### CONSTRUCTION PLANS FOR:

# MANATEE COOLING POND CONCRETE OVERLAY

## (STA. 285+00 TO STA. 295+00) FLORIDA POWER & LIGHT COMPANY

### MANATEE COUNTY, FLORIDA

AMEC FOSTER WHEELER PROJECT NUMBER: 300906

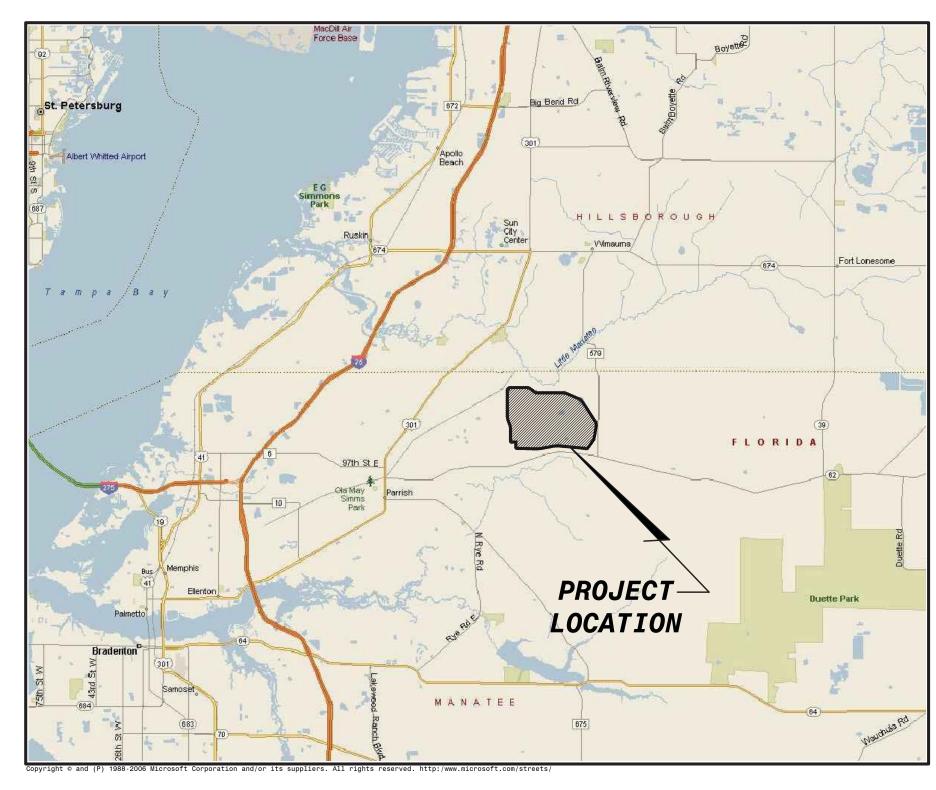
GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN
STANDARDS FOR CONSTRUCTION, MAINTENANCE, AND

UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM;
CURRENT VERSION

FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION; CURRENT VERSION

SURVEY PROVIDED BY: George F. Young, Inc.

299 Dr. Martin Luther Kng Jr. Street North St. Petersburg, FL 33701



SITE LOCATION MAP

MANATEE COUNTY, FLORIDA

SECTION 8, TOWNSHIP 33 SOUTH, RANGE 20 EAST

INDEX OF DRAWINGS
Sheet Number Sheet Title

Sheet Number

1 COVER SHEET

2 AERIAL PHOTOGRAPH AND PROJECT LIMITS

3 PROJECT LAYOUT PLAN

4 EXISTING SOIL-CEMENT TOPOGRAPHY

5 TYPICAL CONCRETE OVERLAY SECTION AND DETAILS

6 KEY AND CONSTRUCTION JOINT DETAILS

7 - 12 SOIL CEMENT CROSS SECTIONS

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.



CONTRACTOR IS TO VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

NOTE:
CONSTRUCTION PLANS ARE AVAILABLE IN AUTODESK CIVIL 3D FORMAT ONLY.
ANY FILE CONVERSIONS WILL BE AT THE CONTRACTOR'S EXPENSE.

I HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF FLORIDA PRACTICING WITH AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC., 2000 E. EDGEWOOD DRIVE, SUITE 215, LAKELAND, FL 33803, A CORPORATION AUTHORIZED TO OPERATE AS A BUSINESS PROVIDING ENGINEERING CONSULTING SERVICES (CA-5392) BY THE STATE OF FLORIDA DEPARTMENT OF PROFESSIONAL REGULATION, BOARD OF PROFESSIONAL ENGINEERS. I FURTHER CERTIFY THAT I, OR OTHERS UNDER MY DIRECT SUPERVISION, HAVE PREPARED THE ENGINEERING EVALUATIONS, FINDINGS, OPINIONS, CALCULATIONS OR TECHNICAL ADVICE HEREBY REPRESENTED IN THESE PLANS.

SIGNATURE:

NAME:

P.E. NUMBER:

DATE:

SIGNATURE:

