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DSHW-2022-000261

Div of Waste Management
and Radiation Control

Tooele County - Ibapah Class IV Permit Application

1 message

JAN 06 2022

chovey@ae2eng.com <chovey@ae2eng.com>

Thu, Jan 6, 2022 at 3:24 PM

To: dwmrcsubmit@utah.gov

Cc: Roy VanOs <rvanos@utah.gov>, Wayne Anderton <WAnderton@tooeleco.org>

Attached is an electronic copy which can be viewed "Permit Application.pdf" at: <https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:3195dd8f-d139-4f46-8639-9003abcc2a6b>

Thanks,

Chet Hovey, P.E.

Principal

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APPLICATION FOR PERMIT RENEWAL

Div of Waste Management
and Radiation Control

JAN 06 2022

IBAPAH SOLID WASTE FACILITY

DSHW-2022-000261

CLASS IVb LANDFILL

DECEMBER 2021



JAN 15 2022



Application for Permit Renewal

FOR

Ibapah Solid Waste Facility

Class IVb

Mailing Address

47 South Main

Tooele, Utah 84074

APPLICATION FOR PERMIT RENEWAL

Class IVb Landfill

Prepared for:



**Ibapah Solid Waste Facility
Tooele County, Utah**

Prepared by:



December 2021

ENGINEER'S CERTIFICATION AND DECLARATION

I, Chet A. Hovey, hereby certify that I am a Registered Professional Civil Engineer holding registration number 368556-2202 in the State of Utah. I declare that this Application for Permit Renewal - Class IVb Landfill for the Ibapah Solid Waste Facility located in Tooele County, Utah, was prepared under my direct supervision for Tooele County.



Utah Class IV and VI Landfill Permit Application Form

Part I General Information APPLICANT: PLEASE COMPLETE ALL SECTIONS.									
Landfill Type	<input type="checkbox"/> Class IVa	<input checked="" type="checkbox"/> Class IVb	Application Type	<input type="checkbox"/> New Application	<input type="checkbox"/> Facility Expansion	<input type="checkbox"/> Class VI	<input checked="" type="checkbox"/> Renewal Application	<input type="checkbox"/> Modification	
For Renewal Applications, Facility Expansion Applications and Modifications Enter Current Permit Number _____									
III. Facility Name and Location									
Name of Facility Ibapah Solid Waste Facility									
Site Address (street or directions to site) 1 mi north of Ibapah Post Office, Ibapah, UT, 84034					County Tooele				
City Ibapah			Zip Code		Telephone				
Township 9	Range 19	Section(s) 15	Quarter/Quarter Section NW		Quarter Section NW				
Main Gate Latitude degrees 40 minutes 3 seconds 3			Longitude degrees 113 minutes 58 seconds 56						
IV. Facility Owner(s) Information									
Name of Facility Owner Tooele County									
Address (mailing) 47 South Main									
City Tooele			State UT		Zip Code 84074		Telephone (435)833-9520		
V. Facility Operator(s) Information									
Name of Facility Operator Tooele County									
Address (mailing) 47 South Main									
City Tooele			State UT		Zip Code 84074		Telephone (435)833-9520		
VI. Property Owner(s) Information									
Name of Property Owner Tooele County									
Address (mailing) 47 South Main									
City Tooele			State UT		Zip Code 84074		Telephone (435)833-9520		
VII. Contact Information									
Owner Contact Wayne Anderton				Title Solid Waste Director					
Address (mailing) 47 South Main Tooele, UT 84074									
City Tooele			State UT		Zip Code 84074		Telephone (435)843-4783		
Email Address wayne.Anderton@tooeleco.org				Alternative Telephone (cell or other)		N.A.			
Operator Contact Wayne Anderton				Title Solid Waste Director					
Address (mailing) 47 South Main Tooele, UT 84074									
City Tooele			State UT		Zip Code 84074		Telephone (435)843-4783		
Email Address wayne.Anderton@tooeleco.org				Alternative Telephone (cell or other)					
Property Owner Contact Wayne Anderton				Title Solid Waste Director					
Address (mailing) 47 South Main Tooele, UT 84074									
City Tooele			State UT		Zip Code 84074		Telephone (435)843-4783		
Email Address wayne.Anderton@tooeleco.org				Alternative Telephone (cell or other)					

Utah Class IV and VI Landfill Permit Application Form

Part I General Information (Continued)				
VIII. Waste Types (check all that apply)			IX. Facility Area	
<input checked="" type="checkbox"/> Landfill will accept all wastes allowed in Class IV or VI landfills Or landfill will accept only the following wastes			Facility Area..... <u>10</u> acres	
Waste Type	Combined Disposal Unit	Monofill Unit	Disposal Area..... <u>10</u> acres	
<input type="checkbox"/> Construction & Demolition	<input type="checkbox"/>	<input type="checkbox"/>	Design Capacity	
<input type="checkbox"/> Tires	<input type="checkbox"/>	<input type="checkbox"/>	Years..... <u>75</u>	
<input type="checkbox"/> Yard Waste	<input type="checkbox"/>	<input type="checkbox"/>	Cubic Yards..... <u>10768</u>	
<input type="checkbox"/> Animals	<input type="checkbox"/>	<input type="checkbox"/>	Tons..... <u>4,845</u>	
<input type="checkbox"/> Contaminated Soil	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/> Other Inert Waste	<input type="checkbox"/>	<input type="checkbox"/>		
Note: Disposal of dead animals must be approved by the Director				
X. Fee and Application Documents				
Indicate Documents Attached To This Application		<input type="checkbox"/> Application Fee: Amount \$		Class VI Special Requirements
<input checked="" type="checkbox"/> Facility Map or Maps	<input checked="" type="checkbox"/> Facility Legal Description	<input checked="" type="checkbox"/> Plan of Operation	<input checked="" type="checkbox"/> Waste Description	<input type="checkbox"/> Documents required by UCA 19-6-108(9) and (10)
<input checked="" type="checkbox"/> Ground Water Report	<input checked="" type="checkbox"/> Closure Design	<input checked="" type="checkbox"/> Cost Estimates	<input checked="" type="checkbox"/> Financial Assurance	
I HEREBY CERTIFY THAT THIS INFORMATION AND ALL ATTACHED PAGES ARE CORRECT AND COMPLETE.				
Signature of Authorized Owner Representative <u>Wayne Anderton</u>		Title <u>Director</u>	Date <u>1-6-2022</u>	
Name typed or printed <u>Wayne Anderton</u>		Address		
Email Address		Alternative Telephone (cell or other)		
Signature of Authorized Land Owner Representative (if applicable)		Title	Date	
Name typed or printed		Address		
Email Address		Alternative Telephone (cell or other)		
Signature of Authorized Operator Representative (if applicable)		Title	Date	
Name typed or printed		Address		
Email Address		Alternative Telephone (cell or other)		

Introduction

- ❖ Includes a brief overview of the purpose of the application

Part I. Facility General Information

- ❖ Includes State of Utah Solid Waste Permit Application forms.
- ❖ Includes information required by Utah Office of Administrative Rules R315-301 through R315-310.

Part II. Facility Technical Information

- ❖ Includes information required by Utah Office of Administrative Rules R315-301 through R315-310.

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Appendix B – Proof of Ownership and Zoning

Appendix C – Scale House Ticket and Other Example Forms

Appendix D – Emergency Action Plan

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Appendix F – Storm Water Pollution Prevention Plan

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Appendix H – Closure and Post Closure Estimate

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Introduction

This document presents a Class IVb Landfill operating permit renewal application for the Ibapah Solid Waste Facility, which is currently under the ownership and operation of Tooele County. The Landfill is operated under the purview of Tooele County Department of Solid Waste and is requesting a renewal permit number from the State of Utah Department of Environmental Quality (UDEQ), Division of Waste Management and Radiation Control (DWMRC).

The application has been organized to follow the general outline of Utah Office of Administrative Rules R315-301 and R315-310. Part I of this document follows the standard form outlining general data pertaining to the site and is a general report providing a facility description, landfill operations plan, and closure and post-closure care plans. Part II provides the Professional Engineering Report and includes information regarding the design and geohydrology of the site.

APPLICATION FOR PERMIT RENEWAL
CLASS IV_b LANDFILL

Part I – Facility General Information

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I.a General Information for All Facilities

I.a.1 General Description of the Facility

R315-310-3(1)(b)

The purpose of this application is to obtain an official permit for an existing facility referred to as the Ibapah Solid Waste Facility (Landfill), which currently operates as a Class IVb landfill utilized for the disposal of construction and demolition solid waste (C&D) and is owned and operated by Tooele County. As can be seen in Figure A-2 (Appendix A) there is also an on-site roll-off container where MSW is placed for periodic transfer off-site to an appropriate facility, while the Class IVb disposal area is located within the southern area of the site.

As this is a relatively small facility which takes in very small quantities of waste, the Landfill is operated as a “self-serve” facility, with equipment brought to the site when necessary to ensure that the disposal site remains in acceptable condition. Customers are encouraged to call in advance of disposing waste at the facility. According to the most recent record-of-survey conducted in 2011, the Landfill property is approximately 10.059 acres in size and is located about one mile north of Ibapah along the east side of Highway 1 (Riddle, 2011). Please refer to Figure 1, Appendix A for a vicinity map of the site’s location as well as Figure 2 for a current facility map.

I.a.2 Legal Description of Property

R315-310-3(1)(c)

Please refer to Appendix B for a copy of the most recent Record of Survey (Riddle 2011), which provides a legal description of the property. This legal description is also provided below:

The property is located in the northwest quarter of Section 15, Township 9 South, Range 19 West, Salt Lake Base and Meridian.

Contains 10.059 acres

The front gate of the facility is located at 113°58’56” north longitude and 40°03’3” west latitude.

I.a.3 Proof of Ownership, lease agreement, or other mechanism

R315-310-3(1)(c)

Please refer “Account View”, Appendix B for information, obtained from the Tooele County official website, supporting the statement that the Ibapah Solid Waste Facility is owned by Tooele County.

I.a.4 Demonstration that Landfill is not a Commercial Facility

The Landfill is owned and operated by Tooele County, Utah. Please refer to Appendix B for information, obtained from the Tooele County official website, supporting the assertion that the Ibapah Solid Waste Facility is owned by Tooele County (Tooele County, 2021).

I.a.5 Waste Type and Anticipated Daily Volume **R315-310-3(1)(d)**

The Landfill is used to dispose of C&D waste materials. Based on tonnages recorded for previous a previous annual report prepared for 2018 (AE², 2019) C&D tonnages are estimated to approximate 65 tons annually, or about .20 tons per day, meeting the tonnage requirement for C&D classification of b.

I.a.6 Intended Schedule of Construction **R315-302-2(2)(a)**

The Landfill is an existing facility that continues to accept (C&D) solid waste on an ongoing basis per engineering plans and waste facility standards. At such time as the available disposal volume is fully utilized, the county will begin a planned post-closure procedure.

I.b General Information for all New or Laterally Expanding Facilities

I.b.1 Documentation of Historical Survey

As the Ibapah Solid Waste Facility is not a new or laterally expanding facility, this section is not within the scope of this application.

I.b.2 Name and Address of Property Owners within 1,000 feet

As the Ibapah Solid Waste Facility is not a new or laterally expanding facility, this section is not within the scope of this application.

I.b.3 Documentation of a Notice of Intent to Apply

As the Ibapah Solid Waste Facility is not a new or laterally expanding facility, this section is not within the scope of this application.

I.b.4 Local Jurisdictional Government

As the Ibapah Solid Waste Facility is not a new or laterally expanding facility, this section is not within the scope of this application.

I.c Location Standards for all New or Laterally Expanding IVa Landfills

I.c.1 Land Use Maps

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.2 Ecologically or Scientifically Significant Areas or Endangered Species

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.3 Map Showing Dwellings, Residential Areas, other Structures, etc.

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.4 Airports

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.5 Geologic Maps

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.6 Site Soils Maps

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.7 Magnitude of 24 Hour 25-Year Storm Events

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.8 Average Annual Rainfall

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.9 Maximum Elevation of Flood Waters Proximate to the Facility

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.10 Maximum Elevation of Flood Waters from 100-Year Flood

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.11 Wetlands

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.c.12 Groundwater

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

I.d Location Standards for New/Laterally Expanding Class IVb and VI Landfill

I.d.1 Floodplains

As this Class IVb facility is neither new nor laterally expanding, this section is not within the scope of this application.

I.d.2 Wetlands

As this Class IVb facility is neither new nor laterally expanding, this section is not within the scope of this application.

I.d.3 Lowest Level of Waste at least 10 above Historical High Ground Water

As this Class IVb facility is neither new nor laterally expanding, this section is not within the scope of this application.

I.d.4 Geology

As this Class IVb facility is neither new nor laterally expanding, this section is not within the scope of this application.

I.d.4 Lowest Waste Level Demonstration

As this Class IVb facility is neither new nor laterally expanding, this section is not within the scope of this application.

I.e Additional Locations Standards for New or Laterally Expanding Class IVb and VI Landfills Requesting the Addition of Dead Animals

I.e.1 Maps showing existing land use

As this Class IVb facility is neither new nor laterally expanding, but it should be noted that this facility has and will continue to accept dead animals for disposal.

I.e.2 Certification that no protected species are in site

As this Class IVb facility is neither new nor laterally expanding, but it should be noted that this facility has and will continue to accept dead animals for disposal.

I.e.3 Maps showing location of dwellings & historic structures

As this Class IVb facility is neither new nor laterally expanding, but it should be noted that this facility has and will continue to accept dead animals for disposal.

I.e.4 List of airports within five miles of facility

As this Class IVb facility is neither new nor laterally expanding, but it should be noted that this facility has and will continue to accept dead animals for disposal.

I.f Plan of Operations for All Facilities

I.f.1 Description of on-site Waste Handling Procedures and Example Form R315-302-2(2)(b) and R315-310-3(1)(f)

I.f.1.A Purpose

The purpose of the Plan of Operation is to provide a written description of the daily operational procedures of the existing Class IVb Landfill. These procedures incorporate the respective operations of the Class IVb disposal area as well as the MSW transfer area.

A landfill is a dynamic system that, over time, generates notable topography changes and therefore requires continual alterations to existing traffic patterns to reach the current active face. Changes may also occur in quantities of disposed materials, demographics of the service area, as well as with the administrative or regulatory requirements themselves. The intent of this Plan of Operations is to provide an accurate description of the current daily operations and procedures while allowing flexibility for the operational changes which will become necessary over time.

I.f.1.B Operational Procedures

I.f.1.B.i Disposal & Transfer

Presently, the Ibapah Solid Waste Facility accepts two classifications of waste, C&D and MSW. The former is disposed of within an on-site disposal cell, while the latter is placed within a roll-off container that is periodically emptied, with the MSW then being disposed of at a permit disposal facility.

I.f.1.B.ii Excavation and Construction of the Cells

As the waste disposed of within the cell is relatively minimal, the volume utilization is currently taking place at a very slow rate. Therefore, the excavation and construction of a new cell is

unlikely to take place for a substantial period of time. However, in the case of new construction and/or closure of an existing cell, the following would take place:

Any potential excavation of a new area would begin with the removal of shrubs, grass, and other vegetation growing within the excavation area. The surface soil is stripped to a minimum depth of 6 inches and stockpiled.

The working face of each cell is constructed at a slope of 3 horizontal to 1 vertical. The unloading of refuse will be restricted to specific areas at any one time in order to limit the size of tipping face while facilitating operational safety.

The final covers are also constructed with a maximum slope of 3 to 1 following the complete utilization of a cell. The final cover for the Class VI cell consists of an 18-inch minimum thickness of compacted native soil topped 6-inches of topsoil or native soil capable of supporting vegetation. Once in place, covers are then seeded to reduce erosion.

I.f.1.B.iii Equipment

The Class IVb Landfill cell design is constructed and operated with equipment transported to the site on an as-needed basis. If breakdowns or future projects require additional equipment, the Solid Waste Department may utilize county-owned equipment from other departments. Tooele County may also utilize rental agreements for additional equipment.

I.f.1.C On-Site Solid Waste Handling Procedures

The Landfill is owned and operated by Tooele County. Daily operation of this facility is under the direction of the Solid Waste Director. In the event of the Director's absence, a Senior Operator is the designate in charge of the landfill.

On a typical day, signage indicates where to place C&D waste. Should the disposal area change, the signage will be shifted accordingly. Annual tonnages are estimated based on observed volume utilization.

I.f.2 Schedule for conducting Inspections and Monitoring, and Example Forms R315-302-2(2)(c), R315-302-2(5)(a), and R315-310-3(1)(g)

Tooele County will be responsible for maintaining and inspecting the Ibapah Solid Waste Facility at a minimum of a quarterly basis in order to ensure proper safety protocols are being followed. A possible form for monitoring and inspection of the Ibapah Solid Waste Facility to ensure proper operation and maintenance is provided in Appendix C. Items that could be inspected on a regular basis are signs, fencing, cover, roads, equipment, etc.

I.f.3 Contingency Plans in the event of a fire or explosion **R315-302-2(2)(d)**

The Contingency Plan (for full copy reference Appendix D) is designed to minimize hazards to human health and/or local environment from any unplanned sudden or non-sudden discharge to air, soil, surface, or groundwater. The provisions of this plan will be carried out immediately upon an emergency or sudden release. However, emergency evacuation of the site would likely not be necessary given the nature of the waste materials stored and processed at the site. The probabilities of incidents caused by fire, explosion, or toxic vapor generation are remote.

I.f.3.A Fire or Explosion

The primary means of fire control in the Class IVb Landfill is to isolate hot or burning solid waste. In the event that a fire does erupt during operating hours, the burning material will be separated from the other materials and doused with water or controlled with fire suppression equipment. This action will be supported, when necessary, by the mobilization equipment owned and operated by the County.

I.f.3.B Explosive Gas Release

It is not expected that the type of waste deposited will produce significant amounts of explosive gases. However, as the Landfill is usually unmonitored, checking gas concentrations near the deposal site during routing site visits is encouraged.

I.f.4 Fugitive Dust Plan **R315-302-2(2)(g)**

The amount of traffic into and out of the Landfill is minimal and dust suppression has not been an issue. If the need arises in the future, Tooele County would implement measures to reduce fugitive dust. The prevailing winds in the area tend to originate from either the northwest or southeast (MRCC, 2021).

I.f.5 Plan for Litter Control and Collection **R315-302-2(2)(h)**

The Landfill Manager will continue the ongoing litter collection program in order to minimize the presence of litter on the site and adjacent properties. This program consists of various activities designed to reduce windblown litter in addition to other site features and operations that aid in the reduction of windblown litter. Activities specifically designed to reduce amounts of windblown litter include minimizing the size of the active face to the extent possible (reducing the area of wastes exposed to wind) and picking up fugitive waste near the drop box area when the bin is serviced.

Other features and operating techniques that have proven to reduce windblown litter include keeping municipal waste from entering the Class IVb cell and the application of daily and intermediate soil cover. Site and surrounding area inspections will be conducted on a routinely

daily basis, and any windblown litter found will be collected. The Maintenance Schedule also provides a section for the tracking of regular litter-control activities (Appendix C).

I.f.6 Hazardous Waste Exclusion Plan **R315-302-2(2)(j)**

A “Prohibited Waste” control program designed to detect and deter attempts to dispose of hazardous and other unacceptable waste is presently implemented at the Ibapah Solid Waste Facility. The program is designed to protect the health and safety of employees, customers, and the general public, as well as protect against contamination of the environment. The Director of Solid Waste is responsible for activities involving hazardous waste.

The site is open for public and private disposal. Signs are posted near the site entrance clearly indicating the types of wastes to be accepted and rejected. During periodic visits to the Landfill, the disposal area will be inspected for prohibited wastes. If any are identified, the immediate area around the waste will be cordoned off while the material removed and set aside for proper disposal actions. The Tooele County Health Department will be notified of actions taken to remove noncompliant waste from the Landfill.

