REPORT

# HISTORY OF CONSTRUCTION ADDENDUM NO. 1

*Martin Lake Steam Electric Station - Ash Ponds*
*Rusk County, Texas*

Submitted to:

**Luminant Generation Company LLC**

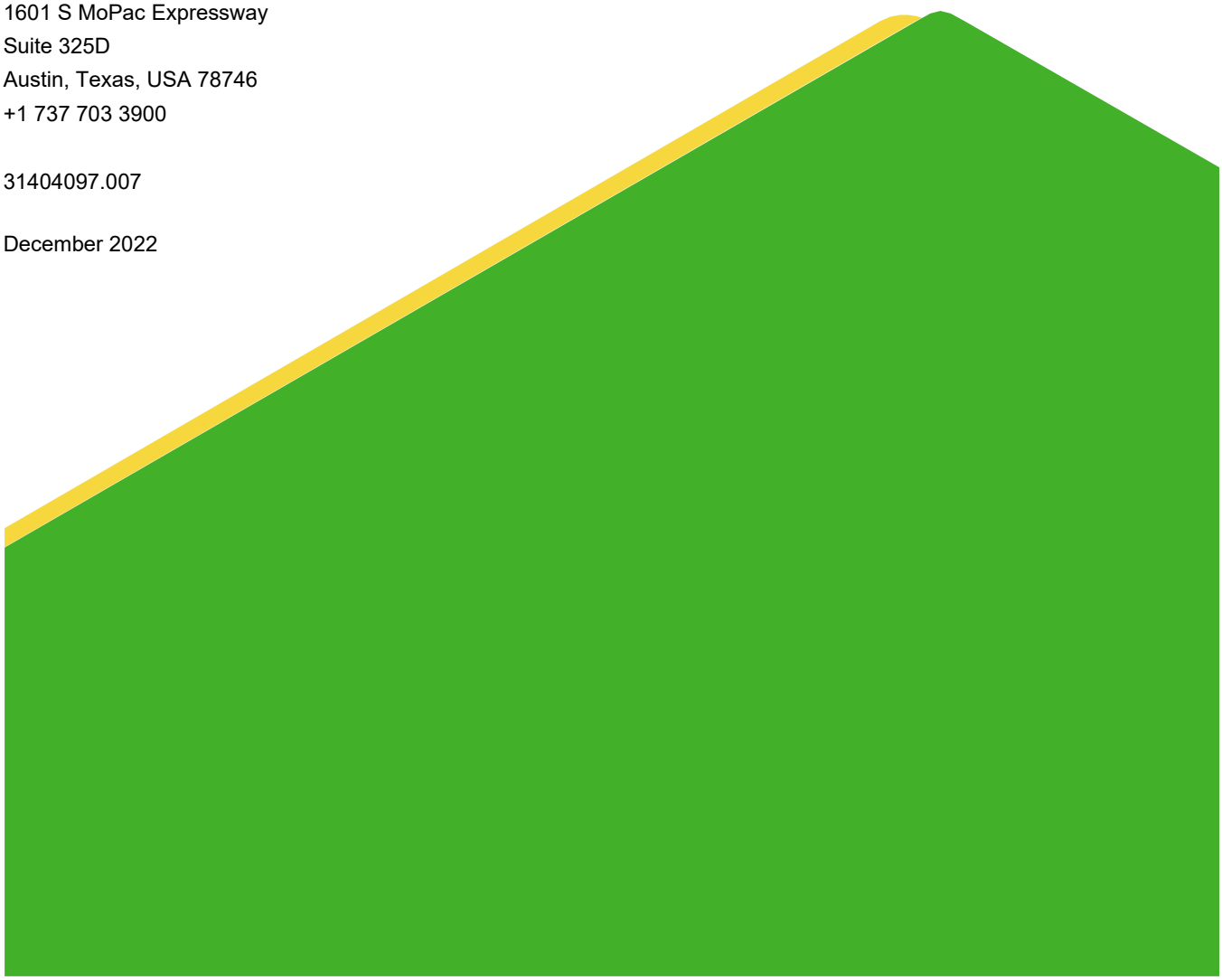
Submitted by:

**WSP GOLDER**

1601 S MoPac Expressway
Suite 325D
Austin, Texas, USA 78746
+1 737 703 3900

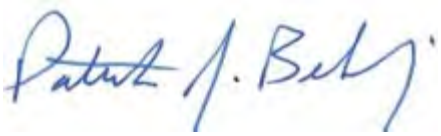
31404097.007

December 2022



# PROFESSIONAL CERTIFICATION

This document and all attachments were prepared by WSP Golder 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 those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I hereby certify that Addendum No.1 to the History of Construction Report for the Ash Ponds at the Martin Lake Steam Electric Station has been prepared in accordance with the requirements of 40 C.F.R. §257.73(c).



Patrick J. Behling, P.E.
Principal Engineer
WSP Golder
Texas Firm Registration No. 22771

# Table of Contents



**APPENDICES**

# DOCUMENT REVISION RECORD

| Issue No. | Date | Details of Revisions |
|---|---|---|
| **Revision 0** | October 2016 | Original Document |
| **Addendum 1** | December 2022 | Added retrofitted EAP, WAP and NSP liner system information |

# 1.0 INTRODUCTION

On behalf of Luminant Generation Company LLC (Luminant), WSP Golder (Golder) has prepared this Addendum No. 1 to the History of Construction Report (HCR) for East Ash Pond (EAP), West Ash Pond (WAP), and New Scrubber Pond (NSP) (collectively referred to as the "Ash Ponds") located at the Martin Lake Steam Electric Station (MLSES) in Rusk County, Texas (hereafter, the "Site"). Coal Combustion Residuals (CCR) including flue gas desulfurization (FGD) wastewater and bottom ash generated as part of MLSES operation are managed in the Ash Ponds. The Ash Ponds are regulated as Existing CCR Impoundments under 40 C.F.R. §257, Subpart D (the "CCR Rule").

The original HCR for the Site was prepared in October 2016 in accordance with 40 C.F.R. §257.73(c) and placed in the MLSES operating record in accordance with 40 C.F.R. §257.105(h)(10) (B&M, 2016a). This Addendum No. 1 updates the HCR to reflect the following:

- Retrofit of the EAP, WAP and NSP liner systems to comply with the requirements of 40 C.F.R. §257.71(a)(1)(ii) completed in accordance 40 C.F.R. §257.102(k).

## 2.0 RETROFIT OF ASH POND LINER SYSTEMS

The EAP, WAP and NSP are constructed partially above and partially below grade and are surrounded by engineered earthen dikes that extend above surrounding ground level. The EAP and WAP share an interior embankment and cover areas of approximately 10 acres and 15 acres, respectively. The NSP is an approximately 13 acre surface impoundment.

At the time the CCR Rule was promulgated, the liner systems in the EAP, WAP and NSP consisted of the following (from bottom to top):

- 18-inch thick compacted clay layer with a hydraulic conductivity of $1x10^{-7}$ cm/sec;
- a 60-mil HDPE geomembrane;
- a geosynthetic drainage layer;
- a second 60-mil HDPE geomembrane; and
- a 4-inch thick concrete revetment mat.

The EAP, WAP and NSP were considered unlined CCR surface impoundments in accordance with 40 C.F.R. §257.71(a)(1) of the CCR Rule (B&M, 2016b). Luminant decided to retrofit the Ash Pond liner systems to satisfy the requirements of 40 C.F.R. §257.71(a)(1)(ii) and maintain compliance with the CCR Rule. A Liner Retrofit Plan for the Ash Ponds were prepared in February 2020 in accordance with 40 C.F.R. §257.102(k)(2) and placed in the MLSES operating record in accordance with 40 C.F.R. §257.105(h)(10) (HDR, 2020). The Ash Pond liner systems were retrofitted sequentially, starting with the EAP, followed by the WAP and finally the NSP.

The liner system retrofit measures for each of the Ash Ponds consisted of the following.

- Pumping of free water from the pond and transfer to one of the other Ash Ponds;
- Excavation of all CCR from the pond and placement in MLSES A1 Landfill; and
- Construction of an alternative composite liner system meeting the requirements of 40 C.F.R. §257.71(a)(1)(ii).

In each impoundment, the retrofitted liner system was installed on top of the existing liner system and consisted of the following (from bottom to top):

- a 6-inch thick layer of general soil fill material placed over the existing liner system;
- a polymer-enhanced geosynthetic clay liner (GCL); and
- a 60-mil HDPE geomembrane.

From 2020 through 2022, the EAP and WAP were each retrofitted with a new composite liner system and a similar composite liner system is currently being installed in the NSP. Engineering drawings for the EAP, WAP and NSP Liner Retrofits are reproduced in Appendix A of this Addendum. As-built drawings for the EAP and WAP Liner Retrofits are reproduced in Appendix B of this Addendum.

The retrofitted liner systems in the EAP, WAP and NSP are alternative composite liners meeting the requirements of 40 C.F.R. §257.71(a)(1)(ii).

# 3.0 REFERENCES

Burns and McDonnell (B&M), 2016a. History of Construction – CCR Surface Impoundments, Martin Lake Steam Electric Station. October 5.

B&M, 2016b. Summary of Liner Construction – Martin Lake Impoundments, Martin Lake Steam Electric Station. September 16.

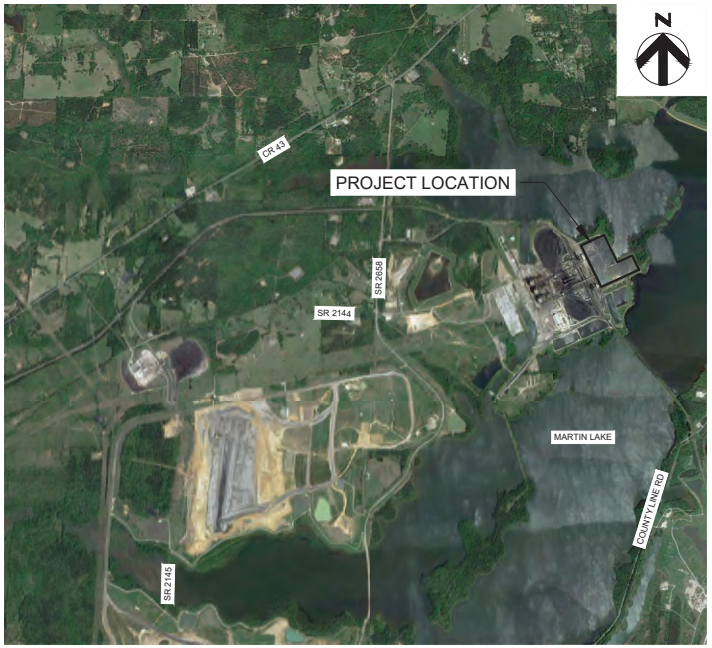
HDR, 2020. Retrofit Plan for Ash Pond Area – East ASh Pond, West Ash Pond and New Scrubber Pond, Martin Lake Steam Electric Station. February 28.

**APPENDIX A**

# Ash Pond Liner Retrofits Engineering Drawings

HDR
Firm Registration No. F-754
17111 Preston Road, Suite 300
Dallas, Texas 75248-1229
972.960.4400

Luminant




VICINITY MAP
NOT TO SCALE

Construction Drawings For

# Martin Lake Steam Electric Station

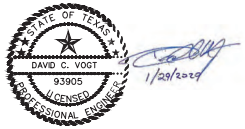
## CCR Impoundment Reline
## East Ash Pond

Project No.
10172630

Rusk County, Texas
January 2020

INDEX OF DRAWINGS





## STANDARD ABBREVIATIONS

| | |
|---|---|
| & | AND |
| APPROX | APPROXIMATELY |
| @ | AT |
| AVG | AVERAGE |
| BOE | BOTTOM OF EXCAVATION |
| BOL | BOTTOM OF LINER |
| X | BY |
| CL | CENTERLINE |
| CMP | CORRUGATED METAL PIPE |
| CO | CLEAN OUT |
| CY | CUBIC YARD |
| DIA | DIAMETER |
| DET | DETAIL |
| DWG | DRAWING |
| E | EAST |
| EAP | EAST ASH POND |
| ELEV | ELEVATION |
| EW | EACH WAY |
| EXIST | EXISTING |
| EXC | EXCAVATION |
| FGD | FLUE GAS DESULFICATION |
| FML | FLEXIBLE MEMBRANE LINER |
| FT | FEET |
| GAL | GALLON |
| GND | GROUND |
| GDL | GRAVEL DRAINAGE LAYER |
| GNDL | GEONET DRAINAGE LAYER |
| HDPE | HIGH DENSITY POLYETHYLENE |
| HORIZ | HORIZONTAL |
| ID | INSIDE DIAMETER |
| IN | INCHES |
| IE | INVERT ELEVATION |
| LCRS | LEACHATE COLLECTION AND REMOVAL SYSTEM |
| LCS | LEACHATE COLLECTION SYSTEM |
| LCP | LEACHATE COLLECTION PIPE |
| LCPR | LEACHATE COLLECTION PIPE RISER |
| LF | LINEAR FEET |
| LB | POUND |
| MH | MANHOLE |
| MAX | MAXIMUM |
| MIL | .001 INCHES |
| MIN | MINIMUM |
| MW | MONITOR WELL |
| MLSES | MARTIN LAKE STEAM ELECTRIC STATION |
| MSL | MEAN SEA LEVEL |
| N | NORTH |
| NIC | NOT IN CONTRACT |
| NO | NUMBER |
| NTS | NOT TO SCALE |
| NTYS | NORTH THICKENER YARD SUMP |
| OC | ON CENTER |
| OZ | OUNCE |
| % | PERCENT |
| PLCP | PERFORATED LEACHATE COLLECTION PIPE |
| PERF | PERFORATED |
| PGL | PROFILE GRADE LINE |
| PDP | PERMANENT DISPOSAL POND |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PVI | POINT OF VERTICAL INTERSECTION |
| PT | POINT OF TANGENT |
| PZ | PIEZOMETER |
| Q | FLOW |
| QTY | QUANTITY |
| R | RADIUS |
| RCP | REINFORCED CONCRETE PIPE |
| REF | REFERENCE |
| REQ | REQUIRED |
| RD | ROAD |
| SCH | SCHEDULE |
| SDL | SAND DRAINAGE LAYER |
| SEC | SECTION |
| SHT | SHEET |
| S | SOUTH |
| SDR | STANDARD DIMENSION RATIO |
| SLQCP | SOIL LINER QUALITY CONTROL PLAN |
| SP | STEEL PIPE |
| SQ | SQUARE |
| SS | SIDE SLOPE |
| STA | STATION |
| STYS | SOUTH THICKENER YARD SUMP |
| T.A.S. | TERMINAL ANCHOR SECTION |
| TL | TANGENT LENGTH |
| TOC | TOP OF COVER |
| TOFC | TOP OF FINAL COVER |
| TOL | TOP OF LINER |
| TOS | TOE OF SLOPE |
| TS | TOP SLOPE |
| TEMP | TEMPORARY |
| TYP | TYPICAL |
| UNO | UNLESS NOTED OTHERWISE |
| VERT | VERTICAL |
| W | WEST |
| W/ | WITH |
| WAP | WEST ASH POND |
| WW | WETWELL |
| YD | YARD |

## CONSTRUCTION SEQUENCE

A. CONTRACTOR SHALL REMOVE EXISTING CCR MATERIAL, ROCKS AND SEDIMENT FROM THE EAP, HAUL AND STOCKPILE IT AT THE DECANT BASIN. LUMINANT WILL LOAD THE STOCKPILED MATERIAL ONTO RAIL CARS FOR DISPOSAL AT THE MARTIN LAKE A-1 AREA LANDFILL.

B. CONTRACTOR SHALL USE WATER FROM THE ADJACENT WEST ASH POND (WAP) OR NEW SCRUBBER POND (SP) TO WASH REMAINING CCR MATERIAL OFF THE SIDES AND FLOOR OF THE EAP AND REMOVE IT. EAP WILL BE VISUALLY INSPECTED BY OWNER'S QAA CONSULTANT TO CONFIRM CCR MATERIAL, ROCKS, AND SEDIMENT HAVE BEEN REMOVED.

C. CONTRACTOR SHALL MODIFY THE EXISTING 48-INCH SUCTION LINE ON THE SOUTH END OF THE POND BY INCREASING THE SCREENED AREA AS SHOWN IN THE PLANS.

D. CONTRACTOR SHALL LOAD AND HAUL GENERAL SOIL FILL MATERIAL FROM THE OWNER'S STOCKPILE LOCATED AT LIBERTY MINE, A LOCATION UNDER THE PROVISIONS OF THE MINE SAFETY AND HEALTH ADMINISTRATION (MSHA) AND APPROXIMATELY 4.5 MILES FROM EAP.

E. CONTRACTOR SHALL PLACE THE GENERAL FILL MATERIAL OVER THE EXISTING CONCRETE REVETMENT TO A DEPTH OF AT LEAST SIX (6) INCHES, NOMINALLY COMPACT, AND SMOOTH ROLL TO FINISH THE INSTALLATION.

F. CONTRACTOR SHALL INSTALL A GEOSYNTHETIC CLAY LINER (GCL) OVER THE SIDES AND FLOOR OF THE EAP AND SECURE IT IN A PERIMETER ANCHOR TRENCH/BATTEN AND STRIP.

G. CONTRACTOR SHALL INSTALL A 60-MIL HDPE LINER DIRECTLY ON THE GCL AND SECURE IT IN A PERIMETER ANCHOR TRENCH/BATTEN AND STRIP.

H. CONTRACTOR SHALL INSTALL 12-INCH HDPE YARD PIPE AS SHOWN IN THE PLANS.

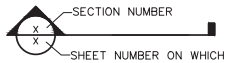
## GENERAL NOTES

1. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND PROJECT SPECIFICATIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE PROJECT SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.
2. COORDINATE SYSTEM IS BASED ON LOCAL SURVEY. THE BENCHMARKS TO BE USED FOR CONSTRUCTION ARE LOCATED AS SHOWN ON DRAWING NO. 00C-01. EXISTING CONTOURS ARE BASED ON TOPOGRAPHICAL SURVEY PERFORMED FEBRUARY 12-20, 2019 BY LACY SURVEYING. CURRENT GROUND ELEVATIONS MAY VARY FROM THOSE SHOWN DUE TO SITE WORK THAT HAS BEEN PERFORMED SINCE THE SURVEY WAS PERFORMED.
3. THE CONTRACTOR SHALL VERIFY EXISTING CONTOURS PRIOR TO THE START OF WORK.
4. THERE SHALL NOT BE ANY ADDITIONAL PAYMENT OR EXTENSION OF CONTRACT TIME FOR WORKING WITH SATURATED SOILS OR HANDLING WATER SEEPAGE DUE TO RAINFALL, RUNOFF AND INFILTRATION.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING ROADS, BENCHMARKS AND EXISTING GROUNDWATER MONITOR WELLS DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PROTECT THE GROUNDWATER MONITOR WELLS, BENCHMARKS AND EXISTING ROADS.
6. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN ESTABLISHED BY THE OWNER OR ENGINEER. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER SAFE WORKING DISTANCE FROM ALL UTILITY EASEMENTS OR LINES.
7. EXCAVATION BY "BLASTING" IS NOT PERMITTED ON THIS PROJECT.
8. FINISHED GROUND ELEVATIONS SHALL MATCH EXISTING GROUND ELEVATIONS EXCEPT AS SHOWN ON THE PLANS. ALL EXCESS SOIL FROM THE EXCAVATION AND GRADING SHALL BE PLACED IN DESIGNATED STOCKPILE LOCATIONS AS APPROVED BY THE OWNER. IF WASTE IS ENCOUNTERED DURING EXCAVATION, THE OWNER SHALL BE NOTIFIED AND THE WASTE REMOVED AND PLACED IN AREAS DESIGNATED AS APPROVED BY THE OWNER. TRANSPORT OF SOIL TO FILL AREAS SHALL BE CONDUCTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
9. GEOTECHNICAL INVESTIGATION REPORTS FOR THE SITE ARE AVAILABLE FOR REVIEW AT LUMINANT'S DALLAS OFFICES. THE CONTRACTOR MAY PERFORM ADDITIONAL GEOTECHNICAL INVESTIGATIONS, AS DEEMED NECESSARY FOR CONSTRUCTION ACTIVITIES, PROVIDED ALL NECESSARY PERMITS AND APPROVALS ARE OBTAINED FROM LUMINANT PRIOR TO INITIATING SUCH WORK. HOWEVER, THERE SHALL BE NO ADDITIONAL PAYMENT TO THE CONTRACTOR FOR ADDITIONAL GEOTECHNICAL INVESTIGATIONS.
10. THE CONTRACTOR SHALL CONSTRUCT, AND UPON COMPLETION OF THE PROJECT, REMOVE TEMPORARY CONSTRUCTION ACCESS ROADS. SUCH ROADS SHALL BE LOCATED AS APPROVED BY THE OWNER. DRAINAGE PATTERNS AT THE SITE SHALL NOT BE ALTERED BY ROAD CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF TEMPORARY DRAINAGE STRUCTURES, INCLUDING CULVERTS, AT NO ADDITIONAL COST TO THE OWNER.
11. THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND UPON COMPLETION OF THE PROJECT, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS AS APPROVED BY LUMINENT ENVIRONMENTAL SERVICES AND IN ACCORDANCE WITH THE SITE SWPPP AND PURSUANT TO TPDES REQUIREMENTS. SUCH CONTROLS SHALL BE PLACED AT THE LIMITS OF DISTURBED AREAS AND AT INTERMEDIATE LOCATIONS WHERE CONCENTRATED FLOW IS LIKELY.
12. TEMPORARY CONSTRUCTION SLOPES SHALL NOT BE GREATER THAN 2H:1V. STEEPER SLOPES WILL ONLY BE ALLOWED IF THE CONTRACTOR PROVIDES A GEOTECHNICAL ENGINEERING REPORT SPECIFYING MAXIMUM SLOPES AND THE DURATION FOR WHICH SUCH SLOPES SHALL REMAIN IN PLACE.
13. THE CONTRACTOR SHALL REMOVE ALL VEGETATION WITHIN THE CONSTRUCTION LIMITS AS REQUIRED TO CONSTRUCT THE PROJECT. ALL VEGETATION SHALL BE REMOVED BY CONTRACTOR AT NO ADDITIONAL EXPENCE TO OWNER.
14. THE CONTRACTOR SHALL OBTAIN AND CONDUCT WORK CONSISTENT WITH A TPDES PERMIT FOR CONSTRUCTION, REFER TO TECHNICAL SPECIFICATIONS. PREPARATION OF A SWPPP AND OBTAINING THE TPDES PERMIT ARE THE CONTRACTORS RESPONSIBILITY.
15. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ERROR OR DISCREPANCY FOUND ONCE THE CONTRACT DOCUMENT IS CAREFULLY REVIEWED AND ALL ASPECTS OF FIELD WORK HAVE BEEN VERIFIED. IN THE EVENT THE CONTRACTOR CONTINUES TO WORK ON AN ITEM WHERE AN ERROR EXISTS, IT SHALL BE DEEMED THAT THE CONTRACTOR BID AND INTENDED TO EXECUTE THE MORE STRINGENT OR HIGHER QUALITY REQUIREMENT WITHOUT AN INCREASE IN CONTRACT SUM OR TIME. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CORRECT ANY FAILURE OF COMPANY PARTS TO COORDINATE OR FIT PROPERLY INTO FINAL POSITION, AS A RESULT OF CONTRACTOR FAILURE TO RAISE OR RESOLVE A DISCREPANCY.
16. THE DRAWINGS AND SPECIFICATIONS SHOULD AGREE WITH EACH OTHER, AND WORK CALLED FOR BY DRAWINGS AND NOT MENTIONED IN SPECIFICATION, OR VICE VERSA, SHALL BE FURNISHED BY BOTH. WHEN DISCREPANCIES EXIST BETWEEN SCALE AND DIMENSIONS, THE DIMENSIONED FIGURE SHALL BE USED.
17. CONTRACTOR AND EACH SUBCONTRACTOR SHALL VERIFY ALL GRADES, LINES, LEVELS, AND DIMENSIONS AS INDICATED ON DRAWINGS, AND HE SHALL REPORT ERRORS TO THE ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR SHALL ESTABLISH BENCHMARKS IN AT LEAST TWO WIDELY SEPARATED PLACES, AND AS WORK PROGRESSES THE CONTRACTOR WILL MAINTAIN ADEQUATE HORIZONTAL AND VERTICAL CONTROL.
18. CONTRACTOR SHALL PROVIDE EROSION CONTROL BY SEEDING FOR ALL AREAS DISTURBED BY CONTRACTOR DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL NOT DISTURB ANY AREA WITHOUT THE APPROVAL OF THE ENGINEER. EROSION CONTROL BY SEEDING SHALL CONFORM TO STANDARD SPECIFICATION 02930.
19. CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROLS AS PER SPECIFICATIONS DURING CONSTRUCTION. SUCH CONTROLS SHALL BE PLACED AT LIMITS OF DISTURBED AREAS AND AT INTERMEDIATE LOCATIONS WHERE CONCENTRATED FLOW IS LIKELY.
20. STORMWATER THAT HAS COME INTO CONTACT WITH THE ASH WITHIN THE EXCAVATED POND IS TO BE CONSIDERED CONTACT STORMWATER. CONTRACTOR WILL CONTROL THE WATER ON SITE IN COMPLIANCE WITH THE TPDES PERMIT.
21. THE CONTRACTOR IS REQUIRED TO PRESENT THE SWPPP TO LUMINANT ENVIRONMENTAL SERVICES FOR APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
22. THE CONTRACTOR IS REQUIRED TO SUBMIT THE NOTICE OF INTENT AND NOTICE OF TERMINATION FOR THE TPDES PERMIT.
23. THE CONTRACTOR IS TO ACQUIRE A DIGGING PERMIT FROM THE PLANT BEFORE COMMENCING ANY EXCAVATION ACTIVITY.

