SW 273

2013-007654

Division of
Solid and Hazardous Waste

OCT 10 2013

HOLDEN TOWN

LANDFILL CLASS IVb

PERMIT APPLICATION

Division of
Solid and Hazardous Waste

OCT 10 2013

Utah Class IV and VI Landfill Permit Application Form

Part I General Information APPLICANT: PLEASE COMPLETE ALL SECTIONS

I. Landfill Type	☐ Class IVa ☒ Class IVb ☐ Class VI	**II. Application Type**	☒ New Application ☐ Renewal Application	☐ Facility Expansion ☐ Modification	

For Renewal Applications, Facility Expansion Applications and Modifications Enter Current Permit Number ____

III. Facility Name and Location

Name of Facility: Holden Town Landfill

Site Address (street or directions to site): SE 1/4 of the NW 1/4 section 35 T19S R4W SLB+m | County: Millard

City: Holden | Zip Code: 84636 | Telephone: 435-795-2213

Township: 19S | Range: 4W | Section(s): 35 | Quarter/Quarter Section: SE 1/4 | Quarter Section: NW 1/4

Main Gate Latitude N degrees 39° minutes 07° seconds 08.01 | Longitude W degrees 112° minutes 16° seconds 23°

IV. Facility Owner(s) Information

Name of Facility Owner: Holden Town Corporation

Address (mailing): P.O. Box 360127

City: Holden | State: Ut | Zip Code: 84636 | Telephone: 435-795-2213

V. Facility Operator(s) Information

Name of Facility Operator: Holden Town Corporation

Address (mailing): P.O. Box 360127

City: Holden | State: Ut | Zip Code: 84636 | Telephone: 435-795-2213

VI. Property Owner(s) Information

Name of Property Owner: Holden Town Corporation

Address (mailing): P.O. Box 360127

City: Holden | State: UT | Zip Code: 84636 | Telephone: 435-795-2213

VII. Contact Information

Owner Contact: Ross Stevens | Title: Holden Town Councilman

Address (mailing): P.O. Box 360044

City: Holden | State: Ut | Zip Code: 84636 | Telephone: 435-795-2605

Email Address: holdenut@crystalpeaks.com | Alternative Telephone (cell or other): (435) 864-7524

Operator Contact: Rod Dastrup | Title: city employee

Address (mailing): P.O. Box 360145

City: Holden | State: Ut | Zip Code: 84636 | Telephone: 435-253-0904

Email Address: radas35@msn.com | Alternative Telephone (cell or other):

Property Owner Contact: James W. Stephenson | Title: Mayor

Address (mailing): P.O. Box 360127

City: Holden | State: Ut | Zip Code: 84636 | Telephone: 435-795-2338

Email Address: | Alternative Telephone (cell or other): 435-253-0583

Utah Class IV and VI Landfill Permit Application Form

Part I General Information (Continued)

VIII. Waste Types (check all that apply)

☐ Landfill will accept all wastes allowed in Class IV or VI landfills **Or** landfill will accept only the following wastes

Waste Type	Combined Disposal Unit	Monofill Unit
☒ Construction & Demolition	☐	☐
☒ Tires	☐	☐
☒ Yard Waste	☐	☐
☒ Animals	☐	☐
☐ Contaminated Soil	☐	☐
☐ Other _____	☐	☐

Note: Disposal of dead animals must be approved by the Director

IX. Facility Area

Facility Area..... 40 acres

Disposal Area..... 2 acres

Design Capacity

Years..... 20+

Cubic Yards..... 6,625

Tons..... 1590

X. Fee and Application Documents

Indicate Documents Attached To This Application

☐ Application Fee: Amount $

☒ Facility Map or Maps ☒ Facility Legal Description ☒ Plan of Operation ☒ Waste Description

☐ Ground Water Report ☐ Closure Design ☐ Cost Estimates ☐ Financial Assurance

Class VI Special Requirements

☐ Documents required by UCA 19-6-108(9) and (10)

I HEREBY CERTIFY THAT THIS INFORMATION AND ALL ATTACHED PAGES ARE CORRECT AND COMPLETE.

Signature of Authorized Owner Representative: Ross M. Stevens	Title: Council man	Date: 9/20/13
Name typed or printed: Ross M. Stevens	Address: P.O. Box 360044 Holden UT 84636	
Email Address	Alternative Telephone (cell or other)	
Signature of Authorized Land Owner Representative (if applicable): James W. Stephenson	Title: Mayor	Date: 9/24/13
Name typed or printed: James W. Stephenson	Address: P.O. Box 63 Holden UT 84636	
Email Address	Alternative Telephone (cell or other)	
Signature of Authorized Operator Representative (if applicable): Signature on org.	Title: Maintenance	Date: 9/24/13
Name typed or printed: Rud Dastrup	Address: P.O. Box 360145 Holden UT 84636	
Email Address	Alternative Telephone (cell or other)	

Utah Class IV and VI Landfill Permit Application Checklist

Important Note: The following checklist is for the permit application and addresses only the requirements of the Division of Solid and Hazardous Waste. Other federal, state, or local agencies may have requirements that the facility must meet. The applicant is responsible to be informed of, and meet, any applicable requirements. Examples of these requirements may include obtaining a conditional use permit, a business license, or a storm water permit. The applicant is reminded that obtaining a permit under the *Solid Waste Permitting and Management Rules* does not exempt the facility from these other requirements. Please take note of the heading of each section for the facilities that the section applies to.

An application for a permit to construct and operate a landfill is the documentation that the landfill will be located, designed, constructed, operated, and closed in compliance with the requirements of Utah Administrative Code R315-301 through 320 (*Utah Solid Waste Permitting and Management Rules*) and Utah Code Annotated 19-6-101 through 123 (*Utah Solid and Hazardous Waste Act*). The application should be written to be understandable by regulatory agencies, landfill operators, and the general public. The application should also be written so that the landfill operator, after reading it, will be able to operate the landfill according to the requirements with a minimum of additional training.

Copies of the *Solid Waste Permitting and Management Rules*, the *Utah Solid and Hazardous Waste Act*, along with many other useful guidance documents can be obtained by contacting the Division of Solid and Hazardous Waste at 801-536-0200. Most of these documents are available on the Division's web page at www.hazardouswaste.utah.gov. Guidance documents can be found at the solid waste section portion of the web page.

When the Director has determined that the application is complete, submit two paper copies of the application as determined complete by the Director, and an electronic copy of the application.

Part II **Application Checklist**

***I.* Facility General Information**	
Description of Item	Location In Document
Ia. General Information for All Facilities	
Completed Part I General information form above	
General description of the facility (R315-310-3(1)(b))	Appendix A
Legal description of property (R315-310-3(1)(c))	Appendix B
Proof of ownership, lease agreement, or other mechanism (R315-310-3(1)(c))	Appendix C
If the permit application is for a Class IV landfill, a demonstration that the landfill is not a commercial facility (see Utah Code Annotated 19-6-102(3) for definition of Commercial)	
Waste type and anticipated daily volume (R315-310-3(1)(d))	Appendix D
Intended schedule of construction (R315-302-2(2)(a))	
Ib. General Information for All New Or Laterally Expanding Facilities	
Documentation that the Historical Survey requirements of R315-302-1(2)(f) have been met (R315-305-4(1)(b)(vi))	Appendix E
Name and address of all property owners within 1000 feet of the facility boundary (R315-310-3(2)(i))	Appendix F
Documentation that a notice of intent to apply for a permit has been sent to all property owners listed above (R315-310-3(2)(ii))	Appendix G

I. **Facility General Information**	
Description of Item	Location In Document
Name of the local government with jurisdiction over the facility site (R315-310-3(2)(iii))	Appendix C
Ic. Location Standards for New Or Laterally Expanding Class IVa Landfills (R315-305-4(1)(a))	
Land use compatibility	
Maps showing the existing land use, topography, residences, parks, monuments, recreation areas or wilderness areas within 1000 feet of the site boundary	Appendix H
Certifications that no ecologically or scientifically significant areas or endangered species are present in site area	Appendix L
Maps showing the location of dwellings, residential areas, other structures, and historic structures.	Appendix A, B
List of airports within five miles of facility and distance to each	n/A
Geology	
Geologic maps showing significant geologic features, faults, and unstable areas	
Maps showing site soils	page 8, Appendix N
Surface water	
Magnitude of 24 hour 25 year and 100 year storm events	page 13+14
Average annual rainfall	Appendix I
Maximum elevation of flood waters proximate to the facility	appendix N
Maximum elevation of flood water from 100 year flood for waters proximate to the facility	n/A
Wetlands	Appendix N
Ground water	page 8
Id. Location Standards for New Or Laterally Expanding Class IVb and VI Landfills	
Floodplains as specified in R315-302-1(2)(c)(ii) (R315-305-4(1)(b)(i))	page 8
Wetlands as specified in R315-302-1(2)(d) (R315-305-4(1)(b)(ii))	Appendix N
The landfill is located so that the lowest level of waste is at least ten feet above the historical high level of ground water (R315-305-4(1)(b)(iii))	page 8
Geology as specified in R315-302-1(2)(b)(i) and (iv) (R315-305-4(1)(b)(iv))	page 8
Demonstration that the lowest level of waste will be ten feet above the historic high ground water elevation	Page 8
Ie. Additional Location Standards for New Or Laterally Expanding Class IVb and VI Landfills Or Landfills Requesting That Dead Animals Be Added As A New Waste Stream (R315-305-4(1)(a)(v))	
Maps showing the existing land use, topography, residences, parks, monuments, recreation areas or wilderness areas within 1000 feet of the site boundary	Appendix H, L.

I. **Facility General Information**	
Description of Item	Location In Document
Certifications that no ecologically or scientifically significant areas or endangered species are present in site area	Appendix L
Maps showing the location of dwellings, residential areas, other structures, and historic structures.	"
List of airports within five miles of facility and distance to each	n/A
If. Plan Of Operations for All Facilities (R315-310-3(1)(e) and R315-302-2(2))	
Description of on-site waste handling procedures and an example of the form that will be used to record the weights or volumes of waste received (R315-302-2(2)(b) And R315-310-3(1)(f))	page 11
Schedule for conducting inspections and monitoring, and examples of the forms that will be used to record the results of the inspections and monitoring (R315-302-2(2)(c), R315-302-2(5)(a), and R315-310-3(1)(g))	page 12
Contingency plans in the event of a fire or explosion (R315-302-2(2)(d))	page 12
Plan to control fugitive dust generated from roads, construction, general operations, and covering the waste (R315-302-2(2)(g))	page 12
Plan for litter control and collection (R315-302-2(2)(h))	page 12
Procedures for excluding the receipt of prohibited hazardous or PCB containing waste (R315-302-2(2)(j))	page 13
Procedures for controlling disease vectors (R315-302-2(2)(k))	page 13
A plan for alternative waste handling (R315-302-2(2)(l))	page 13
A general training plan for site operations (R315-302-2(2)(o))	Appendix O
Any recycling programs planned at the facility (R315-303-4(6))	n/A
Any other site-specific information pertaining to the plan of operation required by the Director (R315-302-2(2)(p))	
Ig. Additional Plan Of Operation Requirements for Class IVa Facilities	
Corrective action programs to be initiated if ground water is contaminated (R315-302-2(2)(e))	n/A
II **Facility Technical Information**	
IIa. Maps for All Facilities	
Topographic map drawn to the required scale with contours showing the boundaries of the landfill unit, ground water monitoring well locations, gas monitoring points, and the borrow and fill areas (R315-310-4(2)(a)(i))	Appendix H
Most recent U.S. Geological Survey topographic map, 7-1/2 minute series, showing the waste facility boundary; the property boundary; surface drainage channels; any existing utilities and structures within one-fourth mile of the site; and the direction of the prevailing winds (R315-310-4(2)(a)(ii))	Appendix H

I. **Facility General Information**	
Description of Item	Location In Document
IIb. Geohydrological Assessment for Class IVa Landfills (R315-310-4(2)(b))	
Local and regional geology and hydrology including faults, unstable slopes and subsidence areas on site (R315-310-4(2)(b)(i))	
Evaluation of bedrock and soil types and properties including permeability rates (R315-310-4(2)(b)(ii))	
Depth to ground water (R315-310-4(2)(b)(iii))	
Quantity, location, and construction of any private or public wells on-site or within 2,000 feet of the facility boundary (R315-310-4(2)(b)(v))	N/A
Tabulation of all water rights for ground water and surface water on-site and within 2,000 feet of the facility boundary (R315-310-4(2)(b)(vi))	
Identification and description of all surface waters on-site and within one mile of the facility boundary (R315-310-4(2)(b)(vii))	
For an existing facility, identification of impacts upon the ground water and surface water from leachate discharges (R315-310-4(2)(b)(viii))	
Calculation of site water balance (R315-310-4(2)(b)(ix))	
IIc. Engineering Report, Plans, Specifications, And Calculations for All Facilities	
Unit design to include cover design; fill methods; and elevation of final cover including plans and drawings signed and sealed by a professional engineer registered in the State of Utah, when required (R315-310-3(1)(b) and R315-310-4(2)(c)(iii))	pg 13
Design and location of run-on and run-off control systems (R315-310-4(2)(c)(viii))	page 13
Anticipated facility life and the basis for calculating the facility's life (R315-310-4(2)(c)(ii))	
Engineering reports required to meet the location standards of R315-305-4 including documentation of any demonstration or exemption made for any location standard (R315-310-4(2)(c)(i))	N/A
Identification of borrow sources for final cover (R315-310-4(2)(c)(iv))	pg 14
Run-off collection, treatment, and disposal and documentation to show that any treatment system is being or has been reviewed by the Division of Water Quality (R315-310-4(2)(c)(v) and R315-310-3(1)(i))	N/A
IId. Closure Requirements for All Facilities	
CLOSURE PLAN (R315-310-3(1)(h))	Appendix J
Closure schedule (R315-310-4(2)(d)(i))	page 14 & 15
Design of final cover (R315-310-4(2)(c)(iii))	Appendix J