I.f.7 Disease Vector Control Plan **R315-302-2(2)(k)**

The expectations for the need to control disease in a construction and demolition waste landfill are minimal. Keeping the open working face small, thoroughly compacting, and covering the waste with soil have proven effective methods in preventing disease vectors from becoming a problem.

I.f.8 Alternative Waste Handling Plan **R315-302-2(2)(l)**

If problems were to occur that prevented the use of the Class IVb Landfill, incoming C&D would be temporarily set aside or deposited at an alternative site if the delay were judged to be substantial. In the event of a major equipment failure, solid waste will be loaded and shipped to an alternative waste disposal facility such as Wasatch Regional, Salt Lake County, West Wendover, or Elko.

I.f.9 General Training Plan for Site Operations **R315-302-2(2)(o)**

Any personnel working at the Ibapah Solid Waste Facility is trained to have a working knowledge of the maintenance and operational techniques necessary to operate the Landfill in a manner consistent with the preservation of human health or safety and the environment. Training is accomplished through on-the-job training (OJT) and classroom training sessions. The Director of Solid Waste, or a designated professional trainer, is in charge of directing these training programs. Initial training is completed within three months of employment followed by an annual review of basic waste management skills.

I.f.9.A Training Schedule

The Solid Waste Director is required to certify as a Manager of Solid Waste, Manager of C&D Landfill and Manager of Transfer Station by completing the training courses and fulfilling the certification requirements of SWTI or SWANA. In addition, operators are required to take Landfill Operator and Waste Screening training courses. Continuing education efforts include the following:

I.f.9.A.i Introductory Training

Synopsis of solid waste regulations, record keeping, and transporter requirements.

- Requirement: All Personnel
- Method: Lecture/video course, OJT
- Review: Annual

I.f.9.A.ii Policies and Procedures

Security, inspections, and emergency response.

- Requirement: All Personnel
- Method: Lecture/video course, OJT
- Review: Annual

I.f.9.A.iii Safety

Personal protection, hazardous waste recognition, hazardous material handling, emergency response, fire protection, and basic first aid.

- Requirement: All Personnel
- Method: Lecture/video course
- Review: Annual

A Safety Training meeting is held once a week with a minimum duration of 15 minutes.

I.f.10 Recycling Programs **R315-303-4(6)**

The Ibapah Solid Waste Facility does not operate a recycling program.

I.f.11 Any other Site-Specific Information Required by the Director **R315-302-2(2)(p)**

There is no other site-specific information that the Director requires.

I.g Additional Plan of Operation Requirements for Class IVa Facilities

I.g.1 Corrective Action Programs to be initiated if ground water is contaminated **R315-302-2(2)(e)**

As the Ibapah Solid Waste Facility is classified as a Class IVb landfill, this section is not within the scope of this application.

APPLICATION FOR PERMIT RENEWAL
CLASS IV_b LANDFILL

Part II - Facility Technical Information

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II.a Maps for all Facilities

II.a.1 200-Scale Topographic Map **R315-310-4(2)(a)(i)**

A topographical map meeting the requirements of R315-310-4(2)(a)(i) can be referenced in Appendix A Figure 3.

Please note that as the Landfill is exempt from groundwater and landfill gas monitoring, the map does not exhibit the sample collection points asked for by this requirement.

II.a.2 7.5-Minute Topographic Map **R315-310-4(2)(a)(ii)**

Please reference Appendix A for required 7.5-minute map of facility and surrounding areas. As indicated on Figure 4 of Appendix A, the Ibapah Solid Waste Facility site is located in a relatively flat geographical area exhibiting a slope toward the north. The prevailing winds in the area are typically northwest or southeast (MGCC, 2020).

II.b Geohydrological Assessment for Class IVa Landfills

II.b.1 Local and Regional Geology and Hydrology **R315-310-4(2)(b)(i)**

II.b.1.A Regional Geology

The Ibapah Solid Waste Facility is located within the eastern Great Basin, an area which exhibits north-trending ranges separated by alluvium-filled basins (Nutt, 1990). The nearest significant fault line to the site is located in the Deep Creek Range fault zone. This fault runs north/south roughly 2-3 miles east of the site. According to the United States Geological Survey (USGS) this fault has not seen movement in about 130,000 years.

II.b.1.B Local Geology

“Deep Creek Valley is a large, north-south trending, internally drained basin that is defined by a series of narrow, normal-fault-bounded bedrock mountain ranges and adjoining low hills that surround a broad, gently sloping valley floor...the basin fill in Deep creek includes a range of semiconsolidated Valley includes a range of semiconsolidated to unconsolidated sidements eroded from the surrounding mountains as a result of weathering processes...The unconsolidated basin fill contains the principal aquifers in Deep Creek Valley” (Gardner, 2015)

II.b.1.C. Regional Geohydrology

Water resources are relatively scarce within the Deep Creek valley, with only a handful of perennial streams flowing into the area from the mountains and one significant stream (Deep Creek) entering and leaving the area. Groundwater is believed to flow in a general northern direction after flowing into the area from the southeast and southwest (Gardner, 2015).

II.b.2. Evaluation of bedrock and soil types and properties

R315-310-4(2)(b)(ii)

The Ibapah Solid Waste Facility ranges in altitude from approximately 5,250 to 5,290 feet. The depth to bedrock underlying the site is unknown; however, based on information from nearby well logs, depth to bedrock is estimated to range from 300 to 500 feet.

II.b.3 Depth to Ground Water

R315-310-4(2)(b)(iii)

According to a groundwater contour map (Gardner, 2015) produced for the United States Geological Survey (USGS), groundwater below the site held an approximate elevation of 5200 ft. relative to the NAD83 datum. Above-ground topographic data of the site would suggest that ground water is therefore at least 50 ft. or more below the ground surface.

A nearby sampling site, used as a “check” of the above conclusion was referenced from the (USGS, 2021), at a location approximately 1 mile south of the site and just southeast of the main Ibapah community. USGS began recording groundwater depths at this location beginning in March 2003, with the most recent measurements recorded in March 2021. This data provides a median below-ground-surface (B.G.S) measurements of between 12.24 ft. at the highest and 13.31 B.G.S at the lowest. This range is supported by comparing groundwater contours (Gardner, 2015) with land elevations in the area, which would seem to place the groundwater in the range given by these readings. While this does seem shallow, as mentioned above this sample location is a mile south of the site and, as indicated on the groundwater contour map (Appendix G), the groundwater elevations falls sharply (~100 ft.) as it nears the location of the site, meaning the B.G.S at the Landfill itself should be substantially deeper.

II.b.4 Private or public wells on-site or within 2,000 feet of the facility boundary

R315-310-4(2)(b)(v)

Well locations within 2,000 feet of the facility boundary, as well as further data for attendant water rights, can be referenced in Appendix G.

II.b.5 Tabulation of water rights on-site and within 2,000 feet of the facility boundary

R315-310-4(2)(b)(v)

A water right investigation of the area surrounding the Ibapah Solid Waste Facility using the Utah Division of Water Rights online database was initiated to identify proximate water right applications on file in the State Engineer’s office. Within a 2000-foot radius, 5 sites were identified. Table 1 below shows the list of water rights for the area. Water right details and mapping for this area can be referenced in Appendix G.

Table 1: Water Rights within 2,000 ft. of Property Boundary

Water Right No.	Owner	Source
17-36	West Deep Creek Irrigation Power Company	Deep Creek
17-39	West Deep Creek Irrigation Power Company	Deep Creek
17-47	Mary S Nicholes	Deep Creek
17-69	Jay Hicks	Underground Water Well
17-218	Bateman Ranches LLC	Underground Water Well

II.b.6 Surface waters on-site and within one mile of the facility boundary
R315-310-4(2)(b)(viii)

A map of surface waters present on-site or within 1 mile of the property boundary can be referenced in Appendix G.

II.b.7 Impact upon ground and surface water from leachate discharges
R315-310-4(2)(b)(vi)

There is no measured leachate discharge from this construction and demolition landfill. This facility is currently exempt from leachate collection and treatment. No significant drainage pathways run directly through the site, while the majority of existing pathways lie some distance away from the site on the other side of the highway. Therefore, direct contamination of nearby surface water originating from the site is unlikely.

Groundwater monitoring are not required or conducted for this site, any impact to groundwater is therefore indeterminate.

II.b.8 Calculation of Site Water Balance
R315-310-4(2)(b)(ix)

This facility is currently exempt from leachate collection and treatment. Therefore, the Landfill is not equipped with a leachate collection system. See Appendix E for stormwater calculations and Appendix G for stormwater management.

II.c Engineering Report – Plans, Specifications, And Calculations

II.c.1 Unit Design to include cover design; fill methods; and evaluation of final cover R315-310-3(1)(b) and R315-310-4(2)(c)(iii)_

The Ibapah Solid Waste Facility is classed as a Class IVb Landfill subject to requirements outlined by Utah Administrative Code 315-305 and is therefore utilized for the disposal of specific categories of waste including C&D waste, inert waste, yard waste, and dead animals. The area permitted to receive this waste includes approximately 10 acres and, as of 2021, waste disposal operations are conducted within the southern portion of the fenced-in area, which is itself only a part of the entire permitted area. Over time, as the cell reaches design elevations and undergoes final closure, the disposal area may shift to any part of the permitted area. For a reference providing final cover elevations as well as a conceptual design of partial buildout, please refer to Appendix I: Figure I-1

Following full utilization, closure activities will include the installation of 18 inches of cover soil, covered with a 6-inch-thick layer of site soils capable of supporting vegetation, providing a total final cover thickness of 24 inches. The maximum side slopes of the finished cell shall be 3H:1V with a top surface proving a minimum grade of 2% in a northwesterly direction, following the placement and contouring of final cover layers, the final cover shall be vegetated with a mixture of range grasses indigenous to the area. During the course of cell-utilization the commonly used fill method on a day-to-day basis is the “canyon-fill” method, where waste is deposited at either the base or top of a lift (depending on the current landfill topographic conditions) and then pushed or compacted on the working face through the use of landfill equipment.

II.c.2 Design and location of run-on and run-off control systems R315-310-4(2)(c)(viii)

Aside from periodic coverage of deposited waste, the Ibapah Solid Waste Facility does not contain an extensive man-made runoff/runoff control system. Due to the arid conditions of the site, as well as the isolated location of the facility, limited diversion structures have proven sufficient up until the present date. In the event of a severe storm resulting in higher-than-normal run-on/run-off volumes, incoming waste would be temporarily halted until conditions became dry enough to resume operations.

4.6.1 Run-on/Run-off Analysis

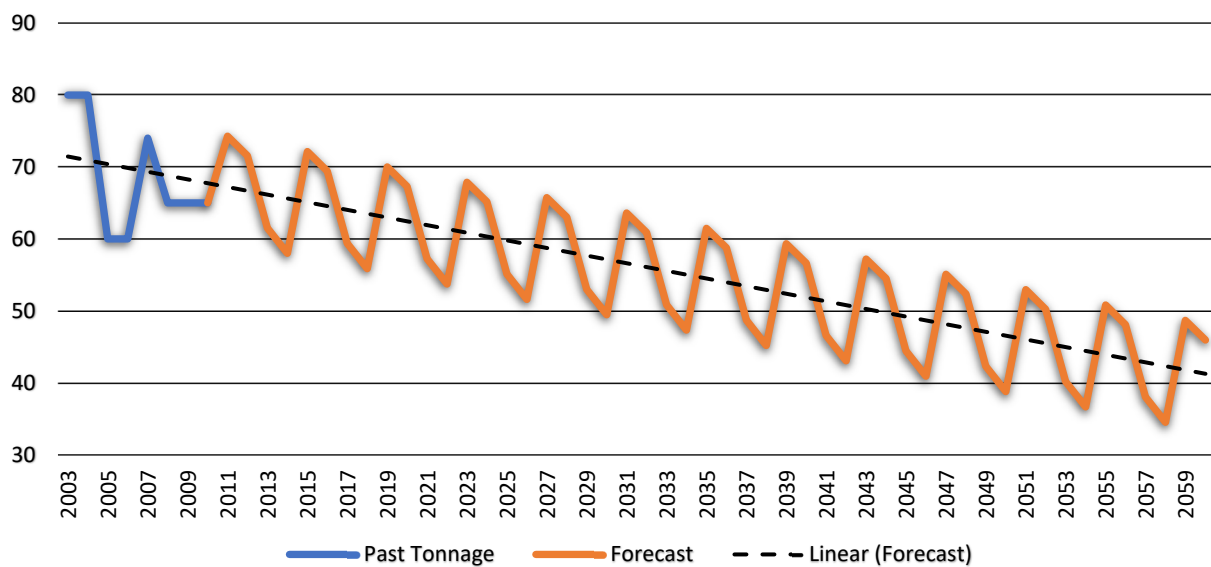
For permitting purposes, a drainage analysis was completed for the proposed cell development of the Ibapah Solid Waste Facility. The site, covering a relatively small area, was analyzed using a single drainage zone encompassing the entire site, which can be referenced in Appendix F: Figure SW-1.

Run-on flow from adjacent areas was assumed to be negligible. The precipitation for the 25-year, 24-hour storm event is 2.22 inches (NOAA, Atlas 14, Volume 1) The watershed soil exhibits the properties of hydrologic group “B” (sandy loam) and sagebrush with grass that is in poor condition, with a Runoff Curve Number of 51 based on general conditions at the site. Details of the input parameters and the model output are included in Appendix F.

The peak flow generated from the 25-year 24-hour storm event was determined for the zone by applying the National Resource Conservation Service Technical Release Number 55 (NRSC TR-55) method.

II.c.3 Anticipated facility life and the basis for calculating the facility’s life
R315-310-4(2)(c)(ii)

The remaining capacity (relative to the final concept grading plan presented in Figure I-2) of the Ibapah Solid Waste Facility is approximately 4,845 tons. While the estimated value used for the annual tonnage entering the Landfill was 65 tons (AE², 2018). As exhibited in the chart below, available annual data would likelihood for a slight decline in incoming waste punctuated by periodic increases, resulting in a longer lifespan. This is supported by a local population that has seen decline in recent years. However, as the data provided is too limited for projecting many years ahead, the anticipated life was based on a constant of 65 tons, which was years of disposal based on available fill volume with expected daily-waste disposal rates and an in-place density of 900 pounds per cubic yard (PCY).



II.c.4 Engineering Reports required to meet location standards **R315-310-4(2)(c)(i)**

As this facility represents an existing, non-expanding, permitted area, location standards are not relevant to this application.

II.c.5 Identification of borrow sources for final cover **R315-310-4(2)(c)(iv)**

The primary borrow source for short-medium term operations will be a designated area located in an east-central area of the site (Appendix A, Figure A2). However, the majority of the site is available as a borrow source if needed.

II.c.6 Run-off collection, treatment, and disposal and DWQ documentation **R315-310-4(6)(c)(v) & R315-310-3(1)(i)**

Run-on and run-off storm water is controlled during both the open and closed phases of all disposal cells. Drainage swales are used to divert water around a cell into existing, on-site, swales in order to prevent ponding against refuse. As an additional measure, the active area of the working face is minimized in order to further reduce the potential for stormwater to come into contact with disposed waste. Final cover run-off is routed to perimeter drainage swales and subsequently discharged into on-site retention basins in such a manner as to minimize erosion. Run-off along access roads is controlled through the use of lowered-profile waterways.

Due to the type of waste disposed (which is not as conducive to leachate production) within the landfill, as well as the classification of the facility itself, no leachate collection is required. No effluent or outflow from a leachate containment system leaves the site.

II.d Closure Requirement for all Facilities

II.d.1 Facility Closure Plan **(R315-310-3(1)(h))**

Closure activities shall be implemented as final grading is completed. Tooele County shall notify the Director of the intent to implement the closure plan 60 days prior to the projected date for the final receipt of waste. Implementation of the closure plan, in whole or in part, shall commence no later than 30 days after final receipt of waste or after the final elevation is attained in part of or all of the landfill cell or unit as identified in the approved facility closure plan (unless otherwise specified in the approved closure plan). Closure activities shall be completed within 180 days following their starting time. Extensions of the closure period may be granted by the Director if

justification for the extension is documented by the Owner or Operator. Final covers shall be constructed as prescribed in Section II.d.3

Following completion of closure operations for a solid waste management unit or facility, Tooele County shall, within 90 days, submit the following items to the Director: closure plan sheets signed by a professional engineer registered in the State of Utah, and a certification by Tooele County, as well as a professional engineer registered in the state of Utah, that the site or unit has been closed in accordance with the approved closure plan. The certificate will require a final inspection performed by the engineer to determine if the landfill met all the closure requirements as outlined in the permit and closure plans. Inspection will include cell cover design requirements, run-on and run-off controls, and maintenance of proper final grading on the cell to promote effective drainage away from disposed materials, and site access restriction with fencing.

II.d.2 Facility Closure schedule R315-310-4(2)(d)(i)

Based on full utilization volume with projected densities and waste streams, see Section II.c.3.

II.d.3 Design of final cover R315-310-4(2)(c)(iii)

The final cover designed for the Class IV cell is mandated by Utah Administrative Code 315-305 to provide a minimum soil thickness of 2 ft. for final cover, the top 6 in. of which must be conducive to local vegetative growth. Revegetating the covers will consist of using an appropriate seed mix and the cover will therefore be prepared to provide a clean, firm, and consistent seedbed. The seeds will be drilled ½ to ¼ inch deep or broadcasted in areas where drilling was found to be impractical. The proposed final cover would therefore be constructed of 18 in. of compacted native site soils overlain by 6 in. of site soils suitable for maintaining a vegetative cover. The final cover would be graded as shown in Figure I-2 effective drainage, prevent ponding, and discourage erosion.

II.d.4 Capacity of site in volume and tonnage R315-310-4(2)(d)(ii)

Full disposal capacity of the site is estimated at 13,460 CY, or 4,845 tons. Please refer to Appendix I: Figure I-2 for full development plan w/ respective volumes and tonnages.

II.d.5 Final inspection by regulatory agencies R315-310-4(2)(d)(iii)

Following the installation of final cover to above specifications, a final inspection will be conducted by a designated representative of the Utah Department of Environmental Quality: Division of Waste Management and Radiation Control. Upon satisfying required inspection standards, the Landfill shall obtain written confirmation from the agency confirming successful closure of the area.

II.e. Post-Closure Requirements for All Facilities

II.e.1 Post-Closure Care Plan **R315-310-3(1)(h)**

Following final closure of the facility, Tooele County shall provide post-closure activities for a further period of 30 years, or as long as the Director determines is necessary for the facility or unit to become stabilized and to protect human health and the environment, for the purpose of ensuring the continued effectiveness of final cover and drainage systems.

The post-closure plan may be amended if conditions and circumstances justify such amendment. If it is determined that amendment of a facility or unit post-closure plan is required, the Director may direct that facility post-closure procedures, in part or whole, to cease until the amendment has been reviewed and approved.

When post-closure activities are complete, as determined by the Director, the owner or operator shall submit a certification to the Director, signed by a representative of Tooele County and a professional engineer registered in the state of Utah stating why post-closure activities are no longer necessary. If the Director finds that post-closure monitoring has established that the facility or unit is stabilized (i.e., little or no settlement, gas production, or leachate generation) the Director may authorize the Tooele County to discontinue any portion, or the entirety, of post-closure maintenance and monitoring activities.

II.e.2 Changes to record of title, land use, and zoning restrictions **315-310-4(2)(e)(v)**

Not later than 60 days following certification of closure Tooele County shall:

- i. Submit plats and a statement of fact concerning the location of any disposal site to the county recorder to be recorded as part of the record of title; and
- ii. Submit proof of record of title filing to the Director.

Records and plans specifying solid waste amounts, location, and periods of operation may be required by the local zoning authority with jurisdiction over land use and be made available for public inspection.

