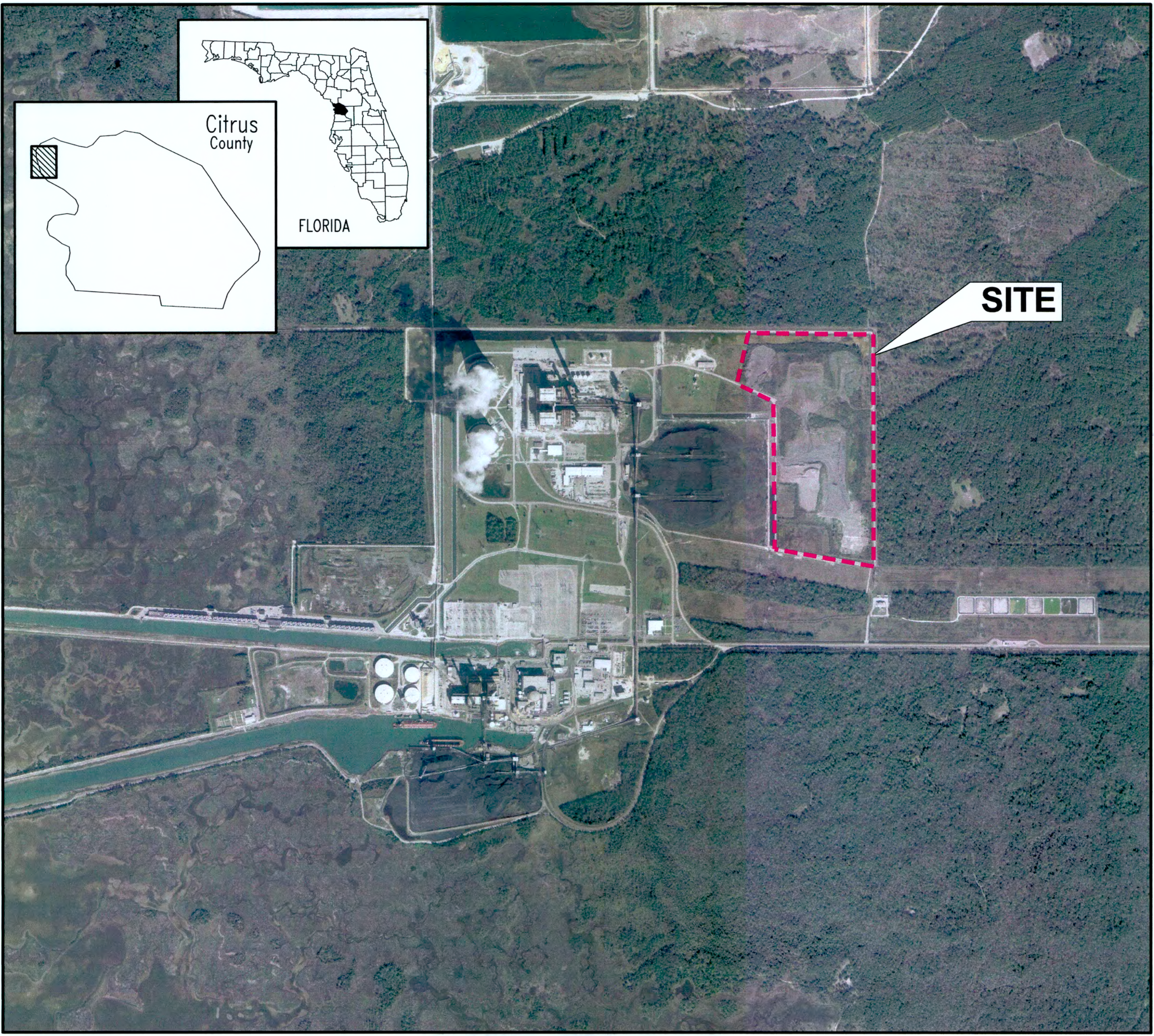


# ASH STORAGE/DISPOSAL AREA VERTICAL EXPANSION

*PROGRESS ENERGY FLORIDA  
CRYSTAL RIVER ENERGY COMPLEX  
CITRUS COUNTY, FLORIDA*



| DRAWING No. | TITLE                         |
|-------------|-------------------------------|
| DRAWING 1   | COVER SHEET/SITE LOCATION MAP |
| DRAWING 2   | EXISTING CONDITIONS           |
| DRAWING 3   | FINAL COVER PLAN              |
| DRAWING 4   | FINAL COVER CROSS SECTIONS    |
| DRAWING 5   | DETAILS                       |
| DRAWING 6   | STORMWATER MANAGEMENT         |

Prepared for:



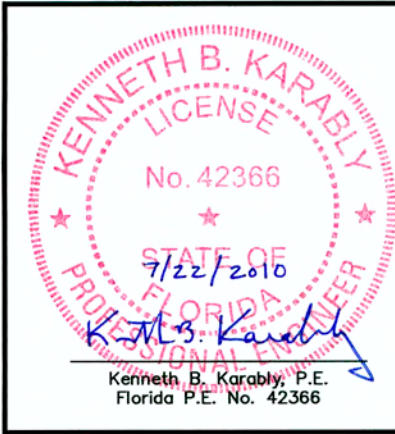
Prepared by:



## REFERENCES

1.) IMAGERY, DEPARTMENT OF REVENUE, 2007.

