGREEMENT (“Agreement”) is made and entered into this ____ day of _____, 2022 by and between:

VILLAMAR COMMUNITY DEVELOPMENT DISTRICT, a local unit of special purpose government established pursuant to Chapter 190, *Florida Statutes*, with a mailing address of 219 East Livingston Street, Orlando, Florida 32801 (“**District**”); and

S&S TOWING & RECOVERY LLC, a Florida limited liability company, with a principal address of 29300 U.S. 27, Dundee, Florida 33838 (“**Contractor**”).

RECITALS

WHEREAS, the District is a local unit of special-purpose government established for the purpose of financing, acquiring, constructing, operating and/or maintaining public infrastructure improvements; and

WHEREAS, the District has adopted that certain *Rules Relating to Overnight Parking and Traffic Enforcement*, a copy of which is attached hereto as **Exhibit A**, and as may be amended from time to time by the Board of Supervisors (“**Board**”) of the District (“**Parking Policies**”); and

WHEREAS, in accordance with Section 715.07, *Florida Statutes*, the District desires to engage an independent contractor to provide vehicle towing/removal services within the District in accordance with the Parking Policies (“**Services**”); and

WHEREAS, the Contractor desires to provide such Services for the District in accordance with Section 715.07, *Florida Statutes*, and other Florida law.

WHEREAS, the Contractor and the District accordingly desire to enter into this Agreement to provide for the rights, duties and obligations of the parties relative to same.

NOW, THEREFORE, in consideration of the recitals, agreements, and mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the parties, the parties agree as follows:

SECTION 1. RECITALS. The recitals so stated are true and correct and by this reference are incorporated into and form a material part of this Agreement.

SECTION 2. DESCRIPTION OF WORK AND SERVICES. The District hereby authorizes the Contractor, and its employees and agents, to perform drive-by inspections and vehicle-towing/removal Services from the District property identified in **Exhibit A**. Contractor is also authorized to perform such Services when requested to do so by the District's designated representatives, who shall be the District Manager (currently Jill Burns), or his or her designee ("**District Representatives**"). All such Services shall be performed only at the times specified in the Parking Policies. Contractor shall also provide vehicle storage relative to any such vehicles towed from District property, all in accordance with the Parking Policies, Section 715.07, *Florida Statutes*, and any other applicable Florida law.

- A. Upon execution of this Agreement, Contractor shall, at its own cost and expense, procure and install the necessary signage as required by Section 715.07, *Florida Statutes*, which signage shall be installed a minimum of twenty-four (24) hours prior to commencement of any towing/removal services by the Contractor.
- B. Upon towing/removal of a vehicle, such vehicle shall be stored by the Contractor within a ten (10)-mile radius of the point of the removal and shall provide for public access to such storage facility as set forth in Section 715.07, *Florida Statutes*.
- C. This Agreement grants to Contractor the right to enter the lands that are subject to this Agreement, for those purposes described in this Agreement, and Contractor hereby agrees to comply with all applicable laws, rules, ordinances and regulations affecting the provision of the Services.

SECTION 3. COMPENSATION. The Contractor acknowledges and agrees that it is not receiving compensation from the District for the provision of the Services. Any compensation due and owing to the Contractor relative to this Agreement shall be remitted by the owner(s) of the towed/removed vehicles.

SECTION 4. EFFECTIVE DATE; TERM. This Agreement shall become effective on the date first written above and shall remain in effect unless terminated with written notice to the other party.

SECTION 5. INSURANCE.

- A. The Contractor shall, at its own expense, maintain insurance during the performance of the Services under this Agreement, with limits of liability not less than the following:

Workers Compensation	statutory
General Liability	
<i>Bodily Injury (including contractual)</i>	\$3,000,000
<i>Property Damage (including contractual)</i>	\$3,000,000

Automobile Liability (if applicable)
Bodily Injury and Property Damage

\$3,000,000

- B.** The District, its staff, consultants and supervisors shall be named as an additional insured. The Contractor shall furnish the District with the Certificate of Insurance evidencing compliance with this requirement prior to commencement of the Services.

SECTION 6. CARE OF PROPERTY; SOVEREIGN IMMUNITY.

- A.** Contractor shall use all due care to protect the property of the District, its residents and landowners from damage. Contractor shall be solely for any damage to property, including vehicles, caused by the towing/removal and/or storage activities contemplated herein. Accordingly, Contractor, its employees, agents and subcontractors shall defend, hold harmless and indemnify the District and its supervisors, officers, staff, representatives and agents against any claims, damages, liabilities, losses and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the acts or omissions of Contractor, and other persons employed or utilized by Contractor in the performance of this Agreement or the Services performed hereunder.
- B.** Obligations under this section shall include the payment of all settlements, judgments, damages, liquidated damages, penalties, forfeitures, back pay awards, court costs, arbitration and/or mediation costs, litigation expenses, attorney fees, paralegal fees and expert witness fees (incurred in court, out of court, on appeal, or in bankruptcy proceedings) as ordered.
- C.** Nothing in this Agreement shall be deemed as a waiver of the District's sovereign immunity or the District's limits of liability as set forth in Section 768.28, *Florida Statutes* or other law, and nothing in this Agreement shall inure to the benefit of any third party for the purpose of allowing any claim which would otherwise be barred under such limitations of liability or by operation of law.

SECTION 7. RECOVERY OF COSTS AND FEES. In the event the District is required to enforce this Agreement by court proceedings or otherwise, the District shall be entitled to recover from Contractor all fees and costs incurred, including reasonable attorneys' fees, paralegal fees, expert witness fees and costs.

SECTION 8. DEFAULT. A default by either party under this Agreement shall entitle the other party to all remedies available at law or in equity, which includes, but is not limited to, the rights of damages, injunctive relief, and specific performance.

SECTION 9. AMENDMENT. Amendments to and waivers of the provisions contained in this Agreement may be made only by an instrument in writing which is executed by both of the parties hereto.

SECTION 10. ASSIGNMENT. Neither the District nor Contractor may assign their rights, duties or obligations under this Agreement without the prior written approval of the other. Any purported assignment without said written authorization shall be void.

SECTION 11. NOTICES. All notices, requests, consents, and other communications hereunder (“Notices”) shall be in writing and shall be delivered, mailed by overnight courier or First Class Mail, postage prepaid, to the parties as follows:

A. If to the District:

VillaMar Community
Development District
219 East Livingston Street
Orlando, Florida 32801
Attn: Jill Burns

With a copy to:

KE Law Group, PLLC
2016 Delta Boulevard, Suite 101
Tallahassee, Florida 32303
Attn: Lauren Gentry

B. If to Contractor:

S&S Towing & Recovery LLC
29300 U.S. 27
Dundee, Florida 33838
Attn: David Santos

Except as otherwise provided in this Agreement, any Notice shall be deemed received only upon actual delivery at the address set forth above. Notices delivered after 5:00 p.m. (at the place of delivery) or on a non-business day, shall be deemed received on the next business day. If any time for giving Notice contained in this Agreement would otherwise expire on a non-business day, the Notice period shall be extended to the next succeeding business day. Saturdays, Sundays, and legal holidays recognized by the United States government shall not be regarded as business days. Counsel for the District and counsel for Contractor may deliver Notice on behalf of the District and Contractor. Any party or other person to whom Notices are to be sent or copied may notify the other parties and addressees of any change in name or address to which Notices shall be sent by providing the same on five (5) days’ written notice to the parties and addressees set forth herein.

SECTION 12. PUBLIC RECORDS. Contractor understands and agrees that all documents of any kind provided to the District in connection with this Agreement may be public records, and, accordingly, Contractor agrees to comply with all applicable provisions of Florida law in handling such records, including but not limited to Section 119.0701, *Florida Statutes*. Contractor acknowledges that the designated public records custodian for the District is **Jill Burns (“Public Records Custodian”)**. Among other requirements and to the extent applicable by law, the Contractor shall 1) keep and maintain public records required by the District to perform the service; 2) upon request by the Public Records Custodian, provide the District with

the requested public records or allow the records to be inspected or copied within a reasonable time period at a cost that does not exceed the cost provided in Chapter 119, *Florida Statutes*; 3) ensure that public records which are exempt or confidential, and exempt from public records disclosure requirements, are not disclosed except as authorized by law for the duration of the contract term and following the contract term if the Contractor does not transfer the records to the Public Records Custodian of the District; and 4) upon completion of the contract, transfer to the District, at no cost, all public records in Contractor's possession or, alternatively, keep, maintain and meet all applicable requirements for retaining public records pursuant to Florida laws. When such public records are transferred by the Contractor, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the District in a format that is compatible with Microsoft Word or Adobe PDF formats.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, *FLORIDA STATUTES*, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (407) 841-5524, JBURNS@GMSCFL.COM, OR 219 EAST LIVINGSTON STREET, ORLANDO, FLORIDA 32801.

SECTION 13. CONTROLLING LAW AND VENUE. This Agreement and the provisions contained herein shall be construed, interpreted, and controlled according to the laws of the State of Florida. The parties agree that venue for any action arising hereunder shall be in a court of appropriate jurisdiction in Polk County, Florida.

SECTION 14. E-VERIFY. The Contractor shall comply with and perform all provisions of Section 448.095, *Florida Statutes*. Accordingly, as a condition precedent to entering into this Agreement, Contractor shall register with and use the United States Department of Homeland Security's E-Verify system to verify the work authorization status of all newly hired employees. If the Contractor anticipates entering into agreements with a subcontractor for the Work, Contractor will not enter into the subcontractor agreement without first receiving an affidavit from the subcontractor regarding compliance with Section 448.095, *Florida Statutes*, and stating that the subcontractor has registered with and uses the E-Verify system and does not employ, contract with, or subcontract with an unauthorized alien. Contractor shall maintain a copy of such affidavit for the duration of the agreement and provide a copy to the District upon request. Any party may terminate this Agreement or any subcontract hereunder if there is a good faith belief on the part of the terminating party that a contracting party has knowingly violated Section 448.09(1), *Florida Statutes*. Upon such termination, Contractor shall be liable for any additional costs incurred by the District as a result of the termination. In the event that the District has a good faith belief that a subcontractor has violated Section 448.095, *Florida Statutes*, but the Contractor has otherwise complied with its obligations hereunder, the District shall promptly

notify the Contractor. The Contractor agrees to immediately terminate the agreement with the subcontractor upon notice from the District.

SECTION 15. FOREIGN INFLUENCE. Contractor understands that under Section 286.101, Florida Statutes, that Contractor must disclose any current or prior interest, any contract with, or any grant or gift from a foreign country of concern as that term is defined within the above referenced statute.

SECTION 16. SEVERABILITY. The invalidity or unenforceability of any one or more provisions of this Agreement shall not affect the validity or enforceability of the remaining portions of this Agreement, or any part of this Agreement not held to be invalid or unenforceable.

SECTION 17. INDEPENDENT CONTRACTOR. In all matters relating to this Agreement, the Contractor shall be acting as an independent contractor. The Contractor shall not have any authority to assume or create any obligation, express or implied, on behalf of the District and the Contractor shall have no authority to represent the District as an agent, employee, or in any other capacity, unless otherwise set forth in this Agreement.

SECTION 18. NO THIRD-PARTY BENEFICIARIES. This Agreement is solely for the benefit of the formal parties hereto and no right or cause of action shall accrue upon or by reason hereof, to or for the benefit of any third party not a formal party hereto. Nothing in this Agreement expressed or implied is intended or shall be construed to confer upon any person or corporation other than the parties hereto any right, remedy or claim under or by reason of this Agreement or any provisions or conditions hereof; and all of the provisions, representations, covenants and conditions herein contained shall inure to the sole benefit of and shall be binding upon the parties hereto and their respective representatives, successors and assigns.

SECTION 19. HEADINGS FOR CONVENIENCE ONLY. The descriptive headings in this Agreement are for convenience only and shall not control nor affect the meaning or construction of any of the provisions of this Agreement.

SECTION 20. ENTIRE AGREEMENT. This instrument shall constitute the final and complete expression of the agreement between the parties relating to the subject matter of this Agreement.

{SIGNATURE PAGE FOLLOWS}

IN WITNESS WHEREOF, the parties execute this Agreement effective as of the day and year first written above.

ATTEST:

**VILLAMAR COMMUNITY
DEVELOPMENT DISTRICT**

Print Name:_____

Chairperson, Board of Supervisors

WITNESS:

**S&S TOWING & RECOVERY LLC, a Florida
limited liability company**

Print Name:_____

By: David Santos
Its: Manager

Exhibit A: Parking Policies

EXHIBIT A

Parking Policies

**VILLAMAR COMMUNITY DEVELOPMENT DISTRICT
RULES RELATING TO PARKING AND PARKING ENFORCEMENT**

In accordance with Chapter 190, *Florida Statutes*, and on November 1, 2022, at a duly noticed public meeting, the Board of Supervisors of the VillaMar Community Development District (“District”) adopted the following policy to govern parking and parking enforcement on certain District property (the “Policy”). This Policy repeals and supersedes all prior rules and/or policies governing the same subject matter.

SECTION 1. INTRODUCTION. The District finds that parked Commercial Vehicles, Vehicles, Vessels and Recreational Vehicles (hereinafter defined) on certain of its property (hereinafter defined) cause hazards and danger to the health, safety and welfare of District residents, paid users and the public. This Policy is intended to provide the District’s residents and paid users with a means to remove such Commercial Vehicles, Vehicles, Vessels and Recreational Vehicles from District designated Tow-Away Zones consistent with this Policy and as indicated on **Exhibit A** attached hereto.

SECTION 2. DEFINITIONS.

- A.** *Commercial Vehicle.* Any mobile item which normally uses wheels, whether motorized or not, that (i) is titled, registered or leased to a company and not an individual person, or (ii) is used for business purposes even if titled, registered or leased to an individual person.
- B.** *Vehicle.* Any mobile item which normally uses wheels, whether motorized or not.
- C.** *Vessel.* Every description of watercraft, barge, or airboat used or capable of being used as a means of transportation on water.
- D.** *Recreational Vehicle.* A vehicle designed for recreational use, which includes motor homes, campers and trailers relative to same.
- E.** *Parked.* A Vehicle, Vessel or Recreational Vehicle left unattended by its owner or user.
- F.** *Tow-Away Zone.* District property in which parking is prohibited and in which the District is authorized to initiate a towing and/or removal action.
- G.** *Overnight.* Between the hours of 10:00 p.m. and 6:00 a.m. daily.

SECTION 3. DESIGNATED PARKING AREAS. Parking is permitted in designated parking areas, as indicated by asphalt markings for parking spaces. On-street parking is only authorized on the odd-numbered side of the street (as indicated by address numbers). On-street parking is expressly prohibited on the even-numbered side of the street (as indicated by address numbers). **Any Vehicle parked on District Property, including District roads, if any, must do so in compliance with all laws, ordinances, and codes.**

SECTION 4. ESTABLISHMENT OF TOW-AWAY ZONES. The even-numbered side of the street (as indicated by address numbers) and those areas within the District's boundaries depicted in **Exhibit A**, which is incorporated herein by reference, are hereby established as "Tow-Away Zones" for all Vehicles, including Commercial Vehicles, Vessels, Recreational Vehicles as set forth in Section 5 herein ("**Tow-Away Zone**").

SECTION 5. EXCEPTIONS.

- A. ON-STREET PARKING EXCEPTIONS.** Abandoned and/or broken down Vehicles are not permitted to be parked on-street at any time and are subject to towing at the Owner's expense. Commercial Vehicles, Recreational Vehicles, and Vessels are not permitted to be parked on-street Overnight and shall be subject to towing at Owner's expense.
- B. PARKING DURING AMENITY HOURS.** Vehicles may park in the designated parking areas of amenity facilities depicted in **Exhibits A and B** during the open hours of operations of such amenity facilities, including any District-authorized special events occurring outside of regular hours of operation. Otherwise, no Overnight parking is permitted at the amenity facilities.
- C. VENDORS/CONTRACTORS.** The District Manager or his/her designee may authorize vendors/consultants in writing to park company vehicles in order to facilitate District business. All vehicles so authorized must be identified by a Parking Pass issued by the District.
- D. DELIVERY VEHICLES AND GOVERNMENTAL VEHICLES.** Delivery vehicles, including but not limited to, U.S.P.S., U.P.S., Fed Ex, moving company vehicles, and lawn maintenance vendors may park on District property while actively engaged in the operation of such businesses. Vehicles owned and operated by any governmental unit may also park on District Property while carrying out official duties.

SECTION 6. TOWING/REMOVAL PROCEDURES.

- A. SIGNAGE AND LANGUAGE REQUIREMENTS.** Notice of the Tow-Away Zones shall be approved by the District's Board of Supervisors and shall be posted on District property in the manner set forth in Section 715.07, *Florida Statutes*. Such signage is to be placed in conspicuous locations, in accordance with Section 715.07, *Florida Statutes*.
- B. TOWING/REMOVAL AUTHORITY.** To effect towing/removal of a Commercial Vehicle, Vehicle, Vessel or Recreational Vehicle, the District Manager or his/her designee must verify that the subject Commercial Vehicle, Vehicle, Vessel or Recreational Vehicle was not authorized to park under this rule in the Overnight Parking Areas and then must contact a firm authorized by Florida law to tow/remove Commercial Vehicle, Vehicles, Vessels and Recreational Vehicles for the removal of such unauthorized vehicle at the owner's expense. The Commercial Vehicle, Vehicle, Vessel or Recreational Vehicle shall be towed/removed by the firm in accordance with Florida law, specifically the provisions set forth in Section 715.07, *Florida Statutes*. Notwithstanding the foregoing, a towing service retained by the District may tow/remove any vehicle parked in the Tow-Away Zone.

- C. **AGREEMENT WITH AUTHORIZED TOWING SERVICE.** The District's Board of Supervisors is hereby authorized to enter into and maintain an agreement with a firm authorized by Florida law to tow/remove unauthorized vehicles and in accordance with Florida law and with the policies set forth herein.

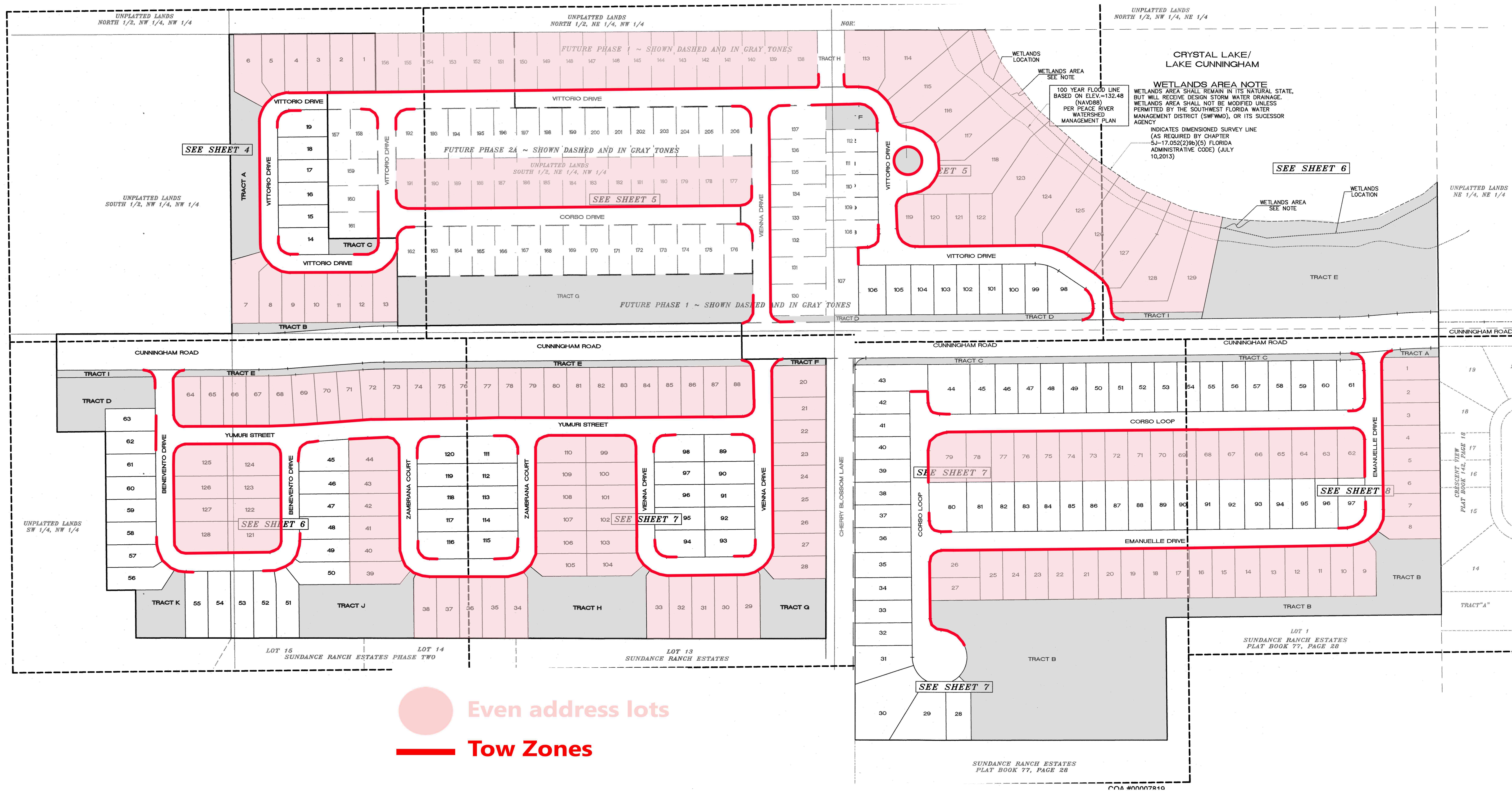
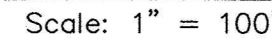
SECTION 7. PARKING AT YOUR OWN RISK. Vehicles, Vessels or Recreational Vehicles may be parked on District property pursuant to this rule, provided however that the District assumes no liability for any theft, vandalism and/ or damage that might occur to personal property and/or to such vehicles.

SECTION 8. AMENDMENTS; DESIGNATION OF ADDITIONAL TOW-AWAY ZONES. The Board in its sole discretion may amend these Rules Related to Parking and Parking Enforcement from time to time to designate new Tow-Away Zones as the District acquires additional common areas. Such designations of new Tow-Away Zones are subject to proper signage and notice prior to enforcement of these rules on such new Tow-Away Zones.

EXHIBIT A – *Tow-Away Zones (highlighted areas)*

Effective date: November 1, 2022

Parking and Tow Zones



SECTION VI



Berger, Toombs, Elam, Gaines & Frank

Certified Public Accountants PL

600 Citrus Avenue
Suite 200
Fort Pierce, Florida 34950

772/461-6120 // 461-1155
FAX: 772/468-9278

September 25, 2022

VillaMar Community Development District
Governmental Management Services, LLC
6200 Lee Vista Boulevard, Suite 300
Orlando, FL 32822

The Objective and Scope of the Audit of the Financial Statements

You have requested that we audit the financial statements of VillaMar Community Development District, (the "District"), which comprise governmental activities and each major fund as of and for the year ended September 30, 2022, which collectively comprise the basic financial statements. We are pleased to confirm our acceptance and our understanding of this audit engagement by means of this letter for the year ending September 30, 2022 and thereafter if mutually agreed upon by VillaMar Community Development District and Berger, Toombs, Elam, Gaines & Frank.

The objectives of our audit are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in the United States of America (GAAS) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users made on the basis of these financial statements. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

The Responsibilities of the Auditor

We will conduct our audit in accordance with (GAAS). Those standards require that we comply with applicable ethical requirements. As part of an audit in accordance with GAAS, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

Fort Pierce / Stuart

Member AICPA

Member AICPA Division for CPA Firms
Private Companies practice Section

Member FICPA



VillaMar Community Development District
September 25, 2022
Page 2

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. However, we will communicate to you in writing concerning any significant deficiencies or material weaknesses in internal control relevant to the audit of the financial statements that we have identified during the audit.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Conclude, based on the audit evidence obtained, whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the District's ability to continue as a going concern for the reasonable period of time.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements may not be detected exists, even though the audit is properly planned and performed in accordance with GAAS.

We will maintain our independence in accordance with the standards of the American Institute of Certified public Accountants.



VillaMar Community Development District
September 25, 2022
Page 3

The Responsibilities of Management and Identification of the Applicable Financial Reporting Framework

Management is responsible for:

1. Identifying and ensuring that the District complies with the laws and regulations applicable to its activities, and for informing us about all known violations of such laws or regulations, other than those that are clearly inconsequential;
2. The design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the District involving management, employees who have significant roles in internal control, and others where the fraud could have a material effect on the financial statements; and
3. Informing us of its knowledge of any allegations of fraud or suspected fraud affecting the District received in communications from employees, former employees, analysts, regulators, short sellers, vendors, customers or others.

The Board is responsible for informing us of its views about the risks of fraud within the entity, and its knowledge of any fraud or suspected fraud affecting the entity.

Our audit will be conducted on the basis that management acknowledges and understands that it has responsibility:

1. To evaluate subsequent events through the date the financial statements are issued or available to be issued, and to disclose the date through which subsequent events were evaluated in the financial statements. Management also agrees that it will not conclude on subsequent events earlier than the date of the management representation letter referred to below;
2. For the design, implementation and maintenance of internal control relevant to the preparations of fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; and
3. To provide us with:
 - a. Access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements including information relevant to disclosures;
 - b. Draft financial statements, including information relevant to their preparation and fair presentation, when needed to allowed for the completion of the audit in accordance with the proposed timeline;



VillaMar Community Development District
September 25, 2022
Page 4

- c. Additional information that we may request from management for the purpose of the audit; and
- d. Unrestricted access to persons within the District from whom we determine it necessary to obtain audit evidence.

As part of our audit process, we will request from management written confirmation concerning representations made to us in connection with the audit, including among other items:

- 1. That management has fulfilled its responsibilities as set out in the terms of this arrangement letter; and
- 2. That it believes the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

Reporting

We will issue a written report upon completion of our audit of VillaMar Community Development District's financial statements. Our report will be addressed to the Board of VillaMar Community Development District. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion, add an emphasis-of-matter or other-matter paragraph(s), or withdraw from the engagement.

Records and Assistance

During the course of our engagement, we may accumulate records containing data that should be reflected in the of VillaMar Community Development District books and records. The District will determine that all such data, if necessary, will be so reflected. Accordingly, the District will not expect us to maintain copies of such records in our possession.

The assistance to be supplied, including the preparation of schedules and analyses of accounts, has been discussed and coordinated with Katie Costa. The timely and accurate completion of this work is an essential condition to our completion of the audit and issuance of our audit report.

Other Relevant Information

In accordance with Government Auditing Standards, a copy of our most recent peer review report has been provided to you, for your information.

Either party may unilaterally terminate this agreement, with or without cause, upon sixty (60) days written notice subject to the condition that the District will pay all invoices for services rendered prior to the date of termination.



VillaMar Community Development District
September 25, 2022
Page 5

Fees, Costs and Access to Workpapers

Our fees for the services described above are based upon the value of the services performed and the time required by the individuals assigned to the engagement, plus direct expenses. Invoices for fees will be submitted in sufficient detail to demonstrate compliance with the terms of this engagement. Billings are due upon submission. Our fee for the services described in this letter for the year ending September 30, 2022 will not exceed \$3,580 unless the scope of the engagement is changed, the assistance which of VillaMar Community Development District has agreed to furnish is not provided, or unexpected conditions are encountered, in which case we will discuss the situation with you before proceeding. All other provisions of this letter will survive any fee adjustment.

In the event we are requested or authorized by of VillaMar Community Development District or are required by government regulation, subpoena, or other legal process to produce our documents or our personnel as witnesses with respect to our engagement for of VillaMar Community Development District, of VillaMar Community Development District will, so long as we are not a party to the proceeding in which the information is sought, reimburse us for our professional time and expenses, as well as the fees and expenses of our counsel, incurred in responding to such requests.

The audit documentation for this engagement is the property of Berger, Toombs, Elam, Gaines, & Frank and constitutes confidential information. However, you acknowledge and grant your assent that representatives of the cognizant or oversight agency or their designee, other government audit staffs, and the U.S. Government Accountability Office shall have access to the audit documentation upon their request and that we shall maintain the audit documentation for a period of at least three years after the date of the report, or for a longer period if we are requested to do so by the cognizant or oversight agency.

Access to requested documentation will be provided under the supervision of Berger, Toombs, Elam, Gaines, & Frank audit personnel and at a location designated by our Firm.



VillaMar Community Development District
September 25, 2022
Page 6

Information Security – Miscellaneous Terms

Berger, Toombs, Elam, Gaines & Frank is committed to the safe and confidential treatment of VillaMar Community Development District's proprietary information. Berger, Toombs, Elam, Gaines & Frank is required to maintain the confidential treatment of client information in accordance with relevant industry professional standards which govern the provision of services described herein. of VillaMar Community Development District agrees that it will not provide Berger, Toombs, Elam, Gaines & Frank with any unencrypted electronic confidential or proprietary information, and the parties agree to utilize commercially reasonable measures to maintain the confidentiality of VillaMar Community Development District's information, including the use of collaborate sites to ensure the safe transfer of data between the parties.

If any term or provision of this arrangement letter is determined to be invalid or unenforceable, such term or provision will be deemed stricken and all other terms and provisions will remain in full force and effect.

Because Berger, Toombs, Elam, Gaines & Frank will rely on of VillaMar Community Development District and its management and Board of Supervisors to discharge the foregoing responsibilities, VillaMar Community Development District holds harmless and releases Berger, Toombs, Elam, Gaines & Frank, its partners, and employees from all claims, liabilities, losses and costs arising in circumstances where there has been a known misrepresentation by a member of VillaMar Community Development District's management, which has caused, in any respect, Berger, Toombs, Elam, Gaines & Frank's breach of contract or negligence. This provision shall survive the termination of this arrangement for services.

This letter constitutes the complete and exclusive statement of agreement between Berger, Toombs, Elam, Gaines, & Frank and of VillaMar Community Development District, superseding all proposals, oral or written, and all other communications, with respect to the terms of the engagement between the parties.

Retention of Records

We will return to you all original records you provide to us in connection with this engagement. Further, in addition to providing you with those deliverables set forth in this engagement letter, we will provide to you a copy of any records we prepare or accumulate in connection with such deliverables which are not otherwise reflected in your books and records without which your books and records would be incomplete. You have the sole responsibility for retaining and maintaining in your possession or custody all of your financial and nonfinancial records related to this engagement. We will not host, and will not accept responsibility to host, any of your records. We, however, may maintain a copy of any records of yours necessary for us to comply with applicable law and/or professional standards or to exercise our rights under this engagement letter. Any such records retained by us will be subject to the confidentiality obligations set forth herein and destroyed in accordance with our record retention policies.



Berger, Toombs, Elam,
Gaines & Frank
Certified Public Accountants PL

VillaMar Community Development District
September 25, 2022
Page 7

Please sign and return the attached copy of this letter to indicate your acknowledgment of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

Sincerely,

*Berger Toombs Elam
Gaines & Frank*

BERGER, TOOMBS, ELAM, GAINES & FRANK
J. W. Gaines, CPA

Confirmed on behalf of the addressee:

_____, _____



Judson B. Baggett
MBA, CPA, CVA, Partner
Marci Reutimann
CPA, Partner

6815 Dairy Road
Zephyrhills, FL 33542
(813) 788-2155
(813) 782-8606

Report on the Firm's System of Quality Control

To the Partners

October 30, 2019

Berger, Toombs, Elam, Gaines & Frank, CPAs, PL
and the Peer Review Committee of the Florida Institute of Certified Public Accountants

We have reviewed the system of quality control for the accounting and auditing practice of Berger, Toombs, Elam, Gaines & Frank, CPAs, PL, (the firm), in effect for the year ended May 31, 2019. Our peer review was conducted in accordance with the Standards for Performing and Reporting on Peer Reviews established by the Peer Review Board of the American Institute of Certified Public Accountants (Standards).

A summary of the nature, objectives, scope, limitations of, and the procedures performed in a System Review as described in the Standards may be found at aicpa.org/prsummary. The summary also includes an explanation of how engagements identified as not performed or reported in conformity with applicable professional standards, if any, are evaluated by a peer reviewer to determine a peer review rating.

Firm's Responsibility

The firm is responsible for designing a system of quality control and complying with it to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. The firm is also responsible for evaluating actions to promptly remediate engagements deemed as not performed or reported in conformity with professional standards, when appropriate, and for remediating weaknesses in its system of quality control, if any.

Peer Reviewer's Responsibility

Our responsibility is to express an opinion on the design of the system of quality control, and the firm's compliance therewith based on our review.

Required Selections and Considerations

Engagements selected for review included engagements performed under *Government Auditing Standards*, including a compliance audit under the Single Audit Act.

As a part of our peer review, we considered reviews by regulatory entities as communicated by the firm, if applicable, in determining the nature and extent of our procedures.

Opinion

In our opinion, the system of quality control for the accounting and auditing practice of Berger, Toombs, Elam, Gaines & Frank, CPAs, PL, in effect for the year ended May 31, 2019, has been suitably designed and complied with to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. Firms can receive a rating of *pass*, *pass with deficiency(ies)*, or *fail*. Berger, Toombs, Elam, Gaines & Frank, CPAs, PL has received a peer review rating of *pass*.

Baggett, Reutimann & Associates, CPAs, PA
BAGGETT, REUTIMANN & ASSOCIATES, CPAs, PA
Signed Electronically by Baggett, Reutimann & Associates, CPAs, PA. U.S. 18161 email jdb@baggettand.com

**ADDENDUM TO ENGAGEMENT LETTER BETWEEN BERGER, TOOMBS,
ELAM, GAINES AND FRANK AND VILLAMAR COMMUNITY
DEVELOPMENT DISTRICT
(DATED SEPTEMBER 25, 2022)**

Public Records. Auditor shall, pursuant to and in accordance with Section 119.0701, Florida Statutes, comply with the public records laws of the State of Florida, and specifically shall:

- a. Keep and maintain public records required by the District to perform the services or work set forth in this Agreement; and
- b. Upon the request of the District's custodian of public records, provide the District with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law; and
- c. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the Agreement if the Auditor does not transfer the records to the District; and
- d. Upon completion of the Agreement, transfer, at no cost to the District, all public records in possession of the Auditor or keep and maintain public records required by the District to perform the service or work provided for in this Agreement. If the Auditor transfers all public records to the District upon completion of the Agreement, the Auditor shall destroy any duplicate public records that are exempt or confidential and exempt from public disclosure requirements. If the Auditor keeps and maintains public records upon completion of the Agreement, the Auditor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the District, upon request from the District's custodian of public records, in a format that is compatible with the information technology systems of the District.

Auditor acknowledges that any requests to inspect or copy public records relating to this Agreement must be made directly to the District pursuant to Section 119.0701(3), Florida Statutes. If notified by the District of a public records request for records not in the possession of the District but in possession of the Auditor, the Auditor shall provide such records to the District or allow the records to be inspected or copied within a reasonable time. Auditor acknowledges that should Auditor fail to provide the public records to the District within a reasonable time, Auditor may be subject to penalties pursuant to Section 119.10, Florida Statutes.

IF THE AUDITOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE AUDITOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT/CONTRACT, THE AUDITOR MAY CONTACT THE CUSTODIAN OF PUBLIC RECORDS FOR THE DISTRICT AT:

**GMS-CF, LLC
6200 LEE VISTA BLVD, SUITE 300
ORLANDO, FL 32822
TELEPHONE: 407-841-5524
EMAIL: JBURNS@GMSCFL.COM**

Auditor: J.W. Gaines

District: VillaMar CDD

By: _____

By: _____

Title: Director

Title: _____

Date: September 25, 2022

Date: _____

SECTION VII

This instrument prepared by:
Mark W. Mangen, Esq.
STRAUGHN & TURNER, P.A.
255 Magnolia Ave SW
Winter Haven, Florida 33880

INSTR # 2022276677
BK 12455 Pgs 1263-1264 PG(s)2
10/20/2022 10:26:35 AM
STACY M. BUTTERFIELD,
CLERK OF COURT POLK COUNTY
RECORDING FEES 18.50

RELEASE AND TERMINATION OF EASEMENTS

WHEREAS, by that certain Easement recorded February 22, 2022 in O.R. Book 12128, Page 0653, Public Records of Polk County, Florida (the "Easement"), VILLAMAR COMMUNITY DEVELOPMENT DISTRICT, was granted an exclusive easement over and across certain lands owned by the respective grantors of said easement, which is further described in the Easement.

WHEREAS, the property subject to and burdened by the Easement is owned by VMAR DEV, LLC, a Florida limited liability company.

WHEREAS, the Easement is no longer in use and the undersigned wish to release and terminate the Easement and to release the property described in the Easement from the encumbrance of the Easement.

NOW THEREFORE, the undersigned hereby terminate said Easement and release and remise all rights, privileges, title, interest and claim in and to the Easement and release the property described in the Easement from the encumbrance of the Easement.

This termination shall be effective as of the date of recording of this instrument.

[Signatures appear on separate signature pages]

Signed, sealed and delivered
in our presence as witnesses:

Jill Burns
Signature of Witness
Jill Burns
Printed Name of Witness
Jill Burns
Signature of Witness
Jill Burns
Printed Name of Witness

VILLAMAR COMMUNITY
DEVELOPMENT DISTRICT, a local unit
of special purpose government

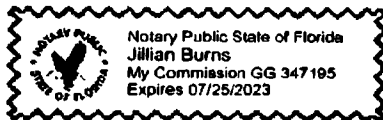
Brian Walsh
By: Brian Walsh
Its: Vice Chair

STATE OF FLORIDA
COUNTY OF POLK

The foregoing instrument was acknowledged before me by means of ☒ physical
presence or ☐ online notarization, this 14th day of September, 2022, by
Brian Walsh, as Vice Chair of VILLAMAR COMMUNITY
DEVELOPMENT DISTRICT, a local unit of special-purpose government, on behalf of the
municipality, who is personally known to me.

(seal)

Jill Burns
Notary Public
Printed Name: Jill Burns



SECTION VIII

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

VILLAMAR CDD – THOMPSON NURSERY ROAD EXTENSION **PHASES 1 & 2**

This Agreement is by and between VillaMar Community Development District ("Owner") and Tucker Paving, Inc. ("Contractor").

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

WORK

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: All labor, materials, equipment, services, and documentation necessary to construct the Project defined herein. The Work may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents

THE PROJECT

- 2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Construction services for Thompson Nursery Road Extension, Phases 1 & 2, including clearing & earthwork, paving, storm drainage, and related improvements.

ENGINEER

- 3.01 The Owner has retained Absolute Engineering, Inc, located at 1000 N. Ashley Drive, Suite 925, Tampa, Florida 33602 ("Engineer") to act as Owner's representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.
- 3.02 The part of the Project that pertains to the Work has been designed by Engineer.

CONTRACT TIMES

- 4.01 *Time is of the Essence*
- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract. The Work to be performed under this Agreement shall be commenced no later than ten (10) calendar days, including Saturdays, Sundays, and holidays, from the date of the Notice to Proceed.

4.02 ~~Contract Times: Dates~~

- A. ~~The Work will be substantially complete on or before [date], and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before [date].~~

4.03 Contract Times: Days

- A. The Work will be substantially complete within One Hundred Eighty (180) days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within Two Hundred Ten (210) days after the date when the Contract Times commence to run.

ALL CALENDAR DAY DURATIONS STATED ABOVE SHALL BE INCLUSIVE OF TIME NECESSARY FOR SHOP DRAWING PREPARATION, REVIEW AND APPROVAL, AND PROCUREMENT, FABRICATION, AND DELIVERY OF ALL MATERIALS REQUIRED FOR COMPLETION OF THE PROJECT.

4.04 ~~Milestones~~

- A. ~~Parts of the Work must be substantially completed on or before the following Milestone(s):~~
- ~~1. Milestone 1 [event & date/days]~~
 - ~~2. Milestone 2 [event & date/days]~~
 - ~~3. Milestone 3 [event & date/days]~~

4.05 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and ~~Milestones not achieved~~ within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. The Owner and Contractor agree that an assessment of actual damages as of the date of this Agreement would be uncertain, and the amount of liquidated damages set forth herein is reasonable. Accordingly, instead of requiring any such proof of actual damages, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
1. *Substantial Completion:* Contractor shall pay Owner \$1,000 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.
 2. *Completion of Remaining Work:* After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$1,000 for each day that expires after such time until the Work is completed and ready for final payment.
 - ~~3. *Milestones:* Contractor shall pay Owner \$[number] for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for achievement of Milestone 1, until Milestone 1 is achieved, or until the time specified for Substantial Completion is reached, at which time the rate indicated in Paragraph 4.05.A.1 will apply, rather than the Milestone rate.~~

4. Liquidated damages for failing to timely attain Milestones, Substantial Completion, and final completion are not additive, and will not be imposed concurrently.
- ~~B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.~~
- ~~C. Bonus: Contractor and Owner further recognize the Owner will realize financial and other benefits if the Work is completed prior to the time specified for Substantial Completion. Accordingly, Owner and Contractor agree that as a bonus for early completion, Owner shall pay Contractor \$[number] for each day prior to the time specified above for Substantial Completion (as duly adjusted pursuant to the Contract) that the Work is substantially complete. The maximum value of the bonus will be limited to \$[number].~~

~~4.06 Special Damages~~

- ~~A. Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.~~
- ~~B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.~~
- ~~C. The special damages imposed in this paragraph are supplemental to any liquidated damages for delayed completion established in this Agreement.~~

CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:

- A. For all Work other than Unit Price Work, a lump sum of Five Million Five Hundred Ninety Eight Thousand One Hundred Twenty Eight Dollars and Sixty-Three Cents \$5,598,128.63.

All specific cash allowances are included in the above price in accordance with Paragraph 13.02 of the General Conditions.

- B. THE LUMP SUM BID PRICE IN SECTION A ABOVE SHALL NOT BE SUBJECT TO ANY ADJUSTMENTS. CONTRACTOR ACKNOWLEDGES AND AGREES THAT CONTRACT PRICE SHALL NOT BE SUBJECT TO FLUCTUATIONS IN MARKET COSTS FOR TOOLS, MATERIALS, SUPPLIES, EQUIPMENT, FUEL OR LABOR. ANY NOTES OR CONDITIONS CONTAINED IN ANY PROPOSAL SUBMITTED BY CONTRACTOR SHALL BE EXCLUDED FROM AND NOT BE PART OF THIS CONTRACT.

- B. ~~For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item).~~

Unit Price Work					
Item No.	Description	Unit	Estimated Quantity	Unit Price	Extended Price
				\$	\$
				\$	\$
				\$	\$
				\$	\$
				\$	\$
Total of all Extended Prices for Unit Price Work (subject to final adjustment based on actual quantities)					\$

~~The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.~~

- C. ~~Total of Lump Sum Amount and Unit Price Work (subject to final Unit Price adjustment) \$[number].~~
- D. For all Work, including additions or changes to the Work, payment shall be made in accordance with at the prices stated in Contractor's Bid, attached hereto as an exhibit. Unit Pricing, as shown in the Contractor's Bid attached hereto, shall only be used in connection with pricing for change orders. The Lump Sum Bid Price and Unit Pricing provided for tools, materials, supplies, equipment, fuel or labor shall not be subject to any cost adjustment for any reason.

PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments; Retainage

- A. Owner shall make progress payments on the basis of Contractor's Applications for Payment in a manner consistent with the Local Government Prompt Payment Act, sections 218.70 through 218.80 of the Florida Statutes. ~~on or about the [ordinal number, such as 5th] day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract.~~ All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of

Values, as provided elsewhere in the Contract. Five percent (5%) of the amount of each progress payment shall be withheld as retainage until final completion of the Work, acceptance of the Work by the Owner, satisfaction of all punch list requirements, and submission of all documents required under Paragraph 15.06 of the General Conditions, subject to any offsets to which the Owner is entitled. Procedures for withholding and release of retainage shall be in accordance with Florida law, including sections 218.735 and 255.078, Florida Statutes.

~~1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.~~

~~a. [number] percent of the value of the Work completed (with the balance being retainage).~~

~~If 50 percent or more of the Work has been completed, as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and~~

~~b. [number] percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).~~

~~B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to [number] percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less [number] percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.~~

6.03 *Final Payment*

A. Upon final completion and acceptance of the Work, in accordance with Paragraph 15.06 of the General Conditions, and subject to final acceptance by Polk County and/or the local utility provider, as applicable, Owner shall pay the remainder of the Contract Price as recommended by the Engineer and in accordance with Paragraph 15.06 of the General Conditions.

6.04 *Consent of Surety*

A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

6.05 *Interest*

A. All payments due and not made within the time prescribed by Section 218.735, Florida Statutes, shall bear interest from thirty (30) days after the due date at the rate of one percent (1%) per month on the unpaid balance in accordance with Section 218.74, Florida Statutes. All amounts not paid when due will bear interest at the rate of [number] percent per annum.

CONTRACT DOCUMENTS

7.01 Contents

- A. The Contract Documents consist of all of the following:
1. This Agreement as modified herein.
 2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
 - c. Bid bond (together with power of attorney)
 3. General Conditions as modified therein.
 4. Supplementary Conditions Relating to Insurance Requirements, Subsurface Conditions, and Hazardous Conditions.
 - ~~5. Project Manual, including but not limited to Specifications as listed in the table of contents of the Project Manual (copy of list attached).~~
 - ~~6. Drawings (not attached but incorporated by reference) consisting of [number] sheets with each sheet bearing the following general title: [title on Drawings].~~
 7. Drawings listed on the attached sheet index.
 8. Contract Addenda (Amendment No. 1).
 9. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (Exhibit A), excluding any reference or notations regarding a changes or adjustment to Contractor's Lump Sum Bid Price or Unit Pricing for tools, materials, supplies, equipment, fuel or labor.
 - b. Geotech Reports
 - i. Preliminary Roadway Report, Thompson Nursery Road Extension, Phase 1, Polk County, Florida, dated December 12, 2008
 - ii. 60% Roadway Soil Survey Report, Thompson Road Extension Phase 1, Project No. P-06-603B, Polk County Florida, dated October 28, 2009
 - iii. 90% Report of Subsurface Exploration and Geotechnical Engineering Evaluation, Thompson Nursery Road Extension Over CSX Railroad, County Project No. 5400037, Polk County, Florida, dated September 28, 2009
 - c. Bid Addendum(s), if any (Addendum No. 1)
 10. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.

- e. Warranty Bond, if any.
- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 Contractor's Representations

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - 1. Contractor has examined and carefully studied the Contract Documents, including Addenda, if any.
 - 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, if any, with respect to the Technical Data in such reports and drawings.
 - 5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.
 - 7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.
12. Contractor is financially solvent, able to pay its debts as they mature and possesses sufficient working capital (subject to payments by Owner required under this Agreement) to complete the Work required to be performed of it under this Contract.
13. Contractor is able to furnish (directly or by subcontract or through vendors) any plant, tools, materials, supplies, equipment, fuel, and labor at the stated Unit Pricing necessary to complete the services required of Contractor under this Contract, and Contractor has sufficient experience and competence to perform the Work under the Contract.
Contractor acknowledges and agrees that there shall be no adjustments in the Unit Pricing or the Lump Sum Bid Price as a result of any increase in cost to Contractor for tools, materials, supplies, equipment, fuel or labor, except as set forth in Amendment No. 1 to this Agreement.
14. Contractor is authorized to do business in the State of Florida and is properly licensed (to the extent required by law) by all necessary governmental authorities having jurisdiction over the Work.

8.02 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.03 *Standard General Conditions*

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or “track changes” (redline/strikeout), and/or in the Supplementary Conditions.

MISCELLANEOUS

1.01 Terms

- A. Terms used in the Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions unless otherwise stated herein.

9.02 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents

9.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

9.04 Public Records

- A. The Contractor understands and agrees that all documents of any kind provided to the District in connection with this Contract may be public records, and, accordingly, Contractor agrees to comply with all applicable provisions of Florida law in handling such records, including but not limited to Section 119.0701, Florida Statutes. Contractor acknowledges that the designated public records custodian for the District is Jill Burns (“Public Records Custodian”). Among other requirements and to the extent applicable by law, the Contractor shall:

- 1) keep and maintain public records required by the District to perform the service;
- 2) upon request by the Public Records Custodian, provide the District with the requested public records or allow the records to be inspected or copied within a reasonable time period at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes;
- 3) ensure that public records which are exempt or confidential, and exempt from public records disclosure requirements, are not disclosed except as authorized by law for the

duration of the contract term and following the contract term if the Contractor does not transfer the records to the Public Records Custodian of the District; and

- 4) upon completion of the contract, transfer to the District, at no cost, all public records in Contractor's possession or, alternatively, keep, maintain and meet all applicable requirements for retaining public records pursuant to Florida laws. When such public records are transferred by the Contractor, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the District in a format that is compatible with Microsoft Word or Adobe PDF formats.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 219 EAST LIVINGSTON STREET, ORLANDO, FLORIDA 32801, TELEPHONE: (407) 841-5524, FAX: (407) 839-1526, OR EMAIL: JBURNS@GMSCFL.COM.

9.05 Assignment of Warranties

- A. Contractor shall assign to Owner all warranties extended to Contractor by material suppliers and subcontractors. If an assignment of warranty requires the material supplier and/or subcontractor to consent to same, then Contractor shall secure the material supplier's and/or subcontractor's consent to assign said warranties to Owner.

9.06 Construction Defects

- A. CLAIMS FOR CONSTRUCTION DEFECTS ARE NOT SUBJECT TO THE NOTICE AND CURE PROVISIONS OF CHAPTER 558, FLORIDA STATUTES.

9.07 Restriction on Removal of Fill Dirt from Work Site

- A. Contractor acknowledges that all suitable soil/fill material shall remain on-site. Fill material shall not be removed from the Project site without the written consent of the Owner.

9.08 Public Entity Crimes

- A. Pursuant to Section 287.133(3)(a), Florida Statutes:

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list.

Contractor represents that in entering into this Contract, the Contractor has not been placed on the convicted vendor list within the last 36 months and, in the event that the Contractor is placed on the convicted vendor list, the Contractor shall immediately notify the Owner whereupon this Contract may be terminated by the Owner.

9.09 Scrutinized Companies

Contractor represents that in entering into this Contract, neither it nor any of its officers, directors, executives, partners, shareholders, members, or agents is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Section 215.473, Florida Statutes, and in the event such status changes, Contractor shall immediately notify Owner.

9.10 Counterparts

This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall be an original; however, all such counterparts together shall constitute, but one and the same instrument.

9.11 E-Verify.

The Contractor shall comply with and perform all provisions of Section 448.095, Florida Statutes. Accordingly, as a condition precedent to entering into this Agreement, Contractor shall register with and use the United States Department of Homeland Security's E-Verify system to verify the work authorization status of all newly hired employees.

If the Contractor anticipates entering into agreements with a subcontractor for the Work, Contractor will not enter into the subcontractor agreement without first receiving an affidavit from the subcontractor regarding compliance with Section 448.095 and stating that the subcontractor has registered with and uses the E-Verify system and does not employ, contract with, or subcontract with an unauthorized alien. Contractor shall maintain a copy of such affidavit for the duration of the agreement and provide a copy to the Owner upon request. Any party may terminate this Agreement or any subcontract hereunder if there is a good faith belief on the part of the terminating party that a contracting party has knowingly violated Section 448.09(1), Florida Statutes. Upon such termination, Contractor shall be liable for any additional costs incurred by Owner as a result of the termination.

In the event that the Owner has a good faith belief that a subcontractor has violated Section 448.095, but the Contractor has otherwise complied with its obligations hereunder, the Owner shall promptly notify the Contractor. The Contractor agrees to immediately terminate the agreement with the subcontractor upon notice from the Owner.

9.12 Direct Purchase of Materials

A. Owner represents to Contractor that Owner is a governmental entity exempt from Florida sales and use tax, and will provide Contractor with a copy of its Consumer Exemption Certificate. Upon assignment, Owner may elect to implement a direct purchase arrangement whereby Owner will directly acquire certain materials ("Direct Purchase Materials") necessary for the completion of the Work directly from the suppliers to take advantage of Owner's tax-exempt status. Assuming the Agreement is assigned to such a governmental entity, the following shall apply:

- B. Within 10 days of the issuance of the Notice to Proceed or other written authorization for Work, Owner shall provide Contractor with a list of materials that will be treated as Direct Purchase Materials.
- C. Owner shall issue purchase orders directly to suppliers of Direct Purchase Materials. Such purchase orders shall include Owner's consumer certificate of exemption number and shall require that the supplier provide the required shipping and handling insurance and provide for delivery with title and risk of loss transferring upon delivery at the jobsite and after acceptance by Owner. Corresponding change orders shall be executed at the time of the direct purchase to reflect the direct purchases made by the Owner and if the original contract contemplated sale of materials and installation by same person, the change order needs to reflect sale of materials and installation by different legal entities.
- D. Owner shall issue a Certificate of Entitlement to each supplier of Direct Purchase Materials, and furnish a copy of same to the Contractor. Each Certificate of Entitlement must have attached thereto the corresponding purchase order. Each Certificate of Entitlement shall acknowledge that if the Department of Revenue determines the purchase is not a tax-exempt purchase by a governmental entity, then the governmental entity will be responsible for any tax, penalties and interest determined to be due. Each Certificate of Entitlement shall affirm that (1) the attached purchase order is being issued directly to the vendor supplying the tangible personal property the Contractor will use in the identified public works; (2) the vendor's invoice will be issued directly to the governmental entity; (3) payment of the vendor's invoice will be made directly by the governmental entity to the vendor from public funds; (4) the governmental entity will take title to the tangible personal property from the vendor at the time of delivery by the vendor; and (5) the governmental entity assumes the risk of damage or loss at the time of delivery by the vendor.
- E. Upon delivery of the Direct Purchase Materials to the jobsite, the Owner, through Contractor as its agent, shall inspect the materials and invoices to determine that they conform to the purchase order. If the materials conform, Owner shall accept and take title to the Direct Purchase Materials through its agent, which is Contractor.
- F. Suppliers shall issue invoices directly to Owner. Owner shall process invoices and issue payment directly to the suppliers.
- G. Upon acceptance of Direct Purchase Materials, Owner shall assume risk of loss of same until they are incorporated into the Project. Contractor, as Owner's agent, shall be responsible for safeguarding all Direct Purchase Materials and for obtaining and managing all warranties and guarantees for all material and products as required under the Contract Documents. All warranties provided by Contractor as part of Contract shall apply to all Direct Purchase Materials, as though Contractor had purchased the Direct Purchase Materials.

[Signatures on following page]

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on October 18, 2022 (which is the Effective Date of the Contract).

Owner: VillaMar

Community Development District

(typed or printed name of organization)

By: 

(individual's signature)

Date: 10/10/22

(date signed)

Name: Warren K. (Rennie) Heath, II

(typed or printed)

Title: Chairman

(typed or printed)

Attest: 

(individual's signature)

Title: Asst. Project Manager

(typed or printed)

Address for giving notices:

c/o Governmental Management Services, LLC

219 E. Livingston Street

Orlando, Florida, 32801

Designated Representative:

Name: Jill Burns

(typed or printed)

Title: District Manager

(typed or printed)

Address:

c/o Governmental Management Services, LLC

219 E. Livingston Street

Orlando, Florida, 32801

Phone: 407-841-5524

Email: jburns@gmscfl.com

(If [Type of Entity] is a corporation, attach evidence of authority to sign. If [Type of Entity] is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

Contractor: Tucker Paving, Inc.

(typed or printed name of organization)

By: 

(individual's signature)

Date: 10-10-22

(date signed)

Name: Patrick Brasted

(typed or printed)

Title: VP

(typed or printed)

(If [Type of Entity] is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: 

(individual's signature)

Title: CFO

(typed or printed)

Address for giving notices:

Tucker Paving, Inc.

5658 Lucerne Park Road

Winter Haven, Florida 33881

Designated Representative:

Name: Patrick Brasted

(typed or printed)

Title: VP

(typed or printed)

Address:

Phone: (863) 299-2262

Email: _____

License No.: _____

(where applicable)

State: _____

Drawings – Sheet Index

SHT. NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL CONSTRUCTION NOTES
3	TYPICAL ROADWAY SECTIONS AND DETAILS
4	AERIAL SITE PLAN
5	EXISTING SITE CONDITIONS
6	OVERALL MASTER DRAINAGE PLAN
7-9	GRADING AND DRAINAGE PLAN
10,11	CROSS SECTIONS
12	STORM STRUCTURE DATA AND DETAILS
13	CONTROL STRUCTURE DETAILS
14	EROSION CONTROL AND GEOWEB DETAILS
15,16	DRAINAGE DETAILS
17-22	ROADWAY PLAN AND PROFILES
23-28	SIGNING AND PAVEMENT MARKING PLAN
29	OVERALL DRAINAGE AREA MAP
30-32	DRAINAGE AREA MAP
33	CONSTRUCTION SURFACE WATER MANAGEMENT PLAN
LA1	PERMIT LANDSCAPE PLANS
IR1	PERMIT IRRIGATION PLANS

7.01 A. 2a. and 2b. -
FORMS OF P&P BONDS

Bond Number Assigned by Surety:

[Bond Number]**PERFORMANCE BOND**

Contractor Name: Tucker Paving, Inc. Address (principal place of business): 5658 Lucerne Park Road Winter haven, Florida 33881 <u>Telephone Number: (863) 299-2262</u>	Surety Name: Berkley Insurance Company Address (principal place of business): 475 Steamboat Road Greenwich, Connecticut 06830 <u>Telephone Number: [Telephone Number]</u>
Owner Name: Scenic Terrace North Community Development District Mailing address (principal place of business): 219 East Livingston Street Orlando, Florida 32801 <u>Telephone Number: (407) 841-5524</u>	Contract Description (name and location): VillaMar Community Development District, Thompson Nursery Road Extension Phases 1 & 2 Polk County, Florida Contract Price: \$5,598,128.63 Effective Date of Contract: [Date from Contract]
Bond Bond Amount: \$ Price) Date of Bond: [Date] <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: None See Paragraph 16	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
<i>(Full formal name of Contractor)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.	

EJCDC® C-610, Performance Bond.

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and American Society of Civil Engineers. All rights reserved.

Bond Number Assigned by Surety:[Bond Number]

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

Bond Number Assigned by Surety:**[Bond Number]**

- 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
 - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
 7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
 8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
 9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
 10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
 11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
 12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

Bond Number Assigned by Surety:

[Bond Number]

statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
 - 14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. Modifications to this Bond are as follows: **This Bond is hereby amended so that the provisions and limitations of Section 255.05, including without limitation subsection (6) and the notice and time limitation provisions in subsections (2) and (10), or Sections 713.23 and 713.245, Florida Statutes, whichever are applicable, are incorporated by reference herein.**

Bond Number Assigned by Surety:

[Bond Number]

PAYMENT BOND

Contractor Name: Tucker Paving, Inc. Address (principal place of business): 5658 Lucerne Park Road Winter haven, Florida 33881 Telephone Number: (863) 299-2262	Surety Name: Address (principal place of business): Telephone Number: [Telephone Number]
Owner VillaMar Community Development Name: District Mailing address (principal place of business): 219 East Livingston Street Orlando, Florida 32801 Telephone Number: (407) 841-5524	Contract Description (name and location): VillaMar Community Development District, Thompson Nursery Road Extension Phases 1 & 2 Polk County, Florida Contract Price: \$5,598,128.63 Effective Date of Contract: [Date, from Contract]
Bond Bond Amount: \$ Price) Date of Bond: [Date] (Date of Bond cannot be earlier than Effective Date of Contract) Modifications to this Bond form: None See Paragraph 18	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
(Full formal name of Contractor)	(Full formal name of Surety) (corporate seal)
By: _____ (Signature)	By: _____ (Signature)(Attach Power of Attorney)
Name: _____ (Printed or typed)	Name: _____ (Printed or typed)
Title: _____	Title: _____
Attest: _____ (Signature)	Attest: _____ (Signature)
Name: _____ (Printed or typed)	Name: _____ (Printed or typed)
Title: _____	Title: _____
Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.	

EJCDC® C-615, Payment Bond.

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Bond Number Assigned by Surety:

[Bond Number]

17. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
18. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
19. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
20. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
21. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 21.1. Claimants who do not have a direct contract with the Contractor
 - 121.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 121.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 21.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
22. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
23. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 23.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 23.2. Pay or arrange for payment of any undisputed amounts.
 - 23.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety

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shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

24. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
25. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
26. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
27. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
28. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
29. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
30. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
31. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
32. Definitions

32.1. *Claim*—A written statement by the Claimant including at a minimum:

132..1. The name of the Claimant;

132..2. The name of the person for whom the labor was done, or materials or equipment furnished;

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- 132..3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 132..4. A brief description of the labor, materials, or equipment furnished;
 - 132..5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 132..6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 132..7. The total amount of previous payments received by the Claimant; and
 - 132..8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 32.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 32.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 32.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 32.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
33. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
34. Modifications to this Bond are as follows: **This Bond is hereby amended so that the provisions and limitations of Section 255.05, including without limitation subsection (6) and the notice and time limitation provisions in subsections (2) and (10), or Sections 713.23 and 713.245, Florida Statutes, whichever are applicable, are incorporated by reference herein.**

7.01A. 3. GENERAL CONDITIONS

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT THOMPSON NURSERY ROAD EXTENSION PHASE 1 & 2

1.02 ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, the project manual and any documents included or referenced therein, including but not limited to Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

10. *Claim*

- a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
 - b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, chemical, element, compound, solution, mixture, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, chemical, element, compound, solution, mixture, or material.
12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.

20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.
22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
- a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction. Such definitions shall further include, where the context reasonably allows, compliance with any applicable permits and/or other similar approvals issued by governmental bodies, agencies, and authorities.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner or Engineer to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.

30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not

approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.

42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work. Notwithstanding anything to the contrary herein, “Substantial Completion” shall be considered to be on the date which all applicable governmental agencies having jurisdiction over the Work have issued unconditional certificates of completion and have signed off on all final inspections with respect to each portion of the work and the Owner is able to utilize each portion of the Work set forth in the Contract Documents for the intended purpose. Also notwithstanding anything to the contrary contained herein, Contractor shall be responsible for obtaining the final inspections and applicable written approvals from all governmental agencies with jurisdiction with respect to each portion of the Work, and in connection therewith, Owner and Engineer shall comply with all of its obligations required by the issuing authority in order to enable the Contractor to obtain such Certificate.
43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.

47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the ~~Bidding Requirements~~ or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day*: The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*: The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
1. does not conform to the Contract Documents;
 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

3. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).

E. *Furnish, Install, Perform, Provide*

1. The word "furnish," when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word "install," when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. *Contract Price or Contract Times:*** References to a change in "Contract Price or Contract Times" or "Contract Times or Contract Price" or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term "or both" is not expressed.
- G.** Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

1.03 ARTICLE 2—PRELIMINARY MATTERS

2.01 Delivery of Performance and Payment Bonds; Evidence of Insurance

- A. *Performance and Payment Bonds:*** When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds). Contractor must provide a certified copy of the recorded bonds before commencing the Work or before recommending the Work after a default or abandonment.
- B. *Evidence of Contractor's Insurance:*** When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner's Insurance:*** ~~After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.~~

2.02 Copies of Documents

- A. Owner shall furnish to Contractor ~~one~~ four printed ~~copy~~ copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 Before Starting Construction

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

Such schedules shall be consistent with the documents provided to the Owner as part of the Contractor's Bid.

2.04 Preconstruction Conference; Designation of Authorized Representatives

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 Acceptance of Schedules

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

Such schedules shall be consistent with the documents provided to the Owner as part of the Contractor's Bid.

2.06 Electronic Transmittals

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

1.04 **ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE**

3.01 Intent

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 Reference Standards

A. *Standards Specifications, Codes, Laws and Regulations*

- 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 Reporting and Resolving Discrepancies

A. *Reporting Discrepancies*

- 1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
- 2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly

report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

3. ~~Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.~~

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Requirements of the Contract Documents

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 Reuse of Documents

- A. Contractor and its Subcontractors and Suppliers shall not:
 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings,

Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or

2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

1.05 ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 Commencement of Contract Times; Notice to Proceed

- A. The Contract Times will commence to run ~~on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. No Work shall be performed before the issuance of a Notice to Proceed. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.~~

4.02 Starting the Work

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date. Notwithstanding the foregoing, should any Work be performed at the Site prior to such date, such Work shall be deemed to have been performed pursuant to this Contract.

4.03 Reference Points

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.

- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 Delays in Contractor's Progress

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include ~~but are not limited to only~~ the following:
 - 1. Severe and unavoidable acts of God or natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Times under this paragraph within 15 days of the damaging, delaying, disrupting, or interfering event, or such claim shall be waived. Contractor shall be required to prove that any abnormal weather conditions are in excess of normal rainfall amounts or other normal weather conditions, and must provide such documentation of unusually severe weather as the Engineer deems reasonably necessary. Normal seasonal adverse weather typical for the _____ area, including heavy rain shall not be deemed as causing any delays for the Project.