II.e.3 Maintenance activities to maintain cover and run-on/run-off control systems **R315-310-4(2)(e)(v)**

Post-closure maintenance activities will consist of quarterly inspections of the cover and run-on/runoff control systems. Any required maintenance will be logged in the inspection log with an expected completion date for corrective measures to be completed. When the needed repairs are completed, the affected area or areas will be re-inspected, and a date corrective measure completed along with the inspector's signature being included on the inspection log.

Maintenance activities are to proceed in a timely manner in order to maintain functionality of the cover and run-on/runoff control systems. Post-closure care and monitoring will be completed, as determined by the Director, when either the 30-year post-closure period is complete, or the unit

has stabilized. The Director may determine that the post-closure period is complete in less than 30 years. Upon completion of post-closure care. A post-closure period certification will be submitted to the Director signed by the Owner or Operator. The Tooele County Department of Solid Waste utilizes a Public Treasurers Investment Fund as a financial assurance mechanism. Funds for Closure and Post-Closure operations will be reimbursed from the financial assurance PTIF account to pay for all activities performed that year.

II.e.4 Facility contact information during the post-closure care period
R315-310-4(2)(e)(vi)

Ibapah Solid Waste Facility

Wayne Anderton
 47 South Main
 Tooele, UT 84074
 Telephone: (435) 843-4785
 Email: wayne.anderton@tooeleco.org

II.f Financial Assurance for All Facilities

II.f.1 Identification of closure costs including cost calculations
R315-310-4(2)(d)(iv)

Tooele County currently is responsible for closure and post-closure costs for the Ibapah Solid Waste Facility. Tooele County may close a subarea of the disposal site of the site as it meets final grades. The estimated current costs are itemized in Appendix H. Tooele County has been putting monies in a PTIF closure and post-closure Account. The current balance of the fund is \$385,995.45 which covers the costs of closure and post-closure activities. In addition, Tooele County Department of Solid Waste demonstrates financial assurance set forth in subsection R315-309-3(7) entitled Local Government Financial Test.

Task	Quantity	Units	Unit Cost	Task Cost
Closure				
Fill and Grade	0.5	AC	\$ 4,551.58	\$ 2,275.79
Move & Place Soil Cover (18")	1210	CY	\$ 4.29	\$ 5,194.58
Move & Place Topsoil (6")	400	CY	\$ 4.29	\$ 1,716.00
Final Grading	0.5	AC	\$ 1,717.58	\$ 858.79
Revegetation	0.5	AC	\$ 1,374.06	\$ 687.03
Survey & Engineer Certification	1	LS	\$ 5,367.43	\$ 5,367.43
Subtotal				\$ 16,099.62
Post - Closure				
Post-Closure Monitoring	30	Job	\$ 1,717.58	\$ 51,527.42
Subtotal				\$ 51,527.42
Total				\$ 67,627.04

II.f.2 Identification of post-closure care costs including cost calculations
R315-310-4(2)(e)(iv)

Per estimation in Appendix H. It will cost approximately \$1,718 per year for 30 years to cover post-Closure costs.

II.f.3 Identification of financial assurance mechanism
R315-309-1(1) and R315-310-3(1)(j)

The Tooele County Department of Solid Waste utilizes a Public Treasurers Investment Fund (PTIF) as a financial assurance mechanism. Funds for Closure and Post-Closure operations will be reimbursed from the financial assurance PTIF account to pay for all activities performed that year. Please refer to Appendix J for additional information on this account. In addition to the aforementioned PTIF account, the Tooele County Department of Solid Waste demonstrates financial assurance set forth in subsection R315-309-3(7).

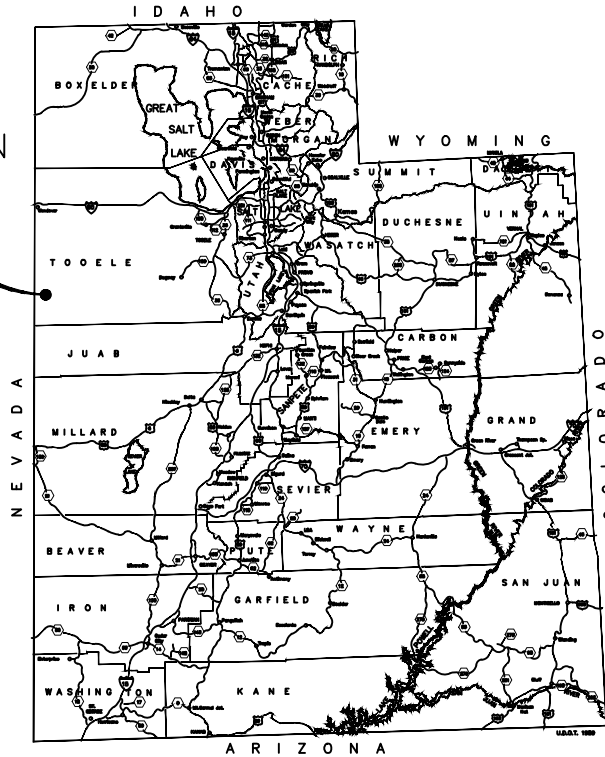
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Appendix A – Facility Mapping

1. Figure A-1: Vicinity map
2. Figure A-2: Facility Map
3. Figure A-3: Topographic Map
4. Figure A-4 – 7.5 Minute Mapp
5. Regional Geological Map



PROJECT LOCATION



LOCATION MAP



LEGEND

-  COUNTY BOUNDARIES
-  IBAPAH SOLID WASTE FACILITY LANDFILL

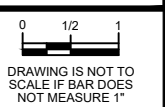


VICINITY MAP

REVISIONS	
NO.	DATE

VICINITY MAP
 IBAPAH SOLID WASTE FACILITY
 TOOELE COUNTY, UTAH

ADVANCED ENVIRONMENTAL ENGINEERING
 789 EAST 80 NORTH, KAYSVILLE, UTAH 84037
 PHONE: (801) 775-3155



DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1"

DESIGN: DESIGN
 DRAWN: DRAWN
 CHECKED: CHECKED
 SCALE: HORZ. HORISCALE
 VERT. VERTISCALE
 DATE: DATE

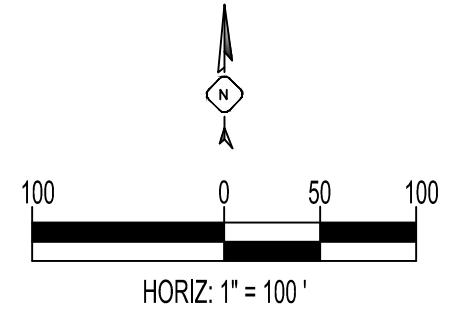
FIGURE:
A-1

TTL_BLK_DWGNO TTL_BLK_DATE TTL_BLK_DWGNAME



FACILITY MAP

IBAPAH SOLID WASTE FACILITY



LEGEND

- PROPERTY LINE —
- FENCELINE
- EX ROAD
- FACILITY FEATURE

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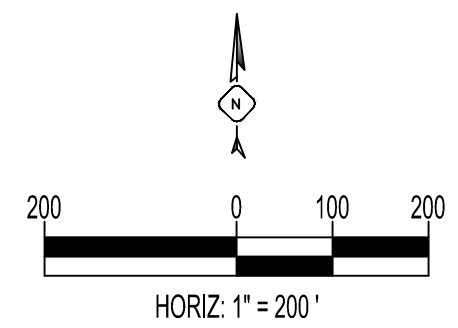
FACILITY MAP





IBAPAH SOLID WASTE FACILITY
TOOELE COUNTY, UTAH

DESIGN:	
DRAWN:	TL
CHECKED:	CH
DATE:	11/28/21



TOPOGRAPHIC MAP (200 SCALE)
 IBAPAH SOLID WASTE FACILITY

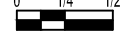


LEGEND	
EX MAJOR CONTOUR	— 5010 —
EX MINOR CONTOUR	— 5010 —
PROPERTY LINE	
EXISTING CLASS IVb	
CURRENT MSW DROPBOX	
BORROW	
FENCELINE	— x —

NOTE: THE CLASS IVb DISPOSAL AREA INCLUDES THE ENTIRE PROPERTY AS DENOTED BY THE PROPERTY LINE

NO.	DATE	REVISION

DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1/2 INCH



TOPOGRAPHIC MAP (200 SCALE)
 IBAPAH SOLID WASTE FACILITY
 TOOELE COUNTY, UTAH



DESIGN:	TL
DRAWN:	Ch
CHECKED:	Ch
DATE:	11/28/21

REVISION			
DATE			
NO.			
DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1/2 INCH			

7.5 MINUTE MAP

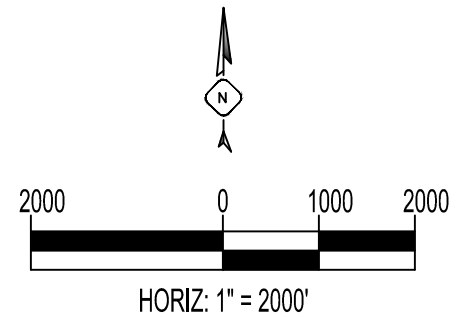
IBAPAH SOLID WASTE FACILITY
TOOELE COUNTY, UTAH



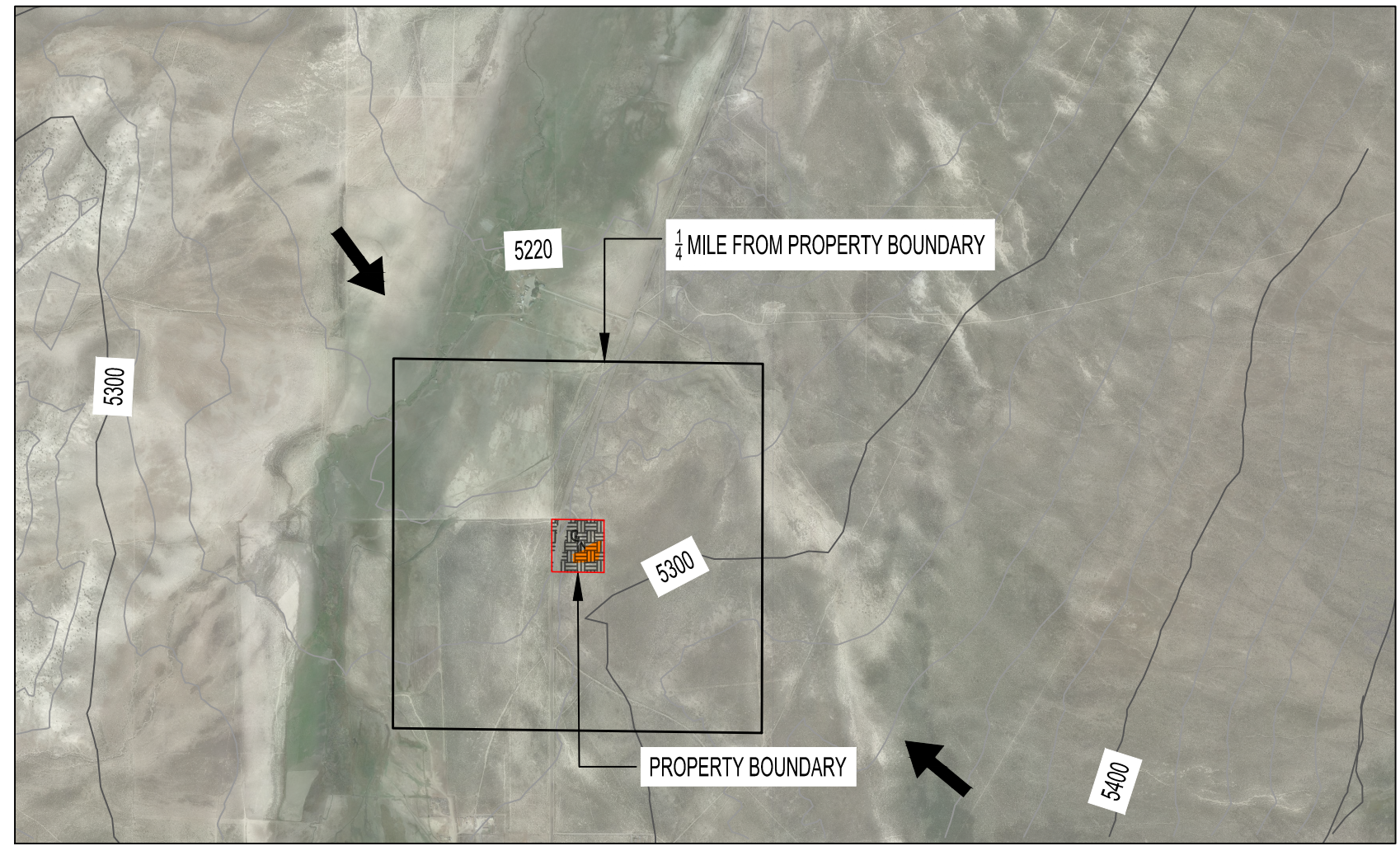
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A-4

7.5 MINUTE MAP
IBAPAH SOLID WASTE FACILITY



LEGEND	
EX MAJOR CONTOUR	— 5020 —
EX MINOR CONTOUR	— 5100 —
PROPERTY LINE	
CLASS IVb	
MSW	
BORROW	
FENCELINE	
PREVAILING WIND	



INFORMATION ADDRESSING R315-310-4(ii)

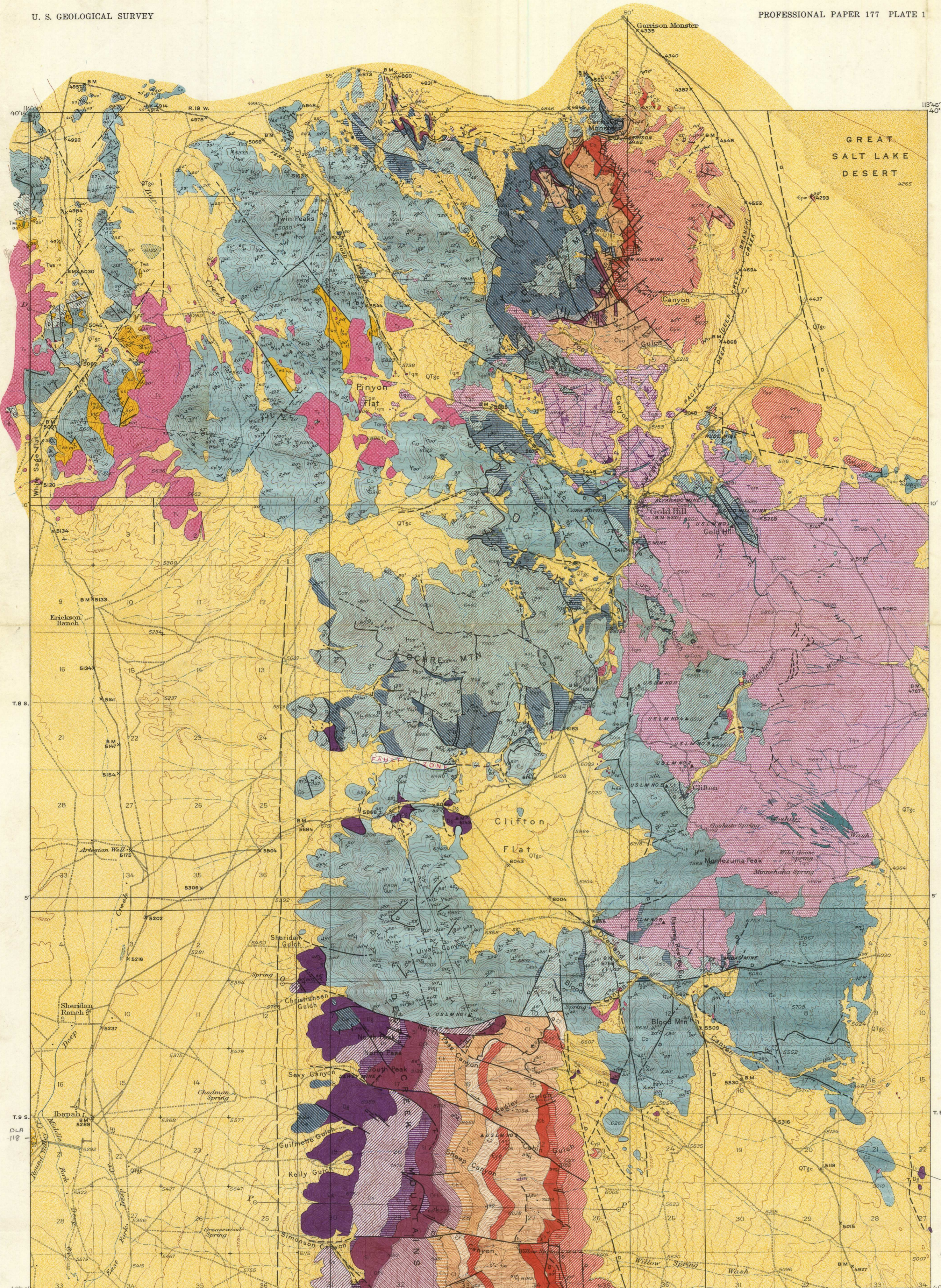
STRUCTURES WITHIN 1/4 MILE OF FACILITY BOUNDARY: NONE

DIRECTION OF PREVAILING WINDS: NORTHWEST AND SOUTHEAST

SURFACE DRAINAGE CHANNELS: NATURAL WASHES

EXISTING UTILITIES: NONE

GENERAL DRAINAGE DIRECTION OF SURROUNDING AREA: NORTHWARD



EXPLANATION

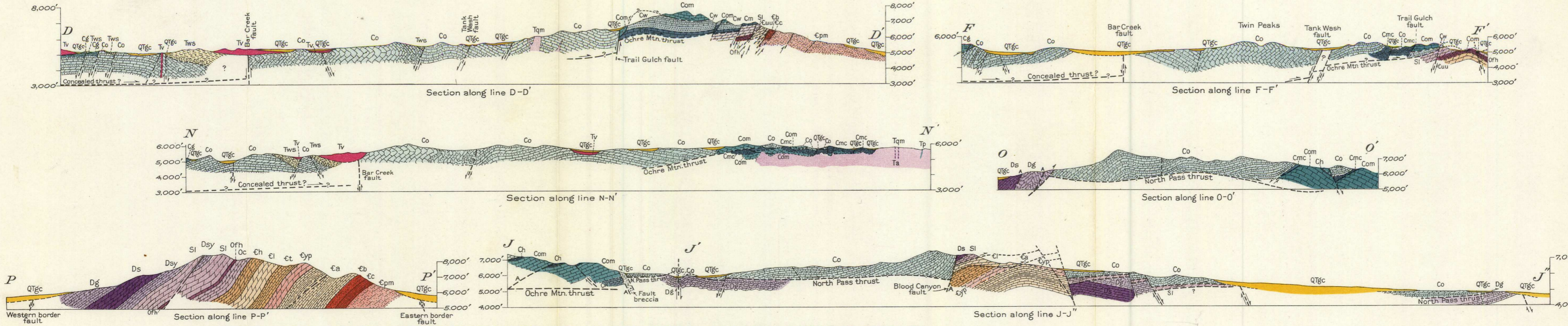
Period	Formation	Symbol	Notes
QUATERNARY	Gravel and clay	QTgc	
	Pliocene (?) sediments	Tps	
	White Sage formation	Tws	
TERTIARY	Limestone	Tl	
	Gerster formation	Cg	
TRIASSIC	Gerster formation	Co	
	Oquirrh formation	Cm	
	Manning Canyon formation	Cm	
	Ochre Mountain limestone (Ch. Herst shale member)	Cw	
CARBONIFEROUS	Woodman formation	Cm	
	Madison limestone	Dg	
	Guilmette formation	Dg	
DEVONIAN	Simonson dolomite	Ds	
	Sevy dolomite	Sl	
SILURIAN	Laketown dolomite	Sl	
	Fish Haven dolomite	Ofh	
ORDOVICIAN	Chokecherry dolomite	Ofc	
	Hicks formation	Ch	
CAMBRIAN	Undifferentiated Upper Cambrian on Dutch Mountain	Cuu	
	Lamb dolomite	Ld	
	Trippe limestone	Tl	
	Undifferentiated Middle Cambrian on Dutch Mountain	Cum	
	Young Peak dolomite	Cyp	
	Abercrombie formation	Ca	
	Busby quartzite	Cb	
Cabin shale	Cc		
Prospect Mountain quartzite (C ₁ , shale member)	Cpm		

