

Department of Energy

Portsmouth/Paducah Project Office 1017 Majestic Drive, Suite 200 Lexington, Kentucky 40513 (859) 219-4000

MAY 29 2019

Ms. Jamie Nielsen, Supervisor Permit Administration Section Division of Waste Management, Solid Waste Branch Kentucky Department for Environmental Protection 300 Sower Boulevard, 2nd Floor Frankfort, Kentucky 40601 PPPO-02-5578759-19B

Dear Ms. Nielsen:

2019 ANNUAL SURVEY FOR THE PADUCAH GASEOUS DIFFUSION PLANT C-746-U CONTAINED LANDFILL, PERMIT NUMBER 073-00045, AGENCY INTEREST NO. 3059

Enclosed is the Paducah Gaseous Diffusion Plant 2019 Solid Waste Landfill Annual Survey Form, DEP 8059 (6/10), to the Kentucky Division of Waste Management along with associated cross section drawings, as required by 401 *KAR* 47:190 § 8(2).

Four Rivers Nuclear Partnership, LLC completed field work on April 16, 2019.

To assist in the review, previously submitted figures, C-746-U Landfill Phases R1, Drawing C7DC746UA001 R9, and Drawing C5E-59701-K10, RB, are included.

If you have any questions or require additional information, please contact David Dollins at (270) 441-6819.

Sincerely,

Jennifer Woodard Paducah Site Lead

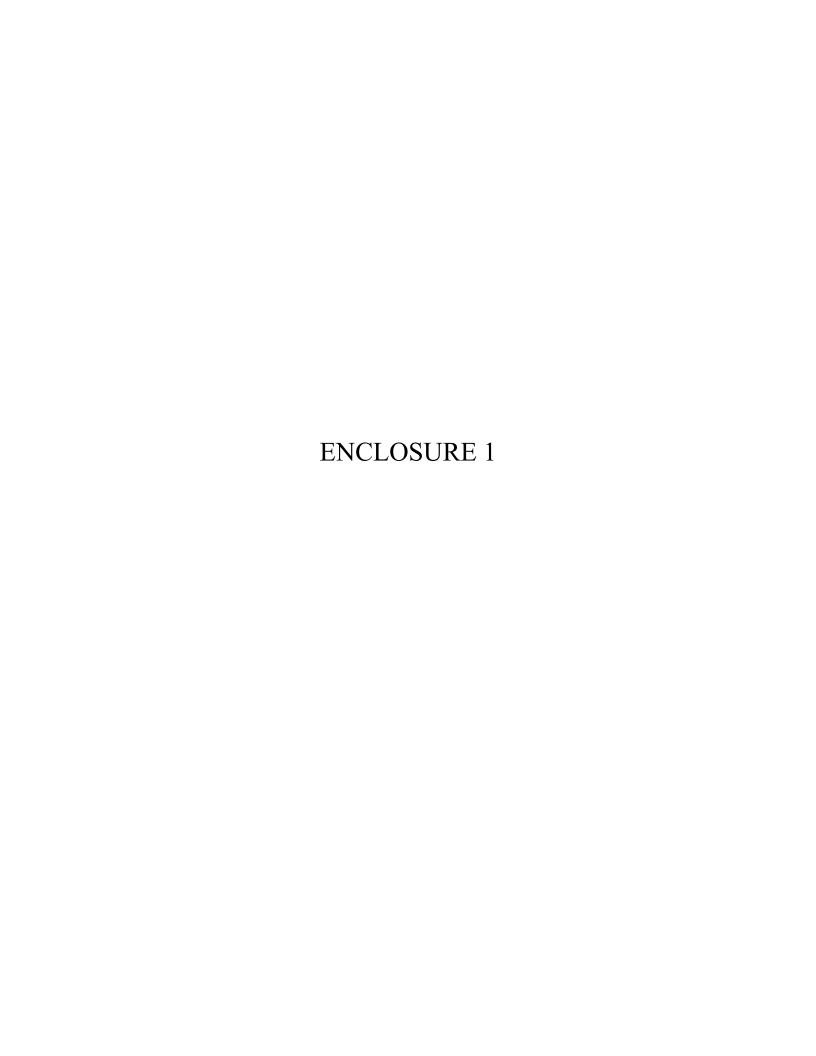
Portsmouth/Paducah Project Office

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Enclosures:

- 1. Certification Page
- 2. C-746-U Landfill 2019 Annual Landfill Survey Drawings
- 3. 2019 Annual Survey Form DEP 8059 (6/10)
- 4. C-746-U Landfill Phases R1
- 5. Drawing C7DC746UA001 R9
- 6. Drawing C5E-59701-K10, RB

e-copy w/enclosures: april.ladd@pppo.gov, PPPO april.webb@ky.gov, KDEP christopher.jung@ky.gov, KDEP christopher.travis@ky.gov, KDEP dave.dollins@pppo.gov, PPPO dave.hutchison@pad.pppo.gov, FRNP dennis.greene@pad.pppo.gov, FRNP frnpcorrespondence@pad.pppo.gov, FRNP gary.hines@pad.pppo.gov, FRNP james.miller@pad.pppo.gov, FRNP jennifer.blewett@pad.pppo.gov, FRNP jennifer.watson@pad.pppo.gov, FRNP jennifer.woodard@pppo.gov, PPPO kelly.layne@pad.pppo.gov, FRNP kim.knerr@pppo.gov, PPPO leo.williamson@ky.gov, KDEP lisa.crabtree@pad.pppo.gov, FRNP myrna.redfield@pad.pppo.gov, FRNP pad.rmc@pad.pppo.gov, SSI tabitha.owens@ky.gov, KDEP tammy.smith@pad.pppo.gov, FRNP



CERTIFICATION

Document Identification:

2019 Annual Survey for the Paducah Gaseous Diffusion Plant C-746-U Contained Landfill, Permit Number 073-00045, Agency Interest No. 3059, dated May 2019

I certify under penalty of law that this document and all attachments were prepared 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 the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations.

