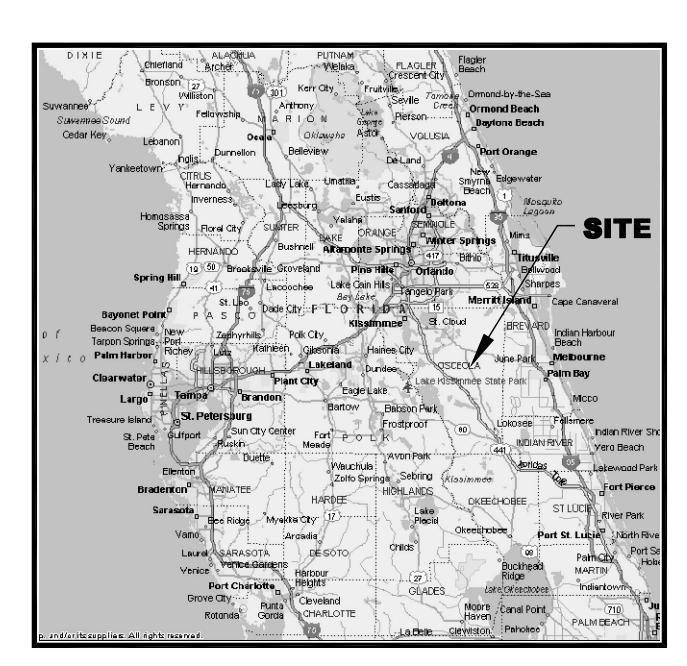
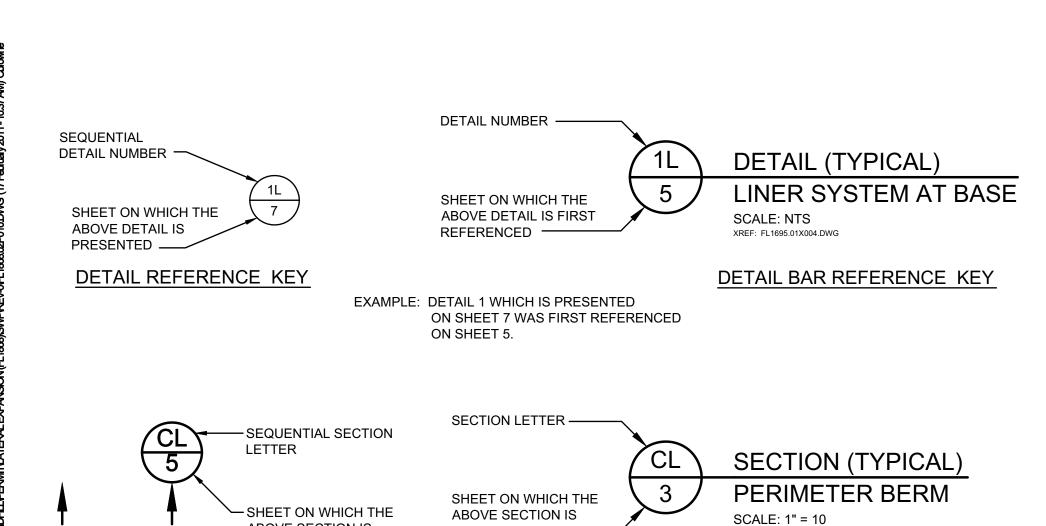
APPENDIX ILateral Expansion Permit Drawings

J.E.D. SOLID WASTE MANAGEMENT FACILITY ST.CLOUD, FLORIDA LATERAL EXPANSION MAJOR SOLID WASTE PERMIT MODIFICATION FEBRUARY 2011



LOCATION MAP

SCALE: 1" = 32 MILES



FIRST REFERENCED ——

ON SHEET 5 WAS FIRST REFERENCED ON SHEET 3.

EXAMPLE: SECTION C WHICH IS PRESENTED

XREF: FL1695.01X083.DWG

SECTION BAR REFERENCE KEY

ABOVE SECTION IS

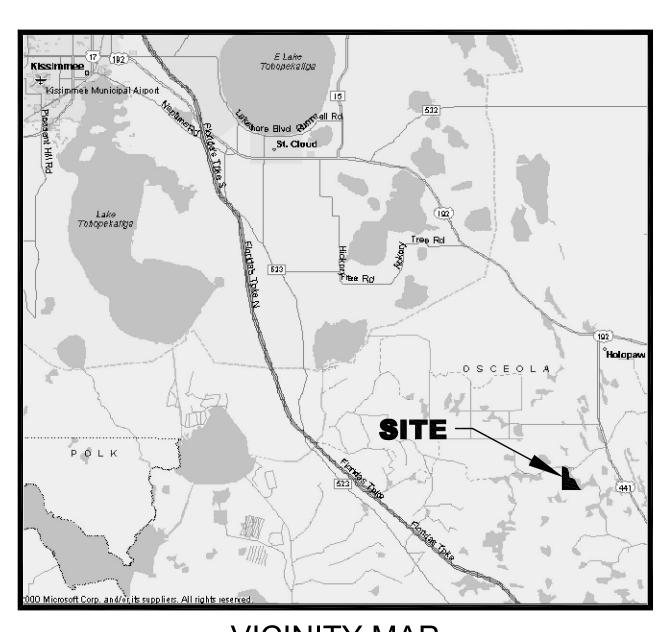
PRESENTED

SECTION REFERENCE KEY

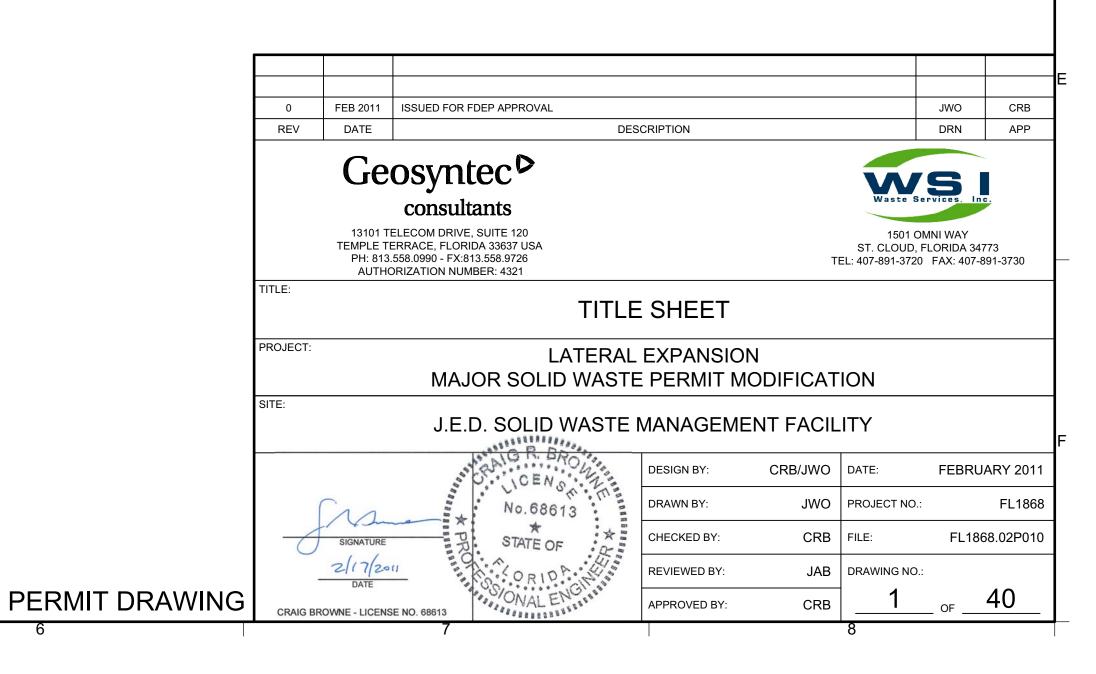
LIST OF DRAWINGS TITLE COMMENTS LANDFILL CROSS SECTIONS I LANDFILL CROSS SECTIONS III LINER SYSTEM DETAILS II - CELLS 8 THROUGH 23 LEACHATE SUMP PLAN - CELLS 8 THROUGH 23 SECONDARY SUMP CROSS SECTIONS - CELLS 8 THROUGH 23 LEACHATE SUMP CROSS SECTIONS - CELLS 8 THROUGH 23 LEACHATE COLLECTION SYSTEM DETAILS - CELLS 8 THROUGH 23 EACHATE STORAGE FACILITY CROSS SECTIONS EACHATE MANAGEMENT SYSTEM SCHEMATIC DIAGRAM I NOTE 1,2 NOTE 1,2 JPDATED GROUNDWATER MONITORING NETWORK AND BENCH MARKS NOTE 1,2 NOTE 1,2 PHASE 3 CONSTRUCTION SEQUENCING FUTURE CONSTRUCTION AND WASTE FILL SEQUENCING NOTE 1,3 NOTE 1,3 GAS MANAGEMENT SYSTEM (GMS) PLAN I CONCEPTUAL LAYOUT OF HORIZONTAL GAS COLLECTORS GAS MANAGEMENT DETAILS II GAS MANAGEMENT DETAILS III GAS MANAGEMENT DETAILS IV LFG PIPELINE DETAILS I 0 REVISED FINAL COVER SYSTEM GRADING PLAN I REVISED FINAL COVER SYSTEM GRADING PLAN II 0 FINAL COVER SYSTEM DETAILS STORM WATER MANAGEMENT PLAN NOTE 4 NOTE 4 TORM WATER MANAGEMENT PLAN II NOTE 4 NOTE 4 TORM WATER MANAGEMENT DETAILS III

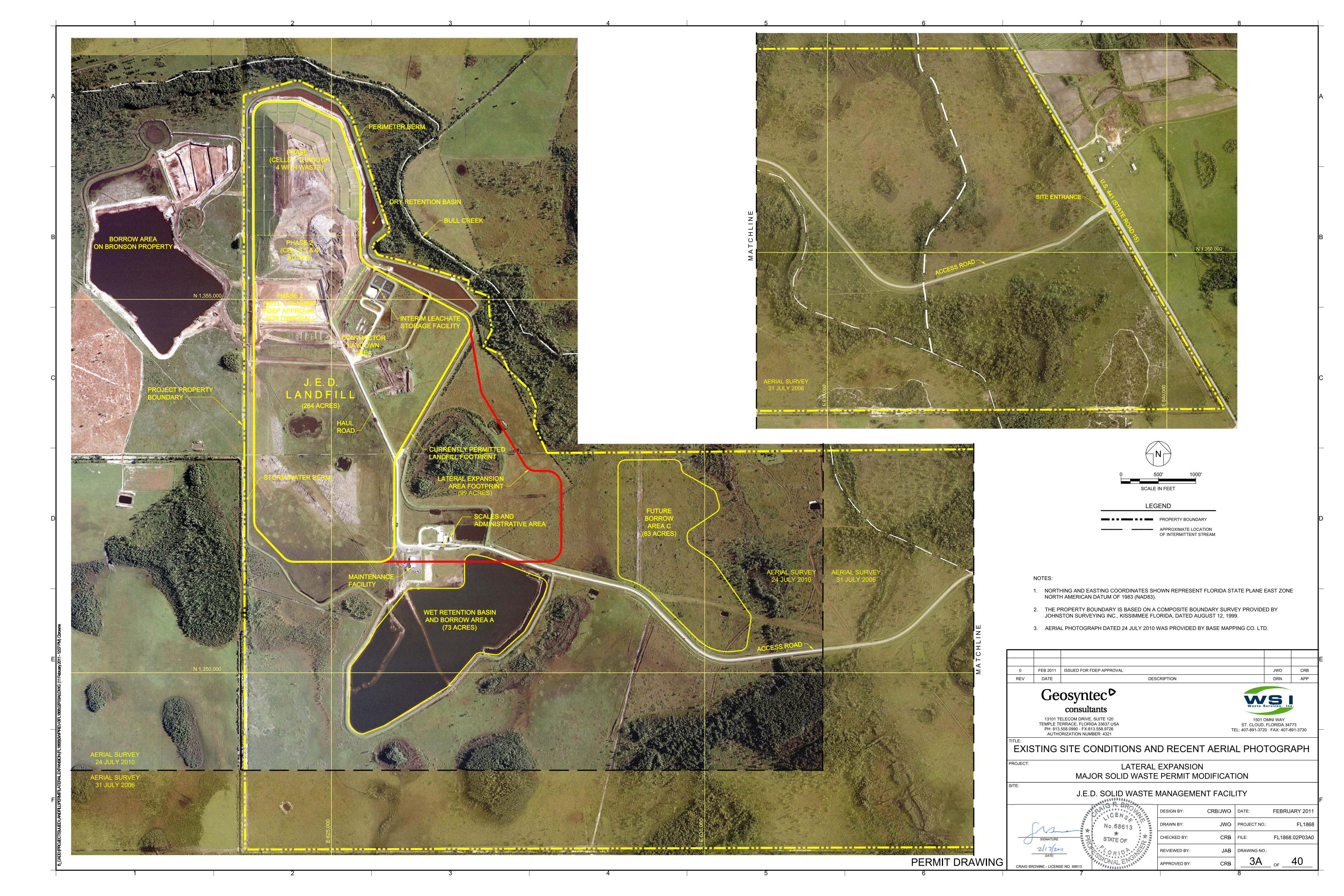
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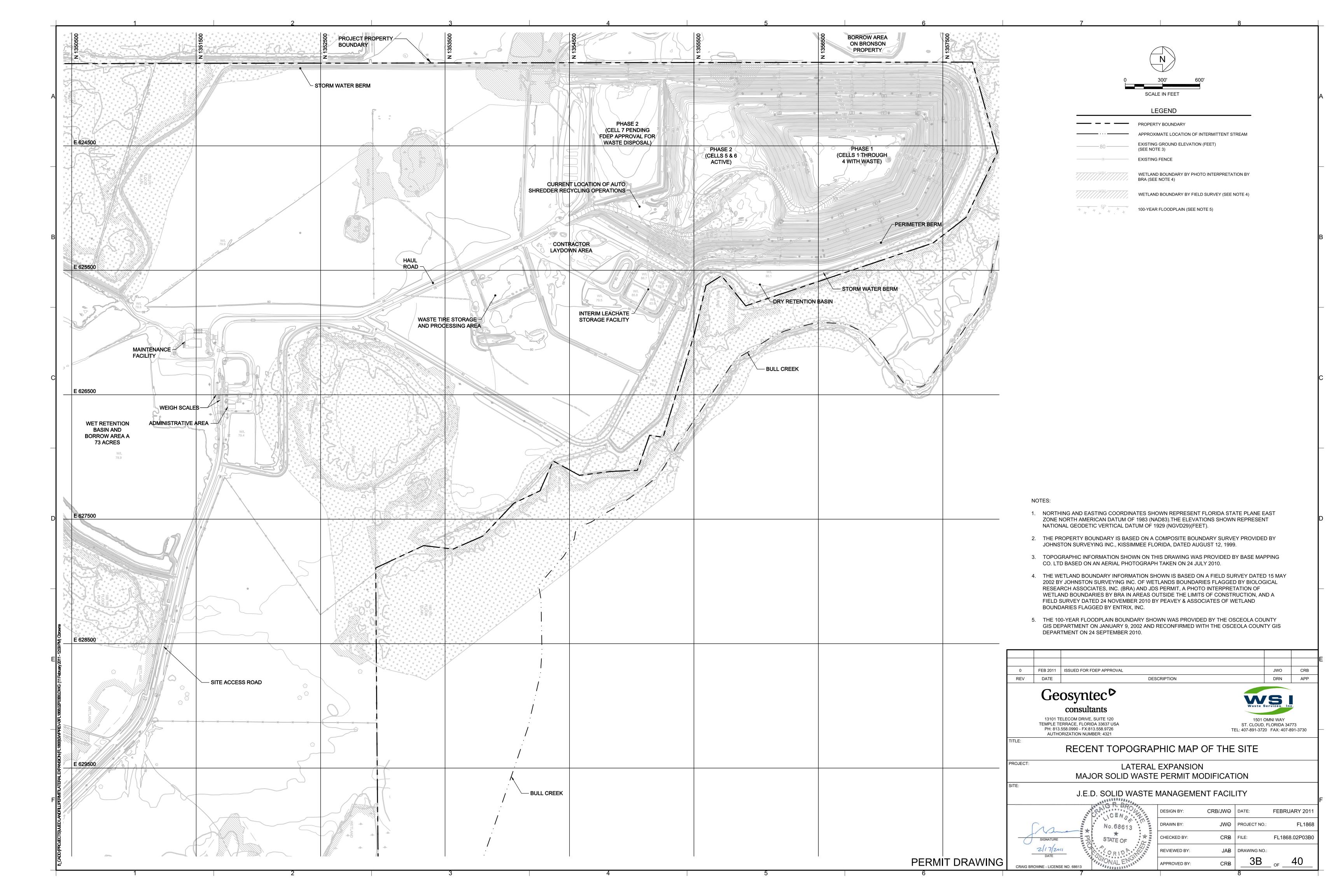
- 1. THESE LATERAL EXPANSION PERMIT DRAWINGS MODIFY PREVIOUSLY APPROVED PERMIT DRAWINGS (AS INDICATED BY NOTES 2 AND 3). ONLY THE SHEETS THAT HAVE BEEN MODIFIED (INDICATED IN BOLD FONT IN THE DRAWING LIST) ARE INCLUDED IN THE PERMIT DRAWING SET. THERE ARE NO SUBSTANTIAL CHANGES TO THE REMAINING DRAWINGS (WHICH HAVE BEEN SCREENED IN THE DRAWING LIST).
- 2. REFER TO RENEWAL PERMIT DRAWINGS FOR PHASES 2 AND 3 SUBMITTED TO FDEP IN SEPTEMBER 2006.
- 3. REFER TO MAJOR MODIFICATION PERMIT DRAWINGS FOR PHASES 1 THROUGH 3 SUBMITTED TO FDEP IN SEPTEMBER 2007.
- 4. THE DRAWINGS RELATED TO THE STORM WATER MANAGEMENT SYSTEM HAVE BEEN MODIFIED AND SUBMITTED TO FDEP ALONG WITH THE ERP CONCEPTUAL PERMIT MODIFICATION APPLICATION.
- 5. THE SECTIONS AND DETAILS NUMBERING IN THIS LATERAL EXPANSION PERMIT DRAWING SET HAVE BEEN FOLLOWED BY THE LETTER "L" TO DISTINGUISH THEM FROM SECTIONS AND DETAILS SUBMITTED IN PREVIOUS PERMIT DRAWING SETS FOR THE JED FACILITY IN 2006 AND 2007.