I. **Facility General Information**	
Description of Item	Location In Document
Capacity of site in volume and tonnage (R315-310-4(2)(d)(ii))	page 14
Final inspection by regulatory agencies (R315-310-4(2)(d)(iii))	page 14
IIe. Post-Closure Requirements for All Facilities	
POST-CLOSURE CARE PLAN (R315-310-3(1)(h))	
Changes to record of title, land use, and zoning restrictions (R315-310-4(2)(e)(v))	page 14
Maintenance activities to maintain cover and run-on/run-off control systems (R315-310-4(2)(e)(iii))	page 14
List the name, address, and telephone number of the person or office to contact about the facility during the post-closure care period (R315-310-4(2)(e)(vi))	page 16
IIf. Financial Assurance for All Facilities (R315-310-3(1)(j))	
Identification of closure costs including cost calculations (R315-310-4(2)(d)(iv))	Appendix K
Identification of post-closure care costs including cost calculations (R315-310-4(2)(e)(iv))	Appendix Q
Identification of the financial assurance mechanism that meets the requirements of Rule R315-309 and the date that the mechanism will become effective (R315-309-1(1) and R315-310-3(1)(j))	Appendix K

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APPLICATION FOR A CLASS IVb LANDFILL PERMIT

FOR THE

HOLDEN TOWN LANDFILL

Prepared by:

Tamara Dallin
Holden Town Clerk
56 North Main Street
Holden, Utah 84636
(435) 795-2213

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Appendix B – Map with Plat Description - Landfill

Appendix C – Quit Claim Deed – Holden Town Landfill

Appendix D – Holden Town Landfill Log

Appendix E – Historical Survey

Appendix F – Property Owners

Appendix G – Notification of intent to apply for permit

Appendix H – Topographical Map – Landfill

Appendix I – Annual Rainfall

Appendix J – Closure Costs

Appendix K – PTIF Account

Appendix L – United States Department of Agriculture Letter

Appendix M – Kern River Gas Transmission Company Letter

Appendix N – Natural Resources Conservation Service Letter

Appendix O – Training Log for Site Operators

Appendix P – Random/Quarterly Inspection Form

Appendix Q – Post-Closure Care Costs

UTAH DEPARTMANT OF ENVIRONMENTAL QUALITY

DIVISION OF SOLID AND HAZARDOUS WASTE

Application for a permit to operate a class IVb landfill
R315-305-3(2)

1. Name of Facility: Holden Town Class IVb Landfill

2. Site Location: SE ¼ of the NW ¼ Section 35 T19S R4W SLB&M

Latitude – 39d07m12.5s N
Longitude – 112d16m14.5s W

3. Facility/Property Owner Holden Town

4. Contact Person Ross Stevens – Councilman
Tamara Dallin – Town Clerk

56 North Main
Holden, Utah 84636
Phone: (435)795-2213
Fax: (435)795-2351
holdenut@crystalpeaks.com

5. Type of Facility Class IVb Landfill

6. Certification of Submitted Information: Ross Stevens – Holden Town Councilman

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

Signature: Ross M. Stevens Date: 9-12-13

Ross M. Stevens – Holden Town Councilman

SUBSCRIBED AND SWORN to before me this 12 day of Sept, 2013

Laurie Johnson

My Commission Expires 4-29-15

Notary Public
LAURIE JOHNSON
Commission #609121
My Commission Expires
April 29, 2015
State of Utah

The Holden Town Class IVb Landfill is an existing solid waste disposal facility, located in Millard County, Utah. The landfill currently serves the town of Holden and accepts green, construction, and inert waste and there is a pit for dead animals. The landfill also accepts metals that are stockpiled in a separate area and sold for recycling.

The property on which the Holden Town Landfill is located is owned by Holden Town, Utah. The parcel description is SE ¼ of the NW ¼ of Sec. 35, T19S, R4W, SLM 40 acres. The name, address, and telephone number of the contact person regarding site ownership is:

Mayor James W. Stephenson
P.O. Box 360127
Holden, Utah 84636
(435) 795-2213
holdenut@crystalpeaks.com

The Holden Town Landfill is located at Township – 19 south, Range – 4 West, Section 35 and is approximately 40 acres. Surrounding use is agriculture and open range. See appendix A

Holden Town has a Quit Claim Deed for the landfill property. See a Appendix C

Capacity of site in volume and tonnage – annual average site volume is 79.5 tons per year, calculated to be approximately .25 tons daily.

The historical survey was completed by BIGHORN ARCHAEOLOGICAL CONSUTANTS, LLC. Bighorn recommends a finding of no historic properties affected. See appendix E

The names and addresses of surrounding property owners are included in this report. See appendix F

Notice was given to surrounding property owners of intent to apply for a landfill permit from the State of Utah Division of Solid and Hazardous Waste Department. See appendix G

Topographical maps - showing existing land use, residences, parks, monuments, recreation areas, or wilderness areas and location of dwellings. See appendix A, B and H

Holden Town requested information from the Forest Service for a map showing existing land use, residence, parks, monuments, recreation or wilderness areas within 1,000 feet of the site boundary and certifications that no ecologically or scientifically significant areas or endangered species are present in the site area. See appendix L

There are no airports within a 5 mile radius of the Holden Town landfill.

There is an average rainfall report included. See appendix I

Location Standards – New or laterally Expanding Class IVb Landfill

Flood plains – based on the FEMA flood insurance rate map, Holden Town Landfill is not located on a flood plain. See appendix N

Wetlands – based on the records available to our town, the landfill doesn't appear to fall into this category. See appendix N

The Holden Town landfill is an above ground landfill. The flesh pit dug for burial of livestock and other animals is 6 ft deep and no water has ever surfaced or is there any indication of any signs of historical water.

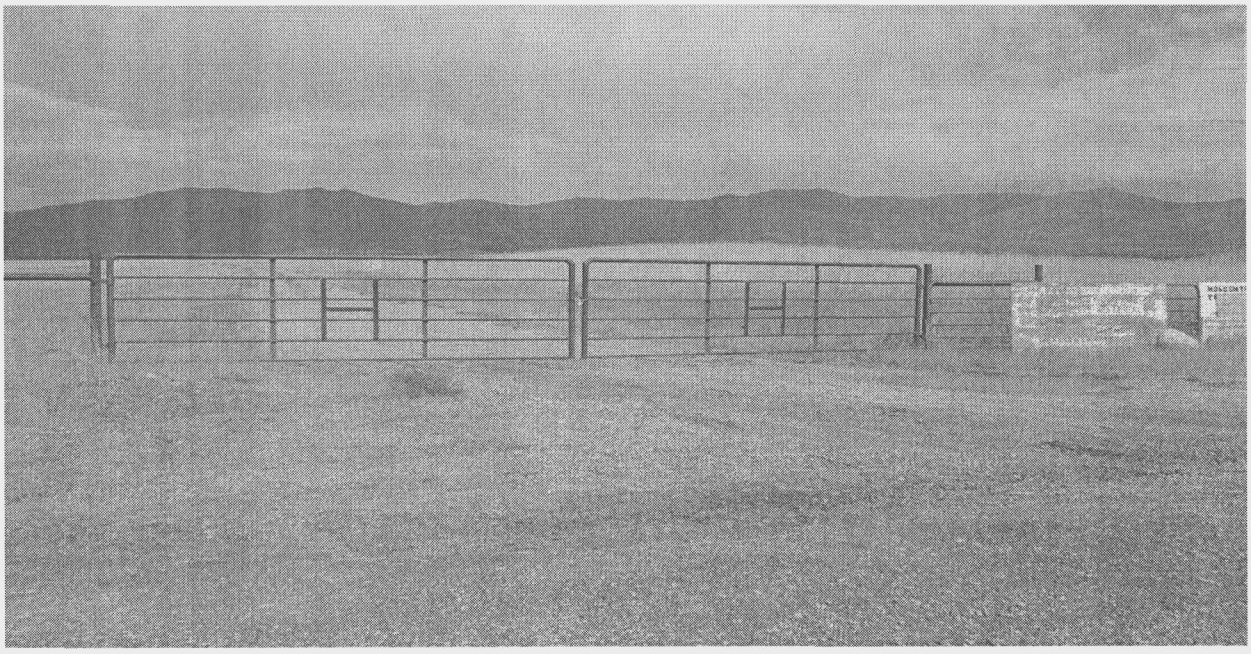
Geophysical Site Location Standards

Holden is located on the eastern edge of the Black Rock Desert. Pahvant Butte is at the north end of the Black Rock Desert. There are black basalt flows from the base of the butte and other sources to the south. Most of the Black Rock Desert in the Holden area is on the eastern side on irrigated farmland today while further to the west into Millard County there are areas of young basalt flows and small-sized volcanoes. Studies and data at and around the landfill location do not appear to reveal any unstable geologic conditions or features.

The Holden area is dominated by consolidated Quaternary alluvial deposits interbedded with lacustrine deposits from the Pleistocene Lake Bonneville that are primarily in the upper 200 feet or so of deposits. Lithology from a local well boring south of the landfill reported contents of clay, gravel and boulders. A wet zone, possibly a water table, was noted at approximately 160 feet below surface of this same boring. Another nearby well had similar lithologic features but with cemented quarts and gray clays. Around the 200 foot depth of this well was sticky wet mud. Depths below 200 feet were logged as black colored 'volcanic' type lithology. A third well in the vicinity of the landfill had logged records of reaching water at approximately 168 feet below surface. These nearby wells were approximately 1,200-3,000 feet from the Holden Landfill.

Sign at the entrance to the landfill

Gate at the entrance to the landfill – the gate is locked at all times; patrons need to sign their name and record what they are dumping before they are given a key to enter the landfill.



This is the area to dump burnable waste, green waste.

There are signs to direct patrons to the proper dumping site.

Plan Of Operations

Holden Town is submitting the following Plan of Operation for a Class IVb permit as required by the State of Utah. This plan of Operation presents the general procedures for handling of various types of waste which are either prohibited or accepted for disposal at this facility. The intended schedule of landfill construction, inspections and maintenance; fire control and contingency plans in the event of a fire or explosion; litter prevention; procedures for controlling disease vectors; general training and safety plan for site personnel; and , other information pertaining to the operation and maintenance of the facility. Information related to closure construction, post closure maintenance care, and financial assurance is also included.

The Holden Town landfill has no hours of operation. Those wishing to dump at the landfill must check out a key with the Holden Town offices during normal business hours.

There is a fence along the boundary of the disposal area to impede unauthorized entry by the public and large animals. There is a locked gate at the entry to the landfill. The landfill is locked 24 hours a day and those who want to enter must check out a key.

The Holden Town Maintenance employee is the landfill site attendant. His responsibilities include site inspections, monitoring, filing the required paperwork, burial of flesh pit, and reporting any problems to the Councilmember over the landfill. The equipment currently utilized at the landfill is a back hoe.

Holden Town Landfill accepts: Inert material – rocks, cement bricks, and dirt in one area. There is a section of the landfill that accepts – only (green waste) limbs, leaves, and unpainted wood. Open burning of stockpiled tree limbs and woody yard waste takes place twice a year in accordance with Air Quality Rules. The third area is for construction debris and painted wood. There is an area for tires and scrap metal (this is sold and recycled) and a flesh pit, the animals disposed of here are covered within 24 hours.
The rules are simple – All loads must be separated, and household waste is not accepted.

Household, commercial and industrial waste, hazardous materials such as paints, thinners, fuels, pesticides, oil or chemical fertilizers, and tires are not accepted.

Waste handling procedures: At the landfill, there are signs posted to direct patrons to the appropriate area to dump. Signs are: metal, flesh pit, limbs and branches, construction debris, and concrete.

An example of the form used by Holden Town when patrons check out a key to dump debris is attached to permit. See appendix D

The quantity of debris/waste is visually estimated by the person deposing of the waste and is recorded by them when checking out the key to enter the landfill. Daily logs are kept of all waste/debris being dumped and will be entered into the operating record. Incoming loads will be randomly selected for a more detailed inspection by the town employee, who will check to make sure no illegal dumping is taking place.