In no event shall Owner or Engineer be liable to Contractor, any subcontractor, any supplier, or any other person or organization, or to any surety or employee or any agent of them, for damages, including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs, arising out of or resulting from:

- 1. delays caused by or within the control of Contractor (or Subcontractor or Supplier); or

2. delays beyond the control of both Owner and Contractor, including, but not limited to, fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility owners or other contractors performing other work;

Nor shall Owner or Engineer of each of them be liable to Contractor for any claims, costs, losses or damages sustained by Contractor on or in connection with any other project or anticipated project.

Except for an adjustment to the Contract Times, the Contractor shall not be entitled to and hereby waives any and all damages that it may suffer by reason of delay or for any Act of God, and waives all damages that it may suffer by reason of such delay including but not limited to lost profits, overhead, and other consequential damages. No payment of any claim for damages shall be made to the Contractor as compensation for damages for any delays or hindrances that are avoidable by Contractor.

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.

Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work. Such supporting documentation shall include, where appropriate, documentation of abnormal weather conditions and an explanation of their impact on Contract Price and/or Contract Times.

- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

1.06 ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. ~~Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.~~
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 Use of Site and Other Areas

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify, defend and hold harmless Indemnitees (defined in Paragraph 7.18) ~~Owner and Engineer, and the officers, directors, members,~~

~~partners, employees, agents, consultants and subcontractors of each and any of them,~~
from and against any such claim, and against all liabilities, suits, liens, demands, costs,
losses, interest, expenses, penalties, fines, judgments, and damages (including but not
limited to all fees and charges of engineers, architects, attorneys, and other professionals
and all court or arbitration or other dispute resolution fees and costs) whether monetary
or otherwise, arising out of or relating to any claim or action, legal or equitable, brought
by any such owner or occupant against Owner, Engineer, or any other party indemnified
hereunder to the extent caused directly or indirectly, in whole or in part by, or based
upon, Contractor's negligent, reckless or intentionally wrongful performance of the Work,
or because of other negligent, reckless or intentionally wrongful actions or conduct of the
Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, rubbish, debris, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 Subsurface and Physical Conditions

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. Those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site ~~that contain Technical Data from which the Engineer prepared the Contract Drawings and Specifications;~~
 - 2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), ~~that contain Technical Data from which the Engineer prepared the Contract Drawings and Specifications;~~ and
 - 3. Technical Data contained in such reports and drawings, if any.
- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
- C. *No Reliance by Contractor on Technical Data:* Contractor may not rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, ~~but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Instead, while the Technical Data is believed to be reliable, the Technical Data was prepared for Owner's benefit by third parties~~

and accordingly, Owner cannot guarantee the quantity, quality, completeness or accuracy of that information. Contractor warrants it has, by careful examination, satisfied itself as to the nature and location of the Work, the character, quality of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecuting of the Work. Contractor further warrants that the Contract Price is just and reasonable compensation for all the Work, including all foreseeable and foreseen risks, hazards, and difficulties in connection therewith.

- D. *Limitations of Other Data and Documents:* ~~Except for such reliance on Technical Data,~~ Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
 3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 Differing Subsurface or Physical Conditions

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data ~~on which Contractor is entitled to rely as provided in Paragraph 5.03~~ is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site

condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
 - 1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
 - 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
 - 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.

4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions:* Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 Underground Facilities

- A. *Contractor's Responsibilities:* Owner and Engineer do not warrant or guarantee the accuracy or completeness of any information or data regarding underground facilities provided by others. Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for, without additional compensation from the Owner:
 1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations, including but not limited to notification of and cooperation with utility companies and agencies when the Contractor's operations are close to existing facilities in order to provide time for the utilities to stake the location of their existing facilities. This coordination effort shall be done in compliance with Florida Statutes Chapter 556, "Underground Facility Damage Prevention and Safety Act," latest revision.;
 3. locating or verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
 1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to

Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;

3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

F. *Possible Price and Times Adjustments*

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records,

or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 Hazardous Environmental Conditions at Site

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site, if any;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site, if any; and
3. Technical Data contained in such reports and drawings.

B. *No Reliance by Contractor on Technical Data Authorized*: Contractor may not rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings. ~~but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.~~ Instead, while the Technical Data is believed to be reliable, the Technical Data was prepared for the Owner's benefit by third parties and accordingly, the Owner cannot guarantee the quantity, quality, completeness or accuracy of that information. ~~Except for such reliance on Technical Data,~~ Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern. Neither Contractor nor any of its successors, assigns, agents, employees, contractors, subcontractors, materialmen, officers, invitees, and representatives shall store, place, generate, manufacture, refine, handle, or locate on the Site a Constituent of Concern.

- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. ~~To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.~~

- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless Indemnitees—Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, liabilities, suits, liens, demands, costs, losses, interest, expenses, penalties, fines, judgments, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution fees and costs) whether monetary or otherwise, arising out of or relating to the wholly or partially negligent, reckless, or intentionally wrongful failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, including without limitation, Contractor’s successors, assigns, agents, employees, contractors, subcontractors, materialmen, officers, invitees, and representatives, or to a Hazardous Environmental Condition created in whole or in part by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual’s or entity’s own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

1.07 ARTICLE 6—BONDS AND INSURANCE

6.01 Performance, Payment, and Other Bonds

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor’s obligations under the Contract. These bonds must remain in effect until one year (for the payment bond) and two years (for the performance bond) after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or Regulations, and must be issued and signed by a surety named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond. In addition, each bond shall be on an Owner-approved form and the payment bond shall contain the following language: “This Bond is hereby amended so that the provisions and limitations of Section 255.05, including without limitation subsection (6) and the notice and time limitation provisions in subsections (2) and (10), or Sections 713.23 and 713.245, Florida Statutes, whichever are applicable, are incorporated by reference herein.”

- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 Insurance—General Provisions

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Prior to commencing the Work and entering any lands upon which the Work shall be performed, Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.
- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained

and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, and subject to Florida's Public Records Law, recognizing ultimate assignment of this Contract is anticipated to occur to Creekview Community Development District, as a unit of government, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.

- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
- H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.
- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.

- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least ~~10~~ 30 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.
- O. The fact that an entity or individual is named as an additional insured on a particular insurance policy required under this Contract is not intended to constitute a waiver of any rights of any kind, including subrogation rights, claims for indemnification or any other rights or claims.

6.03 Contractor's Insurance

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 - 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds:* The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 - 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 - 2. include coverage for the respective supervisors, professional staff, officers, directors, members, partners, employees, agents, subcontractors, and consultants of all such additional insureds;
 - 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);
 - 4. not seek contribution from insurance maintained by the additional insured; and

5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 Builder's Risk and Other Property Insurance

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- ~~C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.~~
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 Property Losses; Subrogation

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. ~~Owner and Contractor waives all rights against each other and the respective Owner and its officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waives all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.~~
 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. ~~Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.~~
1. ~~Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.~~
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.
- 6.06 Receipt and Application of Property Insurance Proceeds
- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy.

Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

1.08 ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 Contractor's Means and Methods of Construction

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 Supervision and Superintendence

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 Labor; Working Hours

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.
- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any

other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.

- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

The Contractor shall be responsible, whether previously scheduled or not, for the payment of Owner's cost of overtime inspection outside of the working hours described above. The Contractor will be required to pay for overtime inspection services on unscheduled work, work which is delayed by the Contractor's suppliers or subcontractors and any other work performed for the convenience of the Contractor as he deems necessary to meet the schedule.

7.04 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 "Or Equals"

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For

the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:

- a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) 3) has a proven record of performance and availability of responsive service; and
 - 4) 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 5) 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 6) 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.

1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 7) 1) perform adequately the functions and achieve the results called for by the general design;
 - 8) 2) be similar in substance to the item specified; and
 - 9) 3) be suited to the same use as the item specified.
 - b. will state:
 - 10) 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 11) 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 12) 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 13) 1) all variations of the proposed substitute item from the item specified; and
 - 14) 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.

- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 Concerning Subcontractors and Suppliers

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.

- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 Patent Fees and Royalties

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- ~~B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.~~

- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify, defend and hold harmless ~~Indemnitees Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them,~~ from and against all claims, liabilities, suits, liens, demands, costs, losses, interest, expenses, penalties, fines, judgments, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution fees or costs) whether monetary or otherwise, arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents, to the extent such infringement is caused in whole or in part by the negligent, reckless, or intentionally wrongful actions of the Contractor or those for which Contractor is responsible including without limitation, Contractor's successors, assigns, agents, employees, contractors, subcontractors, materialmen, officers, invitees, and representatives.

7.09 Permits

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner Contractor shall pay all charges and fees of utility owners for connections for providing permanent service to the Work, including without limitation water and electrical meters (if applicable), installation fees, electrical inspection fees, and temporary services and utilities. Contractor shall additionally provide all signage required by applicable permits and governmental authorities.
- B. Owner and Contractor acknowledge and agree that Owner intends to turn over all or a portion of the Work upon completion to Clay County and/or the Clay County Utility Authority and the Creekview Community Development District for ownership and maintenance. To the extent that Owner intends to turn over any portion of the Work to another governmental entity for ownership or other purposes, Contractor agrees at its sole expense to take all actions necessary (including but not limited to providing all warranties, improvement bonds, and close-out documents required by the governmental entity even if such requirements are beyond what is required herein) to ensure that the recipient governmental entity accepts the Work.

7.10 Taxes

- A. Contractor shall pay all sales, consumer, use, and other similar taxes and assessments required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 Laws and Regulations

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

- B. If Contractor or those for whom Contractor is responsible performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify, defend, and hold harmless Indemnitees Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, liabilities, suits, liens, demands, costs, losses, interest, expenses, penalties, fines, judgments, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution fees or costs) whether monetary or otherwise arising out of or relating to such Work or other action. ~~It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.~~
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 Record Documents

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
1. all persons on the Site or who may be affected by the Work;
 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
 - D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
 - E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Among other requirements, the Contractor or Subcontractor performing trench excavation work on the Project shall comply with the applicable trench safety standards.
 - F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
 - G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
 - H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
 - I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
 - J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.
- 7.14 Hazard Communication Programs
- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 Emergencies

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 Submittals

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 15) 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 16) 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 17) 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.
- 3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.

1. *Shop Drawings*

- a. Contractor shall be required to submit all Shop Drawings by the following Milestone dates:

(1) For all X, by Y.

(2) for all Y, by Z.

- b. Contractor shall submit the number of copies required in the Specifications.
- c. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.

2. *Samples*

- a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

- 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals and in no event shall Engineer fail to review and provide comments or approval longer than 72 hours after Contractor submittal. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
- 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
- 5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.

6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. *Resubmittal Procedures for Shop Drawings and Samples*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval within 72 hours, or longer if agreed to by Owner in writing, of receipt of such drawings by Engineer. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. *Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs*

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 - d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.

- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
1. Observations by Engineer;
 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. Use or occupancy of the Work or any part thereof by Owner;
 5. Any review and approval of a Shop Drawing or Sample submittal;
 6. The issuance of a notice of acceptability by Engineer or other similar acceptance by Owner;
 7. The end of the correction period established in Paragraph 15.08;
 8. Any inspection, test, or approval by others; or
 9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the

assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

- F. Contractor shall assign to Owner all warranties extended to Contractor by material suppliers and subcontractors. If an assignment of warranty requires the material supplier or subcontractor to consent to same, then Contractor shall secure the material supplier's or subcontractor's consent to assign said warranties to Owner.
- G. The warranties provided in this Contract shall be in addition to and not in limitation of any other warranty or remedy required by law.

7.18 Indemnification

- A. ~~To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.~~

To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify, hold harmless, and defend Owner, and its supervisors, managers, attorneys, engineers, consultants, agents, subcontractors and employees, of each and any of all of the foregoing entities and individuals (together, "Indemnitees") from all claims, liabilities, damages, losses, fees, and costs (including, but not limited to, reasonable fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution fees and costs), whether monetary or otherwise, to the extent caused, in part or in whole, by the negligence, recklessness, or intentionally wrongful misconduct of the Contractor, or any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed or used by any of them to perform any of the Work.

To the extent required by Florida law to make the provisions of any indemnification, defense or hold harmless provision of this Contract enforceable (and otherwise this sentence does not apply), such indemnification, hold harmless and defense obligation shall be \$5,000,000.00 (or the amount of any applicable insurance coverage, if such amount is greater), the amount of which bears a reasonable commercial relationship to the Contract and was part of the project specifications or bid documents. In the event that any indemnification, defense or hold harmless provision of this Contract is determined to be unenforceable, the provision shall be reformed to give the provision the maximum effect allowed by Florida law and for the benefit of the Indemnitees. The Contractor shall ensure that any and all Subcontractors, and Suppliers, include this express paragraph for the benefit of the Indemnitees.

- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 Delegation of Professional Design Services

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.
- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

1.09 ARTICLE 8—OTHER WORK AT THE SITE

8.01 Other Work

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 Coordination

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;

2. An itemization of the specific matters to be covered by such authority and responsibility; and
 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 Legal Relationships

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, ~~or negligence,~~ recklessness, or intentional misconduct in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other

contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify, defend, and hold harmless Indemnitees Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, liabilities, suits, liens, demands, interest, expenses, penalties, fines, judgments, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution fees and costs) whether monetary or otherwise, arising out of or relating to such damage, delay, disruption, or interference.

1.10 ARTICLE 9—OWNER’S RESPONSIBILITIES

9.01 Communications to Contractor

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 Replacement of Engineer

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer’s status under the Contract Documents will be that of the former Engineer.

9.03 Furnish Data

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 Pay When Due

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 Lands and Easements; Reports, Tests, and Drawings

- A. Owner’s duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner’s duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner’s identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 Insurance

- A. Owner’s responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 Change Orders

- A. Owner’s responsibilities with respect to Change Orders are set forth in Article 11.

9.08 Inspections, Tests, and Approvals

- A. Owner’s responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 Limitations on Owner's Responsibilities

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 Undisclosed Hazardous Environmental Condition

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 Evidence of Financial Arrangements

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 Safety Programs

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

1.11 ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 Owner's Representative

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 Visits to Site

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and

programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 Resident Project Representative

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 Engineer's Authority

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.
- E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 Determinations for Unit Price Work

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 Limitations on Engineer's Authority and Responsibilities

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply

with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 Compliance with Safety Program

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

1.12 ARTICLE 11—CHANGES TO THE CONTRACT

11.01 Amending and Supplementing the Contract

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order or a Work Change Directive.

11.02 Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work

involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and

4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.

- B. ~~If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.~~

11.03 Work Change Directives

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.
- B. If Owner has issued a Work Change Directive and:
 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 Field Orders

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 Owner-Authorized Changes in the Work

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work including but not limited to for the purposes of achieving cost savings, and Owner reserves the right to delete portions of the Work and contract with third parties to provide any such deleted Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.

- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 Unauthorized Changes in the Work

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 - 1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 - 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 - 3. ~~Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).~~
- C. Contractor's Fee: The Contractor's fee allowed to Contractor for overhead and profit shall be included in the Cost of the Work and/or in the approved Schedule of Values and shall not be claimed after bid submittal. When applicable, the Contractor's fee for overhead and profit will be determined as follows:
 - 1. ~~A mutually acceptable fixed fee; or~~
 - 2. ~~If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:~~
 - a. ~~For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;~~
 - b. ~~For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;~~

- ~~c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;~~
- ~~d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;~~
- ~~e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and~~
- ~~f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.~~

11.08 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 Change Proposals

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. *Change Proposal Procedures*

1. ***Submittal:*** Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
2. ***Supporting Data:*** The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. ***Engineer's Initial Review:*** Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
 4. ***Engineer's Full Review and Action on the Change Proposal:*** Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 5. ***Binding Decision:*** Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals:*** If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion:*** Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 Notification to Surety

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

1.13 **ARTICLE 12—CLAIMS**

12.01 Claims

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 - 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and

decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

1.14 ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 Cost of the Work

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used ~~for two distinct purposes:~~
 1. ~~To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost plus fee, time and materials, or other cost based terms; or~~
 2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which

include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
5. Other costs consisting of the following:
 - a. ~~The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.~~
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 18) 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
 - c. *Construction Equipment Rental*
 - 19) 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.

20) 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions, or if none is specified, in a rate book mutually acceptable to both parties. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.

21) 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- ~~h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.~~
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. The cost of purchasing, renting, or furnishing small tools and hand tools.

3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
6. Expenses incurred in preparing and advancing Claims.
7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. Contractor's Fee

1. ~~When the Work as a whole is performed on the basis of cost-plus-a-fee, then:~~
 - a. ~~Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.~~
 - b. ~~for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:~~
 - 22) 1) ~~When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.~~
 - 23) 2) ~~When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.~~
2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. Documentation and Audit:** Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. All such documentation may be considered public records under Florida Law as set forth in the Contract Documents and shall be maintained in accordance with Florida Law. ~~Contractor shall preserve all such documents for a period of three years after the final payment by Owner.~~ Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement and/or the Contract Documents.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

1.15 ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Access to Work

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 Tests, Inspections, and Approvals

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;

2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
3. by manufacturers of equipment furnished under the Contract Documents;
4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 Acceptance of Defective Work

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 Uncovering Work

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 Owner May Stop the Work

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this

right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

1.16 ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. ~~If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and~~

~~equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner. Progress payments are to be made only on installed material, and no payments shall be made on stored material, whether on or off site, unless prior written arrangements are made with Owner.~~

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. Payment Becomes Due

1. ~~Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor. Owner shall make payment to the Contractor in the amount recommended by Engineer (subject to the provisions of this Contract) in accordance with the prompt payment provisions contained in Sections 218.70 et seq., Florida Statutes. Contractor shall make payments due to subcontractors and suppliers within ten (10) days in accordance with the prompt payment provisions contained in Section 218.735(6), 218.735(7), and 218.74, Florida Statutes.~~

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 Contractor's Warranty of Title

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.

- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.
- G. To the extent this paragraph 15.03 is inconsistent in any way with Florida's Local Government Prompt Payment Act, sections 218.70 et seq., Florida Statutes, such Act shall control, and this Contract shall be construed to allow for the maximum amount of time allowable under the Act in order to review any punch lists and make payment.

15.04 Partial Use or Occupancy

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
 - 2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 Final Inspection

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 Final Payment

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
 2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is

acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.

- D. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work. Without intending to limit any other requirements set forth herein for final payment, the Work shall not be deemed complete until the Engineer has certified that, among any other requirements herein, the Contractor has completed all of the Work; there is satisfactory operation of all equipment, by means of acceptance tests; all punch list items has been corrected to the satisfaction of Owner and Engineer; the Contractor has provided all evidence of all releases of all mechanics', materialmen's and like liens; all warranties, equipment operation and maintenance manuals, As-Built Drawings and other required documents have been delivered; all other required approvals and acceptances by city, county and state governments, or other authority having jurisdiction have been provided; all rubbish, tools, and surplus materials and equipment from the Project Site have been removed; and a final affidavit and release of claims has been provided.
- E. *Final Payment Becomes Due*: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 Waiver of Claims

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment. Final payment shall not be construed to mean acceptance of defective work or improper materials.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 Correction Period

- A. If within ~~one year~~ two years after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
1. correct the defective repairs to the Site or such adjacent areas;
 2. correct such defective Work;

3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
 - C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
 - D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
 - E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
 - F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

1.17 ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 Owner May Suspend Work

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.
- B. When all or a portion of the Work is suspended for any reason, Contractor shall securely fasten down all coverings and other protections necessary to protect the Work and the Site from injury by the elements or otherwise.

16.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a any material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.

- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 Owner May Terminate for Convenience

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Owner will pay to Contractor all amounts due and not previously paid to Contractor for Work completed in accordance with the Contract prior to such notice, as well as the cost of reasonably protecting Work in place, and for Work thereafter completed as specified in such notice, as well as release and payment to Contractor of all retainage held by Owner related to the portion of the Work completed. No payments will be made for any potential costs of settling or paying claims arising out of termination of the Work under subcontracts, equipment leases, orders or other related arrangements. In such case, Contractor shall be paid for (without duplication of any items):
- ~~1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;~~
 - ~~2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and~~
 - ~~3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.~~
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, consequential damages of any kind, or other economic loss arising out of or resulting from such termination.
- C. Upon any such termination, Contractor shall:
1. Immediately discontinue Work on the date and to the extent specified in the notice except to the extent necessary to protect Work in place;
 2. Place no further orders for materials, services, or facilities, other than as may be necessary or required for completion of such portion of Work under the Contract that is not terminated;
 3. Promptly make every reasonable effort to obtain cancellation upon terms reasonably satisfactory to Owner of all purchase orders and Subcontracts to the extent they relate to the performance of Work terminated or assign to Owner those orders and Subcontracts and revoke agreements specified in such notice;
 4. Reasonably assist Owner, as specifically requested in writing, in the maintenance, protection and disposition of property acquired by Owner under the Contract, as may be necessary;
 5. Complete performance of any Work which is not terminated; and

6. Deliver to Owner an affidavit regarding the identity of unpaid potential lienors and the amounts due to each.

16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the eContract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

1.18 **ARTICLE 17—FINAL RESOLUTION OF DISPUTES**

17.01 Methods and Procedures

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.
- C. In the event Owner or Contractor is required to enforce this Contract by court proceedings, alternative dispute resolution, appellate proceedings or otherwise, then venue for any such legal action shall be in [County] County, Florida, and the prevailing party shall be entitled to recover from the other party all fees and costs, including reasonable attorney's fees and costs,

paralegal fees, and expert witness fees, incurred in bringing or defending such action and/or enforcing any judgment granted in such action.

1.19 ARTICLE 18—MISCELLANEOUS

18.01 Giving Notice

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 Computation of Times

- A. When any period of time is referred to in the Contract by days, it will be computed ~~to~~ based on calendar days and shall exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 Cumulative Remedies

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 Limitation of Damages

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, supervisors, staff, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 No Waiver

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 Survival of Obligations

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 Controlling Law

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 Headings

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

18.11 Sovereign Immunity

- A. Contractor and Owner agree that nothing in this Contract shall be deemed as a waiver of the Owner's sovereign immunity or the Owner's limits of liability as set forth in Section 768.28, Florida Statutes, or other statute or law, and nothing in this Contract shall inure to the benefit of any third party for the purpose of allowing any claim which would otherwise be barred under such limitations of liability or by operation of law.

18.12 No Third-Party Beneficiaries

Except with respect to Contractor's indemnification of the Indemnitees as set forth herein, and except as otherwise specifically provided herein, this Contract is solely for the benefit of Owner and Contractor and no right or cause of action shall accrue upon or by reason, to or for the benefit of any third party not a formal party to this Contract (specifically including but not limited to any design professionals, subcontractors, or material suppliers directly engaged by Contractor). Nothing in this Contract expressed or implied is intended or shall be construed to confer upon any person or corporation other than Owner and Contractor any right, remedy, or claim under or by reason of this Contract or any of the provisions or conditions of this Contract; and all of the provisions, representations, covenants, and conditions contained in this Contract shall inure to the sole benefit of and shall be binding upon Owner and Contractor and their respective representatives, successors, and assigns.

7.01A. 4. SUPPLEMENTARY CONDITIONS

SUPPLEMENTARY CONDITIONS

VILLAMAR CDD – THOMPSON NURSERY ROAD EXTENSION, PHASES 1 & 2 PROJECT

The following supplements establish information supplementary to the *Standard General Conditions of the Construction Contract*, EJCDC Document No. C-700, 2018 Edition (the “**General Conditions**”), including establishing insurance limits and other requirements pursuant to Article 6, and identifying certain reports relating to subsurface conditions and hazardous conditions at the site pursuant to Article 5.

Other changes have been marked directly in underlined and strike-through text on the Standard Form of Agreement and the General Conditions. The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

SC-5.03 SUBSURFACE AND PHYSICAL CONDITIONS

1. *Reports.* Pursuant to Paragraph 5.03.A.1. of the General Conditions, the following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner and were used by Engineer in the preparation of the Contract Drawings and Specifications:

i. Preliminary Roadway Report, Thompson Nursery Road Extension, Phase 1, Polk County, Florida, dated December 12, 2008

ii. 60% Roadway Soil Survey Report, Thompson Road Extension Phase 1, Project No. P-06-603B, Polk County Florida, dated October 28, 2009

iii. 90% Report of Subsurface Exploration and Geotechnical Engineering Evaluation, Thompson Nursery Road Extension Over CSX Railroad, County Project No. 5400037, Polk County, Florida, dated September 28, 2009

2. *Drawings.* Pursuant to Paragraph 5.03.A.2. of the General Conditions, the following drawings of physical conditions relating to existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities) are known to Owner and were used by Engineer in the preparation of the Contract Drawings and Specifications:

No reports or drawings related to physical conditions and subsurface structures at the Site are known to the Owner.

3. *Technical Data.* Pursuant to Paragraph 5.03.A.3. of the General Conditions, the following Technical Data is contained in the reports and drawings of subsurface and physical conditions:

No reports or drawings related to physical conditions and subsurface structures at the Site are known to the Owner.

SC-5.06 HAZARDOUS ENVIRONMENTAL CONDITIONS AT SITE

1. *Reports.* Pursuant to Paragraph 5.06.A.1. of the General Conditions, the following reports of Hazardous Environmental Conditions at or adjacent to the Site are known to Owner:

No reports or drawings related to physical conditions and subsurface structures at the Site are known to the Owner.

2. *Drawings.* Pursuant to Paragraph 5.06.A.2. of the General Conditions, the following drawings of Hazardous Environmental Conditions at or adjacent to the Site are known to Owner:

No reports or drawings related to physical conditions and subsurface structures at the Site are known to the Owner.

3. *Technical Data.* Pursuant to Paragraph 5.06.A.3. of the General Conditions, the following Technical Data is contained in the reports and drawings of Hazardous Environmental Conditions:

No reports or drawings related to physical conditions and subsurface structures at the Site are known to the Owner.

SC-6.01 PERFORMANCE, PAYMENT, AND OTHER BONDS

Contractor must provide the required Payment and Performance Bonds as required in the General Conditions. Pursuant to Paragraph 6.01.B. of the General Conditions, the following additional bonds are required:

N/A

SC-6.03 CONTRACTOR'S INSURANCE

Pursuant to Paragraph 6.03.A. of the General Conditions, the limits of Contractor's required insurance shall be as follows.

1. Contractor shall provide coverage for not less than the following amounts, or greater where required by Laws and Regulations:

Workers' Compensation and Employer's Liability

Workers' Compensation	Statutory
Employer's Liability	
Each Accident	\$1,000,000
Each Employee	\$1,000,000
Policy Limit	\$1,000,000

b. Commercial General Liability

General Aggregate	\$3,000,000
Products - Completed Operations Aggregate	\$3,000,000

Personal and Advertising Injury	\$3,000,000
Bodily Injury and Property Damage*—Each Occurrence	\$3,000,000

**Property Damage liability shall provide explosion, collapse, and under-ground coverages where applicable.*

c. Automobile Liability*

Bodily Injury	
Each Person	\$1,000,000
Each Accident	\$1,000,000
Property Damage	
Each Accident	\$1,000,000
[OR]	
Combined Single Limit (Bodily Injury and Property Damage)	\$2,000,000

**Automobile liability insurance shall include coverage for all owned, non-owned, and hired vehicles*

d. Excess or Umbrella Liability*

Per Occurrence	\$3,000,000
General Aggregate	\$3,000,000

e. Contractor's Pollution Liability*

Each Occurrence/Claim	\$1,000,000
General Aggregate	\$2,000,000

**Pollution liability shall cover third-party injury and property damage claims, including clean-up costs.*

f. Builder's Risk

- i. Amount** – upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof)
- ii. Form** – must be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available

under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.

- iii. *Scope* – cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures;

cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier);

extend to cover damage or loss to insured property while in transit;

allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance;

allow for the waiver of the insurer's subrogation rights, as set forth below;

provide primary coverage for all losses and damages caused by the perils or causes of loss covered;

not include a co-insurance clause;

include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions;

include performance/hot testing and start-up; and

be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.

2. All insurance policies required to be purchased and maintained will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days after notice has been received by the purchasing policyholder. Within three days of

receipt of any such notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

3. Automobile liability insurance provided by Contractor will be written on an occurrence basis and provide coverage against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle.

4. Contractor's commercial general liability policy will be written on a 1996 or later ISO commercial general liability occurrence form and include the following coverages and endorsements:

- a. Products and completed operations coverage maintained for three (3) years after final payment;
- b. Blanket contractual liability coverage to the extent permitted by law;
- c. Broad form property damage coverage; and
- d. Severability of interest; underground, explosion, and collapse coverage; personal injury coverage.

5. The Contractor's commercial general liability and automobile liability, umbrella or excess, pollution liability and builder's risk policies will include and list Owner, Engineer, Highland Sumner, LLC VMar Dev, LLC, and the respective supervisors, subsidiaries, affiliates, professional staff, officers, directors, members, partners, employees, agents, consultants, and subcontractors of each as additional insureds; and the insurance afforded to these additional insureds will provide primary coverage for all claims covered thereby (including, as applicable, those arising from both ongoing and completed operations) on a non-contributory basis.

6. Additional insured endorsements will include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.

7. Contractor shall provide ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent for design professional additional insureds.

8. Umbrella or excess liability insurance will be written over the underlying employer's liability, commercial general liability, and automobile liability insurance. The coverage afforded must be at least as broad as that of each and every one of the underlying policies. Contractor may meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy.

9. The Contractor shall provide property insurance covering physical loss or damage during construction to structures, materials, fixtures, and equipment, including those materials, fixtures, or equipment in storage or transit.

10. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 15. Alternatively, the Owner has the right but not the obligation to secure such required insurance in which event Contractor shall pay the cost for that required insurance and shall

furnish, upon demand, all information that may be required in connection with the Owner's obtaining the required insurance.

SC-8.02 COORDINATION

Pursuant to Paragraph 8.02 of the General Conditions, if Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following information pertains to such other work:

1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors:

Construction Manager, designated by the District.

2. An itemization of the specific matters to be covered by such authority and responsibility:

Refer to the General Conditions.

3. The extent of such authority and responsibilities:

Refer to the General Conditions.

SC-10.03 RESIDENT PROJECT REPRESENTATIVE

Pursuant to Paragraph 10.03.A. of the General Conditions, if Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, that representative and its authorities and responsibilities are identified below.

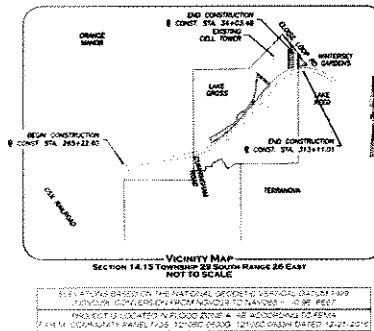
N/A

Pursuant to Paragraph 10.03.B. of the General Conditions, if Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, that representative and its responsibilities and authorities are identified below.

Warren K. Heath II and his designees; see General Conditions for scope of responsibilities and authorities outlined for Construction Manager.

7.01A. 7. DRAWINGS LISTED ON SHEET INDEX

PROJECT LOCATION
 THOMPSON NURSERY ROAD PHASES 1 & 2
 WINTER HAVEN, POLK COUNTY, FLORIDA
 SEC. 14, 15 TWP. 28S R0E 20E



ENGINEER
ABSOLUTE ENGINEERING, INC.
1000 N. ASHLEY DRIVE, SUITE 925
TAMPA, FLORIDA 33602
PH: (813) 221-1516
FAX: (813) 344-0100

SHT. NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL CONSTRUCTION NOTES
3	TYPICAL ROADWAY SECTIONS AND DETAILS
4	AERIAL SITE PLAN
5	EXISTING SITE CONDITIONS
6	OVERALL MASTER DRAINAGE PLAN
7-9	GRADING AND DRAINAGE PLAN
10, 11	CROSS SECTIONS
12	GEOTECHNICAL DATA AND DETAILS
13	CONTROL STRUCTURE DETAILS
14	EROSION CONTROL AND GEOWED DETAILS
15, 16	DRAINAGE DETAILS
17-22	ROADWAY PLAN AND PROFILES
23-28	SIGNING AND PAVEMENT MARKING PLAN
29	OVERALL DRAINAGE AREA MAP
30-32	DRAINAGE AREA MAP
33	CONSTRUCTION SURFACE WATER MANAGEMENT PLAN
LA 1	PERMIT LANDSCAPE PLANS
IR 1	PERMIT IRRIGATION PLANS

[illegible]

POLK COUNTY LAND DEVELOPMENT DIVISION STANDARD NOTES

1. Rights, signs and easement markings shall be installed prior to starting a phase of construction.
2. All construction shall conform to the requirements of Appendix A of the Polk County Land Development Code and the Polk County Ordinance No. 10-2000.
3. Changes from plans or specifications substantially affecting performance or appearance of systems must be submitted in a written request to the Engineer of Record and signed written approval by the County Engineer prior to the implementation of such changes. Where changes are approved by the Polk County Land Development Code, the Polk County Ordinance No. 10-2000, and the Polk County Engineer, the Engineer of Record shall submit the appropriate application and fees for a new review of the plans of the proposed system to the County Engineer.
4. The Contractor shall notify the Polk County Engineer (PCE) 30 days prior to the start of construction and prior to the start of any major construction activity, including the pouring of concrete.
5. To schedule the required time for construction, the Engineer of Record shall submit a written request to the Polk County Land Development Division, Office of the County Engineer, 30 days prior to the start of construction.
6. All construction shall conform to the requirements of Appendix A of the Polk County Land Development Code, the Polk County Ordinance No. 10-2000, and the Polk County Engineer. The Engineer of Record shall submit the appropriate application and fees for a new review of the plans of the proposed system to the County Engineer.
7. All construction shall conform to the requirements of Appendix A of the Polk County Land Development Code, the Polk County Ordinance No. 10-2000, and the Polk County Engineer. The Engineer of Record shall submit the appropriate application and fees for a new review of the plans of the proposed system to the County Engineer.
8. The Engineer of Record shall submit the appropriate application and fees for a new review of the plans of the proposed system to the County Engineer.
9. The Engineer of Record shall submit the appropriate application and fees for a new review of the plans of the proposed system to the County Engineer.
10. The Engineer of Record shall submit the appropriate application and fees for a new review of the plans of the proposed system to the County Engineer.

PRELIMINARY CONSTRUCTION NOTES TYPICAL ROADWAY SECTION

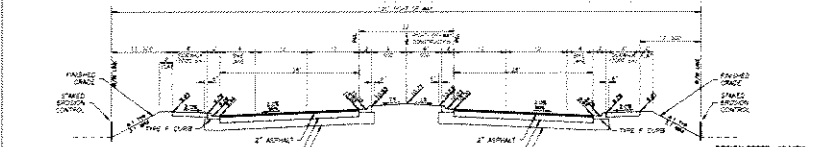
1. Existing existing surface shall be suitable concrete of 1000 psi and 1000 psi and shall meet current Florida Department of Transportation specifications.
2. All curbs and gutters shall be placed in a minimum of 12" depth. Subgrade shall be a minimum of 1000 psi and 1000 psi and shall meet current Florida Department of Transportation specifications.
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10. All curbs and gutters shall be placed in a minimum of 12" depth. Subgrade shall be a minimum of 1000 psi and 1000 psi and shall meet current Florida Department of Transportation specifications.

BASE MATERIAL - CRUSHED CONCRETE

1. Crushed concrete base shall be placed in a minimum of 12" depth. Subgrade shall be a minimum of 1000 psi and 1000 psi and shall meet current Florida Department of Transportation specifications.
2. Crushed concrete base shall be placed in a minimum of 12" depth. Subgrade shall be a minimum of 1000 psi and 1000 psi and shall meet current Florida Department of Transportation specifications.
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10. Crushed concrete base shall be placed in a minimum of 12" depth. Subgrade shall be a minimum of 1000 psi and 1000 psi and shall meet current Florida Department of Transportation specifications.

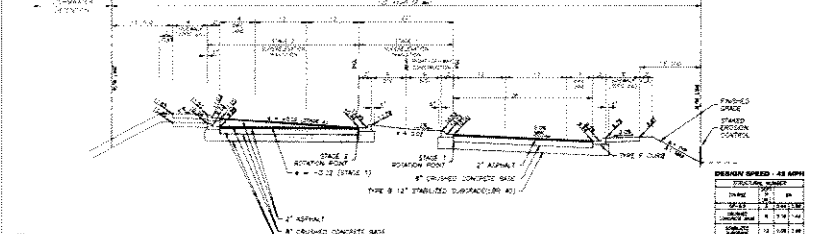
ALTERNATE BASE MATERIAL - SOIL CEMENT

1. Soil cement base shall be placed in a minimum of 12" depth. Subgrade shall be a minimum of 1000 psi and 1000 psi and shall meet current Florida Department of Transportation specifications.
2. Soil cement base shall be placed in a minimum of 12" depth. Subgrade shall be a minimum of 1000 psi and 1000 psi and shall meet current Florida Department of Transportation specifications.
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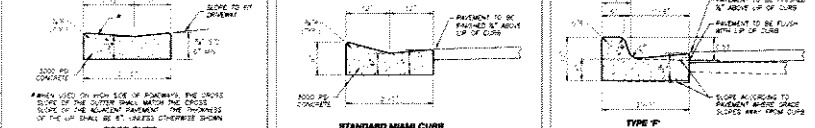
THOMPSON NURSERY ROAD TYPICAL SECTION
URBAN COLLECTION, 4 LANE - DIVIDED
STA. 300+00 TO STA. 303+00.00

DESIGN SPEED - 40 MPH
SECTION NOTES
1. ALL DIMENSIONS SHOWN ARE MINIMUM
2. ALL DIMENSIONS SHOWN ARE MINIMUM
3. SUPERSTRACTION NOTES SHOWN ABOUT THE TRUCK LANE LINE (TLL)



THOMPSON NURSERY ROAD TYPICAL SECTION
URBAN COLLECTION, 4 LANE - DIVIDED
STA. 303+00.00 TO STA. 310+00.00

DESIGN SPEED - 40 MPH
SECTION NOTES
1. ALL DIMENSIONS SHOWN ARE MINIMUM
2. ALL DIMENSIONS SHOWN ARE MINIMUM
3. SUPERSTRACTION NOTES SHOWN ABOUT THE TRUCK LANE LINE (TLL)



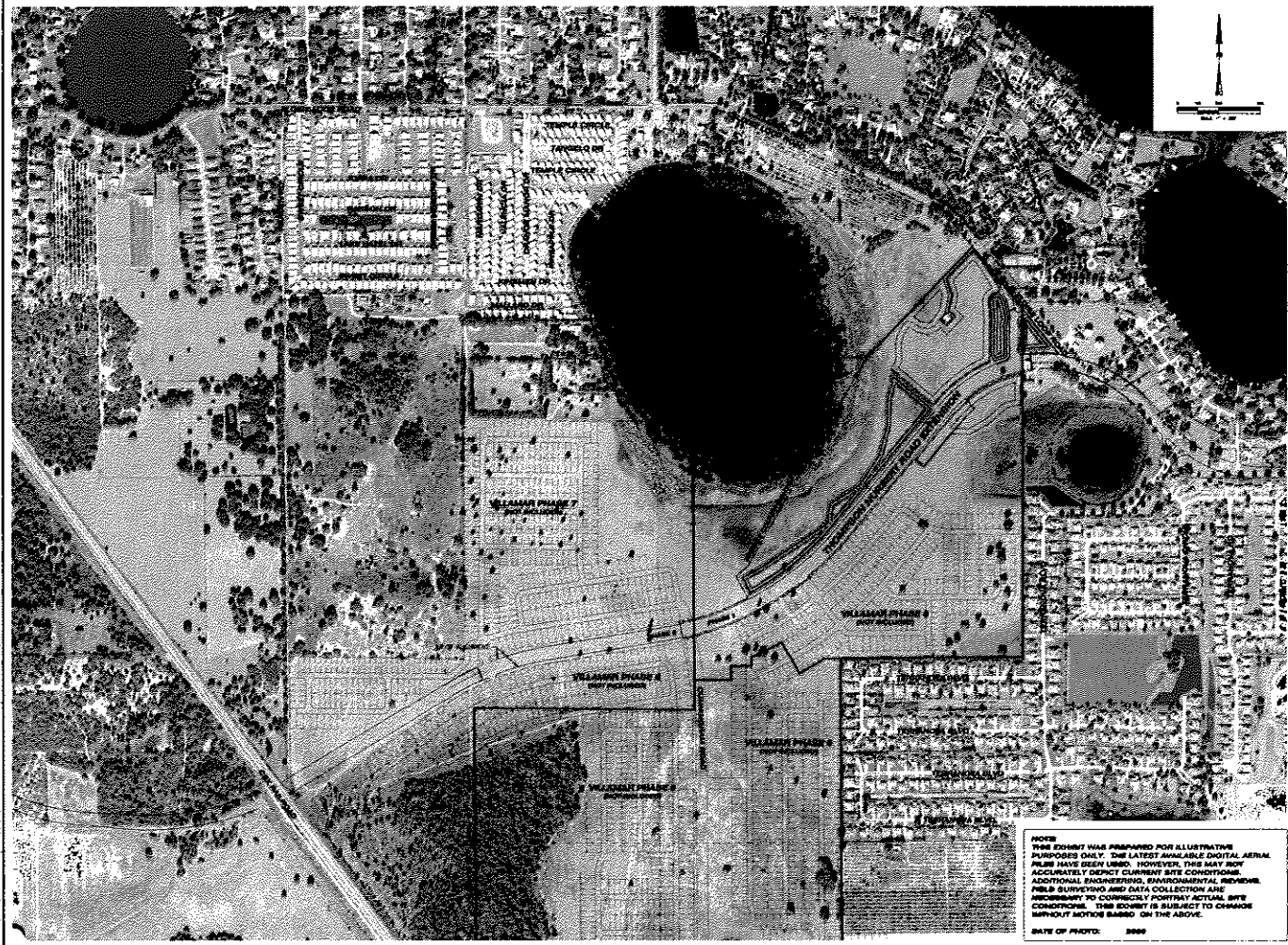
STANDARD MAH CURB
URBAN COLLECTION, 4 LANE - DIVIDED
STA. 300+00 TO STA. 303+00.00

DESIGN SPEED - 40 MPH
SECTION NOTES
1. ALL DIMENSIONS SHOWN ARE MINIMUM
2. ALL DIMENSIONS SHOWN ARE MINIMUM
3. SUPERSTRACTION NOTES SHOWN ABOUT THE TRUCK LANE LINE (TLL)



TYPE 'F' CURB AND GUTTER
URBAN COLLECTION, 4 LANE - DIVIDED
STA. 303+00.00 TO STA. 310+00.00

DESIGN SPEED - 40 MPH
SECTION NOTES
1. ALL DIMENSIONS SHOWN ARE MINIMUM
2. ALL DIMENSIONS SHOWN ARE MINIMUM
3. SUPERSTRACTION NOTES SHOWN ABOUT THE TRUCK LANE LINE (TLL)



NOTE: THIS EXHIBIT WAS PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. THE LATEST AVAILABLE DIGITAL AERIAL FILMS HAVE BEEN USED. HOWEVER, THIS MAY NOT ACCURATELY DEPICT CURRENT SITE CONDITIONS. ADDITIONAL ENGINEERING, ENVIRONMENTAL, GEOTECHNICAL, AND SURVEYING DATA COLLECTION ARE NECESSARY TO CORRECTLY PORTRAY ACTUAL SITE CONDITIONS. THIS EXHIBIT IS SUBJECT TO CHANGE WITHOUT NOTICE BASED ON THE ABOVE.

DATE OF PHOTO: 2000

ABSOLUTE ENGINEERING, INC.

10000 W. US HWY 1, SUITE 100
FORT MYERS, FL 33907
(813) 938-1100

AERIAL SITE PLAN

**THOMPSON NURSERY ROAD EXTENSION
PHASES 1 & 2**

WINTER HAVEN, POLK COUNTY, FLORIDA

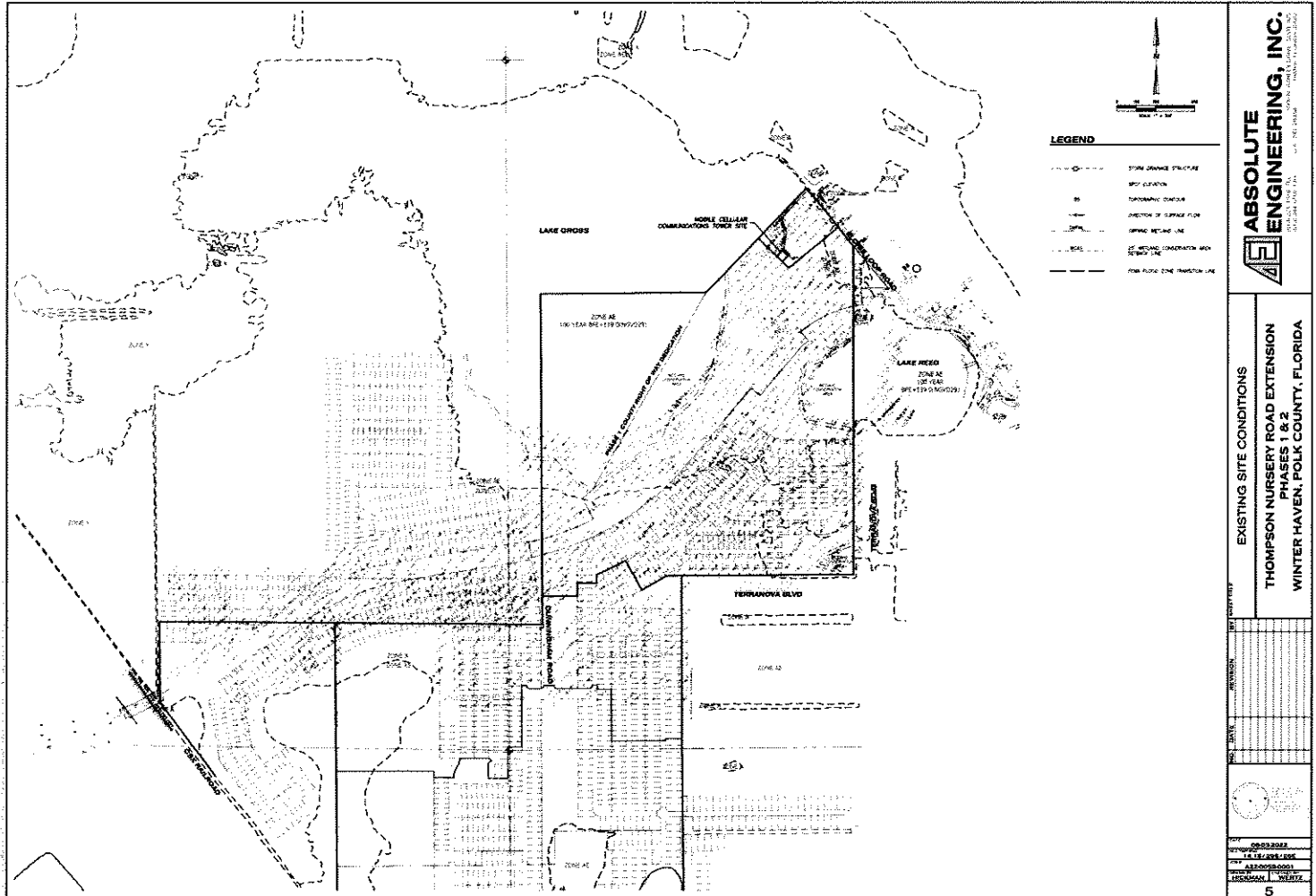
DATE: 02/28/2002

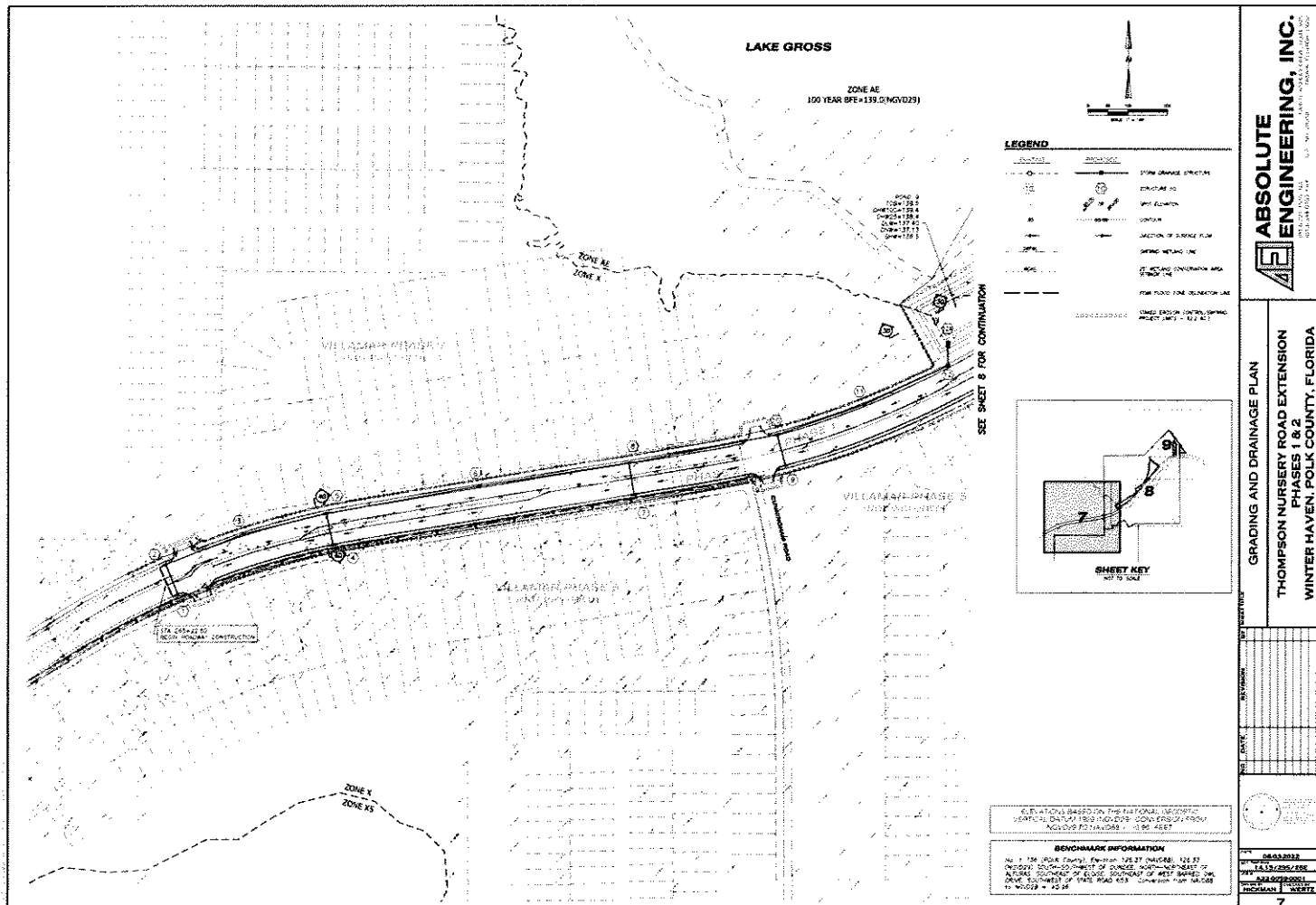
BY: J. V. [Signature]

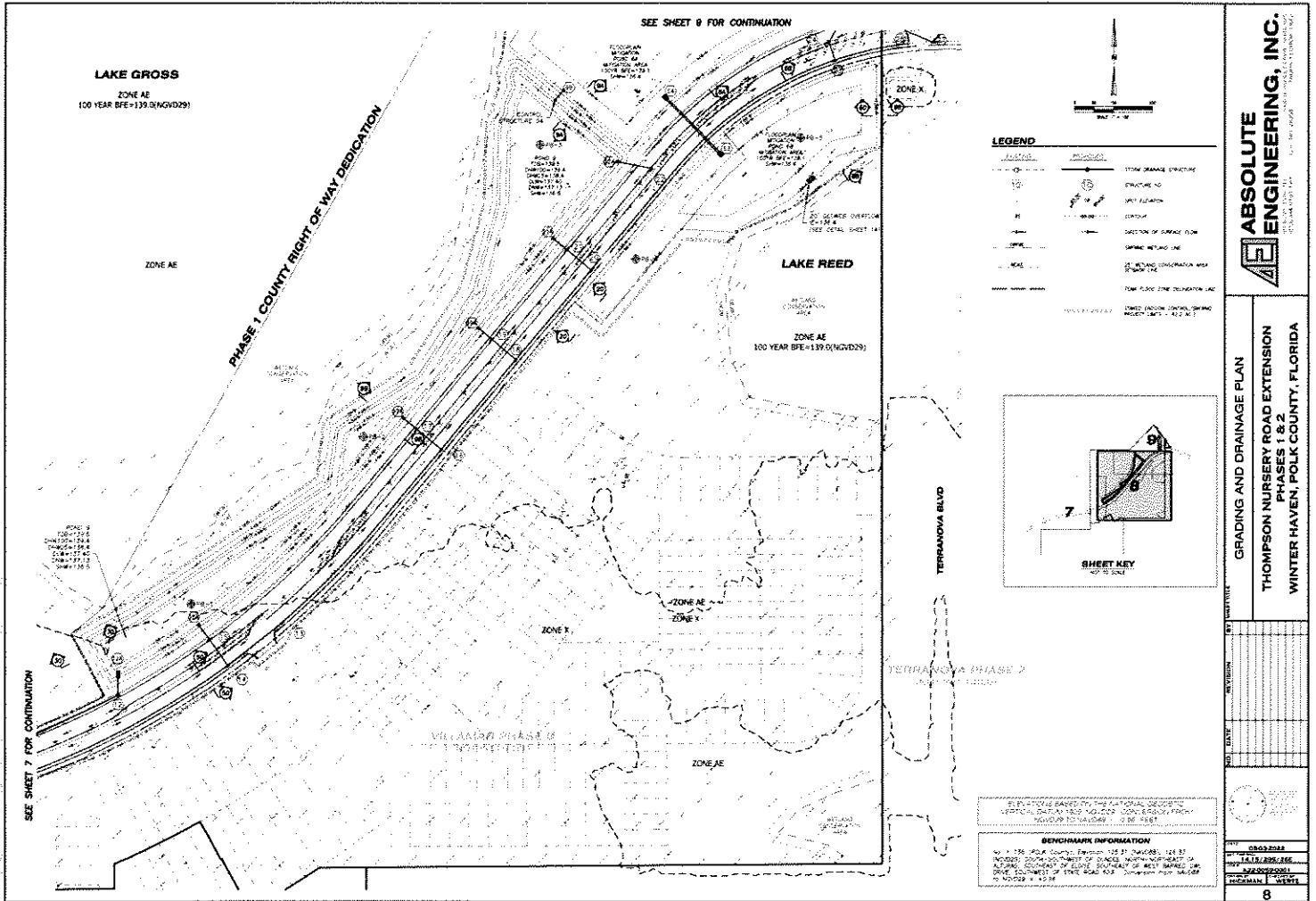
FOR: [Signature]

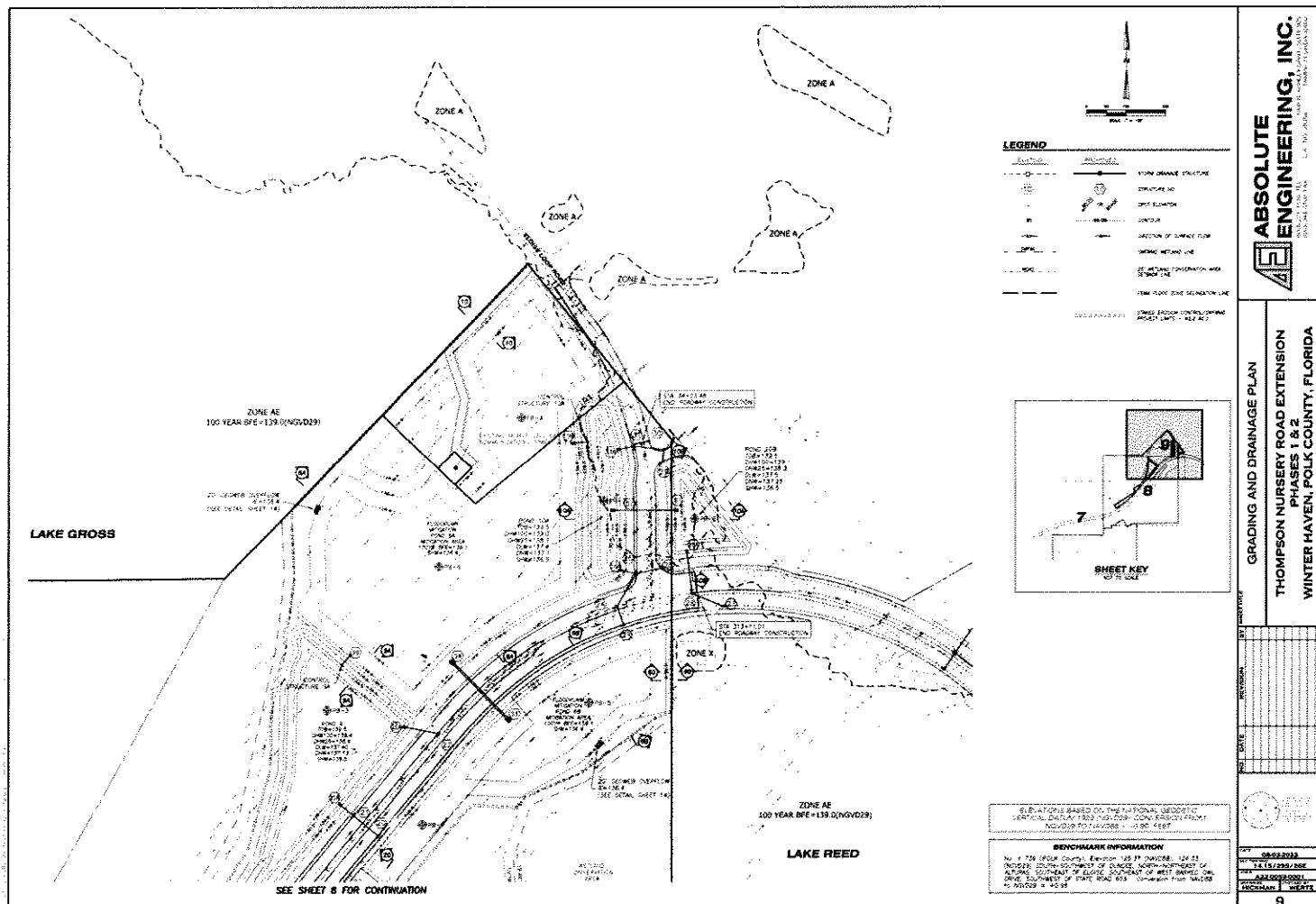
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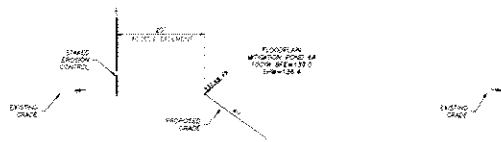
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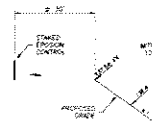








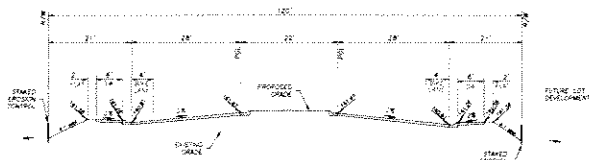
SECTION 10-10



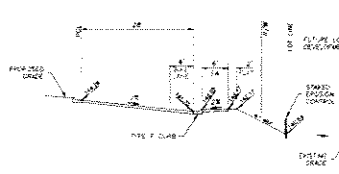
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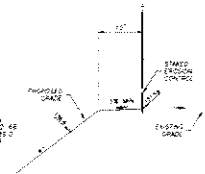
SECTION 30-30



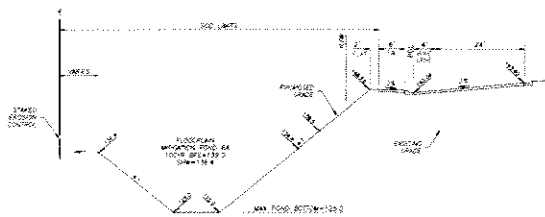
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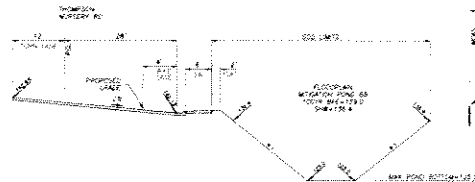
SECTION 50-50



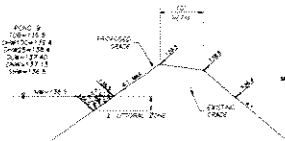
SECTION 60-60



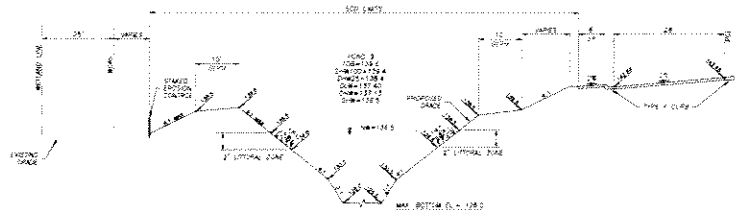
SECTION 6A-6A



SECTION 6B-6B



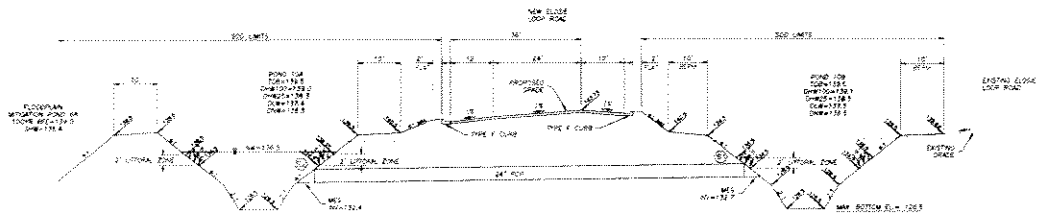
SECTION 6A-8A



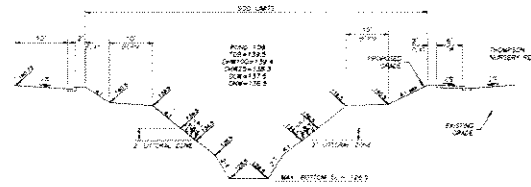
SECTION 6B-8B

NOTES:
1. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
2. ALL DIMENSIONS ARE IN FEET AND INCHES.
3. ALL DISTANCES ARE IN FEET.
4. ALL ANGLES ARE IN DEGREES.
5. ALL SURFACES ARE TO BE FINISHED TO THE PROPOSED GRADE.
6. ALL UTILITIES ARE TO BE DEEPER THAN THE PROPOSED GRADE.
7. ALL UTILITIES ARE TO BE PROTECTED BY A MINIMUM OF 18 INCHES OF COVER.
8. ALL UTILITIES ARE TO BE MARKED WITH RED FLAGGING.
9. ALL UTILITIES ARE TO BE MAINTAINED AT ALL TIMES.
10. ALL UTILITIES ARE TO BE REPAIRED IMMEDIATELY.
11. ALL UTILITIES ARE TO BE REPLACED IF DAMAGED.
12. ALL UTILITIES ARE TO BE REMOVED IF NOT NEEDED.
13. ALL UTILITIES ARE TO BE INSTALLED TO THE PROPOSED GRADE.
14. ALL UTILITIES ARE TO BE INSTALLED TO THE PROPOSED GRADE.
15. ALL UTILITIES ARE TO BE INSTALLED TO THE PROPOSED GRADE.

