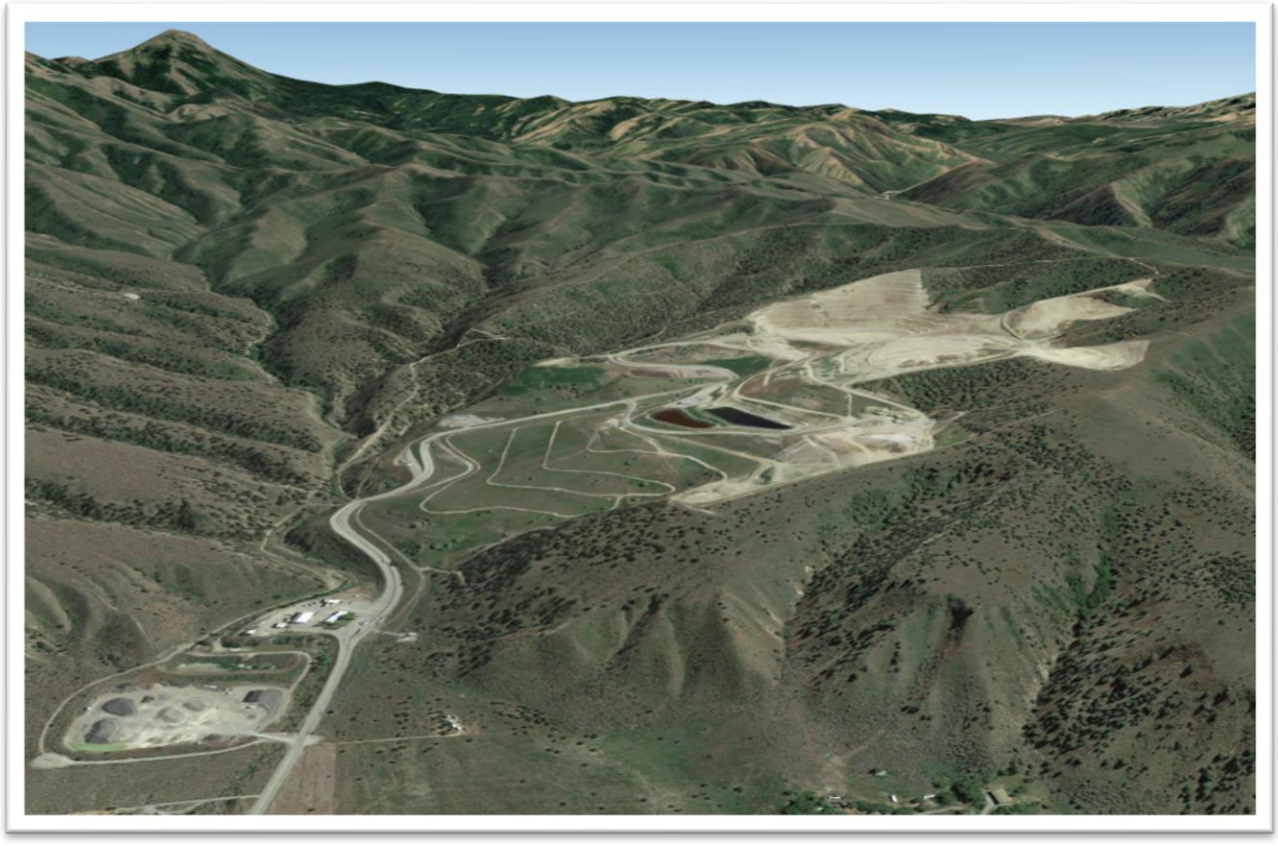
OPERATIONS PLAN

BANNOCK COUNTY

FORT HALL MINE LANDFILL



1500 N. FORT HALL MINE RD.
POCATELLO, ID 83204

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FORT HALL MINE LANDFILL

INTRODUCTION

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(1) Implement a program for detecting and preventing disposal of regulated hazardous wastes as provided in 40 CFR.20.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.06(009)(04): Solid Waste Management Facility Classification – Tier III Facility.

IDAPA 58.01.06(013)(04): Applicable Requirements for Tier III Facilities – Operating Plan.

40 CFR 258 (Subpart C): Operating Criteria

The Fort Hall Mine Landfill is operated to comply with regulatory requirements and to maximize the life of the landfill. This Plan describes how the Fort Hall Mine Landfill will be operated during its active life. This Plan is intended to satisfy "Operating Criteria" required by (RCRA) Subtitle D, Subpart C, Parts 258.20-258.29 (July 2012). It also meets or exceeds the State regulatory requirements specified in the Idaho Solid Waste Facilities Act, Idaho Code; Section 39-7412, Standards for Operation (hereafter referred to as the Act.)

The design of landfill Cell 2, the leachate collection system, the final cover for the old fill area, and The Ground Water Monitoring Plan was approved by the Idaho Department of Environmental Quality (IDEQ) on October 8, 1993. Approval of site expansion and changes to the Ground Water Monitoring Plan and the landfill design was given by IDEQ in 2008. We have also enclosed a copy of the letter of approval for the Recertification of the Operation Plan in December 7, 2018. Enclosed you will also find the Current Engineering Design (attachment G), and the Ground Water Monitoring letter (attachment A) submitted by IDEQ to Bannock County.

1.0 GENERAL LANDFILL INFORMATION

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(01) General Siting Requirements.
(03) General Operating Requirements.
(04) Operating Plan.
(11) Tier III Processing Facilities.
(13) Tier III NMSWLF.

40 CFR 258 (Subpart B): Criteria for Municipal Solid Waste Landfills – Location Restrictions.

1.1 HOURS OF OPERATION

The landfill is open to receive waste for ten hours per day from 7:00am – 5:00pm, six days per week, Monday – Saturday. The landfill is closed on Sundays and holidays. As required by 40 CFR 258.25, a permanent fence has been placed around the landfill site.

The entrance gate is locked while the landfill is closed to the public to prevent unauthorized vehicular traffic and illegal dumping of wastes.

1.2 SITE PERSONNEL

Bannock County Landfill has 14 full-time employees. Additional personnel will be hired as required to staff any new operations at the landfill. The personnel types and descriptions are summarized below.

Position	Qualifications	Roles
Assistant Public Works Director	MOLO certified, First Aid, CPR, and Hazardous Materials	Overall management of landfill operations, personnel, budgeting, and environmental.
Assistant Operations Manager	MOLO certified, First Aid, CPR, and Hazardous Materials	Supervision of field activities, insuring adequate training and safety briefings to the employees and providing a copy of each to the employee Ensure all employees are informed as new hazards become evident, and monitor and correct health and safety problems.

Management Assistant	First Aid and CPR	Assists the landfill manager in his/her duties, temporarily replaces the Scale House Technician when needed, records all receipts, monitors the landfill budget, and schedules all employees training and other landfill meetings.
Gas System Operator	MOLO certified, CDL, First Aid, and CPR	Monitors and maintains the landfill gas system, probes and generator, performs daily/weekly inspections on gas system equipment, and records and analyzes all inspections and system data.
Scale House Technicians	First Aid and CPR	Levies fees on landfill customers, operates the scale, keeps appropriate records, controls site access screens for unauthorized waste, and provides general customer direction and information
Equipment Operators	CDL, First Aid, CPR, and Hazardous Waste	Grading and excavating, necessary equipment maintenance, waste leveling and compaction, application of daily cover, and general site road maintenance. Operators are also responsible for keeping the working face in the smallest area practical and screening for unauthorized waste.
Engineer (in house)	Must have a college degree in engineering and meet all other requirements.	Reviews all environmental documents for the landfill, coordinates with hired landfill contractor and engineers, files and stores all environmental documents, and performs any other necessary duties.