Rock Type	Symbol
Younger igneous rocks (chiefly volcanic)	Tv
Porphyry dikes	Tp
Aplite dikes	Ad
Quartz monzonite	Tqm

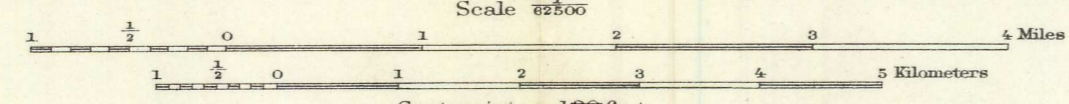
Fault Type	Symbol
Thrust fault (T, overthrust side)	T
Transverse fault (arrow shows direction of relative movement)	A
Transverse fault (A, relative movement away from observer)	A
Normal fault (D, downthrown side)	D
Strike and dip of rocks	Symbol
Shaft	Symbol
Tunnel	Symbol
Prospect	Symbol

Topography by R.T. Evans, W.J. Lloyd, E.S. Rickard,
H.S. Milled and S.L. Parker
Control by U.S. Geological Survey and U.S. Coast and Geodetic Survey
Surveyed in 1924-1925

Geology by T. B. Nolan,
F. A. Melton, and W. D. Mark



GEOLOGIC MAP AND SECTIONS OF GOLD HILL QUADRANGLE, UTAH

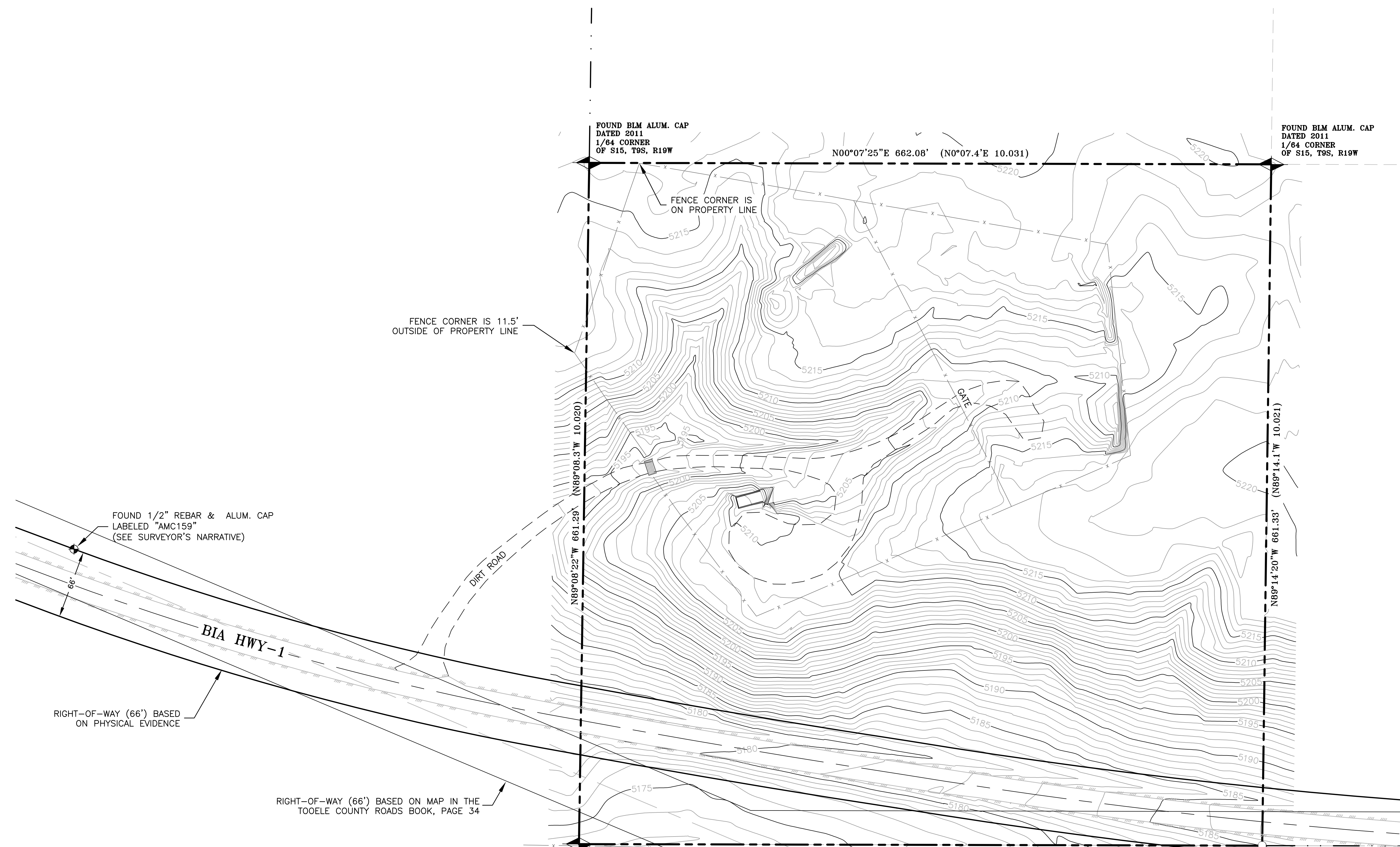


Appendix B – Proof of Ownership and Zoning

1. Record of Survey
2. Tooele County Website Info
3. County Zoning Map



**IBAPAH LANDFILL
RECORD OF SURVEY**
LOCATED IN THE NORTHWEST QUARTER OF SECTION 15,
TOWNSHIP 9 SOUTH, RANGE 19 WEST,
SALT LAKE BASE AND MERIDIAN



FOUND 1/2" REBAR & ALUM. CAP
LABELED "AMC159"
(SEE SURVEYOR'S NARRATIVE)

RIGHT-OF-WAY (66') BASED
ON PHYSICAL EVIDENCE

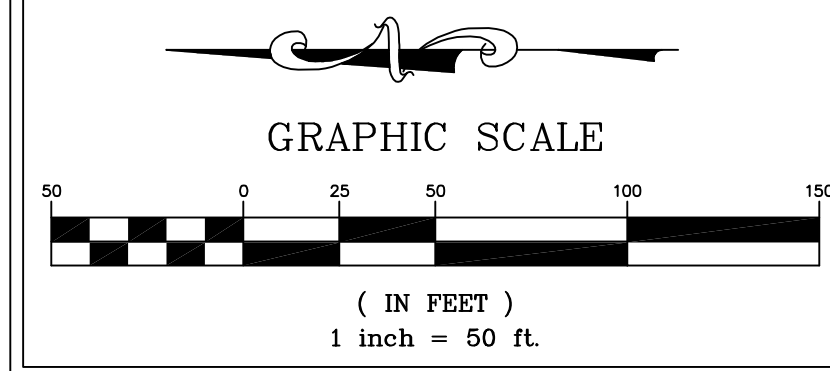
RIGHT-OF-WAY (66') BASED ON MAP IN THE
TOOELE COUNTY ROADS BOOK, PAGE 34

FOUND BLM ALUM. CAP
DATED 2011
1/64 CORNER
OF S15, T9S, R19W

FOUND BLM ALUM. CAP
DATED 2011
1/64 CORNER
OF S15, T9S, R19W


FOUND BLM ALUM. CAP
DATED 2011
NORTHWEST CORNER
OF S15, T9S, R19W

SET REBAR & CAP
LABELED "RIDGELINE"



REVISIONS NO. 08/28/11 JLR ISSUED TO CLIENT	DRAWN BY: JBL Consulting DESIGN BY: JLR CHECKED BY: JLR DATE: 09/08/11	CLIENT: IBAPAH DWS: IBAPAH ROS-TOPO.dwg JOB No: IBAP-2011-01 DRAWING IS REDUCED IF LESS THAN 27.25" UNLESS NOTED OTHERWISE OVER SCALE	P.O. Box 36 Tooele, Utah 84074 Tel. - 801-885-8081	IBAPAH LANDFILL RECORD OF SURVEY	LOCATED IN THE NORTHWEST QUARTER OF SECTION 15 TOWNSHIP 9 SOUTH, RANGE 19 WEST, SALT LAKE BASE AND MERIDIAN	SHEET: 2 OF 2
--	---	---	--	--	---	-------------------------

Account View

 erecording.tooeleco.org/eaglesoftware/taxweb/account.jsp



Acres 10

Parcel Number 07-070-0-0025

Account Number R025006

Tax District 11 - O.D. COUNTY

Year Built

Above Ground SQFT

Basement SQFT

Basement SQFT Complete

Status Code EX - Exempt

HouseNumber

StreetName

Parcels

OwnerName TOOELE COUNTY CORPORATION

Legal THE NW 1/4 NW 1/4 NW 1/4 OF SECTION 15, T9S R19W SLB&M PATENT FOR
1994 10.00 AC

Entry Date

Remarks

Owner Name TOOELE COUNTY CORPORATION

In Care Of Name TOOELE COUNTY CORPORATION

Owner Address 47 SOUTH MAIN
TOOELE, UT 84074
UNITED STATES

Actual (2021) \$23,400

Primary Taxable \$23,400

Exempt (\$23,400)

Adjusted Taxable Total \$0

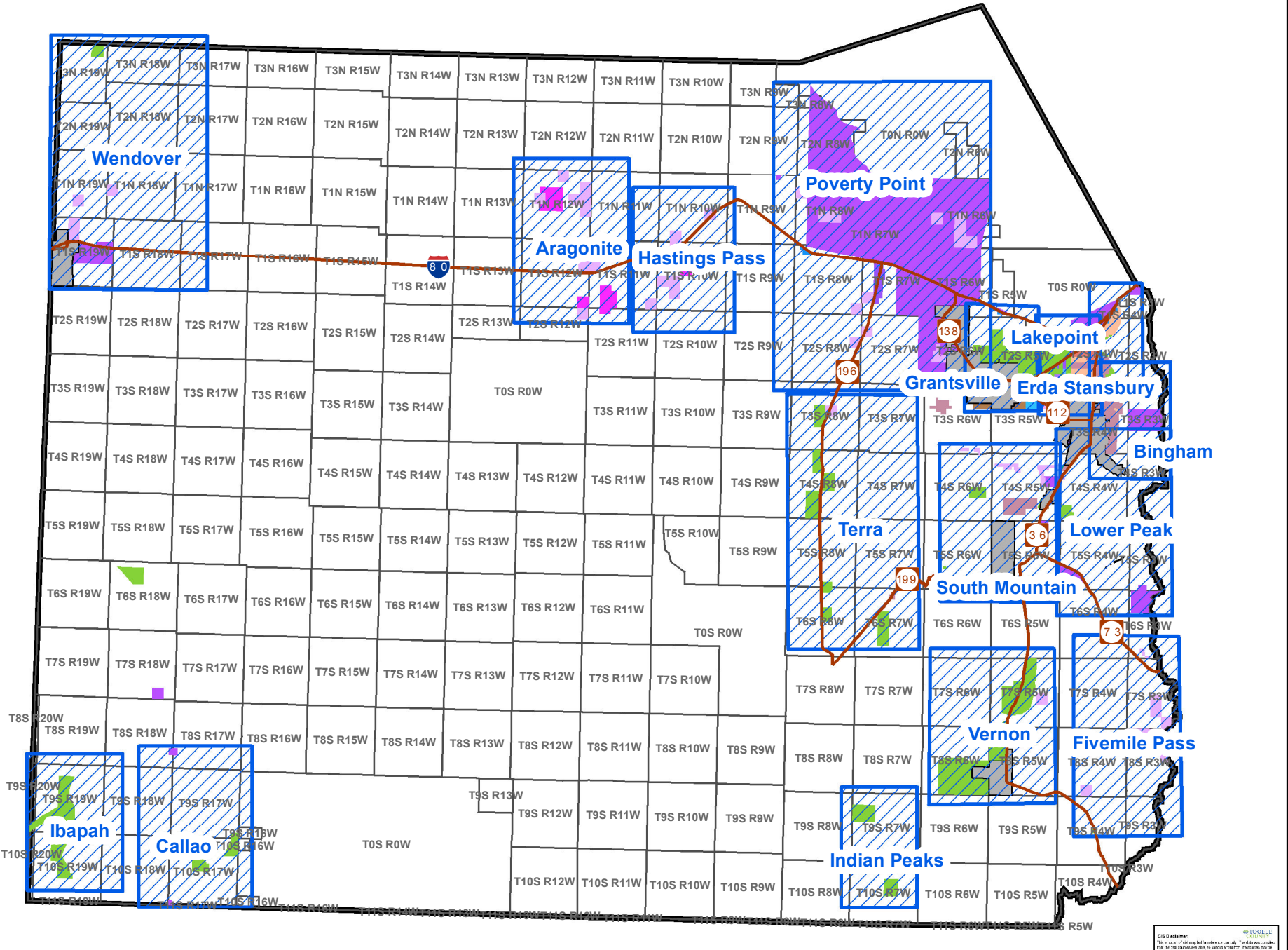
Type	Actual	Assessed	Acres
LX01	\$23,400	\$23,400	10.000

Tax Area: 11 **Tax Rate:** 0.012160

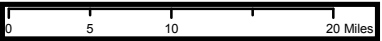
County Zoning Index Map

Legend

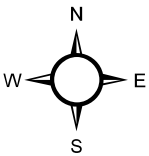
- Zoning Map (Blue hatched box)
- Zoning (MU-40)
- Zone
- A-20 (Green)
- A-40 (Light Green)
- C-T (Pink)
- CG (Light Blue)
- CH (Blue)
- CN (Light Blue)
- CS (Teal)
- MD (Purple)
- MG (Light Purple)
- MG-EX (Light Purple)
- MG-H (Pink)
- Municipal (Grey)
- P-2 (Light Purple)
- R-1-10 (Light Orange)
- R-1-8 (Light Orange)
- R-M-15 (Light Orange)
- R-M-7 (Light Orange)
- RR-1 (Light Orange)
- RR-10 (Light Orange)
- RR-5 (Light Orange)
- RRS (Light Blue)
- T-I (Light Blue)



Date: 3/20/2012



CS Disclaimer
 This is a set of preliminary maps. The data was compiled from various sources and is subject to change. The County is not responsible for any errors or omissions. The user assumes all liability for any use of the data. The County is not responsible for any damage or loss resulting from the use of the data. The County is not responsible for any damage or loss resulting from the use of the data. The County is not responsible for any damage or loss resulting from the use of the data.



Appendix C – Scale House Ticket and Other Example Forms

1. Facility Inspection Form

**TOOELE COUNTY HEALTH DEPARTMENT
SOLID WASTE MANAGEMENT FACILITY INSPECTION FORM**

Site Name _____ Telephone _____ Date _____
 Site Location _____ Site Owner/Operator _____
 Facility Type: Municipal _____ C/D _____ Asbestos _____ Private _____ Other (specify) _____
 Inspection Type: Construction _____ Permit _____ Complaint _____ Routine _____ Closure _____ Post-Closure _____
 Consultation _____ Training _____
 Site Acreage _____ Estimated Site Life Remaining _____

LEGEND OF INSPECTION NOTATION: X - Violation, OK - No violation, BLANK - Not inspected/Not applicable

UNAUTHORIZED WASTE EXCLUSION

- () 1. Incoming loads inspected
(Check applicable methods)
() Random () 10% () Suspicious
- () 2. Procedures for notification implemented
- () 3. Unauthorized or hazardous waste accepted
(specify in remarks)

WASTE COMPACTING

- () 4. Adequate waste compacting equipment available
- () 5. Waste compacting adequate

DAILY COVER

- () 6. Daily cover provided (note type in remarks)
- () 7. Daily cover thickness adequate

ACCESS CONTROL

- () 8. Unauthorized access controlled
(note measures in remarks)

LITTER CONTROL

- () 9. Litter control program in place
- () 10. Access roads and facility free of litter

DISEASE & VECTOR CONTROL

- () 11. Rodent, mosquito, fly measures taken
- () 12. Rodent, mosquito, fly conditions present

AIR QUALITY

- () 13. Open burning
- () 14. Surface or subsurface fires
- () 15. Appropriate air emissions parameters monitored
- () 16. Fugitive dust controls in place

RECORD KEEPING

(Documents kept and available)

- () 17. Hard copy of operational plan
- () 18. Employees trained on operational plan
- () 19. Closure and post-closure plans
- () 20. Cost estimates and financial assurance documents
- () 21. Incoming load inspections
- () 22. Rejected waste loads (including hauler's name)
- () 23. Groundwater monitoring results
- () 24. Methane gas monitoring results
- () 25. Air emissions monitoring
- () 26. County and State inspections
- () 27. Personnel trained
- () 28. Training program procedures
- () 29. Inspection procedures
- () 30. Closure and post-closure plans
- () 31. Cost estimates and financial assurance

LINER

- () 32. Constructed with an impermeable liner system
(specify type and thickness in remarks)

EXPLOSIVE GASES

- () 33. Methane gas recovery or venting system in place
(specify type in remarks)
- () 34. Methane gas monitored

LEACHATE COLLECTION SYSTEM

- () 36. Constructed with a leachate collection system
- () 37. Leachate collection system and operation approved

SURFACE WATER & RUN-ON/OFF CONTROL SYSTEM

- () 38. System for diverting 24-hour, 25-year storm event
- () 39. System for treating 24-hour, 25-year storm event
- () 40. Runoff impacted surface water properly discharged

FINAL COVER

- () 41. Covered with engineered system
- () 42. 24 inch minimum thickness
- () 43. Final cover meets maximum permeability requirements
- () 44. Upper 6" capable of supporting vegetation
- () 45. Completed portions of landfill re-vegetated
(note type in comments)

GROUNDWATER MONITORING SYSTEM

- () 46. Groundwater monitoring system in place
- () 47. Groundwater sampled and analyzed at required intervals
- () 48. Department has latest groundwater results performed
- () 49. Statistical comparison of analytical results performed
- () 50. Wells: locked, concrete pad intact, casing intact, covered

CLOSURE PLAN

- () 51. Methods, procedures, and process to be used for closure
- () 52. Estimate of the portion of the landfill open for disposal
- () 53. Estimate of the maximum inventory of wastes during landfill lifetime
- () 54. Description of the final cover design
- () 55. Schedule to complete closure
- () 56. Inspections for settling
- () 57. Inspections for subsidence
- () 58. Inspections for erosion
- () 59. Erosion prevention plan
- () 60. Maintenance and operations for leachate collection and disposal
- () 61. Groundwater monitoring
- () 62. Methane gas monitoring

FINANCIAL ASSURANCE

- () 63. Cost estimate of third party closure implementation
- () 64. Cost estimate of third party post-closure implementation
- () 65. Mechanism for funding closure and post-closure care

SITING RESTRICTION

- () 66. 10,000 feet from turbojet aircraft airport
- () 67. 5,000 feet from piston aircraft airport
- () 68. In a 100-year flood plain
- () 69. Measures taken to divert water flow from facility
- () 70. Any part of facility or operation area in a wetland
- () 71. Within 200 feet of a line having a displacement in Holocene
- () 72. Within "seismic impact zone"
- () 73. Within landslide prone area
- () 74. Within subsidence prone area
- () 75. Over Karst terrain or cavern
- () 76. Within expansive soils area

Env. Health Specialist Signature: _____
 Facility Operator Signature: _____

Appendix D – Emergency Action Plan

**SOLID WASTE MANAGEMENT
IBAPAH SOLID WASTE FACILITY
EMERGENCY OPERATIONS PLAN**

This document provides landfill employees with information on how to respond and what to expect in the case of a major disaster, such as an earthquake. While this particular facility is unmanned the majority of the time, events such as natural disasters could produce quantities of waste large enough to necessitate temporary personnel and equipment in order to ensure safe and efficient disposal. The Ibapah Solid Waste Facility (hereafter referred to as the Facility), in an effort to respond to various disasters that could seriously threaten lives and property in the county, has developed this Emergency Operations Plan. The format of this plan complements other plans developed for country use and is therefore not intended for use as a standalone plan. The intent is to use this plan in conjunction with State, County, and Local EOCs.