NO. 41823

STATE OF

CORIDA

NO. 41823

Digitally signed by

<u>jeff.beriswill@ame</u>cfw.com

<u>DN:</u>

cn=jeff.beriswill@amecfw.com

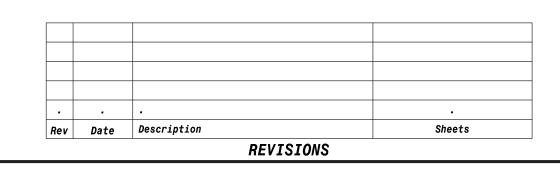
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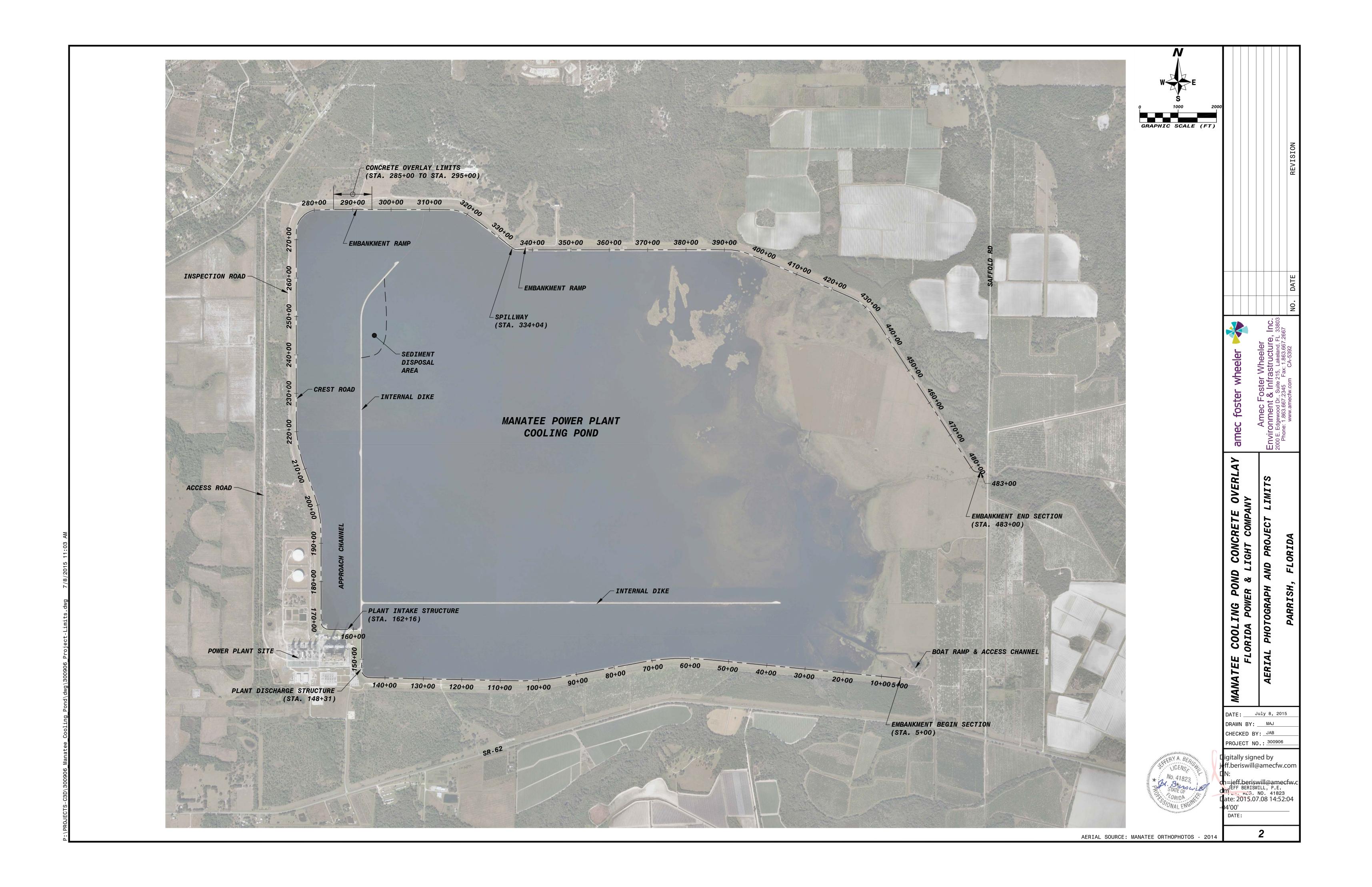
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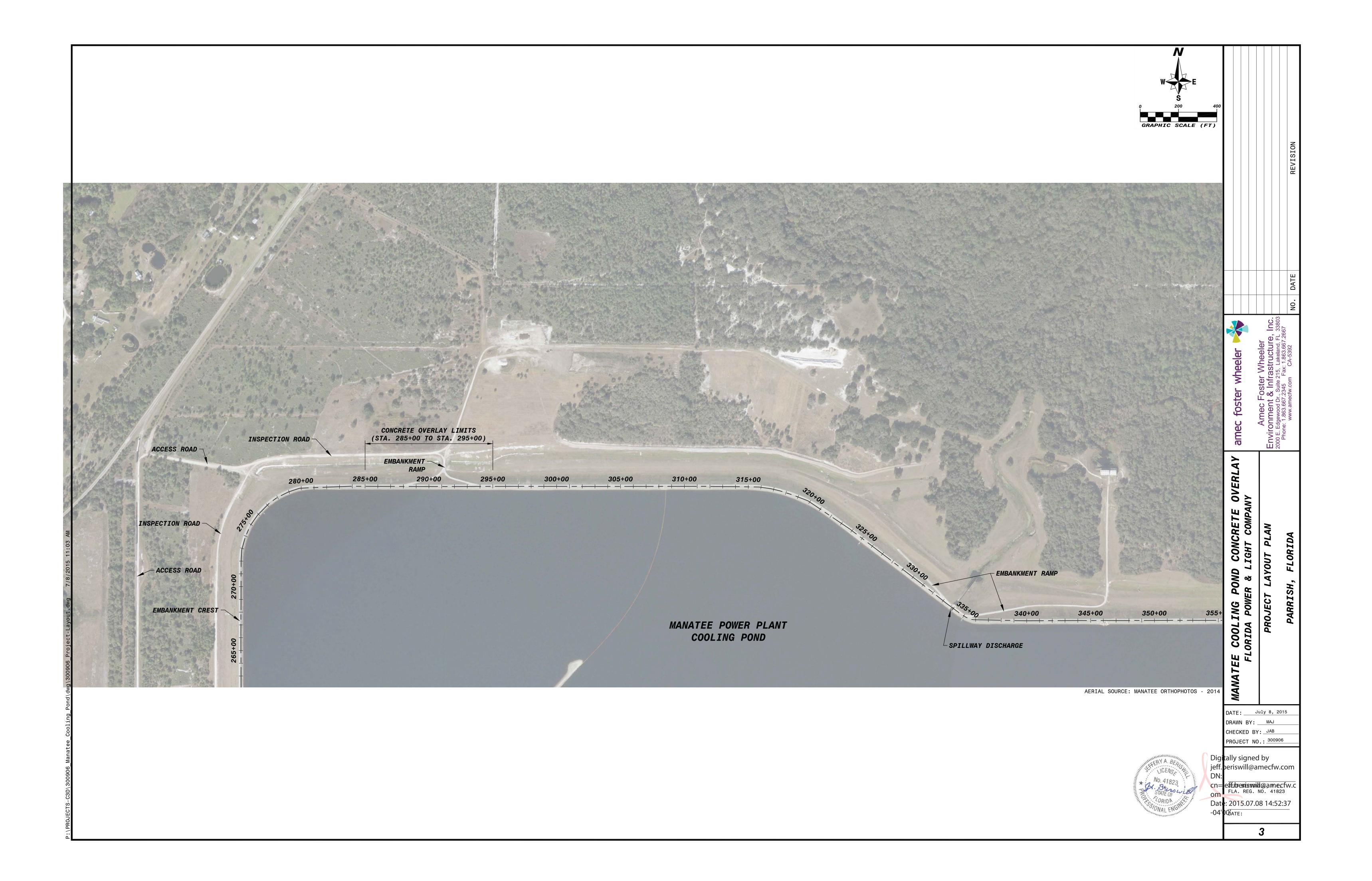
amec foster wheeler

Amec Foster Wheeler Environment & Infrastructure, Inc.