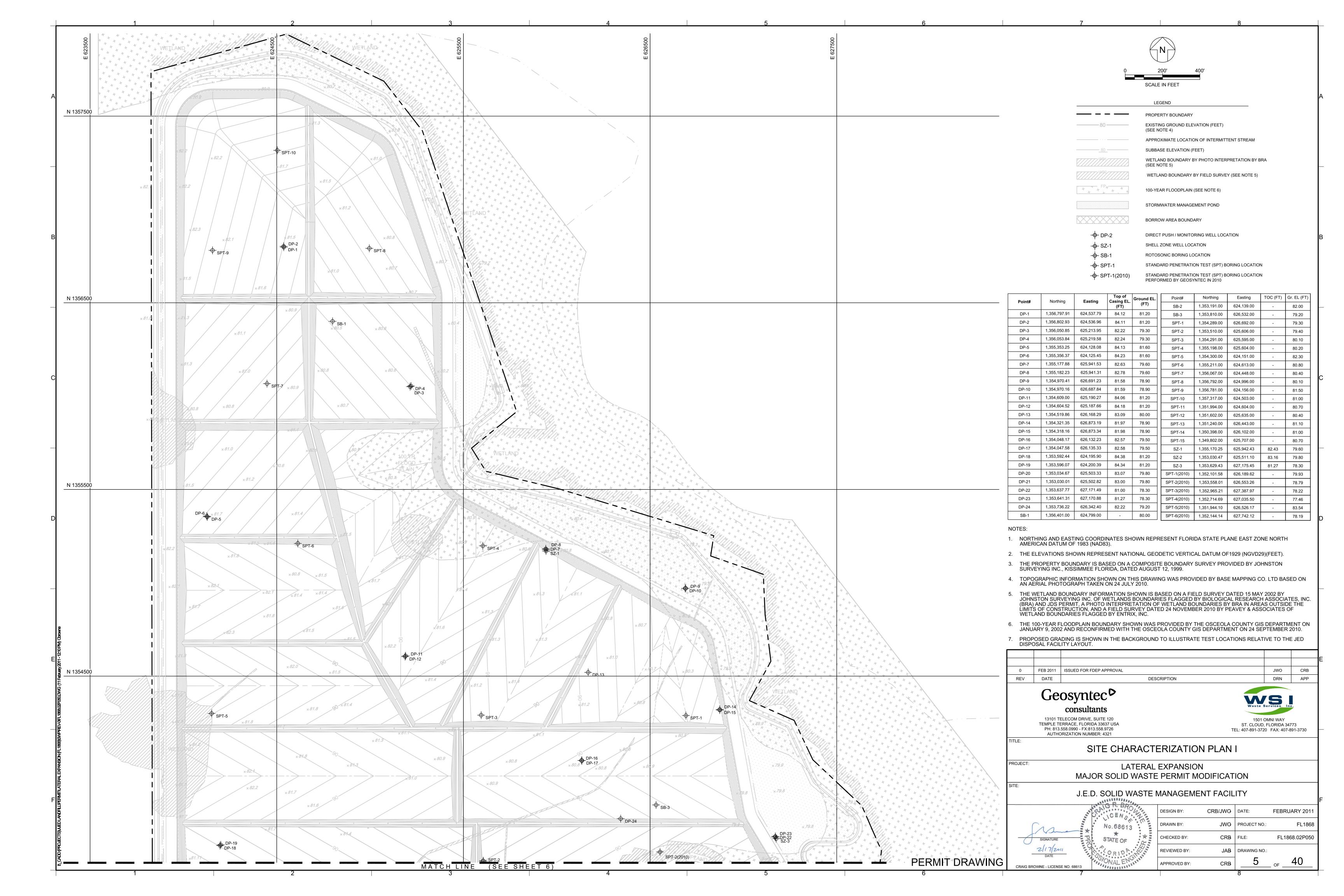


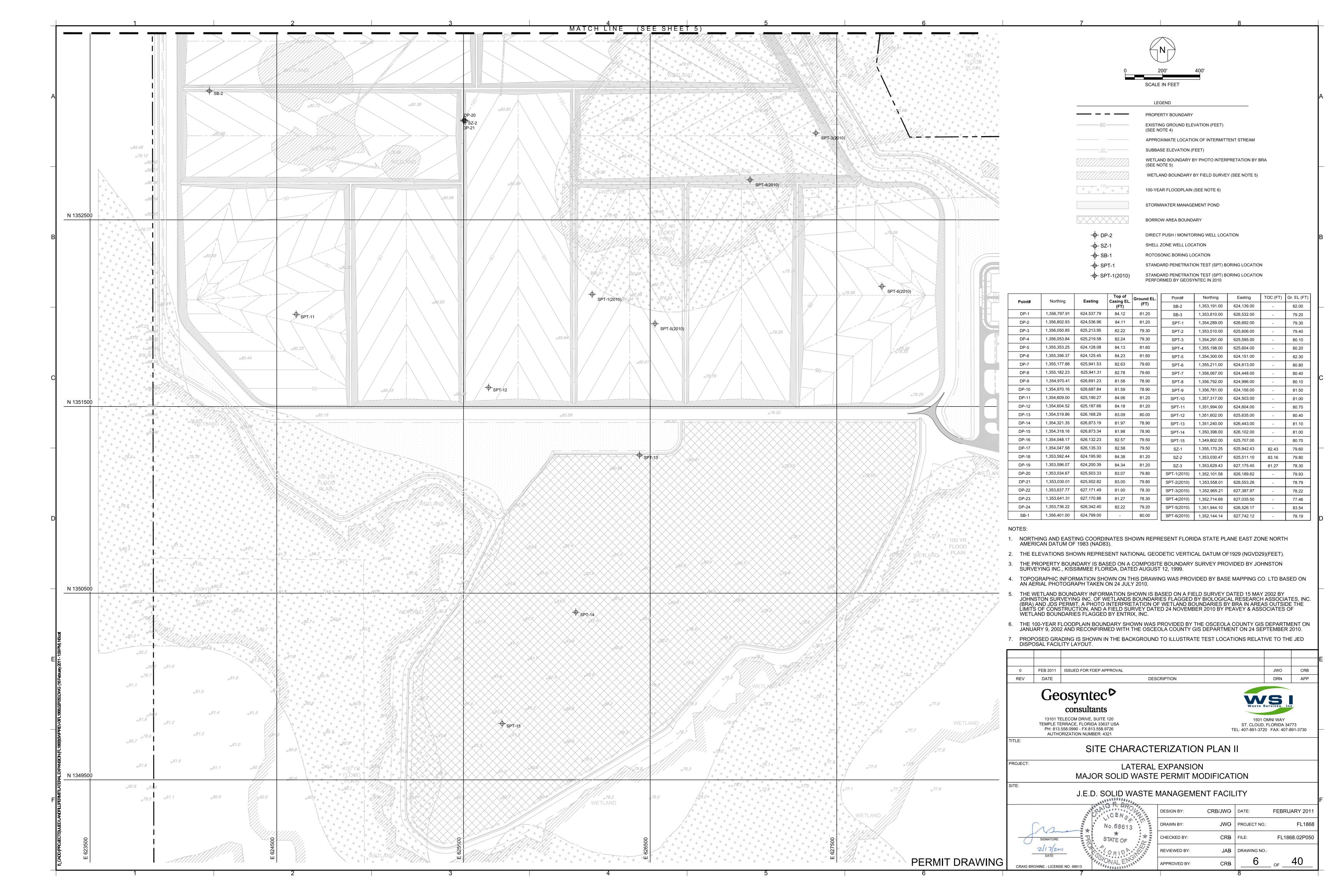
VICINITY MAP

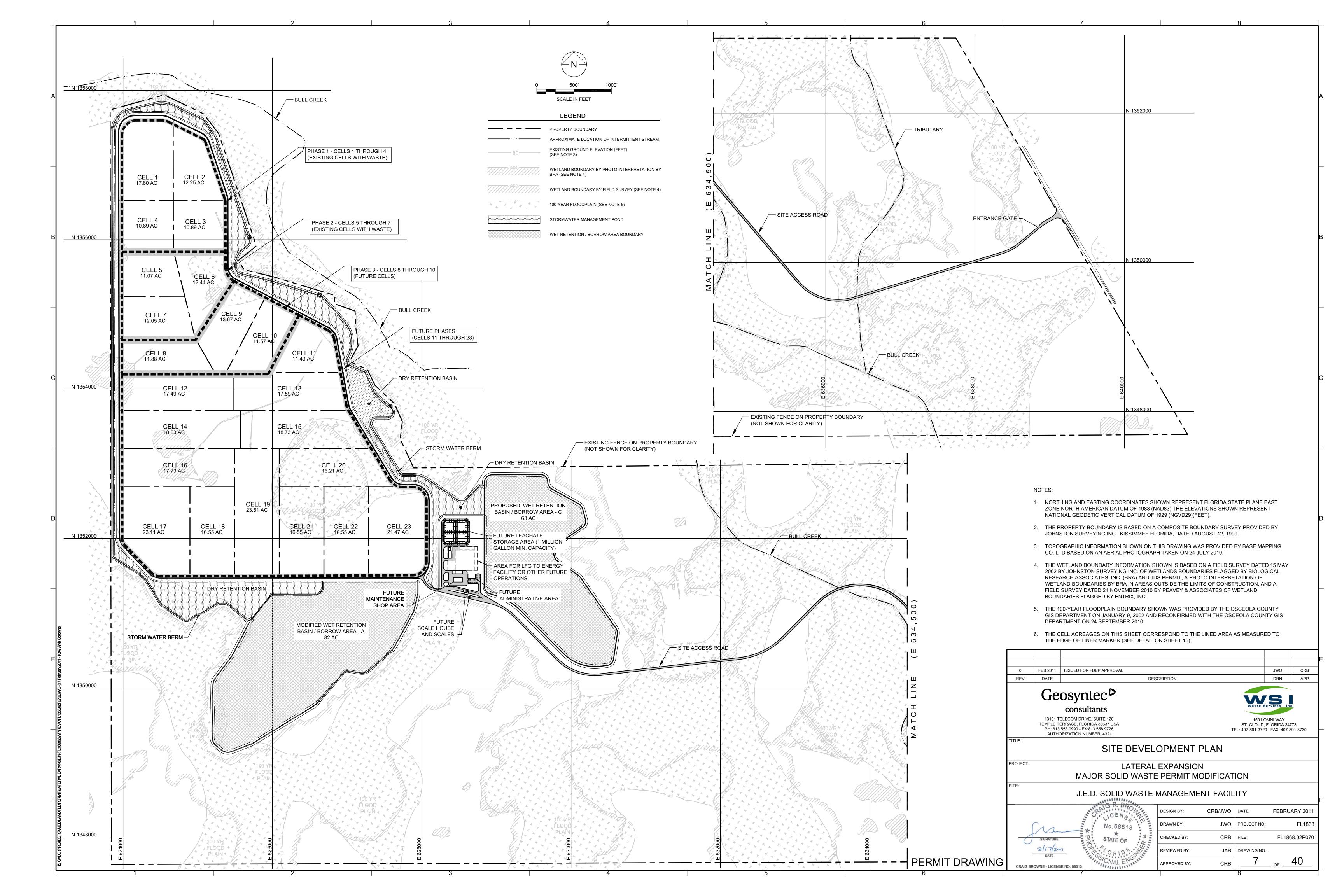


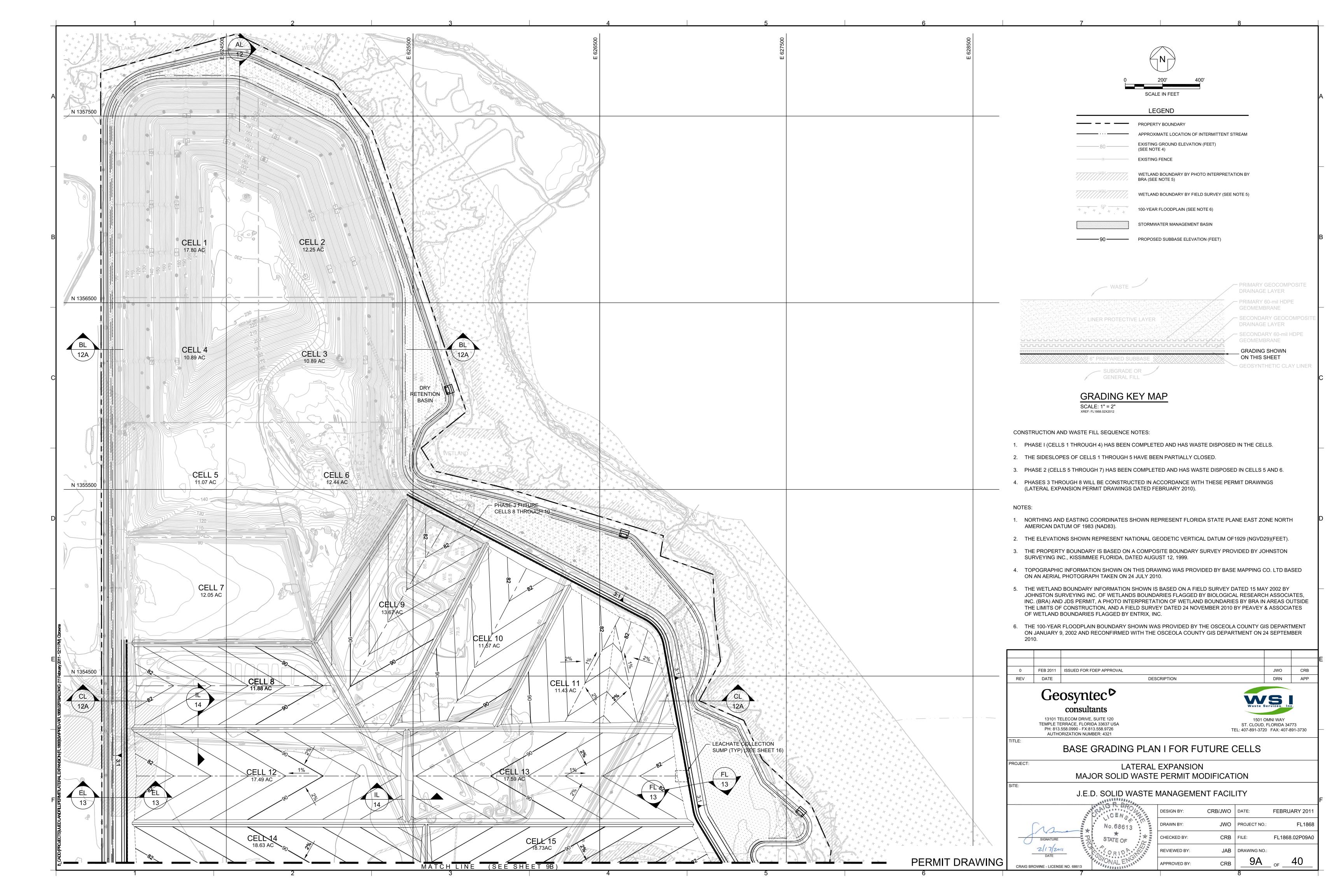


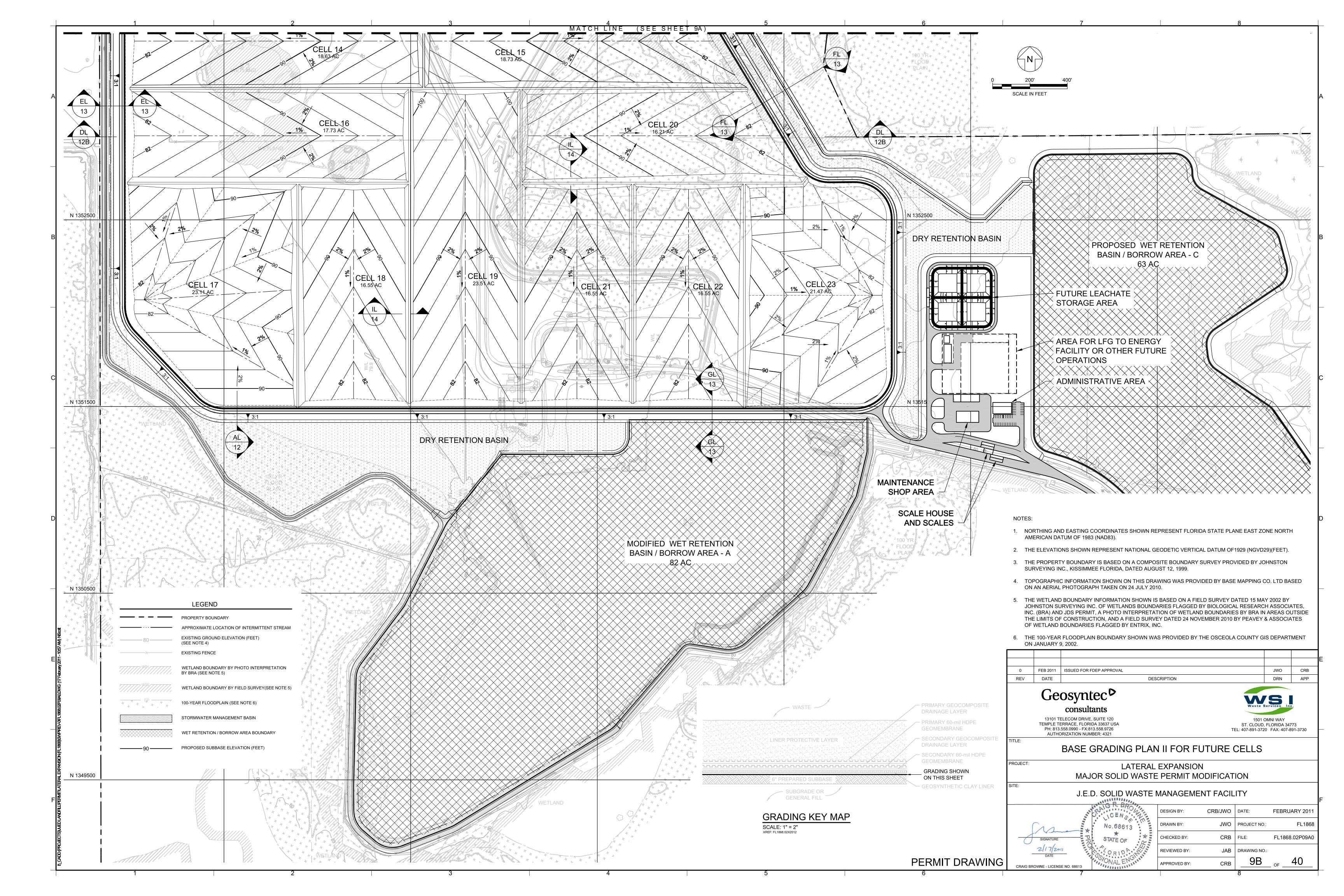