ASSUMPTIONS

1. The Facility is expected to continue normal operation and will therefore need to maintain normal daily operation besides handling the disposal of emergency, nonhazardous rubble material. Because of the location of the Facility and the minimal infrastructure and equipment located on the premises, the facility is expected to be minimally affected by most major disasters apart from changes in the quantity of incoming waste.
2. The Facility will be most heavily impacted approximately 72 hours after an emergency, when the clean up, removal and disposal of rubble begins. The Facility may then need to be open around the clock (24 hour operation). Depending on the nature of the emergency, personnel and/or equipment may be needed to run the operation.
3. After the initial 72 hours, and if personnel and/or equipment have been provided for use at the facility, the current situation will be reevaluated in order to determine if facility operation should return to normal procedures, or if personal and/or equipment are still needed.

FIRST RESPONSE

DURING WORK HOURS

1. Remain calm and reassure others. Avoid objects that could fall. Do not touch downed power lines or objects touching downed power lines. This is especially significant at the landfill.
2. Report your location, physical condition and area damage to your supervisor.
3. Provided the facility areas are not severely damaged or inaccessible, continue with normal duties. In the event that certain areas are severely damaged, perform other duties as assigned by supervisor.
4. Supervisor should check all areas for structure damage. Also check utilities (power, sewer, gas and water lines). If necessary, turn these off. Call Tooele County dispatch and report findings.
5. All efforts will be made to contact Facility employees' families and others that employees have listed on the Family notification List. Employees will be notified of family status as soon as possible.

AFTER WORKING HOURS

1. Contact the Facility (if no response contacts Tooele County dispatch) and give your location, status, and availability. If you are unable to get to the Landfill, report to the nearest fire station for instructions on what to do or where to go.
2. The first person to arrive at the Landfill should check structures for damages. Also check utilities (power, sewer, gas and water) lines. If necessary, turn these off. Call Tooele County dispatch and report findings.
3. After all structures and utilities have been inspected, perform normal duties unless otherwise assigned by the supervisor.

FACILITY OPERATIONS

1. The Landfill will maintain regularly scheduled hours of availability.
2. When the emergency cleanup begins, approximately 72 hours later, the Facility may need to be open 24 hours per day.
3. The Solid Waste Disposal Division will supply fuel, equipment, and manpower as available (as needed) for cleanup in other areas of the county.
4. When 24-hour operation begins, personnel and equipment may need to be brought to the site to oversee disposal activities
5. During the cleanup and disposal of rubble, City/County and State Health department inspectors will need to be at the site to determine if the substance being disposed of contains hazardous waste material. If so determined, then the governing authorities (federal, state or local) must arrange for proper disposal at a designated hazardous waste disposal facility (not Tooele County Solid Waste Facility).
6. As directed by Tooele County Commissioners, emergency cleanup vehicles will be weighed or the volume measured and may or may not be charged. However, careful records must be kept for FEMA.
7. During 24-hour operation employees should expect to work 12-hour shifts. Management will designate employee's shifts.

Appendix E – Storm Water Analysis

1. NOAA Precipitation Frequency Estimate
2. NRCS Site Soil Map Exhibit
3. NRCS Soil Survey
4. TR-55 Analysis



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

PF tabular

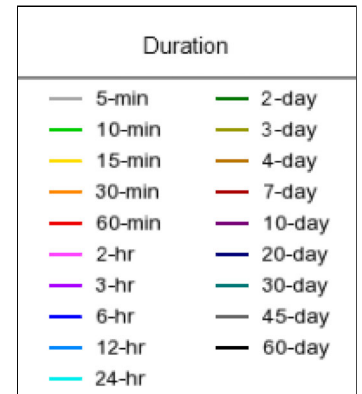
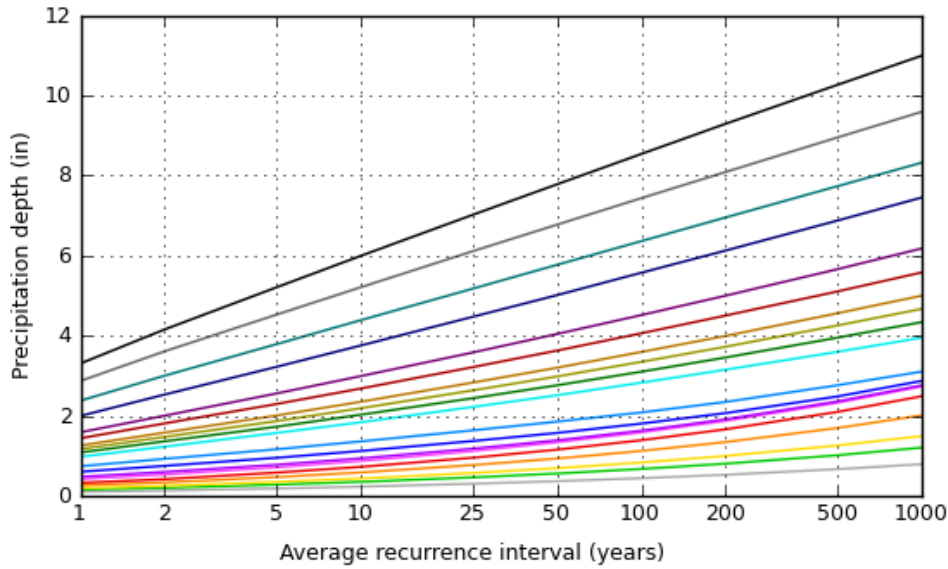
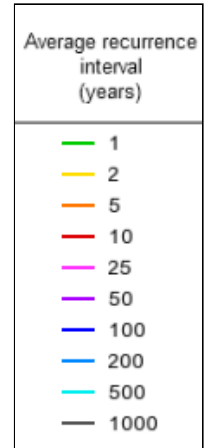
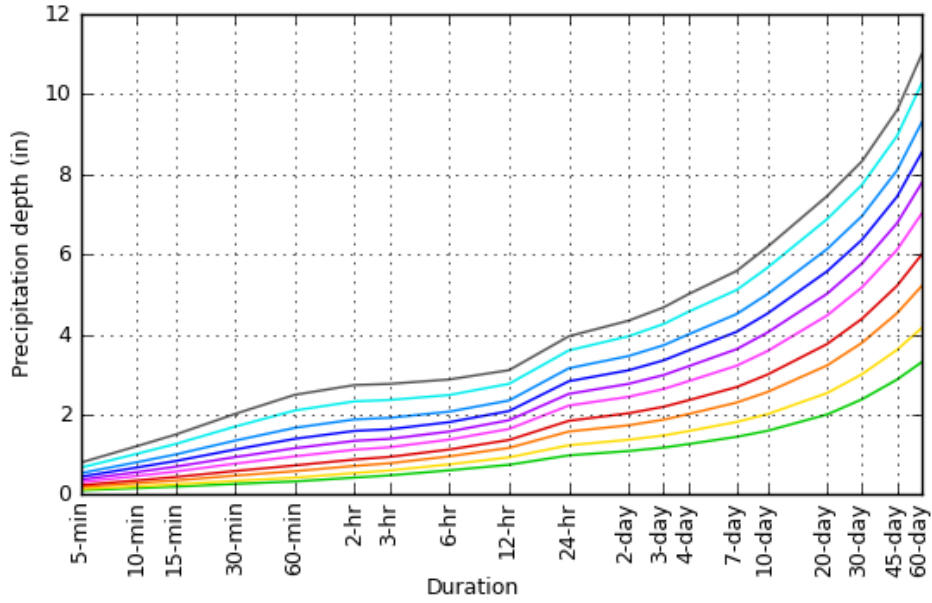
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.103 (0.091-0.124)	0.133 (0.118-0.159)	0.185 (0.164-0.222)	0.231 (0.203-0.276)	0.303 (0.260-0.363)	0.367 (0.309-0.439)	0.442 (0.365-0.533)	0.529 (0.423-0.643)	0.667 (0.512-0.822)	0.792 (0.586-0.988)
10-min	0.157 (0.138-0.189)	0.202 (0.179-0.242)	0.282 (0.250-0.338)	0.351 (0.309-0.421)	0.461 (0.396-0.552)	0.559 (0.471-0.668)	0.673 (0.555-0.811)	0.805 (0.644-0.979)	1.01 (0.779-1.25)	1.21 (0.892-1.50)
15-min	0.195 (0.172-0.234)	0.251 (0.222-0.300)	0.349 (0.310-0.419)	0.435 (0.383-0.521)	0.571 (0.491-0.684)	0.693 (0.584-0.829)	0.834 (0.688-1.00)	0.998 (0.798-1.21)	1.26 (0.966-1.55)	1.49 (1.11-1.87)
30-min	0.263 (0.231-0.315)	0.338 (0.299-0.405)	0.470 (0.417-0.564)	0.586 (0.516-0.702)	0.769 (0.661-0.921)	0.933 (0.787-1.12)	1.12 (0.926-1.35)	1.35 (1.08-1.63)	1.70 (1.30-2.09)	2.01 (1.49-2.51)
60-min	0.325 (0.286-0.390)	0.418 (0.370-0.501)	0.582 (0.516-0.698)	0.725 (0.638-0.869)	0.952 (0.818-1.14)	1.16 (0.973-1.38)	1.39 (1.15-1.68)	1.66 (1.33-2.02)	2.10 (1.61-2.59)	2.49 (1.84-3.11)
2-hr	0.421 (0.373-0.484)	0.536 (0.474-0.615)	0.713 (0.627-0.820)	0.872 (0.762-1.00)	1.12 (0.956-1.28)	1.34 (1.12-1.54)	1.59 (1.30-1.84)	1.87 (1.50-2.19)	2.33 (1.79-2.75)	2.73 (2.04-3.29)
3-hr	0.476 (0.424-0.538)	0.599 (0.530-0.682)	0.778 (0.690-0.881)	0.938 (0.825-1.06)	1.18 (1.02-1.34)	1.39 (1.18-1.58)	1.63 (1.37-1.87)	1.91 (1.57-2.21)	2.36 (1.87-2.77)	2.76 (2.12-3.30)
6-hr	0.603 (0.543-0.675)	0.751 (0.674-0.838)	0.951 (0.855-1.06)	1.12 (1.00-1.25)	1.37 (1.21-1.53)	1.57 (1.37-1.76)	1.81 (1.56-2.04)	2.07 (1.75-2.35)	2.48 (2.06-2.86)	2.87 (2.32-3.36)
12-hr	0.741 (0.671-0.820)	0.926 (0.837-1.02)	1.16 (1.05-1.29)	1.36 (1.23-1.51)	1.64 (1.46-1.81)	1.86 (1.64-2.06)	2.08 (1.82-2.33)	2.35 (2.02-2.64)	2.76 (2.33-3.14)	3.11 (2.58-3.57)
24-hr	0.976 (0.892-1.07)	1.23 (1.13-1.35)	1.57 (1.44-1.71)	1.84 (1.68-2.01)	2.22 (2.02-2.42)	2.51 (2.27-2.75)	2.83 (2.54-3.09)	3.15 (2.82-3.44)	3.60 (3.19-3.94)	3.95 (3.47-4.33)
2-day	1.08 (0.997-1.18)	1.37 (1.26-1.49)	1.73 (1.59-1.88)	2.03 (1.86-2.20)	2.44 (2.22-2.65)	2.76 (2.50-3.00)	3.10 (2.79-3.37)	3.46 (3.10-3.76)	3.95 (3.50-4.30)	4.34 (3.82-4.74)
3-day	1.17 (1.08-1.27)	1.47 (1.36-1.60)	1.87 (1.72-2.03)	2.19 (2.01-2.38)	2.63 (2.40-2.86)	2.98 (2.71-3.23)	3.35 (3.02-3.64)	3.73 (3.34-4.05)	4.26 (3.78-4.63)	4.67 (4.11-5.09)
4-day	1.26 (1.16-1.36)	1.58 (1.46-1.72)	2.01 (1.84-2.18)	2.35 (2.15-2.55)	2.83 (2.59-3.07)	3.20 (2.91-3.47)	3.60 (3.25-3.90)	4.00 (3.59-4.34)	4.56 (4.05-4.96)	5.00 (4.41-5.45)
7-day	1.44 (1.33-1.58)	1.81 (1.67-1.98)	2.30 (2.11-2.52)	2.68 (2.46-2.94)	3.22 (2.93-3.52)	3.63 (3.30-3.97)	4.06 (3.68-4.45)	4.51 (4.05-4.94)	5.11 (4.54-5.62)	5.58 (4.92-6.15)
10-day	1.59 (1.46-1.74)	2.00 (1.84-2.19)	2.56 (2.33-2.80)	2.99 (2.73-3.27)	3.58 (3.24-3.91)	4.04 (3.66-4.41)	4.52 (4.07-4.94)	5.00 (4.48-5.49)	5.66 (5.04-6.23)	6.18 (5.46-6.82)
20-day	2.00 (1.84-2.17)	2.53 (2.33-2.75)	3.22 (2.96-3.50)	3.76 (3.44-4.08)	4.47 (4.08-4.85)	5.01 (4.56-5.45)	5.58 (5.06-6.07)	6.13 (5.53-6.69)	6.88 (6.17-7.52)	7.45 (6.65-8.17)
30-day	2.38 (2.19-2.58)	3.00 (2.76-3.26)	3.79 (3.48-4.11)	4.39 (4.03-4.75)	5.18 (4.72-5.61)	5.77 (5.25-6.26)	6.36 (5.76-6.90)	6.96 (6.27-7.57)	7.74 (6.91-8.43)	8.32 (7.39-9.11)
45-day	2.87 (2.65-3.11)	3.61 (3.35-3.92)	4.53 (4.18-4.91)	5.21 (4.82-5.65)	6.11 (5.62-6.63)	6.78 (6.22-7.33)	7.44 (6.80-8.04)	8.09 (7.36-8.77)	8.95 (8.11-9.73)	9.60 (8.64-10.5)
60-day	3.31 (3.05-3.59)	4.16 (3.84-4.53)	5.21 (4.80-5.66)	6.00 (5.52-6.51)	7.02 (6.45-7.63)	7.78 (7.13-8.47)	8.54 (7.79-9.28)	9.30 (8.44-10.1)	10.3 (9.27-11.2)	11.0 (9.89-12.0)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

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PF graphical

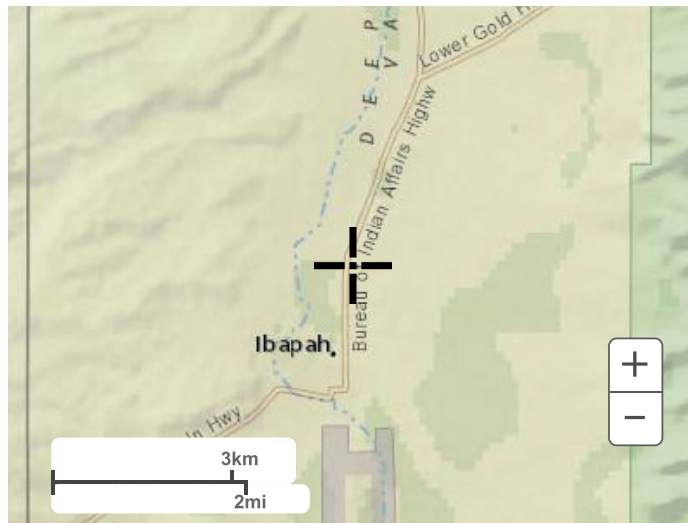
PDS-based depth-duration-frequency (DDF) curves
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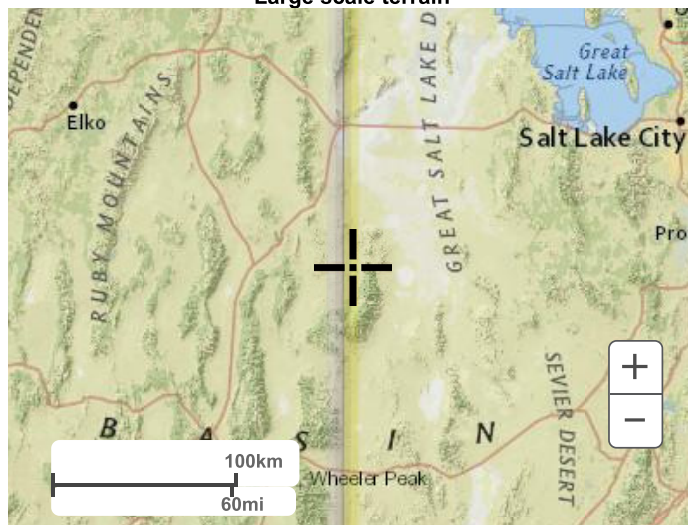
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Maps & aerials

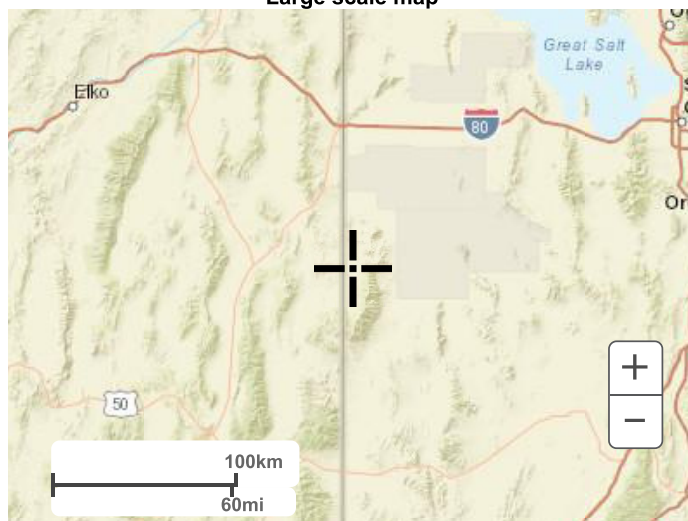
Small scale terrain



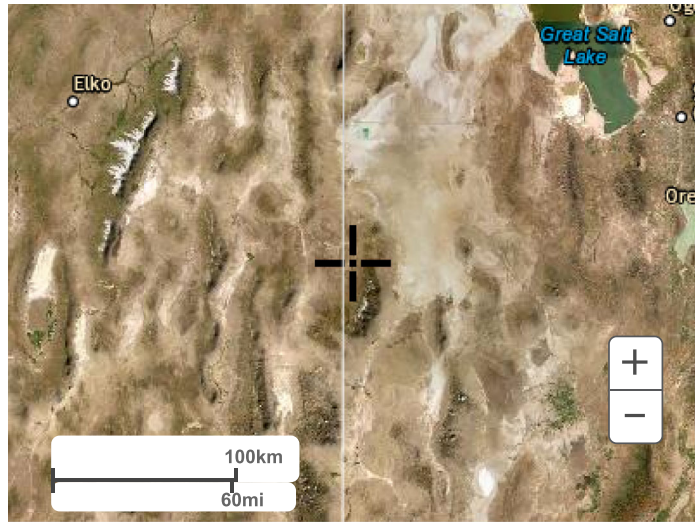
Large scale terrain



Large scale map



Large scale aerial



[Back to Top](#)

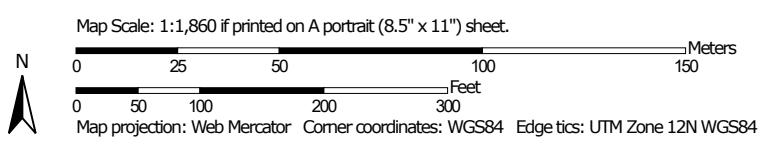
[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

Soil Map—Tooele Area, Utah - Tooele County and Parts of Box Elder, Davis and Juab Counties