Landfill employees are responsible for ensuring all operating procedures from this Plan are followed, that fieldwork is performed in accordance with this Plan, and to direct landfill users to the appropriate policies for disposal of acceptable wastes. Deviations from this Plan are based upon field conditions and are documented in field notes. Employee responsibilities include reporting to the supervisor any unsafe conditions or practices, reporting all facts pertaining to incidents that result in injury, and reporting equipment malfunctions or deficiencies.

1.3 FACILITIES

The landfill has a break room and restroom facilities in the Landfill Office building. Bottled water is available as the drinking water supply. Bottled water and portable sanitary facilities are

also provided at the shelters in the operations monitoring areas at Cell 2, Cell 3, Cell 4, and at the scale house.

Bannock County has also provided handling and storage facilities at the Fort Hall Mine Landfill (FHML). An enclosed room approximately 14' X 20' has been constructed inside the recycling building. The handling room provides segregated storage areas for flammable liquids and solids, corrosives, caustics, poisons, automotive fluids, alkaline and rechargeable batteries. Storage shelves are constructed with spill resistant lips.

A list of all current facilities located at the FHML and their corresponding functions is given in the table below:

Facility	Location	Function
Landfill Office	Entrance	Office and personnel area
Scale House	Entrance	Weigh incoming waste
Tire Building	Entrance	Store, de-rim and ship out tires
Air Stripper Building	Entrance	Water remediation
Recycle Building	Entrance	HHW collection and storage, parts storage, HHW lock-up area
Weed and Mosquito Office	Entrance	Office area for Weed and Mosquito Personnel
Weed and Mosquito Maintenance Building	Entrance	Parts and chemical storage
Fuel and Maintenance Building	Below Cell 4	Fueling area, parts and tools area
Appliance Building	Bottom SW corner of Cell 1	Extracting freon
Tire Wash	Along the road about ¼ mile after the entrance	Clean vehicles before they leave site (for SWPPP and off site tracking)
Generator Building	Below Cell 2	Office and gas-to-energy facility
Compost Area	Bottom SW corner of Cell 1	Windrowing, screening, and loading all compost

Leachate Ponds	Below Cells 2	Collection of all leachate from Cells 2 and 4
Storm Water Pond	Below the entrance	Collection of runoff from all areas outside of Landfill Cells 2, 3 and 4

1.4 EQUIPMENT

Equipment located at the landfill, along with descriptions of the equipment's functions are described in the following table:

Equipment Type	Function
Scrapers	Moving material for cover, roads and new cells
Bulldozers	Pushing garbage, dirt work, ripping, covering, and slope work
Sheep-foot compactors	Compacting waste
Backhoes	Trenching and loading
Excavator	Trenching and loading
Grader	Road maintenance and snow removal
Wheel Loader	Loading and compost
Skid Steer	Loading, compost, and moving material
Forklift	Moving heavy/large objects or materials
Roll-off truck	Hauling dumpsters
TDS	Tarp deployment systems
Portable Litter Screens	Active face litter control
Roll-off Boxes	Hauling waste from Bannock County facilities
Truck with sander and plow	Snow removal
Water trucks	Dust control and road maintenance
Personnel Vehicles	Transportation of personnel to on-site and off-site

	locations, refueling of equipment (ability only for select vehicles)

Bannock County has 3 recovery machines for refrigeration units; two for the removal of R-12 and R-22 gas, and one specific for R-134 gas to minimize the chances for commingling of different types of refrigeration gas. Recovery machines are serviced according to manufactures recommendations on a regular basis.

1.4.1 EQUIPMENT BACKUP PROVISIONS

In the event of equipment repairs or during equipment maintenance periods, the facility will obtain equipment from other facilities, contractors, or local rental companies to avoid interruption of waste services.

2.0 FACILITY ACCESS & WASTE MONITORING

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(1) Implement a program for detecting and preventing disposal of regulated hazardous wastes as provided in 40 CFR 258.20.

(5) Ensure that MSWLF units do not violate any ambient air quality standard or emission standard from any emission of landfill gases, combustion or any other emission associated with a MSWLF unit as provided in 40 CFR 258.24.

(6) Provide and control access as provided in 40 CFR 258.25.

(8) Prohibit the disposal of noncontainerized liquids or sludges containing free liquids in MSWLF units except as provided in 40 CFR 258.28.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

(11)(b) Weigh all incoming waste or provide an equivalent method of measuring waste tonnage capable of estimating total annual solid waste tonnage.

Idaho Statute 39-110: Registration of Persons Engaged in Operations or Construction where Air Pollution is a Factor – Reports.

IDAPA 58.01.01: Rules for the Control of Air Pollution in Idaho.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(05) Ground Water Monitoring Requirements.

(11) Tier III Processing Facilities.

(13) Tier III NMSWLFs.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(20) Procedures for excluding the receipt of hazardous waste.

(25) Access Requirements.

Waste hauling vehicles arriving at the landfill pass through the entrance facilities at the base of the landfill site. All vehicles are weighed at the scale house area. The scale house attendant questions haulers and inspects, if necessary, for unacceptable materials.

2.1 CONTROL OF PUBLIC ACCESS

Public access to the landfill is controlled to prevent illegal dumping of wastes, to limit public exposure to hazards at the landfill site, and to prevent unauthorized vehicular traffic in accordance with Idaho statute 39-7412(6) and federal regulations 40 CFR 258.25. Public access to the landfill is allowed through a gate at the main entrance (scale house) where operating hours are clearly posted. A sign is posted at the landfill entrance displaying the following information:

- Name of site;
- Hours of operation;
- Unacceptable materials;
- Available recycling areas;
- Emergency telephone numbers; and
- Fees.

Persons bringing refuse to the landfill are required to stop at the scale house prior to proceeding into the landfill area. The active landfill area is enclosed with a four-strand barbed wire fence that encloses the entire 932 acre-County-owned area. Permanent "No Trespassing" signs are posted on the perimeter fences.

A combination of signs and roadway striping is used for traffic control. All vehicles, including private autos, are allowed access to each waste disposal location.

2.2 CONTROL OF INCOMING WASTE

Control and regulation of incoming wastes are exerted through the functions performed by the landfill staff at the entrance facilities. The facilities consist of a scale house, recycling drop-off containers, tire storage/battery building, Household Hazardous Waste (HHW) Building and Compost Area, as well as an appliance recycling area. As part of continual landfill improvement, Bannock County has implemented a program, including personnel training, to recognize and to detect unacceptable waste during random inspections. Scale house attendants, spotters, and operators have to rely on their best judgment, combined with knowledge of regulations and administrative policy to make decisions about where to direct waste. Inspections occur randomly at a frequency of approximately once per every 100 loads.

Scale house attendants direct landfill traffic to the appropriate disposal location. Vehicles with household waste are directed to Cell 2 and vehicles with municipal solid waste are directed to Cell 4. Construction and demolition (C&D) waste, asbestos and dead animals are directed to Cell 3. Compostable materials are directed the compost site. Mixed loads are directed to Cell 4. Recyclable materials are directed to the recycling area near the front office.

