



**SPURLOCK STATION LANDFILL  
AREA C PHASE 4-A CELL CONSTRUCTION**

**CCR RULE – POST-CONSTRUCTION  
RUN-ON & RUN-OFF CONTROLS CERTIFICATION**



**EAST KENTUCKY POWER COOPERATIVE**

**COAL COMBUSTION RESIDUAL RULE COMPLIANCE**

**REV. 0 (5/12/20)**

# CERTIFICATION

EAST KENTUCKY POWER COOPERATIVE  
SPURLOCK STATION LANDFILL – AREA C PHASE 4 CELL CONSTRUCTION  
CCR RULE – RUN-ON AND RUN-OFF CONTROLS CERTIFICATION

## CERTIFICATION

I hereby certify, as a Professional Engineer in the Commonwealth of Kentucky, that the constructed Area C Phase 4 CCR waste cell at East Kentucky Power Cooperative's Spurlock Station Landfill has been constructed to meet the project plans, specifications and requirements of 40 CFR 257.81 (Run-on and run-off controls for CCR landfills.) The information in this document was assembled under my direct supervisory control. This report is not intended or represented to be suitable for reuse by East Kentucky Power Cooperative or others without specific verification or adaptation by the Engineer.



S. Tim Oakes, P.E. [21,483] - Kenvirons, Inc.

Date: 5/12/20



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## 1.0 INTRODUCTION

On April 17, 2015, the Environmental Protection Agency (EPA) issued the final version of the federal Coal Combustion Residual Rule (CCR Rule) to regulate the disposal of coal combustion residual (CCR) materials generated at coal-fired units. The rule will be administered as part of the Resource Conservation and Recovery Act [RCRA, 42 United States Code (U.S.C.) §6901 et seq.], under Subtitle D.

East Kentucky Power Cooperative (EKPC) is subject to the CCR Rule and as such will demonstrate compliance with 40 Code of Federal Regulations (CFR) §257.81. This document serves as EKPC's verification that Area C Phase 4-A lateral expansion was constructed in accordance with the run-on and run-off controls criteria as set forth by 40 CFR 257.81. The Area C Phase 4-A lateral cell expansion was designed by Kenvirons, Inc. and the CQA for cell construction was certified by Kenvirons, Inc. A Record drawing displaying the surface water controls related to Area C Phase 4-A waste cell can be found in Attachment 1.

**TABLE 1-1 RUN-ON AND RUN-OFF CONTROLS CERTIFICATION SUMMARY**

CONSTRUCTION CRITERIA			
Unit: Area C Phase 4 Cell Construction			
DESCRIPTION	CCR RULE COMPLIANCE		
	YES	NO	REPORT REFERENCE
Run-On Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 2.0
Run-Off Controls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 3.0

## 2.0 RUN-ON CONTROLS

Storm water diversion structures were constructed as part of Area C Phase 4-A cell project to divert run-on from intercepting the active cell area. Grout lined ditches parallel the waste limits of Area C Phase 4-A to divert storm water to an existing sediment basin (Pond 1) to the southeast. Diversion controls that aide in minimizing stormwater generation within the Area C Phase 4-A cell limits include intermediate geosynthetic rain gutters. Stormwater run-on is effectively diverted through the installed rain gutters to flow excess stormwater out of the cell and into the perimeter ditches prior to contact with CCR wastes that will be placed below the gutters. The gutters aide in minimizing leachate generation and help control CCR sediment migration. All ditches were constructed to meet the project plans and specifications which are based on water flows generated by a minimum 25-year/24-hour storm event.

### **3.0 RUN-OFF CONTROLS**

The constructed grout lined perimeter ditches will convey stormwater run-off to an existing sediment basin (Pond 1) to the southeast. All ditches were constructed to meet the project plans and specifications which are based on water flows generated by a minimum 25-year/24-hour storm event.

### **4.0 REPORT LIMITATIONS**

This report is based on data collected and observations made during construction that could be visually seen. Review of design documents and survey information provided by EKPC as well as CQA work performed by Kenvirons design of Area C Phase 4-A lateral expansion. This run-on and run-off controls certification is based on Kenvirons' understanding of design plans for the Area C Phase 4-A lateral expansion and EKPC's plant operations, maintenance, storm water and CCR handling procedures for the newly constructed lateral expansion. Changes in any of these operations or procedures may result in deviation from the intended design and operation of Area C Phase 4-A storm water controls.