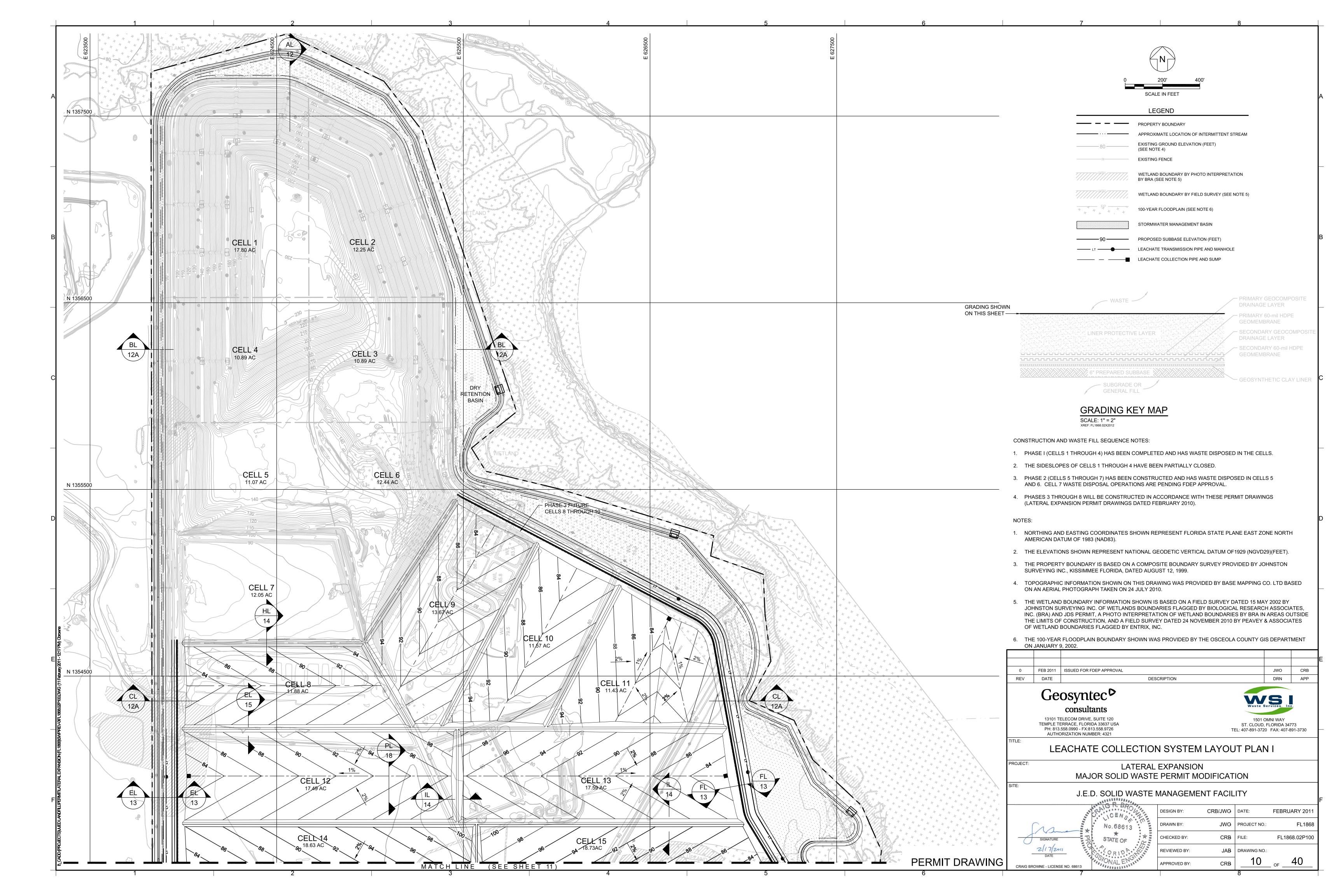


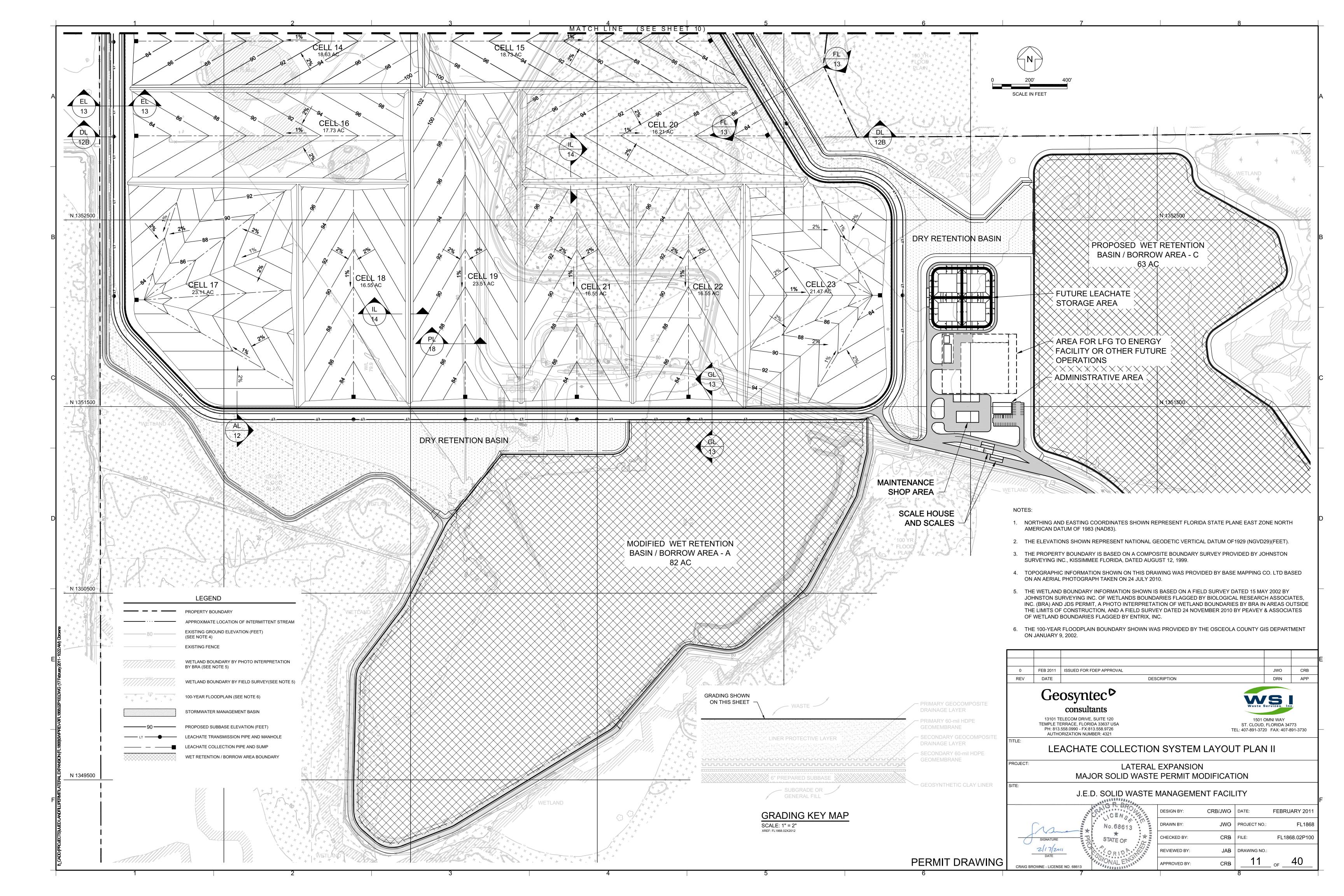


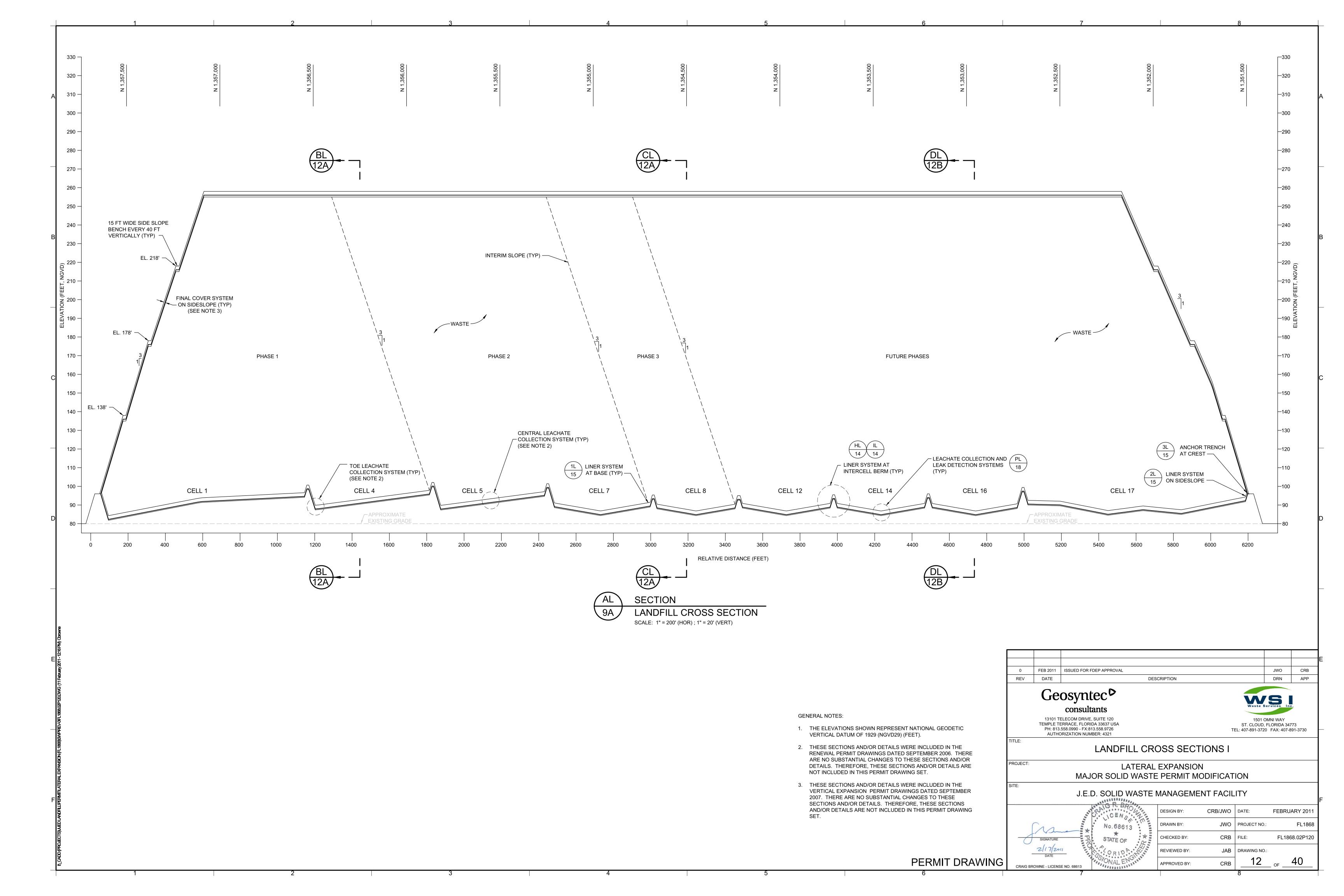


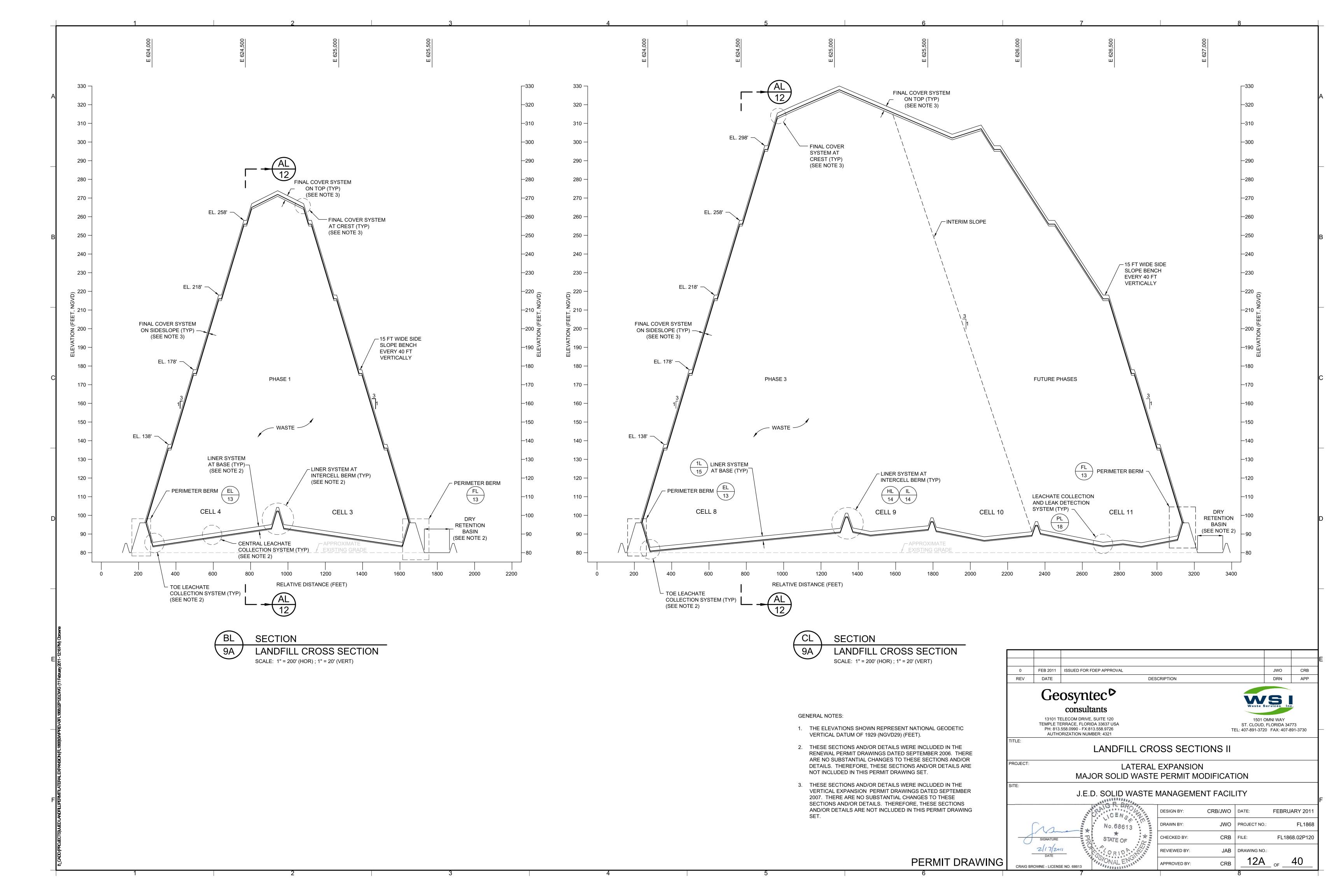


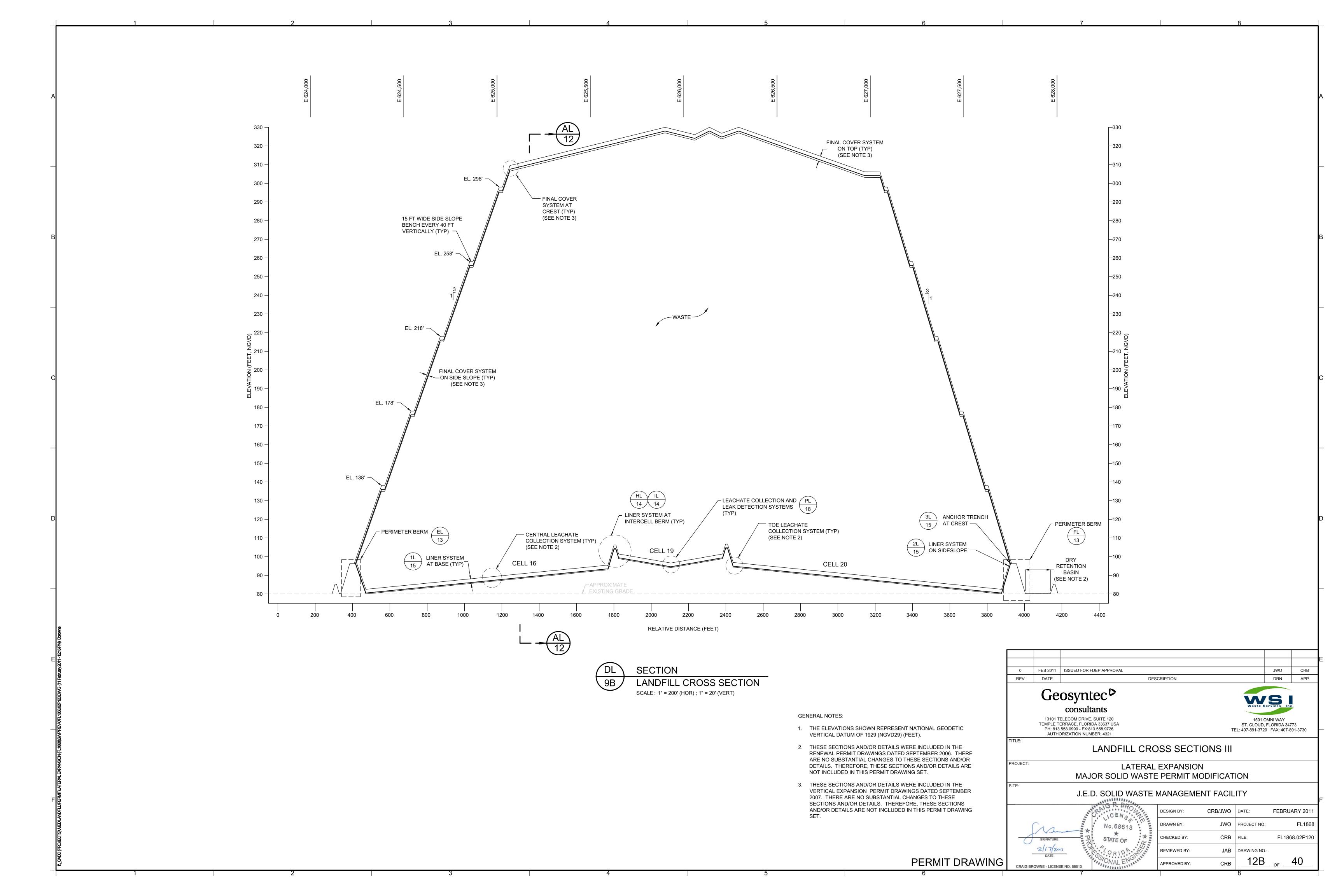