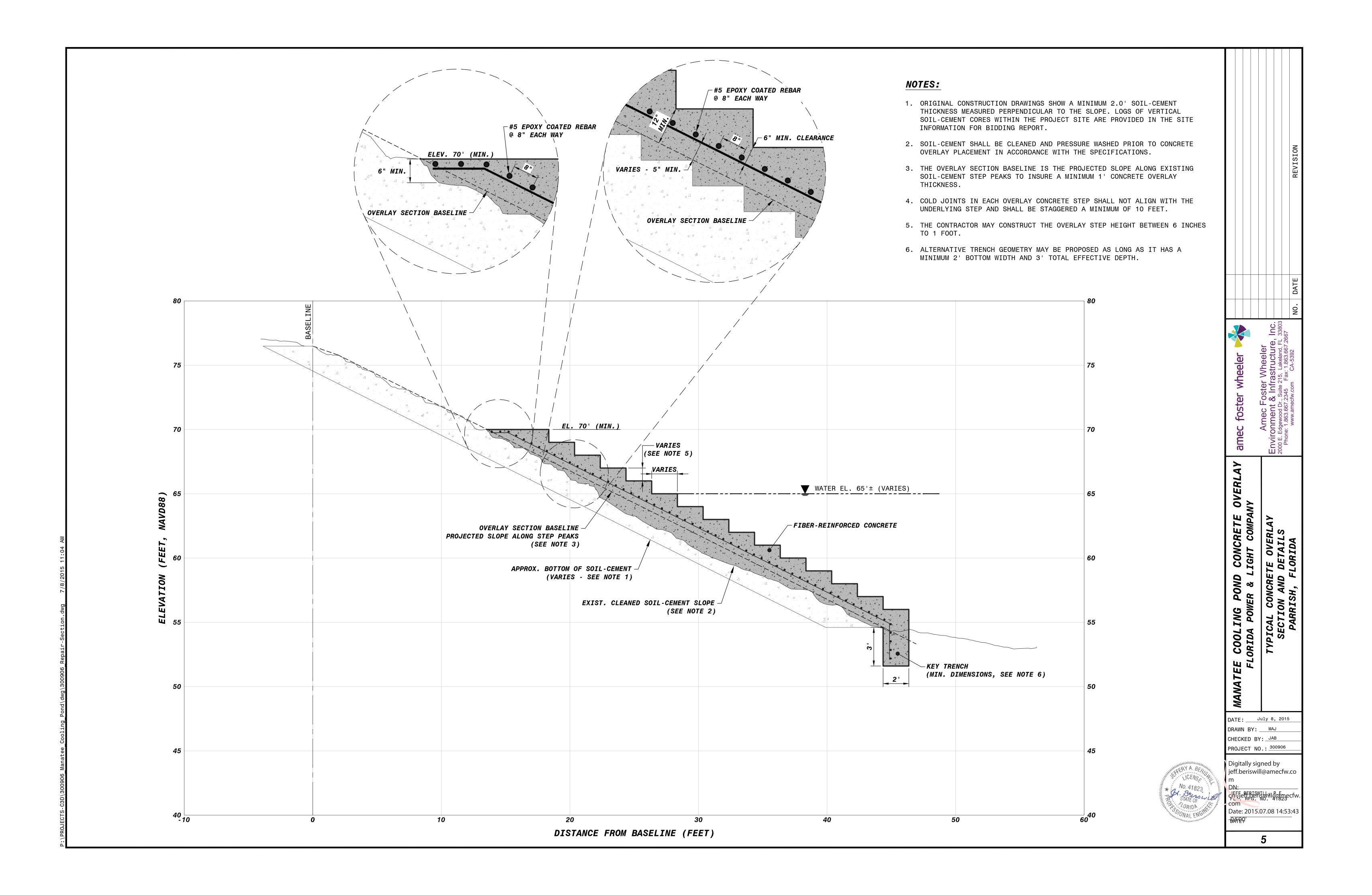
2000 E. Edgewood Dr., Suite 215, Lakeland, FL 33803 Phone: 1.863.667.2345 Fax: 1.863.667.2667 www.amecfw.com CA-5392 FINAL PLANS
JULY 08, 2015

