



Post-Closure Inspection Report for the Tonopah Test Range and Nevada Test and Training Range, Nevada

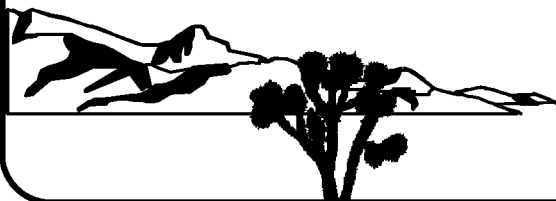
For Calendar Year 2019

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**POST-CLOSURE INSPECTION REPORT
FOR THE TONOPAH TEST RANGE AND NEVADA TEST
AND TRAINING RANGE, NEVADA**

FOR CALENDAR YEAR 2019

U.S. Department of Energy, Environmental Management Nevada Program
Las Vegas, Nevada

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FOR THE TONOPAH TEST RANGE AND NEVADA TEST AND TRAINING RANGE,
NEVADA**

FOR CALENDAR YEAR 2019

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List of Acronyms and Abbreviations

BMP	Best management practice
CADD	Corrective action decision document
CAS	Corrective action site
CAU	Corrective action unit
CR	Closure report
DOE	U.S. Department of Energy
MFR	Memorandum for Record
NDEP	Nevada Division of Environmental Protection
NNSA/NFO	U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office
NNSA/NSO	U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office
NTTR	Nevada Test and Training Range
OUO	Official Use Only
ROTC	Record of Technical Change
TTR	Tonopah Test Range
UR	Use restriction
USAF	U.S. Air Force
UXO	Unexploded ordnance

Executive Summary

This report provides the results of the annual post-closure use restriction (UR) inspections at the closed corrective action sites (CASs) located on the Tonopah Test Range (TTR) and Nevada Test and Training Range (NTTR) that are accessed through the TTR/NTTR main gate. This report covers post-closure UR inspections for calendar year 2019, and includes visual inspections and repair activities completed at the following corrective action units (CAUs):

- CAU 400, Bomblet Pit and Five Points Landfill (TTR)
- CAU 407, Roller Coaster RadSafe Area (TTR)
- CAU 424, Area 3 Landfill Complexes (TTR)
- CAU 453, Area 9 UXO Landfill (TTR)
- CAU 487, Thunderwell Site (TTR)

Site figures are included in [Appendix A](#). The Post-Closure Inspection Plans and subsequent correspondence modifying the requirements for each UR are included in [Appendix B](#).

The Post-Closure Inspection Checklists are included in [Appendix C](#). Field Notes are included in [Appendix D](#). [Appendix E](#), Inspection Photographs, does not include photographs because none were taken during the 2019 post-closure inspections. [Appendix F](#), Post-Closure Vegetation Monitoring Report, does not include any data because vegetation monitoring was not conducted at any CAU in 2019.

Visual inspections were conducted according to the post-closure plans in the approved closure reports and subsequent correspondence with the Nevada Division of Environmental Protection. The annual post-closure inspections for CAUs 407, 424, 453, and 487, as well as the best management practice inspection at CAU 400, were conducted on June 5, 2019. No maintenance or repair issues were noted at CAUs 453 or 487, or at CASs associated with CAU 424 (except CASs 03-08-002-A304 and 03-08-002-A308). No vegetation deficiencies were noted at CAUs 400 or 407. Maintenance items and subsequent repairs include the following:

- **CAU 407**, CAS TA-23-001-TARC (Roller Coaster RadSafe Area): A section of the south perimeter fence at the southeast corner had fallen. The fence was repaired on June 25, 2019.
- **CAU 424**, CAS 03-08-002-A304 (Landfill Cell A3-4): Nevada Division of Environmental Protection representatives requested a survey marker and UR sign be placed on top of the newly installed monument. A marker was installed in 2019, and a UR sign is anticipated to be installed in 2020.
- **CAU 424**, CAS 03-08-002-A308 (Landfill Cell A3-8): The southeast monument needed additional lava rock. The lava rock was added on June 25, 2019.

1.0 Introduction

1.1 Scope and Objectives

This report includes visual inspection results, maintenance and repair activities, and recommendations for calendar year 2019 for closed corrective action sites (CASs) on the Tonopah Test Range (TTR) and Nevada Test and Training Range (NTTR) that are accessed through the TTR/NTTR main gate. The TTR is part of and is located on the NTTR. The locations of the CASs are shown in [Figure A-1](#) of [Appendix A](#).

The visual inspection of use restrictions (URs) associated with the following corrective action units (CAUs) and CASs are included in this report:

- **CAU 400: Bomblet Pit and Five Points Landfill (TTR)**
 - CAS TA-19-001-05PT: Ordnance Disposal Pit
- **CAU 407: Roller Coaster RadSafe Area (TTR)**
 - CAS TA-23-001-TARC: Roller Coaster RadSafe Area
- **CAU 424: Area 3 Landfill Complexes (TTR)**
 - CAS 03-08-001-A301: Landfill Cell A3-1
 - CAS 03-08-002-A302: Landfill Cell A3-2
 - CAS 03-08-002-A303: Landfill Cell A3-3
 - CAS 03-08-002-A304: Landfill Cell A3-4
 - CAS 03-08-002-A305: Landfill Cell A3-5
 - CAS 03-08-002-A306: Landfill Cell A3-6
 - CAS 03-08-002-A308: Landfill Cell A3-8
- **CAU 453: Area 9 UXO Landfill (TTR)**
 - CAS 09-55-001-0952: Area 9 Landfill
- **CAU 487: Thunderwell Site (TTR)**
 - CAS RG-26-001-RGRV: Thunderwell Site

Site figures are included in [Appendix A](#). Post-Closure Inspection Plans (a history of inspection requirements at each CAU) are included in [Appendix B](#). Post-Closure Inspection Checklists are included in [Appendix C](#). Field notes are included in [Appendix D](#). [Appendix E](#), Photographs, does not include any inspection photographs because none were taken during the 2019 post-closure inspections. [Appendix F](#), Post-Closure Vegetation Monitoring Report, does not include any data because vegetation monitoring was not conducted at any CAU in 2019.

Post-closure UR inspections consist of the following activities:

- Visual inspection of fencing, signs, monuments, and/or markers for indications of wear and legibility of signs
- Visual inspection of soil covers for indications of subsidence, erosion, or unauthorized use
- Vegetation survey to quantify the condition of vegetative covers (as needed)

2.0 Inspection Results

Visual inspections were conducted on June 5, 2019. The post-closure inspection plans were published in the applicable closure report (CR) for each CAU. Subsequent correspondence with the Nevada Division of Environmental Protection (NDEP) has on occasion modified the requirements (noted in [Appendix B](#)).

2.1 CAU 400, Bomblet Pit and Five Points Landfill (TTR)

The Five Points Landfill (CAS TA-19-001-05PT, Ordnance Disposal Pit) was cleaned closed in 1997 (DOE/NV, 1996). No URs are required for this site. As part of site restoration, the CAS was vegetated in 1997 under the *Tonopah Test Range Closure Sites Revegetation Plan* (DOE/NV, 1997). Fencing was required for a minimum of five years and is still present. In correspondence dated March 20, 2014, NDEP approved the recommendation to conduct vegetation monitoring only on an as-needed basis if significant changes or concerns are noted during annual visual inspections (MacDougall, 2014). The site is shown in [Figure A-2](#) of [Appendix A](#).

A best management practice (BMP) visual inspection was conducted on June 5, 2019, at the Five Points Landfill. No problems were identified. There were no significant changes in vegetation at the site. Notes were recorded on the Field Activity Daily Log presented in [Appendix D](#).

Subsequent to the June inspections, approval to end the BMP visual inspections was granted by NDEP in an October 31, 2019, letter. The request for ending visual BMP inspections and approval of the request are presented in [Attachment B-1](#) of [Appendix B](#).

2.2 CAU 407, Roller Coaster RadSafe Area (TTR)

Visual inspections are conducted according to the post-closure requirements for CAU 407, Roller Coaster RadSafe Area (TTR), CAS TA-23-001-TARC, Roller Coaster RadSafe Area, as described in the CR (NNSA/NV, 2001a), Record of Technical Change (ROTC) 1 (DOE/EMNV, 2019a), and subsequent correspondence. In correspondence dated March 20, 2014, NDEP approved the recommendation to conduct vegetation monitoring only on an as-needed basis if significant changes

or concerns are noted during annual visual inspections (MacDougall, 2014). The site is shown in [Figure A-3 of Appendix A](#).

The annual visual inspection was conducted on June 5, 2019. The south perimeter fence near the southeast corner had fallen. The fence was repaired on June 25, 2019. Vegetation status appeared to be similar to the vegetation status in the surrounding area.

2.3 CAU 424, Area 3 Landfill Complexes (TTR)

Visual inspections are conducted according to the post-closure requirements for CAU 424, Area 3 Landfill Complexes (TTR), CAS 03-08-001-A301, Landfill Cell A3-1; CAS 03-08-002-A302, Landfill Cell A3-2; CAS 03-08-002-A303, Landfill Cell A3-3; CAS 03-08-002-A304, Landfill Cell A3-4; CAS 03-08-002-A305, Landfill Cell A3-5; CAS 03-08-002-A306, Landfill Cell A3-6; and CAS 03-08-002-A308, Landfill Cell A3-8, as described in the CR (DOE/NV, 1999a), ROTC 1 (DOE/EMNV, 2019b), and subsequent correspondence. The landfill locations are shown in [Figure A-4 of Appendix A](#). The annual inspection was conducted on June 5, 2019.

Landfill Cell A3-1 (CAS 03-08-001-A301): No issues or concerns were identified. The site is shown in [Figure A-5 of Appendix A](#).

Landfill Cell A3-2 (CAS 03-08-002-A302): No issues or concerns were identified. The site is shown in [Figure A-5 of Appendix A](#).

Landfill Cell A3-3 (CAS 03-08-002-A303): No issues or concerns were identified. The site is shown in [Figure A-6 of Appendix A](#).

Landfill Cell A3-4 (CAS 03-08-002-A304): A brass survey marker was installed on the newly installed concrete monument. A UR sign is anticipated to be installed on the monument in 2020. No other problems were identified. The site is shown in [Figure A-7 of Appendix A](#).

Landfill Cell A3-5 (CAS 03-08-002-A305): No issues or concerns were identified. The site is shown in [Figure A-8 of Appendix A](#).

Landfill Cell A3-6 (CAS 03-08-002-A306): No issues or concerns were identified. The site is shown in [Figure A-9](#) of [Appendix A](#).

Landfill Cell A3-8 (CAS 03-08-002-A308): The southeast monument needed additional lava rock. The lava rock was added on June 25, 2019. The site is shown in [Figure A-10](#) of [Appendix A](#).

2.4 CAU 453, Area 9 UXO Landfill (TTR)

Visual inspections are conducted according to the post-closure requirements for CAU 453, Area 9 UXO Landfill (TTR), CAS 09-55-001-0952, Area 9 Landfill, as described in the CR (DOE/NV, 1999b), ROTC 1 (DOE/EMNV, 2019c), and subsequent correspondence. The site is shown in [Figure A-11](#) of [Appendix A](#). The annual inspection was conducted on June 5, 2019. No issues or concerns were identified.

2.5 CAU 487, Thunderwell Site (TTR)

Visual inspections are conducted according to the post-closure requirements for CAU 487, Thunderwell Site (TTR), CAS RG-26-001-RGRV, Thunderwell Site, as described in the Corrective Action Decision Document (CADD)/CR (NNSA/NV, 2001b), ROTC 3 (DOE/EMNV, 2019d), and subsequent correspondence. The site is shown in [Figure A-12](#) of [Appendix A](#). The annual inspection was conducted on June 5, 2019. No problems were identified, and no maintenance or repairs were required.

3.0 Summary

A brief summary of the annual visual inspections and proposed inspection requirements are outlined below.

3.1 CAU 400, Bomblet Pit and Five Points Landfill (TTR)

No problems were identified. As indicated in [Section 2.1](#), approval to end the BMP visual inspections was granted by NDEP in an October 31, 2019, letter. Therefore, no BMP visual inspections of the Five Points Landfill (CAS TA-19-001-05PT, Ordnance Disposal Pit) will be performed in the future. The request for ending visual BMP inspections and approval of the request are presented in [Attachment B-1](#) of [Appendix B](#).

3.2 CAU 407, Roller Coaster RadSafe Area (TTR)

The south perimeter fence at the southeast corner was discovered to be down during the June 5, 2019, inspection. The site was repaired on June 25, 2019.

3.3 CAU 424, Area 3 Landfill Complexes (TTR)

The following observations and recommendations for the seven CASs within CAU 424 during the June 5, 2019, inspection:

- **Landfill Cell A3-1 (CAS 03-08-001-A301).** No problems were identified.
- **Landfill Cell A3-2 (CAS 03-08-002-A302).** No problems were identified.
- **Landfill Cell A3-3 (CAS 03-08-002-A303).** No problems were identified.
- **Landfill Cell A3-4 (CAS 03-08-002-A304).** A brass survey marker was installed on the newly installed concrete monument. A UR sign is anticipated to be installed on the monument in 2020.
- **Landfill Cell A3-5 (CAS 03-08-002-A305).** No problems were identified.

- **Landfill Cell A3-6 (CAS 03-08-002-A306).** No problems were identified.
- **Landfill Cell A3-8 (CAS 03-08-002-A308).** The southeast monument needed additional lava rock. The lava rock was added on June 25, 2019.

3.4 CAU 453, Area 9 UXO Landfill (TTR)

No problems were identified.

3.5 CAU 487, Thunderwell Site (TTR)

No problems were identified.

4.0 References

DOE/EMNV, see U.S. Department of Energy, Environmental Management Nevada Program.

DOE/NV, see U.S. Department of Energy, Nevada Operations Office.

MacDougall, J., Nevada Department of Environmental Protection. 2014. Letter to R.F. Boehlecke (NNSA/NFO) titled “Acceptance of the Post- Closure Inspection Report for 2013, Tonopah Test Range, Nevada, Federal Facility Agreement and Consent Order,” 20 March. Las Vegas, NV.

NNSA/NSO, see U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office.

NNSA/NV, see U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office.

U.S. Department of Energy, Environmental Management Nevada Program. 2019a. *Record of Technical Change to Closure Report for Corrective Action Unit 407: Roller Coaster RADSAFE Area, Tonopah Test Range, Nevada*, DOE/NV--694-rev 1; ROTC No. DOE/NV--694-rev 1-ROTC 1, 19 November. Las Vegas, NV.

U.S. Department of Energy, Environmental Management Nevada Program. 2019b. *Record of Technical Change to Closure Report for Corrective Action Unit 424: Area 3 Landfill Complex, Tonopah Test Range, Nevada*, Rev. 0, DOE/NV/11718--283; ROTC No. DOE/NV/11718--283-ROTC 1, 2 July. Las Vegas, NV.

U.S. Department of Energy, Environmental Management Nevada Program. 2019c. *Record of Technical Change to Closure Report for Corrective Action Unit 453: Area 9 UXO Landfill, Tonopah Test Range, Nevada*, DOE/NV/11718--284; ROTC No. DOE/NV/11718--284-ROTC 1, 19 November. Las Vegas, NV.

