

PASCO COUNTY, FLORIDA
INTEROFFICE MEMORANDUM

TO: Joaquin Servia
Development Review Manager

DATE: July 10, 2015 FILE: PDD15-1374

SUBJECT: Small Commercial
Development Review –
Withlacoochee River Electric
Cooperative, Inc. Wesley
Chapel Electric Substation,
Preliminary Site/Construction
Plan and Stormwater
Management Plan and Report
(Project No. SML15-047)
Recommendation: Approval
with Conditions (Attachment
No. 1)

FROM: Misty Mills
Planner I

REFERENCES: Land Development Code,
Sections 300, Procedures;
403, Site Development;
and 900, Development
Standards; Comm. Dist. 2

PROJECT DESCRIPTION:

| | |
|---|---|
| Commission District: | The Honorable Mike Moore |
| Project Name: | Withlacoochee River Electric Cooperative, Inc. (WREC), Wesley Chapel Substation |
| Developer's Name: | Withlacoochee River Electric Cooperative, Inc. |
| Location: | On the east side of Wesley Chapel Boulevard approximately 0.50 miles north-east of the intersection of State Road 56 and Wesley Chapel Boulevard, Wesley Chapel, Florida (Attachment No. 2) |
| Parcel ID No: | 22-26-19-0000-00200-0040 |
| Land Use Classification: | RES-3 (Residential – 3.0 du/ga) |
| Zoning District: | A-C Agricultural |
| Acreage: | 3.58 Acres, m.o.l. |
| Use/Square Feet: | Electrical Distribution Substation/No Building |
| Flood Zone: | "X" and "AE" |
| Water/Sewage: | N/A |
| Transportation Analysis Zone: | 336 |
| Mobility Fee Assessment District: | N/A |
| Mobility Fee Collection/Benefit District: | N/A |
| Roads: | Wesley Chapel Boulevard (Public) |

Certificate of Capacity:

N/A

DEVELOPER'S REQUEST:

The applicant/developer of WREC Wesley Chapel Substation is requesting approval of a Preliminary Site/Construction Plan and Stormwater Management Plan and Report approval to construct an unmanned electrical substation (Attachment No. 3).

BACKGROUND AND FINDINGS OF FACT:

See Attachment No. 4

CONCURRENCY ANALYSIS:

An Initial Certificate of Capacity is not required for an unmanned electric substation.

RECOMMENDATION:

The Planning and Development Department recommends approval of the Preliminary Site/Construction Plan and Stormwater Management Plan and Report request with the attached conditions.

ATTACHMENTS:

1. Conditions of Approval
2. Location Map
3. Site Plan
4. Background and Findings of Fact

PLANNING AND DEVELOPMENT DEPARTMENT ACTION:

APPROVED

B.C.C.
 D.R.C.

Pasco County

By:  Date 7-29-15

**For Substantial Compliance With
The Applicable Provisions of Pasco County
Land Development Regulations
And Their Intent**

ATTACHMENT NO. 1 – CONDITIONS OF APPROVAL
WREC WESLEY CHAPEL ELECTRIC SUBSTATION

Hard-Copy Site Development Permit

1. Before commencing approved construction activities, the applicant/developer or project contractor shall obtain from the Planning and Development Department an authorization to commence approved construction, a.k.a. "a hard copy Site Development Permit." To obtain said authorization, the following, as applicable, must be submitted to the Planning and Development Department:
 - a. The completed notarized acknowledgment portion of the attached agenda memorandum. The owner/developer is hereby notified that the effective date of this development approval shall be the date of the final County action; however, no activity shall commence on site until such time as the acknowledgment portion of this document is completed (including notarization) and received by the Planning and Development Department.
 - b. A copy of the Southwest Florida Water Management District (SWFWMD) Permit and Plan or exemption letter. In the event the SWFWMD Permit and Plan require any changes to the County-approved plan, an amendment to the County-approved plan shall be submitted for review and approval prior to the issuance of the Site Development Permit.
 - c. National Pollutant Discharge Elimination System Permit/permit application.

No construction shall commence until the permit has been properly posted on the site.

General

2. The developer acknowledges that any provisions of Pasco County ordinances and any rezoning conditions of approval not specifically waived shall be in full force and effect, including all impact fee ordinances. In the event ordinances/resolutions are adopted by the BCC including, but not limited to, solid waste, public safety, or wildlife, the developer shall be required to comply with such ordinances/resolutions.
3. The developer acknowledges that approval of this Preliminary Site Plan (PSP) does not establish vested rights with respect to construction of the project. Further, the developer acknowledges that no permit shall be issued or plat approved without the issuance of a Final Certificate of Capacity.
4. The applicant/developer or successors in interest are advised of the following restrictions:
 - a. No owner of the property within the development may construct or maintain any building, residence, or structure, or undertake or perform any activity in the wetlands, buffer areas, and upland conservation areas described in the approved plan or record plat unless prior approval is received from the SWFWMD pursuant to environmental resource permitting.

- b. No owner of the property within the development may construct or maintain any building, residence, or structure, or undertake or perform any activity within the 100-year floodplain described in the approved plan and/or record plat of the subdivision unless prior approval is received from the SWFWMD pursuant to environmental resource permitting.
 - c. No owner of the property may undertake any roadway improvements within this development unless prior written authorization or notification of exemption is received from the SWFWMD pursuant to environmental resource permitting.
5. All construction work, including roads, drainage, and utilities, shall be constructed in accordance with County design standards and tested in compliance with the Engineering Services Department's *Testing Specifications for Construction of Roads, Storm Drainage, and Utilities*.
 6. The applicant/developer shall acknowledge that should the County collect funds under a guarantee document, the developer shall authorize the County or its designee access to the property in question to complete the required work.
 7. The applicant/developer shall acknowledge that should the County be required to institute legal proceedings in order to collect any funds under a guarantee document, the developer shall be responsible for attorney's fees and court costs incurred by the County in such action.
 8. The developer acknowledges that an appeal may be filed against the decision of the Planning and Development Department within 30 days of the date of this approval. Any development that takes place within the 30-day-appeal deadline shall not establish vested rights with respect to construction of the project.
 9. Site plans approved by the Planning and Development Department are the final approved documents. Changes/additions/deletions to approved site plans; i.e., building size, location, loading zones, etc., require revised site plan submittal, review fee, and approval in accordance with the Land Development Code (LDC), Sections 300, 403, and 900.
 10. The applicant/developer or project contractor shall notify the Project Management Division at least five working days prior to commencing any activity on the site.
 11. The applicant/developer acknowledges that the Preliminary Site Plan (PSP) and all associated alternative standards requests shall expire within six years of the original approval date of the PSP if Building Permits for the entire development have not been issued, or where a Building Permit is not required, all work authorized by the PSP shall be complete. Any extension shall be applied for at least 60 days prior to expiration of any of the above time limits.

In the event the PSP is voided, all subsequent submittals shall comply with regulations in effect at the time of the said resubmittals.

Construction Plan

12. No fill shall be placed within the 100-year floodplain designation unless compensating volume to mitigate the fill is provided on site or off site within the same basin and reviewed and approved by the County.
13. All construction within the County right-of-way will require a Right-of-Way Use Permit. The review and issuance of the Right-of-Way Use Permit shall be conducted in accordance with the LDC, Section 406.5, Right-of-Way Use Permit, and must be obtained prior to commencement of construction. The developer shall ensure that any improvements installed in rights-of-way are constructed to County standards
14. The developer shall provide fire protection in compliance with the Pasco County Code of Ordinances, Chapter 46, Article III, and any subsequent amendments.
15. Prior to any construction activity, the developer shall ensure that proper erosion and sediment control measures are in place. The applicant/developer or project contractor shall notify the Stormwater Management Division at least two working days prior to commencing any site preparation, including clearing and grubbing work, for a preinspection of the sediment and erosion-control devices. The developer shall control all fugitive dust originating from the project site and shall indicate on the construction drawings the manner in which fugitive dust is to be controlled. Further, all retention pond side slopes and associated swales shall be sodded to prevent soil erosion.
16. The applicant/developer acknowledges, in accordance with the LDC, Section 905.2, Landscaping and Buffering, wooden fences are not allowed as a visual screen in any of the buffer areas. If the applicant/developer proposes the use of a fence for a visual screen within any buffer area, vinyl fencing or chain-link fencing with black-out fabric or slats shall be used.
17. The applicant/developer acknowledge, in accordance with the LDC, Section 905.2, Landscaping and Buffering, any plant materials of whatsoever type and kind required by the Landscape and Buffering regulations and this approval, shall be replaced within thirty days of their demise and/or removal.
18. If, during construction activities, any evidence of historic resources including, but not limited to, aboriginal or historic pottery, prehistoric stone tools, bone or shell tools, historic trash pits, or historic building foundation, are discovered, work shall come to an immediate stop, and the Florida Department of Historic Resources (State Historic Preservation Officer) and the County shall be notified within two working days of the resources found on the site.
19. If, during construction activities, any evidence of the presence of State and Federally protected plant and/or animal species is discovered, work shall come to an immediate stop, and the County shall be notified within two working days of the plant and/or animal species found on the site.

Development Standards

20. The design standards are in accordance with the appropriate zoning district regulations and uses contained within the LDC for specific parcel.

Building Permit

21. Site plans submitted with Building Permit applications are invalid as to final site approval unless stamped approved by the Planning and Development Department. These plans are submitted to show building location in regard to property line, other buildings, etc., only. The site must conform to those plans submitted and/or approved by the Planning and Development Department in accordance with the Land Development Code (LDC), Sections 300 and 403.
22. The applicant/developer acknowledges that a Building Permit shall be obtained for all structures that have a footer, regardless of size, through the Central Permitting Division; i.e., including, but not inclusive of, buildings, accessories, dumpster walls, and retaining walls.
23. A Registered Landscape Architect or other person as authorized by Chapter 481, Florida Statutes, as amended or other type of professional as approved by the County Administrator or designee shall conduct a final field inspection. A Certificate of Compliance shall be provided to the County prior to platting, or where platting is not required, prior to issuance of the Certificate of Occupancy (CO).
24. The applicant/developer shall arrange for a final site inspection approval by the County prior to occupancy/use of the permitted facility.

OWNER/DEVELOPER'S ACKNOWLEDGMENT:

The owner/developer acknowledges that it has read, understood, and accepted the conditions of approval.

Date

Signature

Print Name

Title

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____
(date), by _____ (name
of corporation acknowledging) a _____
(State or place of incorporation) corporation, on behalf of the corporation. He/she is personally
known to me or who has produced _____ (type of
identification) as identification.

Seal:

NOTARY

CONTROL STRUCTURE DATA

| STR. NO. | FDOT BOX TYPE | MODIFIED ATTENUATION AND TREATMENT CONTROLS | | | | | | | REMARKS | |
|----------|---------------|---|---------------------|-----|-----------|-------------------|-------|----|---------|---------------------|
| | | OPENING TYPE | ATTENUATION OPENING | | EL. (FT.) | TREATMENT OPENING | | | | EL. (FT.) |
| | | | A | B | | C | D | F° | | |
| NO. | TYPE | TYPE | A | B | EL | C | D | F° | EL | REMARKS |
| CS-1 | D | CS-7 | 30" | 6" | 38.4 | 20.5" | 4.75" | | 38.0 | POND 1A (THROAT A) |
| CS-2 | E | CS-7 | 42" | 12" | 33.0 | 27.5" | 6" | | 32.5 | POND 2B (THROAT A) |
| | | CS-2 | 27" | 12" | 33.0 | | | | | POND 2B (THROAT A1) |
| | | CS-2 | 27" | 12" | 33.0 | | | | | POND 2B (THROAT A2) |
| CS-3 | H | CS-7 | 66" | 15" | 35.2 | 36" | 6" | | 34.7 | POND 3B (THROAT A) |
| | | CS-2 | 27" | 15" | 35.2 | | | | | POND 3B (THROAT A1) |
| | | CS-2 | 27" | 15" | 35.2 | | | | | POND 3B (THROAT A2) |
| CS-4A | C | CS-2 | 24" | 6" | 33.3 | | | | | POND 4A (THROAT A) |
| | | CS-2 | 10" | 6" | 33.3 | | | | | POND 4A (THROAT A1) |
| | | CS-2 | 10" | 6" | 33.3 | | | | | POND 4A (THROAT A2) |
| CS-4B | C | CS-7 | 24" | 6" | 33.3 | 24" | 4.75" | | 32.9 | POND 4B (THROAT A) |
| | | CS-2 | 10" | 6" | 33.3 | 14" | 4.75" | | 32.9 | POND 4B (THROAT A1) |
| | | CS-2 | 10" | 6" | 33.3 | 13.5" | 4.75" | | 32.9 | POND 4B (THROAT A2) |
| CS-5 | D | CS-7 | 36" | 6" | 33.4 | 33" | 4.75" | | 33.0 | POND 5A (THROAT A) |
| | | CS-2 | 18" | 6" | 33.4 | | | | | POND 5A (THROAT A1) |
| | | CS-2 | 18" | 6" | 33.4 | | | | | POND 5A (THROAT A2) |



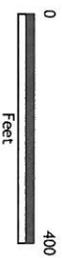
SML15-047
WREC Electric Substation

22 26 19 0000 00200 0040

PHYSICAL ADDRESS:
 25288 WESLEY CHAPEL BLVD
 LUTZ FL 33559

TAZ - 273 & 286
Commission District: 2

 **SUBJECT PROPERTY**



Pasco County GIS | 6/30/2015 | troberts

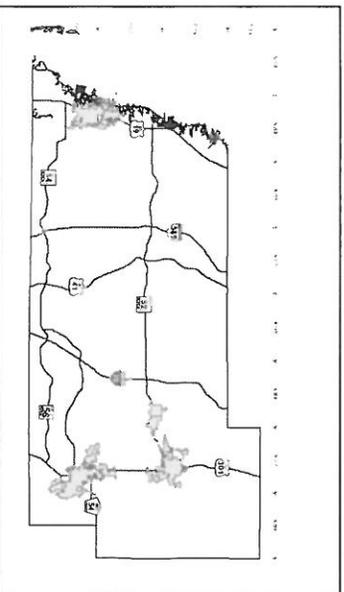




Figure B: Site Plan Overlay on Aerial

WREC - Wesley Chapel Sub-Station

Sec/Twn/Rng
22/26S/19E

ATTACHMENT NO. 4 - BACKGROUND AND FINDINGS OF FACT
WREC WESLEY CHAPEL ELECTRIC SUBSTATION

BACKGROUND:

The property has its original zoning of A-C Agriculture.

FINDINGS OF FACT:

1. Presently, the subject site is unimproved.
2. The Preliminary Site/Construction Plan and Stormwater Management Plan and Report have been reviewed by the Planning and Development Department, and it has been determined that the proposed use is consistent with the above-referenced zoning district's permitted uses and with the Pasco County applicable provisions of the Comprehensive Plan as submitted.
3. The Preliminary Site/Construction Plan, and Stormwater Management Plan and Report for the above-subject project were prepared for Withlacoochee River Electric Cooperative, Inc. by Coastal Engineering Associates and consist of 11 sheets dated June 3, 2015; the sheets were last revised on July 3, 2015. The plans were originally received by the Planning and Development Department on June 17, 2015, and final revisions were received on July 9, 2015.
4. Timing and Phasing Analysis and a Substandard Roadway Analysis were found to be exempt at the pre-application meeting on May 12, 2015.

The Planning and Development Department's approval of this Preliminary Site/Construction Plan and Stormwater Management Plan and Report constitutes a finding by the Planning and Development Department that the Preliminary Site/Construction Plan and Stormwater Management Plan and Report, as conditioned, are consistent with those Goals, Objectives, and Policies of the Comprehensive Plan and those provisions of the LDC that are applicable to Preliminary Site/Construction Plan and Stormwater Management Plan and Report approvals. This action is based on the office review of the plans, supporting documentation, and certifications of the Engineer of Record.

PRELIMINARY / CONSTRUCTION / STORMWATER MANAGEMENT PLANS

for

WREC WESLEY CHAPEL ELECTRICAL SUBSTATION

3.58 ACRES ±

PASCO COUNTY, FLORIDA

Project Number 15022

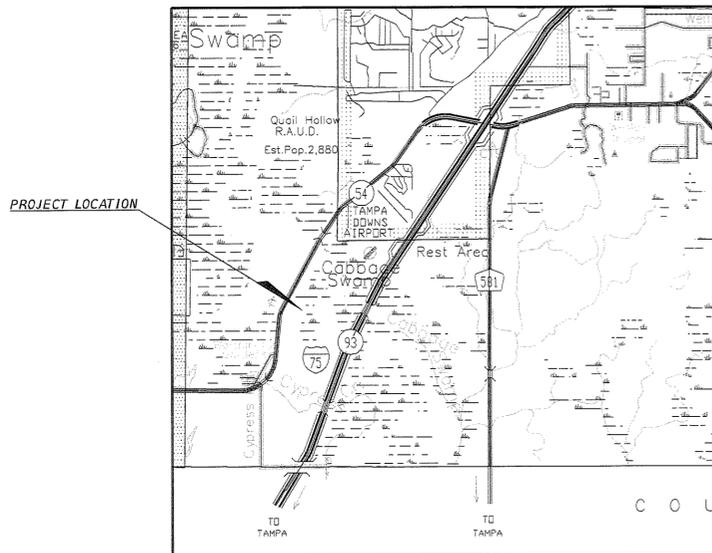
PREPARED FOR:

WITHLACOOCHEE RIVER ELECTRIC COOPERATIVE, INC.
CORPORATE OFFICE (352) 567-5133
14651 21ST STREET
DADE CITY, FLORIDA 33523

PREPARED BY:

Coastal Engineering
Planning
Surveying
Environmental
Construction Management
engineering associates, inc.
966 Candlelight Boulevard - Brooksville - Florida 34601
(352) 796-9423 - Fax (352) 799-8359
EB-0000142

| Sheet Index | |
|--------------|---------------------------------|
| Sheet Number | Sheet Title |
| -- | COVER SHEET |
| 1 | NOTES & LEGEND |
| 2 | EXISTING CONDITIONS INFORMATION |
| 3 | SITE PLAN |
| 4 | DRAINAGE PLAN |
| 5 | GRADING & PAVING PLAN |
| 6 | DETAILS (1) |
| 7 | DETAILS (2) |
| 8 | DETAIL (3) |
| 9 | CSWM SWPP PLAN DETAILS |
| 10 | CSWM SWPP PLAN NOTES |
| 11 | LANDSCAPE PLAN |



LOCATION MAP
N.T.S.
9/T/R
22/268/19E



NOTE: PROJECT IS A SIMULTANEOUS SUBMITTAL FOR PASCO COUNTY

TECHNICAL SPECIFICATIONS

THE FOLLOWING ARE INCORPORATED HEREIN BY REFERENCE:

1. FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", EDITION 2014.
2. FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY AND TRAFFIC DESIGN STANDARDS", EDITION 2015.
3. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
4. F.D.O.T. UTILITY ACCOMMODATION MANUAL (2010).

PLAN REVISIONS

| DATE | REVISION NO. | REVISION | AGENCY | PERMIT TYPE | PERMIT NO. | EXP. DATE |
|--------|--------------|-----------------|--------------|-------------|------------|-----------|
| 7/3/15 | 1 | COUNTY COMMENTS | PASCO COUNTY | | | |
| - | - | - | PASCO ROW | | | |
| - | - | - | FDEP | | | |
| - | - | - | FDOT | | | |
| - | - | - | | | | |

AGENCY APPROVALS

DESIGN ENGINEER : SCOTT D. MCKEE, P.E.

Scott D McKee

PROFESSIONAL ENGINEER FLORIDA REGISTRATION NO. 65654

GENERAL CONSTRUCTION NOTES

- 1. BENCHMARK DATUM IS NAVD 88, BENCHMARK T-669 WITH A PUBLISHED ELEVATION OF 67.85..
2. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION IN ACCORDANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS AND TO TOLERANCES STATED HEREIN OR IN THE SPECIFICATIONS. REFER TO THE BOUNDARY AND TOPOGRAPHIC SURVEY FOR ADDITIONAL INFORMATION ON HORIZONTAL AND VERTICAL CONTROL.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROL MARKERS AND PROPERTY CORNERS (MONUMENTS, PIPES, ETC.) FOR THE DURATION OF CONSTRUCTION. MARKERS SHALL BE CONTINUOUSLY FLAGGED AND SHALL BE RESET IMMEDIATELY BY A FLORIDA LICENSED LAND SURVEYOR IF ANY SHOULD BECOME DISTURBED.
4. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE DRAWINGS AND DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, ETC. AFFECTING HIS WORK PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, DRIVEWAYS, SIDEWALKS, RETAINING WALLS, ETC. REMOVED OR DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COSTS WITH THE SAME MATERIAL REMOVED OR DAMAGED OR AS DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO POSSIBLE INCIDENTAL CONFLICTS WITH EXISTING STRUCTURES SUCH AS MAIL BOXES, SIGNS, FENCES, BILLBOARDS, ETC. AND SHALL INCLUDE IN HIS OVERALL COSTS THE REMOVAL AND OR REPLACEMENT AND PROTECTION OF SUCH INCIDENTAL ITEMS.
7. THE CONTRACTOR, PRIOR TO BIDDING THIS WORK, SHALL APPRAISE HIMSELF AS TO ALL ABOVE AND BELOW GROUND FEATURES THAT HE MAY ENCOUNTER DURING CONSTRUCTION AND INCLUDE INTO HIS OVERALL BID ALL COSTS FOR SPECIFIC CONSTRUCTION METHODS AND PROCEDURES THAT NEED TO BE TAKEN TO WORK AROUND SUCH APPURTENANCES.
8. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PROCEEDING WITH ANY SITE WORK WITH WHICH A CONFLICT HAS ARISEN DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS.
9. CONSTRUCTION SHALL BE CARRIED OUT "IN THE DRY". THE CONTRACTOR SHALL REVIEW SITE CONDITIONS AND DETERMINE METHODS AND EXTENT OF DEWATERING NECESSARY AND SHALL INCLUDE COSTS OF DEWATERING IN THE BID. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR CONTROL OF GROUND OR SURFACE WATER OR FOR ADDITIONAL MATERIALS OR REWORK REQUIRED AS A RESULT OF INADEQUATE OR INSUFFICIENT DEWATERING.
10. ALL WORK TO BE PERFORMED FOR THE COMPLETION OF THIS PROJECT SHALL BE CONSTRUCTED ACCORDING TO THE BEST PRACTICES OF THE INDUSTRY AND IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND/OR COUNTY CODES, ORDINANCES, STANDARDS AND PERMIT CONDITIONS. FLORIDA BUILDING CODE (LATEST EDITION) AS APPLICABLE.