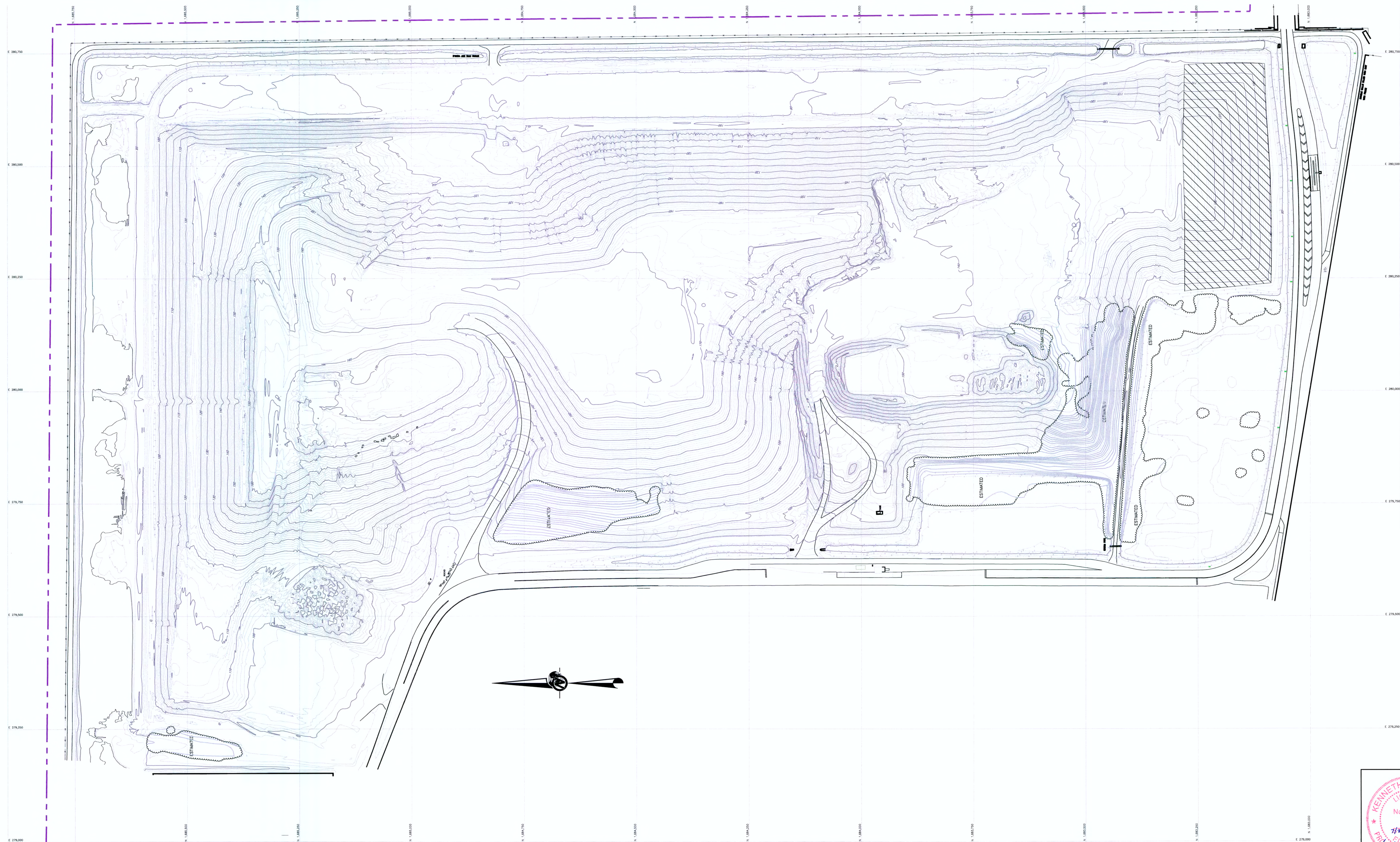
## SITE LOCATION MAP



DECEMBER 2010

DRAWING 1

\\nas01\proj\083-82671\dwg\08382671G002\_00.dwg 11/15/2009 1:30pm



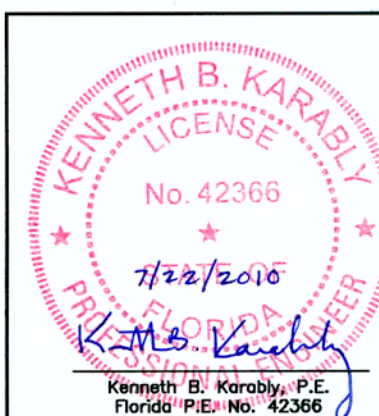
#### LEGEND

- EXISTING CONTOURS (SITE DATUM)
- PROPERTY BOUNDARY
- EXISTING MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- PREVIOUSLY CLOSED AREA

#### REFERENCES

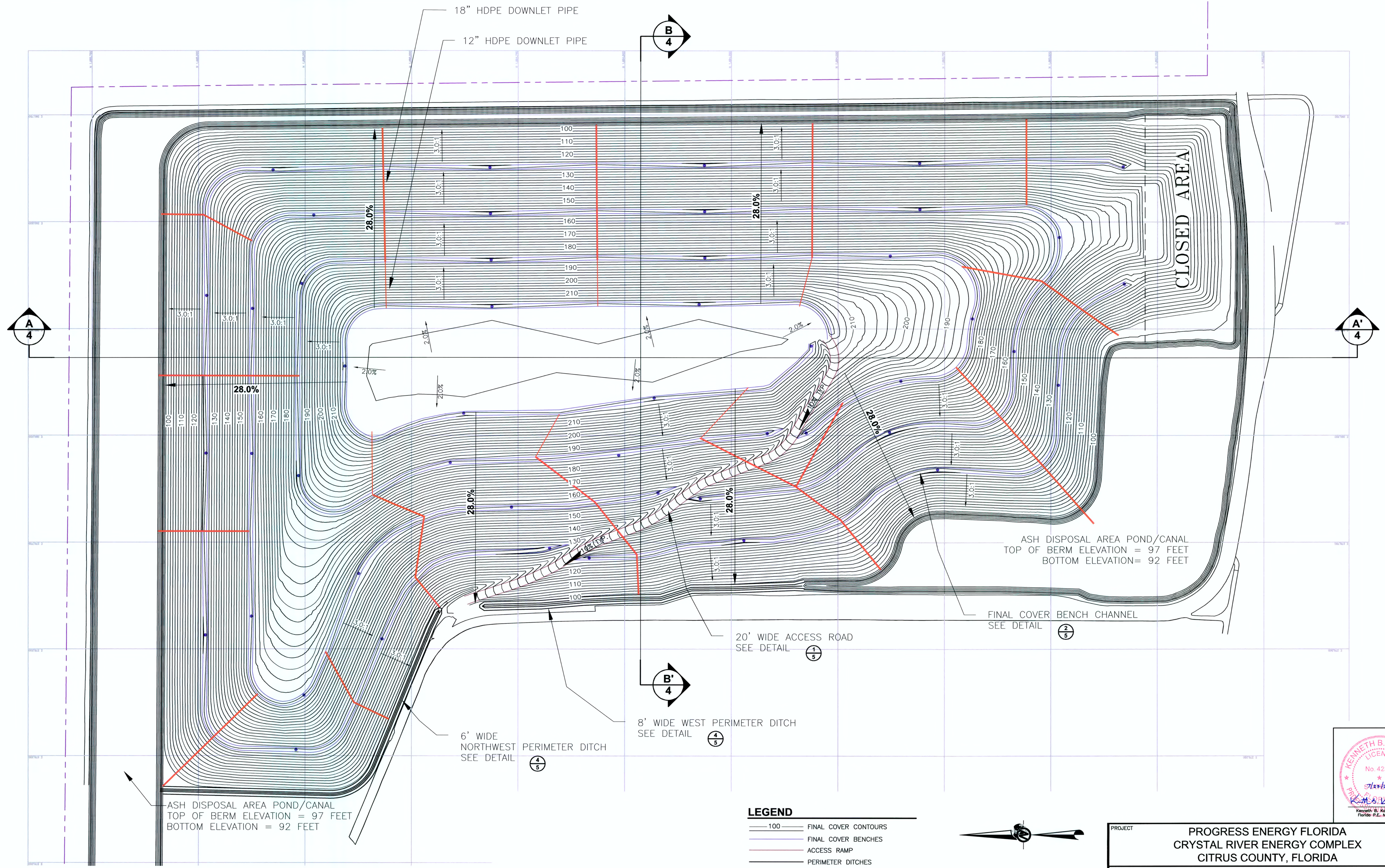
THIS TOPOGRAPHIC & QUANTITY SURVEY HAS BEEN PRODUCED BY PHOTOGRAMMETRIC METHODS BY: AMERICARIBE MAPPING, LLC.