U.S. Department of Energy, Environmental Management Nevada Program. 2019d. *Record of Technical Change to Corrective Action Decision Document/Closure Report for Corrective Action Unit 487: Thunderwell Site, Tonopah Test Range, Nevada*, Rev. 0, DOE/NV--761; ROTC No. DOE/NV--761-ROTC 3, 19 November. Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office. 2001a. *Closure Report for Corrective Action Unit 407: Roller Coaster RADSAFE Area, Tonopah Test Range, Nevada*, DOE/NV--694-rev 1. Las Vegas, NV.

U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office. 2001b. *Corrective Action Decision Document/Closure Report for Corrective Action Unit 487: Thunderwell Site, Tonopah Test Range, Nevada*, DOE/NV--761. Las Vegas, NV.

- U.S. Department of Energy, Nevada Operations Office. 1996. *Closure Report for No. 400: Bomblet Pit and Five Points Landfill, Tonopah Test Range, DOE/NV--459, UC-700*. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 1997. *Tonopah Test Range Closure Sites Revegetation Plan, DOE/NV/11718-115, UC-702*. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 1999a. *Closure Report for Corrective Action Unit 424: Area 3 Landfill Complex, Tonopah Test Range, Nevada, DOE/NV/11718--283*. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 1999b. *Closure Report for Corrective Action Unit 453: Area 9 UXO Landfill, Tonopah Test Range, Nevada, DOE/NV/11718--284*. Las Vegas, NV.