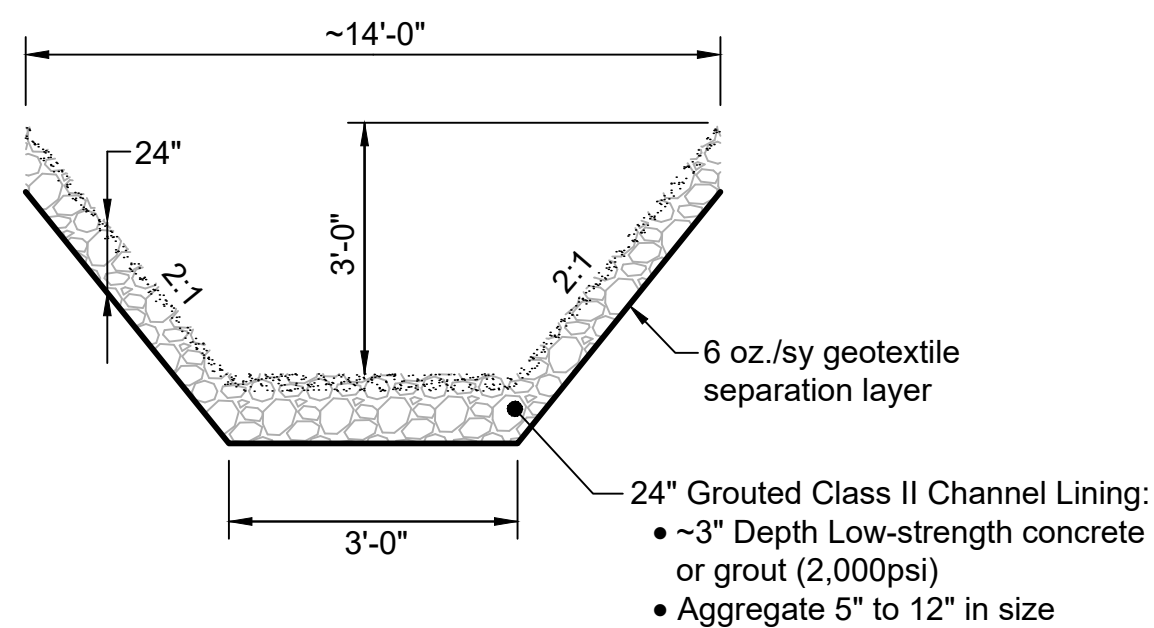
The run-on and run-off controls certification is based on established engineering principles and provided in a manner consistent with the level of care and skill ordinarily exercised by the engineering consultants under similar circumstances. No other representation is intended.