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tooele Area, Utah - Tooele County and Parts of Box Elder, Davis and Juab Counties
Survey Area Data: Version 14, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 7, 2012—Jul 25, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21	Hiko Peak gravelly loam, 2 to 15 percent slopes	13.9	75.8%
43	Medburn fine sandy loam, saline, 2 to 4 percent slopes	4.4	24.2%
Totals for Area of Interest		18.3	100.0%

Tooele Area, Utah - Tooele County and Parts of Box Elder, Davis and Juab Counties

43—Medburn fine sandy loam, saline, 2 to 4 percent slopes

Map Unit Setting

National map unit symbol: j5q6

Elevation: 4,500 to 5,800 feet

Mean annual precipitation: 8 to 12 inches

Mean annual air temperature: 46 to 50 degrees F

Frost-free period: 100 to 140 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Medburn and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Medburn

Setting

Landform: Fan remnants, lake terraces

Landform position (three-dimensional): Tread

Down-slope shape: Concave, linear

Across-slope shape: Convex, linear

Parent material: Alluvium and/or lacustrine deposits derived from sedimentary rock

Typical profile

H1 - 0 to 8 inches: fine sandy loam

H2 - 8 to 46 inches: fine sandy loam

H3 - 46 to 60 inches: fine sandy loam

Properties and qualities

Slope: 2 to 4 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Maximum salinity: Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 4s

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C
Ecological site: R028AY202UT - Semidesert Alkali Loam (Black
Greasewood)
Hydric soil rating: No

Minor Components

Hiko peak

Percent of map unit: 8 percent

Taylorflat

Percent of map unit: 7 percent

Data Source Information

Soil Survey Area: Tooele Area, Utah - Tooele County and Parts of Box Elder,
Davis and Juab Counties

Survey Area Data: Version 14, Jun 8, 2020

Tooele Area, Utah - Tooele County and Parts of Box Elder, Davis and Juab Counties

21—Hiko Peak gravelly loam, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: j5pf

Elevation: 4,400 to 6,000 feet

Mean annual precipitation: 10 to 12 inches

Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 100 to 140 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Hiko peak and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hiko Peak

Setting

Landform: Fan remnants

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Mixed alluvium

Typical profile

H1 - 0 to 4 inches: gravelly loam

H2 - 4 to 12 inches: very gravelly loam

H3 - 12 to 60 inches: very gravelly loam

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 30.0

Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Ecological site: R028AY215UT - Semidesert Gravelly Loam
(Wyoming Big Sagebrush) North
Hydric soil rating: No

Minor Components

Medburn

Percent of map unit: 4 percent

Spager

Percent of map unit: 3 percent

Berent

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: Tooele Area, Utah - Tooele County and Parts of Box Elder,
Davis and Juab Counties
Survey Area Data: Version 14, Jun 8, 2020

Tyler

Permit Application
Ibapah Waste Management Facility
Tooele County, Utah

Hydrograph Peak/Peak Time Table

Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period 25-Yr (cfs) (hr)
------------------------------------	--

SUBAREAS

Area A	0.10 23.96
--------	---------------

REACHES

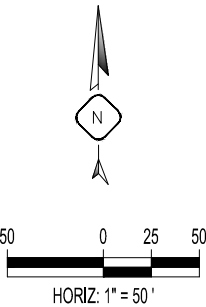
OUTLET	0.10
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Appendix F – Storm Water Pollution Prevention Plan

1. Figure F-1: Stormwater Pollution Prevention Plan

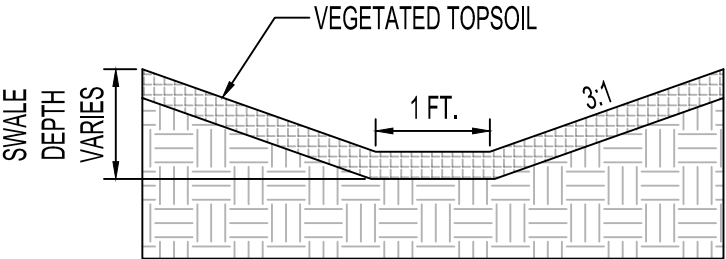


**STORMWATER POLLUTION PREVENTION PLAN
IBAPAH SOLID WASTE FACILITY**



WATERSHED LEGEND	
PROPERTY LINE	
DRAINAGE SWALE	
EX MAJOR CONTOUR	5005
EX MINOR CONTOUR	5001
WATERSHED AREA	

25YR/24HR STORM WATER DISCHARGE		
AREA (AC)	PEAK DISCHARGE (CFS)	REQUIRED CAPACITY (AC-FT)
1.24	NEGLIGIBLE	NEGLIGIBLE



TYPICAL DRAINAGE SWALE
N.T.S

NO.	DATE	REVISION

DRAWING IS NOT TO SCALE IF BAR
DOES NOT MEASURE 1/2 INCH

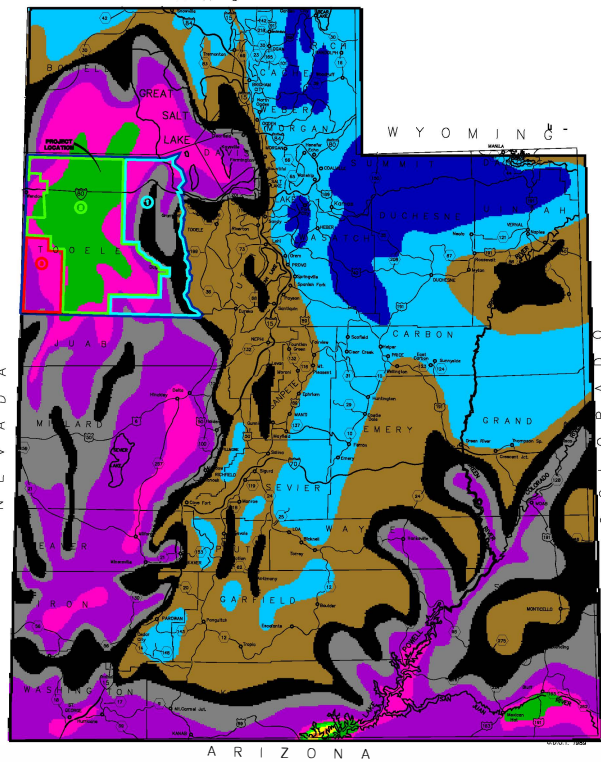
STORMWATER POLLUTION PREVENTION PLAN
IBAPAH SOLID WASTE FACILITY
TOOELE COUNTY, UTAH



DESIGN: _____
DRAWN: TL
CHECKED: CH
DATE: 11/29/21

Appendix G – Water Sources

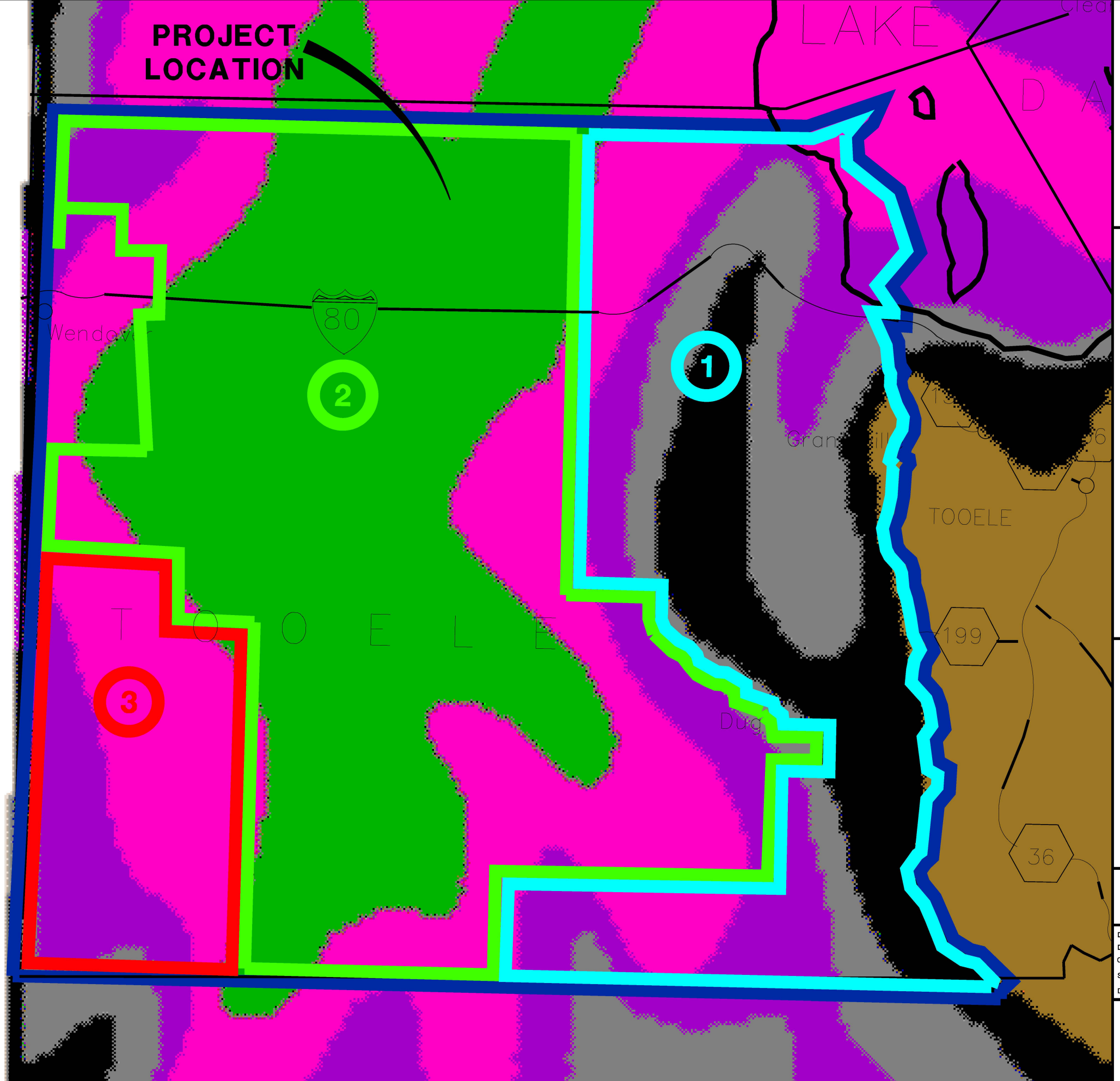
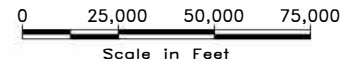
1. Figure G-1: Free Water Surface Evaporation (Tooele County)
2. Figure G-2: Surface Water Exhibit
3. Figure G-3: Water Rights Exhibit
4. Water Rights Data
5. Regional Potentiometric Map



LOCATION MAP

**Free Water Surface Evaporation
(Shallow Lake)
Annual**

Legend		
Annual FWS Evaporation (in inches)		
80 or greater	60 - 64.9	40 - 44.9
75 - 79.9	55 - 59.9	35 - 39.9
70 - 74.9	50 - 54.9	less than 35
65 - 69.9	45 - 49.9	



REVISIONS	
NO.	DATE

TOOELE COUNTY, UTAH
FREE WATER SURFACE EVAPORATION MAP
IBAPAH SOLID WASTE FACILITY

AEC2
ADVANCED ENVIRONMENTAL ENGINEERING
 1219 WEST STONECREEK LANE, LAYTON UTAH 84041
 PHONE: 801-918-5107 FAX: 801-544-2429

0 1/2 1
 DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1"

DESIGN: _____
 DRAWN: _____
 CHECKED: CAH
 SCALE: HORIZ. AS NOTED
 VERT. NONE
 DATE: 9/06

FIGURE:
G-1



NO.	DATE	REVISION

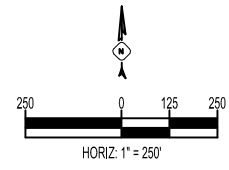
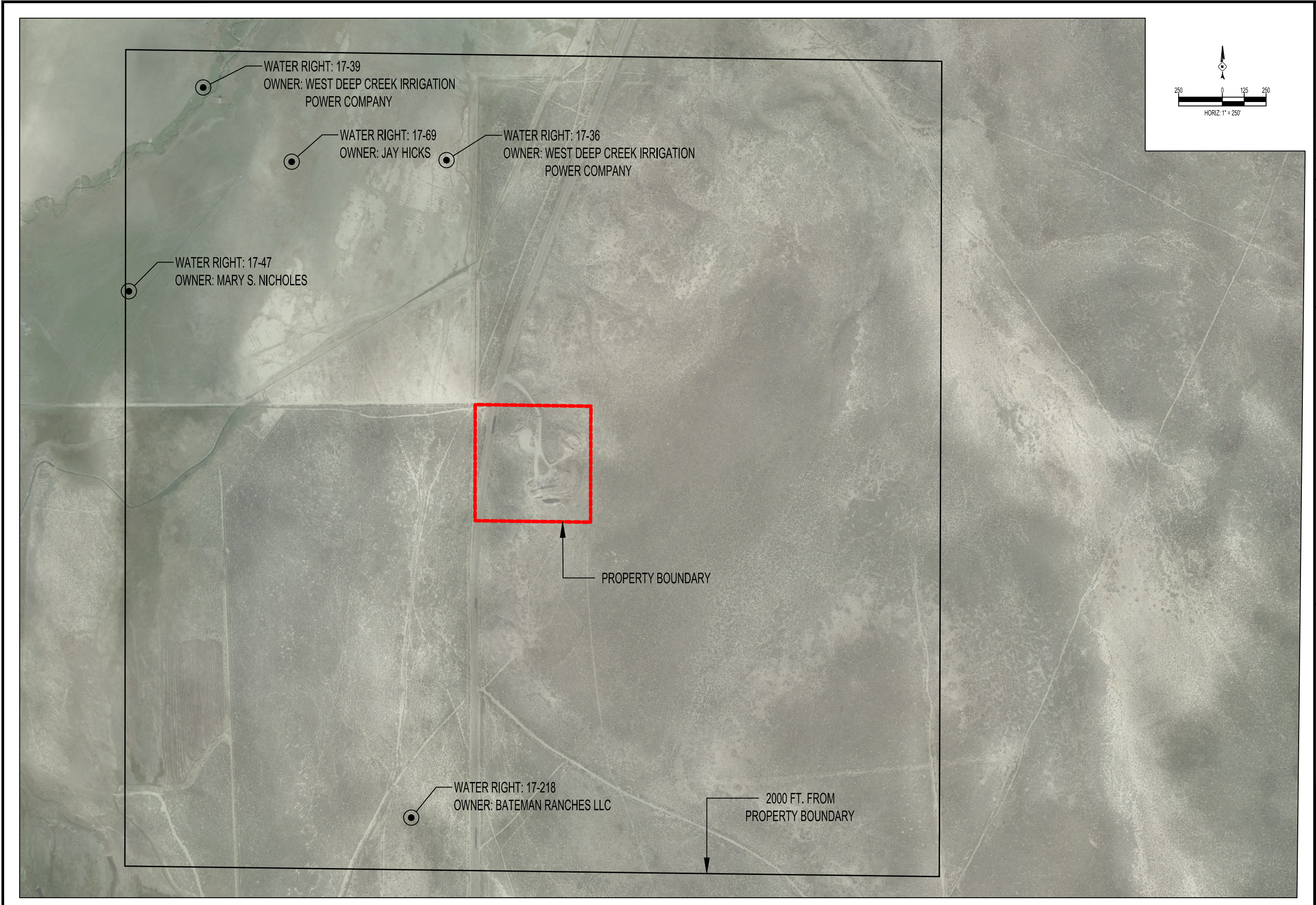
DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1/2 INCH

0 1/4 1/2

SURFACE WATER WITHIN 1 MILE
IBAPAH SOLID WASTE FACILITY
TOOELE COUNTY, UTAH



DESIGN:	
DRAWN:	TL
CHECKED:	CH
DATE:	11/29/21



NO.	DATE	REVISION

DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1/2 INCH

WATER RIGHTS WITHIN 2,000 FT.
 IBAPAH SOLID WASTE FACILITY
 TOOELE COUNTY, UTAH



DESIGN:	
DRAWN:	TL
CHECKED:	CH
DATE:	11/29/21

G-3



Water Right Details

[Open Classic View](#)

Water Right: 17-36

Run Date: 11/23/2021 3:36:36 PM

Select Related Information

WARNING: Water Rights makes NO claims as to the accuracy of this data.

Water Right: 17-36

Application/Claim Number:

Certificate Number:

Home Display
Scanned Documents

[View Map](#)

Owners

Name: West Deep Creek Irrigation & Power Company
Address: Ibapah UT 84034

Remarks: Interest:

General

Type of Right: Decree Source of Info.: Water User's Claim **Status:**

Quantity of Water: 3.5 CFS

Source: Deep Creek
County: Tooele

Common Description:

Proposed Determin. Book: 17- Map: [18d](#) Publication Date:

Land Owned by Applicant: County Tax Id#:

Dates [View More](#)

Filing:
Filed: 07/19/1965
Priority: 10/28/1880 Decree/Class:

Advertising:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Engineer Action: Action Date:

Certification:
Proof Due Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter Date:

Points of Diversion [View Map](#)

Points of Diversion - Surface

[\(1\) S 1180 feet W 220 feet from E4 corner, Sec 09 T 9S R 19W SLBM](#)

Diverting Works: Source:

Elevation: UTM: 245457.333, 4438128.36 (NAD83)

Stream Alteration Required:

Water Uses [View Map](#) [View Use Data](#)

Water Use Group Number: [12329](#)
Water Rights Appurtenant to the following use(s): 17-36(DEC),

Irrigation-Beneficial Use Amount: 59 acres Group Total: 59 Prd of Use: 04/01-10/31
Comments: WUC's 36, 37, 38, 39 are limited to the irrigation requirements of 233 acres of primary water and 173 acres of secondary water.

Stock Water-Beneficial Use Amount: 420 ELUs Group Total: 420 Prd of Use: 04/01-10/31

Domestic-Beneficial Use Amount: 1 EDUs Group Total: 1 Prd of Use: 04/01-10/31

Place of Use	North West Quarter				North East Quarter				South West Quarter				South East Quarter				Section Totals
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 03 T 9S R 19W SLBM									22.7	1.4	23.9						48
Sec 04 T 9S R 19W SLBM																4.4	4.4
Sec 09 T 9S R 19W SLBM					6.6												6.6
Group Acreage Total:																	

Place of Use Stock

North West Quarter	North East Quarter	South West Quarter	South East Quarter

	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 03 T 9S R 19W SLBM									X	X	X					
Sec 04 T 9S R 19W SLBM																X
Sec 09 T 9S R 19W SLBM						X										

Use Totals - for 1 group

<u>Use Type</u>	<u>Sole Supply Total</u>	<u>Group Total</u>
Irrigation:	59 acres	59 acres
Stock Water:	420 ELUs	420 ELUs
Domestic:	1 EDUs	1 EDUs

Document Listing For Folder: 17-36

[Show Help](#)

-

Scan Order	Date	Description	Comment
1		Scanning History Sheet	
2		Application Summary_(1/2 green sheet)	
3	07/19/1965	Water User's Claim	Pg 1
4	07/19/1965	Water User's Claim	Pg 2
5	07/19/1965	Water User's Claim	
6	07/19/1965	Water User's Claim	
7	07/01/1963	Hydrographic Survey Map Sheet	Sheet 18a
8	07/01/1963	Hydrographic Survey Map Sheet	Sheet 19b

Water Right Details

--

1 of 2 🔍 - + ↺ ↻ 📄 Page view A Read aloud 🗒 Add text ▾ Draw ▾ H

Water Right Details for 17-39

Utah Division of Water Rights

11/23/2021 3:38 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 17-39

Application/Claim:

Certificate:

Owners:

Name: West Deep Creek Irrigation & Power Company
Address: Ibapah UT 84034

Interest:

Remarks:

General:

Type of Right: Decree	Source of Info.: Water User's Claim	Status:
Quantity of Water: 3.5 CFS		
Source: Deep Creek		
County: Tooele		
Common Description:		
Proposed Det. Book: 17-	Map: 18a	Pub. Date:
Land Owned by Appl.:	County Tax Id#:	

Dates:

Filing:

Filed: 07/19/1965

Priority: 10/28/1880

Decree/Class:

Advertising:

Publication Began:

Publication End:

Newspaper:

Protest End Date:

Protested: Not Protested

Hearing Held:

Approval:

State Eng. Action:

Action Date:

Recon. Req. Date:

Recon. Req Action:

Certification:

Proof Due Date:

Extension Filed Date:

Election or Proof:

Election/Proof Date:

Certificate Date:

Lapsed, Etc. Date:

Lapsed Letter

Wells:

Prov. Well Date:

Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:

Stream Alteration Required:

(1) S 440 ft. W 1390 ft. from E4 corner, Sec 09 T 9S R 19W SLBM

Diverting Works:

Source:

Elevation:

UTM: 245100.717, 4438353.912

Proposed Water Uses:

Proposed Water Uses - Group Number: 12332

Water Use Types:

Irrigation-Beneficial Use Amount: 44.2 acres Group Total: 44.2 Period of Use: 04/01 to 10/31
 Comments: WUC`s 36, 37, 38, 39 are limited to the irrigation requirements of 233 acres of primary water & 173 acres of secondary water.