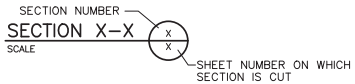
## SYMBOLS

### SECTION DETAIL INDICATORS

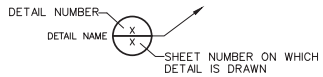
DRAWING ON WHICH SECTION IS CUT:



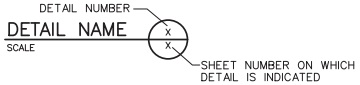

DRAWING ON WHICH SECTION APPEARS:

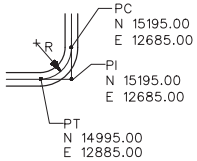


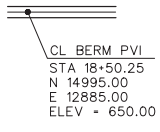

DRAWING ON WHICH DETAIL IS INDICATED:



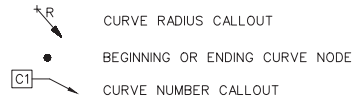

DRAWING ON WHICH DETAIL APPEARS:



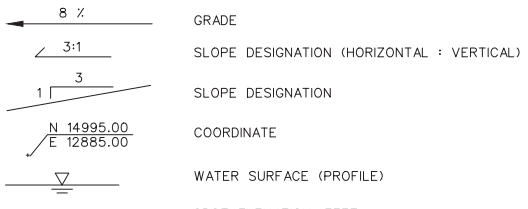




CURVE WITH HORIZONTAL CONTROL:




VERTICAL CONTROL DESIGNATION




| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED · PROFESSIONAL ENGINEER · 1/29/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

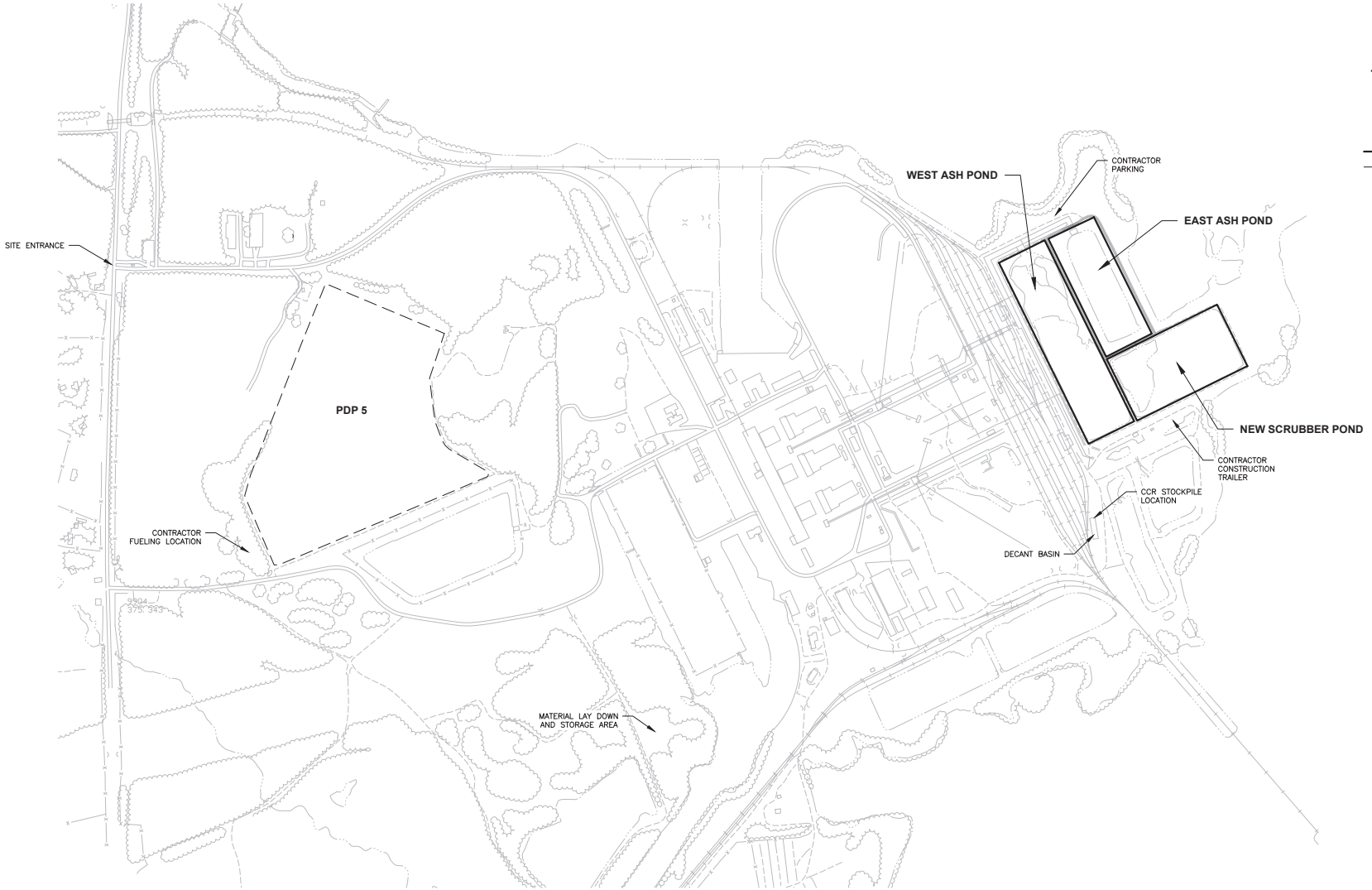
**ABBREVIATIONS AND GENERAL NOTES**

0 1" 2"

FILENAME 00G-02.dwg

SCALE

SHEET 00G-02




| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/29/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

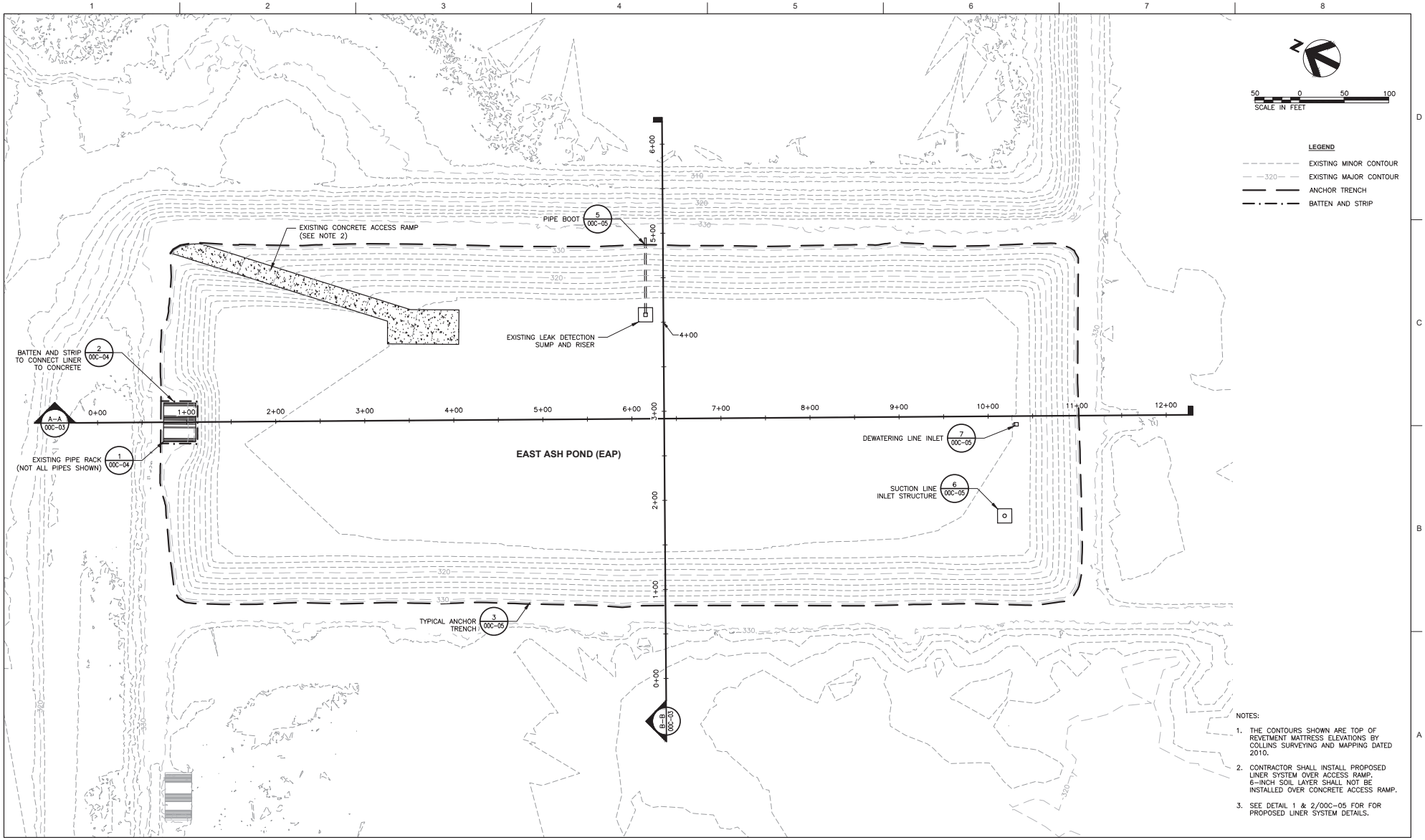
Luminant

## SITE LAYOUT

0 1" 2"

FILENAME 00C-01.dwg
SCALE 1" = 400'

SHEET
**00C-01**




NOTES:

1. THE CONTOURS SHOWN ARE TOP OF REVETMENT MATTRESS ELEVATIONS BY COLLINS SURVEYING AND MAPPING DATED 2010.
2. CONTRACTOR SHALL INSTALL PROPOSED LINER SYSTEM OVER ACCESS RAMP. 6–INCH SOIL LAYER SHALL NOT BE INSTALLED OVER CONCRETE ACCESS RAMP.
3. SEE DETAIL 1 & 2/00C–05 FOR FOR PROPOSED LINER SYSTEM DETAILS.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/29/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**EAST ASH POND**

FILENAME 00C-02.dwg
SCALE 1" = 50'

SHEET
**00C-02**

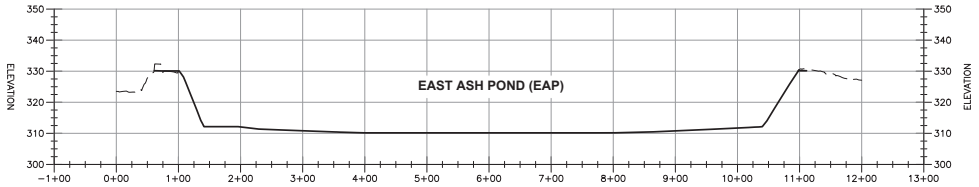
100 0 100 200
HORIZONTAL SCALE: 1" = 100'

20 0 20 40
VERTICAL SCALE: 1" = 20'

**LEGEND**

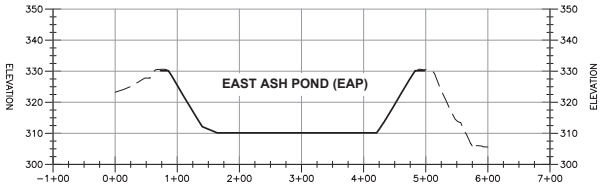
EXISTING GROUND SURFACE

PROPOSED GRADE




SECTION A–A (A–A, 00C–02)

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'




SECTION B–B (B–B, 00C–02)

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/29/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

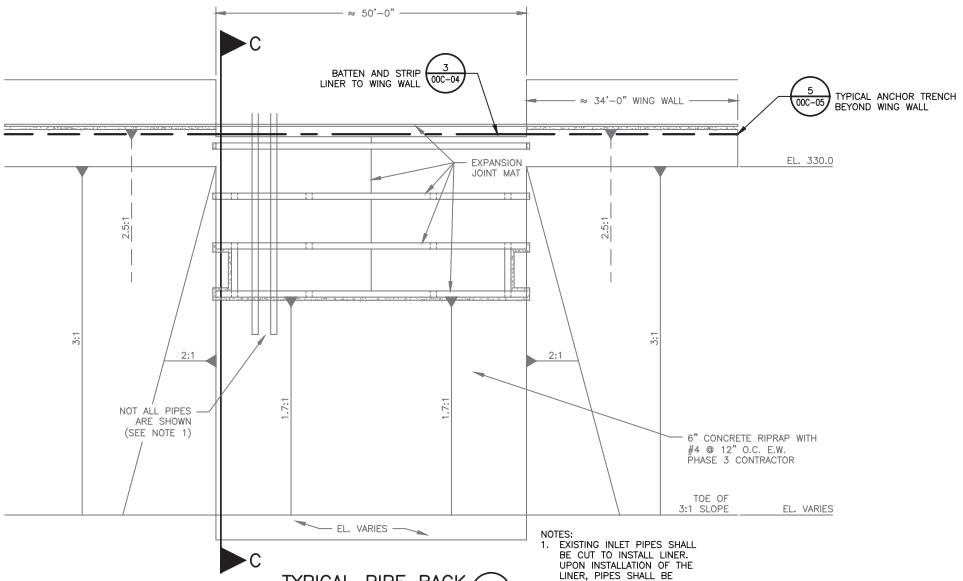
**CROSS SECTIONS**

0 1" 2"

FILENAME 00C-03.dwg

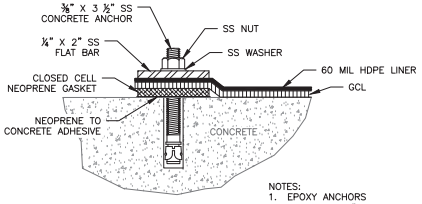
SCALE H: 1" = 100' ; V: 1" = 20'

SHEET **00C-03**



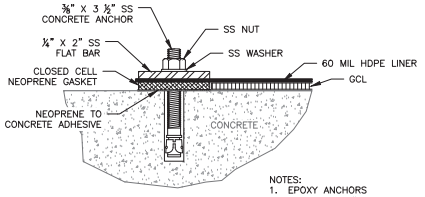

TYPICAL PIPE RACK
NOT TO SCALE
1
00C-02

NOTES:
1. EXISTING INLET PIPES SHALL BE CUT TO INSTALL LINER. UPON INSTALLATION OF THE LINER, PIPES SHALL BE REINSTALLED.



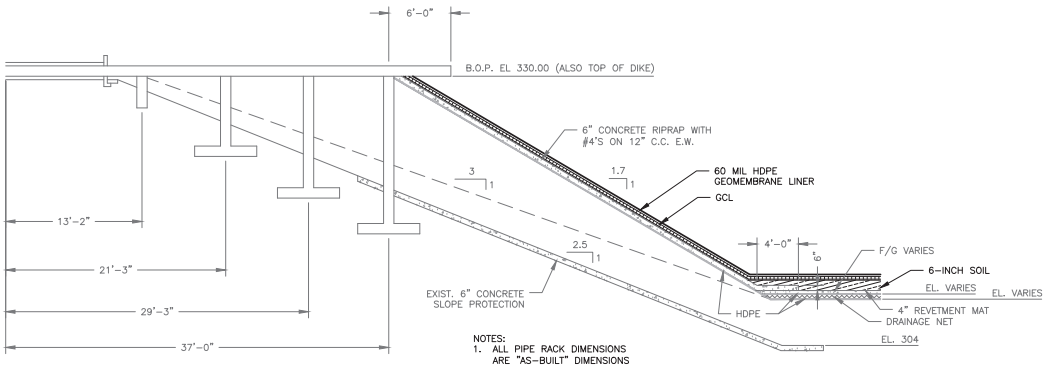

NOTES:
1. EPOXY ANCHORS SPACED AT 6" O.C.

BATTEN AND STRIP CONNECTION AT ANCHOR TRENCH
NOT TO SCALE
2A
00C-06




NOTES:
1. EPOXY ANCHORS SPACED AT 6" O.C.

BATTEN AND STRIP CONNECTION BELOW WATER SURFACE
NOT TO SCALE
2B
00C-06




NOTES:
1. ALL PIPE RACK DIMENSIONS ARE "AS-BUILT" DIMENSIONS FOR EAST ASH POND.

SECTION C-C
NOT TO SCALE

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/29/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

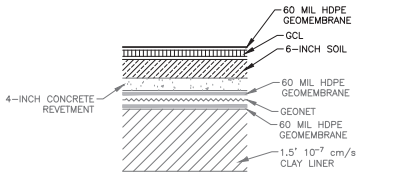
Luminant

**DETAILS (1 OF 2)**

0 1" 2"

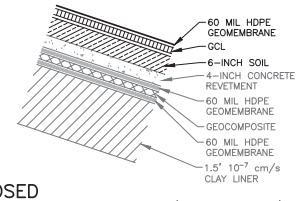
FILENAME 00C-04.dwg
SCALE

SHEET
**00C-04**



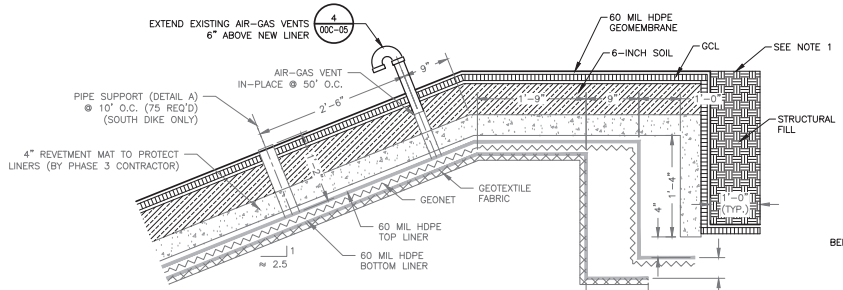

PROPOSED EAP RETROFIT SECTION (FLOOR) (1 00C-05)

NOT TO SCALE




PROPOSED EAP RETROFIT SECTION (SIDESLOPE) (2 00C-05)

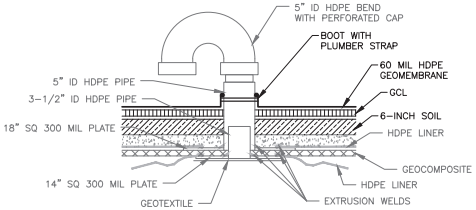
NOT TO SCALE




NOTES:
1. THE ANCHOR TRENCH SHALL BE INSTALLED OUTSIDE OF THE EXISTING ANCHOR TRENCH.

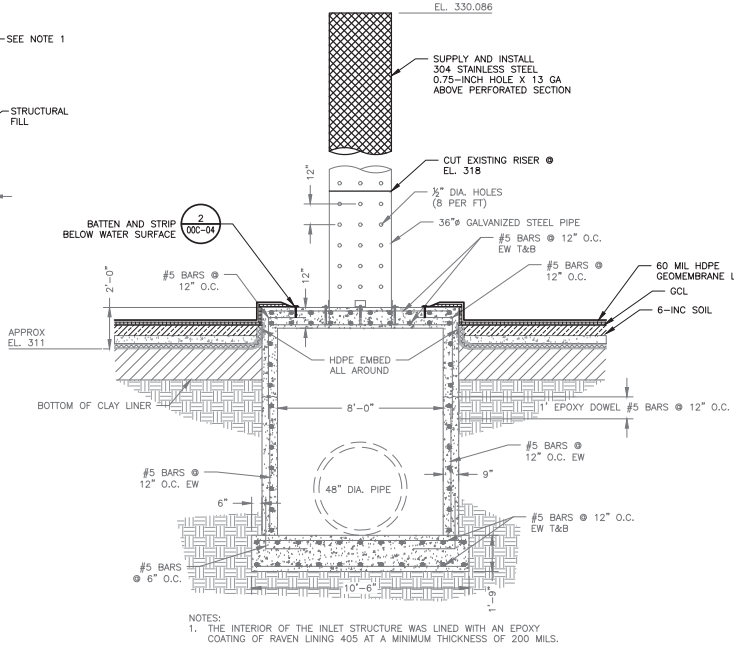
ANCHOR TRENCH (3 00C-02)

NOT TO SCALE




TYPICAL AIR-GAS VENT (4 00C-05)

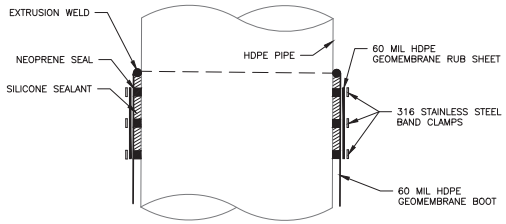
NOT TO SCALE




NOTES:
1. THE INTERIOR OF THE INLET STRUCTURE WAS LINED WITH AN EPOXY COATING OF RAVEN LINING 405 AT A MINIMUM THICKNESS OF 200 MILS.

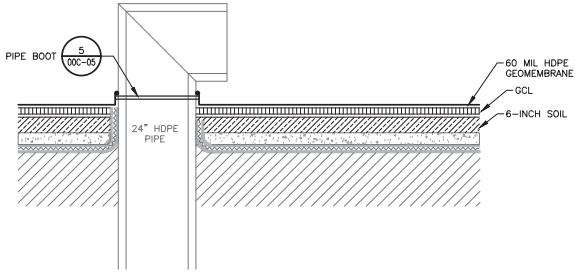
SUCTION LINE INLET STRUCTURE (6 00C-02)

NOT TO SCALE




PIPE BOOT (5 00C-02)

NOT TO SCALE




24" DEWATERING LINE INLET (7 00C-02)

NOT TO SCALE

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS — DAVID C. VOGT — 93905 — LICENSED PROFESSIONAL ENGINEER — 1/29/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

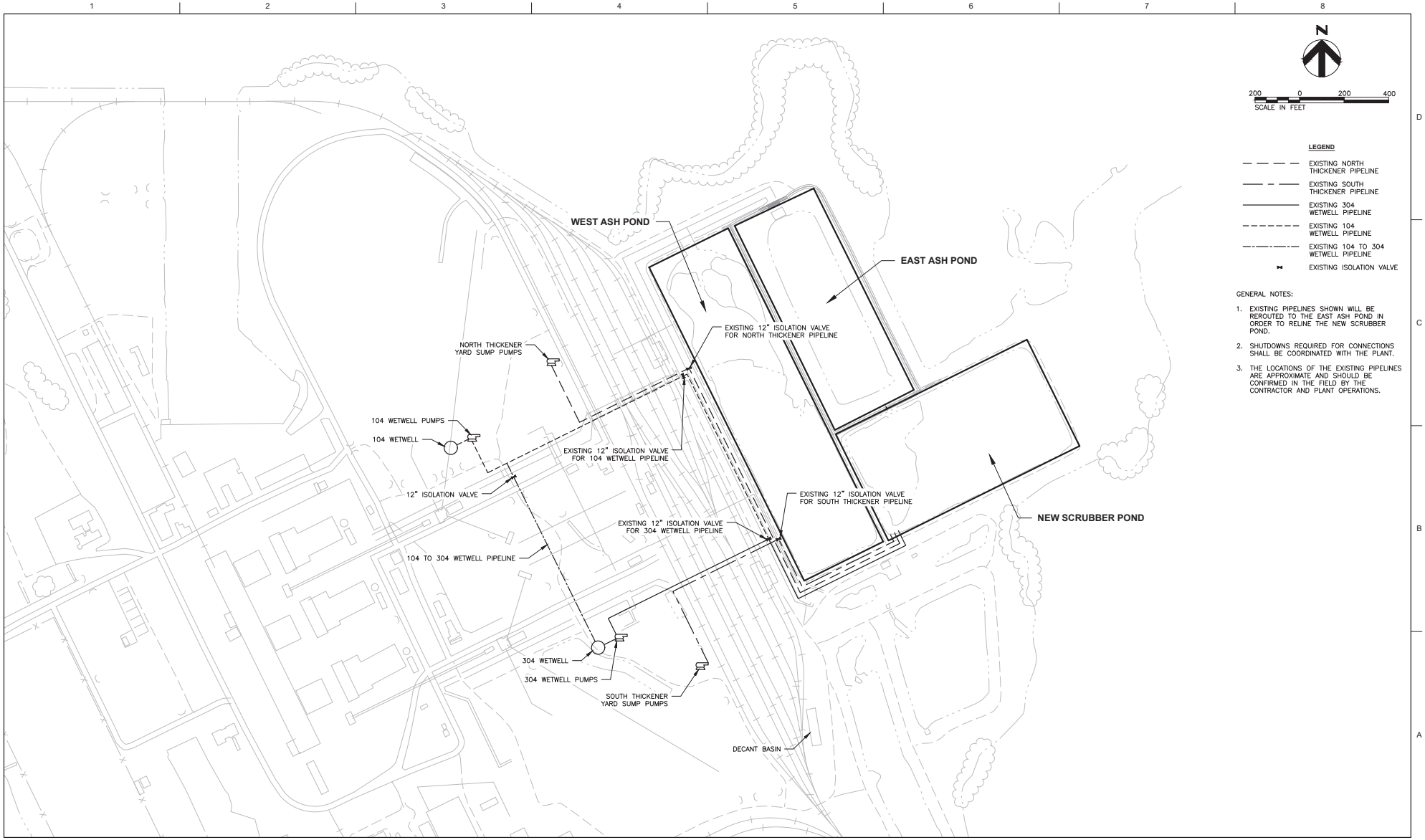
**DETAILS (2 OF 2)**

0 1" 2"