THIS MAP REPRESENTS ACTUAL SITE CONDITIONS AT THE TIME OF AERIAL PHOTOGRAPHY TAKEN OCTOBER 26, 2010



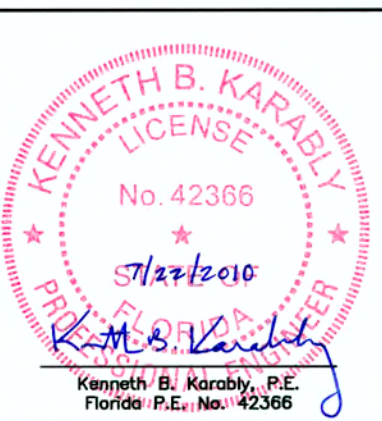
|                                                                                                                                  |  |                                                                                   |     |                          |                       |
|----------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|-----|--------------------------|-----------------------|
| PROJECT                                                                                                                          |  | PROGRESS ENERGY FLORIDA<br>CRYSTAL RIVER ENERGY COMPLEX<br>CITRUS COUNTY, FLORIDA |     |                          |                       |
| TITLE                                                                                                                            |  | EXISTING CONDITIONS                                                               |     |                          |                       |
|  Golder Associates<br>Jacksonville, Florida |  | PROJECT No. 083-82671.1                                                           |     | FILE No. 08382671G002_R0 |                       |
|                                                                                                                                  |  | DESIGN                                                                            | KBK | 11/25/09                 | SCALE AS SHOWN REV. 0 |
|                                                                                                                                  |  | CADD                                                                              | BCL | 12/07/10                 | DRAWING 2             |
|                                                                                                                                  |  | CHECK                                                                             | SFS | 12/01/10                 |                       |
|                                                                                                                                  |  | REVIEW                                                                            | KBK | 12/01/10                 |                       |

\\young\file\_08382671\0003\_R0.dwg Aug 04, 2011 - 1:37pm



#### LEGEND

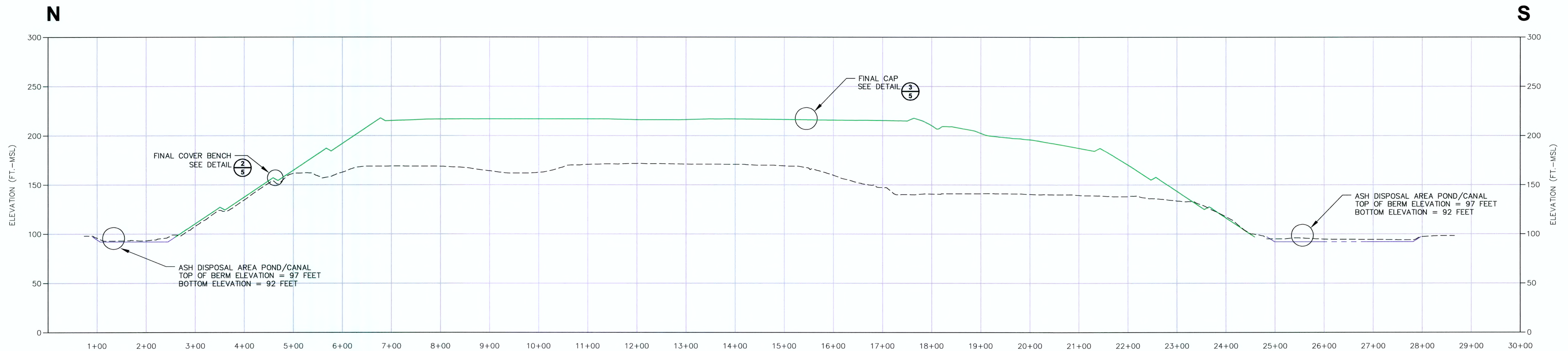
- 100 FINAL COVER CONTOURS
- FINAL COVER BENCHES
- ACCESS RAMP
- PERIMETER DITCHES
- ASH DISPOSAL AREA POND/CANAL
- 12 INCH DOWNLET PIPES
- 18 INCH DOWNLET PIPES
- PROPERTY BOUNDARY
- BENCH DITCH HIGH POINT



|             |     |                                                                                   |           |          |                 |
|-------------|-----|-----------------------------------------------------------------------------------|-----------|----------|-----------------|
| PROJECT     |     | PROGRESS ENERGY FLORIDA<br>CRYSTAL RIVER ENERGY COMPLEX<br>CITRUS COUNTY, FLORIDA |           |          |                 |
| TITLE       |     | FINAL COVER PLAN                                                                  |           |          |                 |
| PROJECT No. |     | 083-82671                                                                         | FILE No.  |          | 08382671G003_R0 |
| DESIGN      | SFS | 11/25/09                                                                          | SCALE     | AS SHOWN | REV. 0          |
| CADD        | BCL | 07/22/10                                                                          | DRAWING 3 |          |                 |
| CHECK       | SFS | 07/22/10                                                                          |           |          |                 |
| REVIEW      | KBK | 07/22/10                                                                          |           |          |                 |