Four Rivers Nuclear Partnership, LLC

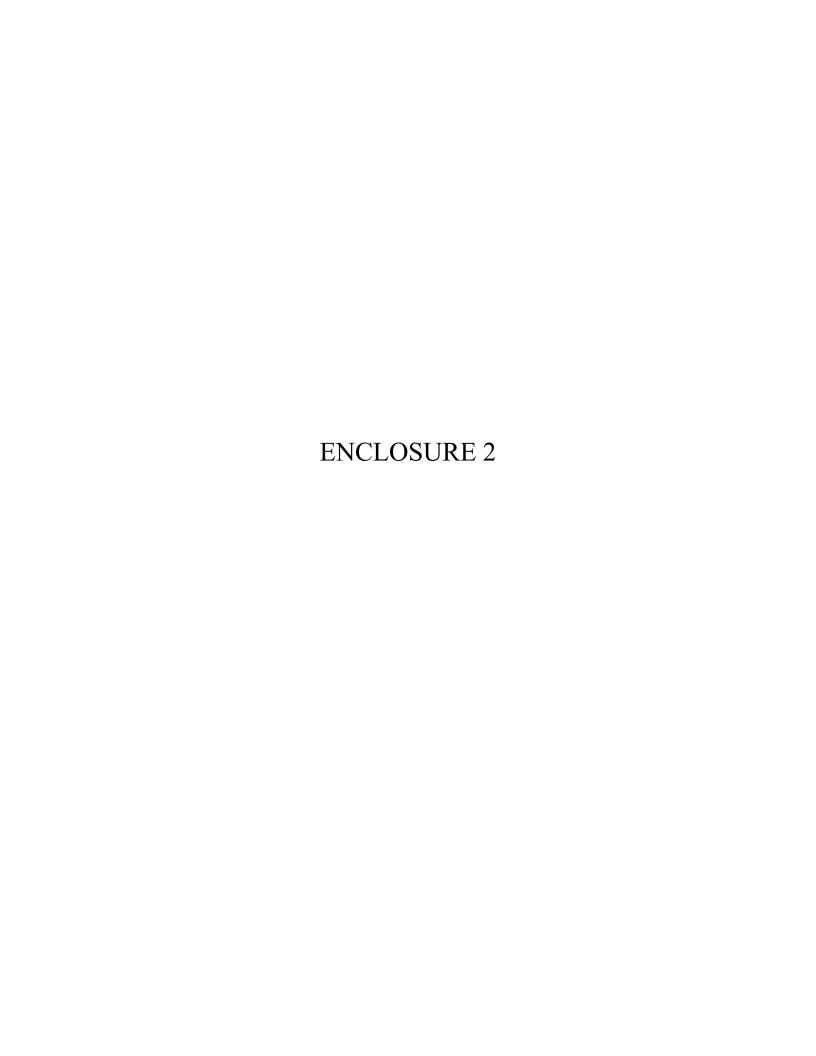
Myrna E. Redfield, Deputy Program Manager Four Rivers Nuclear Partnership, LLC