FILENAME 00C-05.dwg

SCALE NOT TO SCALE

SHEET 00C-05




| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | J. ORDONEZ, P.E. |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | D. VOGT, P.E. |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
JAIME ORDONEZ
124838
REGISTERED
ENGINEER

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

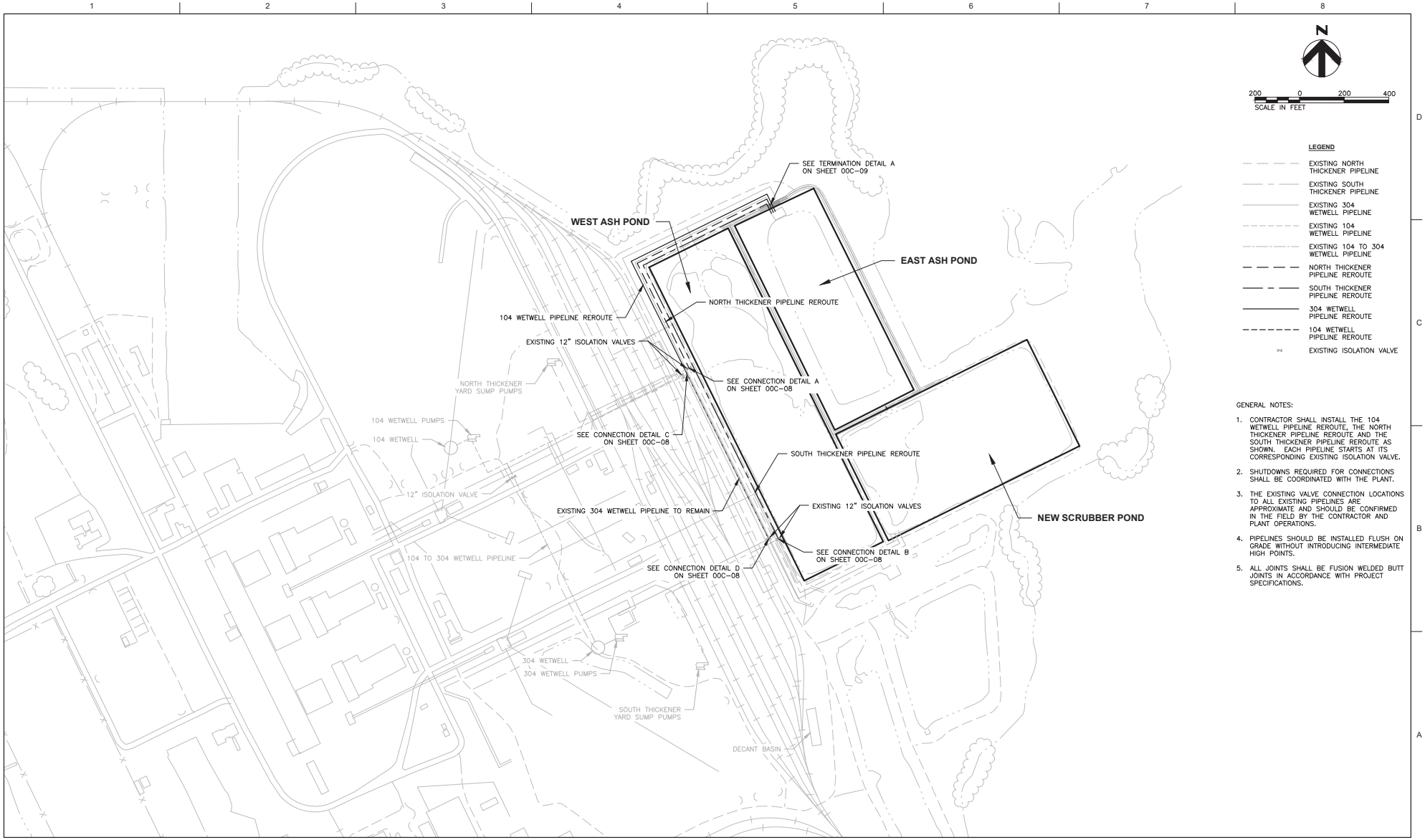
Luminant

## EXISTING YARD PIPING

0 1" 2"

FILENAME 00C-06.dwg
SCALE 1" = 200'

SHEET
**00C-06**




GENERAL NOTES:

1. CONTRACTOR SHALL INSTALL THE 104 WETWELL PIPELINE REROUTE, THE NORTH THICKENER PIPELINE REROUTE AND THE SOUTH THICKENER PIPELINE REROUTE AS SHOWN. EACH PIPELINE STARTS AT ITS CORRESPONDING EXISTING ISOLATION VALVE.
2. SHUTDOWNS REQUIRED FOR CONNECTIONS SHALL BE COORDINATED WITH THE PLANT.
3. THE EXISTING VALVE CONNECTION LOCATIONS TO ALL EXISTING PIPELINES ARE APPROXIMATE AND SHOULD BE CONFIRMED IN THE FIELD BY THE CONTRACTOR AND PLANT OPERATIONS.
4. PIPELINES SHOULD BE INSTALLED FLUSH ON GRADE WITHOUT INTRODUCING INTERMEDIATE HIGH POINTS.
5. ALL JOINTS SHALL BE FUSION WELDED BUTT JOINTS IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | J. ORDONEZ, P.E. |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | D. VOGT, P.E. |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
JAIME ORDONEZ
124838
REGISTERED PROFESSIONAL ENGINEER

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

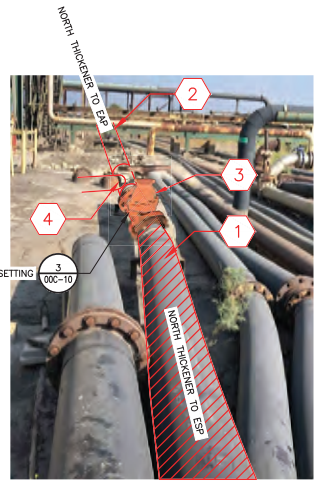
Luminant

## MODIFIED YARD PIPING

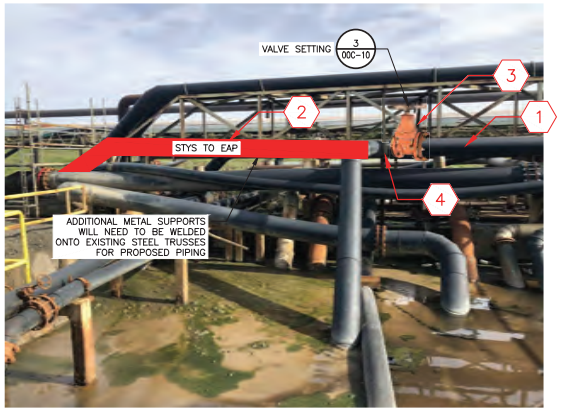
0 1" 2"

FILENAME 00C-07.dwg
SCALE 1" = 200'

SHEET
**00C-07**




CONNECTION TO NORTH THICKENER PIPELINE A 00C-07
NOT TO SCALE



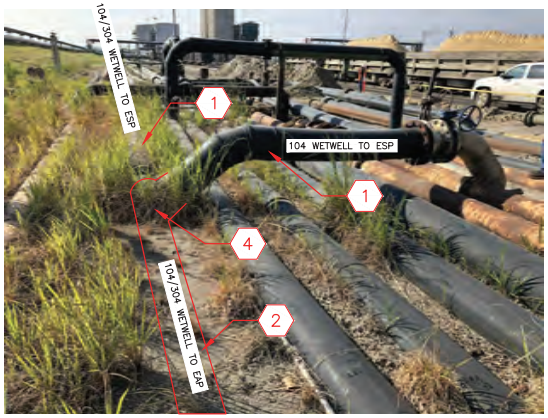

CONNECTION TO SOUTH THICKENER PIPELINE B 00C-07
NOT TO SCALE

GENERAL NOTES:

1. SHUTDOWNS REQUIRED FOR CONNECTIONS SHALL BE COORDINATED WITH THE PLANT.
2. THE CONNECTIONS LOCATION TO ALL EXISTING PIPELINES ARE APPROXIMATE AND SHOULD BE CONFIRMED IN THE FIELD BY THE CONTRACTOR AND PLANT OPERATIONS.
3. CONNECTIONS C AND D MUST BOTH BE COMPLETE BEFORE MAKING EITHER OF THESE LINES OPERATIONAL.
4. ALL PIPE AND FITTING SIZES SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING OR MANUFACTURING OF PIPE.

KEY NOTES:

1. EXISTING TO REMAIN
2. PIPELINE REROUTE
3. 12" ISOLATION VALVE
4. INSTALL SIZE ON SIZE TEE




CONNECTION TO 104 WETWELL TO ESP PIPELINE C 00C-07
NOT TO SCALE


CONNECTION TO 304 WETWELL TO ESP PIPELINE C 00C-07
NOT TO SCALE

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | J. ORDONEZ, P.E. |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | D. VOGT, P.E. |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
JAIME ORDONEZ
124838
REGISTERED
ENGINEER

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

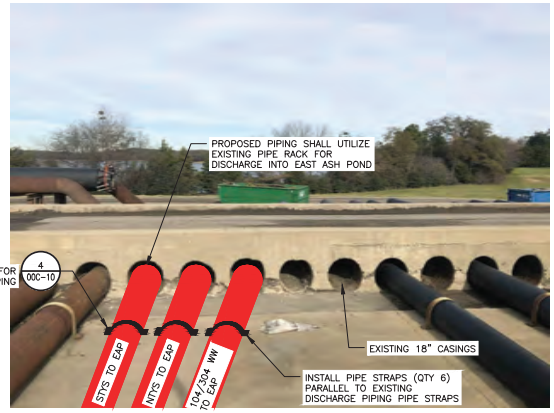
Luminant

**YARD PIPING CONNECTIONS AND DETAILS**

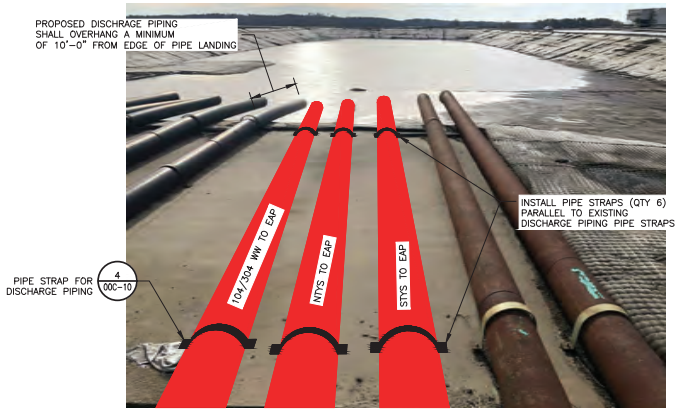
0 1" 2"

FILENAME 00C-08.dwg
SCALE NOT TO SCALE

SHEET
**00C-08**

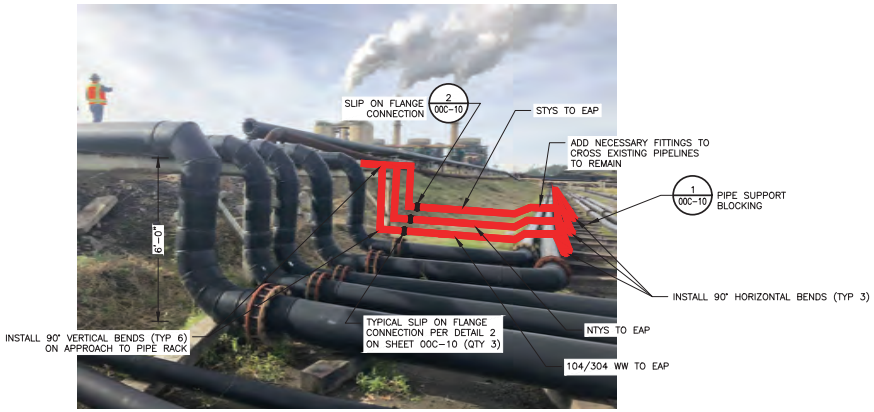



TERMINATION DETAIL A AT EXISTING PIPE RACK (A, 00C-08)
NOT TO SCALE




TERMINATION DETAIL B AT EXISTING PIPE RACK (B, 00C-09)
NOT TO SCALE


TERMINATION DETAIL C AT EXISTING PIPE RACK (C, 00C-09)
NOT TO SCALE




TERMINATION DETAIL D AT EXISTING PIPE RACK (D, 00C-09)
NOT TO SCALE

GENERAL NOTES:

1. EXISTING PIPELINES SHOWN SHALL BE REROUTED TO THE EAST ASH POND IN ORDER TO RELINE THE NEW SCRUBBER POND.
2. SHUTDOWNS REQUIRED FOR CONNECTIONS SHALL BE COORDINATED WITH THE PLANT.
3. THE CONNECTIONS LOCATION TO ALL EXISTING PIPELINES ARE APPROXIMATE AND SHOULD BE CONFIRMED IN THE FIELD BY THE CONTRACTOR AND PLANT OPERATIONS.
4. ALL JOINTS SHALL BE FUSION WELDED BUTT JOINTS IN ACCORDANCE WITH PROJECT SPECIFICATIONS, UNLESS OTHERWISE NOTED.
5. ALL PIPE AND FITTING SIZES SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING OR MANUFACTURING OF PIPE.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | J. ORDONEZ, P.E. |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | D. VOGT, P.E. |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS — JAIME ORDONEZ — 124838 — REGISTERED PROFESSIONAL ENGINEER

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

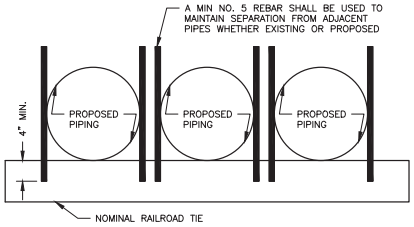
Luminant

**YARD PIPING CONNECTIONS AND DETAILS**

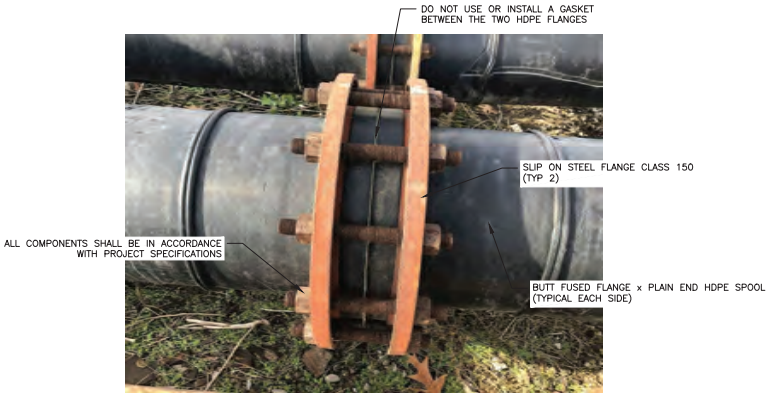
0 1" 2"

FILENAME 00C-09.dwg
SCALE NOT TO SCALE

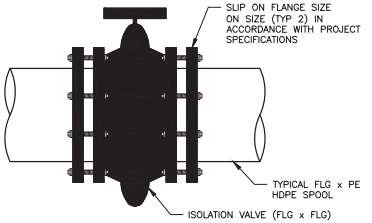
SHEET 00C-09



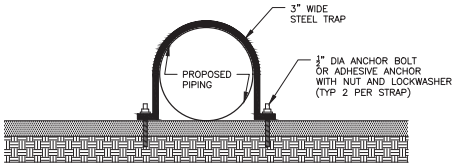

PIPE SUPPORT BLOCKING (1, 00C-09)
NOT TO SCALE




SLIP ON FLANGE CONNECTION (2, 00C-09)
NOT TO SCALE




VALVE SETTING (3, 00C-08)
NOT TO SCALE




PIPE STRAP FOR DISCHARGE PIPING (4, 00C-09)
NOT TO SCALE

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | J. ORDONEZ, P.E. |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | D. VOGT, P.E. |
| PROJECT NUMBER | 10172630 |


**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**YARD PIPING DETAILS**

0 1" 2"

FILENAME 00C-10.dwg
SCALE NOT TO SCALE

SHEET **00C-10**


| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| F | 01/29/2020 | ISSUED FOR BID |
| E | 01/23/2020 | ISSUED FOR CLIENT REVIEW |
| D | 01/14/2020 | ISSUED FOR CLIENT REVIEW |
| C | 12/20/2019 | ISSUED FOR CLIENT REVIEW |
| B | 11/26/2019 | ISSUED FOR CLIENT REVIEW |
| A | 11/12/2019 | ISSUED FOR CLIENT REVIEW |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/29/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**STOCKPILE AND HAUL ROUTE**

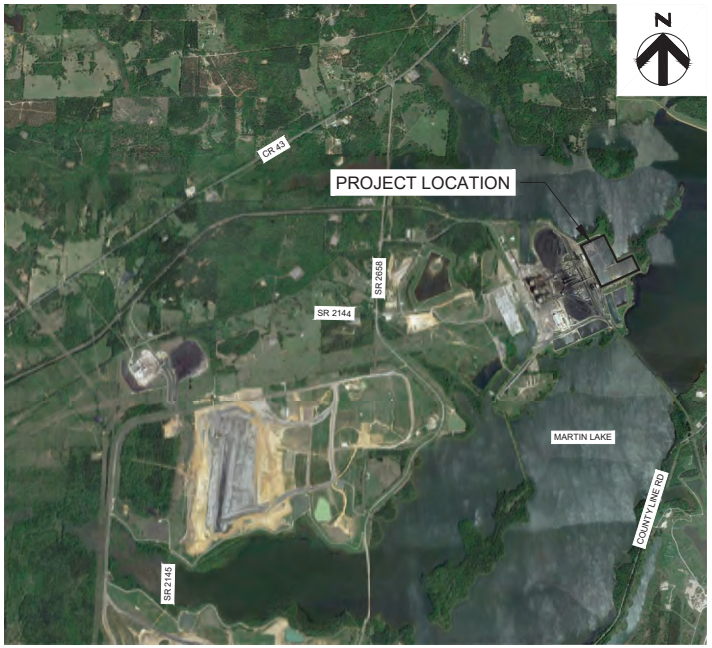
0 1" 2"

FILENAME 00C-11.dwg
SCALE 1" = 600'

SHEET
**00C-11**

HDR
Firm Registration No. F-754
17111 Preston Road, Suite 300
Dallas, Texas 75248-1229
972.960.4400

Luminant




VICINITY MAP
NOT TO SCALE

Construction Drawings For

# Martin Lake Steam Electric Station

## CCR Impoundment Reline
## West Ash Pond

Project No.
10172630

Rusk County, Texas
January 2020

INDEX OF DRAWINGS



STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

## STANDARD ABBREVIATIONS

| | |
|---|---|
| & | AND |
| APPROX | APPROXIMATELY |
| @ | AT |
| AVG | AVERAGE |
| BOE | BOTTOM OF EXCAVATION |
| BOL | BOTTOM OF LINER |
| X | BY |
| CL | CENTERLINE |
| CMP | CORRUGATED METAL PIPE |
| CO | CLEAN OUT |
| CY | CUBIC YARD |
| DIA | DIAMETER |
| DET | DETAIL |
| DWG | DRAWING |
| E | EAST |
| EAP | EAST ASH POND |
| ELEV | ELEVATION |
| EW | EACH WAY |
| EXIST | EXISTING |
| EXC | EXCAVATION |
| FGD | FLUE GAS DESULFICATION |
| FML | FLEXIBLE MEMBRANE LINER |
| FT | FEET |
| GAL | GALLON |
| GND | GROUND |
| GDL | GRAVEL DRAINAGE LAYER |
| GNDL | GEONET DRAINAGE LAYER |
| HDPE | HIGH DENSITY POLYETHYLENE |
| HORIZ | HORIZONTAL |
| ID | INSIDE DIAMETER |
| IN | INCHES |
| IE | INVERT ELEVATION |
| LCRS | LEACHATE COLLECTION AND REMOVAL SYSTEM |
| LCS | LEACHATE COLLECTION SYSTEM |
| LCP | LEACHATE COLLECTION PIPE |
| LCPR | LEACHATE COLLECTION PIPE RISER |
| LF | LINEAR FEET |
| LB | POUND |
| MH | MANHOLE |
| MAX | MAXIMUM |
| MIL | .001 INCHES |
| MIN | MINIMUM |
| MW | MONITOR WELL |
| MLSES | MARTIN LAKE STEAM ELECTRIC STATION |
| MSL | MEAN SEA LEVEL |
| N | NORTH |
| NIC | NOT IN CONTRACT |
| NO | NUMBER |
| NTS | NOT TO SCALE |
| NTYS | NORTH THICKENER YARD SUMP |
| OC | ON CENTER |
| OZ | OUNCE |
| % | PERCENT |
| PLCP | PERFORATED LEACHATE COLLECTION PIPE |
| PERF | PERFORATED |
| PGL | PROFILE GRADE LINE |
| PDP | PERMANENT DISPOSAL POND |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PVI | POINT OF VERTICAL INTERSECTION |
| PT | POINT OF TANGENT |
| PZ | PIEZOMETER |
| Q | FLOW |
| QTY | QUANTITY |
| R | RADIUS |
| RCP | REINFORCED CONCRETE PIPE |
| REF | REFERENCE |
| REQ | REQUIRED |
| RD | ROAD |
| SCH | SCHEDULE |
| SDL | SAND DRAINAGE LAYER |
| SEC | SECTION |
| SHT | SHEET |
| S | SOUTH |
| SDR | STANDARD DIMENSION RATIO |
| SLQCP | SOIL LINER QUALITY CONTROL PLAN |
| SP | STEEL PIPE |
| SQ | SQUARE |
| SS | SIDE SLOPE |
| STA | STATION |
| STYS | SOUTH THICKENER YARD SUMP |
| T.A.S. | TERMINAL ANCHOR SECTION |
| TL | TANGENT LENGTH |
| TOC | TOP OF COVER |
| TOFC | TOP OF FINAL COVER |
| TOL | TOP OF LINER |
| TOS | TOE OF SLOPE |
| TS | TOP SLOPE |
| TEMP | TEMPORARY |
| TYP | TYPICAL |
| UNO | UNLESS NOTED OTHERWISE |
| VERT | VERTICAL |
| W | WEST |
| W/ | WITH |
| WAP | WEST ASH POND |
| WW | WETWELL |
| YD | YARD |

## CONSTRUCTION SEQUENCE

A. CONTRACTOR SHALL CLEAN THE WAP BY REMOVING ANY REMAINING CCR MATERIAL, ROCKS, AND SEDIMENT.

B. CONTRACTOR SHALL USE WATER FROM THE ADJACENT EAST ASH POND (EAP) OR NEW SCRUBBER POND (SP) TO WASH REMAINING CCR MATERIAL OFF THE SIDES AND FLOOR OF THE WAP AND REMOVE IT. EAP WILL BE VISUALLY INSPECTED BY OWNER'S COA CONSULTANT TO CONFIRM CCR MATERIAL, ROCKS, AND SEDIMENT HAVE BEEN REMOVED.

C. CONTRACTOR SHALL LOAD AND HAUL GENERAL SOIL FILL MATERIAL FROM THE OWNER'S STOCKPILE LOCATED AT LIBERTY MINE, A LOCATION UNDER THE PROVISIONS OF THE MINE SAFETY AND HEALTH ADMINISTRATION (MSHA) AND APPROXIMATELY 4.5 MILES FROM EAP.

D. CONTRACTOR SHALL PLACE THE GENERAL FILL MATERIAL OVER THE EXISTING CONCRETE REVETMENT TO A DEPTH OF AT LEAST SIX (6) INCHES, NOMINALLY COMPACT, AND SMOOTH ROLL TO FINISH THE INSTALLATION.

E. CONTRACTOR SHALL INSTALL A GEOSYNTHETIC CLAY LINER (GCL) OVER THE SIDES AND FLOOR OF THE WAP AND SECURE IT IN A PERIMETER ANCHOR TRENCH/BATTEN AND STRIP.

F. CONTRACTOR SHALL INSTALL A 60-MIL HDPE LINER DIRECTLY ON THE GCL AND SECURE IT IN A PERIMETER ANCHOR TRENCH/BATTEN AND STRIP.