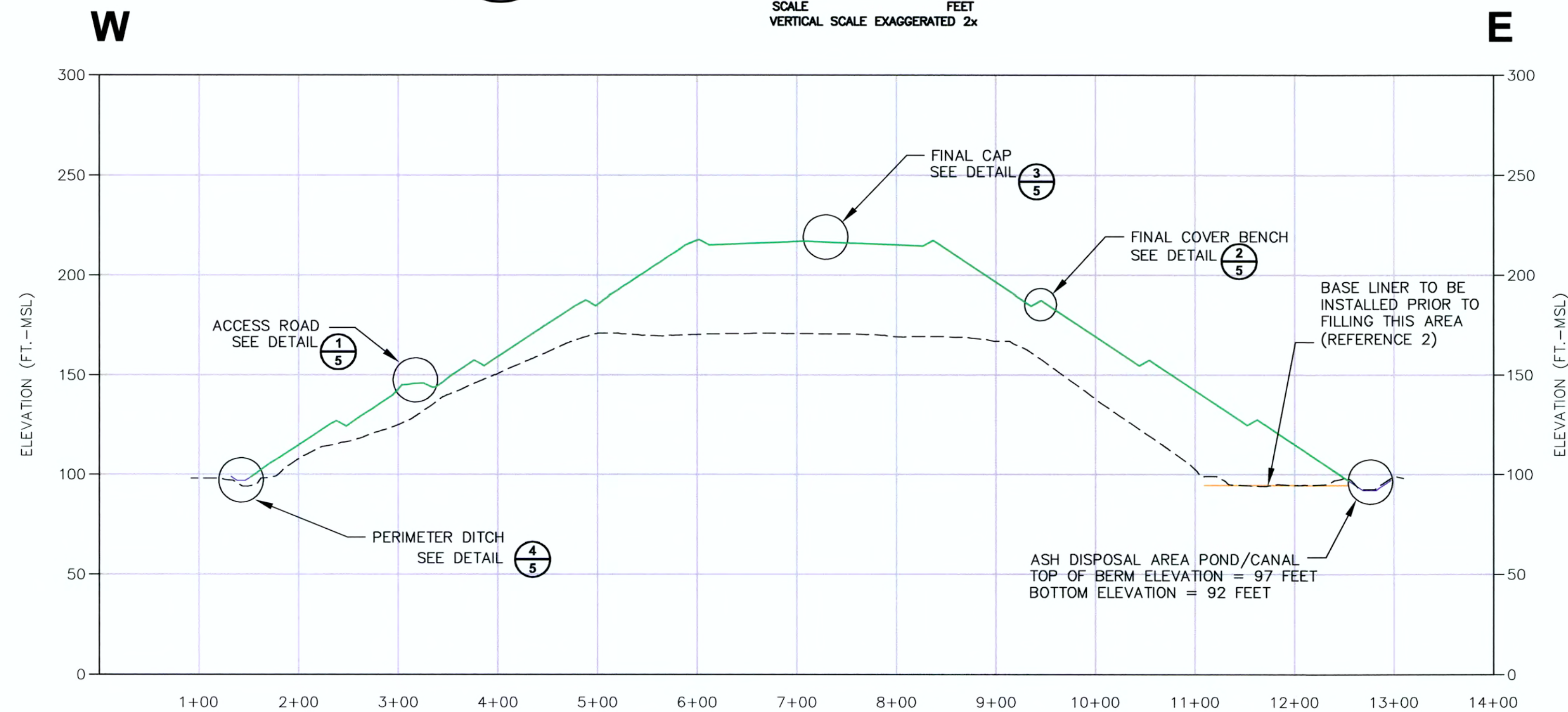


J:\working files\08382671\0205\_R0.dwg Aug 04, 2011 1:35pm



**A**  
**4** NORTH-SOUTH CROSS SECTION

100 0 100  
SCALE FEET  
VERTICAL SCALE EXAGGERATED 2x



**B**  
**4** WEST-EAST CROSS SECTION

100 0 100  
SCALE FEET  
VERTICAL SCALE EXAGGERATED 2x

**LEGEND**

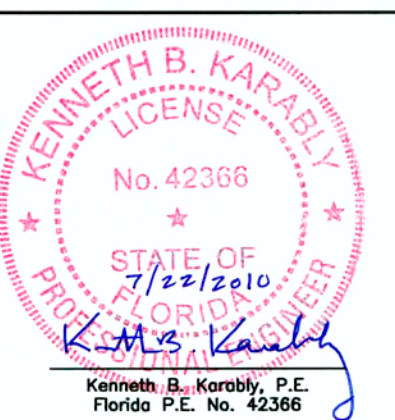
- FINAL COVER
- EXISTING TOPOGRAPHY
- SUBGRADE
- PERIMETER DITCHES AND ASH DISPOSAL AREA POND/CANAL