**ATTACHMENT 1**

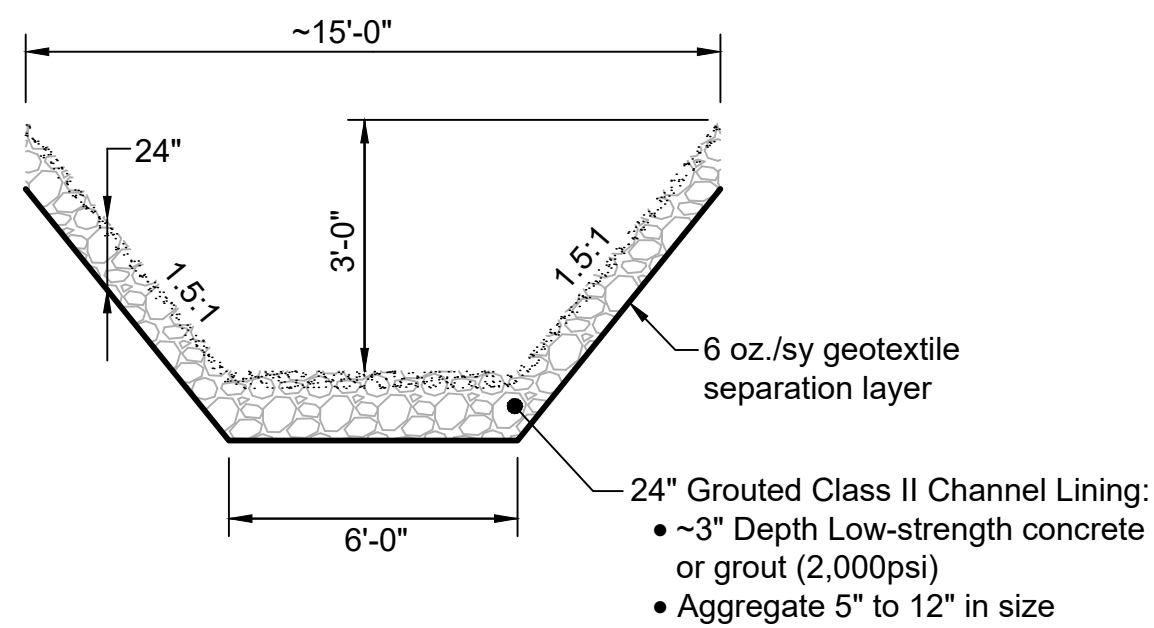
**RECORD DRAWING**



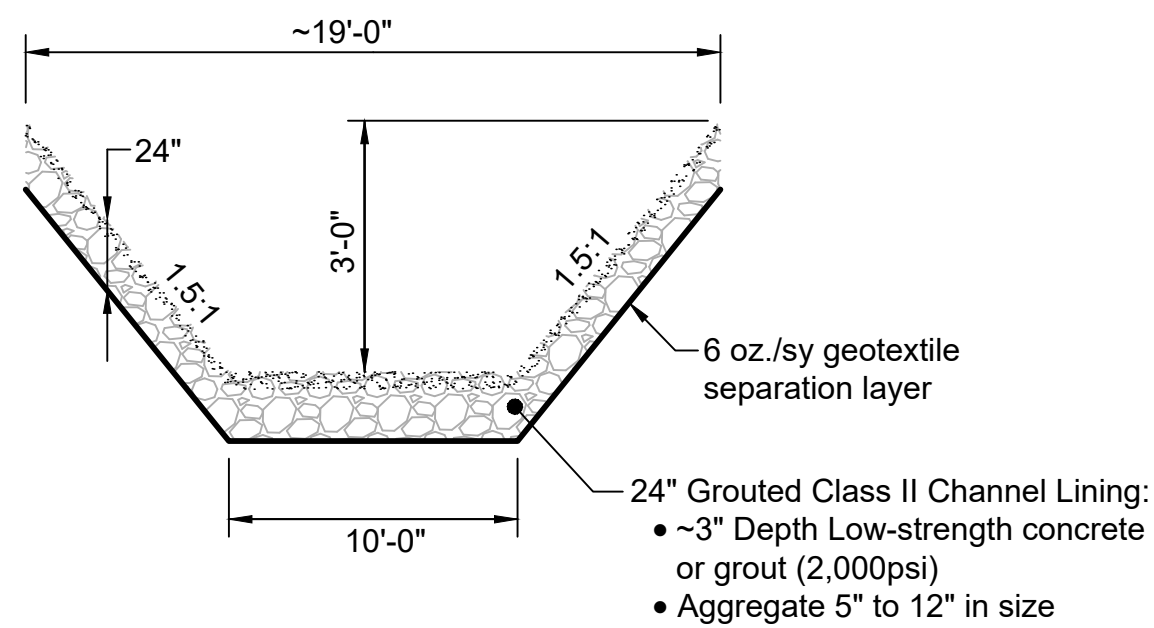
N:\P\2018122\RECORD DRAWINGS\SPURLOCK\_AREA C PHASE 4\_RECORD RUN-ON AND RUN-OFF CONTROLS.dwg, 6/4/2020 1:34:12 PM, DWG To PDF.pcf, p.3



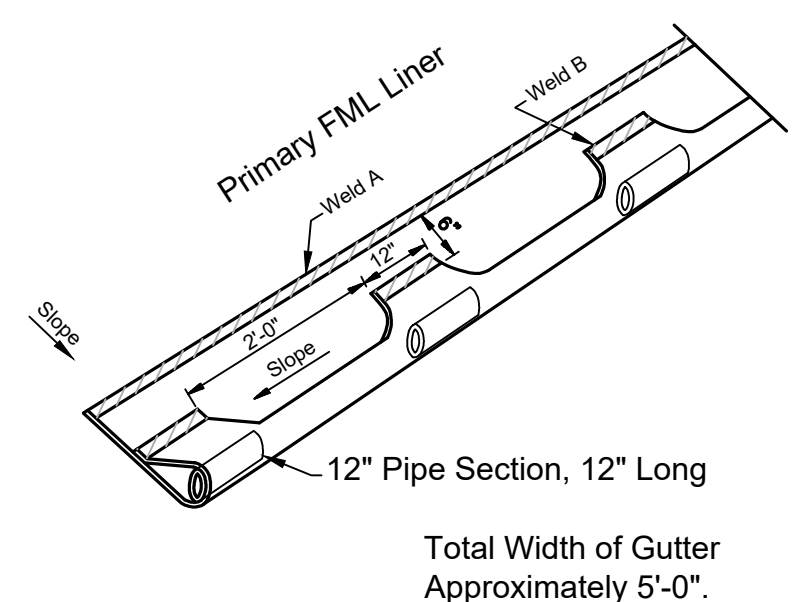
CLASS III - TRAPEZOIDAL  
A-A' TEMPORARY DIVERSION DITCH  
N.T.S.