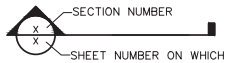
## GENERAL NOTES

1. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND PROJECT SPECIFICATIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE PROJECT SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.
2. COORDINATE SYSTEM IS BASED ON LOCAL SURVEY. THE BENCHMARKS TO BE USED FOR CONSTRUCTION ARE LOCATED AS SHOWN ON DRAWING NO. 00C-01. EXISTING CONTOURS ARE BASED ON TOPOGRAPHICAL SURVEY PERFORMED FEBRUARY 12-20, 2019 BY LACY SURVEYING. CURRENT GROUND ELEVATIONS MAY VARY FROM THOSE SHOWN DUE TO SITE WORK THAT HAS BEEN PERFORMED SINCE THE SURVEY WAS PERFORMED.
3. THE CONTRACTOR SHALL VERIFY EXISTING CONTOURS PRIOR TO THE START OF WORK.
4. THERE SHALL NOT BE ANY ADDITIONAL PAYMENT OR EXTENSION OF CONTRACT TIME FOR WORKING WITH SATURATED SOILS OR HANDLING WATER SEEPAGE DUE TO RAINFALL, RUNOFF AND INFILTRATION.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING ROADS, BENCHMARKS AND EXISTING GROUNDWATER MONITOR WELLS DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PROTECT THE GROUNDWATER MONITOR WELLS, BENCHMARKS AND EXISTING ROADS.
6. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN ESTABLISHED BY THE OWNER OR ENGINEER. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER SAFE WORKING DISTANCE FROM ALL UTILITY EASEMENTS OR LINES.
7. EXCAVATION BY "BLASTING" IS NOT PERMITTED ON THIS PROJECT.
8. FINISHED GROUND ELEVATIONS SHALL MATCH EXISTING GROUND ELEVATIONS EXCEPT AS SHOWN ON THE PLANS. ALL EXCESS SOIL FROM THE EXCAVATION AND GRADING SHALL BE PLACED IN DESIGNATED STOCKPILE LOCATIONS AS APPROVED BY THE OWNER. IF WASTE IS ENCOUNTERED DURING EXCAVATION, THE OWNER SHALL BE NOTIFIED AND THE WASTE REMOVED AND PLACED IN AREAS DESIGNATED AS APPROVED BY THE OWNER. TRANSPORT OF SOIL TO FILL AREAS SHALL BE CONDUCTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
9. GEOTECHNICAL INVESTIGATION REPORTS FOR THE SITE ARE AVAILABLE FOR REVIEW AT LUMINANT'S DALLAS OFFICES. THE CONTRACTOR MAY PERFORM ADDITIONAL GEOTECHNICAL INVESTIGATIONS, AS DEEMED NECESSARY FOR CONSTRUCTION ACTIVITIES, PROVIDED ALL NECESSARY PERMITS AND APPROVALS ARE OBTAINED FROM LUMINANT PRIOR TO INITIATING SUCH WORK. HOWEVER, THERE SHALL BE NO ADDITIONAL PAYMENT TO THE CONTRACTOR FOR ADDITIONAL GEOTECHNICAL INVESTIGATIONS.
10. THE CONTRACTOR SHALL CONSTRUCT, AND UPON COMPLETION OF THE PROJECT, REMOVE TEMPORARY CONSTRUCTION ACCESS ROADS. SUCH ROADS SHALL BE LOCATED AS APPROVED BY THE OWNER. DRAINAGE PATTERNS AT THE SITE SHALL NOT BE ALTERED BY ROAD CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF TEMPORARY DRAINAGE STRUCTURES, INCLUDING CULVERTS, AT NO ADDITIONAL COST TO THE OWNER.
11. THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND UPON COMPLETION OF THE PROJECT, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS AS APPROVED BY LUMINENT ENVIRONMENTAL SERVICES AND IN ACCORDANCE WITH THE SITE SWPPP AND PURSUANT TO TPDES REQUIREMENTS. SUCH CONTROLS SHALL BE PLACED AT THE LIMITS OF DISTURBED AREAS AND AT INTERMEDIATE LOCATIONS WHERE CONCENTRATED FLOW IS LIKELY.
12. TEMPORARY CONSTRUCTION SLOPES SHALL NOT BE GREATER THAN 2H:1V. STEEPER SLOPES WILL ONLY BE ALLOWED IF THE CONTRACTOR PROVIDES A GEOTECHNICAL ENGINEERING REPORT SPECIFYING MAXIMUM SLOPES AND THE DURATION FOR WHICH SUCH SLOPES SHALL REMAIN IN PLACE.
13. THE CONTRACTOR SHALL REMOVE ALL VEGETATION WITHIN THE CONSTRUCTION LIMITS AS REQUIRED TO CONSTRUCT THE PROJECT. ALL VEGETATION SHALL BE REMOVED BY CONTRACTOR AT NO ADDITIONAL EXPENCE TO OWNER.
14. THE CONTRACTOR SHALL OBTAIN AND CONDUCT WORK CONSISTENT WITH A TPDES PERMIT FOR CONSTRUCTION, REFER TO TECHNICAL SPECIFICATIONS. PREPARATION OF A SWPPP AND OBTAINING THE TPDES PERMIT ARE THE CONTRACTORS RESPONSIBILITY.
15. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ERROR OR DISCREPANCY FOUND ONCE THE CONTRACT DOCUMENT IS CAREFULLY REVIEWED AND ALL ASPECTS OF FIELD WORK HAVE BEEN VERIFIED. IN THE EVENT THE CONTRACTOR CONTINUES TO WORK ON AN ITEM WHERE AN ERROR EXISTS, IT SHALL BE DEEMED THAT THE CONTRACTOR BID AND INTENDED TO EXECUTE THE MORE STRINGENT OR HIGHER QUALITY REQUIREMENT WITHOUT AN INCREASE IN CONTRACT SUM OR TIME. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CORRECT ANY FAILURE OF COMPANY PARTS TO COORDINATE OR FIT PROPERLY INTO FINAL POSITION, AS A RESULT OF CONTRACTOR FAILURE TO RAISE OR RESOLVE A DISCREPANCY.
16. THE DRAWINGS AND SPECIFICATIONS SHOULD AGREE WITH EACH OTHER, AND WORK CALLED FOR BY DRAWINGS AND NOT MENTIONED IN SPECIFICATION, OR VICE VERSA, SHALL BE FURNISHED BY BOTH. WHEN DISCREPANCIES EXIST BETWEEN SCALE AND DIMENSIONS, THE DIMENSIONED FIGURE SHALL BE USED.
17. CONTRACTOR AND EACH SUBCONTRACTOR SHALL VERIFY ALL GRADES, LINES, LEVELS, AND DIMENSIONS AS INDICATED ON DRAWINGS, AND HE SHALL REPORT ERRORS TO THE ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR SHALL ESTABLISH BENCHMARKS IN AT LEAST TWO WIDELY SEPARATED PLACES, AND AS WORK PROGRESSES THE CONTRACTOR WILL MAINTAIN ADEQUATE HORIZONTAL AND VERTICAL CONTROL.
18. CONTRACTOR SHALL PROVIDE EROSION CONTROL BY SEEDING FOR ALL AREAS DISTURBED BY CONTRACTOR DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL NOT DISTURB ANY AREA WITHOUT THE APPROVAL OF THE ENGINEER. EROSION CONTROL BY SEEDING SHALL CONFORM TO STANDARD SPECIFICATION 02930.
19. CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROLS AS PER SPECIFICATIONS DURING CONSTRUCTION. SUCH CONTROLS SHALL BE PLACED AT LIMITS OF DISTURBED AREAS AND AT INTERMEDIATE LOCATIONS WHERE CONCENTRATED FLOW IS LIKELY.
20. STORMWATER THAT HAS COME INTO CONTACT WITH THE ASH WITHIN THE EXCAVATED POND IS TO BE CONSIDERED CONTACT STORMWATER. CONTRACTOR WILL CONTROL THE WATER ON SITE IN COMPLIANCE WITH THE TPDES PERMIT.
21. THE CONTRACTOR IS REQUIRED TO PRESENT THE SWPPP TO LUMINANT ENVIRONMENTAL SERVICES FOR APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
22. THE CONTRACTOR IS REQUIRED TO SUBMIT THE NOTICE OF INTENT AND NOTICE OF TERMINATION FOR THE TPDES PERMIT.
23. THE CONTRACTOR IS TO ACQUIRE A DIGGING PERMIT FROM THE PLANT BEFORE COMMENCING ANY EXCAVATION ACTIVITY.

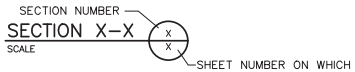
## SYMBOLS

### SECTION DETAIL INDICATORS

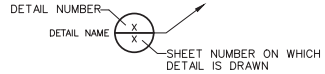
DRAWING ON WHICH SECTION IS CUT:



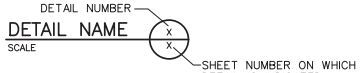

DRAWING ON WHICH SECTION APPEARS:

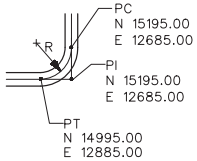



DRAWING ON WHICH DETAIL IS INDICATED:



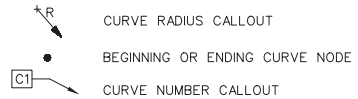

DRAWING ON WHICH DETAIL APPEARS:



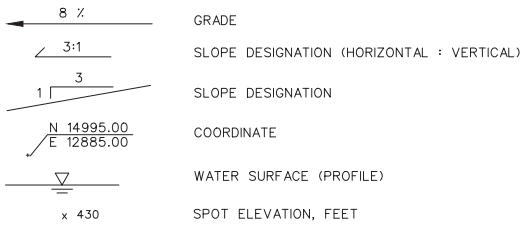





CURVE WITH HORIZONTAL CONTROL:




VERTICAL CONTROL DESIGNATION




| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED · PROFESSIONAL ENGINEER · 1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

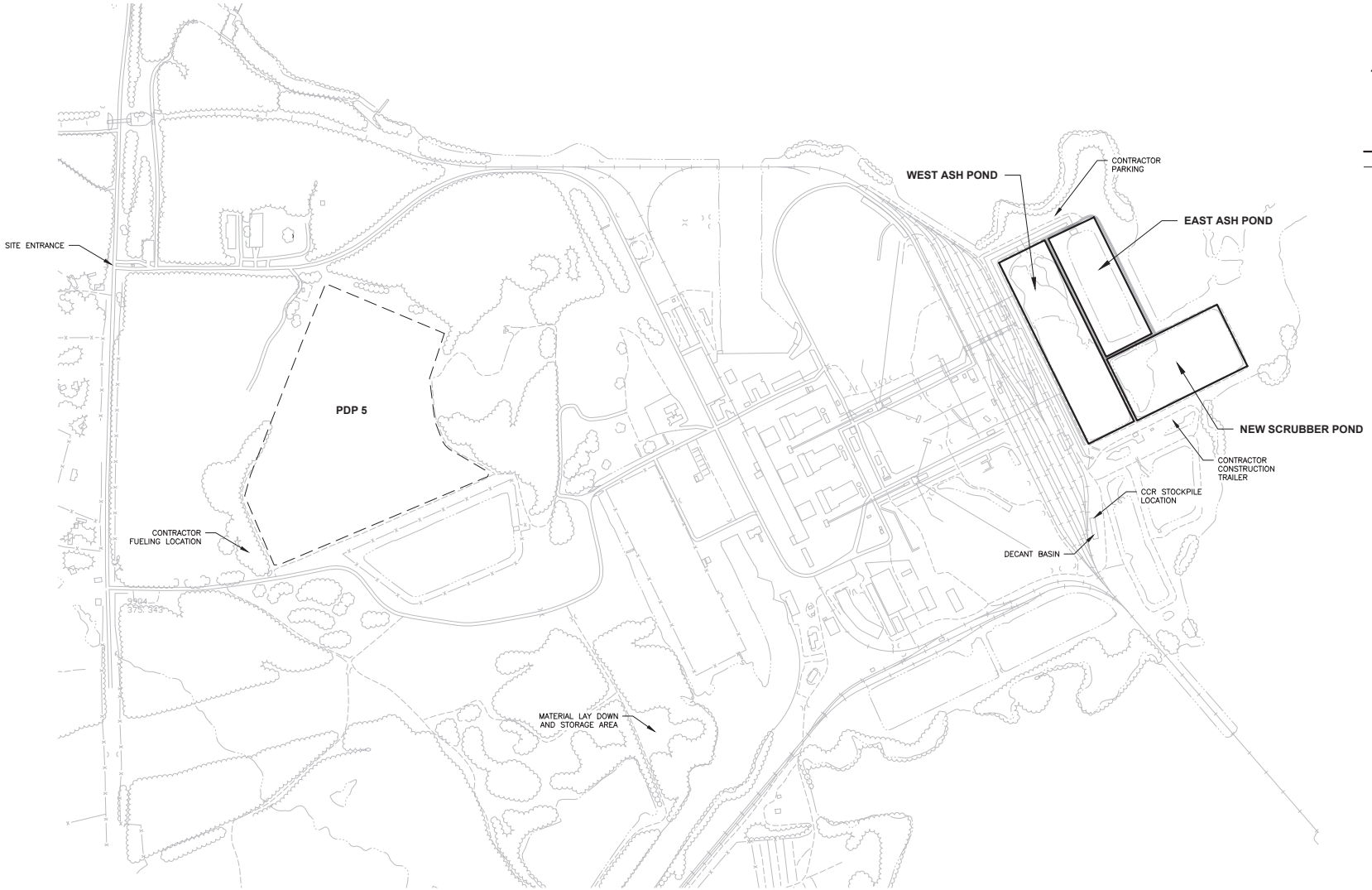
Luminant

**ABBREVIATIONS AND GENERAL NOTES**

0 1" 2"

FILENAME 00G-02.dwg
SCALE

SHEET 00G-02




| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

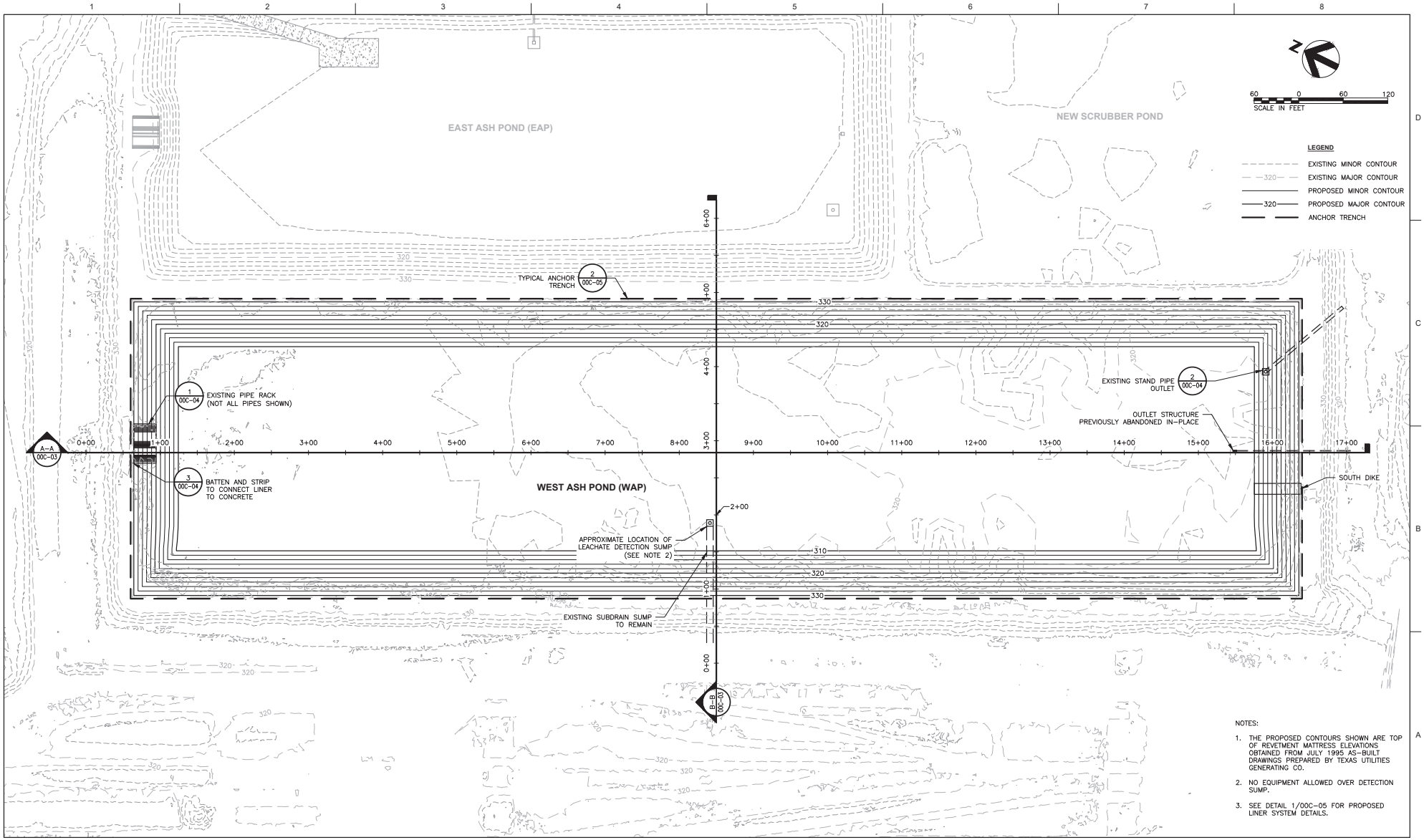
Luminant

**SITE LAYOUT**

0 1" 2"

FILENAME 00C-01.dwg
SCALE 1" = 400'

SHEET
**00C-01**




NOTES:

1. THE PROPOSED CONTOURS SHOWN ARE TOP OF REVETMENT MATTRESS ELEVATIONS OBTAINED FROM JULY 1995 AS-BUILT DRAWINGS PREPARED BY TEXAS UTILITIES GENERATING CO.
2. NO EQUIPMENT ALLOWED OVER DETECTION SUMP.
3. SEE DETAIL 1/00C-05 FOR PROPOSED LINER SYSTEM DETAILS.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**WEST ASH POND**

0 1" 2"

FILENAME 00C-02.dwg
SCALE 1" = 60'

SHEET
**00C-02**

100 0 100 200
HORIZONTAL SCALE: 1" = 100'

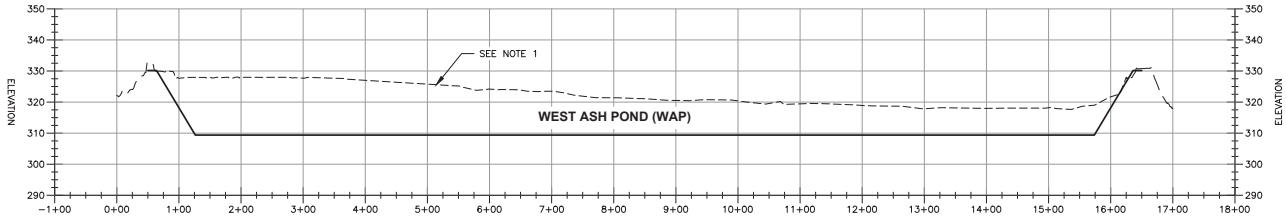
20 0 20 40
VERTICAL SCALE: 1" = 20'

**LEGEND**

- TOP OF CCR MATERIAL
- EXISTING GROUND SURFACE
- PROPOSED GRADE

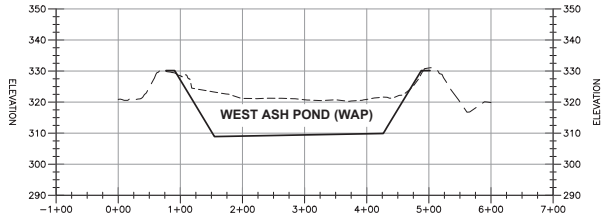
NOTES:

1. CCR ELEVATION FROM BATHYMETRIC SURVEY TAKEN FEBRUARY 2019 BY LACEY SURVEYING OF ARP, TEXAS. AT START OF PROJECT, OWNER WILL HAVE REMOVED BULK OF CCR MATERIAL FROM THE WEST ASH POND
2. CONTRACTOR WILL REMOVE REMAINING CCR MATERIAL, ROCKS AND SEDIMENT WITHIN POND BEFORE INSTALLATION OF THE LINER SYSTEM.




SECTION A–A (A–A, 00C–02)

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'




SECTION B–B (B–B, 00C–02)

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'

HDR

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED · PROFESSIONAL ENGINEER · 1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

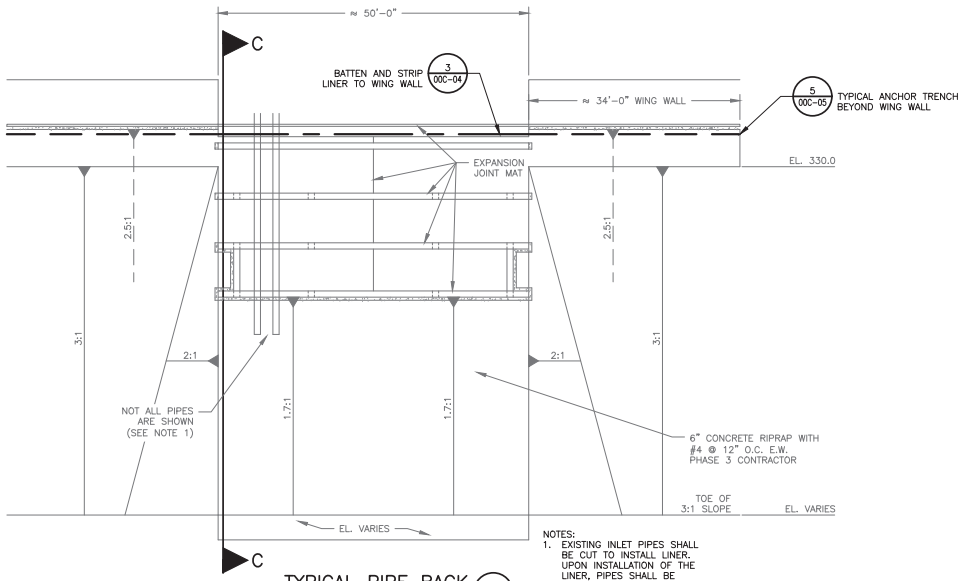
Luminant

**CROSS SECTIONS**

0 1" 2"

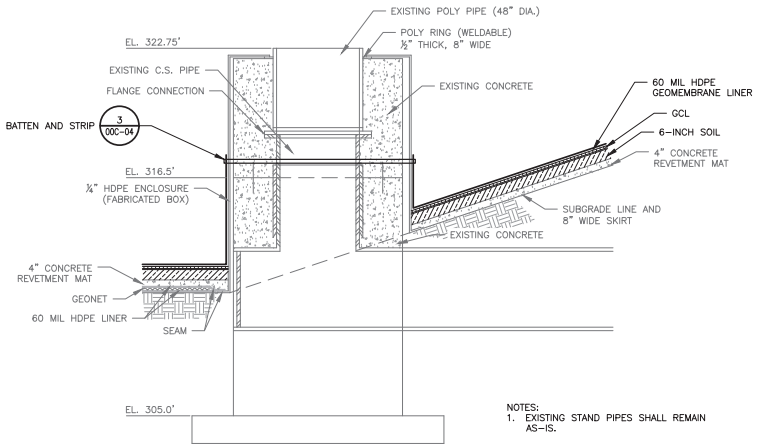
FILENAME 00C-03.dwg
SCALE H: 1" = 100' ; V: 1" = 20'

SHEET 00C-03



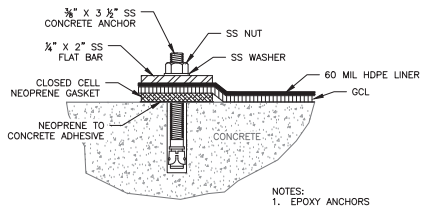

TYPICAL PIPE RACK (1 / 00C-02)
NOT TO SCALE

NOTES:
1. EXISTING INLET PIPES SHALL BE CUT TO INSTALL LINER. UPON INSTALLATION OF THE LINER, PIPES SHALL BE REINSTALLED.



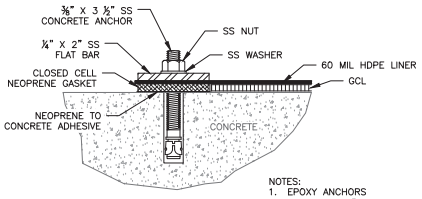

NOTES:
1. EXISTING STAND PIPES SHALL REMAIN AS-IS.

STANDPIPE ENCLOSURE (2 / 00C-02)
NOT TO SCALE



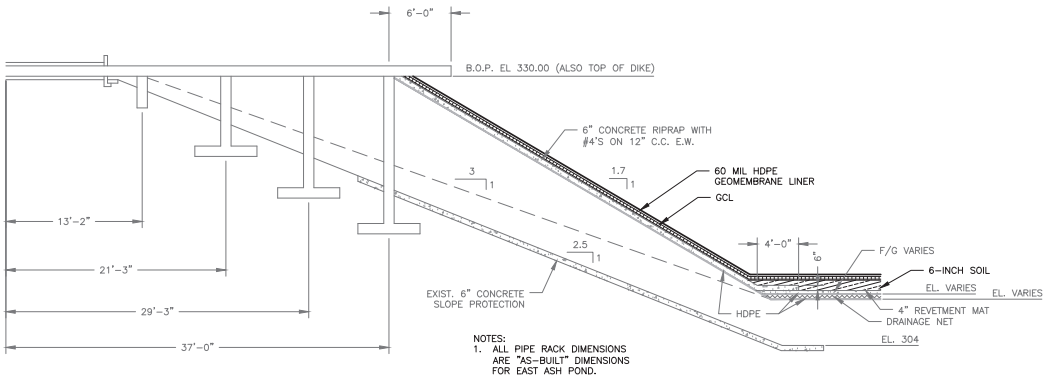

NOTES:
1. EPOXY ANCHORS SPACED AT 6" O.C.