Hazardous waste -there will be an assessment made of what was dumped illegally and the Holden Fire Chief will be contacted or another authorized person/department. Wastes that are suspected of being hazardous will be handled as hazardous waste. Holden Volunteer Fire Department will be responsible for the proper management of any waste deemed hazardous or otherwise. If the hazardous waste is to be transported, it must be stored in an appropriate container and transported by a licensed individual.

Schedule for conducting inspections and monitoring – there is a daily record kept of what is dumped. See appendix D. The Holden Town maintenance employee performs random inspections and monitoring. There are quarterly inspections performed where the maintenance employee walks the perimeter and inspects what has been dumped. They also monitor if material is in the proper location. Refer to appendix P.

The landfill has developed contingency plan to be implemented in the event of an emergency at the site. The plan includes an organized, coordinated, and technically and financially feasible course of action for response to fire or explosion, releases of toxic or hazardous material. In the event of a fire, explosion, or suspicious material/dangerous material the local fire department (911) will be contacted immediately or another local emergency/authority. In the event of a fire at one of the dump areas, stockpiled dirt will be used to cover the burning or smoldering area. Water will not be applied to the active face unless absolutely necessary.

A general emergency operations plan has been developed by the Holden Town CERT team. In addition, the County Sheriff maintains a hazardous materials' response plan. It is anticipated that one of these plans will be invoked by county personnel if the severity of an event at the landfill facility requires the participation of an emergency response team.

Holden Town Landfill will be operated in a manner which does not create odors, unsightliness, or other nuisances.

Fugitive dust control – the traffic is not enough to generate a dust control problem, speed limit is minimal and road is paved until you get 23ft from the landfill locked gate. The area on and around the facility is native grasses; so dust is not a problem.

Litter control and collection – no waste is dumped that could create a litter problem.

Procedures for prohibited waste: Hazardous, PCB waste and other none acceptable waste will be handled accordingly. The waste will be identified and then the local fire department or another authorized department will be contacted. Then the waste will be properly disposed of.

Procedure for controlling disease vectors: all material disposed of at the Holden landfill doesn't attract vectors. The material allowed is: limbs, leaves and unpainted wood, rocks cement bricks and dirt, construction debris, and scrap metal. All animals dumped in flesh pit are buried within 24 hours.

Plan for alternative waste handling – In the unlikely event, requiring the short term closure of the landfill, several options are available. Waste haulers may be temporarily diverted to the Fillmore or Delta Transfer Station or the Millard County landfill, located six miles east of Delta, Utah.

General Training Plan – there are two (2) people responsible for the landfill, an elected official and the town maintenance employee. The town provides opportunities for in-house and other outside trainings. Appendix O is an example of the training log used by Holden Town.

Recycling programs are not available in Millard County.

There are maps included with this permit. See appendices A and B. They will give a clear picture of the landfill in relation to state and county boundaries, zoning of the landfill property and the surrounding land. There are no structures within a half – mile of the facility. The closest weather station for which prevailing wind information is available is near Delta, Utah. According to the Utah State Climatologist's Office, the prevailing winds in the Delta area blow from the northwest to the southeast.

Engineering Reports, Plans, Specifications, and Calculations

Landfill cover design and fill method – landfill will be covered with 18 inches of fill soil and 6 inches of native top soil, at a low grade slant to minimize erosion and allow native grasses to grow. Materials (dirt) will be provided by Holden Town three miles north of landfill. See appendix J.

The run-off control system for the Holden Town landfill will be designed to control and redirect the flow of water caused by rain fall. The landfill is continually being leveled and grated with a backhoe and new soil is continually being unearthed or added regularly. The uneven surfaces will minimize the volume of contact water generated during precipitation events. Rough contouring could be performed and/or temporary berms constructed throughout the life of the site if needed.

Design and location of run-on and run-off – Run-off controls during the active life of the facility will be reviewed and instigated if needed. The landfill is located in a relatively flat area, all water stays in the landfill area and any water that would run-off is absorbed into the soil and doesn't impact the landfill in anyway.

Anticipated facility life of landfill – Holden Town landfill was first opened in the late 1990's, and in no way is filled to capacity. There is still adequate land to expand. With this information the life expectancy is estimated to be 20 + years.

Borrow sources – material to cover landfill if needed will be collected three miles north of landfill and onsite. Refer to appendix J.

Facility General Information

Capacity of site in volume and tonnage – annual average site volume is 79.5 tons per year.

79.5 x 20 = 1,590 tons over the next 20 years, the landfill can accommodate this much debris.

Final inspection by regulatory agency –Will be coordinated by The State of Utah, Department of Environmental Quality

Post – Closure Requirements

Closure Plan has been prepared for the Holden Town Landfill in accordance with the Utah State Code. Closure of the landfill will be performed in accordance with this plan and in such a manner as to:

- Minimize the need for further maintenance
- Minimize or eliminate threats to human health in the environment from post-closure run-off or other issues
- Adequately prepare the facility for the post-closure period

The final cover will consist of 18 inches of fill soil, with 6 inches of native top soil. Then reseeding of surrounding area vegetation will cover the landfill.

As of this date, Holden Town holds the title to the landfill property. Upon closure, the landfill site will be recorded as part of the record of title with the County Recorder no later than 60 days after certification of closure. If required by local authorities, records may also include information regarding the dates of landfill operation, the amount of debris disposed of at the site, and the location of disposal areas.

At least 60 days before the projected final receipt of debris is dumped in the landfill, Holden Town will notify the Executive Secretary of the intent to close the Holden Town landfill and

implement the closure plan. Within thirty (30) days after the final receipt of debris, Holden Town will implement the approved closure plan. The closure activities described in this plan will be completed within 180 days of initiation.

Following the completion of closure activities, a final report will be prepared and entered into the operating record of the facility. The report will summarize all closure activity that has been completed on the landfill. The Executive Secretary will be notified upon the completion of closure activities. Following final approval by UDEQ, the post-closure maintenance plan will be initiated pursuant to the approved Post – Closure Plan, outlined in this permit.

All land around landfill is native grasses and in the past has been used for cattle grazing, if landfill closed, the land would then again be used for cattle grazing. There has been no material deposed of on this property to create a problem.

At this time there are no zoning restrictions.

Maintenance – the landfill will be inspected semi annually, the cover and run-on/run-off systems will be maintained and monitored for problems, fencing will be inspected and repaired if needed. All post closure costs will be managed and adjusted as needed.

The closure cost estimate, detailed in appendix Q, has been prepared by Sunrise Engineering * 25 East 500 North *Fillmore, Utah 84631 * (435)743-6151 * Licensed Professional Engineer, Zane W. Pentz, No. 186879. The cost estimate is based on 2013 dollars.

The PTIF Financial Assurance trust fund account # 1464 is in place with a current balance of $36,000. Holden Town no longer contributes to this PTIF fund and believes that with accrued interest there will be adequate money to cover closure and post-closure operations. See appendix K

Post Closure inspections will continue on a bi-annual basis for a period of thirty years. If post closure monitoring reviews indicate that the site has stabilized and does not pose a threat to human health or the environment, Holden Town may petition the Executive Secretary for a decrease in the length of the post- closure monitoring period.

All information will be made available to UDEQ upon request.

Closure Costs – See appendix J and K

Post Closure care costs – See appendix Q

HOLDEN TOWN
P.O. BOX 360127
HOLDEN, UTAH 84636

Rules for Holden Town Landfill - (bulk waste site)

1. Keep discarded materials separated as to contents.
   Burnable items: trees, grass, straw/hay lumber brush – green waste
   Scrap metals: Please no motor vehicles without transferred titles
   Tires – must dump in correct area
   Inert material – rocks, dirt, broken concrete, bricks, etc.
   Dead animals- please push into the flesh pit

2. NO household garbage allowed

3. ABSOLUTELY NO HAZARDOUS MATERIALS ALLOWED ON THIS SITE
Examples: paints, thinners, fuels, pesticides, oil or chemical fertilizers.
Contact Millard County landfill for information on how to dispose of hazardous waste
(435) 864-2297

ABSOLUTELY NO BURNING ALLOWED BY UNAUTHORIZED PERSONS

DISCHARGING FIREARMS IN THIS AREA IS PROHIBITED AND PUNISHABLE BY LAW

There is a place for everything, please dump in the appropriate area.
Violation of these rules are subject to punishment and may result in a fine

This waste site is maintained by Holden Town and paid for by Holden Town citizens.
Help us keep our landfill open – follow the rules.

To report a violation or questions, contact Holden Town Office @ 435-795-2213.

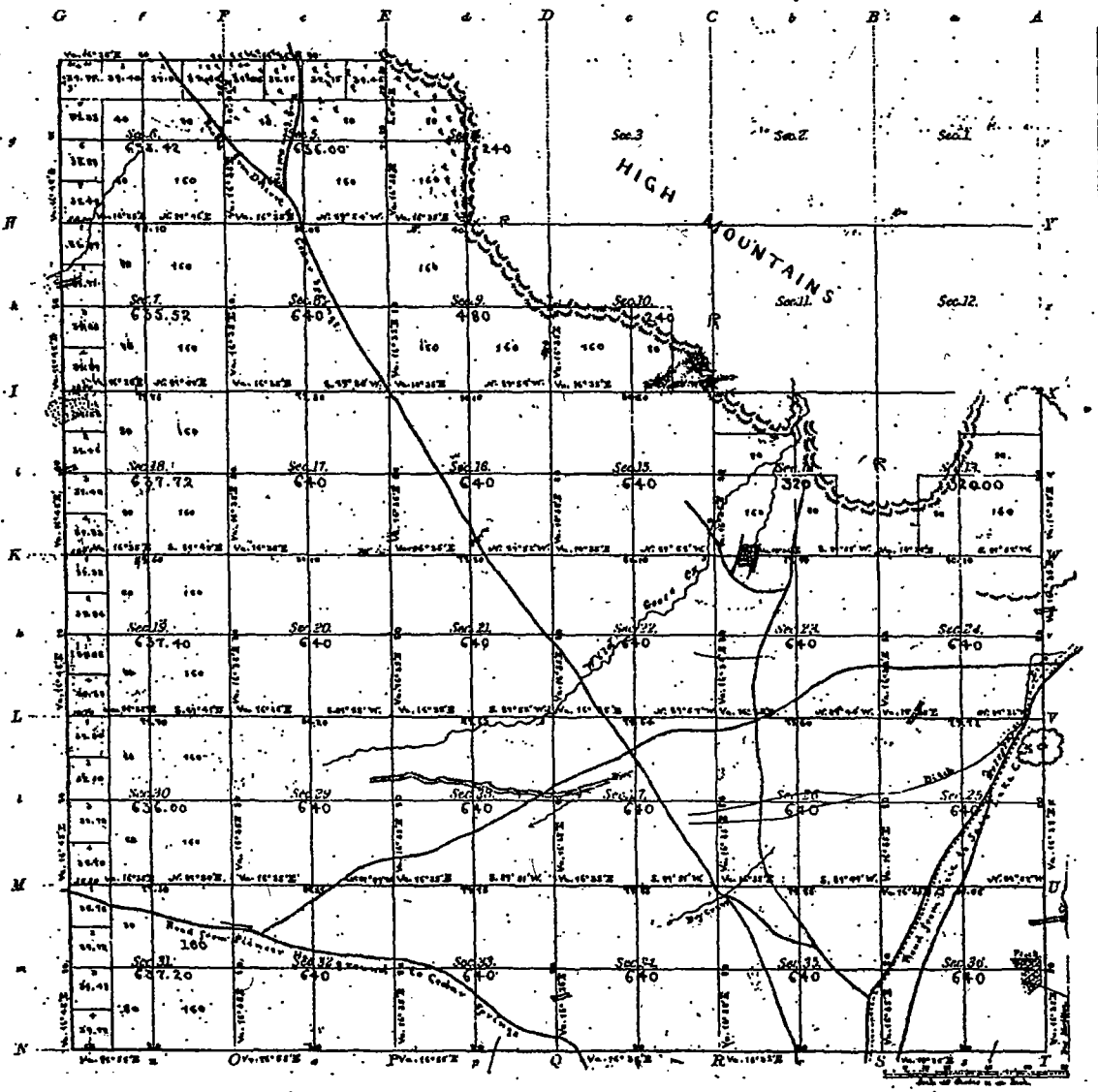
Holden Town Council
May 3, 1997

Revised 4/25/2013

APPENDIX A

GENERAL DESCRIPTION

TOWNSHIP No. 19 South RANGE No. 4 West Salt Lake MERIDIAN



Meanders of

Posts	Courses	Chl. Dist.	Posts	Courses	Chl. Dist.	Posts	Courses	Chl. Dist.