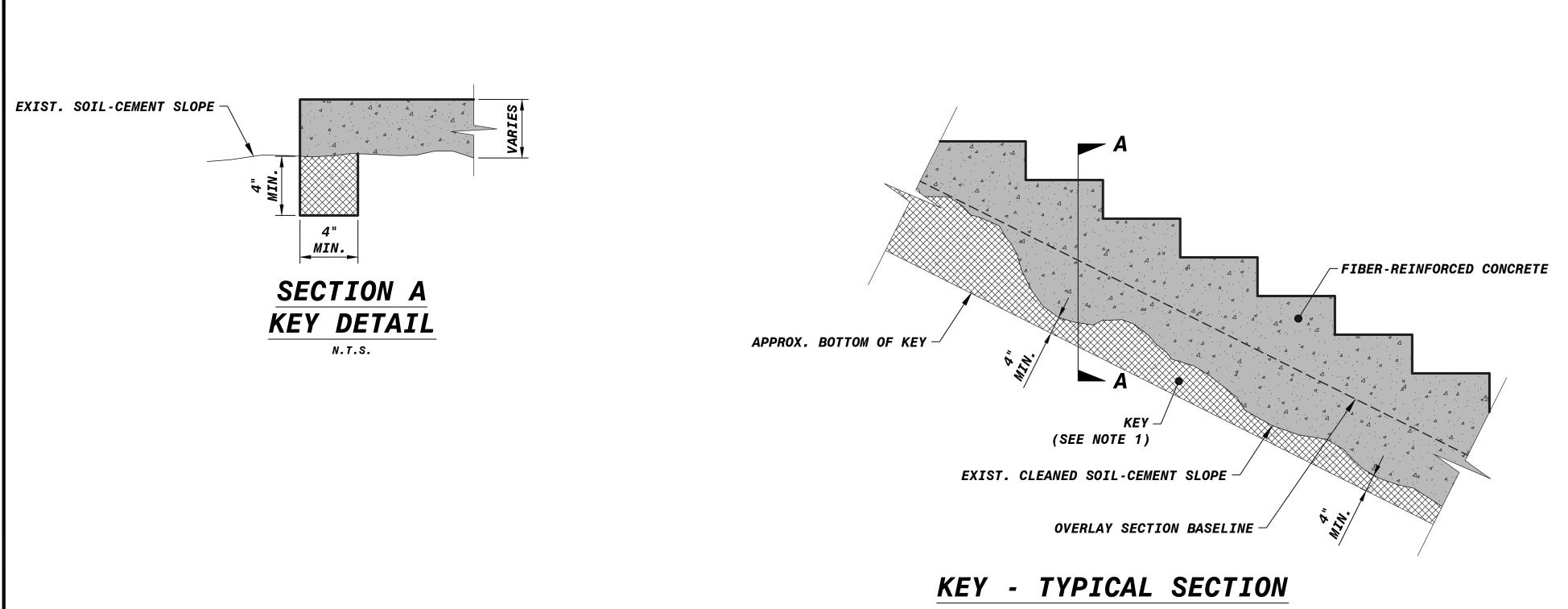












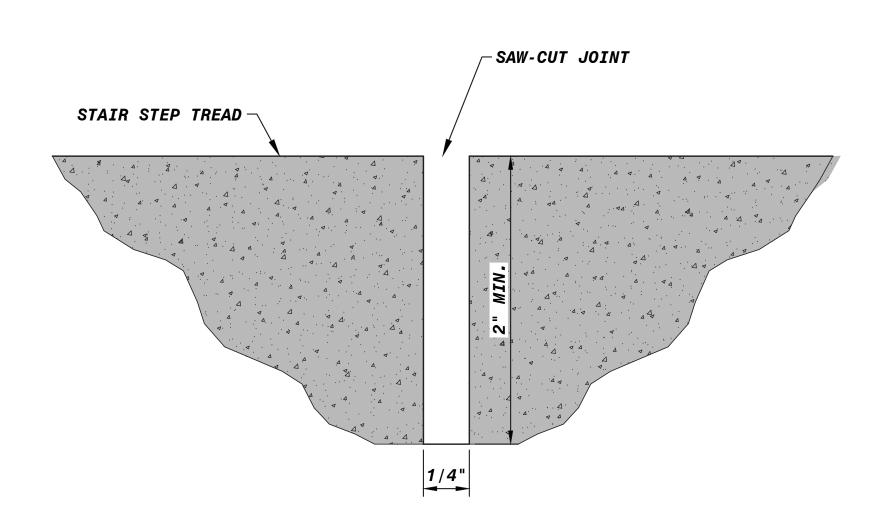
- 1. KEY TO BE EXCAVATED AT END STATION OF THE WORK AREA (STA. 285+00 AND STA. 295+00). KEY TRENCH SHALL EXTEND THROUGH EXISTING SOIL-CEMENT STEPS A MINIMUM OF 6 INCHES BELOW THE BOTTOM OF THE STEP RISER.
- 2. CONSTRUCTION JOINTS SHALL BE PLACED IN THE CONCRETE OVERLAY STEP TREADS BETWEEN ELEV. 57' AND ELEV. 70'.
- 3. CONSTRUCTION JOINTS SHALL BE SPACED EVERY 20 FEET ALONG THE STEP ALIGNMENT.