NO.	REVISION	DATE	BY	CHKD.	APP'D.
1	ISSUED FOR PERMIT	08/02/2012	TAJ	TAJ	TAJ
2	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ
3	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ
4	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ
5	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ
6	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ
7	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ
8	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ
9	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ
10	REVISED FOR COMMENTS	08/03/2012	TAJ	TAJ	TAJ



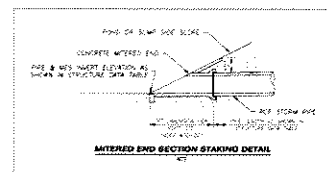
SECTION 10A-10A



SECTION 10B-10B

STORM STRUCTURE DATA										STRUCTURE LOCATION & REMARKS
NO.	STRUCTURE	TYPE & SIZE	TOP ELEV.	TYPE	DIAM. INCHES	LENGTH FEET	DEPTH FEET	INVERT ELEV. LOWER END	INVERT ELEV. UPPER END	
1	CURB INLET #1-1	18" x 18" x 18"	142.40	BCP	18	82	5.15	137.25	137.08	5.12
2	CURB INLET #1-2	18" x 18" x 18"	142.50	BCP	30	4.4	0.09	138.18	138.01	2.82
3	PIPE MANHOLE	36" DIA.	141.88	BCP	36	2.4	0.07	139.87	139.83	0.04
4										
5										
6	CURB INLET #1-3	18" x 18" x 18"	141.25	BCP	18	87	5.15	136.10	135.92	5.19
7	CURB INLET #1-4	18" x 18" x 18"	141.25	BCP	30	34	0.08	133.89	133.78	0.11
8	PIPE MANHOLE	36" DIA.	141.85	BCP	36	385	0.06	131.05	131.00	0.04
9										
10										
11	CURB INLET #1-5	18" x 18" x 18"	140.74	BCP	18	87	5.12	133.53	133.35	5.18
12	CURB INLET #1-6	18" x 18" x 18"	140.74	BCP	30	37	0.12	133.02	132.90	0.12
13										
14	CURB INLET #1-7	18" x 18" x 18"	141.80	BCP	18	87	5.15	135.59	135.41	5.18
15	CURB INLET #1-8	18" x 18" x 18"	141.80	BCP	30	37	0.15	135.18	135.06	0.12
16	CURB INLET #1-9	18" x 18" x 18"	142.47	BCP	30	334	0.27	132.84	132.57	0.27
17	PIPE MANHOLE	36" DIA.	142.31	BCP	36	88	0.02	134.12	134.10	0.02
18										
19	CONCRETE COLLECTION TANK		138.82	BCP	24	37	0.02	133.82	133.82	0.00
20	PIPE MANHOLE	36" DIA.	138.80	BCP	36	37	0.02	133.80	133.80	0.00
21										
22	CURB INLET #1-10	18" x 18" x 18"	140.75	BCP	18	113	5.12	133.53	133.35	5.18
23	CURB INLET #1-11	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
24										
25	CURB INLET #1-12	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
26	CURB INLET #1-13	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
27	PIPE MANHOLE	36" DIA.	140.75	BCP	36	102	0.02	134.27	134.25	0.02
28										
29	CURB INLET #1-14	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
30	CURB INLET #1-15	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
31	PIPE MANHOLE	36" DIA.	140.75	BCP	36	146	0.02	133.72	133.70	0.02
32										
33	DOUBLE MANHOLE	36" DIA.	140.75	BCP	36	140	0.18	133.80	133.62	0.18
34										

STORM STRUCTURE DATA										STRUCTURE LOCATION & REMARKS
NO.	STRUCTURE	TYPE & SIZE	TOP ELEV.	TYPE	DIAM. INCHES	LENGTH FEET	DEPTH FEET	INVERT ELEV. LOWER END	INVERT ELEV. UPPER END	
14	CURB INLET #1-16	18" x 18" x 18"	142.34	BCP	18	87	5.15	137.13	137.07	5.12
15	CURB INLET #1-17	18" x 18" x 18"	142.34	BCP	30	41	0.04	134.12	134.00	0.12
16	PIPE MANHOLE	36" DIA.	141.84	BCP	36	87	0.04	134.27	134.24	0.03
17	CURB INLET #1-18	18" x 18" x 18"	141.84	BCP	18	87	0.04	134.12	134.00	0.12
18	CURB INLET #1-19	18" x 18" x 18"	141.84	BCP	30	37	0.04	134.12	134.00	0.12
19										
20	CURB INLET #1-20	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
21	CURB INLET #1-21	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
22										
23	CURB INLET #1-22	18" x 18" x 18"	142.32	BCP	18	87	5.12	137.08	136.95	5.15
24	CURB INLET #1-23	18" x 18" x 18"	142.32	BCP	30	37	0.04	134.88	134.75	0.13
25										
26	CURB INLET #1-24	18" x 18" x 18"	140.75	BCP	18	87	5.15	134.44	134.34	0.10
27	CURB INLET #1-25	18" x 18" x 18"	140.75	BCP	30	37	0.04	134.27	134.20	0.07
28										
29	CURB INLET #1-26	18" x 18" x 18"	140.75	BCP	18	88	5.15	134.08	133.96	0.12
30	CURB INLET #1-27	18" x 18" x 18"	140.75	BCP	30	102	0.02	134.27	134.20	0.07
31										
32	CURB INLET #1-28	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
33	CURB INLET #1-29	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
34										
35	CURB INLET #1-30	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
36	CURB INLET #1-31	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
37										
38	CURB INLET #1-32	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
39	CURB INLET #1-33	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
40										
41	CURB INLET #1-34	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
42	CURB INLET #1-35	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
43										
44	CURB INLET #1-36	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
45	CURB INLET #1-37	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
46										
47	CURB INLET #1-38	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
48	CURB INLET #1-39	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
49										
50	CURB INLET #1-40	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
51	CURB INLET #1-41	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
52										
53	CURB INLET #1-42	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
54	CURB INLET #1-43	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
55										
56	CURB INLET #1-44	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
57	CURB INLET #1-45	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
58										
59	CURB INLET #1-46	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
60	CURB INLET #1-47	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
61										
62	CURB INLET #1-48	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
63	CURB INLET #1-49	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
64										
65	CURB INLET #1-50	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
66	CURB INLET #1-51	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
67										
68	CURB INLET #1-52	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
69	CURB INLET #1-53	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
70										
71	CURB INLET #1-54	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
72	CURB INLET #1-55	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
73										
74	CURB INLET #1-56	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
75	CURB INLET #1-57	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
76										
77	CURB INLET #1-58	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
78	CURB INLET #1-59	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
79										
80	CURB INLET #1-60	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
81	CURB INLET #1-61	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
82										
83	CURB INLET #1-62	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
84	CURB INLET #1-63	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
85										
86	CURB INLET #1-64	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
87	CURB INLET #1-65	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
88										
89	CURB INLET #1-66	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
90	CURB INLET #1-67	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
91										
92	CURB INLET #1-68	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
93	CURB INLET #1-69	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
94										
95	CURB INLET #1-70	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
96	CURB INLET #1-71	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
97										
98	CURB INLET #1-72	18" x 18" x 18"	140.75	BCP	18	87	5.12	133.53	133.35	5.18
99	CURB INLET #1-73	18" x 18" x 18"	140.75	BCP	30	37	0.12	133.02	132.90	0.12
100										

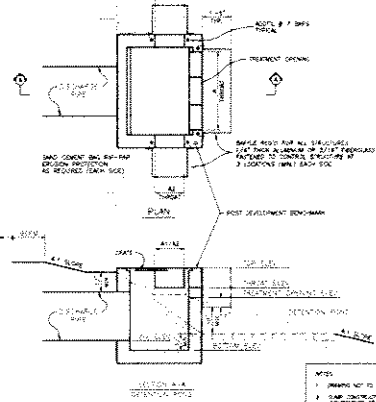
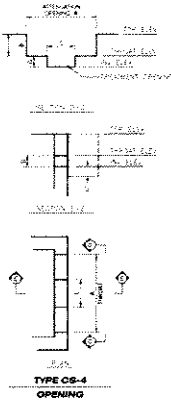
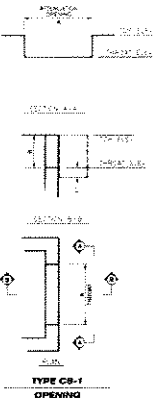


NOTES:
 1. ALL MANHOLE STRUCTURE DIMENSIONS ARE SHOWN FROM THE INVERT UNLESS OTHERWISE NOTED. REFER TO FIELD DESIGN DIMENSIONS AND ELEVATIONS IN PHASE 1 & 2.
 2. ALL MITERED END SECTIONS MUST BE SHOWN FROM THE INVERT UNLESS OTHERWISE NOTED.

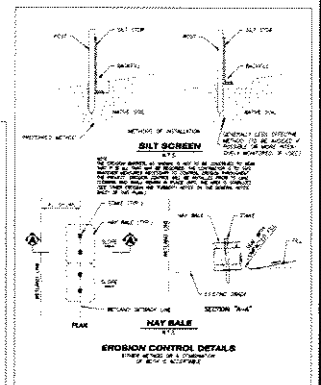
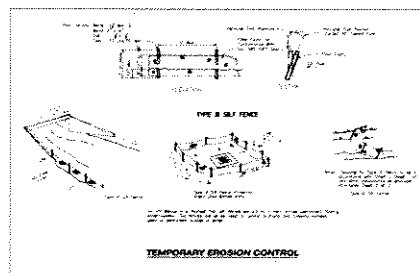
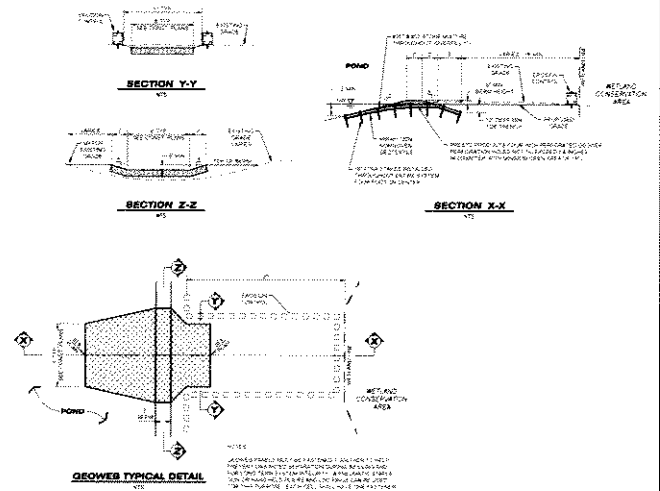
ABSOLUTE ENGINEERING, INC.
 1000 N. W. 10th Ave.
 Fort Lauderdale, FL 33304
 (954) 576-1000
 FAX (954) 576-1001
 WWW.ABSOLUTE-ENG.COM

STORM STRUCTURE DATA
 THOMPSON NURS

CONTROL STRUCTURE DATA															
STA NO.	FOOTING TYPE	TOP EL. (FT.)	BOT. EL. (FT.)	ORIGINATE PIPE			ATTENUATION AND TREATMENT CONTROLS								REMARKS
				TYPE	SIZE (IN.)	DM. EL. (FT.)	SP. (FT.)	ATTENUATION OPENING		TREATMENT OPENING					
								A	B	C	D	E	F		
14	C	138.45		RCP	24	133.85	CS-4	8'-0"	1'-2 1/2"	137.45	1'-12"	2'-3 1/2"	-	POD 8	
							CS-1	2'-0"	1'-2 1/2"	137.45					
							CS-1	2'-0"	1'-2 1/2"	137.45					
15A	D	138.45		RCP	24	133.85	CS-4	2'-0"	1'-0"	137.45	0'-4"	2'-8 3/4"	-	POD 10A	



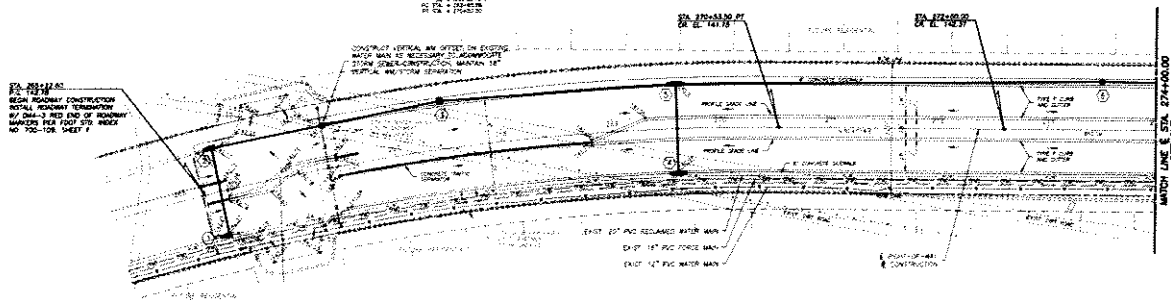
- 1. DRAWING NOT TO SCALE
- 2. TANK, DETENTION, AND TREATMENT OPENINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, SEVENTH EDITION, 2003.



REAR ROADWAY CONSTRUCTION
INSTALL REINFORCED CONCRETE
W/ DRAIN-3 RED END OF ROADWAY
MARKER FOR FUTURE ROAD
NO 700-108 SHEET 1

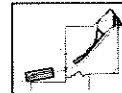
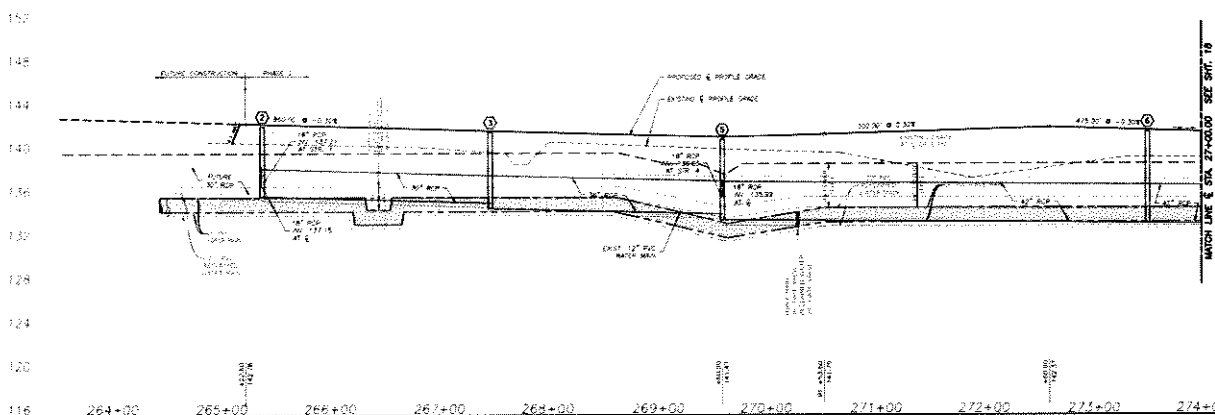
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CHECKED BY: [unintelligible]
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL

STORM STRUCTURE INSTALLATION NOTE
CONSTRUCTION TO BE IN ACCORDANCE WITH THE FOLLOWING NOTES:
1. EXISTING STRUCTURE TO BE REMOVED AND REPLACED WITH NEW CONSTRUCTION.
2. EXISTING STRUCTURE TO BE REMOVED AND REPLACED WITH NEW CONSTRUCTION.
3. EXISTING STRUCTURE TO BE REMOVED AND REPLACED WITH NEW CONSTRUCTION.



THOMPSON NURSERY ROAD

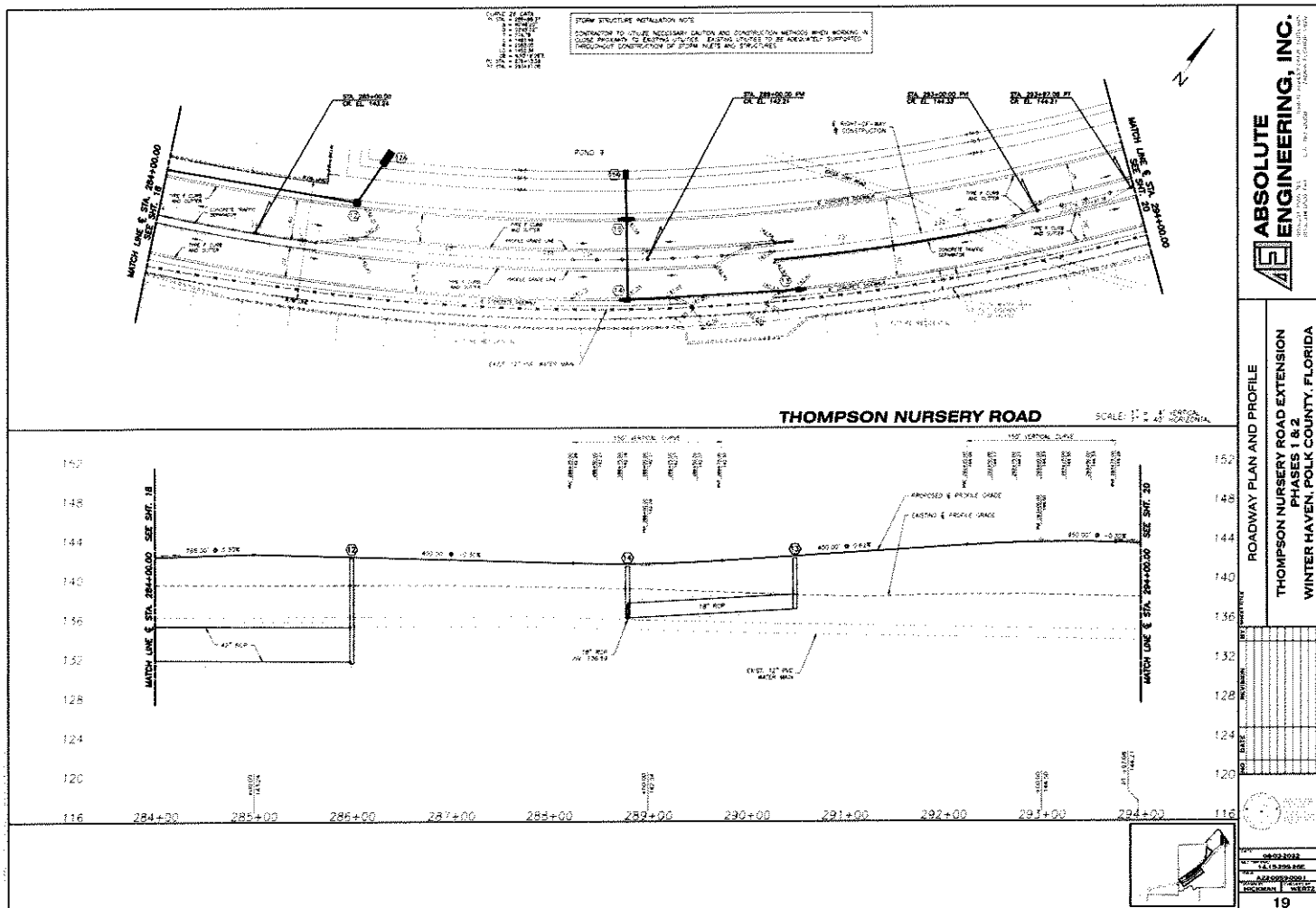
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1" = 4' VERTICAL



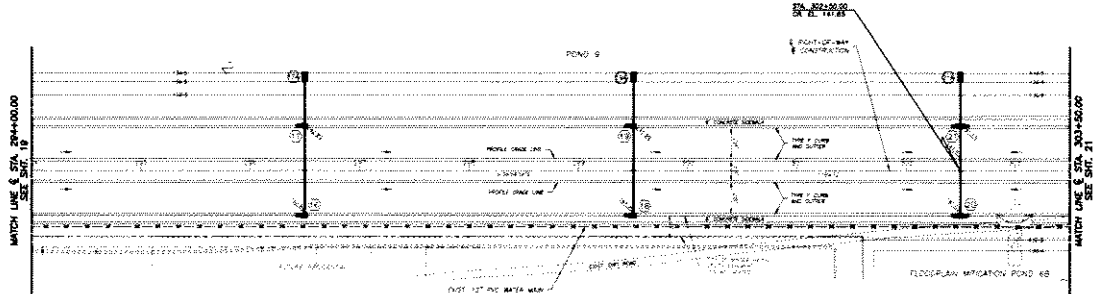
**ABSOLUTE
ENGINEERING, INC.**

ROADWAY PLAN AND PROFILE
THOMPSON NURSERY ROAD EXTENSION
PHASES 1 & 2
WINTER HAVEN, POLK COUNTY, FLORIDA

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	03.04.2014
2	REVISED	03.04.2014
3	REVISED	03.04.2014
4	REVISED	03.04.2014
5	REVISED	03.04.2014
6	REVISED	03.04.2014
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8	REVISED	03.04.2014
9	REVISED	03.04.2014
10	REVISED	03.04.2014

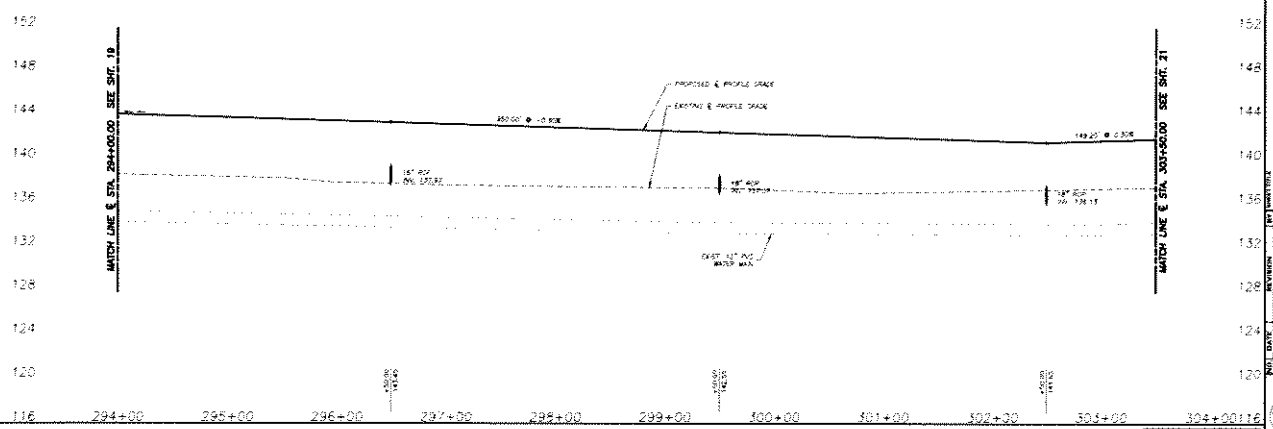


STORM STRUCTURE ADAPTATION NOTE:
CONTRACTOR TO OBTAIN NECESSARY CAUTION AND CONSTRUCTION METHODS WHEN WORKING IN
CLOSE PROXIMITY TO EXISTING UTILITIES. EXISTING UTILITIES TO BE ADEQUATELY PROTECTED
THROUGHOUT CONSTRUCTION OF STORM PILES AND STRUCTURES.



THOMPSON NURSERY ROAD

SCALE: 1" = 40' HORIZONTAL

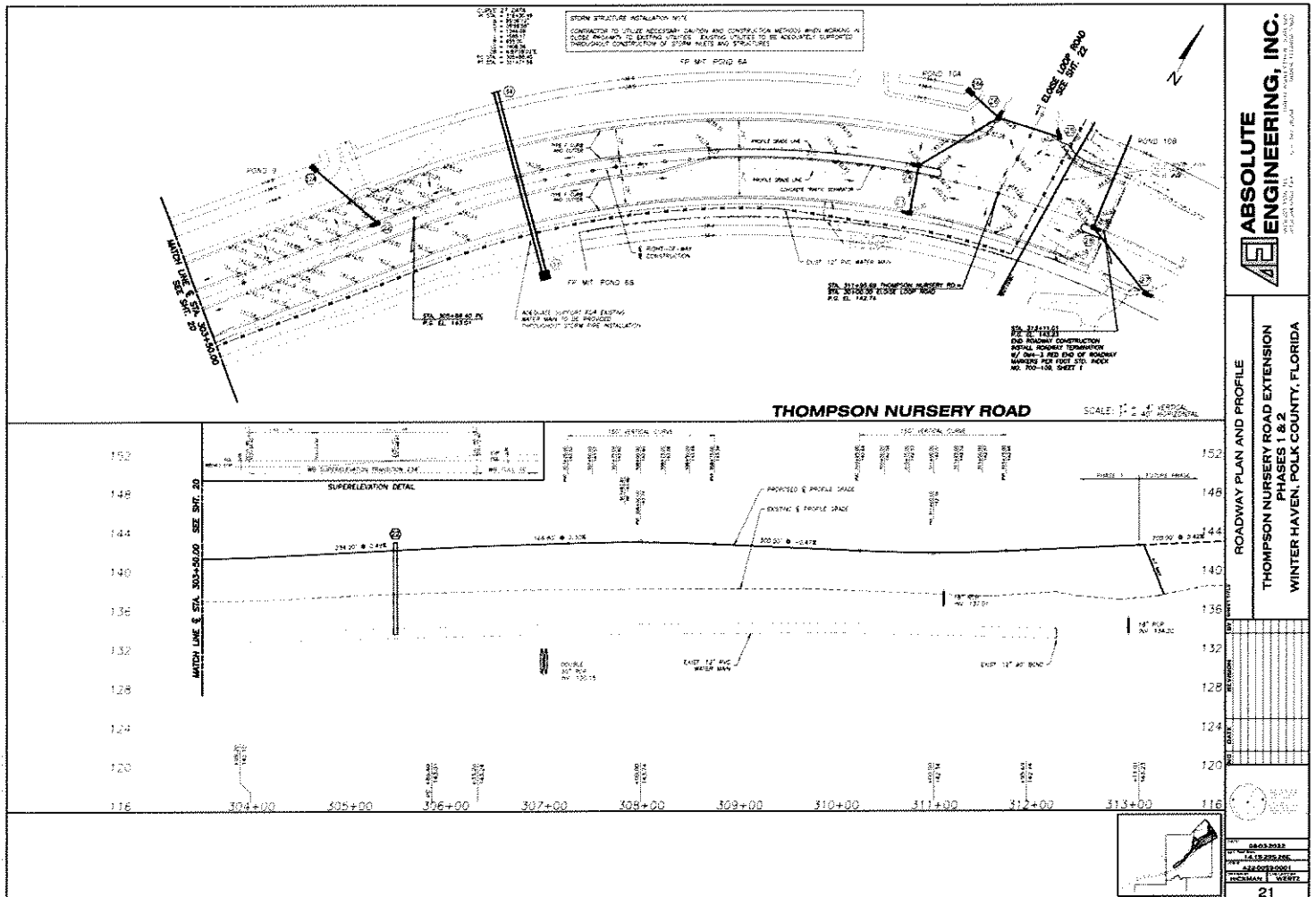


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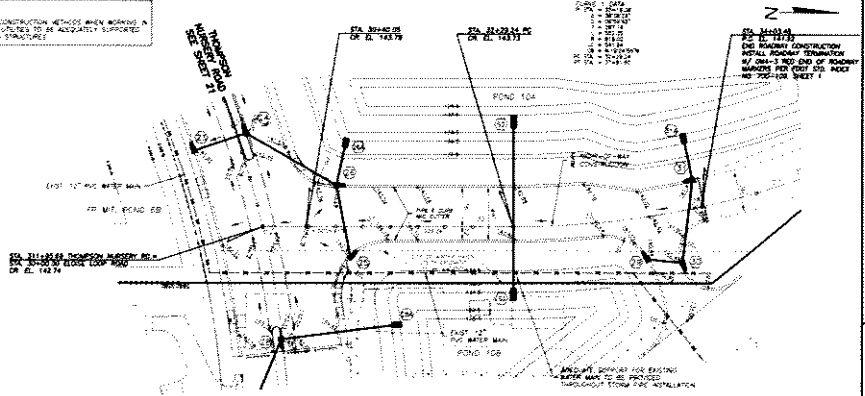
ROADWAY PLAN AND PROFILE
THOMPSON NURSERY ROAD EXTENSION
PHASES 1 & 2
WINTER HAVEN, POLK COUNTY, FLORIDA

NO.	DATE	REVISION
1		
2		
3		
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6		
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9		
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20

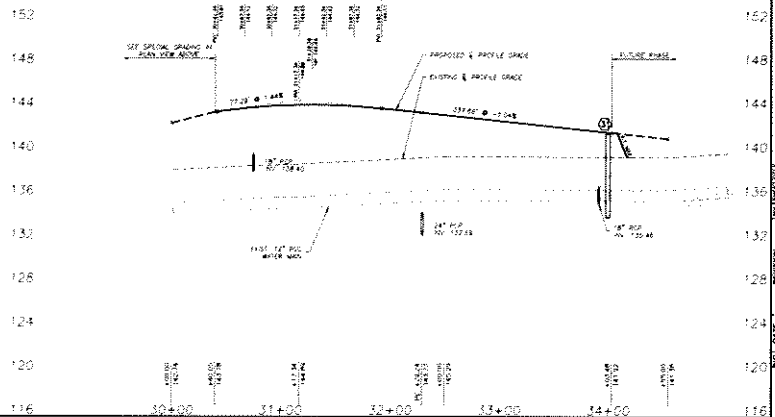


STORM STRUCTURE INSTALLATION NOTE:
CONTRACTOR TO UTILIZE NECESSARY CAUTION AND CONSTRUCTION METHODS WHEN WORKING IN
CLOSE PROXIMITY TO EXISTING UTILITIES. EXISTING UTILITIES TO BE ACCURATELY SUPPORTED
THROUGHOUT CONSTRUCTION OF STORM INLETS AND STRUCTURES.



ELOISE LOOP ROAD

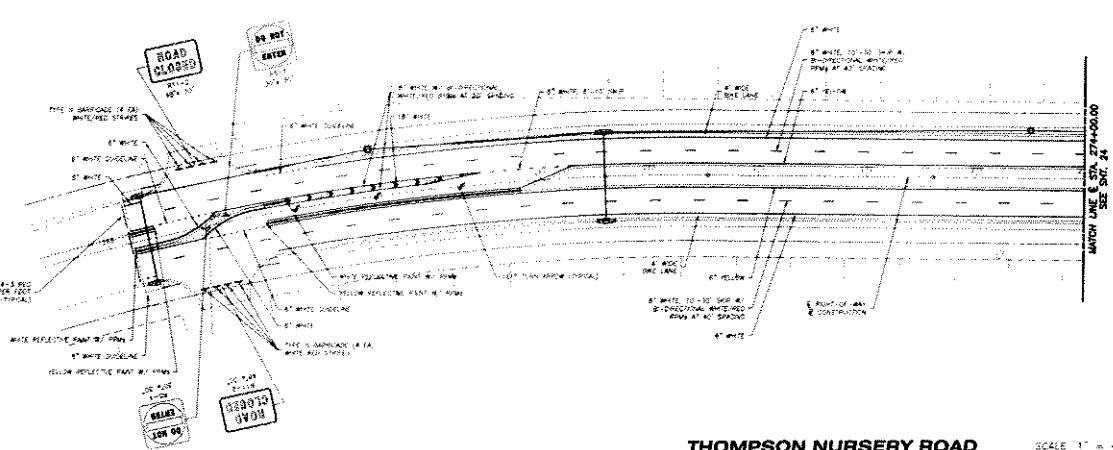
SCALE: 1" = 4' (SECTION)
1" = 40' (PLAN)



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ROADWAY PLAN AND PROFILE
THOMPSON NURSERY ROAD EXTENSION
PHASES 1 & 2
WINTER HAVEN, POLK COUNTY, FLORIDA

NO.	REVISION	DATE
1	ISSUED FOR PERMIT	06/03/2024
2	REVISED FOR COMMENTS	06/10/2024
3	REVISED FOR COMMENTS	06/17/2024
4	REVISED FOR COMMENTS	06/24/2024
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6	REVISED FOR COMMENTS	07/08/2024
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281	REVISED FOR COMMENTS	



THOMPSON NURSERY ROAD

SCALE 1" = 40'



ABSOLUTE ENGINEERING, INC.

10000 W. US HWY 90, SUITE 100
FORT WORTH, TEXAS 76133
(817) 441-1111

SIGNING AND PAVEMENT MARKING PLAN

THOMPSON NURSERY ROAD EXTENSION

PHASES 1 & 2

WINTER HAVEN, POLK COUNTY, FLORIDA

NO.	DATE	DESCRIPTION	BY	CHECKED
1	08-23-2020	100% COMPLETE	ALFARO/BOHNS	WHEELER

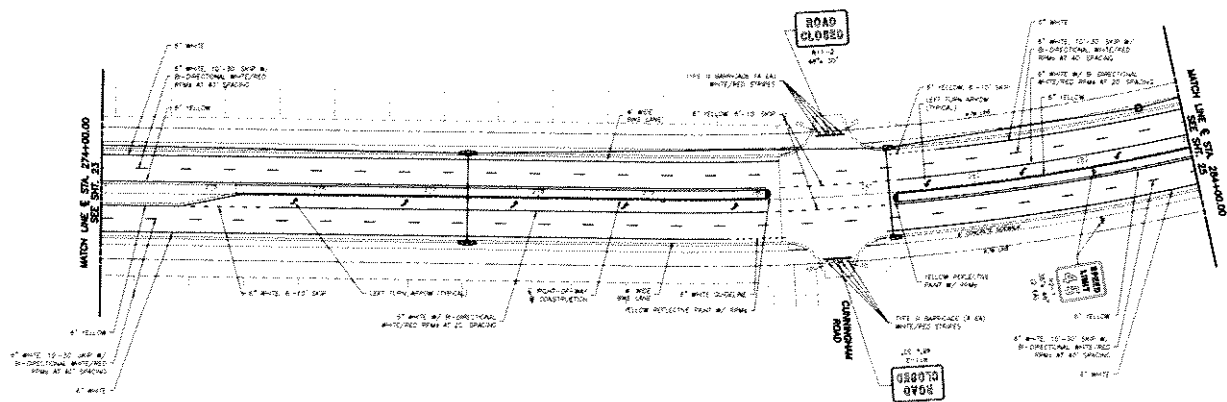
PROJECT NO. 2019-000001

DATE: 08-23-2020

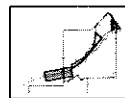
BY: ALFARO/BOHNS

CHECKED: WHEELER

23

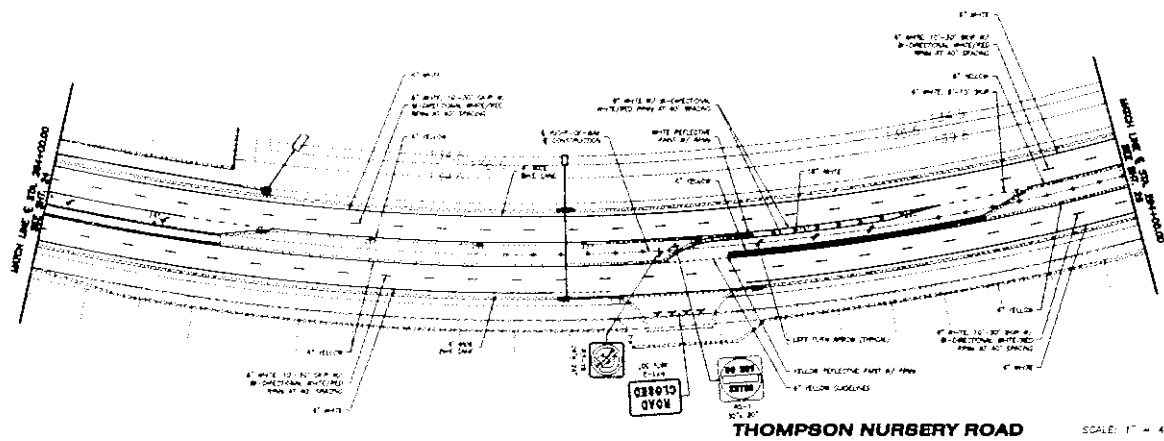


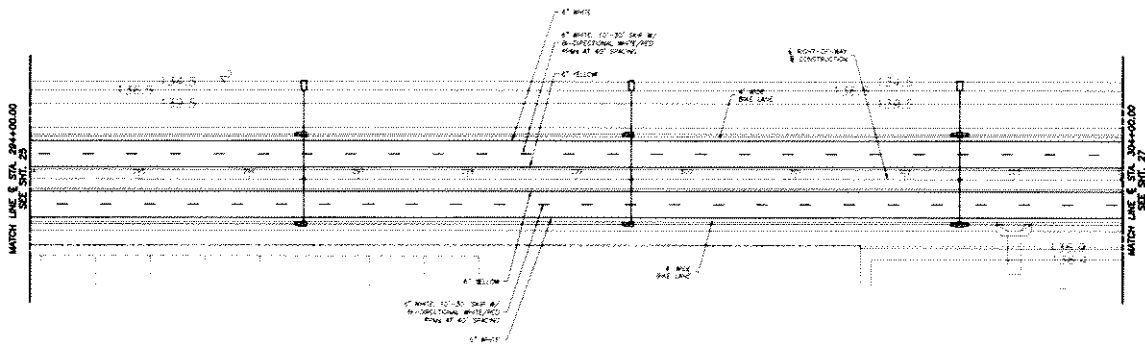
THOMPSON NURSERY ROAD SCALE 1" = 40'



NO.	DATE	REVISION

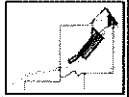
DESIGNED BY	06/23/2022
CHECKED BY	12/15/2022 SAK
APPROVED BY	07/26/2023 SAK
DRAWN BY	WICKHAM / WICKHAM





THOMPSON NURSERY ROAD

SCALE: 1" = 40'



NO.	DATE	REVISION
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2	10-18-2022	REVISED
3	11-08-2022	REVISED
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100	11-08-2022	REVISED



7.01 A.8. CONTRACT ADDENDA (AMENDMENT NO. 1)

AMENDMENT NO. 1 TO EJCDC LUMP SUM PRICE CONTRACT POTENTIALLY TIME AND PRICE-IMPACTED MATERIALS

This Amendment No. 1 made this 18th day of October in the year 2022 is made contemporaneous with and supplements the Agreement dated October 18, 2022 between

Villamar Community Development District, OWNER

and

Tucker Paving, Inc., CONTRACTOR

for the following:

Thompson Nursery Road Extension Phases 1 & 2, PROJECT.

Terms used in this Amendment, unless otherwise defined, shall have the same meaning as defined in the Agreement.

1. POTENTIALLY TIME AND PRICE-IMPACTED MATERIAL. As of the date of this Amendment, certain markets providing essential materials to the Project are experiencing or are expected to experience significant, industry-wide economic fluctuation during the performance of this Agreement that may impact price, availability and delivery time frames ("Potentially Time and Price-Impacted Material"). This Amendment provides for a fair allocation of the risk of such market conditions between the Owner and the Contractor and shall only apply to the Potentially Time and Price-Impacted Material(s) listed in Schedule A to this Amendment.

2. BASELINE PRICE AND TIME. Owner and Contractor shall agree upon a method for establishing the market price as of the date of this Amendment ("Baseline Price") and the method for calculating an adjustment in the pricing for a Potentially Time and Price-Impacted Material listed in Schedule A to this Amendment.

2.1. Compensation for any Potentially Time and Price-Impacted Material shall not be duplicated in any contingency amounts established under the terms of the Agreement.

3. ADJUSTMENT IN BASELINE PRICE. If during the course of the Project a Potentially Time and Price-Impacted Material item experiences an increase or decrease in its Baseline Price, either Party may notify the other in writing within ten (10) days from the date the basis for an equitable adjustment to the Contract Price arises and shall provide appropriate documentation substantiating such adjustment. An adjustment in the pricing for a Potentially Time and Price-Impacted Material shall not include any amount for markup, including overhead and profit.

3.1. In the event of a decrease in a Baseline Price, the Contract Price shall be equitably adjusted to reflect such decrease, subject to section 3.3 of this Amendment, but only for those Potentially Time and Price-Impacted Materials delivered on or after the date on which written notice of the adjustment in Baseline Price is given.

3.2. In the event of an increase in a Baseline Price, the Contract Price shall be equitably adjusted to reflect such increase, subject to section 3.3 of this Amendment, but only for those Potentially Time and Price-Impacted Materials delivered on or after the date on which written notice of the adjustment in Baseline Price is given.

3.3. The Contract Price shall not be adjusted by more than five (5%) percent of the original Contract Price for the aggregate of the increases or decreases in Baseline Prices for Potentially Time and Price-Impacted Materials.

3.4. No adjustment shall be made for any quantities of Potentially Time and Price-Impacted Materials scheduled for delivery under the terms of the Agreement prior to the date on which written notice of the adjustment in Baseline Price is given, unless the failure to deliver such quantities before that date is the fault of the Owner and is documented as such.

3.5. Payment, if any, for an adjustment shall be made in accordance with the terms of the Agreement.

4. TIME-IMPACT AND AVAILABILITY If the Contractor is delayed at any time in the commencement or progress of the Work due to a delay in the delivery of, or unavailability of, a Potentially Time and Price-Impacted Material, beyond the control of and without any fault attributable to the Contractor, its Subcontractors and Material Suppliers, the Contractor shall be entitled to an equitable extension of the Contract Time and an equitable adjustment of the Contract Price in accordance with the Agreement. The Owner and Contractor shall undertake reasonable steps to mitigate the effect of such delays. Such steps shall include the expedited Shop Drawings submittal and response Milestone Dates set forth in the Agreement, immediate order of materials, and Owner direct purchase of materials, among other mitigation strategies.

OWNER: VillaMar Community Development District

By _____

CONTRACTOR: Tucker Paving, Inc.

By: _____

END OF DOCUMENT.

SCHEDULE A TO AMENDMENT NO. 1 POTENTIALLY TIME AND PRICE-IMPACTED MATERIALS

Potentially Time and Price-Impacted Materials should be identified and described with specificity. The methods for establishing the Baseline Price for a Potentially Time and Price-Impacted Material should be based upon an objective standard and include: 1) established market or catalog prices; 2) actual material costs; 3) material costs indices; and, 4) such other mutually agreed upon method. Pricing based on material costs indices must identify the index category or subcategory that most accurately reflects the Potentially Time and Price-Impacted Material specified. Such Price-Impacted Materials must exceed the schedule of values line item by over 5% to be entitled to a Price adjustment. Further, submittal of at least two material supplier quotes for the same quantity and materials must accompany any request for a Price adjustment pursuant to this Amendment. Requests for Time based on unavailability of materials must be supported with milestone dates for delivery of materials in original bid and must be deemed reasonable with supporting affidavits by materials supplier and the time must deviate by more than 5% of schedule days.

1. Potentially Time and Price-Impacted Material: [_____]

Baseline Price: \$[____]/[____] (unit) as established by Contractor's schedule of values (unless such line item was deemed unreasonable based on current pricing indexes and then such Baseline Price per unit shall be based on pricing index as of the date of bid opening).

Pricing Method: [_____]

2. Potentially Time and Price-Impacted Material:[_____]

Baseline Price: \$[____]/[____] (unit) as established by Contractor's schedule of values (unless such line item was deemed unreasonable based on current pricing indexes and then such Baseline Price per unit shall be based on pricing index as of the date of bid opening).

Pricing Method: [_____]

3. [____]Potentially Time and Price-Impacted Material: [_____]

Baseline Price: \$[____]/[____] (unit) as established by Contractor's schedule of values (unless such line item was deemed unreasonable based on current pricing indexes and then such Baseline Price per unit shall be based on pricing index as of the date of bid opening).

Pricing Method: [_____]

4. Potentially Time and Price-Impacted Material:

Baseline Price: [____]/[____] (unit) as established by Contractor's schedule of values (unless such line item was deemed unreasonable based on current pricing indexes and then such Baseline Price per unit shall be based on pricing index as of the date of bid opening).

Pricing Method: [_____]

(Attach additional sheets as necessary)

7.01A. A.9.a. -
CONTRACTOR'S BID



5658 Lucerne Park Road
Winter Haven, FL 33881
Phone: 863-299-2262
Fax: 863-294-1007
www.tuckerpaving.com

To:	Absolute Engineering	Contact:	Heather Wertz	
Address:	1000 N Ashley Drive Suite 925 Tampa, FL 33602	Phone:		
		Fax:		
Project Name:	Thompson Nursery Road Extension	Bid Number:	22-619	
Project Location:	Eloise Loop Road, Winter Haven, FL	Bid Date:	8/26/2022	
Item Description	Estimated Quantity	Unit	Unit Price	Total Price

CLEARING & EARTHWORK

NPDES Compliance - (6 Months)	1.00	LS	\$7,037.18	\$7,037.18
Payment And Performance Bond	1.00	LS	\$60,825.57	\$60,825.57
Warranty Bond	1.00	LS	\$13,436.92	\$13,436.92
Clearing & Grubbing	1.00	LS	\$84,939.51	\$84,939.51
Construction Entrance	1.00	EACH	\$4,057.61	\$4,057.61
Mobilization	1.00	LS	\$34,934.87	\$34,934.87
Bahia Sod	38,215.00	SY	\$4.72	\$180,374.80
Grass & Mulch - HYDROGRASS	32,000.00	SY	\$0.58	\$18,560.00
Unclassified Excavation & Grading	1.00	LS	\$397,037.43	\$397,037.43
Pond 9	1.00	LS	\$48,604.55	\$48,604.55
Pond 10A	1.00	LS	\$7,795.52	\$7,795.52
Pond 10B	1.00	LS	\$5,837.30	\$5,837.30
Flood Mitigation Pond 6A	1.00	LS	\$118,405.05	\$118,405.05
Flood Mitigation Pond 6B	1.00	LS	\$31,224.31	\$31,224.31
4" Geoweb Weir	2.00	EACH	\$3,478.88	\$6,957.76
Type III Silt Fence	10,654.00	LF	\$1.45	\$15,448.30

Total Price for above CLEARING & EARTHWORK Items: \$1,035,476.68

PAVING

Sawcut & Match Existing Asphalt	120.00	LF	\$9.11	\$1,093.20
2" SP 9.5 Asphalt Pavement	37,339.00	SY	\$24.44	\$912,565.16
8" Crushed Concrete Base	37,339.00	SY	\$25.86	\$965,586.54
12" Stabilized Subgrade (LBR 40)	37,339.00	SY	\$7.94	\$296,471.66
6' Concrete Sidewalk - 4" Thick	8,891.00	LF	\$37.07	\$329,589.37
ADA Handicap Ramp	16.00	EACH	\$1,334.32	\$21,349.12
F - Curb	15,910.00	LF	\$22.76	\$362,111.60
Transition Curb	285.00	LF	\$32.04	\$9,131.40
Drop Curb	245.00	LF	\$32.04	\$7,849.80
Concrete Traffic Separator	11,120.00	SF	\$11.90	\$132,328.00
Dead End Barricade (Install) - 24' Travel Lane	6.00	EACH	\$1,574.29	\$9,445.74
Type III Barricade (Install)	20.00	EACH	\$798.03	\$15,960.60
Pavement Markings & Signage	1.00	LS	\$187,348.80	\$187,348.80
Maintenance Of Traffic	1.00	LS	\$16,192.77	\$16,192.77
Dead End Barricade (Install) - 36' Travel Lane	1.00	EACH	\$2,248.99	\$2,248.99

Total Price for above PAVING Items: \$3,269,272.75

STORM DRAINAGE



5658 Lucerne Park Road
Winter Haven, FL 33881
Phone: 863-299-2262
Fax: 863-294-1007
www.tuckerpaving.com

To:	Absolute Engineering	Contact:	Heather Wertz
Address:	1000 N Ashley Drive Suite 925 Tampa, FL 33602	Phone:	
		Fax:	
Project Name:	Thompson Nursery Road Extension	Bid Number:	22-619
Project Location:	Eloise Loop Road, Winter Haven, FL	Bid Date:	8/26/2022

Item Description	Estimated Quantity	Unit	Unit Price	Total Price
18" RCP Pipe	1,676.00	LF	\$81.74	\$136,996.24
24" RCP Pipe	216.00	LF	\$112.28	\$24,252.48
30" RCP Pipe	594.00	LF	\$158.15	\$93,941.10
36" RCP Pipe	216.00	LF	\$206.65	\$44,636.40
42" RCP Pipe	1,672.00	LF	\$283.51	\$474,028.72
Type P-5 Curb Inlet - 4' Diameter	18.00	EACH	\$8,718.51	\$156,933.18
Type P-5 Curb Inlet - 5' Diameter	1.00	EACH	\$9,153.81	\$9,153.81
Type P-6 Curb Inlet - 4' Diameter	4.00	EACH	\$10,462.25	\$41,849.00
Type P-6 Curb Inlet - 5' Diameter	3.00	EACH	\$14,894.49	\$44,683.47
Type J-5 Curb Inlet	1.00	EACH	\$14,081.12	\$14,081.12
Type J Storm Manhole - 5' Diameter	1.00	EACH	\$13,286.69	\$13,286.69
Type J Storm Manhole - 6' Diameter	3.00	EACH	\$13,627.79	\$40,883.37
Control Structure 9A	1.00	EACH	\$9,543.30	\$9,543.30
Control Structure 10A	1.00	EACH	\$9,543.30	\$9,543.30
Mitered End Section 18" RCP	8.00	EACH	\$1,951.39	\$15,611.12
Mitered End Section 24" RCP	4.00	EACH	\$2,678.23	\$10,712.92
Mitered End Section 42" RCP	1.00	EACH	\$9,386.91	\$9,386.91
Double Mitered End Section 30" RCP	2.00	EACH	\$8,897.90	\$17,795.80
Stub & Plug 8'- 18" RCP	1.00	LS	\$7,096.39	\$7,096.39
Temporary Concrete Top	1.00	EACH	\$3,805.84	\$3,805.84
Clean And Video Proposed Storm Line	1.00	LS	\$19,979.80	\$19,979.80
Dewatering Storm Pipe Install	4,374.00	LF	\$21.76	\$95,178.24

Total Price for above STORM DRAINAGE Items: \$1,293,379.20

Total Bid Price: \$5,598,128.63



5658 Lucerne Park Road
Winter Haven, FL 33881
Phone: 863-299-2262
Fax: 863-294-1007
www.tuckerpaving.com

To:	Absolute Engineering	Contact:	Heather Wertz
Address:	1000 N Ashley Drive Suite 925 Tampa, FL 33602	Phone:	
		Fax:	
Project Name:	Thompson Nursery Road Extension	Bld Number:	22-619
Project Location:	Eloise Loop Road, Winter Haven, FL	Bld Date:	8/26/2022

Notes:

- ***** AT CURRENT BID TIME, WE ARE EXPERIENCING INDUSTRY WIDE PRICE VOLATILITY IN THE MATERIAL MARKET. TUCKER PAVING RESERVES THE RIGHT TO REVIEW ALL FINAL PROPOSAL PRICING AT TIME OF CONTRACT AWARD.**
- *****CONTRACTOR SHALL RECEIVE EQUITABLE ADJUSTMENTS TO BOTH TIME AND PRICE IN THE EVENT SUPPLY CHAIN DELAYS AND/OR FUEL AND MATERIAL COST INCREASES, THAT OCCUR WHICH ARE OUT OF ITS CONTROL.**
- *****ALL EXCESS FILL MATERIALS STOCKPILED ON VILLIMAR PHASE 7 SITE.**

Not Included in Proposal:

- Permit/Permit Fees
- Construction Layout & As-Builts
- Soil Testing
- Littoral Plantings
- Landscaping & Irrigation
- Tree Protection/Pruning/Relocation
- Retaining Walls, Footers, And Excavation/Backfill Of Footers
- Fence Relocation/Installation
- Asbestos Removal
- Site Clearing/Well Abandonment
- Installation/Relocation/Repair Of Fence/Gates
- Relocation/Removal/Repair Of Existing Or Unknown Utilities
- Relocation/Removal/Repair Of Power Poles Or Guy Wires
- Excavation/Backfill Of Building Foundation And/Or Footers
- Removal Of Muck/Contaminated/Unsuitable Soils Or Materials
- Over Excavation
- Project Identification Sign
- Materials/Work/Services not indicated or listed.

ACCEPTED: The above prices, specifications and conditions are satisfactory and hereby accepted. Buyer: _____ Signature: _____ Date of Acceptance: _____	CONFIRMED: Tucker Paving, Inc. Authorized Signature: _____ Estimator: Rick Allen (863) 299-2262 rick@tuckerpaving.com
---	---

Thompson Nursery Road Extension

ID	Task Name	Duration	Start	Finish	
1	Thompson Nursery Road Extension	126 days	Mon 9/12/22	Mon 3/6/23	
2	Pre-Construction	41 days	Mon 9/12/22	Mon 11/7/22	
3	Notice to Proceed	1 day	Mon 9/12/22	Mon 9/12/22	
4	Material Buy Out & Submittals	10 days	Tue 9/13/22	Mon 9/26/22	
5	Procurement	30 days	Tue 9/27/22	Mon 11/7/22	
6	Construction Schedule	116 days	Mon 9/26/22	Mon 3/6/23	
7	Clearing and Grubbing	10 days	Mon 9/26/22	Fri 10/7/22	
8	Balance Site	50 days	Wed 10/5/22	Tue 12/13/22	
9	Storm Sewer Installation	27 days	Tue 11/8/22	Wed 12/14/22	
10	Subgrade	38 days	Wed 11/23/22	Fri 1/13/23	
11	F-Curb	38 days	Mon 11/28/22	Wed 1/18/23	
12	Base	38 days	Thu 12/1/22	Mon 1/23/23	
13	Clean and Video	10 days	Mon 1/16/23	Fri 1/27/23	
14	Pave (2 Lifts)	14 days	Mon 1/30/23	Thu 2/16/23	
15	Signage and Temp Striping	2 days	Fri 2/17/23	Mon 2/20/23	
16	Thermo Striping	3 days	Thu 3/2/23	Mon 3/6/23	
17	Grade BOC/Sidewalk	15 days	Mon 1/2/23	Fri 1/20/23	
18	Sidewalk	19 days	Mon 1/9/23	Thu 2/2/23	
19	Final Grade ROW/Stabilize	15 days	Mon 1/23/23	Fri 2/10/23	

Project: Thompson Nursery Road Date: Fri 8/26/22	Task	Project Summary	Manual Task	Start-only	Deadline
	Split	Inactive Task	Duration-only	Finish-only	Progress
	Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
	Summary	Inactive Summary	Manual Summary	External Milestone	



THOMPSON NURSERY ROAD EXTENSION PHASES 1 & 2 SUBDIVISION INFRASTRUCTURE

Schedule of Estimated Quantities and Unit Prices Bid Summary

	Contractor
CLEARING & EARTHWORK.....	\$ 1,035,476.68
PAVING.....	\$ 3,269,272.75
STORM DRAINAGE.....	\$ 1,293,379.20
TOTAL:	\$ 5,598,128.63
TOTAL CALENDAR DAYS TO SUBSTANTIAL COMPLETION: (see Schedule Note below).....	180
TOTAL CALENDAR DAYS TO FINAL COMPLETION: (see Schedule Note below)	210

The principle items of work and quantities shown herein are approximate only and are furnished solely for the purpose of showing the approximate scope of work to be performed. The Contractor shall examine the site of the work and shall inform himself fully in regard to all conditions pertaining to the place where the work is to be done. It is the Contractor's responsibility to perform his own quantity take-off and shall submit his bid showing the items of all work, unit prices and lump sum price for all work called for in the plans, specifications and contract documents based on his assessment of the work to be performed. No claim shall be made against Hamilton Engineering & Surveying, Inc. , nor the Owner for any errors or omissions in the Contractor's items of work and quantities, and the unit prices shall only be used as a basis of payment to items specifically added or deleted upon change order approved by Owner and Engineer, and as a basis for computing partial pay estimates when called for in the contract.

NOTE: Unit prices for all underground construction shall include all costs necessary to comply with the "**TRENCH SAFETY ACT**" and conform with all Occupational Safety and Health Administration (OSHA) regulations.

SCHEDULE NOTE: All calendar day durations indicated above include (1) timelines for shop drawing preparation, review, and approval, (2) fabrication and delivery timelines for sanitary and storm structures, and (3) procurement and delivery of all materials.

Contractor's Name: (Typed or Printed)

TUCKER PAVING, INC

Address:

5658 LUCERNE PARK ROAD

By _____
(Signature)

Title: EXECUTIVE VICE-PRESIDENT

Telephone No.: 863-299-2262

**THOMPSON NURSERY ROAD EXTENSION
PHASES 1 AND 2
SUBDIVISION INFRASTRUCTURE**

CLEARING & EARTHWORK

Item No.	Description	Unit	Estimated Engineer's Quantity	Contractor's Quantity	Unit Price	Total Amount
	Compliance with requirements of FDEP Generic NPDES Permit	LS	1	1	\$ 7,037.18	\$ 7,037.18
	Performance Bond	LS	1	1	\$ 60,825.57	\$ 60,825.57
	Warranty Bond	LS	1	1	\$ 13,436.92	\$ 13,436.92
	Clearing and Grubbing	LS	1	1	\$ 84,939.51	\$ 84,939.51
	Construction Entrance	EA	2	1	\$ 4,057.61	\$ 4,057.61
	Mobilization	LS	1	1	\$ 34,934.87	\$ 34,934.87
	Solid Sod (Side slopes steeper than 5:1) Please supply unit cost for change order purposes.	SY	36911	38215	\$ 4.72	\$ 180,374.80
	Grass and Mulch (Side slopes flatter than 5:1) Please supply unit cost for change order purposes.	SY	33,477	32000	\$ 0.58	\$ 18,560.00
	Unclassified Excavation	LS		1	\$ 397,037.43	\$ 397,037.43
	Wetland and Deleterious Soils Removal (if required)	AC			\$ -	\$ -
	Off-site Fill (In Place-Compacted) (if required)	CY	By Contractor		\$ -	\$ -
	On-site Fill (In Place-Compacted) (if required)	CY	By Contractor		\$ -	\$ -
	Stockpile Excess Fill	CY	By Contractor		\$ -	\$ -
	Detention Pond " 9 " (complete)	LS	1	1	\$ 48,604.55	\$ 48,604.55
	Detention Pond " 10A " (complete)	LS	1	1	\$ 7,795.52	\$ 7,795.52
	Detention Pond " 10B " (complete)	LS	1	1	\$ 5,837.30	\$ 5,837.30
	Detention Pond " " (complete)	LS			\$ -	\$ -
	Flood Midigation Pond " 6A " (complete)	LS	1	1	\$ 118,405.05	\$ 118,405.05
	Flood Midigation Pond " 6B " (complete)	LS	1	1	\$ 31,224.31	\$ 31,224.31
	Tree Barricade	LF			\$ -	\$ -
	Swale/Ditch Construction (complete)	LF			\$ -	\$ -
	Type "V" Drainage Swale	LF			\$ -	\$ -
	GEO Web	EA	2	2	\$ 3,478.88	\$ 6,957.76
	Turbidity Barrier	LF			\$ -	\$ -
	Staked Erosion Control	LF	10,601	10654	\$ 1.45	\$ 15,448.30
					TOTAL	\$ 1,035,476.68

By: MT/KM
Checked: PN/MT
Engineer: HW

**THOMPSON NURSERY ROAD EXTENSION
PHASES 1 AND 2
SUBDIVISION INFRASTRUCTURE**

PAVING

Item No.	Description	Unit	Estimated Engineer's Quantity	Contractor's Quantity	Unit Price	Total Amount
	Saw-Cut and Match Existing Pavement	LF	120	120	\$ 9.11	\$ 1,093.20
	2" Asphaltic Surface Course (Type S-9.5)	SY	39,020	37,339	\$ 24.44	\$ 912,565.16
	8 " Crushed Concrete Base Course*	SY	39,020	37,339	\$ 25.86	\$ 965,586.54
	6" Limerock Base Course (LBR_____)	SY			\$ -	\$ -
	12" Compacted Subgrade	SY			\$ -	\$ -
	12" Stabilized Subgrade	SY	39,020	37,339	\$ 7.94	\$ 296,471.66
	Stabilized Shoulder 5' Width	SY			\$ -	\$ -
	5 ' Concrete Sidewalk (4" Thick)	LF			\$ -	\$ -
	6 ' Concrete Sidewalk (4" Thick)	LF	8,820	8,891	\$ 37.07	\$ 329,589.37
	5 ' Concrete Sidewalk (6" Thick)	LF			\$ -	\$ -
	7' Thickened Edge Sidewalk	LF			\$ -	\$ -
	ADA Sidewalk Ramp per FDOT Index 304 (Complete)	EA	16	16	\$ 1,334.32	\$ 21,349.12
	Concrete Miami Curb (Type A) **	LF			\$ -	\$ -
	Concrete Curb (Type D) **	LF			\$ -	\$ -
	Concrete Curb (Type F) **	LF	16,635	15,910	\$ 22.76	\$ 362,111.60
	Concrete Transition Curb **	LF	285	285	\$ 32.04	\$ 9,131.40
	Concrete Curb (Drop) **	LF	80	245	\$ 32.04	\$ 7,849.80
	Concrete Curb (Flat) **	LF			\$ -	\$ -
	Concrete Traffic Separator **	SF	3526	11,120	\$ 11.90	\$ 132,328.00
	Dead End Barricade (install) - 24'	EA	7	6	\$ 1,574.29	\$ 9,445.74
	Type III Barricade (install)	EA	16	20	\$ 798.03	\$ 15,960.60
	Signage & Striping	LS	1	1	\$ 187,348.80	\$ 187,348.80
	Maintenance of Traffic	LS	1	1	\$ 16,192.77	\$ 16,192.77
	Dead End Barricade (install) - 36'	EA	0	1	\$ 2,248.99	\$ 2,248.99
					TOTAL	\$ 3,269,272.75

* The contractor shall base his bid on constructing the soil cement base with full blend borrow material with a minimum seven (7) day compressive strength of 300 psi for _____ inch (") soil cement base. If additional cement material is required at the time of construction due to the contractor wanting to mix when slightly excessive moisture is present or if "wet spots" are encountered, then the contractor is responsible for the additional cost.

** All cost for stabilization under curb shall be included in the unit price for the curb.

By: MT/KM
 Checked: PN/MT
 Engineer: HW

**THOMPSON NURSERY ROAD EXTENSION
PHASES 1 AND 2
SUBDIVISION INFRASTRUCTURE**

STORM DRAINAGE SYSTEM

Item No.	Description	Unit	Estimated Engineer's Quantity	Contractor's Quantity	Unit Price	Total Amount
	18" RCP	LF	1646	1676	\$ 81.74	\$ 136,996.24
	24" RCP	LF	208	216	\$ 112.28	\$ 24,252.48
	30" RCP	LF	594	594	\$ 158.15	\$ 93,941.10
	36" RCP	LF	216	216	\$ 206.65	\$ 44,636.40
	42" RCP	LF	1,672	1672	\$ 283.51	\$ 474,028.72
	P5 Curb Inlet (4' Diameter)	EA	18	18	\$ 8,718.51	\$ 156,933.18
	P5 Curb Inlet (5' Diameter)	EA	1	1	\$ 9,153.81	\$ 9,153.81
	P6 Curb Inlet (4' Diameter)	EA	4	4	\$ 10,462.25	\$ 41,849.00
	P6 Curb Inlet (6' Diameter)	EA	3	3	\$ 14,894.49	\$ 44,683.47
	J5 Curb Inlet (4' Diameter)	EA	1	1	\$ 14,081.12	\$ 14,081.12
	Type J Manhole (5' Diameter)	EA	1	1	\$ 13,286.69	\$ 13,286.69
	Type J Manhole (6' Diameter)	EA	3	3	\$ 13,627.79	\$ 40,883.37
	Control Structure <u>9A</u> Complete	EA	1	1	\$ 9,543.30	\$ 9,543.30
	Control Structure <u>10A</u> Complete	EA	1	1	\$ 9,543.30	\$ 9,543.30
	Control Structure <u> </u> Complete	EA			\$ -	\$ -
	Mitered End Section <u>18</u> " RCP	EA	8	8	\$ 1,951.39	\$ 15,611.12
	Mitered End Section <u>24</u> " RCP	EA	4	4	\$ 2,678.23	\$ 10,712.92
	Mitered End Section <u>42</u> " RCP	EA	1	1	\$ 9,386.91	\$ 9,386.91
	Double Mitered End Section <u>30</u> " RCP	EA	2	2	\$ 8,897.90	\$ 17,795.80
	Stub & Plug 8' - 18" RCP	LS	1	1	\$ 7,096.39	\$ 7,096.39
	Temporary Concrete Tops	EA	1	1	\$ 3,805.84	\$ 3,805.84
	Rip Rap	EA				\$ -
	Outfall Sump	EA			\$ -	\$ -
	CLEAN & VIDEO PROPOSED STORM	LS	0	1	\$ 19,979.80	\$ 19,979.80
	DEWATERING PIPE INSTALLATION	LF	0	4374	\$ 21.76	\$ 95,178.24
					TOTAL	\$ 1,293,379.20

By: MT/KM
 Checked: PN/MT
 Engineer: HW

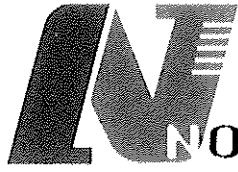
**BID ALTERNATE FOR UTILIZING LIMEROCK BASE IN LIEU OF CRUSHED CONCRETE BASE
DEDUCT \$63,199.99**

**PER PLAN SHEET 3 ASPHALT NOTE #1- ASPHALT INSTALLED TO FDOT SPEC
FDOT DOES NOT ALLOW A 2" SP9.5 LIFT
WE HAVE PRICED TO INSTALL THE ASPHALT IN 2 - 1" LIFTS
FDOT ALLOWS 40% RAP ASPHALT MIX - OUR PROPOSAL INCLUDES 40% RAP MIX**

NO MUCK/ORAGANIC MATERIAL REMOVAL IS INCLUDED

ALL EXCAVATED MATERIALS STOCKPILED ON FUTURE VILLIMAR 7 SITE

7.01A. A. 9.b. - GEOTECH REPORTS



TRANSPORTATION
INFRASTRUCTURE
CONSTRUCTION
ENVIRONMENTAL
ENGINEERING

NODARSE
ASSOCIATES, INC.