Notes
H. Cdy. [illegible]
[illegible]
[illegible]
[illegible]
Subs. [illegible]
Plat Books
Fyts. [illegible]
Subs. [illegible]

Total number of Acres 18,213.26

Surveys Designated	By Whom Surveyed	Date of Contract	Amount of Surveys	When Surveyed
K.F.W. Boundary Township lines	Ferdinand Bruhat	Oct. 25th 1869	[illegible]	[illegible]
Subdivisions	do do	do do	47 78 54	[illegible]

The above Map of Township No. 19 South of Range No. 4 West Salt Lake Meridian Utah Territory is strictly conformable to the field notes of the survey thereof on file in this Office, which have been examined and approved.

Surveyor General's Office
Salt Lake City Utah
June 1st 1879

C. C. Clemmons
Surv. Genl.

1079

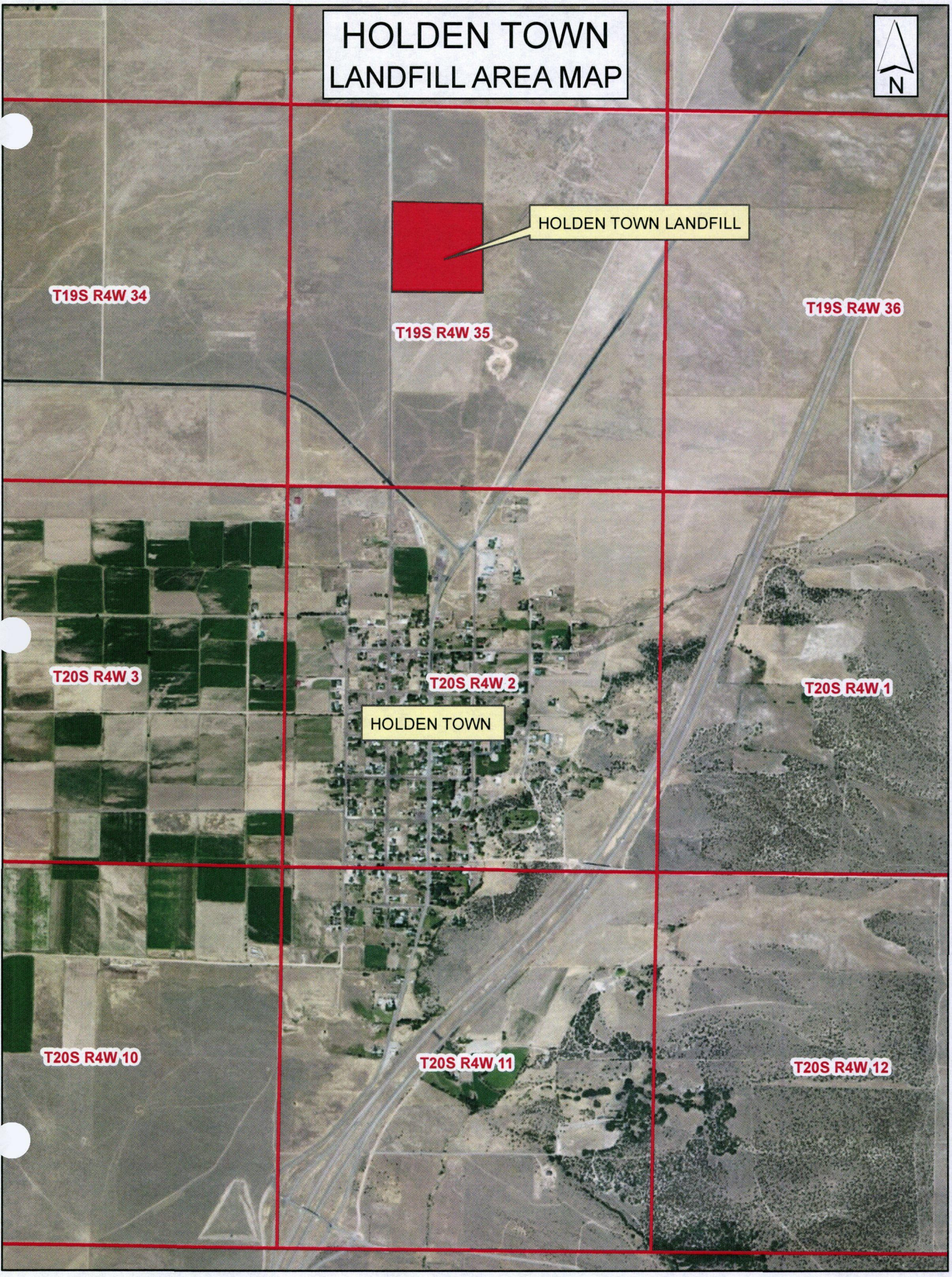
1079

APPENDIX B

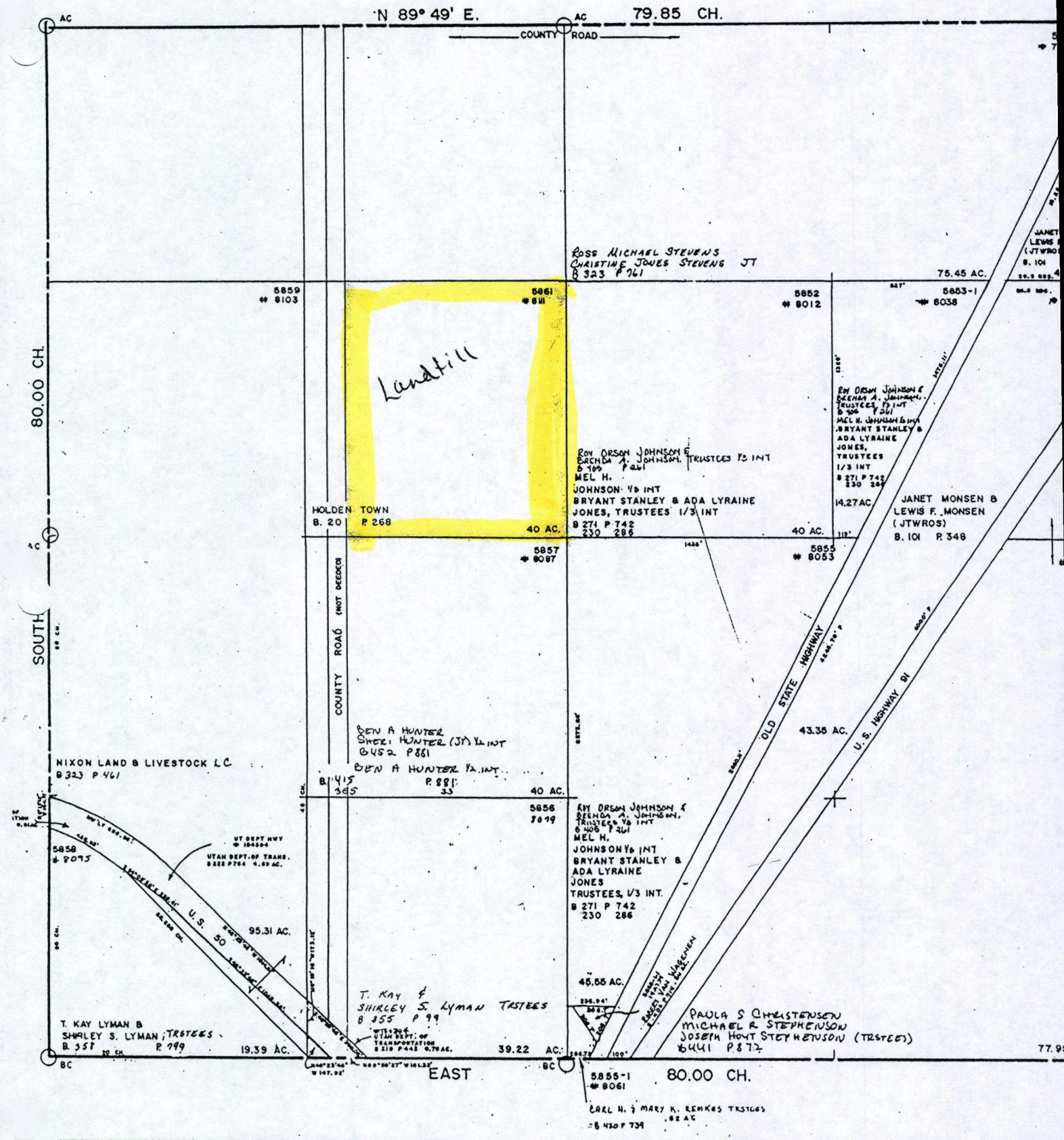
MAP WITH PLAT DESCRIPTION

LANDFILL

HOLDEN TOWN
LANDFILL AREA MAP



SECTION 35, T 19 S R 4 W S.L.B. & M. (6)



U.S.T.C. approval Date	PLAT DEPARTMENT MILLARD COUNTY, UTAH	Section 35 T19S R 4 drawn by: A.L. date: 7

APPENDIX C

QUIT CLAIM DEED

HOLDEN TOWN

LANDFILL

PARCEL OWNERSHIP QUERY MILLARD COUNTY DATE: 11/03/05

SERIAL NUMBER	ACCOUNT	YEAR	ACREAGE	DIST	PARCEL ADDRESS
5861	0008111	1984	40.00	06	

OWNER: HOLDEN TOWN

TAX NOTICE MAILED TO: HOLDEN TOWN
PO BOX 127
HOLDEN UT 84636-0127

BOOK: PAGE:

ENTRY NUMBER:

PARCEL DESCRIPTION

SE1/4 OF THE NW 1/4 OF SEC 35, T19S, R4W, SLM 40 ACRES.

Quit Claim Deed

MILLARD COUNTY, a Municipal Corporation of the State of Utah, grantor, hereby quit claims to Holden Town Grantee of Holden Utah, for the sum of One and no/00----------($1.00)---------- Dollars the following described tract of land situated in Millard County, State of Utah, to-wit:

SE¼NW¼, Section 35, Township 19 South, Range 4 West, S.L.B.&M.

IN WITNESS WHEREOF, the grantor has caused these presents to be duly executed by the County Clerk of Millard County, Utah, and its corporate seal to be hereunto affixed, pursuant to a resolution of the Board of County Commissioners of said Millard County, this 1st day of February 1939

Witness: MILLARD COUNTY,

Iris Robins By Arthur C. Brown County Clerk.

(SEAL)

STATE OF UTAH, County of Millard. } ss.

On this 11th day of February A. D. 1939, personally appeared before me Arthur C. Brown the duly elected, qualified and acting County Clerk of Millard County, Utah, the signer of the foregoing instrument, who acknowledged to me that he as such Clerk of Millard County aforesaid, executed the same pursuant to a resolution of the County Commissioners of said County.

Recorded 2-14-1939 at 9:45 A.M.
Blanche M. Savage County Recorder
#40176

Blanche M. Savage
County Recorder in and for Millard County, Utah.
(SEAL)

APPENDIX D

HOLDEN TOWN LANDFILL LOG

Holden Town Landfill Log

Date:	Name and phone number:	Contents: Description and load size.	Number of loads
3 Dec	FRANK THOMAS 795-2206	TREE LIMBS	3
12-5	GARY Teeples	Cement	1
12-5	Alison Johnson	Metal Boards	1
Dec.	T.J. Wood	Limbs	
12-19	Ken Ziegler		
12/21	KIRK STEVENS	CONSTRUCTION DEBRI	1
12/28	Dean Larsen	Death Pit	
1/02/10	Jordan Arnold	Animal	1
1/6/10	FRANK THOMAS	LIMBS	1
1/6	Mike Josse	Shingle	1
1/4	Mickey Steinle	Misc Junk	1
1/11	FRANK THOMAS	LIMBS	1
1/14	Jason Teeples	Drywall / Trim	1
1/15	Blake Stevens	Transmision / pallet	1
1/16	Mike Josse	Construction Debris	
1/24	Jason Teeples	Drywall	1
1/26	JoAnn Larsen	Dead cow	1
1/29	Jake Christensen	Dead cow	
2/1	Mike Josse	Construction Debris	1
2/9	Ken Zeigler	Tree Limbs	1
2-10	Todd Trosely	contact	

One truck load is roughly equal to ½ ton full of compacted waste slightly heaped.