The waste load projection for the Fort Hall Mine Landfill, presented in the Final Engineering Design Report, was estimated at 260 tons per day (TPD). Current estimates; confirmed by routine weighing of incoming vehicles; indicates a total waste flow of approximately 370 TPD.

2.2.1 SCALE HOUSE

The scale house is the primary means of controlling the entry of vehicles and waste into the entire site. Scale house attendants will make an initial determination of waste type and quality and payment of appropriate fees.

The scale house is equipped with a computer to record scale and customer data. It is also equipped with incoming and outgoing cameras for safety of the attendants. The Act requires all Municipal Solid Waste Landfills (MSWLFs) that dispose of more than 20 tons per day (TPD) of municipal solid waste to weigh all incoming waste or provide an equivalent method of measuring waste tonnage to be used for estimating total annual waste tonnage.

2.3 PROTECTION OF PUBLIC & PRIVATE PROPERTY

The Landfill is located in an isolated area in the Portneuf Gap. It is necessary, and required by law, to protect public and private properties near the landfill from endangerment or contamination from the landfill. Landfill gas and groundwater monitoring/remediation systems provide a level of protection and containment for potential contamination or other endangerment.

3.0 WORKER SAFETY & TRAINING

Idaho Statute 39-7412: Standards for Operations. Owners or operators of all MSWLF units shall:

(1) Implement a program for detecting and preventing disposal of regulated hazardous wastes as provided in 40 CFR 258.20.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 17.04.01: General Safety and Health Standards Code 1.

(014) Purpose and Scope.

3.1 PERSONNEL TRAINING

The safety-training program is directed toward work functions at the landfill that can lead to injury and damage. These programs cover standard operating procedures such as accident prevention, proper lifting techniques, operation of land filling and environment monitoring equipment, confined-space entry training (if such a space is constructed on-site), and hazardous materials identification. Emergency procedure training includes CPR/first aid, fire protection, and hazardous waste handling. Safety meetings occur on a weekly basis. Two trainings, one in the spring and one in the fall, also occur each year. Training records are retained in the landfill office.

3.2 HEALTH & SAFETY

The Site Safety and Health Plan (SSHP) is intended to serve multiple purposes. It ensures the Southeastern Idaho Public Health (SIPH) Department that health and safety concerns are addressed. Furthermore, it provides landfill supervisors with sufficiently detailed information to implement the Plan; it provides reference material and guidance for landfill employees; it is used as the basis for the training of landfill employees in the standard hazards related to working at the landfill; and it establishes the measures for worker protection and site control.

This Plan is updated or amended whenever the design, operation, construction or maintenance of the landfill changes, or if it is determined that the Plan must be amended to provide adequate protection for potential emergency or hazardous conditions.

3.3 STANDARD POLICIES & PROCEDURES

Employee safety requirements are mandated by state General Health and Safety Standards, IDAPA 17, Title 4, Chapter 1 (1996). All operating activities are performed in accordance with these regulations. Brief descriptions of the most prevalent landfill safety concerns and associated operating procedures are presented below.

Personnel working around solid waste must be continually aware of sharp and jagged items, moving machines, and falling objects. Protective clothing is effective in reducing and eliminating

injury. According to the specific job, the appropriate personal protective equipment (PPE) and clothing is provided. Steel toe boots, high visibility clothing and leather gloves are required to be worn at all times. Personnel are required to wear the protective clothing and appropriate equipment while working onsite.

Two-way radio is the primary source or communication with landline and cell phones being secondary sources of communication. All County vehicles, the scale house, and the landfill office are equipped with two-way radios. Landline telephones are located in the front office, scale house, and the Weed and Mosquito office. Management personnel are equipped with cell phones. The landfill front office and scale house communicate via landline telephone, and the scale house personnel communicate with operations via the two-way radios. In times of emergencies, all forms of communication are used.

Hazardous wastes are not accepted for disposal at the site. It is possible such wastes may inadvertently or illegally be delivered with other wastes or in carelessly discarded containers. Landfill employees are suspicious of drums, bags, or boxes containing solid sludge or liquid. Labels may indicate types of material but should not be totally relied upon. All wastes are visually screened for identification upon entering the site, according to the hazardous waste prevention and detection program as described in Section 4.2.2.

Landfill employees are aware of the dangers associated with leachate and landfill gases. Leachate can have a very high organic content, and elevated chemical levels, that could cause rashes or burns upon skin contact. Employees are required to avoid contact with leachate. Landfill gas could cause toxic or explosive atmospheres in unventilated spaces. Testing of potentially dangerous areas, such as excavations in refuse and utility spaces, is conducted before working or entry into such a space. If a dangerous situation arises, a confined-space entry program will be developed and appropriate precautions taken. Monitoring of gas levels in the landfill buildings and in the soil probes is discussed in Section 10.2.

Chemical hazards may be present when performing ground water sampling. Ground water monitoring personnel wear protective gloves, eyewear, and aprons when using chemicals for equipment calibration or sample preservation. Ground water monitoring personnel also wear gloves to prevent contamination of samples.

In case of emergency, first-aid kits and dry chemical fire extinguishers are provided in all landfill buildings, vehicles, and all major operating equipment. Personnel are shown the locations for each first-aid kit and fire extinguisher, and are trained in their use and operation. All landfill personnel are required to have current CPR/first-aid certification.

3.4 EMERGENCY PREPARATION & PROCEDURES

Emergency eyewash and shower facilities are available at all times. Emergency showers are located in the landfill front office and in the Weed and Mosquito maintenance building. Emergency eyewash facilities are located in the landfill front office, the Household Hazardous Waste (HHW) building, and the Wed and Mosquito maintenance building.

Information provided during safety briefings include: designated routes of emergency exits, locations of emergency equipment, etc. A copy of the Volunteer Briefing Statement is included in Attachment D.

In the event of an emergency, the procedures outlined in section 13 entitled “Emergency Situations” and its corresponding subsections will be immediately implemented. The Emergency/Evacuation Plan is included in Attachment I.

In addition, the collection area will be immediately evacuated and kept clear until the site is cleared for return by Bannock County or emergency personnel.

In emergencies of a fire or spill, landfill personnel will be instructed to exit downwind and remain away from the collection area until cleared to return by Bannock County or emergency personnel.

4.0 WASTE TYPES & WASTE ACCEPTANCE POLICIES

Idaho Statute 39-7412: Standards for Operations. Owners or operators of all MSWLF units shall:

(1) Implement a program for detecting and preventing disposal of regulated hazardous wastes as provided in 40 CFR 258.20.

(8) Prohibit the disposal of noncontainerized liquids or sludges containing free liquids in MSWLF units except as provided in 40 CFR 258.28.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(04) Operating Plan.

(11) Tier III Processing Facilities.

(13) Tier II NMSWLFs.

40 CFR 258: Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(20) Procedures for excluding the receipt of hazardous waste.

(28) Liquids Restrictions.