Appendix A

Site Figures

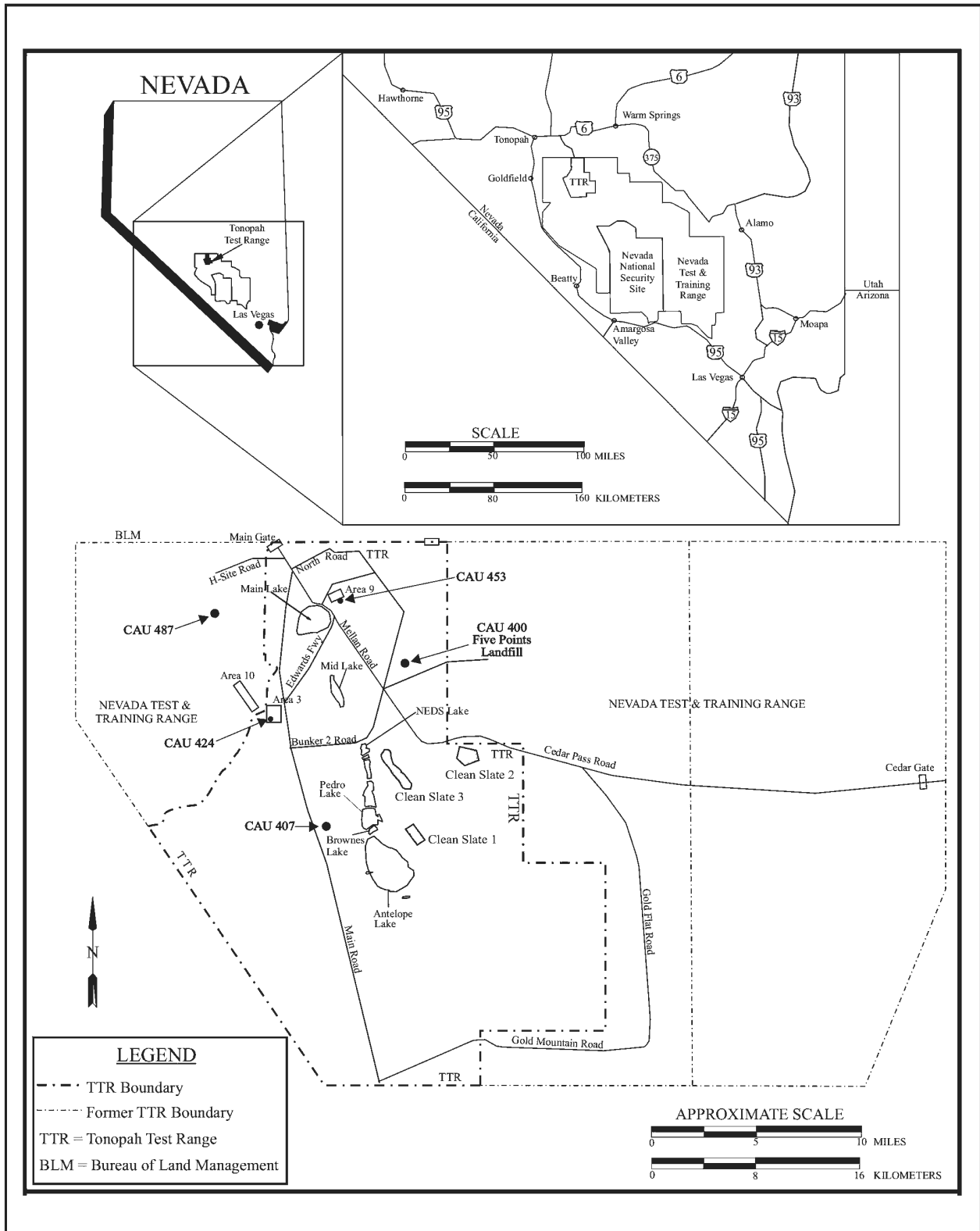


Figure A-1
Tonopah Test Range Post-Closure Monitoring Sites Location Map

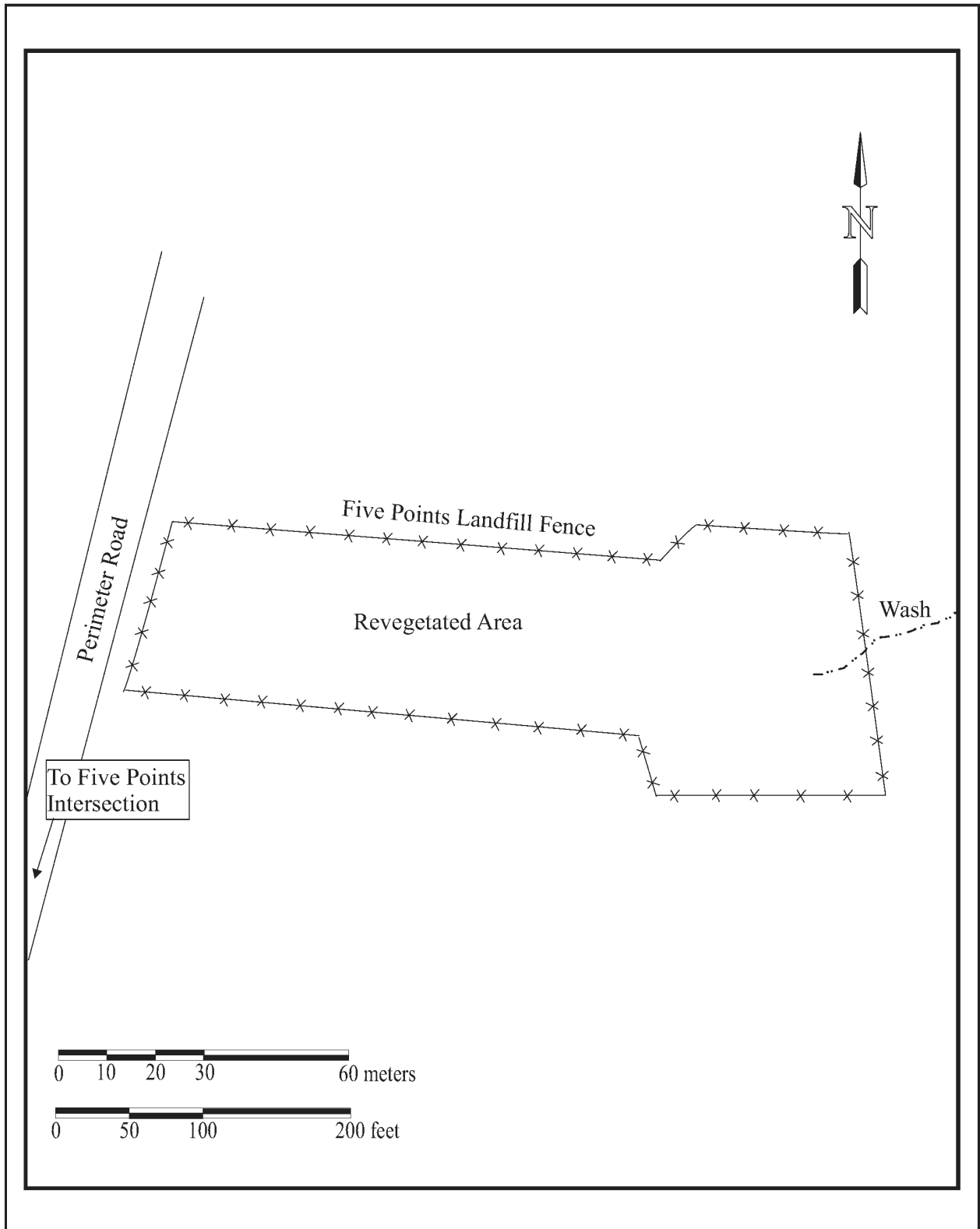


Figure A-2
CAU 400 Five Points Landfill Location Map

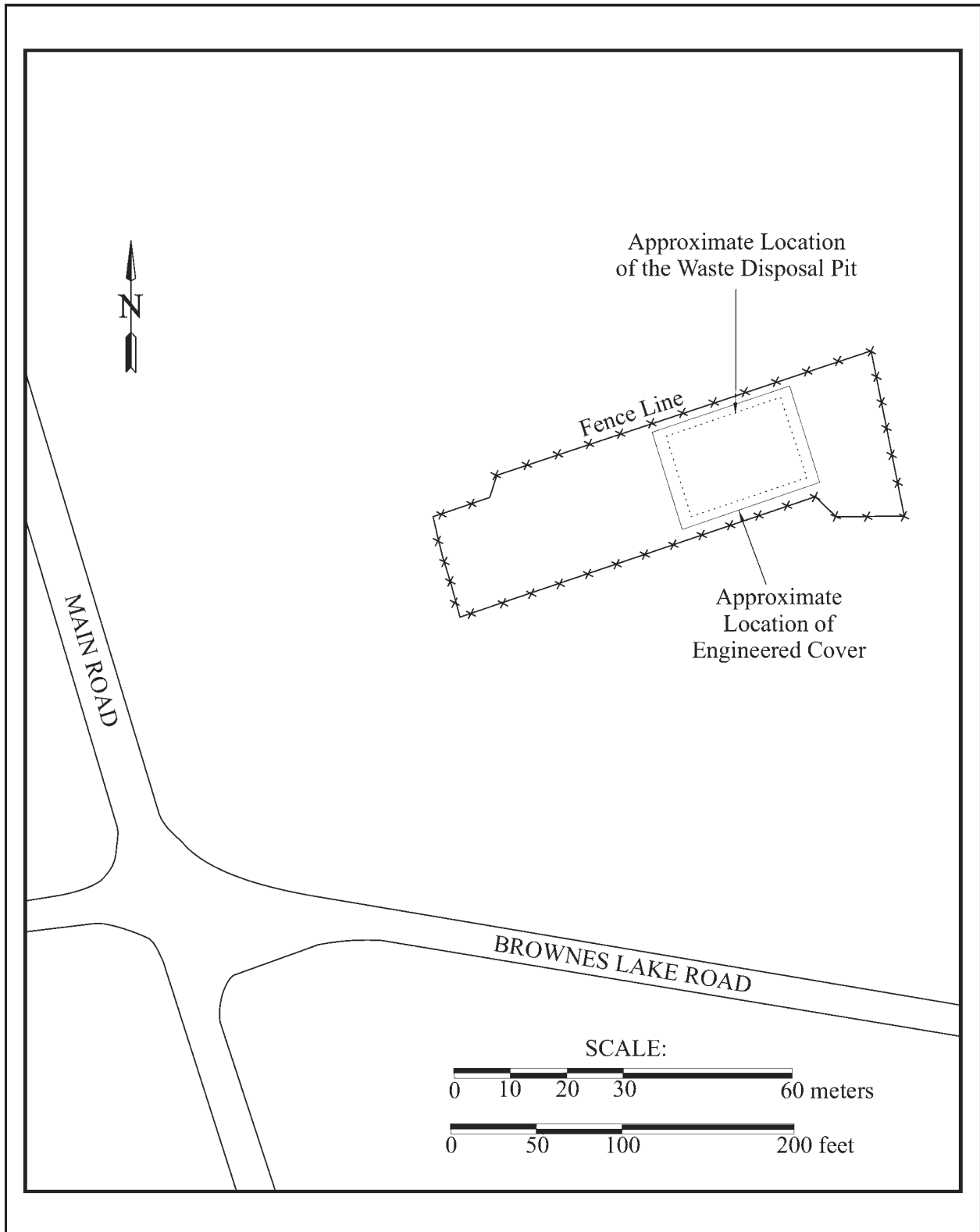


Figure A-3
CAU 407 Roller Coaster RadSafe Area Location Map

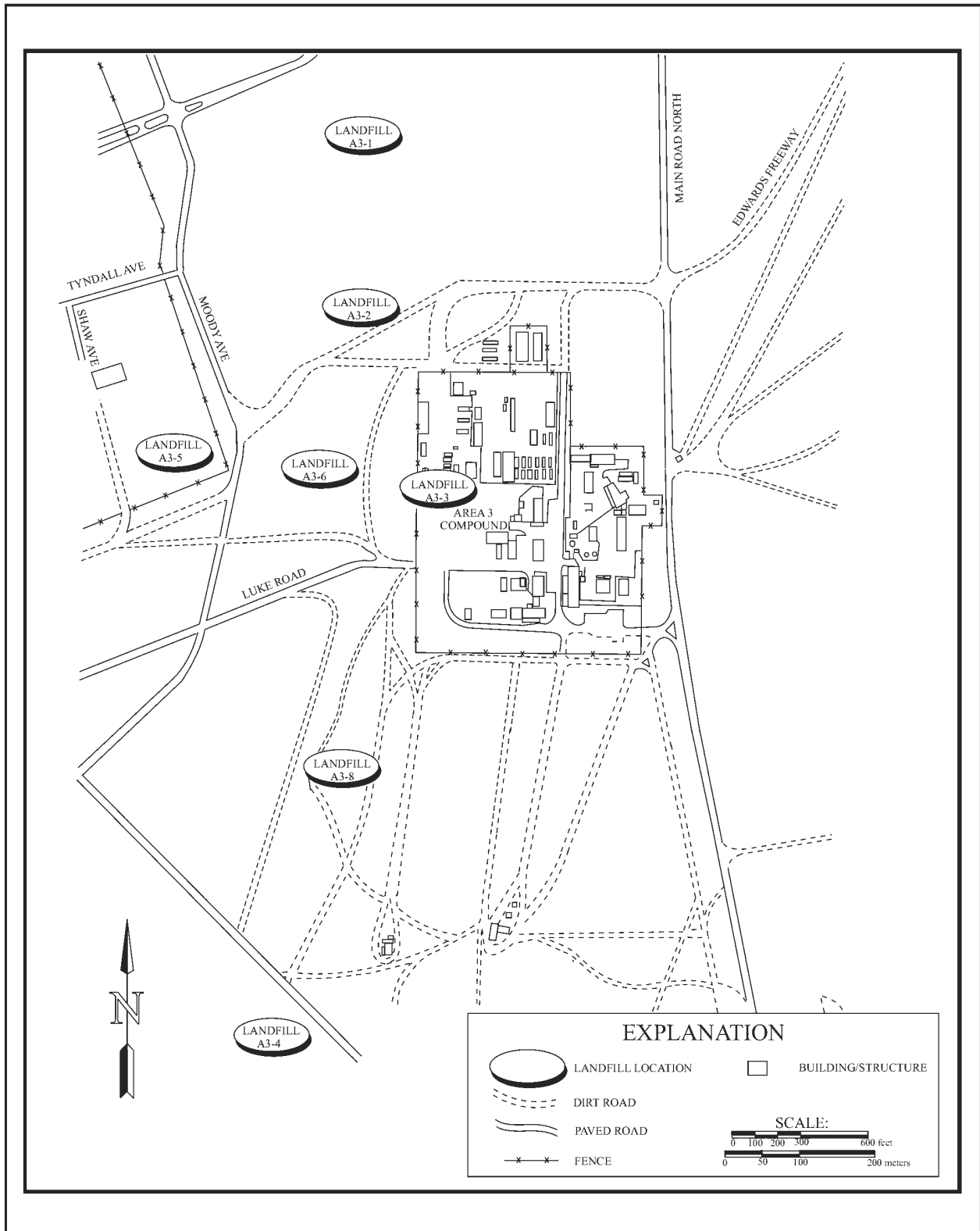


Figure A-4
CAU 424 Area 3 Landfill Complexes Location Map

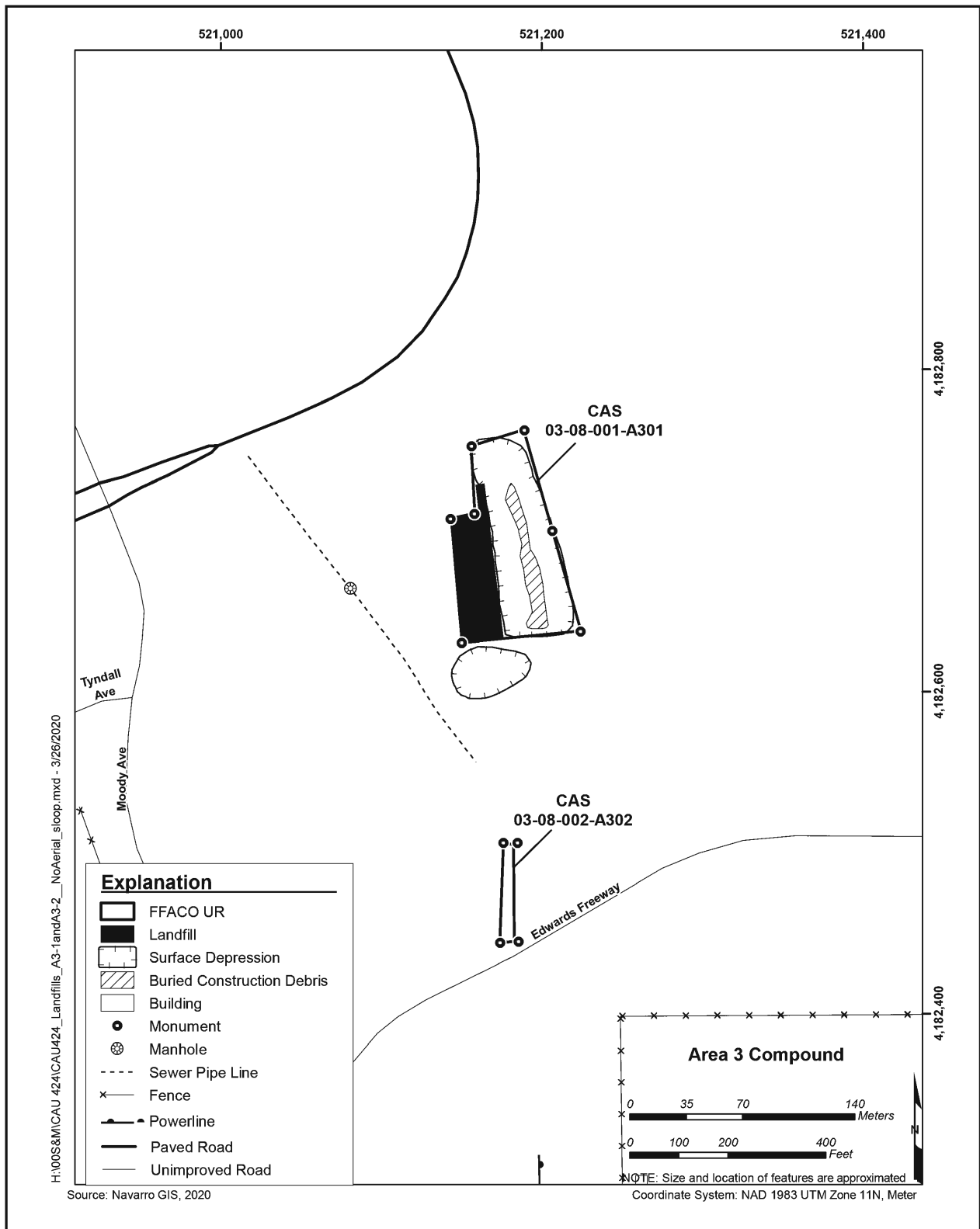


Figure A-5
CAU 424 Landfill Cells A3-1 and A3-2

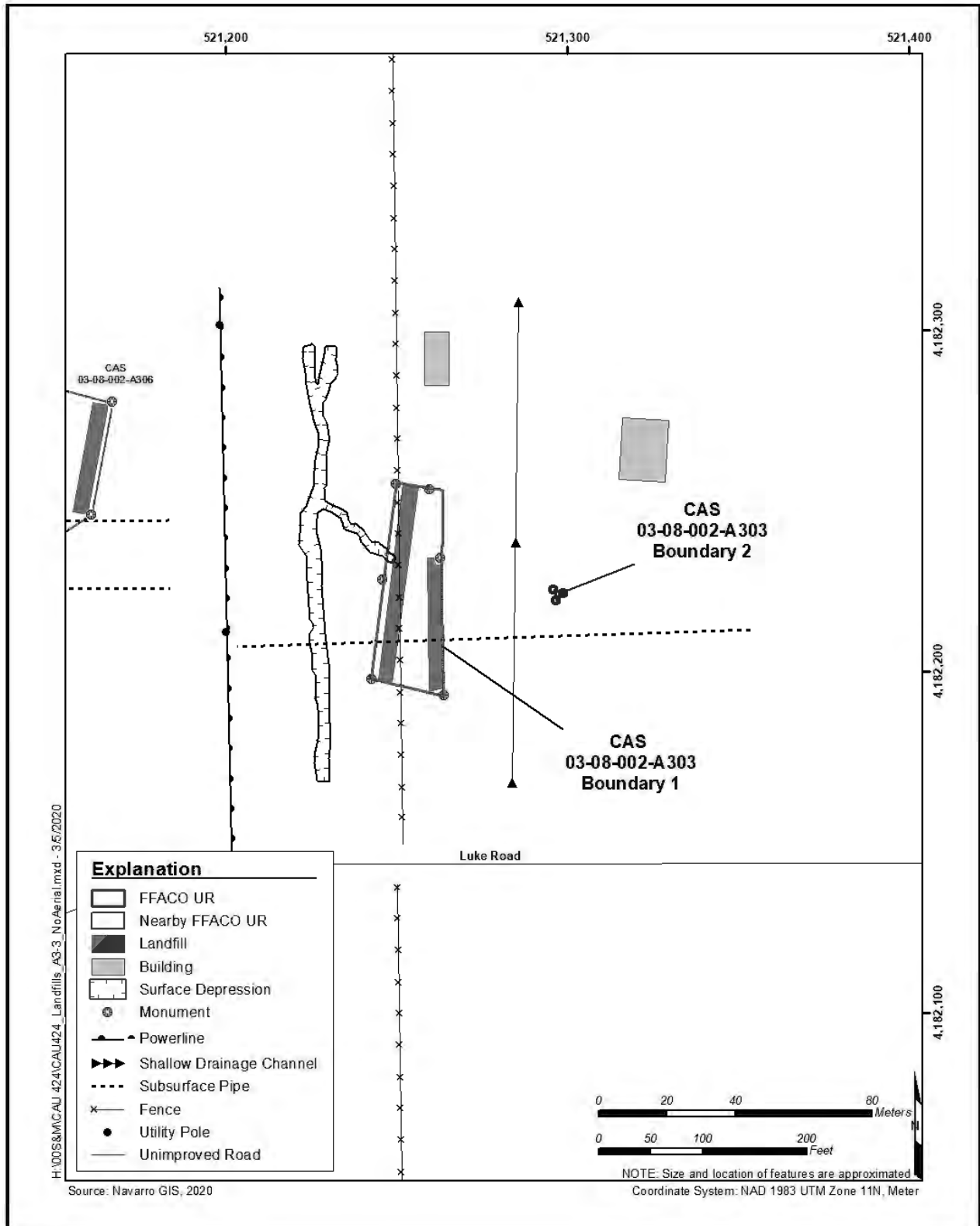


Figure A-6
CAU 424 Landfill Cell A3-3