Copied 3-2009

2009

2010

2010

APPENDIX E

HISTORICAL SURVEY

BIGHORN ARCHAEOLOGICAL CONSULTANTS, LLC
1791 NORTH 280 WEST
OREM, UTAH 84057
(801) 368-8091

Report Number 10-41

A Cultural Resource Inventory of the City of Holden's Landfill Location, Millard County, Utah

by

Aaron A. Jordan
And
Jon R. Baxter

for

Holden City Office
59 Main Street
Holden, Utah 84636

Utah SHPO Project Authorization No.: U10-HO-0404s
Federal Antiquities Permit Number 08UT84316

July 2010

COVER PAGE
Must Accompany All Project Reports
Submitted to Utah SHPO

Project Name: A Cultural Resource Inventory for the City of Holden's Landfill Location, Millard County, Utah

State Proj. No.: U10-HO-0404s

Report Date: August 2010

County(ies): Millard

Principal Investigator: Jon Baxter

Field Supervisor(s): Aaron Jordan

Records search completed at what office(s)? SHPO

Record search date(s): 06/27/10 SHPO

Area Surveyed – Intensive (≤15 m intervals): 37 acres Recon/Intuitive (>15 m intervals): _____ acres

7.5' Series USGS Map Reference(s): Holden

SITES REPORTED	COUNT / SMITHSONIAN SITE NUMBERS
Archaeological Sites	0
Revisits (no inventory form update)	0
Updates (updated IMACS site inventory form attached)	0
New recordings (IMACS site inventory form attached)	0
Total Count of Archaeological Sites	0
Historic Structures (USHS 106 site info form attached)	0
Total National Register Eligible Sites	0

Checklist of Required Items, attached

1. X Copy of the final report
2. X Copy of 7.5' Series USGS map with surveyed/excavated area clearly identified
3. ___ Completed IMACS site inventory updated forms
   - ___ Parts A and B or C
   - ___ IMACS Encoding Form
   - ___ Site Sketch Map
   - ___ Photographs
   - ___ Copy of the appropriate 7.5' Series USGS map with site location marked and Smithsonian site number clearly labeled
4. X Completed "Cover Page" accompanying final report and survey materials

For UDSH office use only

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Summary and Project Recommendations 4
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Abstract

At the request of the city of Holden City, Utah, Bighorn Archaeological Consultants, LLC, has completed a cultural resource inventory of approximately 37 acres of land owned by Holden City for use as a landfill in Millard County, Utah.

Cultural resource investigations of this location resulted in the identification of no cultural resources. As such, Bighorn recommends a finding of no historic properties affected for this project.

Introduction

The city of Holden in Millard County, Utah, is in the process of preparing paperwork to be submitted to the state of Utah in order to relicense a parcel of city owned land for continued use as a landfill location. Part of this relicensing process requires a cultural resources inventory of the licensed property to be carried out.

At the request of the city of Holden, Bighorn Archaeological Consultants, LLC, (Bighorn) has completed a cultural resource inventory of the Holden landfill location in Millard County, Utah. The inventory was conducted under Utah State Project Authorization Number U10-HO-0404s and fieldwork was completed by Aaron Jordan on 28 June 2010. Field conditions for the inventory were good. Though the project area was completely covered by tall growing grasses, the ground was still visible. The land, which is owned by the city of Holden, has been heavily disturbed due directly to it having been used in the recent past as a city landfill location.

Project Location

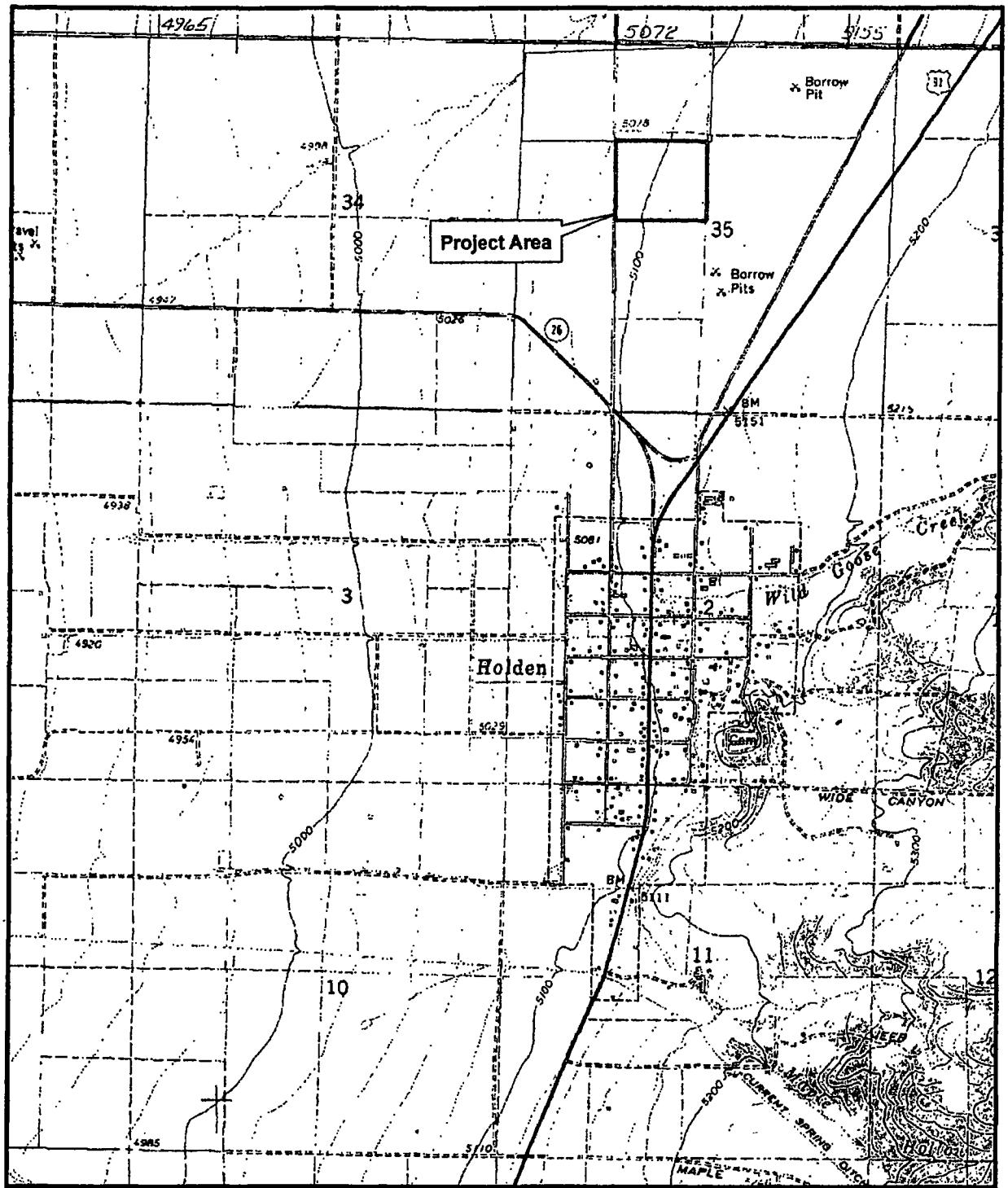
The project area is located on city owned land in Millard, Utah (Figure 1). Specifically, the proposed inventory area is located in Holden, Utah (USGS 7.5' Series Quadrangle: Holden, Utah 1962). Legal descriptions are provided in Table 1.

Table 1. Project Legal Descriptions

Landfill Location	**Township**	**Range**	**Section(s)**
	19 South	4 West	35

Environmental Setting

The project area is located in the foothills of the Pahvant Range on the eastern margins of Pahvant Valley. Pahvant Valley itself is a small, generally flat, north/south trending valley that lies nestled between the Sevier Desert and Pahvant Range. The valleys altitude varies from approximately 4,600 ft. to 5,800 ft. asl. Soils consist mainly of coarse, platy clays and sand interspersed with a high content of subangular and rounded gravels and cobbles. The faunal community is dominated by small mammals such as jackrabbit, cottontail, coyote, and a wide variety of rodents. Mule deer and Elk are the most common large mammals. Much of the general area in and around the Holden landfill location has been adapted to agriculture or ranching, and domestic livestock have reduced or even replaced the native fauna in the area. Evidence of heavy grazing, farming, and ranching activities is readily apparent within and surrounding the project area. Vegetation, in and surrounding the landfill location, consists primarily of modern agricultural fields. The limited native vegetation observed included a sparse assortment of sagebrush, rabbitbrush, various species of bunch grasses and forbs. Native sediments in the immediate vicinity of the project area have been extensively disturbed in the recent past by modern farming equipment such as tractors and plows. As a result, the potential presence of intact prehistoric and historical cultural deposits is highly unlikely.



Legend

- Project Area
- BLM
- Private

Project Location Map

BIGHORN ARCHAEOLOGICAL CONSULTANTS, LLC

1:24,000

0 — 1 mi

0 — 1 km

USGS 7.5' Series Quad: Holden, UT

Juab County
T19S, R4W

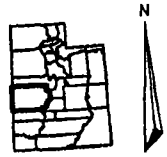


Figure 2 Project area overview looking southeast; Holden City is visible right of center and the Pahvant Range is visible in background.

Previous Research

Prior to beginning the inventory, Bighorn conducted a Class I file search, for reported projects and previously recorded cultural sites, online at the Utah Division of State History's computer database on 27 June 2010. This search revealed one cultural resource inventory within ½ mile of the Area of Potential Effects (APE) (Table 2). No previously recorded cultural resource sites are on file as being located within the survey area.

Table 2. Previous Cultural Resource Inventories within ½ Mile of the APE

Project Name	Project Number	Reference
1990 Kern River Pipeline-Utah	U-90-DH-0184	Bruder & Rogge 1990

General Land Office (GLO) maps and aerial photographs of the area were also reviewed for historic features, such as roads and trails. An 1878 GLO map indicates the potential presence of a historic road in or near the project area (Appendix A). This road, which is unnamed on the 1878 map, was not relocated at the time of the survey. The road alignment has most likely been destroyed by modern farming and ranching activities in the area.

Inventory Methods

As previously mentioned, the purpose of the current inventory is to conduct a cultural resource inventory of approximately 37 acres of land which currently serves as a landfill location for the city of Holden. The inventory was completed by walking multiple, parallel 15 meter wide transects over the entire landfill area. The project area was identified by following existing fence lines and through the use of a Trimble GeoXT global positioning system (GPS) unit.

Cultural resources encountered during inventory are recorded as sites or isolates. In particular, historic, prehistoric, or archaeological features or any archaeological or historic anomaly that contains, at a minimum, greater than ten artifacts in a 10-meter diameter area, or a combination of features and artifacts, are considered a site. All other cultural materials that do not meet the above criteria are considered isolated finds, or single artifacts that little is known about and their significance cannot be determined.

Inventory Results

During the cultural resource inventory, no new cultural resource sites or isolates were identified within the APE.

Summary and Project Recommendations

At the request of Holden City, Bighorn was asked to complete a cultural resource inventory of the Holden landfill location in Millard County, Utah. Cultural resource investigations of this location resulted in the identification of no new cultural resources. As such, Bighorn recommends a finding of **no historic properties affected** for this project.

References Cited

Bruder, J. Simon, and A.S. Rogge (editors)

1990 *Kern River Pipeline, Utah.* Utah State Authorization Number U90-DH-0184. Dames & Moore, Salt Lake City, Utah.

APPENDIX F

PROPERTY OWNERS

Ownership- All (PDF) - PUBLIC

Account No Parcel	District Acres	Owner
	Legal	
0008012 5852	06 31	JTD HOLDEN NO 1 LLC 10692 S 300 E SANDY, UT 84070

BEG N 1/16TH (NW COR SW1/4 NE1/4) COR SEC 35, T19S, R4W, SLB&M, S 89°15'03" E 2119.58 FT ALG N BDRY S1/2 NE1/4 SD SEC 35 TO W BDRY CO RD, S 26°35'48" W 4098.35 FT ALG SD W BDRY CO RD, N 88°41'32" W 368.91 FT TO 1/4 SEC LN, N 01°18'37" E 3684.93 FT ALG 1/4 SEC LN TO BEG. LESS BEG NW COR SE/4 SD SEC 35, (C 1/4 COR), S 01°18'37" W 642.66 FT ALG 1/4 SEC LN, S 89°02'23" E 1089.91 FT TO W BDRY CO RD, N 26°35'48" E 2176.32 FT ALG SD W BDRY CO RD TO N BDRY S 1/2 NE/4 SD SEC 35, N 89°15'03" W 2119.58 FT ALG SD BDRY TO NW COR SW/4 NE/4 (N 1/16 COR), S 01°18'37" W 1311.65 FT ALG 1/4 SEC LN TO BEG.

Ownership- All (PDF) - PUBLIC

Account No Parcel	District Acres	Owner
	Legal	
0008087 5857	06 40.00	HUNTER BEN A JT 1/2INT HUNTER SHERI 1/2INT JT HUNTER BEN A 1/2INT PO BOX 100 HOLDEN, UT 84636-0100

NE1/4 SW1/4 SEC 35, T19S, R4W, SLM.

Ownership- All (PDF) - PUBLIC

Account No Parcel	District Acres	Owner
	Legal	
0185502 5852-1	06 74.3	DUFFIN, THOMAS A TRSTEE 4222 WANDER LN SALT LAKE CITY, UT 84124

BEG NW COR SE1/4 SEC 35, T19S, R4W, SLM (C 1/4 COR), S 01°18'37" W 642.66 FT ALG 1/4 SEC LN, S 89°02'23" E 1189.74 FT TO W BDRY CO RD, N 26°35'48" E 2176.32 FT ALG SD W BDRY CO RD TO N BDRY. S1/2 NE1/4 SD SEC 35, N 89°15'03" W 2119.58 FT ALG SD BDRY TO NW COR SW1/4 NE1/4 (N 1/16 COR), S 01°18'37" W 1311.65 FT ALG 1/4 SEC LN TO BEG.