**Preliminary Roadway Report
Thompson Nursery Road Extension, Phase 1
Polk County, Florida**

GAINESVILLE
TALLAHASSEE

JACKSONVILLE
TAMPA

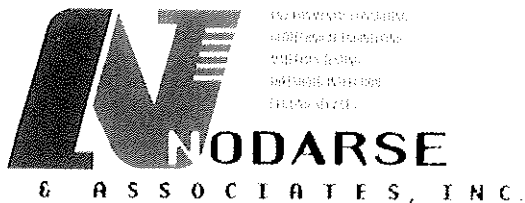
LAKELAND
WEST PALM BEACH

MIAMI

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504 E. TYLER ST. | TAMPA, FLORIDA 33602
P: 813-221-0050 | 800-655-4464 | F: 813-221-0051
WWW.NODARSE.COM



December 12, 2008
Project No. 04-06-0014-101A

Mr. Tom Montgomery, P.E.,
Pitman-Hartenstein & Associates, Inc.
6989 East Fowler Avenue
Tampa, Florida 33617

Preliminary Roadway Report
Thompson Nursery Road Extension, Phase 1
Polk County, Florida

Dear Tom:

Nodarse & Associates, Inc. (N&A) is pleased to present this Preliminary Soil Survey Report for the above-referenced project. This exploration was authorized by your firm and was performed in general accordance with our proposal dated January 26, 2006. This report presents a general summary of the results of our soil survey. The detailed results of the soil survey are presented on the **roadway Soil Survey** and the **Report of Auger Borings** in the **Appendix**.

PROJECT DESCRIPTION

We understand that Polk County is conducting a Project Development and Environment (PD&E) Study, which evaluates capacity improvement options along the proposed S.R. 540 Extension, Thompson Nursery Road Extension, Thompson Nursery Road Widening and Chalet Suzanne Road Widening in Polk County, Florida. A geotechnical report by N&A dated November 16, 2006 summarized the results of explorations and evaluations for the proposed widening of the roadway along Thompson Nursery Road and Chalet Suzanne Road from Waterset Gardens Drive to SR-17. The section that pertains to this report is the proposed extension of Thompson Nursery Road from US 17 to east of West Lake Ruby Drive, a distance of approximately 6.63 miles. The project site is located in Sections 5, 6, 8, 9, 14, 15 and 16, Township 29 South and Range 26 East in Polk County, Florida.

We understand that the typical section for the proposed roadway extension will be a four lane divided urban major collector roadway with a 22 foot median, 12 foot lanes, four foot bicycle lanes and 6 foot sidewalks on both sides. This report is limited to the roadway extension. Geotechnical recommendations addressing other aspects of the proposed extension, including intersection signalization, box culverts, signal supports and a bridge, will be presented under separate cover.

GAINESVILLE
ATLANTA, GA

JACKSONVILLE
TAMPA

LAKELAND
WEST PALM BEACH

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ORMOND BEACH
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The existing area of the roadway alignment is currently occupied by rural residential areas and farm lands.

REVIEW OF AVAILABLE DATA

Based on the United States Geological Survey (USGS) "Eloise, Florida" quadrangle map, the elevations along the proposed roadway alignment range from +130 feet NGVD to +150 feet NGVD. An excerpt of the USGS the quadrangle map for the project area is shown on **Figure 1** of the **Appendix**.

A portion of the United States Department of Agriculture (USDA) soil survey for Polk County for the project site is shown on **Figure 2** of the **Appendix**. Soils found in the vicinity of the project site are summarized in the following table.

Symbol	USDA Soil Name	Depth of Seasonal High Groundwater Table for Soil Type in its Natural State	Typical Duration of Seasonal High
2	Apopka Fine Sand, 0 to 5 Percent Slopes	> 6.0 feet	-
3	Candler Sand, 0 to 5 Percent Slopes	> 6.0 feet	-
6	Eaton Mucky Fine Sand	+2.0 - 0 feet	Jun - Feb
7	Pomona Fine Sand	0 - 1.0 feet	Jun - Oct
13	Samsula Muck	+2.0 - 0 feet	Jan - Dec
14	Sparr Fine Sand	1.5 - 3.5 feet	Jul - Oct
15	Tavares Fine Sand, 0 to 5 Percent Slopes	3.5 - 6.0 feet	Jun - Dec
17	Smyrna and Myakka Fine Sands	0 - 1.0 feet	Jun - Oct
21	Immokalee sand	0 - 1.0 feet	Jun - Oct
22	Pomella Fine Sand	2.0 - 3.5 feet	Jul - Nov
23	Ona Fine Sand	0 - 1.0 feet	Jun - Oct
25	Placid and Myakka Fine Sands	+2.0 - 0 feet	Jul - Nov
29	St. Lucie Fine Sand, 0 to 5 Percent Slopes	>6.0 feet	-
31	Adamsville Fine Sand	2.0 - 3.5 feet	Jun - Nov
32	Kaliga Muck	+1.0 - 0 feet	Jan - Dec
35	Hontoon Muck	+2.0 - 0 feet	Jan - Dec

Note that the soil series indicated by the SCS may vary in description from conditions found by our field work. The differences may be in interpretation of soil types or be the result of activity at the site subsequent to the publication. The SCS publication is used as a reference and N&A is not attempting to verify the existence of the SCS soil types. The limits of the SCS series may not represent inclusions within a mapped area. Inclusions are varying soil types found within a defined, mapped series.

SUBSURFACE EXPLORATION

Boring locations were determined and staked in the field by N&A personnel based on site plans provided by Pitman-Hartenstein & Associates, Inc.

Subsurface conditions for the proposed roadway improvements were explored by performing a series of 4 to 8 foot deep hand auger borings at a 100 foot spacing from west of US 17 to east of West Lake Ruby Drive, along the proposed center line of Thompson Nursery Road. The boring locations that had to be offset, due to inaccessibility of actual locations are shown referenced by offset from the center line, on the attached **Report of Auger Borings for Roadway Sheet (Figures 4 through 11)** in the **Appendix**.

The hand auger boring procedure consisted of manually turning a 3 inch diameter, 6 inch long bucket sampler into the soil until it was full. The sampler was then retrieved and the soils in the sampler were visually examined and classified. The procedure was repeated until the desired termination depth was achieved or shallow groundwater levels caused collapse of the borehole. Samples of representative strata were obtained for further visual classification and testing. Water levels were measured at the boreholes at the time of our field exploration to evaluate the depth to groundwater. The holes were then backfilled with soil cuttings.

LABORATORY TESTING

Samples recovered from the borings were returned to the laboratory for visual classification and stratification by a geotechnical engineer. Index property tests were conducted on selected samples to aid classification. The results of the laboratory testing are tabulated on **Table 1** in the **Appendix**. The results have also been summarized on the Soil Survey Sheet, **Figure 3** in the **Appendix**.

GENERAL SUBSURFACE CONDITIONS

The soil conditions encountered in the roadway borings are shown on the **Soil Boring Profiles (Figure 4 through 11)** in the **Appendix**. The soil survey encountered six (6) generalized soil strata to the depths explored in the borings. Soil samples obtained from these borings were transported to our geotechnical engineering laboratory for testing.

The results of our laboratory testing program are summarized on the attached **Roadway Soil Survey Sheet** and in **Table 1** in the **Appendix**. The generalized soil strata, based on visual examination and the laboratory testing program are summarized in the following table.

Soil Stratum	Soil Description	AASHTO Classification	Classification by FDOT Index 505
1	Dark brown, brown, light brown, tan, gray and light gray fine sand with rock fragments, trace of clay and roots	A-3	Select (S)
2	Brown, light brown, orange, red, tan and gray clayey fine sand	A-2-6	Plastic (P)
3	Dark Brown Muck	A-8	Muck (M)
4	Dark Brown, brown, dark gray and gray silty fine sand	A-2-4	Select (S)
5	Brown, light brown, orange, red, gray and tan sandy clay	A-6 / A-7-6	Plastic (P)
6	Dark Brown, dark gray and sandy silt	A-4	Plastic (P)

The areas of most concern are the areas of with organic soils, classified as muck (A-8) in the AASHTO Soil Classification, as they should either be avoided or excavated, if appropriate. Muck was found in the following tabulated locations of the project site.

Station	Offset (ft)	Approximate Depth of Organic Soils (ft)
40+00	CL	0 - 1
62+00	CL	0 - 2
61+00	CL	0 - 1.5
62+00	CL	0 - 2
63+00	CL	0 - 2
64+00	CL	0 - 1
65+00	CL	0 - 2
66+00	CL	0 - 2
67+00	CL	0 - 1
68+00	CL	0 - 1.5
69+00	CL	0 - 1
70+00	CL	0 - 2
71+00	CL	0 - 0.5
72+00	CL	0 - 1
73+00	CL	0 - 1.5
74+00	CL	0 - 1
75+00	CL	0 - 1.5
77+00	CL	0 - 0.5
78+00	CL	0 - 0.5
79+00	CL	0 - 1
80+00	CL	0 - 1
81+00	CL	0 - 1
82+00	CL	0 - 3
83+00	CL	0 - 2.5
84+00	CL	0 - 3

Station	Offset (ft)	Approximate Depth of Organic Soils (ft)
85+00	CL	0 - 2
86+00	CL	1 - 3
87+00	CL	0 - 2.5
88+00	CL	0 - 1
91+00	CL	0 - 2
92+00	CL	0 - 0.5
93+00	CL	0 - 0.5
95+00	CL	0 - 0.5
96+00	CL	0 - 0.5
97+00	CL	0 - 0.5
98+00	CL	0 - 1
99+00	CL	0 - 1
100+00	CL	0 - 1
101+00	CL	0 - 1
102+00	CL	0 - 1
103+00	CL	0 - 0.75
104+00	CL	0 - 1
105+00	CL	0 - 0.5
148+00	CL	0 - 1
149+00	CL	0 - 1
152+00	CL	0.5 - 1.5
153+00	CL	0 - 1
154+00	CL	0.5 - 5
155+00	CL	1 - 7
156+00	CL	1 - 5
164+00	CL	0 - 8
165+00	CL	0 - 8
204+00	CL	1 - 5
206+00	CL	0 - 3
207+00	CL	0 - 5
208+00	CL	0 - 5
209+00	CL	0 - 4
210+00	CL	0 - 4
211+00	CL	0 - 4
212+00	CL	0 - 4
213+00	CL	0 - 5
214+00	CL	0 - 2
215+00	CL	0 - 5
216+00	CL	0 - 5
217+00	CL	0 - 5
218+00	CL	0 - 5

Note that at this time, no intent to delineate the muck has been attempted. Note also that since some of the borings were terminated in muck and the total depth of muck may be greater. As design proceeds and the proposed roadway alignment is being determined, delineation will be performed as necessary.

As indicated in the soil borings (**Figure 4 thru 11**), groundwater was detected in some of the auger borings, at approximate depths ranging from 1 to 5 feet below present ground surface. Groundwater levels fluctuate with the amount of local rainfall and, therefore, may be different at other times. Estimated seasonal high groundwater depths are shown on **Table 2** in the **Appendix**. These estimates are based on interpretation of USDA soil survey data, soil borings, antecedent conditions and consideration of adjacent wetlands and roadway improvements.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on the project characteristics previously described, the data obtained in our field exploration and our experience with similar subsurface conditions and construction types. If subsurface conditions different from those disclosed by the borings are encountered during construction, we should be notified immediately so that we might review the following recommendations in light of such changes.

Roadway Construction: Material use and/or removal should be completed in accordance with FDOT Indices 500 and 505. The following summarizes the generalized use or non-use of the soils and materials that will most likely be encountered during the roadway constructions.

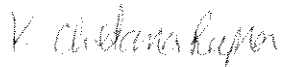
- The material from Stratum 1 (A-3) appears to be satisfactory for use as compacted roadway fill when utilized in accordance with Index 505.
- The material from Stratum 4 (A-2-4) appears to be satisfactory for use as compacted roadway fill when utilized in accordance with Index 505. However, it should be noted that this material is likely to retain excess moisture and be difficult to compact. It should be used in the embankment above the water level existing at the time of construction.
- The materials from Strata 2, 5 and 6 (A-2-6, A-4, A-6 and A-7-6) are plastic and shall be removed in accordance with Index 500. This material may be placed above the existing water levels (at the time of construction) to within 4 feet of the proposed base. This material should also be placed uniformly in the lower portion of the embankment for some distance along the project rather than full depth for short distances.
- Soil in Stratum 3 is highly organic and shall be removed in accordance with Index 500 of the Florida Department of Transportation (FDOT) Roadway Traffic and Design Standards unless otherwise shown on the plans.

CLOSURE

N&A appreciates the opportunity to be of service to you on this project. If you should have any questions concerning the contents of this report, or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,

NODARSE & ASSOCIATES, INC.



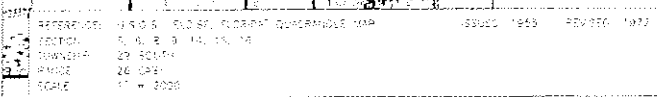
Chetana R. Kommireddi, E.I.
Geotechnical Engineer



Stephen C. Knauss, P.E.
Senior Geotechnical Engineer
FL Registration No. 28202

Distribution: 3 – Addressee
1 – File

Appendix: Vicinity Map (Figure 1)
SCS Soils Map (Figure 2)
Roadway Soil Survey (Figure 3)
Report of Auger and Core Borings for Roadway (Figures 4 through 11)
Summary of Laboratory Test Results (Table 1)
Estimated Seasonal High Groundwater Depths (Table 2)



DATE	5/24/08	FILE NO	04-58-0374-1018	PAGE	1
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PROPERTY: 6900 S.W. 10TH AVE. FOR POLY DEVELOPMENT, FLORIDA
 SECTION: 1, 2, 3, 4, 14, 15, 16
 TOWNSHIP: 28 SOUTH
 RANGE: 28 WEST
 SCALE: 1" = 2500'

USDA, MAP
 THOMPSON NURSERY ROAD EXTENSION
 POLY DEVELOPMENT, FLORIDA

DATE	SW	 NODARSE ASSOCIATES, INC.
DATE	CPK	
DATE	NOTED	
DATE	SW	

01-25-08 01-25-08 01-25-08 01-25-08

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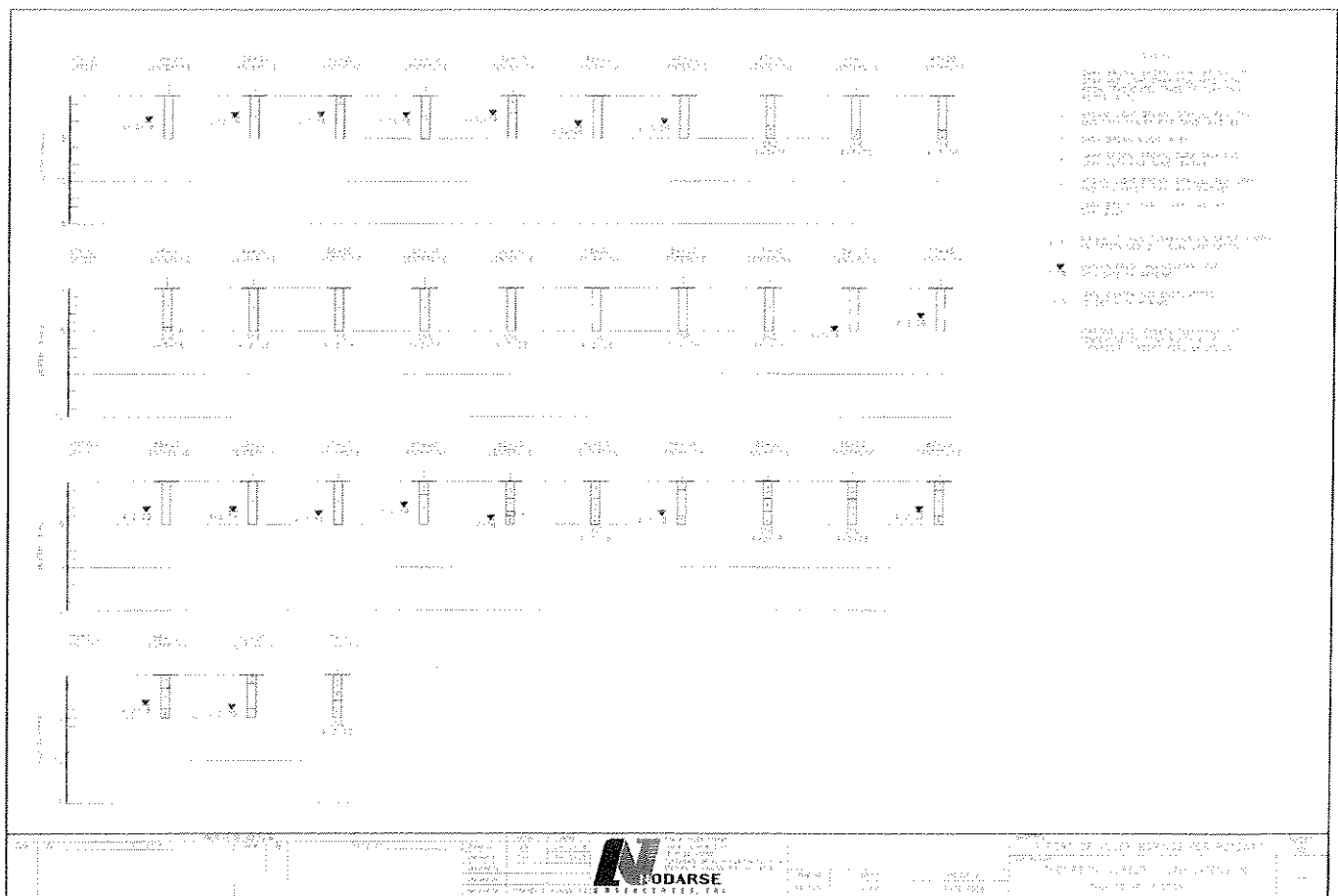
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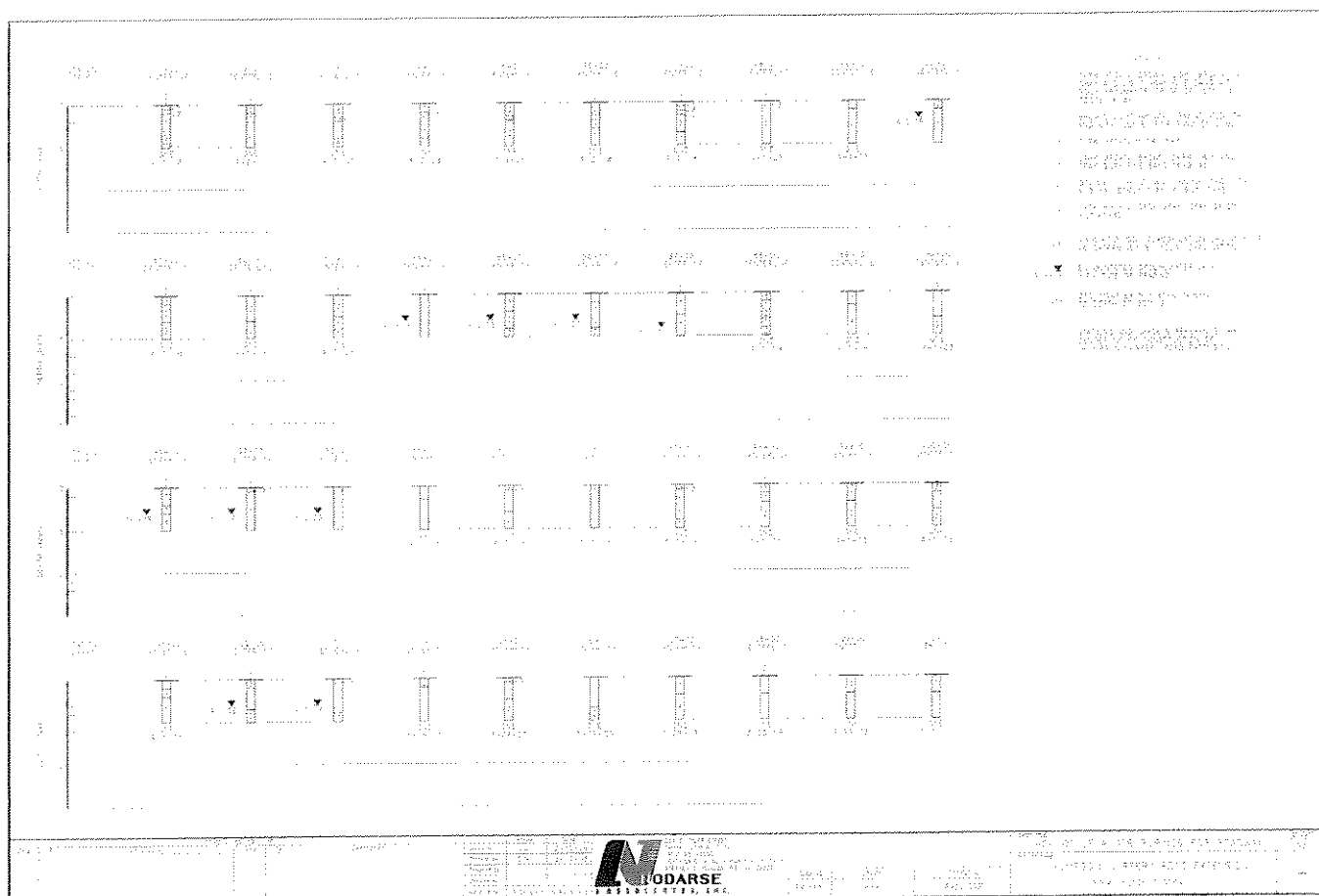
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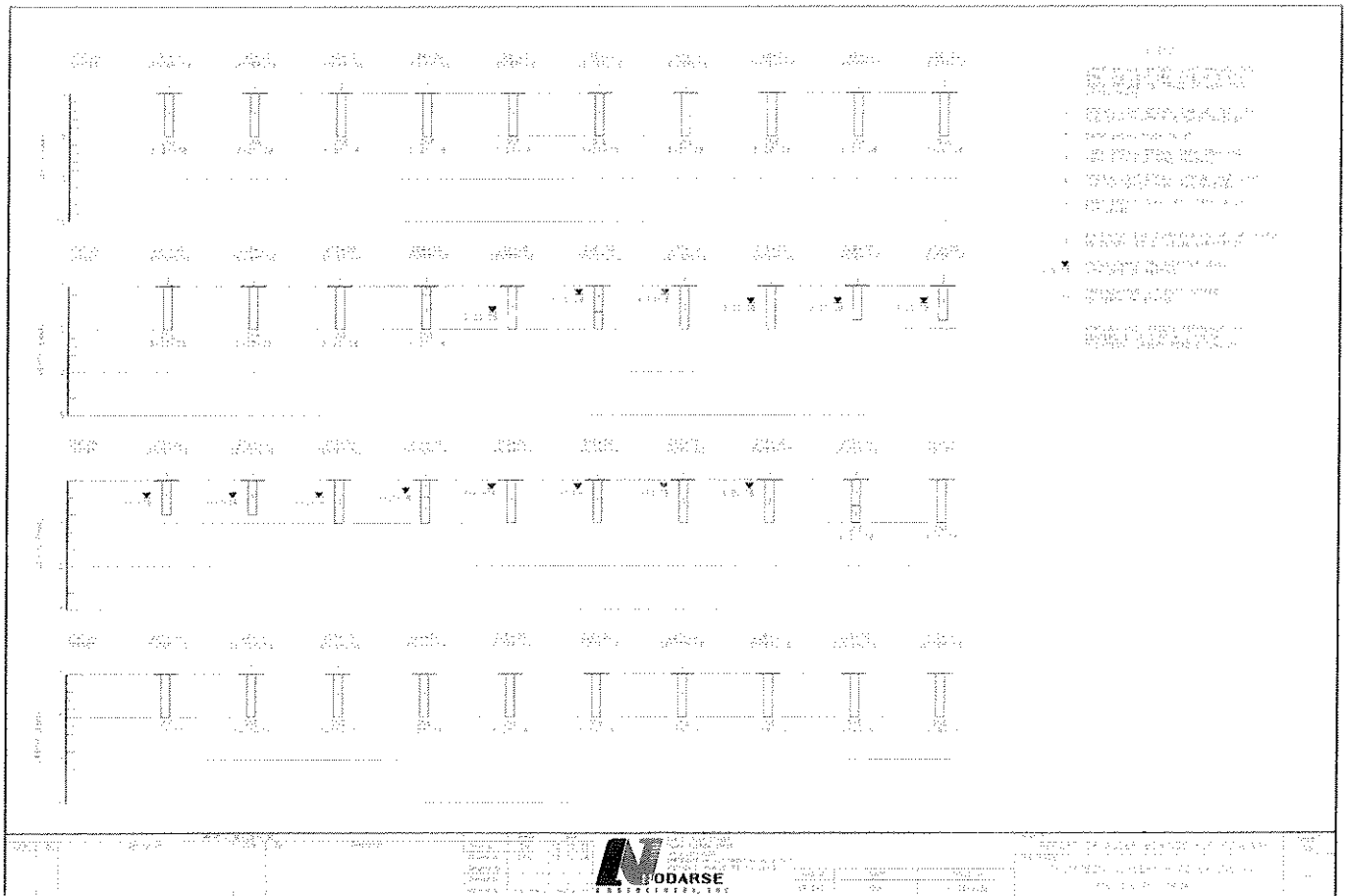
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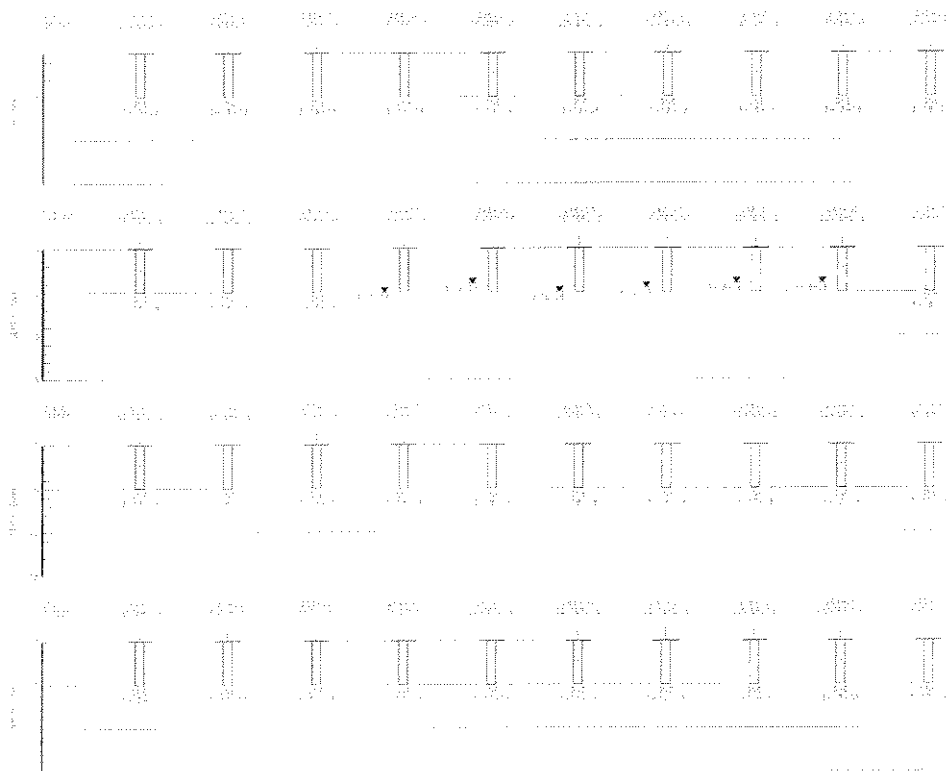
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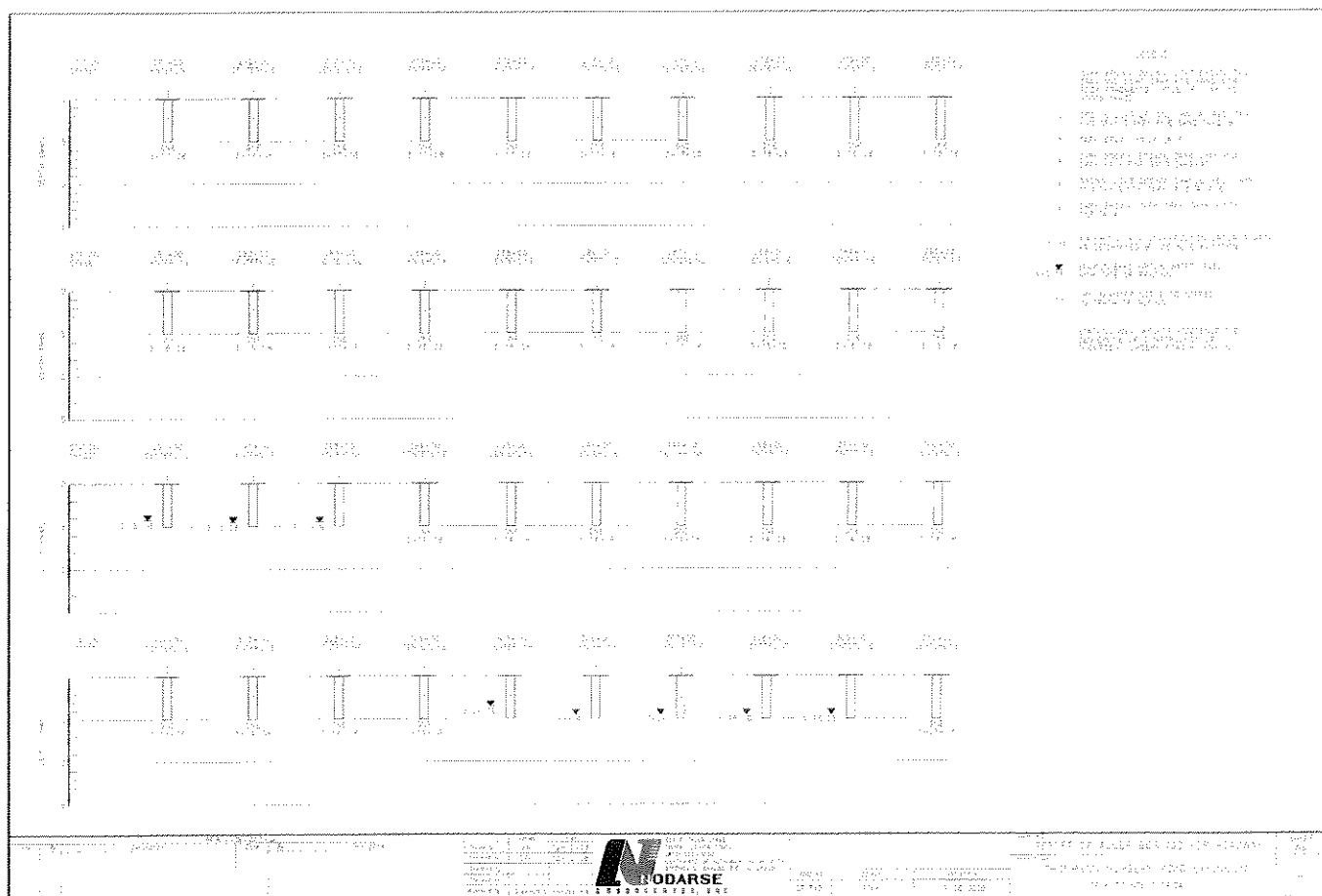


TABLE 1
LABORATORY TEST RESULTS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Stratum Number	Station	Offset (ft)	Sample Depth(ft)	Percent Passing Sieve Number							Moisture Content (%)	Organic Content (%)	Atterberg limits		AASHTO Classification
				4	10	20	40	60	100	200			LL (%)	PI (%)	
1	51+00	Center line	1 - 4	-	-	-	-	-	-	5	5	-	-	-	A-3
1	91+00	Center line	2 - 3	100	100	100	82	39	12	6	3	-	-	-	A-3
1	104+00	Center line	1 - 2	-	-	-	-	-	-	10	18	2	-	-	A-3
1	115+00	20 LT	0 - 2	-	-	-	-	-	-	9	4	-	-	-	A-3
1	138+00	Center line	1 - 5	100	100	100	82	37	9	4	3	-	-	-	A-3
1	153+00	Center line	1 - 3	-	-	-	-	-	-	9	13	3	-	-	A-3
1	161+00	Center line	1.5 - 4	-	-	-	-	-	-	10	11	-	-	-	A-3
1	182+00	Center line	0 - 3	100	100	100	87	42	12	6	2	-	-	-	A-3
1	203+00	Center line	0 - 1	-	-	-	-	-	-	9	9	-	-	-	A-3
1	205+00	Center line	3.5 - 5	-	-	-	-	-	-	10	25	4	-	-	A-3
1	220+00	10 RT	1 - 1.5	-	-	-	-	-	-	6	2	-	-	-	A-3
1	248+00	Center line	4 - 5	-	-	-	-	-	-	4	21	-	-	-	A-3
1	266+00	Center line	0 - 1.5	100	100	99	84	31	7	3	3	-	-	-	A-3
1	285+00	Center line	0 - 2	-	-	-	-	-	-	3	4	-	-	-	A-3
1	307+00	Center line	1 - 5	100	100	100	90	45	10	3	3	-	-	-	A-3
1	329+00	Center line	0.5 - 5	-	-	-	-	-	-	3	2	-	-	-	A-3
3	42+00	Center line	0 - 2	-	-	-	-	-	-	17	28	10	-	-	A-8
3	63+00	Center line	0 - 2	-	-	-	-	-	-	85	146	76	-	-	A-8
3	80+00	Center line	0 - 1	-	-	-	-	-	-	45	38	20	-	-	A-8
3	96+00	Center line	0 - 0.5	-	-	-	-	-	-	31	16	17	-	-	A-8
3	149+00	Center line	0 - 1	-	-	-	-	-	-	20	48	28	-	-	A-8
3	217+00	Center line	0 - 5	-	-	-	-	-	-	9	457	87	-	-	A-8
4	68+00	Center line	4 - 5	-	-	-	-	-	-	20	8	-	-	-	A-2-4
4	107+00	Center line	2 - 5	100	100	100	88	52	30	24	9	-	N.P.	N.P.	A-2-4
4	131+00	Center line	3.5 - 5	-	-	-	-	-	-	27	11	-	N.P.	N.P.	A-2-4
4	145+00	Center line	3.5 - 5	100	100	100	82	44	19	15	13	-	-	-	A-2-4
4	169+00	Center line	3.5 - 5	-	-	-	-	-	-	28	16	-	N.P.	N.P.	A-2-4
4	219+00	Center line	3 - 5	100	100	100	89	53	35	33	13	-	N.P.	N.P.	A-2-4
5	84+00	Center line	3 - 5	-	-	-	-	-	-	71	26	-	35	13	A-6
5	97+00	Center line	4 - 5	100	100	100	98	88	80	77	20	-	34	20	A-6
6	62+00	Center line	4 - 5	100	100		91	63	41	37	12	-	N.P.	N.P.	A-4
6	76+00	Center line	0 - 1	-	-	-	-	-	-	94	121	-	-	-	A-4
6	79+00	Center line	1 - 5	-	-	-	-	-	-	43	15	-	N.P.	N.P.	A-4

N. P. - Non-Plastic

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
36+00**	-	-	-
37+00**	-	-	-
38+00	Centerline	2.9	0
39+00	Centerline	2.4	0
40+00	Centerline	2.5	0
41+00	Centerline	2.6	0
42+00	Centerline	2.3	0
43+00	Centerline	3.6	0
44+00	Centerline	3.3	0
45+00	Centerline	GNE	3
46+00	Centerline	GNE	4
47+00	Centerline	GNE	>6
48+00	Centerline	GNE	>6
49+00	Centerline	GNE	>6
50+00	Centerline	GNE	>6
51+00	Centerline	GNE	>6
52+00	Centerline	GNE	>6
53+00	Centerline	GNE	>6
54+00	Centerline	GNE	>6
55+00	Centerline	GNE	>6
56+00	Centerline	5	2
57+44	Centerline	3.5	1
58+00	Centerline	3.5	1
59+00	Centerline	3.5	1
60+00	Centerline	4	1
61+00	Centerline	3	0
62+00	Centerline	4.5	1
63+00	Centerline	GNE	1
64+00	Centerline	4	1
65+00	Centerline	GNE	1
66+00	Centerline	GNE	1
67+00	Centerline	3.5	0
68+00	Centerline	3.5	0
69+00	Centerline	4	1
70+00	Centerline	GNE	1
71+00	Centerline	GNE	1
72+00	Centerline	GNE	1
73+00	Centerline	GNE	1
74+00	Centerline	GNE	1
75+00	Centerline	GNE	1

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

† Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
76+00	Centerline	GNE	1
77+00	Centerline	GNE	1
78+00	Centerline	GNE	1
79+00	Centerline	GNE	1
80+00	Centerline	2	0
81+00	Centerline	GNE	1
82+00	Centerline	GNE	1
83+00	Centerline	GNE	1
84+00	Centerline	3	0
85+00	Centerline	3	0
86+00	Centerline	3	0
87+00	Centerline	4	1
88+00	Centerline	GNE	1
89+00	Centerline	GNE	1
90+00	Centerline	GNE	1
91+00	Centerline	3	0
92+00	Centerline	3	0
93+00	Centerline	3	0
94+00	Centerline	GNE	1
96+00	Centerline	GNE	1
97+00	Centerline	GNE	1
98+00	Centerline	GNE	1
99+00	Centerline	GNE	1
100+00	Centerline	GNE	1
101+00	Centerline	GNE	1
102+00	Centerline	3	0
103+00	Centerline	3	0
104+00	Centerline	GNE	0
105+00	Centerline	GNE	1
106+00	Centerline	GNE	1
107+00	Centerline	GNE	1
108+00	Centerline	GNE	1
109+00	Centerline	GNE	1
110+00	35 LT	GNE	1
111+00	30 LT	GNE	1
112+00	25 LT	GNE	3
113+00	25 LT	GNE	3
114+00	25 LT	5	2
115+00	20 LT	5	2

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

† Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
116+00	20 LT	GNE	3
117+00	20 LT	GNE	3
118+00	Centerline	GNE	3
119+00	Centerline	GNE	3
120+00	Centerline	GNE	3
121+00	Centerline	GNE	3
122+00	Centerline	GNE	3
123+00	Centerline	GNE	3
124+00	Centerline	GNE	3
125+00	Centerline	GNE	3
126+00	Centerline	GNE	3
127+00	Centerline	GNE	3
128+00	Centerline	GNE	3
129+00	Centerline	GNE	3
130+00	Centerline	GNE	3
131+00	Centerline	GNE	3
132+00	Centerline	GNE	3
133+00	Centerline	GNE	3
134+00	Centerline	GNE	3
135+00	Centerline	GNE	3
136+00	Centerline	GNE	4
136+70	Centerline	GNE	3
138+00	Centerline	GNE	2
139+00	Centerline	GNE	2
140+00	Centerline	GNE	1
141+00	Centerline	GNE	1
142+00	Centerline	5	1
143+00	Centerline	4	1.5
144+00	Centerline	4	1.5
145+00	Centerline	5	1.5
146+00	Centerline	5	1
147+00	Centerline	4.8	1
148+00	Centerline	4.7	1
149+00	Centerline	4.2	1
150+00	Centerline	3.5	1
151+00	Centerline	3.5	1
152+00	Centerline	3.9	0.5
153+00	Centerline	2.9	0
154+00	Centerline	2.1	0.5

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

† Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
155+00	Centerline	GNE	1
156+00	Centerline	GNE	1
157+00***	-	-	-
158+00***	-	-	-
159+00***	-	-	-
160+00***	-	-	-
161+00	Centerline	GNE	1.5
162+00	Centerline	5	1.5
163+00	Centerline	3.5	1.5
164+00	Centerline	3	0
165+00	Centerline	2.5	0
166+00	Centerline	3	0
167+00	Centerline	4	1
168+00	Centerline	GNE	2
169+00	Centerline	GNE	2
170+00	Centerline	GNE	2
171+00	Centerline	GNE	2
172+00	Centerline	GNE	3
173+00	Centerline	GNE	3
174+00	Centerline	GNE	3
175+00	Centerline	GNE	3
176+00	Centerline	GNE	3
177+00	Centerline	GNE	3
178+00	Centerline	GNE	3
179+00	Centerline	GNE	3
180+00	Centerline	GNE	3
181+00	Centerline	GNE	3
182+00	Centerline	GNE	3
183+00	Centerline	GNE	3
184+00	Centerline	GNE	3
185+00	Centerline	GNE	3
186+00	Centerline	GNE	3
187+00	Centerline	GNE	3
188+00	Centerline	GNE	3
189+00	Centerline	GNE	3
190+00	Centerline	GNE	3.5
191+00	Centerline	GNE	3.5
192+00	Centerline	GNE	3.5
193+00	Centerline	GNE	3.5

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

+ Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
194+00	Centerline	GNE	3.5
195+00	Centerline	GNE	3.5
196+00	Centerline	GNE	3
197+00	Centerline	GNE	3
198+00	Centerline	GNE	2
199+00	Centerline	GNE	2
200+00	Centerline	GNE	2
201+00	Centerline	GNE	2
202+00	Centerline	GNE	1
203+00	Centerline	GNE	1
204+00	Centerline	GNE	1
205+00	Centerline	3	0
206+00	Centerline	1	+
207+00	Centerline	1	+
208+00	Centerline	2	+
209+00	Centerline	2	+
210+00	Centerline	2	+
211+00	Centerline	2	+
212+00	Centerline	2	+
213+00	Centerline	2	+
214+00	Centerline	1.5	+
215+00	Centerline	1	+
216+00	Centerline	1	+
217+00	Centerline	1	+
218+00	Centerline	1	+
219+00	Centerline	GNE	1.5
220+00	10 RT	GNE	1.5
221+00	Centerline	GNE	1
222+00	Centerline	GNE	1
223+00	Centerline	GNE	1
224+00	Centerline	GNE	1
225+00	Centerline	GNE	0.5
226+00	Centerline	GNE	0.5
227+00	Centerline	GNE	0.5
228+00	Centerline	GNE	0.5
229+00	Centerline	GNE	1
230+00	Centerline	GNE	1
231+00	Centerline	GNE	1
232+00	Centerline	GNE	1

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

+ Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
233+00	Centerline	GNE	1
234+00	Centerline	GNE	>6
235+00	Centerline	GNE	>6
236+00	Centerline	GNE	>6
237+00	Centerline	GNE	>6
238+00	Centerline	GNE	3
239+00	Centerline	GNE	3.5
240+00	Centerline	GNE	3.5
241+00	Centerline	GNE	3.5
242+00	Centerline	GNE	2
243+00	Centerline	GNE	2
244+00	Centerline	5	1.5
245+00	Centerline	3.9	2.5
246+00	Centerline	5	1
247+00	Centerline	4.4	1
248+00	Centerline	4	1
249+00	Centerline	4	1
250+00	Centerline	GNE	2
251+00	Centerline	GNE	1.5
252+00	Centerline	GNE	3.5
253+00	Centerline	GNE	3.5
254+00	Centerline	GNE	1
255+00	Centerline	GNE	1
256+00	Centerline	GNE	1
257+00	Centerline	GNE	1
258+00	Centerline	GNE	1
259+00	Centerline	GNE	1.5
260+00	Centerline	GNE	1.5
261+00	Centerline	GNE	1.5
262+00	Centerline	GNE	1.5
263+00	Centerline	GNE	1.5
264+00	Centerline	GNE	1.5
265+00	Centerline	GNE	1.5
266+00	Centerline	GNE	2
267+00	Centerline	GNE	2
268+00	Centerline	GNE	2
269+00	Centerline	GNE	1.5
270+00	Centerline	GNE	1.5
271+00	Centerline	GNE	1.5

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

† Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
272+00	Centerline	GNE	1
273+00	Centerline	GNE	1
274+00	Centerline	GNE	3
275+00	Centerline	GNE	3
276+00	Centerline	GNE	3
277+00	Centerline	GNE	3
278+00	Centerline	GNE	3
279+00	Centerline	GNE	3
280+00	Centerline	GNE	3
281+00	Centerline	GNE	3
282+00	Centerline	GNE	2
283+00	Centerline	GNE	2
284+00	Centerline	GNE	2
285+00	Centerline	GNE	2
286+00	Centerline	GNE	2
287+00	Centerline	GNE	2
288+00	Centerline	GNE	2
289+00	Centerline	GNE	2
290+00	Centerline	GNE	2
291+00	Centerline	4.3	1.5
292+00	Centerline	4.4	1.5
293+00	Centerline	4.6	1.5
294+00	Centerline	GNE	2
295+00	Centerline	GNE	2
296+00	Centerline	GNE	1
297+00	Centerline	GNE	1.5
298+00	Centerline	GNE	1.5
299+00	Centerline	GNE	1.5
300+00	Centerline	GNE	2
301+00	Centerline	GNE	2
302+00	Centerline	GNE	1.5
303+00	Centerline	GNE	2
304+00	Centerline	GNE	2
305+00	Centerline	3.5	1
306+00	Centerline	4.5	1
307+00	Centerline	4.5	1
308+00	Centerline	4.5	1
309+00	Centerline	4.5	1
310+00	Centerline	GNE	1.5
311+00	Centerline	GNE	1.5

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

† Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101A

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
312+00	Centerline	GNE	2
313+00	Centerline	GNE	1.5
314+00	Centerline	GNE	2
315+00	Centerline	GNE	2
316+00	Centerline	GNE	2
317+00	Centerline	GNE	2
318+00	Centerline	GNE	1.5
319+00	Centerline	GNE	1.5
320+00	Centerline	GNE	3
321+00	Centerline	GNE	3
322+00	30 LT	GNE	3.5
323+00	Centerline	GNE	3.5
324+00	Centerline	GNE	3.5
325+00	Centerline	GNE	3.5
326+00	Centerline	GNE	3
327+00	Centerline	GNE	3
328+00	Centerline	GNE	3
329+00	Centerline	GNE	3
330+00	Centerline	GNE	3

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

† Estimated seasonal high water table above existing ground surface.

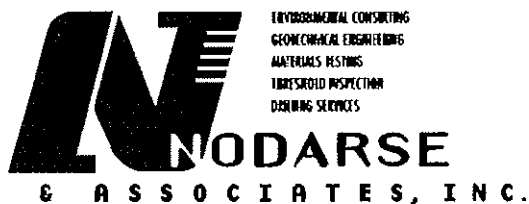
**60% Roadway Soil Survey Report
Thompson Nursery Road Extension
Phase I
Project No. P-06-603B
Polk County, Florida**

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APPENDIX:

FIGURE 1:	USGS Quadrangle Map
FIGURE 2:	USDA Soils Map
FIGURE 3:	Report Soil Survey
FIGURES 4-11:	Report of Auger Borings for Roadway
FIGURES 12 & 13:	Report of Auger Borings for Ponds
TABLE 1:	Laboratory Test Results
TABLE 2:	Estimated Seasonal High Groundwater Levels



October 28, 2009
Project No. 04-06-0014-101B

Mr. Tom Montgomery, P.E.
Pitman-Hartenstein & Associates, Inc.
6989 East Fowler Avenue
Tampa, Florida 33617

60% Roadway Soil Survey Report
Thompson Nursery Road Extension, Phase 1
Project No. P-06-603B
Polk County, Florida

Dear Mr. Montgomery:

Nodarse & Associates, Inc. (N&A) is pleased to present this 60% Soil Survey Report for the above-referenced project. This exploration was authorized by your firm and was performed in general accordance with our proposal dated January 26, 2006. This report presents a general summary of the results of our soil survey. The detailed results of the soil survey are presented on the **Roadway Soil Survey** and the **Report of Auger Boring Sheets** in the **Appendix**.

PROJECT DESCRIPTION

Polk County has proposed constructing an extension to State Road 540, an extension of Thompson Nursery Road as well as widening Thompson Nursery Road and Chalet Suzanne Road in Polk County, Florida. A geotechnical report by **N&A** dated November 16, 2006 summarized the results of explorations and evaluations for the proposed widening of the roadway along Thompson Nursery Road and Chalet Suzanne Road from Waterset Gardens Drive to SR-17. The section that pertains to this report is the proposed extension of Thompson Nursery Road from US 17 to east of West Lake Ruby Drive, a distance of approximately 6.6 miles. The project site is located in Sections 5, 6, 8, 9, 14, 15 and 16, Township 29 South and Range 26 East in Polk County, Florida. The existing area of the roadway alignment is currently occupied by rural residential areas and farm lands. A bridge is proposed at a location in Sections 15, Township 29 South and Range 26 East in Polk County, Florida where the proposed extension will pass over the existing CSX Railroad.

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The typical section for the proposed roadway will be a four lane divided urban major collector roadway with a 22 foot median, 12 foot lanes, 4 foot bicycle lanes and 6 foot sidewalks on both sides. Based on preliminary 60% plans it appears a majority of the alignment will be filled. This report is limited to the roadway extension. Other Geotechnical aspects of the proposed extension will include: intersection signalization, box culverts, a single span bridge over the CSX Railroad, retaining walls and stormwater ponds. At this time, the locations of the box culverts and overhead signals have not yet been determined. Reports addressing signal structure foundations and the bridge and wall foundations will be submitted under separate covers.

REVIEW OF AVAILABLE DATA

Based on the United States Geological Survey (USGS) "Eloise, Florida" quadrangle map, the elevations along the proposed roadway alignment range from approximately +130 feet NGVD to +150 feet NGVD. An excerpt of the USGS the quadrangle map for the project area is shown on **Figure 1 of the Appendix.**

A portion of the United States Department of Agriculture (USDA) soil survey for Polk County for the project site is shown on **Figure 2 of the Appendix.** Soils found in the vicinity of the project site are summarized in the following table.

Symbol	USDA Soil Name	Depth of Seasonal High Groundwater Table for Soil Type in its Natural State	Typical Duration of Seasonal High
2	Apopka Fine Sand, 0 to 5 Percent Slopes	> 6.0 feet	-
3	Candler Sand, 0 to 5 Percent Slopes	> 6.0 feet	-
6	Eaton Mucky Fine Sand, Depressional	+2.0 - 0 feet	Jun - Feb
7	Pomona Fine Sand	0 - 1.0 feet	Jun - Oct
13	Samsula Muck	+2.0 - 0 feet	Jan - Dec
14	Span Fine Sand, 0 to 5 Percent Slopes	1.5 - 3.5 feet	Jul - Oct
15	Tavares Fine Sand, 0 to 5 Percent Slopes	3.5 - 6.0 feet	Jun - Dec
17	Smyrna and Myakka Fine Sands	0 - 1.0 feet	Jun - Oct
21	Immokalee Sand	0 - 1.0 feet	Jun - Oct
22	Pomella Fine Sand	2.0 - 3.5 feet	Jul - Nov
23	Ona Fine Sand	0 - 1.0 feet	Jun - Oct
25	Placid and Myakka Fine Sands, Depressional	+2.0 - 0 feet	Jul - Nov
29	St. Lucie Fine Sand, 0 to 5 Percent Slopes	>6.0 feet	-
31	Adamsville Fine Sand	2.0 - 3.5 feet	Jun - Nov
32	Kaliga Muck	+1.0 - 0 feet	Jan - Dec
35	Hontoon Muck	+2.0 - 0 feet	Jan - Dec

Note that the soil series indicated by the SCS may vary in description from conditions found by our field work. The differences may be in interpretation of soil types or be the result of activity at the site subsequent to the publication. The SCS publication is used as a reference and N&A is not attempting to verify the existence of the SCS soil types. The limits of the SCS series may not represent inclusions within a mapped area. Inclusions are varying soil types found within a defined, mapped series.

Based on review of the potentiometric surface for the upper Floridan Aquifer in the Southwest Florida Water Management District and Vicinity, the potentiometric surface at the site ranges from approximately +100 to +110 feet NGVD. Based on the depth of the confining layer and the proposed elevation of the roadway, artesian conditions are not anticipated to be a concern.

SUBSURFACE EXPLORATION

Boring locations were determined and staked in the field by N&A personnel based on site plans provided by Pitman-Hartenstein & Associates, Inc.

Subsurface conditions were explored along the proposed roadway alignment by performing a series of 4 to 8 foot deep hand auger borings at an approximate 100 foot spacing from west of US 17 to east of West Lake Ruby Drive. Shallow auger borings were terminated due to high ground water levels and cave-in of the borehole. Subsurface conditions for the ponds were explored by performing thirty-seven machine auger borings to a depth of about 15 feet at requested locations within the pond areas. The approximate boring location and offset for the roadway and pond borings are shown on **Report of Auger Borings for Roadway Sheets (Figures 4 through 11)** and **Report of Auger Borings for Ponds Sheets (Figures 12 and 13)** in the Appendix.

The machine auger borings were performed by hydraulically turning a 4-inch diameter continuous flight auger into the ground in 5-foot increments. Additional flights were added until the desired termination depth was achieved. The auger was then extracted without further rotations and representative soil samples were retrieved from the auger. Samples were visually classified in the field and were then packaged and returned to our soils laboratory for further classification and testing. The holes were then backfilled with soil cuttings.

The hand auger boring procedure consisted of manually turning a 3 inch diameter, 6 inch long bucket sampler into the soil until it was full. The sampler was then retrieved and the soils in the sampler were visually examined and classified. The procedure was repeated until the desired termination depth was achieved or shallow groundwater levels caused collapse of the borehole. Samples of representative strata were obtained for further visual classification and testing. Water levels were measured at the boreholes at the time of our field exploration to evaluate the depth to groundwater. The holes were then backfilled with soil cuttings.

LABORATORY TESTING

Samples recovered from the borings were returned to the laboratory for visual classification and stratification by a geotechnical engineer. Index property tests were conducted on selected samples to aid classification. The results of the laboratory testing are tabulated on **Table 1** in the **Appendix**. The results have also been summarized on the **Roadway Soil Survey Sheet, Figure 3** in the **Appendix**. All laboratory testing was performed in accordance with appropriate testing methods.

GENERAL SUBSURFACE CONDITIONS

The soil conditions encountered in the borings for the roadway and pond areas are shown on the **Report of Auger Borings for Roadway Sheets (Figures 4 through 11)** and **Report of Auger Borings for Ponds Sheets (Figures 12 and 13)** in the **Appendix**. The soil survey encountered six (6) generalized soil strata to the depths explored in the borings. Soil samples obtained from these borings were transported to our geotechnical engineering laboratory for testing. Strata boundaries between borings should be considered approximate as the actual transition between soil types may be gradual. Descriptions of the soils encountered in these borings are accompanied by the AASHTO Classification Symbol (A-3, A-2-4, etc.).

The results of our laboratory testing program are summarized on the attached **Roadway Soil Survey Sheet (Figure 3)** and in **Table 1** in the **Appendix**. The generalized soil strata, based on visual examination and the laboratory testing program are summarized in the following table.

Soil Stratum	Soil Description	AASHTO Classification	Classification by FDOT Index 505
1	Dark brown, brown, light brown, tan, gray and light gray fine sand possibly with rock fragments, trace of clay or roots	A-3	Select (S)
2	Brown, light brown, orange, red, tan and gray clayey fine sand	A-2-6	Plastic (P)
3	Dark brown muck	A-8	Muck (M)
4	Dark brown, brown, dark gray and gray silty fine sand	A-2-4	Select (S)
5	Brown, light brown, orange, red, gray and tan sandy clay	A-6 / A-7-6	Plastic (P)
6	Dark brown, dark gray, gray and sandy silt	A-4	Plastic (P)

As indicated in the soil borings, performed in the roadway alignment and pond areas (**Figures 4 through 13**), groundwater was observed during our exploration from approximately 0.5 feet below the existing ground surface to greater than 15 feet below the ground surface. It should be noted that the roadway borings were generally conducted during the "dry" season while the pond borings were conducted during the "rainy" season. Encountered groundwater levels are shown adjacent to the soil boring profiles, where applicable, in the **Appendix**. Borings that did not encounter groundwater to the termination depth, are denoted as GNE adjacent to the soil profile. Groundwater levels fluctuate with the amount of local rainfall and, therefore, may be different at other times. Estimated seasonal high groundwater levels for the roadway borings are shown on **Table 2** in the **Appendix**. Estimated seasonal high groundwater levels for the ponds are shown adjacent to the soil boring profiles on **Figures 12 and 13** in the **Appendix**. These estimates are based on interpretation of USDA soil survey data, soil borings, antecedent conditions and consideration of adjacent wetlands and roadway improvements.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on the project characteristics previously described, the data obtained in our field exploration and our experience with similar subsurface conditions and construction types. If subsurface conditions different from those disclosed by the borings are encountered during construction, we should be notified immediately so that we might review the following recommendations in light of such changes.

Roadway Construction: Material use and/or removal should be completed in accordance with FDOT Indices 500 and 505. The following summarizes the generalized use or non-use of the soils and materials that will most likely be encountered during the roadway constructions.

- The material from Stratum 1 (A-3) appears to be satisfactory for use as compacted roadway fill when utilized in accordance with Index 505.
- The material from Stratum 4 (A-2-4) appears to be satisfactory for use as compacted roadway fill when utilized in accordance with Index 505. However, it should be noted that this material is likely to retain excess moisture and be difficult to compact. It should be used in the embankment above the water level existing at the time of construction.
- The materials from Strata 2, 5 and 6 (A-2-6, A-4, A-6 and A-7-6) are plastic and shall be removed in accordance with Index 500. This material may be placed above the existing water levels (at the time of construction) to within 4 feet of the proposed base. This material should also be placed uniformly in the lower portion of the embankment for some distance along the project rather than full depth for short distances.

- Soil in Stratum 3 is highly organic and shall be removed in accordance with Index 500 of the Florida Department of Transportation (FDOT) Roadway Traffic and Design Standards unless otherwise shown on the plans.

Generally, a minimum separation of 2 feet is recommended between the estimated seasonal high groundwater level and the bottom of a limerock base. Based on preliminary 60% plans it appears this minimum separation is achieved. Once complete 60% plans are complete N&A will review base clearance through the alignment.

The areas of most concern are the areas of with organic soils, classified as muck (A-8) in the AASHTO Soil Classification, as they should either be avoided or excavated, if appropriate. Muck was encountered in the following tabulated locations of the project site.

Station	Offset (ft)	Approximate Depth of Organic Soils (ft)
40+00	CL	0 - 1
42+00	CL	0 - 2
61+00	CL	0 - 1.5
62+00	CL	0 - 2
63+00	CL	0 - 2
64+00	CL	0 - 1
65+00	CL	0 - 2
66+00	CL	0 - 2
67+00	CL	0 - 1
68+00	CL	0 - 1.5
69+00	CL	0 - 1
70+00	CL	0 - 2
71+00	CL	0 - 0.5
72+00	CL	0 - 1
73+00	CL	0 - 1.5
74+00	CL	0 - 1
75+00	CL	0 - 1.5
76+00	CL	0 - 1.5
77+00	CL	0 - 0.5
78+00	CL	0 - 0.5
79+00	CL	0 - 1
80+00	CL	0 - 1
81+00	CL	0 - 1
82+00	CL	0 - 3
83+00	CL	0 - 2.5
84+00	CL	0 - 3
85+00	CL	0 - 2
86+00	CL	1 - 3
87+00	CL	0 - 2.5
88+00	CL	0 - 1

Station	Offset (ft)	Approximate Depth of Organic Soils (ft)
91+00	CL	0 - 2
92+00	CL	0 - 0.5
93+00	CL	0 - 0.5
95+00	CL	0 - 0.5
96+00	CL	0 - 0.5
97+00	CL	0 - 0.5
98+00	CL	0 - 1
99+00	CL	0 - 1
100+00	CL	0 - 1
101+00	CL	0 - 1
102+00	CL	0 - 1
103+00	CL	0 - 0.75
104+00	CL	0 - 1
105+00	CL	0 - 0.5
148+00	CL	0 - 1
149+00	CL	0 - 1
152+00	CL	0.5 - 1.5
153+00	CL	0 - 1
154+00	CL	0.5 - 5
155+00	CL	1 - 7
156+00	CL	1 - 5
164+00	CL	0 - 8
165+00	CL	0 - 8
204+00	CL	1 - 5
206+00	CL	0 - 3
207+00	CL	0 - 5
208+00	CL	0 - 5
209+00	CL	0 - 4
210+00	CL	0 - 4
211+00	CL	0 - 4
212+00	CL	0 - 4
213+00	CL	0 - 5
214+00	CL	0 - 2
215+00	CL	0 - 5
216+00	CL	0 - 5
217+00	CL	0 - 5
218+00	CL	0 - 5

Note that at this time, no effort to delineate the muck has been attempted. Note also that since some of the borings were terminated in muck, the total depth of muck may be greater. As design proceeds and the proposed roadway alignment is finalized, delineation will be performed as necessary.

Stormwater Ponds: As stated earlier, sixteen pond locations are proposed throughout the roadway extension. The ponds are designated as Pond 1 through Pond 10 and FPC 1 through FPC 6. Borings

were performed at locations requested by PH&A in each of these pond locations to obtain soil and groundwater information. The results of the borings performed in the proposed pond locations are shown on the **Report of Auger Borings for Ponds Sheets (Figures 12 and 13)** in the **Appendix**.

In general, the proposed locations are suitable for the ponds with some limitations. The borings performed within the pond locations encountered intermixing layers of fine sands (A-3)(Stratum 1) and silty fine sands (A-2-4)(Stratum 4) from the existing ground surface to the boring termination depths of 15 feet. Occasionally, clayey fine sand (A-2-6)(Stratum 2) was encountered between the depths of 10 to 15 feet. It should be noted that in Pond 1 and FPC 1 sandy clay (A-6 and A-7-6)(Stratum 5) was encountered between the depth of 1.5 to 12 feet.

Based on the results of the borings, some ponds will provide more roadway fill than others. A significant amount of the soil from Pond 1 is Stratum 5 and thus can be used within the limitations previously expressed. One of two of the borings in Flood Plain Compensation (FPC) area 1 and Pond 3 also have a significant amount of Stratum 5 soil. The soil in the initial 10 feet or more in the other ponds and FPC areas were generally Stratum 1, which can be used anywhere and Stratum 4 which can generally be used anywhere, but may be difficult to compact because it may retain excess moisture.

Groundwater levels encountered in the pond borings and the estimated seasonal high groundwater levels are shown adjacent to the soil boring profiles on the **Report of Auger Borings for Ponds Sheets (Figures 12 and 13)** in the **Appendix**.

REPORT LIMITATIONS

This report is based on the results of a limited number of borings and may not accurately reflect conditions between or away from boring locations. Variations of the subsoil conditions between or away from the borings may occur. If conditions not discussed in this report are observed, we request the opportunity to review our recommendations.


Pitman-Hartenstein & Associates, Inc.
Nodarse & Associates, Inc. Project No. 04-06-0014-101B
Page 9

CLOSURE

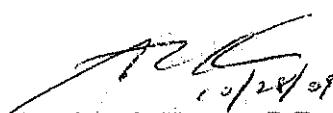
N&A appreciates the opportunity to be of service to you on this project. If you should have any questions concerning the contents of this report, or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,

NODARSE & ASSOCIATES, INC.