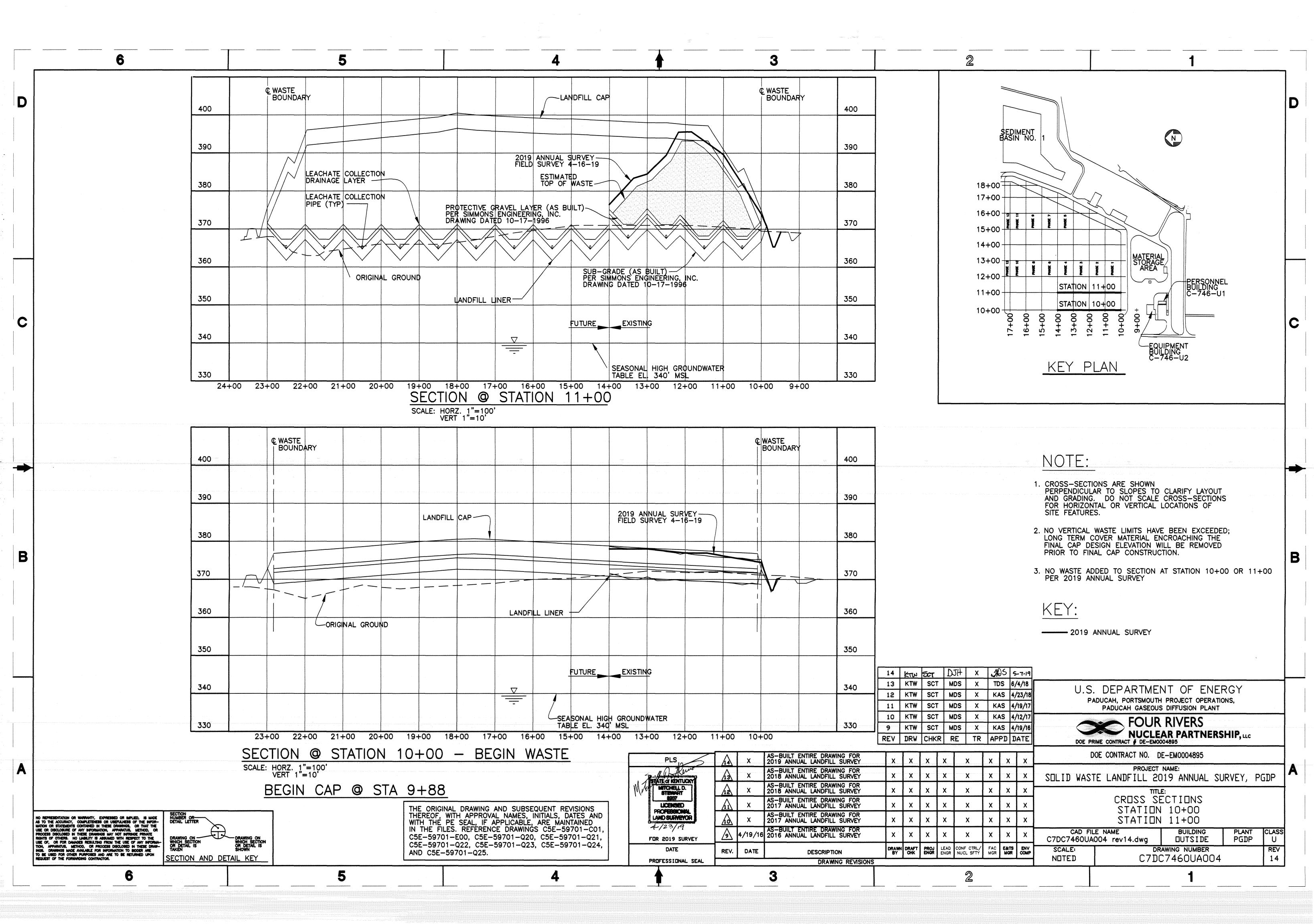
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations.