Ownership- All (PDF) - PUBLIC

Account No Parcel	District Acres	Owner
	Legal	
0007998 5850	06 75.45	4 S HOLDING COMPANY L L C 448 N 100 E HOLDEN, UT 84636

N1/2 NE1/4 SEC 35, T19S, R4W, SLM. LESS BEG SE COR NE1/4 NE1/4 SD SEC 35, W 26.5 RDS, N 25°44' E 15.26 CHS, S 55 RDS TO BEG.

Ownership- All (PDF) - PUBLIC

Account No Parcel	District Acres	Owner
	Legal	
0008103 5859	06 95.31	NIXON LAND & LIVESTOCK L C PO BOX 132 HOLDEN, UT 84636-0132

SW1/4 NW1/4 & BEG NW COR SW1/4 SEC 35, T19S, R4W, SLM, S 20 CHS, S 45° E 28.285 CHS, N 40 CHS, W 20 CHS TO BEG. LESS PRTN TO UDOT.

APPENDIX G

NOTIFICATION OF INTENT

TO APPLY FOR PERMIT

HOLDEN TOWN CORPORATION
P. O. BOX 360127
HOLDEN, UTAH 84636

February 19, 2011

Dear Property Owner:

This letter is to inform you of the intent of Holden Town to apply for a landfill permit from the Utah Division of Solid and Hazardous Waste. This is in accordance with policy R315-310-3(2) (ii).

If you have any questions regarding this matter, please feel free to contact Mayor Jim Stephenson or City Councilman Jeff Whatcott at 435-795-2213.

Thank you,

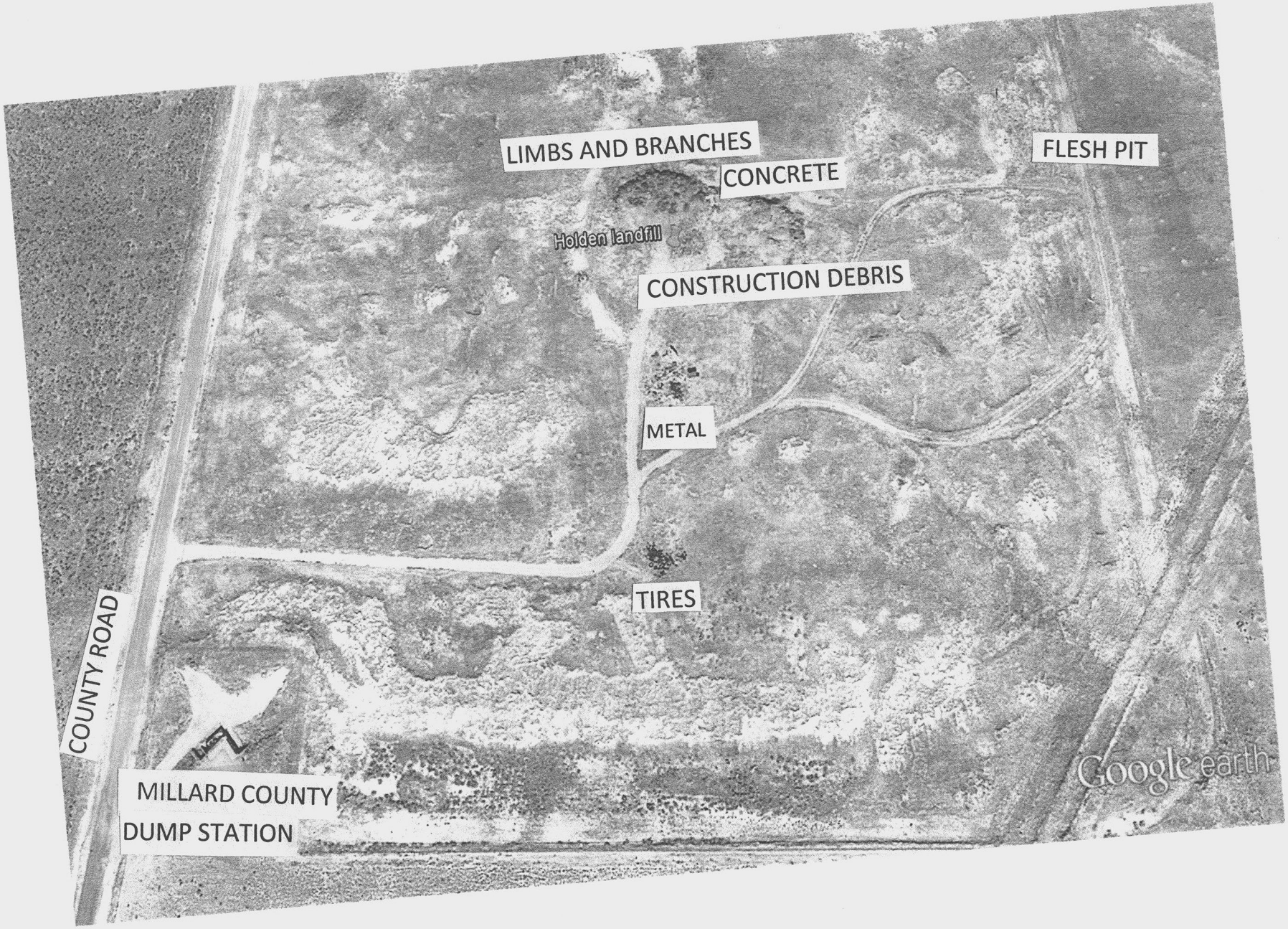
Jeff Whatcott
Holden Town Councilman

Enclosure

APPENDIX H

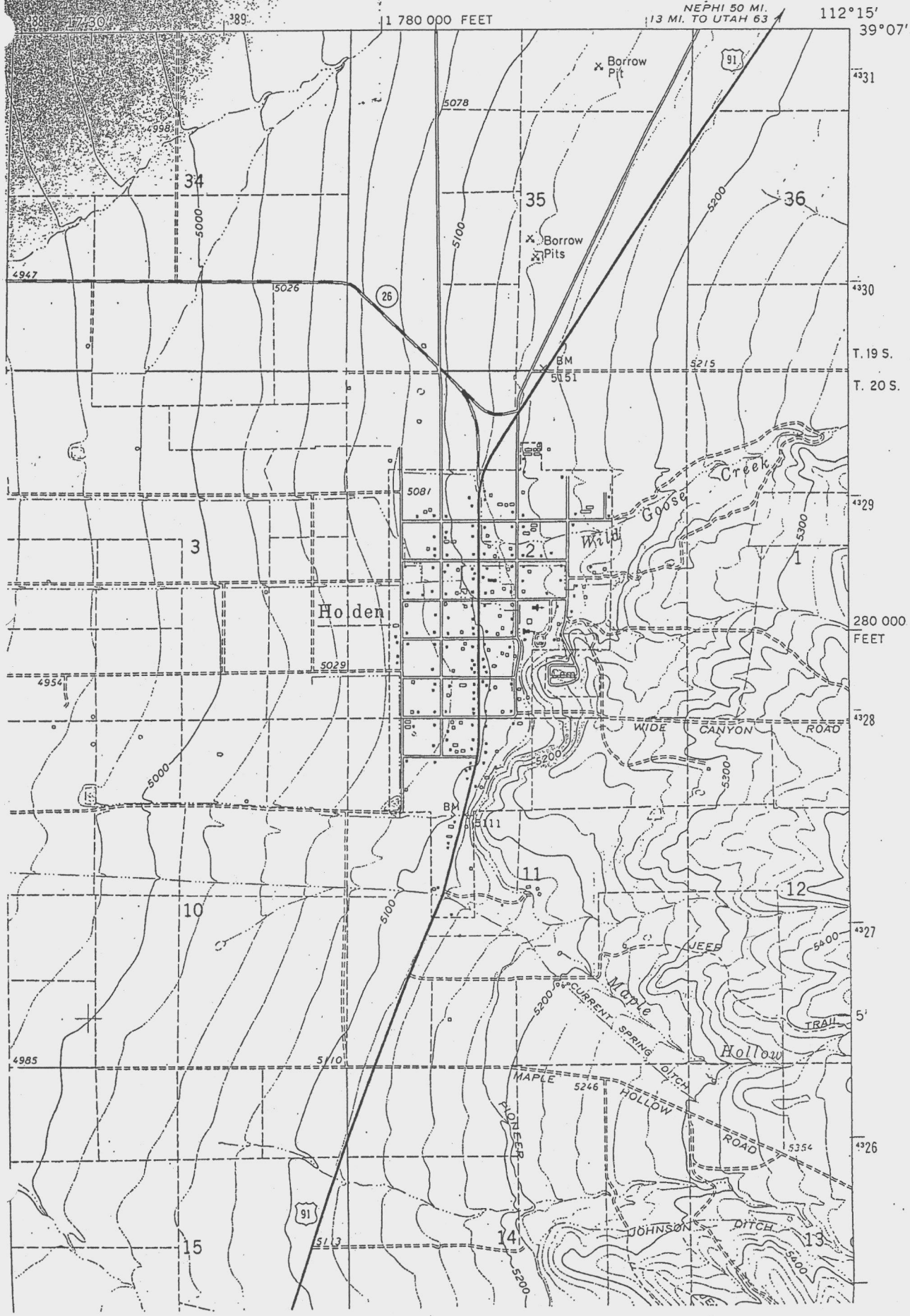
TOPOGRAPHICAL MAP

LANDFILL


LIMBS AND BRANCHES
CONCRETE
FLESH PIT
Holden landfill
CONSTRUCTION DEBRIS
METAL
TIRES
COUNTY ROAD
MILLARD COUNTY
DUMP STATION
Google earth