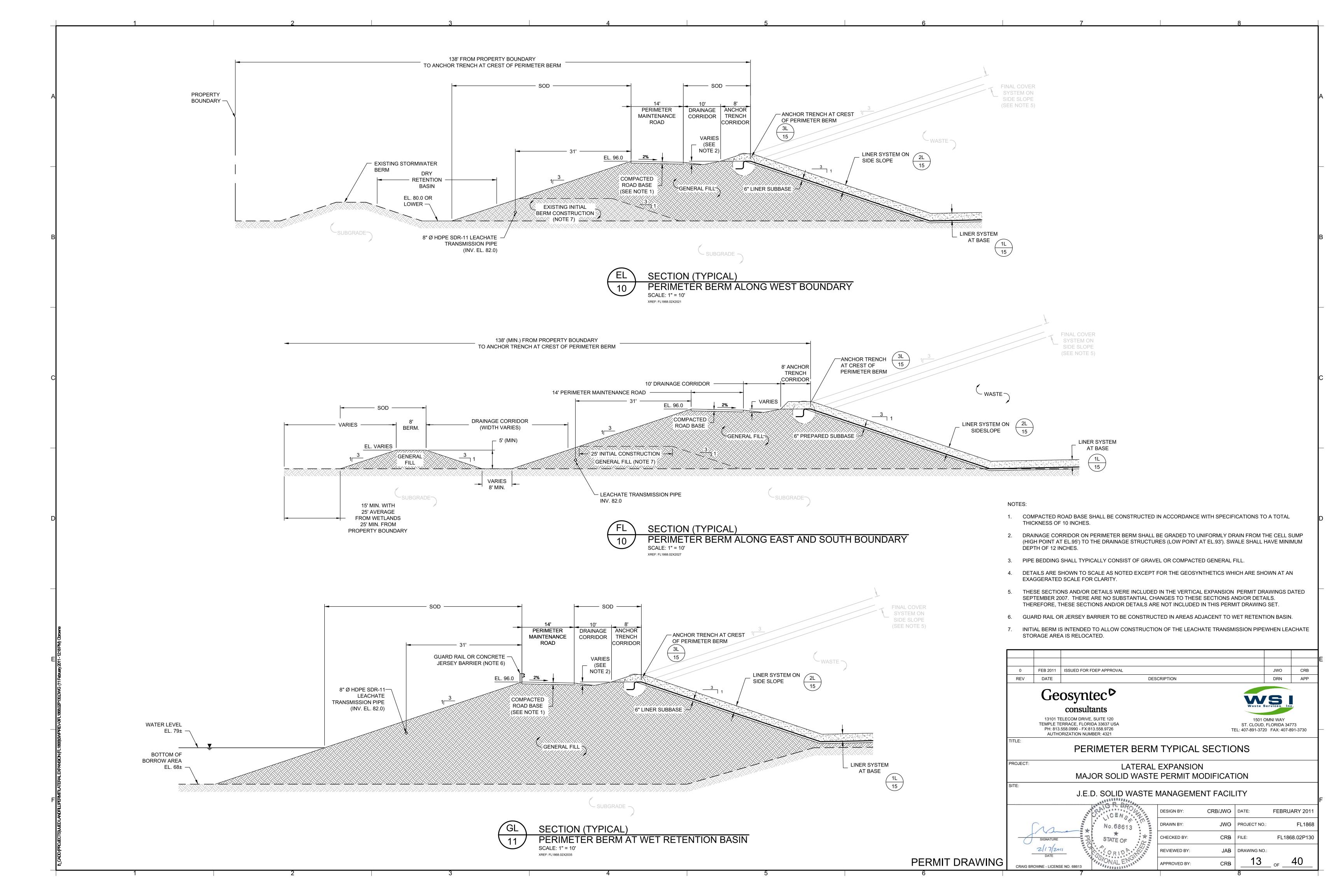


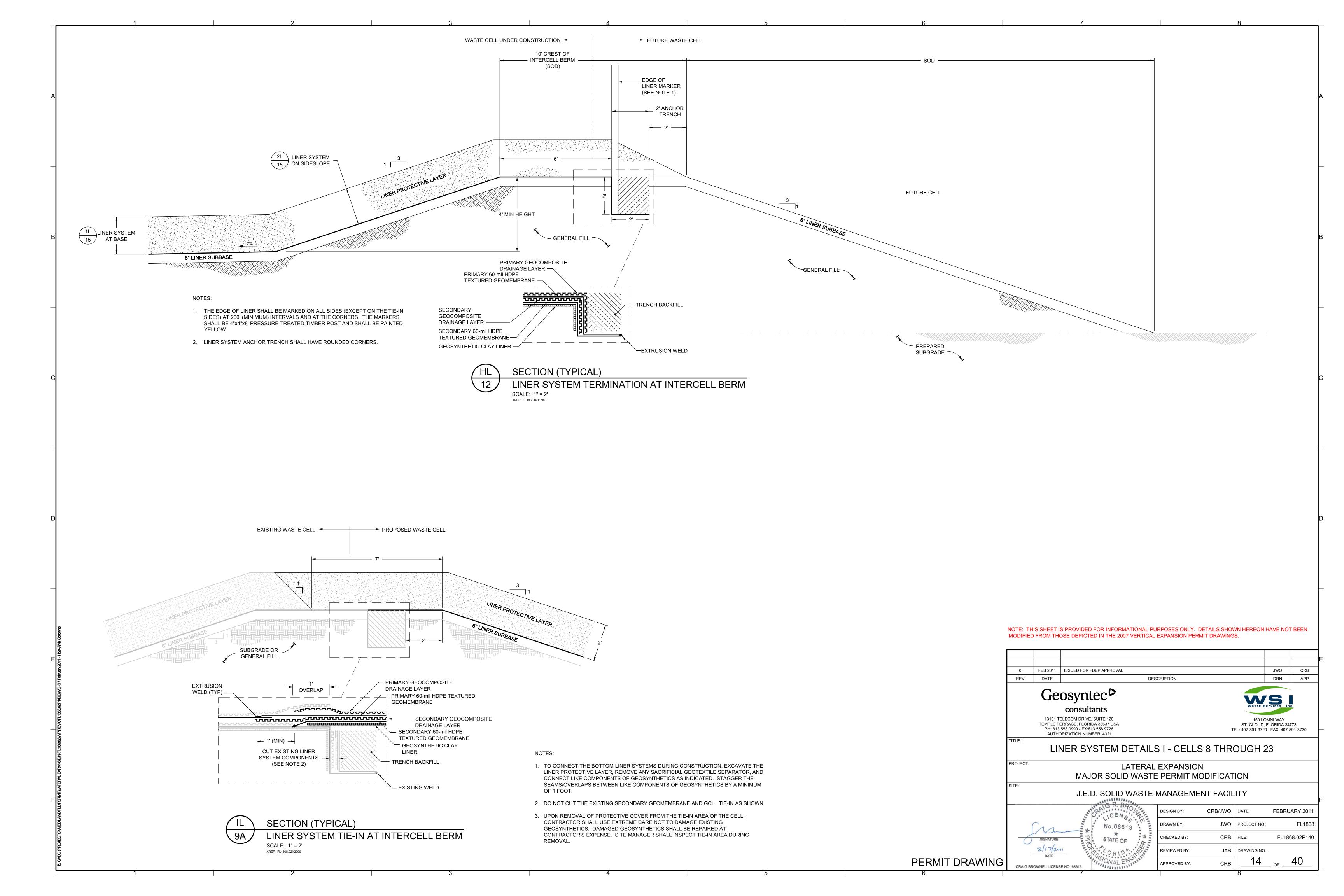


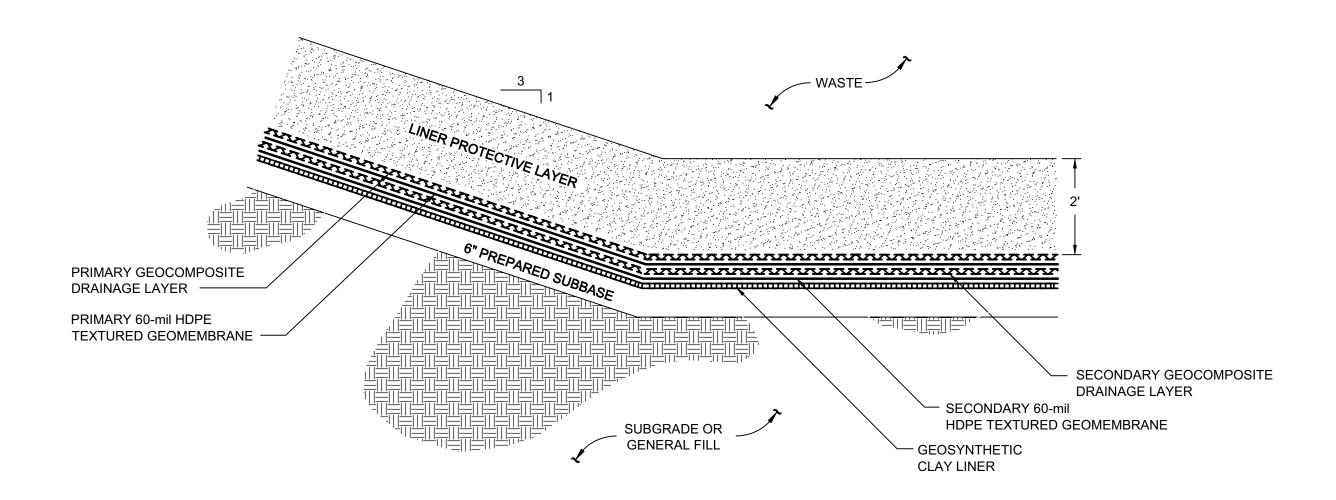










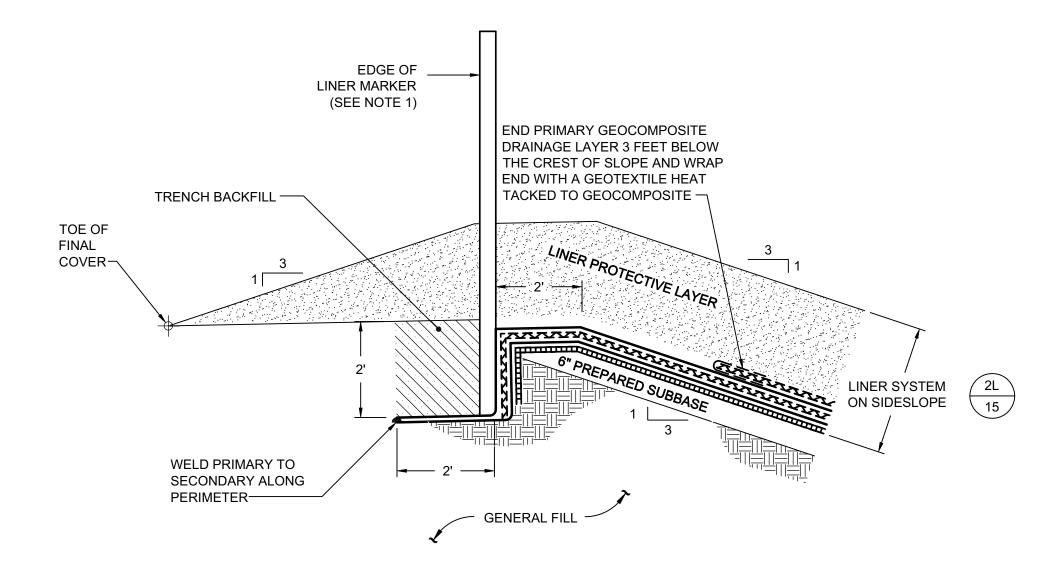


1L DETAIL (TYPICAL)