Eric A. McAra, P.E.
Project Engineer
FL Registration No. 69841



Stephen C. Knauss, P.E.
Senior Geotechnical Engineer
FL Registration No. 28202

Distribution: 3 – Addressee
1 – File

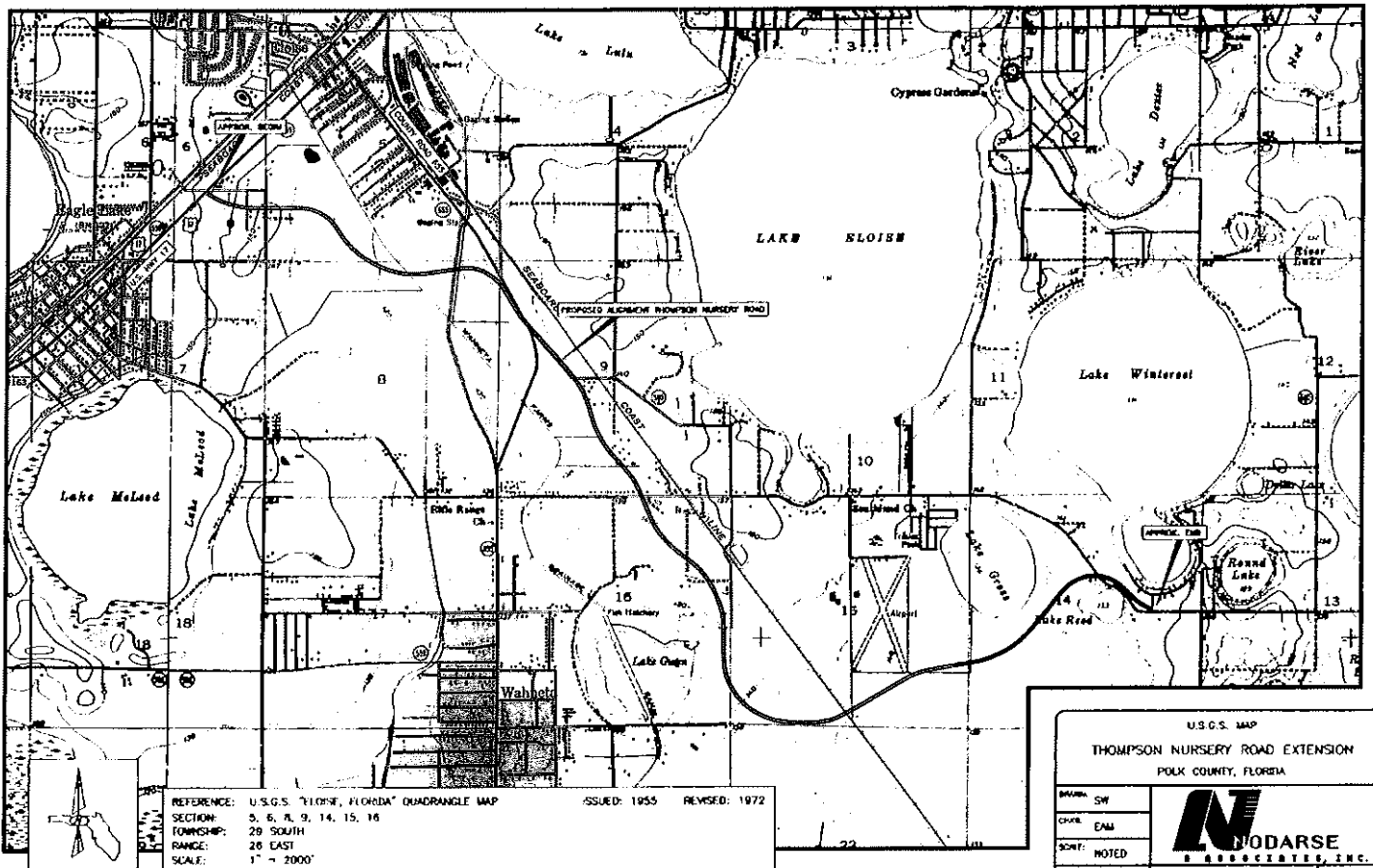
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APPENDIX

**INDEX TO APPENDIX
60% SOIL SURVEY REPORT
THOMPSON NURSERY ROAD EXTENSION, PHASE I
POLK COUNTY, FLORIDA
N&A PROJECT NO. 04-06-0014-101B**

Item	Designation	Description
1	Figure 1	USGS Quadrangle Map
2	Figure 2	USDA Soils Map
3	Figure 3	Roadway Soil Survey
4	Figures 4 through 11	Report of Auger Borings for Roadway
5	Figures 12 and 13	Report of Auger Borings for Ponds
6	Table 1	Laboratory Test Results
7	Table 2	Estimated Seasonal High Groundwater Levels

FIGURES



REFERENCE: U.S.G.S. "ELOISE, FLORIDA" QUADRANGLE MAP
 SECTION: 5, 6, 8, 9, 14, 15, 16
 TOWNSHIP: 29 SOUTH
 RANGE: 20 EAST
 SCALE: 1" = 2000'

ISSUED: 1955 REVISED: 1972

U.S.G.S. MAP
 THOMPSON NURSERY ROAD EXTENSION
 POLK COUNTY, FLORIDA

BLANK: SW

CHUR: EAM

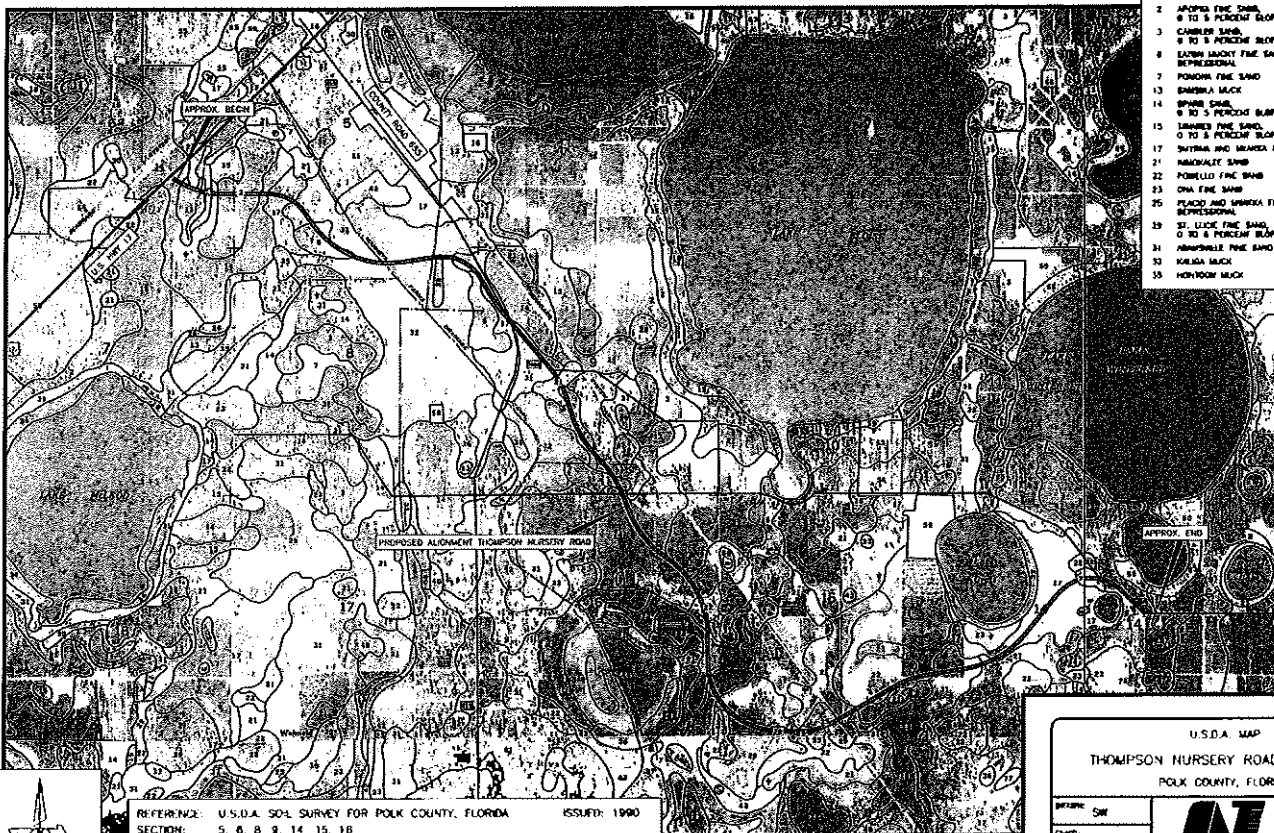
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DATE: 9-8-09

NODARSE
 ASSOCIATES, INC.

PROJ. NO. 04-06-0014-1018

FIGURE: 1



- SOILS MAP INDEX**
- 2 JACKSON FINE SAND
 - 3 4 TO 8 PERCENT SLOPES
 - 4 COLUMBIAN SAND
 - 5 8 TO 12 PERCENT SLOPES
 - 6 LUTON LAUCKY FINE SAND, RETRODEGRADED
 - 7 PONDORA FINE SAND
 - 8 BAKERSIA MUCK
 - 9 SPANISH SAND
 - 10 8 TO 12 PERCENT SLOPES
 - 11 LAMAR FINE SAND
 - 12 0 TO 4 PERCENT SLOPES
 - 13 SUTHERLAND AND MARIETTA FINE SANDS
 - 14 HAWKSWORTH SAND
 - 15 POMEROY FINE SAND
 - 16 OMA FINE SAND
 - 17 PLEASANT AND MARIETTA FINE SANDS
 - 18 BELLEVILLE SAND
 - 19 ST. LOUIS FINE SAND
 - 20 0 TO 4 PERCENT SLOPES
 - 21 HAWKSWORTH FINE SAND
 - 22 KOLIDA MUCK
 - 23 HONOLULU MUCK

REFERENCE: U.S.D.A. SOIL SURVEY FOR POLK COUNTY, FLORIDA ISSUED: 1960
 SECTION: 5, 6, 8, 9, 14, 15, 16
 TOWNSHIP: 29 SOUTH
 RANGE: 26 EAST
 SCALE: 1" = 2000'

U.S.D.A. MAP
 THOMPSON NURSERY ROAD EXTENSION
 POLK COUNTY, FLORIDA

DRAWN: SW
 CHECKED: EAM
 SCALE: NOTED
 DATE: 9-8-69

N
 NODARSE
 ASSOCIATES, INC.

PROJECT NO. 04-08-0014-1018 FIGURE: 2

DISTRICT: 7
ROAD No. S.R. 54D
COUNTY: POCAHONTE
PROJECT No. P-06-6034

SURVEY BEGINS STA. 38+00 SURVEY ENDS STA. 330+00

STRATUM NO.	ORGANIC CONTENT			SEVEN TENSILE STRENGTHS % PASS						ASHES LUMPS (%)			CORROSION TEST RESULTS						
	NO. OF TESTS	% ORGANIC	MOISTURE CONTENT	NO. OF TESTS	10 MESH	40 MESH	60 MESH	100 MESH	200 MESH	NO. OF TESTS	LIQUID LIMIT	PLASTIC INDEX	ASHTO GROUP	MATERIAL DESCRIPTION	NO. OF TESTS	RESISTIVITY ohm-cm	CHLORIDES ppm	SULFATES ppm	pH
1	3	2-4	2-23	28	100	82-90	31-59	7-17	5-10	-	-	-	A-3	DARK BROWN, BROWN, LIGHT BROWN, TAN, GRAY AND LIGHT GRAY FINE SAND, POSSIBLY WITH ROCK FRAGMENTS, TRACE OF CLAY OR ROOTS	-	-	-	-	-
2	-	-	14	1	100	65	53	32	30	-	-	-	A-2-5	BROWN, LIGHT BROWN, ORANGE, RED, TAN AND GRAY CLAYEY FINE SAND (A-2-5)	-	-	-	-	-
3	7	10-37	16-45.7	8	94	75	56	28	9-24	-	-	-	A-B	DARK BROWN MUCK	-	-	-	-	-
4	-	-	7-23	11	99-100	82-90	41-70	16-35	11-33	4	NP	NP	A-2-4	DARK BROWN, BROWN, DARK GRAY AND BROWN FINE SAND	-	-	-	-	-
5	-	-	15-26	4	100	95-98	61-68	42-90	37-77	4	14-47	13-32	A-B A-2-6	BROWN, LIGHT BROWN, ORANGE, RED, TAN AND GRAY CLAYEY FINE SAND (A-2-6)	-	-	-	-	-
6	-	-	12-15	2	100	81	63	41	37-45	2	NP	NP	A-4	DARK BROWN, DARK GRAY, GRAY SANDY SILT	-	-	-	-	-

ENGAGEMENT AND STAGNANT MATERIAL

STRATA BOX 3-TANKS ARE APPROXIMATELY HALF FULL AFTER GRADING

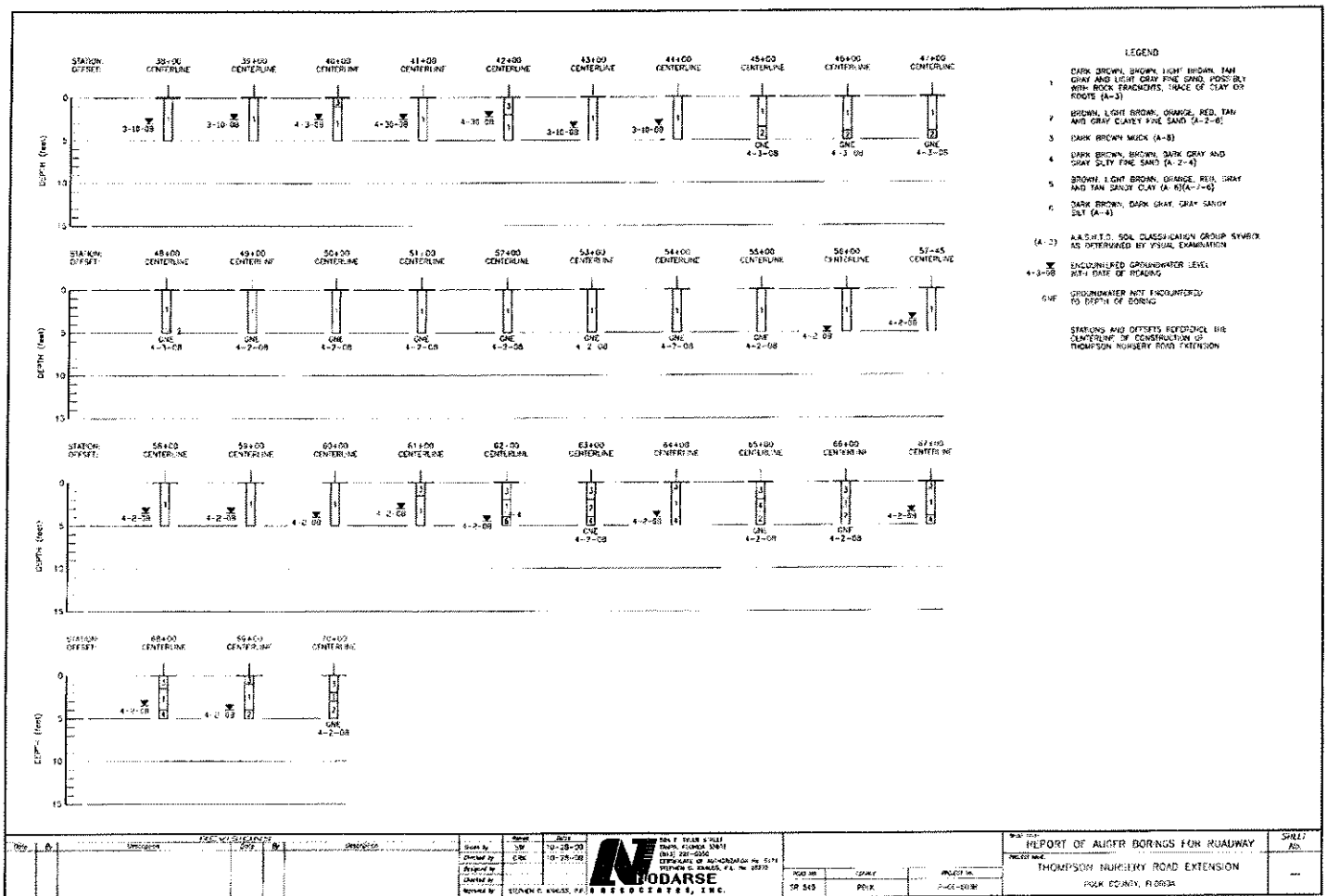
▼ WATER NAME ENTERED

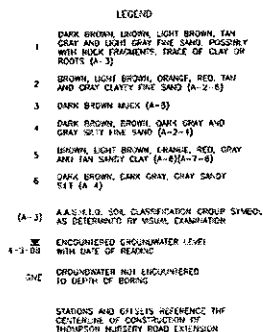
32 - SEASONAL HIGH WATER TABLE
GNC = PROGNOSIS NOT ENCOUNTERED

NOTES

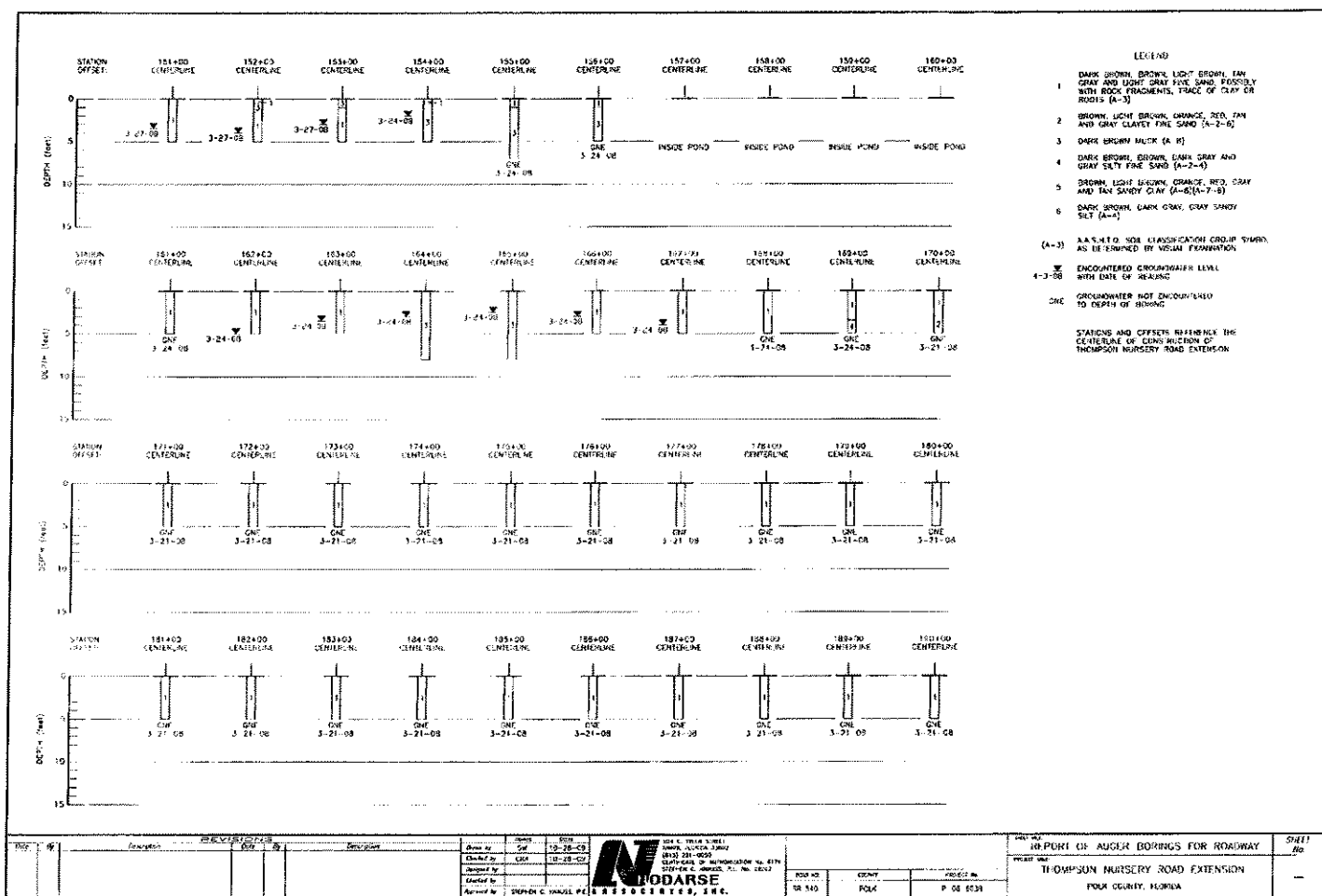
- 1) STRATA MATERIALS ARE AUTHENTICATE AND REPRESENT SOIL STRATA AT EACH TEST LOCATION ONLY. NO STRONG CORRELATIVE LINES THAT ARE SHOWN ARE FOR ESTIMATING CONTAMINANT GAINS AND DO NOT NARROWLY DEFINE THE LOCATION OF CONTAMINANT. VARIOUS REMEDIATION EFFORTS SHOULD BE ANTICIPATED AS DESCRIBED IN SECTION 2.4. FOR FURTHER DETAILS SEE SECTION 2.4.1.
- 2) BULKY FAIRLY SHOWN AS \square WHERE DOCUMENTED AT TIME OF SURVEY. GROUNDWATER NOT ENCOUNTERED SHOWN AS "T". ESTIMATED SEASONAL MAX GROUNDWATER LEVEL SHOWN AS SL.
- 3) SOIL ANALYSIS INCLUDES DATA FROM ROADWAY AND MOVED AREAS.
- 4) THE SYMBOL "X" REPRESENTS AN UNAVAILABLE PARAMETER.
- 5) THE SYMBOL "N" REPRESENTS NON-PLANTING.
- 6) THE MATERIAL SHOWN STRATA 1 SHOULD BE CLASSIFIED AS SELECT (S). THE MATERIAL IS SATISFACTORY FOR USE AS COMPACTED FILL WHEN LIMITED IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
- 7) THE MATERIAL SHOWN STRATA 4 SHOULD BE CLASSIFIED AS SELECT (S). THE MATERIAL IS SATISFACTORY FOR USE AS COMPACTED FILL WHEN LIMITED IN ACCORDANCE WITH INDEX 505. HOWEVER, THE MATERIAL MAY RETAIN EXCESS MOISTURE AND MAY BE DIFFICULT TO DRY AND COMPACT. IT SHOULD BE USED ONLY FOR THE EMPLOYMENT AREAS ADJACENT TO THE LINE OF CONSTRUCTION.
- 8) THE MATERIAL FROM STRATA 2, 5 AND 6 SHOULD BE CLASSIFIED AS PLASTIC (P). THIS MATERIAL BE REMOVED IN ACCORDANCE WITH INDEX AND 505. THIS MATERIAL MAY BE PLACED ABOVE THE EXISTING WATER LEVELS OR COVERED WITH A 6" MINIMUM THICKNESS OF PLASTIC. THIS MATERIAL SHOULD BE PLACED AT LEAST 6" BELOW THE WATER LEVEL IN THE LOWER PORTION OF THE EMPLACEMENT FROM SOME DISTANCE ALONG THE PROJECT PATHWAY THAN FULL DEPTH FOR SHORT DURATION.
- 9) THE MATERIAL SHOWN STRATA 3 IS HIGHLY ORGANIC AND SHALL BE REMOVED IN ACCORDANCE WITH

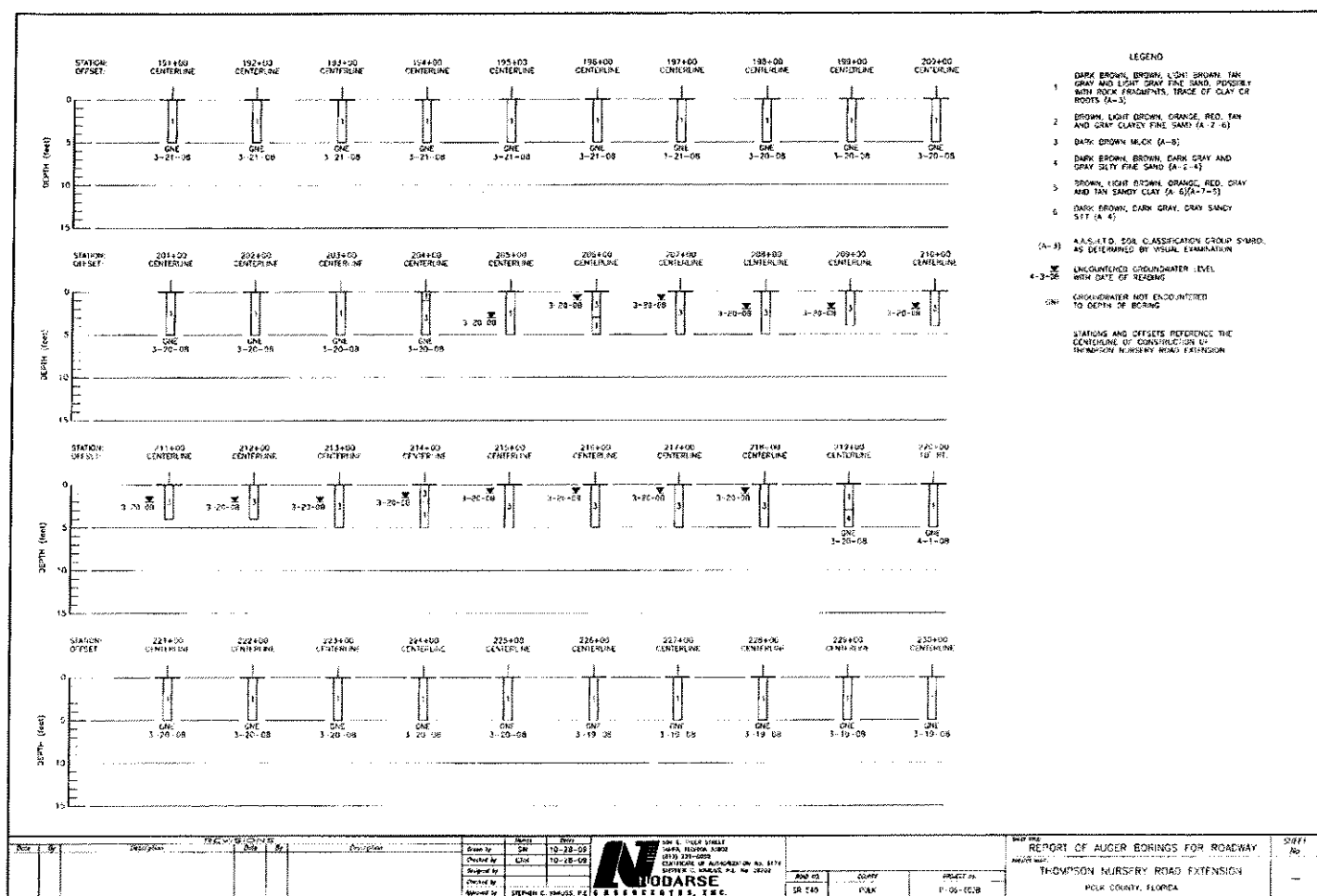
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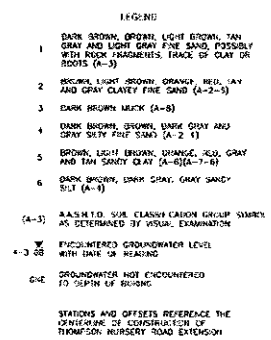




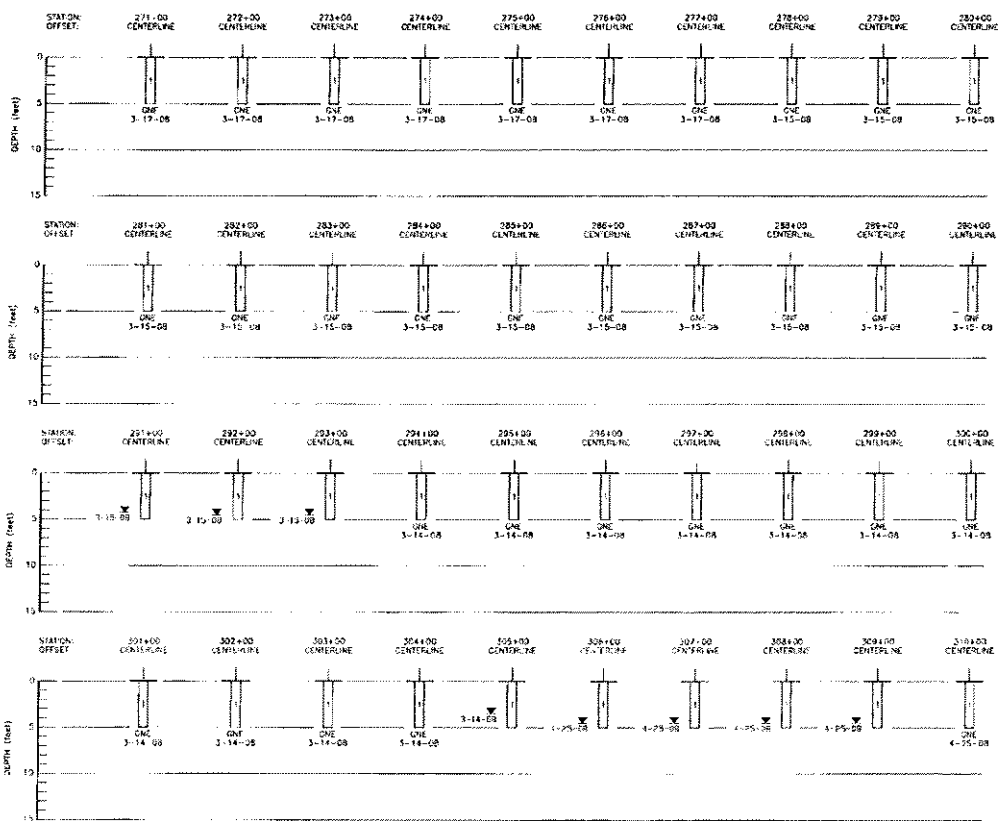
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<p>PROJECT NO: [Number]</p> <p>CLIENT: [Name]</p> <p>PROJECT NAME: [Name]</p>										<p>REPORT OF AUGER BORINGS FOR ROADWAY</p> <p>THOMPSON NURSERY ROAD EXTENSION</p> <p>POLK COUNTY, FLORIDA</p>											





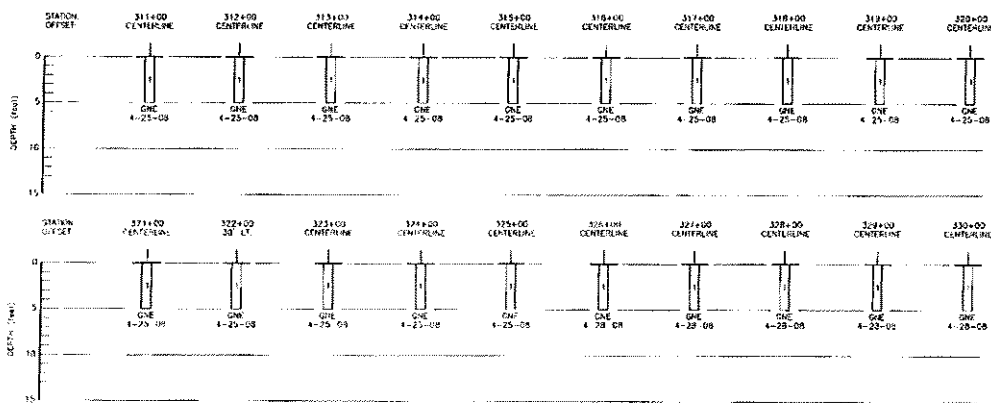


NCDARSC nm1 ASSOC. No 04 05 0014 HIGH FIGURE 9



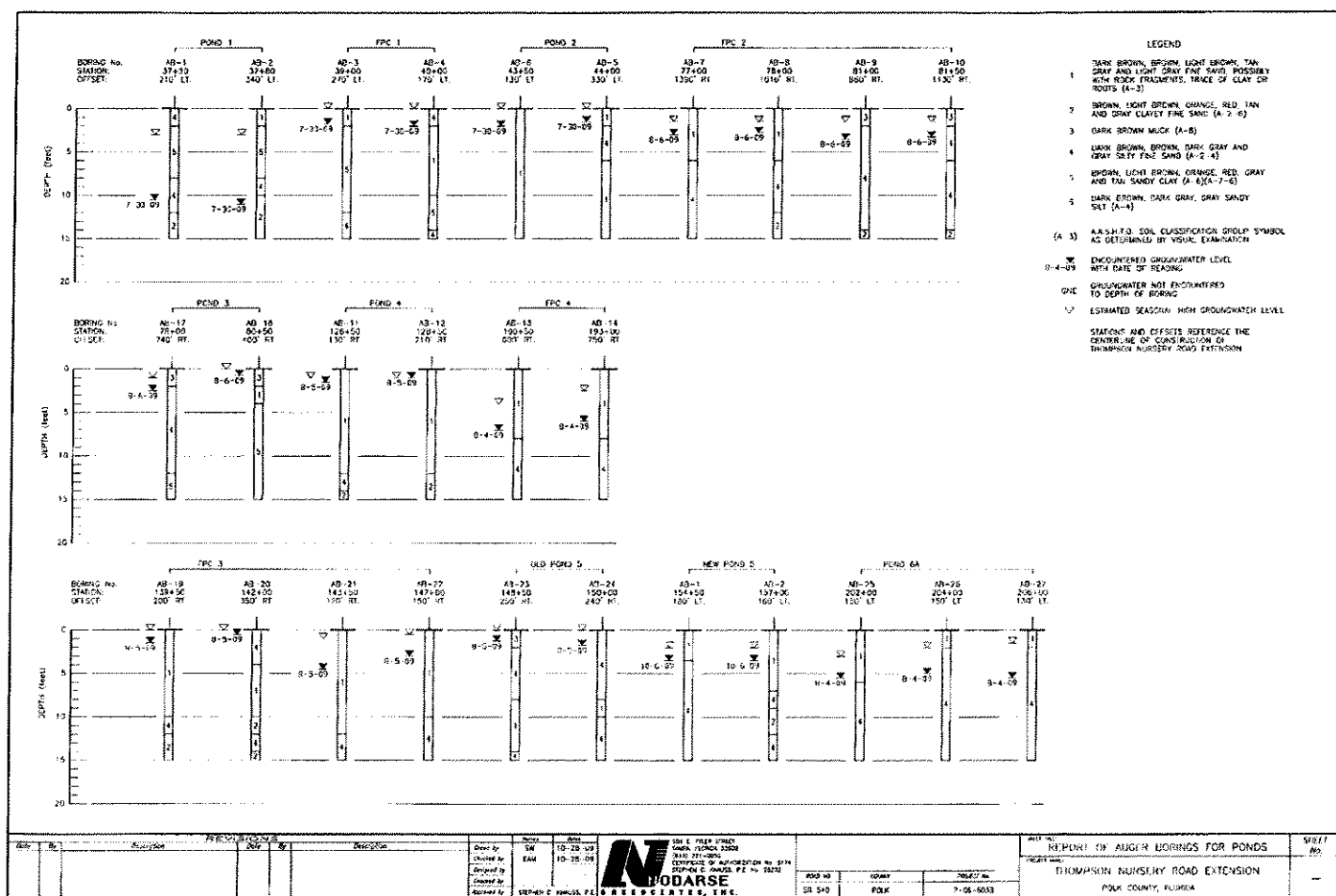
- LEGEND**
- 1 DARK BROWN, BROWN, LIGHT BROWN, TAN, GRAY AND LIGHT GRAY FINE SAND POSSIBLY WITH ROCK FRAGMENTS, TRACT OF CLAY OR ROOTS (A-3)
 - 2 BROWN, LIGHT BROWN, ORANGE, RED, TAN AND GRAY CLAYED FINE SAND (A-2-E)
 - 3 DARK BROWN MUCK (A-B)
 - 4 DARK BROWN, BROWN, DARK GRAY AND GRAY SILTY FINE SAND (A-2-A)
 - 5 BROWN, LIGHT BROWN, ORANGE, RED, GRAY AND TAN SILTY CLAY (A-6(A-7-B))
 - 6 DARK BROWN, DARK GRAY, GRAY SANDY SILT (A-4)
 - (A-1) A.A.S.H.T.O. SOIL CLASSIFICATION GROUP SYMBOL, AS DETERMINED BY VISUAL EXAMINATION
 - 7 ENCUMBERED GROUNDWATER LEVEL WITH DATE OF READING
 - ONE GROUNDWATER NOT ENCOUNTERED TO DEPTH OF 10 FEET
- STATIONS AND OFFSETS REFERENCE THE CENTERLINE OF COAST-ROD OF THOMPSON NURSERY ROAD EXTENSION

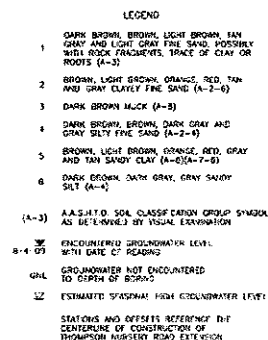
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- LEGEND
- 1 DARK BROWN, BROWN, LIGHT BROWN, TAY GRAY AND LIGHT GRAY FINE SAND, POSSIBLY WITH ROCK FRAGMENTS, TRACE OF CLAY OR ROOTS (A-3)
 - 2 BROWN, LIGHT BROWN, ORANGE, RED, TAN AND GRAY CLAYEY FINE SAND (A-2-6)
 - 3 DARK BROWN MUCK (A-8)
 - 4 DARK BROWN, BROWN, DARK GRAY AND GRAY SILTY FINE SAND (A-2-4)
 - 5 BROWN, LIGHT BROWN, ORANGE, RED, GRAY AND TAN SANDY CLAY (A-6)(A-7-8)
 - 6 DARK BROWN, DARK GRAY, GRAY SANDY SILT (A-4)
- (A-3) AASHTO SOIL CLASSIFICATION GROUP SYMBOL AS DETERMINED BY VISUAL EXAMINATION
- 4 3-08 ENCOUNTERED GROUNDWATER LEVEL WITH DATE OF READING
- ONE GROUNDWATER NOT ENCOUNTERED TO DEPTH OF BORING
- STATIONS AND OFFSETS REFERENCE THE CENTERLINE OF CONSTRUCTION OF THOMPSON NURSERY ROAD EXTENSION

101 9 101 9 101 9	101 9 101 9 101 9	101 9 101 9 101 9	101 9 101 9 101 9	101 9 101 9 101 9	101 9 101 9 101 9	101 9 101 9 101 9	101 9 101 9 101 9
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MODARFC and ASSOC No. 04-C8-0214-102H ENGINE: 1.1

TABLES

TABLE 1
SUMMARY OF LABORATORY TEST RESULTS FOR ROADWAY AND PONDS
THOMPSON NURSERY ROAD EXTENSION
POLK COUNTY, FLORIDA
N&A PROJECT NO. 04-06-0014-101B

Stratum Number	Approximate Station	Approximate Offset (centerline of construction) (ft)	Sample Depth (ft)	Percent Passing Sieve Number							Moisture Content (%)	Organic Content (%)	Atterberg Limits		AASHTO Classification
				4	10	20	40	60	100	200			LL	PI	
1	51+00	Centerline	1-4	-	-	-	-	-	-	5	5	-	NP	NP	A-3
	91+00	Centerline	2-3	100	100	100	82	39	12	6	3	-	NP	NP	A-3
	104+00	Centerline	1-2	-	-	-	-	-	-	10	18	2	NP	NP	A-3
	115+00	20 LT	0.1-2	-	-	-	-	-	-	9	4	-	NP	NP	A-3
	138+00	Centerline	1-5	100	100	100	82	37	9	4	3	-	NP	NP	A-3
	153+00	Centerline	1-3	-	-	-	-	-	-	9	13	3	NP	NP	A-3
	161+00	Centerline	1.5-4	-	-	-	-	-	-	10	11	-	NP	NP	A-3
	182+00	Centerline	0.1-3	100	100	100	87	42	12	6	2	-	NP	NP	A-3
	203+00	Centerline	0.1-1	-	-	-	-	-	-	9	9	-	NP	NP	A-3
	205+00	Centerline	3.5-5	-	-	-	-	-	-	10	25	4	NP	NP	A-3
	220+00	10 RT	1-1.5	-	-	-	-	-	-	6	2	-	NP	NP	A-3
	248+00	Centerline	4-5	-	-	-	-	-	-	4	21	-	NP	NP	A-3
	266+00	Centerline	0.1-1.5	100	100	99	84	31	7	3	3	-	NP	NP	A-3
	285+00	Centerline	0.1-2	-	-	-	-	-	-	3	4	-	NP	NP	A-3
	307+00	Centerline	1-5	100	100	100	90	45	10	3	3	-	NP	NP	A-3
	329+00	Centerline	0.5-5	-	-	-	-	-	-	3	2	-	NP	NP	A-3
	43+50	130 LT (POND 2)	14-15	100	100	100	90	59	6	5	23	-	NP	NP	A-3
	81+50	1130 RT (FPC 2)	2-2.5	100	100	99	85	51	17	10	14	-	NP	NP	A-3
	128+50	210 RT (POND 4)	6-6.5	100	100	100	86	40	11	5	20	-	NP	NP	A-3
	190+50	600 RT (FPC 4)	2-2.5	100	100	100	86	39	10	5	2	-	NP	NP	A-3
	139+50	200 RT (FPC 3)	6-6.5	100	100	99	82	41	13	9	20	-	NP	NP	A-3
	147+00	150 RT (FPC 3)	4-4.5	100	100	100	82	39	13	9	19	-	NP	NP	A-3
	244+50	240 RT (POND 7)	2-2.5	100	100	100	83	33	10	5	15	-	NP	NP	A-3
	246+50	550 RT (FPC 5)	0.1-1.0	100	100	100	84	33	8	4	6	-	NP	NP	A-3
	320+50	150 LT (POND 9)	4-4.5	100	100	100	86	37	8	5	3	-	NP	NP	A-3
	373+00	300 RT (POND 10)	6-6.5	100	100	99	82	43	12	6	9	-	NP	NP	A-3
	317+50	190 LT (FPC 6)	8-8.5	100	100	100	88	53	32	30	14	-	-	-	A-2-6

TABLE 1
SUMMARY OF LABORATORY TEST RESULTS FOR ROADWAY AND PONDS
THOMPSON NURSERY ROAD EXTENSION
POLK COUNTY, FLORIDA
N&A PROJECT NO. 04-06-0014-101B

Stratum Number	Approximate Station	Approximate Offset (centerline of construction) (ft)	Sample Depth (ft)	Percent Passing Sieve Number						Moisture Content (%)	Organic Content (%)	Atterberg Limits		AASHTO Classification
				4	10	20	40	60	100	200		LL	PI	
3	42+00	Centerline	0.1 - 2	-	-	-	-	-	-	17	28	-	-	A-8
	63+00	Centerline	0.1 - 2	-	-	-	-	-	-	85	146	-	-	A-8
	76+00	Centerline	0.1 - 1	-	-	-	-	-	-	94	121	-	-	A-4
	80+00	Centerline	0.1 - 1	-	-	-	-	-	-	45	38	-	-	A-8
	96+00	Centerline	0.1 - 0.5	-	-	-	-	-	-	31	16	-	-	A-8
	149+00	Centerline	0.1 - 1	-	-	-	-	-	-	20	48	-	-	A-8
	217+00	Centerline	0.1 - 5	-	-	-	-	-	-	9	457	-	-	A-8
	148+50	250 RT (POND 5)	0.1 - 2	100	94	88	75	46	28	23	86	-	-	A-8
	68+00	Centerline	4 - 5	-	-	-	-	-	-	20	8	-	-	A-2-4
	107+00	Centerline	2 - 5	100	100	100	88	52	30	24	9	NP	NP	A-2-4
4	131+00	Centerline	3.5 - 5	-	-	-	-	-	-	27	11	NP	NP	A-2-4
	145+00	Centerline	3.5 - 5	100	100	100	82	44	19	15	13	-	-	A-2-4
	169+00	Centerline	3.5 - 5	-	-	-	-	-	-	28	16	NP	NP	A-2-4
	219+00	Centerline	3 - 5	100	100	100	89	53	35	33	13	NP	NP	A-2-4
	78+00	1010 RT (POND 2)	10 - 10.5	100	100	99	84	70	29	23	19	-	-	A-2-4
	78+00	740 RT (POND 3)	2 - 2.5	100	100	92	84	50	17	11	9	-	-	A-2-4
	150+00	240 RT (POND 5)	2 - 2.5	100	99	98	84	47	16	21	23	-	-	A-2-4
	204+00	150 LT (POND 6A)	2 - 2.5	100	100	100	90	51	19	14	7	-	-	A-2-4
	209+50	150 LT (POND 6B)	8 - 8.5	100	100	100	87	41	31	19	18	-	-	A-2-4
	84+00	Centerline	3 - 5	-	-	-	-	-	-	71	26	35	13	A-6
5	97+00	Centerline	4 - 5	100	100	100	98	88	80	77	20	34	20	A-6
	37+20	210 LT (POND 1)	4 - 4.5	100	100	100	96	81	42	37	15	32	15	A-6
	80+50	400 RT (POND 3)	14 - 14.5	100	100	100	97	82	44	42	18	47	32	A-7-6
6	62+00	Centerline	4 - 5	100	100	100	91	63	41	37	12	NP	NP	A-4
	79+00	Centerline	1 - 5	-	-	-	-	-	-	43	15	NP	NP	A-4

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101B

Station	Offset* (feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
36+00**	-	-	-
37+00**	-	-	-
38+00	Centerline	2.9	0
39+00	Centerline	2.4	0
40+00	Centerline	2.5	0
41+00	Centerline	2.6	0
42+00	Centerline	2.3	0
43+00	Centerline	3.6	0
44+00	Centerline	3.3	0
45+00	Centerline	GNE	3
46+00	Centerline	GNE	4
47+00	Centerline	GNE	>6
48+00	Centerline	GNE	>6
49+00	Centerline	GNE	>6
50+00	Centerline	GNE	>6
51+00	Centerline	GNE	>6
52+00	Centerline	GNE	>6
53+00	Centerline	GNE	>6
54+00	Centerline	GNE	>6
55+00	Centerline	GNE	>6
56+00	Centerline	5	2
57+44	Centerline	3.5	1
58+00	Centerline	3.5	1
59+00	Centerline	3.5	1
60+00	Centerline	4	1
61+00	Centerline	3	0
62+00	Centerline	4.5	1
63+00	Centerline	GNE	1
64+00	Centerline	4	1
65+00	Centerline	GNE	1
66+00	Centerline	GNE	1
67+00	Centerline	3.5	0
68+00	Centerline	3.5	0
69+00	Centerline	4	1
70+00	Centerline	GNE	1
71+00	Centerline	GNE	1
72+00	Centerline	GNE	1
73+00	Centerline	GNE	1
74+00	Centerline	GNE	1
75+00	Centerline	GNE	1

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

+ Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101B

Station	Offset* (feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
76+00	Centerline	GNE	1
77+00	Centerline	GNE	1
78+00	Centerline	GNE	1
79+00	Centerline	GNE	1
80+00	Centerline	2	0
81+00	Centerline	GNE	1
82+00	Centerline	GNE	1
83+00	Centerline	GNE	1
84+00	Centerline	3	0
85+00	Centerline	3	0
86+00	Centerline	3	0
87+00	Centerline	4	+
88+00	Centerline	GNE	3
89+00	Centerline	GNE	1
90+00	Centerline	GNE	1
91+00	Centerline	3	0
92+00	Centerline	3	0
93+00	Centerline	3	0
94+00	Centerline	GNE	1
95+00	Centerline	GNE	1
96+00	Centerline	GNE	1
97+00	Centerline	GNE	1
98+00	Centerline	GNE	3
99+00	Centerline	GNE	2.5
100+00	Centerline	GNE	0
101+00	Centerline	GNE	0
102+00	Centerline	3	0
103+00	Centerline	3	0
104+00	Centerline	GNE	0
105+00	Centerline	GNE	1
106+00	Centerline	GNE	1
107+00	Centerline	GNE	1
108+00	Centerline	GNE	1
109+00	Centerline	GNE	1
110+00	35 LT	GNE	1
111+00	30 LT	GNE	1
112+00	25 LT	GNE	3
113+00	25 LT	GNE	3
114+00	25 LT	5	2
115+00	20 LT	5	2

* Offsets from centerline of construction.

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TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101B

Station	Offset *(feet)	Encountered Ground Water Depth(feet)	Estimated Seasonal High Ground Water Depth (feet)
116+00	20 LT	GNE	3
117+00	20 LT	GNE	3
118+00	Centerline	GNE	3
119+00	Centerline	GNE	3
120+00	Centerline	GNE	3
121+00	Centerline	GNE	3
122+00	Centerline	GNE	3
123+00	Centerline	GNE	3
124+00	Centerline	GNE	3
125+00	Centerline	GNE	3
126+00	Centerline	GNE	3
127+00	Centerline	GNE	3
128+00	Centerline	GNE	3
129+00	Centerline	GNE	3
130+00	Centerline	GNE	3
131+00	Centerline	GNE	3
132+00	Centerline	GNE	3
133+00	Centerline	GNE	3
134+00	Centerline	GNE	3
135+00	Centerline	GNE	3
136+00	Centerline	GNE	4
136+70	Centerline	GNE	3
138+00	Centerline	GNE	2
139+00	Centerline	GNE	2
140+00	Centerline	GNE	1
141+00	Centerline	GNE	1
142+00	Centerline	5	1
143+00	Centerline	4	1.5
144+00	Centerline	4	1.5
145+00	Centerline	5	1.5
146+00	Centerline	5	1
147+00	Centerline	4.8	1
148+00	Centerline	4.7	1
149+00	Centerline	4.2	1
150+00	Centerline	3.5	1
151+00	Centerline	3.5	1
152+00	Centerline	3.9	0.5
153+00	Centerline	2.9	0
154+00	Centerline	2.1	0.5
155+00	Centerline	GNE	1

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

+ Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101B

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
156+00	Centerline	GNE	1
157+00***	-	-	est. elevation +128 ft
158+00***	-	-	est. elevation +128.5 ft
159+00***	-	-	est. elevation +129 ft
160+00***	-	-	est. elevation +129 ft
161+00	Centerline	GNE	1.5
162+00	Centerline	5	1.5
163+00	Centerline	3.5	1.5
164+00	Centerline	3	0
165+00	Centerline	2.5	0
166+00	Centerline	3	0
167+00	Centerline	4	1
168+00	Centerline	GNE	2
169+00	Centerline	GNE	2
170+00	Centerline	GNE	2
171+00	Centerline	GNE	2
172+00	Centerline	GNE	3
173+00	Centerline	GNE	3
174+00	Centerline	GNE	3
175+00	Centerline	GNE	3
176+00	Centerline	GNE	3
177+00	Centerline	GNE	3
178+00	Centerline	GNE	3
179+00	Centerline	GNE	3
180+00	Centerline	GNE	3
181+00	Centerline	GNE	3
182+00	Centerline	GNE	3
183+00	Centerline	GNE	3
184+00	Centerline	GNE	3
185+00	Centerline	GNE	3
186+00	Centerline	GNE	3
187+00	Centerline	GNE	3
188+00	Centerline	GNE	3
189+00	Centerline	GNE	3
190+00	Centerline	GNE	3.5
191+00	Centerline	GNE	3.5
192+00	Centerline	GNE	3.5
193+00	Centerline	GNE	3.5
194+00	Centerline	GNE	3.5
195+00	Centerline	GNE	3.5

- * Offsets from centerline of construction.
- ** Existing structure. Boring not performed.
- *** Existing pond. Boring not performed.
- + Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101B

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
196+00	Centerline	GNE	3
197+00	Centerline	GNE	3
198+00	Centerline	GNE	2
199+00	Centerline	GNE	2
200+00	Centerline	GNE	2
201+00	Centerline	GNE	2
202+00	Centerline	GNE	1
203+00	Centerline	GNE	1
204+00	Centerline	GNE	1
205+00	Centerline	3	0
206+00	Centerline	1	+
207+00	Centerline	1	+
208+00	Centerline	2	+
209+00	Centerline	2	+
210+00	Centerline	2	+
211+00	Centerline	2	+
212+00	Centerline	2	+
213+00	Centerline	2	+
214+00	Centerline	1.5	+
215+00	Centerline	1	+
216+00	Centerline	1	+
217+00	Centerline	1	+
218+00	Centerline	1	+
219+00	Centerline	GNE	1.5
220+00	10 RT	GNE	1.5
221+00	Centerline	GNE	1
222+00	Centerline	GNE	1
223+00	Centerline	GNE	1
224+00	Centerline	GNE	1
225+00	Centerline	GNE	0.5
226+00	Centerline	GNE	0.5
227+00	Centerline	GNE	0.5
228+00	Centerline	GNE	0.5
229+00	Centerline	GNE	1
230+00	Centerline	GNE	1
231+00	Centerline	GNE	1
232+00	Centerline	GNE	1
233+00	Centerline	GNE	1
234+00	Centerline	GNE	>6
235+00	Centerline	GNE	>6

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

+ Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101B

Station	Offset * (feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
236+00	Centerline	GNE	>6
237+00	Centerline	GNE	>6
238+00	Centerline	GNE	3
239+00	Centerline	GNE	3.5
240+00	Centerline	GNE	3.5
241+00	Centerline	GNE	3.5
242+00	Centerline	GNE	2
243+00	Centerline	GNE	2
244+00	Centerline	5	1.5
245+00	Centerline	3.9	2.5
246+00	Centerline	5	1
247+00	Centerline	4.4	1
248+00	Centerline	4	1
249+00	Centerline	4	1
250+00	Centerline	GNE	2
251+00	Centerline	GNE	1.5
252+00	Centerline	GNE	3.5
253+00	Centerline	GNE	3.5
254+00	Centerline	GNE	1
255+00	Centerline	GNE	1
256+00	Centerline	GNE	1
257+00	Centerline	GNE	1
258+00	Centerline	GNE	1
259+00	Centerline	GNE	1.5
260+00	Centerline	GNE	1.5
261+00	Centerline	GNE	1.5
262+00	Centerline	GNE	1.5
263+00	Centerline	GNE	1.5
264+00	Centerline	GNE	1.5
265+00	Centerline	GNE	1.5
266+00	Centerline	GNE	2
267+00	Centerline	GNE	2
268+00	Centerline	GNE	2
269+00	Centerline	GNE	1.5
270+00	Centerline	GNE	1.5
271+00	Centerline	GNE	1.5
272+00	Centerline	GNE	1
273+00	Centerline	GNE	1
274+00	Centerline	GNE	3
275+00	Centerline	GNE	3

* Offsets from centerline of construction.

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+ Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101B

Station	Offset * (feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Groundwater Depth (feet)
276+00	Centerline	GNE	3
277+00	Centerline	GNE	3
278+00	Centerline	GNE	3
279+00	Centerline	GNE	3
280+00	Centerline	GNE	3
281+00	Centerline	GNE	3
282+00	Centerline	GNE	2
283+00	Centerline	GNE	2
284+00	Centerline	GNE	2
285+00	Centerline	GNE	2
286+00	Centerline	GNE	2
287+00	Centerline	GNE	2
288+00	Centerline	GNE	2
289+00	Centerline	GNE	2
290+00	Centerline	GNE	2
291+00	Centerline	4.3	1.5
292+00	Centerline	4.4	1.5
293+00	Centerline	4.6	1.5
294+00	Centerline	GNE	2
295+00	Centerline	GNE	2
296+00	Centerline	GNE	1
297+00	Centerline	GNE	1.5
298+00	Centerline	GNE	1.5
299+00	Centerline	GNE	1.5
300+00	Centerline	GNE	2
301+00	Centerline	GNE	2
302+00	Centerline	GNE	1.5
303+00	Centerline	GNE	2
304+00	Centerline	GNE	2
305+00	Centerline	3.5	1
306+00	Centerline	4.5	1
307+00	Centerline	4.5	1
308+00	Centerline	4.5	1
309+00	Centerline	4.5	1
310+00	Centerline	GNE	1.5
311+00	Centerline	GNE	1.5
312+00	Centerline	GNE	2
313+00	Centerline	GNE	1.5
314+00	Centerline	GNE	2
315+00	Centerline	GNE	2

* Offsets from centerline of construction.

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+ Estimated seasonal high water table above existing ground surface.

TABLE 2
ESTIMATED SEASONAL HIGH GROUNDWATER LEVELS
Thompson Nursery Road Extension
Polk County, Florida
N&A Project No. 04-06-0014-101B

Station	Offset *(feet)	Encountered Ground Water Depth (feet)	Estimated Seasonal High Ground Water Depth (feet)
316+00	Centerline	GNE	2
317+00	Centerline	GNE	2
318+00	Centerline	GNE	1.5
319+00	Centerline	GNE	1.5
320+00	Centerline	GNE	3
321+00	Centerline	GNE	3
322+00	30 LT	GNE	3.5
323+00	Centerline	GNE	3.5
324+00	Centerline	GNE	3.5
325+00	Centerline	GNE	3.5
326+00	Centerline	GNE	3
327+00	Centerline	GNE	3
328+00	Centerline	GNE	3
329+00	Centerline	GNE	3
330+00	Centerline	GNE	3

* Offsets from centerline of construction.

** Existing structure. Boring not performed.

*** Existing pond. Boring not performed.

+ Estimated seasonal high water table above existing ground surface.

**90% Report of Subsurface Exploration and
Geotechnical Engineering Evaluation
Thompson Nursery Road Extension
Over CSX Railroad
County Project No. 5400037
Polk County, Florida**

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September 28, 2009
Project No. 04-06-0014-101C

Mr. Tom Montgomery, P.E.
Pitman-Hartenstein & Associates, Inc.
6989 East Fowler Avenue
Tampa, Florida 33617

**90% Report of Subsurface Exploration and
Geotechnical Engineering Evaluation
Thompson Nursery Road Extension
Over CSX Railroad**
County Project No. 5400037
Polk County, Florida

Dear Mr. Montgomery:

Nodarse & Associates, Inc. (N&A) is pleased to present to you this 90% report of geotechnical evaluation for the above-referenced project. This evaluation was performed in accordance with our agreement dated January 26, 2006. The purposes of this evaluation were to explore subsurface conditions at the proposed bridge and wall locations and to develop geotechnical engineering recommendations regarding bridge and wall foundations. This report exhibits the data used in our analyses and presents our conclusions and recommendations regarding bridge and wall foundation design. All stationing in this report is referenced from centerline of construction. Geotechnical recommendations addressing the roadway and drainage for this project are presented in our soil survey report.

PROJECT DESCRIPTION

Polk County has proposed constructing an extension to State Road 540, an extension of Thompson Nursery Road as well as widening Thompson Nursery Road and Chalet Suzanne Road in Polk County, Florida. A geotechnical report by N&A dated November 16, 2006 summarized the results of explorations and evaluations for the proposed widening of the roadway along Thompson Nursery Road and Chalet Suzanne Road from Waterset Gardens Drive to SR-17. The section that pertains to this report is the proposed extension of Thompson Nursery Road from US 17 to east of West Lake

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Ruby Drive, a distance of approximately 6.6 miles. A bridge is located in Sections 15, Township 29 South and Range 26 East in Polk County, Florida where the proposed extension will pass over the existing CSX Railroad. The bridge area is currently rural residential areas and farm lands.

The typical section for the proposed roadway will be a four lane divided urban major collector roadway with a 22 foot median, 12 foot lanes, 4 foot bicycle lanes and 6 foot sidewalks on both sides. The proposed bridge is anticipated to be a single span bridge supported by a deep foundation system. Based on preliminary 60% plans, it appears that embankment heights will be on the order of approximately 40 feet in height at the end bent locations. A total of ten walls are anticipated and will range in heights from 4 feet up to 30 feet in height near the end bent locations adjacent to the existing CSX right of way. This report is limited to the bridge and retaining wall locations. At this time additional borings are being performed for the embankment and retaining walls areas. In addition, two borings are being performed to greater depths than what is included in this report to better define subsoil conditions below a depth of 100 feet.

REVIEW OF AVAILABLE DATA

Based on the "Eloise, Florida" United States Geological Survey (USGS) Quadrangle map excerpted on **Figure 1** in the **Appendix**, existing ground surface elevations in the vicinity of the bridge are about +140 +/- feet NGVD. The surrounding vicinity appears to be undeveloped rural area with a marsh/swamp and lake west of the bridge and wet areas at the proposed bridge site.

Based on the United States Department of Agriculture (USDA) Soil Survey map of Polk County, Florida, excerpted on **Figure 2** in the **Appendix**, the near-surface soils at the Bridge site consists of the following:

Symbol No.	USDA Soil Name	Depth of Seasonal High Groundwater Table for Site in its Natural State	Typical Duration of Seasonal High
21	Immokalee Sand	0 - 1.0 feet	Jun - Oct
25	Placid and Myakka Fine Sands, Depressional	+2.0 - 0 feet	Jul - Nov

Note that the soil series indicated by the SCS may vary in description from conditions found by our field work. The differences may be in interpretation of soil types or be the result of activity at the site subsequent to the publication. The SCS publication is used as a reference and N&A is not attempting to verify the existence of the SCS soil types. The limits of the SCS series may not represent inclusions within a mapped area. Inclusions are varying soil types found within a defined, mapped series.

Based on review of the potentiometric surface for the upper Floridan Aquifer in the Southwest Florida Water Management District and Vicinity, the potentiometric surface at the site ranges from approximately +100 to +110 feet NGVD. Based on the depth of the confining layer, artesian conditions are not anticipated to be a concern.

FIELD EXPLORATION PROGRAM AND METHODS

Field Exploration Program: The subsurface exploration performed by N&A for the bridge consisted of four Standard Penetration Test (SPT) borings, to depths of 100 to 115 feet below the existing grade. Borings were generally performed at elevations of about +136 to +137 feet within the end bent locations. Stations, offsets and elevations are approximate and were obtained by scaling from site plans and cross sections. The approximate SPT boring locations are shown on the location plan on **Figure 3** in the **Appendix**.

Field Exploration Methods: The SPT borings were performed continuously in the upper 10 feet and at 5 feet depth intervals thereafter. Each sample was removed from the sampler in the field and was examined and visually classified by an engineering technician. Representative portions of each sample were packaged and sealed for transportation to our laboratory for further examination and visual classification. Water levels were measured in the boreholes at the time of our field exploration to evaluate the depth to groundwater. Upon completion, the boreholes were sealed with cement grout.

Adjacent to the SPT boring profiles are the "N" values. These "N" values are the number of hammer blows required to advance the split spoon sampler a distance of 12 inches. The "N" values have been empirically correlated with various soil properties and are considered to be indicative of the relative density of cohesionless soils and consistency of cohesive soils.

GENERAL SUBSURFACE CONDITIONS

The soil samples obtained from the SPT borings were visually classified in accordance with the Unified Soil Classification System (USCS) and limited laboratory testing. Stratification boundaries between soil types should be considered approximate as the actual transition between soil types may be gradual.

The table below present a generalization of the subsurface conditions encountered in the bridge borings. Detailed subsurface conditions encountered in the SPT borings are shown on **Figures 4 and 5** in the **Appendix**.

Average Elevation From - To (ft, NGVD)	Soil Description	"N" Value Range
+137 to +70	Fine sand (SP), slightly silty fine sand (SP-SM), silty fine sand (SM) and clayey fine sand (SC)	5 - 40
+70 to +23	Silty fine sand (SM) and clayey fine sand (SC)	WR* - 29
+23 to +21	Sandy clay (CL)	10

*WR represents weight of drill rod being sufficient to advance sample spoon.

Groundwater levels were observed between the elevations of +133 to +134 feet during our field exploration (November and December 2008). Groundwater levels will fluctuate with the amount of local rainfall and with site development and, therefore, may be different at other times. We anticipate seasonal high groundwater levels to be near elevation +135 to +136 feet NGVD. Our estimated seasonal high groundwater levels are based on review of the USGS quadrangle map, USDA soil survey, and adjacent roadway borings. Soil and groundwater conditions encountered in the borings are presented in **Figures 4 and 5** in the **Appendix**.

LABORATORY TESTING PROGRAM

The laboratory testing program (performed in general accordance with Florida methods) was performed on a selected soil sample obtained from our borings to assist in the visual classification. Testing included a single sieve grain size analysis, moisture content test and corrosion testing on a single sample. The laboratory test results for the structure borings are shown adjacent to the SPT boring profiles, in **Figures 4 and 5** in the **Appendix**.

Environmental Classification: One soil sample was obtained from the SPT borings in the bridge foundation areas for corrosion testing to determine subsurface environmental conditions. Corrosion tests were performed in accordance with FDOT Structure Design Guidelines. Testing included pH, chlorides, sulfates and resistivity tests. Based on the results, the superstructure should be classified as slightly aggressive. The environmental classification for the substructure is slightly aggressive for use in selection of an appropriate class of concrete and steel, respectively. The corrosion series test results are summarized in **Table 1** in the **Appendix**.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on the project characteristics previously described, the data obtained in our field exploration and our experience with similar subsurface conditions and construction types. If final structure locations or grades are significantly different from those previously described in this report, or if subsurface conditions different from those disclosed by the borings are encountered during construction, we should be notified immediately so that we might review and modify, if necessary, the following recommendations.

General: The following is our understanding of the project. It is assumed that up to 40 feet of embankment will be place at the end bent locations with a portion of the embankment retained by 30 foot high MSE walls. Based on the borings, settlement at or near the highest embankment section of the end bents is estimated to be approximately 8 to 10 inches. A majority of the settlement is anticipated to occur within about 60 days after the full embankment height has been achieved. The amount of settlement will induce a large amount of downdrag on piles should they be driven prior to fill placement and it is recommended that piles not be driven prior to embankment construction. Settlement of the embankment should be monitored to determine when piles can be driven that will have minimal negative skin friction.

The following options were considered but are not recommended due to constructability issues:

- 1) Placing full embankment height, while monitoring settlement. Once a majority of the settlement has occurred predrilling through the embankment to natural grade then driving the piles. Due to the MSE wall straps, predrilling would result in damage to the straps and is not recommended.
- 2) Driving concrete piles approximately 10 to 15 feet into the existing ground then placing embankment and monitoring settlement. Once a majority of the settlement has occurred, come back and continue driving piles. Because a test pile program could not take place before the piles need to be ordered, this alternative is not recommended.
- 3) Due to the soil conditions, drilled shafts would not derive significant capacity based on the borings and subsoil conditions and would not be economical.
- 4) Due to the moderate subsoil conditions larger piles driven prior to fill placement to overcome downdrag will have to be spaced relatively closer together resulting in less space for the MSE wall straps.

Based on the above considerations, it is recommended that voids be created at the pile locations by the use of casing while placing the full embankment height, wall straps and wire wall. The use of corrugated steel sleeves, polyvinyl chloride (PVC) sleeves or other alternatives may be feasible.

Due to the pile spacing's, casing for an 18-inch concrete driven pile will be too large (25-inches in diameter) and will not provide sufficient spacing for the MSE wall straps. The use of a 16-inch diameter closed ended steel pipe pile is recommended with a casing diameter of 18-inches.

Pipe Pile Foundations: The FDOT computer model *FB-Deep v.1.22* was used to evaluate estimated Davisson ultimate capacities for the 16-inch closed ended steel pipe pile section. The input soil parameters were obtained from the SPT borings performed for this evaluation. The Davisson capacities versus pile tip elevations for the 16-inch closed ended steel pipe pile are shown on **Plate 1** in the **Appendix**. The **FB-Deep computer output** has also been included in the **Appendix**. The Nominal Bearing Resistance (NBR) curves shown on **Plate 1** for the 16-inch closed ended steel pipe pile section can be used to find approximate tip elevations and estimate pile lengths for the piles using the following formula:

$$NBR \geq \frac{\text{Factored Design Load} + \text{Net Scour} + \text{Downdrag}}{\phi}$$

Where ϕ is a resistance factor, and
 $\phi = 0.75$ with static load tests, and
 $\phi = 0.65$ with dynamic load tests (PDA)

It is anticipated that test piles will be evaluated utilizing the PDA method and thus a ϕ value of 0.65 will be utilized.