**REFERENCES**

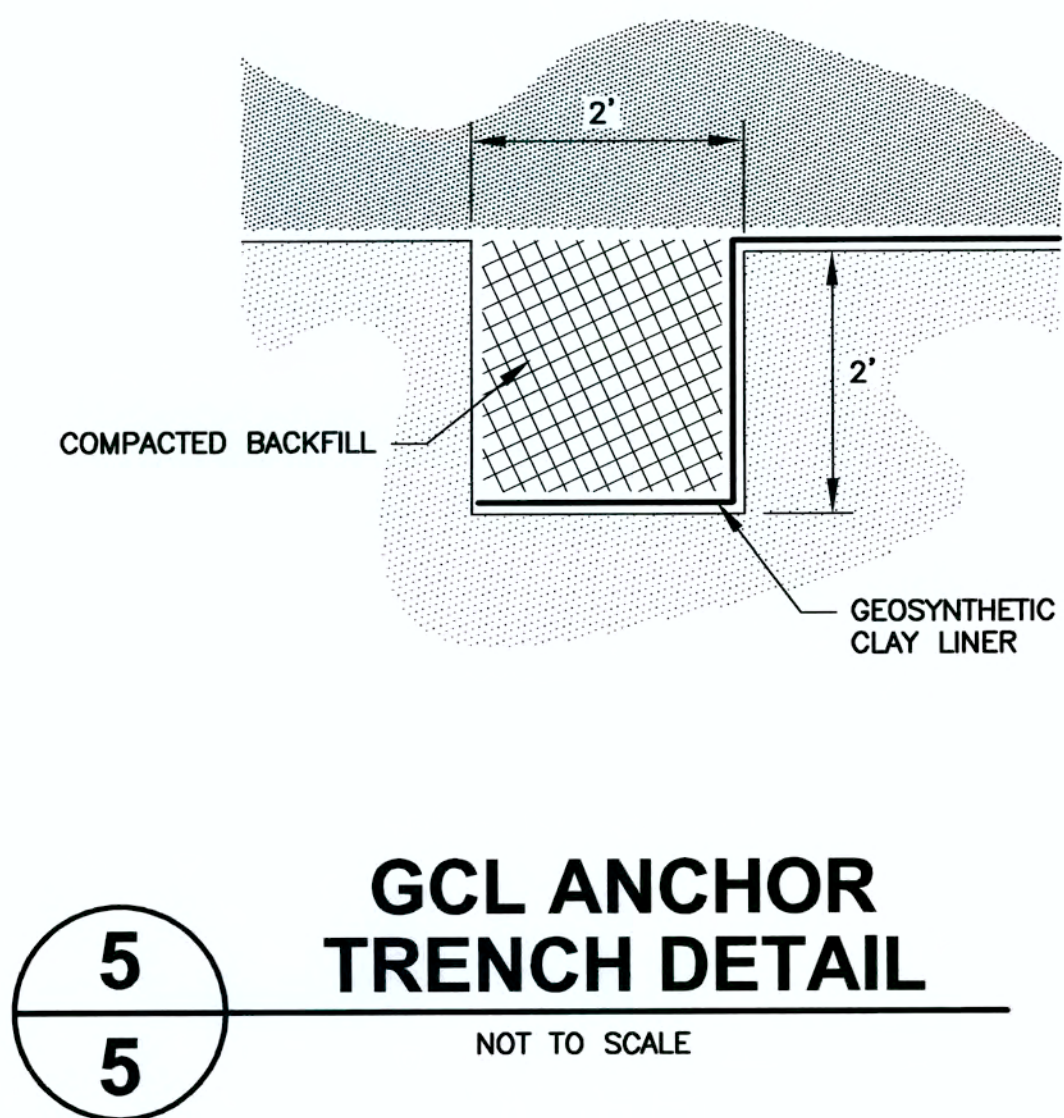
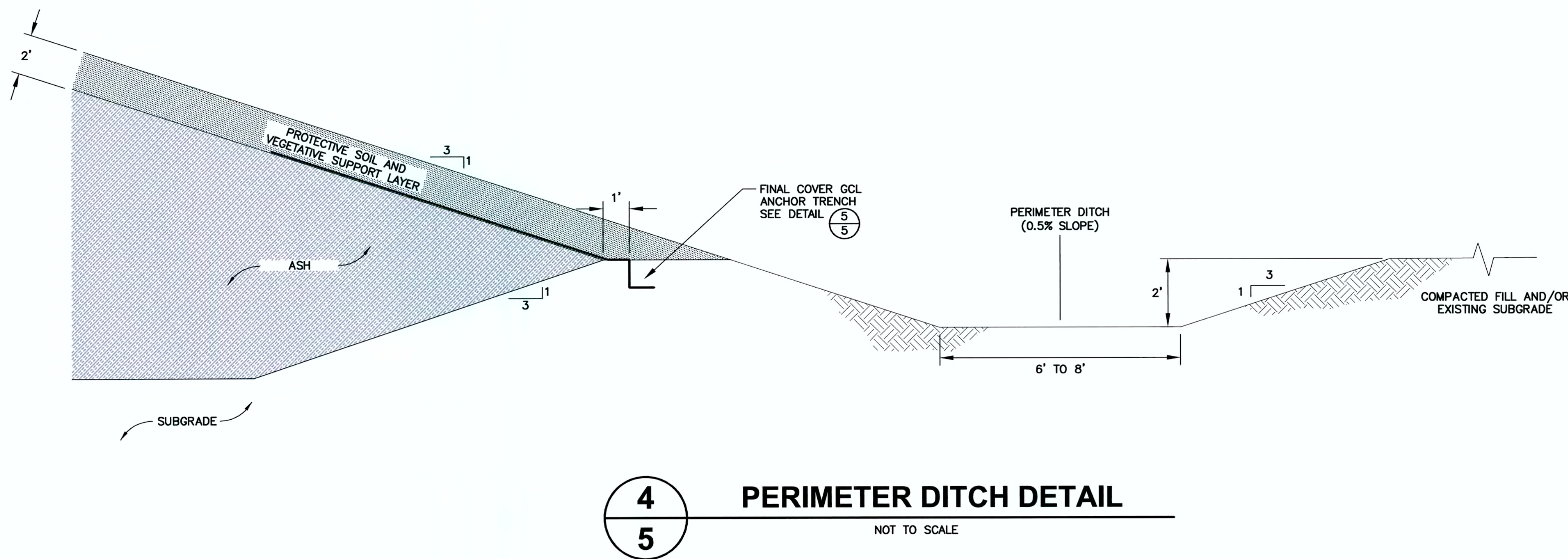
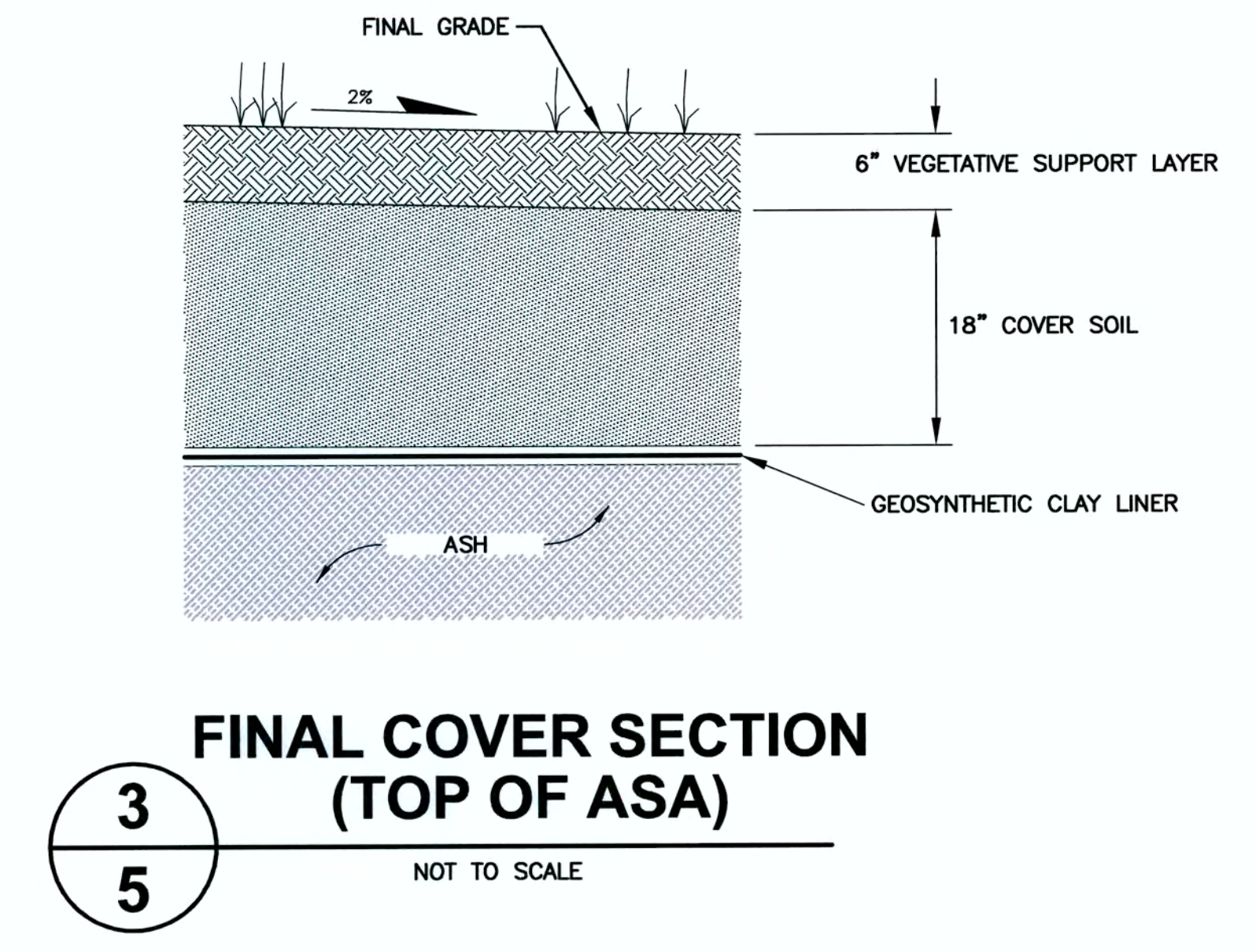
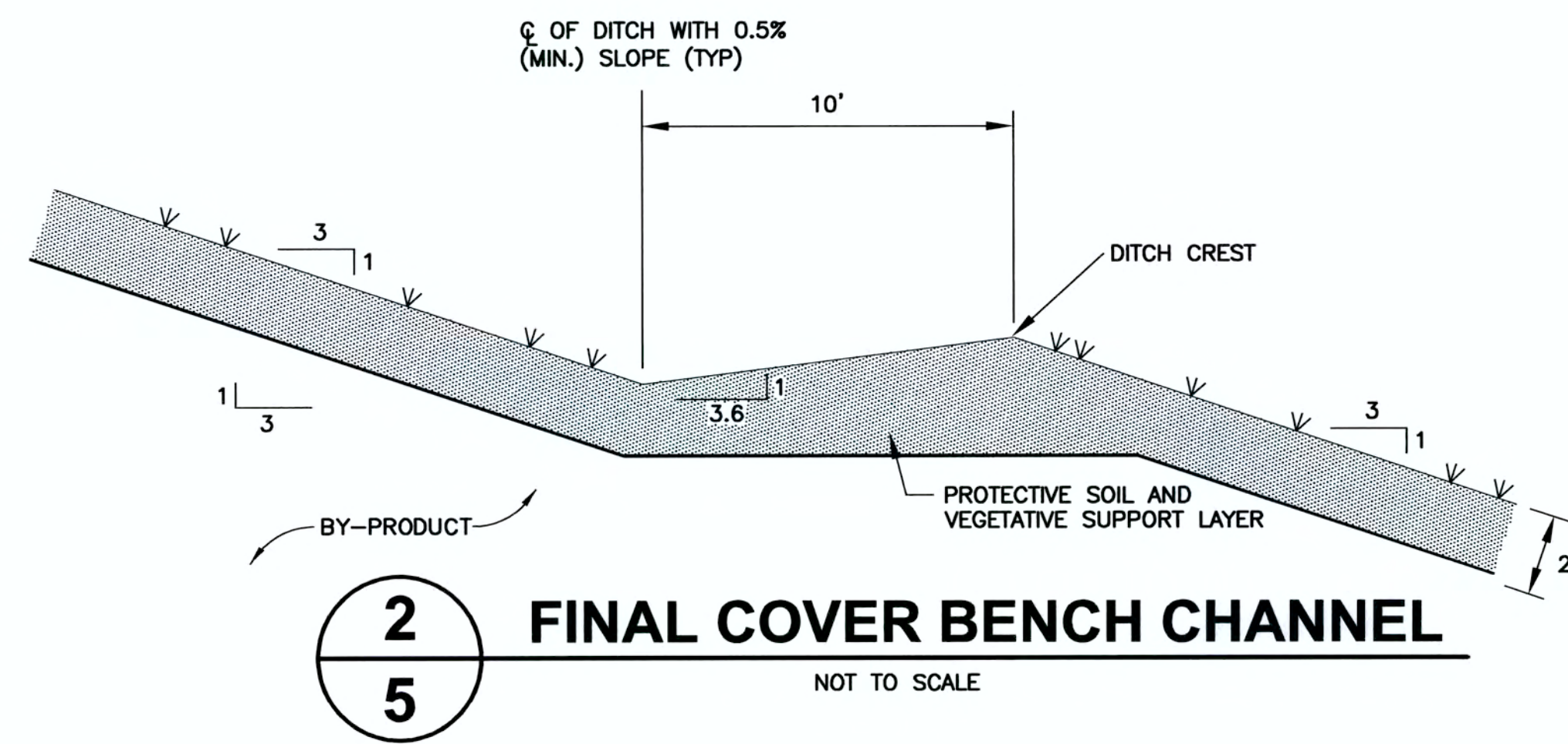
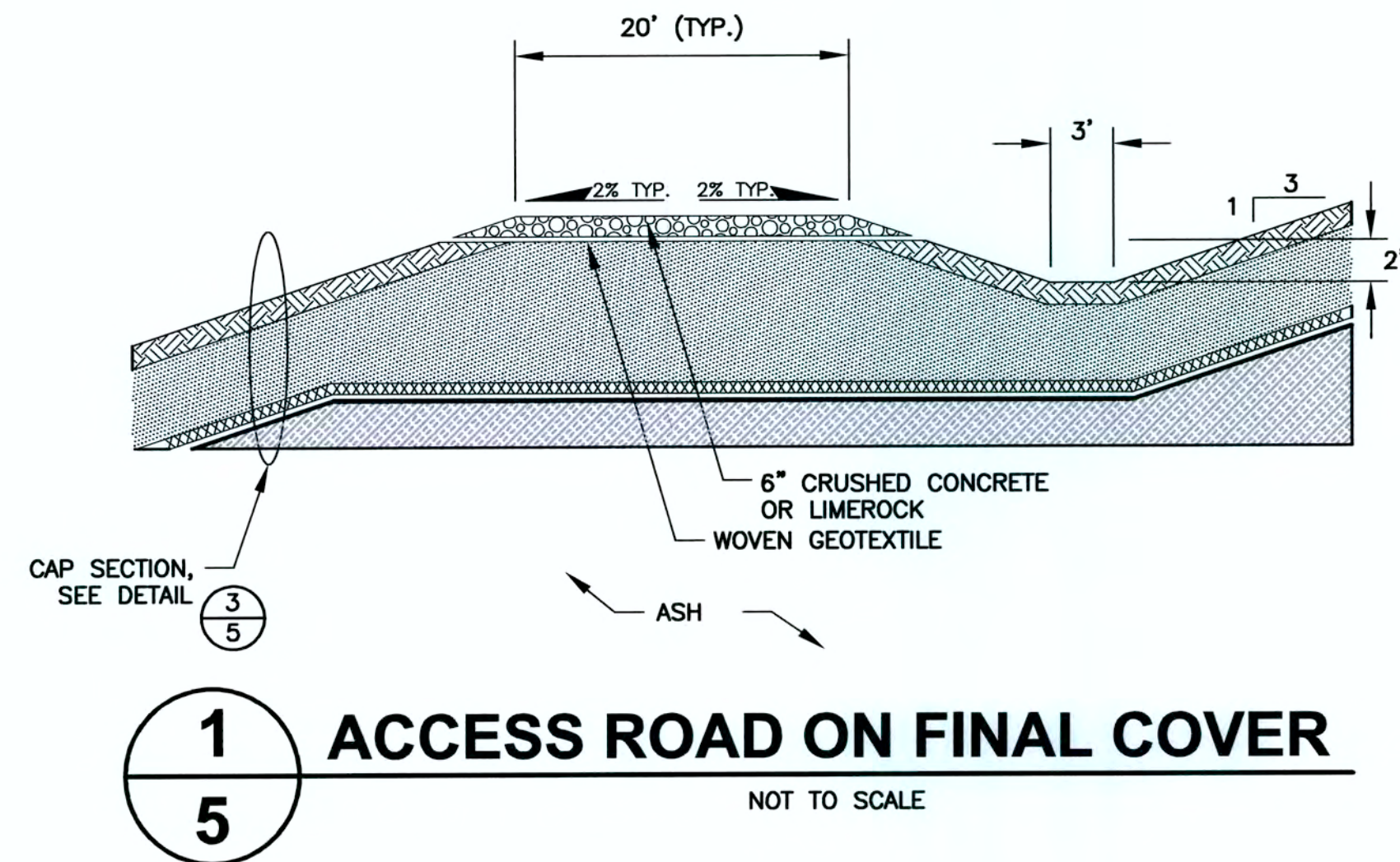
- EXISTING TOPOGRAPHY FROM AERIAL SURVEY BY AMERICARIBE MAPPING, LLC TAKEN OCTOBER 26, 2010.
- BASE LINER DETAILS HORIZONTAL RECONFIGURATION SUPPORTING TECHNICAL INFORMATION AND DATED MARCH 18, 2010 AND REVISED SUPPORTING TECHNICAL INFORMATION DATED MAY 27, 2010.