12 LINER SYSTEM AT BASE

SCALE: 1" = 2'

XREF: FL1868.02X004



3L 12

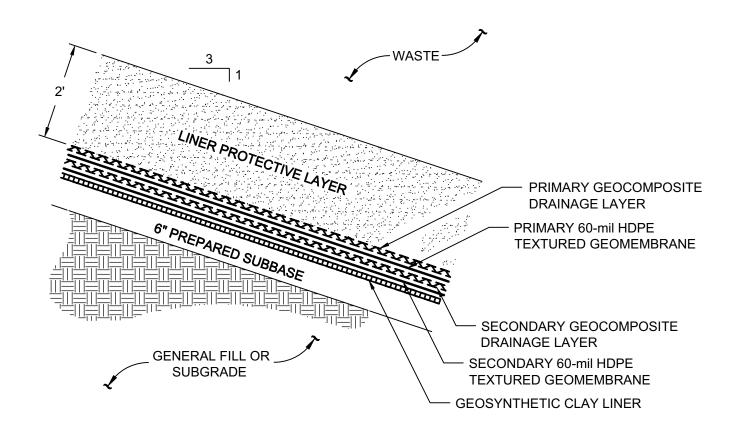
DETAIL (TYPICAL)

ANCHOR TRENCH AT CREST OF PERIMETER BERM SCALE: 1" = 2'

NOTES:

XREF: FL1868.02X003

- 1. THE EDGE OF LINER SHALL BE MARKED AT 200' (MINIMUM) INTERVALS AS SHOWN ON SHEET 4. THE MARKERS SHALL BE 4"x4"x8' PRESSURE-TREATED TIMBER POST AND SHALL BE PAINTED YELLOW.
- 2. LINER SYSTEM ANCHOR TRENCH SHALL HAVE ROUNDED CORNERS.



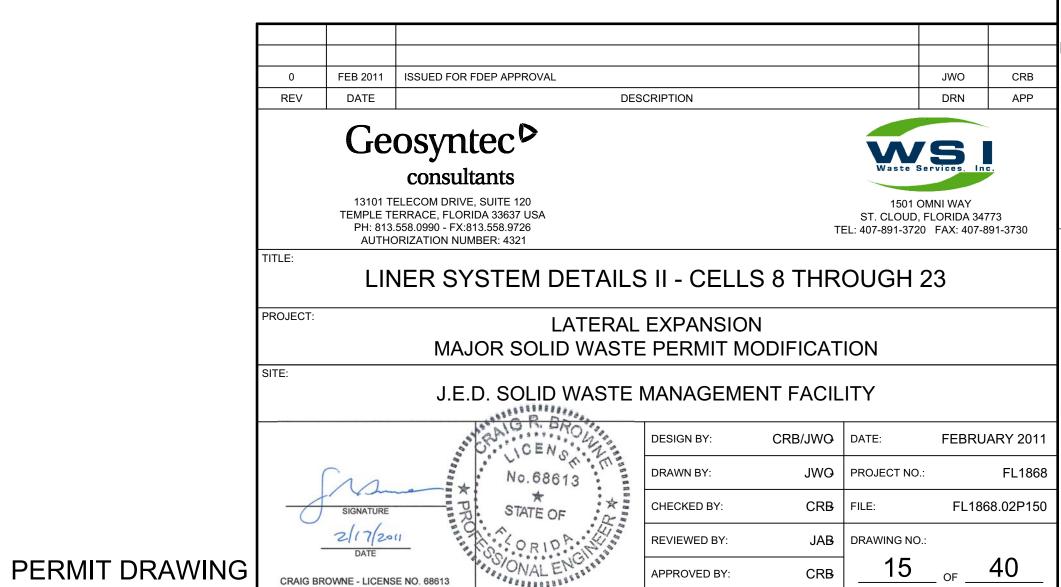
DETAIL (TYPICAL)

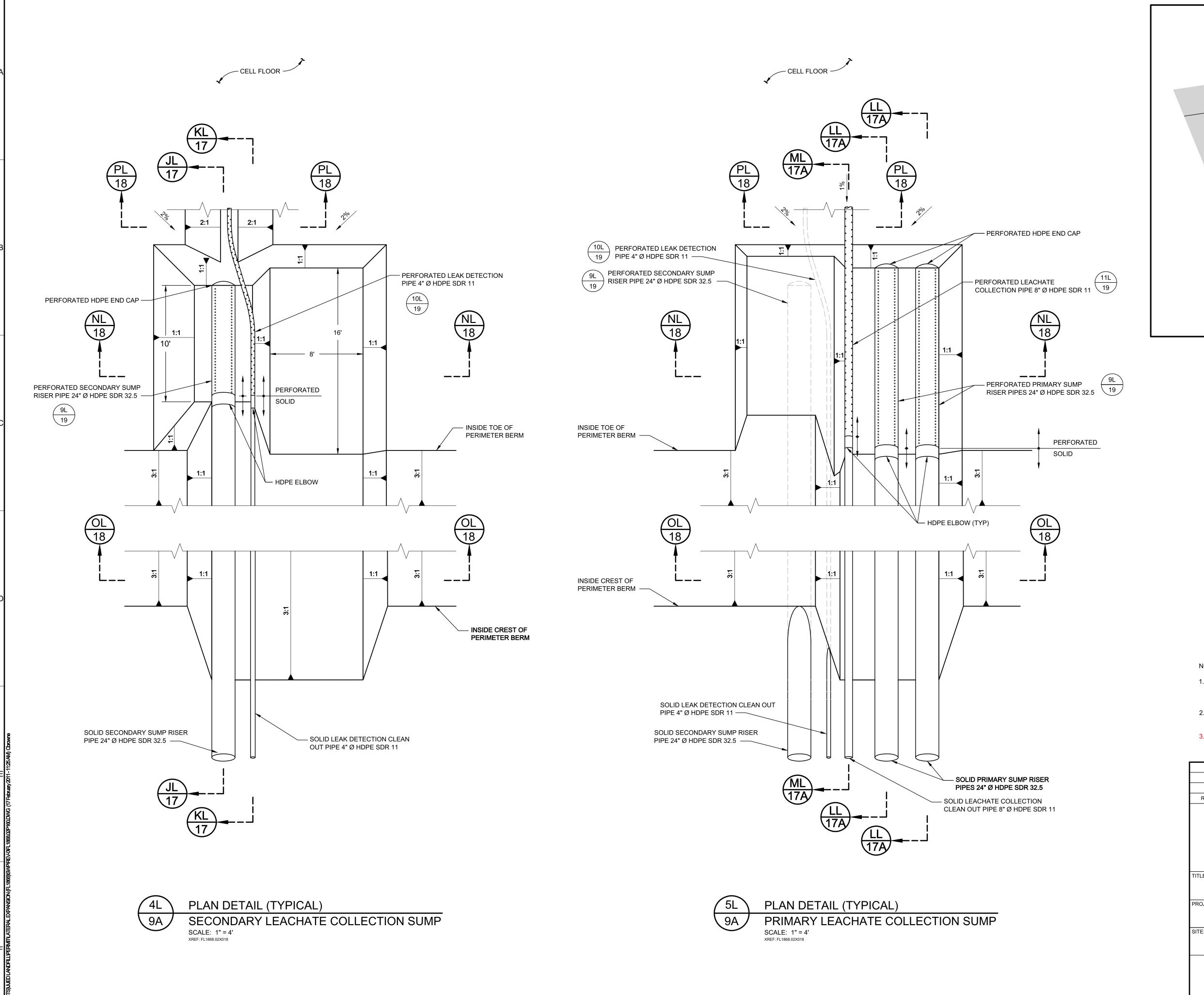
12 LINER SYSTEM ON SIDESLOPE

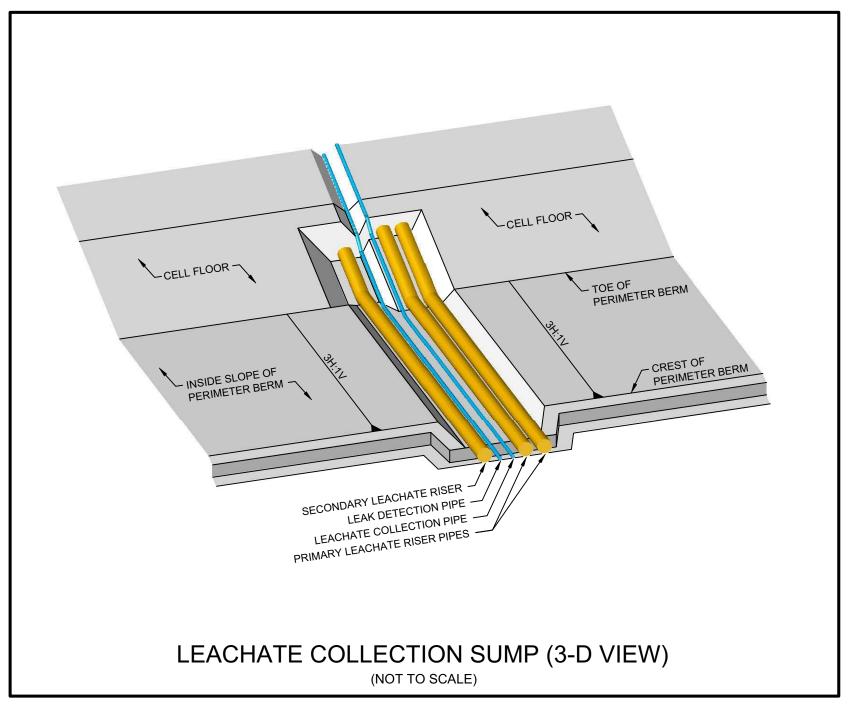
SCALE: 1" = 2'

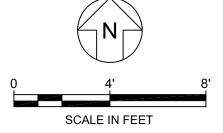
XREF: FL1868.02X074

NOTE: THIS SHEET IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. DETAILS SHOWN HEREON HAVE NOT BEEN MODIFIED FROM THOSE DEPICTED IN THE 2007 VERTICAL EXPANSION PERMIT DRAWINGS.





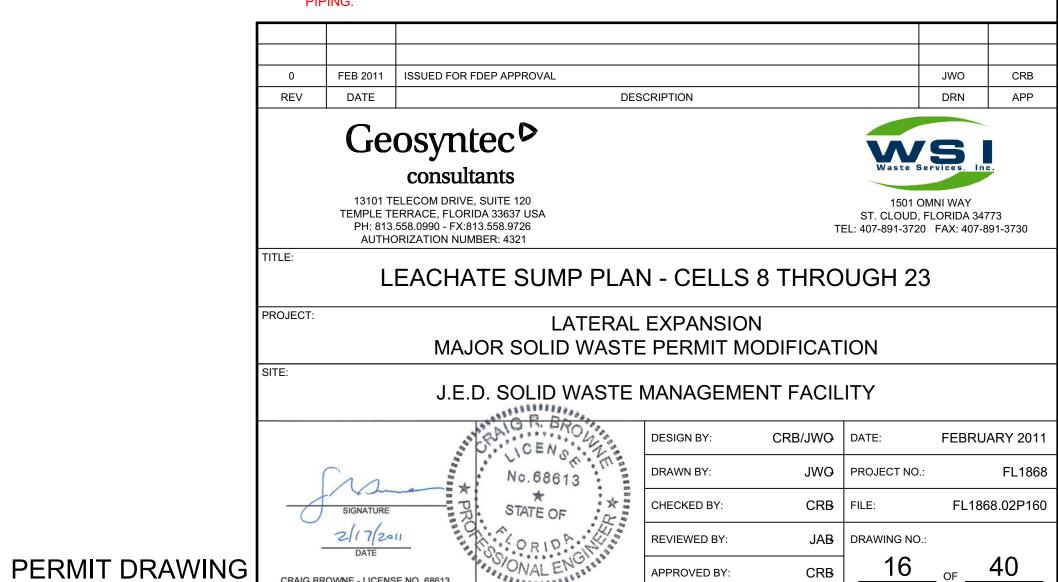




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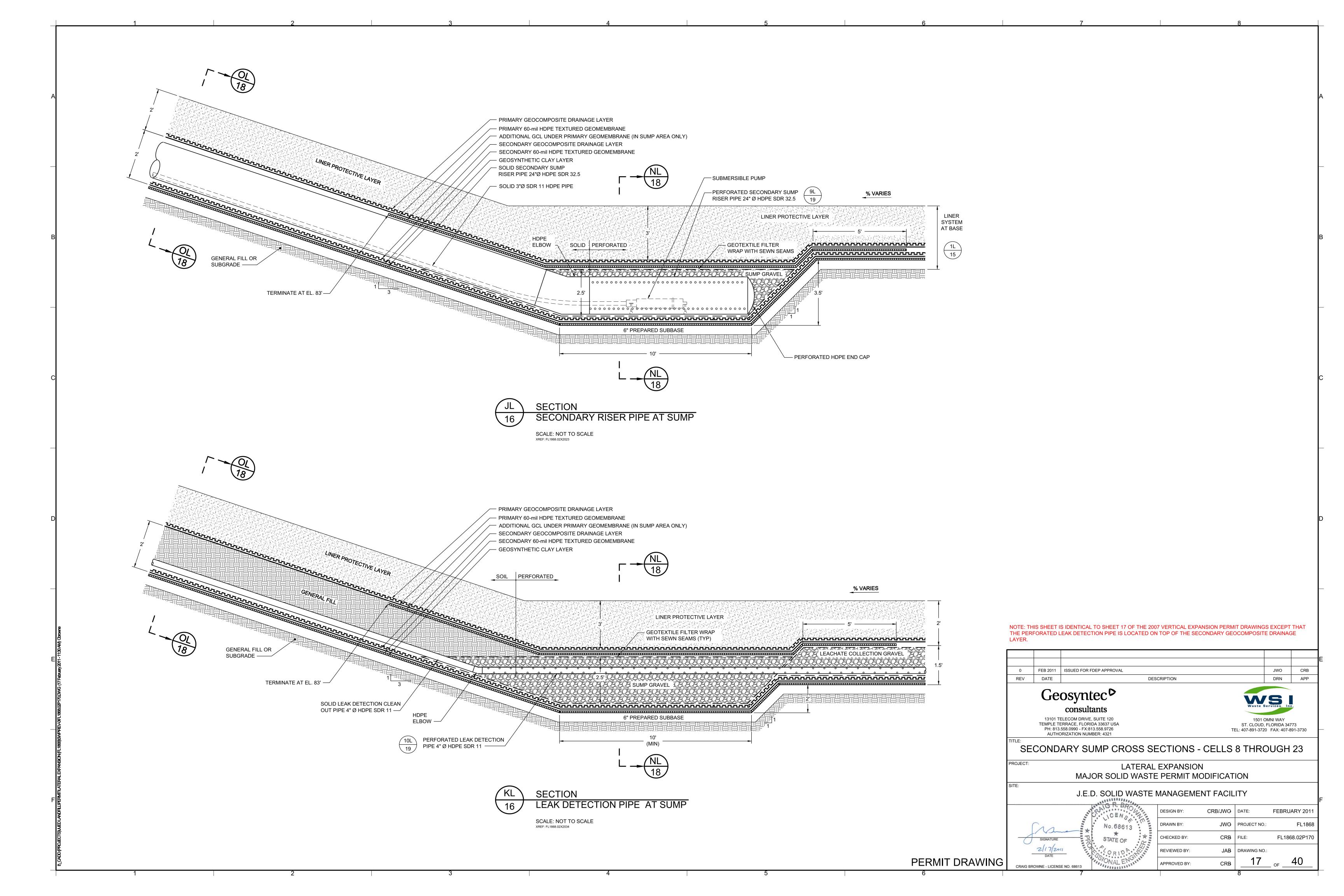
CRAIG BROWNE - LICENSE NO. 68613