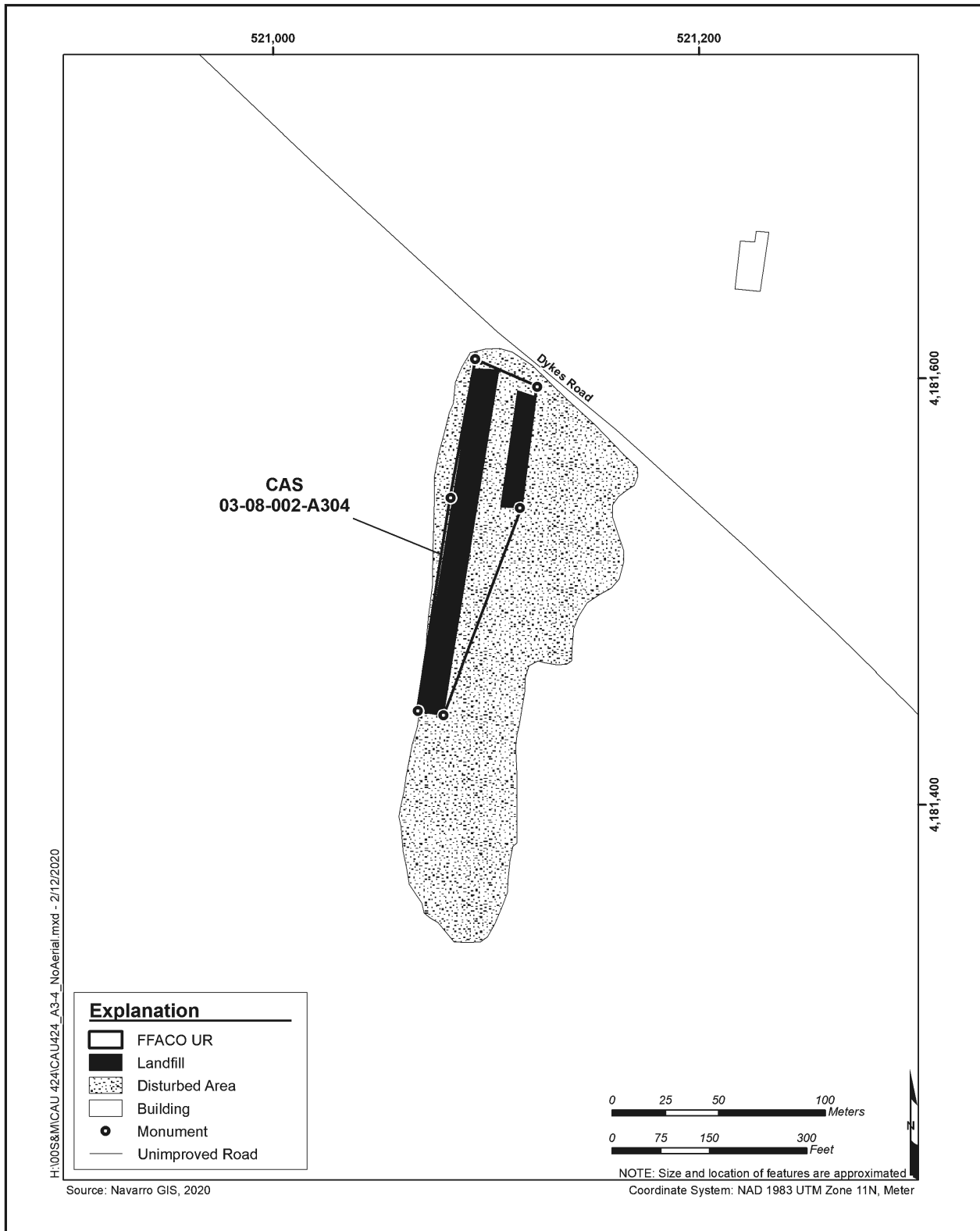


Figure A-7
CAU 424 Landfill Cell A3-4

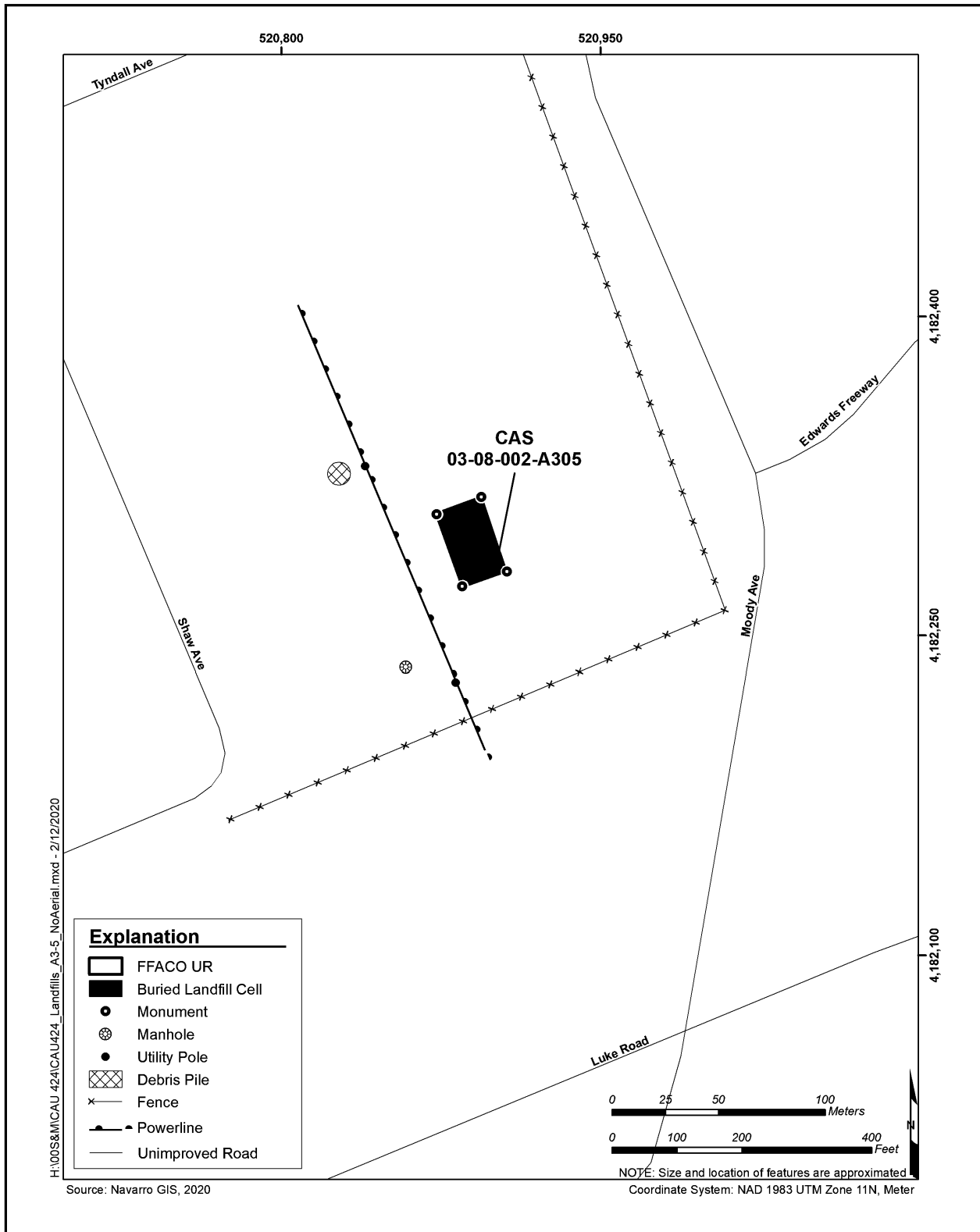


Figure A-8
CAU 424 Landfill Cell A3-5

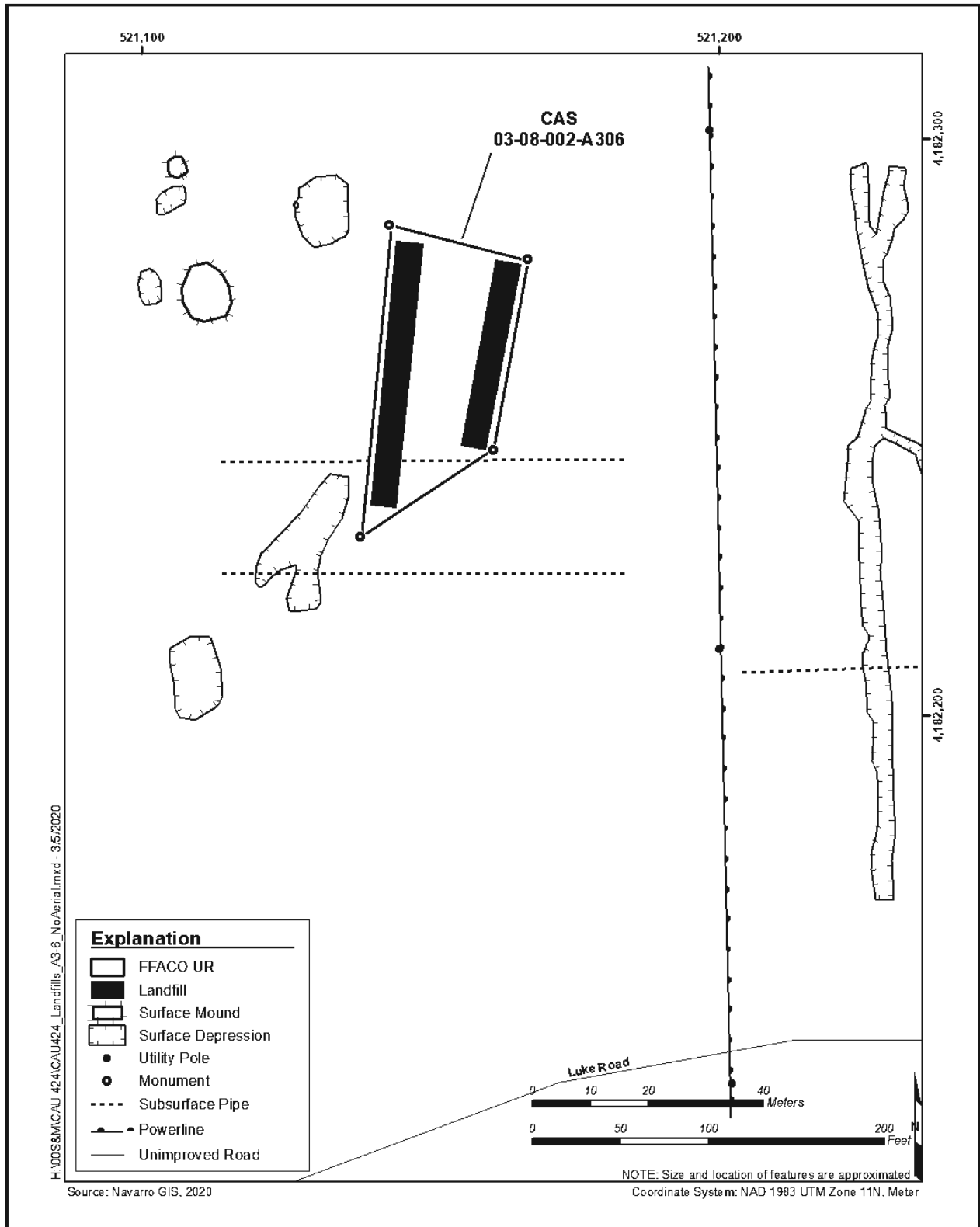


Figure A-9
CAU 424 Landfill Cell A3-6

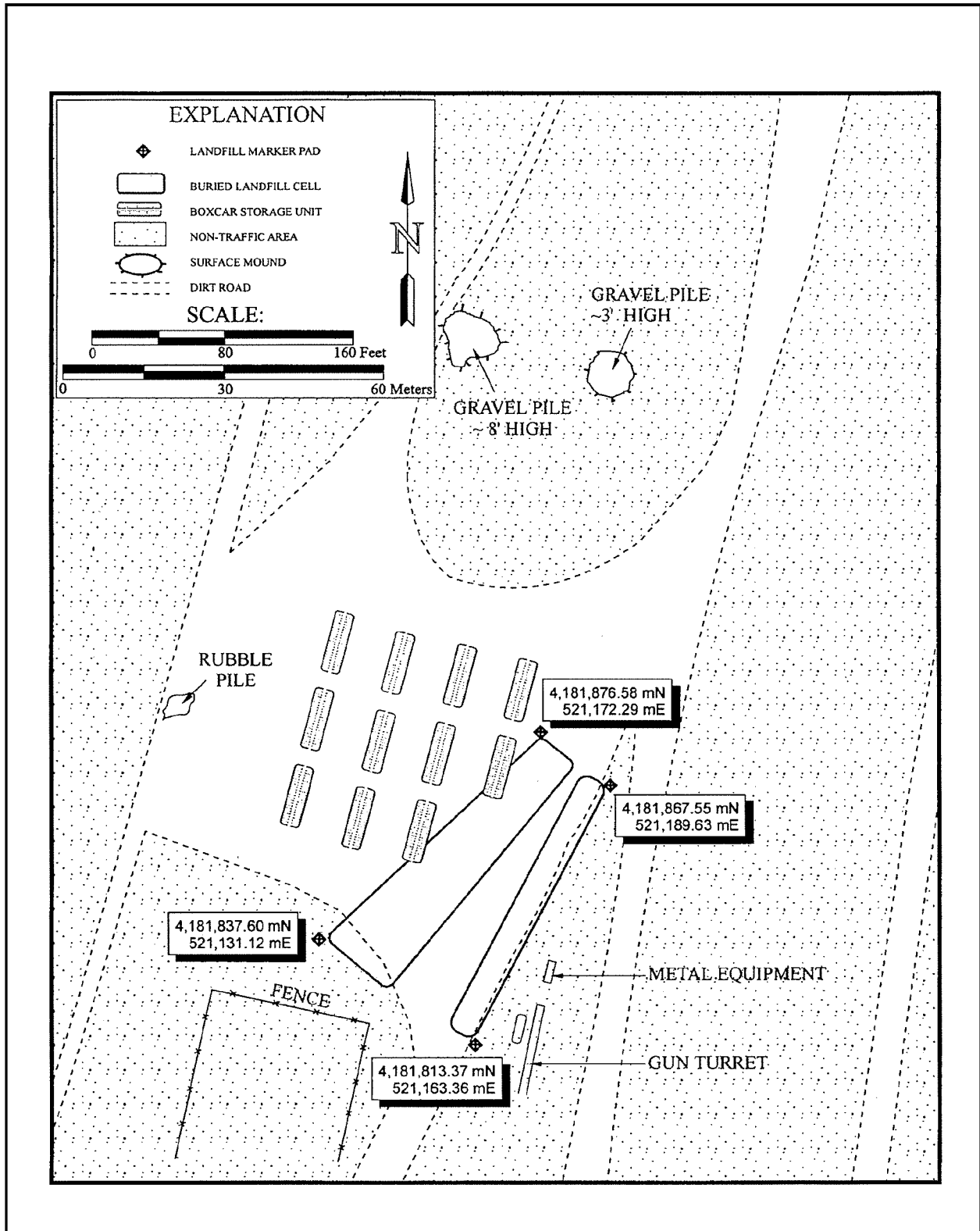


Figure A-10
CAU 424 Landfill Cell A3-8

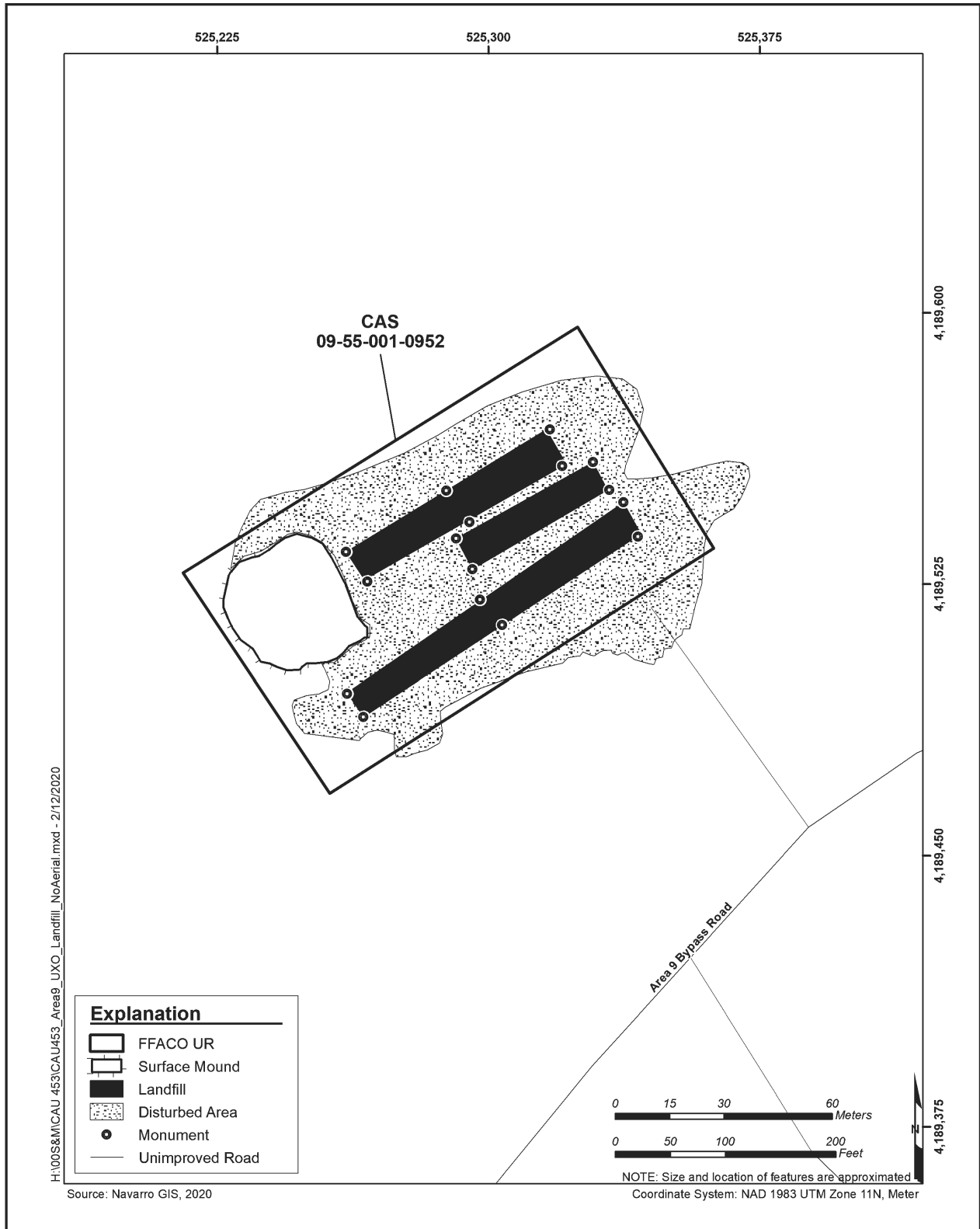


Figure A-11
CAU 453 Area 9 UXO Landfill Location Map

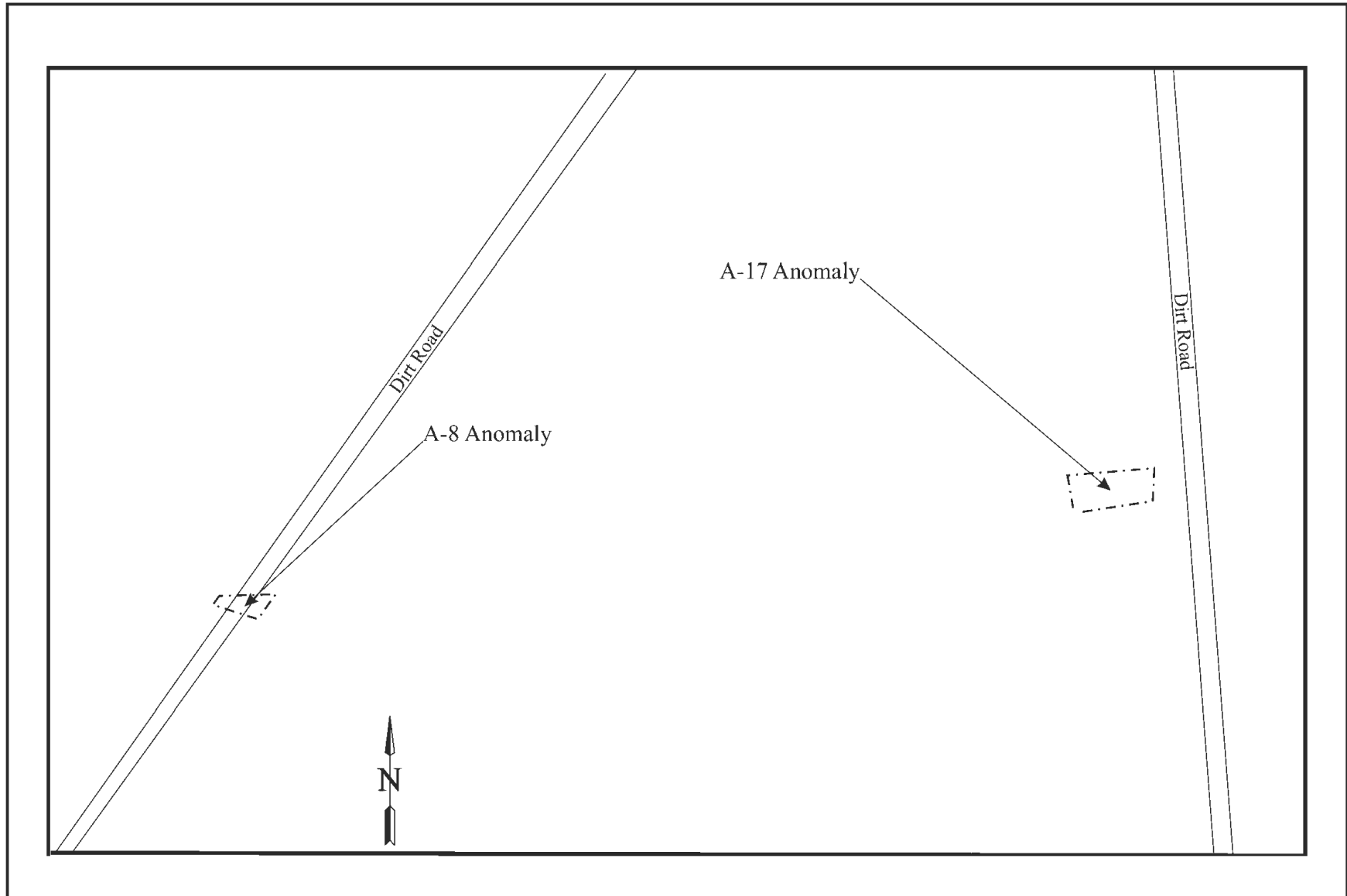


Figure A-12
CAU 487 Thunderwell Site Location Map

A.1.0 References

Navarro GIS, see Navarro Geographic Information Systems.