MINIMUM REQUIRED AS-BUILTS

GENERAL

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A RECORD SURVEY(S) PREPARED AND SUBMITTED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER INCLUDING, BUT NOT LIMITED TO, LOCATION AND FINISHED GRADE ELEVATIONS IN PAVED AND NON-PAVED AREAS SUFFICIENT TO DETERMINE DIRECTION OF SITE DRAINAGE AND ELEVATIONS OF RETENTION/DETENTION AREAS, MITIGATION AREAS AND DITCH/CHANNEL CONVEYANCES INCLUDING TOPS OF BANKS, TOES OF SLOPES, FOND BOTTOMS AND WATER LEVELS; ELEVATIONS AND DIMENSIONS OF POND CONTROL STRUCTURES, SPILLWAYS AND UNDERDRAINS; DRAINAGE STRUCTURE GRATE/INLET/RIM ELEVATIONS, STORM PIPE SIZES, PIPE MATERIALS, AND PIPE INVERTS, PLUS LOCATIONS, DIMENSIONS AND ELEVATIONS OF ALL OTHER CONSTRUCTION COMPONENTS WHICH VARY FROM THE DESIGN. UTILITY INFORMATION SHALL INCLUDE LOCATION OF WATER LINES, VALVES, BENDS, METERS AND ELEVATIONS OF PIPES WHERE DEPTH OF COVER VARIES FROM DESIGN; TIES TO SANITARY SEWER LINES, MANHOLE RIM AND INVERT ELEVATIONS, CLEANOUTS AND SERVICE CONNECTIONS.
2. ALL DIMENSIONS SHALL BE IN FEET DIMENSIONED OFF CENTERLINE OF ROADS OR OTHER PERMANENT STRUCTURES. IF ONLY ONE DIMENSION CAN BE TAKEN OFF THE CENTERLINE OF ROAD, THE SECOND SHALL BE OFF A PERMANENT MARKER OR REFERENCE POINT.
3. FOUR (4) SETS OF 24X36 SIGNED AND SEALED AS-BUILT DRAWINGS, ONE (1) CD WITH AUTOCAD AND ADOBE PDF'S OF ALL SHEETS SHALL BE SUBMITTED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

TECHNICAL SPECIFICATIONS

ALL SITE AND UTILITY WORK PERFORMED ON THIS PROJECT SHALL BE GOVERNED BY THE APPLICABLE PROVISIONS OF PASCO COUNTY. IN ADDITION, THE FOLLOWING STANDARDS ARE INCORPORATED BY REFERENCE:

- 1. FLORIDA DEPARTMENT OF TRANSPORTATION "ROADWAY AND TRAFFIC DESIGN STANDARDS", LATEST EDITION.
2. FLORIDA DEPT. OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
3. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.

PASCO COUNTY GENERAL NOTES

- 1. THE NPDES NOTIFICATION OF INTENT SHALL BE FILED BY THE CONTRACTOR WITHIN 30 DAYS OF INITIATING LAND DISTURBING ACTIVITIES. THE CONTRACTOR SHALL SUPPLY A COPY OF THE NOT TO PASCO COUNTY AS A CONDITION OF PERMIT ISSUANCE.
2. PRIOR TO START OF THE CLEARING AND GRUBBING, OR ANY SOIL DISTURBANCE CONTACT PASCO COUNTY STORMWATER MANAGEMENT AT 727-834-3611 FOR A SOIL EROSION AND SEDIMENT CONTROL PRE-INSPECTION MEETING.
4. PRIOR TO CONSTRUCTION A BUILDING PERMIT SHALL BE OBTAINED FOR ALL STRUCTURES THAT HAVE A FOOTER, REGARDLESS OF SIZE, THROUGH PASCO COUNTY CENTRAL PERMITTING, INCLUDING BUT NOT LIMITED TO BUILDING, ACCESSORIES, AND RETAINING WALLS.
5. ANY OFF-SITE DISTURBANCE SHALL BE RESTORED TO THE PRE OR BETTER CONDITION.

MAINTENANCE OF TRAFFIC

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MAINTENANCE OF TRAFFIC, INCLUDING SIGNAGE AND BARRICADES AS NEEDED IN ACCORDANCE WITH APPLICABLE PERMITS AND PASCO COUNTY DIVISION OF TRAFFIC SERVICES.
2. NOT WITHIN FOOT RIGHT OF WAY AND SURROUNDING COUNTY STREETS SHALL CONFORM TO THE FOOT 2015 STANDARD INDEX 600 SERIES AS APPROPRIATE.
3. CONTRACTOR SHALL PROVIDE 24 HOURS NOTICE TO LOCAL EMERGENCY SERVICES DEPARTMENT(S) WHENEVER CONSTRUCTION ACTIVITIES ARE EXPECTED TO IMPEDE NORMAL TRAFFIC FLOW.
4. THE CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLANS TO APPROPRIATE REGULATORY AGENCIES HAVING JURISDICTION OVER IMPACTED ROADWAYS. CONSTRUCTION SHALL NOT COMMENCE WITHIN ROW UNTIL MOT APPROVALS FOR IMPACTED ROAD ARE RECEIVED.
5. ALL STORM SEWER PIPES SHALL BE CLASS III REINFORCED CONCRETE PIPE (RCP) (ASTM C-76) UNLESS OTHERWISE NOTED AND INSTALLED AT THE LOCATIONS AND GRADES SHOWN ON THE DRAWINGS. PRECAST INLETS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE FOOT ROADWAY AND TRAFFIC DESIGN STANDARDS.

ROAD, DRAINAGE AND GRADING CONSTRUCTION NOTES

- 1. ALL PAVEMENT AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE LATEST EDITION OF THE FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. IMPROVEMENTS WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE, OR COUNTY DEPARTMENT HAVING JURISDICTION OVER THE ROAD.
2. PAVEMENT AND GRADING SHALL BE SLOPED TO THE PROPOSED ELEVATIONS AND CONTOURS SHOWN ON THE DRAWINGS. SMOOTH, CONSTANT SLOPES SHALL BE MAINTAINED BETWEEN PROPOSED ELEVATIONS AND CONTOURS. PROPOSED CONTOUR ELEVATIONS, SPOT ELEVATIONS AND FINISHED GRADE ELEVATIONS IN NON-PAVED AREAS REFER TO FINISHED SURFACE ELEVATION ONCE SODDING OR SEEDING IS COMPLETE.
3. ALL STORM SEWER PIPES SHALL BE CLASS III REINFORCED CONCRETE PIPE (RCP) (ASTM C-76) UNLESS OTHERWISE NOTED AND INSTALLED AT THE LOCATIONS AND GRADES SHOWN ON THE DRAWINGS. PRECAST INLETS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE FOOT ROADWAY AND TRAFFIC DESIGN STANDARDS.

TECHNICAL SPECIFICATIONS

CLEARING AND GRUBBING

- 1. THIS WORK SHALL CONSIST OF CLEARING, GRUBBING, REMOVING AND DISPOSING OF ALL VEGETATION AND DEBRIS WITH THE LIMITS OF CONSTRUCTION, AS DESIGNATED ON THE DRAWINGS OR AS REQUIRED BY THE ENGINEER. CONTRACTOR SHALL ONLY REMOVE ONLY THOSE TREES IDENTIFIED ON THE DRAWINGS FOR REMOVAL UNLESS APPROVED OTHERWISE BY THE ENGINEER.
2. THE AREA WITHIN LIMITS OF CONSTRUCTION SHALL BE CLEARED OF TREES, STUMPS, ROOTS, BRUSH, GRASSES, AND DEBRIS WHICH IS UNSUITABLE FOR CONSTRUCTION MATERIAL.

EXCAVATION

THE CONTRACTOR SHALL PERFORM ALL EXCAVATION NECESSARY TO ACCOMPLISH THE CONSTRUCTION INDICATED ON THE DRAWINGS. ALL EXCAVATED MATERIAL NOT REQUIRED FOR FILL OR EMBANKMENT SHALL BE DISPOSED OF BY THE CONTRACTOR, IN A MANNER CONSISTENT WITH STATE AND LOCAL REGULATIONS.

ALL TOPSOIL THAT IS SUITABLE FOR LANDSCAPING OR GRASSING OPERATIONS SHALL BE STOCKPILED NEARBY FOR SUCH USE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

NO OVER-EXCAVATION SHALL BE PERMITTED, EXCEPT AS REQUIRED TO REMOVE UNSUITABLE MATERIALS, UNLESS APPROVED BY THE ENGINEER.

- 1. UNSUITABLE MATERIAL
PLASTIC SOILS AS DEFINED IN ASTM D 2487 SOIL CLASSIFICATION GROUPS ML, CL, CH, MH, OH, OL AND PT. SOILS WHICH CONTAIN ROCK LARGER THAN 3 INCHES, DEBRIS, ORGANIC MATTER, VEGETATION AND OTHER DELETERIOUS MATTER. MAY ALSO INCLUDE SOILS NOT MAINTAINED WITHIN 20 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.
2. SUITABLE MATERIAL
NON-PLASTIC SOILS AS DEFINED BY ASTM D 2487 SOIL CLASSIFICATION GROUPS SW, SM, SC FREE OF UNSUITABLE MATERIALS.
3. BORROW
BORROW SHALL BE RESORTED TO ONLY WHEN SUFFICIENT QUANTITIES OF SUITABLE MATERIAL ARE NOT AVAILABLE FROM THE SITE AND DRAINAGE EXCAVATION. IN NO CASE SHALL MATERIAL BE BORROWED UNLESS APPROVED BY THE ENGINEER, AND THEN ONLY FROM DESIGNATED OR APPROVED BORROW PITS. SAID PITS TO BE APPROVED AS TO THEIR LOCATION AND IF BORROW IS TO BE MEASURED IN PITS, CROSS-SECTIONING OF THEIR SURFACE.

- 4. SHORING
THE CONTRACTOR SHALL DO ALL SHORING REQUIRED TO PERFORM AND PROTECT THE EXCAVATION, AND AS REQUIRED BY OSHA REGULATION FOR THE SAFETY OF WORKERS.
5. EXCAVATION AT TREES
EXCEPT WHERE TREES ARE SHOWN ON THE DRAWINGS TO BE REMOVED, TREES SHALL BE PROTECTED FROM INJURY DURING CONSTRUCTION OPERATIONS. NO TREE ROOTS OVER TWO INCHES IN DIAMETER SHALL BE CUT WITHOUT EXPRESS PERMISSION OF THE OWNER. TREES SHALL BE SUPPORTED DURING EXCAVATION AS MAY BE DIRECTED BY THE ENGINEER/ARCHITECT.

- 6. DEWATERING
THE CONTRACTOR SHALL PROVIDE ADEQUATE EQUIPMENT FOR THE REMOVAL OF ALL SURFACE AND SUBSURFACE WATER WHICH IS ENCOUNTERED DURING THE EXCAVATION OPERATION IN ORDER THAT IT WILL BE SUITABLY DRY FOR WORKING, FORM SETTING AND CONCRETE POURING AND SETTING.

- 7. EMBANKMENT
THIS WORK SHALL CONSIST OF FURNISHING AND PLACING THE MATERIALS REQUIRED FOR FILL OR EMBANKMENT FOR THE CONSTRUCTION AS INDICATED ON THE DRAWINGS. THE MATERIAL USED FOR EMBANKMENT SHALL CONSIST OF SAND, GRAVEL OR A CONGLOMERATE THEREOF AND/OR OTHER SUITABLE MATERIAL APPROVED BY THE ENGINEER. IF THE MATERIALS ARE OF A VARIABLE QUALITY, THE CONTRACTOR SHALL PLAN HIS OPERATION SO THAT THE UPPER TWO (2) FEET OF THE EMBANKMENT IS CONSTRUCTED OF SELECTED MATERIALS AS APPROVED AND DIRECTED BY THE ENGINEER.

PRIOR TO PLACING ANY EMBANKMENT, THE SURFACE TO RECEIVE THE EMBANKMENT SHALL BE FLOWED OR SCARIFIED. FILL OR EMBANKMENT SHALL BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN TWELVE (12) INCHES MEASURED LOOSE. EACH LAYER WILL THEN BE COMPACTED BY AN APPROVED METHOD IN ACCORDANCE WITH THE PROCEDURE SPECIFIED UNDER COMPACTION.

- 1. BACKFILL
ALL BACKFILL MATERIAL SHALL BE CLEAN AND FREE OF ALL LUMBER, TRASH, OR OTHER DEBRIS, AND SHALL BE THOROUGHLY COMPACTED IN LAYERS NOT MORE THAN TWELVE (12) INCHES AND BROUGHT TO AN ELEVATION ABOVE THE FINISHED GRADE SUFFICIENT TO PROVIDE SETTLEMENT.

PRIOR TO BACKFILLING, THE AREAS AROUND STRUCTURES UPON WHICH BACKFILL IS TO BE PLACED SHALL BE CLEARED OF ALL TRASH AND DEBRIS OF ANY DESCRIPTION, UNLESS DIRECTED BY THE ENGINEER TO BE LEFT IN PLACE, SUCH AS SHEETING AND BRACING.

GRADING SHALL CONSIST OF THE PREPARATION, SHAPING, FINISHING AND TRIMMING OF ALL AREAS OF CONSTRUCTION NOT OTHERWISE COVERED IN THIS SECTION, IN SUCH A MANNER SO AS TO RECEIVE GRASSING, SOD OR PLANTINGS WITHOUT FURTHER WORK. IN FINAL SHAPING OF THE SURFACE OF EARTHWORK A TOLERANCE OF 0.1 FOOT ABOVE OR BELOW THE PLAN ELEVATION WILL BE ALLOWED. DEVIATIONS FROM PLAN GRADES SHALL NOT DISRUPT STORM WATER FLOW PATTERNS SHOWN ON DRAWINGS.

COMPACTION AREAS TO BE COMPACTED SHALL BE MOISTENED AND COMPACTED BY EITHER ROLLING, TAMPING OR ANY OTHER METHOD APPROVED BY THE ENGINEER. IN ORDER TO OBTAIN THE DESIRED DENSITY, THE ENGINEER SHALL INSPECT ALL COMPACTED AREAS PRIOR TO FURTHER CONSTRUCTION OPERATIONS. ALL EMBANKMENT, INCLUDING EMBANKMENTS UNDER SLABS AND FOOTINGS SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557. ALL SUBGRADES SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557 UNLESS SPECIFIED OTHERWISE ON THE DRAWINGS. COMPACTION REQUIREMENT FOR NON-PAVED AREAS WHICH ARE NOT PART OF STORM WATER MANAGEMENT SYSTEM MAY BE REDUCED TO 90%.

SUBGRADE WHEN THE WORK UNDER THIS CONTRACT INCLUDES THE CONSTRUCTION OF A BASE AND/OR SURFACE COURSE, THE SUBGRADE WORK SHALL CONSIST OF BRINGING THE BOTTOM OF EXCAVATIONS AND THE TOP OF EMBANKMENTS WITHIN THE AREA TO BE PAVED TO A SURFACE CONFORMING TO THE GRADES, LINES AND CROSS-SECTIONS SHOWN ON THE DRAWINGS, OF UNIFORM REQUIRED DENSITY READY TO RECEIVE THE BASE AND/OR PAVING COURSE. ALL SOFT AND YIELDING MATERIAL AND OTHER PORTIONS OF THE SUBGRADE WHICH WILL NOT COMPACT READILY SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL AND THE WHOLE SUBGRADE BROUGHT TO LINE AND GRADE AND RE-COMPACTED.

STABILIZING STABILIZING THE SUBGRADE IS TO BE DONE BY THE LIMEROCK BEARING RATIO METHOD (LBR), IN WHICH THE REQUIRED BEARING VALUE SHALL BE OBTAINED EITHER BY CONSTRUCTION USING SELECTED MATERIALS, OR BY STABILIZING THE EXISTING SUBGRADE MATERIAL BY THE ADDITION AND MIXING-IN OF SUITABLE STABILIZING MATERIALS, ALL IN ACCORDANCE WITH THE LINES, GRADES, THICKNESS, AND NOTES SHOWN ON THE DRAWINGS.

AFTER THE SUBGRADE GRADING IS SUBSTANTIALLY COMPLETED, THE CONTRACTOR SHALL DETERMINE IF AN ADDITIVE STABILIZING MATERIAL IS REQUIRED, AND IF SO, HE/SHE SHALL SELECT THE TYPE AND ESTABLISH THE QUANTITY REQUIRED TO BRING THE SUBGRADE TO THE SPECIFIED BEARING VALUE. THE CONTRACTOR SHALL DETERMINE SUCH QUANTITIES BY TESTS MADE ON THE SUBGRADE AND INTENDED STABILIZING MATERIAL. NO ADDITIVE STABILIZING MATERIAL WILL BE REQUIRED WHERE THE BEARING VALUE IS EQUAL TO OR GREATER THAN THE DESIGN VALUE AND STABILIZATION SHALL BE OMITTED, WITH NO PAYMENT MADE FOR SUCH AREAS. UNLESS OTHERWISE INDICATED, THE MATERIALS FOR STABILIZING ADDITIVES SHALL BE EITHER LOCAL OR COMMERCIAL MATERIALS AS APPROVED BY THE ENGINEER.

PRIOR TO THE ADDITION OF ANY STABILIZING MATERIALS, THE SUBGRADE SHALL HAVE BEEN CONSTRUCTED TO AN ELEVATION WHICH WILL PROVIDE A SUBGRADE SURFACE CONFORMING TO THE PLANS UPON COMPLETION OF THE STABILIZING. THE STABILIZING PROCESS MAY BE EITHER IN SEPARATE LAYERS OR TO FULL DEPTH, PROVIDED THAT THE BEARING VALUE IS UNIFORMLY OBTAINED THROUGHOUT EACH LAYER, ALL IN ACCORDANCE WITH THE THICKNESSES AND NOTES AS SHOWN ON THE DRAWINGS. REGARDLESS OF THE STABILIZING MATERIALS USED OR THE BEARING VALUES OBTAINED, ALL MATERIAL WHICH WILL NOT PASS A 3-1/2 INCH SIEVE SHALL BE REMOVED OR BROKEN DOWN TO MEET SUCH REQUIREMENT. THE SPREADING OF STABILIZING MATERIAL SHALL BE BY MEANS OF A ROCK SPREADER TO THE THICKNESS AND QUANTITY REQUIRED THROUGH-OUT THE LENGTH AND WIDTH TO BE STABILIZED, EXCEPT IN AREAS WHERE THE MECHANICAL ROCK SPREADERS ARE NOT PRACTICABLE, OTHER MEANS OF SPREADING MAY BE USED, SUBJECT TO THE WRITTEN APPROVAL OF THE ENGINEER.

THE STABILIZING MATERIALS SHALL BE THOROUGHLY MIXED OR MIXED IN BY PLOWING, DISCING, HARROWING, ROTARY TILLERS, OR OTHER EQUIPMENT APPROVED BY THE ENGINEER, UNTIL THE MIXED MATERIALS ARE OF UNIFORM TEXTURE AND BEARING CAPACITY THROUGHOUT THE WIDTH AND DEPTH OF THE COURSE BEING PROCESSED.

TECHNICAL SPECIFICATIONS (CONT.)

LIMEROCK BASE

LIMEROCK MATERIALS SHALL MEET FOOT SECTION 911.

PLACING AND SPREADING SHALL BE PER FOOT SECTION 200.

BASE STABILIZATION SHALL BE PER FOOT SECTION 230.

SEED, MULCH AND SOD

WHERE SPECIFIED IN DRAWINGS, THE REQUIREMENTS FOR SEED AND MULCH SHALL BE PER FOOT SPECIFICATION SECTION 570. IN THE PERIOD FROM MARCH 15 TO OCTOBER 15, THE SEED MIXTURE SHALL BE THIRTY (30) POUNDS OF BAHIA, AND THIRTY (30) POUNDS OF BERMUDA. IN THE REMAINDER OF THE YEAR, THE MIXTURE SHALL BE TWENTY (20) POUNDS EACH OF BAHIA, BERMUDA AND RYE SEED.

WHERE SOD IS SPECIFIED IN THE DRAWINGS, INSTALLATION SHALL BE PER FOOT SPECIFICATION SECTION 575.

