
To:	Geoff Strack, P.E. Waste Connections	From:	Brad Sullivan, P.E., Stantec
File:	227704387	Date:	January 7, 2024

Reference: SKB Rosemount Industrial Waste Facility 2023 Annual CCR Inspection Report

Purpose

This memorandum fulfills the requirements of 40 CFR § 257.84 Inspection Requirements for coal combustion residue (CCR) Surface Landfills, Part b, regarding an annual inspection by a qualified professional engineer.

Background and Applicability

SKB Environmental, Inc. owns and operates the SKB Rosemount Industrial Waste Facility (the Landfill or Facility herein), an industrial waste disposal facility operating under MPCA Solid Waste Permit SW-383, originally issued in January of 1992.

The site is located on a 236-acre parcel in Sections 19, 20 and 25 of Township 115 North, Range 18 West, in the City of Rosemount, Minnesota, which is in Dakota County. The site is located between Minnesota State Highway 55 (aka Courthouse Boulevard) and Dakota County Road 38, and is accessed via 13425 Courthouse Boulevard, Rosemount, MN 55068.

All industrial waste cells are permitted to accept CCR and operating records indicate that CCR Material is contained in Cells 1, 2, 3, and 6. See Figure 1 for a facility site plan.

CCR Landfill Inspection (40 CFR § 257.84)

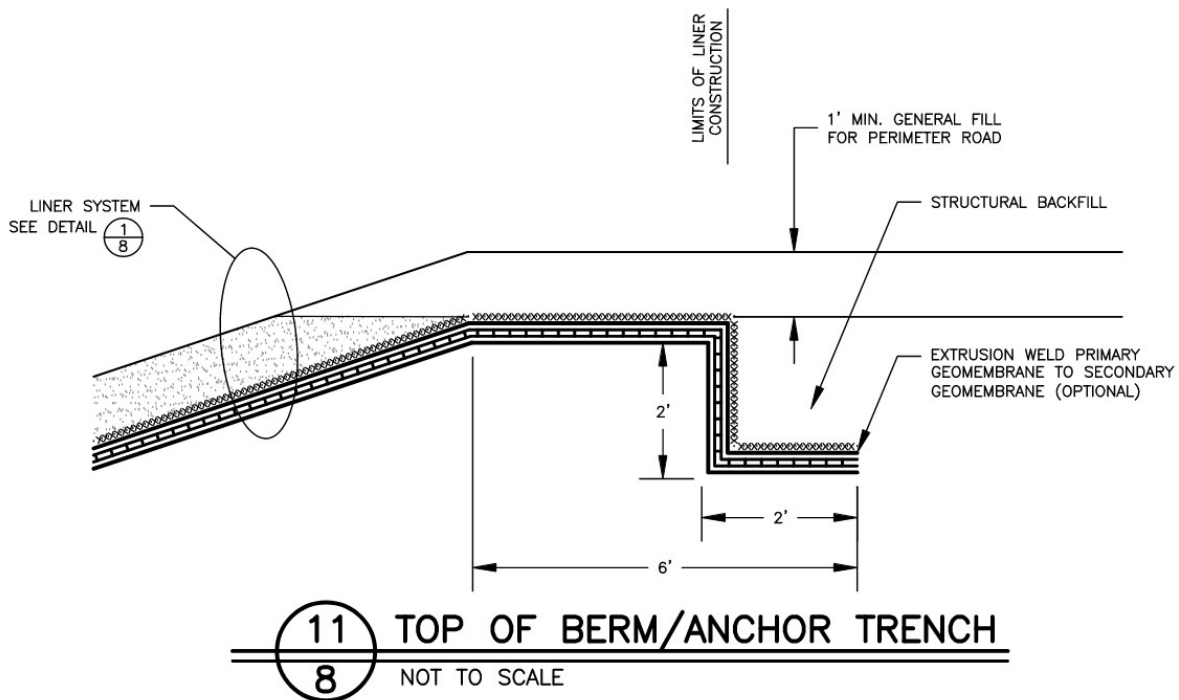
On October 27, 2023, Brad Sullivan, PE, of Stantec conducted the on-site inspection of the CCR Landfill. As part of the inspection, the following operating and inspection records were reviewed:

- Weekly visual CCR inspections performed by landfill operators for this annual reporting period;
- Previous annual inspections performed by a licensed professional engineer;
- CCR unit design and construction information required by §257.73(c)(1) and §257.74(c)(1); and
- Previous periodic structural stability assessments required under § 257.73(d).