Navarro Geographic Information Systems. 2020. ESRI ArcGIS Software.

Appendix B

Post-Closure Inspection Plans

B.1.0 CAU 400, Bomblet Pit and Five Points Landfill (TTR) Post-Closure Inspection Plan

CAS TA-55-001-TAB2, Ordnance Disposal Pit (aka Bomblet Pit), and CAS TA-19-001-05PT, Ordnance Disposal Pit (aka Five Points Landfill), were clean closed in 1996 as described in the *Closure Report for CAU No. 400: Bomblet Pit and Five Points Landfill, Tonopah Test Range* (DOE/NV, 1996a) that was approved in 1997. There are no URs at either CAS.

Restoration and revegetation were required at the site as described in the *Streamlined Approach for Environmental Restoration Plan, CAU No. 400: Bomblet Pit and Five Points Landfill, Tonopah Test Range* (DOE/NV, 1996b), Section 3.7: “Efforts will be made to revegetate the Five Points Landfill. A site survey has been conducted to assess the potential for revegetation, topsoil replacement, and seeding with native plant species.”

The revegetation plan is described in the *Tonopah Test Range Closure Sites Revegetation Plan* (DOE/NV, 1997). This report states that fences should remain in place for a minimum of five years.

In the letter “Request to Reduce Frequency of Tonopah Test Range (TTR) Post-Closure Monitoring Inspections from Semi-Annual to Annual Site Inspections for the Following CAUs: 400, 404, 407, 423, 424, 426, 427, 453, 487” dated November 28, 2006, the U.S. Department of Energy (DOE), National Nuclear Security Administration Nevada Site Office (NNSA/NSO) noted that CAU 400 was being inspected semi-annually as a BMP to document vegetation growth and inspect the integrity of site fencing (Jones, 2006). NNSA/NSO requested that the inspection frequency be reduced to annual. This request was approved by NDEP in the December 5, 2006, letter “NNSA/NSO Request to Reduce the Frequency of Post-Closure Monitoring of Corrective Action Units (CAU) 400, 404, 407, 423, 424, 426, 427, 453, and 487 at Tonopah Test Range (TTR), Nevada” (Murphy, 2006).

In the *Post-Closure Inspection Report for the Tonopah Test Range, Nevada for Calendar Year 2013* (NNSA/NFO, 2014), the DOE, National Nuclear Security Administration Nevada Field Office (NNSA/NFO) requested a reduction in vegetation monitoring at the site from annual to an as-needed basis. This change was approved in the March 20, 2014, letter “Acceptance of the Post-Closure Inspection Report for 2013, Tonopah Test Range, Nevada, Federal Facility Agreement and Consent

Order” (MacDougall, 2014). The last annual vegetation monitoring was conducted in 2013. Future vegetation monitoring will be conducted “when significant changes are noted during the annual visual inspections.”

Currently, annual visual inspections are conducted at CAS TA-19-001-05PT, Ordnance Disposal Pit, Five Points Landfill as a BMP to determine whether there have been significant changes to the condition of the vegetation prompting the need for vegetation monitoring.

During the summer of 2019, the annual visual inspections were conducted at CAS TA-19-001-05PT, Ordnance Disposal Pit, Five Points Landfill, as a BMP to determine whether there have been significant changes to the condition of the vegetation prompting the need for vegetation monitoring.

On March 28, 2019, EM Nevada Program sent a letter to NDEP requesting approval to remove the fencing and discontinue BMP inspections that had been in place at CAS TA-19-00-05PT at CAU 400: Bomblet Pit and Five Points Landfill (TTR). After this letter was sent, meetings were held with NDEP to discuss this request. In one of the meetings, NDEP indicated that they would wait to give their approval for the CAU 400 request until EM Nevada Program had concurrence from the U.S. Air Force (USAF) on this action. On October 29, 2019, EM Nevada Program sent a letter indicating that USAF acknowledgment had been obtained. USAF acknowledgment was noted in a September 4, 2019, Memorandum for Record (MFR). This MFR was attached to the October 29 letter. The USAF MFR acknowledged the EM Nevada Program’s proposed changes to the current inspection and maintenance practices for CAU 400. NDEP representatives provide final approval of EM Nevada Program’s proposed changes in an October 31, 2019, letter. NDEP accepted the USAF acknowledgment of the proposed changes and therefore approved EM Nevada Program’s request to remove the fencing and the discontinuation of BMP inspections at CAS TA-19-00-05PT at CAU 400: Bomblet Pit and Five Points Landfill (TTR). All aforementioned letters are included in [Attachment B-1](#) with the exception of Official Use Only (OUO) marked September 4, 2019 USAF MFR.

B.2.0 CAU 407, Roller Coaster RadSafe Area (TTR) Post-Closure Inspection Plan

The *Closure Report for Corrective Action Unit 407: Roller Coaster RADSAFE Area, Tonopah Test Range, Nevada* (NNSA/NV, 2001a) was approved in 2002 and required quarterly inspections the first six months after the construction of a cover followed by two years of semi-annual inspections. Following these inspections, the inspection frequency would be determined by NDEP based on the results of these inspections. An ROTC (DOE/EMNV, 2019a) was issued in 2019.

In the letter “Request to Reduce Frequency of Tonopah Test Range (TTR) Post-Closure Monitoring Inspections from Semi-Annual to Annual Site Inspections for the Following CAUs: 400, 404, 407, 423, 424, 426, 427, 453, 487” dated November 28, 2006, NNSA/NSO noted that CAU 407 was being inspected semi-annually and requested that the inspection frequency be reduced to annual (Jones, 2006). This request was approved by NDEP in the December 5, 2006, letter “NNSA/NSO Request to Reduce the Frequency of Post-Closure Monitoring of Corrective Action Units (CAU) 400, 404, 407, 423, 424, 426, 427, 453, and 487 at Tonopah Test Range (TTR), Nevada” (Murphy, 2006).

In the *Post-Closure Inspection Report for the Tonopah Test Range, Nevada for Calendar Year 2013* (NNSA/NFO, 2014), NNSA/NFO requested a reduction in vegetation monitoring at the site from annual to an as-needed basis. This change was approved in the March 20, 2014, letter “Acceptance of the Post-Closure Inspection Report for 2013, Tonopah Test Range, Nevada, Federal Facility Agreement and Consent Order” (MacDougall, 2014). The last annual vegetation monitoring was conducted in 2014. Future vegetation monitoring will be conducted “when significant changes are noted during the annual visual inspections.”

Currently, annual visual inspections are conducted at CAU 407 to document the condition of the cover, fencing, and postings; and to determine whether there have been significant changes to the condition of the vegetation prompting the need for a vegetation monitoring. Any identified maintenance and repair requirements are remedied within 90 working days of discovery.

B.3.0 CAU 424, Area 3 Landfill Complexes (TTR) Post-Closure Inspection Plan

The *Closure Report for Corrective Action Unit 424: Area 3 Landfill Complex, Tonopah Test Range, Nevada* (DOE/NV, 1999a) was approved in 1999; required semi-annual inspections; and noted that additional nonscheduled inspections may be required after severe weather events such as heavy rainfall, flash flooding, and high winds. An ROTC (DOE/EMNV, 2019b) was issued in 2019.

In the letter “Request to Reduce Frequency of Tonopah Test Range (TTR) Post-Closure Monitoring Inspections from Semi-Annual to Annual Site Inspections for the Following CAUs: 400, 404, 407, 423, 424, 426, 427, 453, 487” dated November 28, 2006, NNSA/NSO noted that CAU 424 was being inspected semi-annually and requested that the inspection frequency be reduced to annual (Jones, 2006). This request was approved by NDEP in the December 5, 2006, letter “NNSA/NSO Request to Reduce the Frequency of Post-Closure Monitoring of Corrective Action Units (CAU) 400, 404, 407, 423, 424, 426, 427, 453, and 487 at Tonopah Test Range (TTR), Nevada” (Murphy, 2006).

Currently, annual visual inspections are conducted at CAU 424 to document the condition of the landfill covers, monuments, and postings. Any identified maintenance and repair requirements are remedied within 90 working days of discovery.

B.4.0 CAU 453, Area 9 UXO Landfill (TTR) Post-Closure Inspection Plan

The *Closure Report for Corrective Action Unit 453: Area 9 UXO Landfill, Tonopah Test Range, Nevada* (DOE/NV, 1999b) was approved in 1999; required semi-annual inspections; and noted that additional nonscheduled inspections may be required after severe weather events such as heavy rainfall, flash flooding, and high winds. An ROTC (DOE/EMNV, 2019c) was issued in 2019.

In the letter “Request to Reduce Frequency of Tonopah Test Range (TTR) Post-Closure Monitoring Inspections from Semi-Annual to Annual Site Inspections for the Following CAUs: 400, 404, 407, 423, 424, 426, 427, 453, 487” dated November 28, 2006, NNSA/NSO noted that CAU 453 was being inspected semi-annually and requested that the inspection frequency be reduced to annual (Jones, 2006). This request was approved by NDEP in the December 5, 2006, letter “NNSA/NSO Request to Reduce the Frequency of Post-Closure Monitoring of Corrective Action Units (CAU) 400, 404, 407, 423, 424, 426, 427, 453, and 487 at Tonopah Test Range (TTR), Nevada” (Murphy, 2006).

Currently, annual visual inspections are conducted at CAU 453 to document the condition of the landfill cover, fencing, monuments, and postings. Any identified maintenance and repair requirements are remedied within 90 working days of discovery.

B.5.0 CAU 487, Thunderwell Site (TTR) Post-Closure Inspection Plan

ROTC 2 (NNSA/NSO, 2004) for the final *Corrective Action Decision Document/Closure Report for Corrective Action Unit 487: Thunderwell Site, Tonopah Test Range, Nevada* (NNSA/NV, 2001b) required semi-annual inspections. ROTC 3 (DOE/EMNV, 2019d) was issued in 2019.

In the letter “Request to Reduce Frequency of Tonopah Test Range (TTR) Post-Closure Monitoring Inspections from Semi-Annual to Annual Site Inspections for the Following CAUs: 400, 404, 407, 423, 424, 426, 427, 453, 487” dated November 28, 2006, NNSA/NSO noted that CAU 487 was being inspected semi-annually and requested that the inspection frequency be reduced to annual (Jones, 2006). This request was approved by NDEP in the December 5, 2006, letter “NNSA/NSO Request to Reduce the Frequency of Post-Closure Monitoring of Corrective Action Units (CAU) 400, 404, 407, 423, 424, 426, 427, 453, and 487 at Tonopah Test Range (TTR), Nevada” (Murphy, 2006).

Currently, annual visual inspections are conducted at CAU 487 to document the condition of the monuments and postings, and to look for indications of ground disturbance. Maintenance and repair requirements must continue to be made within 90 days of discovery and documented in writing at the time of repair.

B.6.0 References

DOE/EMNV, see U.S. Department of Energy, Environmental Management Nevada Program.

DOE/NV, see U.S. Department of Energy, Nevada Operations Office.

Jones, J.B., U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office. 2006. Letter to T. Murphy (NDEP) titled “Request to Reduce Frequency of Tonopah Test Range (TTR) Post-Closure Monitoring Inspections from Semi-Annual to Annual Site Inspections for the Following CAUs: 400, 404, 407, 423, 424, 426, 427, 453, 487,” 28 November. Las Vegas, NV.

MacDougall, J., Nevada Department of Environmental Protection. 2010. Letter to R.F. Boehlecke (NNSA/NFO) titled “Acceptance of the Post-Closure Inspection Report for 2009, Tonopah Test Range, Nevada, Federal Facility Agreement and Consent Order,” 15 July. Las Vegas, NV.

MacDougall, J., Nevada Department of Environmental Protection. 2014. Letter to R.F. Boehlecke (NNSA/NFO) titled “Acceptance of the Post-Closure Inspection Report for 2013, Tonopah Test Range, Nevada, Federal Facility Agreement and Consent Order,” 20 March. Las Vegas, NV.

Murphy, T.H., Nevada Department of Environmental Protection. 2006. Letter to J.B. Jones (NNSA/NSO) titled “NNSA/NSO Request to Reduce the Frequency of Post-Closure Monitoring of Corrective Action Units (CAU) 400, 404, 407, 423, 424, 426, 427, 453, and 487 at Tonopah Test Range (TTR), Nevada,” 5 December. Las Vegas, NV.

NNSA/NFO, see U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office.

NNSA/NSO, see U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office.

NNSA/NV, see U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office.

U.S. Department of Energy, Environmental Management Nevada Program. 2019a. *Record of Technical Change to Closure Report for Corrective Action Unit 407: Roller Coaster RADS SAFE Area, Tonopah Test Range, Nevada*, DOE/NV--694-rev 1; ROTC No. DOE/NV--694-rev 1-ROTC 1, 19 November. Las Vegas, NV.

U.S. Department of Energy, Environmental Management Nevada Program. 2019b. *Record of Technical Change to Closure Report for Corrective Action Unit 424: Area 3 Landfill Complex, Tonopah Test Range, Nevada*, Rev. 0, DOE/NV/11718--283; ROTC No. DOE/NV/11718--283-ROTC 1, 2 July. Las Vegas, NV.