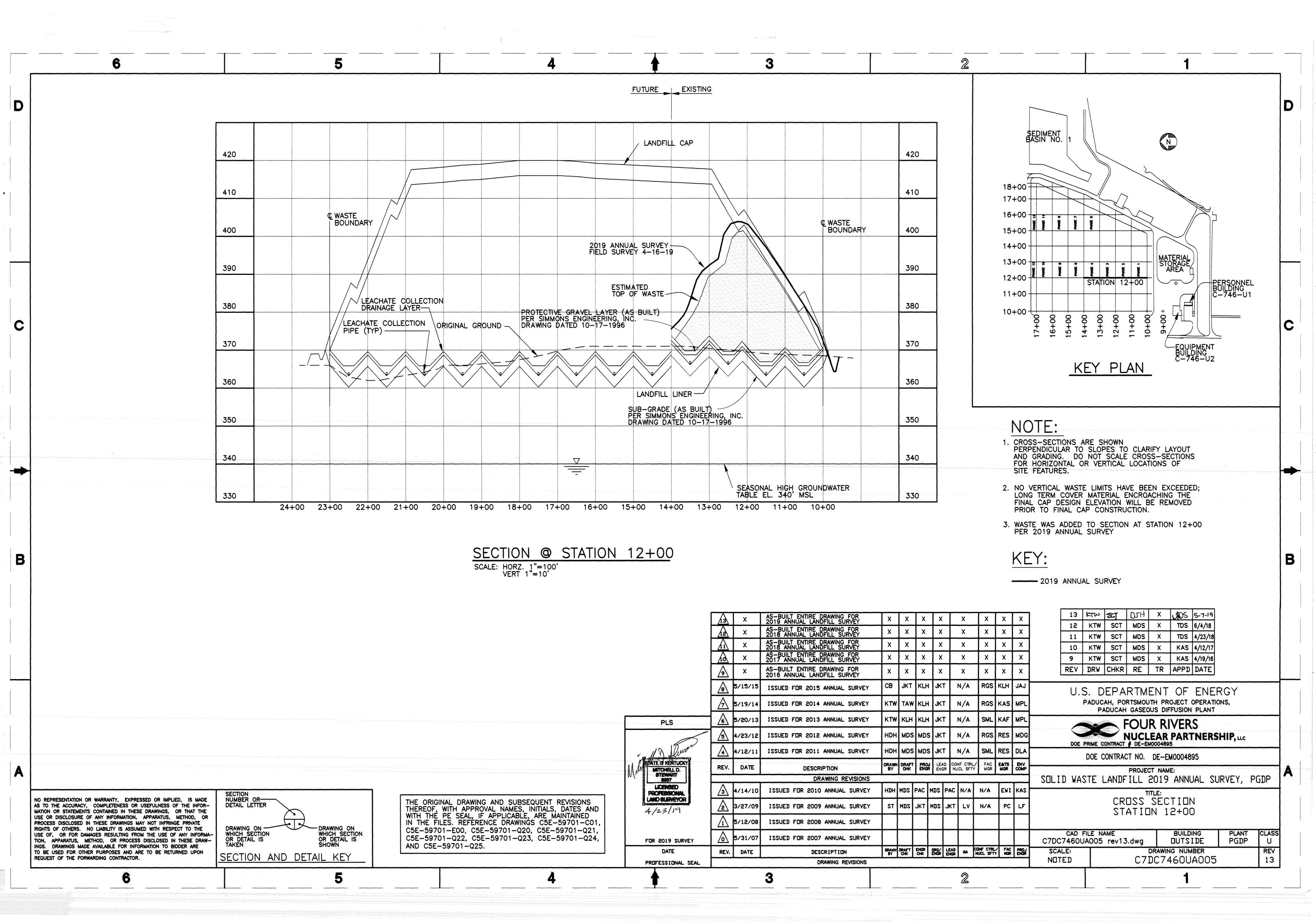
U.S. Department of Energy

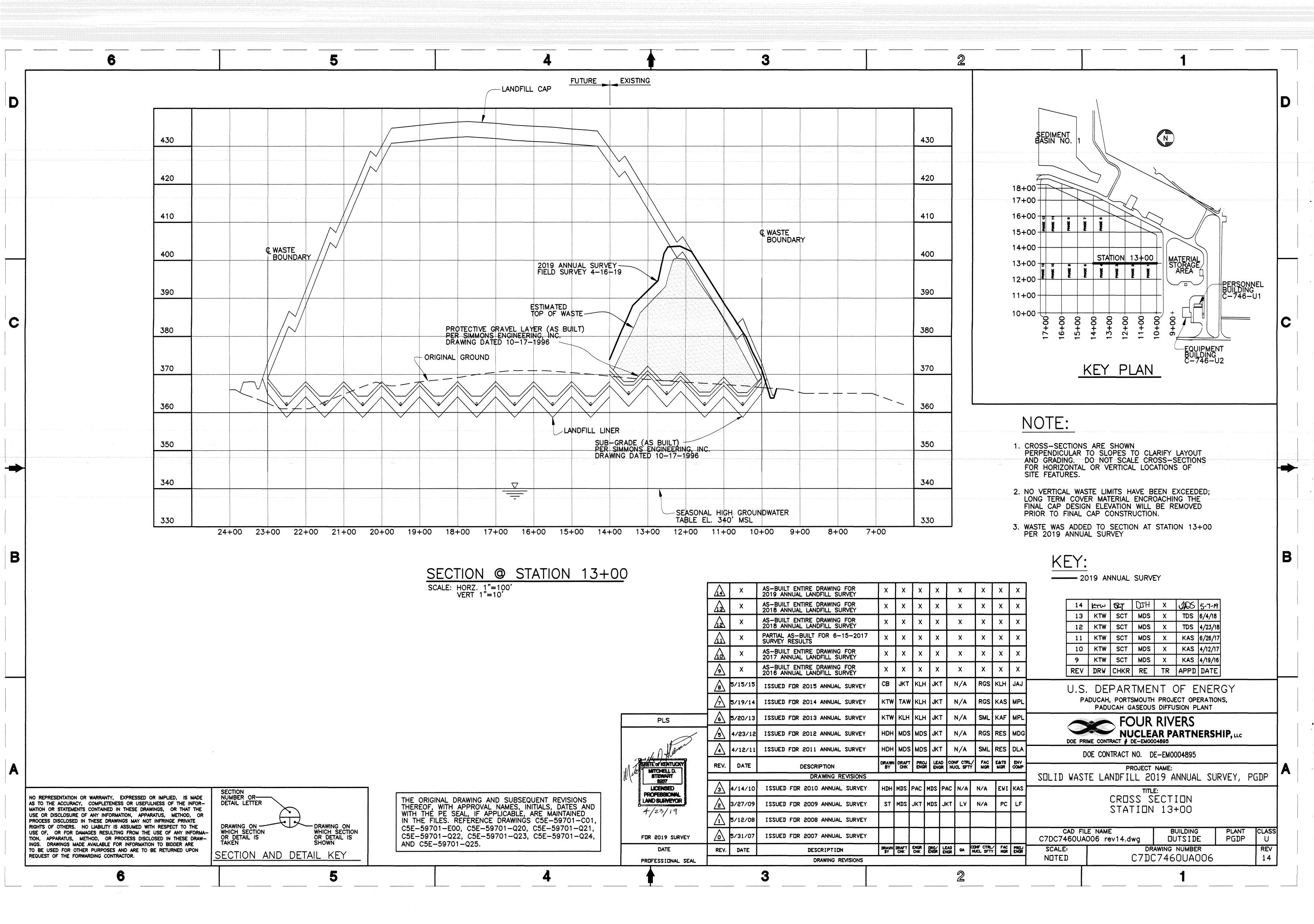
ennifer Woodard, Paducah Site Lead ortsmouth/Paducah Project Office