BATTEN AND STRIP CONNECTION AT ANCHOR TRENCH (3A / 00C-04)
NOT TO SCALE




NOTES:
1. EPOXY ANCHORS SPACED AT 6" O.C.

BATTEN AND STRIP CONNECTION BELOW WATER SURFACE (3B / 00C-04)
NOT TO SCALE




NOTES:
1. ALL PIPE RACK DIMENSIONS ARE "AS-BUILT" DIMENSIONS FOR EAST ASH POND.

SECTION C-C
NOT TO SCALE

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

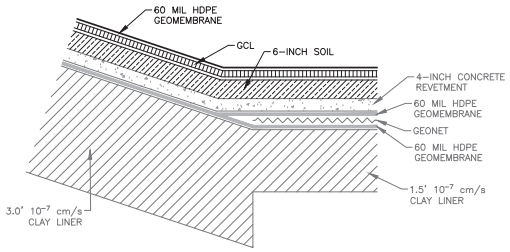
Luminant

**DETAILS (1 OF 2)**

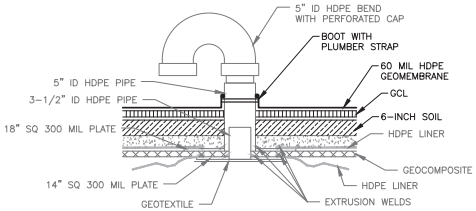
0 1" 2"

FILENAME 00C-04.dwg
SCALE

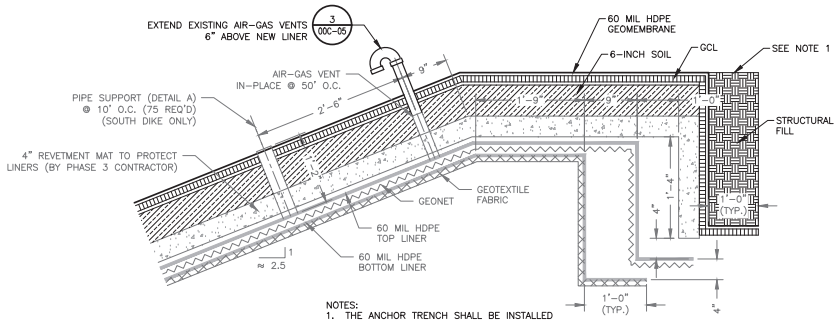
SHEET
**00C-04**




PROPOSED WAP SECTION (1 / 00C-05)
NOT TO SCALE




TYPICAL AIR-GAS VENT (3 / 00C-05)
NOT TO SCALE




NOTES:
1. THE ANCHOR TRENCH SHALL BE INSTALLED OUTSIDE OF THE EXISTING ANCHOR TRENCH.

ANCHOR TRENCH (2 / 00C-02)
NOT TO SCALE

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS — DAVID C. VOGT — 93905 — LICENSED PROFESSIONAL ENGINEER — 1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**DETAILS (2 OF 2)**

0 1" 2"

FILENAME 00C-05.dwg
SCALE NOT TO SCALE

SHEET 00C-05


| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**STOCKPILE AND HAUL ROUTE**

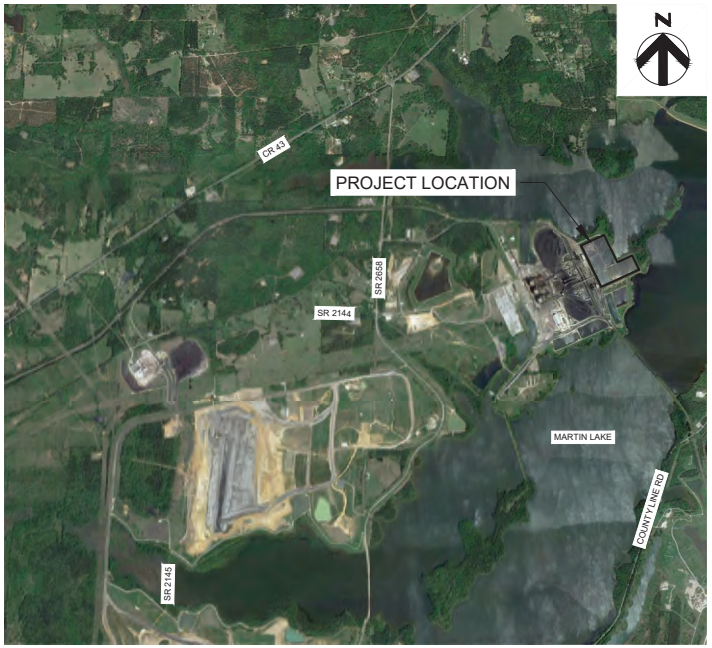
0 1" 2"

FILENAME 00C-06.dwg
SCALE 1" = 600'

SHEET
**00C-06**

HDR ENGINEERING, INC.
76 SOUTH LAURA STREET, SUITE 1600
JACKSONVILLE, FL 32202
COA# 4213

Luminant




VICINITY MAP
NOT TO SCALE

Construction Drawings For

# Martin Lake Steam Electric Station

## CCR Impoundment Reline
## New Scrubber Pond

Project No.
10172630

Rusk County, Texas
January 2020

INDEX OF DRAWINGS



STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

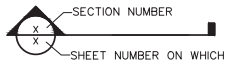
## STANDARD ABBREVIATIONS

| | |
|---|---|
| & | AND |
| APPROX | APPROXIMATELY |
| @ | AT |
| AVG | AVERAGE |
| BOE | BOTTOM OF EXCAVATION |
| BOL | BOTTOM OF LINER |
| X | BY |
| CL | CENTERLINE |
| CMP | CORRUGATED METAL PIPE |
| CO | CLEAN OUT |
| CY | CUBIC YARD |
| DIA | DIAMETER |
| DET | DETAIL |
| DWG | DRAWING |
| E | EAST |
| EAP | EAST ASH POND |
| ELEV | ELEVATION |
| EW | EACH WAY |
| EXIST | EXISTING |
| EXC | EXCAVATION |
| FGD | FLUE GAS DESULFICATION |
| FML | FLEXIBLE MEMBRANE LINER |
| FT | FEET |
| GAL | GALLON |
| GND | GROUND |
| GDL | GRAVEL DRAINAGE LAYER |
| GNDL | GEONET DRAINAGE LAYER |
| HDPE | HIGH DENSITY POLYETHYLENE |
| HORIZ | HORIZONTAL |
| ID | INSIDE DIAMETER |
| IN | INCHES |
| IE | INVERT ELEVATION |
| LCRS | LEACHATE COLLECTION AND REMOVAL SYSTEM |
| LCS | LEACHATE COLLECTION SYSTEM |
| LCP | LEACHATE COLLECTION PIPE |
| LCPR | LEACHATE COLLECTION PIPE RISER |
| LF | LINEAR FEET |
| LB | POUND |
| MH | MANHOLE |
| MAX | MAXIMUM |
| MIL | .001 INCHES |
| MIN | MINIMUM |
| MW | MONITOR WELL |
| MLSES | MARTIN LAKE STEAM ELECTRIC STATION |
| MSL | MEAN SEA LEVEL |
| N | NORTH |
| NIC | NOT IN CONTRACT |
| NO | NUMBER |
| NTS | NOT TO SCALE |
| NTYS | NORTH THICKENER YARD SUMP |
| OC | ON CENTER |
| OZ | OUNCE |
| % | PERCENT |
| PLCP | PERFORATED LEACHATE COLLECTION PIPE |
| PERF | PERFORATED |
| PGL | PROFILE GRADE LINE |
| PDP | PERMANENT DISPOSAL POND |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PVI | POINT OF VERTICAL INTERSECTION |
| PT | POINT OF TANGENT |
| PZ | PIEZOMETER |
| Q | FLOW |
| QTY | QUANTITY |
| R | RADIUS |
| RCP | REINFORCED CONCRETE PIPE |
| REF | REFERENCE |
| REQ | REQUIRED |
| RD | ROAD |
| SCH | SCHEDULE |
| SDL | SAND DRAINAGE LAYER |
| SEC | SECTION |
| SHT | SHEET |
| S | SOUTH |
| SDR | STANDARD DIMENSION RATIO |
| SLQCP | SOIL LINER QUALITY CONTROL PLAN |
| SP | STEEL PIPE |
| SQ | SQUARE |
| SS | SIDE SLOPE |
| STA | STATION |
| STYS | SOUTH THICKENER YARD SUMP |
| T.A.S. | TERMINAL ANCHOR SECTION |
| TL | TANGENT LENGTH |
| TOC | TOP OF COVER |
| TOFC | TOP OF FINAL COVER |
| TOL | TOP OF LINER |
| TOS | TOE OF SLOPE |
| TS | TOP SLOPE |
| TEMP | TEMPORARY |
| TYP | TYPICAL |
| UNO | UNLESS NOTED OTHERWISE |
| VERT | VERTICAL |
| W | WEST |
| W/ | WITH |
| WAP | WEST ASH POND |
| WW | WETWELL |
| YD | YARD |

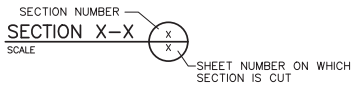
## SYMBOLS

### SECTION DETAIL INDICATORS

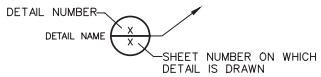
DRAWING ON WHICH SECTION IS CUT:



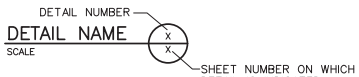

DRAWING ON WHICH SECTION APPEARS:

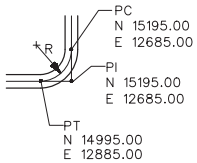



DRAWING ON WHICH DETAIL IS INDICATED:



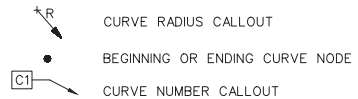

DRAWING ON WHICH DETAIL APPEARS:



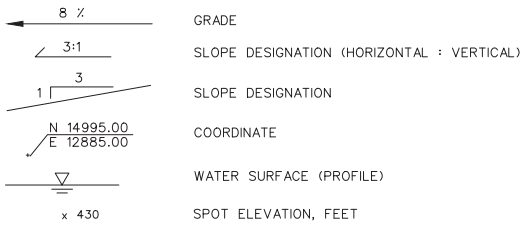





CURVE WITH HORIZONTAL CONTROL:




VERTICAL CONTROL DESIGNATION




## CONSTRUCTION SEQUENCE

A. CONTRACTOR SHALL CLEAN THE NSP BY REMOVING ANY REMAINING CCR MATERIAL, ROCKS, AND SEDIMENT.

B. CONTRACTOR SHALL USE WATER FROM THE ADJACENT WEST ASH POND (WAP) OR EAST ASH POND (EAP) TO WASH REMAINING CCR MATERIAL OFF THE SIDES AND FLOOR OF THE NSP AND REMOVE IT. EAP WILL BE VISUALLY INSPECTED BY OWNER'S COA CONSULTANT TO CONFIRM CCR MATERIAL, ROCKS, AND SEDIMENT HAVE BEEN REMOVED.

C. CONTRACTOR SHALL LOAD AND HAUL GENERAL SOIL FILL MATERIAL FROM THE OWNER'S STOCKPILE LOCATED AT LIBERTY MINE, A LOCATION UNDER THE PROVISIONS OF THE MINE SAFETY AND HEALTH ADMINISTRATION (MSHA) AND APPROXIMATELY 4.5 MILES FROM EAP.

D. CONTRACTOR SHALL PLACE THE GENERAL FILL MATERIAL OVER THE EXISTING CONCRETE REVETMENT TO A DEPTH OF AT LEAST SIX (6) INCHES, NOMINALLY COMPACT, AND SMOOTH ROLL TO FINISH THE INSTALLATION.

E. CONTRACTOR SHALL INSTALL A GEOSYNTHETIC CLAY LINER (GCL) OVER THE SIDES AND FLOOR OF THE NSP AND SECURE IT IN A PERIMETER ANCHOR TRENCH/BATTEN AND STRIP.

F. CONTRACTOR SHALL INSTALL A 60-MIL HDPE LINER DIRECTLY ON THE GCL AND SECURE IT IN A PERIMETER ANCHOR TRENCH/BATTEN AND STRIP.

## GENERAL NOTES

1. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND PROJECT SPECIFICATIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE PROJECT SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.
2. COORDINATE SYSTEM IS BASED ON LOCAL SURVEY. THE BENCHMARKS TO BE USED FOR CONSTRUCTION ARE LOCATED AS SHOWN ON DRAWING NO. 00C-01. EXISTING CONTOURS ARE BASED ON TOPOGRAPHICAL SURVEY PERFORMED FEBRUARY 12-20, 2019 BY LACY SURVEYING. CURRENT GROUND ELEVATIONS MAY VARY FROM THOSE SHOWN DUE TO SITE WORK THAT HAS BEEN PERFORMED SINCE THE SURVEY WAS PERFORMED.
3. THE CONTRACTOR SHALL VERIFY EXISTING CONTOURS PRIOR TO THE START OF WORK.
4. THERE SHALL NOT BE ANY ADDITIONAL PAYMENT OR EXTENSION OF CONTRACT TIME FOR WORKING WITH SATURATED SOILS OR HANDLING WATER SEEPAGE DUE TO RAINFALL, RUNOFF AND INFILTRATION.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING ROADS, BENCHMARKS AND EXISTING GROUNDWATER MONITOR WELLS DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PROTECT THE GROUNDWATER MONITOR WELLS, BENCHMARKS AND EXISTING ROADS.
6. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN ESTABLISHED BY THE OWNER OR ENGINEER. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER SAFE WORKING DISTANCE FROM ALL UTILITY EASEMENTS OR LINES.
7. EXCAVATION BY "BLASTING" IS NOT PERMITTED ON THIS PROJECT.
8. FINISHED GROUND ELEVATIONS SHALL MATCH EXISTING GROUND ELEVATIONS EXCEPT AS SHOWN ON THE PLANS. ALL EXCESS SOIL FROM THE EXCAVATION AND GRADING SHALL BE PLACED IN DESIGNATED STOCKPILE LOCATIONS AS APPROVED BY THE OWNER. IF WASTE IS ENCOUNTERED DURING EXCAVATION, THE OWNER SHALL BE NOTIFIED AND THE WASTE REMOVED AND PLACED IN AREAS DESIGNATED AS APPROVED BY THE OWNER. TRANSPORT OF SOIL TO FILL AREAS SHALL BE CONDUCTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
9. GEOTECHNICAL INVESTIGATION REPORTS FOR THE SITE ARE AVAILABLE FOR REVIEW AT LUMINANT'S DALLAS OFFICES. THE CONTRACTOR MAY PERFORM ADDITIONAL GEOTECHNICAL INVESTIGATIONS, AS DEEMED NECESSARY FOR CONSTRUCTION ACTIVITIES, PROVIDED ALL NECESSARY PERMITS AND APPROVALS ARE OBTAINED FROM LUMINANT PRIOR TO PUTTING SUCH WORK. HOWEVER, THERE SHALL BE NO ADDITIONAL PAYMENT TO THE CONTRACTOR FOR ADDITIONAL GEOTECHNICAL INVESTIGATIONS.
10. THE CONTRACTOR SHALL CONSTRUCT, AND UPON COMPLETION OF THE PROJECT, REMOVE TEMPORARY CONSTRUCTION ACCESS ROADS. SUCH ROADS SHALL BE LOCATED AS APPROVED BY THE OWNER. DRAINAGE PATTERNS AT THE SITE SHALL NOT BE ALTERED BY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF TEMPORARY DRAINAGE STRUCTURES, INCLUDING CULVERTS, AT NO ADDITIONAL COST TO THE OWNER.
11. THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND UPON COMPLETION OF THE PROJECT, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS AS APPROVED BY LUMINENT ENVIRONMENTAL SERVICES AND IN ACCORDANCE WITH THE SITE SWPPP AND PURSUANT TO TPDES REQUIREMENTS. SUCH CONTROLS SHALL BE PLACED AT THE LIMITS OF DISTURBED AREAS AND AT INTERMEDIATE LOCATIONS WHERE CONCENTRATED FLOW IS LIKELY.
12. TEMPORARY CONSTRUCTION SLOPES SHALL NOT BE GREATER THAN 2H:1V. STEEPER SLOPES WILL ONLY BE ALLOWED IF THE CONTRACTOR PROVIDES A GEOTECHNICAL ENGINEERING REPORT SPECIFYING MAXIMUM SLOPES AND THE DURATION FOR WHICH SUCH SLOPES SHALL REMAIN IN PLACE.
13. THE CONTRACTOR SHALL REMOVE ALL VEGETATION WITHIN THE CONSTRUCTION LIMITS AS REQUIRED TO CONSTRUCT THE PROJECT. ALL VEGETATION SHALL BE REMOVED BY CONTRACTOR AT NO ADDITIONAL EXPENCE TO OWNER.
14. THE CONTRACTOR SHALL OBTAIN AND CONDUCT WORK CONSISTENT WITH A TPDES PERMIT FOR CONSTRUCTION, REFER TO TECHNICAL SPECIFICATIONS. PREPARATION OF A SWPPP AND OBTAINING THE TPDES PERMIT ARE THE CONTRACTORS RESPONSIBILITY.
15. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ERROR OR DISCREPANCY FOUND ONCE THE CONTRACT DOCUMENT IS CAREFULLY REVIEWED AND ALL ASPECTS OF FIELD WORK HAVE BEEN VERIFIED. IN THE EVENT THE CONTRACTOR CONTINUES TO WORK ON AN ITEM WHERE AN ERROR EXISTS, IT SHALL BE DEEMED THAT THE CONTRACTOR BID AND INTENDED TO EXECUTE THE MORE STRINGENT OR HIGHER QUALITY REQUIREMENT WITHOUT AN INCREASE IN CONTRACT SUM OR TIME. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO CORRECT ANY FAILURE OF COMPANY PARTS TO COORDINATE OR FIT PROPERLY INTO FINAL POSITION, AS A RESULT OF CONTRACTOR FAILURE TO RAISE OR RESOLVE A DISCREPANCY.
16. THE DRAWINGS AND SPECIFICATIONS SHOULD AGREE WITH EACH OTHER, AND WORK CALLED FOR BY DRAWINGS AND NOT MENTIONED IN SPECIFICATION, OR VICE VERSA, SHALL BE FURNISHED BY BOTH. WHEN DISCREPANCIES EXIST BETWEEN SCALE AND DIMENSIONS, THE DIMENSIONED FIGURE SHALL BE USED.
17. CONTRACTOR AND EACH SUBCONTRACTOR SHALL VERIFY ALL GRADES, LINES, LEVELS, AND DIMENSIONS AS INDICATED ON DRAWINGS, AND HE SHALL REPORT ERRORS TO THE ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR SHALL ESTABLISH BENCHMARKS IN AT LEAST TWO WIDELY SEPARATED PLACES, AND AS WORK PROGRESSES THE CONTRACTOR WILL MAINTAIN ADEQUATE HORIZONTAL AND VERTICAL CONTROL.
18. CONTRACTOR SHALL PROVIDE EROSION CONTROL BY SEEDING FOR ALL AREAS DISTURBED BY CONTRACTOR DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL NOT DISTURB ANY AREA WITHOUT THE APPROVAL OF THE ENGINEER. EROSION CONTROL BY SEEDING SHALL CONFORM TO STANDARD SPECIFICATION 02930.
19. CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROLS AS PER SPECIFICATIONS DURING CONSTRUCTION. SUCH CONTROLS SHALL BE PLACED AT LIMITS OF DISTURBED AREAS AND AT INTERMEDIATE LOCATIONS WHERE CONCENTRATED FLOW IS LIKELY.
20. STORMWATER THAT HAS COME INTO CONTACT WITH THE ASH WITHIN THE EXCAVATED POND IS TO BE CONSIDERED CONTACT STORMWATER. CONTRACTOR WILL CONTROL THE WATER ON SITE IN COMPLIANCE WITH THE TPDES PERMIT.
21. THE CONTRACTOR IS REQUIRED TO PRESENT THE SWPPP TO LUMINANT ENVIRONMENTAL SERVICES FOR APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
22. THE CONTRACTOR IS REQUIRED TO SUBMIT THE NOTICE OF INTENT AND NOTICE OF TERMINATION FOR THE TPDES PERMIT.
23. THE CONTRACTOR IS TO ACQUIRE A DIGGING PERMIT FROM THE PLANT BEFORE COMMENCING ANY EXCAVATION ACTIVITY.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED · PROFESSIONAL ENGINEER · 1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**NEW SCRUBBER POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

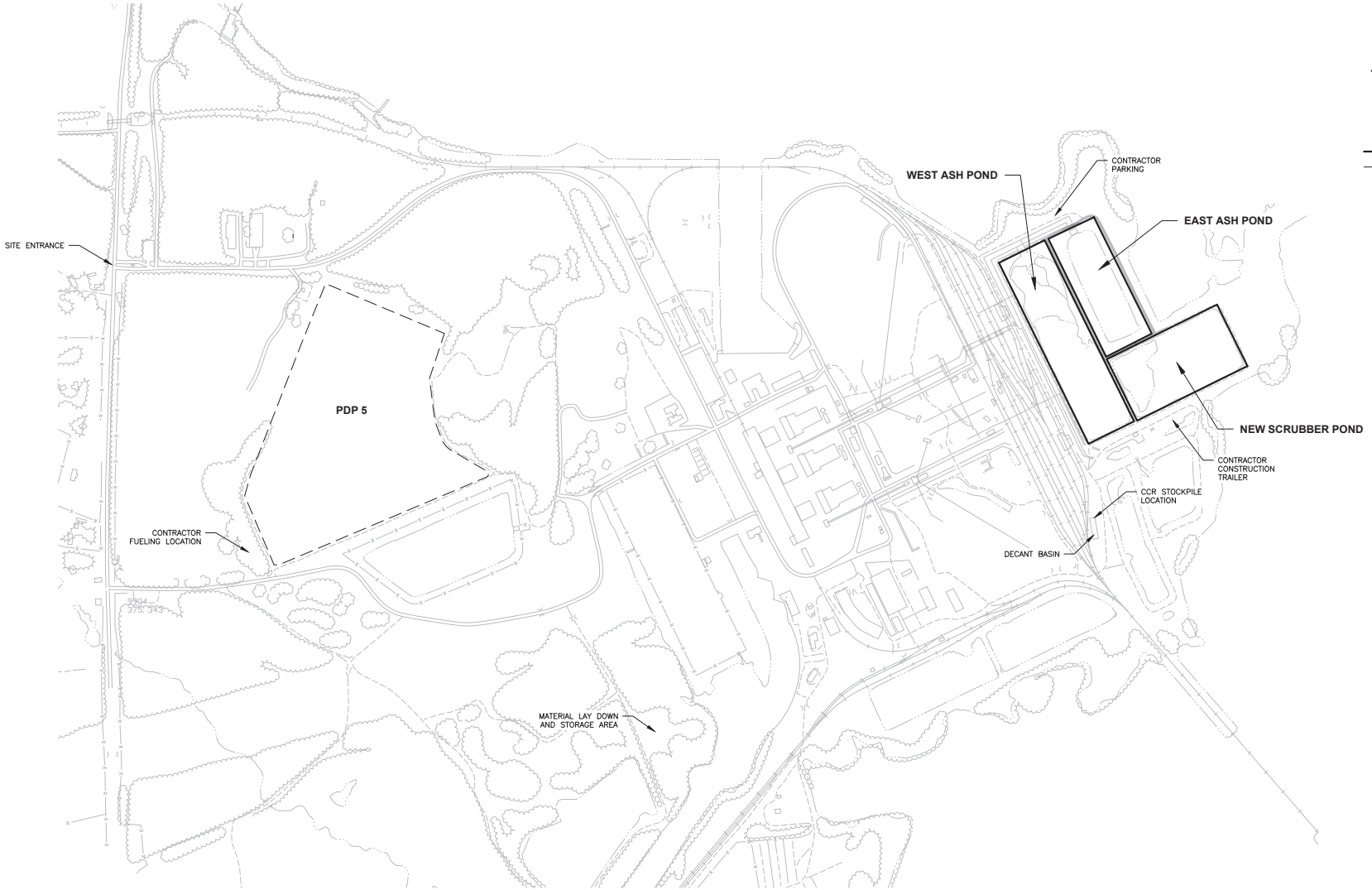
**ABBREVIATIONS AND GENERAL NOTES**

0 1" 2"