- U.S. Department of Energy, Environmental Management Nevada Program. 2019c. *Record of Technical Change to Closure Report for Corrective Action Unit 453: Area 9 UXO Landfill, Tonopah Test Range, Nevada*, DOE/NV/11718--284; ROTC No. DOE/NV/11718--284-ROTC 1, 19 November. Las Vegas, NV.
- U.S. Department of Energy, Environmental Management Nevada Program. 2019d. *Record of Technical Change to Corrective Action Decision Document/Closure Report for Corrective Action Unit 487: Thunderwell Site, Tonopah Test Range, Nevada*, Rev. 0, DOE/NV--761; ROTC No. DOE/NV--761-ROTC 3, 19 November. Las Vegas, NV.
- U.S. Department of Energy, National Nuclear Security Administration Nevada Field Office. 2014. *Post-Closure Inspection Report for the Tonopah Test Range, Nevada for Calendar Year 2013*, Rev. 0, DOE/NV--1517. Las Vegas, NV.
- U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office. 2001a. *Closure Report for Corrective Action Unit 407: Roller Coaster RADS SAFE Area, Tonopah Test Range, Nevada*, DOE/NV--694-rev 1. Las Vegas, NV.
- U.S. Department of Energy, National Nuclear Security Administration Nevada Operations Office. 2001b. *Corrective Action Decision Document/Closure Report for Corrective Action Unit 487: Thunderwell Site, Tonopah Test Range, Nevada*, DOE/NV--761. Las Vegas, NV.
- U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office. 2004. *Record of Technical Change No. 2 for the Final Corrective Action Decision Document/Closure Report for Corrective Action Unit 487: Thunderwell Site, Tonopah Test Range, Nevada*, Rev. 0. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 1996a. *Closure Report for CAU No. 400: Bomblet Pit and Five Points Landfill, Tonopah Test Range*, Rev. 0, DOE/NV--459. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 1996b. *Streamlined Approach for Environmental Restoration Plan, CAU No. 400: Bomblet Pit and Five Points Landfill, Tonopah Test Range*, Rev. 0, DOE/NV--424. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 1997. *Tonopah Test Range Closure Sites Revegetation Plan*, DOE/NV/11718-115 UC-702. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 1999a. *Closure Report for Corrective Action Unit 424: Area 3 Landfill Complex, Tonopah Test Range, Nevada*, DOE/NV/11718--283. Las Vegas, NV.
- U.S. Department of Energy, Nevada Operations Office. 1999b. *Closure Report for Corrective Action Unit 453: Area 9 UXO Landfill, Tonopah Test Range, Nevada*, DOE/NV/11718--284. Las Vegas, NV.

Attachment B-1

Letters

(8 Pages)



U.S. Department of Energy
Environmental Management
Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

MAR 28 2019

Christine Andres, Chief
Bureau of Federal Facilities
Division of Environmental Protection
2030 East Flamingo Road, Suite 230
Las Vegas, NV 89119-0818

REQUEST TO IMPLEMENT CHANGES TO THE INSPECTION AND MAINTENANCE
PRACTICES AT CORRECTIVE ACTION UNIT (CAU) 400: BOMBLET PIT AND FIVE
POINTS LANDFILL (TTR)

The U.S. Department of Energy, Office of Environmental Management Nevada Program requests that the Nevada Division of Environmental Protection approve the removal of fencing and the discontinuation of best management practice inspections at CAS TA-19-00-05PT (CAU 400) located at Five Points intersection on the Tonopah Test Range (TTR).

It is recognized that these items have been previously discussed with your staff; as requested in a meeting held on June 26, 2018, this letter serves as a formal request.

Please contact Tiffany Gamero at (702) 295-7645 if further information on this matter is needed.

/s/ Wilhelm R. Wilborn

Bill R. Wilborn
Deputy Program Manager, Operations
EM Nevada Program

EMO:13152.TG

cc via e-mail:
Mark McLane, NDEP
Justin Costa Rica, NDEP
Jeffrey Fraher, DTRA/CXTS
Pat Matthews, Navarro
Navarro Central Files
MSTS Correspondence Management
FFACO Group, EM
Tiffany Gamero, EM
NFO Read File



U.S. Department of Energy
 Environmental Management
 Nevada Program
 P.O. Box 98518
 Las Vegas, NV 89193-8518

EMO.190401.0002

MAR 28 2019

(R)
 Filed Locally/
 Sent to Recall

 (RF) (G)
 NFO Read File

Christine Andres, Chief
 Bureau of Federal Facilities
 Division of Environmental Protection
 2030 East Flamingo Road, Suite 230
 Las Vegas, NV 89119-0818

REQUEST TO IMPLEMENT CHANGES TO THE INSPECTION AND MAINTENANCE PRACTICES AT CORRECTIVE ACTION UNIT (CAU) 400: BOMBLET PIT AND FIVE POINTS LANDFILL (TTR)

The U.S. Department of Energy, Office of Environmental Management Nevada Program requests that the Nevada Division of Environmental Protection approve the removal of fencing and the discontinuation of best management practice inspections at CAS TA-19-00-05PT (CAU 400) located at Five Points intersection on the Tonopah Test Range (TTR).

It is recognized that these items have been previously discussed with your staff; as requested in meeting held on June 26, 2018, this letter serves as a formal request.

Please contact Tiffany Gamero at (702) 295-7645 if further information on this matter is needed.

CONCUR	
EMNV Prog.	5-7063
EMNV-O	
Gamero	<i>TAG</i>
03/25/19	
EMNV-OS	
Dinsman	<i>[Signature]</i>
03/26/19	
D/EMNV-O	
Wilborn	<i>[Signature]</i>
03/28/19	
EMNV Prog.	
5-7063	

Original Signed by:
 Bill Wilborn

Bill R. Wilborn
 Deputy Program Manager, Operations
 EM Nevada Program

EMO:13152.TG

cc via e-mail:
 Mark McLane, NDEP
 Justin Costa Rica, NDEP
 Jeffrey Fraher, DTRA/CXTS
 Pat Matthews, Navarro
 Navarro Central Files
 MSTS Correspondence Management
 FFACO Group, EM
 Tiffany Gamero, EM
 NFO Read File



U.S. Department of Energy
Environmental Management
Nevada Program
100 N. City Parkway, Suite 1750
Las Vegas, NV 89106-4617

OCT 29 2019

Christine Andres, Chief
Bureau of Federal Facilities
Division of Environmental Protection
2030 East Flamingo Road, Suite 230
Las Vegas, NV 89119-0818

REQUEST TO IMPLEMENT CHANGES TO THE INSPECTION AND MAINTENANCE PRACTICES AT CORRECTIVE ACTION UNIT (CAU) 400: BOMBLET PIT AND FIVE POINTS LANDFILL (TTR)

In March 2019, the Environmental Management (EM) Nevada Program sent a letter to the Nevada Division of Environmental Protection (NDEP), copy enclosed, requesting approval to remove the fencing and discontinue best management practice inspections that have been in place at Corrective Action Site TA-19-00-05PT at CAU 400: Bomblet Pit and Five Points Landfill (TTR). After this letter was sent, meetings were held with NDEP to discuss this request, along with other items that the EM Nevada Program is working on with regard to the Use Restriction Form update efforts. In one of the meetings, NDEP expressed that they would wait to give their approval for the CAU 400 request until the EM Nevada Program had concurrence from the U. S. Air Force (USAF) on this action.

Please find enclosed the September 4, 2019, response letter from the USAF acknowledging the EM Nevada Program intent to remove the fencing and discontinue inspections.

With this acknowledgement from the USAF, the EM Nevada Program is requesting that NDEP approve the request to remove the fence and discontinue inspections. Once we receive approval from NDEP, plans to remove the fence will begin. Inspections for CAU 400 were not done in calendar year 2019, therefore the Post-Closure Inspection Report for the Tonopah Test Range and Nevada Test and Training Range for Calendar Year 2019, and future years, will not include information on CAU 400.

Please contact Carol Dinsman at (702) 724-0832 if further information on this matter is needed.

/s/ Wilhelm R. Wilborn

Bill R. Wilborn
Deputy Program Manager, Operations
EM Nevada Program

EMO:14028.CD

Enclosures:
As stated

cc w/encl. via email:

Mark McLane, NDEP

Jeffrey Fraher, DTRA/CXTS

Ken Kreie, LM

Brian Allen, MSTS

Kari Stringfellow, MSTS

MSTS Correspondence Management

Mark Burmeister, Navarro

Pat Matthews, Navarro

Navarro Central Files

Rob Boehlecke, EM

Kevin Cabble, EM

Tiffany Gamero, EM

FFACO Group, EM

EM Records

NFO Read File



U.S. Department of Energy
Environmental Management
Nevada Program
P.O. Box 98518
Las Vegas, NV 89193-8518

MAR 28 2019

Christine Andres, Chief
Bureau of Federal Facilities
Division of Environmental Protection
2030 East Flamingo Road, Suite 230
Las Vegas, NV 89119-0818

REQUEST TO IMPLEMENT CHANGES TO THE INSPECTION AND MAINTENANCE PRACTICES AT CORRECTIVE ACTION UNIT (CAU) 400: BOMBLET PIT AND FIVE POINTS LANDFILL (TTR)

The U.S. Department of Energy, Office of Environmental Management Nevada Program requests that the Nevada Division of Environmental Protection approve the removal of fencing and the discontinuation of best management practice inspections at CAS TA-19-00-05PT (CAU 400) located at Five Points intersection on the Tonopah Test Range (TTR).

It is recognized that these items have been previously discussed with your staff; as requested in a meeting held on June 26, 2018, this letter serves as a formal request.

Please contact Tiffany Gamero at (702) 295-7645 if further information on this matter is needed.

/s/ Wilhelm R. Wilborn

Bill R. Wilborn
Deputy Program Manager, Operations
EM Nevada Program

EMO:13152.TG

cc via e-mail:
Mark McLane, NDEP
Justin Costa Rica, NDEP
Jeffrey Fraher, DTRA/CXTS
Pat Matthews, Navarro
Navarro Central Files
MSTS Correspondence Management
FFACO Group, EM
Tiffany Gamero, EM
NFO Read File



**U.S. Department of Energy
Environmental Management
Nevada Program
100 N. City Parkway, Suite 1750
Las Vegas, NV 89106-4617**

EMO.191029.0003

OCT 29 2019

Christine Andres, Chief
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Division of Environmental Protection
2030 East Flamingo Road, Suite 230
Las Vegas, NV 89119-0818

(R)
Filed Locally/
Sent to Recall

(RF) (G)
NFO Read File

REQUEST TO IMPLEMENT CHANGES TO THE INSPECTION AND MAINTENANCE PRACTICES AT CORRECTIVE ACTION UNIT (CAU) 400: BOMBLET PIT AND FIVE POINTS LANDFILL (TTR)

In March 2019, the Environmental Management (EM) Nevada Program sent a letter to the Nevada Division of Environmental Protection (NDEP), copy enclosed, requesting approval to remove the fencing and discontinue best management practice inspections that have been in place at Corrective Action Site TA-19-00-05PT at CAU 400: Bomblet Pit and Five Points Landfill (TTR). After this letter was sent, meetings were held with NDEP to discuss this request along with other items that the EM Nevada Program is working on with regard to the Use Restriction Form update efforts. In one of the meetings, NDEP expressed that they would wait to give their approval for the CAU 400 request until the EM Nevada Program had concurrence from the U. S. Air Force (USAF) on this action.

CONCUR

EMNV Prog. 5-7063
EMNV-OS
Dinsman <i>[Signature]</i>
10/28 /19
EMNV-O
Gamero <i>[Signature]</i>
10/28 /19
D/EMNV-O
Wilborn <i>[Signature]</i>
10/28 /19
EMNV Prog. 5-7063

Please find enclosed the September 4, 2019, response letter from the USAF acknowledging the EM Nevada Program intent to remove the fencing and discontinue inspections.

With this acknowledgement from the USAF, the EM Nevada Program is requesting that NDEP approve the request to remove the fence and discontinue inspections. Once we receive approval from NDEP, plans to remove the fence will begin. Inspections for CAU 400 were not done in calendar year 2019, therefore the Post-Closure Inspection Report for the Tonopah Test Range and Nevada Test and Training Range for Calendar Year 2019, and future years, will not include information on CAU 400.

Please contact Carol Dinsman at (702) 724-0832 if further information on this matter is needed.

Original Signed by:
Bill Wilborn

Bill R. Wilborn
Deputy Program Manager, Operations
EM Nevada Program

EMO:14028.CD

Enclosures:
As stated



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources
Steve Sisolak, Governor
Bradley Crowell, Director
Greg Lovato, Administrator

EMO.191104.0002

October 31, 2019

Mr. Bill R. Wilborn
Deputy Program Manager, Operations
EM Nevada Program
100 N. City Parkway, Suite #1750
Las Vegas, Nevada 89106

RE: Request to Implement Changes to the Inspection and Maintenance Practices at Corrective Action Unit (CAU) 400: Bomblet Pit and Five Points Landfill (TTR)
Federal Facility Agreement and Consent Order

Dear Mr. Wilborn:

The Nevada Division of Environmental Protection, Bureau of Federal Facilities (NDEP) has received and reviewed the Environmental Management Nevada Program's (EM Nevada Program) above-referenced letter dated October 29, 2019. The enclosure from the United States Air Force in that letter provides their acknowledgement of the proposed changes at CAU 400. Therefore, NDEP approves EM Nevada Program's request to remove the fencing and the discontinuation of best management practice inspections at Corrective Action Site TA-19-00-05PT at CAU 400: Bomblet Pit and Five Points Landfill (TTR).