Stock Water-Beneficial Use Amount: 420 Group Total: 420 Period of Use: 04/01 to 10/31

Domestic-Beneficial Use Amount: 1 EDUs Group Total: 1 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section Totals	
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE		
Sec 04 T 9S R 19W																	6.7	6.7
Sec 09 T 9S R 19W						18.4		17.5							1.6			37.5
Group Acreage Total :																		

Place of Use Stock:

	North West				North East				South West				South East				
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 04 T 9S R 19W SLBM																	X
Sec 09 T 9S R 19W SLBM						X		X						X			

Use Totals:

Irrigation sole-supply total: 44.2 acres	for a group total of: 44.2 acres
Stock Water sole-supply total: 420 ELUs	for a group total of: 420 ELUs
Domestic sole-supply total: 1 EDUs	for a group total of: 1 EDUs

Water Right Details for 17-47

Utah Division of Water Rights

11/23/2021 3:39 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 17-47

Application/Claim:

Certificate:

Owners:

Name: Mary S. Nicholes
Address: Wendover UT 84043

Interest:

Remarks:

General:

Type of Right: Pending Adjudication Claim Source of Info.: Water User's Claim Status:

Quantity of Water:

Source: Deep Creek

County: Tooele

Common Description:

Proposed Det. Book: 17-

Map: 19c

Pub. Date:

Land Owned by Appl.:

County Tax Id#:

Dates:

Filing:

Filed: 08/24/1965

Priority: / /1880

Decree/Class:

Advertising:

Publication Began:

Publication End:

Newspaper:

Protest End Date:

Protested: Not Protested

Hearing Held:

Approval:

State Eng. Action:

Action Date:

Recon. Req. Date:

Recon. Req Action:

Certification:

Proof Due Date:

Extension Filed Date:

Election or Proof:

Election/Proof Date:

Certificate Date:

Lapsed, Etc. Date:

Lapsed Letter

Wells:

Prov. Well Date:

Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Point to Point:

(1) Stream from a point at N 660 feet E 660 feet from S4 corner, Sec 09 T 9S R 19W SLBM
to a point at S 660 feet E 660 feet from NW corner, Sec 03 T 9S R 19W SLBM

Comment: Administratively updated by State Engineer.

Source:

Proposed Water Uses:

Proposed Water Uses - Group Number: 12341

Water Use Types:

Stock Water-Beneficial Use Amount: 420 Group Total: 420 Period of Use: 01/01 to 12/31

Place of Use Stock:

	North West				North East				South West				South East			
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 03 T 9S R 19W SLBM	X															
Sec 09 T 9S R 19W SLBM															X	

Use Totals:

Stock Water sole-supply total: 420 ELUs for a group total of: 420 ELUs

Water Right Details for 17-69

Utah Division of Water Rights

11/23/2021 3:38 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 17-69

Application/Claim:

Certificate:

Owners:

Name: Jay Hicks
Address: Ibapah UT 84034

Interest:

Remarks:

General:

Type of Right: Pending Adjudication Claim Source of Info.: Water User's Claim Status:

Quantity of Water: 0.015 CFS

Source: Underground Water Well

County: Tooele

Common Description:

Proposed Det. Book: 17-

Map: 18a

Pub. Date:

Land Owned by Appl.:

County Tax Id#:

Dates:

Filing:

Filed: 07/19/1965

Priority: / /1900

Decree/Class:

Advertising:

Publication Began:

Publication End:

Newspaper:

Protest End Date:

Protested: Not Protested

Hearing Held:

Approval:

State Eng. Action:

Action Date:

Recon. Req. Date:

Recon. Req Action:

Certification:

Proof Due Date:

Extension Filed Date:

Election or Proof:

Election/Proof Date:

Certificate Date:

Lapsed, Etc. Date:

Lapsed Letter

Wells:

Prov. Well Date:

Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) S 1160 ft. W 1110 ft. from E4 corner, Sec 09 T 9S R 19W SLBM

Well Diameter: in.

Depth: to ft.

Year Drilled:

Well Log:

Well Id#:

Elevation:

UTM: 245186.061, 4438134.456 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 12362

Water Use Types:

Stock Water -Beneficial Use Amount: 385	Group Total: 385	Period of Use: 01/01 to 12/31
Domestic -Beneficial Use Amount: 1 EDUs	Group Total: 1	Period of Use: 01/01 to 12/31

Use Totals:

Stock Water sole-supply total: 385 ELUs	for a group total of: 385 ELUs
Domestic sole-supply total: 1 EDUs	for a group total of: 1 EDUs

Water Right Details for 17-218

Utah Division of Water Rights

11/23/2021 3:40 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 17-218

Application/Claim: A78065

Certificate:

Changes:

a40239 (Filed: 10/27/2014) Certificated

Owners:

Name: Bateman Ranches, LLC
Address: c/o Kyle Bateman
P O Box 6112
Ibapah, UT 84034 Interest:
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Certificate Status: Certificated
Quantity of Water: 434.8 ACFT
Source: Underground Water Well
County: Tooele
Common Description: Ibapah
Proposed Det. Book: 17- Map: Pub. Date:
Land Owned by Appl.: Yes County Tax Id#: 0707000029,

Dates:

Filing:
Filed: 06/26/2008
Priority: 06/26/2008 Decree/Class:
Advertising:
Publication Began: 07/31/2008 Publication End: 08/07/2008 Newspaper: Tooele Transcript -
Protest End Date: 08/27/2008 Protested: Not Protested Hearing Held:
Approval:
State Eng. Action: Approved Action Date: 05/17/2011
Recon. Req. Date: Recon. Req Action:
Certification:
Proof Due Date: 05/31/2018 Extension Filed Date:
Election or Proof: Proof Election/Proof Date: 05/16/2018
Certificate Date: 09/05/2019 Lapsed, Etc. Date: Lapsed Letter
Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 281 ft. W 351 ft. from E4 corner, Sec 16 T 9S R 19W SLBM
Well Diameter: 12 in. Depth: 520 to ft. Year Drilled: 2015 Well Log: Yes Well Id#:
Elevation: UTM: 245358.842, 4436963.544 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 627266																	
Water Use Types:																	
Irrigation -Beneficial Use Amount: 108 acres					Group Total: 108					Period of Use: 04/01 to 10/31							
Stock Water -Beneficial Use Amount: 100					Group Total: 100					Period of Use: 01/01 to 12/31							
Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 16 T 9S R 19W					X	X	X	X					X	X		X	108
Group Acreage Total :																108	

Use Totals:	
Irrigation sole-supply total: 108 acres	for a group total of: 108 acres
Stock Water sole-supply total: 100 ELUs	for a group total of: 100 ELUs

Segregation History:										
This Right was Segregated from: none										
as originally filed:	Flow in CFS	AND/OR/BLANK	Quantity in Acre-Feet	Water Uses						
				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
		842.8	210.0	100.0						
The following Water Rights have been Segregated from 17-218:										
(1) Adjustment			[408.0]	[102.0]						
AppNum:	Adjustment based on Proof and Certificate									
	Filed: 09/05/2019									
Commen										
This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
		434.8	108.0	100.0						

Extensions										
Filed: 05/10/2016					Proof Due: 05/31/2018					
Advertising:										
Publication Began:			Publication End:			Newspaper:				
Protested: Not Protested			Hearing Held:			Protest End Date:				
Approval:										
SE Action: Approved			Action Date: 11/23/2016			Memo Decision: No				

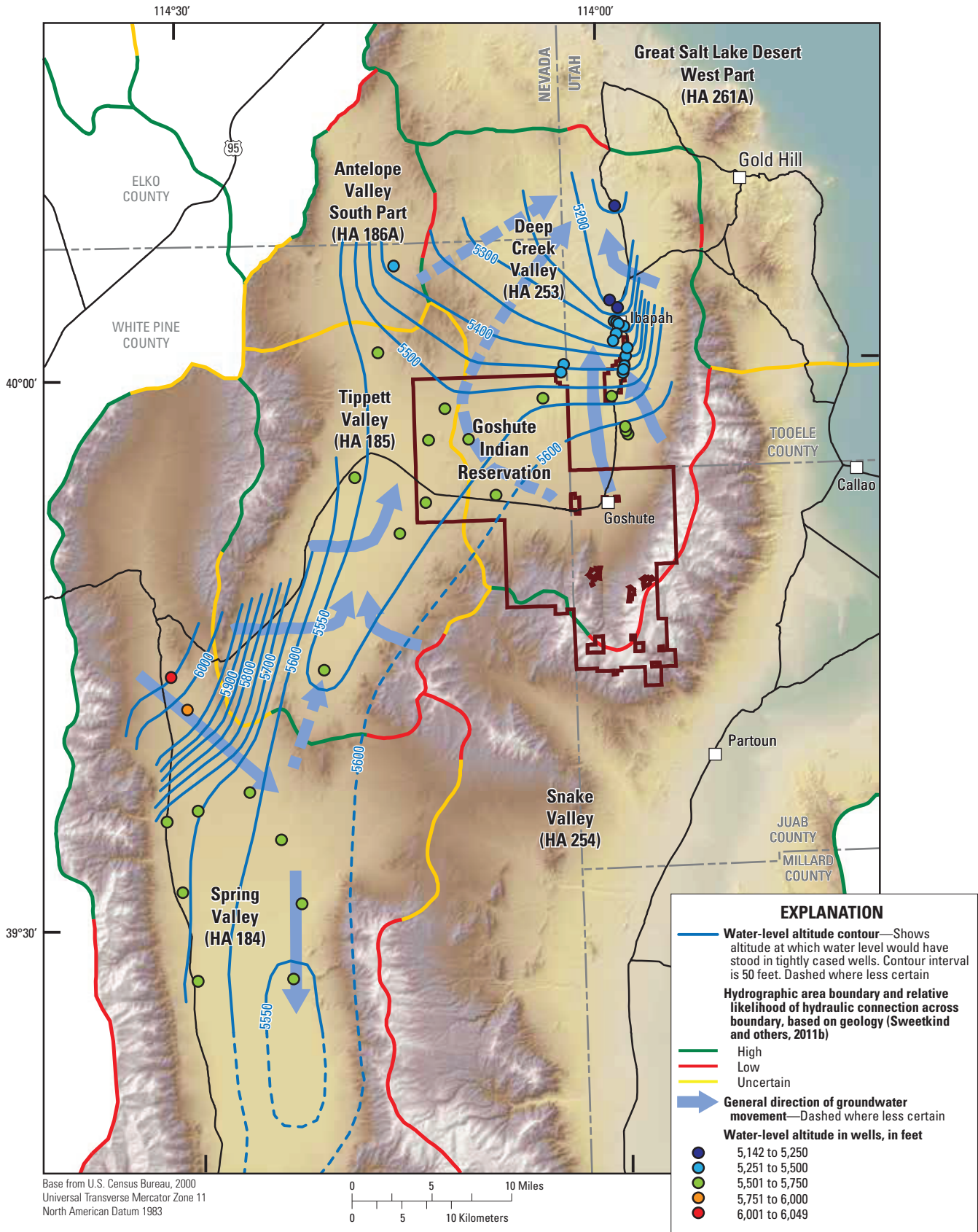


Figure 8. Regional water-level (potentiometric) surface map and general direction of groundwater movement for Deep Creek Valley and adjacent areas, Utah and Nevada.

Appendix H – Closure and Post Closure Estimate

1. Tabulated Closure/Post-Closure Costs

Total Closure Costs For Ibapah Ivb Landfill

OPINION OF PROBABLE COSTS FOR POST-CLOSURE

Fill & Grade	0.5	AC	\$4,551.58	\$2,275.79
Move & Place Soil Cover (18")	1210	CY	\$4.29	\$5,194.58
Move & Place Compost Topsoil (6")	400	CY	\$4.29	\$1,716.00
Final Grading	0.5	AC	\$1,717.58	\$858.79
Revegetation	0.5	AC	\$1,374.06	\$687.03
Survey & Engineer Certification	1	LS	\$5,367.43	\$5,367.43
Subtotal				
POST-CLOSURE				
Post-Closure Monitoring	30	JOB	\$1,717.58	\$51,527.42
Subtotal				
Total				\$67,627.04

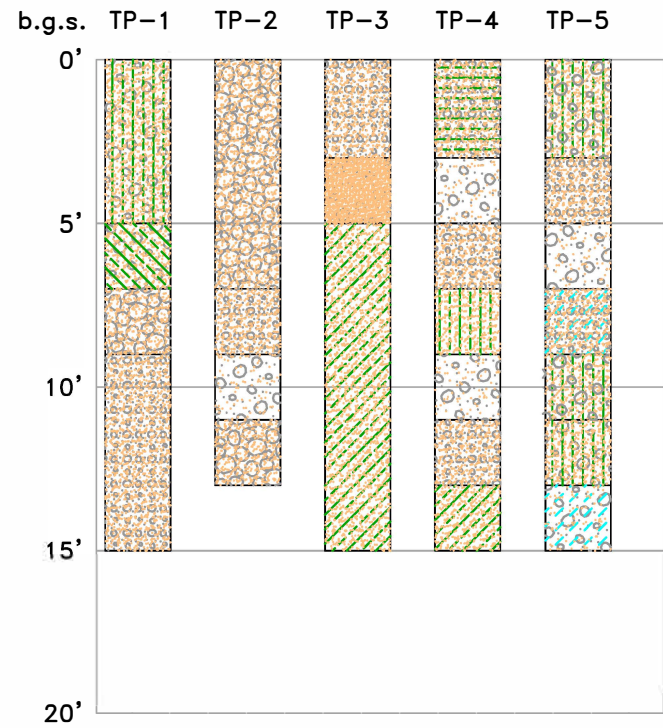
*All unit costs are multiplied by the DWMRC inflation factor/multiplier 1.042%

Appendix I – Facility Life Projections

1. Figure I-1: Cell Plan and Boring Log
2. Figure I-2: Final Grading Plan

TOOELE COUNTY FIGURES\FIG 4.4 IBAPAH LANDFILL.dwg

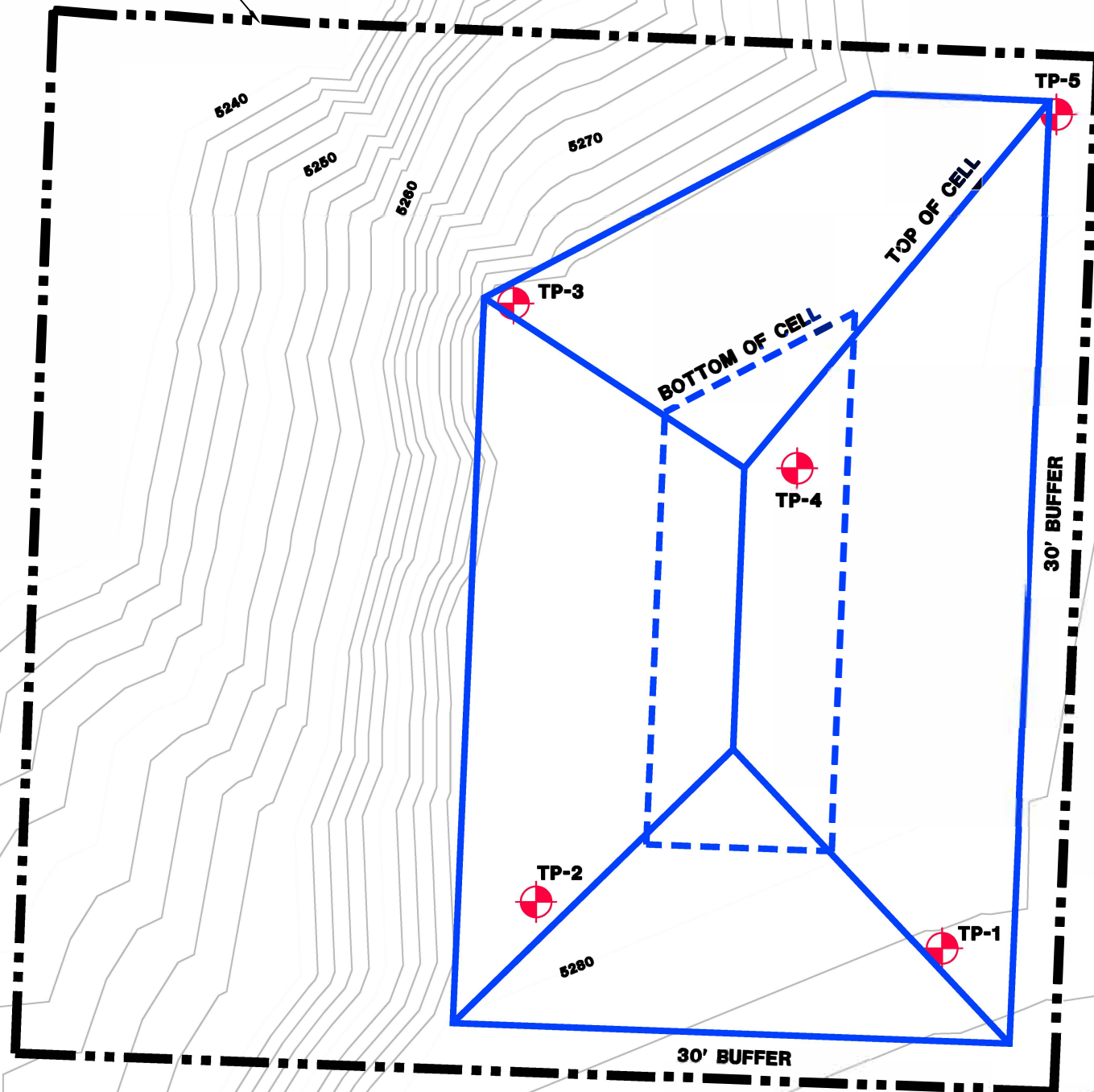
9/04/06



LEGEND

- | | | | |
|--|---|--|---|
| | SANDY LEAN CLAY (CL) | | POORLY GRADED GRAVEL WITH SAND (GP) |
| | CLAYEY SAND WITH GRAVEL (SC) | | WELL GRADED GRAVEL WITH SAND (GW) |
| | POORLY GRADED SAND WITH GRAVEL (SP) | | WELL GRADED SAND WITH GRAVEL (SW) |
| | POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) | | WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC) |
| | CLAYEY GRAVEL WITH SAND (GC) | | WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM) |