FILENAME 00G-02.dwg

SCALE

SHEET 00G-02




| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**NEW SCRUBBER POND RELINE**
**RUSK COUNTY, TEXAS**

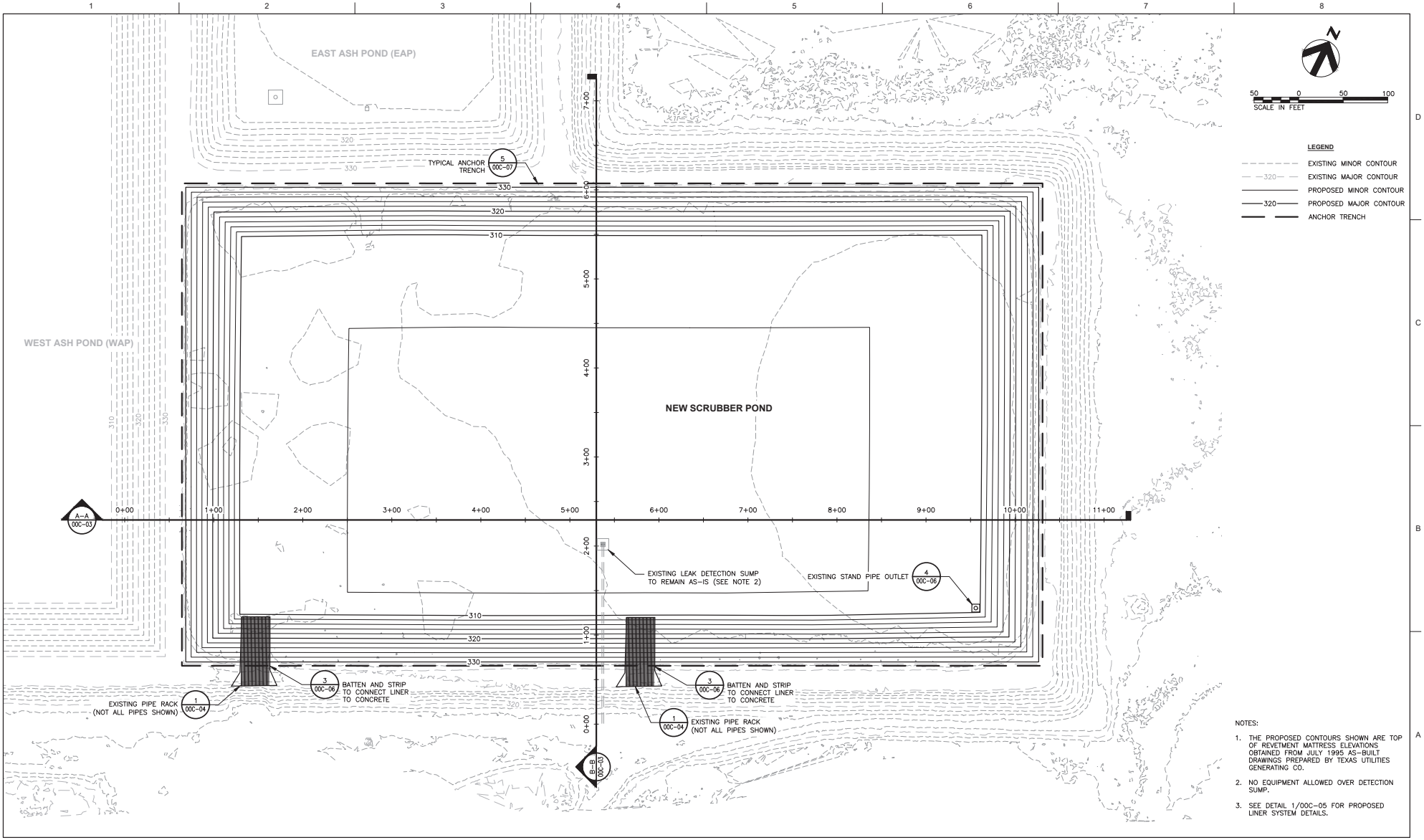
Luminant

**SITE LAYOUT**

0 1" 2"

FILENAME 00C-01.dwg
SCALE 1" = 400'

SHEET
**00C-01**




NOTES:

1. THE PROPOSED CONTOURS SHOWN ARE TOP OF REVETMENT MATTRESS ELEVATIONS OBTAINED FROM JULY 1995 AS-BUILT DRAWINGS PREPARED BY TEXAS UTILITIES GENERATING CO.
2. NO EQUIPMENT ALLOWED OVER DETECTION SUMP.
3. SEE DETAIL 1/00C-05 FOR PROPOSED LINER SYSTEM DETAILS.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**NEW SCRUBBER POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**NEW SCRUBBER POND**

FILENAME 00C-02.dwg
SCALE 1" = 50'

SHEET
**00C-02**

100 0 100 200
HORIZONTAL SCALE: 1" = 100'

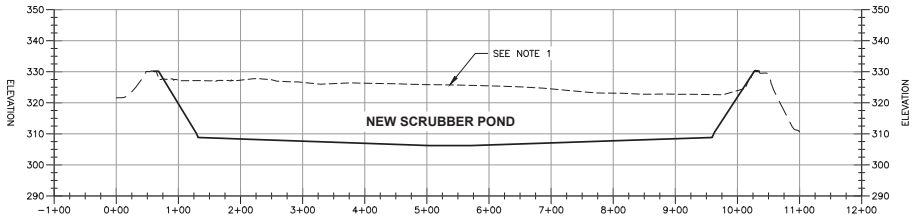
20 0 20 40
VERTICAL SCALE: 1" = 20'

**LEGEND**

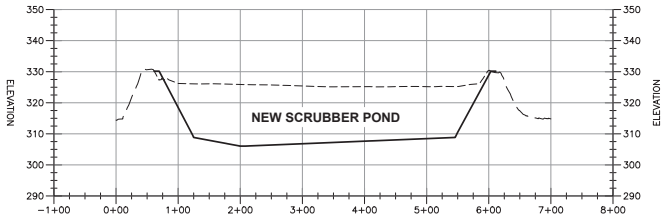
- TOP OF CCR MATERIAL
- EXISTING GROUND SURFACE
- PROPOSED GRADE

NOTES:

1. CCR ELEVATION FROM BATHYMETRIC SURVEY TAKEN FEBRUARY 2019 BY LACEY SURVEYING OF ARP, TEXAS. AT START OF PROJECT, OWNER WILL HAVE REMOVED BULK OF CCR MATERIAL FROM THE NEW SCRUBBER POND
2. CONTRACTOR WILL REMOVE REMAINING CCR MATERIAL, ROCKS AND SEDIMENT WITHIN POND BEFORE INSTALLATION OF THE LINER SYSTEM.




SECTION A–A (A–A, 00C–02)
HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'




SECTION B–B (B–B, 00C–02)
HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'

HDR

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**NEW SCRUBBER POND RELINE**
**RUSK COUNTY, TEXAS**

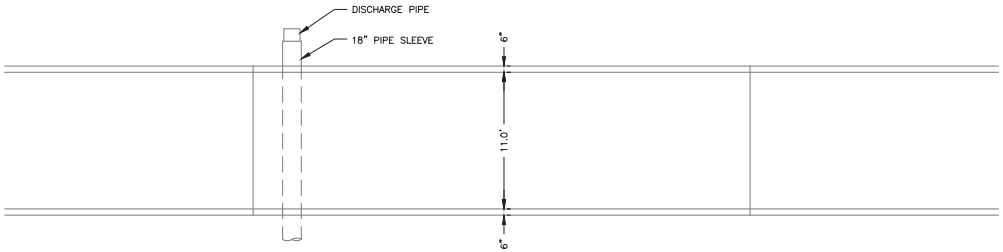
Luminant

**CROSS SECTIONS**

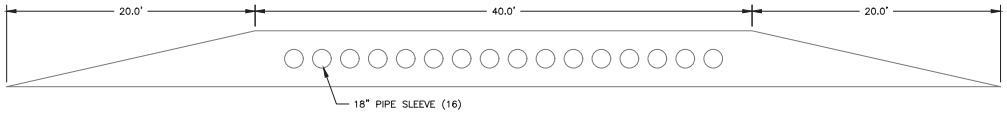
0 1" 2"

FILENAME 00C-03.dwg
SCALE H: 1" = 100' ; V: 1" = 20'

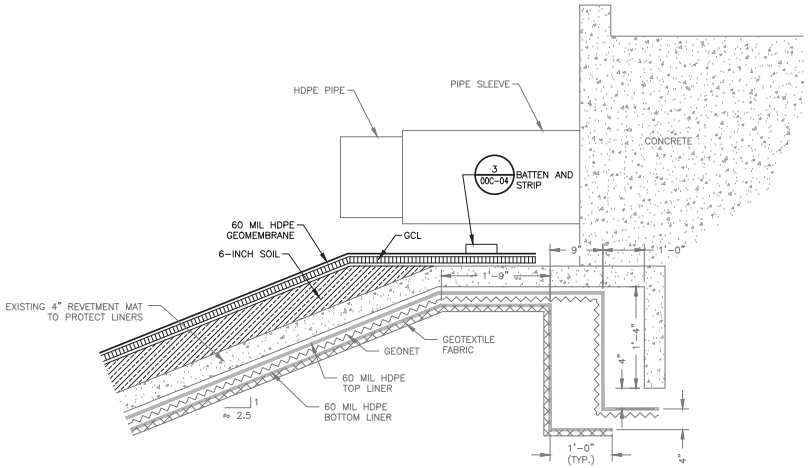
SHEET **00C-03**



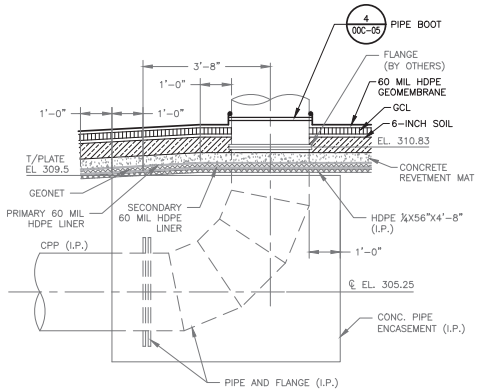

PIPE RACK PLAN VIEW (1 / 00C-02)
NOT TO SCALE



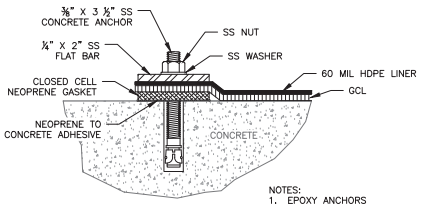

PIPE RACK PROFILE (1 / 00C-02)
NOT TO SCALE



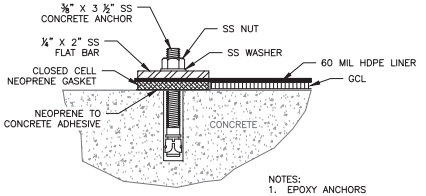

PIPE RACK SECTION (2 / 00C-04)
NOT TO SCALE




PIPE ENCASEMENT (2 / 00C-02)
NOT TO SCALE




BATTEN AND STRIP CONNECTION AT ANCHOR TRENCH (3A / 00C-02)
NOT TO SCALE




BATTEN AND STRIP CONNECTION BELOW WATER SURFACE (3B / 00C-02)
NOT TO SCALE

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED PROFESSIONAL ENGINEER · 1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**NEW SCRUBBER POND RELINE**
**RUSK COUNTY, TEXAS**

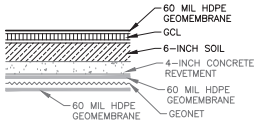
Luminant

**DETAILS (1 OF 2)**

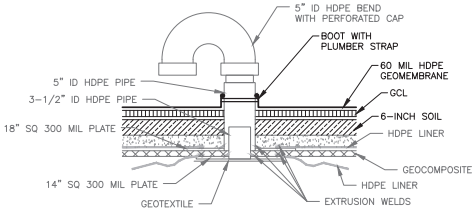
0 1" 2"

FILENAME 00C-04.dwg
SCALE

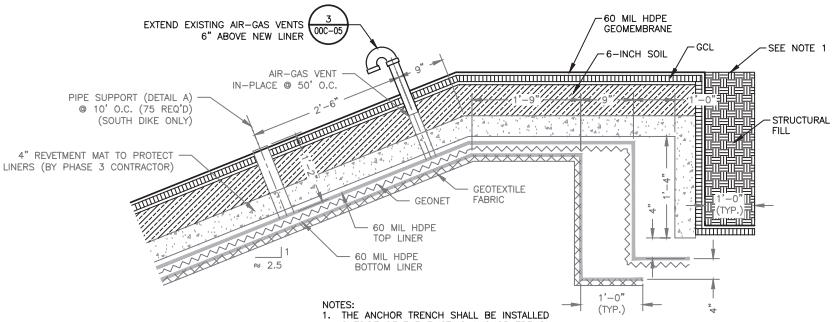
SHEET **00C-04**




PROPOSED
NEW SCRUBBER POND RETROFIT SECTION (1 / 00C-05)
NOT TO SCALE

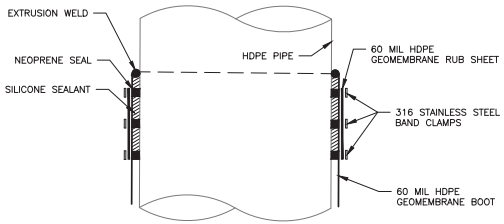



TYPICAL AIR-GAS VENT (3 / 00C-05)
NOT TO SCALE




NOTES:
1. THE ANCHOR TRENCH SHALL BE INSTALLED OUTSIDE OF THE EXISTING ANCHOR TRENCH.

ANCHOR TRENCH (2 / 00C-02)
NOT TO SCALE




PIPE BOOT (4 / 00C-04)
NOT TO SCALE

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**NEW SCRUBBER POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**DETAILS**
**(2 OF 2)**

0 1" 2"

FILENAME 00C-05.dwg
SCALE NOT TO SCALE

SHEET
**00C-05**


| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
1/31/2020

**MARTIN LAKE STEAM ELECTRICAL STATION**
**NEW SCRUBBER POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**STOCKPILE AND HAUL ROUTE**

0 1" 2"

FILENAME 00C-06.dwg
SCALE 1" = 600'

SHEET
**00C-06**

**APPENDIX B**

# EAP and WAP Pond Liner Retrofits
# As-Built Drawings

HDR
Firm Registration No. F-754
17111 Preston Road, Suite 300
Dallas, Texas 75248-1229
972.960.4400

Luminant


VICINITY MAP
NOT TO SCALE

As-built Drawings For

# Martin Lake Steam Electric Station

## CCR Impoundment Reline
## East Ash Pond
## As-Constructed Liner Drawings

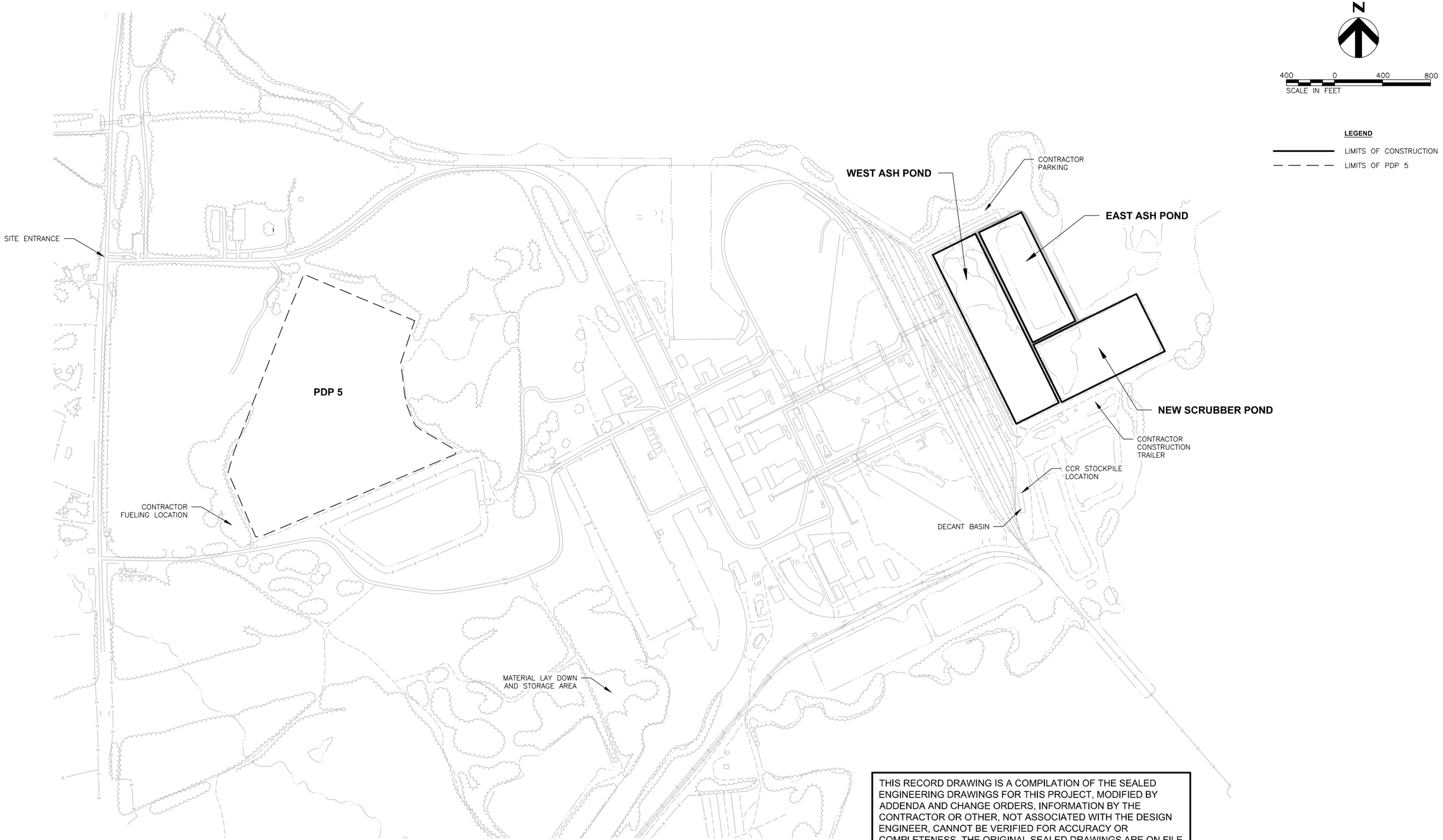
Project No.
10172630

Rusk County, Texas
March 2021

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS. INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

STATE OF TEXAS
DAVID C. VOGT
93903
LICENSED
PROFESSIONAL ENGINEER
3-26-2021

INDEX OF DRAWINGS




THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| B | 03/26/21 | AS-CONSTRUCTED LINER DRAWINGS |
| A | 10/16/20 | AS-BUILTS |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
3-26-2021

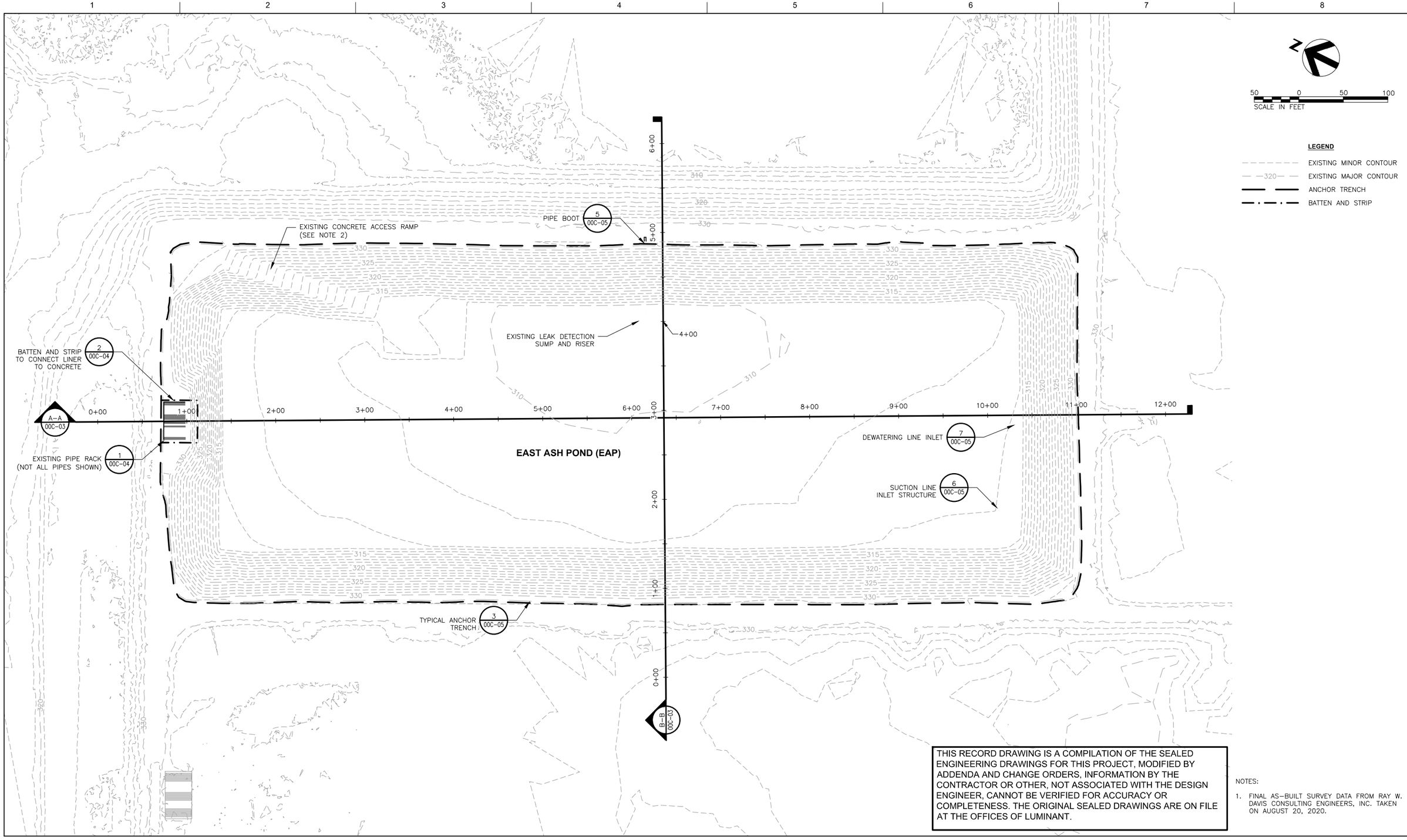
**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**SITE LAYOUT**

0 1" 2"

| | |
|---|---|
| FILENAME | 00C-01.dwg |
| SCALE | 1" = 400' |
| SHEET | 00C-01 |




THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

NOTES:

1. FINAL AS–BUILT SURVEY DATA FROM RAY W. DAVIS CONSULTING ENGINEERS, INC. TAKEN ON AUGUST 20, 2020.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| B | 03/26/21 | AS-CONSTRUCTED LINER DRAWINGS |
| A | 10/16/20 | AS-BUILTS |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
3-26-2021

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**EAST ASH POND**

0 1" 2"

FILENAME 00C-02.dwg
SCALE 1" = 50'



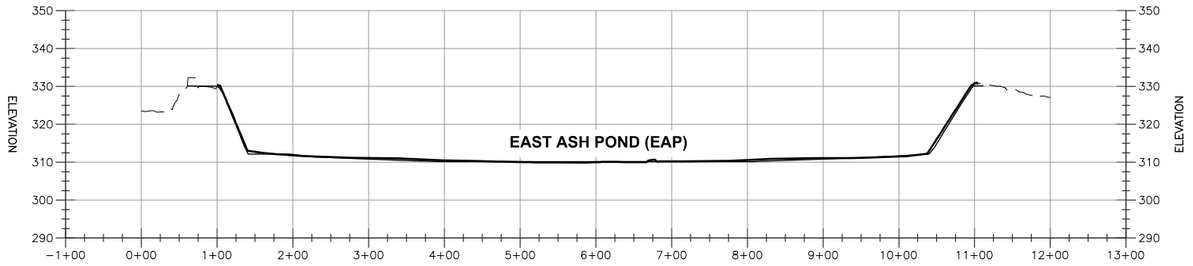
SHEET **00C-02**

100 0 100 200
HORIZONTAL SCALE: 1" = 100'

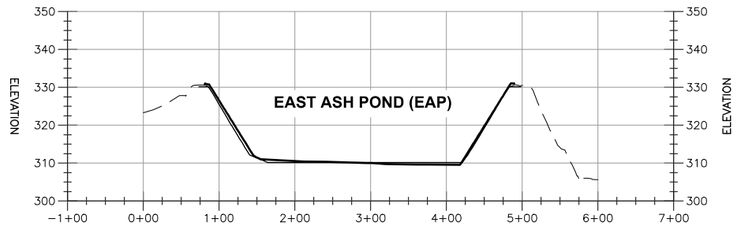
20 0 20 40
VERTICAL SCALE: 1" = 20'

**LEGEND**

- EXISTING GROUND SURFACE
- PROPOSED GRADE
- ASBUILT GRADE




SECTION A–A (A–A, 00C–02)
HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'




SECTION B–B (B–B, 00C–02)
HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20'

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| B | 03/26/21 | AS-CONSTRUCTED LINER DRAWINGS |
| A | 10/16/20 | AS-BUILTS |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED · PROFESSIONAL ENGINEER · 3-26-2021