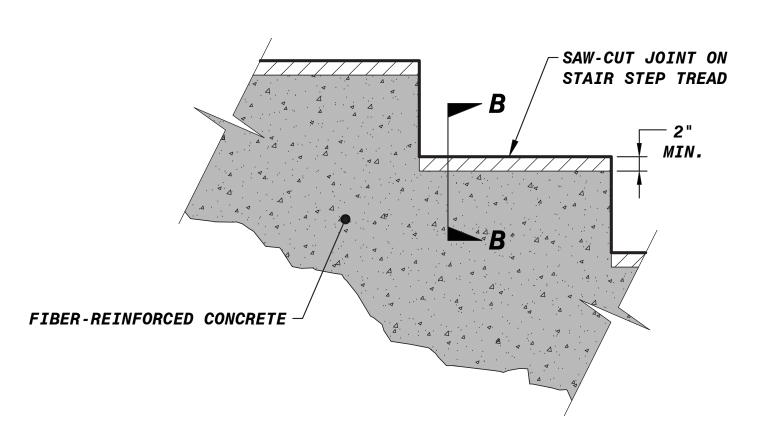
MANATEE COOLING POND CONCRETE OVERLA FLORIDA POWER & LIGHT COMPANY

DATE: \_\_\_\_\_July 8, 2015 DRAWN BY: MAJ

PROJECT NO.: 300906 Digitally signed by jeff.beriswill@amecfw.com

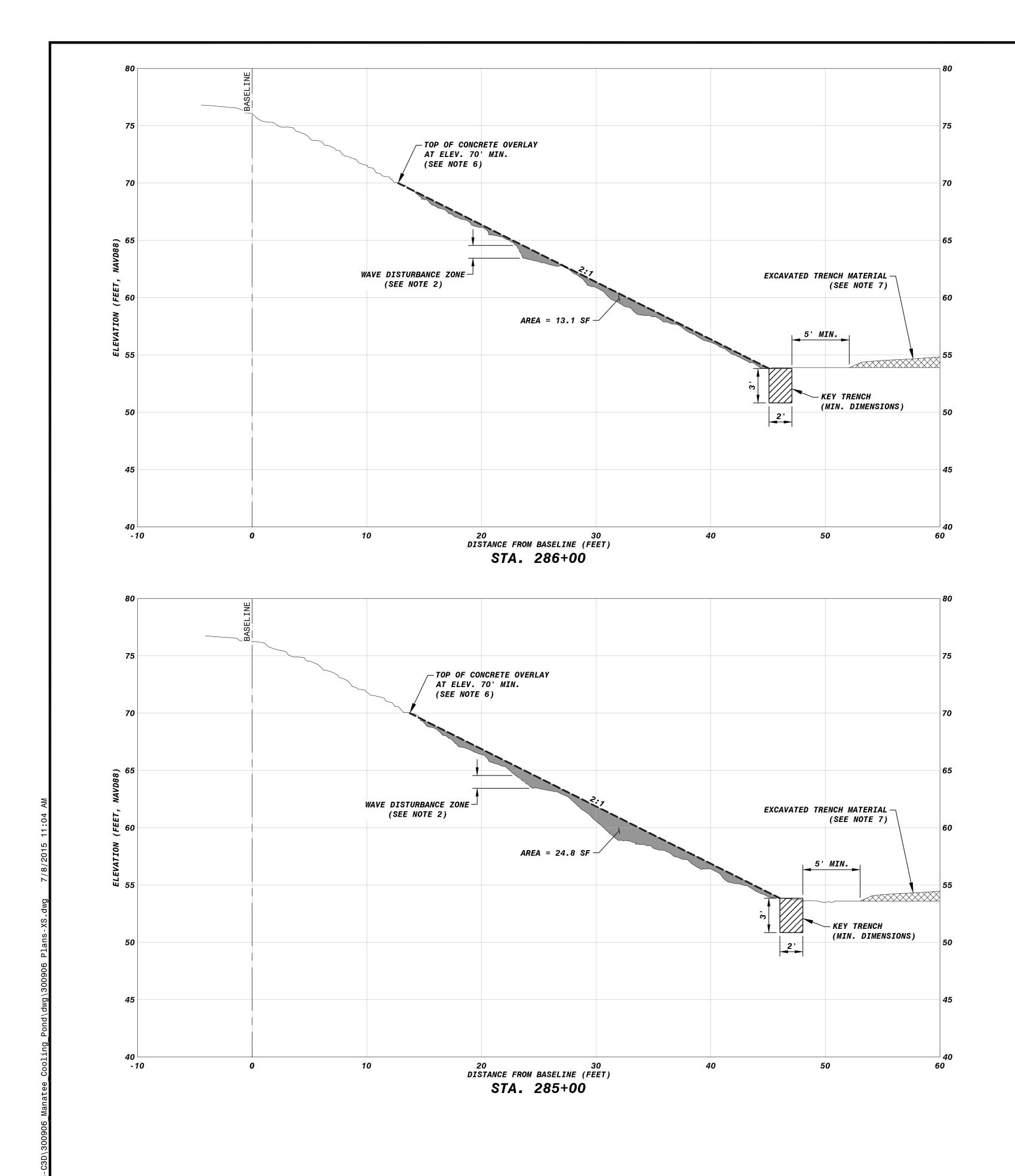


SECTION B CONSTRUCTION JOINT - DETAIL



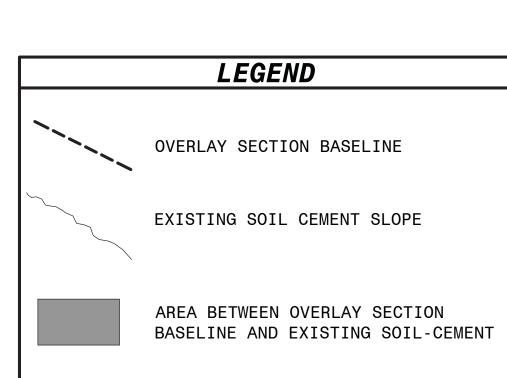
CONSTRUCTION JOINT - TYPICAL SECTION

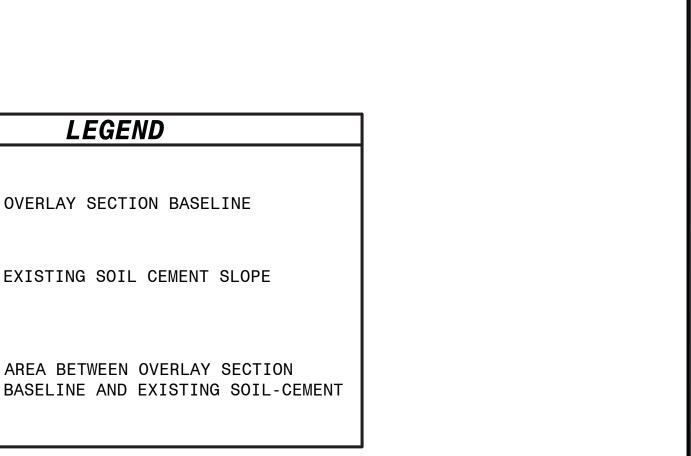
N.T.S.



- 1. SECTIONS BASED ON COMBINED LIDAR/SONAR SURVEY BY GEORGE F. YOUNG, INC. WITH A GENERAL ACCURACY OF 0.5'±.
- 2. SURVEY DATA COULD NOT BE OBTAINED WITHIN THE ZONE OF WAVE DISTURBANCE (GENERALLY BETWEEN ELEV. 63' AND ELEV. 65' AT THE TIME OF THE SURVEY.)
- 3. COOLING POND WATER LEVEL WILL VARY BASED ON THE POWER PLANT NEEDS.
- 4. SECTION BASELINE MAY BE VARIED BY THE CONTRACTOR BASED ON SITE CONDITIONS AND CONSTRUCTION METHODS AS APPROVED BY FLORIDA POWER AND LIGHT COMPANY (FPL).
- 5. A MINIMUM 1' OVERLAY SECTION THICKNESS SHALL BE MAINTAINED AT ALL LOCATIONS AND STEPS SHALL BE CONTINUOUS WITH SMOOTH TRANSITIONS AT TRANSVERSE JOINTS.
- 6. TOP OF OVERLAY SHALL BE AT A MINIMUM ELEV. 70'. THE TOP ELEVATION MAY VARY TO MATCH EXISTING STEPS AND TO MAINTAIN A MINIMUM VERTIVAL THICKNESS OF 6" ON THE OVERLAY TIE-IN WITH THE TOP EXISTING SOIL-CEMENT STEP.

7. MATERIAL MECHANICALLY EXCAVATED FROM THE KEY TRENCH MAY BE DISPOSED IN THE COOLING POND BOTTOM IN ACCORDANCE WITH CONSTRUCTION SPECIFICATION SECTION C - EXCAVATION OF BOTTOM KEY TRENCH.