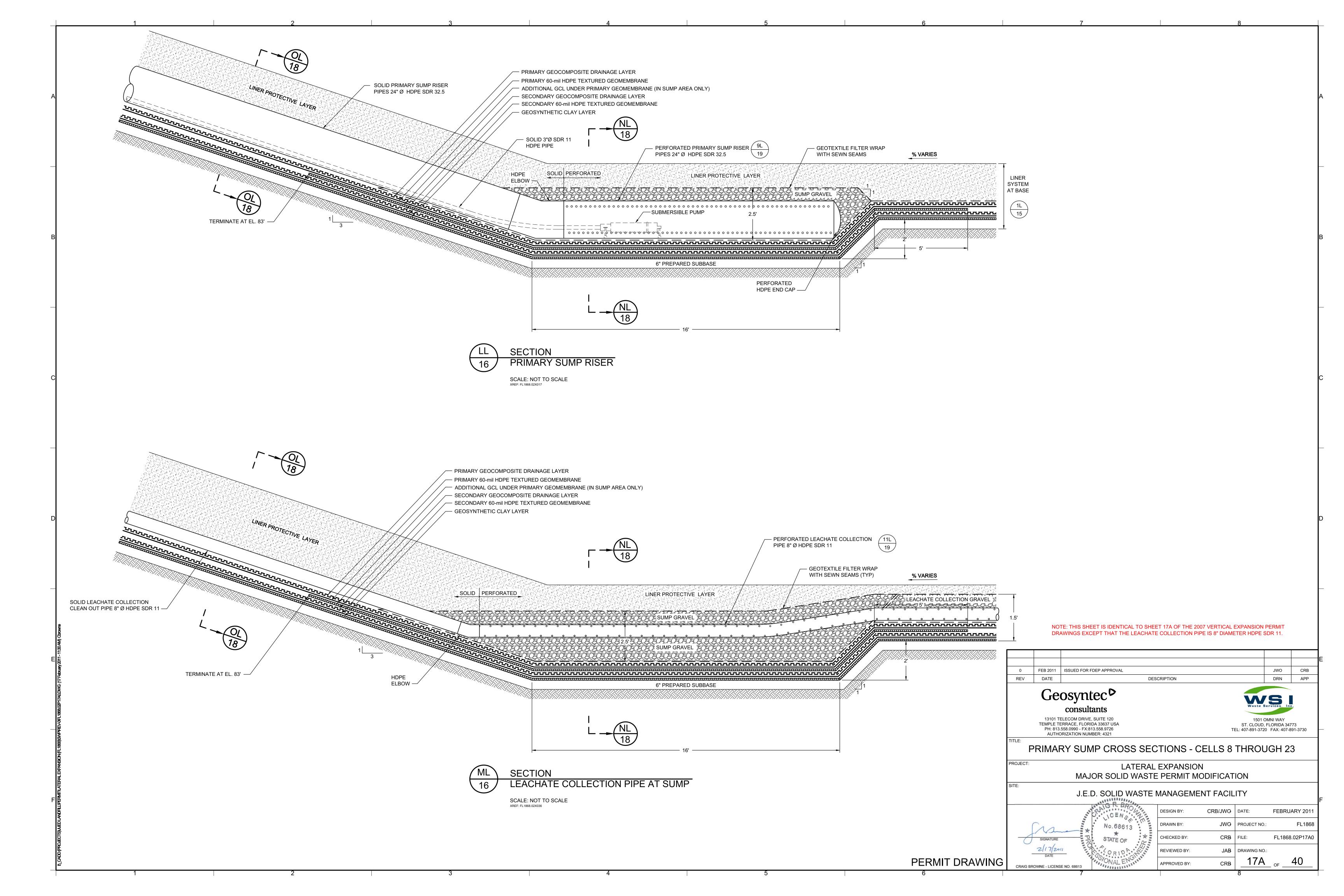
- 1. ALL SUMP RISERS SHALL BE PROVIDED WITH SEALABLE BLIND FLANGES AS APPROVED BY THE ENGINEER. ALL FLANGES FOR ALL PIPE SIZES SHALL HAVE RED RUBBER GASKETS. THE NUTS, BOLTS, AND WASHERS USED TO SECURE THE BLIND FLANGES SHALL BE ZINC PLATED.
- 2. ALL PIPE PENETRATIONS THROUGH LINER SYSTEM SHALL BE DOUBLE BANDED WITH NON-ADJUSTABLE STAINLESS STEEL CLAMPS (SEE SHEET 19 FOR DETAIL).
- 3. THIS SHEET IS IDENTICAL TO SHEET 16 OF THE 2007 VERTICAL EXPANSION PERMIT DRAWINGS EXCEPT THAT THE WIDTH OF THE SUMP WAS INCREASED TO ALLOW FOR GREATER SPACING BETWEEN SUMP

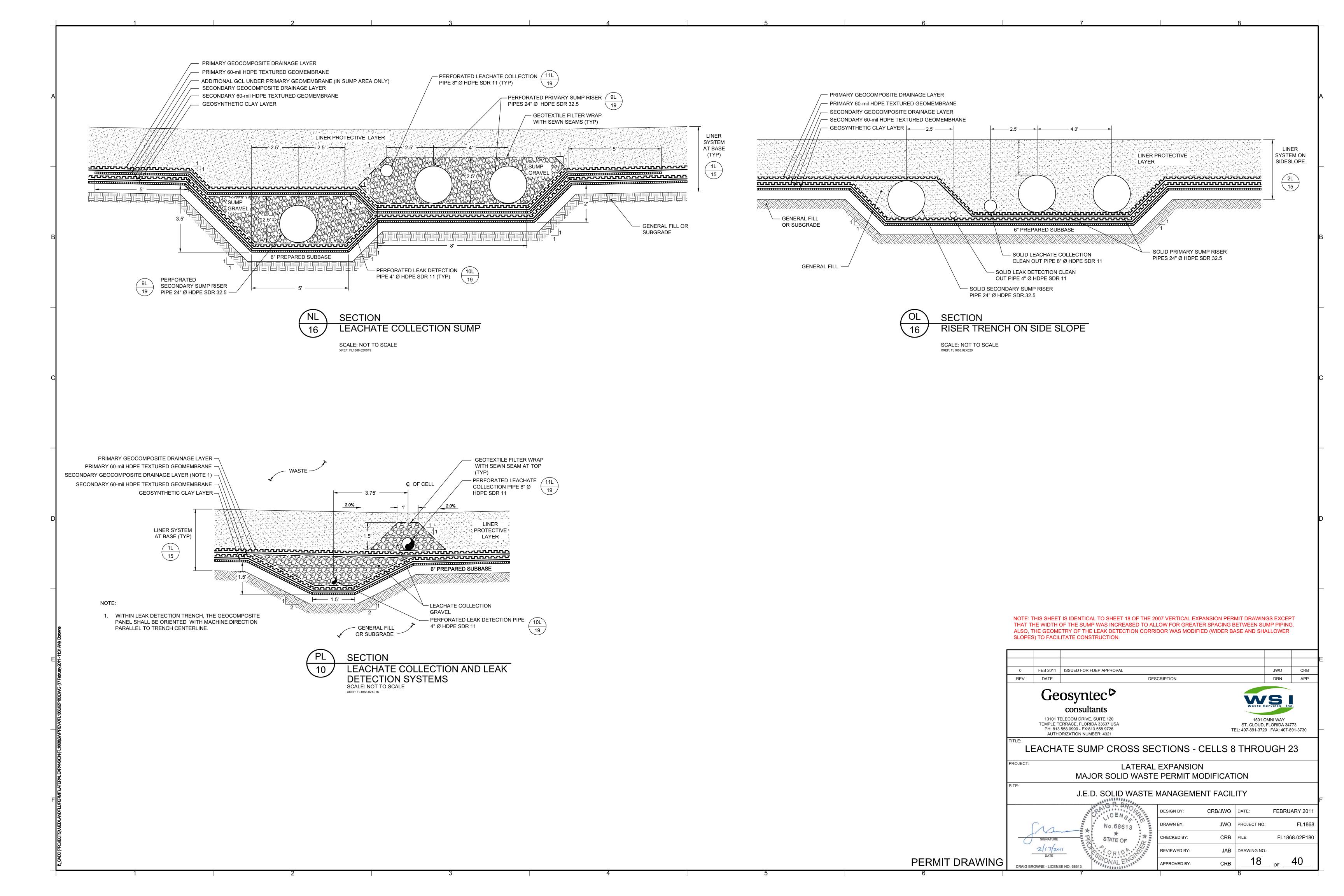


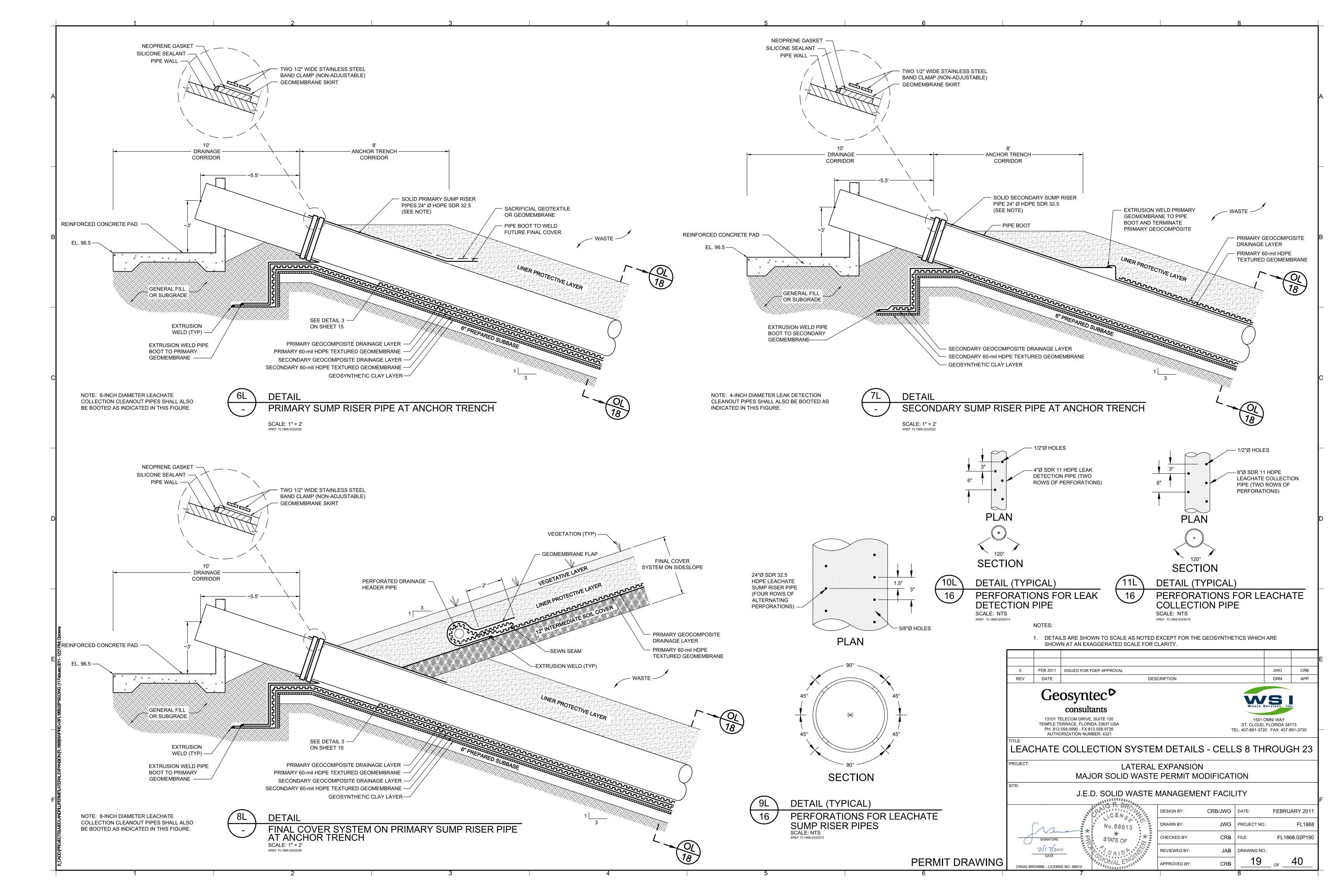
APPROVED BY:

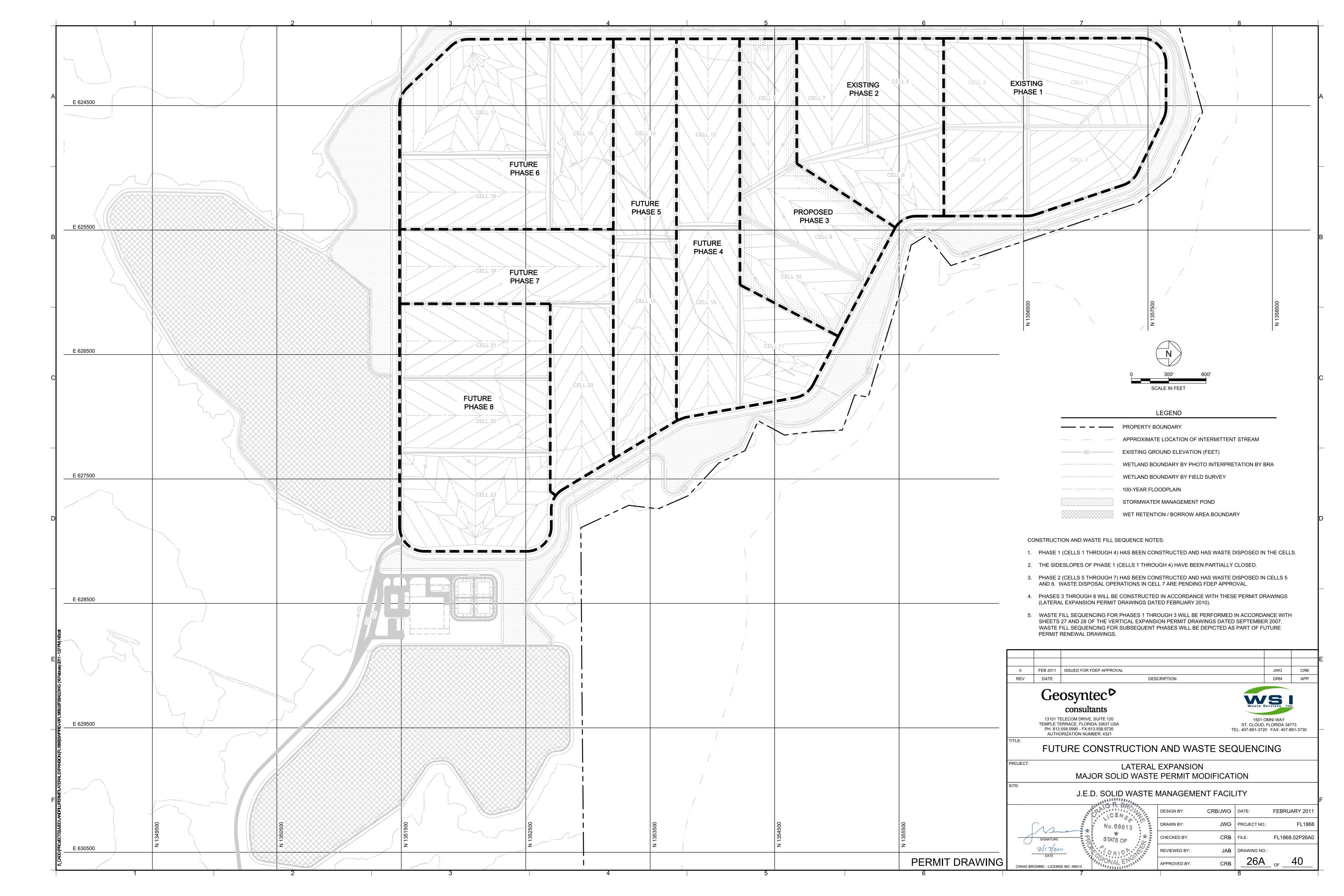
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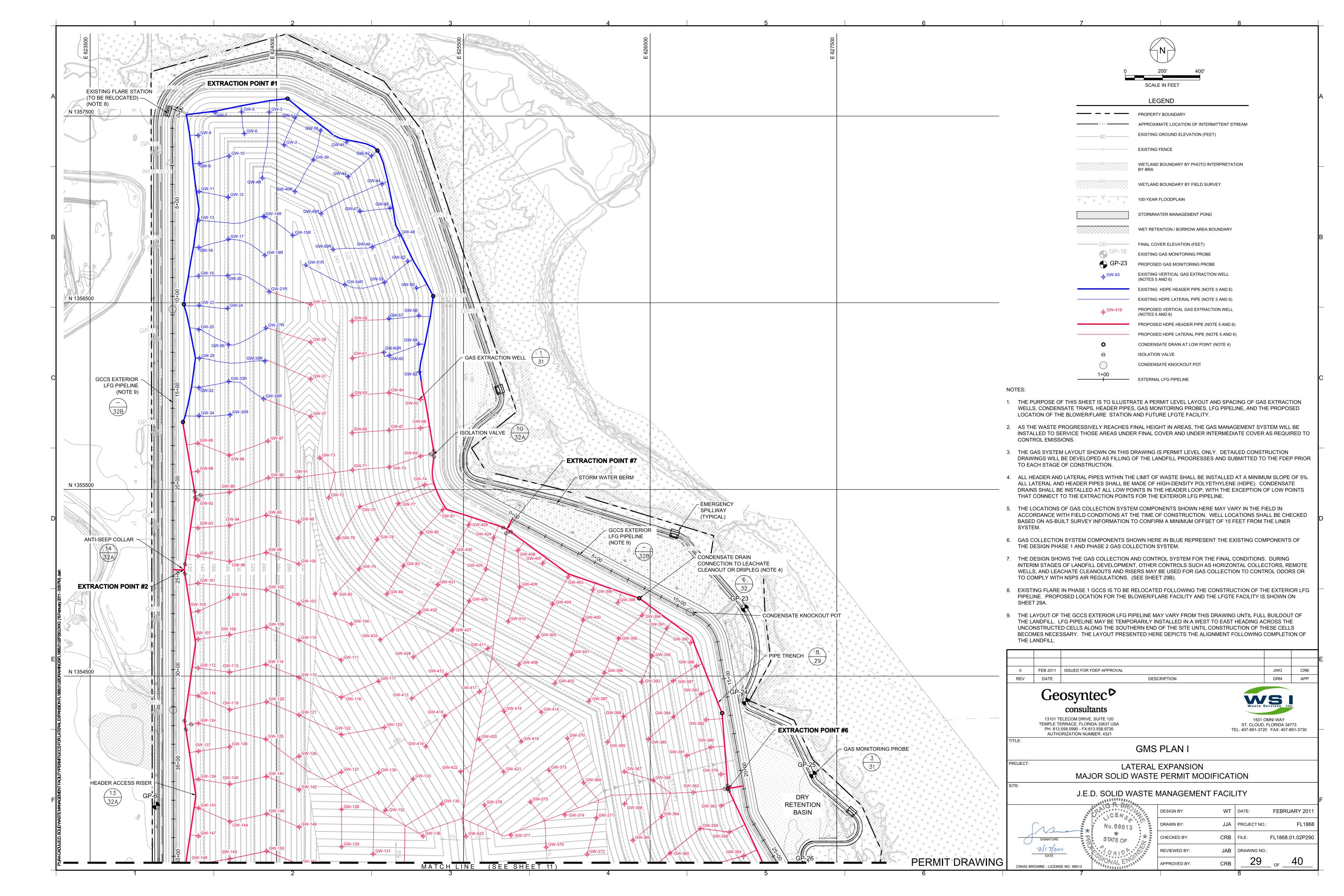