Landfill Cell Design

In general, most of the facility's landfill cell embankments were constructed using granular borrow material, which consisted of silty clay and clayey sand type soils. The fill was placed and compacted to 95% of Standard Proctor Dry Density in lift thicknesses ranging from 8 inches to 12 inches. The final subgrade surface was proof rolled prior to geosynthetics installation. The landfill lining systems varies from cell to cell, but all meet the requirements of CFR 257.70. A typical perimeter section from the 2021 Cell 6 Construction Drawings prepared by Tetra-Tech dated February 2021 is shown below.

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During the inspection, no signs of landfill cell embankment distress or waste slope instability were observed and no other structural or containment CCR landfill issues were noted. The landfill embankments and interim covered slopes were generally in good condition with a well-established vegetation cover and no signs of significant erosion.

Photos of the landfill embankments and waste slopes were taken during the inspection. Figure 2 presents the photo locations, and Attachment 1 contains a photo log from the inspections.

CCR Landfill Inspection Report

40 CFR § 257.84, Subpart b.2 requires the following topics in italics be addressed within this report. The requirements are shown in italics with the response immediately afterwards for each item.

- (i) *Any changes in geometry of the impounding structure since the previous annual inspection;*

Approximately 13.6 acres of Cell 6 were constructed during the summer of 2023. At the time of the inspection, the newly constructed Cell 6 area was complete, but awaiting operational approval and inactive. The portions of Cell 6 that were constructed in 2021 and 2022 were actively receiving waste for disposal, including CCR throughout 2023.

There were no other apparent changes to the embankment geometry of any other landfill cell when compared to the permit drawings or the past inspection reports other than the 2023 construction as noted above.

The annual aerial photogrammetry survey was performed on October 18, 2023, which the estimated in-place volume of total waste (including all accepted wastes) is based on. A comparison of the 2023 and 2022 aerial surveys confirm that the embankment and slope topography is substantially unchanged. The 2023 aerial survey is shown on Figure 1.

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(ii) *The approximate volume of CCR contained in the unit at the time of the inspection;*

The approximate volume of CCR material contained in the landfill at the time of the inspection is 728,265 cubic yards.

(iii) *Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures; and*

None of the following were observed that could indicate structural weakness;

- Signs of slumping or rotational movement;
- Lateral or vertical distortion of the embankment crest;
- Seepage on the outboard slope; or
- Borrowing or damage due to vectors.

(iv) *Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.*

There were no changes noted that may could potentially affect the stability or operation of the impoundment. Observations were consistent with those noted in that report.

Notification Requirements

The SKB Rosemount Industrial Waste Landfill is in compliance with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