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

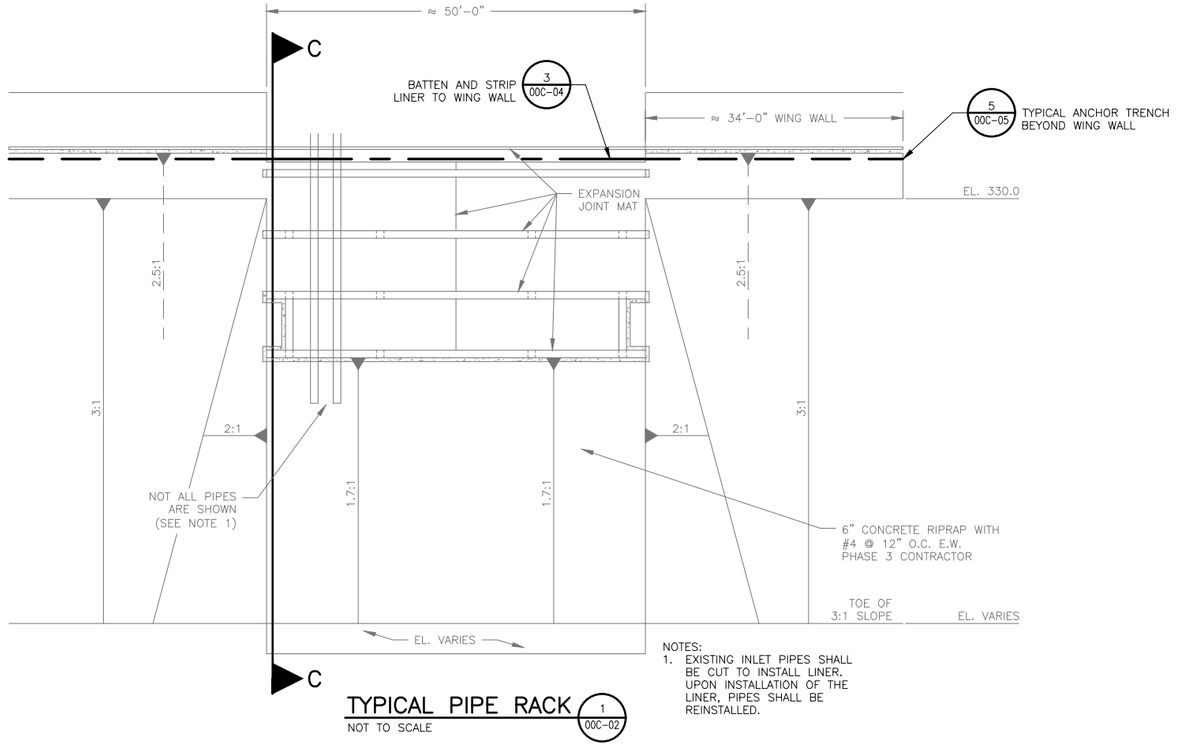
**CROSS SECTIONS**

0 1" 2"

FILENAME 00C-03.dwg
SCALE H: 1" = 100' ; V: 1" = 20'

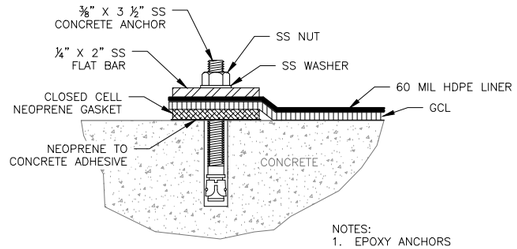


SHEET **00C-03**



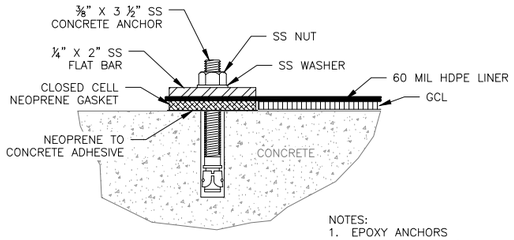

NOTES:
1. EXISTING INLET PIPES SHALL BE CUT TO INSTALL LINER. UPON INSTALLATION OF THE LINER, PIPES SHALL BE REINSTALLED.

## TYPICAL PIPE RACK
1
00C-02
NOT TO SCALE



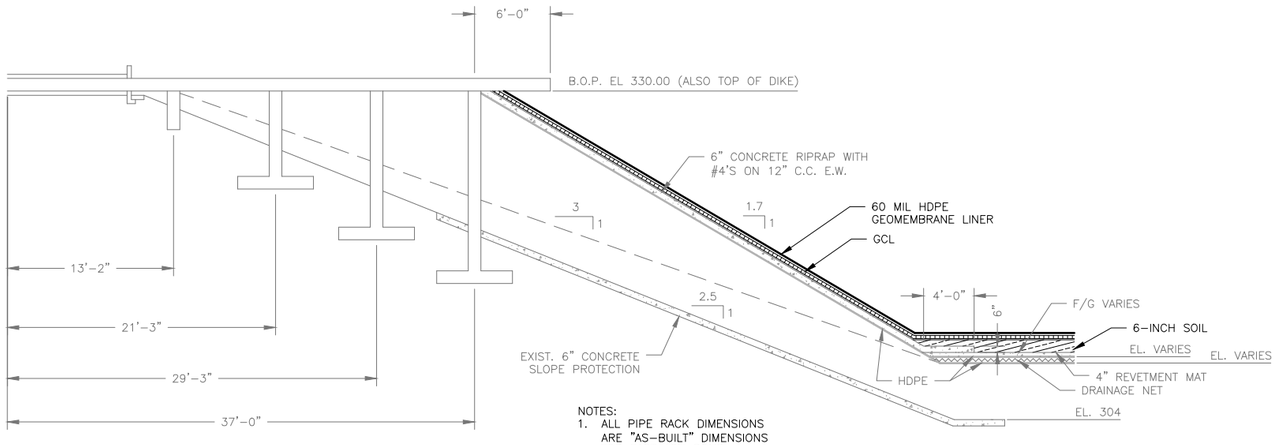

NOTES:
1. EPOXY ANCHORS SPACED AT 6" O.C.

## BATTEN AND STRIP CONNECTION AT ANCHOR TRENCH
2A
00C-06
NOT TO SCALE




NOTES:
1. EPOXY ANCHORS SPACED AT 6" O.C.

## BATTEN AND STRIP CONNECTION BELOW WATER SURFACE
2B
00C-06
NOT TO SCALE




NOTES:
1. ALL PIPE RACK DIMENSIONS ARE "AS-BUILT" DIMENSIONS FOR EAST ASH POND.

## SECTION C-C
NOT TO SCALE

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| B | 03/26/21 | AS-CONSTRUCTED LINER DRAWINGS |
| A | 10/16/20 | AS-BUILTS |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
3-26-2021

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

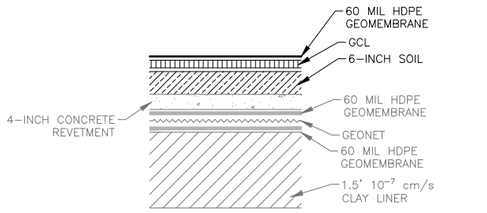
**DETAILS**
**(1 OF 2)**

0 1" 2"

FILENAME 00C-04.dwg
SCALE

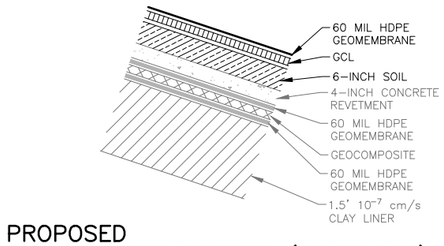


SHEET **00C-04**



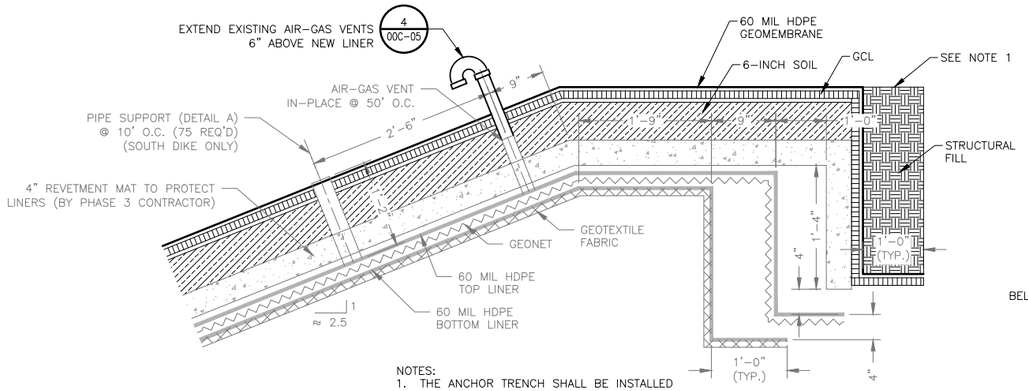

PROPOSED EAP RETROFIT SECTION (FLOOR) 1 00C-05

NOT TO SCALE




PROPOSED EAP RETROFIT SECTION (SIDESLOPE) 2 00C-05

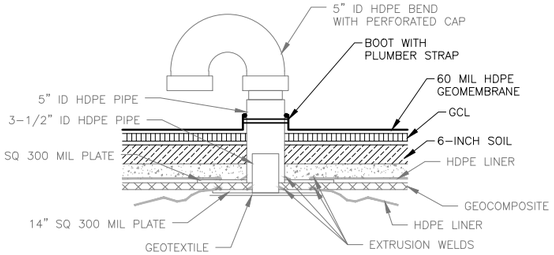
NOT TO SCALE




NOTES:
1. THE ANCHOR TRENCH SHALL BE INSTALLED OUTSIDE OF THE EXISTING ANCHOR TRENCH.

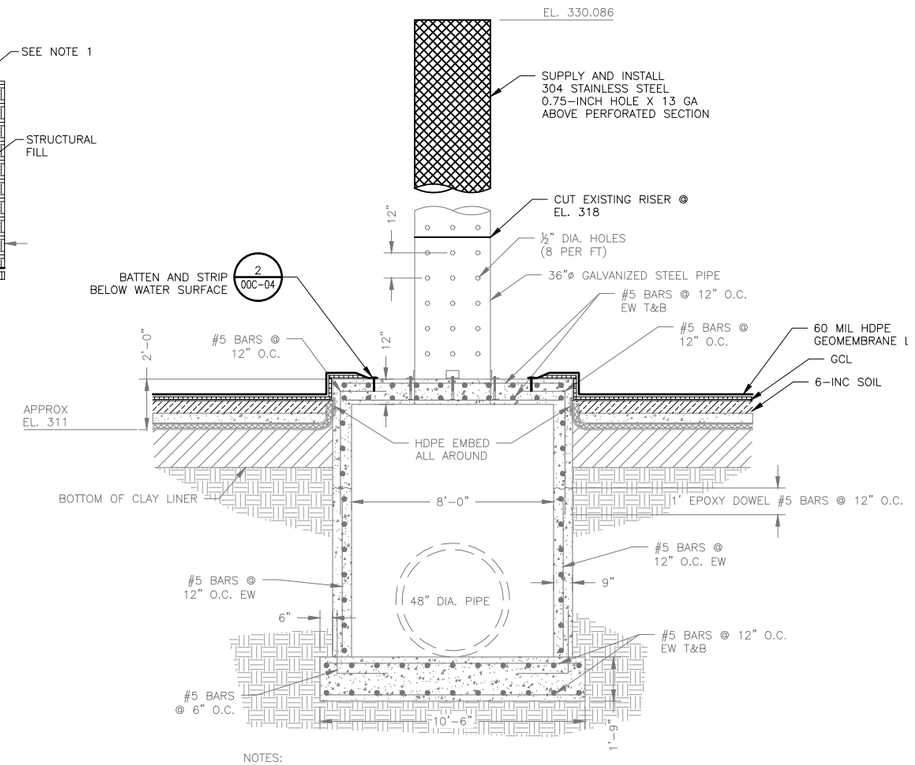
ANCHOR TRENCH 3 00C-02

NOT TO SCALE




TYPICAL AIR-GAS VENT 4 00C-05

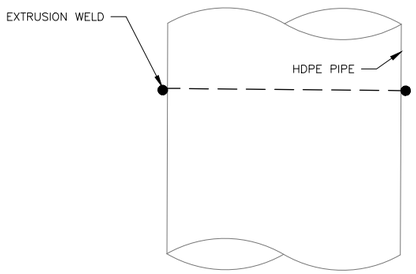
NOT TO SCALE




NOTES:
1. THE INTERIOR OF THE INLET STRUCTURE WAS LINED WITH AN EPOXY COATING OF RAVEN LINING 405 AT A MINIMUM THICKNESS OF 200 MILS.

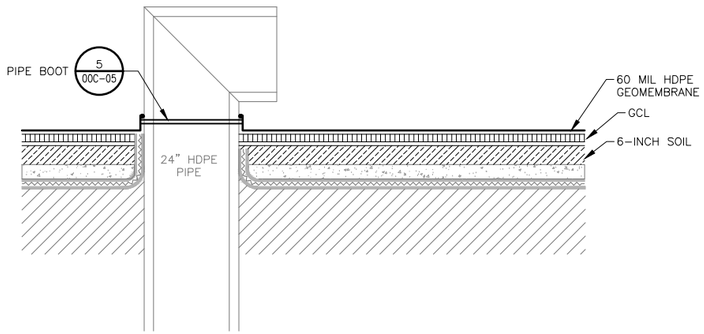
SUCTION LINE INLET STRUCTURE 6 00C-02

NOT TO SCALE




PIPE BOOT 5 00C-02

NOT TO SCALE




24" DEWATERING LINE INLET 7 00C-02

NOT TO SCALE

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| B | 03/26/21 | AS-CONSTRUCTED LINER DRAWINGS |
| A | 10/16/20 | AS-BUILTS |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED · PROFESSIONAL ENGINEER · 3-26-2021

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**DETAILS (2 OF 2)**

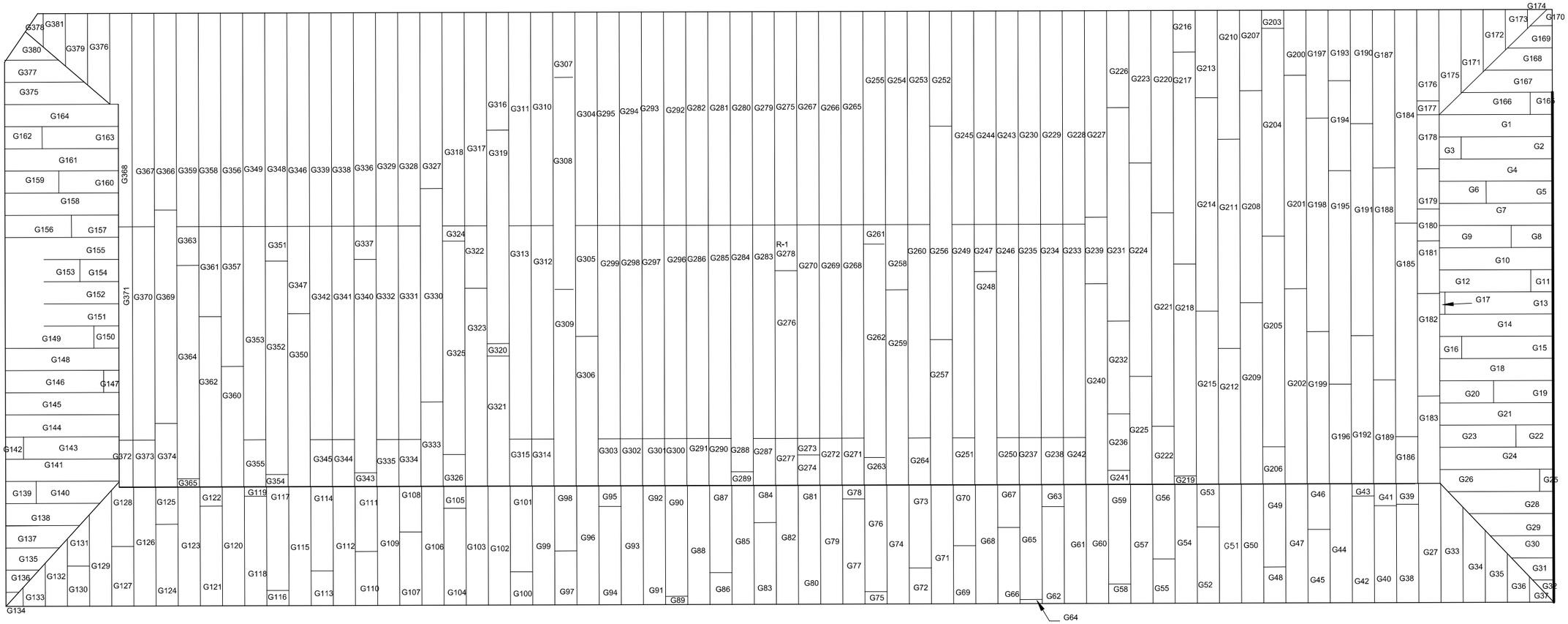
0 1" 2"

FILENAME 00C-05.dwg
SCALE NOT TO SCALE

SHEET 00C-05

N

40 0 40 80
SCALE IN FEET




THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| B | 03/26/21 | AS-CONSTRUCTED LINER DRAWINGS |
| A | 10/16/20 | AS-BUILTS |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
3-26-2021

**MARTIN LAKE STEAM ELECTRICAL STATION**
**EAST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

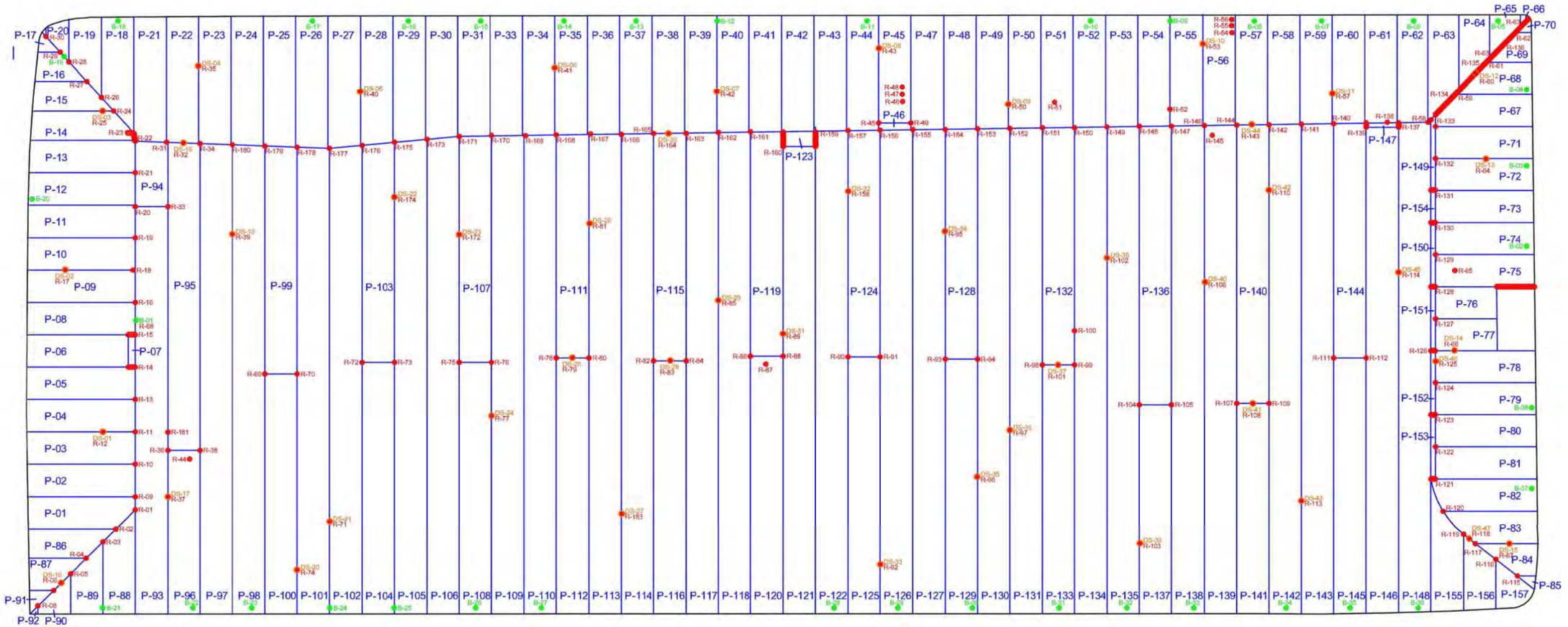
**GCL PANEL LAYOUT**

0 1" 2"

| | |
|---|---|
| FILENAME | 00C-06.dwg |
| SCALE | 1"=40' |



SHEET 00C-06




— GEOMEMBRANE SEAM
● REPAIR
● DESTRUCT
● BOOT

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

0 75 150
SCALE IN FEET

LONE STAR LINING COMPANY

Lone Star Lining Company
1675 American Way
Cedar Hill, TX 75104
Phone: (972) 291-5494
Fax: (972) 291-5515

LUMINANT, MARTIN LAKE
TATUM, TEXAS

EAST ASH POND RE LINE
RECORD DRAWING

| SIZE | | DWG NO. | REV |
|---|---|---|---|
| 11" x 17" | | 22028-rd | |

| SCALE | DATE | SHEET |
|---|---|---|
| AS SHOWN | 9/18/2020 | |

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| B | 03/26/21 | AS-CONSTRUCTED LINER DRAWINGS |
| A | 10/16/20 | AS-BUILTS |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
3-26-2021

MARTIN LAKE STEAM ELECTRICAL STATION
EAST ASH POND RELINE
RUSK COUNTY, TEXAS

Luminant

HDPE PANEL LAYOUT

0 1" 2"

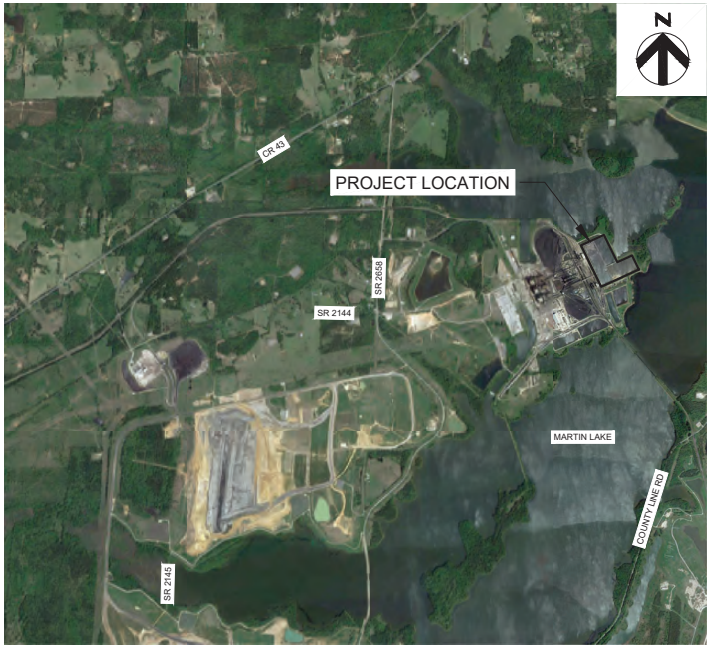
FILENAME 00C-07.dwg
SCALE ##########



SHEET 00C-07

HDR
Firm Registration No. F-754
17111 Preston Road, Suite 300
Dallas, Texas 75248-1229
972.960.4400