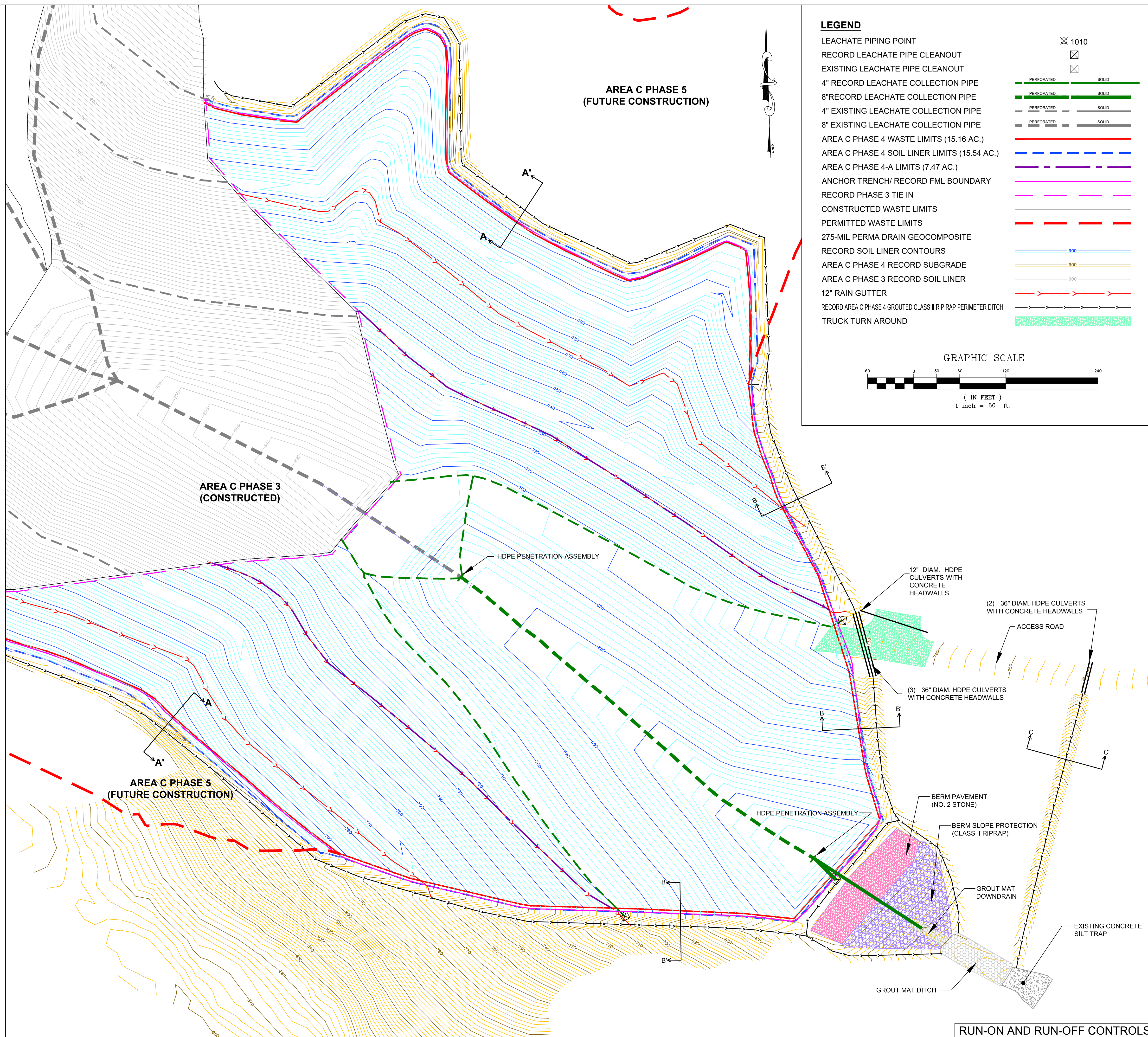
CLASS III - TRAPEZOIDAL  
B-B' PERMANENT DIVERSION DITCH  
N.T.S.



CLASS III - TRAPEZOIDAL  
C-C' ROAD DOWNDRAIN  
N.T.S.