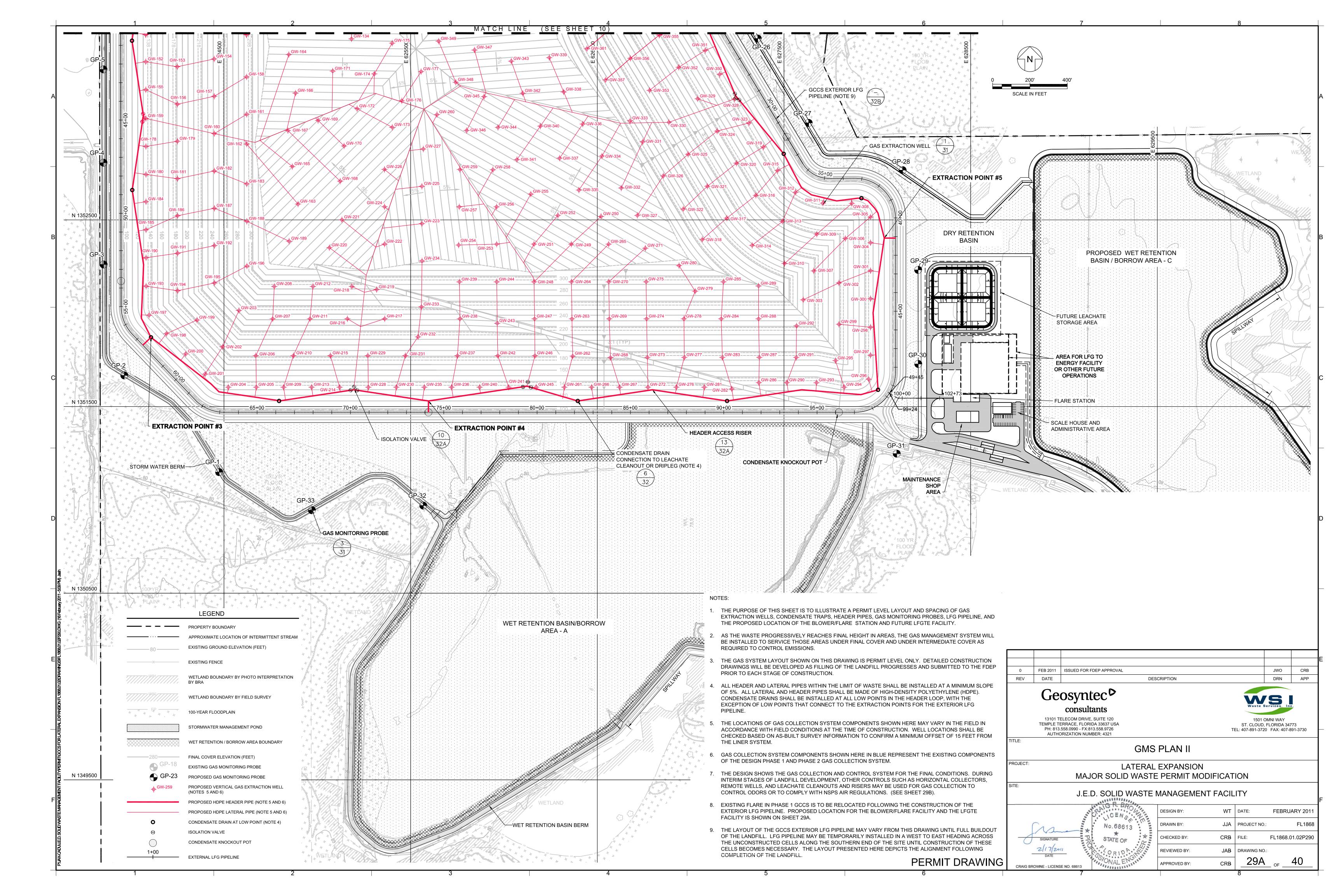


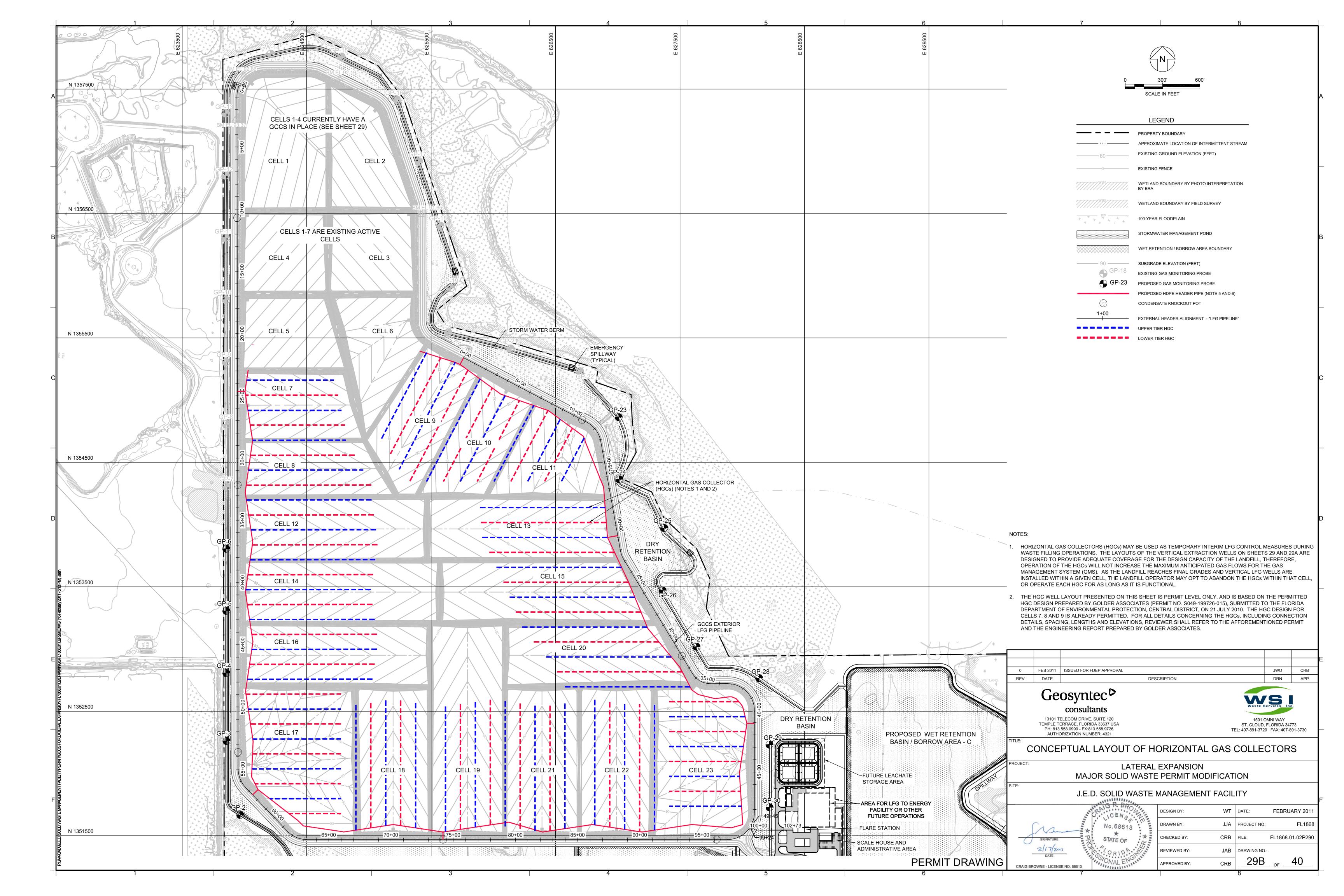


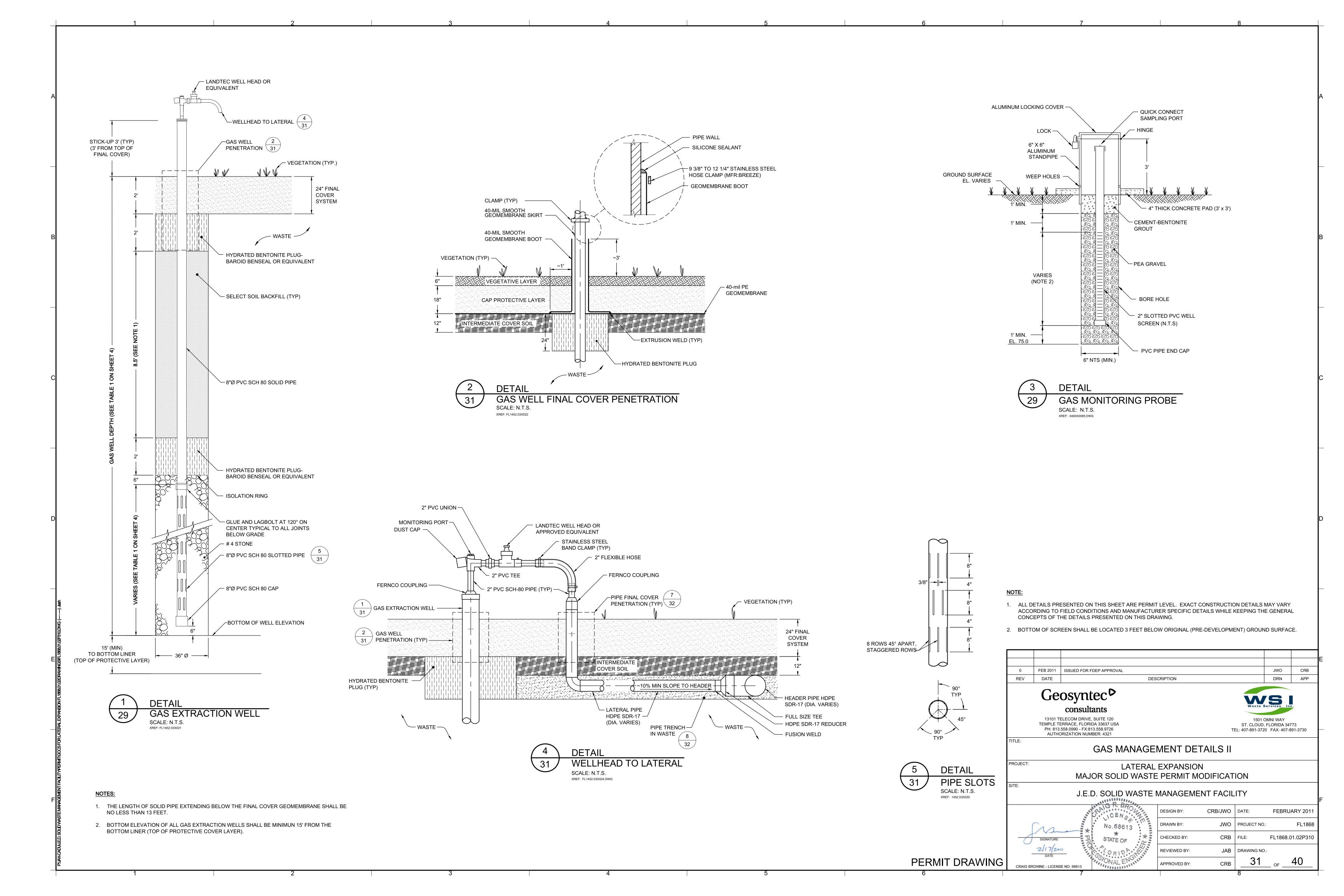


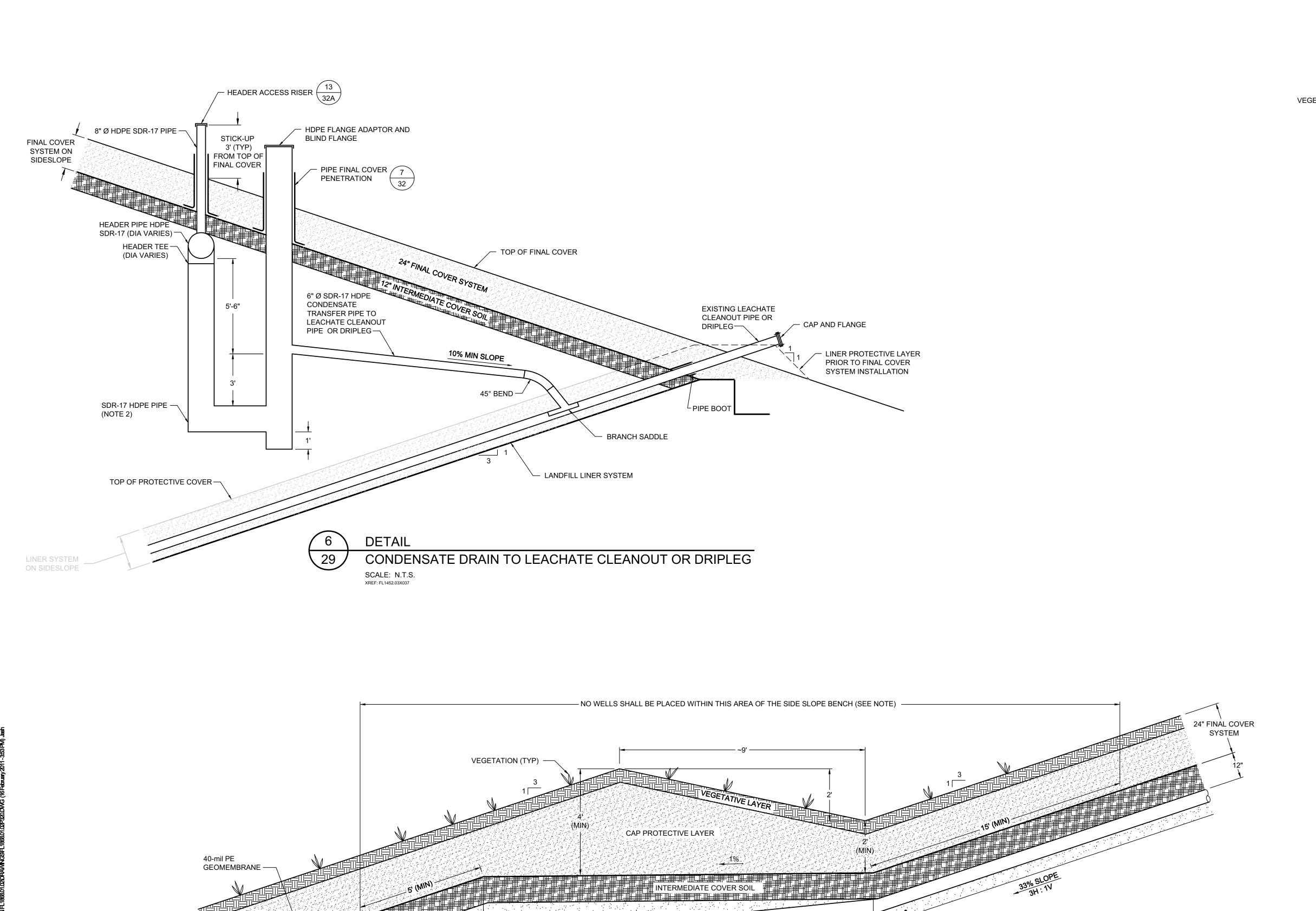












PIPE WALL
SILICONE SEALANT

9 3/8" TO 12 1/4" STAINLESS STEEL
HOSE CLAMP (MFR:BREEZE)

HYDRATED
BENTONITE PLUG

GEOMEMBRANE BOOT

VEGETATION (TYP.)