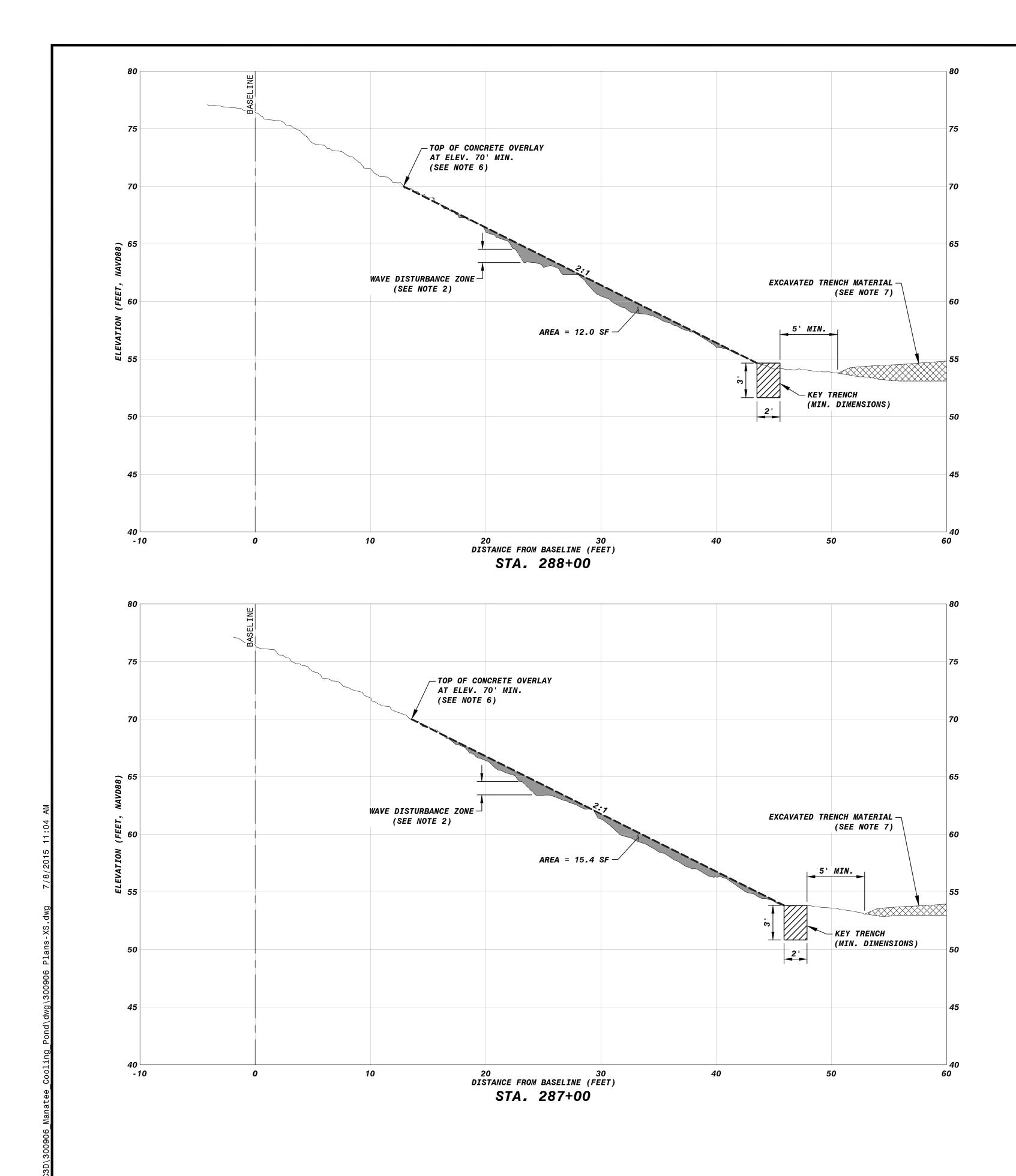




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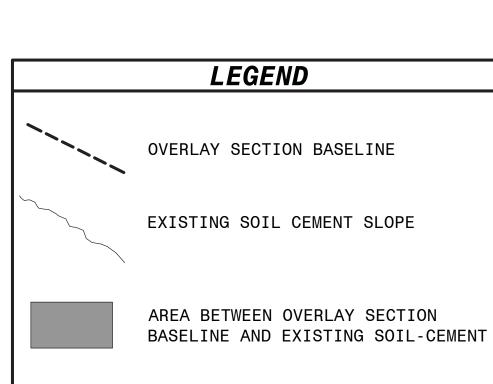
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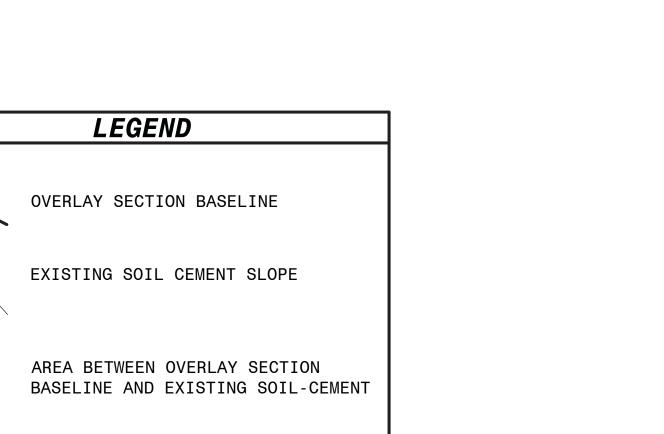
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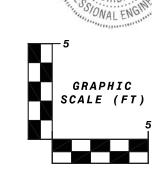
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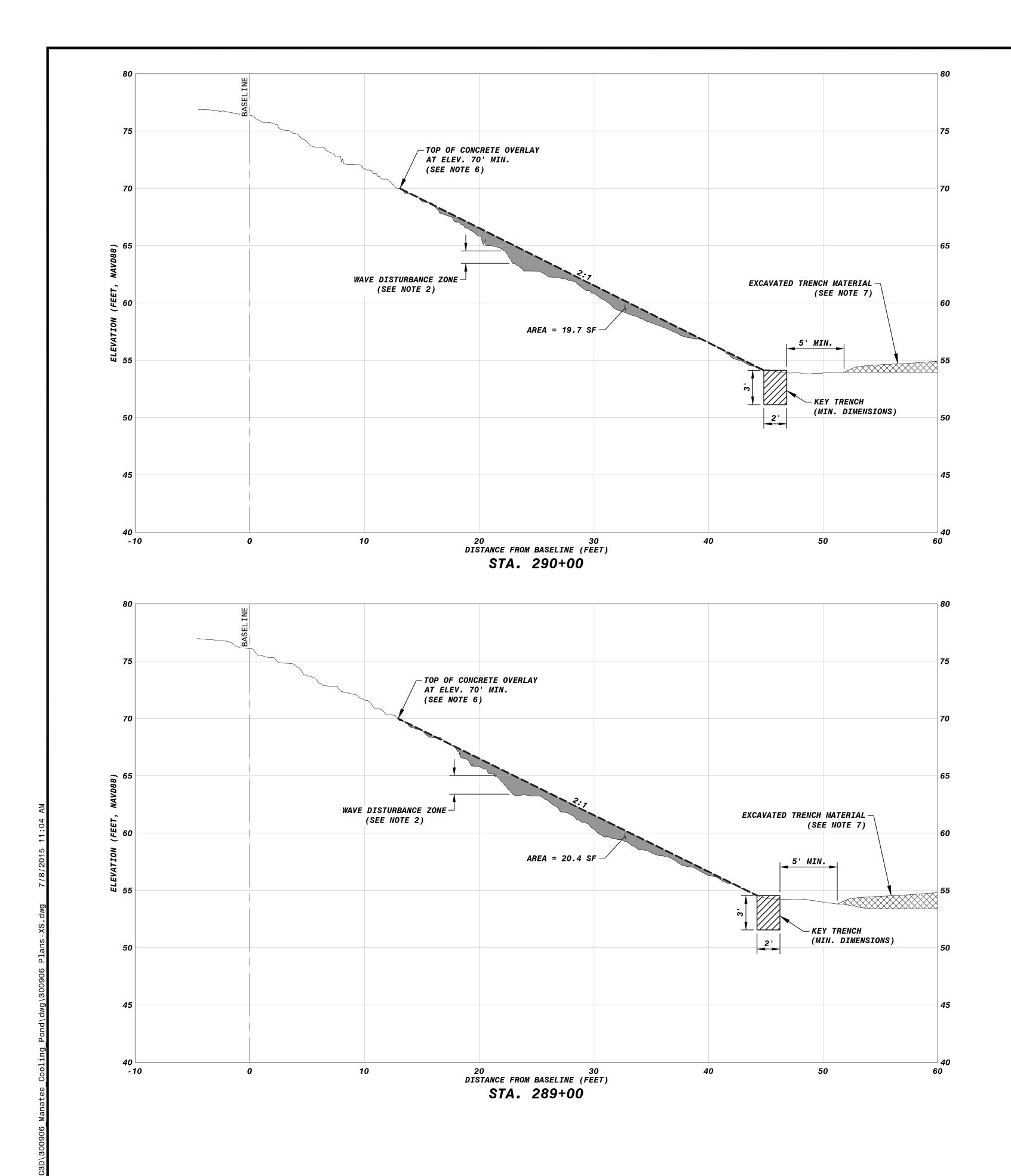


MANATEE COOLING POND CONCRETE OVERLA FLORIDA POWER & LIGHT COMPANY

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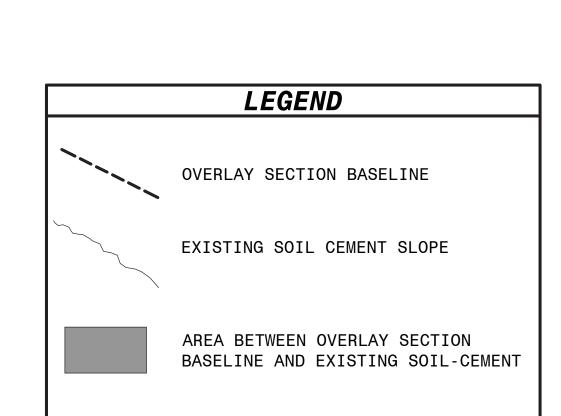
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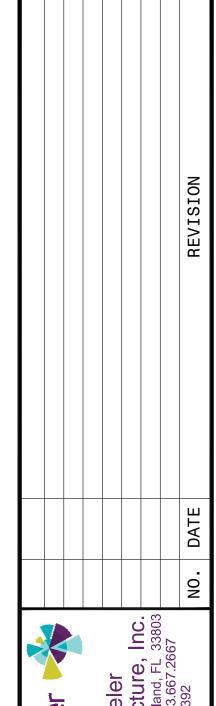


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Foster Wheeler

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MANATEE COOLING POND CONCRETE OVERLA
FLORIDA POWER & LIGHT COMPANY
SOIL-CEMENT CROSS SECTIONS
STA. 289+00 TO STA. 290+00
PARRISH, FLORIDA