ASPHALT

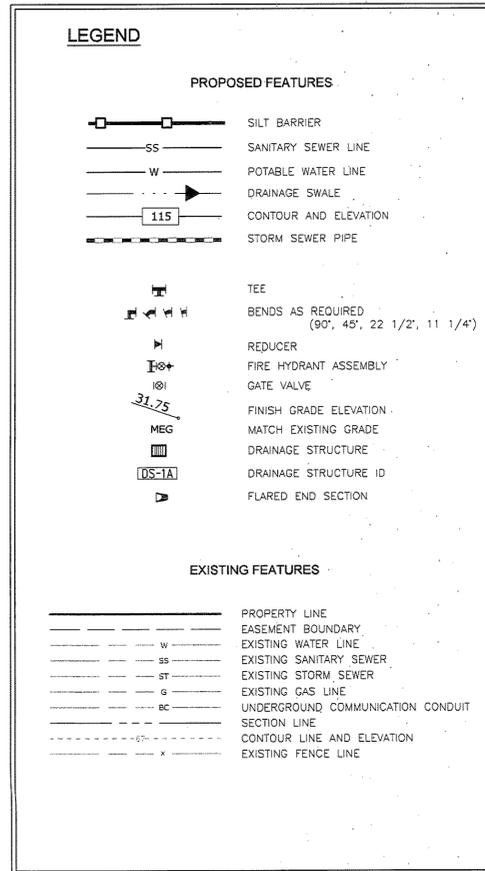
GENERAL CONSTRUCTION REQUIREMENTS SHALL BE PER FOOT SECTION 33

ENVIRONMENTAL PROTECTION NOTES

- 1. CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED IN WETLAND AREAS UNLESS SUCH CONSTRUCTION PRACTICES ARE APPROVED IN A PLAN OF OPERATION SUBMITTED TO THE ENGINEER & THE APPROPRIATE REGULATORY AUTHORITIES. WHERE CONSTRUCTION IS NECESSARY ACROSS OR ADJACENT TO WETLAND JURISDICTIONAL AREAS, SILT BARRIERS SHALL BE INSTALLED AS SHOWN ON THE PLANS. SILT BARRIERS SHALL BE CONSIDERED LIMITS OF CONSTRUCTION WITHIN OR ADJACENT TO JURISDICTIONAL AREAS.
2. CONSTRUCTION SHALL PROCEED SUCH THAT ALL STORMWATER FACILITIES WITHIN A WATERSHED AREA ARE IN PLACE AND OPERATIONAL PRIOR TO CONSTRUCTION OF IMPERVIOUS SURFACES WITHIN THAT AREA.
3. STAKED OR FLOATING SILT SCREENS OR SYNTHETIC HAY BALES, AS APPROPRIATE, SHALL BE UTILIZED AS SILT BARRIERS AND PLACED IN LOCATIONS SHOWN ON THE PLANS AND AT OTHER LOCATIONS AS REQUIRED TO KEEP SEDIMENT FROM REACHING WATER BODIES OR WETLAND AREAS. ONCE CONSTRUCTION IS COMPLETE AND FINISH GRADING / STABILIZATION HAS BEEN ACHIEVED, SILT BARRIERS SHALL BE COMPLETELY REMOVED TO THE SATISFACTION OF THE OWNER AND PRIOR TO FINAL ACCEPTANCE.
4. ALL FUGITIVE DUST SHALL BE CONTROLLED ON SITE. ONLY AREAS SCHEDULED FOR IMMEDIATE CONSTRUCTION SHALL BE CLEARED OR STRIPPED OF VEGETATION. WATERING, APPLICATION OF CALCIUM CHLORIDE OR OTHER PRIOR MEANS OF DUST CONTROL SHALL BE EMPLOYED TO PREVENT THE EMANATION OF DUST FROM THE SITE. PERMANENT GRASSING, LANDSCAPING AND OTHER SITE WORK SHALL BE INITIATED AS SOON AS POSSIBLE.
5. ALL WATER COLLECTED AND PUMPED DURING TRENCH DEWATERING ACTIVITIES SHALL BE DISPOSED OF IN UPLAND AREAS INTO DOUBLE STAKED HAY BALES. DISCHARGE LOCATIONS SHALL BE A MINIMUM OF 75 FEET FROM THE NEAREST SURFACE WATER BODY OR WETLAND AREA, TO ALLOW FOR MAXIMUM OVERLAND FILTRATION OF SOIL PARTICLES.
6. TEMPORARY STOCKPILES SHALL NOT BE LOCATED ADJACENT TO UNDISTURBED WETLANDS. ADDITIONALLY, STOCKPILES TO REMAIN FOR LONGER THAN 24 HOURS SHALL BE CONFINED BY SILT BARRIERS WHICH PREVENT RUNOFF SEDIMENTATION FROM ENCRANCHING UPON WETLAND AREAS OR SURFACE WATER BODIES. STOCKPILES IN PLACE AND UNTOUCHED FOR 7 DAYS OR MORE TO HAVE VEGETATIVE COVER TO PREVENT WIND EROSION AND SEDIMENT DISPERSAL.
7. ALL TRASH AND CONSTRUCTION DEBRIS PRODUCED FROM THIS PROJECT SHALL BE COLLECTED BY THE CONTRACTOR DAILY. THESE MATERIALS SHALL BE STAGED OR CONTAINERIZED AS NECESSARY TO PREVENT ACCIDENTAL RELEASE. DISPOSAL OF SOLID WASTE MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPAL, COUNTY AND STATE REGULATIONS.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING PORTABLE SANITARY WASTE UNITS ON-SITE FOR USE BY HIS EMPLOYEES DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL MAINTAIN CONTROL OF ANY HAZARDOUS MATERIALS UTILIZED ON-SITE FOR CONSTRUCTION. STORAGE CONTAINERS, VEHICLES, ETC. WILL BE INSPECTED REGULARLY FOR LEAKAGE. A SPILL PREVENTION/RECOVERY PLAN SHALL BE ESTABLISHED WHICH COVERS CLEANUP AND NOTIFICATION OF APPROPRIATE GOVERNMENT AGENCIES.
10. CONTRACTOR SHALL NOT REMOVE TREES WITHOUT APPROVAL OF THE LOCAL GOVERNING JURISDICTION. TREE PROTECTION SHALL BE IN ACCORDANCE WITH LOCAL GOVERNING AUTHORITY.
11. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING SITE EROSION AND SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION OR ALTER EXISTING TOPOGRAPHY. THE CONTRACTOR SHALL PROVIDE ADDITIONAL SOD, SYNTHETIC HAY BALES, SAND BAGS OR SEED & MULCH, AS NECESSARY, TO ACHIEVE AN EROSION-FREE SITE (FREE FROM RUTTING, ETC.) TO THE LINES AND GRADES SHOWN IN THE PLANS UNTIL FINAL ACCEPTANCE. ALL SWALES AND SURFACES 4:1 OR STEEPER SHALL BE SODDED. ALL OTHER UNPAVED SURFACES WHERE EROSION THAT CANNOT BE CONTROLLED BY OTHER MEASURES SHALL BE SODDED. ALL SOD SHALL BE ARGENTINE BAHIA UNLESS SPECIFICALLY SHOWN OTHERWISE IN THE CONTRACT DOCUMENTS. ALL SODDED SLOPES OVER 4:1, SHALL BE INSTALLED WITH SOD PEGS.
12. SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS PERMANENTLY STABILIZED. SEE SWPP / CSWMP NOTES AND DETAIL SHEETS FOR ADDITIONAL INFORMATION.
13. THE REMOVAL OF LITTORAL SHELF VEGETATION (INCLUDING CATTAILS) FROM WET DETENTION PONDS IS PROHIBITED UNLESS OTHERWISE APPROVED BY THE SOUTH-WEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWM). REMOVAL INCLUDES DREDGING, THE APPLICATION OF HERBICIDES, CUTTING AND THE INTRODUCTION OF GRASS CARP. ANY QUESTIONS REGARDING AUTHORIZED ACTIVITIES WITHIN THE WET DETENTION PONDS SHALL BE ADDRESSED TO THE REGULATION MANAGER OF SWFWM'S LOCAL OFFICE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF TEMPORARY SEDIMENT/EROSION CONTROL DEVICES WHEN NO LONGER NEEDED.

SPECIAL NOTES TO CONTRACTORS

- 1. WHERE TREE REMOVAL IS REQUIRED DUE TO CONSTRUCTION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND DISPOSE OF THOSE TREES. THE COST FOR THIS REMOVAL AND DISPOSAL SHALL BE INCLUDED IN THE CONTRACTOR'S OVERALL COSTS. TREE REMOVAL AND PROTECTION SHALL COMPLY WITH APPLICABLE CITY AND COUNTY CODES.
2. UNLESS SPECIFIED OTHERWISE, CONTRACTOR SHALL FURNISH AND INSTALL ALL PROPOSED ITEMS SHOWN WITHIN THE CONSTRUCTION PLANS.
3. CONSTRUCTION EQUIPMENT AND MATERIAL TRANSPORT / STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR. BOTH SHALL BE STAGED OUTSIDE THE CLEAR ZONE, AND NOT OBSTRUCT THE SITE DISTANCE OF ANY INTERSECTIONS OR DRIVEWAYS.
4. THE CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLANS TO APPROPRIATE REGULATORY AGENCIES HAVING JURISDICTION OVER IMPACTED ROADWAYS. CONSTRUCTION SHALL NOT COMMENCE WITHIN ROW UNTIL MOT APPROVALS FOR IMPACTED ROAD(S) ARE RECEIVED. CONTRACTOR SHALL ALSO NOTIFY LOCAL EMERGENCY SERVICES DEPARTMENTS WHENEVER CONSTRUCTION ACTIVITIES WILL IMPEDE NORMAL TRAFFIC FLOW.
5. CONSTRUCTION EQUIPMENT AND MATERIAL TRANSPORT / STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR. UPON REQUEST, THE OWNER WILL PROVIDE ACCESS TO THE CLOSEST OPEN SPACE OWNED AND AVAILABLE FOR THE CONTRACTOR'S USE. HOWEVER, THE SITE MAY NOT BE CONTIGUOUS TO THE PROJECT AREA OR OF SUFFICIENT SIZE TO ACCOMMODATE THE ENTIRE PROJECT INVENTORY OF MATERIALS / EQUIPMENT.
6. CONTRACTOR SHALL COMPILE A PRECONSTRUCTION VIDEO FOR ROUTE THROUGH PARCEL 2. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR/REPLACEMENT OF ANY DAMAGE TO PARCEL 2 FACILITIES CAUSED BY CONSTRUCTION OR CONSTRUCTION TRAFFIC.
7. ALL EQUIPMENT AND MATERIALS (INCLUDING EXCESS FILL) TO BE REMOVED OR DEMOLISHED DURING THE CONSTRUCTION PROCESS, UNLESS NOTED TO BE SALVAGED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
8. A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IS NOT PART OF THE PERMITTING OBTAINED WITH THIS PLAN SET. THEREFORE, THE CONTRACTOR IS ADVISED THAT AN NPDES CONSTRUCTION PERMIT IS REQUIRED FOR THIS PROJECT AND THAT THE CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND ADHERING TO THIS PERMIT. REFER TO SUBSECTION 62-621, F.A.C. FOR ADDITIONAL INFORMATION. THE INFORMATION PROVIDED IN THE CSWMP/SWPP NOTES AND DETAILS SHEETS ARE FOR COMPLIANCE WITH ENVIRONMENTAL RESOURCE PERMITTING UNDER CHAPTER 62-333, F.A.C. AND MAY BE USED AS A REFERENCE FOR COMPLIANCE WITH NPDES PERMITTING BUT ARE NOT NECESSARILY INCLUSIVE OF ALL NPDES REQUIREMENTS.



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NOTES & LEGEND
WREC WESLEY CHAPEL ELECTRICAL SUBSTATION

DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL ENGINEER
Scott D. McKee, P.E., F.L.
7/7/15

Coastal Engineering Associates, Inc.
966 Candlelight Boulevard - Brooksville, Florida 34601
(862) 786-9423 - Fax (862) 786-8550
EB-0000142

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Table with columns: DATE, REV. BY/REV. NO., COUNTY COMMENTS, REVISION. Row 1: 7/23/15, J-W, 1, -

SHEET 1

JOB No.: 15022

SITE DATA

OWNER: WITHLACOOCHIE RIVER ELECTRIC COOPERATIVE, INC.
 PERMITTEE: WITHLACOOCHIE RIVER ELECTRIC
 ADDRESS: 14651 21ST ST
 DADE CITY, FL 33523-2920
 PHONE: (352) 567-5133 ext 6410
 ENGINEER: COASTAL ENGINEERING ASSOC., INC.
 SURVEYOR: SIMMONS & BEALL, INC. SURVEYING & MAPPING
 36739 S.R. 52
 DADE CITY, FL 33526
 (352) 567-0048
 ADDRESS: 966 CANDLELIGHT BLVD.
 BROOKSVILLE, FL 34601
 PHONE: (352) 796-9423

PARCEL ID: 22-26-19-0000-00200-0040
 PARCEL ADDRESS: WESLEY CHAPEL BLVD

EXISTING ZONING/FUTURE LAND USE: AC / Res-3
 NORTH - AC / Res-3
 SOUTH - MPUD / ROR
 EAST - AC / Res-3
 WEST - ROW - AC / Res-3

PROPOSED USE: UNMANNED SUBSTATION (NO OCCUPIED STRUCTURES PROPOSED)

FEMA FLOOD ZONE: BASED UPON REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE (FIRM), MAP NUMBER 12101C0409F EFFECTIVE DATE 9/26/14; THE SUBJECT PARCEL LIES WITHIN ZONE "X" WITH THE EASTERN PROPERTY AREA OUTSIDE OF THE PROPOSED WORK AREA IN ZONE "AE" (ELEV. 54.20').

FOR ADDITIONAL FLOOD INFORMATION SEE TROUT CREEK WATERSHED FLOODPLAIN REPORT DATED APRIL 2010.

PROPERTY AREA: ± 3.58 ACRES
 TOTAL PROJECT AREA = 133,609.10 SF / 3.07 AC (0.05 AC WITHIN ROW)
 PROPOSED AREAS:
 ASPHALT IN ROW = 1,803.27 SF (0.04 AC)
 GRAVEL IN ROW = 9,864.41 SF (0.23 AC)
 GRAVEL AREA = 49,165.34 SF (1.13 AC / 31.52% OF PROPERTY)
 POND = 24,008.25 SF (0.55 AC / 15.40% OF PROPERTY)
 PERVIOUS AREAS = 71,470.12 SF (1.64 AC / 45.82% OF PROPERTY)
 WETLAND AND BUFFER = 11,325.60 SF (0.26 AC / 7.26% OF PROPERTY)

WETLANDS TO THE EAST SEPARATED BY 15' MIN. (25' AVERAGE) BUFFER AND IS NOT INCLUDED IN PROJECT AREA CALCULATIONS ABOVE. BUFFER PROVIDED = 10,410.74 SF OVER 301 LF = 34.58 LF AVERAGE PROVIDED

UTILITIES
 A: WATER AND SEWER: NONE PROPOSED
 B: ELECTRIC: WREC
 C: TELEPHONE: NONE PROPOSED

FIRE PROTECTION: PASCO COUNTY

SOIL CLASSIFICATION:
 #5 MYAKKA (B/D)

EXISTING VEGETATION:
 GOOD CONDITION COVER WOODED AREA

PROPOSED TREE REMOVAL:
 SITE IS EXEMPT FROM TREE MITIGATION. SEE LANDSCAPING PLAN FOR TREE AND SHRUB PLANTINGS

BUILDING SETBACKS: PROJECT SITE IS ZONED UNDEVELOPED AC

NORTH PROPERTY LINE: 25'
 EAST PROPERTY LINE: 50'
 WEST PROPERTY LINE: 50'
 SOUTH PROPERTY LINES: 25'

GENERAL PERMITTING REQUIREMENTS:
 ENVIRONMENTAL RESOURCE - STANDARD GENERAL
 NPDES - CONSTRUCTION SITE > 1 AC
 PASCO COUNTY - BUILDING PERMIT
 PASCO COUNTY - RIGHT-OF-WAY USE PERMIT

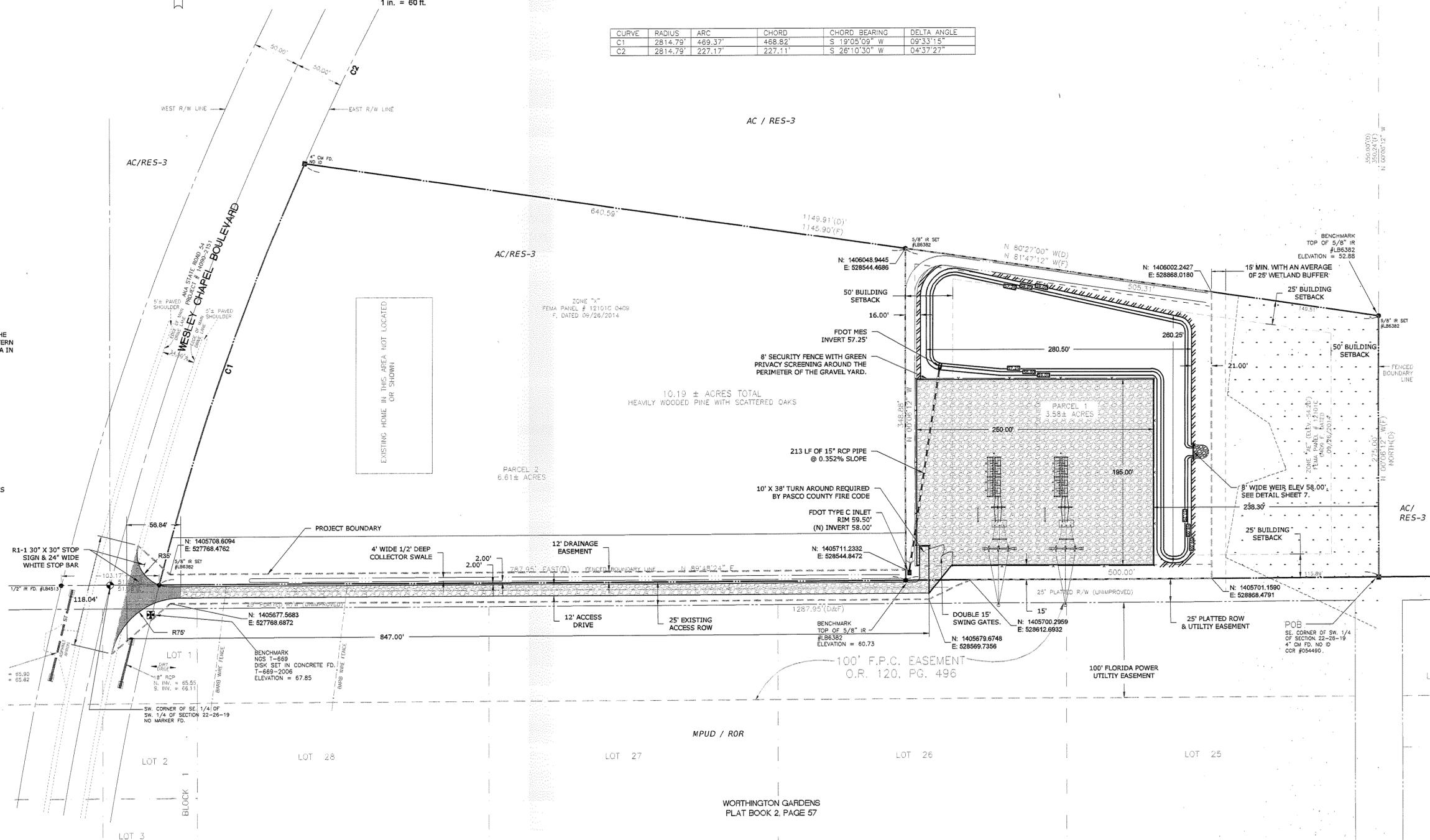
NOTES:
 1. LIGHTING TO BE CONTAINED ONSITE TO PREVENT ANY LIGHT SPILLAGE
 2. THESE PLANS ARE INTENDED ONLY FOR PERMITTING AND CONSTRUCTION OF CIVIL SITE WORKS AND ASSOCIATED DRAINAGE FEATURES. DESIGN AND PERMITTING OF ELECTRICAL SUBSTATION COMPONENTS INCLUDING TRANSFORMERS, GENERATORS, POWER POLES, AND POWER LINES SHALL BE BY OTHERS.
 3. ADDITIONAL SEPARATE PERMITTING WILL BE REQUIRED BY OTHERS FOR SITE LIGHTING, SIGNAGE, IRRIGATION, ETC.
 4. SUBSTATION EQUIPMENT IS SHOWN FOR INFORMATION PURPOSES ONLY ACCORDING TO LAYOUT PROVIDED BY WREC AND DOES NOT REPRESENT DESIGN OR APPROVAL BY THE ENGINEER.
 5. THE OWNER/DEVELOPER ACKNOWLEDGES THAT THIS APPROVAL DOES NOT INCLUDE WORK IN THE COUNTY RIGHT-OF-WAY WORK SHALL BE FUNCTION OF AN APPROVED PASCO COUNTY RIGHT-OF-WAY USE PERMIT.