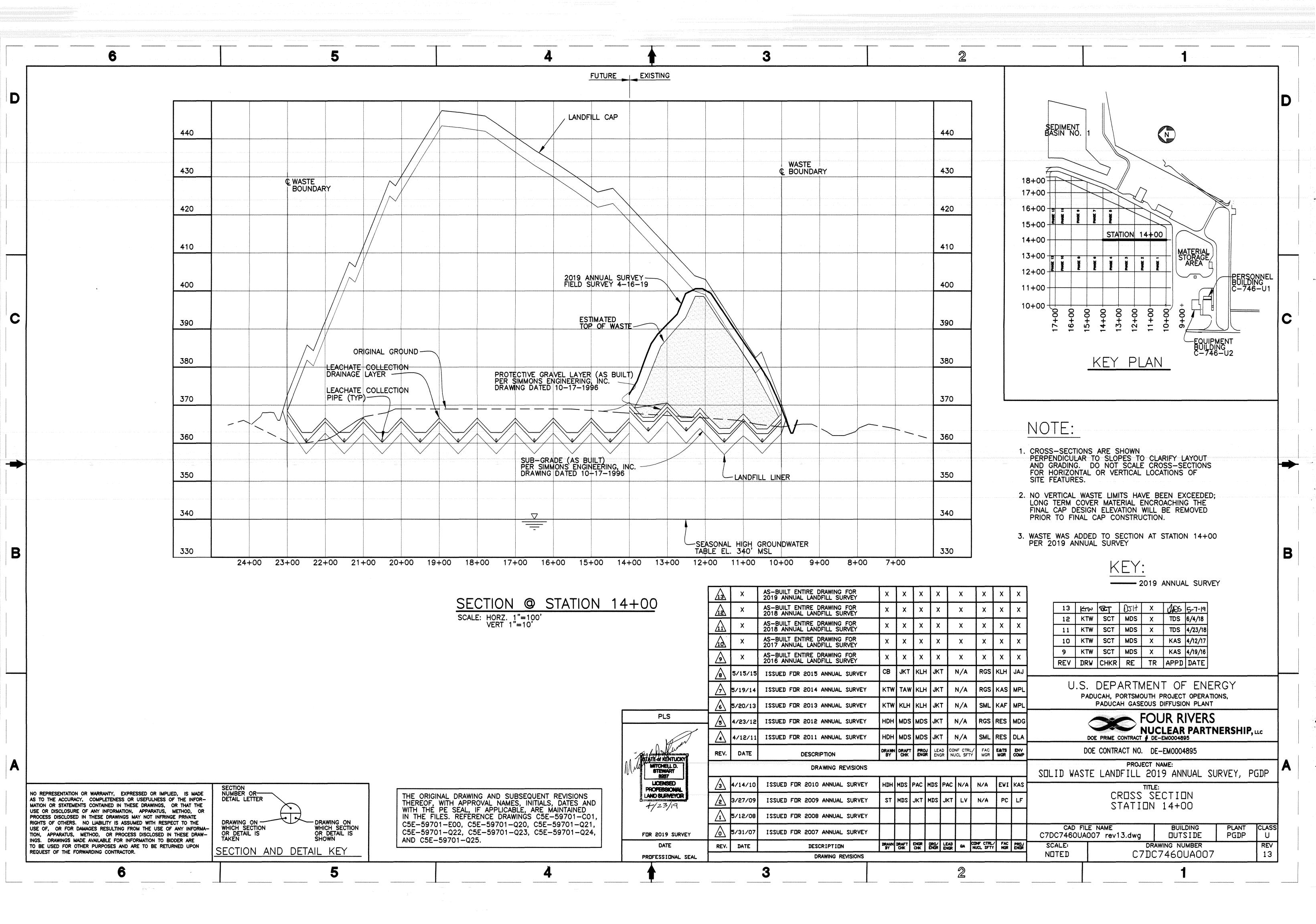
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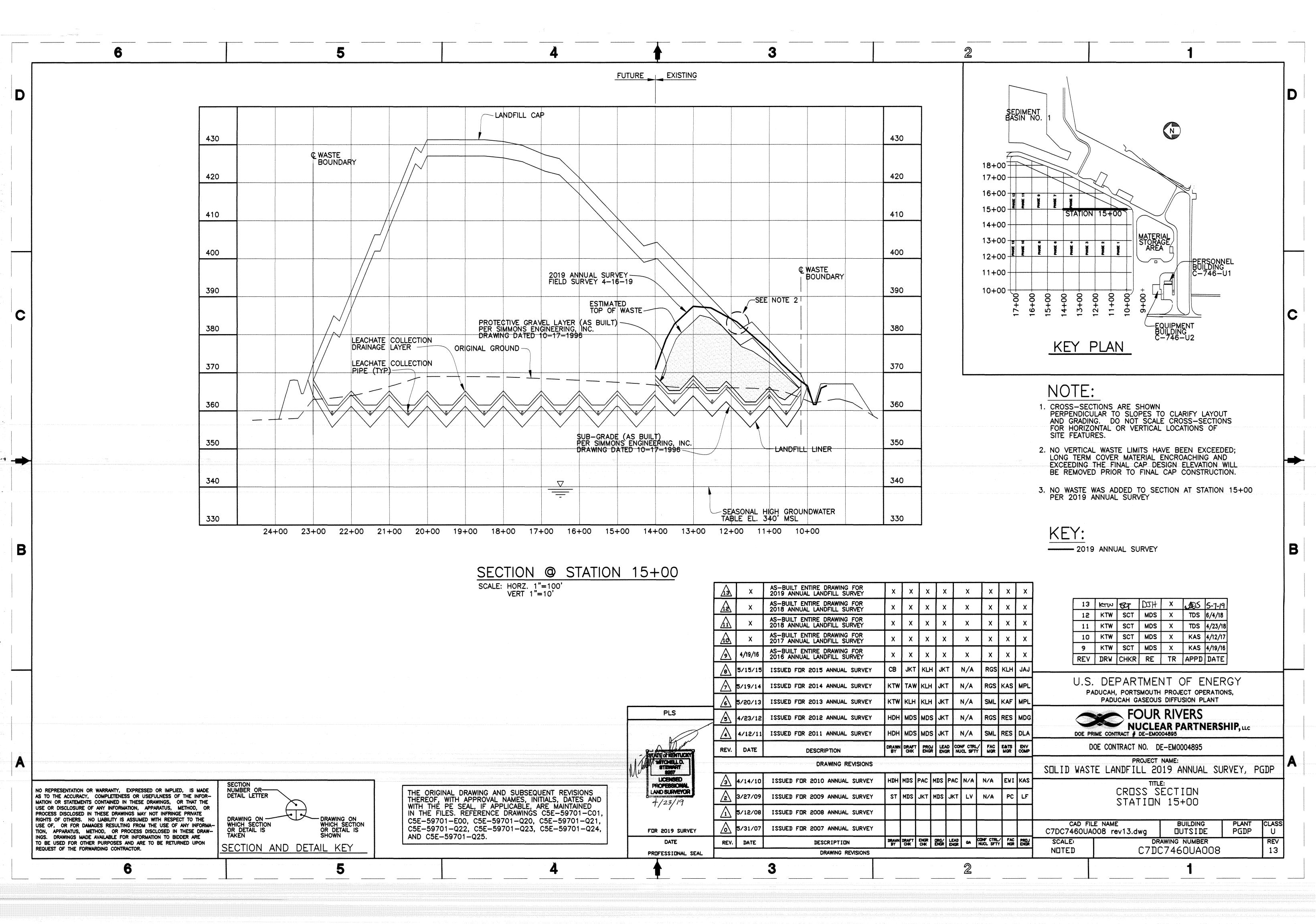