HOLDEN QUADRANGLE
UTAH–MILLARD CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
SE/4 HOLDEN 15' QUADRANGLE

3562 II NW (SCIPIO PASS)



APPENDIX I

ANNUAL RAINFALL

ELECTRIC LAKE U P & L	1980-2007	2.46	2.59	2.69	2.34	1.92	1.14	1.15	1.59	1.88	2.10	2.39	2.29	24.54
ELKHORN ASHLEY RNGR STN	1920-1956	1.05	1.00	1.12	1.22	1.33	1.14	1.07	1.37	1.29	1.32	0.81	1.18	13.90
EMERY	1901-1978	0.47	0.50	0.43	0.39	0.60	0.51	0.83	1.12	0.90	0.81	0.33	0.44	7.33
EMERY 15 SW	1979-1986	0.98	0.80	1.97	1.06	1.00	0.75	1.51	1.54	1.45	1.26	1.25	1.11	14.68
ENTERPRISE	1954-2007	1.26	1.70	1.75	1.05	0.83	0.49	0.94	1.15	1.10	1.33	1.29	1.17	14.06
ENTERPRISE BERYL JCT	1948-2006	0.72	0.90	1.15	0.81	0.67	0.51	1.01	1.04	0.83	0.90	0.75	0.61	9.90
EPHRAIM SORENSENS FLD	1949-2007	0.93	1.05	1.25	1.16	1.12	0.68	0.69	0.80	1.06	1.15	0.97	0.99	11.85
ESCALANTE	1901-2007	0.95	0.80	0.85	0.57	0.59	0.46	1.19	1.81	1.15	1.12	0.66	0.80	10.95
ESKDALE	1966-2007	0.27	0.40	0.65	0.67	0.67	0.63	0.55	0.56	0.65	0.67	0.38	0.29	6.39
EUREKA	1948-1984	1.69	1.49	1.80	1.62	1.50	1.17	1.24	1.35	1.12	1.17	1.34	1.53	17.02
FAIRFIELD	1950-2007	1.03	0.99	1.11	1.06	1.20	0.72	0.94	0.98	0.93	1.10	0.93	0.92	11.91
FAIRVIEW	1985-1997	1.29	1.36	1.56	1.47	1.59	0.94	0.97	0.89	1.24	1.40	1.38	1.06	15.15
FAIRVIEW 8 N	1975-2007	1.59	1.46	1.57	1.33	1.80	1.04	1.02	1.17	1.52	1.68	1.45	1.30	16.93
FARMINGTON	1948-1965	2.28	1.68	2.24	2.75	2.23	1.11	0.37	0.98	0.90	1.28	1.74	1.73	19.29
FARMINGTON USU FLD STN	1948-2007	2.02	2.00	2.44	2.60	2.68	1.46	0.76	0.86	1.41	2.06	1.98	1.93	22.20
FERRON	1948-2007	0.68	0.60	0.61	0.52	0.69	0.53	0.85	1.07	0.94	0.92	0.56	0.49	8.46
FILLMORE	1928-2006	1.37	1.48	1.83	1.67	1.39	0.78	0.73	0.87	0.89	1.30	1.38	1.28	14.97
FISH SPRINGS REFUGE	1960-2006	0.39	0.51	0.73	1.05	0.98	0.71	0.52	0.57	0.72	0.83	0.52	0.36	7.89
FLAMING GORGE	1957-2007	0.46	0.60	1.00	1.52	1.51	1.16	1.03	1.19	1.14	1.30	0.75	0.58	12.24
FORT DUCHESNE	1894-2007	0.39	0.36	0.45	0.54	0.64	0.56	0.50	0.68	0.75	0.83	0.37	0.42	6.49
FREMONT INDIAN S P	1988-2007	0.78	0.98	0.90	1.11	1.00	0.76	0.96	1.42	0.90	1.59	0.84	0.68	11.92
FRUITA	1948-1967	0.29	0.13	0.36	0.54	0.65	0.48	0.99	1.18	0.67	0.83	0.41	0.33	6.86
GARFIELD	1950-2007	1.20	1.25	1.72	2.27	2.05	1.15	0.83	0.85	1.38	1.65	1.60	1.27	17.22
GARLAND 1 NE	1948-1979	1.47	1.26	1.28	1.55	1.56	1.48	0.50	0.90	1.00	1.21	1.25	1.22	14.68
GARRISON	1951-1990	0.45	0.45	0.86	0.76	0.73	0.50	0.57	0.77	0.69	0.78	0.58	0.46	7.60
GENEVA STEEL	1953-1960	1.14	0.97	0.78	1.08	0.90	0.53	0.25	0.64	0.72	0.58	0.59	0.79	8.97
GENEVA STEEL 2	1960-1982	1.20	1.07	1.15	1.45	1.36	0.82	0.58	0.77	0.86	1.70	1.04	1.01	13.01
GLEN CANYON CITY	1962-1974	0.31	0.44	0.44	0.34	0.40	0.20	0.55	1.01	0.48	0.84	0.67	0.65	6.33
GOLD HILL	1966-1990	0.68	0.61	1.03	1.33	1.43	0.86	0.79	1.12	1.10	1.04	0.60	0.50	11.09
GRANTSVILLE	1956-2007	0.70	0.89	1.26	1.49	1.29	0.84	0.74	0.74	0.89	1.07	0.97	0.81	11.69
GRANTSVILLE POWERHOUSE	1948-1956	1.59	0.92	1.38	1.09	1.44	0.75	1.16	1.02	0.47	0.80	1.28	1.33	13.23
GREEN RIVER AVIATION	1893-2007	0.42	0.43	0.47	0.51	0.57	0.33	0.54	0.79	0.70	0.80	0.44	0.36	6.36
GROUSE CREEK	1959-2007	0.99	0.81	0.80	1.01	1.44	1.21	0.76	0.75	0.77	0.85	0.96	1.00	11.35
GUNLOCK POWERHOUSE	1948-2006	1.42	1.66	1.71	0.88	0.60	0.36	0.75	1.10	0.84	1.05	0.99	1.04	12.40
GUNNISON	1956-1990	0.71	0.62	1.00	0.93	0.85	0.49	0.48	0.64	0.94	0.87	0.79	0.61	8.93
HANS FLAT RANGER STN	1980-2007	0.71	0.53	0.81	0.74	0.58	0.48	1.02	1.09	1.10	1.31	0.85	0.52	9.74
HANKSVILLE	1948-2007	0.40	0.24	0.45	0.44	0.44	0.27	0.48	0.75	0.73	0.74	0.40	0.28	5.62
HANNA	1952-1994	0.90	0.97	0.81	0.73	1.10	0.97	0.99	1.35	1.20	1.13	0.76	0.90	11.81
HARDWARE RANCH	1956-1991	1.72	1.55	1.55	1.63	1.72	1.25	0.73	1.00	1.33	1.38	1.54	1.68	17.08
HATCH	1948-2007	0.80	0.87	0.96	0.66	0.77	0.54	1.47	1.64	1.17	1.10	0.85	0.75	11.58
HEBER	1892-2007	1.90	1.71	1.54	1.32	1.29	0.82	0.77	0.99	1.06	1.42	1.44	1.66	15.92
HELPER CARBON U P & L	1980-2003	1.16	1.32	1.43	1.14	1.12	0.63	1.06	1.33	1.88	1.58	1.02	0.73	14.40
HENRIEVILLE	1963-1979	0.82	0.79	0.92	0.71	0.67	0.42	0.94	1.35	0.94	0.98	1.06	0.81	10.41
HIAWATHA	1921-1992	0.97	1.02	1.13	0.95	1.17	0.97	1.30	1.81	1.36	1.23	0.85	1.02	13.78
HIGH LINE CITY CREEK	1948-1956	3.50	2.22	3.22	3.49	2.53	1.22	1.17	1.02	0.81	1.82	2.27	3.37	26.64
HITE	1949-1962	0.59	0.33	0.39	0.43	0.46	0.23	0.36	0.60	0.59	0.77	0.51	0.41	5.67
HITE MARINA	1968-1978	0.63	0.25	0.49	0.31	0.30	0.12	0.59	0.32	0.19	1.11	0.57	0.43	5.31
HITE RANGER STN	1978-2006	0.67	0.50	0.77	0.50	0.39	0.31	0.67	0.52	0.86	1.30	0.71	0.49	7.69
HOVENWEEP NM	1957-2007	0.88	0.96	1.02	0.80	0.66	0.32	0.86	1.09	1.08	1.37	1.02	0.91	10.97
HUNTSVILLE MONASTERY	1976-2007	2.53	2.14	2.18	1.96	2.32	1.24	0.85	0.87	1.65	1.89	2.28	2.26	22.17
IBAPAH	1948-2007	0.63	0.64	0.89	1.15	1.26	1.06	0.76	0.76	0.72	0.88	0.54	0.51	9.80
IOSEPA SOUTH RANCH	1951-1958	0.97	0.59	1.05	1.44	1.26	0.64	0.47	0.63	0.14	0.65	0.82	0.98	9.64
JENSEN	1948-2007	0.53	0.51	0.59	0.72	0.76	0.63	0.54	0.65	0.89	1.06	0.56	0.58	8.02
JOHNSON PASS	1972-2007	1.45	1.62	1.81	1.70	2.08	0.96	1.15	0.99	1.19	1.46	1.31	1.28	17.00
KAMAS 3 NW	1948-2007	1.59	1.56	1.59	1.60	1.60	1.10	1.01	1.12	1.36	1.63	1.56	1.42	17.14
KANAB	1899-2007	1.53	1.51	1.53	0.98	0.62	0.36	1.06	1.42	1.19	1.09	1.03	1.20	13.52
KANOSH	1928-2003	1.25	1.44	1.81	1.64	1.40	0.72	0.84	1.05	0.88	1.25	1.37	1.24	14.89
KNOLLS 10 NE	1986-2004	0.61	0.46	0.91	1.01	1.23	0.68	0.36	0.31	0.56	0.77	0.61	0.38	7.89
KODACHROME BASIN PARK	1979-2007	1.08	1.30	1.11	0.75	0.63	0.38	1.05	1.61	1.36	1.32	0.73	0.66	11.98
KOOSHAREM	1948-2007	0.61	0.56	0.69	0.63	0.84	0.61	1.17	1.34	1.02	0.93	0.55	0.58	9.53
LAKETOWN	1910-2007	0.98	0.86	0.94	1.21	1.21	0.97	0.61	0.81	1.01	1.21	0.98	0.92	11.71
LA POINT	1948-1961	0.66	0.41	0.58	0.70	0.83	0.55	0.45	0.85	0.83	1.04	0.68	0.66	8.24
LA SAL	1901-1978	0.85	0.83	0.81	1.00	0.89	0.77	1.43	1.54	1.21	1.57	0.90	1.04	12.84
LA SAL 2 SE	1978-2007	0.86	0.84	1.00	1.00	0.91	0.71	1.33	1.60	1.75	1.82	1.14	0.74	13.70
LA VERKIN	1950-2007	1.34	1.45	1.53	0.77	0.51	0.28	0.70	0.91	0.82	0.82	0.96	0.86	10.95
LEVAN	1895-2007	1.27	1.29	1.65	1.54	1.40	0.75	0.78	0.91	1.03	1.37	1.14	1.26	14.39
LEWISTON	1928-1976	1.72	1.44	1.70	2.03	1.83	1.58	0.54	0.85	1.05	1.59	1.47	1.55	17.35
LITTLE SAHARA DUNES	1979-2007	0.93	0.97	1.15	1.29	1.49	0.67	0.73	0.76	0.98	1.35	0.69	0.49	11.50
LOA	1948-2007	0.36	0.29	0.52	0.43	0.70	0.54	1.06	1.31	0.86	0.74	0.40	0.36	7.57
LOGAN RADIO KVNU	1956-2007	1.31	1.27	1.66	1.83	1.81	1.35	0.69	0.88	1.39	1.64	1.43	1.33	16.59
LOGAN UTAH STATE UNIV	1893-2007	1.60	1.53	1.91	2.04	2.05	1.23	0.63	0.81	1.23	1.72	1.48	1.47	17.70
LOGAN USU EXP STN	1950-1978	1.58	1.28	1.63	1.99	1.61	1.51	0.43	0.99	1.02	1.43	1.45	1.54	16.56
LOGAN 5 SW EXP FARM	1969-2007	1.71	1.65	1.79	1.97	2.06	1.31	0.79	0.86	1.41	1.88	1.56	1.59	18.58
LOWER AMERICAN FORK POW	1928-1957	1.60	1.41	1.63	1.80	1.61	1.15	0.75	1.03	0.72	1.53	1.37	1.66	16.26
LUCIN	1948-1990	0.68	0.48	0.85	0.60	0.73	0.66	0.70	0.74	0.63	0.51	0.52	0.54	7.64
LUND	1950-1967	0.54	0.45	0.70	0.78	0.54	0.30	0.55	0.96	0.58	0.63	0.70	0.57	7.30
LYTLE RANCH	1988-2007	1.54	2.08	1.59	0.75	0.38	0.28	0.57	0.69	0.60	0.88	0.66	0.53	10.55
MAESER 9 NW	1983-2007	0.80	1.03	1.15	1.30	1.40	1.18	1.10	1.11	1.74	1.72	1.05	0.73	14.31
MANILA	1952-2007	0.33	0.35	0.64	1.00	1.27	1.07	0.96	0.91	0.87	0.85	0.52	0.32	9.09
MANTI	1928-2007	1.01	1.12	1.39	1.30	1.27	0.84	0.75	0.88	1.03	1.25	1.02	0.99	12.85
MARYSVALE	1948-2007	0.58	0.57	0.74	0.64	0.66	0.41	0.78	1.02	0.78	0.81	0.56	0.51	8.06
MEXICAN HAT	1948-2007	0.53	0.47	0.46	0.36	0.38	0.21	0.65	0.69	0.72	0.85	0.49	0.48	6.29
MIDLAKE	1968-1981	0.95	0.60	0.99	0.67	1.09	0.73	0.38	0.52	0.67	0.68	0.99	0.47	8.74
MIDVALE	1948-1971	1.25	1.07	1.51	1.78	1.48	0.95	0.58	1.06	0.78	1.12	1.19	1.54	14.31
MILFORD	1906-2005	0.65	0.77	1.04	0.87	0.72	0.46	0.71	0.86	0.70	0.91	0.65	0.71	9.05
MINERSVILLE	1948-2007	0.78	0.87	1.30	1.06	0.88	0.57	1.05	1.32	0.94	1.08	0.79	0.79	11.43

APPENDIX J

CLOSURE COSTS

CARLING & COMPANY
P.O. BOX 267
175 NORTH 1100 WEST
FILLMORE, UTAH 84631
(435)743-6963
FAX (435)743-4330

TO: Holden Town Council
ATTN: Jeff Whatcott

FROM: Shan Carling

DATE: October 18, 2010

SUBJECT: Holden Landfill
ESTIMATE

Cost estimate to cover 1-1/2 acres with 18 inches fill soil
Cost estimate to cover 1-1/2 acres with 6 inches native top soil

Material provided by Holden Town (3 miles north from landfill)

Trucking & Loading	$26,000.00
Equipment cost for covering landfill	$15,000.00
TOTAL	$41,000.00

Shan Carling

Great Basin NATIVES

Plants for and from the Intermountain West

75 West 300 South Holden, Utah 84636 phone: (435) 795-2303 merrilllester@gmail.com

15 October 2010

Holden Town Board

Holden, UT 84636

A mix of native forbs, shrubs, and grasses for restoring the original vegetation at Holden Town dump area would cost $500. The mix would consist of seeds matching the surrounding vegetation.