**NOTES**

- ALL ELEVATIONS SHOWN ARE RELATIVE TO SITE DATUM.



|                                                                                       |             |                                                                                   |          |                  |          |
|---------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|----------|------------------|----------|
| PROJECT                                                                               |             | PROGRESS ENERGY FLORIDA<br>CRYSTAL RIVER ENERGY COMPLEX<br>CITRUS COUNTY, FLORIDA |          |                  |          |
| TITLE                                                                                 |             | FINAL COVER CROSS SECTIONS                                                        |          |                  |          |
|  | PROJECT No. | 083-82671                                                                         | FILE No. | 08382671G005_R0  |          |
|                                                                                       | DESIGN      | KBK                                                                               | 11/25/09 | SCALE            | AS SHOWN |
|                                                                                       | CADD        | BCL                                                                               | 12/07/10 | REV.             | 0        |
|                                                                                       | CHECK       | SFS                                                                               | 12/01/10 | <b>DRAWING 4</b> |          |
| REVIEW                                                                                |             | KBK                                                                               | 12/01/10 |                  |          |



|                                                                                       |             |                                                                                   |          |                  |          |
|---------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|----------|------------------|----------|
| PROJECT                                                                               |             | PROGRESS ENERGY FLORIDA<br>CRYSTAL RIVER ENERGY COMPLEX<br>CITRUS COUNTY, FLORIDA |          |                  |          |
| TITLE                                                                                 |             | <b>DETAILS</b>                                                                    |          |                  |          |
|  | PROJECT No. | 083-82671                                                                         | FILE No. | 08382671G006_R0  |          |
|                                                                                       | DESIGN      | KBK                                                                               | 11/25/09 | SCALE            | AS SHOWN |
|                                                                                       | CADD        | BCL                                                                               | 12/07/10 | REV.             | 0        |
|                                                                                       | CHECK       | SFS                                                                               | 12/01/10 | <b>DRAWING 5</b> |          |
|                                                                                       | REVIEW      | KBK                                                                               | 12/01/10 |                  |          |

ASH DISPOSAL AREA POND/CANAL  
TOP OF BERM ELEVATION = 97 FEET  
BOTTOM ELEVATION= 92 FEET

DOWNLET PIPE

PREVIOUSLY  
CLOSED AREA

ASH DISPOSAL AREA POND/CANAL  
TOP OF BANK ELEVATION = 97 FEET  
BOTTOM ELEVATION = 92 FEET

N 1,684,084  
E 279,648  
RL 95 FEET (INV.)

WEST PERIMETER DITCH  
3H:1V SIDE-SLOPES  
2 FEET DEEP  
0.5% SLOPE  
SEE DETAIL ⊕

ACCESS ROAD AND DITCH  
SEE DETAIL ⊕

N 1,684,827  
E 279,596  
RL 98.8 FEET (INV.)

ROUTE ACCESS ROAD DITCH  
DRAINAGE TO NORTHWEST  
PERIMETER DITCH

N 1,684,935  
E 279,590  
RL 99.6 FEET (INV.)

NORTHWEST PERIMETER DITCH  
3H:1V SIDE-SLOPES  
2 FEET DEEP  
0.5% SLOPE  
SEE DETAIL ⊕

N 1,685,590  
E 279,170  
RL 95 FEET (INV.)