GRAPHIC SCALE



(IN FEET)
 1 in. = 60 ft.

| CURVE | RADIUS | ARC | CHORD | CHORD BEARING | DELTA ANGLE |
|-------|----------|---------|---------|---------------|-------------|
| C1 | 2814.79' | 469.37' | 468.82' | S 19°05'09" W | 09°33'15" |
| C2 | 2814.79' | 227.17' | 227.11' | S 26°10'30" W | 04°37'27" |



PASCO COUNTY DEVELOPMENT REVIEW - STANDARD SITE PLAN NOTES

- AS APPLICABLE, THE OWNER/DEVELOPER WILL PROVIDE COPIES OF THE REQUIRED PERMITS FROM THE RESPECTIVE GOVERNING AGENCIES, PRIOR TO ISSUANCE OF THE SDP.
- ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE PASCO COUNTY STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES SPECIFICATIONS, LATEST EDITION.
- INSTALLATION OF FUEL STORAGE TANKS REQUIRES REVIEW AND APPROVAL BY THE FIRE MARSHAL AND THE ISSUANCE OF A SEPARATE BUILDING PERMIT. APPROVAL OF THE SITE PLAN DOES NOT CONSTITUTE APPROVAL OF THE LOCATION OF THE FUEL TANKS.
- ALL PROPOSED SIGNS MUST BE APPLIED FOR, APPROVED, AND PERMITTED ON AN INDIVIDUAL BASIS APART FROM ANY ULTIMATELY-APPROVED SITE PLAN. APPROVAL OF THIS SITE PLAN DOES NOT CONSTITUTE APPROVAL OF ANY SIGNAGE.
- ALL CLEAR-SIGHT AREAS SHALL BE KEPT FREE OF ANY SIGNAGE PLANTINGS, TREES, ETC. IN EXCESS OF THREE-AND-A-HALF (3 1/2) FEET IN HEIGHT.
- NO IRRIGATION SYSTEM OR LANDSCAPING SHALL BE INSTALLED IN ANY COUNTY OR STATE RIGHT-OF-WAY WITHOUT ISSUANCE OF APPROPRIATE RIGHT-OF-WAY USE PERMIT.
- THE OWNER/DEVELOPER ACKNOWLEDGES THAT THE SITE AND ITS SUBSEQUENT BUILDING PERMITS SHALL COMPLY WITH ALL REZONING/MPUD/PUD CONDITIONS.
- ALL STRUCTURES, INCLUDING BUFFER WALLS, TRAINING WALLS, SIGNAGE, ETC. REQUIRE BUILDING PERMITS.
- IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF THE PRESENCE STATE AND FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES IS DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE.
- IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORICAL POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC BUILDING FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORICAL RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND PASCO COUNTY SHALL BE NOTIFIED WITH TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.
- CONSTRUCTION WITHIN PASCO COUNTY RIGHT OF WAY SHALL CONFORM TO PASCO COUNTY SPECIFICATIONS.

SITE PLAN

**WREC WESLEY CHAPEL
 ELECTRICAL SUBSTATION**

DRAWING INVALID UNLESS SIGNED
 DATED & SEALED BY REGISTERED
 PROFESSIONAL
Scott D. McKee
 7/8/15
 SCOTT D. MCKEE P.E.
 FL. REG. NO. 65654

Engineering
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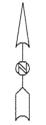
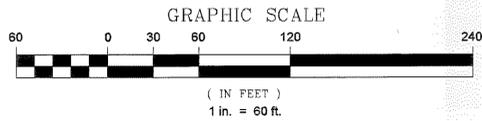
| DATE | REV. BY | REV. NO. | REVISION |
|--------|---------|----------|-----------------|
| 7/3/15 | J.W. | 1 | COUNTY COMMENTS |

SHEET
3

JOB No.: 15022

LEGEND

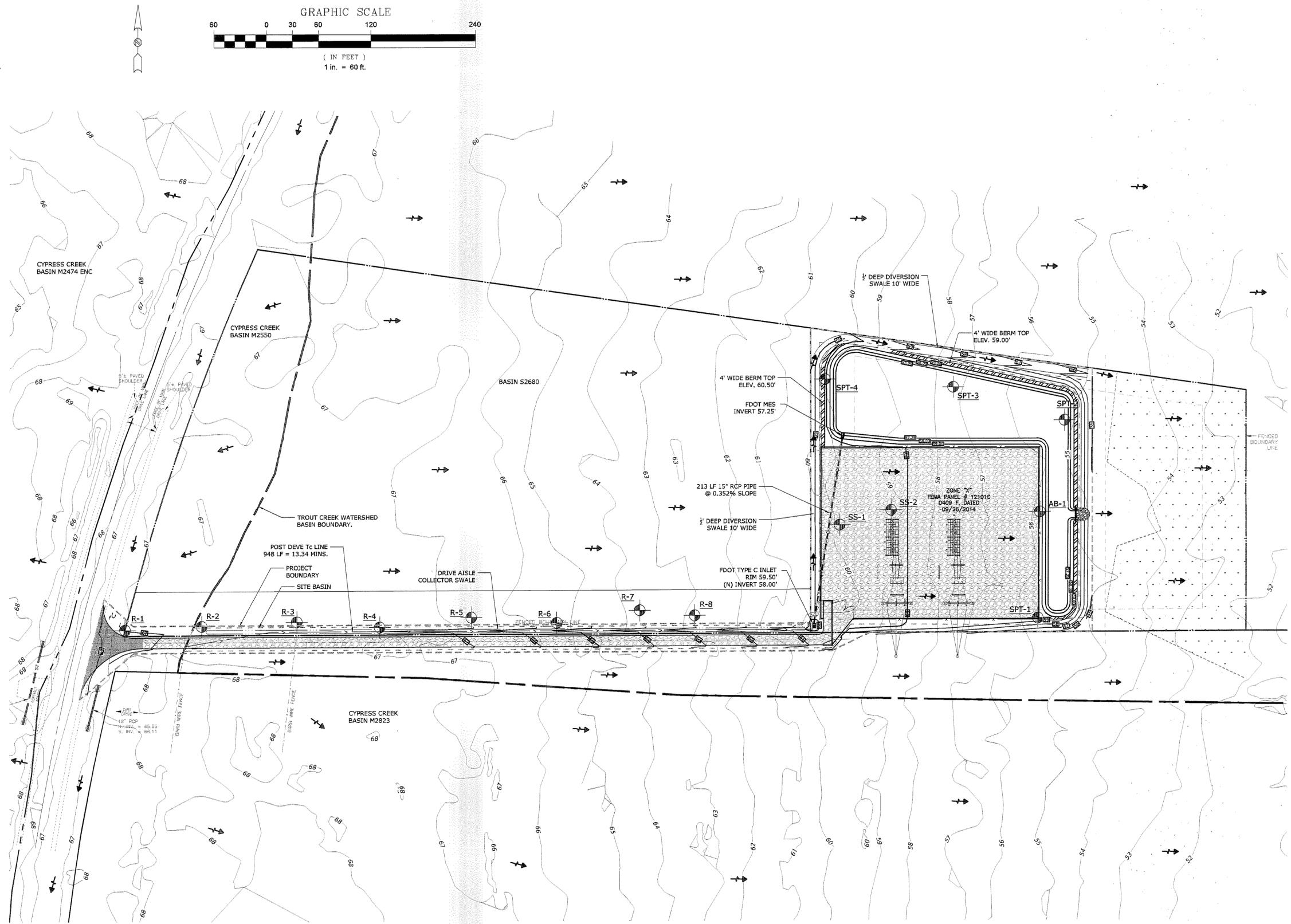
-  = TROUT CREEK WATERSHED BASIN BOUNDARY (PER AYRES ASSOC. INC., APRIL 2010)
-  = PROJECT LIMITS 146,714.68 SF (3.37 AC.) INCLUDING 0.05 AC WITHIN THE ROW
-  = PROJECT BASIN 118,583.13 SF (2.72 AC.)
-  = PROPOSED SURFACE WATER FLOW DIRECTION
-  = PROPOSED ASPHALT PAVEMENT
-  = GRAVEL
-  = BERM
-  = EXISTING CONTOUR
-  = PROPOSED CONTOUR



ERP DRAINAGE INFORMATION

PRE DEVELOPMENT DRAINAGE INFORMATION
 TOTAL PROJECT AREA = 3.07 AC±
 SITE IS PART OF TROUT CREEK WATERSHED BASIN S2680 = 197.30 AC±
 PROJECT BASIN = 2.50 AC±
 TOTAL PROJECT DRAINAGE AREA TO POND
 POND = ±0.721 AC AT TOP OF BANK
 = ±0.550 AC AT TOE OF SLOPE
 DESIGN CN PRE DEVELOPMENT = 79
 DESIGN CN POST DEVELOPMENT BASIN = 87
 SITE IS OPEN BASIN WITH 1 OUTFALL WEIR TO BASIN S2680.

- DRAINAGE NOTES:**
- 1) ACCORDING TO PASCO COUNTY SOIL SURVEY, SITE CONSISTS OF #5 MYAKKA (B/D) SOILS.
 - 2) GROUND COVER CONSISTS OF WOODS (GOOD) CN 79.
 - 3) CONTOURS ON THIS SHEET ONLY FROM LIDAR DATA PULLED FROM SWFWMD GIS FOR PASCO COUNTY. CONTOURS REPRESENTATIVE OF THE SAME USED FOR TROUT CREEK AND CYPRESS CREEK WATERSHED FLOODPLAIN STUDIES.



DRAINAGE PLAN

**WFREC WESLEY CHAPEL
ELECTRICAL SUBSTATION**

DRAWING INVALID UNLESS SIGNED,
DATED & SEALED BY REGISTERED
PROFESSIONAL

 7/5/15
 SCOTT D. MCKEE P.E.
 FL. REG. NO. 65654

Engineering
 Surveying
 Environmental
 Transportation
 Construction Management

Coastal
 engineering associates, inc.
 966 Candlelight Boulevard - Brooksville - Florida 34601
 (352) 796-9423 - Fax (352) 798-8359
 EB-0000142

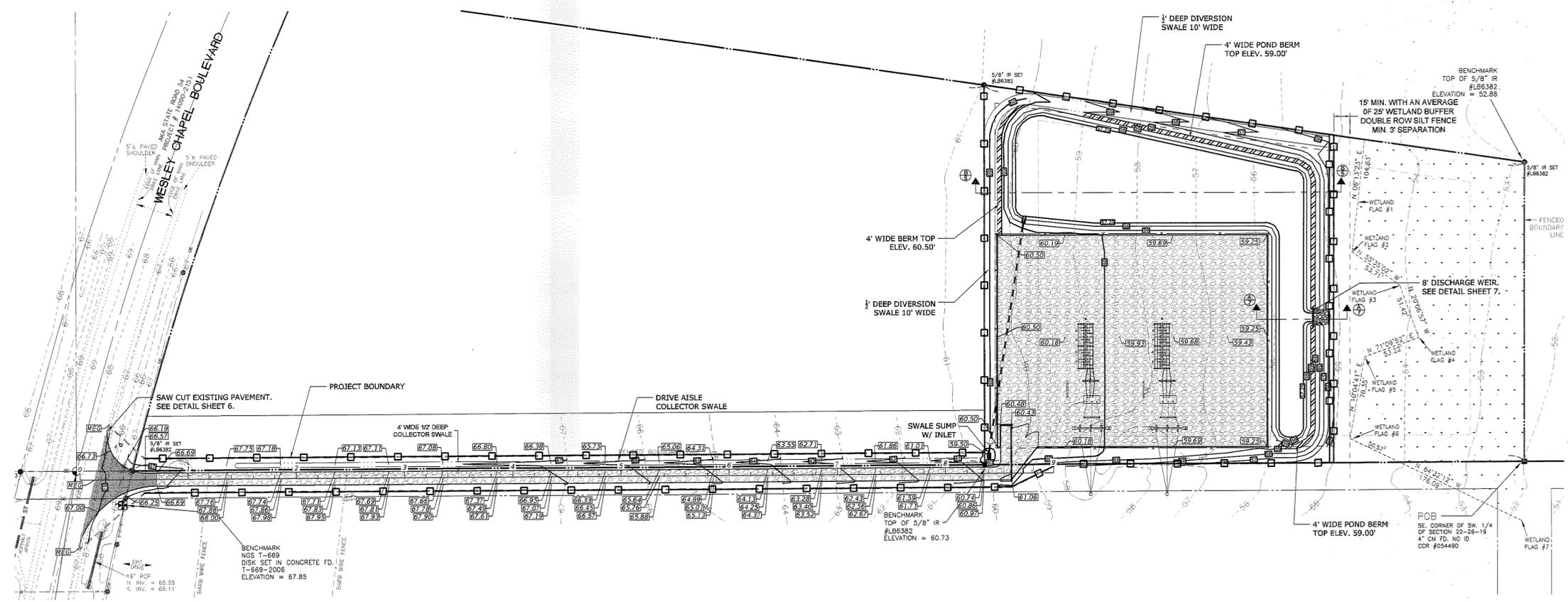
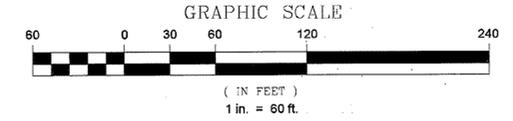
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 INCORPORATED IDEAS AND DESIGNS,
 AS AN INSTRUMENT OF THE
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 ASSOCIATES, INC. AND IS NOT TO BE
 USED, IN WHOLE OR IN PART FOR
 ANY OTHER PROJECT WITHOUT THE
 WRITTEN AUTHORIZATION OF COASTAL
 ENGINEERING ASSOCIATES, INC.

| DATE | REV. BY | REV. NO. | REVISION |
|--------|---------|----------|-----------------|
| 7/5/15 | JLW | 1 | COUNTY COMMENTS |
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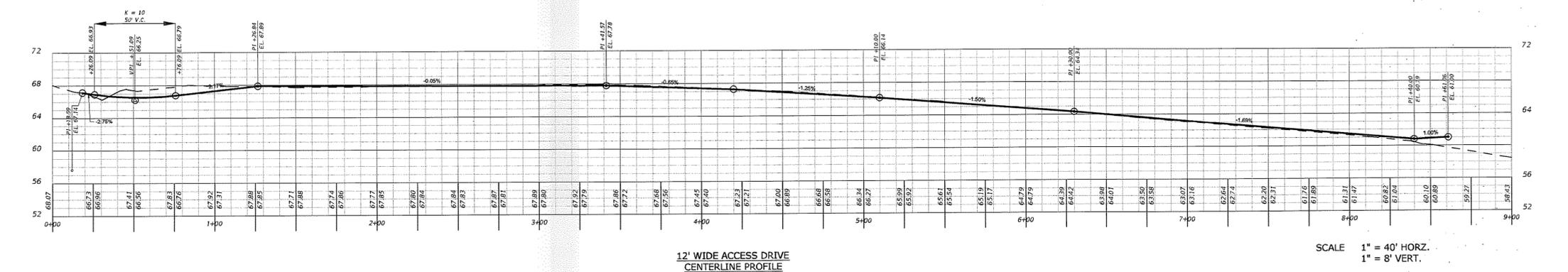
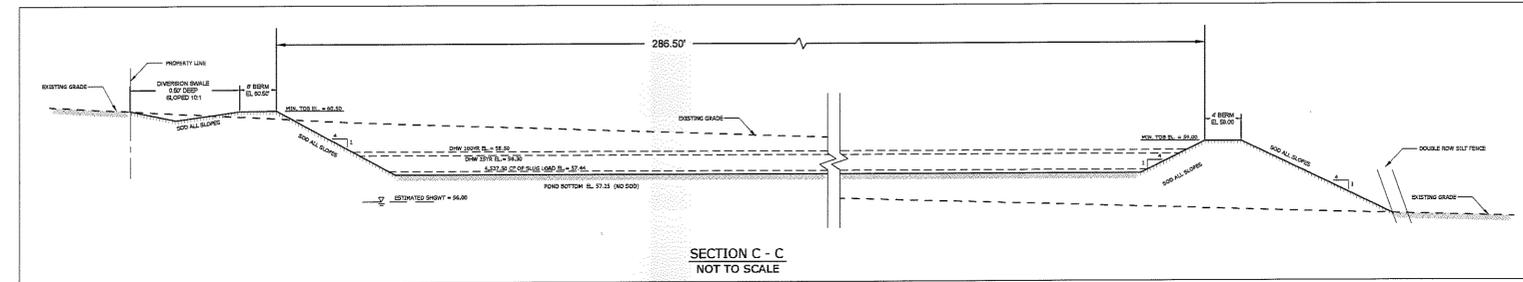
SHEET
4
 JOB No.: 15022
 WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

LEGEND

- = TROUT CREEK WATERSHED BASIN BOUNDARY (PER AYRES ASSOC. INC., APRIL 2010)
- = PROJECT LIMITS 133,609.10 SF (3.07 AC.) INCLUDING 0.45 AC WITHIN THE ROW
- = SITE BASIN 108,800.66 SF (2.50 AC.)
- = SILT FENCE
- = WETLAND LINE
- = PROPOSED ASPHALT PAVEMENT
- = GRAVEL
- = BERM
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = HP = INTERMEDIATE HIGH POINT
- = PROPOSED SPOT GRADE



- NOTES**
- 1) SILT FENCE SHALL BE INSTALLED AS SHOWN ON SHEET 2.
 - 2) SEE DETAILS SHEET 6 FOR PAVEMENT TYPICAL SECTIONS AND SPECIFICATIONS.
 - 3) GRASS AREAS SHALL SLOPE PER DRAINAGE PLAN AND IN THE DIRECTION OF THE DRAINAGE FLOW ARROWS SHOWN ON SHEET 4.
 - 4) SEE SHEETS 4 AND 6 FOR DRAINAGE STRUCTURE DATA.
 - 5) SEE SHEET 3 FOR DIMENSIONS AND RADII.
 - 6) ONSITE SOIL MATERIALS MEETING THE PROJECT SPECIFICATIONS FOR SUITABLE FILL SHALL BE UTILIZED FOR BACKFILL WHERE APPROPRIATE. IMPORT FILL FROM OFF SITE MAY ALSO BE REQUIRED. MATERIALS UNSUITABLE FOR BACKFILL SHALL BE REMOVED FROM SITE AND PROPERLY DISPOSED OF.
 - 7) FINISH GRADES SHOWN IN UNPAVED AREAS ARE AFTER COMPACTION AND STABILIZATION.
 - 8) GRADING/BACKFILL FOR UNPAVED AREAS SHALL BE COMPLETED IN MAXIMUM 12" LIFTS AND COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS. MINIMUM COMPACTION FOR ANY FILLED AREA SHALL BE 90% OF MAX DENSITY PER ASTM D-1557. DENSITY SAMPLING AND TESTING SHALL BE COMPLETED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
 - 9) SITE STABILIZATION SHALL BE PROVIDED FOR ANY/ALL DISTURBED AREAS; SLOPES TO BE SODDED, DRA BOTTOM TO BE SEED/MULCH UNLESS SPECIFIED OTHERWISE SEE SHEET 7. SOD ROADWAY SHOULDERS.
 - 10) ALL DISTURBED AREAS WITHIN RIGHT-OF-WAY SHALL BE RESTORED WITH BAHIA SOD PER FDOT SPEC 981 UNLESS SHOWN OTHERWISE.



GRADING & PAVING PLAN
WREC WESLEY CHAPEL
ELECTRICAL SUBSTATION

DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL
Scott D. McKee
 7/8/15
 SCOTT D. MCKEE, P.E.
 FL. REG. NO. 65664

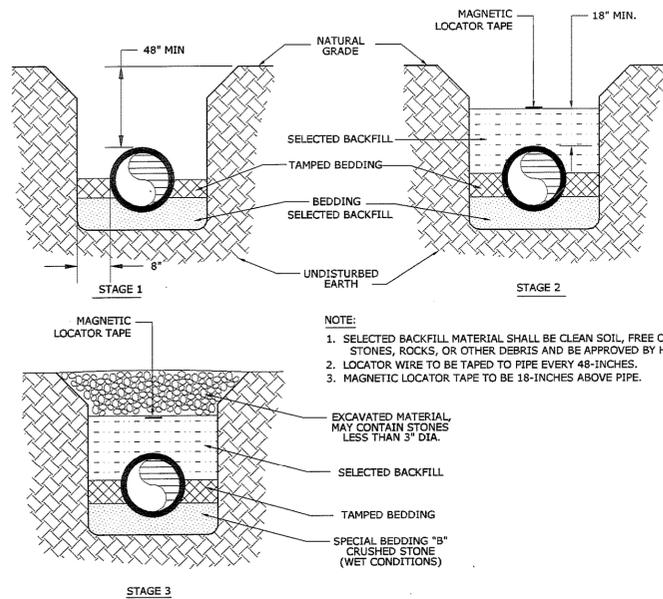
Engineering
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 966 Candlelight Boulevard - Brooksville, Florida 34601
 (352) 796-9423 - Fax (352) 796-8369
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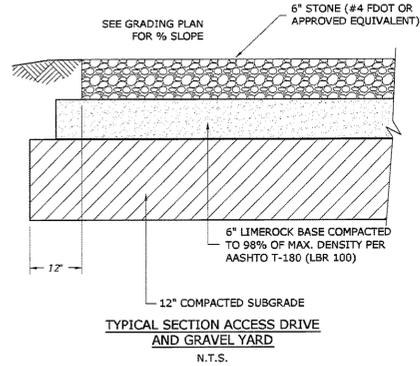
SHEET
5

JOB No.: 15022

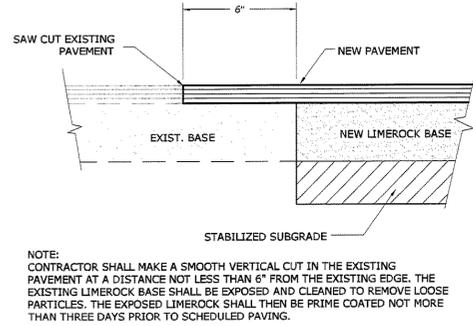


- NOTE:
1. SELECTED BACKFILL MATERIAL SHALL BE CLEAN SOIL, FREE OF LUMPS, STONES, ROCKS, OR OTHER DEBRIS AND BE APPROVED BY HCDJ
 2. LOCATOR WIRE TO BE TAPED TO PIPE EVERY 48-INCHES.
 3. MAGNETIC LOCATOR TAPE TO BE 18-INCHES ABOVE PIPE.