4.1 ACCEPTABLE WASTES

Municipal solid waste (MSW), construction and demolition (C&D) waste including dead animals and asbestos waste, drums, electronics, household hazardous waste (HHW), Household liquids, mercury, syringes, petroleum contaminated soils (PCS), trailer homes, and treatment plant sludge are accepted at the Fort Hall Mine Landfill. Cell 2 and Cell 4 are lined cells and designated for all MSW and household waste. All commercial waste will be disposed of in Cell 4 and public waste will be disposed of in Cell 2. The locations of these Cells are shown in Attachment H.

Descriptions and information on waste types accepted by the County and the County's Waste Acceptance Policies for disposal can be found in the following sections. The table below provides a list of the acceptable waste types and provides whether there is a current Waste Acceptance Policy for the corresponding type of waste.

Section	Type of Waste	Is there a current Waste Acceptance Policy provided for this type of waste?
4.3	Municipal Solid Waste (MSW) and Ash	No
4.4	Construction and Demolition	Yes

	(C&D) Waste	
4.4.1	Asbestos	Yes
4.4.2	Dead Animals	No
4.5	Compost	No
4.6	Refrigeration Units	No
4.7	Drums	Yes
4.8	Electronics	Yes
4.9	Household Hazardous Waste (HHW)	Yes
4.10	Household Liquids	Yes
4.11	Mercury	Yes
4.12	Needle-Syringe	Yes
4.13	Petroleum Contaminated Soils (PCS)	Yes
4.14	Trailer Home Disposal	Yes
4.15	Recycling	No
4.15.1	Tires	No
4.15.2	Batteries	Yes
4.16	Wastewater Treatment Plant Sludge	Yes
4.17	Sump Waste	Yes

Regulated hazardous wastes, liquid wastes, and polychlorinated biphenyl (PCB) wastes are not accepted.

4.2 RESTRICTED WASTES

4.2.1 LIQUID DISPOSAL

40 CFR 258.28 imposes liquid disposal restrictions on municipal solid waste landfills (MSWLFs). Bulk or non-containerized liquid waste is not accepted unless the waste is a household waste other than septic waste or leachate or gas condensate derived from Cell 2 or Cell 4. When all other legal disposal efforts have been exhausted, outdated containerized beer is accepted at Cell 2 or Cell 4. The decision to accept this liquid is based on several factors which include, but are not limited to: Directed to Cell 2 or Cell 4; temperature hot enough to dissipate a portion of liquid after being compacted; covered as soon as feasible.

If a customer can demonstrate through (EPA Method 9095: Paint Filter Liquids Test) that the waste contains no free liquids, and meets other requirements as imposed by landfill personnel, it is accepted. This determination is made by the type of container being delivered to the landfill. Empty containers of commercial household products are disposed of in the landfill. Containers full or partially full of commercial household products are collected and stored at a designated hazardous waste storage area at the site and are not placed in the landfill. Car batteries used motor oil and antifreeze are also collected and stored at the designated area.

4.2.2 HAZARDOUS WASTE

40 CRF, Part 258.20, requires procedures for excluding the receipt of hazardous waste. Under this regulation, hazardous waste is defined as regulated hazardous wastes and PCB wastes. The County, at a minimum, performs random inspections of incoming loads to ensure that the loads do not contain regulated hazardous waste or PCB waste, maintains records of these inspections, trains facility personnel to recognize such wastes, and notifies the proper authorities if such waste is discovered at the facility. The hazardous waste detection and prevention program at the Fort Hall Mine Landfill (FHML) includes four components: customer notification, employee training, site surveillance, and waste inspection.

1. Customer Notification: Customer notification consists of signs posted at the landfill entrance stating that regulated hazardous wastes and PCB wastes are prohibited. Bannock County informs residents of household hazardous waste collection days by sending out news releases to the local media, and flyers to all cities within Bannock County. The collection days are the first Saturday of every month, April through October.
2. Employee Training: Several employees have attended the Eastern Idaho Technical College where they successfully completed the **OSHA 1910.120 40-Hour Hazardous Waste Operations & Emergency Response Training (HAZWOPER)**. After successfully completing the 40-hour training, employees annually complete an 8-hour refresher course and then file documentation of the training. If the refresher training is not completed annually, the employee is required to retake the 40-hour training. Employee training covers the effects of hazardous waste, procedures for identifying prohibited materials, as well as notification and response procedures. Site attendants and operations personnel are trained to identify containers and waste loads that may

warrant an inspection for hazardous materials. Personnel training occurs through employee participation in State and Health District sponsored educational seminars. Information bulletins and regular staff meetings are used as a method of increasing employee awareness of the techniques and procedures used for waste screening, handling and identification.

3. Site Surveillance: Site surveillance is conducted daily by screening waste at both the scale house before the vehicle is directed to the appropriate disposal area and at points of discharge as waste is being off-loaded. Selective screening is conducted any time landfill personnel have reason to believe unacceptable waste may be present. The frequency of inspections depends on familiarity with customers. For example, waste received from a waste generator with which Bannock County has little previous experience requires more frequent inspections. The frequency of random inspections is a minimum of 1 in every 100 loads received. Using a random number generator, times for random inspections are determined for Cell 2 and Cell 3. Vehicles arriving at the respective disposal area at the pre-determined time are subjected to a random inspection. Waste screeners are provided a calendar showing assigned times for daily random inspections for one month at a time. Waste from commercial or industrial sources may require more frequent inspection than waste predominantly from households. Hazardous materials are accepted from very small quantity generators (VSQG) during organized hazardous waste collection programs for storage and transportation.

4. Waste Inspection: Waste brought to the facility in containers used for hazardous materials, in containers not ordinarily used for the disposal of household wastes, or in unmarked containers may warrant inspections. Loads may also warrant inspections if brought to the facility in vehicles not typically used for disposal of municipal solid waste. Waste inspections are conducted by having the vehicle entering the landfill discharge their waste load for landfill staff to examine before actual disposal of the waste at the facility, thus allowing Bannock County to refuse to dispose of the waste if it is deemed unacceptable. These inspections are performed near or adjacent to the working face of the landfill and may be videotaped for legal purposes. Equipment operators continuously look for prohibited waste and other material-related dangers.

   Vehicles identified as delivering hazardous waste to the landfill in containers other than those typically used for household consumer products are not allowed to off-load and abandon the container or its contents at the landfill. Exempt household hazardous wastes, however, received in their original commercial product containers are collected and temporarily stored in a designated area at the facility prior to proper disposal. In the unlikely event of a customer abandoning hazardous waste at the landfill, the waste will be removed from the site by the County and disposed of properly. An effort will be made to determine the source of the hazardous waste to recover the costs of waste handling and transport.

   In the event an abandoned container shows no signs of damage, it will be moved to safe location to prevent damage. If the container, however, is damaged, shows signs of

leakage, or has indications that the contents are under pressure, it will remain in place until the County's representative for identifying hazardous waste identifies the waste type and determines if the container can safely be moved to the appropriate disposal facility. Once the container has been moved, Southeast Idaho Public Health (SIPH) and the Department of Environmental Quality will be notified of the incident and for concurrence on the appropriate disposal facility and disposal/removal of the container.

Records of inspections are kept on-site in the Landfill Operating Record. Inspection records include the date and time wastes were received, names of the hauling firm and driver, source of their wastes, vehicle identification numbers, observations made by the inspector, and the inspection video tapes, if any. Response and notification procedures for dealing with hazardous waste found on-site are discussed in the "Emergency Procedures" found in Section 13 of this Plan.