Pile Installation: Our estimate of driven pile lengths was based on static pile analysis. Additional deep borings are currently being performed at the end bent locations to verify subsoil conditions at greater depths below the existing borings. The actual driven lengths will be a function of the actual field driving behavior. The driving system used should be a proper type and have a sufficient hammer energy in accordance with specification Section 455. A minimum of one test pile with dynamic load is anticipated at each end bent location. Test pile locations are shown on the Foundation Layout sheet.

There should be no construction issues to be considered for noise or damage to nearby, existing structures since none were present within close proximity to the proposed bridge.

A pile data table for the bridge widening, incorporating factored design loads, is presented as follows:

PILE DATA TABLE							
Installation Criteria							
End Bent Number	Pile Size (in.)	Nominal Bearing Resistance (tons)**	Tension Capacity (tons)	Minimum Tip Elevation (ft.)	Test Pile Length (ft)	Required Jet Elevation (ft)	Required Preform Elevation (ft)
End Bent 1 (EB)	16" pipe	132	N/A	*	150	N/A	N/A
End Bent 2 (EB)	16" pipe	132	N/A	*	140	N/A	N/A
End Bent 1 (WB)	16" pipe	132	N/A	*	145	N/A	N/A
End Bent 2 (WB)	16" pipe	132	N/A	*	160	N/A	N/A
Design Criteria							
End Bent No.	Factored Design Load(tons)	Down Drag (tons)	Total Scour Resistance (tons)	Net Scour Resistance (tons)	100-Year Scour Elevation (ft)	Long Term Scour Elevation (ft)	Resistance Factor- ϕ
End Bent 1 (EB)	86	N/A	N/A	N/A	N/A	N/A	0.65
End Bent 2 (EB)	86	N/A	N/A	N/A	N/A	N/A	0.65
End Bent 1 (WB)	86	N/A	N/A	N/A	N/A	N/A	0.65
End Bent 2 (WB)	86	N/A	N/A	N/A	N/A	N/A	0.65

*Minimum tip elevation shall be determined in accordance with Section 455 – 5.8 of the Specifications.

$$** NBR \geq \frac{\text{Factored Design Load} + \text{Net Scour} + \text{Downdrag}}{\phi}$$

ϕ is based on the use of dynamic load tests.

Estimated production pile lengths for the bridge widening based on the result of our analysis, review of boring profiles, and geotechnical engineering judgment are shown as follows:

Bent Designation	Boring Nos.	Pile Type	Nominal Bearing Resistance (tons)	Estimated Pile Tip Elevation (feet, NGVD)	Approximate Pile Cutoff Elevation (feet, NGVD)	Estimated Production Pile Length (feet)	Estimated Test Pile Length (feet)
End Bent 1 (EB)	B-3	16" pipe	132	N/A	+164	130	150
End Bent 2 (EB)	B-4	16" pipe	132	N/A	+164	125	140
End Bent 1 (WB)	B-1	16" pipe	132	N/A	+164	130	145
End Bent 2 (WB)	B-2	16" pipe	132	N/A	+164	145	160

Downdrag: Based on the results of the subsurface exploration and the amount of settlement, downdrag (negative skin friction) could be a considerable amount if piles are driven before embankment placement. If the embankment is placed and piles are driven after a majority of the settlement has occurred, downdrag should be minimal and, thus, is not included in the pile driving criteria. It should be noted that a majority of the settlement that occurs, will occur during embankment construction since fine sand to silty fine sand were primarily encountered to a depth of over 100 feet below natural grade.

Pile Group Action: No reduction of the individual pile capacities will be required if piles are spaced center to center at three times width or greater. The pile caps usually contribute to the overall bearing capacity of the pile group, provided they are supported on competent soil outside the outer perimeter of the group. However, we do not recommend taking credit for this additional capacity because of potential for loss of soil cover at the pile cap.

Mechanically Stabilized Earth (MSE) and Wire Mesh Retaining Walls: As previously discussed, permanent MSE retaining walls are anticipated for the construction of the bridge over the CSX Railroad. Based on the amount of anticipated settlement it is recommended that the embankment be built up with the MSE wall straps and wire mesh walls prior to attaching the concrete wall panels. The panels should not be placed until a majority of the settlement has occurred based on settlement monitoring and the piles have been driven.

It is our understanding that MSE retaining wall systems will be utilized at the end bent locations. The proposed walls and earth geometry in the proposed MSE wall locations were based on information supplied by PH&A.

Borings are currently being performed to verify the subsoil conditions at the proposed wall areas.

Based on preliminary borings and assuming that select backfills are placed behind the walls, the following parameters were generally used in our analysis at each wall location:

		Reinforced Soil	Random Backfill	Loose to Medium Dense Fine Sand (elevation ft, NGVD)
Depth Below Existing Ground Surface (Feet, NGVD)	MSE Walls 1 and 2	--	--	+137 to +37
	MSE Walls A -- H	--	--	--
Effective Unit Weight (pcf)		110 (moist)	105 (moist)	105 (moist), 110 (sat)
Cohesion (psf)		5,000	0	0
Internal Friction (°)		32	30	29

Groundwater levels were observed at about 3 feet below existing grade.

An external stability analysis was performed to evaluate the minimum reinforcement lengths. Minimum reinforcement lengths were calculated for varying wall heights up to 30 feet. The global stability was analyzed using the computer program STABL6. The external stability analysis also utilized the spreadsheet program MSE Wall – LRFD, Version 2.4 developed by the FDOT. The complete computer output are provided for wall heights of 4, 12, 15 and 30 feet and is attached in the **Appendix**. The results of the analyses are summarized on **Table 2** in the **Appendix**.

The minimum reinforcement lengths in the **Table 2** were calculated using mechanical wall heights. These minimum reinforcement lengths were calculated for external stability only. An internal stability analysis may require longer reinforcement lengths than recommended in this evaluation. Wall heights presented in the table represent the distance from top of leveling pad to top of wall. Based on the FDOT Structures Design Guidelines, the reinforcement lengths recommended meet the minimum length criteria required. We recommend that the reinforced earth wall straps/mesh be placed to avoid conflict with end bent piles and end bent caps.

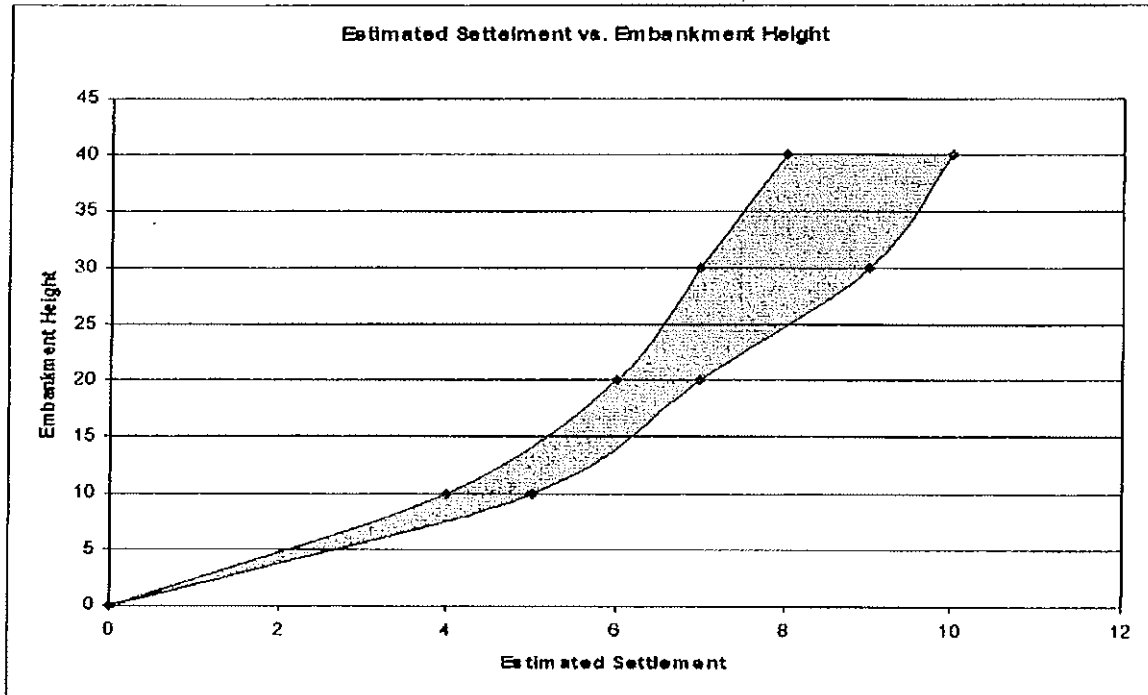
Notes addressing the following issues should be considered for inclusion in the plans:

- Placement of wall straps/mesh to avoid conflict with end bent piles and cap.
- MSE wall concrete panels should be placed after the piles have been driven and that a majority of the settlement has occurred.

Settlement: Settlement estimates were made using the method outline in the FHWA Soils and Foundations Workshop Manual to determine total and differential movements that should be anticipated in the wall system. Short term settlements were estimated to range from 8 to 10 inches for 40 foot high embankments. Due to the mostly granular nature of the soils, a majority of the “short-term” settlement should occur during construction (approximately 30 to 90 days). The “consolidation” settlement for the proposed embankment is estimated to be less than 1 inch. The total settlement is the sum of the “short-term” and “consolidation” settlements. Differential movements that are experienced across the wall system are expected to be about 0.1 inches per lineal foot of wall or less.

Settlement of the embankment should be monitored during embankment construction and until the rate of settlement is less than 1 inch per month. A monitoring system using settlement plates or other means should be installed prior to embankment construction. It is estimated that a majority of the settlement will occur during construction of the embankment and that the majority of settlement will be complete approximately 30 to 60 days after the full embankment heights have been placed.

The following graph depicts the estimated settlement vs. embankment heights:



REPORT LIMITATIONS


This report is based on the results of a limited number of borings and may not accurately reflect conditions between or away from boring locations. Variations of the subsoil conditions between or away from boring locations may occur. This report should also be considered preliminary with the understanding that more detailed information will be addressed in subsequent reports after the remaining borings have been completed.

CLOSURE

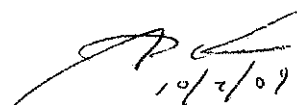
N&A appreciates the opportunity to be of service to you on this project. If you should have any questions concerning the contents of this report, or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,

NODARSE & ASSOCIATES, INC.



Eric A. McAra, P.E.
Project Engineer
FL Registration No. 69841



Stephen C. Knauss, P.E.
Senior Geotechnical/Materials Engineer
FL Registration No. 28202

Attachment: Appendix

cc: Mr. Fares E. Tannous, P.E. – PH&A (Jacksonville)

APPENDIX

**INDEX TO APPENDIX
THOMPSON NURSERY ROAD EXTENSION
OVER CSX RAILROAD
COUNTY PROJECT NO. 5400037
POLK COUNTY, FLORIDA
N&A PROJECT NO. 04-06-0014-101C**

Item No.	Designation	Description
1	Table 1	Corrosion Series Test Results
2	Table 2	External Stability Results MSE Walls
3	Figure 1	USGS Quadrangle Map
4	Figure 2	USDA Soil Survey Map
5	Figure 3	Report of SPT Borings for Structures – Location Plan
6	Figures 4 and 5	Report of SPT Borings for Structures – Boring Profiles
7	Plate 1	Pile Capacity Curves
8		Pile Capacity Calculations
9		Downdrag
10		Embankment Settlement
11		External Stability Analysis

TABLES

TABLE 1
CORROSION SERIES TESTING RESULTS FOR BRIDGE
THOMPSON NURSURY ROAD EXTENSION
OVER CSX RAILROAD
PROJECT NO. 5400037
POLK COUNTY, FLORIDA
COUNTY PROJECT NO. 5400037

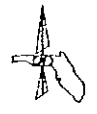
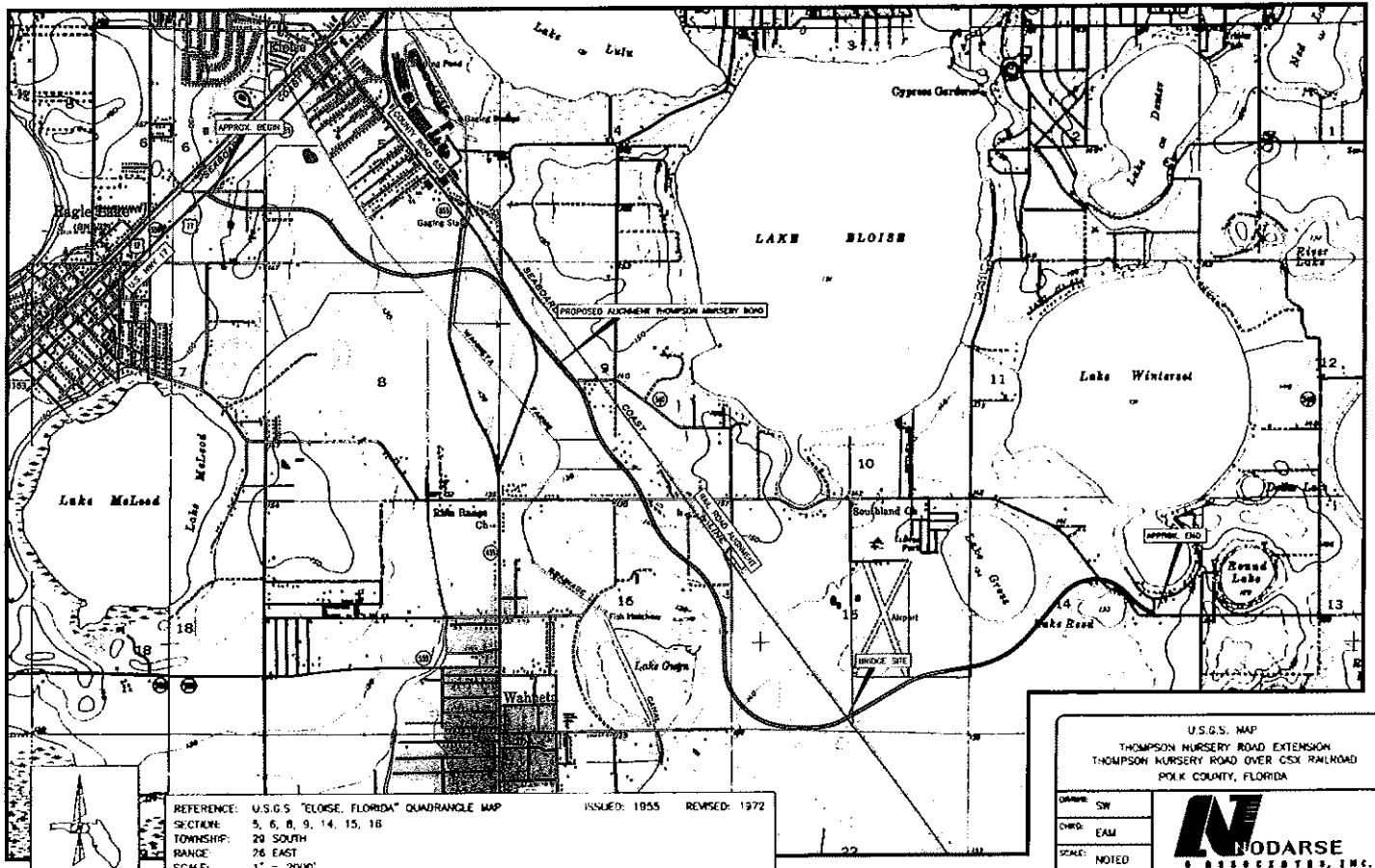
Approximate Station	Approximate Offset (feet)	Sample Depth (feet)	pH	Minimum Resistivity (ohm-cm)	Chlorides (ppm)	Sulfates (ppm)	Substructural Environmental Classification	
							Concrete	Steel
246+31	19 RT	0.1 - 3.0	7.7	26,000	60	<5	Slightly Aggressive	Slightly Aggressive

TABLE 2

EXTERNAL STABILITY RESULTS
MSE WALLS
THOMPSON NURSERY ROAD EXTENSION
OVER CSX RAILROAD
COUNTY PROJECT NO. 5400037
POLK COUNTY, FLORIDA
N&A PROJECT NO. 04-06-0014-101C


Maximum Wall Height Feet	Minimum Reinforcement Length (feet)	Capacity Demand Ratio For				Calculated Factor of Safety for Global Stability ($\Rightarrow 1.5$)	Maximum Nominal Bearing Resistance (psf)
		Overturning ($\Rightarrow 1$)	Eccentricity ($\Rightarrow < 1$)	Sliding ($\Rightarrow 1$)	Bearing Resistance ($\Rightarrow 1$)		
4	8	8.2	0.3	1.8	3.7	>1.5	2,500
12	9	2.1	1.0	1.1	1.2	1.7	2,500
15	11	2.2	0.9	1.2	1.1	1.7	2,500
30	30	2.4	0.5	1.0	1.0	1.6	3,000

FIGURES

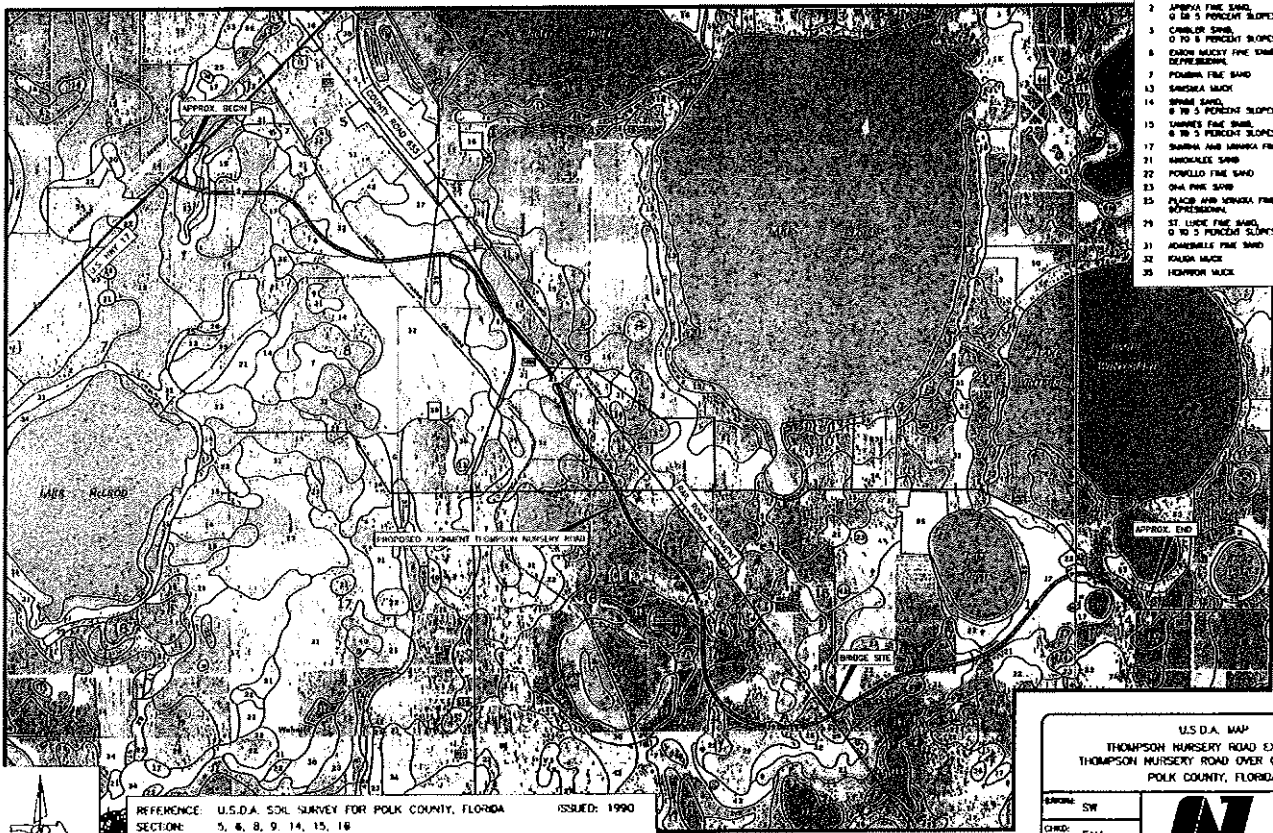


REFERENCE: U.S.G.S. "ELOISE, FLORIDA" QUADRANGLE MAP
 SECTION: 5, 6, 8, 9, 14, 15, 16
 TOWNSHIP: 20 SOUTH
 RANGE: 26 EAST
 SCALE: 1" = 20,000'

ISSUED: 1955 REVISED: 1972

U.S.G.S. MAP		 NODARSE ASSOCIATES, INC.
THOMPSON NURSERY ROAD EXTENSION		
THOMPSON NURSERY ROAD OVER CSX RAILROAD		
POLK COUNTY, FLORIDA		
OWNER:	SW	DATE: 9-8-09 PROJ. NO: 04 06-0014-131C FIGURE: 1
OWNER:	EAM	
SCALE:	NOTED	
DATE:	9-8-09	


- SOIL MAP INDEX**
- 2 SANDY FINE SAND, 0 TO 5 PERCENT SLOPES
 - 3 CANKER SAND, 0 TO 5 PERCENT SLOPES
 - 4 FINE MUCKY FINE SAND, DEPRESSIONS
 - 7 POOR FINE SAND
 - 13 SANDY MUCK
 - 14 SAND, 8 TO 5 PERCENT SLOPES
 - 15 SANDY FINE SAND, 0 TO 5 PERCENT SLOPES
 - 17 SANDY AND MUCKY FINE SANDS
 - 21 SANDY MUCK
 - 22 SANDY FINE SAND
 - 23 SAND, 0 TO 5 PERCENT SLOPES
 - 25 SAND AND MUCKY FINE SANDS, DEPRESSIONS
 - 29 ST. LUCIE FINE SAND, 0 TO 5 PERCENT SLOPES
 - 31 SANDY FINE SAND
 - 32 SANDY MUCK
 - 35 SANDY MUCK



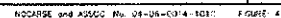
REFERENCE: U.S.D.A. SOIL SURVEY FOR POLK COUNTY, FLORIDA
 SECTION: 5, 6, 8, 9, 14, 15, 16
 TOWNSHIP: 28 SOUTH
 RANGE: 26 EAST
 SCALE: 1" = 2000'

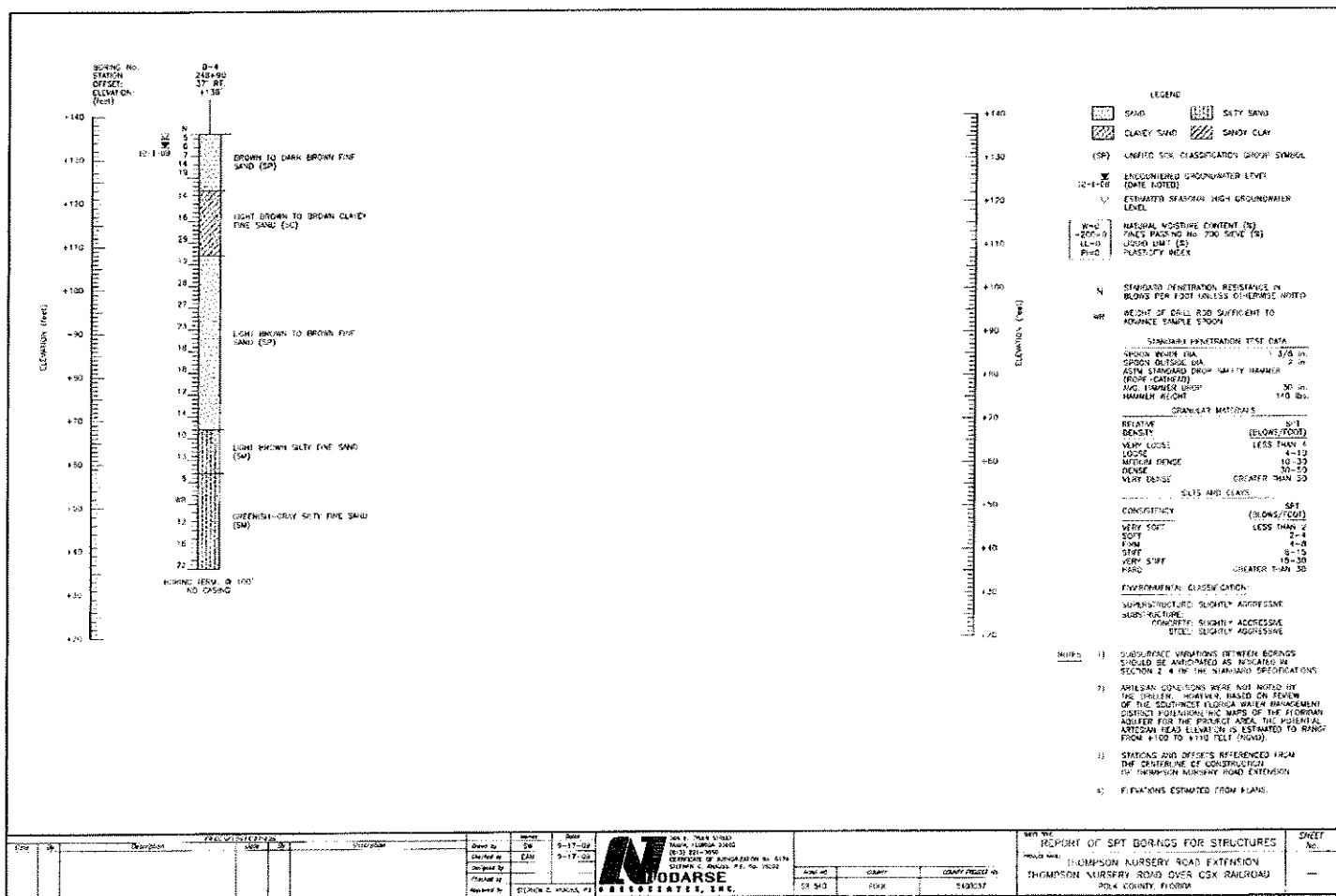
ISSUED: 1990

U.S.D.A. MAP
 THOMPSON NURSERY ROAD EXTENSION
 THOMPSON NURSERY ROAD OVER CSX RAILROAD
 POLK COUNTY, FLORIDA

DESIGNED BY: SW	 NODARSE ENGINEERS, INC.
CHECKED BY: EAM	
SCALE: NOTED	
DATE: 9-8-09	PROJ. NO. 04-06-0014-101C FIGURE: 2



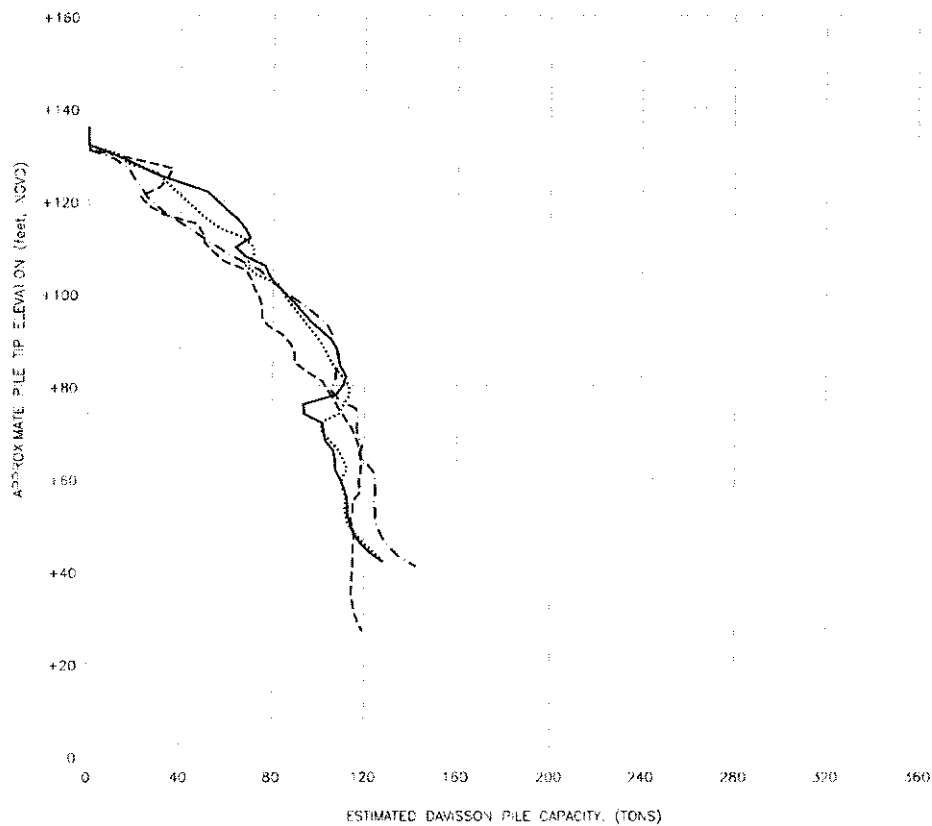




DATE	0-17-00	BY	JAN	FOR	THOMPSON NURSERY ROAD EXTENSION	SHEET	1	
PROJECT	THOMPSON NURSERY ROAD EXTENSION						NO.	1
DESIGNED BY	JAN						CHECKED BY	JAN
APPROVED BY	JAN						DATE	0-17-00
REPORT OF SPT BORINGS FOR STRUCTURES THOMPSON NURSERY ROAD EXTENSION POLK COUNTY, FLORIDA								

PLATE

THOMPSON NURSERY ROAD OVER CSX RAILROAD - COUNTY PROJECT No. 54000.57
16 INCH DIAMETER STEEL PIPE PILE (CLOSED END)



LEGEND

- B-1
- - - B-2
- B-3
- - - B-4

NOTES:

- 1) PILE CAPACITIES BASED ON FB-DEEP v.1.22
- 2) GRAPHED VALUES ARE THE ESTIMATED DAWSON CAPACITY (TONS) FOR 16 INCH CLOSED END STEEL PIPE PILE.
- 3) TO OBTAIN THE NOMINAL BEARING CAPACITY AT A GIVEN DEPTH, DIVIDE THE FACTORED DESIGN LOAD BY AN APPROPRIATE FRICTION

16" DIAMETER CLOSED-END STEEL PIPE PILE
THOMPSON NURSERY ROAD EXTENSION
THOMPSON NURSERY ROAD OVER CSX RAILROAD
POLK COUNTY, FLORIDA

DRAWN: SW

CHECKED: EAM

SCALE: -

DATE: 10-1-09



PROJ. No. Q4-06-0014-101C

PLATE: 1

PILE CAPACITY CALCULATIONS

General Information:

Input file:xtension\101\A\final-reports\Bridge\FB-Deep\TB-1-eric-pipe.spc
Project number: 04-06-0014-101A
Job name: TNR Bridge over CSX
Engineer: EAM
Units: English

Analysis Information:

Analysis Type: SPT

Soil Information:

Boring date: 11/27/08, Boring Number: B-1
Station number: 246+20 watertable = 136 Offset: 19 LT

Ground Elevation: 137.000(ft)

Hammer type: Safety Hammer

ID	Depth (ft)	No. of Blows (Blows/ft)	Soil Type
1	0.00	6.00	5- Cavity layer
2	2.00	6.00	5- Cavity layer
3	4.00	13.00	5- Cavity layer
4	6.00	8.00	3- Clean sand
5	8.00	22.00	2- Clay and silty sand
6	10.00	24.00	2- Clay and silty sand
7	15.00	29.00	3- Clean sand
8	20.00	22.00	3- Clean sand
9	25.00	38.00	3- Clean sand
10	25.10	16.00	2- Clay and silty sand
11	30.00	16.00	3- Clean sand
12	35.00	13.00	3- Clean sand
13	40.00	25.00	3- Clean sand
14	45.00	17.00	3- Clean sand
15	50.00	23.00	3- Clean sand
16	55.00	13.00	3- Clean sand
17	60.00	19.00	3- Clean sand
18	60.10	3.00	2- Clay and silty sand
19	65.00	3.00	3- Clean sand
20	70.00	11.00	2- Clay and silty sand
21	70.10	7.00	3- Clean sand
22	75.00	7.00	2- Clay and silty sand
23	80.00	6.00	2- Clay and silty sand
24	85.00	4.00	2- Clay and silty sand
25	89.90	4.00	3- Clean sand
26	90.00	12.00	2- Clay and silty sand
27	95.00	14.00	2- Clay and silty sand
28	99.90	14.00	3- Clean sand
29	100.00	34.00	2- Clay and silty sand

Shaft002.tmp
Blowcount Average Per Soil Layer

Layer Num.	Starting Elevation (ft)	Bottom Elevation (ft)	Thickness (ft)	Average Blowcount (Blows/ft)	Soil Type
1	137.00	131.00	6.00	8.33	5-Void
2	131.00	129.00	2.00	8.00	3-Clean Sand
3	129.00	122.00	7.00	23.43	2-Clay and Silty Sand
4	122.00	111.90	10.10	25.62	3-Clean Sand
5	111.90	107.00	4.90	16.00	2-Clay and Silty Sand
6	107.00	76.90	30.10	17.84	3-Clean Sand
7	76.90	72.00	4.90	3.00	2-Clay and Silty Sand
8	72.00	67.00	5.00	3.00	3-Clean Sand
9	67.00	66.90	0.10	11.00	2-Clay and Silty Sand
10	66.90	62.00	4.90	7.00	3-Clean Sand
11	62.00	47.10	14.90	5.68	2-Clay and Silty Sand
12	47.10	47.00	0.10	4.00	3-Clean Sand
13	47.00	37.10	9.90	12.99	2-Clay and Silty Sand
14	37.10	37.00	0.10	14.00	3-Clean Sand
15	37.00	37.00	0.00	34.00	2-Clay and Silty Sand

Driven Pile Data:

=====

Pile unit weight = 490.00(pcf), Section Type: Pipe

Pile Geometry:

Width (in)	Length (ft)	Tip Elev. (ft)	Thickness (in)	Pile End
16.00	1.00	136.00	0.50	CLOSED
16.00	3.00	134.00	0.50	CLOSED
16.00	5.00	132.00	0.50	CLOSED
16.00	7.00	130.00	0.50	CLOSED
16.00	9.00	128.00	0.50	CLOSED
16.00	11.00	126.00	0.50	CLOSED
16.00	13.00	124.00	0.50	CLOSED
16.00	15.00	122.00	0.50	CLOSED
16.00	17.00	120.00	0.50	CLOSED
16.00	19.00	118.00	0.50	CLOSED
16.00	21.00	116.00	0.50	CLOSED
16.00	23.00	114.00	0.50	CLOSED
16.00	25.00	112.00	0.50	CLOSED
16.00	27.00	110.00	0.50	CLOSED
16.00	29.00	108.00	0.50	CLOSED
16.00	31.00	106.00	0.50	CLOSED
16.00	33.00	104.00	0.50	CLOSED
16.00	35.00	102.00	0.50	CLOSED
16.00	37.00	100.00	0.50	CLOSED
16.00	39.00	98.00	0.50	CLOSED
16.00	41.00	96.00	0.50	CLOSED
16.00	43.00	94.00	0.50	CLOSED
16.00	45.00	92.00	0.50	CLOSED
16.00	47.00	90.00	0.50	CLOSED
16.00	49.00	88.00	0.50	CLOSED
16.00	51.00	86.00	0.50	CLOSED
16.00	53.00	84.00	0.50	CLOSED
16.00	55.00	82.00	0.50	CLOSED
16.00	57.00	80.00	0.50	CLOSED

Shaft002.tmp

16.00	59.00	78.00	0.50 CLOSED
16.00	61.00	76.00	0.50 CLOSED
16.00	63.00	74.00	0.50 CLOSED
16.00	65.00	72.00	0.50 CLOSED
16.00	67.00	70.00	0.50 CLOSED
16.00	69.00	68.00	0.50 CLOSED
16.00	71.00	66.00	0.50 CLOSED
16.00	73.00	64.00	0.50 CLOSED
16.00	75.00	62.00	0.50 CLOSED
16.00	77.00	60.00	0.50 CLOSED
16.00	79.00	58.00	0.50 CLOSED
16.00	81.00	56.00	0.50 CLOSED
16.00	83.00	54.00	0.50 CLOSED
16.00	85.00	52.00	0.50 CLOSED
16.00	87.00	50.00	0.50 CLOSED
16.00	89.00	48.00	0.50 CLOSED
16.00	91.00	46.00	0.50 CLOSED
16.00	93.00	44.00	0.50 CLOSED
16.00	95.00	42.00	0.50 CLOSED
16.00	97.00	40.00	0.50 CLOSED
16.00	99.00	38.00	0.50 CLOSED

Driven Pile Capacity:

Section Type: Pipe
 Pile width: 16.00 (in)
 Thickness: 0.50 (in)
 End Type: closed end

Test Pile Length (ft)	Pile Width (in)	Ultimate Side Friction (tons)	Mobilized End Bearing (tons)	Estimated Davisson Capacity (tons)	Allowable Pile Capacity (tons)	Ultimate Pile Capacity (tons)
1.00	16.0	0.00	0.00	0.00	0.00	0.00
3.00	16.0	0.00	0.00	0.00	0.00	0.00
5.00	16.0	0.16	0.00	0.16	0.08	0.16
7.00	16.0	1.58	9.25	10.83	5.42	29.34
9.00	16.0	6.34	13.69	20.03	10.01	47.40
11.00	16.0	9.99	17.96	27.95	13.98	63.88
13.00	16.0	13.81	25.94	39.75	19.88	91.64
15.00	16.0	21.96	29.79	51.75	25.88	111.34
17.00	16.0	25.81	30.08	55.89	27.95	116.06
19.00	16.0	28.89	31.28	60.17	30.08	122.72
21.00	16.0	31.80	32.86	64.66	32.33	130.38
23.00	16.0	36.48	31.53	68.00	34.00	131.06
25.00	16.0	42.03	28.31	70.33	35.17	126.94
27.00	16.0	46.21	17.64	63.84	31.92	99.12
29.00	16.0	49.15	18.96	68.11	34.06	106.04
31.00	16.0	52.21	24.60	76.81	38.41	126.01
33.00	16.0	54.56	23.96	78.52	39.26	126.45
35.00	16.0	56.73	24.57	81.30	40.65	130.43
37.00	16.0	58.78	26.38	85.16	42.58	137.93
39.00	16.0	61.47	27.69	89.16	44.58	144.53
41.00	16.0	65.17	27.56	92.73	46.36	147.85
43.00	16.0	68.52	27.79	96.30	48.15	151.87
45.00	16.0	71.41	29.32	100.73	50.37	159.38

shaft002.tmp						
47.00	16.0	74.26	30.97	105.23	52.61	167.16
49.00	16.0	77.43	30.31	107.74	53.87	168.36
51.00	16.0	80.82	27.55	108.37	54.18	163.46
53.00	16.0	83.75	25.73	109.48	54.74	160.95
55.00	16.0	86.12	25.85	111.97	55.98	163.66
57.00	16.0	88.39	21.98	110.36	55.18	154.31
59.00	16.0	91.00	16.23	107.23	53.62	139.69
61.00	16.0	93.18	0.01	93.19	46.59	93.20
63.00	16.0	93.18	0.34	93.52	46.76	94.20
65.00	16.0	93.18	8.20	101.38	50.69	117.78
67.00	16.0	93.89	8.07	101.96	50.98	118.11
69.00	16.0	96.02	6.92	102.94	51.47	116.79
71.00	16.0	98.24	8.00	106.25	53.12	122.26
73.00	16.0	99.91	7.22	107.13	53.57	121.57
75.00	16.0	102.15	4.87	107.01	53.51	116.74
77.00	16.0	104.62	4.70	109.32	54.66	118.73
79.00	16.0	106.98	4.06	111.04	55.52	119.15
81.00	16.0	109.13	3.12	112.25	56.12	118.48
83.00	16.0	110.47	2.29	112.77	56.38	117.35
85.00	16.0	110.92	1.77	112.69	56.35	116.23
87.00	16.0	110.92	3.03	113.95	56.98	120.00
89.00	16.0	110.92	4.66	115.58	57.79	124.89
91.00	16.0	112.81	5.58	118.38	59.19	129.54
93.00	16.0	115.77	6.60	122.37	61.18	135.56
95.00	16.0	118.60	9.71	128.31	64.16	147.74
97.00	16.0	0.00	0.00	0.00	0.00	0.00
99.00	16.0	0.00	0.00	0.00	0.00	0.00

NOTES

1. MOBILIZED END BEARING IS 1/3 OF THE ORIGINAL RB-121 VALUES.
2. DAVISSON PILE CAPACITY IS AN ESTIMATE BASED ON FAILURE CRITERIA, AND EQUALS ULTIMATE SIDE FRICTION PLUS MOBILIZED END BEARING.
3. ALLOWABLE PILE CAPACITY IS 1/2 THE DAVISSON PILE CAPACITY.
4. ULTIMATE PILE CAPACITY IS ULTIMATE SIDE FRICTION PLUS 3 x THE MOBILIZED END BEARING.
EXCEPTION: FOR H-PILES TIPPED IN SAND OR LIMESTONE, THE ULTIMATE PILE CAPACITY IS ULTIMATE SIDE FRICTION PLUS 2 x THE MOBILIZED END BEARING.

General Information:

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Input file:xtension\101\A\final-reports\Bridge\FB-Deep\TB-2-eric-pipe.spc
 Project number: 04-06-0014-101A
 Job name: TNR Bridge over CSX
 Engineer: EAM
 Units: English

Analysis Information:

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Analysis Type: SPT

Soil Information:

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Boring date: 12/02/08, Boring Number: B-2
 Station number: 248+80 watertable = 135 Offset: 36 LT

Ground Elevation: 136.000(ft)

Hammer type: Safety Hammer

ID	Depth (ft)	No. of Blows (Blows/ft)	Soil Type

1	0.00	8.00	5- Cavity layer
2	2.00	8.00	5- Cavity layer
3	4.00	13.00	5- Cavity layer
4	6.00	18.00	3- Clean sand
5	7.90	18.00	2- Clay and silty sand
6	8.00	33.00	3- Clean sand
7	10.00	20.00	3- Clean sand
8	15.00	6.00	2- Clay and silty sand
9	19.90	6.00	3- Clean sand
10	20.00	40.00	2- Clay and silty sand
11	25.00	30.00	3- Clean sand
12	25.10	15.00	2- Clay and silty sand
13	30.00	15.00	3- Clean sand
14	35.00	17.00	3- Clean sand
15	40.00	17.00	3- Clean sand
16	45.00	8.00	2- Clay and silty sand
17	50.00	30.00	3- Clean sand
18	50.10	16.00	2- Clay and silty sand
19	55.00	16.00	3- Clean sand
20	60.00	14.00	3- Clean sand
21	65.00	17.00	3- Clean sand
22	70.00	13.00	3- Clean sand
23	75.00	10.00	3- Clean sand
24	80.00	10.00	2- Clay and silty sand
25	80.10	5.00	3- Clean sand
26	85.00	5.00	2- Clay and silty sand
27	90.00	4.00	2- Clay and silty sand
28	95.00	0.00	2- Clay and silty sand
29	100.00	0.00	2- Clay and silty sand
30	105.00	0.00	2- Clay and silty sand
31	110.00	7.00	2- Clay and silty sand
32	115.00	10.00	1- Plastic Clay

Shaft002.tmp

Blowcount Average Per Soil Layer

Layer Num.	Starting Elevation (ft)	Bottom Elevation (ft)	Thickness (ft)	Average Blowcount (Blows/ft)	soil Type
1	136.00	130.00	6.00	9.67	5-Void
2	130.00	128.10	1.90	18.00	3-Clean Sand
3	128.10	128.00	0.10	18.00	2-Clay and Silty Sand
4	128.00	121.00	7.00	23.71	3-Clean Sand
5	121.00	116.10	4.90	6.00	2-Clay and Silty Sand
6	116.10	116.00	0.10	6.00	3-Clean Sand
7	116.00	111.00	5.00	40.00	2-Clay and Silty Sand
8	111.00	110.90	0.10	30.00	3-Clean Sand
9	110.90	106.00	4.90	15.00	2-Clay and Silty Sand
10	106.00	91.00	15.00	16.33	3-Clean Sand
11	91.00	86.00	5.00	8.00	2-Clay and Silty Sand
12	86.00	85.90	0.10	30.00	3-Clean Sand
13	85.90	81.00	4.90	16.00	2-Clay and Silty Sand
14	81.00	56.00	25.00	14.00	3-Clean Sand
15	56.00	55.90	0.10	10.00	2-Clay and Silty Sand
16	55.90	51.00	4.90	5.00	3-Clean Sand
17	51.00	21.00	30.00	2.67	2-Clay and Silty Sand
18	21.00	21.00	0.00	10.00	1-Plastic clay

Driven Pile Data:

Pile unit weight = 490.00(pcf), Section Type: Pipe

Pile Geometry:

Width (in)	Length (ft)	Tip Elev. (ft)	Thickness (in)	Pile End
16.00	1.00	135.00	0.50	CLOSED
16.00	3.00	133.00	0.50	CLOSED
16.00	5.00	131.00	0.50	CLOSED
16.00	7.00	129.00	0.50	CLOSED
16.00	9.00	127.00	0.50	CLOSED
16.00	11.00	125.00	0.50	CLOSED
16.00	13.00	123.00	0.50	CLOSED
16.00	15.00	121.00	0.50	CLOSED
16.00	17.00	119.00	0.50	CLOSED
16.00	19.00	117.00	0.50	CLOSED
16.00	21.00	115.00	0.50	CLOSED
16.00	23.00	113.00	0.50	CLOSED
16.00	25.00	111.00	0.50	CLOSED
16.00	27.00	109.00	0.50	CLOSED
16.00	29.00	107.00	0.50	CLOSED
16.00	31.00	105.00	0.50	CLOSED
16.00	33.00	103.00	0.50	CLOSED
16.00	35.00	101.00	0.50	CLOSED
16.00	37.00	99.00	0.50	CLOSED
16.00	39.00	97.00	0.50	CLOSED
16.00	41.00	95.00	0.50	CLOSED
16.00	43.00	93.00	0.50	CLOSED
16.00	45.00	91.00	0.50	CLOSED

shaft002.tmp

16.00	47.00	89.00	0.50 CLOSED
16.00	49.00	87.00	0.50 CLOSED
16.00	51.00	85.00	0.50 CLOSED
16.00	53.00	83.00	0.50 CLOSED
16.00	55.00	81.00	0.50 CLOSED
16.00	57.00	79.00	0.50 CLOSED
16.00	59.00	77.00	0.50 CLOSED
16.00	61.00	75.00	0.50 CLOSED
16.00	63.00	73.00	0.50 CLOSED
16.00	65.00	71.00	0.50 CLOSED
16.00	67.00	69.00	0.50 CLOSED
16.00	69.00	67.00	0.50 CLOSED
16.00	71.00	65.00	0.50 CLOSED
16.00	73.00	63.00	0.50 CLOSED
16.00	75.00	61.00	0.50 CLOSED
16.00	77.00	59.00	0.50 CLOSED
16.00	79.00	57.00	0.50 CLOSED
16.00	81.00	55.00	0.50 CLOSED
16.00	83.00	53.00	0.50 CLOSED
16.00	85.00	51.00	0.50 CLOSED
16.00	87.00	49.00	0.50 CLOSED
16.00	89.00	47.00	0.50 CLOSED
16.00	91.00	45.00	0.50 CLOSED
16.00	93.00	43.00	0.50 CLOSED
16.00	95.00	41.00	0.50 CLOSED
16.00	97.00	39.00	0.50 CLOSED
16.00	99.00	37.00	0.50 CLOSED
16.00	101.00	35.00	0.50 CLOSED
16.00	103.00	33.00	0.50 CLOSED
16.00	105.00	31.00	0.50 CLOSED
16.00	107.00	29.00	0.50 CLOSED
16.00	109.00	27.00	0.50 CLOSED
16.00	111.00	25.00	0.50 CLOSED
16.00	113.00	23.00	0.50 CLOSED
16.00	115.00	21.00	0.50 CLOSED

Driven Pile Capacity:

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Section Type: Pipe
 Pile width: 16.00 (in)
 Thickness: 0.50 (in)
 End Type: closed end

Test Pile Length (ft)	Pile Width (in)	Ultimate Side Friction (tons)	Mobilized End Bearing (tons)	Estimated Davisson Capacity (tons)	Allowable Pile Capacity (tons)	Ultimate Pile Capacity (tons)
1.00	16.0	0.00	0.00	0.00	0.00	0.00
3.00	16.0	0.00	0.00	0.00	0.00	0.00
5.00	16.0	0.35	0.00	0.35	0.18	0.35
7.00	16.0	2.98	16.80	19.78	9.89	53.39
9.00	16.0	7.26	29.50	36.76	18.38	95.75
11.00	16.0	10.71	23.64	34.35	17.18	81.64
13.00	16.0	13.48	17.83	31.30	15.65	66.96
15.00	16.0	15.89	6.60	22.49	11.25	35.68
17.00	16.0	17.22	8.26	25.48	12.74	41.99

shaft002.tmp

19.00	16.0	17.94	15.17	33.11	16.55	63.44
21.00	16.0	23.16	24.27	47.43	23.72	95.97
23.00	16.0	28.92	20.96	49.88	24.94	91.80
25.00	16.0	33.72	16.62	50.35	25.17	83.59
27.00	16.0	37.68	16.61	54.29	27.14	87.51
29.00	16.0	40.30	18.53	58.83	29.41	95.90
31.00	16.0	43.42	24.94	68.35	34.18	118.23
33.00	16.0	45.94	24.87	70.81	35.41	120.55
35.00	16.0	48.57	23.59	72.16	36.08	119.33
37.00	16.0	51.25	23.16	74.41	37.21	120.74
39.00	16.0	53.93	21.80	75.73	37.87	119.33
41.00	16.0	56.62	18.75	75.37	37.69	112.86
43.00	16.0	59.36	18.50	77.86	38.93	114.86
45.00	16.0	62.14	22.40	84.54	42.27	129.33
47.00	16.0	65.23	22.46	87.69	43.84	132.60
49.00	16.0	68.97	20.55	89.52	44.76	130.62
51.00	16.0	73.25	16.32	89.57	44.79	122.22
53.00	16.0	76.74	18.29	95.04	47.52	131.63
55.00	16.0	79.98	21.62	101.60	50.80	144.84
57.00	16.0	82.37	21.77	104.13	52.07	147.66
59.00	16.0	84.64	21.94	106.57	53.29	150.44
61.00	16.0	86.97	21.84	108.81	54.40	152.50
63.00	16.0	89.12	22.50	111.62	55.81	156.63
65.00	16.0	91.76	22.47	114.23	57.11	159.16
67.00	16.0	94.64	21.57	116.21	58.10	159.34
69.00	16.0	96.96	20.48	117.44	58.72	158.40
71.00	16.0	99.03	19.38	118.42	59.21	157.18
73.00	16.0	100.91	17.86	118.77	59.38	154.48
75.00	16.0	102.59	15.74	118.33	59.17	149.82
77.00	16.0	104.52	13.32	117.84	58.92	144.47
79.00	16.0	107.14	11.12	118.27	59.13	140.51
81.00	16.0	109.16	5.72	114.88	57.44	126.31
83.00	16.0	110.38	4.91	115.29	57.65	125.12
85.00	16.0	112.07	1.99	114.06	57.03	118.03
87.00	16.0	113.63	1.85	115.48	57.74	119.18
89.00	16.0	114.41	1.16	115.57	57.78	117.88
91.00	16.0	114.51	0.78	115.28	57.64	116.83
93.00	16.0	114.51	0.58	115.09	57.54	116.25
95.00	16.0	114.51	0.47	114.97	57.49	115.90
97.00	16.0	114.51	0.23	114.74	57.37	115.21
99.00	16.0	114.51	0.05	114.56	57.28	114.65
101.00	16.0	114.51	0.02	114.53	57.27	114.58
103.00	16.0	114.51	0.40	114.90	57.45	115.70
105.00	16.0	114.51	1.22	115.72	57.86	118.16
107.00	16.0	115.01	2.14	117.16	58.58	121.44
109.00	16.0	116.53	2.66	119.19	59.60	124.51
111.00	16.0	0.00	0.00	0.00	0.00	0.00
113.00	16.0	0.00	0.00	0.00	0.00	0.00
115.00	16.0	0.00	0.00	0.00	0.00	0.00

NOTES

1. MOBILIZED END BEARING IS 1/3 OF THE ORIGINAL RB-121 VALUES.
2. DAVISSON PILE CAPACITY IS AN ESTIMATE BASED ON FAILURE CRITERIA, AND EQUALS ULTIMATE SIDE FRICTION PLUS MOBILIZED END BEARING.
3. ALLOWABLE PILE CAPACITY IS 1/2 THE DAVISSON PILE CAPACITY.
4. ULTIMATE PILE CAPACITY IS ULTIMATE SIDE FRICTION PLUS 3 x THE MOBILIZED END BEARING.
EXCEPTION: FOR H-PILES TIPPED IN SAND OR LIMESTONE, THE ULTIMATE PILE CAPACITY IS ULTIMATE SIDE FRICTION PLUS

Shaft002.tmp
2 x THE MOBILIZED END BEARING.

General Information:

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Input file:xtension\101\A\final-reports\Bridge\FB-Deep\TB-3-eric-pipe.spc
 Project number: 04-06-0014-101A
 Job name: TNR Bridge over CSX
 Engineer: EAM
 Units: English

Analysis Information:

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Analysis Type: SPT

Soil Information:

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Boring date: 11/28/08, Boring Number: B-3
 Station number: 246+30 watertable = 136 Offset: 19 RT

Ground Elevation: 137.000(ft)

Hammer type: Safety Hammer

ID	Depth (ft)	No. of Blows (Blows/ft)	Soil Type
1	0.00	6.00	5- Cavity layer
2	2.00	6.00	5- Cavity layer
3	4.00	13.00	5- Cavity layer
4	6.00	10.00	3- Clean sand
5	8.00	12.00	3- Clean sand
6	9.90	12.00	2- Clay and silty sand
7	10.00	29.00	3- Clean sand
8	15.00	21.00	3- Clean sand
9	20.00	22.00	3- Clean sand
10	24.90	22.00	2- Clay and silty sand
11	25.00	49.00	3- Clean sand
12	30.00	21.00	2- Clay and silty sand
13	35.00	14.00	3- Clean sand
14	40.00	20.00	3- Clean sand
15	45.00	17.00	3- Clean sand
16	50.00	18.00	3- Clean sand
17	55.00	15.00	3- Clean sand
18	60.00	21.00	3- Clean sand
19	65.00	4.00	2- Clay and silty sand
20	70.00	14.00	2- Clay and silty sand
21	75.00	9.00	2- Clay and silty sand
22	75.10	0.00	3- Clean sand
23	80.00	0.00	2- Clay and silty sand
24	85.00	4.00	2- Clay and silty sand
25	90.00	7.00	2- Clay and silty sand
26	94.90	7.00	3- Clean sand
27	95.00	16.00	2- Clay and silty sand
28	100.00	29.00	2- Clay and silty sand

shaft002.tmp

53.00	16.0	81.76	25.05	106.81	53.40	156.90
55.00	16.0	84.24	25.92	110.16	55.08	162.01
57.00	16.0	86.80	26.38	113.18	56.59	165.94
59.00	16.0	89.70	23.73	113.43	56.71	160.89
61.00	16.0	92.74	18.36	111.09	55.55	147.81
63.00	16.0	94.70	14.44	109.13	54.57	138.01
65.00	16.0	95.85	4.87	100.72	50.36	110.45
67.00	16.0	96.65	4.97	101.62	50.81	111.56
69.00	16.0	98.64	6.20	104.85	52.42	117.25
71.00	16.0	102.15	6.56	108.71	54.35	121.82
73.00	16.0	105.76	5.01	110.77	55.38	120.78
75.00	16.0	109.01	3.48	112.49	56.24	119.45
77.00	16.0	110.24	0.00	110.24	55.12	110.24
79.00	16.0	110.24	0.00	110.24	55.12	110.24
81.00	16.0	110.24	1.89	112.13	56.06	115.90
83.00	16.0	110.24	1.37	111.62	55.81	114.37
85.00	16.0	110.24	1.45	111.69	55.85	114.59
87.00	16.0	110.75	2.36	113.11	56.55	117.83
89.00	16.0	112.27	3.71	115.98	57.99	123.39
91.00	16.0	114.60	5.39	119.98	59.99	130.76
93.00	16.0	116.53	7.75	124.28	62.14	139.77
95.00	16.0	117.96	10.68	128.64	64.32	149.99
97.00	16.0	0.00	0.00	0.00	0.00	0.00
99.00	16.0	0.00	0.00	0.00	0.00	0.00

NOTES

1. MOBILIZED END BEARING IS 1/3 OF THE ORIGINAL RB-121 VALUES.
2. DAVISSON PILE CAPACITY IS AN ESTIMATE BASED ON FAILURE CRITERIA, AND EQUALS ULTIMATE SIDE FRICTION PLUS MOBILIZED END BEARING.
3. ALLOWABLE PILE CAPACITY IS 1/2 THE DAVISSON PILE CAPACITY.
4. ULTIMATE PILE CAPACITY IS ULTIMATE SIDE FRICTION PLUS 3 x THE MOBILIZED END BEARING.
EXCEPTION: FOR H-PILES TIPPED IN SAND OR LIMESTONE, THE ULTIMATE PILE CAPACITY IS ULTIMATE SIDE FRICTION PLUS 2 x THE MOBILIZED END BEARING.

General Information:

Input file:xtension\101\A\final-reports\Bridge\FB-Deep\TB-4-eric-pipe.spc
 Project number: 04-06-0014
 Job name: TNR Bridge over CSX
 Engineer: EAM
 Units: English

Analysis Information:

Analysis Type: SPT

Soil Information:

Boring date: 12/01/08, Boring Number: B-4
 Station number: 248+90 watertable = 135 Offset: 37 RT

Ground Elevation: 136.000(ft)

Hammer type: Safety Hammer

ID	Depth (ft)	No. of Blows (Blows/ft)	Soil Type
1	0.00	5.00	5- Cavity layer
2	2.00	5.00	5- Cavity layer
3	4.00	6.00	5- Cavity layer
4	6.00	7.00	3- Clean sand
5	7.90	7.00	2- Clay and silty sand
6	8.00	14.00	3- Clean sand
7	10.00	19.00	3- Clean sand
8	15.00	14.00	2- Clay and silty sand
9	20.00	16.00	2- Clay and silty sand
10	24.90	16.00	3- Clean sand
11	25.00	29.00	2- Clay and silty sand
12	30.00	19.00	3- Clean sand
13	35.00	28.00	3- Clean sand
14	40.00	27.00	3- Clean sand
15	45.00	23.00	3- Clean sand
16	50.00	18.00	3- Clean sand
17	55.00	18.00	3- Clean sand
18	55.10	12.00	2- Clay and silty sand
19	60.00	12.00	3- Clean sand
20	65.00	14.00	3- Clean sand
21	70.00	10.00	2- Clay and silty sand
22	75.00	13.00	2- Clay and silty sand
23	75.10	6.00	3- Clean sand
24	80.00	6.00	2- Clay and silty sand
25	85.00	0.00	2- Clay and silty sand
26	89.90	0.00	3- Clean sand
27	90.00	12.00	2- Clay and silty sand
28	95.00	16.00	2- Clay and silty sand
29	99.90	16.00	3- Clean sand
30	100.00	22.00	2- Clay and silty sand

shaft002.tmp

Blowcount Average Per Soil Layer

Layer Num.	Starting Elevation (ft)	Bottom Elevation (ft)	Thickness (ft)	Average Blowcount (Blows/ft)	Soil Type
1	136.00	130.00	6.00	5.33	5-Void
2	130.00	128.10	1.90	7.00	3-Clean Sand
3	128.10	128.00	0.10	7.00	2-Clay and Silty sand
4	128.00	121.00	7.00	17.57	3-Clean Sand
5	121.00	111.10	9.90	14.99	2-Clay and Silty sand
6	111.10	111.00	0.10	16.00	3-Clean Sand
7	111.00	106.00	5.00	29.00	2-Clay and Silty sand
8	106.00	80.90	25.10	22.98	3-Clean Sand
9	80.90	76.00	4.90	12.00	2-Clay and Silty sand
10	76.00	66.00	10.00	13.00	3-Clean Sand
11	66.00	60.90	5.10	10.06	2-Clay and Silty sand
12	60.90	56.00	4.90	6.00	3-Clean Sand
13	56.00	46.10	9.90	3.03	2-Clay and Silty sand
14	46.10	46.00	0.10	0.00	3-Clean Sand
15	46.00	36.10	9.90	13.98	2-Clay and Silty sand
16	36.10	36.00	0.10	16.00	3-Clean Sand
17	36.00	36.00	0.00	22.00	2-Clay and Silty sand

Driven Pile Data:

=====
Pile unit weight = 490.00(pcf), Section Type: Pipe

Pile Geometry:

width (in)	Length (ft)	Tip Elev. (ft)	Thickness (in)	Pile End
16.00	1.00	135.00	0.50	CLOSED
16.00	3.00	133.00	0.50	CLOSED
16.00	5.00	131.00	0.50	CLOSED
16.00	7.00	129.00	0.50	CLOSED
16.00	9.00	127.00	0.50	CLOSED
16.00	11.00	125.00	0.50	CLOSED
16.00	13.00	123.00	0.50	CLOSED
16.00	15.00	121.00	0.50	CLOSED
16.00	17.00	119.00	0.50	CLOSED
16.00	19.00	117.00	0.50	CLOSED
16.00	21.00	115.00	0.50	CLOSED
16.00	23.00	113.00	0.50	CLOSED
16.00	25.00	111.00	0.50	CLOSED
16.00	27.00	109.00	0.50	CLOSED
16.00	29.00	107.00	0.50	CLOSED
16.00	31.00	105.00	0.50	CLOSED
16.00	33.00	103.00	0.50	CLOSED
16.00	35.00	101.00	0.50	CLOSED
16.00	37.00	99.00	0.50	CLOSED
16.00	39.00	97.00	0.50	CLOSED
16.00	41.00	95.00	0.50	CLOSED
16.00	43.00	93.00	0.50	CLOSED
16.00	45.00	91.00	0.50	CLOSED
16.00	47.00	89.00	0.50	CLOSED
16.00	49.00	87.00	0.50	CLOSED
16.00	51.00	85.00	0.50	CLOSED

shaft002.tmp

16.00	53.00	83.00	0.50	CLOSED
16.00	55.00	81.00	0.50	CLOSED
16.00	57.00	79.00	0.50	CLOSED
16.00	59.00	77.00	0.50	CLOSED
16.00	61.00	75.00	0.50	CLOSED
16.00	63.00	73.00	0.50	CLOSED
16.00	65.00	71.00	0.50	CLOSED
16.00	67.00	69.00	0.50	CLOSED
16.00	69.00	67.00	0.50	CLOSED
16.00	71.00	65.00	0.50	CLOSED
16.00	73.00	63.00	0.50	CLOSED
16.00	75.00	61.00	0.50	CLOSED
16.00	77.00	59.00	0.50	CLOSED
16.00	79.00	57.00	0.50	CLOSED
16.00	81.00	55.00	0.50	CLOSED
16.00	83.00	53.00	0.50	CLOSED
16.00	85.00	51.00	0.50	CLOSED
16.00	87.00	49.00	0.50	CLOSED
16.00	89.00	47.00	0.50	CLOSED
16.00	91.00	45.00	0.50	CLOSED
16.00	93.00	43.00	0.50	CLOSED
16.00	95.00	41.00	0.50	CLOSED
16.00	97.00	39.00	0.50	CLOSED
16.00	99.00	37.00	0.50	CLOSED

Driven Pile Capacity:

Section Type: Pipe
Pile width: 16.00 (in)
Thickness: 0.50 (in)
End Type: closed end

Test Pile Length (ft)	Pile Width (in)	Ultimate Side Friction (tons)	Mobilized End Bearing (tons)	Estimated Davisson Capacity (tons)	Allowable Pile Capacity (tons)	Ultimate Pile Capacity (tons)
1.00	16.0	0.00	0.00	0.00	0.00	0.00
3.00	16.0	0.00	0.00	0.00	0.00	0.00
5.00	16.0	0.13	0.00	0.13	0.07	0.13
7.00	16.0	1.14	10.07	11.21	5.60	31.35
9.00	16.0	3.53	13.69	17.22	8.61	44.60
11.00	16.0	6.51	13.08	19.59	9.79	45.74
13.00	16.0	9.97	12.87	22.84	11.42	48.58
15.00	16.0	13.92	11.12	25.04	12.52	47.28
17.00	16.0	18.06	11.28	29.34	14.67	51.89
19.00	16.0	21.75	12.68	34.43	17.22	59.80
21.00	16.0	25.60	15.54	41.14	20.57	72.23
23.00	16.0	29.39	17.71	47.10	23.55	82.53
25.00	16.0	33.79	19.55	53.34	26.67	92.45
27.00	16.0	38.77	20.55	59.32	29.66	100.43
29.00	16.0	42.09	24.15	66.24	33.12	114.54
31.00	16.0	46.63	27.88	74.51	37.25	130.27
33.00	16.0	49.45	29.07	78.52	39.26	136.65
35.00	16.0	52.54	30.86	83.40	41.70	145.12
37.00	16.0	55.91	32.89	88.81	44.40	154.59
39.00	16.0	59.46	34.90	94.36	47.18	164.15

Shaft002.tmp						
41.00	16.0	63.24	36.52	99.76	49.88	172.81
43.00	16.0	67.09	36.58	103.67	51.84	176.84
45.00	16.0	70.72	34.99	105.71	52.85	175.69
47.00	16.0	74.13	32.93	107.05	53.53	172.91
49.00	16.0	77.28	31.24	108.52	54.26	170.99
51.00	16.0	80.20	28.77	108.97	54.49	166.51
53.00	16.0	83.08	24.44	107.53	53.76	156.41
55.00	16.0	85.95	21.12	107.08	53.54	149.32
57.00	16.0	91.93	13.29	105.23	52.61	131.82
59.00	16.0	94.10	14.89	108.99	54.50	138.77
61.00	16.0	96.69	19.73	116.42	58.21	155.88
63.00	16.0	98.73	18.43	117.15	58.58	154.01
65.00	16.0	100.89	15.84	116.73	58.36	148.40
67.00	16.0	103.34	13.82	117.16	58.58	144.80
69.00	16.0	106.22	12.91	119.13	59.56	144.94
71.00	16.0	109.51	8.23	117.74	58.87	134.19
73.00	16.0	113.10	8.27	121.37	60.68	137.91
75.00	16.0	116.95	7.74	124.69	62.34	140.16
77.00	16.0	118.17	6.58	124.75	62.37	137.90
79.00	16.0	119.86	5.22	125.08	62.54	135.52
81.00	16.0	121.80	2.46	124.26	62.13	129.17
83.00	16.0	123.28	1.76	125.03	62.52	128.54
85.00	16.0	123.72	1.12	124.84	62.42	127.08
87.00	16.0	123.72	2.53	126.25	63.13	131.32
89.00	16.0	123.72	4.61	128.33	64.17	137.55
91.00	16.0	125.59	5.96	131.56	65.78	143.48
93.00	16.0	128.56	7.24	135.80	67.90	150.27
95.00	16.0	131.59	10.93	142.52	71.26	164.38
97.00	16.0	0.00	0.00	0.00	0.00	0.00
99.00	16.0	0.00	0.00	0.00	0.00	0.00

NOTES

1. MOBILIZED END BEARING IS 1/3 OF THE ORIGINAL RB-121 VALUES.
2. DAVISSON PILE CAPACITY IS AN ESTIMATE BASED ON FAILURE CRITERIA, AND EQUALS ULTIMATE SIDE FRICTION PLUS MOBILIZED END BEARING.
3. ALLOWABLE PILE CAPACITY IS 1/2 THE DAVISSON PILE CAPACITY.
4. ULTIMATE PILE CAPACITY IS ULTIMATE SIDE FRICTION PLUS 3 X THE MOBILIZED END BEARING.
EXCEPTION: FOR H-PILES TIPPED IN SAND OR LIMESTONE, THE ULTIMATE PILE CAPACITY IS ULTIMATE SIDE FRICTION PLUS 2 X THE MOBILIZED END BEARING.