If you have questions regarding this matter, please contact either Mark McLane or me at (702) 486-2850, ext. 226 or 232, respectively

Sincerely,

/s/ Chris D. Andres

Christine D. Andres
Chief
Bureau of Federal Facilities

CDA/MM

ec: EM Records, EM/NV
Robert Boehlecke, EM/NV
Mark Burmeister, EM/NV
Kevin Cabbie, EM/NV
Tiffany Gamero, EM/NV

Mr. Bill R. Wilborn
Page 2 of 2
October 31, 2019

Pat Matthews, EM/NV
FFACO Group, EM/NV
NFO Read File
Navarro Central Files
MSTS Correspondence Management, Las Vegas, NV
Ken Kreie, LM

cc: EM Records, EM/MV
J.T. Fraher, DTRA/CXTS, Kirkland AFB, NM

Appendix C
Post-Closure Inspection Checklists
(10 Pages)

POST-CLOSURE INSPECTION CHECKLIST

**CAU 407, ROLLER COASTER RADSAFE AREA (TTR) –
CAS TA-23-001-TARC, ROLLER COASTER RADSAFE AREA**

Inspection Date: 6/5/19	Reason for Inspection: Annual
Date of Last Post-Closure Inspection: 6/26/18	Reason for Last Post-Closure Inspection: Annual
Responsible Entity: Navarro	
Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro	

A. GENERAL INSTRUCTIONS

- Visual inspection includes features described in this checklist.
- Field notes are not required if the checklist and associated attachments adequately describe site conditions.
- Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)	YES	NO	EXPLANATION (required if shaded box is checked)
1. Were anomalies or trends detected on previous inspections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Were maintenance or repairs performed since the last inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Animal burrows repaired west of 19/8/18

C. SITE INSPECTION (To be completed during the site visit)

UR Signs:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Are all use restriction signs legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Waste Unit Cover/Fenced Area:			
YES NO EXPLANATION (required if shaded box is checked)			
1. Is there evidence of settling or cracking, water ponding or animal burrows on the cover?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there any waste exposed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Is there evidence of erosion (wind or water) on the cover?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Is there vegetation up against the fencing (inside or outside)?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Is there damage to or a break in the fencing or fenceposts?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	South fence is down near SE corner
6. Is there trash or debris within the fenced area?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there any other issues not specifically described in this checklist?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

D. FIELD CONCLUSIONS

	YES	NO	EXPLANATION (required if shaded box is checked)
1. Have photographs of the site been taken?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there an imminent hazard to the integrity of the landfill cover?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

The site is in generally good condition, but a section of fence is down near the SE corner

E. INSPECTION PERSONNEL:

Inspector (Printed Name): **Juan Alvarez**

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: Dawn Siskman	Date: 2-10-2020
-----------------------------------	------------------------

POST-CLOSURE INSPECTION CHECKLIST

CAU 424, AREA 3 LANDFILL COMPLEXES (TTR) – CAS 03-08-001-A301, LANDFILL CELL A3-1

Inspection Date: <u>6/5/19</u>	Reason for Inspection: <u>Annual</u>
Date of Last Post-Closure Inspection: <u>6/26/18</u>	Reason for Last Post-Closure Inspection: <u>Annual</u>
Responsible Entity: Navarro	
Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro	

- A. GENERAL INSTRUCTIONS**
- Visual inspection includes features described in this checklist.
 - Field notes are not required if the checklist and associated attachments adequately describe site conditions.
 - Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)	YES	NO	EXPLANATION (required if shaded box is checked)
1. Were anomalies or trends detected on previous inspections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>for 2/26/20 Annual BORROW</u>
2. Were maintenance or repairs performed since the last inspection?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>for 2/26/20 repair work of 10/8/18</u>

C. SITE INSPECTION (To be completed during the site visit)			
UR Signs/Landfill Markers:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Are all use restriction signs legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Have any of the monuments been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Have any of the monument/survey markers been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Waste Unit Cover:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Is there evidence of subsidence (settling or cracking, water ponding or animal burrows) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there evidence of erosion (wind or water) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Is there any waste exposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Are there signs of unauthorized use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there any other issues not specifically described in this checklist?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

D. FIELD CONCLUSIONS	YES	NO	EXPLANATION (required if shaded box is checked)
1. Have photographs of the site been taken?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there an imminent hazard to the integrity of the landfill cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

(Site is in good condition)

E. INSPECTION PERSONNEL:
 Inspector (Printed Name): Juan Alvarez

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: Dawn Sickerman Date: 2-10-2020

POST-CLOSURE INSPECTION CHECKLIST

CAU 424, AREA 3 LANDFILL COMPLEXES (TTR) – CAS 03-08-002-A302, LANDFILL CELL A3-2

Inspection Date: 6/5/19	Reason for Inspection: Annual
Date of Last Post-Closure Inspection: 6/26/18	Reason for Last Post-Closure Inspection: Annual
Responsible Entity: Navarro	
Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro	

A. GENERAL INSTRUCTIONS

- Visual inspection includes features described in this checklist.
- Field notes are not required if the checklist and associated attachments adequately describe site conditions.
- Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)	YES	NO	EXPLANATION (required if shaded box is checked)
1. Were anomalies or trends detected on previous inspections?	<input checked="" type="checkbox"/>		Debris pile on cover, subsidence hole in cover
2. Were maintenance or repairs performed since the last inspection?	<input checked="" type="checkbox"/>		Repairs made during visit of 10/8/18

C. SITE INSPECTION (To be completed during the site visit)

UR Signs/Landfill Markers:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Are all use restriction signs legible?	<input checked="" type="checkbox"/>		
2. Have any of the monuments been disturbed or damaged?		<input checked="" type="checkbox"/>	
3. Have any of the monument/survey markers been disturbed or damaged?		<input checked="" type="checkbox"/>	
Waste Unit Cover:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Is there evidence of subsidence (settling or cracking, water ponding or animal burrows) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there evidence of erosion (wind or water) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Is there any waste exposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Are there signs of unauthorized use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there any other issues not specifically described in this checklist?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

D. FIELD CONCLUSIONS	YES	NO	EXPLANATION (required if shaded box is checked)
1. Have photographs of the site been taken?		<input checked="" type="checkbox"/>	
2. Is there an imminent hazard to the integrity of the landfill cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

The site is in good condition

E. INSPECTION PERSONNEL:

Inspector (Printed Name): **Juan Alvarado**

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: **Dawn Stekman** Date: **2-10-2020**

POST-CLOSURE INSPECTION CHECKLIST

CAU 424, AREA 3 LANDFILL COMPLEXES (TTR) – CAS 03-08-002-A303, LANDFILL CELL A3-3

Inspection Date: <u>6/5/19</u>	Reason for Inspection: <u>Annual</u>
Date of Last Post-Closure Inspection: <u>6/26/18</u>	Reason for Last Post-Closure Inspection: <u>Annual</u>
Responsible Entity: Navarro	
Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro	

A. GENERAL INSTRUCTIONS

- Visual inspection includes features described in this checklist.
- Field notes are not required if the checklist and associated attachments adequately describe site conditions.
- Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)	YES	NO	EXPLANATION (required if shaded box is checked)
1. Were anomalies or trends detected on previous inspections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>low rock wall on toxic portion</u>
2. Were maintenance or repairs performed since the last inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>added rock wall at 10/8/18</u>

C. SITE INSPECTION (To be completed during the site visit)

UR Signs/Landfill Markers:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Are all use restriction signs legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Have any of the monuments been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Have any of the ground-flush survey markers been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Have any of the monument/survey markers been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Waste Unit Cover:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Is there evidence of subsidence (settling or cracking, water ponding or animal burrows) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there evidence of erosion (wind or water) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Is there any waste exposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Are there signs of unauthorized use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there any other issues not specifically described in this checklist?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

D. FIELD CONCLUSIONS	YES	NO	EXPLANATION (required if shaded box is checked)
1. Have photographs of the site been taken?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there an imminent hazard to the integrity of the landfill covers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

site is in good condition

E. INSPECTION PERSONNEL:

Inspector (Printed Name): Juan Alvares

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: <u>Dawn Siekerman</u>	Date: <u>2-10-2020</u>
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POST-CLOSURE INSPECTION CHECKLIST

CAU 424, AREA 3 LANDFILL COMPLEXES (TTR) – CAS 03-08-002-A304, LANDFILL CELL A3-4

Inspection Date: <u>6/5/19</u>	Reason for Inspection: <u>Annual</u>
Date of Last Post-Closure Inspection: <u>6/28/18</u>	Reason for Last Post-Closure Inspection: <u>Annual</u>
Responsible Entity: Navarro	
Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro	

A. GENERAL INSTRUCTIONS

- Visual inspection includes features described in this checklist.
- Field notes are not required if the checklist and associated attachments adequately describe site conditions.
- Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)	YES	NO	EXPLANATION (required if shaded box is checked)
1. Were anomalies or trends detected on previous inspections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>More marker and sign needed on NE monument</u>
2. Were maintenance or repairs performed since the last inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>A base marker add to NE monument</u>

C. SITE INSPECTION (To be completed during the site visit)

UR Signs/Landfill Markers:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Are all use restriction signs legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Have any of the monuments been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Have any of the monument/survey markers been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Waste Unit Cover:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Is there evidence of subsidence (settling or cracking, water ponding or animal burrows) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there evidence of erosion (wind or water) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Is there any waste exposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Are there signs of unauthorized use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there any other issues not specifically described in this checklist?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

D. FIELD CONCLUSIONS	YES	NO	EXPLANATION (required if shaded box is checked)
1. Have photographs of the site been taken?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there an imminent hazard to the integrity of the landfill covers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes:

Site is in generally good condition. A UR sign is need on NE monument

E. INSPECTION PERSONNEL:

Inspector (Printed Name): Juan Alvarado

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: Dawn Sickerman Date: 2-10-2020

POST-CLOSURE INSPECTION CHECKLIST

CAU 424, AREA 3 LANDFILL COMPLEXES (TTR) – CAS 03-08-002-A306, LANDFILL CELL A3-6

Inspection Date: 6/5/19 Reason for Inspection: Annual

Date of Last Post-Closure Inspection: 6/26/18 Reason for Last Post-Closure Inspection: Annual

Responsible Entity: Navarro

Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro

A. GENERAL INSTRUCTIONS

- Visual inspection includes features described in this checklist.
- Field notes are not required if the checklist and associated attachments adequately describe site conditions.
- Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)

	YES	NO	EXPLANATION (required if shaded box is checked)
1. Were anomalies or trends detected on previous inspections?		X	
2. Were maintenance or repairs performed since the last inspection?		X	

C. SITE INSPECTION (To be completed during the site visit)

UR Signs/Landfill Markers:

	YES	NO	EXPLANATION (required if shaded box is checked)
1. Are all use restriction signs legible?	X		
2. Have any of the monuments been disturbed or damaged?		X	
3. Have any of the monument/survey markers been disturbed or damaged?		X	

Waste Unit Cover:

	YES	NO	EXPLANATION (required if shaded box is checked)
1. Is there evidence of subsidence (settling or cracking, water ponding or animal burrows) on the cover?		X	
2. Is there evidence of erosion (wind or water) on the cover?		X	
3. Is there any waste exposed?		X	
3. Are there signs of unauthorized use?		X	
Are there any other issues not specifically described in this checklist?		X	

D. FIELD CONCLUSIONS

	YES	NO	EXPLANATION (required if shaded box is checked)
1. Have photographs of the site been taken?		X	
2. Is there an imminent hazard to the integrity of the landfill covers?		X	

Notes:

The site is in good condition, no issues.

E. INSPECTION PERSONNEL:

Inspector (Printed Name): Juan Alvarez

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: Dawn Stekeman

Date: 2-10-2020

POST-CLOSURE INSPECTION CHECKLIST

CAU 424, AREA 3 LANDFILL COMPLEXES (TTR) – CAS 03-08-002-A308, LANDFILL CELL A3-8

Inspection Date: 6/5/19	Reason for Inspection: Annual
Date of Last Post-Closure Inspection: 6/26/18	Reason for Last Post-Closure Inspection: Annual
Responsible Entity: Navarro	
Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro	

A. GENERAL INSTRUCTIONS

- Visual inspection includes features described in this checklist.
- Field notes are not required if the checklist and associated attachments adequately describe site conditions.
- Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)	YES	NO	EXPLANATION (required if shaded box is checked)
1. Were anomalies or trends detected on previous inspections?	<input checked="" type="checkbox"/>		SW movement couldn't be fixed
2. Were maintenance or repairs performed since the last inspection?	<input checked="" type="checkbox"/>		SW movement fixed and covered w/ loose rock

C. SITE INSPECTION (To be completed during the site visit)

UR Signs/Landfill Markers:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Are all use restriction signs legible?	<input checked="" type="checkbox"/>		
2. Have any of the ground-flush survey markers been disturbed or damaged?		<input checked="" type="checkbox"/>	
Waste Unit Cover:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Is there evidence of subsidence (settling or cracking, water ponding or animal burrows) on the cover?		<input checked="" type="checkbox"/>	
2. Is there evidence of erosion (wind or water) on the cover?		<input checked="" type="checkbox"/>	
3. Is there any waste exposed?		<input checked="" type="checkbox"/>	
4. Are there signs of unauthorized use?		<input checked="" type="checkbox"/>	
Are there any other issues not specifically described in this checklist?		<input checked="" type="checkbox"/>	

D. FIELD CONCLUSIONS	YES	NO	EXPLANATION (required if shaded box is checked)
1. Have photographs of the site been taken?		<input checked="" type="checkbox"/>	
2. Is there an imminent hazard to the integrity of the landfill covers?		<input checked="" type="checkbox"/>	

Notes:

site in good condition more loose rock is needed at SE ~~monument~~ for 6/5/19 monument.

E. INSPECTION PERSONNEL:

Inspector (Printed Name): **Juan Alvarez**

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: **Dawn Siekeman** Date: **2-10-2020**

POST-CLOSURE INSPECTION CHECKLIST

CAU 453, AREA 9 UXO LANDFILL (TTR) – CAS 09-55-001-0952, AREA 9 LANDFILL

Inspection Date: 6/15/19	Reason for Inspection: Annual
Date of Last Post-Closure Inspection: 6/26/18	Reason for Last Post-Closure Inspection: Annual
Responsible Entity: Navarro	
Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro	

A. GENERAL INSTRUCTIONS

- Visual inspection includes features described in this checklist.
- Field notes are not required if the checklist and associated attachments adequately describe site conditions.
- Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)	YES	NO	EXPLANATION (required if shaded box is checked)
1. Were anomalies or trends detected on previous inspections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Animal burrows and Erosion tunnels
2. Were maintenance or repairs performed since the last inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Repairs made week of 1/8/18

C. SITE INSPECTION (To be completed during the site visit)

UR Signs/Monuments:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Are all use restriction signs legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Have any of the monuments been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Have any of the monument/survey markers been disturbed or damaged?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Waste Unit Cover/Fenced Area:	YES	NO	EXPLANATION (required if shaded box is checked)
1. Is there evidence of settling or cracking, water ponding or animal burrows on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there evidence or erosion (wind or water) on the cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Is there any waste exposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Are there signs of unauthorized excavation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Is there vegetation up against the fencing (inside or outside)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Is there damage to or a break in the fencing or fenceposts (signs of wear)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is there trash or debris within the fenced area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there any other issues not specifically described in this checklist?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

D. FIELD CONCLUSIONS	YES	NO	EXPLANATION (required if shaded box is checked)
1. Have photographs of the site been taken?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Is there an imminent hazard to the integrity of the landfill cover?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes: **Site is in good condition, no issues**

E. INSPECTION PERSONNEL:

Inspector (Printed Name): **Juan Alvarado**

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: Dawn Siekerman	Date: 2-10-2020
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POST-CLOSURE INSPECTION CHECKLIST

CAU 487, THUNDERWELL SITE (TTR) – CAS RG-26-001-RGRV, THUNDERWELL SITE

Inspection Date: 6/5/19 Reason for Inspection: Annual

Date of Last Post-Closure Inspection: 6/26/18 Reason for Last Post-Closure Inspection: Annual

Responsible Entity: Navarro

Responsible Facility Owner: Pat Matthews, Environmental Restoration Manager, Navarro

A. GENERAL INSTRUCTIONS

- Visual inspection includes features described in this checklist.
• Field notes are not required if the checklist and associated attachments adequately describe site conditions.
• Photographs are not required but may be taken to document maintenance/repair needs, anomalous features, or new features (such as changes in adjacent area land use).

B. PREPARATION (To be completed prior to the site visit)

Table with 4 columns: Question, YES, NO, EXPLANATION. Rows 1: Were anomalies or trends detected on previous inspections? (NO checked); 2: Were maintenance or repairs performed since the last inspection? (NO checked).

C. SITE INSPECTION (To be completed during the site visit)

UR Signs/Monuments: (A8 and A17 Anomalies)

Table with 4 columns: Question, YES, NO, EXPLANATION. Rows 1: Are all use restriction signs legible? (YES checked); 2: Have any of the monuments been disturbed or damaged? (NO checked); 3: Have any of the monument/survey markers been disturbed or damaged? (NO checked); Waste Unit Cover: 1: Is there evidence of subsidence, erosion, unauthorized use, etc? (NO checked); 2: Is there any waste exposed? (NO checked); Are there any other issues not specifically described in this checklist? (NO checked).