Luminant




VICINITY MAP
NOT TO SCALE

As-Built Drawings For

# Martin Lake Steam Electric Station

## CCR Impoundment Reline West Ash Pond

Project No.
10172630

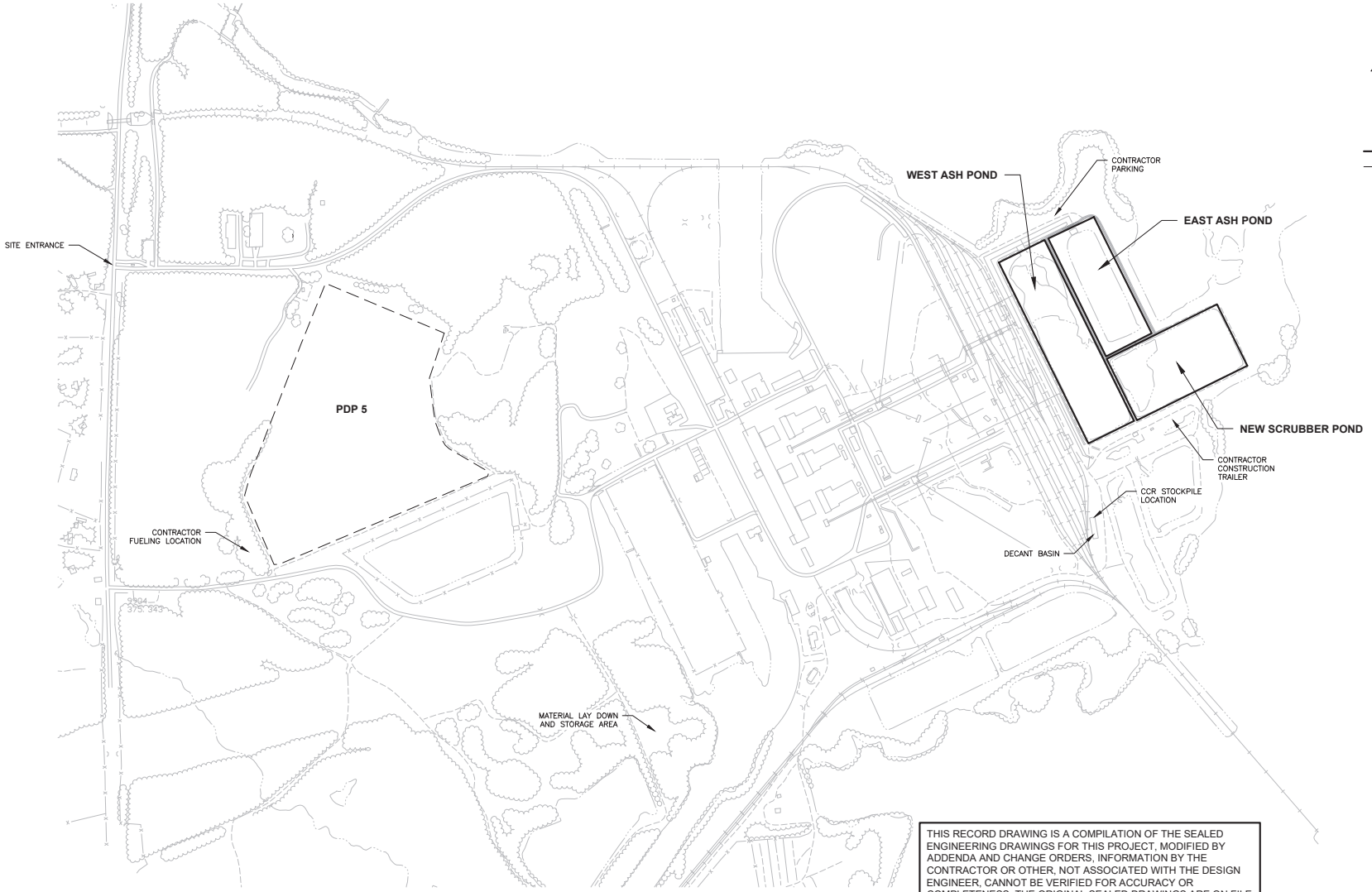
Rusk County, Texas
February 2022

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

INDEX OF DRAWINGS



STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
11/27/2022




THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| C | 02/07/2022 | AS-CONSTRUCTED LINER DRAWINGS |
| B | 08/02/2021 | ADDED ACCESS RAMP |
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
11/27/2022



**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

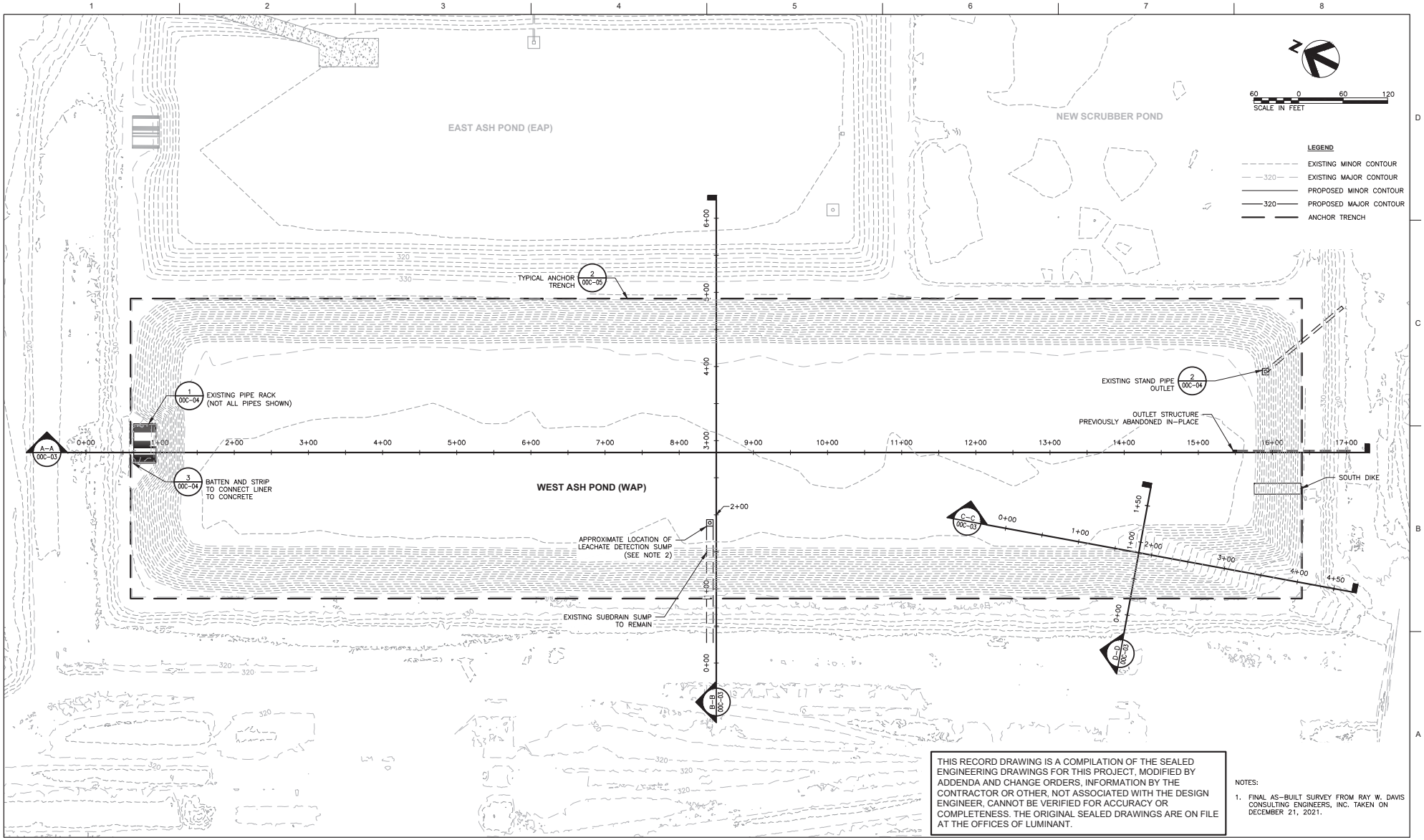
Luminant

## SITE LAYOUT

0 1" 2"

FILENAME 00C-01.dwg
SCALE 1" = 400'

SHEET
**00C-01**




THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

NOTES:

1. FINAL AS-BUILT SURVEY FROM RAY W. DAVIS CONSULTING ENGINEERS, INC. TAKEN ON DECEMBER 21, 2021.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| C | 02/07/2022 | AS-CONSTRUCTED LINER DRAWINGS |
| B | 08/02/2021 | ADDED ACCESS RAMP |
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
11/27/2022



**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

**WEST ASH POND**

0 1" 2"

FILENAME 00C-02.dwg
SCALE 1" = 60'

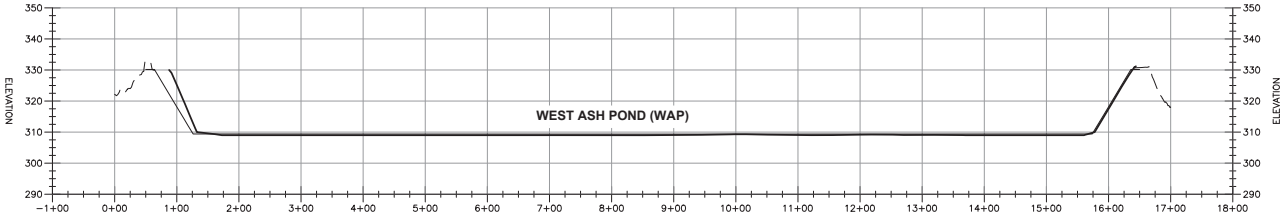
SHEET
**00C-02**

HORIZONTAL SCALE: 1" = 100'

VERTICAL SCALE: 1" = 20'

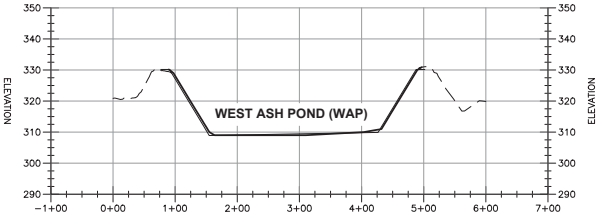
**LEGEND**

- EXISTING GROUND SURFACE
- PROPOSED GRADE
- ASBUILT GRADE



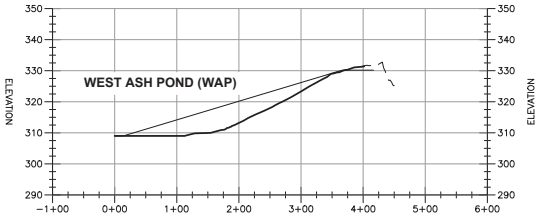

## SECTION A–A

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20' (A–A, 00C–02)



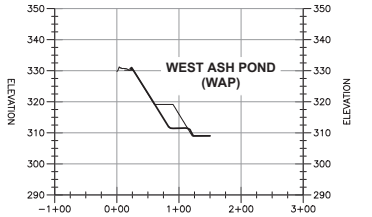

## SECTION B–B

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20' (B–B, 00C–02)




## SECTION C–C

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20' (C–C, 00C–02)




## SECTION D–D

HORIZONTAL SCALE: 1" = 100' ; VERTICAL SCALE: 1" = 20' (D–D, 00C–02)

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| C | 02/07/2022 | AS-CONSTRUCTED LINER DRAWINGS |
| B | 08/02/2021 | ADDED ACCESS RAMP |
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED PROFESSIONAL ENGINEER · 11/27/2022



**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

Luminant

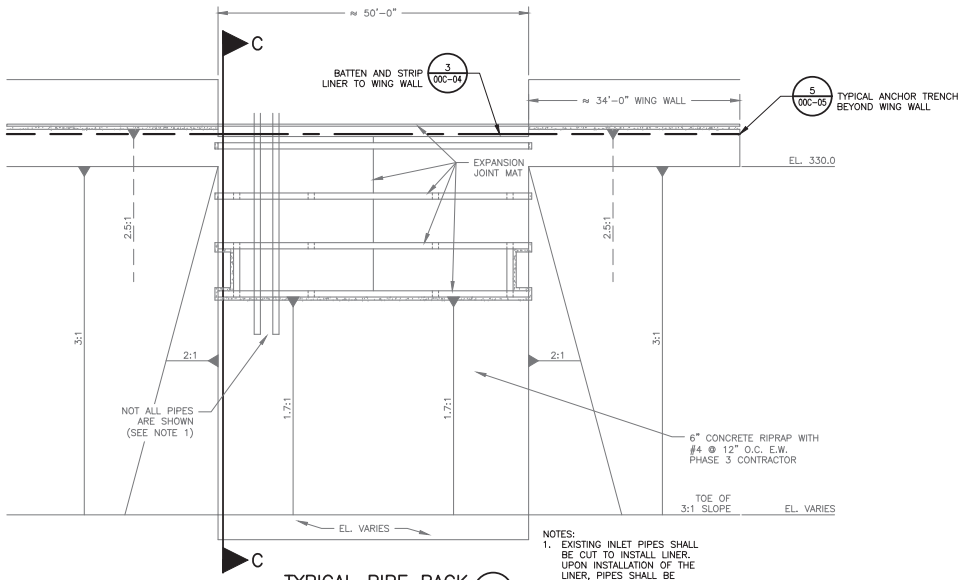
**CROSS SECTIONS**

0 1" 2"

FILENAME 00C-03.dwg

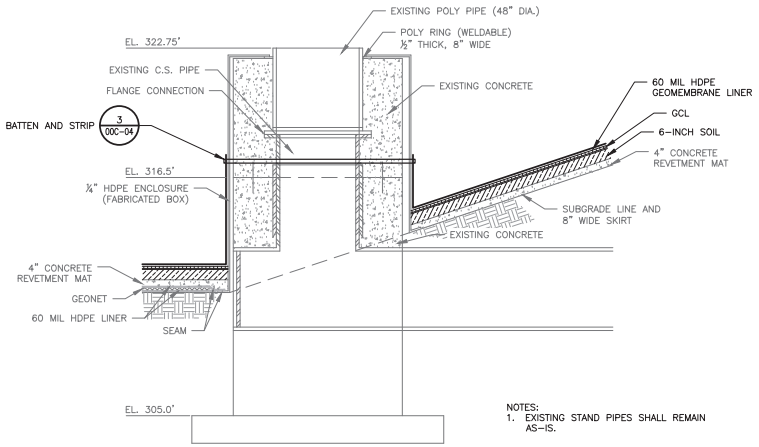
SCALE H: 1" = 100' ; V: 1" = 20'

SHEET **00C-03**



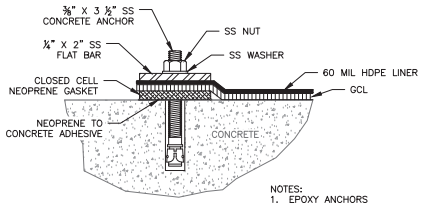

NOTES:
1. EXISTING INLET PIPES SHALL BE CUT TO INSTALL LINER. UPON INSTALLATION OF THE LINER, PIPES SHALL BE REINSTALLED.

## TYPICAL PIPE RACK
1
00C-02
NOT TO SCALE



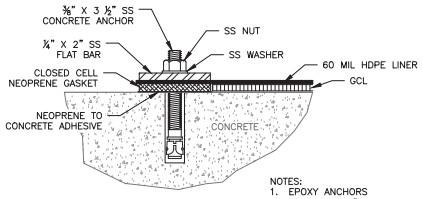

NOTES:
1. EXISTING STAND PIPES SHALL REMAIN AS-IS.

## STANDPIPE ENCLOSURE
2
00C-02
NOT TO SCALE



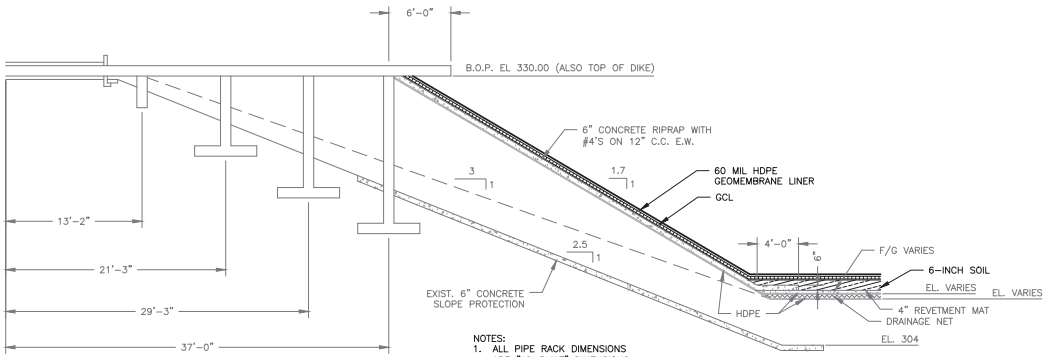

NOTES:
1. EPOXY ANCHORS SPACED AT 6" O.C.

## BATTEN AND STRIP CONNECTION AT ANCHOR TRENCH
3A
00C-04
NOT TO SCALE




NOTES:
1. EPOXY ANCHORS SPACED AT 6" O.C.

## BATTEN AND STRIP CONNECTION BELOW WATER SURFACE
3B
00C-04
NOT TO SCALE




NOTES:
1. ALL PIPE RACK DIMENSIONS ARE "AS-BUILT" DIMENSIONS FOR EAST ASH POND.

## SECTION C-C
NOT TO SCALE

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| C | 02/07/2022 | AS-CONSTRUCTED LINER DRAWINGS |
| B | 08/02/2021 | ADDED ACCESS RAMP |
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED PROFESSIONAL ENGINEER
11/27/2022



**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

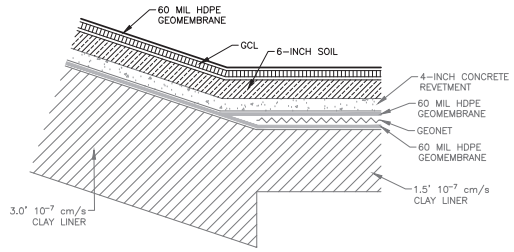
Luminant

**DETAILS**
**(1 OF 2)**

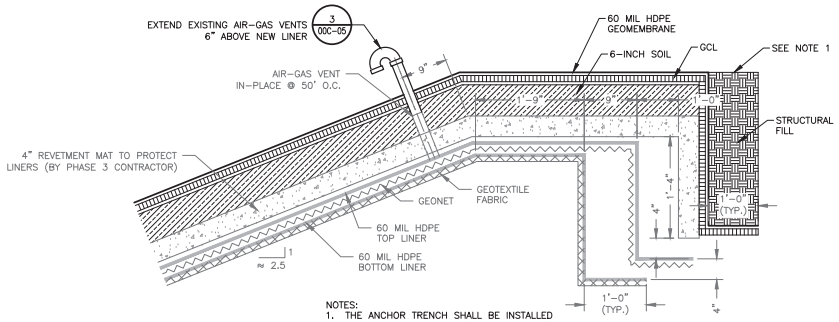
0 1" 2"

FILENAME 00C-04.dwg
SCALE

SHEET
**00C-04**

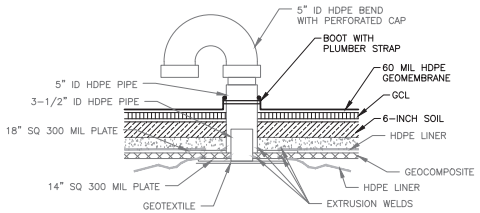



PROPOSED WAP SECTION (1 / 00C-05)
NOT TO SCALE




NOTES:
1. THE ANCHOR TRENCH SHALL BE INSTALLED OUTSIDE OF THE EXISTING ANCHOR TRENCH.

ANCHOR TRENCH (2 / 00C-02)
NOT TO SCALE




TYPICAL AIR-GAS VENT (3 / 00C-05)
NOT TO SCALE

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| C | 02/07/2022 | AS-CONSTRUCTED LINER DRAWINGS |
| B | 02/26/2021 | REVISED DETAIL 2 |
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS · DAVID C. VOGT · 93905 · LICENSED PROFESSIONAL ENGINEER · 11/27/2022



**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

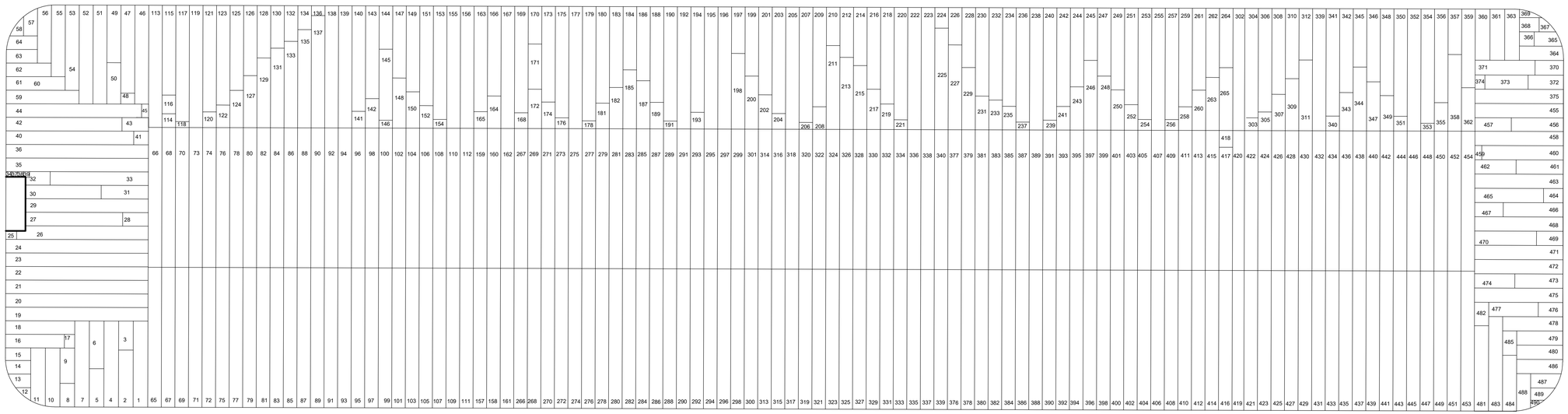
Luminant

**DETAILS**
**(2 OF 2)**

0 1" 2"

FILENAME 00C-05.dwg
SCALE NOT TO SCALE

SHEET **00C-05**




THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| C | 02/07/2022 | AS-CONSTRUCTED LINER DRAWINGS |
| B | 08/02/2021 | ADDED ACCESS RAMP |
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER

2/7/2022

**MARTIN LAKE STEAM ELECTRICAL STATION**
**WEST ASH POND RELINE**
**RUSK COUNTY, TEXAS**

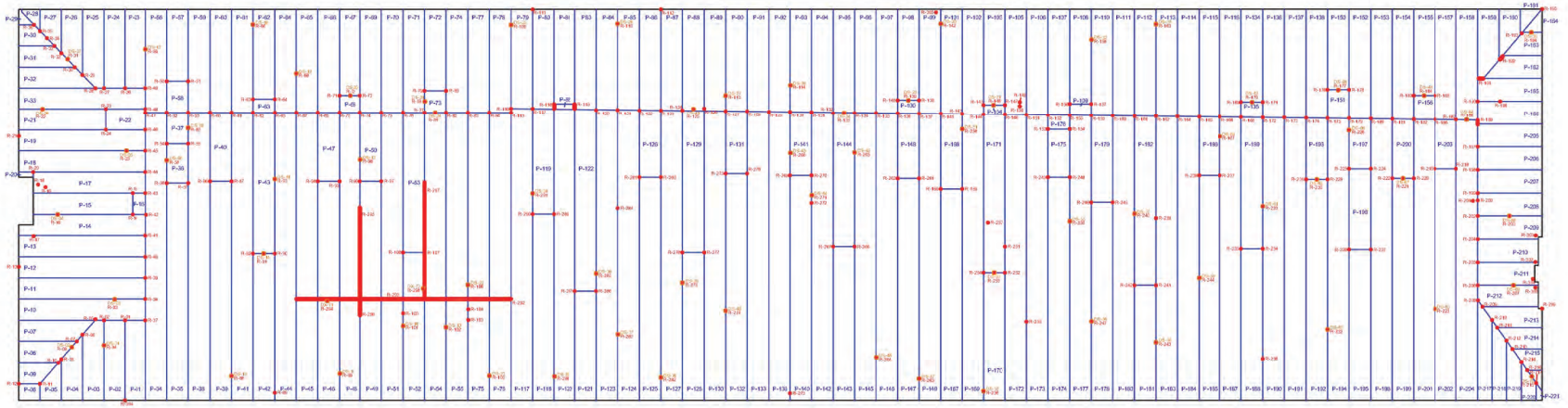
Luminant

**GCL PANEL LAYOUT**

0 1" 2"

| | |
|---|---|
| FILENAME | 00C-07.dwg |
| SCALE | 1" = 60' |

SHEET **00C-07**



GEOMEMBRANE SEAM
REPAIR
DESTRUCT

THIS RECORD DRAWING IS A COMPILATION OF THE SEALED ENGINEERING DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA AND CHANGE ORDERS, INFORMATION BY THE CONTRACTOR OR OTHER, NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. THE ORIGINAL SEALED DRAWINGS ARE ON FILE AT THE OFFICES OF LUMINANT.

LONE STAR LINING COMPANY

Lone Star Lining Company
1675 American Way
Cedar Hill, TX 75104
Phone: (972) 291-5494
Fax: (972) 291-5515

LUMINANT MARTIN LAKE
TATUM, TEXAS

WEST ASH POND
RECORD DRAWING

| SIZE | DWG NO. | REV |
|---|---|---|
| 11" x 17" | 22131-rd | |

| SCALE | DATE | SHEET |
|---|---|---|
| AS SHOWN | 12/20/2021 | |

0 115 230
SCALE IN FEET

| ISSUE | DATE | DESCRIPTION |
|---|---|---|
| C | 02/07/2022 | AS-CONSTRUCTED LINER DRAWINGS |
| B | 08/02/2021 | ADDED ACCESS RAMP |
| A | 01/31/2020 | ISSUED FOR BID |

| | |
|---|---|
| PROJECT MANAGER | D. VOGT, P.E. |
| DESIGNED BY | K. PERERA |
| DRAWN BY | J. RAYMOND |
| CHECKED BY | M. ROBERTS |
| PROJECT NUMBER | 10172630 |

STATE OF TEXAS
DAVID C. VOGT
93905
LICENSED
PROFESSIONAL ENGINEER
11/27/2022



MARTIN LAKE STEAM ELECTRICAL STATION
WEST ASH POND RELINE
RUSK COUNTY, TEXAS

Luminant

HDPE PANEL LAYOUT

0 1" 2"

FILENAME 00C-06.dwg
SCALE 1" = 60'

SHEET
00C-06