Conclusions and Recommendations

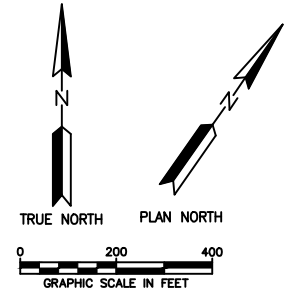
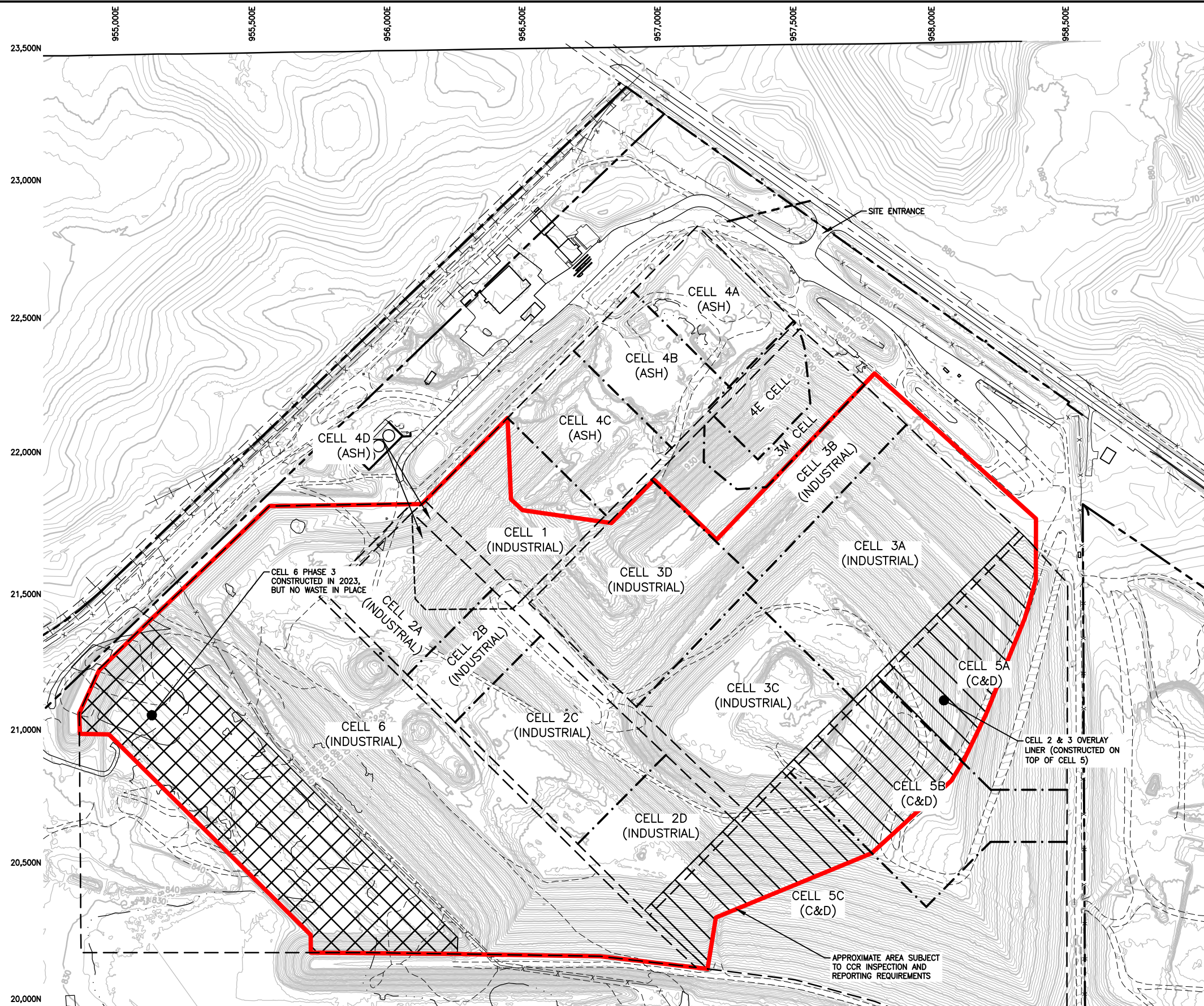
The SKB Rosemount Landfill facility has been constructed and operated in accordance with the facility permit and the CCR regulations. No embankment or waste slope stability issues were observed during the visual inspection.

40 CFR § 257.83, Subpart b.5 and 40 CFR § 257.84, Subpart b.5 each require that if a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken. There were no deficiencies or releases related to CCR operations identified during the inspection.

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly registered Professional Engineer under the laws of the State of Minnesota.