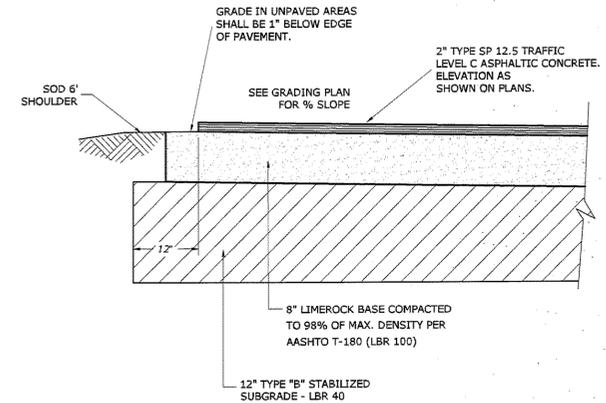
PIPE BEDDING DETAIL
HERNANDO COUNTY STANDARD DETAIL: 16
NOT TO SCALE



TYPICAL SECTION ACCESS DRIVE
AND GRAVEL YARD
N.T.S.

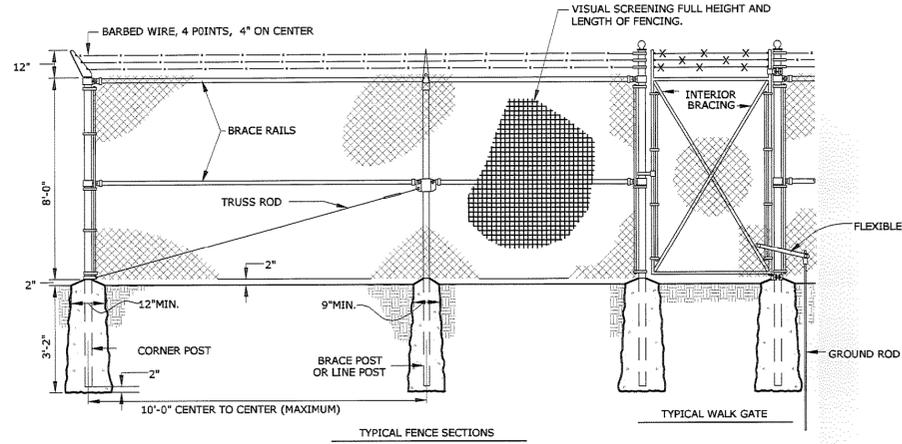
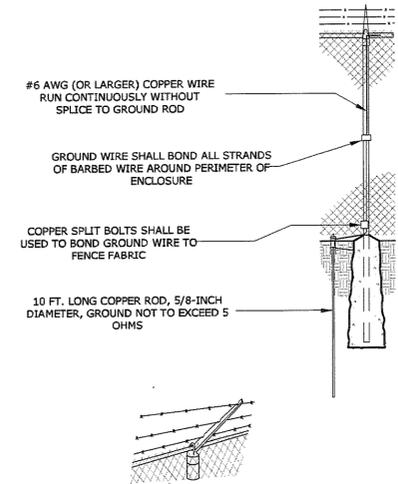


PAVEMENT ABUTMENT DETAIL
N.T.S.

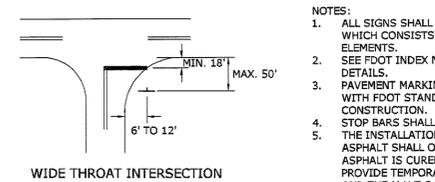
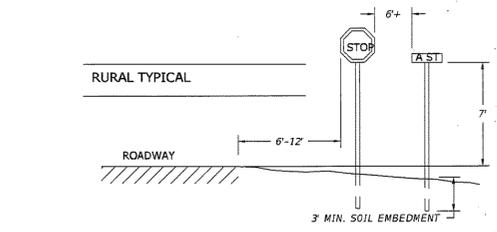


ALTERNATIVE
13.5\"/>

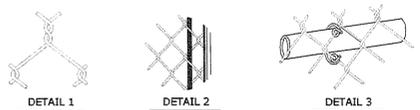
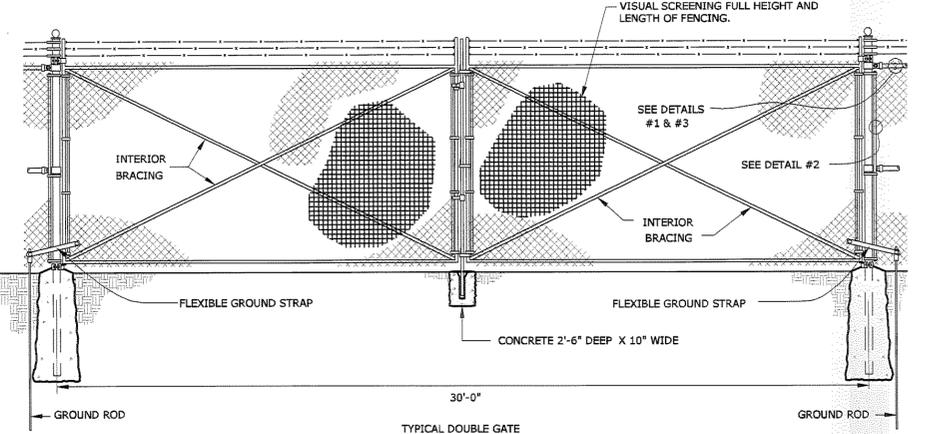
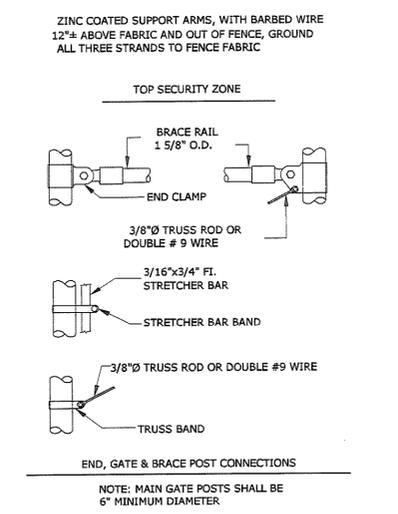
TYPICAL PAVEMENT SECTION
ACCESS DRIVEWAYS
N.T.S.



- FENCING NOTES:
1. END, CORNER, AND PULL POSTS TO BE TUBULAR, 3-INCH ASA SCH. 40 LINE POSTS TO BE TUBULAR, 2-1/2-INCH ASA SCH. 40.
 2. LINE AND CORNER POSTS MAY BE OF A SECTION OF EQUIVALENT STRUCTURAL STRENGTH.
 3. CHAIN LINK FABRIC SHALL BE 9 GAUGE GALVANIZED WIRE, WITH 2-INCH MESH FABRIC TO BE TWISTED AND BARBED BOTH TOP AND BOTTOM.
 4. FABRIC TO BE TIED TO SUPPORT RAILS, 24\"/>



- NOTES:
1. ALL SIGNS SHALL BE TYPE III-A HIGH PERFORMANCE SHEETING, WHICH CONSISTS OF ENCAPSULATED SPHERICAL LENS ELEMENTS.
 2. SEE FDOT INDEX NO'S. 17344 AND 17346 FOR ADDITIONAL DETAILS.
 3. PAVEMENT MARKING APPLICATION AND MATERIALS TO COMPLY WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 4. STOP BARS SHALL BE THERMOPLASTIC.
 5. THE INSTALLATION OF THERMOPLASTIC MARKINGS FOR NEW ASPHALT SHALL OCCUR AT LEAST 30 DAYS AFTER THE NEW ASPHALT IS CURED. THE CONTRACTOR/DEVELOPER SHALL PROVIDE TEMPORARY PAVEMENT MARKINGS PER THE PLANS AND THE MUT.C.D. UNTIL THE PERMANENT MARKINGS ARE INSTALLED.



DETAILS (1)
WREC WESLEY CHAPEL
ELECTRICAL SUBSTATION

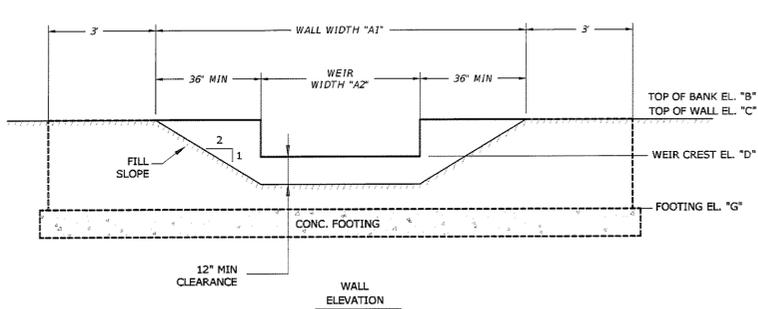
DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL ENGINEER
Scott D. McKeef
7/8/15
SCOTT D. MCKEE, P.E., FL REG. NO. 65654

Engineering Planning Environmental Transportation Construction Management
Coastal
966 Candlelight Boulevard - Boca Raton, Florida 33461
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EB-0000142

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| DATE | REV. BY | REV. NO. | REVISION |
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| 7/3/15 | JLW | 1 | COUNTY COMMENTS |

SHEET
6
JOB No: 15022
WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

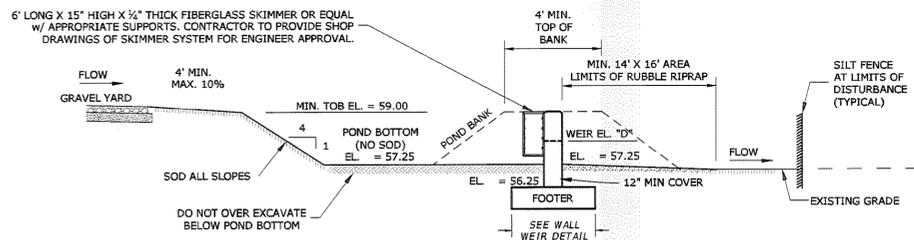
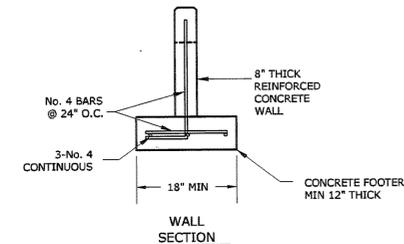


POND - 1 DATA

| DESCRIPTION | |
|--------------------------------|-----------|
| MIN. BERM/T.O.B. ELEV. | 59.00 |
| AREA AT TOP OF BANK (sq ft) | 31,427.65 |
| BOTTOM ELEVATION | 57.25 |
| AREA AT BOTTOM (sq ft) | 24,008.25 |
| SIDE SLOPE | 4:1 |
| SEASONAL HIGH WATER ELEV. | 56.00 |
| 25 YR DESIGN HIGH WATER ELEV. | 58.30 |
| 100 YR DESIGN HIGH WATER ELEV. | 58.50 |
| TREATMENT VOLUME (CU.FT.) | 4,537.50 |
| TREATMENT VOLUME ELEV. | 57.44 |

EMERGENCY WALL WEIR CONTROL STRUCTURE DATA

| DESCRIPTION | |
|---------------------|---------|
| WALL WIDTH "A1" | 14' MIN |
| WEIR WIDTH "A2" | 8' |
| TOP OF BANK EL. "B" | 59.00 |
| TOP OF WALL EL. "C" | 59.00 |
| WEIR CREST EL. "D" | 57.92 |
| FOOTING EL. "G" | 56.25 |

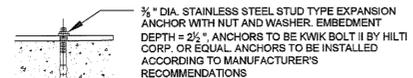


- NOTES:**
- RE-GRADE POND BOTTOM AFTER ALL SITE EROSION IN CONTRIBUTING DRAINAGE AREAS HAS BEEN CONTROLLED AND IMMEDIATELY PRIOR TO BANK SODDING.
 - SKIMMER SHALL HAVE AT LEAST 6" CLEAR SPACE BETWEEN BOTTOM OF POND AND SKIMMER AND OFFSET 6" FROM WEIR CREST ELEV.

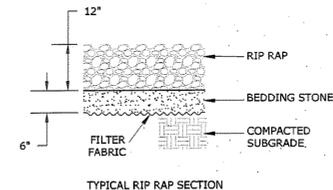
SECTION A-A
NOT TO SCALE

14' X 16' X 1' SHALL BE STABILIZED WITH RUBBLE RIPRAP.

WEIR DETAIL
NOT TO SCALE



SKIMMER FASTENERS
NOT TO SCALE



RIP RAP NOTES:

- THESE DETAILS SHALL BE UTILIZED WHERE RIP RAP IS SPECIFIED ON THE PLANS.
- RIP RAP AND BEDDING STONE SHALL MEET FDOT STANDARDS AND THE FOLLOWING EXCEPTIONS:
 - MAX RUBBLE SIZE - 15LBS WITH MAJORITY 4LBS.
 - FINES PORTION MAY BE UP TO 10%.
 - BEDDING STONE SHALL BE COARSE AGGREGATE SIZES 3 THROUGH 1.
- GEO MAT FABRIC SHALL BE WOVEN AMOCO 1198 OR APPROVED EQUAL. TYPICAL ROLL WIDTH IS 12-FT.
- INSTALLATION & USE OF PINS FOR GEO MAT BE PER MANUFACTURER INSTRUCTIONS.

ROAD WORK AHEAD

Table I Device Spacing

| Speed (mph) | Max. Distance Between Devices (ft.) | | | |
|-------------|-------------------------------------|----|--|-----|
| | Cones or Tubular Markers | | Type I or Type II Barricades or Vertical Panels or Drums | |
| 25 | 25 | 50 | 25 | 50 |
| 30 to 45 | 25 | 50 | 20 | 50 |
| 50 to 70 | 25 | 50 | 50 | 100 |

Table II Taper Length - Shoulder

| Speed (mph) | W/L (ft) | | | Notes |
|-------------|-----------|------------|------------|---------|
| | 8' Shldr. | 10' Shldr. | 12' Shldr. | |
| 25 | 28 | 35 | 42 | L=WS/50 |
| 30 | 40 | 50 | 60 | |
| 35 | 55 | 68 | 82 | L=WS |
| 40 | 72 | 90 | 107 | |
| 45 | 120 | 150 | 180 | L=WS |
| 50 | 133 | 167 | 200 | |
| 55 | 147 | 183 | 220 | L=WS |
| 60 | 160 | 200 | 240 | |
| 65 | 173 | 217 | 260 | L=WS |
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| 50 to 70 | 25 | 50 | 50 | 100 |

Table II Taper Length - Shoulder

| Speed (mph) | W/L (ft) | | | Notes |
|-------------|-----------|------------|------------|---------|
| | 8' Shldr. | 10' Shldr. | 12' Shldr. | |
| 25 | 28 | 35 | 42 | L=WS/50 |
| 30 | 40 | 50 | 60 | |
| 35 | 55 | 68 | 82 | L=WS |
| 40 | 72 | 90 | 107 | |
| 45 | 120 | 150 | 180 | L=WS |
| 50 | 133 | 167 | 200 | |
| 55 | 147 | 183 | 220 | L=WS |
| 60 | 160 | 200 | 240 | |
| 65 | 173 | 217 | 260 | L=WS |
| 70 | 187 | 233 | 280 | |

Table I Device Spacing

| Speed (mph) | Max. Distance Between Devices (ft.) | | | |
|-------------|-------------------------------------|----|--|-----|
| | Cones or Tubular Markers | | Type I or Type II Barricades or Vertical Panels or Drums | |
| 25 | 25 | 50 | 25 | 50 |
| 30 to 45 | 25 | 50 | 20 | 50 |
| 50 to 70 | 25 | 50 | 50 | 100 |

Table II Taper Length - Shoulder

| Speed (mph) | W/L (ft) | | | Notes |
|-------------|-----------|------------|------------|---------|
| | 8' Shldr. | 10' Shldr. | 12' Shldr. | |
| 25 | 28 | 35 | 42 | L=WS/50 |
| 30 | 40 | 50 | 60 | |
| 35 | 55 | 68 | 82 | L=WS |
| 40 | 72 | 90 | 107 | |
| 45 | 120 | 150 | 180 | L=WS |
| 50 | 133 | 167 | 200 | |
| 55 | 147 | 183 | 220 | L=WS |
| 60 | 160 | 200 | 240 | |
| 65 | 173 | 217 | 260 | L=WS |
| 70 | 187 | 233 | 280 | |

Table I Device Spacing

| Speed (mph) | Max. Distance Between Devices (ft.) | | | |
|-------------|-------------------------------------|----|--|-----|
| | Cones or Tubular Markers | | Type I or Type II Barricades or Vertical Panels or Drums | |
| 25 | 25 | 50 | 25 | 50 |
| 30 to 45 | 25 | 50 | 20 | 50 |
| 50 to 70 | 25 | 50 | 50 | 100 |

Table II Taper Length - Shoulder

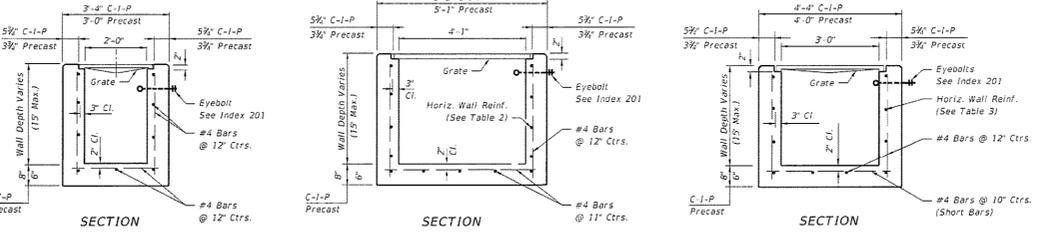
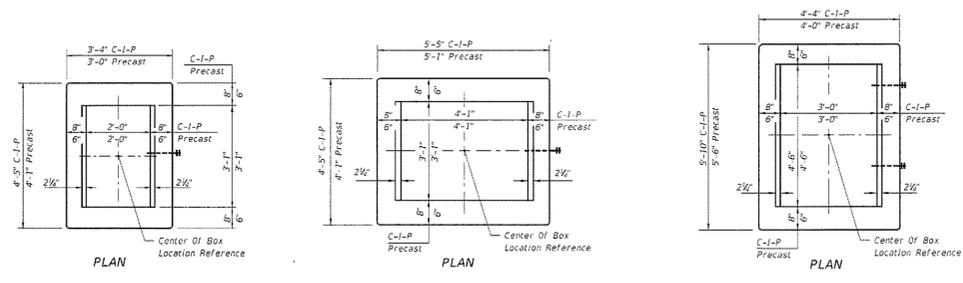
| Speed (mph) | W/L (ft) | | | Notes |
|-------------|-----------|------------|------------|---------|
| | 8' Shldr. | 10' Shldr. | 12' Shldr. | |
| 25 | 28 | 35 | 42 | L=WS/50 |
| 30 | 40 | 50 | 60 | |
| 35 | 55 | 68 | 82 | L=WS |
| 40 | 72 | 90 | 107 | |
| 45 | 120 | 150 | 180 | L=WS |
| 50 | 133 | 167 | 200 | |
| 55 | 147 | 183 | 220 | L=WS |
| 60 | 160 | 200 | 240 | |
| 65 | 173 | 217 | 260 | L=WS |
| 70 | 187 | 233 | 280 | |

Table I Device Spacing

| Speed (mph) | Max. Distance Between Devices (ft.) | | | |
|-------------|-------------------------------------|----|--|-----|
| | Cones or Tubular Markers | | Type I or Type II Barricades or Vertical Panels or Drums | |
| 25 | 25 | 50 | 25 | 50 |
| 30 to 45 | 25 | 50 | 20 | 50 |
| 50 to 70 | 25 | 50 | 50 | 100 |

Table II Taper Length - Shoulder

| Speed (mph) | W/L (ft) | | | Notes |
|-------------|-----------|------------|------------|---------|
| | 8' Shldr. | 10' Shldr. | 12' Shldr. | |
| 25 | 28 | 35 | 42 | L=WS/50 |
| 30 | 40 | 50 | 60 | |
| 35 | 55 | 68 | 82 | L=WS |
| 40 | 72 | 90 | 107 | |
| 45 | 120 | 150 | 180 | L=WS |
| 50 | 133 | 167 | 200 | |
| 55 | 147 | 183 | 220 | L=WS |
| 60 | 160 | 200 | 240 | |
| 65 | 173 | 217 | 260 | L=WS |
| 70 | 187 | 233 | | |



HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

| WALL DEPTH | SCHEDULE | AREA (in. ² /ft.) | MAX. SPACING BARS | WWF |
|------------|----------|------------------------------|-------------------|-----|
| 0'-15" | A12 | 0.20 | 12" | #4 |

TYPE C

Recommended Maximum Pipe Size:
 2'-0" Wall - 18" Pipe
 3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)

| WALL DEPTH | SCHEDULE | AREA (in. ² /ft.) | MAX. SPACING BARS | WWF |
|------------|----------|------------------------------|-------------------|-----|
| 0'-6" | A12 | 0.20 | 12" | #4 |
| 6'-10" | A6 | 0.20 | 6" | #4 |
| 10'-13" | A4 | 0.20 | 4" | #4 |
| 10'-15" | B5.5 | 0.24 | 5 1/2" | #4 |