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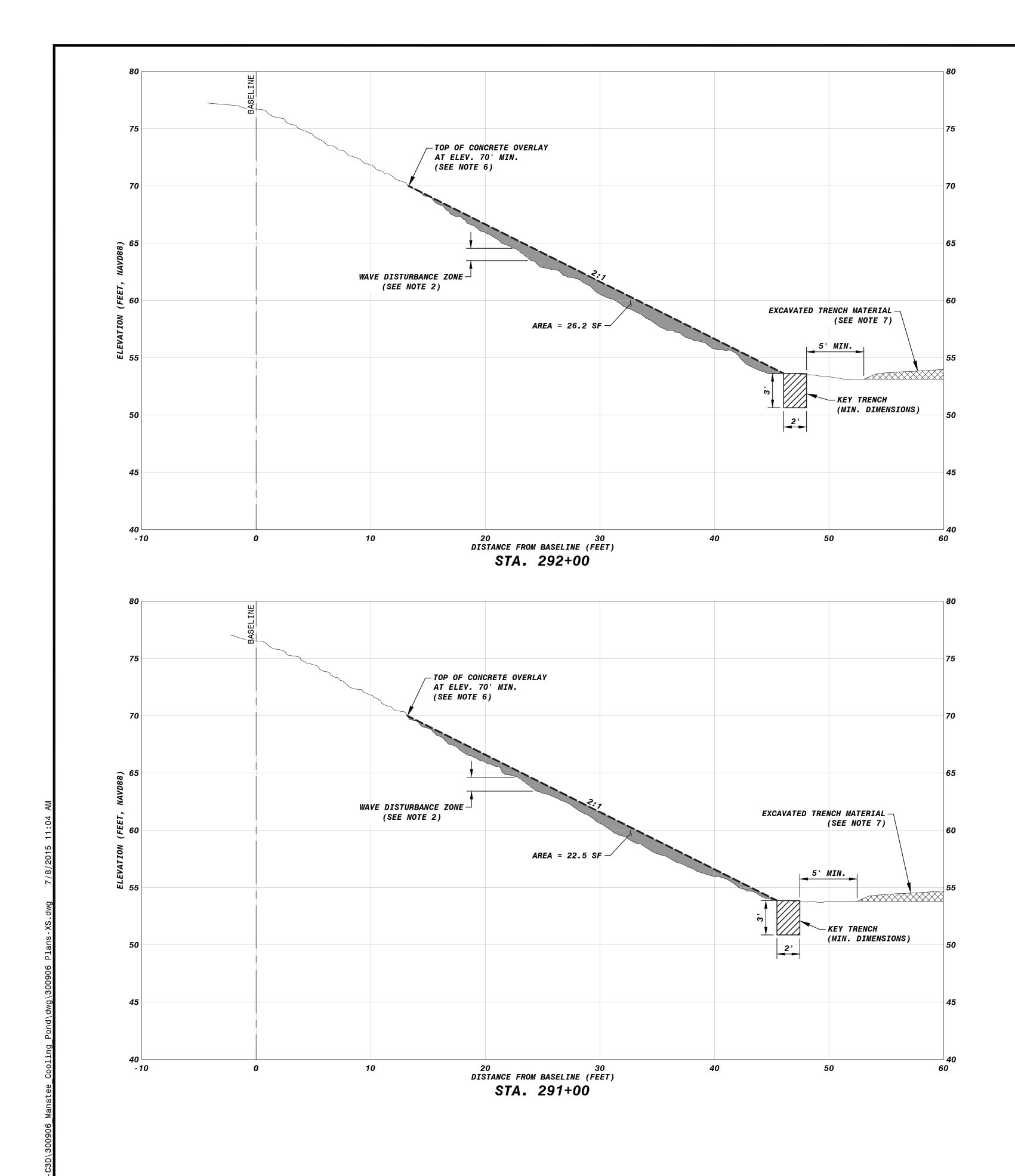
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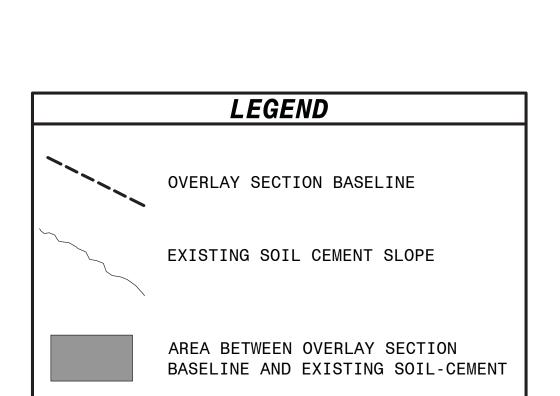
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MANATEE COOLING POND CONCRETE OVERLA FLORIDA POWER & LIGHT COMPANY

GRAPHIC SCALE (FT)