Brad Sullivan, P.E. # 56502
January 7, 2024



LEGEND

	CONSTRUCTED BUT NOT IN OPERATION
	CELL 2 & 3 OVERLAY LINER

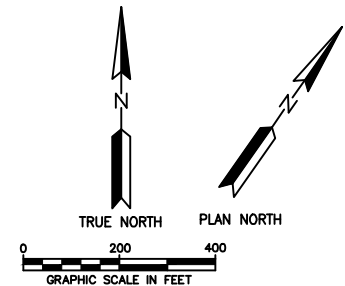
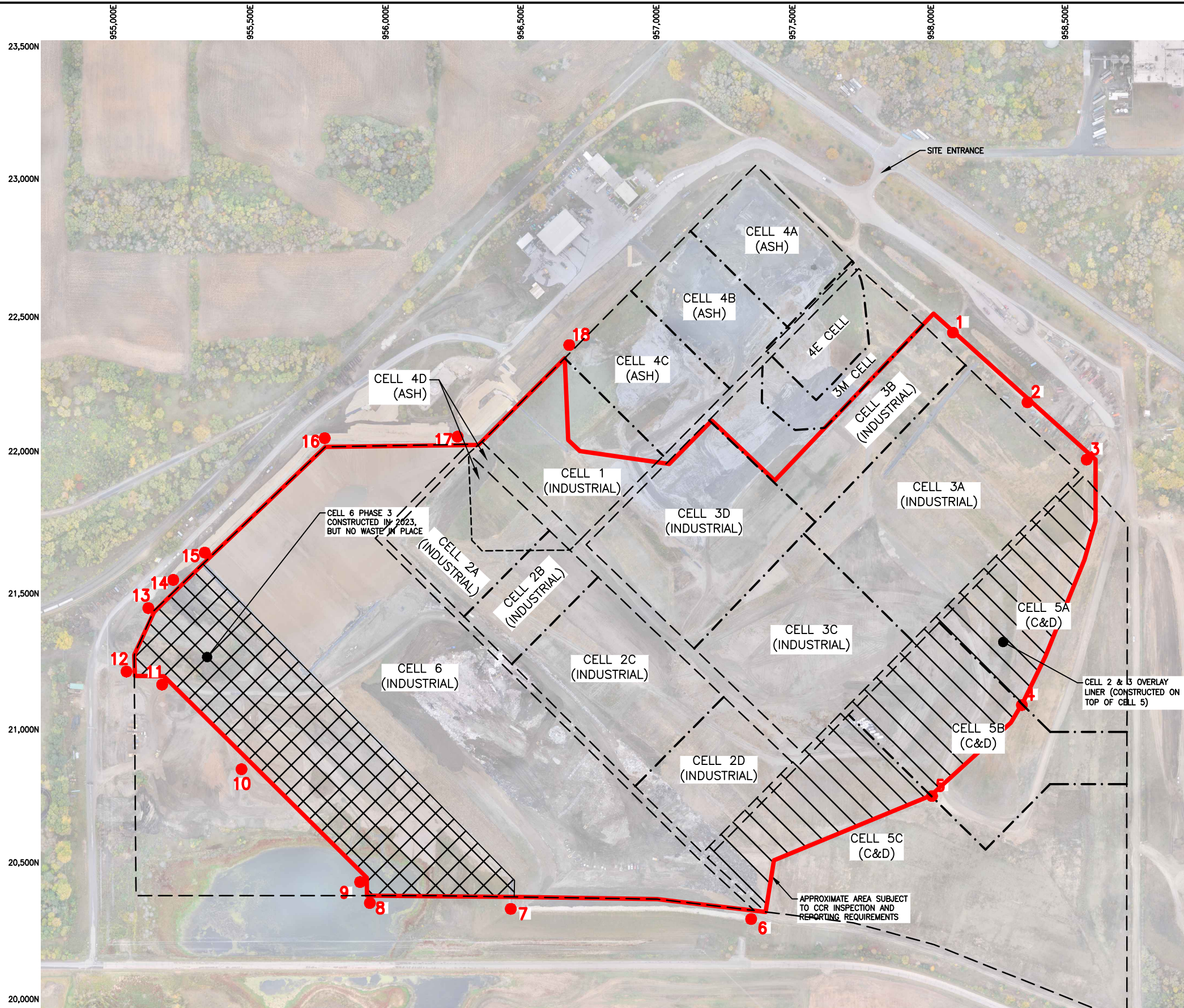
NOTE:
BASE MAPPING HAS BEEN UPDATED BY AERIAL SURVEY PROVIDED BY FIRMATEK MAPPING COMPLETED ON OCTOBER 18, 2023.

SEAL	SUB CONSULTANT	PRIME CONSULTANT
#	DESCRIPTION	XXX XXX XX/XX/XX
REV	REVISION DESCRIPTION	DWN APP REV DATE



PROJECT TITLE	2023 CCR INSPECTION REPORT
PROJECT NO.	227704387
SKM	TJS
BWS	SCALE AS NOTED

SHEET TITLE	SITE MAP		
DWN BY	CHK'D	APP'D	DWG DATE
SKM	TJS	BWS	JAN. 2024
PROJECT NO.	SHEET NO.	REV NO.	
227704387	FIGURE 1	0	



- LEGEND**
- PHOTO LOCATIONS
 - CONSTRUCTED BUT NOT IN OPERATION
 - CELL 2 & 3 OVERLAY LINER

NOTE:
 BASE MAPPING HAS BEEN UPDATED BY AERIAL SURVEY PROVIDED BY FIRMA TEK MAPPING COMPLETED ON OCTOBER 18, 2023.