4.3 MUNICIPAL SOLID WASTE & ASH PROCEDURE

Ash is the end product of incineration of bio medical waste and defined in the Rules, Regulations, and Minimum Standards for Hospitals in Idaho section 2, 1002, 19 contained in the Idaho Department of Health and Welfare Rules and Regulations. All municipal solid waste and ash from any local health facilities, and any local veterinarian offices if applicable, are directed to Cell 4 where landfill employees will direct the placement of the off-loaded waste. All waste in Cell 4 is covered per the procedures outlined in Section 6.

4.4 CONSTRUCTION & DEMOLITION WASTE PROCEDURE & POLICY

Cell 3 is the location for construction and demolition waste. Landfill Employees will direct the placement. The following page gives the Waste Acceptance Policy for Construction and Demolition (C&D) Debris.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

Construction and Demolition Debris Policy

Bannock County accepts construction and demolition debris (C&D) at the Fort Hall Mine Landfill and McCammon Landfill sites. C&D waste is defined as inert material and can be disposed of at a much lower rate than municipal solid waste (MSW). It is up to the customer to meet our acceptance criteria, and loads are subject to random load inspections. In order for waste to be accepted as C&D it must meet these requirements:

1) C&D waste consists of:

   - Construction/demolition debris
   - Cured asphalt and concrete rubble
   - Masonry rubble
   - Uncontaminated soils, rock, gravel, or dirt fill
   - Land clearing wastes;(stumps, branches, sod, or limbs)
   - Scrap metals, fencing, wire, poles, or boards
   - Dead animals (Pocatello only)
   - Asbestos (Pocatello only)

2) The load of waste must contain no more than 10% of organic materials (excluding dead animals), carpet, and plastics.

3) Waste must not contain any hazardous materials.

4) Any load that is redirected will be subject to the appropriate MSW tipping fee.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.4.1 DEAD ANIMALS PROCEDURE

Bannock County accepts dead animals from Bannock County only at the FHML. All dead animals will be disposed of in Cell 3. Landfill personnel will direct the placement of the dead animals. Dead Animals will be covered at the end of each day with twelve inches of soil.

4.4.2 ASBESTOS PROCEDURE & POLICY

The operational procedure for disposal of asbestos is in accordance with the provisions of federal Asbestos National Emissions Standards for Hazardous Air Pollutants (Asbestos NESHAP – 40 CFR 61, Subpart M) as provided in the following list.

- Asbestos debris from a structure built before 1979 will be treated and charged as containing asbestos unless there is documentation and testing stating otherwise.
- Containerized asbestos waste loads arriving after normal landfill operating hours may be refused entry into the landfill.
- Waste Shipments (manifests) must be completed for each load and given to the scale house attendant upon arrival. The scale house attendant will sign, date and put total weight.
- All asbestos will be treated as friable.
- Asbestos must be kept moist before and during transport.
- OSHA or EPA approved warning labels must be permanently marked or attached.
- Contractor/hauler will provide necessary manpower and equipment at the time of delivery to stack or place containerized waste.
- Upon arrival at the disposal site caution must be taken to ensure that the asbestos remains in the containment source for the safety of the landfill employees, employees of the transporter, as well as our customers. The disposal area will be clearly marked with signs.
- Asbestos will be covered at the end of each day with six inches of compacted soil.

Asbestos waste is covered daily and disposed of in a designated area of Cell 3 as shown in Attachment H. The following page gives the Waste Acceptance Policy for Asbestos.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

ASBESTOS ACCEPTANCE POLICY

FAILURE TO COMPLETE ALL REQUIREMENTS MAY RESULT IN LOAD REFUSAL

Bannock County accepts asbestos at the Fort Hall Mine Landfill. McCammon Landfill does not accept Asbestos. In order to comply with NESHAP regulations found in 40 CFR Part 61 the following conditions must be met:

1) Asbestos must be properly contained
   - Friable asbestos must be contained in twelve-mil plastic (double wrapped or bagged in six-mil plastic is standard practice), wetted, and properly labeled.
   - Non-Friable Asbestos must be contained in twelve-mil plastic (double wrapped or bagged in six-mil plastic is standard practice) and properly labeled.

2) Manifest must be complete and handed to scale house attendant upon arrival at the landfill.

3) The asbestos must be placed where directed by Landfill personnel.

4) All roofing will be treated and charged as construction debris.

5) **Any** structure built before 1979 will be treated and charged as asbestos.

6) OSHA or EPA approved warning labels must be permanently marked or attached to plastic wrapping.

Tipping Fees:
The disposal fee for asbestos is $100/Ton in-county and $150/Ton for out-of-county. Landfill personnel will be responsible for load inspections.

Hours:
Fort Hall Mine Landfill accepts properly contained asbestos between the hours of 7:00am and 5:00pm, Monday through Saturday.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.5 COMPOST PROCEDURE

In August of 2017, the Bannock County Commissioners passed a resolution allowing the landfill to sell compost Monday – Saturday, 9am-5pm, year round.

The acceptable wastes for the compost are grass clippings, straw, garden flowers, leaves and manure.

The control and inspection of yard waste is done at the scale house. This includes the determination of waste type and quantity (weight), payment (if any) and recording of all pertinent data. Haulers of incoming yard waste are directed from the scale house to the composting area.

The landfill personnel involved in the composting operations receive safety training. This includes standard operating procedures such as accident prevention, proper lifting techniques and environmental monitoring. Emergency procedure training includes CPR/first aid, fire protection and hazardous waste recognition and handling.

First-aid kits and dry chemical fire extinguishers are provided in the equipment. Personnel are expected to be familiar with their location, use and operation.

A backhoe, water truck and loader are used to process the compost. When needed, a Trommel screen is rented to filter the compost.

Windrows are constructed 12 to 14 feet wide at the base, 8 feet high and 120 feet long. Access aisles between windrows are 14 to 16 feet apart to allow sufficient room for turning with a backhoe.

The windrows are formed layer by layer. This layer is watered so that the material has approximately 50 percent moisture. Layers are added and watered until the windrow is approximately 8 feet high and 12 feet wide. Windrows are turned depending on temperature and moisture conditions. During the active composting stage, temperatures in the interior of the pile should be maintained between 120° F and 140° F. The active composting stage is generally finished when temperature levels don't increase above 120° F. *Temperatures are monitored using a temperature probe. These monitoring events usually occur every winter and spring because of the arid climate and because water is not added to the compost. Records of these temperature monitoring events are not required to be recorded.

Processed compost will then be used as cover material on a lined cell or sold to the public. Before compost is sold to public the County tests several nutrient levels, and CO_2 and ammonia content. We also use a Solvita Kit and a chart to determine how hot the compost is.

Subtitle D, Title-40 CFR Part 258.29, Record-Keeping Requirements, requires that Bannock County record and retain a number of landfill records and reports. Bannock County will maintain information about number of vehicles, weights and types of wastes by using the scale software. Because all vehicles must pass through the scale house prior to off-loading yard waste at the composting site, these records will provide information on daily yard waste composting loads.

4.6 REFRIGERATION UNITS PROCEDURE

Household and small commercial refrigeration units bearing the most common types of refrigeration gas, R-12, R-22, and R-134A, are accepted at the landfill. Refrigeration gases are recovered by employees using EPA approved recovery devices.