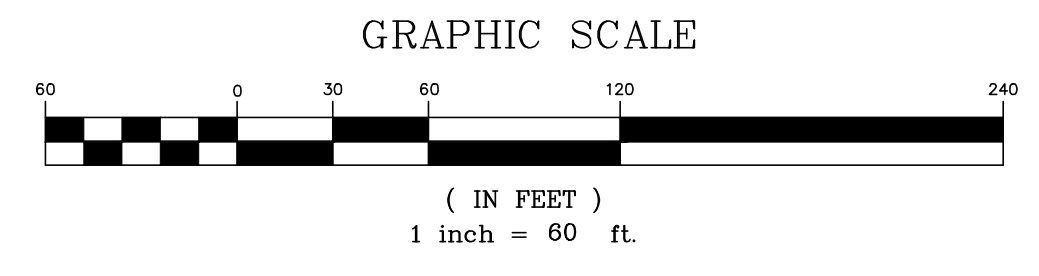


RAIN GUTTER SYSTEM DETAIL  
Total Width of Gutter Approximately 5'-0".

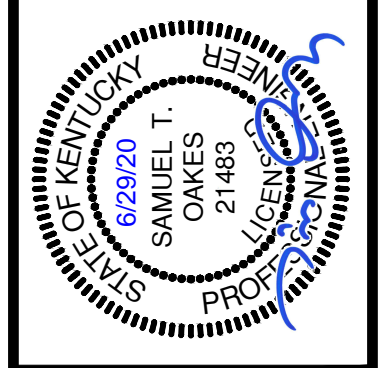


**LEGEND**

LEACHATE PIPING POINT	⊗ 1010
RECORD LEACHATE PIPE CLEANOUT	⊗
EXISTING LEACHATE PIPE CLEANOUT	⊗
4" RECORD LEACHATE COLLECTION PIPE	— PERFORATED — SOLID —
8" RECORD LEACHATE COLLECTION PIPE	— PERFORATED — SOLID —
4" EXISTING LEACHATE COLLECTION PIPE	— PERFORATED — SOLID —
8" EXISTING LEACHATE COLLECTION PIPE	— PERFORATED — SOLID —
AREA C PHASE 4 WASTE LIMITS (15.16 AC.)	— (Red dashed line) —
AREA C PHASE 4 SOIL LINER LIMITS (15.54 AC.)	— (Blue dashed line) —
AREA C PHASE 4-A LIMITS (7.47 AC.)	— (Purple dashed line) —
ANCHOR TRENCH/ RECORD FML BOUNDARY	— (Pink dashed line) —
RECORD PHASE 3 TIE IN	— (Pink dashed line) —
CONSTRUCTED WASTE LIMITS	— (Green dashed line) —
PERMITTED WASTE LIMITS	— (Red dashed line) —
275-MIL PERMA DRAIN GEOCOMPOSITE	— (Green dashed line) —
RECORD SOIL LINER CONTOURS	— (Blue solid line) — 900
AREA C PHASE 4 RECORD SUBGRADE	— (Yellow solid line) — 900
AREA C PHASE 3 RECORD SOIL LINER	— (Orange solid line) — 900
12" RAIN GUTTER	— (Red solid line with arrows) —
RECORD AREA C PHASE 4 GROUTED CLASS II RIP RAP PERIMETER DITCH	— (Red solid line with arrows) —
TRUCK TURN AROUND	— (Green stippled area) —

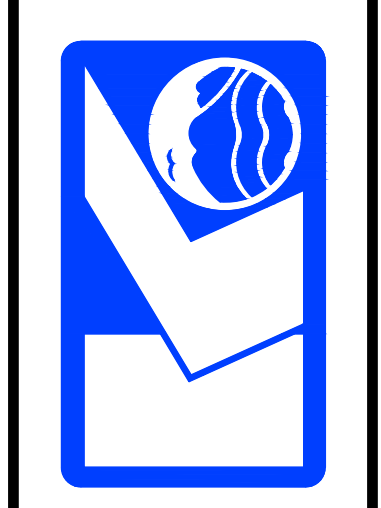


**SPURLOCK STATION LANDFILL**  
MASON COUNTY, KENTUCKY  
PERMIT NO. 081-00005  
AREA C, PHASE 4A  
RECORD DRAWINGS



DRAWN BY: NTW	CHECKED BY: SMR
DATE: JANUARY 2020	SCALE: AS SHOWN
PROJECT NO: 2018122	WASTE LIMIT

**KENVIRNS, INC.**  
FRANKFORT, KENTUCKY



PROJECT NO.  
2018122  
SHEET NO.  
1 of 1