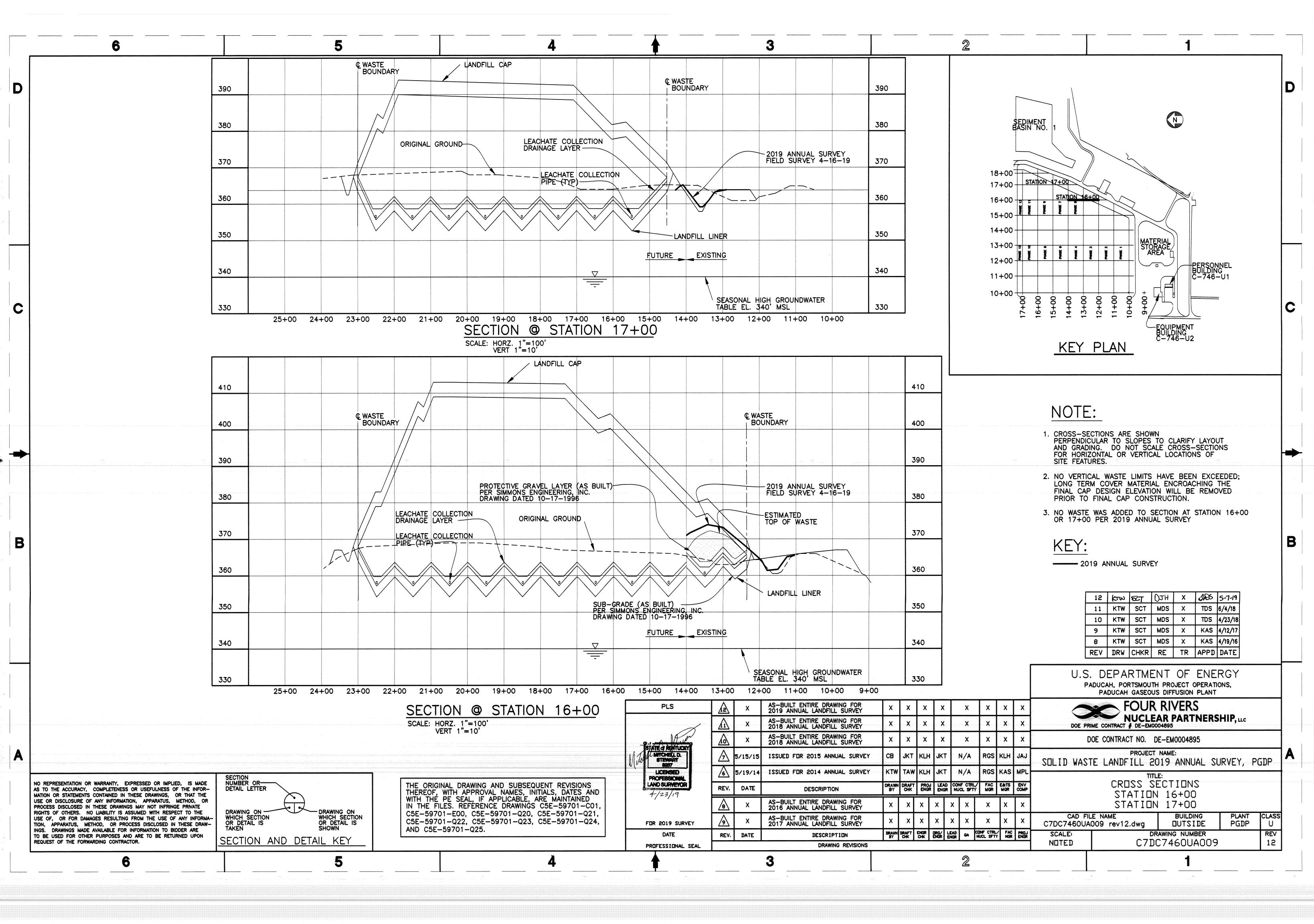


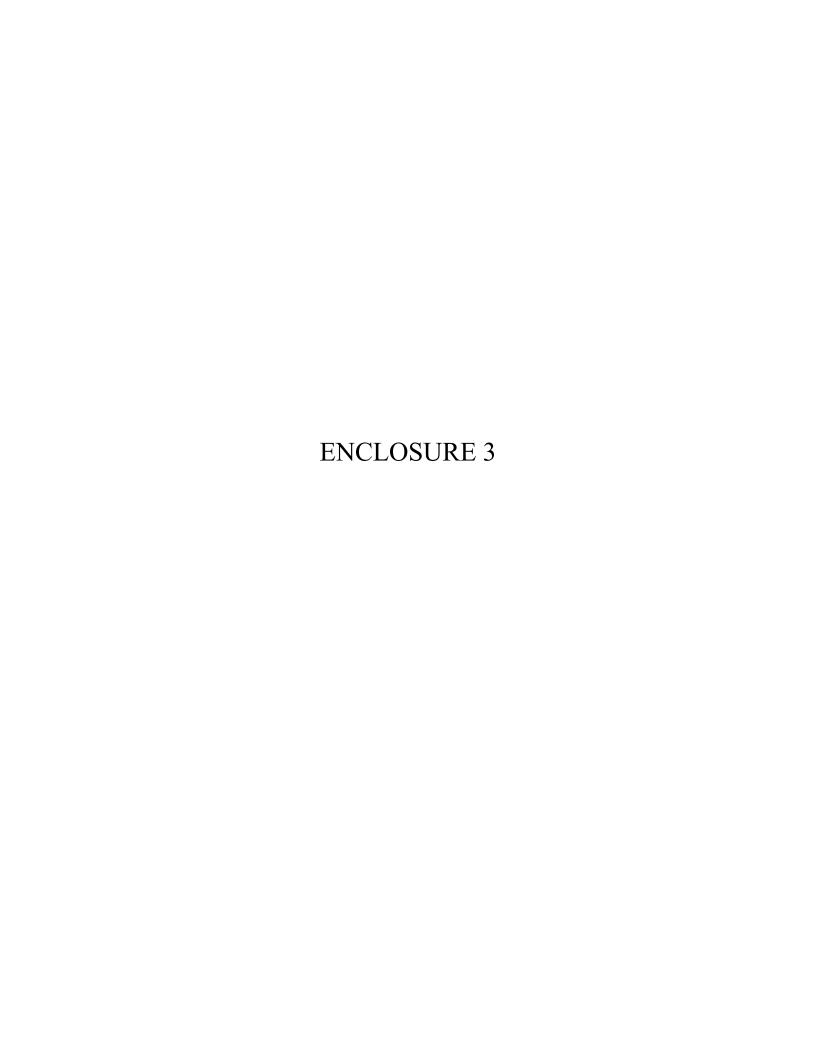














ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
200 FAIR OAKS LANE, SECOND FLOOR
FRANKFORT, KY 40601
TELEPHONE NUMBER (502) 564-6716

Solid Waste Landfill Annual Survey Form DEP 8059 (6/10)

(To be submitted in conjunction with the annual survey report required by 401 KAR 47:190, Section 8)

Statutes and regulations may be viewed online at the following website address: http://www.lrc.ky.gov/search.htm

Solid waste application forms are available at the following website address: http://www.waste.ky.gov

	DWM OFFICAL USE ONLY	
AI#:	Application #:	
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GENERAL INSTRUCTIONS

- 1. APPLICABILITY The owner or operator of a contained, construction and demolition or residual landfill shall complete, and submit the following reporting forms as listed in 401 KAR 47:190, Section 8(4).
- 2. ASSISTANCE Questions regarding this form may be directed in writing to the Division of Waste Management (DWM), Solid Waste Branch at the address listed above, or by calling (502) 564-6716.
- 3. SUBMISSION Please type or print legibly in permanent ink. Submit the original and one copy of the completed form to the DWM at the address listed above. If an item is not applicable to your facility write "N/A" in the space provided.
- 4. LAWS AND REGULATIONS Applicants are expected to understand and comply with all laws and regulations applicable to the facility.

To assist you in the submittal of a complete and accurate report, the DWM has identified the most common errors found during the review process. These errors are listed below for your convenience.

- 1. Failure to complete the report. Required maps, attachments, and supplemental data must be submitted with this report.
- 2. Failure to properly sign the report and drawings. An individual with signature authority for the applicant as defined by KRS 224.01-010(44) and 401 KAR 47:160 must sign the appropriate signature section of the form. Maps and drawings must be signed, dated and sealed by a professional engineer or professional land surveyor.
- 3. Failure to provide appropriate attachments, maps, drawings and narratives of sufficient detail.