OVERFLOW WEIR  
INVERT ELEVATION = 95.75 FEET  
BASE WIDTH = 108 FEET

## LEGEND

- FINAL COVER
- PERIMETER DITCHES
- ASH DISPOSAL AREA POND/CANAL
- 12 INCH DOWNLET PIPES
- 18 INCH DOWNLET PIPES
- PROPERTY BOUNDARY

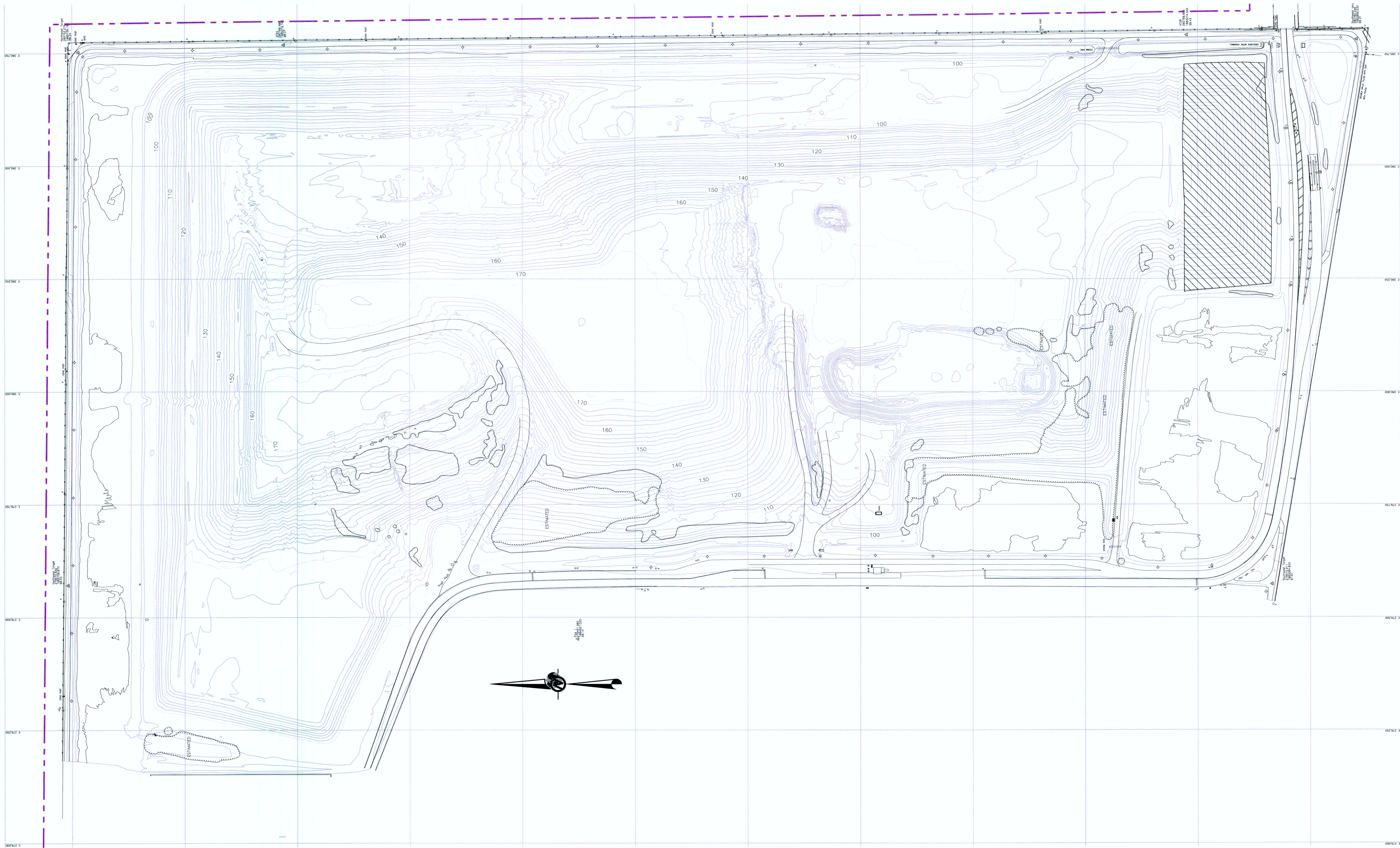
## NOTES

ALL ELEVATIONS SHOWN ARE RELATIVE TO SITE DATUM.



|         |  |                                                                                   |           |          |                       |
|---------|--|-----------------------------------------------------------------------------------|-----------|----------|-----------------------|
| PROJECT |  | PROGRESS ENERGY FLORIDA<br>CRYSTAL RIVER ENERGY COMPLEX<br>CITRUS COUNTY, FLORIDA |           |          |                       |
| TITLE   |  | STORMWATER MANAGEMENT                                                             |           |          |                       |
|         |  | PROJECT No.                                                                       | 083-82671 | FILE No. | 083826710007_R0       |
|         |  | DESIGN                                                                            | SFS       | 11/25/09 | SCALE AS SHOWN REV. 0 |
|         |  | CADD                                                                              | BCL       | 07/22/10 | DRAWING 6             |
|         |  | CHECK                                                                             | SFS       | 07/22/10 |                       |
|         |  | REVIEW                                                                            | KBK       | 07/22/10 |                       |

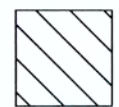




**LEGEND**

—100— EXISTING CONTOURS (SITE DATUM)

- - - - - PROPERTY BOUNDARY

 PREVIOUSLY CLOSED AREA

**REFERENCE**

1.) EXISTING CONTOURS BASED ON APRIL 26, 2011 TOPOGRAPHIC SURVEY BY GEODETIC SERVICES SOUTH, INC.



|                                                                                       |              |                                                                                   |          |
|---------------------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------|----------|
| PROJECT                                                                               |              | PROGRESS ENERGY FLORIDA<br>CRYSTAL RIVER ENERGY COMPLEX<br>CITRUS COUNTY, FLORIDA |          |
| TITLE                                                                                 |              | <b>EXISTING CONDITIONS</b><br>(April 26, 2011)                                    |          |
|  |              |                                                                                   |          |
| PROJECT No.                                                                           | 083-82671    | FILE No.                                                                          | 08382671 |
| DESIGN                                                                                | SFS 08/04/11 | SCALE                                                                             | AS SHOWN |
| CADD                                                                                  | BCL 08/04/11 | REV.                                                                              | 0        |
| CHECK                                                                                 | SFS 08/05/11 |                                                                                   |          |
| REVIEW                                                                                | KBK 08/05/11 |                                                                                   |          |