REV	REVISION DESCRIPTION	DWN	APP	REV DATE

SEAL

SUB CONSULTANT

PRIME CONSULTANT

PROJECT TITLE
2023 CCR INSPECTION REPORT

SKB ROSEMOUNT LANDFILL
 ROSEMOUNT, MINNESOTA

SHEET TITLE			
PHOTO LOCATIONS			
DWN BY	CHK'D	APP'D	DWG DATE
SKM	TJS	BWS	JAN. 2024
PROJECT NO.		SCALE	
227704387		AS NOTED	
SHEET NO.		REV NO.	
FIGURE 2		0	

2023 Rosemount Landfill CCR Inspection



Location 1 – Looking Southeast, Cell 3A & 3B Waste Slope & Anchor Trench



Location 1 – Looking Northwest, Cell 3 Berm

2023 Rosemount Landfill CCR Inspection



Location 2 – Looking Northwest, Cell 3 Berm & Stormwater Pond



Location 2 – Looking Northwest, Cell 3 Anchor Trench and Waste Slope

2023 Rosemount Landfill CCR Inspection



Location 2 – Looking Southeast, Cell 3A Anchor Trench and Northeastern Waste Slope



Location 3 – Looking Northwest, Cell 3A Anchor Trench and Northeastern Waste Slope

2023 Rosemount Landfill CCR Inspection



Location 3 – Looking Southwest, Cell 3 East Corner at toe of Interior Access Road



Location 4 – Looking Northeast, Cell 3 Liner Limit

2023 Rosemount Landfill CCR Inspection



Location 4 – Looking Southwest, Cell 3 Liner Limit



Location 5 – Looking Southwest, Phase 3 Liner Limit



Location 5 – Looking Northwest, at Phase 3 Liner Limit



Location 5 – Looking Northeast, Phase 3 Liner Limit

2023 Rosemount Landfill CCR Inspection



Location 6 – Cell 6 southeast corner, toe of southern waste slope, looking west



Location 6 – Cell 6, southeast corner, outer berm, looking west



Location 6 – Cell 6, southeast corner, looking north at edge of overlay liner



Location 7 – Cell 6, toe of southern waste slope, looking east

2023 Rosemount Landfill CCR Inspection



Location 7 – Cell 6, southern outer berm, looking east



Location 7 – Cell 6, interior of southern landfill berm, looking west

2023 Rosemount Landfill CCR Inspection



Location 8 – Cell 6, interior of southern landfill berm, looking west



Location 8 – Cell 6, exterior of southern landfill berm, looking west

2023 Rosemount Landfill CCR Inspection



Location 8 – Cell 6, looking north along temporary phase construction berm



Location 9 – Cell 6, looking northwest along temporary phase construction berm

2023 Rosemount Landfill CCR Inspection



Location 9 – Cell 6, looking south along temporary phase construction berm



Location 10 – Cell 6, looking southeast along temporary phase construction berm

2023 Rosemount Landfill CCR Inspection



Location 10 – Cell 6, looking northwest along temporary phase construction berm



Location 11 – Cell 6, looking southeast along temporary phase construction berm

2023 Rosemount Landfill CCR Inspection



Location 11 – Cell 6, looking west along temporary phase construction berm



Location 12 – Cell 6, looking east along temporary phase construction berm

2023 Rosemount Landfill CCR Inspection



Location 12 – Cell 6, interior top of berm, looking north



Location 13 – Cell 6, exterior top of berm, looking north

2023 Rosemount Landfill CCR Inspection



Location 13 – Cell 6, interior top of berm, looking north



Location 13 – Cell 6, interior top of berm, looking south

2023 Rosemount Landfill CCR Inspection



Location 14 – Cell 6, exterior top of berm, looking south



Location 14 – Cell 6, exterior top of berm, looking north

2023 Rosemount Landfill CCR Inspection



Location 14 – Cell 6, interior top of berm, looking north



Location 14 – Cell 6, interior top of berm, looking south

2023 Rosemount Landfill CCR Inspection



Location 15 – Cell 6 northwestern outer berm, looking northeast



Location 15 – Cell 6 northwestern toe of waste slope, looking northeast

2023 Rosemount Landfill CCR Inspection



Location 15 – Cell 6 midpoint of northwestern outer berm, looking southwest



Location 16 – Cell 6 northwestern top of berm, looking southwest

2023 Rosemount Landfill CCR Inspection



Location 16 – Cell 6 northern top of berm, looking northeast



Location 16 – Cell 6 northern outer berm, looking northeast

2023 Rosemount Landfill CCR Inspection



Location 17 – Cell 6 northern top of berm, looking southwest



Location 17 – Cell 6 northern outer berm, looking southwest

2023 Rosemount Landfill CCR Inspection



Location 18 – Cell 1 Toe of Waste Slope, looking southwest



Location 18 – Cell 1 edge of cap, looking south