DOWNDRAG



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 BY EMM/ML
 PAGE 1 of 1

SUBJECT Potential Drowning

For 16-inch Closed Ended Steel Pipe Pile
 Negative Skin Friction (Based on RB-12)

Ult. Skin Friction (q_s)

Clayey Sand

0.19 TSF

Clayey/Silty Sands

$$\frac{2\bar{N}(110-\bar{N})}{60+5\bar{N}}$$

Based on RB-12, q_s 248+90, 37 RT

<u>Depth</u>	<u>Soil Type</u>	<u>\bar{N}</u>	<u>Friction</u>
0-12	Clayey Sand	10	0.19 TSF
12-17	Clayey Sands	19	0.75 TSF
17-43	Sands	20	0.49 TSF
43-56.5	Silty Sands	14	0.54 TSF

Module 25 and 10kip

$$0.19 \text{ TSF} \times (\pi)(16/12)(12) = 10.3 \text{ TONS}$$

$$0.75 \text{ TSF} \times (\pi)(16/12)(15) = 47.1 \text{ TONS}$$

$$0.49 \text{ TSF} \times (\pi)(16/12)(15) = 30.8 \text{ TONS}$$

$$0.54 \text{ TSF} \times (\pi)(16/12)(13.5) = 33.4 \text{ TONS}$$

121.6 TONS

Assume 122 TONS of possible Drowning due to
 Settlement

SETTLEMENT



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PAGE 1 of 5

SUBJECT Short-Term Settlement
Thompson Nursery Road

Based on FHWA Soils & Foundations Workshop Manual

General Soil Profile Boring B-4 Station 248+90, 37RT

0-13 Sand $N=10$

13-28 Clayey fine sand $N=19$

28-43 Sand $N=26$

43-70 Sand & Silty sand $N=14$

Existing Overburden pressure @ midpoint of layer

$$P_o @ 6.5 = (115)(1) + (110 - 62.4)(5.5) = \underline{366.8 \text{ psf}}$$

$$P_o @ 20.5 = [(115)(1) + (110 - 62.4)(12)] + (115 - 62.4)(7.5) = \underline{1070.7 \text{ psf}}$$

$$P_o @ 35.5 = 676.2 + (115 - 62.4)(15) + (110 - 62.4)(7.5) = \underline{1822.2 \text{ psf}}$$

$$P_o @ 56.5 = 676.2 + 787 + (110 - 62.4)(28.5) = \underline{2821.8 \text{ psf}}$$

Blow Count Correction (Fig 12)

$$N'/N = 2.3 \quad N' = 23$$

$$N'/N = 1.95 \quad N' = 29$$

$$N'/N = 1.0 \quad N' = 26$$

$$N'/N = 0.9 \quad N' = 13$$

Bearing Capacity Index (Fig 13)

$$C' = 67$$

$$C' = 67$$

$$C' = 67$$

$$C' = 45$$

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PAGE 2 of 5

SUBJECT St. Johns River South Fork

Thompson Avenue Road

Proposed Embankment Pressure (40')

$$\Delta P = (40+2)(105) = \underline{4410 \text{ psf}}$$

Calculated Settlement

$$\Delta H = H \left(\frac{1}{6} \right) \log \frac{P_s + \Delta P}{P_s}$$
$$= 13 \left(\frac{1}{6} \right) \log \frac{366.8 + 4410}{366.8} = 0.22$$

$$\Delta H = 15 \left(\frac{1}{6} \right) \log \frac{1070.7 + 4410}{1070.7} = 0.16$$

$$\Delta H = 15 \left(\frac{1}{6} \right) \log \frac{1822.2 + 4410}{1822.2} = 0.12$$

$$\Delta H = 27 \left(\frac{1}{4} \right) \log \frac{2821.8 + 4410}{2821.8} = 0.25$$

Total 0.75

$\approx 9''$

Assume 8 to 10 inches for 40ft Embankment

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PAGE 3 of 5

SUBJECT Short-Term Settlement
Thompson Road, Kissimmee

Proposed Embankment Pressure (30')

$$\Delta P = (30 + 2)(105) = \underline{3360 \text{ psf}}$$

Calculated Settlement

$$\Delta H = H \left(\frac{1}{e} \right) \log \frac{P_0 + \Delta P}{P_0}$$

$$= 13 \left(\frac{1}{67} \right) \log \frac{3008 + 3360}{3008} = 0.20$$

$$\Delta H = 15 \left(\frac{1}{67} \right) \log \frac{1070.7 + 3360}{1070.7} = 0.14$$

$$\Delta H = 15 \left(\frac{1}{68} \right) \log \frac{1822.2 + 3360}{1822.2} = 0.10$$

$$\Delta H = 17 \left(\frac{1}{45} \right) \log \frac{2821.8 + 3360}{2821.8} = 0.20$$

Total / 0.64

$\approx 7.7"$

Assume 7 to 9 inches for 30' Ft Embankment

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PAGE 4 of 5

SUBJECT Shoreline Erosion - Highway

Thompson Road

Proposed Embankment Pressure (20')

$$\Delta P = (20 \times 2) \times 10.5 = \underline{2310 \text{ psf}}$$

Calculated Settlement

$$\Delta H = H \left(\frac{1}{C_v} \right) \log \frac{P_o + \Delta P}{P_o} \\ = 13 \left(\frac{1}{67} \right) \log \frac{366.8 + 2310}{366.8} = 0.17$$

$$\Delta H = 15 \left(\frac{1}{67} \right) \log \frac{1070.7 + 2310}{1070.7} = 0.11$$

$$\Delta H = 15 \left(\frac{1}{67} \right) \log \frac{1822.2 + 2310}{1822.2} = 0.08$$

$$\Delta H = 27 \left(\frac{1}{45} \right) \log \frac{2821.8 + 2310}{2821.8} = 0.16$$

Total 0.52

≈ 6.2

Allowable 6 to 7 inches for 20 ft Embankment

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PAGE 5 of 5

SUBJECT 10' - 0" Embankment
Thompson Nursery Road

Proposed Embankment Pressure (10')

$$\Delta P = (10 + 2)(105) = \underline{1260 \text{ psf}}$$

Calculated Settlement

$$\Delta H = H \left(\frac{1}{C_v} \right) \log \frac{P_o + \Delta P}{P_o}$$
$$= 13 \left(\frac{1}{67} \right) \log \frac{366.8 + 1260}{366.8} = 0.13$$

$$\Delta H = 15 \left(\frac{1}{67} \right) \log \frac{1070.7 + 1260}{1070.7} = 0.08$$

$$\Delta H = 15 \left(\frac{1}{67} \right) \log \frac{1822.2 + 1260}{1822.2} = 0.05$$

$$\Delta H = 27 \left(\frac{1}{45} \right) \log \frac{2821.8 + 1260}{2821.8} = 0.10$$

Total 0.36

≈ 4.3

Assume 4 to 5 inches for 10' Embankment

me
9/23/09

EXTERNAL STABILITY ANALYSIS

MSE WALL - LRFD External Stability Analysis
version 2.5
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (2006)

page 1 of 2

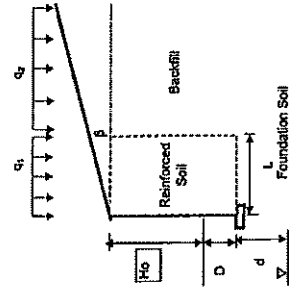
	H (ft)	H _o (ft)	D (ft)	L (ft)	Minimum Reinforcement Length Requirement (SQ3 Eq 3.13)	Over- turning CDR z=1	Eccen- tricity CDR z=1	Sliding CDR z=1	Bearing Resistance CDR z=1	β (deg)	λ (ft)	Water d (ft)	v _{1d} (psf)	y _{1d} (psf)	δ _{1d} (deg)	φ _{1d} (deg)	c _{1d} (psf)	φ _u (deg)	q ₁ (psf)	q ₂ (psf)	Cw
1	4.0	2.0	2.0	8.0	OK	8.15	0.25	1.82	3.59	0.0	0.0	0.0	110.0	105.0	30.0	29.0	0.0	30.0	250	250	0.50
2	12.0	10.0	2.0	9.0	OK	2.09	0.96	1.12	1.19	0.0	0.0	0.0	110.0	105.0	30.0	29.0	0.0	30.0	250	250	0.50
3	15.0	13.0	2.0	11.0	OK	2.17	0.92	1.17	1.10	0.0	0.0	0.0	110.0	105.0	30.0	29.0	0.0	30.0	250	250	0.50
4	30.0	28.0	2.0	30.0	OK	2.40	0.47	1.01	1.00	26.6	30.0	0.0	110.0	105.0	30.0	29.0	0.0	30.0	250	250	0.50
5	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	#DIV/0!
6	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	#DIV/0!
7	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
8	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
9	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
10	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
11	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
12	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
13	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
14	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
15	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
16	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
17	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
18	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
19	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!
20	0.0	0.0	0.0	0.0	OK	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!

Indicator required input

Note:

Disclaimer: No Warranty, expressed or implied, is made by the author or the Florida Department of Transportation (FDOT) as to the accuracy and the functioning of this program or the results it produces; nor shall the fact of distribution constitute any such warranty, and no responsibility is assumed by the author or the FDOT in any connection therewith.

- H Wall Height H = H_o + D
H_o Wall Height above ground (feet)
D Wall Embedment Depth (feet)
L Reinforcing Strap Length (feet)
CDR Capacity-Demand Ratio for:
Overturning = M_r / M_o ⇒ 1.0
Eccentricity = e / (L/6) ⇒ 1.0
Sliding = F_r / F_d ⇒ 1.0
Bearing Resistance = q_r / q_u ⇒ 1.0
β Slope of backfill soil (degrees)
λ Horizontal distance from the back of the wall to the top of the slope (for broken-back slopes) (feet)
d Use λ >= 2H when modeling infinite slopes
Water depth below base of leveling pad (feet)
y_{1d} Reinforced fill unit weight (pounds per cubic foot)
q_{1d} Backfill soil unit weight (pounds per cubic foot)
φ_{1d} Backfill soil angle of internal friction (degrees)
y_{1s} Foundation Soil unit weight (pounds per cubic foot)
q_{1s} Foundation Soil angle of internal friction (degrees)
φ_{1s} Foundation Soil cohesion (pounds per square foot)
q_u Base Angle of Internal Friction (degrees) (Sliding)
Surcharge load over reinforced soil mass (pounds per square foot) - Should be zero when modeling infinite slopes
Surcharge load behind reinforced soil mass (pounds per square foot) - Should be zero when modeling infinite slopes
Cw = 0.5 for d < 0, Over 1.0 for d >= 1.5L + D



9/23

DATE 8/28/09

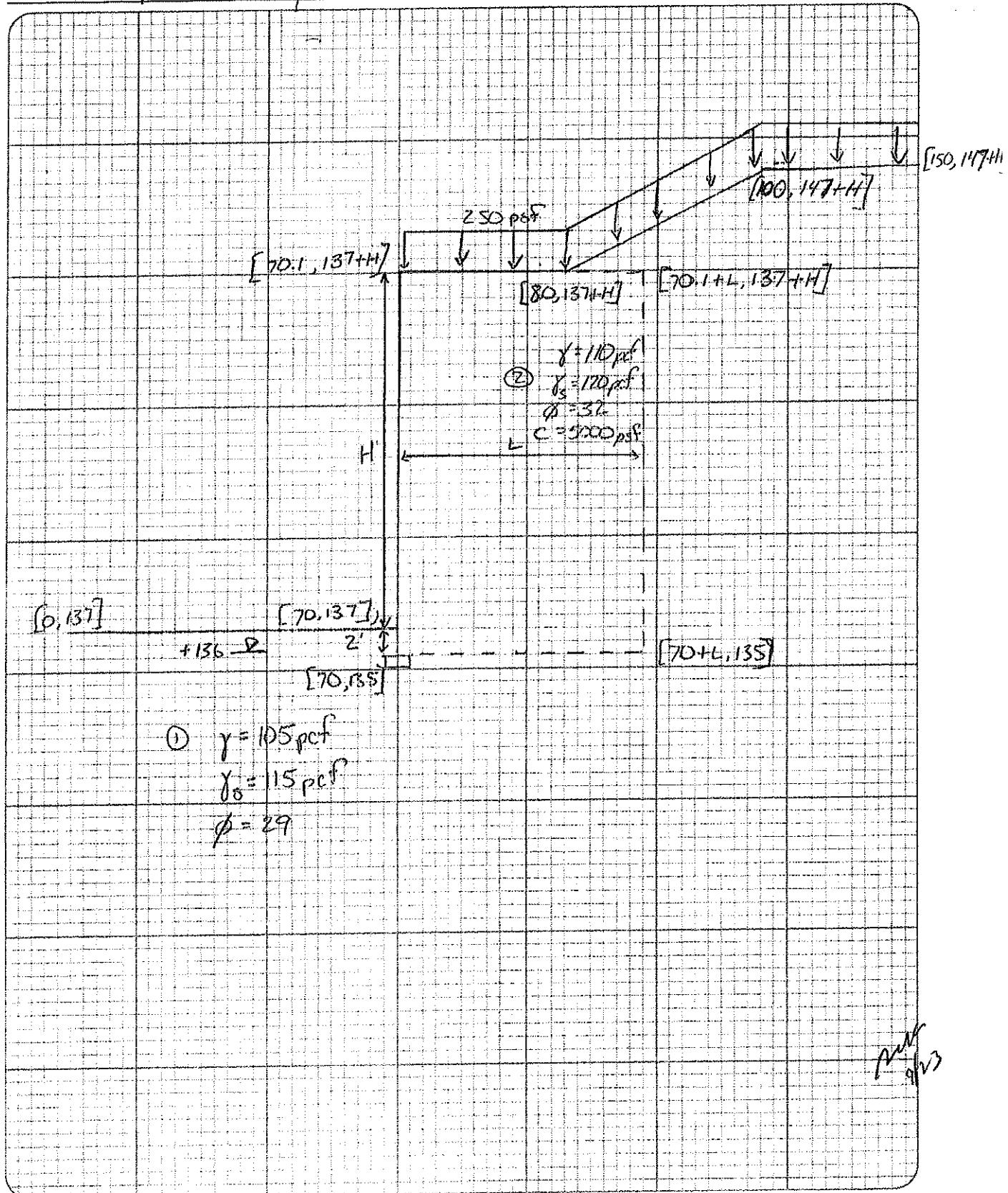
PROJECT No. 04-06-0014

BY EAM/SCK

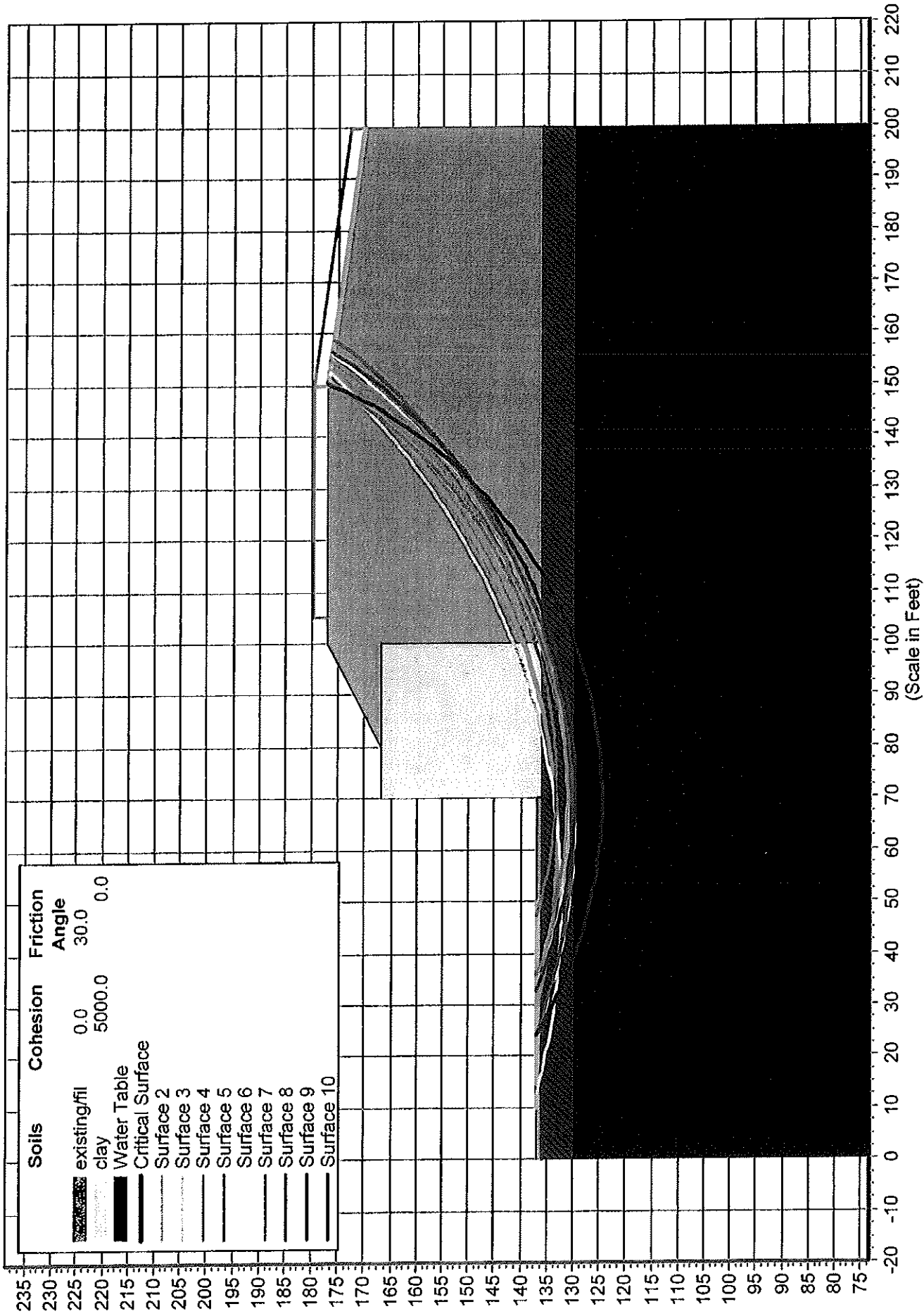
SUBJECT MSE Walls 1 & 2

Thompson Nursery Rd over CSX RR

PAGE 1 of 1



Problem: Thompson Nursery Road Over CSX RR (30 foot high wall) - FS Min- Bishop = 1.605



result
 ** STABL for WINDOWS **
 by
 Geotechnical Software Solutions

mm
 9/27

1

--Slope Stability Analysis--
 Simplified Janbu, Simplified Bishop
 or Spencer's Method of Slices

Run Date:
 Time of Run:
 Run By:
 Input Data Filename: run.in
 Output Filename: result.out
 Unit: U.S.C.
 Plotted Output Filename: result.plt

PROBLEM DESCRIPTION Thompson Nursery Road Over CSX RR (30 foot high wall)

BOUNDARY COORDINATES

6 Top Boundaries
 10 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
**** ERROR - PF04 **** Boundary 8					
1	0.00	137.00	70.00	137.00	1
2	70.00	137.00	70.10	167.00	2
3	70.10	167.00	80.00	167.00	2
4	80.00	167.00	100.00	177.00	1
5	100.00	177.00	150.00	177.00	1
6	150.00	177.00	200.00	170.00	1
7	70.00	137.00	70.00	135.00	1
8	100.10	167.00	80.00	167.00	2
9	70.00	135.00	100.00	135.00	1
10	100.00	135.00	100.10	167.00	1

1

ISOTROPIC SOIL PARAMETERS

2 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	105.0	115.0	0.0	30.0	0.00	0.0	0

2 115.0 125.0 5000.0 ^{result} 0.0 0.00 0.0 0

1
1 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	0.00	136.00
2	200.00	136.00

1
BOUNDARY LOAD(S)

2 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	105.00	150.00	250.0	0.0
2	150.00	200.00	250.0	10.0

1
NOTE - Intensity Is Specified As A Uniformly Distributed Force Acting On A Horizontally Projected Surface.

A Critical Failure Surface Searching Method, Using A Random Technique For Generating Circular Surfaces, Has Been Specified.

300 Trial Surfaces Have Been Generated.

20 Surfaces Initiate From Each Of 15 Points Equally Spaced Along The Ground Surface Between X = 10.00 ft.
and X = 50.00 ft.

Each Surface Terminates Between X = 150.00 ft.
and X = 200.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 2.00 ft.

2.00 ft. Line Segments Define Each Trial Failure surface.

1

result

	Y	A	X	I	S	F	T
	0.00	41.43	82.85	124.28	165.70	207.13	
X	0.00	+-----+-----+-----+-----+-----+					
	41.43	+-----+-----+-----+-----+-----+					
A	82.85	+-----+-----+-----+-----+-----+					
	124.28	+-----+-----+-----+-----+-----+					
X	124.28	+-----+-----+-----+-----+-----+					
	165.70	+-----+-----+-----+-----+-----+					
I	165.70	+-----+-----+-----+-----+-----+					
	207.13	+-----+-----+-----+-----+-----+					
S	207.13	+-----+-----+-----+-----+-----+					
	248.55	+-----+-----+-----+-----+-----+					
F	289.98	+-----+-----+-----+-----+-----+					
	331.41	+-----+-----+-----+-----+-----+					
T	331.41	+-----+-----+-----+-----+-----+					

 ***** EXECUTION OF STABL ABORTED *****

1

result

Following Are Displayed The Ten Most Critical Of The Trial
Failure Surfaces Examined. They Are Ordered - Most Critical
First.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 70 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	30.00	137.00
2	31.94	136.50
3	33.88	136.04
4	35.84	135.61
5	37.80	135.21
6	39.76	134.84
7	41.73	134.51
8	43.71	134.21
9	45.69	133.94
10	47.68	133.71
11	49.67	133.51
12	51.66	133.34
13	53.66	133.21
14	55.66	133.11
15	57.65	133.04
16	59.65	133.01
17	61.65	133.01
18	63.65	133.04
19	65.65	133.11
20	67.65	133.21
21	69.65	133.34
22	71.64	133.51
23	73.63	133.71
24	75.61	133.95
25	77.60	134.22
26	79.57	134.52
27	81.55	134.85
28	83.51	135.22
29	85.47	135.62
30	87.42	136.05
31	89.37	136.52
32	91.31	137.02
33	93.23	137.55
34	95.15	138.11
35	97.06	138.71
36	98.96	139.34
37	100.85	140.00
38	102.73	140.69
39	104.59	141.41
40	106.44	142.16
41	108.28	142.95
42	110.11	143.76
43	111.92	144.61
44	113.72	145.48
45	115.50	146.39
46	117.27	147.32
47	119.02	148.29

		result
48	120.76	149.28
49	122.48	150.30
50	124.18	151.36
51	125.86	152.44
52	127.53	153.55
53	129.17	154.68
54	130.80	155.85
55	132.41	157.04
56	133.99	158.25
57	135.56	159.50
58	137.10	160.77
59	138.63	162.06
60	140.13	163.38
61	141.61	164.73
62	143.06	166.10
63	144.50	167.50
64	145.91	168.92
65	147.29	170.36
66	148.65	171.82
67	149.99	173.31
68	151.30	174.82
69	152.59	176.35
70	152.79	176.61

Circle Center At X = 60.6 ; Y = 252.2 and Radius, 119.2

*** 1.605 ***

Individual data on the 80 slices

Slice No.	Width (ft)	Weight (lbs)	Water	Water	Force Norm (lbs)	Force Tan (lbs)	Earthquake		
			Force Top (lbs)	Force Bot (lbs)			Force Hor (lbs)	Force Ver (lbs)	Surcharge Load (lbs)
1	1.9	50.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	1.9	149.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.2	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	1.8	223.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	2.0	328.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	2.0	408.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	2.0	481.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	2.0	548.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	2.0	609.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	2.0	662.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	2.0	709.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	2.0	748.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	2.0	781.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	2.0	806.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	2.0	824.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	2.0	835.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	2.0	838.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	2.0	834.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	2.0	823.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	2.0	805.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	2.0	780.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.4	135.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.1	212.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	1.5	5912.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

					result					
25	2.0	7612.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	2.0	7552.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	2.0	7484.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	2.0	7407.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.4	1589.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	1.5	5299.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.8	2722.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	1.2	4136.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	2.0	6959.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	1.7	6154.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	0.2	895.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	1.9	7129.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	1.9	7199.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	1.9	7258.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	1.9	7307.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	1.9	7346.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	1.9	7374.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	1.0	4061.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	57.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	0.1	333.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	0.7	2920.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	1.9	7225.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	1.9	7041.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.4	1524.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	1.4	5326.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	361.0
50	1.8	6654.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	460.0
51	1.8	6452.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	456.6
52	1.8	6245.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	453.1
53	1.8	6033.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	449.5
54	1.8	5816.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	445.8
55	1.8	5595.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	441.9
56	1.8	5370.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	437.9
57	1.7	5141.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	433.8
58	1.7	4909.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	429.6
59	1.7	4673.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	425.2
60	1.7	4436.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	420.8
61	1.7	4196.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	416.2
62	1.6	3955.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	411.5
63	1.6	3712.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	406.7
64	1.6	3468.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	401.7
65	1.6	3224.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	396.7
66	1.6	2980.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	391.5
67	1.5	2736.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	386.2
68	1.5	2492.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	380.9
69	1.5	2250.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	375.4
70	1.5	2010.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	369.8
71	1.5	1771.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	364.1
72	1.4	1535.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	358.3
73	1.4	1301.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	352.4
74	1.4	1071.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	346.4
75	1.4	844.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	340.3
76	1.3	622.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	334.1
77	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
78	1.3	387.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	325.1
79	1.3	154.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	321.4
80	0.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.8

Failure Surface Specified By 69 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
--------------	----------------	----------------

		result
1	32.86	137.00
2	34.74	136.33
3	36.64	135.69
4	38.55	135.10
5	40.47	134.54
6	42.40	134.02
7	44.34	133.54
8	46.29	133.10
9	48.25	132.70
10	50.22	132.34
11	52.19	132.02
12	54.17	131.74
13	56.16	131.49
14	58.15	131.29
15	60.14	131.13
16	62.14	131.01
17	64.14	130.93
18	66.14	130.89
19	68.14	130.88
20	70.13	130.92
21	72.13	131.00
22	74.13	131.12
23	76.12	131.28
24	78.11	131.48
25	80.10	131.72
26	82.08	132.00
27	84.05	132.33
28	86.02	132.68
29	87.98	133.08
30	89.93	133.52
31	91.87	134.00
32	93.81	134.52
33	95.73	135.07
34	97.64	135.67
35	99.53	136.30
36	101.42	136.97
37	103.29	137.68
38	105.14	138.43
39	106.98	139.21
40	108.81	140.03
41	110.62	140.89
42	112.40	141.78
43	114.18	142.71
44	115.93	143.67
45	117.66	144.67
46	119.37	145.71
47	121.06	146.78
48	122.73	147.88
49	124.38	149.01
50	126.00	150.18
51	127.60	151.38
52	129.17	152.62
53	130.72	153.88
54	132.25	155.18
55	133.75	156.50
56	135.22	157.86
57	136.66	159.24
58	138.07	160.66
59	139.46	162.10
60	140.82	163.57
61	142.14	165.07
62	143.44	166.59
63	144.70	168.14

		result
64	145.94	169.71
65	147.14	171.31
66	148.31	172.93
67	149.44	174.58
68	150.55	176.25
69	150.94	176.87

Circle Center At X = 67.2 ; Y = 230.2 and Radius, 99.3

*** 1.652 ***

1

Failure Surface Specified By 78 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	12.86	137.00
2	14.79	136.50
3	16.74	136.02
4	18.69	135.58
5	20.64	135.16
6	22.60	134.77
7	24.57	134.40
8	26.54	134.07
9	28.52	133.76
10	30.50	133.48
11	32.48	133.23
12	34.47	133.00
13	36.46	132.81
14	38.45	132.64
15	40.45	132.50
16	42.44	132.39
17	44.44	132.30
18	46.44	132.25
19	48.44	132.22
20	50.44	132.22
21	52.44	132.25
22	54.44	132.31
23	56.44	132.39
24	58.44	132.51
25	60.43	132.65
26	62.42	132.82
27	64.41	133.02
28	66.40	133.24
29	68.38	133.50
30	70.36	133.78
31	72.34	134.09
32	74.31	134.43
33	76.28	134.79
34	78.24	135.18
35	80.19	135.61
36	82.14	136.05
37	84.09	136.53
38	86.02	137.03
39	87.95	137.56
40	89.87	138.12
41	91.78	138.71

		result
42	93.69	139.32
43	95.58	139.96
44	97.47	140.62
45	99.34	141.31
46	101.21	142.03
47	103.07	142.78
48	104.91	143.55
49	106.75	144.34
50	108.57	145.16
51	110.38	146.01
52	112.18	146.89
53	113.97	147.78
54	115.74	148.71
55	117.50	149.66
56	119.25	150.63
57	120.98	151.63
58	122.70	152.65
59	124.41	153.70
60	126.10	154.77
61	127.77	155.86
62	129.43	156.98
63	131.07	158.12
64	132.70	159.28
65	134.31	160.47
66	135.90	161.68
67	137.48	162.91
68	139.03	164.17
69	140.58	165.44
70	142.10	166.74
71	143.60	168.06
72	145.09	169.40
73	146.55	170.76
74	148.00	172.14
75	149.43	173.54
76	150.83	174.96
77	152.22	176.40
78	152.46	176.66

Circle Center At X = 49.4 ; Y = 274.0 and Radius, 141.8

*** 1.693 ***

Failure surface Specified By 75 coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	24.29	137.00
2	26.17	136.34
3	28.07	135.71
4	29.98	135.12
5	31.90	134.55
6	33.83	134.03
7	35.77	133.53
8	37.72	133.07
9	39.67	132.65
10	41.63	132.26
11	43.60	131.90

		result
12	45.57	131.58
13	47.55	131.29
14	49.54	131.03
15	51.52	130.82
16	53.51	130.63
17	55.51	130.48
18	57.51	130.37
19	59.50	130.29
20	61.50	130.24
21	63.50	130.23
22	65.50	130.26
23	67.50	130.32
24	69.50	130.42
25	71.50	130.55
26	73.49	130.71
27	75.48	130.91
28	77.47	131.14
29	79.45	131.41
30	81.42	131.72
31	83.40	132.06
32	85.36	132.43
33	87.32	132.84
34	89.27	133.28
35	91.21	133.75
36	93.15	134.26
37	95.07	134.81
38	96.99	135.38
39	98.89	135.99
40	100.78	136.64
41	102.67	137.31
42	104.54	138.02
43	106.39	138.76
44	108.24	139.54
45	110.07	140.34
46	111.88	141.18
47	113.69	142.05
48	115.47	142.95
49	117.24	143.88
50	118.99	144.84
51	120.73	145.84
52	122.45	146.86
53	124.15	147.91
54	125.83	149.00
55	127.49	150.11
56	129.13	151.25
57	130.76	152.42
58	132.36	153.62
59	133.94	154.84
60	135.50	156.10
61	137.04	157.38
62	138.55	158.68
63	140.04	160.02
64	141.51	161.37
65	142.95	162.76
66	144.37	164.17
67	145.76	165.60
68	147.13	167.06
69	148.48	168.54
70	149.79	170.05
71	151.08	171.57
72	152.35	173.13
73	153.59	174.70
74	154.79	176.29

75 154.82 result
 176.33
 Circle Center At X = 63.0 ; Y = 244.6 and Radius, 114.4

*** 1.694 ***

1

Failure Surface Specified By 61 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	47.14	137.00
2	49.07	136.45
3	51.00	135.94
4	52.95	135.48
5	54.90	135.05
6	56.86	134.67
7	58.84	134.34
8	60.81	134.05
9	62.80	133.80
10	64.79	133.59
11	66.78	133.43
12	68.78	133.32
13	70.78	133.24
14	72.78	133.22
15	74.78	133.23
16	76.78	133.29
17	78.77	133.40
18	80.77	133.54
19	82.76	133.74
20	84.74	133.97
21	86.72	134.25
22	88.70	134.58
23	90.66	134.94
24	92.62	135.35
25	94.57	135.81
26	96.51	136.30
27	98.43	136.84
28	100.35	137.42
29	102.25	138.05
30	104.13	138.71
31	106.00	139.42
32	107.86	140.16
33	109.70	140.95
34	111.52	141.78
35	113.32	142.65
36	115.10	143.56
37	116.86	144.51
38	118.60	145.49
39	120.32	146.52
40	122.02	147.58
41	123.69	148.68
42	125.33	149.81
43	126.95	150.99
44	128.55	152.19
45	130.12	153.44
46	131.65	154.71

		result
47	133.17	156.02
48	134.65	157.36
49	136.10	158.74
50	137.52	160.15
51	138.91	161.59
52	140.27	163.05
53	141.59	164.55
54	142.88	166.08
55	144.14	167.63
56	145.37	169.22
57	146.55	170.83
58	147.70	172.46
59	148.82	174.12
60	149.90	175.81
61	150.58	176.92

Circle Center At X = 73.1 ; Y = 223.8 and Radius, 90.6

*** 1.697 ***

Failure Surface Specified By 75 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	24.29	137.00
2	26.17	136.32
3	28.06	135.67
4	29.96	135.05
5	31.87	134.47
6	33.80	133.92
7	35.73	133.40
8	37.67	132.92
9	39.62	132.47
10	41.57	132.06
11	43.54	131.68
12	45.51	131.33
13	47.48	131.02
14	49.46	130.74
15	51.45	130.50
16	53.44	130.30
17	55.43	130.13
18	57.43	129.99
19	59.43	129.89
20	61.42	129.82
21	63.42	129.79
22	65.42	129.79
23	67.42	129.83
24	69.42	129.91
25	71.42	130.02
26	73.41	130.16
27	75.41	130.34
28	77.39	130.55
29	79.38	130.80
30	81.36	131.08
31	83.33	131.40
32	85.30	131.75
33	87.26	132.14

		result
34	89.22	132.56
35	91.17	133.02
36	93.11	133.51
37	95.04	134.03
38	96.96	134.59
39	98.87	135.18
40	100.77	135.80
41	102.66	136.46
42	104.53	137.15
43	106.40	137.87
44	108.25	138.63
45	110.09	139.42
46	111.91	140.24
47	113.72	141.09
48	115.52	141.97
49	117.29	142.89
50	119.06	143.83
51	120.80	144.81
52	122.53	145.82
53	124.24	146.85
54	125.93	147.92
55	127.60	149.02
56	129.26	150.14
57	130.89	151.30
58	132.50	152.48
59	134.10	153.69
60	135.67	154.93
61	137.21	156.20
62	138.74	157.49
63	140.24	158.81
64	141.72	160.16
65	143.18	161.53
66	144.61	162.92
67	146.02	164.34
68	147.40	165.79
69	148.75	167.26
70	150.08	168.75
71	151.39	170.27
72	152.67	171.81
73	153.92	173.37
74	155.14	174.95
75	156.03	176.16

Circle Center At X = 64.2 ; Y = 243.9 and Radius, 114.1

*** 1.728 ***

1

Failure Surface Specified By 69 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	35.71	137.00
2	37.61	136.35
3	39.51	135.74
4	41.43	135.17
5	43.35	134.63

		result
6	45.29	134.13
7	47.24	133.67
8	49.19	133.25
9	51.15	132.86
10	53.12	132.51
11	55.10	132.21
12	57.08	131.94
13	59.07	131.71
14	61.06	131.52
15	63.05	131.36
16	65.05	131.25
17	67.05	131.17
18	69.05	131.14
19	71.05	131.14
20	73.05	131.18
21	75.05	131.27
22	77.04	131.39
23	79.04	131.55
24	81.03	131.74
25	83.01	131.98
26	84.99	132.26
27	86.97	132.57
28	88.94	132.92
29	90.90	133.32
30	92.85	133.75
31	94.80	134.21
32	96.73	134.72
33	98.66	135.26
34	100.57	135.84
35	102.47	136.46
36	104.36	137.12
37	106.24	137.81
38	108.10	138.54
39	109.95	139.30
40	111.78	140.10
41	113.60	140.94
42	115.40	141.81
43	117.18	142.72
44	118.95	143.66
45	120.69	144.63
46	122.42	145.64
47	124.13	146.68
48	125.81	147.76
49	127.48	148.87
50	129.12	150.01
51	130.74	151.18
52	132.34	152.39
53	133.91	153.62
54	135.46	154.89
55	136.98	156.18
56	138.48	157.51
57	139.95	158.86
58	141.40	160.24
59	142.81	161.65
60	144.20	163.09
61	145.57	164.56
62	146.90	166.05
63	148.20	167.57
64	149.47	169.11
65	150.72	170.67
66	151.93	172.27
67	153.11	173.88
68	154.26	175.52

69 154.81 result
 176.33
 Circle Center At X = 69.9 ; Y = 233.6 and Radius, 102.4

*** 1.734 ***

Failure Surface Specified By 76 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	24.29	137.00
2	26.17	136.34
3	28.07	135.70
4	29.98	135.10
5	31.90	134.53
6	33.82	134.00
7	35.76	133.49
8	37.70	133.02
9	39.65	132.58
10	41.61	132.18
11	43.58	131.80
12	45.55	131.46
13	47.52	131.16
14	49.50	130.88
15	51.49	130.64
16	53.48	130.43
17	55.47	130.26
18	57.47	130.12
19	59.46	130.01
20	61.46	129.94
21	63.46	129.90
22	65.46	129.89
23	67.46	129.92
24	69.46	129.98
25	71.46	130.07
26	73.45	130.20
27	75.45	130.36
28	77.44	130.55
29	79.43	130.78
30	81.41	131.04
31	83.39	131.33
32	85.36	131.66
33	87.33	132.02
34	89.29	132.41
35	91.24	132.83
36	93.19	133.29
37	95.13	133.78
38	97.06	134.30
39	98.98	134.86
40	100.89	135.44
41	102.79	136.06
42	104.69	136.71
43	106.57	137.40
44	108.43	138.11
45	110.29	138.85
46	112.13	139.63
47	113.96	140.44

		result
48	115.78	141.27
49	117.58	142.14
50	119.37	143.04
51	121.14	143.97
52	122.90	144.92
53	124.64	145.91
54	126.36	146.92
55	128.07	147.97
56	129.76	149.04
57	131.43	150.14
58	133.08	151.27
59	134.71	152.42
60	136.32	153.61
61	137.92	154.82
62	139.49	156.05
63	141.04	157.31
64	142.57	158.60
65	144.08	159.92
66	145.56	161.25
67	147.03	162.62
68	148.47	164.00
69	149.88	165.42
70	151.28	166.85
71	152.65	168.31
72	153.99	169.79
73	155.31	171.29
74	156.60	172.82
75	157.87	174.37
76	158.97	175.74

Circle Center At X = 64.9 ; Y = 249.3 and Radius, 119.4

*** 1.779 ***

1

Failure Surface Specified By 72 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	32.86	137.00
2	34.72	136.27
3	36.60	135.58
4	38.48	134.92
5	40.39	134.30
6	42.30	133.72
7	44.22	133.17
8	46.16	132.67
9	48.10	132.20
10	50.06	131.77
11	52.02	131.38
12	53.99	131.02
13	55.96	130.71
14	57.94	130.43
15	59.93	130.20
16	61.92	130.00
17	63.91	129.84
18	65.91	129.72

		result
19	67.91	129.64
20	69.91	129.60
21	71.91	129.60
22	73.91	129.64
23	75.91	129.72
24	77.90	129.83
25	79.90	129.99
26	81.89	130.18
27	83.87	130.42
28	85.85	130.69
29	87.83	131.00
30	89.80	131.35
31	91.76	131.74
32	93.71	132.17
33	95.66	132.63
34	97.59	133.14
35	99.52	133.68
36	101.43	134.26
37	103.34	134.88
38	105.23	135.53
39	107.10	136.22
40	108.97	136.95
41	110.81	137.71
42	112.65	138.51
43	114.46	139.35
44	116.26	140.22
45	118.05	141.13
46	119.81	142.07
47	121.56	143.05
48	123.28	144.06
49	124.99	145.10
50	126.67	146.18
51	128.34	147.29
52	129.98	148.43
53	131.60	149.61
54	133.19	150.81
55	134.76	152.05
56	136.31	153.32
57	137.83	154.62
58	139.33	155.95
59	140.80	157.30
60	142.24	158.69
61	143.65	160.10
62	145.04	161.54
63	146.40	163.01
64	147.73	164.50
65	149.03	166.02
66	150.30	167.57
67	151.54	169.14
68	152.74	170.73
69	153.92	172.35
70	155.06	173.99
71	156.18	175.65
72	156.46	176.10

Circle Center At X = 71.0 ; Y = 231.4 and Radius, 101.8

*** 1.793 ***

result
Failure Surface Specified By 76 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	24.29	137.00
2	26.01	135.99
3	27.77	135.03
4	29.54	134.10
5	31.33	133.21
6	33.14	132.37
7	34.97	131.56
8	36.82	130.80
9	38.69	130.08
10	40.57	129.40
11	42.46	128.76
12	44.37	128.17
13	46.30	127.62
14	48.23	127.11
15	50.18	126.65
16	52.13	126.23
17	54.10	125.86
18	56.07	125.53
19	58.05	125.25
20	60.04	125.01
21	62.03	124.81
22	64.02	124.66
23	66.02	124.56
24	68.02	124.50
25	70.02	124.49
26	72.02	124.52
27	74.02	124.60
28	76.01	124.72
29	78.01	124.89
30	79.99	125.10
31	81.98	125.35
32	83.96	125.66
33	85.93	126.00
34	87.89	126.39
35	89.84	126.83
36	91.78	127.31
37	93.71	127.83
38	95.63	128.40
39	97.53	129.01
40	99.42	129.66
41	101.30	130.36
42	103.16	131.10
43	105.00	131.88
44	106.82	132.70
45	108.63	133.56
46	110.41	134.46
47	112.18	135.41
48	113.92	136.39
49	115.64	137.41
50	117.33	138.47
51	119.00	139.57
52	120.65	140.71
53	122.27	141.88
54	123.86	143.09
55	125.43	144.33
56	126.96	145.61
57	128.47	146.93

		result
58	129.95	148.28
59	131.39	149.66
60	132.81	151.07
61	134.19	152.52
62	135.54	154.00
63	136.85	155.50
64	138.14	157.04
65	139.38	158.60
66	140.59	160.19
67	141.77	161.81
68	142.90	163.46
69	144.00	165.13
70	145.06	166.83
71	146.08	168.54
72	147.07	170.29
73	148.01	172.05
74	148.92	173.83
75	149.78	175.64
76	150.37	176.95

Circle Center At X = 69.6 ; Y = 212.9 and Radius, 88.4

*** 1.815 ***

1

	Y	A	X	I	S	F	T
	0.00	41.43	82.85	124.28	165.70	207.13	
X	0.00	+	-----+	-----+	-----*	-----+	-----+
		-			.3		
		-			...3		
		-			...31		
		-			...31		
	41.43	+			...011		
		-			...015		
		-			...0415		
		-			...041.		
		-			...041*	*	
		-			...0613		
A	82.85	+			...0911.	*	
		-			...021.		
		-			...02*1	*	*
		-			...09213		/1
		-			...0621.		
		-			...0211		
X	124.28	+			...0211		
		-			...06113		
		-			...6213		
		-			...84112		
		-			...611*1/2		
I	165.70	+			...86		
		-				
		-				
		-				
		-				

$$W \dots *2/$$

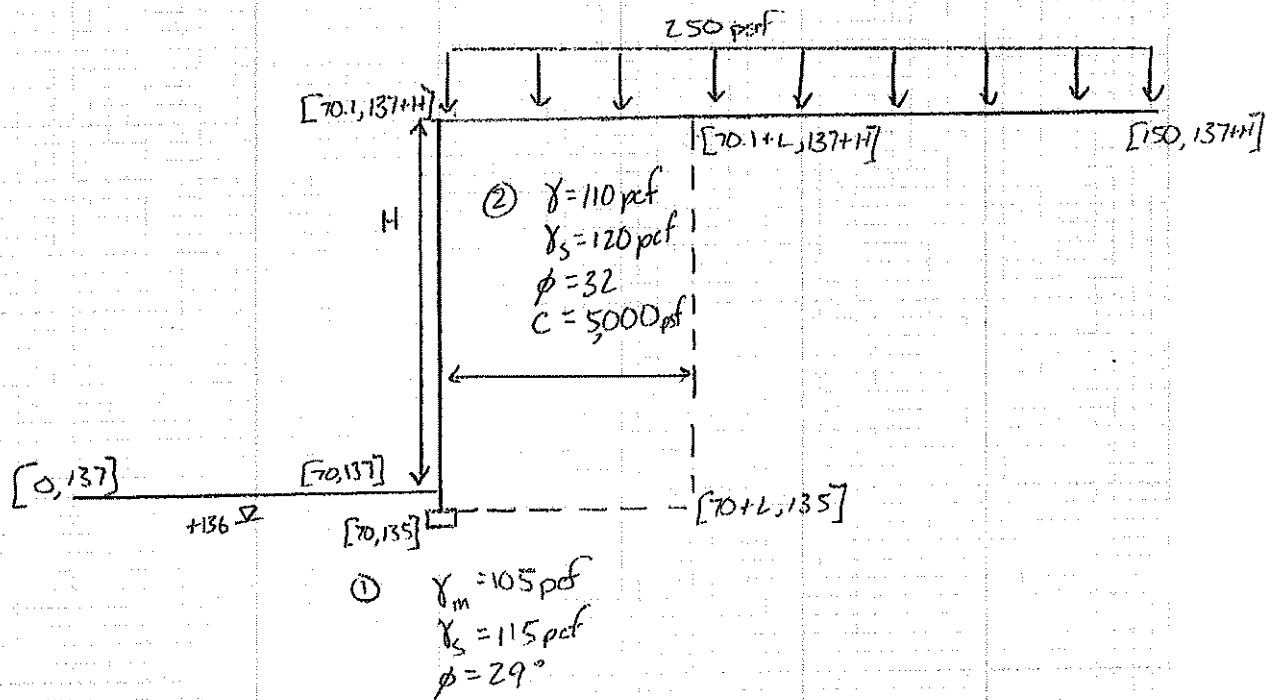
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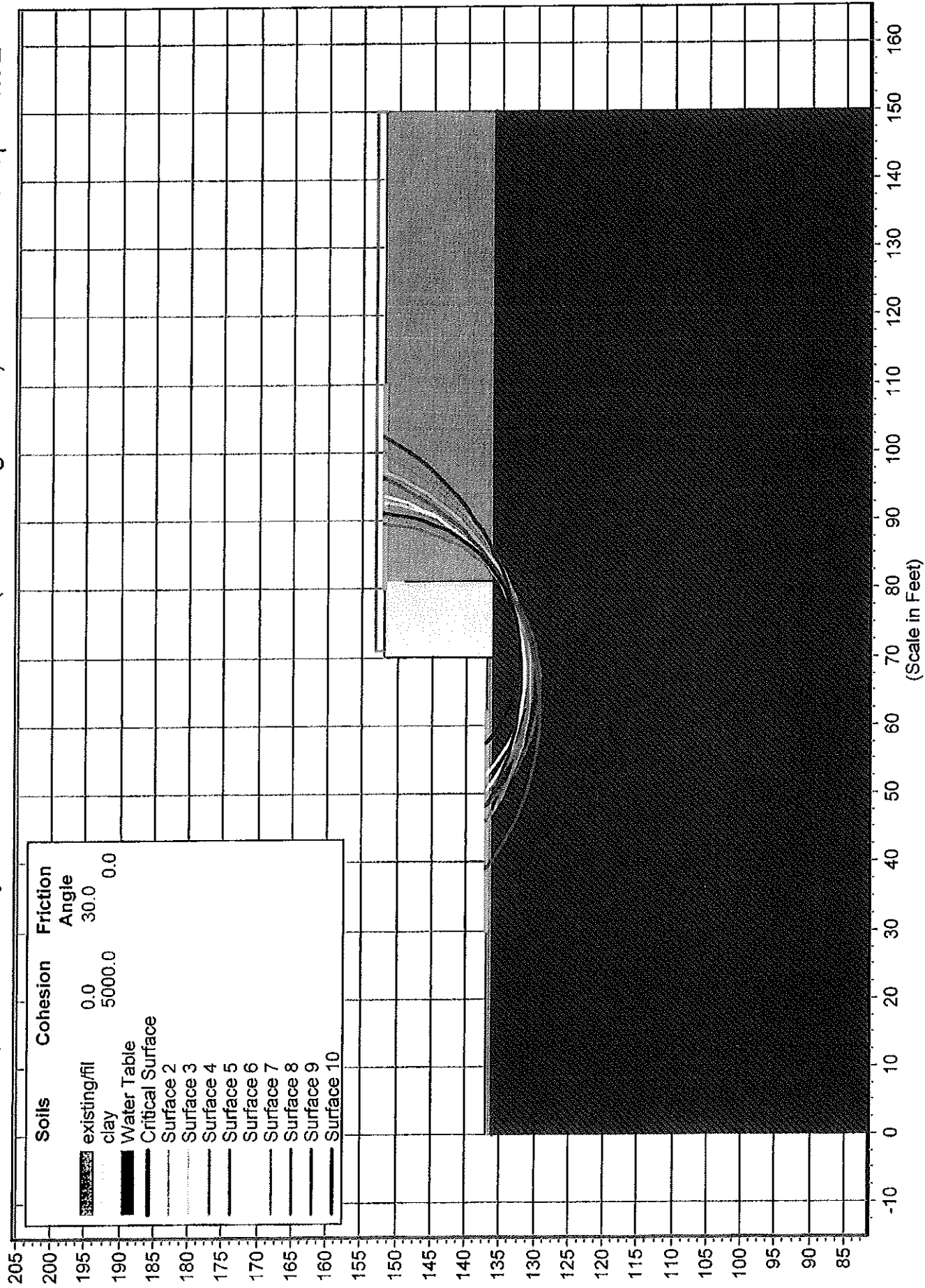
DATE 8/28/09
 PROJECT No. 04-06-0014
 BY ENM/SCK
 PAGE 1 of 1

SUBJECT MSE Wall 113
Thompson Nursery Rd/over CSX RR



Rev
 9/2/09

Problem: Thompson Nursery Road Over CSX RR (15 foot high wall) - FS Min- Bishop = 1.72



Paul
9/27

result
** STABL for WINDOWS **
by
Geotechnical Software Solutions

1

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer's Method of Slices

Run Date:
Time of Run:
Run By:
Input Data Filename: run.in
Output Filename: result.out
Unit: U.S.C.
Plotted Output Filename: result.plt

PROBLEM DESCRIPTION Thompson Nursery Road Over CSX RR (15 foot high wall)

BOUNDARY COORDINATES

4 Top Boundaries
7 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	0.00	137.00	70.00	137.00	1
2	70.00	137.00	70.10	152.00	2
3	70.10	152.00	81.10	152.00	2
4	81.10	152.00	150.00	152.00	1
5	70.00	137.00	70.00	135.00	1
6	70.00	135.00	81.00	135.00	1
7	81.00	135.00	81.10	149.00	1

1

ISOTROPIC SOIL PARAMETERS

2 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	105.0	115.0	0.0	30.0	0.00	0.0	0
2	115.0	125.0	5000.0	0.0	0.00	0.0	0

1

1 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

result

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	0.00	136.00
2	150.00	136.00

1

BOUNDARY LOAD(S)

1 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	71.00	150.00	250.0	0.0

NOTE - Intensity Is Specified As A Uniformly Distributed
Force Acting On A Horizontally Projected Surface.

1

A Critical Failure Surface Searching Method, Using A Random
Technique For Generating Circular Surfaces, Has Been Specified.

300 Trial Surfaces Have Been Generated.

20 Surfaces Initiate From Each Of 15 Points Equally Spaced
Along The Ground Surface Between X = 30.00 ft.
and X = 62.00 ft.

Each Surface Terminates Between X = 80.00 ft.
and X = 110.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation
At Which A Surface Extends Is Y = 2.00 ft.

2.00 ft. Line Segments Define Each Trial Failure Surface.

1

Following Are Displayed The Ten Most Critical Of The Trial
Failure Surfaces Examined. They Are Ordered - Most Critical
First.

result
 * * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 28 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	50.57	137.00
2	52.09	135.70
3	53.71	134.53
4	55.43	133.50
5	57.22	132.61
6	59.08	131.88
7	61.00	131.30
8	62.95	130.89
9	64.94	130.64
10	66.94	130.55
11	68.93	130.63
12	70.92	130.88
13	72.88	131.29
14	74.79	131.86
15	76.66	132.59
16	78.45	133.47
17	80.17	134.50
18	81.79	135.66
19	83.32	136.96
20	84.73	138.38
21	86.01	139.91
22	87.17	141.54
23	88.18	143.26
24	89.05	145.06
25	89.77	146.93
26	90.33	148.85
27	90.73	150.81
28	90.87	152.00

Circle Center At X = 67.0 ; Y = 154.6 and Radius, 24.0

*** 1.720 ***

Individual data on the 36 slices

Slice No.	Width (ft)	Weight (lbs)	Water	Water	Force Norm (lbs)	Force Tan (lbs)	Earthquake		Surcharge Load (lbs)
			Force Top (lbs)	Force Bot (lbs)			Force Hor (lbs)	Force Ver (lbs)	
1	1.2	61.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.4	42.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	1.6	321.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	1.7	537.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	1.8	742.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	1.9	928.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	1.9	1087.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	2.0	1212.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	2.0	1299.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

					result					
10	2.0	1343.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	2.0	1344.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	1.1	705.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.1	153.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.8	1959.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.1	194.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	1.9	4437.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	469.0
17	1.9	4436.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	479.2
18	1.9	4184.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	465.6
19	1.8	3882.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	448.9
20	1.7	3538.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	429.1
21	0.7	1391.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	175.5
22	0.1	255.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.8
23	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
24	0.1	173.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2
25	0.7	1206.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	173.1
26	0.4	673.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.2
27	1.1	1834.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	281.5
28	1.4	2121.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	352.4
29	1.3	1737.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	321.8
30	1.2	1368.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	288.9
31	1.0	1024.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	254.0
32	0.9	715.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	217.4
33	0.7	451.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	179.2
34	0.6	241.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	139.8
35	0.4	90.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.5
36	0.1	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0

Failure surface Specified By 32 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	46.00	137.00
2	47.68	135.91
3	49.41	134.92
4	51.20	134.03
5	53.04	133.24
6	54.93	132.57
7	56.85	132.00
8	58.79	131.55
9	60.77	131.22
10	62.75	131.00
11	64.75	130.89
12	66.75	130.90
13	68.75	131.03
14	70.73	131.28
15	72.70	131.64
16	74.64	132.11
17	76.55	132.70
18	78.43	133.40
19	80.26	134.20
20	82.04	135.11
21	83.76	136.12
22	85.43	137.24
23	87.02	138.44
24	88.54	139.74
25	89.99	141.13
26	91.35	142.59
27	92.62	144.14
28	93.80	145.75
29	94.88	147.43

		result
30	95.87	149.17
31	96.75	150.97
32	97.18	152.00

Circle Center At X = 65.5 ; Y = 165.1 and Radius, 34.3

*** 1.741 ***

1

Failure Surface Specified By 28 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	52.86	137.00
2	54.40	135.73
3	56.04	134.59
4	57.78	133.59
5	59.59	132.74
6	61.46	132.04
7	63.39	131.51
8	65.35	131.13
9	67.34	130.92
10	69.34	130.88
11	71.34	131.01
12	73.32	131.30
13	75.26	131.75
14	77.17	132.37
15	79.01	133.14
16	80.78	134.07
17	82.48	135.14
18	84.07	136.34
19	85.56	137.68
20	86.93	139.13
21	88.18	140.70
22	89.29	142.36
23	90.25	144.11
24	91.07	145.94
25	91.74	147.82
26	92.24	149.76
27	92.58	151.73
28	92.60	152.00

Circle Center At X = 68.8 ; Y = 154.8 and Radius, 23.9

*** 1.747 ***

Failure Surface Specified By 28 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	50.57	137.00

		result
2	52.22	135.86
3	53.94	134.84
4	55.73	133.95
5	57.58	133.19
6	59.48	132.57
7	61.42	132.08
8	63.39	131.74
9	65.38	131.54
10	67.38	131.48
11	69.38	131.57
12	71.36	131.81
13	73.33	132.18
14	75.26	132.70
15	77.15	133.36
16	78.98	134.15
17	80.76	135.07
18	82.46	136.11
19	84.09	137.28
20	85.62	138.56
21	87.06	139.95
22	88.39	141.44
23	89.62	143.03
24	90.72	144.69
25	91.71	146.44
26	92.56	148.24
27	93.28	150.11
28	93.86	152.00

Circle Center At X = 67.1 ; Y = 159.1 and Radius, 27.6

*** 1.749 ***

1

Failure surface specified By 29 coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	48.29	137.00
2	49.71	135.59
3	51.25	134.31
4	52.88	133.17
5	54.61	132.16
6	56.42	131.30
7	58.29	130.60
8	60.22	130.06
9	62.18	129.68
10	64.17	129.46
11	66.17	129.42
12	68.16	129.54
13	70.14	129.83
14	72.09	130.28
15	73.99	130.90
16	75.84	131.67
17	77.61	132.59
18	79.30	133.66
19	80.89	134.87
20	82.38	136.21

		result
21	83.75	137.67
22	84.99	139.24
23	86.10	140.90
24	87.06	142.66
25	87.87	144.48
26	88.53	146.37
27	89.02	148.31
28	89.35	150.28
29	89.49	152.00

Circle Center At X = 65.7 ; Y = 153.2 and Radius, 23.8

*** 1.755 ***

Failure Surface Specified By 28 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	50.57	137.00
2	52.22	135.87
3	53.94	134.85
4	55.74	133.97
5	57.59	133.21
6	59.49	132.60
7	61.43	132.12
8	63.41	131.78
9	65.40	131.59
10	67.40	131.54
11	69.39	131.64
12	71.38	131.88
13	73.34	132.26
14	75.27	132.79
15	77.16	133.45
16	78.99	134.25
17	80.76	135.18
18	82.46	136.23
19	84.08	137.41
20	85.61	138.70
21	87.04	140.09
22	88.37	141.59
23	89.59	143.18
24	90.68	144.85
25	91.66	146.60
26	92.50	148.41
27	93.21	150.28
28	93.73	152.00

Circle Center At X = 67.1 ; Y = 159.2 and Radius, 27.6

*** 1.796 ***

result

Point No.	X-Surf (ft)	Y-Surf (ft)
1	46.00	137.00
2	47.71	135.97
3	49.48	135.02
4	51.29	134.18
5	53.14	133.43
6	55.03	132.78
7	56.96	132.23
8	58.91	131.79
9	60.88	131.45
10	62.87	131.22
11	64.86	131.09
12	66.86	131.07
13	68.86	131.16
14	70.85	131.35
15	72.83	131.65
16	74.79	132.05
17	76.72	132.56
18	78.63	133.17
19	80.50	133.88
20	82.33	134.69
21	84.11	135.59
22	85.84	136.59
23	87.52	137.68
24	89.13	138.86
25	90.68	140.13
26	92.17	141.47
27	93.57	142.89
28	94.90	144.38
29	96.15	145.95
30	97.31	147.57
31	98.39	149.26
32	99.37	151.00
33	99.87	152.00

Circle Center At X = 66.2 ; Y = 168.6 and Radius, 37.5

*** 1.807 ***

Failure Surface Specified By 35 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	39.14	137.00
2	40.77	135.83
3	42.45	134.76
4	44.20	133.77
5	45.99	132.88
6	47.82	132.09
7	49.70	131.40
8	51.61	130.80
9	53.55	130.31
10	55.51	129.93

		result
11	57.49	129.65
12	59.48	129.48
13	61.48	129.41
14	63.48	129.45
15	65.48	129.60
16	67.46	129.85
17	69.43	130.21
18	71.37	130.68
19	73.29	131.24
20	75.17	131.91
21	77.02	132.68
22	78.82	133.55
23	80.58	134.51
24	82.27	135.57
25	83.92	136.71
26	85.49	137.94
27	87.00	139.26
28	88.44	140.65
29	89.80	142.11
30	91.08	143.65
31	92.27	145.25
32	93.38	146.92
33	94.40	148.64
34	95.32	150.42
35	96.04	152.00

Circle Center At X = 61.7 ; Y = 166.8 and Radius, 37.4

*** 1.830 ***

1

Failure Surface Specified By 32 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	48.29	137.00
2	50.07	136.09
3	51.89	135.27
4	53.75	134.54
5	55.65	133.90
6	57.57	133.36
7	59.52	132.91
8	61.49	132.56
9	63.48	132.31
10	65.47	132.16
11	67.47	132.11
12	69.47	132.15
13	71.46	132.30
14	73.45	132.54
15	75.42	132.88
16	77.37	133.32
17	79.30	133.86
18	81.20	134.49
19	83.06	135.21
20	84.89	136.03
21	86.67	136.93
22	88.41	137.92

		result
23	90.09	139.00
24	91.72	140.16
25	93.30	141.40
26	94.80	142.71
27	96.24	144.10
28	97.61	145.55
29	98.91	147.08
30	100.13	148.66
31	101.27	150.31
32	102.32	152.00

Circle Center At X = 67.5 ; Y = 172.5 and Radius, 40.3

*** 1.832 ***

Failure Surface Specified By 24 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	57.43	137.00
2	59.03	135.81
3	60.75	134.77
4	62.55	133.91
5	64.43	133.23
6	66.37	132.73
7	68.35	132.43
8	70.34	132.32
9	72.34	132.40
10	74.32	132.68
11	76.27	133.14
12	78.16	133.80
13	79.97	134.63
14	81.70	135.64
15	83.32	136.81
16	84.82	138.13
17	86.19	139.60
18	87.40	141.18
19	88.46	142.88
20	89.34	144.68
21	90.05	146.55
22	90.57	148.48
23	90.91	150.45
24	91.01	152.00

Circle Center At X = 70.5 ; Y = 152.9 and Radius, 20.5

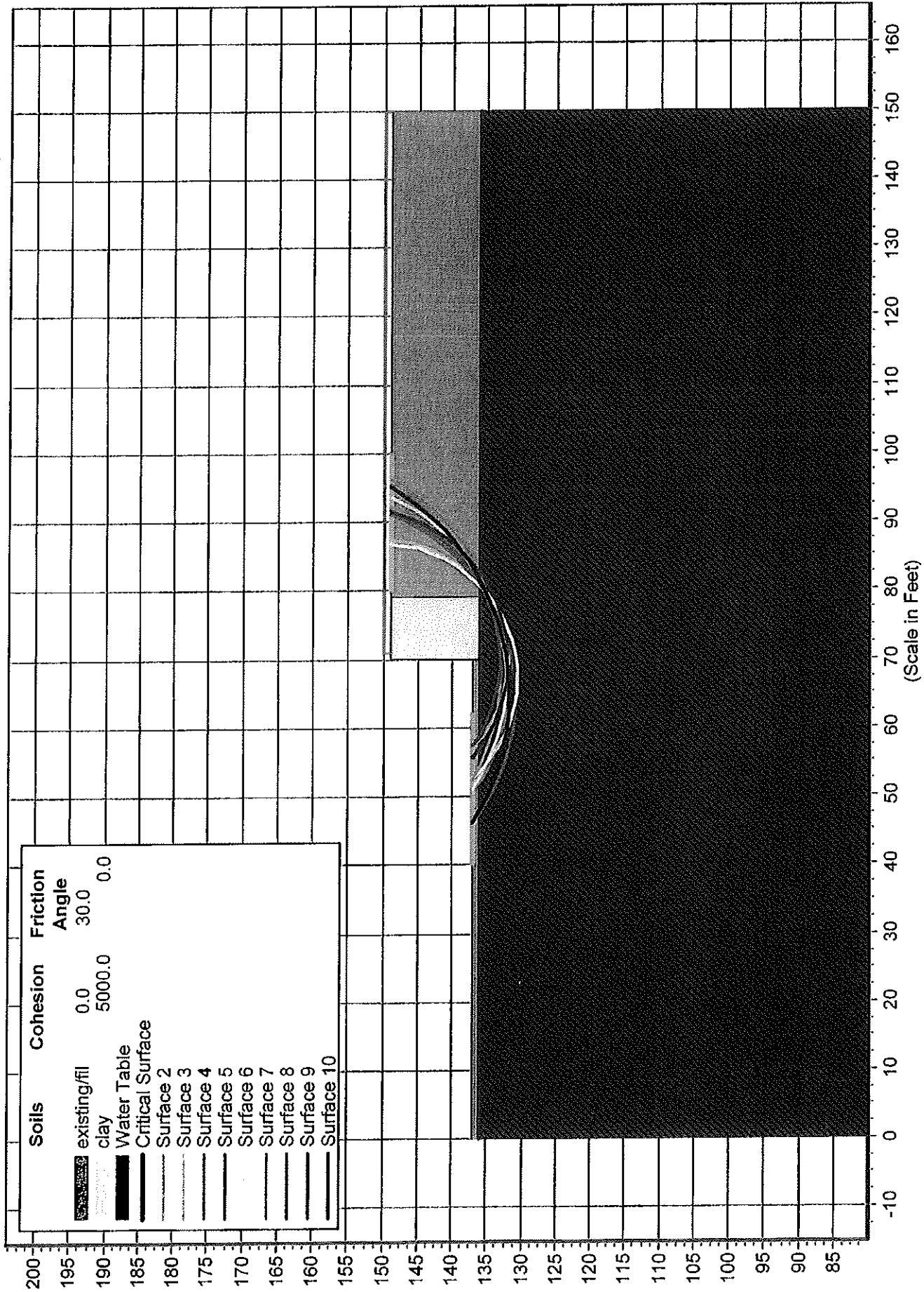
*** 1.832 ***

1

Y	A	X	I	S	F	T.
0.00	35.58	71.15	106.72	142.30	177.87	

X	0.00	+-----+-----+-----+-----+-----W*+-----+
		-
		-
		-
		-
	35.58	+ ..
		... .88
		..822
		..211
		.5130
		.510
A	71.15	+ .51** */1
		..11...
		...*1...*
		..911111
		...7222
		....977
X	106.72	+
		-
		-
		-
I	142.30	+ w *1/
		-
		-
		-
S	177.87	+ ..
		-
		-
		-
	213.45	+ ..
		-
		-
F	249.02	+ ..
		-
		-
T	284.60	+ ..