D. FIELD CONCLUSIONS

Table with 4 columns: Question, YES, NO, EXPLANATION. Rows 1: Have photographs of the site been taken? (NO checked); 2: Is there an imminent hazard to the integrity of the landfill covers? (NO checked).

Notes:

The site is in good condition.

E. INSPECTION PERSONNEL:

Inspector (Printed Name): Juan Alvarado

F. VERIFICATION: I have reviewed this checklist and attachments and have verified that they are complete.

Printed Name: Dawn Siekerman Date: 2-10-2020

Appendix D

Field Notes

(6 Pages)

FIELD ACTIVITY DAILY LOG

DAILY LOG	DATE	6	5	19
	SHEET	1	OF	6

PROJECT NAME: Pre- and Post-Closure Monitoring, TTR/NTTR CAUs WCP# NAV-SM-TTRNTTR-323 Rev. 04		PROJECT NO.: LN19-812
FIELD ACTIVITY SUBJECT: Inspection of TTR Corrective Action Units		
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:		
<p>0700 check in truck</p> <p>0720 Depart Tonopah</p> <p>Personnel: DOE EM: Tiffany Guerrero, Pamela Acity Contract EM: Juan Alvarado WHEP : Mark McClellan DOE LM: Ken Kreib, Polly Robinson for DOE contract LM: Jackie Petrella, Patty Gallo Mike McDonald, Dan Brenneke</p> <p>0800 Arrive NTTR</p> <p>0900 @ Trailer pull / TTR / Introductions</p> <p>0923 dept for 424</p>		
VISITORS ON SITE: See above	CHANGES FROM PLANS AND SPECIFICATIONS, AND OTHER SPECIAL ORDERS AND IMPORTANT DECISIONS. None	
WEATHER CONDITIONS: Sunny / calm 70's - 90's	IMPORTANT TELEPHONE CALLS: None	
PERSONNEL ON SITE:		
SIGNATURE /s/ Signature on file	DATE: 4/5/19	

FIELD ACTIVITY DAILY LOG

(CONTINUATION SHEET)


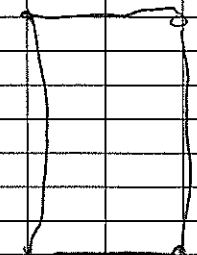
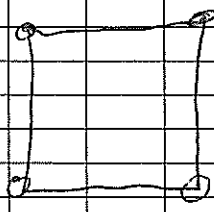
DAILY LOG	DATE	6	5	19
	SHEET 2	OF	6	

PROJECT NAME: Pre- and Post-Closure Monitoring, TTR/NTTR CAUs
 WCP# NAV-SM-TTRNTTR-323 Rev. 04

PROJECT NO.: LN19-812

FIELD ACTIVITY SUBJECT: Inspection of TTR Corrective Action Units

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0928	Avenue	3-1	424																	
																				
<p>Some windows will filled in / collapsed NO ISSUES signs ground</p>																				
0938	Avenue	3-2	424																	
																				
<p>NO ISSUES signs ground file permit subsidence filled</p>																				
0946	Avenue	3-5	425	4/5/19																
																				
<p>NO ISSUES, signs OK LHM question - are road/paved area and available / may be - yes tree</p>																				

FIELD ACTIVITY DAILY LOG

(CONTINUATION SHEET)

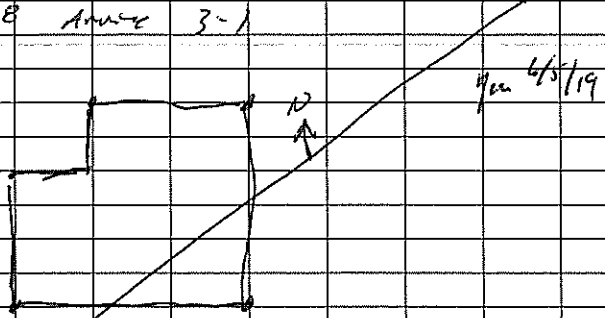
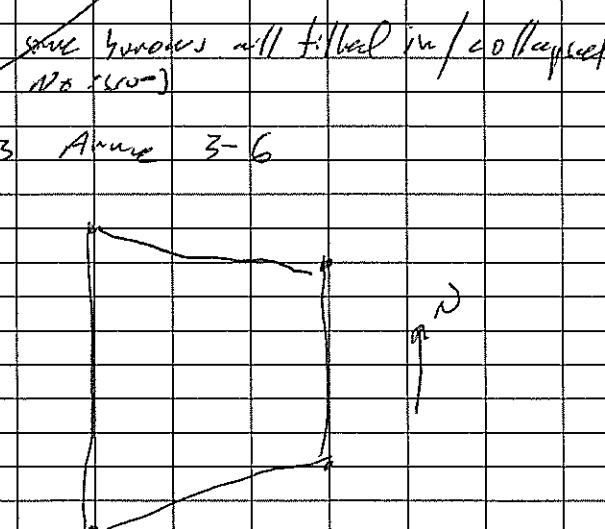
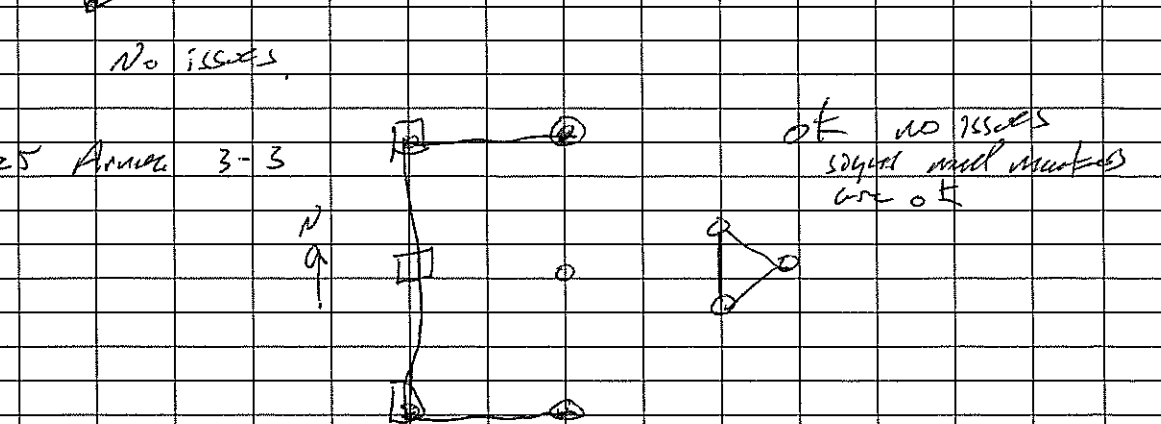
DAILY LOG	DATE	6	5	19
	SHEET	3	OF	6

PROJECT NAME: Pre- and Post-Closure Monitoring, TTR/NTTR CAUs
 WCP# NAV-SM-TTRNTTR-323 Rev. 04

PROJECT NO.: LN19-812

FIELD ACTIVITY SUBJECT: Inspection of TTR Corrective Action Units

DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:

0928	Ammu	3-1			
			<p>some burrows will filled in/collapsed No issues</p>		
1013	Ammu	3-6			
			<p>No issues</p>		
1025	Ammu	3-3			
			<p>OK no issues slight mud marks are OK</p>		

LM - Operation; Air force has own "PE OP" system

FIELD ACTIVITY DAILY LOG

(CONTINUATION SHEET)

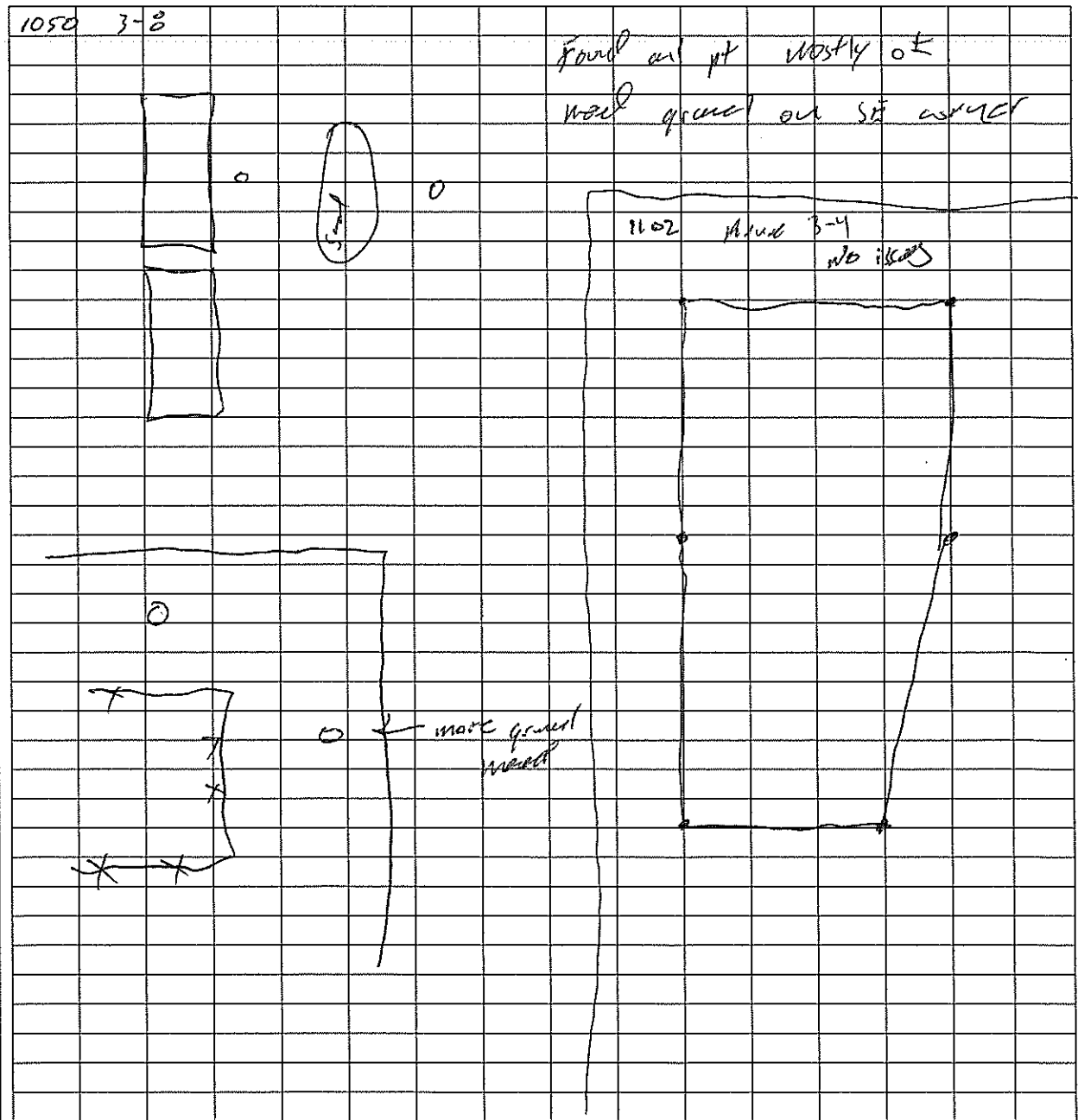
DAILY LOG	DATE	6	5	19
	SHEET	4	OF	6

PROJECT NAME: Pre- and Post-Closure Monitoring, TTR/NTTR CAUS
 WCP# NAV-SM-TTRNTTR-323 Rev. 04

PROJECT NO.: LN19-812

FIELD ACTIVITY SUBJECT: Inspection of TTR Corrective Action Units

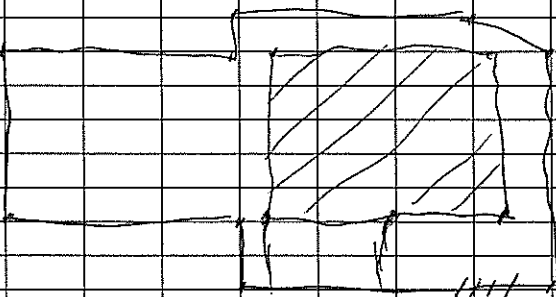
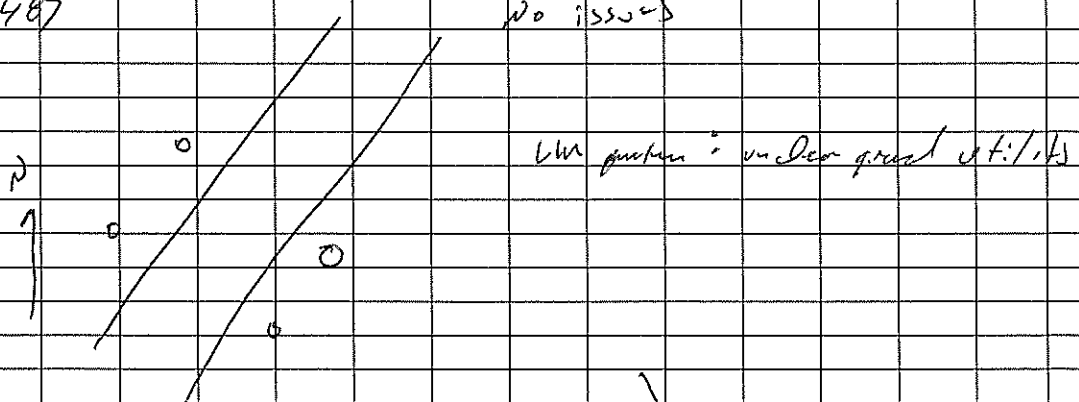
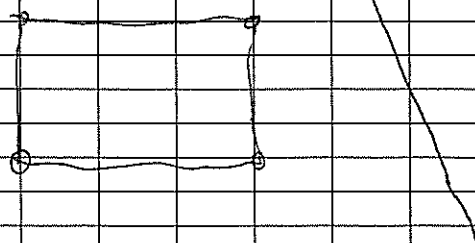
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:



FIELD ACTIVITY DAILY LOG

(CONTINUATION SHEET)

DAILY LOG	DATE	6	5	19
	SHEET 5	OF	6	

PROJECT NAME: Pre- and Post-Closure Monitoring, TTR/NTTR CAUs WCP# NAV-SM-TTRNTTR-323 Rev. 04		PROJECT NO.: LN19-812	
FIELD ACTIVITY SUBJECT: Inspection of TTR Corrective Action Units			
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS:			
1111	407		
1142	400	Signs of fence is down no issues	
1224	487		
1231	487		

FIELD ACTIVITY DAILY LOG

(CONTINUATION SHEET)

DAILY LOG	DATE	6	5	19
	SHEET 6	OF	6	

PROJECT NAME: Pre- and Post-Closure Monitoring, TTR/NTTR CAUs WCP# NAV-SM-TTRNTTR-323 Rev. 04	PROJECT NO.: LN19-812
FIELD ACTIVITY SUBJECT: Inspection of TTR Corrective Action Units	
DESCRIPTION OF DAILY ACTIVITIES AND EVENTS: <i>1300 hrs at a tank</i> <i>NDEP corrector - sign no cas identified</i>	

Appendix E

Photographs

Note: No photographs were taken during the 2019 inspections.

Appendix F

Post-Closure Vegetation Monitoring Report

Note: Post-closure vegetation was not conducted in 2019.

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