General procedures are followed by technicians removing refrigerant gas:

- Refrigerant gas bearing units are placed in a location where the ambient temperature of refrigeration gas can be controlled prior to the extraction. When the ambient temperature is known, the unit is de-commissioned according to recovery equipment manufacturers specified procedures.
- Prior to gas removal, the following are recorded on a "Refrigerant Removal Tracking/Disposal Form" as provided in Attachment E.
    - A description of the unit and/or serial number
    - Label information on the type of gas present in the system
    - Technicians initials
    - Date
    - Weight of the recovery cylinder prior to each use
- Units are assessed to determine whether the condenser system and related tubing is intact. If no obvious breaches in the condenser system are observed, a piercing valve is installed in the condenser tubing.
- Gas temperature and pressure are recorded and the relationship is checked against a wall chart to confirm the type of gas present in the system.
- Refrigerant gas is removed according to recovery equipment manufacturers specified procedures and placed into dedicated cylinders.
- Following each removal effort, the weight of the cylinder is recorded. The difference in weight is calculated and represents the weight of gas removed from each refrigeration unit. The weight of gas removed is recorded on the form.
- Each type of refrigeration gas is stored in separate EPA approved and tested pressure cylinders until 80% of the weight capacity of the cylinder is reached. Full cylinders are returned to a local vendor and exchanged for empty cylinders. Detailed and accurate records are kept for each refrigeration unit de-commissioned.
- After gas removal is completed, the condenser is removed from each refrigeration unit and residual compressor oil drained. Compressor oil is collected in a 55 gallon barrel and disposed of properly, usually as flammable liquid along with other wastes collected during a HHW collection event. Drained condensers are disposed in Cell 2 or Cell 4.
- De-commissioned refrigeration units are placed in a designated area for transfer to a recycling facility.
- Completed data forms are placed on permanent file as part of the landfill operating record. Records are maintained according to state and federal requirements.

4.7 DRUMS PROCEDURE & POLICY

Bannock County accepts drums at the FHML during operation hours. The drums are inspected at scale and tipping areas to make sure they meet the requirements given in the Drum Policy. If the drums are acceptable, landfill employees direct those disposing of drums to a lined landfill cell. The following page gives the Waste Acceptance Policy for Drums.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

Drum Policy

Bannock County accepts drums at Fort Hall Mine landfill and McCammon Landfill. A drum is a cylindrical container, made of steel or plastics, used for shipping bulk materials. Drums are generally used in commercial and industrial applications for the transportation of hazardous waste materials; therefore in order for Bannock County to accept drums they must meet these requirements:

1) Drums must be emptied, rinsed, and residue free.

2) The rinsed drums must then have lids off and/or holes punctured in both ends.

3) All Drums brought to Bannock County will be inspected for hazardous waste.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.8 ELECTRONICS PROCEDURE & POLICY

Bannock County accepts electronic waste (E-waste) at the FHML during operation hours. The E-waste is inspected at the scale house to make sure it meets the requirements given in the E-waste Policy. If the E-waste is acceptable, landfill employees direct those disposing of the waste to the electrical recycle container located near the landfill front office. The following page gives the Waste Acceptance Policy for E-waste.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

Electronic Waste Policy

FAILURE TO COMPLETE ALL REQUIREMENTS MAY RESULT IN LOAD REFUSAL

Bannock County accepts Electronic waste (E-Waste) at Fort Hall Mine Landfill free of charge.

Acceptable E-Waste

- Computer towers
- Flat screen TVs and monitors
- Rechargeable batteries
- Cell phones
- Laptops
- Home electronics (cable boxes, sound systems, DVD, RCA, satellite boxes)
- Solar products

There is a charge for Cathode Ray Tube (CRT) monitors and televisions. The CRT monitor is the older, larger, and heavier version of the LCD monitors with a bowl-shaped screen made of glass.

Thank you for your cooperation.
For additional information, Please contact us at (208) 236-0607.

4.9 HOUSEHOLD HAZARDOUS WASTE (HHW) PROCEDURE & POLICY

Bannock County accepts Household Hazardous Waste (HHW) at the FHML every first Saturday in April thru October from 9:00 am to 3:00 pm. The operational procedure for these events and the collection and disposal of HHW is given in section 12.1. Bannock County has the right to refuse loads and/or require additional testing. Loads are also subject to random load inspections. The following page gives the Waste Acceptance Policy for HHW.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

Household Hazardous Waste Policy

FAILURE TO COMPLETE ALL REQUIREMENTS MAY RESULT IN LOAD REFUSAL

Bannock County accepts household hazardous waste (HHW) at the Fort Hall Mine location. Household hazardous waste is **accepted every first Saturday April thru October, 9:00am to 3:00pm.** Acceptance is dependent on the review of source and generation information. Bannock County has the right to refuse loads and/or require additional testing. Loads are also subject to random load inspections.

Acceptable Types of HHW:

- **Used motor oil** – 5 gallons maximum container size. Acceptable in unmarked containers and must be transferred without spilling.
- **Antifreeze** – Acceptable in unmarked containers and must be transferred without spilling.
- **Flammable and Combustible Liquids –** 5 gallons maximum container size. It must be in original sealed container.
- **Batteries** – Alkaline, Nickel-Cadmium (Ni-Cd), Lithium-Ion (Li-ion), Nickel-Metal-Hydride (Ni-MH), small sealed lead (Pb), automotive batteries.
- **Corrosives** – Must be less than 2 gallons to accept.
- **Pesticide, Herbicide, or Fertilizer** – 5 gallons maximum container size. It must be in original sealed container.
- **Mercury** – Thermometers, thermostats, and elemental mercury (small containers) are accepted in our HHW program.

We do not limit the HHW diversion program to these items.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.10 HOUSEHOLD LIQUIDS

Bannock County will accept bulk household liquid waste only from Bingham County's Central Transfer Station. This liquid waste is limited to household waste collected in the drainage tank as part of normal solid waste transfer. No other sources of liquid waste are to be transferred or accepted. The scale house personnel will direct the Bingham County trucks to the Cell 2 leachate pond where the liquid waste is disposed of. The requirements for this acceptance are given on the following page.

All other Household Liquids will comply with RCRA Title 40 CRF Part 258 listed below.
§258.28 Liquids restrictions.

a) Bulk or non-containerized liquid waste may not be placed in MSWLF units unless:
    1. The waste is household waste other than septic waste;
    2. The waste is leachate or gas condensate derived from the MSWLF unit and the MSWLF unit, whether it is a new or existing MSWLF, or lateral expansion, is designed with a composite liner and leachate collection system as described in § 258.40(a)(2) of this part. The owner or operator must place the demonstration in the operating record and notify the State Director that it has been placed in the operating record; or
    3. The MSWLF unit is a Project XL MSWLF and meets the applicable requirements of § 258.41. The owner or operator must place documentation of the landfill design in the operating record and notify the State Director that it has been placed in the operating record.

b) Containers holding liquid waste may not be placed in a MSWLF unit unless:
    1. The container is a small container similar in size to that normally found in household waste;
    2. The container is designed to hold liquids for use other than storage; or
    3. The waste is household waste.

c) For purposes of this section:
    1. Liquid waste means any waste material that is determined to contain "free liquids" as defined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication SW-846) which is incorporated by reference. A suffix of "B" in the method number indicates revision two (the method has been revised twice). Method 9095B is dated November 2004. This incorporation by reference was approved by the Director of the Federal Register pursuant to 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of approval and a notice of any change in this material will be published in the Federal Register.
    2. Gas condensate means the liquid generated as a result of gas recovery process(es) at the MSWLF unit.