18"

12"

CAP PROTECTIVE LAYER

40-mil PE
GEOMEMBRANE
GEOMEMBRANE

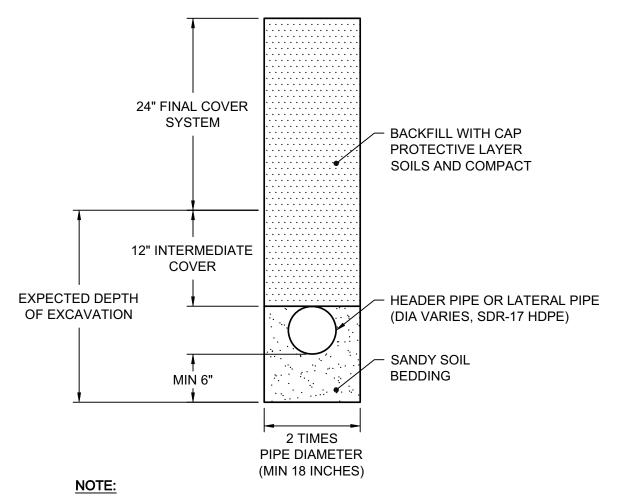
EXTRUSION WELD (TYP)

GEOMEMBRANE BOOT

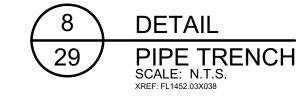
DETAIL

7 DETAIL
31 PIPE FINAL COVER PENETRATION
SCALE: N.T.S.

XREF: FL1452.03X023



HEADER AND LATERAL PIPES SHALL TYPICALLY BE INSTALLED 3-FT BELOW THE TOP OF FINAL COVER AS INDICATED. HOWEVER, ALL PIPES SHALL BE INSTALLED AT CONSTANT SLOPE BETWEEN THE END POINTS.



NOT

6" MIN SANDY SOIL

BEDDING

LATERAL PIPE HDPE SDR-17

GAS EXTRACTION WELLS ADJACENT TO THE SIDE SLOPE BENCHES SHALL BE

LATERAL PIPE TRENCH AT BENCH CROSSING

OFFSET FROM THE EDGE OF THE 15-FT WIDE BENCH AS INDICATED.

15' SIDE SLOPE BENCH

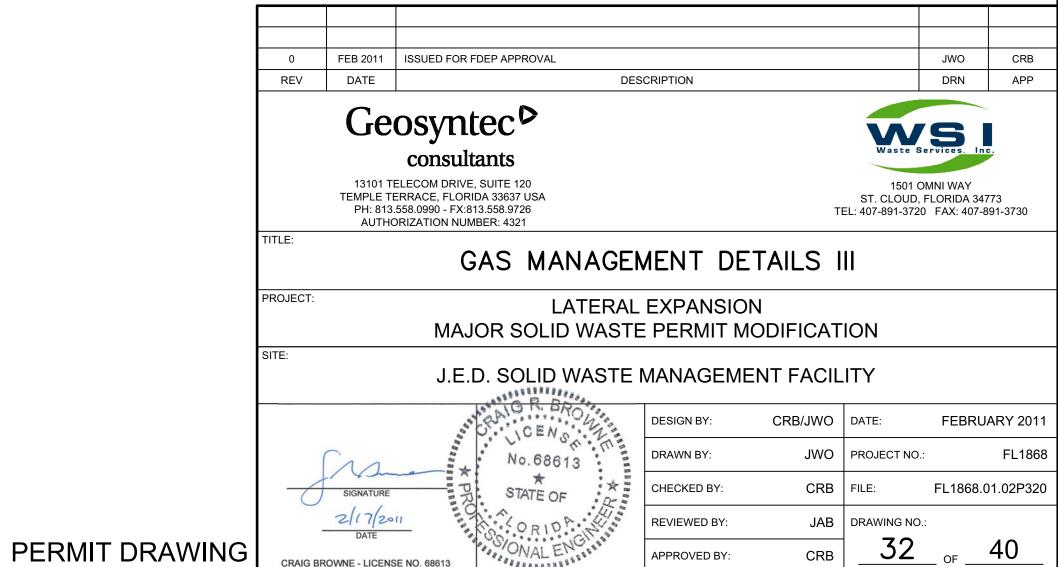
(EVERY 40' VERTICAL FEET)

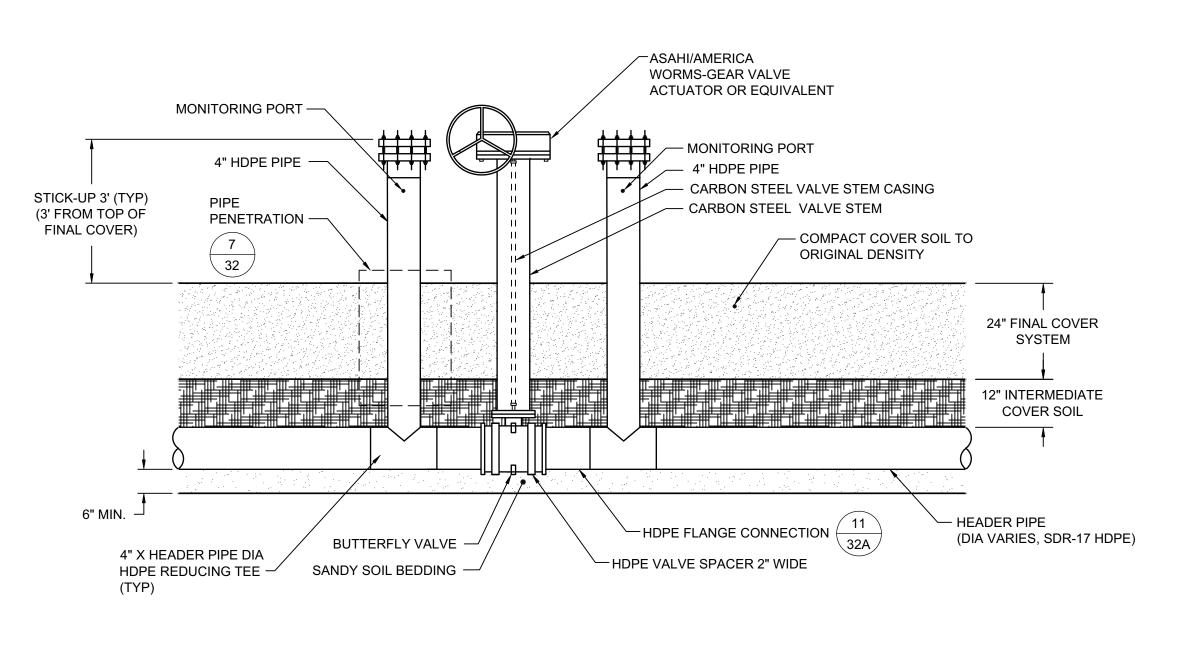
DETAIL

SCALE: N.T.S.

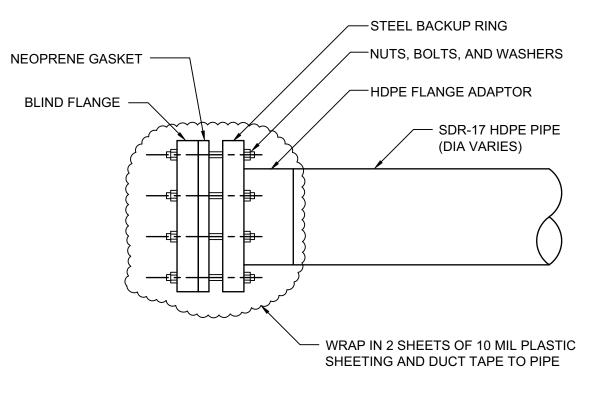
XREF: FL1452.03X034

- ALL DETAILS PRESENTED ON THIS SHEET ARE PERMIT LEVEL. EXACT CONSTRUCTION DETAILS MAY VARY ACCORDING TO FIELD CONDITIONS AND MANUFACTURER SPECIFIC DETAILS WHILE KEEPING THE GENERAL CONCEPTS OF THE DETAILS PRESENTED ON THIS DRAWING.
- PIPE SIZE FOR CONDENSATE DRAIN "U" SHALL MATCH THE HEADER PIPE SIZE FOR THAT LOCATION, BUT SHALL NOT BE LESS THAN 10 INCHES IN DIAMETER.





—STEEL BACKUP RING —NUTS, BOLTS, AND WASHERS NEOPRENE GASKET —HDPE FLANGE ADAPTOR -SDR-17 HDPE PIPE (DIA VARIES) - WRAP IN 2 SHEETS OF 10 MIL PLASTIC SHEETING AND DUCT TAPE TO PIPE

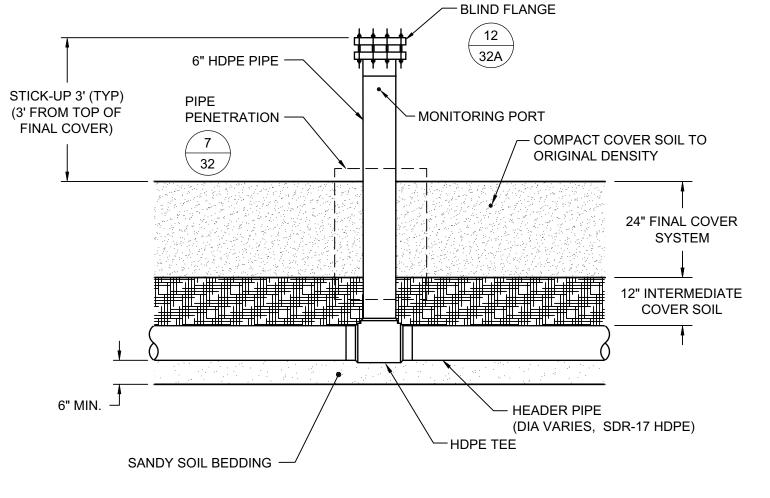


DETAIL ISOLATION VALVE SCALE: N.T.S.

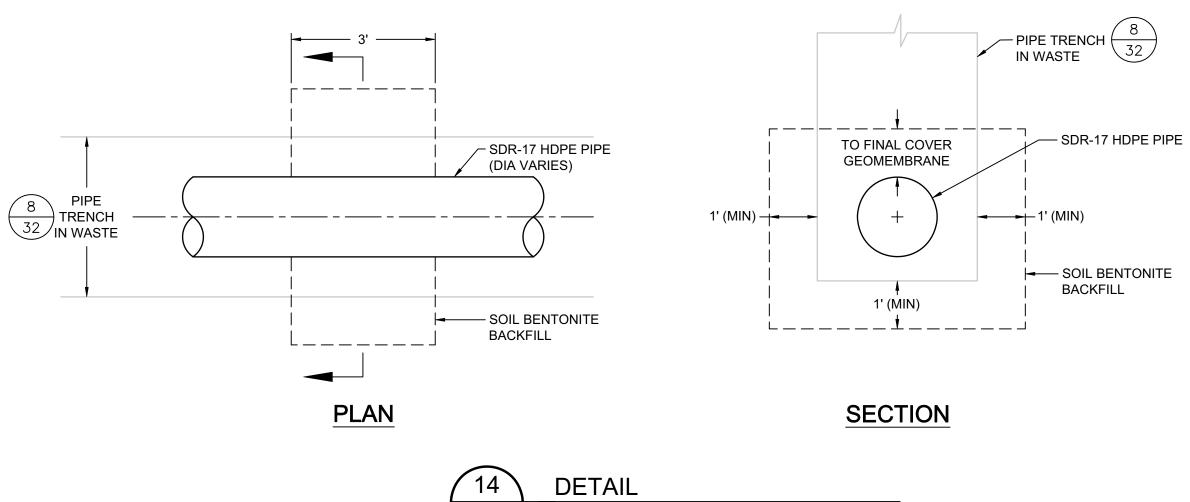
XREF: FL1452.03X025

DETAIL FLANGE CONNECTION (TYP.) SCALE: N.T.S. XREF: FL1452.03X026





HEADER ACCESS RISER (NOTE 2) SCALE: NTS XREF: FL1452.03X028

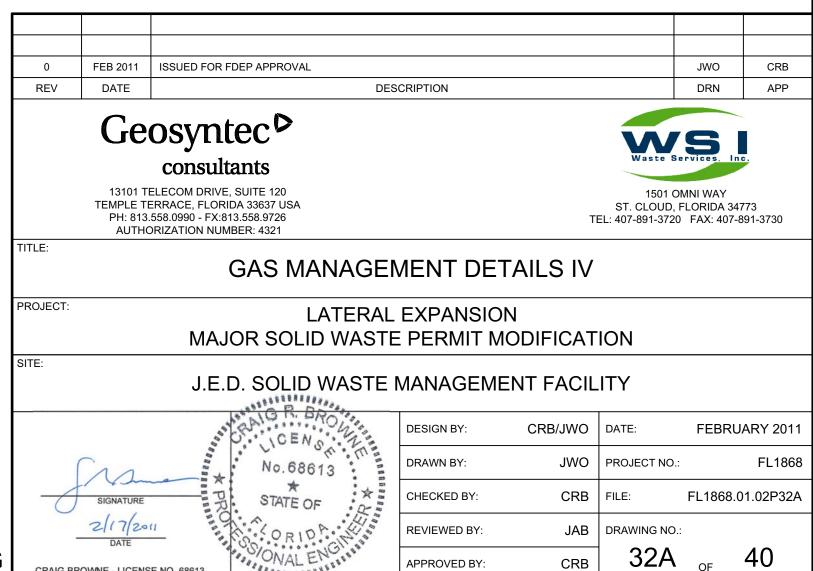


SCALE: N.T.S. XREF: FL1452.03X030

- THE ANTI-SEEP COLLAR SHALL EXTEND AT LEAST 1 FOOT BEYOND THE TRENCH IN EACH DIRECTION.
- SOIL BENTONITE BACKFILL SHALL CONSIST OF MINIMUM 10% BENTONITE BY WEIGHT.

NOTE:

- 1. ALL DETAILS PRESENTED ON THIS SHEET ARE PERMIT LEVEL. EXACT CONSTRUCTION DETAILS MAY VARY ACCORDING TO FIELD CONDITIONS AND MANUFACTURER SPECIFIC DETAILS WHILE KEEPING THE GENERAL CONCEPTS OF THE DETAILS PRESENTED ON THIS DRAWING.
- 2. HEADER ACCESS RISERS ARE TO BE INSTALLED AT ALL HIGH POINTS ALONG THE HEADER PATH.



APPROVED BY:

PERMIT DRAWING

CRAIG BROWNE - LICENSE NO. 68613