Thanks,

Merrill Johnson

Merrill Johnson

APPENDIX K

PTIF ACCOUNT

STATEMENT OF ACCOUNT

PTIF

UTAH PUBLIC TREASURERS' INVESTMENT FUND

Richard K. Ellis, Utah State Treasurer, Fund Manager
PO Box 142315
350 N State Street, Suite 180
Salt Lake City, Utah 84114-2315
Local Call (801) 538-1042 Toll Free (800) 395-7665
www.treasurer.utah.gov

HOLDEN TOWN-CAP OUTLAY
ALISON JOHNSON
PO BOX 360127
HOLDEN UT 84636

Account	Account Period
1464	July 01, 2013 through July 31, 2013

Summary

Beginning Balance	$ 47,624.67	Average Daily Balance	$ 50,334.35
Deposits	$ 8,421.87	Interest Earned	$ 21.87
Withdrawals	$ 0.00	360 Day Rate	0.5046
Ending Balance	$ 56,046.54	365 Day Rate	0.5116

Date	Activity	Deposits	Withdrawals	Balance
07/01/2013	FORWARD BALANCE	$ 0.00	$ 0.00	$ 47,624.67
07/22/2013	TRANSFER IN	$ 8,400.00	$ 0.00	$ 56,024.67
07/31/2013	REINVESTMENT	$ 21.87	$ 0.00	$ 56,046.54
07/31/2013	ENDING BALANCE	$ 0.00	$ 0.00	$ 56,046.54

{Effective: 07/31/2013} *The GASB Fair Value factor at June 30, 2013 is 1.00502171*

APPENDIX L

UNITED STATES DEPARTMENT OF AGRICULTURE

(LETTER)

USDA United States Department of Agriculture | Forest Service | Fishlake National Forest
Fillmore Ranger District
Fax: (435) 743-4113 | 390 S Main
Fillmore, UT 84631
Phone: (435) 743-5721

File Code: 1500
Date: January 21, 2011

Jeff Whatcott, Councilman
Holden Town
P.O. Box 113
Holden, UT 84636

Dear Councilman Whatcott:

The Forest Service was requested to provide information on Holden Town's landfill permit application. Two areas requested were:

1. Maps showing the existing land use, topography, residence, parks, monuments, recreation or wilderness areas within 1,000 feet of the site boundary.
2. Certifications that no ecologically or scientifically significant areas or endangered species are present in the site area.

The nearest National Forest lands are over three miles from the landfill site. Forest maps do not show information for the site area.

To my knowledge, there are no residences, parks monuments recreation, or wilderness areas within 1,000 feet of the site boundary. To my knowledge there are no endangered, threatened or sensitive plant or animal species near the site. Millard County area in general does have a few Bald Eagles over winter season, but this site would have no impact on the species.

The present site appears to be in a good location and serves the community of Holden well.

Sincerely,

Del W. Barnhurst

DEL BARNHURST
District Ranger

APPENDIX M

KERN RIVER GAS TRANSMISSION COMPANY

(LETTER)

Chris Jorgensen
Land Representative

P.O. Box 71400
Salt Lake City, UT 84171-0400
(801) 937-6353 Office
(801) 937-6312 Fax

October 22, 2010

Jeff Whatcott
P.O. Box 113
Holden, UT 84636

RE: Holden Town Landfill

Dear Mr. Whatcott:

Kern River Gas Transmission Company (Kern River) was requested to provide a letter verifying that the Kern River pipelines do not affect the Holden landfill. The Kern River pipelines run from the northeast to the southwest and are up gradient of the landfill. I reviewed aerial photography and have confirmed with management that normal pipeline operations will not affect the Holden landfill. However, any excavation activity within Kern River's Right-of-Way would require a call into Blue Stakes.

If you have any questions or concern please feel free to contact me anytime at 1-801-937-6353. If I'm not available, leave a message along with your phone number so I may return your call promptly.

Sincerely,

Chris Jorgensen

Land Representative

CC:

L. Ryan
S. Allgood
S. Rice
D. Gibbons

APPENDIX N

Natural Resources Conservation Service

Letter – Lars Rasmussen

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
Fillmore Field Office
65 West 100 North
Fillmore, UT 84631
(435) 743-6655
FAX (435) 743-5117

March 12, 2013

Ross Stevens, Councilman
Holden Town
P.O. Box 360044
Holden, Utah 84636

Dear Councilman Stevens:

NRCS was requested to provide information on Holden Town's landfill permit application regarding wetlands and floodplains.

NRCS has not conducted an official wetland determination on the site for the purpose of Food Security Act or other compliance reasons. To my knowledge no consultation with the Army Corp of Engineers has been conducted either (the Army Corps of Engineers may or may not claim jurisdiction on some wetlands).

The East Millard Soil Survey indicates that the property in question is mapped as mapunit 37 (Donardo very stony loam). Neither Donnardo nor the other minor components of the mapping unit are described as hydric (potentially wetland) soils. I have made a field visit to the site and it revealed no indication of hydrophytic vegetation that would indicate a hydric soil is present as an inclusion of the mapunit. Although I am not in position to make an "official" wetland determination, this information does not suggest to me potential for wetland presence and I suggest no further wetland investigation would be warranted.

A review of FEMA flood insurance rate maps does not indicate the site has been identified with specific flood plain hazards. A Flood plain hazard rating of "D" is applied which means :

ZONE	DESCRIPTION
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

I hope this helps.

Sincerely,

Lars Rasmussen
District Conservationist

APPENDIX O

TRAINING LOG FOR SITE OPERATORS

Holden Town

Landfill Training Record

Date	Name	Location	Class Attended	Signature

APPENDIX P

RANDOM INSPECTION FORM

QUARTERLY INSPECTION FORM

HOLDEN TOWN LANDFILL
Quarterly Site Inspection

Area of Inspection	Condition	Repairs Needed	Comments
Date:	Inspector:		

_____
Year

HOLDEN TOWN LANDFILL
Random Inspection Record

Date	Driver's Name	Residential/Commercial	Phone	Time	Load Contents	Quantity	Observations/Actions Taken

_____
Year

APPENDIX Q

POST-CLOSURE CARE COSTS

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS

I.1 - Landfill Post-Closure Opinion of Probable Costs

SUNRISE ENGINEERING

Project: **HOLDEN TOWN LANDFILL**

Date: June 19, 2013
By: ZWP

HOLDEN TOWN LANDFILL POST-CLOSURE COST ESTIMATE

Based on Oklahoma Department of Environmental Quality 2010 Worksheet for Calculating Closure and Post-closure Cost Estimates table I.1 as Provided in the Utah Division of Solid and Hazardous Waste Solid Waste Management Program, Preparation of Solid Waste Facility Closure and Post Closure Cost Estimates Guidance.

	Task/Service	Quantity	Units	Multiplier[a]	COST/UNIT[b]	TOTAL COST	SOURCE	NOTES
1.0	Site Maintenance							
a	Site Inspections	2	Per Year	30	$ 68.35	$ 4,101	a.	
b	General Maintenance	1	Per Year	30	$ 250.00	$ 7,500	a.	
c	Remediation and/or Gas Control Equipment	N/A	Lump sum	0.3	$ -	$ -	a.	
2.0	Monitoring Equipment							
a	Rework/Replace Monitoring Well(s)	N/A	VLF	0.25	$ 68.24	$ -	a.	
b	Plug Abandoned Monitoring Well(s)	N/A	VLF	0.25	$ 27.14	$ -	a.	
c	Final Plugging of Monitoring Well(s)	N/A	VLF	1	$ 27.14	$ -	a.	
d	Rework/Replace Methane Probe(s)	N/A	VLF	0.25	$ 58.55	$ -	a.	
e	Plug Abandoned Methane Probe(s)	N/A	VLF	0.25	$ 21.40	$ -	a.	
f	Final Plugging of Methane Probe(s)	N/A	VLF	1	$ 21.40	$ -	a.	
g	Final Plugging of Piezometer(s)	N/A	VLF	1	$ 21.40	$ -	a.	
3.0	Sampling and Analysis							
a	Groundwater Monitoring Wells	N/A	wells	60	$ 632.48	$ -	a.	
b	Methane Gas Probes	N/A	probes	60	$ 41.04	$ -	a.	
c	Surface Water Monitoring Points	N/A	points	60	$ 76.32	$ -	a.	
d	Leachate	N/A	sample	60	$ 122.82	$ -	a.	
4.0	Final Cover Maintenance							
a	Mow and Fertilize Vegetative Cover	N/A	acres	8	$ 194.05	$ -	a.	
b	Repair Erosion, Settlement, and Subsidence for On-site Soils	N/A	acres	0	2.81	$ -	a.	
c	Reseed Vegetative Cover	N/A	acres	0.2	485.14	$ -	a.	
5.0	Leachate Management							
a	Clean Leachate Line(s)	N/A	Per Year	30	$ 1,504.09	$ -	a.	
b	Maintain Leachate Collection System and Equipment	N/A	Per Year	30	2,336.66	$ -	a.	
c	Collect, Treat, Transport, and Dispose of Leachate	N/A	gal/yr	30	0.30	$ -	a.	
6	Tasks Not Identified							
7	Subtotal					$ 11,601	a.	
8	Administrative Services	1	Lump sum	0.06	11,601.00	$ 696	a.	
9	Technical and Professional Services	1	Lump sum	0.07	11,601.00	$ 812	a.	
10	Post-Closure Contingency	1	Lump sum	0.10	11,601.00	$ 1,160	a.	
11		**TOTAL POST CLOSURE COST ESTIMATE**				**$ 14,269**	a.	

a. Oklahoma Department of Environmental Quality as Provided in the Utah Division of Solid and Hazardous Waste Solid Waste Management Program, Preparation of Solid Waste Facility Closure and Post Closure Cost Estimates Guidance.

In providing opinions of probable construction cost, the Client understands that the Engineer has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinion of probable construction cost provided herein is made on the basis of the Engineer's qualifications and experience. The Engineer makes no warranty, expressed or implied, as to the accuracy of such opinions compared to bid or actual costs.

accepted by 7-10-13

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS AND SURVEYORS

I.1 - Landfill Post-Closure Opinion of Probable Costs

SUNRISE ENGINEERING

Project: **HOLDEN TOWN LANDFILL**

Date: June 19, 2013

By: ZWP

HOLDEN TOWN LANDFILL POST-CLOSURE COST ESTIMATE

Based on Oklahoma Department of Environmental Quality 2010 Worksheet for Calculating Closure and Post-closure Cost Estimates table I.1 as Provided in the Utah Division of Solid and Hazardous Waste Solid Waste Management Program, Preparation of Solid Waste Facility Closure and Post Closure Cost Estimates Guidance.

	Task/Service	Quantity	Units	Multiplier[a]	COST/UNIT[b]	TOTAL COST	SOURCE	NOTES
1.0	Site Maintenance							
a	Site Inspections	2	Per Year	30	$ 68.35	$ 4,101	a.	
b	General Maintenance	1	Per Year	30	$ 250.00	$ 7,500	a.	
c	Remediation and/or Gas Control Equipment	N/A	Lump sum	0.3	$ -	$ -	a.	
2.0	Monitoring Equipment							
a	Rework/Replace Monitoring Well(s)	N/A	VLF	0.25	$ 68.24	$ -	a.	
b	Plug Abandoned Monitoring Well(s)	N/A	VLF	0.25	$ 27.14	$ -	a.	
c	Final Plugging of Monitoring Well(s)	N/A	VLF	1	$ 27.14	$ -	a.	
d	Rework/Replace Methane Probe(s)	N/A	VLF	0.25	$ 58.55	$ -	a.	
e	Plug Abandoned Methane Probe(s)	N/A	VLF	0.25	$ 21.40	$ -	a.	
f	Final Plugging of Methane Probe(s)	N/A	VLF	1	$ 21.40	$ -	a.	
g	Final Plugging of Piezometer(s)	N/A	VLF	1	$ 21.40	$ -	a.	
3.0	Sampling and Analysis							
a	Groundwater Monitoring Wells	N/A	wells	60	$ 632.48	$ -	a.	
b	Methane Gas Probes	N/A	probes	60	$ 41.04	$ -	a.	
c	Surface Water Monitoring Points	N/A	points	60	$ 76.32	$ -	a.	
d	Leachate	N/A	sample	60	$ 122.82	$ -	a.	
4.0	Final Cover Maintenance							
a	Mow and Fertilize Vegetative Cover	N/A	acres	8	$ 194.05	$ -	a.	
b	Repair Erosion, Settlement, and Subsidence for On-site Soils	N/A	acres	0	2.81	$ -	a.	
c	Reseed Vegetative Cover	N/A	acres	0.2	485.14	$ -	a.	
5.0	Leachate Management							
a	Clean Leachate Line(s)	N/A	Per Year	30	$ 1,504.09	$ -	a.	
b	Maintain Leachate Collection System and Equipment	N/A	Per Year	30	2,336.66	$ -	a.	
c	Collect, Treat, Transport, and Dispose of Leachate	N/A	gal/yr	30	0.30	$ -	a.	
6	Tasks Not Identified	N/A						
7	Subtotal					$ 11,601	a.	
8	Administrative Services	1	Lump sum	0.06	11,601.00	$ 696	a.	
9	Technical and Professional Services	1	Lump sum	0.07	11,601.00	$ 812	a.	
10	Post-Closure Contingency	1	Lump sum	0.10	11,601.00	$ 1,160	a.	
11		**TOTAL POST CLOSURE COST ESTIMATE**				**$ 14,269**	**a.**	

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