[56 FR 51016, Oct. 9, 1991, as amended at 66 FR 42449, Aug. 13, 2001; 70 FR 34555, June 14, 2005

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HOUSEHOLD LIQUID ACCEPTANCE POLICY

FAILURE TO COMPLETE ALL REQUIREMENTS MAY RESULT IN LOAD REFUSAL

Bannock County will accept bulk household liquid waste only from Bingham County's Central Transfer Station. Liquid waste accepted will be limited to household waste collected in the drainage tank as part of normal solid waste transfer. No other sources of liquid waste are to be transferred or accepted.

Requirements for acceptance of this waste are:

1) Bingham County must utilize a dedicated, marked tanker and county personnel to transfer the liquid to Bannock County. No outside contractors or pumper trucks are to be used. Bingham County is responsible for compliance with all federal, state, and local transportation regulations.
2) Bingham County will supply a manifest of waste to the Fort Hall Mine Landfill scale house upon delivery. The log will include date of transfer, quantity of liquid, and name and signature of personnel providing the documentation. This log will be placed into Bannock County's permanent operating record.
3) Liquid waste will be placed directly into the lined leachate collection pond at the Fort Hall Mine Landfill. Liquid waste will not be placed in any other location, including the operating landfill cell.

Hours: Operating hours for accepting this waste will be between 7am and 5pm.

Tipping Fee: Tipping fee of $30.00/ton

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.11 MERCURY

Bannock County accepts anything with small amounts of mercury (thermometers, thermostats, etc.) at the FHML during the HHW days held on every first Saturday in April thru October from 9:00 am to 3:00 pm. The mercury collected, along with other HHW, is removed from the landfill and shipped out by Clean Harbors. The following page gives the Waste Acceptance Policy for Mercury.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

MERCURY PROGRAM

Bannock County Fort Hall Mine Landfill accepts thermometers, thermostats and small amounts of elemental mercury for free on every first Saturday, April thru October 9am to 3pm. In order to protect the safety of our personnel please follow these instructions:

1) All mercury should be secured in cardboard, bubble wrap, or some other reasonable type of protection.

2) Thermometers with blue or red liquid inside do not contain mercury and can be thrown away with regular trash.

3) All fluorescent bulbs containing mercury should be secured to protect from breakage. Non-fluorescent bulbs can be discarded in regular trash containers.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607

4.12 NEEDLE-SYRINGE

Bannock County accepts household needles or syringes at the FHML during operation hours. Usually needles or syringes are incinerated before coming to the landfill, but those that aren't are disposed of with the regular waste. The following page gives the Waste Acceptance Policy for Needle-Syringes.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

HOUSEHOLD NEEDLE/SYRINGE DISPOSAL GUIDELINES

Bannock County Fort Hall Mine Landfill accepts the disposal of household needles and syringes. In order to protect the safety of our personnel, please follow these instructions:

1) Used needles and syringes should be placed in a puncture-proof, leak-proof container with a tight-fitting lid. Appropriate containers include red sharps containers (available from most pharmacies at a cost of $3-$5) or a heavy plastic bottle (such as a laundry detergent bottle).

2) Bleach or another disinfecting solution should be added.

3) When the container is full, make sure the lid is on tight, and apply heavy tape (duct tape or packaging tape) to ensure that the lid remains sealed.

4) Take the sealed container directly to landfill, and alert the scale house that you are disposing of used needles and syringes.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.13 PETROLEUM CONTAMINATED SOIL (PCS)

On a case-by-case basis, the Landfill will accept petroleum-contaminated soil (PCS) from cleanups or other events if the PCS qualifies as a non-hazardous waste under the exemption provided in 40 CFR 261.4(b)(10). Laboratory test results proving this qualification must be submitted to the Bannock County Solid Waste Management Department for approval prior to waste acceptance. Bannock County's PCS Acceptance Policy, which is given on the following page, is subject to change without notice and the Landfill reserves the right to require additional testing prior to disposal of PCS or to reject any PCS waste that the Landfill determines may potentially pose an unreasonable risk or environmental concern to Landfill operations.

The acceptance procedure for PCS is as follows:

1. Before PCS is delivered to the Landfill, prior written notification must be given to the Solid Waste Management Department. Notification shall include test results from a State of Idaho-approved laboratory, location of the PCS, and quantity of material.
2. Unacceptable PCS will not be accepted, and owners/transporters will be referred to DEQ for further guidance. Unacceptable PCS conditions include, but are not limited to, the following:
    a. PCS that contains and RCRA-listed hazardous material that is not exempted by 40 CFR 261.4
    b. PCS that poses a health and/or safety risk to personnel at the Landfill
    c. PCS that contains "free product" or is in a slurry form (see Liquid Waste Disposal)
3. All samples must be analyzed in a State of Idaho-approved laboratory using test methods approved by EPA and DEQ including, but not limited to: benzene, toluene, ethylbenzene, and total xylenes (BTEX); and, toxicity characteristic leaching procedure (TCLP) – metals, volatiles, and pesticides. Sample methods shall be in accordance with EPA procedures and are subject to review and approval by the Landfill. The amount of sampling required will be determined on a case-by-case basis by the Bannock County Solid Waste Management Department. The burden of proof that PCS material is acceptable for final disposal falls to the generator of the waste material as prescribed by EPA regulations.
4. Representative samples for testing shall be collected by a qualified professional in the field of sampling, testing, removal, handling, and characterization of PCS. Depending on the situation and factors surrounding the generation of the PCS, the Landfill may require certification of an Idaho-registered Professional Geologist (P.G.), a Professional Engineer (P.E.), or other professional with the proper qualifications.
5. PCS that does not meet the criteria for a hazardous waste as stated in 40 CFR 261.24, and is in conformance with items 1. through 4. above, may be accepted for final disposal at the Landfill.
    a. PCS accepted for final disposal at the Landfill shall be used as daily cover material and worked into existing soil cover on the working face of the current operating cell. Accepted PCS shall not be stock-piled for any significant length of time prior to being used as cover.

6. This program refers only to PCS. Under no circumstances will this program be adapted to other hazardous substances.

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Ph. (208) 236-0607

PETROLEUM CONTAMINATED SOILS

Bannock County accepts petroleum contaminated soil (PCS) at the Fort Hall Mine Landfill. Acceptance is on a case by case basis dependent on verifying the source of the release and a review of lab data which is representative of the PCS and that it meets applicable acceptance criteria.

PCS Generated as the Result of Spills & Accidents

Where the source of petroleum is known and is only contaminated by soil and no other chemical contaminants, the following acceptance criteria shall apply:

Petroleum Type	Laboratory Analysis Required	Acceptance Criteria
Gasoline PCS	TPH 8015, Gasoline Range Organics, flashpoint	100 mg/kg (ppm) or less
JP-4 (Jet A Fuel)	TPH 8015, Gasoline Range Organics, flashpoint	100 mg/kg (ppm) or less
Diesel PCS	TPH 8015, Diesel Range Organics, flashpoint	3,000 mg/kg (ppm) or less
Heating, Motor, and Lube Oil PCS	TPH 8015, Extended Range Organics, flashpoint	3,000 mg/kg (ppm) or less
Hydraulic Fluid/Mineral Oil PCS	TPH 8015	3,000 mg/kg (ppm) or less

Unknown Sources of PCS

Other sources of PCS must be characterized to document that it does not meet the definition of a hazardous waste.