TYPE D

Recommended Maximum Pipe Size:
 3'-1" Wall - 24" Pipe
 4'-1" Wall - 36" Pipe

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 3)

| WALL DEPTH | SCHEDULE | AREA (in. ² /ft.) | MAX. SPACING BARS | WWF |
|------------|----------|------------------------------|-------------------|-----|
| 0'-5" | A12 | 0.20 | 12" | #4 |
| 0'-7 1/2" | A6 | 0.20 | 6" | #4 |
| 7.5'-10' | B5.5 | 0.24 | 5 1/2" | #4 |
| 10'-15" | C6.5 | 0.37 | 6 1/2" | #4 |

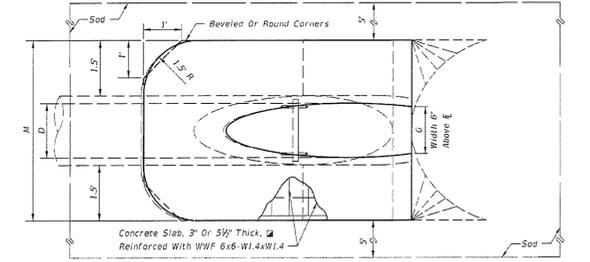
TYPE E

Recommended Maximum Pipe Size:
 3'-0" Wall - 24" Pipe
 4'-0" Wall - 36" Pipe

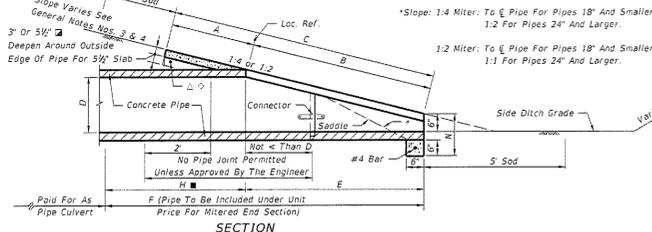
| | | | |
|------------------------|------------------------------------|---------------|------------------|
| LAST REVISION 07/01/05 | DESCRIPTION: 2015 DESIGN STANDARDS | INDEX NO. 232 | SHEET NO. 1 of 7 |
|------------------------|------------------------------------|---------------|------------------|

| D | X | A | B | C | E | F | G | H | M | | | | N | | | | 5% CONCRETE SLAB (CY) | | | | SODDING (SY) | | | | | | | | | | | |
|------|---------|------|-------|-------|-------|----|------|-----|--------|-------|--------|-------|--------|------|-------|------|-----------------------|------|--------|------|--------------|------|-------|------|--------|------|--------|------|--------|------|-------|--|
| | | | | | | | | | Single | | Double | | Triple | | Quad. | | Single | | Double | | Triple | | Quad. | | Single | | Double | | Triple | | Quad. | |
| | | | | | | | | | Pipe | Slab | Pipe | Slab | Pipe | Slab | Pipe | Slab | Pipe | Slab | Pipe | Slab | Pipe | Slab | Pipe | Slab | Pipe | Slab | Pipe | Slab | Pipe | Slab | | |
| 15' | 2'-2" | 1.92 | 2.18 | 4.10 | 2.08 | 5 | 1.22 | 2.9 | 4.65 | 7.21 | 9.79 | 12.37 | 14.95 | 1.19 | 0.38 | 0.58 | 0.77 | 0.96 | 21 | 24 | 27 | 30 | | | | | | | | | | |
| 16' | 2'-10" | 1.97 | 2.24 | 4.21 | 2.58 | 6 | 1.41 | 3.4 | 4.92 | 7.75 | 10.58 | 13.42 | 16.27 | 1.21 | 0.44 | 0.65 | 0.87 | 1.09 | 22 | 25 | 28 | 31 | | | | | | | | | | |
| 24' | 3'-5" | 2.06 | 3.85 | 5.91 | 3.56 | 7 | 1.75 | 3.4 | 5.50 | 8.92 | 12.33 | 15.75 | 19.17 | 1.25 | 0.54 | 0.83 | 1.12 | 1.42 | 24 | 28 | 32 | 35 | | | | | | | | | | |
| 30' | 4'-5" | 2.15 | 4.55 | 7.10 | 4.58 | 8 | 2.00 | 3.4 | 6.08 | 10.33 | 14.58 | 18.83 | 23.09 | 1.29 | 0.66 | 1.00 | 1.30 | 1.61 | 26 | 31 | 35 | 40 | | | | | | | | | | |
| 36' | 5'-11" | 2.25 | 6.08 | 8.32 | 5.50 | 9 | 2.24 | 3.4 | 6.67 | 11.75 | 16.83 | 21.92 | 27.33 | 1.33 | 0.81 | 1.18 | 1.55 | 1.93 | 28 | 34 | 39 | 45 | | | | | | | | | | |
| 42' | 6'-0" | 2.34 | 7.21 | 9.55 | 6.56 | 10 | 2.45 | 3.4 | 7.25 | 13.25 | 19.25 | 25.25 | 31.25 | 1.38 | 0.97 | 1.38 | 1.85 | 2.33 | 30 | 37 | 43 | 50 | | | | | | | | | | |
| 48' | 6'-6" | 2.43 | 8.33 | 10.78 | 7.56 | 11 | 2.65 | 3.4 | 7.83 | 14.58 | 21.33 | 28.08 | 34.83 | 1.42 | 1.13 | 1.61 | 2.14 | 2.69 | 32 | 39 | 47 | 54 | | | | | | | | | | |
| 54' | 7'-0" | 2.52 | 9.44 | 11.99 | 8.56 | 12 | 2.83 | 3.4 | 8.42 | 16.08 | 23.75 | 31.42 | 39.42 | 1.46 | 1.31 | 1.84 | 2.44 | 3.08 | 34 | 42 | 51 | 59 | | | | | | | | | | |
| 60' | 8'-0" | 2.62 | 10.56 | 13.18 | 9.56 | 14 | 3.00 | 4.4 | 9.00 | 17.50 | 26.00 | 34.50 | 43.00 | 1.51 | 1.51 | 2.09 | 2.74 | 3.48 | 36 | 45 | 55 | 64 | | | | | | | | | | |
| 66' | 9'-2" | 2.71 | 11.68 | 14.39 | 10.56 | 15 | 3.18 | 4.4 | 9.58 | 18.75 | 27.92 | 37.08 | 46.14 | 1.54 | 1.68 | 2.25 | 2.94 | 3.74 | 38 | 48 | 58 | 68 | | | | | | | | | | |
| 72' | 10'-0" | 2.80 | 12.80 | 15.60 | 11.56 | 16 | 3.30 | 4.4 | 10.16 | 20.16 | 30.16 | 40.16 | 50.16 | 1.58 | 1.89 | 2.54 | 3.28 | 4.12 | 40 | 51 | 62 | 73 | | | | | | | | | | |
| 78' | 10'-10" | 2.89 | 13.92 | 16.80 | 12.56 | 17 | 3.45 | 4.4 | 10.75 | 21.60 | 32.16 | 43.16 | 54.16 | 1.62 | 2.07 | 2.81 | 3.61 | 4.51 | 42 | 53 | 64 | 75 | | | | | | | | | | |
| 84' | 11'-0" | 2.98 | 15.04 | 18.00 | 13.56 | 18 | 3.60 | 4.4 | 11.33 | 23.10 | 33.60 | 45.10 | 57.10 | 1.66 | 2.22 | 3.03 | 3.88 | 4.83 | 44 | 55 | 66 | 77 | | | | | | | | | | |
| 90' | 11'-10" | 3.07 | 16.16 | 19.20 | 14.56 | 19 | 3.75 | 4.4 | 11.92 | 24.60 | 35.16 | 47.16 | 59.16 | 1.70 | 2.37 | 3.25 | 4.15 | 5.10 | 46 | 57 | 68 | 79 | | | | | | | | | | |
| 96' | 12'-0" | 3.16 | 17.28 | 20.40 | 15.56 | 20 | 3.90 | 4.4 | 12.50 | 26.10 | 36.60 | 49.10 | 61.10 | 1.74 | 2.52 | 3.47 | 4.42 | 5.42 | 48 | 59 | 70 | 81 | | | | | | | | | | |
| 102' | 12'-10" | 3.25 | 18.40 | 21.60 | 16.56 | 21 | 4.05 | 4.4 | 13.08 | 27.60 | 38.16 | 51.16 | 63.16 | 1.78 | 2.67 | 3.68 | 4.68 | 5.73 | 50 | 61 | 72 | 83 | | | | | | | | | | |

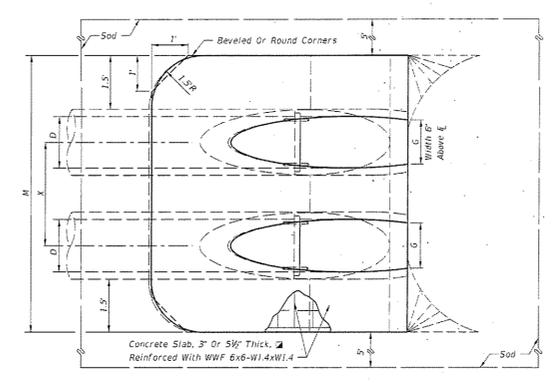
See General Note No. 5.
 See Sheet 5 For 3" Slab Quantities
 Values shown for estimating pipe quantities and are for information only.
 Dimensions permitted to allow use of 8' standard pipe lengths.
 Dimensions permitted to allow use of 12' standard pipe lengths.
 Concrete slab shall be deepened to form bridge across crown of pipe. See section below.



TOP-VIEW SINGLE PIPE



SECTION



TOP-VIEW MULTIPLE PIPE

NOTE: See sheet 6 for details and notes.

SINGLE AND MULTIPLE ROUND CONCRETE PIPE

| | | | |
|------------------------|------------------------------------|---------------|------------------|
| LAST REVISION 07/01/02 | DESCRIPTION: 2015 DESIGN STANDARDS | INDEX NO. 272 | SHEET NO. 1 of 6 |
|------------------------|------------------------------------|---------------|------------------|

DETAIL (3)
 WREC WESLEY CHAPEL
 ELECTRICAL SUBSTATION

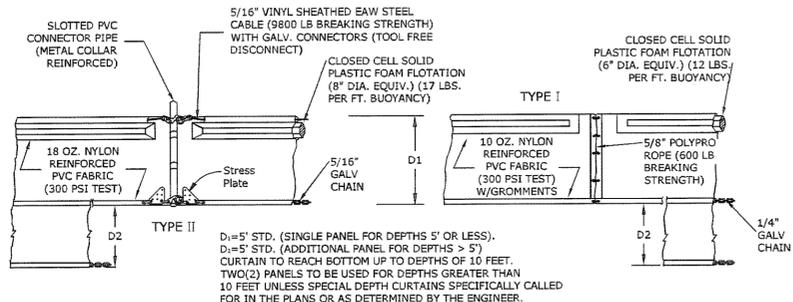
DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL ENGINEER
 Scott D. McKee
 7/8/15
 SCOTT D. MCKEE, P.E., F.L.
 REC. NO. 65654

Engineering Surveying Environmental Transportation Management
Coastal engineering associates, inc.
 966 Candlelight Boulevard - Brooksville, Florida 34601
 (352) 796-8423 - Fax (352) 799-8565
 EB-0000142

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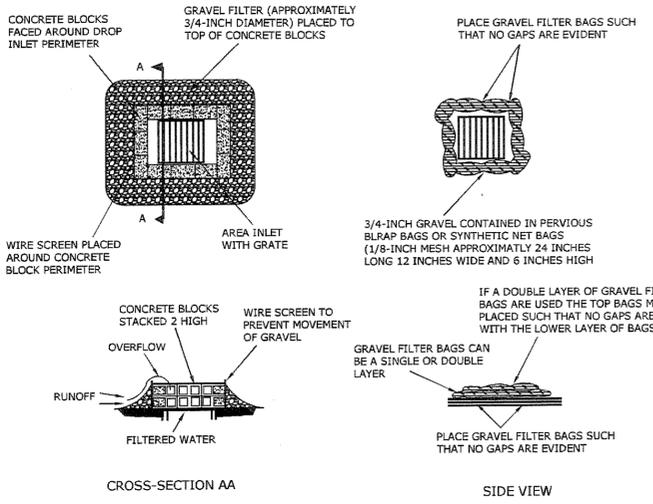
| DATE | REV. BY | REV. NO. | REVISION |
|--------|---------|----------|-----------------|
| 7/2/15 | JLW | 1 | COUNTY COMMENTS |

SHEET
8
 WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"
 15022



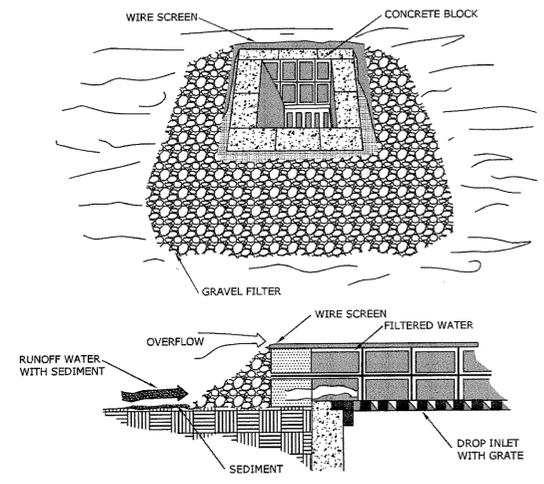
NOTE: COMPONENTS OF TYPE I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT OF THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

FLOATING TURBIDITY BARRIERS
N. T. S.



CONCRETE BLOCK FILTER **GRAVEL FILTER BAGS**

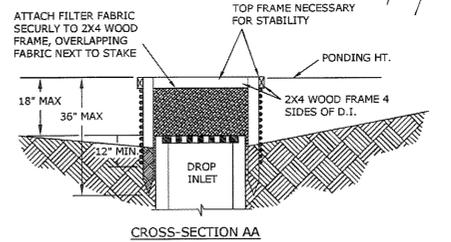
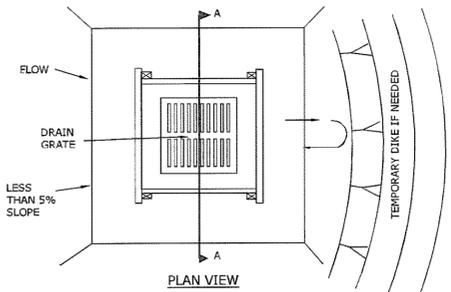
NOTE: GRAVEL FILTERS MAY BE USED ON PAVEMENT OR BARE GROUND.



BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

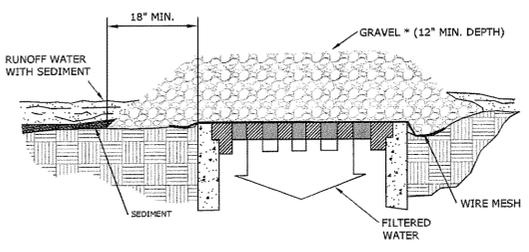
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, AND WHERE AN OVERFLOW CAPACITY NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

- PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET. WITH THE END OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATION OF 4, 8, AND 12 INCH WIDE (10, 20, AND 30 CM) BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES (30 CM) HIGH AND NO GREATER THAN 24 INCHES (60 CM) HIGH.
- WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2 INCH (13 MM) OPENINGS SHALL BE USED.
- STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER. SUITABLE COARSE AGGREGATE SHALL BE USED.
- IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.



- NOTES:
- DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%). THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY OR MEDIANS.
 - USE 2X4 WOOD OR EQUIVALENT METAL STAKES, (3 FT. MIN LENGTH)
 - INSTALL 2X4 WOOD TOP FRAME TO INSURE STABILITY.
 - THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

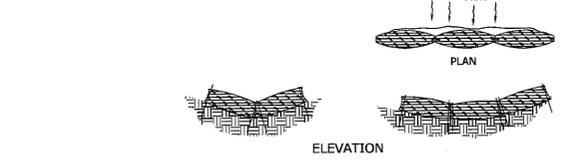
SILT FENCE DROP INLET SEDIMENT BARRIER



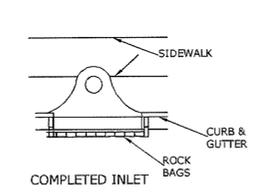
GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

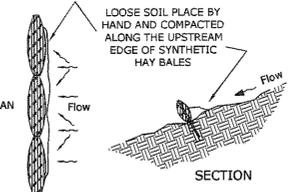
* GRAVEL SHALL BE FDOT #3, #357, OR #5 COARSE AGGREGATE.



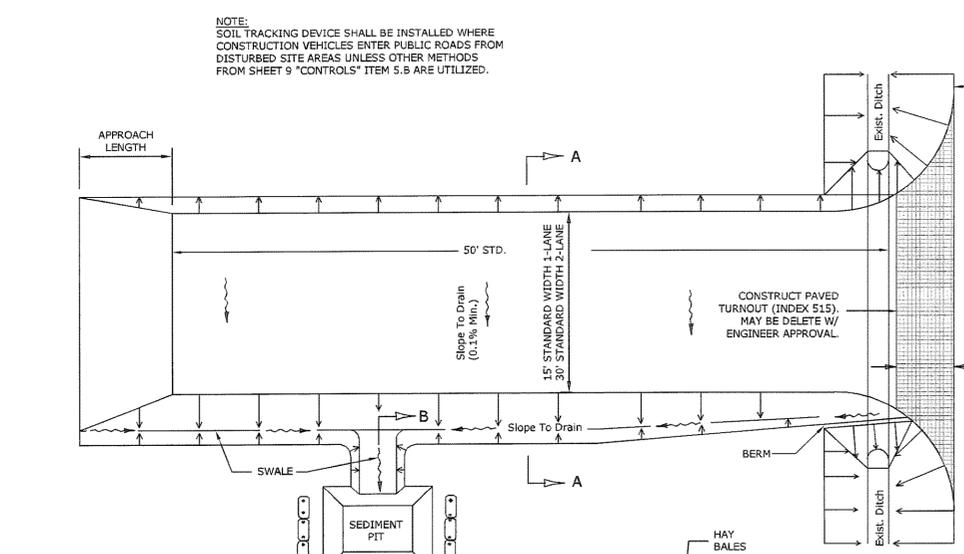
BARRIERS FOR SWALES
N. T. S.



BARRIERS FOR INLETS
N. T. S.

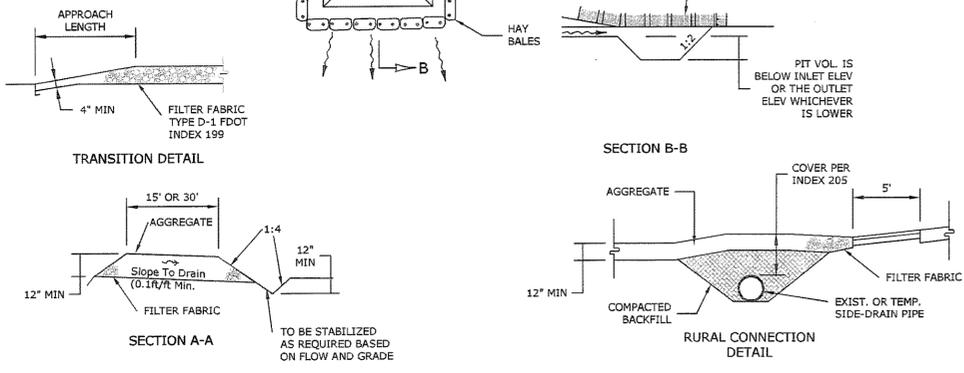


BARRIERS FOR SLOPES
N. T. S.

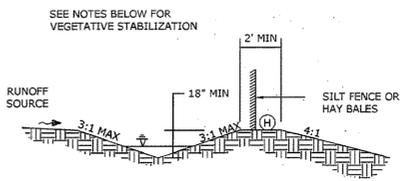


NOTE: SOIL TRACKING DEVICE SHALL BE INSTALLED WHERE CONSTRUCTION VEHICLES ENTER PUBLIC ROADS FROM DISTURBED SITE AREAS UNLESS OTHER METHODS FROM SHEET 9 "CONTROLS" ITEM 5.B ARE UTILIZED.

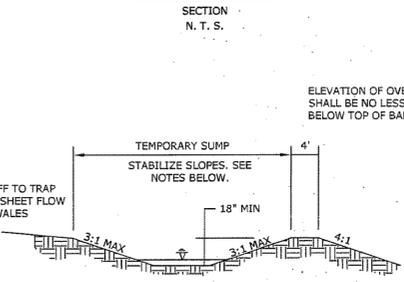
- GENERAL NOTES:
- PROTECT PROPOSED CURB INLET ON CASE BY CASE DETERMINATION AS NECESSARY TO MINIMIZE DESIMENT ACCUMULATION IN NEW STORM SYSTEMS. WHEN NECESSARY, UTILIZE ROCK BAGS AS PER DETAIL THIS SHEET.
 - PROTECT FUTURE GRATE INLETS WITH HAY BALES (SEE SWPP PLAN SHEET). THESE ARE INLETS PROPOSED IN NON-PAVED AREAS. PROTECT THESE INLETS WITH HAY BALES AS PER DETAIL THIS SHEET.
 - FLOATING TURBIDITY BARRIERS SHALL BE REQUIRED WHEREVER THERE EXISTS THE POTENTIAL FOR POINT DISCHARGE OF SEDIMENT / DEBRIS TO SURFACE WATERS. UNDER CONDITIONS WHERE OTHER MEASURES HAVE BEEN INSTALLED TO PREVENT THIS TYPE OF DISCHARGE, FLOATING BARRIERS MAY BE ELIMINATED. CONSULT WITH THE ENGINEER FOR CASE BY CASE DETERMINATION.
 - SYNTHETIC HAY BALES TO BE SEDIMENT SHIELD (tm), OR EQUIVALENT.
 - SYNTHETIC HAY BALES TO BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.