NOTE: Solid Waste Regulations require the landfill owner or operator to notify the cabinet no less than fifteen (15) calendar days prior to the date the survey is to be conducted. Additionally, the annual survey is required to be made between January 1 and May 1 each year. The results of the survey must be submitted to the cabinet within sixty (60) days of the date of the survey unless aerial photography is used. If aerial photography is used, the results must be submitted within ninety (90) days of the aerial photography. Refer to 401 KAR 47:190, Section 8(2) for additional requirements for annual surveys.

Warning! Due to the potential for identity theft, do not provide social security numbers to the DWM as part of this application. If this information is required during the normal course of review of the application, a cabinet representative will contact the appropriate individual to acquire this information in a secure format.



Permittee Information

- 1. Agency Interest #: 3059
- 2. Permit #: 073 00045
- 3. Permittee Name: Owner: U.S. Department of Energy (This refers to the corporation, LLC, business, person, government agency, etc., that owns or operates the facility.)
- 4. Permittee Mailing Address: Four Rivers Nuclear Partnership, LLC; 5511 Hobbs Road
- 5. City: Kevil

- **6.** State: KY **7.** Zip Code: 42053
- 8. Contact Person: Gary Hines
- 9. Title: Landfill Manager
- 10. E-mail Address: gary.hines@pad.pppo.gov
- **11.** Phone #: 270-441-6211 ext. N/A
- **12.** Cell #: 270-816-4164

13. Fax #: 270-441-6303

Preparer Information

- 14. Firm Name: Soldier Creek Engineering and Technical Services, LLC
- 15. Mailing Address: 459 Soldier Creek Road
- **16.** City: Kirksey

- 17. State: KY 18. Zip Code: 42054
- 19. Individual Name: Keith Thorn
- 20. E-mail Address: keith.thorn@soldiercreekengineering.com
- **21.** Phone #: 270-462-4600 ext. N/A
- **22.** Cell #: 270-556-5501

- 23. Fax #: N/A -
- 24. Name of licensed person performing survey: Mitchell Stewart, P.L.S. Number 3237
 - a. Firm KY P. E. License No.: N/A

Expires: -

b. Individual - KY P. E. License No.: N/A

Expires: -

c. Firm - KY L. S. License No.: 942

Expires: 12-31-2019

d. Individual - KY L. S. License No.: 3237

Expires: 6-30-2020



Facility Information

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25. Date of current over-flight / survey: 4 - 16 - 2019
26. Date of last over-flight / survey: 3 - 22 - 2018
27. Number of days between over-flights / surveys: 390
28. Total permitted landfill airspace in cubic yards: 1,179,420 C.Y.
29. <u>FILLED</u> airspace as of this date in cubic yards: 133,594 C.Y.
30. Subtract Item 28 from Item 29 to obtain remaining airspace in cubic yards: 1,045,826 C.Y.
31. Provide the necessary Cross-sections, maps or drawings
32. Have any waste limits been exceeded horizontally or vertically? Yes No
33. If the answer to Item 32 is "yes", provide a summary description of the area(s) where the waste boundary or limits have been exceeded. Include, in this summary, a description of the specific locations or areas exceeded, along with volume calculations specifying the amount, in cubic yards, filled outside the permitted airspace. Clearly delineate the areas on the cross sections that must accompany this submittal.
N/A

34. Provide the quantity of waste (in tons) disposed per day by dividing the number of days since the last survey by the waste (in tons) received for the number of days to the date of this annual survey (based on 365 calendar days per year).

4.05 Tons Per Day

Example: ABC Landfill conducts its current annual survey on April 1. The last survey was done on March 15 of the previous year.

Total days between March 15 of 1998 and April 1 of 1999: 365+16=381 days

During the time period from March 15 of the previous year to April 1 of the current year, ABC Landfill disposed of 381,000 tons of all wastes.

Divide 381,000 tons by 381 days.

Thus the ABC Landfill disposed of an average of 1,000 tons of waste per day.



35. Provide the rate of compaction of waste by subtracting the volume of airspace consumed since the last annual survey and dividing the resulting figure by the pounds of waste received since the date of the last survey.

827 lbs/ C.Y.

Example: In the previous example, if 381,000 tons of waste was received between March 15, 1998 and April 1, 1999. During that time period, 481,234 CY were filled.

$$(\# TONS) (2,000 lbs) = (381,000)(2,000) = 1,583.43 lbs/C.Y.$$

 $C.Y.$ $481,234$

The landfill achieved a compaction rate of 1,583 lbs per cubic yards.

Certification

36. Pursuant to 401 KAR 47:160, Section 6, a person with signature authority such as a sole proprietor, owner, partner, corporate officer, plant manager, LLC member, mayor, county judge executive or other authorized official must sign this certification statement.

NOTE: Consultants may not sign the following certification statement.

"I certify under penalty of law that this document and all attachments were prepared 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 the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations."

Title of Person Signing: Depty Roger Marcy Co Date: 5 -28-19
Signature per 401 KAR 47:160: Mys Rolfeld
Subscribed and sworn to before me this 28th day of May, Year 20 19
Notary Public Signature: Sala Bown # 609500
State of VY Gounty of STATE ATLANGE My commission expires: 10.77-27

Name of Person Signing (type or print): Where E Rackield