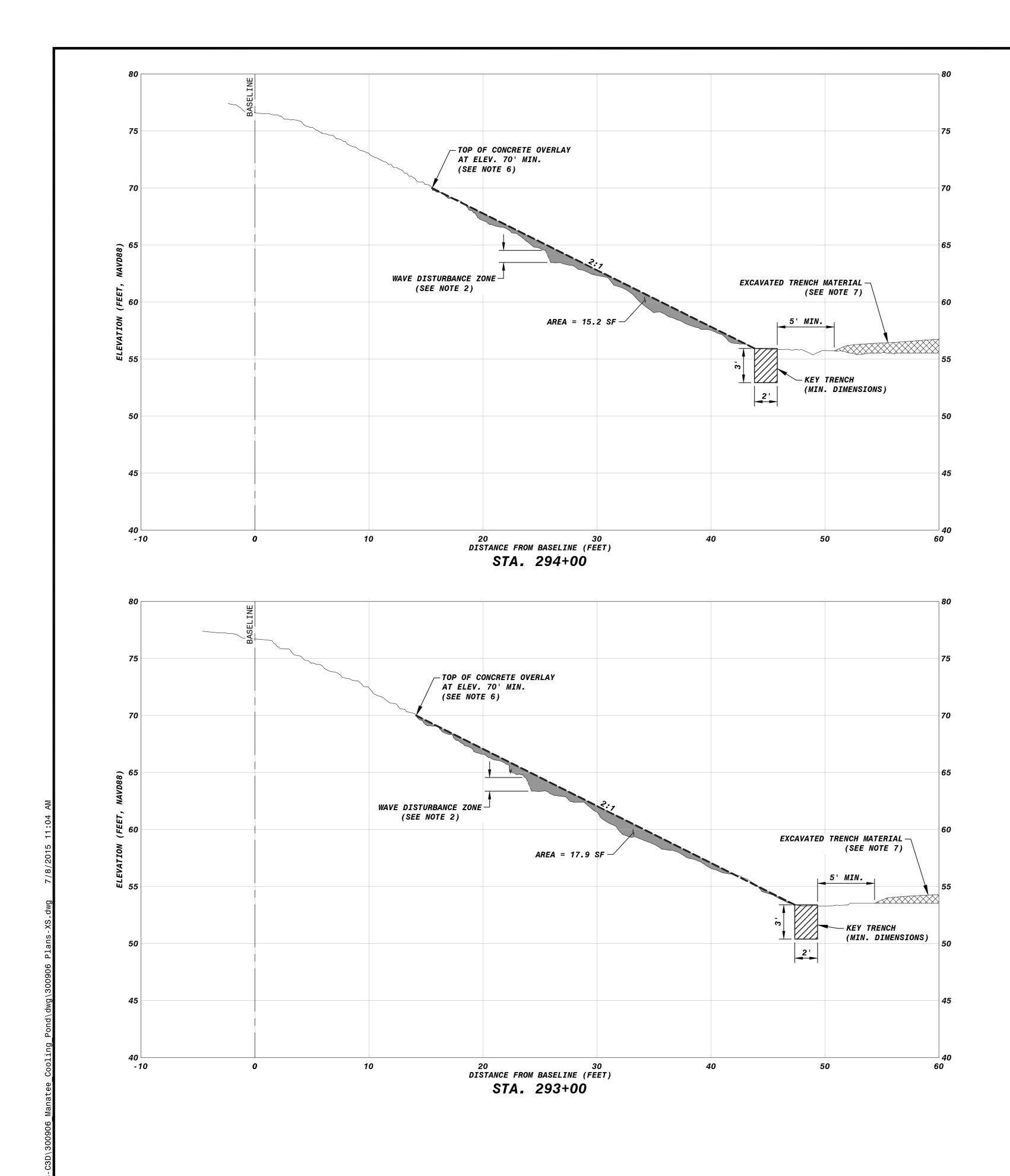
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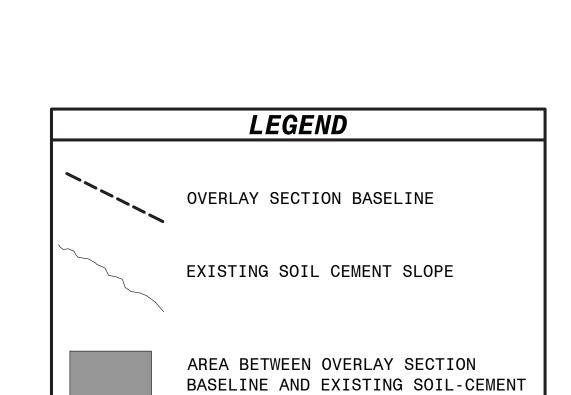
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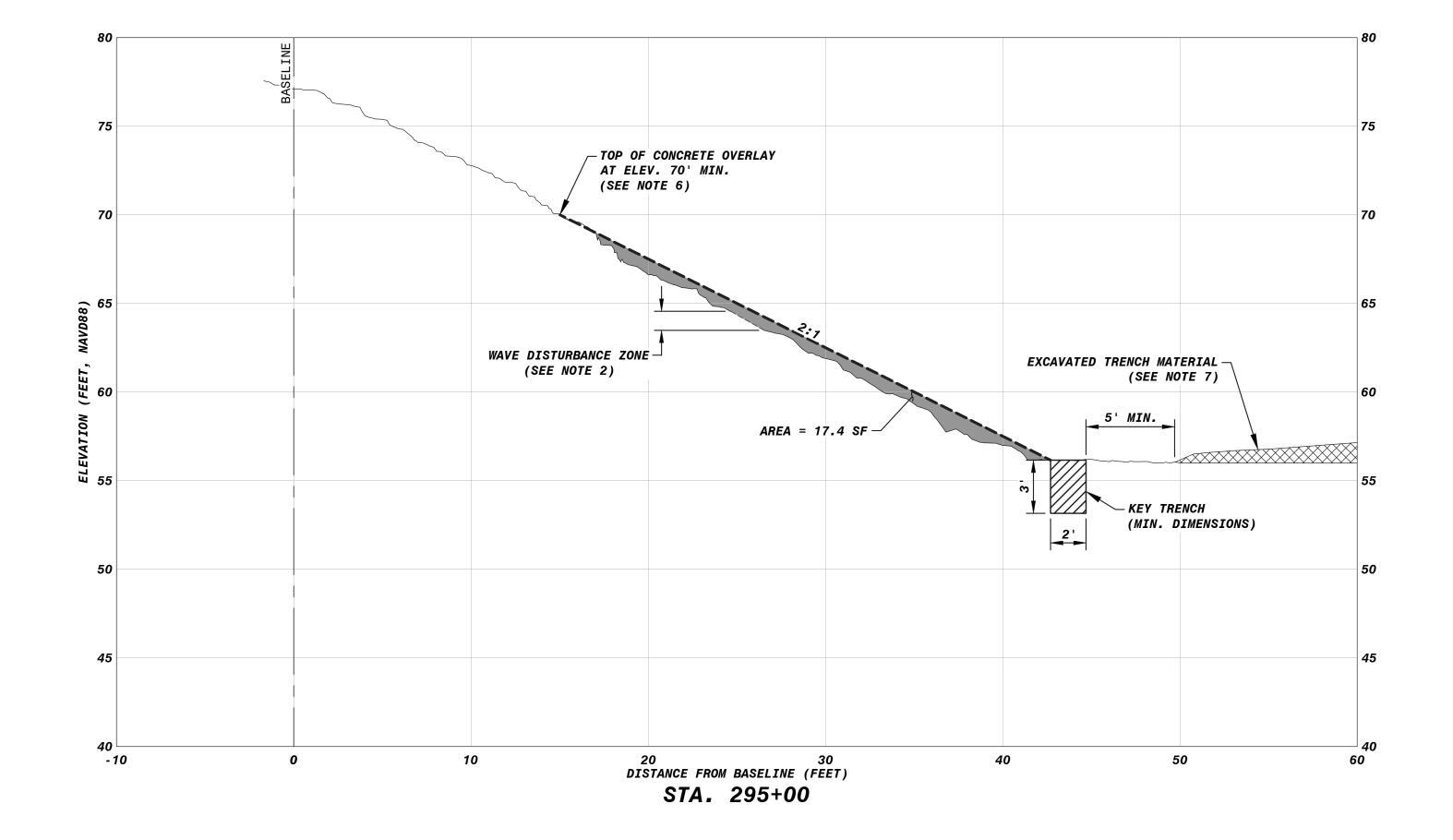
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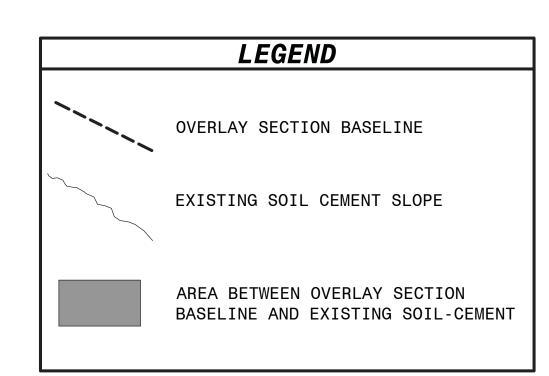
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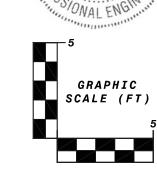
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MANATEE COOLING POND CONCRETE OVERLA FLORIDA POWER & LIGHT COMPANY CROSS SECTIONS 295+00 H, FLORIDA

DATE: \_\_\_\_\_July 8, 2015 j@HEBKEBWBN@arMecfw.com PROJECT NO.: 300906 Date: 2015.07.08 14:58:01

JEFF BERISWILL, P.E. FLA. REG. NO. 41823

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