SOIL TRACKING PREVENTION DEVICE
N. T. S.

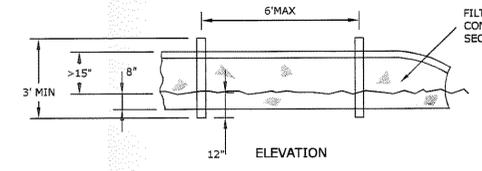


DIVERSION BERM
SECTION N. T. S.

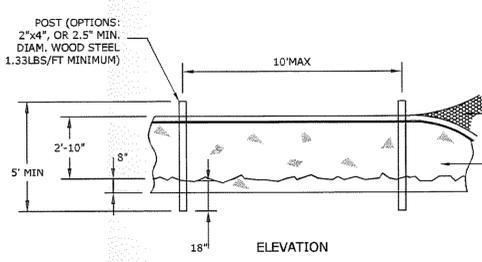


- NOTES:
- WHEN BERMS, SWALES OR TRAPS SHALL REMAIN IN PLACE FOR MORE THAN 30 DAYS, ALL SLOPES SHALL BE STABILIZED WITH SOD OR SEED/MULCH.
 - VEGETATIVE STABILIZATION SHALL NOT BE REQUIRED FOR THE BOTTOM 6" OF SEDIMENT TRAPS.
 - REMOVE SEDIMENT FROM SWALES AND TRAPS WHEN THE DEPTH REACHES 6".
 - ADDITIONAL INFORMATION MAY BE OBTAINED FROM THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, JULY 2008.

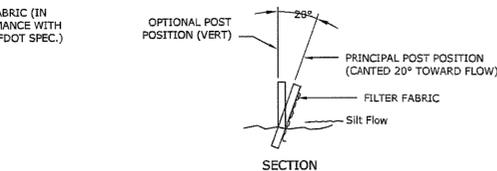
SEDIMENT TRAP
SECTION N. T. S.



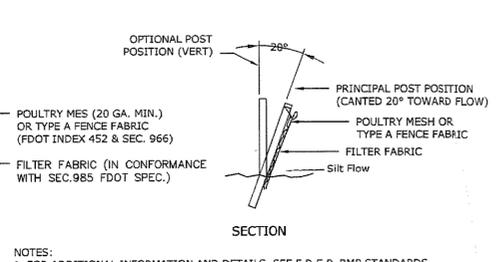
TYPE III SILT FENCE
N. T. S.



TYPE IV SILT FENCE
N. T. S.



SECTION



SECTION

- NOTES:
- FOR ADDITIONAL INFORMATION AND DETAILS, SEE F.D.E.P. BMP STANDARDS.
 - UNLESS SPECIFIED, HAY BARRIERS MAY BE USED IN LIEU OF SILT FENCES.
 - ADDITIONAL POSTS AND RAILS MAY BE NECESSARY TO SECURE AND SUPPORT BARRIERS.
 - ADDITIONAL FENCE LENGTHS MAY BE REQUIRED BY THE ENGINEER OR BY REGULATORY AGENCIES.
 - DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

CSWM SWPP PLAN DETAILS
WREC WESLEY CHAPEL
ELECTRICAL SUBSTATION

DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL ENGINEER
Scott D. McKee, P.E., F.L.
REG. NO. 65654

Engineering
Planning
Design
Construction Management
Coastal
engineering associates, inc.
866 Candlelight Boulevard
(352) 786-9423 • Fax (352) 789-6369
Brocksville, Florida 34601
EB-0000142

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| DATE | REV. BY/REV. NO. | COUNTY COMMENTS |
|--------|------------------|-----------------|
| 7/5/15 | J.W. | 1 |

SHEET
9
JOB No.: 15022
WHEN PRINTED TO SCALE, DRAWING SIZE SHALL BE 22" X 34"

REGULATORY REQUIREMENTS FOR CONSTRUCTION PROJECTS INCLUDE:

ENVIRONMENTAL RESOURCE PERMIT (ERP) CONSTRUCTION SURFACE WATER MANAGEMENT PLAN

PURPOSE: PREVENT EROSION AND SEDIMENT DEPOSIT IN WETLANDS/SURFACE WATERS OR ADJACENT PROPERTIES. PREVENT OFFSITE FLOODING. PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. REGULATORY AGENCY: STATE OF FLORIDA WATER MANAGEMENT DISTRICTS. APPLIES TO: ALL CONSTRUCTION PROJECTS UNLESS SPECIFICALLY EXEMPT BY RULE. RESPONSIBLE ENTITY: ENVIRONMENTAL RESOURCE PERMITTEE SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE. REQUIREMENTS: ALL PERMITTED PROJECTS SHALL PREPARE AND MAINTAIN A CONSTRUCTION SURFACE WATER MANAGEMENT PLAN (CSWMP) IN ACCORDANCE WITH F.A.C. 40D RULES, PART B, BASIS OF REVIEW, SECTION 2.8.

MAJOR COMPONENTS OF THE CSWMP

- 1) SITE PLAN. 2) TOPOGRAPHY AND HYDROLOGIC DATA 3) CONSTRUCTION DETAILS. 4) PROCEDURES TO CONTROL EROSION AND SEDIMENTATION. 5) PROCEDURES FOR STORMWATER MANAGEMENT. 6) MAINTENANCE PROCEDURES. 7) INSPECTION RECORDS.

SEE "THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL", APRIL 2006 (OR LATEST EDITION) FOR ADDITIONAL INFORMATION. AND

CHAPTER 6, "THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT". (FDEP 1988) CONSTRUCTION SURFACE WATER MANAGEMENT RESPONSIBLE ENTITY

NOTE TO CONTRACTOR: A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IS NOT PART OF THE PERMITTING OBTAINED WITH THIS PLAN SET. THEREFORE, THE CONTRACTOR IS ADVISED THAT AN NPDES CONSTRUCTION PERMIT MAY BE REQUIRED FOR THIS PROJECT AND THAT THE CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND ADHERING TO THIS PERMIT. REFER TO SUBSECTION 62-621., F.A.C. FOR ADDITIONAL INFORMATION.

THE INFORMATION PROVIDED IN THE SWPPP NOTES AND DETAILS SHEETS ARE FOR COMPLIANCE WITH ENVIRONMENTAL RESOURCE PERMITTING UNDER CHAPTER 62-333, F.A.C. AND MAY BE USED AS A REFERENCE FOR COMPLIANCE WITH NPDES PERMITTING BUT ARE NOT NECESSARILY INCLUSIVE OF ALL NPDES REQUIREMENTS.

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)

PURPOSE: PREVENT THE DISCHARGE OF POLLUTANTS ASSOCIATED WITH CONSTRUCTION ACTIVITIES TO SURFACE WATERS OF THE STATE. REGULATORY AGENCY: EPA AND STATE OF FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION. APPLIES TO: ALL CONSTRUCTION PROJECTS DISTURBING ONE (1) OR MORE ACRES OF LAND UNLESS SPECIFICALLY EXEMPT BY RULE. RESPONSIBLE ENTITY: THE "OPERATOR" AS DEFINED IN F.A.C. 62-621.300(4)(a) SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE. TYPICALLY THE CONTRACTOR SHALL BE OPERATOR AND FILE NPDES NOTICE OF INTENT (NOI). REQUIREMENTS: ALL NON-EXEMPT PROJECTS SHALL PREPARE AND MAINTAIN A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH F.A.C. 62-621. THE SWPPP SHALL BE COMPLETED PRIOR TO SUBMITTAL OF THE NOI AND MAINTAINED THROUGH THE LENGTH OF PROJECT.

MAJOR COMPONENTS OF THE SWPPP

- 1) SITE PLAN. 2) TOPOGRAPHY AND HYDROLOGIC DATA 3) CONSTRUCTION DETAILS. 4) PROCEDURES TO CONTROL EROSION AND SEDIMENTATION. 5) MEASURES TO CONTROL OTHER POLLUTANTS. 6) MAINTENANCE PROCEDURES. 7) INSPECTION RECORDS. 8) OPERATOR CERTIFICATION.

SEE "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES", MAY 2003 (OR LATEST EDITION) FOR ADDITIONAL INFORMATION.

COMPLIANCE WITH NPDES GENERAL PERMIT CONDITIONS FOR CONSTRUCTION SITES SHALL BE THE CONTRACTOR'S RESPONSIBILITY INCLUDING SUBMITTAL OF THE NPDES NOTICES OF INTENT (NOI) AND TERMINATION (NOT) TO FDEP IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS.

CONTRACTOR IS ADVISED THAT THIS CONSTRUCTION PLAN SET DOES NOT FULFILL ALL REQUIREMENTS OF THE SWPPP. TO ENSURE COMPLIANCE, ADDITIONAL ITEMS TO BE SUPPLIED AND MAINTAINED ON SITE BY THE CONTRACTOR SHALL INCLUDE:

- 1. Certification Statement. In accordance with F.A.C. 62-621.305 all documents related to the NPDES Permit, including Contractor's SWPPP, shall contain the following statement "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations". 2. Subcontractor's Statement. In accordance with Document 62-621.300(4)(a), any subcontractors responsible for SWPPP activities shall sign a copy of the following statement "I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder". Certifications are to include name and title of person providing signature, as well as, name, address and telephone number of the contracting firm, and date certification is made. 3. Records. Contractor's SWPPP shall contain Records of all inspections and maintenance activities as required by permit. A copy of the NOI shall also be kept with the SWPPP. Records are to be maintained for no less than 3 years after final stabilization of the site. 4. Amendments Contractor's SWPPP shall include any modifications to the "Plan" as may be required to address such items as specific construction phasing, changes to controls made in the field, or changes in responsible personnel.

The following documents may be consulted for additional guidance:

WWW.DEP.STATE.FL.US/LEGAL/RULES/SHARED/62-621/62-621.PDF

WWW.DEP.STATE.FL.US/WATER/STORMWATER/NPDES/DOCS/SWPPPTRAINING.PDF

OR FDEP CAN BE CONTACTED AT 1-850-245-7522 FOR ANY NPDES PERMIT REQUIREMENTS.

INFORMATION CONTAINED IN THESE CONSTRUCTION PLANS IS INTENDED TO PROVIDE A STARTING POINT FOR THE CSWMP AND SWPPP PLANS. IN ORDER TO FULLY COMPLY WITH ALL ASPECTS OF CSWMP AND SWPPP REQUIREMENTS, ADDITIONAL ITEMS SHALL BE PROVIDED BY THE RESPONSIBLE ENTITY TO INCLUDE: INSPECTION RECORDS, UPDATES / MODIFICATIONS, AND CERTIFICATIONS.

REFERENCES MADE TO THE "PLAN" IN THE FOLLOWING NOTES REFERS BOTH TO THE CSWMP AND SWPPP AND SHALL BE INTERCHANGEABLE. THE "PLAN" COMPONENTS PROVIDED BY THE ENGINEER INCLUDE SITE DATA, STORMWATER MANAGEMENT EROSION/SEDIMENT CONTROL INSTRUCTIONS, DETAILS, AND NOTES AS PRESENTED THROUGHOUT THIS CONSTRUCTION PLAN SET.

"PLAN" AMENDMENTS

THE PLAN SHALL BE AMENDED WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR DISCHARGE OF POLLUTANTS TO SURFACE WATERS OF THE STATE OR MUNICIPAL SEWER SYSTEM (MS4). THE PLAN ALSO SHALL BE AMENDED IF IT PROVES TO BE INEFFECTIVE OR TO INDICATE ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR IMPLEMENTING CONTROL MEASURES. ALL AMENDMENTS SHALL BE SIGNED, DATED, AND KEPT AS ATTACHMENTS TO THE ORIGINAL PLAN.

SITE DATA

PROJECT NAME: WREC ELECTRICAL SUBSTATION WESLEY CHAPEL PROJECT DESCRIPTION: CONSTRUCT GRAVEL DRIVEWAY, SUBSTATION AND DRAINAGE SYSTEM.

LOCATION: S 22 T 26S R 19E

PROJECT SIZE: ± 3.07 AC SIZE OF DISTURBED AREA: ± 3.07 AC

SITE MAP: SEE CONSTRUCTION PLANS COVER SHEET EXISTING TOPOGRAPHY: SEE CONSTRUCTION PLAN SHEET 2

PROPOSED TOPOGRAPHY: SEE CONSTRUCTION PLAN SHEET 5

PREDEVELOPMENT DRAINAGE MAP: SEE SHEET 2 & STORMWATER MANAGEMENT REPORT EXHIBIT E

POST-DEVELOPMENT DRAINAGE MAP: SEE SHEET 4

SCS SOIL DATA: #5 MYAKKA HSG (B/D)

ADDITIONAL DATA INCLUDING GEOTECHNICAL STUDY AND STORMWATER MANAGEMENT REPORT ARE AVAILABLE FROM THE ENGINEER.

RUNOFF COEFFICIENTS: PREDEVELOPMENT C VALUE = 0.2 UNPAVED POST-DEVELOPMENT C VALUE = 0.2 UNPAVED = 0.9 PAVED

DISCHARGE POINTS AND RECEIVING WATER OR MS4 (UP TO 100 YR / 24 HR EVENT) DISCHARGE: EASTERN PROPERTY LINE RECEIVING WATER: TROUT CREEK WATERSHED BASIN S2680 DRAINAGE AREA: ± 2.50 AC FROM / THROUGH PROJECT AREA

FDOT PRECIPITATION ZONE: ZONE 6

WATER MANAGEMENT DISTRICT RAINFALL DATA: 2.3 YR / 24 HR = 4.7 INCHES 5 YR / 24 HR = 5.6 INCHES 10 YR / 24 HR = 7.5 INCHES 25 YR / 24 HR = 9.5 INCHES 100 YR / 24 HR = 12.8 INCHES

CONSTRUCTION ACTIVITIES

- 1. Sequence of Major Soil Disturbing Activities For each construction phase clear and grub as necessary for installation of perimeter controls only. Install perimeter controls before beginning other land disturbing activities. Remove perimeter controls only after all upstream areas are stabilized. A. Clearing, grubbing and earthwork for ponds (unless approved otherwise). B. Clearing, grubbing and earthwork for swales. C. Storm sewer construction. Install storm pipe in the upstream direction. D. Clearing and grubbing for utility installation. E. Clearing, grubbing and earthwork associated with pavement and buildings. F. Complete site work. G. Remove erosion control measures prior to final demobilization. 2. Areas of Soil Disturbing Activities Any areas where permanent features are shown to be constructed shall be disturbed. 3. Areas to be Stabilized All areas disturbed during construction shall be stabilized unless specifically shown otherwise.

CONTROLS

The following discussion defines general guidelines for the use of erosion/sediment controls and stabilization.

- 1. Temporary and permanent stabilization practices. A. Temporary Sodding: Install at the limits of phasing in all locations where construction activities have ceased and the likelihood of erosion is high. B. Temporary Grassing: Install at all locations where construction activities has temporarily stopped for a period to exceed 14 days. C. Permanent planting, sodding and seeding: All disturbed areas not paved will ultimately receive permanent sodding, seed or mulch unless specifically shown otherwise in plans. 2. Structural Controls. Intended to divert, store, retain or otherwise limit storm water flow. Structural controls shall be installed prior to any earthwork or construction activity. A. Silt Fence: Shall be used - around the perimeter of project area, - around wetlands or other surface waters, - where existing ground slopes away from the project, - or wherever there is potential for sediment to migrate offsite. Typical useful life of silt fence is 6 months.

Sheet flow areas may require additional silt fence.

NOTE: Additional silt fence may also be required to designate limits of construction, protect trees, or satisfy local development requirements. Stockpile areas shall include silt fence around the perimeter.

- B. Synthetic Hay Bales May be used as temporary sediment barrier. The useful life of synthetic hay bales depends on exposure to ultra-violet light but is typically 3 months. C. Rock Bags May be used as temporary measure for inlet protection. Primary use shall be around curb type inlets. D. Turbidity Barriers Shall include staked or floating type, as required, wherever there is a point source discharges from project area to surface water. Typical useful life of staked turbidity barriers is 6 months. 3. Sediment Basins for areas disturbing 10 acres or more. Sumps or traps are required to provide 3,600 cu ft of storage per acre drained. When discharge is to an Outstanding Florida Waterway, Storage must be sufficient to accommodate the 10 year / 24 hour storm. Requirement for sediment trap may be satisfied by utilizing the project storm water ponds. If so, Ponds shall be cleaned of excess sediment prior to final acceptance. 4. Permanent storm water management controls. As individual phases of construction are performed, permanent control structures shall be installed. 5. Other Pollutant Controls.

A. Waste Disposal: The Contractor shall be responsible for maintaining field records of their SWPPP activities including disposal of construction debris and waste.

The Contractor shall provide litter control and collection within the project boundaries during construction activities. Any fertilizer, hydrocarbon, or other chemical containers shall be disposed of by the contractor according to EPA standard practices as detailed by the manufacturer. No solid materials including building and construction debris shall be placed in, or discharged to, wetlands, surface waters or buried on site.

B. Offsite Vehicle Tracking: Loaded haul trucks shall be covered by a tarpaulin. In addition, the Contractor shall utilize one or more of the following acceptable methods of control:

- 1. Excess dirt on paved roads shall be removed daily. 2. Soil Tracking Prevention Device may be used where vehicles leave the project area (or enter nearest paved road). 3. Contractor shall provide pollution control by implementing dust control with water application while dust generating activities are conducted.

C. Herbicides / Pesticides: Application rates shall conform to applicable local, state and federal regulations.

D. Toxic Substances: Storage, application, generation, migration of all toxic substances shall conform to applicable local, state ad federal regulations. Containment areas shall be provided whenever potentially hazardous materials are stored on site.

E. Stockpiles: Stockpiling topsoil shall be stockpiled so that natural drainage is not obstructed and no offsite sedimentation occurs. Soil stockpiles should be protected or adequately covered from stormwater during construction. Simple protection measures can include silt fence or a trench around the base of the stockpile. A tarp or temporary seeding may also provide adequate cover for a soil stockpile. Stockpiles should not be placed near the perimeter of the site, near a waterbody or storm drain inlet, or within 10 feet of an infiltration/exfiltration system. If a stockpile is to remain for an extended period of time adequate long term stabilization and maintenance is required and at a minimum should include silt fence and permanent seeding with regular monitoring and maintenance.

6. Non-stormwater Discharges. No non-stormwater discharges to surface waters, wetlands or the MS4 shall be allowed except as specifically approved by applicable permits and regulations.

MAINTENANCE

The Contractor shall be responsible for daily inspection and maintenance of all control devices throughout the construction phase and removal of control devices when no longer necessary.

The following practices shall be used to maintain controls.

- 1. The Contractor shall maintain rain gages on the project site and keep a record of daily rainfall. 2. The Contractor shall check and ensure proper operation of the controls. If a repair is necessary, it shall be initiated within 24 hours of the inspection. 3. Built-up sediment shall be removed when it has reached 1/3 the height of barrier. 4. Any controls which are not functioning as intended shall be repaired or replaced. 5. Sediment sumps, if designed and installed, should have sediment removed as necessary to allow for efficient removal of suspended particles. They should be re-excavated to the design finish grade elevation, if silted in.

Temporary and permanent seeding shall be inspected for bare spots, washouts, and healthy growth. Soil tracking prevention devices shall be maintained to prevent clogging of rock bedding which may impede usefulness of the structure.

NOTE: The PERMITTEE is responsible for ensuring that all controls are properly maintained during and after construction.

INSPECTION AND DOCUMENTATION PROCEDURES

The Contractor shall be responsible for completing weekly inspection report form and maintaining documentation for 3 years following final stabilization. The Contractor shall submit copies of these reports to the owner prior to final payment for work shown within these construction plans. Additional inspection and documentation must be completed within 24 hours after any significant rainfall event.

NOTE: For NPDES, a significant rainfall shall be 0.5 inches or greater. For ERP, a significant rainfall shall be 0.25 inches or greater. To eliminate confusion, Contractor is advised to carryout inspections after rainfall exceeding 0.25 inches. For projects with minimal potential for discharge to surface waters, it may be possible to adjust this criteria. Contact the Engineer for details.

Where sites have been permanently stabilized, inspections/reports shall be conducted at least once per month until construction activities have ceased and NOT has been submitted.

- Minimum inspection requirements shall include: - Points of discharge to waters of the State. - Points of discharge to the MS4 (municipal storm sewer). - Disturbed areas of the site that have not been stabilized. - Areas used for storage of materials that may create a pollution source (i.e. stockpiles, fuel drums, construction debris) and are exposed to rainfall. - Structural Controls - Storm water Management Controls - Locations where vehicles enter and exit the site.

The Contractor shall initiate repairs / corrections within 24 hours of any items found to be in non-compliance with the associated permit requirements. If inspections indicate that the installed stabilization and structural practices are not sufficient to minimize erosion, retain sediment, and prevent the discharge of pollutants Contractor shall complete corrective measures as needed. Contact the Engineer prior to modifying any structural controls which are specifically shown in the construction plans.

NOTE: Specific conditions of all permits may require additional activities above and beyond those outlined above. Check all permit conditions as issued by regulatory agencies to ensure compliance.