Problem: Thompson Nursery Road Over CSX RR (12 foot high wall) - FS Min- Bishop = 1.728



result
 ** STABL for WINDOWS **
 by
 Geotechnical Software Solutions

SM
 9/27

1

--Slope Stability Analysis--
 Simplified Janbu, Simplified Bishop
 or Spencer's Method of Slices

Run Date:
 Time of Run:
 Run By:
 Input Data Filename: run.in
 Output Filename: result.out
 Unit: U.S.C.
 Plotted Output Filename: result.plt

PROBLEM DESCRIPTION Thompson Nursery Road Over CSX RR (12 foot high wall)

BOUNDARY COORDINATES

4 Top Boundaries
 7 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	0.00	137.00	70.00	137.00	1
2	70.00	137.00	70.10	149.00	2
3	70.10	149.00	79.10	149.00	2
4	79.10	149.00	150.00	149.00	1
5	70.00	137.00	70.00	135.00	1
6	70.00	135.00	79.00	135.00	1
7	79.00	135.00	79.10	149.00	1

1

ISOTROPIC SOIL PARAMETERS

2 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	105.0	115.0	0.0	30.0	0.00	0.0	0
2	115.0	125.0	5000.0	0.0	0.00	0.0	0

1

1 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

result

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	0.00	136.00
2	150.00	136.00

1

BOUNDARY LOAD(S)

1 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	71.00	150.00	250.0	0.0

NOTE - Intensity Is Specified As A Uniformly Distributed
Force Acting On A Horizontally Projected Surface.

1

A Critical Failure Surface Searching Method, Using A Random
Technique For Generating Circular Surfaces, Has Been Specified.

300 Trial Surfaces Have Been Generated.

20 Surfaces Initiate From Each Of 15 Points Equally Spaced
Along The Ground Surface Between X = 40.00 ft.
and X = 62.00 ft.

Each Surface Terminates Between X = 80.00 ft.
and X = 100.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation
At Which A Surface Extends Is Y = 2.00 ft.

2.00 ft. Line Segments Define Each Trial Failure Surface.

1

Following Are Displayed The Ten Most Critical Of The Trial
Failure Surfaces Examined. They Are Ordered - Most Critical
First.

result
 * * Safety Factors Are Calculated By The Modified Bishop Method * *

Failure Surface Specified By 26 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	51.00	137.00
2	52.68	135.91
3	54.43	134.94
4	56.24	134.11
5	58.12	133.41
6	60.04	132.85
7	61.99	132.43
8	63.97	132.15
9	65.97	132.02
10	67.97	132.04
11	69.96	132.21
12	71.94	132.52
13	73.89	132.97
14	75.80	133.57
15	77.66	134.30
16	79.46	135.17
17	81.19	136.17
18	82.85	137.29
19	84.42	138.53
20	85.89	139.88
21	87.26	141.34
22	88.52	142.89
23	89.66	144.53
24	90.68	146.25
25	91.57	148.04
26	91.97	149.00

Circle Center At X = 66.7 ; Y = 159.3 and Radius, 27.3

*** 1.728 ***

Individual data on the 33 slices

Slice No.	Width (ft)	Weight (lbs)	Water	Water	Force Norm (lbs)	Force Tan (lbs)	Earthquake		
			Force Top (lbs)	Force Bot (lbs)			Force Hor (lbs)	Force Ver (lbs)	Surcharge Load (lbs)
1	1.5	80.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.1	15.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	1.8	289.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	1.8	472.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	1.9	638.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	1.9	780.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	2.0	896.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	2.0	979.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	2.0	1029.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	2.0	1043.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	2.0	1020.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

					result					
12	0.0	18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.1	121.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.9	1704.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.9	1764.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	234.8
16	1.9	3597.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	486.9
17	1.9	3420.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	477.3
18	1.9	3203.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	465.1
19	1.3	2215.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	335.8
20	0.0	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
21	0.1	142.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2
22	0.4	523.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	89.6
23	1.4	2033.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	360.9
24	0.3	392.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.4
25	1.7	2133.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	413.9
26	1.6	1827.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	392.2
27	1.5	1515.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	368.4
28	1.4	1207.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	342.7
29	1.3	911.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	315.1
30	1.1	634.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	285.8
31	1.0	386.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	255.0
32	0.9	173.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	222.8
33	0.4	19.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.9

Failure surface Specified By 22 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	57.29	137.00
2	58.79	135.68
3	60.43	134.54
4	62.19	133.59
5	64.05	132.85
6	65.98	132.32
7	67.96	132.02
8	69.95	131.95
9	71.95	132.10
10	73.91	132.48
11	75.82	133.08
12	77.65	133.89
13	79.37	134.91
14	80.97	136.12
15	82.41	137.50
16	83.70	139.03
17	84.79	140.70
18	85.70	142.49
19	86.39	144.36
20	86.86	146.31
21	87.11	148.29
22	87.12	149.00

Circle Center At X = 69.6 ; Y = 149.5 and Radius, 17.5

*** 1.760 ***

1

Failure surface Specified By 27 Coordinate Points

result

Point No.	X-Surf (ft)	Y-Surf (ft)
1	51.00	137.00
2	52.71	135.97
3	54.49	135.05
4	56.33	134.26
5	58.21	133.59
6	60.14	133.05
7	62.10	132.64
8	64.08	132.37
9	66.07	132.23
10	68.07	132.23
11	70.07	132.36
12	72.05	132.63
13	74.01	133.03
14	75.94	133.56
15	77.82	134.23
16	79.66	135.01
17	81.44	135.93
18	83.16	136.96
19	84.80	138.10
20	86.36	139.35
21	87.83	140.71
22	89.20	142.16
23	90.48	143.70
24	91.65	145.32
25	92.70	147.02
26	93.64	148.79
27	93.73	149.00

Circle Center At X = 67.1 ; Y = 161.7 and Radius, 29.5

*** 1.772 ***

Failure surface Specified By 26 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	52.57	137.00
2	54.34	136.07
3	56.17	135.26
4	58.05	134.57
5	59.97	134.00
6	61.91	133.55
7	63.89	133.23
8	65.88	133.03
9	67.88	132.96
10	69.88	133.02
11	71.87	133.20
12	73.84	133.51
13	75.79	133.95
14	77.71	134.51
15	79.59	135.19
16	81.43	135.99
17	83.21	136.91

		result
18	84.92	137.93
19	86.57	139.07
20	88.14	140.30
21	89.63	141.64
22	91.03	143.07
23	92.34	144.58
24	93.55	146.17
25	94.65	147.84
26	95.32	149.00

Circle Center At X = 68.0 ; Y = 164.3 and Radius, 31.3

*** 1.788 ***

1

Failure Surface Specified By 28 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	46.29	137.00
2	47.91	135.83
3	49.60	134.77
4	51.37	133.83
5	53.20	133.02
6	55.07	132.33
7	57.00	131.77
8	58.95	131.35
9	60.93	131.06
10	62.92	130.90
11	64.92	130.89
12	66.92	131.01
13	68.90	131.27
14	70.86	131.66
15	72.79	132.18
16	74.68	132.84
17	76.52	133.63
18	78.30	134.54
19	80.02	135.57
20	81.66	136.71
21	83.21	137.97
22	84.68	139.33
23	86.05	140.78
24	87.32	142.33
25	88.48	143.96
26	89.52	145.66
27	90.45	147.44
28	91.13	149.00

Circle Center At X = 64.2 ; Y = 160.0 and Radius, 29.1

*** 1.805 ***

Failure Surface Specified By 24 Coordinate Points

result

Point No.	X-Surf (ft)	Y-Surf (ft)
1	52.57	137.00
2	53.99	135.59
3	55.55	134.34
4	57.23	133.25
5	59.01	132.34
6	60.87	131.61
7	62.80	131.07
8	64.77	130.73
9	66.76	130.59
10	68.76	130.66
11	70.74	130.93
12	72.69	131.39
13	74.58	132.06
14	76.39	132.91
15	78.10	133.94
16	79.70	135.13
17	81.18	136.49
18	82.50	137.98
19	83.67	139.60
20	84.67	141.34
21	85.49	143.16
22	86.12	145.06
23	86.55	147.01
24	86.79	149.00

Circle Center At X = 67.1 ; Y = 150.3 and Radius, 19.7

*** 1.805 ***

1

Failure Surface Specified By 27 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	52.57	137.00
2	54.35	136.09
3	56.19	135.30
4	58.07	134.61
5	59.99	134.05
6	61.94	133.60
7	63.91	133.28
8	65.90	133.07
9	67.90	132.99
10	69.90	133.03
11	71.89	133.20
12	73.87	133.48
13	75.83	133.89
14	77.76	134.42
15	79.65	135.06
16	81.50	135.82
17	83.30	136.70
18	85.04	137.68

		result
19	86.72	138.76
20	88.33	139.95
21	89.86	141.24
22	91.32	142.61
23	92.68	144.07
24	93.95	145.62
25	95.13	147.24
26	96.20	148.93
27	96.24	149.00

Circle Center At X = 68.2 ; Y = 165.5 and Radius, 32.5

*** 1.825 ***

Failure surface specified By 22 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	57.29	137.00
2	58.99	135.95
3	60.78	135.06
4	62.64	134.33
5	64.56	133.77
6	66.53	133.39
7	68.51	133.18
8	70.51	133.15
9	72.51	133.30
10	74.48	133.62
11	76.42	134.12
12	78.30	134.79
13	80.12	135.63
14	81.85	136.62
15	83.49	137.77
16	85.02	139.06
17	86.43	140.48
18	87.71	142.02
19	88.84	143.66
20	89.83	145.40
21	90.65	147.23
22	91.27	149.00

Circle Center At X = 69.9 ; Y = 155.5 and Radius, 22.4

*** 1.825 ***

1

Failure surface Specified By 24 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	55.71	137.00

		result
2	57.32	135.81
3	59.03	134.77
4	60.83	133.89
5	62.69	133.17
6	64.62	132.62
7	66.58	132.25
8	68.57	132.05
9	70.57	132.02
10	72.56	132.18
11	74.54	132.52
12	76.47	133.02
13	78.35	133.70
14	80.16	134.55
15	81.90	135.55
16	83.53	136.70
17	85.05	138.00
18	86.46	139.42
19	87.73	140.97
20	88.86	142.62
21	89.83	144.36
22	90.65	146.19
23	91.30	148.08
24	91.53	149.00

Circle Center At X = 69.8 ; Y = 154.4 and Radius, 22.4

*** 1.832 ***

Failure Surface Specified By 29 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	46.29	137.00
2	48.02	136.01
3	49.81	135.12
4	51.65	134.32
5	53.53	133.64
6	55.44	133.06
7	57.39	132.59
8	59.36	132.23
9	61.34	131.99
10	63.34	131.85
11	65.34	131.83
12	67.33	131.92
13	69.32	132.13
14	71.30	132.44
15	73.25	132.87
16	75.18	133.41
17	77.07	134.05
18	78.93	134.80
19	80.73	135.66
20	82.49	136.61
21	84.19	137.67
22	85.83	138.81
23	87.40	140.05
24	88.90	141.37
25	90.32	142.78

Circle Center At X = 64.7 ; Y = 167.2 and Radius, 35.4

1

Page 10

result

T 278.98 +

7.01A. A. 9.C. - BID ADDENDUM #1

SECTION IX

**DEVELOPER'S AFFIDAVIT AND AGREEMENT
REGARDING PROCUREMENT OF CONSTRUCTION CONTRACT
(THOMPSON NURSERY ROAD EXTENSION PHASES 1 & 2)**

STATE OF FLORIDA
COUNTY OF POIK

BEFORE ME, the undersigned, personally appeared Adam Rhinehart of VMar Dev, LLC (“**Developer**”), who, after being first duly sworn, deposes and says:

- (i) VMar Dev, LLC, is the primary landowner and/or developer within the VillaMar Community Development District (“**District**”) and I, Adam Rhinehart, am authorized to make this affidavit on its behalf and have personal knowledge of the matters stated herein.
- (ii) The agreement (“**Improvement Agreement**”) between the District and Tucker Paving, Inc. (“**Contractor**”), dated October 18, 2022, and attached hereto as **Exhibit A**, X was competitively bid by my office in accordance with the requirements of Section 255.20, *Florida Statutes*, and other applicable laws, rules, and regulations, or is below the applicable bid thresholds and was not required to be competitively bid.
- (iii) Developer agrees to indemnify, hold harmless and defend the District and its successors, assigns, agents, employees, staff, contractors, officers, supervisors, and representatives (together, “**Indemnitees**”), from any and all liability, loss or damage, whether monetary or otherwise, including reasonable attorneys’ fees and costs and all fees and costs of mediation or alternative dispute resolution, as a result of any claims, liabilities, suits, liens, demands, costs, interest, expenses, damages, penalties, fines, or judgments, against Indemnitees and which relate in any way to the assignment of, or bid process for, the Improvement Agreement.

[signature on following page]

Under penalties of perjury, I declare that I have read the foregoing and the facts alleged are true and correct to the best of my knowledge and belief.

Executed this 19 day of October, 2022.

VMAR DEV, LLC

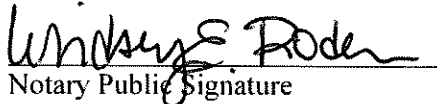
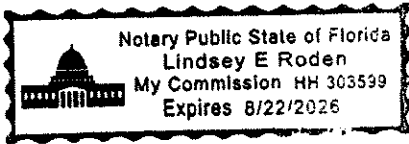


By: Adam Rhinehart

Its: Manager

The foregoing instrument was acknowledged before me by means of ☒ personal appearance or ☐ electronic notarization this 19 day of October, 2022, by Adam Rhinehart, who ☒ is personally known to me or ☐ produced _____ as identification.

(NOTARY SEAL)


Notary Public Signature

Lindsey E. Roden
(Name typed, printed or stamped)
Notary Public, State of Florida
Commission No. HH 303599
My Commission Expires: 8/22/2026

SECTION XII

SECTION C

Villa Mar CDD

Field Management Report



November 01st, 2022

Clayton Smith

Field Services Manager

GMS

Complete

Amenity Review

- + Monitoring facility and maintenance contracts.
- + Facility pre and post storm preparations were completed.
- + Broken auto-fill replaced.
- + Installed a UPS for electrical room.
- + Replaced Damaged keypad.



Complete

Landscape Review and General Maint

- + Monitoring site with landscaper.
- + Leaning trees straightened and strapped after storm.
- + Missing truncated dome mats were installed on Cunningham.

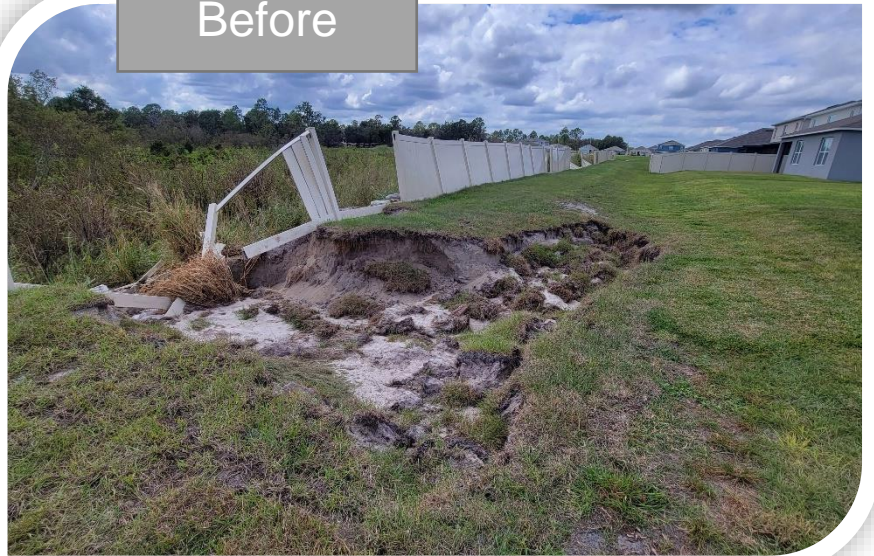


Complete

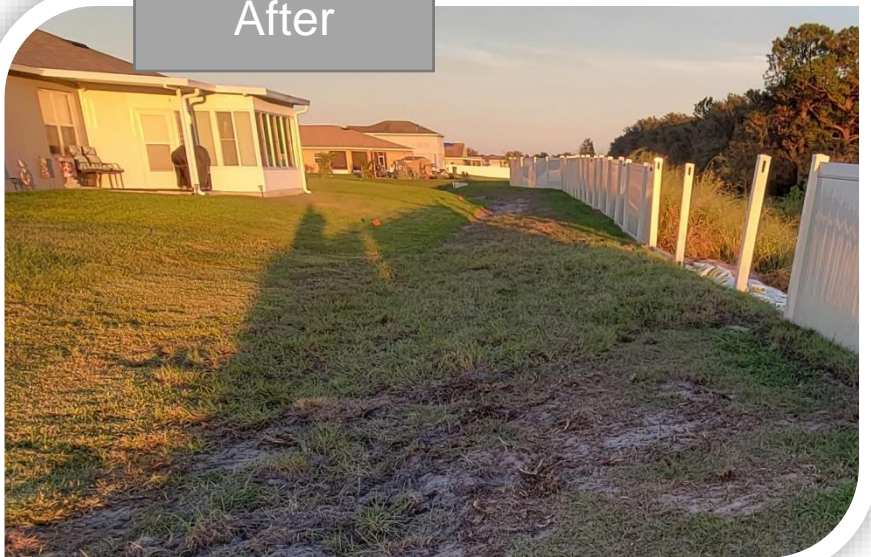
Erosion Repair

- ✚ Massive rains during Hurricane caused a recurrence of the washout behind Emmanuelle drive.
- ✚ Washout was less severe this time.
- ✚ An underdrain was added this time to assist with water shed.

Before



After



In Progress

Hurricane Cleanup and Repairs

- ✚ Fence Repairs are being planned in phases.
- ✚ Street signs that were able to be located were reinstalled. Ordered additional signs to replace those that were lost and/or had damaged mounting brackets



Conclusion

For any questions or comments regarding the above information, please contact me by phone at 407-201-1514, or by email at csmith@gmscfl.com. Thank you.

Respectfully,
Clayton Smith

SECTION D

SECTION 1

VillaMar

Community Development District

Summary of Checks

September 3, 2022 to October 21, 2022

Bank	Date	Check No.'s		Amount
General Fund	9/15/22	375 - 376	\$	4,878.74
	9/21/22	377 - 380	\$	13,256.32
	9/30/22	381 - 385	\$	21,457.00
	10/5/22	386	\$	100.00
	10/14/22	387 - 394	\$	11,820.30
	10/21/22	395 - 403	\$	35,624.28
			\$	87,136.64

CHECK DATE	VEND#	.....INVOICE..... DATE INVOICE	...EXPENSED TO... YRMO DPT ACCT# SUB SUBCLASS	VENDOR NAME	STATUS	AMOUNT	.....CHECK..... AMOUNT #
9/30/22	00047	9/22/22 EL092220	202209 310-51300-11000	SUPERVISOR FEE 09/22/22	*	200.00	
				ERIC LAVOIE			200.00 000381
9/30/22	00011	9/12/22 16858	202209 300-15500-10000	FY23 INSURANCE POLICY	*	15,857.00	
				EGIS INSURANCE			15,857.00 000382
9/30/22	00009	9/15/22 136	202209 300-15500-10000	ASSESSMENT ROLL - FY23	*	5,000.00	
				GOVERNMENTAL MANAGEMENT SERVICES			5,000.00 000383
9/30/22	00008	9/22/22 LS092220	202209 310-51300-11000	SUPERVISOR FEE 09/22/22	*	200.00	
				LAUREN SCHWENK			200.00 000384
9/30/22	00004	9/22/22 RH092220	202209 310-51300-11000	SUPERVISOR FEE 09/22/22	*	200.00	
				RENNIE HEATH			200.00 000385
10/05/22	00018	9/30/22 7	202209 310-51300-31300	AMORTIZATION SCHEDULE S19	*	100.00	
				DISCLOSURE SERVICES LLC			100.00 000386
10/14/22	00034	9/22/22 8206	202209 330-53800-48500	MTHLY CLEANING SVC-SEP 22	*	450.00	
		9/22/22 8206	202209 330-53800-48500	MTHLY TRASH MAIL COLLECT	*	100.00	
				CSS CLEAN STAR SERVICES CENTRAL FL			550.00 000387
10/14/22	00009	9/23/22 140	202207 320-53800-47400	GEN MTHLY MAINT MATERIALS	*	533.77	
				GOVERNMENTAL MANAGEMENT SERVICES			533.77 000388
10/14/22	00039	10/05/22 4312	202209 310-51300-31500	GEN.COUNSEL/MTHLY MEETING	*	4,433.50	
				KE LAW GROUP, PLLC			4,433.50 000389
10/14/22	00043	9/21/22 49941034	202209 330-57200-48100	PEST CONTROL - SEPT 22	*	40.00	
				MASSEY SERVICES INC.			40.00 000390
10/14/22	00015	9/01/22 6918	202209 320-53800-46200	LAWN MAINTENANCE -SEPT 22	*	2,862.92	
				PRINCE & SONS INC.			2,862.92 000391

AP300R	YEAR-TO-DATE ACCOUNTS PAYABLE PREPAID/COMPUTER CHECK REGISTER										RUN 10/25/22	PAGE 3	
*** CHECK DATES 09/03/2022 - 10/21/2022 ***												VILLAMAR CDD - GENERAL FUND	
												BANK A VILLAMAR CDD	
CHECK DATE	VEND#	.....INVOICE.....		...EXPENSED TO...			VENDOR NAME		STATUS	AMOUNT	....CHECK.....	
		DATE	INVOICE	YRMO	DPT	ACCT#	SUB	SUBCLASS			AMOUNT	#	
10/14/22	00045	10/01/22	17312	2022	10	330-53800-48100			*	1,500.00			
POOL MAINTENANCE - OCT 22													
RESORT POOL SERVICES DBA												1,500.00 000392	
10/14/22	00041	9/26/22	PSI-0906	2022	09	320-53800-47000			*	821.25			
POND MAINTENANCE - SEP 22													
SOLITUDE LAKE MANAGEMENT SERVICES												821.25 000393	
10/14/22	00027	10/12/22	10122022	2022	10	300-15500-10000			*	1,078.86			
PLAYGRND/FUR LEASE-NOV 22													
WHFS, LLC												1,078.86 000394	
10/21/22	00034	10/14/22	8412	2022	10	330-53800-48500			*	450.00			
MTHLY CLEANING SVC-OCT 22													
		10/14/22	8412	2022	10	330-53800-48500			*	100.00			
MTHLY TRASH MAIL COLLECT													
CSS CLEAN STAR SERVICES CENTRAL FL												550.00 000395	
10/21/22	00002	10/03/22	87342	2022	10	310-51300-54000			*	175.00			
SPECIAL DISTRICT FEE FY23													
DEPARTMENT OF ECONOMIC OPPORTUNITY												175.00 000396	
10/21/22	00009	10/01/22	142	2022	10	310-51300-34000			*	3,154.42			
MANAGEMENT FEES - OCT 22													
		10/01/22	142	2022	10	310-51300-35200			*	100.00			
WEBSITE MANAGEMENT-OCT 22													
		10/01/22	142	2022	10	310-51300-35100			*	150.00			
INFORMATION TECH - OCT 22													
		10/01/22	142	2022	10	310-51300-31300			*	666.67			
DISSEMINATION SVCS-OCT 22													
		10/01/22	142	2022	10	330-57200-12000			*	416.67			
AMENITY ACCESS - OCT 22													
		10/01/22	142	2022	10	310-51300-51000			*	3.28			
OFFICE SUPPLIES													
		10/01/22	142	2022	10	310-51300-42000			*	61.40			
POSTAGE													
		10/01/22	143	2022	10	320-53800-12000			*	1,312.50			
FIELD MANAGEMENT - OCT 22													
GOVERNMENTAL MANAGEMENT SERVICES												5,864.94 000397	
10/21/22	00038	9/30/22	00049241	2022	09	310-51300-48000			*	435.89			
9/22 MEETING													
		9/30/22	00049241	2022	09	310-51300-48000			*	335.30			
BUDGET MEETING 7/21													
		9/30/22	00049241	2022	09	310-51300-48000			*	814.30			
REQUEST FOR PROPOSALS													
CA FLORIDA HOLDINGS, LLC												1,585.49 000398	
VMCD VILLAMAR CDD												MBYINGTON	

CHECK DATE	VEND#	.....INVOICE..... DATE INVOICE	...EXPENSED TO... YRMO DPT ACCT# SUB SUBCLASS	VENDOR NAME	STATUS	AMOUNT	....CHECK..... AMOUNT #
10/21/22	00043	10/17/22 51831811	202210 330-57200-48100	PEST CONTROL - OCT 22	*	50.00	
				MASSEY SERVICES INC.			50.00 000399
10/21/22	00024	10/01/22 4651957	202210 300-15500-10000	VILLAMAR DEBT 1% ADMN FEE	*	10,185.07	
		10/11/22 4651958	202210 300-15500-10000	VILLAMAR MNT 1% ADMN FEE	*	5,708.60	
				POLK COUNTY PROPERTY APPRAISER			15,893.67 000400
10/21/22	00015	10/01/22 7022	202210 320-53800-46200	LAWN MAINTENANCE - OCT 22	*	7,075.00	
		10/12/22 7062	202210 320-53800-49000	STAND UP & STAKE TREES	*	3,220.00	
		10/14/22 7079	202210 320-53800-47300	RPLC SPRAY/ROTORS/NOZZLES	*	138.93	
				PRINCE & SONS INC.			10,433.93 000401
10/21/22	00045	10/05/22 17584	202210 330-53800-48100	HURRICANE POOL CLEAN UP	*	250.00	
				RESORT POOL SERVICES DBA			250.00 000402
10/21/22	00041	10/06/22 PSI-2055	202210 320-53800-47000	POND MAINTENANCE - OCT 22	*	821.25	
				SOLITUDE LAKE MANAGEMENT SERVICES			821.25 000403
TOTAL FOR BANK A						87,136.64	
TOTAL FOR REGISTER						87,136.64	

SECTION 2

VillaMar
Community Development District

Unaudited Financial Reporting
September 30, 2022



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6	<u>Debt Service Fund Series 2022A3</u>
7	<u>Debt Service Fund Series 2022A4</u>
8	<u>Combined Capital Project Funds</u>
9-10	<u>Month to Month</u>
11	<u>Long Term Debt Report</u>
12	<u>Assessment Receipt Schedule</u>

VillaMar
Community Development District
Combined Balance Sheet
September 30, 2022

	General Fund	Debt Service Fund	Capital Projects Fund	Totals Governmental Funds
Assets:				
<u>Cash:</u>				
Operating Account	\$ 53,909	\$ -	\$ -	\$ 53,909
Capital Projects Account	\$ -	\$ -	\$ 965	\$ 965
<u>Investments:</u>				
<u>Series 2019</u>				
Reserve	\$ -	\$ 203,276	\$ -	\$ 203,276
Revenue	\$ -	\$ 149,721	\$ -	\$ 149,721
Prepayment	\$ -	\$ 19,998	\$ -	\$ 19,998
Construction	\$ -	\$ -	\$ 1	\$ 1
<u>Series 2020</u>				
Reserve	\$ -	\$ 184,450	\$ -	\$ 184,450
Revenue	\$ -	\$ 124,165	\$ -	\$ 124,165
Construction	\$ -	\$ -	\$ 285,392	\$ 285,392
<u>Series 2022 A3</u>				
Reserve	\$ -	\$ 87,200	\$ -	\$ 87,200
Revenue	\$ -	\$ 293	\$ -	\$ 293
Interest	\$ -	\$ 0	\$ -	\$ 0
Construction	\$ -	\$ -	\$ 8	\$ 8
<u>Series 2022 A4</u>				
Reserve	\$ -	\$ 249,825	\$ -	\$ 249,825
Revenue	\$ -	\$ 1,191	\$ -	\$ 1,191
Interest	\$ -	\$ 104,841	\$ -	\$ 104,841
Construction	\$ -	\$ -	\$ 130	\$ 130
Due from Developer	\$ 3,553	\$ -	\$ -	\$ 3,553
Prepaid Expenses	\$ 24,724	\$ -	\$ -	\$ 24,724
Total Assets	\$ 82,186	\$ 1,124,959	\$ 286,496	\$ 1,493,640
Liabilities:				
Accounts Payable	\$ 14,480	\$ -	\$ -	\$ 14,480
Retainage Payable	\$ -	\$ -	\$ 197,287	\$ 197,287
Total Liabilities	\$ 14,480	\$ -	\$ 197,287	\$ 211,767
Fund Balance:				
Nonspendable:				
Prepaid Items	\$ 24,724	\$ -	\$ -	\$ 24,724
Restricted for:				
Debt Service - Series 2019	\$ -	\$ 372,994	\$ -	\$ 372,994
Debt Service - Series 2020	\$ -	\$ 308,615	\$ -	\$ 308,615
Debt Service - Series 2022 A3	\$ -	\$ 87,493	\$ -	\$ 87,493
Debt Service - Series 2022 A4	\$ -	\$ 355,857	\$ -	\$ 355,857
Capital Projects - Series 2019	\$ -	\$ -	\$ 966	\$ 966
Capital Projects - Series 2020	\$ -	\$ -	\$ 285,392	\$ 285,392
Capital Projects - Series 2022 A3	\$ -	\$ -	\$ 8	\$ 8
Capital Projects - Series 2022 A4	\$ -	\$ -	\$ (197,157)	\$ (197,157)
Unassigned	\$ 42,982	\$ -	\$ -	\$ 42,982
Total Fund Balances	\$ 67,706	\$ 1,124,959	\$ 89,209	\$ 1,281,874
Total Liabilities & Fund Balance	\$ 82,186	\$ 1,124,959	\$ 286,496	\$ 1,493,640

VillaMar
Community Development District
General Fund
Statement of Revenues, Expenditures, and Changes in Fund Balance
For The Period Ending September 30, 2022

	Adopted	Prorated Budget	Actual	
	Budget	Thru 09/30/22	Thru 09/30/22	Variance
<u>Revenues:</u>				
Assessments - Tax Roll	\$ 182,270	\$ 182,270	\$ 182,566	\$ 296
Assessments - Direct Bill	\$ 266,175	\$ 266,175	\$ 168,491	\$ (97,684)
Assessments - Lot Closings	\$ -	\$ -	\$ 97,684	\$ 97,684
Boundary Amendment Contributions	\$ -	\$ -	\$ 6,988	\$ 6,988
Miscellaneous Income	\$ -	\$ -	\$ 30	\$ 30
Total Revenues	\$ 448,445	\$ 448,445	\$ 455,759	\$ 7,314
<u>Expenditures:</u>				
<u>General & Administrative:</u>				
Supervisor Fees	\$ 12,000	\$ 12,000	\$ 6,800	\$ 5,200
Engineering	\$ 10,000	\$ 10,000	\$ 1,425	\$ 8,575
Attorney	\$ 30,000	\$ 30,000	\$ 29,223	\$ 777
Annual Audit	\$ 5,000	\$ 5,000	\$ 3,580	\$ 1,420
Assessment Administration	\$ 5,000	\$ 5,000	\$ 5,000	\$ -
Arbitrage	\$ 1,350	\$ 1,350	\$ 900	\$ 450
Dissemination	\$ 7,000	\$ 7,000	\$ 6,700	\$ 300
Trustee Fees	\$ 10,500	\$ 10,500	\$ 7,758	\$ 2,742
Management Fees	\$ 36,050	\$ 36,050	\$ 36,050	\$ (0)
Information Technology	\$ 1,800	\$ 1,800	\$ 1,800	\$ -
Website Maintenance	\$ 1,200	\$ 1,200	\$ 1,200	\$ -
Telephone	\$ 250	\$ 250	\$ -	\$ 250
Postage & Delivery	\$ 850	\$ 850	\$ 574	\$ 276
Insurance	\$ 6,000	\$ 6,000	\$ 5,570	\$ 430
Printing & Binding	\$ 1,000	\$ 1,000	\$ 369	\$ 631
Legal Advertising	\$ 10,000	\$ 10,000	\$ 7,874	\$ 2,126
Other Current Charges	\$ 1,500	\$ 1,500	\$ 471	\$ 1,029
Boundary Amendment Expenses	\$ -	\$ -	\$ 6,988	\$ (6,988)
Office Supplies	\$ 500	\$ 500	\$ 61	\$ 439
Travel Per Diem	\$ 550	\$ 550	\$ -	\$ 550
Dues, Licenses & Subscriptions	\$ 175	\$ 175	\$ 175	\$ -
Total General & Administrative	\$ 140,725	\$ 140,725	\$ 122,518	\$ 18,207

VillaMar
Community Development District
General Fund
Statement of Revenues, Expenditures, and Changes in Fund Balance
For The Period Ending September 30, 2022

	Adopted	Prorated Budget	Actual	
	Budget	Thru 09/30/22	Thru 09/30/22	Variance
<u>Operations & Maintenance</u>				
Field Expenditures				
Property Insurance	\$ 7,900	\$ 7,900	\$ 7,981	\$ (81)
Field Management	\$ 15,000	\$ 15,000	\$ 15,000	\$ -
Landscape Maintenance	\$ 60,000	\$ 60,000	\$ 52,825	\$ 7,175
Landscape Replacement	\$ 7,500	\$ 7,500	\$ 2,741	\$ 4,759
Pond Maintenance	\$ 4,000	\$ 4,000	\$ 4,881	\$ (881)
Streetlights	\$ 60,000	\$ 60,000	\$ 74,716	\$ (14,716)
Electric	\$ 2,500	\$ 2,500	\$ 731	\$ 1,769
Water & Sewer	\$ 45,000	\$ 45,000	\$ 13,395	\$ 31,605
Sidewalk & Asphalt Maintenance	\$ 2,500	\$ 2,500	\$ 2,360	\$ 140
Irrigation Repairs	\$ 4,000	\$ 4,000	\$ 1,262	\$ 2,738
General Repairs & Maintenance	\$ 11,000	\$ 11,000	\$ 6,517	\$ 4,483
Contingency	\$ 2,500	\$ 2,500	\$ 3,566	\$ (1,066)
Subtotal Field Expenditures	\$ 221,900	\$ 221,900	\$ 185,976	\$ 35,924
Amenity Expenditures				
Amenity - Electric	\$ 18,000	\$ 18,000	\$ 15,847	\$ 2,153
Amenity - Water	\$ 5,000	\$ 5,000	\$ 16,367	\$ (11,367)
Playground & Furniture Lease	\$ 14,000	\$ 14,000	\$ 12,946	\$ 1,054
Internet	\$ 3,000	\$ 3,000	\$ 1,772	\$ 1,228
Pest Control	\$ 720	\$ 720	\$ 440	\$ 280
Janitorial Services	\$ 5,400	\$ 5,400	\$ 6,156	\$ (756)
Security Services	\$ 10,000	\$ 10,000	\$ 6,880	\$ 3,120
Pool Maintenance	\$ 16,200	\$ 16,200	\$ 17,680	\$ (1,480)
Amenity Access Management	\$ 5,000	\$ 5,000	\$ 5,000	\$ (0)
Amenity Repairs & Maintenance	\$ 5,000	\$ 5,000	\$ 807	\$ 4,193
Contingency	\$ 2,500	\$ 2,500	\$ 400	\$ 2,100
Subtotal Amenity Expenditures	\$ 84,820	\$ 84,820	\$ 84,295	\$ 525
Total Operations & Maintenance	\$ 306,720	\$ 306,720	\$ 270,272	\$ 36,448
Total Expenditures	\$ 447,445	\$ 447,445	\$ 392,790	\$ 54,655
Excess (Deficiency) of Revenues over Expenditures	\$ 1,000		\$ 62,969	
<u>Other Financing Sources/(Uses):</u>				
Transfer In/(Out)	\$ (1,000)	\$ (1,000)	\$ -	\$ 1,000
Total Other Financing Sources/(Uses)	\$ (1,000)	\$ (1,000)	\$ -	\$ 1,000
Net Change in Fund Balance	\$ -		\$ 62,969	
Fund Balance - Beginning	\$ -		\$ 4,737	
Fund Balance - Ending	\$ -		\$ 67,706	

VillaMar
Community Development District
Debt Service Fund Series 2019 A1
Statement of Revenues, Expenditures, and Changes in Fund Balance
For The Period Ending September 30, 2022

	Adopted	Prorated Budget	Actual	
	Budget	Thru 09/30/22	Thru 09/30/22	Variance
Revenues:				
Assessments - Tax Roll	\$ 404,974	\$ 404,974	\$ 405,628	\$ 654
Assessments - Prepayments	\$ -	\$ -	\$ 18,683	\$ 18,683
Interest	\$ -	\$ -	\$ 1,232	\$ 1,232
Total Revenues	\$ 404,974	\$ 404,974	\$ 425,543	\$ 20,569
Expenditures:				
Interest - 11/1	\$ 147,763	\$ 147,763	\$ 147,763	\$ -
Special Call - 11/1	\$ -	\$ -	\$ 20,000	\$ (20,000)
Principal - 5/1	\$ 110,000	\$ 110,000	\$ 110,000	\$ -
Interest - 5/1	\$ 147,763	\$ 147,763	\$ 147,288	\$ 475
Total Expenditures	\$ 405,525	\$ 405,525	\$ 425,050	\$ (19,525)
Excess (Deficiency) of Revenues over Expenditures	\$ (551)		\$ 493	
Fund Balance - Beginning	\$ 187,971		\$ 372,501	
Fund Balance - Ending	\$ 187,420		\$ 372,994	

VillaMar
Community Development District
Debt Service Fund Series 2020 A2
Statement of Revenues, Expenditures, and Changes in Fund Balance
For The Period Ending September 30, 2022

	Adopted	Prorated Budget	Actual	
	Budget	Thru 09/30/22	Thru 09/30/22	Variance
<u>Revenues:</u>				
Assessments - Direct Bill	\$ 368,900	\$ 368,900	\$ 137,700	\$ (231,200)
Assessments - Lot Closings	\$ -	\$ -	\$ 231,350	\$ 231,350
Interest	\$ -	\$ -	\$ 1,052	\$ 1,052
Total Revenues	\$ 368,900	\$ 368,900	\$ 370,102	\$ 1,202
<u>Expenditures:</u>				
Interest - 11/1	\$ 120,934	\$ 120,934	\$ 120,934	\$ -
Principal - 5/1	\$ 125,000	\$ 125,000	\$ 125,000	\$ -
Interest - 5/1	\$ 120,934	\$ 120,934	\$ 120,934	\$ -
Total Expenditures	\$ 366,869	\$ 366,869	\$ 366,869	\$ -
Excess (Deficiency) of Revenues over Expenditures	\$ 2,031		\$ 3,233	
<u>Other Financing Sources/(Uses):</u>				
Transfer In/(Out)	\$ -	\$ -	\$ (184,450)	\$ (184,450)
Total Other Financing Sources (Uses)	\$ -	\$ -	\$ (184,450)	\$ (184,450)
Net Change in Fund Balance	\$ 2,031		\$ (181,217)	
Fund Balance - Beginning	\$ 120,947		\$ 489,833	
Fund Balance - Ending	\$ 122,978		\$ 308,615	

VillaMar
Community Development District
Debt Service Fund Series 2022 A3
Statement of Revenues, Expenditures, and Changes in Fund Balance
For The Period Ending September 30, 2022

	Adopted	Prorated Budget	Actual	
	Budget	Thru 09/30/22	Thru 09/30/22	Variance
Revenues:				
Interest	\$ -	\$ -	\$ 293	\$ 293
Total Revenues	\$ -	\$ -	\$ 293	\$ 293
Expenditures:				
Interest - 11/1	\$ -	\$ -	\$ -	\$ -
Principal - 5/1	\$ -	\$ -	\$ -	\$ -
Interest - 5/1	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ -	\$ -	\$ -	\$ -
Excess (Deficiency) of Revenues over Expenditures	\$ -		\$ 293	
Other Financing Sources/(Uses):				
Bond Proceeds	\$ -	\$ -	\$ 87,200	\$ 87,200
Transfer In/(Out)	\$ -	\$ -	\$ 0	\$ 0
Total Other Financing Sources (Uses)	\$ -	\$ -	\$ 87,200	\$ 87,200
Net Change in Fund Balance	\$ -		\$ 87,493	
Fund Balance - Beginning	\$ -		\$ -	
Fund Balance - Ending	\$ -		\$ 87,493	

VillaMar
Community Development District
Debt Service Fund Series 2022 A4
Statement of Revenues, Expenditures, and Changes in Fund Balance
For The Period Ending September 30, 2022

	Adopted	Prorated Budget	Actual	
	Budget	Thru 09/30/22	Thru 09/30/22	Variance
Revenues:				
Interest	\$ -	\$ -	\$ 1,191	\$ 1,191
Total Revenues	\$ -	\$ -	\$ 1,191	\$ 1,191
Expenditures:				
Interest - 11/1	\$ -	\$ -	\$ -	\$ -
Principal - 5/1	\$ -	\$ -	\$ -	\$ -
Interest - 5/1	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ -	\$ -	\$ -	\$ -
Excess (Deficiency) of Revenues over Expenditures	\$ -		\$ 1,191	
Other Financing Sources/(Uses):				
Bond Proceeds	\$ -	\$ -	\$ 354,666	\$ 354,666
Total Other Financing Sources (Uses)	\$ -	\$ -	\$ 354,666	\$ 354,666
Net Change in Fund Balance	\$ -		\$ 355,857	
Fund Balance - Beginning	\$ -		\$ -	
Fund Balance - Ending	\$ -		\$ 355,857	

VillaMar
Community Development District
Combined Capital Project Funds
Statement of Revenues, Expenditures, and Changes in Fund Balance
For The Period Ending September 30, 2022

	Series	Series	Series	Series	
	2019 A1	2020 A2	2022 A3	2022 A4	Total
Revenues					
Developer Advances	\$ -	\$ -	\$ 1,058,251	\$ -	\$ 1,058,251
Developer Contributions	\$ 2,014	\$ 924,970	\$ 315,066	\$ 1,951,725	\$ 3,193,774
Interest	\$ 2	\$ 1,031	\$ 8	\$ 152	\$ 1,193
Total Revenues	\$ 2,016	\$ 926,001	\$ 1,373,325	\$ 1,951,877	\$ 4,253,219
Expenditures:					
Bank Fees	\$ 35	\$ -	\$ -	\$ -	\$ 35
Developer Advance Repayment	\$ -	\$ -	\$ 2,804,447	\$ -	\$ 2,804,447
Capital Outlay	\$ 2,014	\$ 838,532	\$ 1,275,557	\$ 5,879,771	\$ 7,995,874
Capital Outlay - Cost of Issuance	\$ -	\$ -	\$ 155,642	\$ 203,449	\$ 359,091
Total Expenditures	\$ 2,049	\$ 838,532	\$ 4,235,646	\$ 6,083,220	\$ 11,159,447
Excess (Deficiency) of Revenues over Expenditures	\$ (33)	\$ 87,468	\$ (2,862,320)	\$ (4,131,343)	\$ (6,906,228)
Other Financing Sources/(Uses)					
Bond Proceeds	\$ -	\$ -	\$ 2,952,800	\$ 3,940,334	\$ 6,893,134
Transfer In/(Out)	\$ -	\$ 184,450	\$ 6,148	\$ (6,148)	\$ 184,450
Total Other Financing Sources (Uses)	\$ -	\$ 184,450	\$ 2,958,948	\$ 3,934,186	\$ 7,077,584
Net Change in Fund Balance	\$ (33)	\$ 271,918	\$ 96,628	\$ (197,157)	\$ 171,356
Fund Balance - Beginning	\$ 999	\$ 13,473	\$ (96,620)	\$ -	\$ (82,148)
Fund Balance - Ending	\$ 966	\$ 285,392	\$ 8	\$ (197,157)	\$ 89,209

VillaMar
Community Development District
Month to Month

	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Total
Revenues:													
Assessments - Tax Roll	\$ -	\$ 1,352	\$ 170,598	\$ 1,110	\$ 6,630	\$ 581	\$ 2,295	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 182,566
Assessments - Direct Bill	\$ -	\$ 28,377	\$ -	\$ -	\$ 27,286	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 112,828	\$ -	\$ 168,491
Assessments - Lot Closings	\$ 56,209	\$ -	\$ -	\$ -	\$ -	\$ 25,649	\$ 15,826	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 97,684
Boundary Amendment Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,140	\$ 1,915	\$ 152	\$ 95	\$ 19	\$ 114	\$ 3,553	\$ 6,988
Miscellaneous Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30	\$ -	\$ -	\$ 30
Total Revenues	\$ 56,209	\$ 29,730	\$ 170,598	\$ 1,110	\$ 33,916	\$ 27,370	\$ 20,035	\$ 152	\$ 95	\$ 49	\$ 112,942	\$ 3,553	\$ 455,759
Expenditures:													
General & Administrative:													
Supervisor Fees	\$ 600	\$ 600	\$ 800	\$ 600	\$ 800	\$ 600	\$ 800	\$ -	\$ -	\$ 600	\$ 800	\$ 600	\$ 6,800
Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,425	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,425
Attorney	\$ 1,645	\$ 3,037	\$ 895	\$ 2,069	\$ 3,513	\$ 2,001	\$ 1,829	\$ 1,349	\$ 2,682	\$ 2,086	\$ 3,686	\$ 4,434	\$ 29,223
Annual Audit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,580	\$ -	\$ -	\$ 3,580
Assessment Administration	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000
Arbitrage	\$ -	\$ -	\$ 450	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450	\$ -	\$ -	\$ 900
Dissemination	\$ 600	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 583	\$ 583	\$ 583	\$ 583	\$ 583	\$ 683	\$ 6,700
Trustee Fees	\$ 2,788	\$ -	\$ -	\$ 4,041	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 929	\$ -	\$ -	\$ 7,758
Management Fees	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 3,004	\$ 36,050
Information Technology	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 1,800
Website Maintenance	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Telephone	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Postage & Delivery	\$ 7	\$ 113	\$ 48	\$ 52	\$ 11	\$ 39	\$ 32	\$ 48	\$ 14	\$ 33	\$ 133	\$ 46	\$ 574
Insurance	\$ 5,570	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,570
Printing & Binding	\$ 4	\$ 72	\$ 6	\$ 1	\$ 6	\$ 277	\$ 3	\$ -	\$ -	\$ -	\$ 0	\$ -	\$ 369
Legal Advertising	\$ 2,098	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 872	\$ -	\$ 2,974	\$ 345	\$ -	\$ 1,585	\$ 7,874
Other Current Charges	\$ 46	\$ 31	\$ 38	\$ 39	\$ 44	\$ 31	\$ 39	\$ 39	\$ 47	\$ 39	\$ 39	\$ 40	\$ 471
Boundary Amendment Expenses	\$ -	\$ -	\$ -	\$ 399	\$ 741	\$ 76	\$ 1,991	\$ 95	\$ 19	\$ 114	\$ 1,633	\$ 1,920	\$ 6,988
Office Supplies	\$ 3	\$ 17	\$ 13	\$ 3	\$ 3	\$ 4	\$ 3	\$ 3	\$ 1	\$ 3	\$ 3	\$ 4	\$ 61
Travel Per Diem	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dues, Licenses & Subscriptions	\$ 175	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 175
Total General & Administrative	\$ 21,789	\$ 7,625	\$ 6,004	\$ 10,957	\$ 8,872	\$ 8,207	\$ 9,406	\$ 5,372	\$ 9,574	\$ 12,017	\$ 10,131	\$ 12,565	\$ 122,518

VillaMar
Community Development District
Month to Month

	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Total
<u>Operations & Maintenance</u>													
Field Expenditures													
Property Insurance	\$ 7,981	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	7,981
Field Management	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	15,000
Landscape Maintenance	\$ 3,630	\$ 4,212	\$ 4,212	\$ 4,212	\$ 4,212	\$ 4,212	\$ 4,212	\$ 4,212	\$ 4,212	\$ 4,212	\$ 4,212	\$ 7,075	52,825
Landscape Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,096	\$ -	\$ 645	\$ -	\$ -	2,741
Pond Maintenance	\$ 266	\$ 266	\$ 266	\$ 266	\$ 428	\$ 428	\$ 428	\$ 428	\$ 428	\$ 428	\$ 428	\$ 821	4,881
Streetlights	\$ 3,800	\$ 3,800	\$ 3,800	\$ 4,915	\$ 7,074	\$ 7,057	\$ 7,057	\$ 7,087	\$ 7,087	\$ 7,087	\$ 7,600	\$ 8,351	74,716
Electric	\$ 55	\$ 56	\$ 60	\$ 32	\$ 66	\$ 57	\$ 62	\$ 62	\$ 69	\$ 67	\$ 73	\$ 73	731
Water & Sewer	\$ 504	\$ 360	\$ 680	\$ 1,431	\$ 1,256	\$ (382)	\$ 1,354	\$ 1,471	\$ 1,781	\$ 2,553	\$ 1,133	\$ 1,255	13,395
Sidewalk & Asphalt Maintenance	\$ -	\$ 2,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2,360
Irrigation Repairs	\$ -	\$ -	\$ 540	\$ 388	\$ -	\$ -	\$ -	\$ 71	\$ 58	\$ -	\$ 205	\$ -	1,262
General Repairs & Maintenance	\$ 560	\$ 2,099	\$ -	\$ -	\$ 720	\$ 1,885	\$ 720	\$ -	\$ -	\$ 534	\$ -	\$ -	6,517
Contingency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 333	\$ -	\$ 229	\$ 1,044	\$ 1,958	\$ -	\$ 1	3,566
Subtotal Field Expenditures	\$ 18,046	\$ 14,402	\$ 10,808	\$ 12,494	\$ 15,006	\$ 14,841	\$ 15,083	\$ 16,905	\$ 15,929	\$ 18,734	\$ 14,902	\$ 18,827	\$ 185,976
Amenity Expenditures													
Amenity - Electric	\$ 1,346	\$ 1,292	\$ 1,281	\$ 1,400	\$ 1,028	\$ 1,007	\$ 1,016	\$ 1,198	\$ 3,031	\$ 1,157	\$ 1,049	\$ 1,042	15,847
Amenity - Water	\$ -	\$ -	\$ -	\$ 10,088	\$ 840	\$ 958	\$ 696	\$ 812	\$ 688	\$ 619	\$ 867	\$ 799	16,367
Playground & Furniture Lease	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	\$ 1,079	12,946
Internet	\$ 116	\$ 222	\$ 275	\$ 116	\$ 116	\$ 116	\$ 116	\$ 116	\$ 116	\$ 156	\$ 156	\$ 156	1,772
Pest Control	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ -	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	440
Janitorial Services	\$ 525	\$ 600	\$ 450	\$ 450	\$ 450	\$ 450	\$ 481	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	6,156
Security Services	\$ -	\$ 240	\$ -	\$ 3,294	\$ -	\$ -	\$ 2,198	\$ -	\$ -	\$ -	\$ 1,148	\$ -	6,880
Pool Maintenance	\$ 1,350	\$ 1,350	\$ 1,350	\$ 1,350	\$ 1,350	\$ 1,350	\$ 1,350	\$ 1,500	\$ 1,780	\$ 1,500	\$ 1,950	\$ 1,500	17,680
Amenity Access Management	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417	5,000
Amenity Repairs & Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 108	\$ -	\$ -	\$ 400	\$ -	\$ -	\$ 300	807
Contingency	\$ -	\$ -	\$ -	\$ 400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	400
Subtotal Amenity Expenditures	\$ 4,872	\$ 5,239	\$ 4,891	\$ 18,633	\$ 5,320	\$ 5,484	\$ 7,392	\$ 5,710	\$ 8,100	\$ 5,517	\$ 7,256	\$ 5,881	\$ 84,295
Total Operations & Maintenance	\$ 22,918	\$ 19,641	\$ 15,699	\$ 31,127	\$ 20,326	\$ 20,326	\$ 22,474	\$ 22,615	\$ 24,028	\$ 24,251	\$ 22,158	\$ 24,708	\$ 270,272
Total Expenditures	\$ 44,707	\$ 27,265	\$ 21,704	\$ 42,083	\$ 29,197	\$ 28,532	\$ 31,881	\$ 27,987	\$ 33,602	\$ 36,268	\$ 32,289	\$ 37,274	\$ 392,790
Excess (Deficiency) of Revenues over Expenditures	\$ 11,502	\$ 2,465	\$ 148,894	\$ (40,973)	\$ 4,719	\$ (1,163)	\$ (11,845)	\$ (27,835)	\$ (33,507)	\$ (36,219)	\$ 80,653	\$ (33,721)	\$ 62,969
Other Financing Sources/Uses:													
Transfer In/(Out)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total Other Financing Sources/Uses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Net Change in Fund Balance	\$ 11,502	\$ 2,465	\$ 148,894	\$ (40,973)	\$ 4,719	\$ (1,163)	\$ (11,845)	\$ (27,835)	\$ (33,507)	\$ (36,219)	\$ 80,653	\$ (33,721)	\$ 62,969

VillaMar
Community Development District
Long Term Debt Report

SERIES 2019, SPECIAL ASSESSMENT REVENUE BONDS AREA 1		
INTEREST RATE:	3.750%, 4.000%, 4.625%, 4.875%	
MATURITY DATE:	5/1/2050	
RESERVE FUND DEFINITION	50% MAXIMUM ANNUAL DEBT SERVICE	
RESERVE FUND REQUIREMENT	\$202,648	
RESERVE FUND BALANCE	\$203,276	
BONDS OUTSTANDING - 06/25/19		\$7,180,000
LESS: SPECIAL CALL - 08/01/20		(\$290,000)
LESS: SPECIAL CALL - 11/1/20		(\$280,000)
LESS: SPECIAL CALL - 2/1/21		(\$45,000)
LESS: PRINCIPAL PAYMENT - 5/1/21		(\$110,000)
LESS: SPECIAL CALL - 5/1/21		(\$30,000)
LESS: SPECIAL CALL - 8/1/21		(\$65,000)
LESS: SPECIAL CALL - 11/1/21		(\$20,000)
LESS: PRINCIPAL PAYMENT - 5/1/22		(\$110,000)
CURRENT BONDS OUTSTANDING		\$6,230,000

SERIES 2020, SPECIAL ASSESSMENT REVENUE BONDS AREA 2		
INTEREST RATE:	2.625%, 3.200%, 3.750%, 4.000%	
MATURITY DATE:	5/1/2051	
RESERVE FUND DEFINITION	50% MAXIMUM ANNUAL DEBT SERVICE	
RESERVE FUND REQUIREMENT	\$184,450	
RESERVE FUND BALANCE	\$184,450	
BONDS OUTSTANDING - 11/24/20		\$6,500,000
LESS: PRINCIPAL PAYMENT - 5/1/22		(\$125,000)
CURRENT BONDS OUTSTANDING		\$6,375,000

SERIES 2022, SPECIAL ASSESSMENT REVENUE BONDS AREA 3		
INTEREST RATE:	3.125%, 3.500%, 4.000%	
MATURITY DATE:	11/1/2051	
RESERVE FUND DEFINITION	50% MAXIMUM ANNUAL DEBT SERVICE	
RESERVE FUND REQUIREMENT	\$87,200	
RESERVE FUND BALANCE	\$87,200	
BONDS OUTSTANDING - 03/18/22		\$3,040,000
CURRENT BONDS OUTSTANDING		\$3,040,000

SERIES 2022, SPECIAL ASSESSMENT REVENUE BONDS AREA 4		
INTEREST RATE:	3.250%, 3.625%, 4.000%, 4.125%	
MATURITY DATE:	5/1/2052	
RESERVE FUND DEFINITION	MAXIMUM ANNUAL DEBT SERVICE	
RESERVE FUND REQUIREMENT	\$249,825	
RESERVE FUND BALANCE	\$249,825	
BONDS OUTSTANDING - 03/18/22		\$4,295,000
CURRENT BONDS OUTSTANDING		\$4,295,000

VillaMar
COMMUNITY DEVELOPMENT DISTRICT
Special Assessment Receipts
Fiscal Year 2022

\$ 195,991.20 \$ 435,455.84 \$ 631,447.04
\$ 182,271.82 \$ 404,973.93 \$ 587,245.75

ON ROLL ASSESSMENTS

							31.04%	68.96%	100.00%
							2019 Debt		
Date	Distribution	Gross Amount	(Discount)/Penalty	Commissions	Interest	Net Receipts	O&M Portion	Service Portion	Total
11/19/21	ACH	\$1,890.56	(\$75.63)	(\$36.30)	\$0.00	\$1,778.63	\$552.06	\$1,226.57	\$1,778.63
11/30/21	ACH	\$9,452.80	(\$378.14)	(\$181.49)	\$0.00	\$8,893.17	\$2,760.30	\$6,132.87	\$8,893.17
11/30/21	1% Fee Adj	(\$6,314.47)	\$0.00	\$0.00	\$0.00	(\$6,314.47)	(\$1,959.91)	(\$4,354.56)	(\$6,314.47)
12/14/21	ACH	\$147,463.68	(\$5,899.03)	(\$2,831.29)	\$0.00	\$138,733.36	\$43,060.65	\$95,672.71	\$138,733.36
12/17/21	ACH	\$357,315.84	(\$14,293.33)	(\$6,860.45)	\$0.00	\$336,162.06	\$104,339.40	\$231,822.66	\$336,162.06
12/31/21	ACH	\$79,403.52	(\$3,138.57)	(\$1,525.30)	\$0.00	\$74,739.65	\$23,198.01	\$51,541.64	\$74,739.65
01/18/22	ACH	\$3,781.12	(\$132.34)	(\$72.98)	\$0.00	\$3,575.80	\$1,109.87	\$2,465.93	\$3,575.80
02/18/22	ACH	\$22,686.72	(\$888.62)	(\$435.96)	\$0.00	\$21,362.14	\$6,630.47	\$14,731.67	\$21,362.14
03/16/22	ACH	\$3,837.83	(\$1,928.36)	(\$38.19)	\$0.00	\$1,871.28	\$580.82	\$1,290.46	\$1,871.28
04/19/22	ACH	\$7,562.24	(\$18.91)	(\$150.87)	\$0.00	\$7,392.46	\$2,294.50	\$5,097.96	\$7,392.46
TOTAL		\$ 627,079.84	\$ (26,752.93)	\$ (12,132.83)	\$ -	\$ 588,194.08	\$ 182,566.17	\$ 405,627.91	\$ 588,194.08

100%	Net Percent Collected
0	Balance Remaining to Collect

DIRECT BILL ASSESSMENTS

VMAR Dev, LLC 2022-01							\$143,925.84	\$41,475.84	\$102,450.00
Date Received	Due Date	Check Number	Net Assessed	Amount Received	General Fund	Series 2020 Debt Service			
	11/1/21		\$71,962.92	*					
	2/1/22		\$35,981.46	*					
	5/1/22		\$35,981.46	*					
				\$ 143,925.84	\$ -	\$ -	\$ -	\$ -	\$ -

VILLA MAR FG, LLC 2022-02							\$112,827.51	\$112,827.51	
Date Received	Due Date	Check Number	Net Assessed	Amount Received	General Fund	Series 2020 Debt Service			
8/9/22	11/1/21	1210	\$56,413.76	\$56,413.76	\$56,413.76				
8/9/22	2/1/22	1210	\$28,206.88	\$28,206.88	\$28,206.88				
8/9/22	5/1/22	1210	\$28,206.88	\$28,206.88	\$28,206.88				
				\$ 112,827.52	\$112,827.52	\$112,827.52			

Adams Homes of Northwest Florida, Inc. 2022-03							\$94,786.00	\$27,286.00	\$67,500.00
Date Received	Due Date	Check Number	Net Assessed	Amount Received	General Fund	Series 2020 Debt Service			
2/15/22	11/1/21	302177	\$47,393.00	\$47,393.00	\$13,643.00	\$33,750.00			
2/15/22	2/1/22	302177	\$23,696.50	\$23,696.50	\$6,821.50	\$16,875.00			
2/15/22	5/1/22	302177	\$23,696.50	\$23,696.50	\$6,821.50	\$16,875.00			
				\$ 94,786.00	\$ 94,786.00	\$ 27,286.00	\$ 67,500.00		

Meritage Homes Corporation 2022-04							\$98,577.44	\$28,377.44	\$70,200.00
Date Received	Due Date	Check Number	Net Assessed	Amount Received	General Fund	Series 2020 Debt Service			
11/15/21	11/1/21	94051170	\$49,288.72	\$49,288.72	\$14,188.72	\$35,100.00			
11/15/21	2/1/22	94051170	\$24,644.36	\$24,644.36	\$7,094.36	\$17,550.00			
11/15/21	5/1/22	94051170	\$24,644.36	\$24,644.36	\$7,094.36	\$17,550.00			
				\$ 98,577.44	\$ 98,577.44	\$ 28,377.44	\$ 70,200.00		

*Amounts to be collected at lot closings