NW 1/4, NW 1/4, NW 1/4 OF SECTION 15 T9S, R19W, SLB&M



REVISIONS	
NO.	DATE

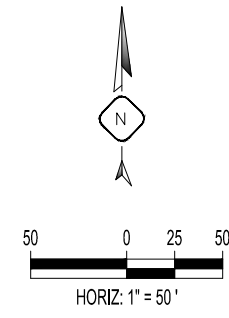
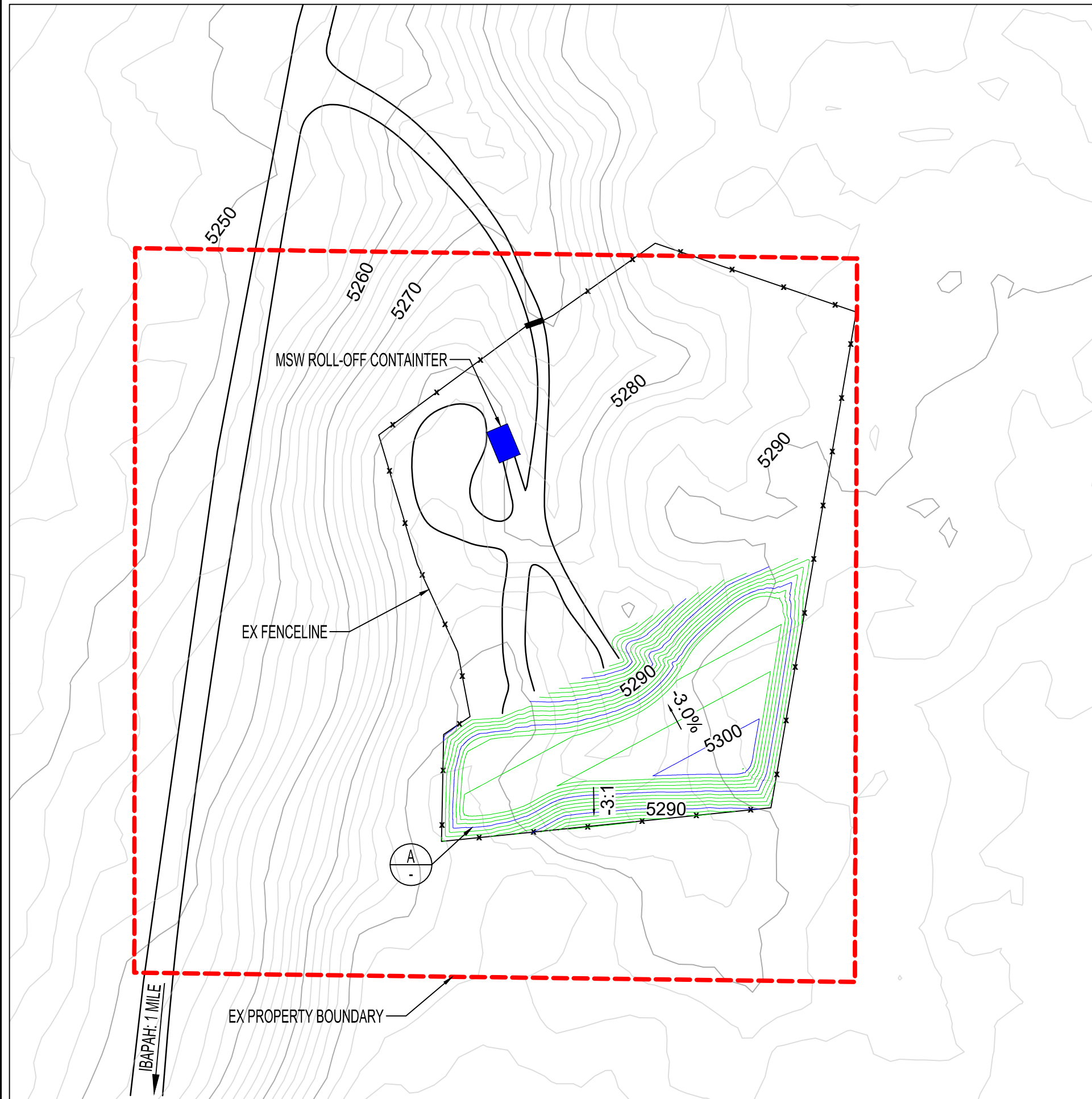
TOOELE COUNTY, UTAH
 IBAPAH SOLID WASTE FACILITY

AEC²
 ADVANCED ENVIRONMENTAL ENGINEERING
 1219 WEST STONECREEK LANE, LAYTON UTAH 84041
 PHONE: 801-918-5107 FAX: 801-544-2429

0 1/2 1
 DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1"

DESIGN: _____
 DRAWN: _____
 CHECKED: CAH
 SCALE: HORIZ AS NOTED
 VERT NONE
 DATE: 9/06

FIGURE:
 I-1



LEGEND

PROPERTY LINE	
FENCELINE	
EX ROADWAY	
EX MAJOR CONTOUR	5005
EX MINOR CONTOUR	5001
PR MAJOR CONTOUR	5005
PR MINOR CONTOUR	5001

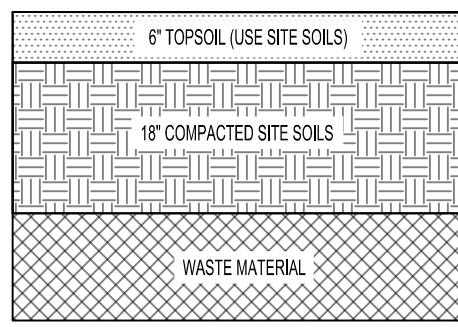
FINISHED CELL STATISTICS (900 PCY)

TOTAL REMAINING VOLUME: 13,460 CY (~6060 TONS)

DISPOSAL VOLUME: 10,768 CY (~4845 TONS)

COVER VOLUME: 2,692 CY (~1211 TONS)

FINAL COVER ELEVATION AT HIGH POINT: 5,300 FT.



A PROPOSED FINAL COVER
N.T.S

NO.	DATE	REVISION

DRAWING IS NOT TO SCALE IF BAR DOES NOT MEASURE 1/2 INCH

FINAL GRADING PLAN
IBAPAH WASTE MANAGEMENT FACILITY
TOOELE COUNTY, UTAH



DESIGN:	
DRAWN:	TL
CHECKED:	CH
DATE:	11/29/21

Appendix J – Financial Assurance

1. Eskrow Agreement Form

ESCROW AGREEMENT FORM

I. SUMMARY

UPTIF Account # 7358

A. Parties to the Agreement:

1. Depositor: Tooele County (the "Entity")
Address: 47 South Main
Tooele, Utah

Contact: Wayne Anderton Tel. No. (435) 833-9520
Tel. No. _____

2. State Agency: Utah Division of Waste Management and Radiation Control
(the "State")
Address: P.O. Box 144880
Salt Lake City, Utah 84114-4880

Contact: Douglas J. Hansen, Director Tel. No. 801-536-0200

3. Escrow Agent: Utah State Treasurer (the "Treasurer")
215 State Capitol
Salt Lake City, Utah 84114

Contact: Jason Nielsen, Financial Manager
Stephanie Baldes, Accountant

Telephone: (801)538-1453 Telefax: (801)538-1465 Toll free: 800-395-7665

B. Deposit Amount(s):

1. Principal amount \$ 412,000.00 (the "Proceeds")

2. Additional amount(s), if any:

\$ _____ From: _____
\$ _____ From: _____
\$ _____ From: _____

C. Authorizing Resolution:

_____ (the "Instrument")

D. Project Description:

Tooele County Solid Waste Facilities (the "Project")

This Summary is an integral part of the Escrow Agreement

II. AGREEMENT

A. The undersigned hereby deliver to the Treasurer, the Proceeds and Additional amount(s) to be held and disposed of by the Treasurer in accordance with the duties, instructions, and upon the terms and conditions hereinafter set forth in this Escrow Agreement to which the undersigned hereby agree:

1. For purposes of this Escrow Agreement and this Escrow Agreement only:
 - (a) The Treasurer shall not incur any liability in acting upon any written authorization and request delivered hereunder and believed by the Treasurer to be genuine and to be signed by the proper parties.
 - (b) The Treasurer may consult with legal counsel in the event of any dispute or question as to the construction of the Treasurer's duties hereunder and shall not be held to any liability for acting in accordance with advice so received.
 - (c) The Treasurer shall have a first lien on the moneys held by it hereunder for its compensation and for any costs, liability or expense or counsel fees it may incur.
2. In the event of any disagreement between the undersigned or any of them, and/or any other person, resulting in adverse claims and demands being made in connection with or for any moneys involved herein or affected hereby, the Treasurer shall be entitled at its option to refuse to comply with any such claim or demand, so long as such disagreement shall continue, and in so refusing the Treasurer may refrain from making any delivery or other disposition of any moneys involved herein or affected hereby and in so doing the Treasurer shall not be or become liable to the undersigned or any of them or to any person or party for its failure or refusal to comply with such conflicting or adverse demands, and the Treasurer shall be entitled to continue so to refrain and refuse so to act until:
 - (a) The rights of the adverse claimants have been finally adjudicated in a court assuming and having jurisdiction of the parties and the moneys involved herein or affected hereby; and/or
 - (b) All differences shall have been adjusted by agreement and the Treasurer shall have been notified thereof in writing signed by all of the persons interested.
3. The fees for the usual services of the Treasurer under the terms of this Escrow agreement are set forth in the schedule attached hereto as **Exhibit A**. It is agreed that additional compensation shall be paid to the Treasurer for any additional or extraordinary service it may be requested to render hereunder, and the Treasurer shall be reimbursed for any out-of-pocket expenses (including, without limitation, fees of counsel) reasonably incurred in connection with additional or extraordinary services.
4. The Entity and the State hereby agree that the deposit of the Proceeds shall constitute compliance with applicable deposit and investment provisions of the Instrument.
5. The duties of the Treasurer under the terms of this Escrow Agreement are as follows:
 - (a) The Treasurer shall receive into a separate fund (the "Escrow Account") Proceeds and any additional amounts to be used in connection with the Project.
 - (b) The Treasurer shall reimburse Entity in amounts authorized in writing by the Entity and the State.
 - (c) Each authorization must be signed by one official from both the Entity and the State, except as provided in (i) of this section, and shall be substantially the same as the form attached as Exhibit B. On behalf of the Entity, the written authorization and request shall be signed by any one of the officials of the Entity identified in Section I.A. 1. above. On behalf of the State, the written authorization and request shall be signed by any one of the officials of the State identified in Section I.A.2. above. The Treasurer assumes no responsibility for expenditure of moneys paid out of the Escrow Account pursuant to a

written authorization and request properly signed and delivered the Treasurer as provided herein.

- (i) If the Entity fails to provide closure, post-closure, or corrective action of the solid waste management facility as required by the *Utah Solid Waste Permitting and Management Rules* and the Entity's solid waste disposal permit, the Executive Secretary will issue an order to close under the authority of Section 19-6-107(7) of the Utah Solid and Hazardous Waste Act. Upon completion of the Administrative process, including the Entity's right to contest and appeal the administrative action, the State may independently request, in writing, reimbursement to a State-approved and authorized third party for the costs related to the third party's activities for closure, post-closure or corrective actions at the facility.
- (d) If a written authorization and request indicates that an amount (the "Retained Amount") payable to a Provider is to be held for retainage pending completion of the Project or the lapse of time, the Treasurer shall segregate such amount and shall invest the Retained Amount in an interest-bearing account (the "Separate Account"), the interest on which shall accrue for the benefit of the Provider. The Retained Amount and all accrued interest thereon shall be disbursed by the Treasurer in the same manner as provided in paragraph 5(b) hereof. All fees charged or incurred by the Treasurer relating to the establishment, investment and disbursement of the Separate Account shall be borne solely by the Provider and may be withheld by the Treasurer from the Separate Account prior to the disbursement thereof; provided, however, that if such fees are borne by the Separate Account, and if the interest earned on the Separate Account is less than the amount of such fees, then the fees withheld from such Separate Account shall not exceed the interest earned and the balance of such fees shall be paid by the Entity.
- (e) The funds deposited by the parties hereto in the Escrow Fund and in any Separate Account shall be invested by the Treasurer in the Utah Public Treasurers' Investment Fund established by Section 51-7-5 of the Utah Code. All interest earned on moneys held in the Escrow Account shall be retained therein and disbursed as provided herein.
- (f) The Treasurer shall report at least monthly concerning the receipts, disbursements and status of the Escrow Account. The reports shall be mailed to the Entity and to the State at their respective addresses as shown in Section I.A. above. Notification of changes of address, if any, shall be in writing and mailed to the parties at their respective addresses as shown in Section I.A. above.
- (g) This Escrow Agreement will be terminated after payment of the fees and out-of-pocket expenses of the Treasurer, and upon liquidation of the Escrow Account as provided herein. This Escrow Account, upon the earlier to occur of:
 - (i) receipt by the Treasurer of a written authorization and request, signed as provided in paragraph 5(c) hereof, stating that the acquisition, construction, improvement and extension of the Project is complete, that all obligations and costs in connection with the Project which are payable out of the Escrow Account have been paid and discharged, and that the Treasurer is authorized and directed to transfer all moneys in the Escrow Fund to the Entity or such other disposition as may be agreed by the State and the Entity; or
 - (ii) receipt by the Treasurer of a written certificate of the State, signed by the appropriate representatives thereof as identified in paragraph 5(c) hereof, stating that at least ___ months have expired from the date of this Agreement and that all remaining moneys in the Escrow Account are to be transferred to the State as a prepayment on the Bond purchased by the State or such other disposition as may be specified by the State.

6. This Agreement may be modified or amended only by a written Amendment attached to this Agreement and signed by the parties to this Agreement.

Entity: Tooele County Solid Waste Facilities

By: Wayne Anderson

Title: Director

Date: 4-1-2022

Attest and Countersign:

By: Jan A. Welch

Title: Manager, Tooele County

Date: 4-2-2022

STATE: Utah Division of Waste Management and Radiation Control

Radiation Control

By: _____

Title: Director

Date: _____

Accepted:

Utah State Treasurer

By: _____

Title: _____

Date: _____

EXHIBIT A

Fees due to State Treasurer as Escrow Agent

Maximum annual fee is 10 basis points (one-tenth of one percent (.001)) applied to the average daily balance in each account. The fee is assessed monthly based on the actual number of days in the month divided by 360 days.

Minimum annual fee is zero.

The Treasurer intends to deduct the administrative fee from gross earnings of each account before crediting earnings to the account(s). The amount of such fees is not reflected on monthly statements to the Entity, and is payable only from gross earnings on the account(s).

Entity shall not be liable to the Treasurer for any other costs or expenses for usual services. Usual services include:

1. Acceptance of funds delivered for deposit.
2. Deposit of funds and issuance of Treasurer's Receipt.
3. Investment of all funds delivered to Treasurer.
4. Credit net interest earnings to designated account(s) on a monthly basis.
5. Reimburse entity for project costs pursuant to receipt of a written authorization and request properly signed and delivered to the Treasurer.
6. Prepare and deliver to Entity and State a monthly accounting showing all deposits, withdrawals, interest credits and rate, ending balance and average balance for each account.

Entity will be liable to the Treasurer for out-of-pocket expenses resulting from any additional or extraordinary service Treasurer is requested to render and reasonably incurs in connection with additional or extraordinary services.

WRITTEN AUTHORIZATION AND REQUEST FOR REIMBURSEMENT
FROM ESCROW FUND

TO: The Utah State Treasurer, as Escrow Agent (the "Treasurer").

DATE: _____

WRITTEN REQUEST NO.: _____

I, the undersigned authorized officer of _____, (the "Entity"), do hereby certify and request to the Treasurer as follows:

- 7. Pursuant to the provisions of the Escrow Agreement by and between the Entity, the State and the Treasurer dated _____, (the "Escrow Agreement"), the undersigned hereby authorizes and requests a reimbursement from the Escrow Account to pay the amounts shown on the attached Payment Schedule.
- 8. Each payment proposed to be made as set forth on the Payment Schedule has been incurred and is a proper charge against the Escrow Account.
- 9. To the extent that the payment of any item set forth on the Payment Schedule is for other than work, materials, equipment or supplies, in connection with this authorization and request, the undersigned certifies that each payment proposed to be made on the Payment Schedules is a proper charge against the Escrow Account, is a reasonable amount and has not been heretofore included in a prior Written Authorization and Request for Reimbursement for the Escrow Account.
- 10. This Written Authorization and Request, including the Payment Schedule attached hereto, shall be conclusive evidence of the facts and statements set forth herein.
- 11. A copy of this Written Authorization and Request is being kept on file in the official records of the Entity.

The terms used herein which are defined in the Escrow Agreement shall have the respective meanings therein assigned to them.

By: _____

Title: _____

EXHIBIT B-2

I/we, the undersigned authorized officer(s) of the State, do hereby certify and request to the Treasurer as follows:

1. I/we have reviewed the foregoing statements of the authorized officer of the Entity attached hereto, and on behalf of the State approve the request for payment from the Escrow Fund made therein; provided that the State has not independently verified the statements of such authorized officer of the Entity attached hereto and makes no representations or certifications with respect thereto.
2. A copy of this Written Authorization and Request is being kept on file in the official records of the State.

The terms used herein shall have the same meanings assigned to them in the attached statements of the authorized officer of the Entity.

Dated the date appearing at the top of the attached statements of the authorized officer of the Entity.

STATE:

By: _____

Title: _____

REIMBURSEMENT SCHEDULE

Check No.	Person or Firm	Amount	Purpose
-----------	----------------	--------	---------

Reimbursement for the above listed payments totaling \$ _____ is to be made to _____ (“Entity”) by transfer of funds from the Escrow Account (PTIF# _____) to (CHECK ONE):

_____ Entity’s general account in the Public Treasurer’s Investment Fund (PTIF#); or to

_____ Entity’s checking account at _____ (“Bank”).
Account number _____

RETAINAGE REQUEST

In addition to the above listed reimbursement, transfer the following retainage amounts:

From Escrow Acct.# To Retainage Acct.# For Contractor (name) #Amount

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Contact Person at time of Wire Transfer _____
(name) _____ (phone #)

UTAH STATE TREASURER
 UTAH PUBLIC TREASURERS' INVESTMENT FUND
 New Account Application and Change Form

DATE _____

A. Title of Account _____

B. PTIF Account Number(s) _____

ACTION:

<input type="checkbox"/> Create New PTIF Account <i>(Sec. A, C, D, E, F)</i>	<input type="checkbox"/> Change Bank/Account <i>(Sec. A, B, E, F)</i> .	<input type="checkbox"/> Add Bank/Account <i>(Sec. A, B, E, F)</i>
<input type="checkbox"/> Change Address <i>(Sec. A, B, D, F)</i>	<input type="checkbox"/> Change Authorized Individuals <i>(Sec. A, B, C, F)</i>	<input type="checkbox"/> Change Internet Access <i>(Sec. A, B, C, F)</i>

C. Individuals Authorized to Make Deposits/Withdrawals:

<u>NAME</u>	<u>TITLE</u>	<u>PHONE</u> <u>INTERNET</u> <u>ACCESS (Y/N) *</u>
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

D. PTIF Statement Mailing Address: _____

Attn: _____

E. Bank (Depository) Information:

<u>New/Additional Bank</u>	<u>Delete Bank</u>
a. Name of Bank _____	Name of Bank _____
b. Account Number _____	Account Number _____
<input type="checkbox"/> Checking <input type="checkbox"/> Savings <input type="checkbox"/> other _____	

F. **Authorization:** In accordance with applicable statutes and procedures established by the Utah State Treasurer, we the undersigned hereby authorize the Utah State Treasurer to make the above changes and/or initiate wire and/or automated clearing house (ACH) credit entries and/or debit entries to our bank indicated above. The depository named above is authorized to credit and/or debit the same to such account. This authorization is to remain in full force and effect until the Utah State Treasurer has received written notification from us of its termination.

Signed _____ (Date) _____ Name _____ Title _____	Signed _____ (Date) _____ Name _____ Title _____
---	---

TWO SIGNATURES REQUIRED

Please **attach a deposit slip** and return this form to:

Utah State Treasurer's Office
 215 State Capitol
 Salt Lake City, Utah 84114

* Must be a registered user, see our website at www.treasurer.state.ut.us