CSWMP SWPPP PLAN NOTES WREC WESLEY CHAPEL ELECTRICAL SUBSTATION

DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL ENGINEER Scott D. McKee 7/7/15 SCOTT D. MCKEE, P.E. FL. REG. NO. C5554

Engineering Surveying Environmental Construction Management Coastal engineering associates, inc. 966 Candlelight Boulevard - Brooksville - Florida 34601 (952) 798-9423 - Fax (952) 798-8359 EB-0000142

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Table with columns: DATE, REV. BY, REV. NO., REVISION, COUNTY COMMENTS. Row 1: 7/3/15, JLV, 1, -

SHEET 10 JOB No.: 15022

PROJECT SPECIFIC REQUIREMENTS

PROPERTY AREA:
 TOTAL PARCEL = 3.58 AC
 DISTURBED AREA = 2.42 AC WITHIN PARCEL OWNERSHIP
 SEMI-IMPERVIOUS GRAVEL AREA = 49,165 (31.52% OF SITE)
 POND BOTTOM = 24,008 (15.40% OF SITE)
 GREEN SPACE = 31,934 SF (20.47% OF SITE)
 UNDISTURBED AREA = 50,862 SF (32.61% OF SITE)

MINIMUM TREES REQUIRED (PERIMETER BUFFERS) = 11 TREES

SITE IS ZONED AG AND WAS A PLANTED PINE TREE FARM. ALL EXISTING TREES WERE PINE AND REMOVED BEFORE PERMITTING.

PROPOSED TREES TO BE PLANTED = 11 (MIN OF 4 DIFFERENT SPECIES REQ.)

TOTAL SITE TREES = 11

BUFFER REQUIREMENTS
 NORTH = 15 FT TYPE B - AC / RES-3
 SOUTH = 15 FT TYPE B - MUD / ROR
 EAST = 10 FT TYPE A - AC / RES-3 (NO NEW TREES PROPOSED, EXISTING VEGETATION AND TREES TO PROVIDE REQUIRED BUFFER)
 WEST = 10 FT TYPE A - ROW - AC / RES-3 (TO BE PLANTED WHEN ADJACENT SITE IS DEVELOPED)

TYPE A BUFFER MIN REQUIREMENTS 10' WIDE WITH SINGLE ROW OF TREES; MAX 60' ON CENTER. CONTINUOUS ROW OF EVERGREEN SHRUBS
 TYPE B BUFFER MIN REQUIREMENTS 15' WIDE WITH SINGLE ROW OF TREES; MAX 60' ON CENTER. VISUAL SCREEN DESIGNED TO BE 80% OPAQUE WITHIN 1 YR. SCREENING TO BE MIN. OF 6' HIGH AT TIME OF INSTALLATION. WOODEN FENCING IS PROHIBITED.

GROUND COVER
 ALL NON-TRAFFIC DISTURBED AREAS (EXCEPT POND BOTTOM) SHALL BE RESTORED WITH BAHIA SOD UNLESS SPECIFICALLY SHOWN OTHERWISE.

SCS SOIL DATA:
 #5 MYAKKA FINE SAND (B/D)

LEGEND

- = PROPOSED TREE (LOW WATER USE)
- = PROPOSED SHRUB ROW (LOW WATER USE)
- = OAK TREE TO REMAIN (SIZE AS INDICATED)
- = TREE TO BE REMOVED
- = BUFFER AREA
- = LANDSCAPE AREA
- = WETLAND AREA

PLANTING LIST

| BUFFER | TYPE | LENGTH (LF) | REQ. # OF TREES PER FT. | TOTAL TREES REQ. | TOTAL TREES PROPOSED | SHRUBS REQ. | SHRUBS PROVIDED |
|--------|------|-------------|-------------------------|------------------|----------------------|-------------|-----------------|
| NORTH | B | 326.90 | 0.0167 | 5,448 | 6 | NONE | NONE |
| EAST | A | 275 | 0.0167 | 4,583* | -- | CONTINUOUS | CONTINUOUS |
| SOUTH | B | 323.38 | 0.0167 | 5,389 | 5 | NONE | ALONG DRA |
| WEST** | A | 348.88 | 0.0167 | 5,815 | 6 | CONTINUOUS | CONTINUOUS |
| TOTALS | | | | 16,652 | 17 | | |

* = 176.58' WIDTH OF LAND TO BE PRESERVED NATURAL WITHIN EASTERN BUFFER. NO PROPOSED LANDSCAPING.

** = LANDSCAPE BUFFER NOT REQUIRED TO BE PLANTED AT TIME OF CONSTRUCTION. WHEN THE ADJACENT LOT IS DEVELOPED, WESTERN BUFFER WILL BE REQUIRED TO BE PLANTED.

GENERAL LANDSCAPE NOTES

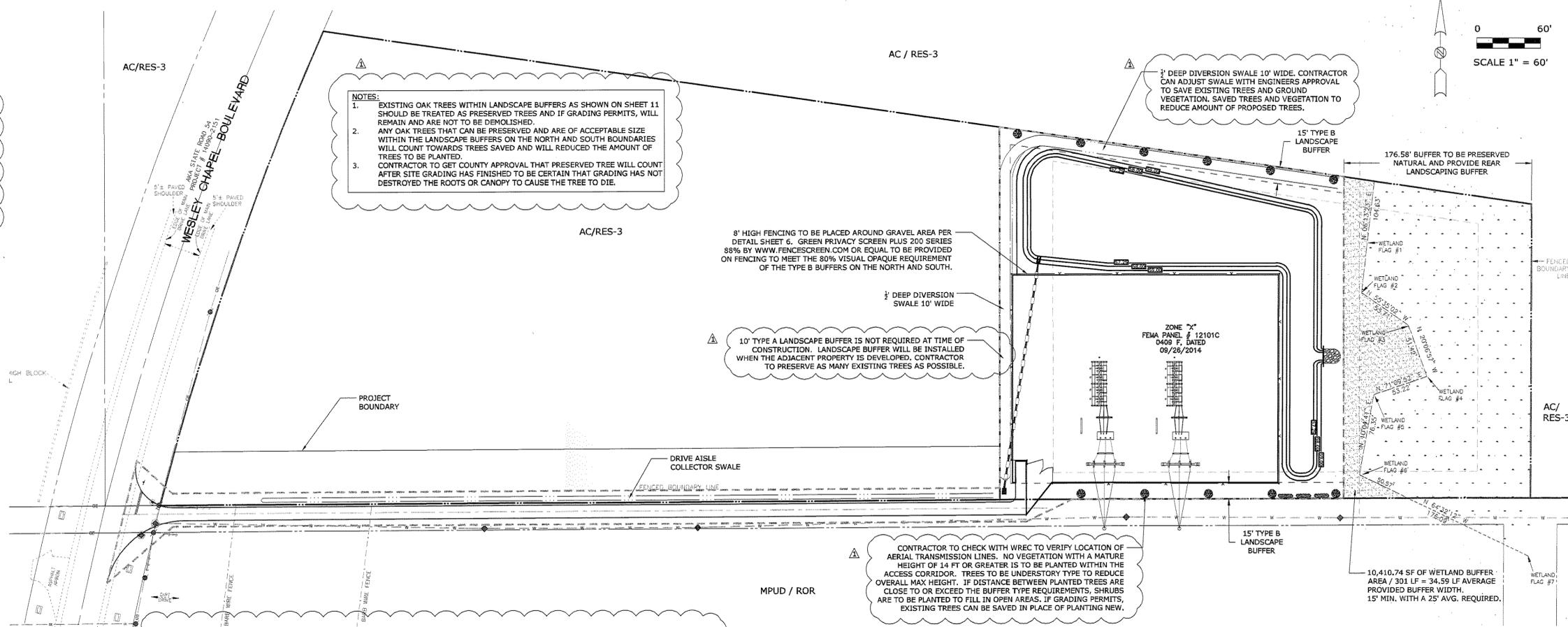
- IT IS THE INTENT OF THIS PLAN TO REPRESENT THE MINIMUM LANDSCAPING AS REQUIRED BY PASCO COUNTY. SPECIFIC PLANTING MATERIALS SHALL BE DETERMINED BY THE OWNER AND LANDSCAPE CONTRACTOR AT THE TIME OF PLANTING BASED UPON LOCAL AVAILABILITY OF MATERIALS. FINAL PLANT LIST AND LAYOUT OR ANY DEVIATIONS FROM THIS PLAN MUST BE ACCEPTED AND APPROVED BY PASCO COUNTY.
- ALL PLANTING MATERIALS SHALL CONFORM TO THE "STANDARDS FOR FLORIDA GRADE NO. 1 OR BETTER AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS, STATE OF FLORIDA, DEPT. OF AGRICULTURE AND CONSUMER SERVICES."
 A) INSTALLED PLANTS SHALL BE GROUPED IN PLANTING AREAS ACCORDING TO WATER USE ZONES AND IRRIGATED SEPARATELY ACCORDING TO HIGH, MODERATE, OR LOW WATER USAGE. IF TURF GRASS IS USED, IT SHALL BE IRRIGATED SEPARATELY FROM OTHER LANDSCAPING.
 B) INSTALLED PLANTS SHALL BE APPROPRIATELY SPACED ACCORDING TO GROWTH NEEDS OF THE SPECIES, EXCEPT FOR THIS PRIORITY, OR AS OTHERWISE INDICATED, NO TWO PLANTS IN BUFFER AREAS (EXCLUDING TREES AND TURF GRASS) SHALL BE MORE THAN THIRTY-SIX INCHES APART ON CENTER.
 C) MULCHES ARE REQUIRED AND SHALL BE AT LEAST THREE (3) INCHES IN DEPTH.
 D) SYNTHETIC LAWNS OR SYNTHETIC PLANTS ARE NOT ACCEPTABLE.
- THE LANDSCAPE CONTRACTOR SHALL UTILIZE PLANTING MATERIAL THAT ARE FLORIDA FRIENDLY AND APPROVED BY THE COUNTY.
- PLANTING MATERIALS SHALL BE DROUGHT TOLERANT, NATIVE SPECIES AS DESCRIBED IN THE IFAS EXTENSION "FLORIDA-FRIENDLY" PLANT LIST.
- ALL LANDSCAPE BUFFERS SHALL CONSIST OF TREES AND SHRUBS, GROUND COVER PLANTS MAY BE INCLUDED AND MULCH BEDS SHALL BE PROVIDED TO FILL ALL SPACE BETWEEN PLANTS.
- WHERE PINE STRAW IS UTILIZED IN PLACE OF MULCH, THE PINE STRAW SHALL BE AT LEAST 3" IN DEPTH.
- TREE PROTECTION FOR TREES TO REMAIN SHALL CONFORM TO INSTRUCTIONS PROVIDED ON SHEET 3.
- ALL AREAS DISTURBED BY CONSTRUCTION WHICH ARE NOT SHOWN AS A PLANTING AREA OR IMPERVIOUS SURFACE SHALL BE SODDED

WITH ARGENTINE BAHIA UNLESS SPECIFICALLY APPROVED OTHERWISE.

- CONTRACTOR TO VERIFY ALL QUANTITIES OF TREES, SHRUBS GROUND COVERS, PINE STRAW, PLANTING SOIL AND SOD.
- NATIVE PRESERVATION AREA TREES MAY BE PRUNED TO MEET CLEAR SIGHT REQUIREMENTS. UNDERSTORY MAY BE MOWED.
- AN UNDERGROUND IRRIGATION SYSTEM SHALL BE PROVIDED FOR TURF GRASS AREAS, TREE ISLANDS AND SHRUB BEDS.
- IRRIGATION SUPPLY SHALL BE PROVIDED BY OTHERS.
- AN AUTOMATIC IRRIGATION CONTROLLER SHALL BE PROVIDED WITH RAIN SENSING SHUT OFF DEVICE APPROPRIATELY LOCATED AWAY FROM EAVES AND DRIP-LINES.
- A SEPARATE PERMIT THROUGH PASCO COUNTY BUILDING DEPARTMENT SHALL BE REQUIRED FOR APPROVAL / INSTALLATION OF THE IRRIGATION SYSTEM.
- THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF LANDSCAPING. MAINTENANCE TO INCLUDE:
 A) ALL REQUIRED LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY CONDITION IN PERPETUITY.
 B) ALL INSTALLED LANDSCAPING SHALL BE NEAT AND ORDERLY IN APPEARANCE AND KEPT FREE OF REFUSE, DEBRIS, DISEASE, PESTS, AND WEEDS, AND SHALL BE FERTILIZED AND IRRIGATED AS NEEDED TO MAINTAIN PLANTS IN A HEALTHY CONDITION.
 C) ONGOING MAINTENANCE TO PREVENT THE ESTABLISHMENT OF PROHIBITED, INVASIVE SPECIES IS REQUIRED.
 D) ANY PLANT MATERIALS OF WHATSOEVER TYPE AND KIND REQUIRED BY COUNTY REGULATIONS SHALL BE REPLACED WITHIN THIRTY (30) DAYS OF THEIR DEMISE AND/OR REMOVAL.
 E) PAVING, TREATING, OR COVERING A REQUIRED LANDSCAPE AREA IN ANY WAY THAT RENDERS IT IMPERVIOUS IS PROHIBITED.
 F) PARKING OF VEHICLES SHALL NOT BE PERMITTED IN REQUIRED LANDSCAPE AREAS.
- SUSTAINABLE PRACTICES. LANDSCAPING SHALL BE INSTALLED SO THAT LANDSCAPING MATERIALS MEET THE CONCEPT OF RIGHT MATERIAL/RIGHT PLACE. INSTALLED TREES AND PLANTS SHALL BE GROUPED INTO ZONES ACCORDING TO WATER, SOIL, CLIMATE, AND

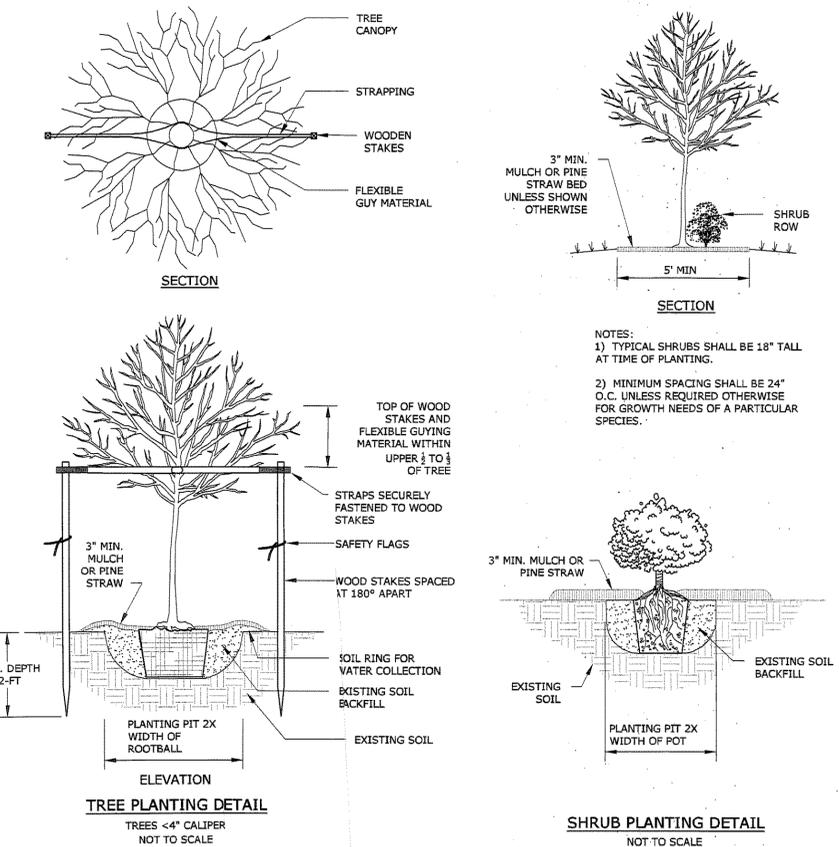
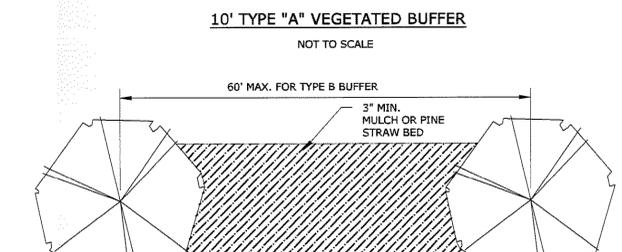
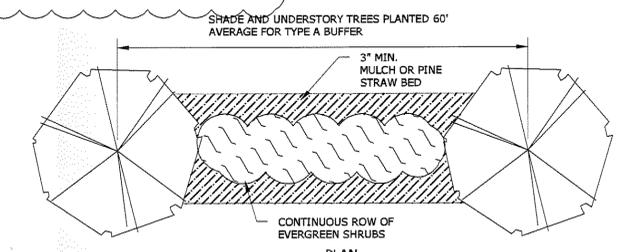
LIGHT REQUIREMENTS. PLANT GROUPINGS BASED ON WATER REQUIREMENTS ARE DROUGHT TOLERANT, NATURAL, AND OASIS. (LDC 905.2-C.1.C)

- DIVERSITY. A MAXIMUM OF 50 PERCENT OF THE PLANT MATERIALS USED, OTHER THAN TREES, MAY BE NON-DROUGHT TOLERANT. A MINIMUM OF 30 PERCENT OF THE PLANT MATERIALS, OTHER THAN TREES AND TURFGRASS, USED TO FULFILL THE REQUIREMENTS OF THIS SUBSECTION SHALL BE NATIVE FLORIDIAN SPECIES, SUITABLE FOR GROWTH IN THE COUNTY. THE USE OF TURFGRASS VARIETIES WITH EXCELLENT DROUGHT TOLERANCE MAY EXCEED THE FIFTY (50) PERCENT LIMITATION. (LDC 905.2-C.1.D)
- DIVERSITY. NO ONE PLANT SPECIES OF SHRUBS OR GROUND COVER PLANTS, EXCLUDING TURFGRASS, SHALL CONSTITUTE MORE THAN 25 PERCENT COVERAGE OF THE OVERALL LANDSCAPE AREA. (LDC 905.2-C.1.D.5)
- MULCH SHALL BE USED IN CONJUNCTION WITH LIVING PLANT MATERIALS SO AS TO COVER EXPOSED SOIL. MULCH SHALL BE INSTALLED TO A MINIMUM DEPTH OF THREE (3) INCHES. THE MULCH SHOULD NOT BE PLACED DIRECTLY AGAINST THE PLANT STEM OR TREE TRUNK. MULCH SHALL NOT BE REQUIRED FOR ANNUAL BEDS. STONE OR GRAVEL MAY BE USED TO COVER A MAXIMUM OF 20 PERCENT OF THE LANDSCAPED AREA. (LDC 905.2-C.3.D)
- TREES REQUIRED TO BE MINIMUM THREE (3) INCHES CALIPER AND TEN (10) FEET HIGH AT INSTALLATION.
- SHADE TREES SHALL BE A MINIMUM OF TWO (2) INCH CALIPER AND SIX (6) FEET IN HEIGHT AT INSTALLATION WITH AN AVERAGE MATURE SPREAD OF GREATER THAN TWENTY (20) FEET.
- SHRUBS WILL BE IN AN APPROPRIATELY SIZED CONTAINER, A MINIMUM OF 18" TALL AT INSTALLATION, AND PLANTED SPACED FOR SPECIES. DWARF SPECIES MAY BE INSTALLED AT A MINIMUM 14" HEIGHT.
- GROUND COVER PLANTS, OTHER THAN TURF GRASS, SHALL REACH A MAXIMUM MATURE HEIGHT OF 24".
- NO ONE PLANT SPECIES OF SHRUB OR GROUND COVER PLANTS SHALL BE MORE THAN 25% COVERAGE OF OVERALL LANDSCAPE AREA.
- NO MORE THAN THIRTY PERCENT (30%) OF LANDSCAPE AREAS MAY BE GRASS; THE BALANCE MUST BE SHRUBS OR GROUND COVER.



PLANT LIST

| QUANTITY | BOTANICAL / COMMON NAME | SPACING | CONTAINER | SIZE |
|----------|---|--------------------------------|--------------|--|
| 17 | TREES: OPTIONAL TYPES; MAGNOLIA GRANDIFLORA (SOUTHERN MAGNOLIA), QUERCUS VIRGINIANA (LIVE OAK), SYCAMORE, ARDISIA ESCALLONIODES (MARBERRY), FORESTIERA SEGREGATA (FLORIDA PRIVET), LAGERSTROEMIA INDICA (CRAPE MYRTLE) | AS SHOWN | 10 Gal. min. | ±10' ht., 3" caliper at time of planting |
| 18 REQ. | SHRUB OPTIONAL TYPES; RAPHIOLEPIS INDICA (DWARF INDIAN HAWTHORN), ROSMARINUS (ROSEMARY), VIBURNUM ODOORATISSIMUM (SWEET VIBURNUM), LIGUSTRUM JAPONICUM (LIGUSTRUM) | 24" O.C. MIN. 36" O.C. MAX. | 3 Gal. min. | 18" ht. min. at time of planting |



LANDSCAPE PLAN

WREC WESLEY CHAPEL
 ELECTRICAL SUBSTATION

DRAWING INVALID UNLESS SIGNED, DATED & SEALED BY REGISTERED PROFESSIONAL ENGINEER

Scott D. McKee, P.E.
 7/18/15
 FL. REG. NO. 65654

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| DATE | REV. BY | REV. NO. | COMMENTS |
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| 7/23/15 | JLW | 1 | |

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