In order to comply with the Resource Conservation Recovery Act (RCRA) 40 CFR 261.31-33, lab analyses of representative samples of the PCS from the sources listed below must be provided. Possible constituents of concern include heavy metals, chlorinated solvents and pesticides. Reported laboratory concentrations must be screened against EPA's Table 1 Maximum Concentration of Contaminants for the Toxicity Characteristic (40 CFR 261.24).

Source	Laboratory Analysis Required	Acceptance Criteria
Used Oil PCS	TPH 8015, Extended Range Organics & flashpoint TCLP 1311 for RCRA 8 metals TCLP 8260 for volatile organic compounds	3,000 mg/kg (ppm) or less
Unknown Source of PCS	TCLP 1311 for RCRA 8 metals TCLP 8260 for volatile organic compounds TCLP 8270C for semi volatile organic compounds TCLP 8081 for chlorinated pesticides TCLP 8151A for chlorinated herbicides TPH 8015 MOD, GRO, DRO, ORO & flashpoint	3,000 mg/kg (ppm) or less

Additional Criteria

1. All appropriate source information and lab work must be submitted to Bannock County for review prior to shipment. If the PCS is accepted, Bannock County must be notified at least 12 hours prior to shipment.
2. Bannock County has the right to refuse loads and/or require additional testing. Loads are also subject to random load inspections.
3. Polychlorinated Biphenyl (PCB) wastes are not accepted.
4. All PCS from any source must also meet the paint filter test.
5. Each load must be accompanied by a signed Waste Tracking/Source Profile Form.
6. PCS must be placed where directed by county personnel.
7. Street Sweepings, Storm Water Sediments and other inert material that may have incidental contact with petroleum products and other organic material is acceptable as long as the generator can certify that the generation of such solid waste was not the result of the clean-up of petroleum spills. If the material was generated as the result of petroleum spill, than the PCS acceptance criteria shall apply.

Fees:
$29 per/ton *in-county*
$40 per/ton *out-county*

Hours:
7am to 5pm Monday thru Saturday

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.14 TRAILER HOME DISPOSAL

Bannock County accepts residential Trailer Home Disposal at the FHML during regular landfill operation hours. The residential trailer homes are inspected and the scale house and the lined cell. Proof that taxes have been payed and all refrigerant has been removed must be provided to the scale house personnel before the trailer home is allowed to be disposed of in the landfill. Operators at the lined cells make sure the tires are removed along with all refrigerant and/or appliances. Residential trailer homes are accepted at the landfill free of charge on the two scheduled Free Day Events every year which can be found on the landfill's webpage's calendar. The following page gives the Waste Acceptance Policy for Trailer Home Disposal.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
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Ph. (208) 236-0607

Trailer Home Disposal Policy

Bannock County accepts Trailer Homes at the Fort Hall Mine Landfill.

Requirements for trailer homes at Bannock County Landfill:

- Verification of refrigerant removal prior to arrival at the Landfill
- Proof from Assessors or Treasurers office that taxes have been paid. (If disposing on Saturday **ALL** documentation must be in-hand. Assessors and Treasurers offices are closed on Saturdays)
- Tires will be removed at disposal area (If disposing of tires they will need to go to appropriate location with a fee).

Tipping Fees:
In-County loads are charged at a rate of $29.00/Ton, and out-of-County loads at $40.00/Ton. If the trailer home is too large for the scale there will be a flat rate of $300.00 per trailer home for in-county and $400.00 per trailer home for out of county. Residential trailer homes will also be accepted at Fort Hall Mine Landfill free of charge on the two scheduled Free Day Events per year**.** Contact the landfill or check our website for the current year free days**. All requirements** will still need to be followed on Free Days.
Hours:
The Bannock County Landfill accepts trailer homes between the hours of 7:00am and 4:00pm, Monday through Saturday.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.15 RECYCLING

A drop-off area for recyclable materials is available at the landfill. Comingled Recyclable materials are accepted from the general public and placed in the appropriate receptacle.

ACCEPTED ITEMS IN THE CONTAINER INCLUDE:

- **Mixed Paper Products** – Newspapers, Magazines, Phone Books, Catalogs, Cardboard Boxes, Cereal Boxes, Frozen Food Boxes, Paper Towel Cores, Office Paper, Note Pads, Index Cards, Coated Paper, Brochures, Envelopes, Manila Folders, Junk Mail, etc.
- **Plastics** – All plastic beverage and household cleaner containers #1 and #2 only (must be rinsed of contents).
- **Tin and Aluminum Cans** (must be rinsed of contents).
- **Glass** (there is a separate labeled container for **glass only**).

ITEMS THAT CANNOT BE PLACED IN THE CONTAINER:

- Plastic Bags, Plastic #'s 3-7, Medical Waste, Food Waste, Packaging Materials (peanuts, bubble wrap, styrofoam).

Use of the drop-off area is monitored by maintenance personnel and scale house attendants.

IF YOU HAVE ANY QUESTIONS CONCERNING WHETHER OR NOT A MATERIAL IS RECYCLABLE CONTACT US AND WE'LL LET YOU KNOW.

4.15.1 TIRES

Bannock County has a disposal charge for all tires and does not except commercial or large equipment tires. We use a covered area for the temporary storage of waste tires. After a sufficient number of tires are accumulated they are taken by Liberty Tire for recycling.

4.15.2 BATTERIES

Bannock County accepts the recycling of vehicle batteries at the FHML and McCammon Landfill facilities. The following page gives the Waste Acceptance Policy for Battery Recycling.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

BATTERY RECYCLING PROGRAM

Bannock County accepts vehicle batteries at its Fort Hall Mine and McCammon facilities. Vehicle batteries are accepted free of charge during regular working hours. All other household batteries are accepted at no charge on our household hazardous waste days. Household Hazardous Waste days are first Saturday of each month April thru October 9am to 3pm. All rechargeable batteries will be accepted at Fort Hall Mine Landfill at no charge Monday thru Saturday.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.16 WASTEWATER TREATMENT PLANT SLUDGE

Bannock County accepts Wastewater Treatment Plant Sludge (bio-solids) at the FHML on a case by case basis depending on the verification of lab data to determine if the sludge meets the applicable acceptance criteria. The following page gives the Waste Acceptance Policy for Wastewater Treatment Plant Sludge.

Bannock County Solid Waste

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Pocatello, Idaho 83204
Ph. (208) 236-0607

WASTEWATER TREATMENT PLANT SLUDGE (BIO-SOLIDS) POLICY

HOURS NOTICE REQUIRED – FAILURE TO COMPLETE ALL REQUIREMENTS MAY RESULT IN LOAD REFUSAL

Bannock County accepts Bio-solids at the Bannock County Fort Hall Mine Landfill. Acceptance is dependent on the review of source and lab data which is representative of the Bio-solids. All appropriate source information and lab work must be submitted to Bannock County for review prior to shipment. A certified lab analysis is good for 12 months from the date it was tested. Bannock County has the right to refuse loads and/or require additional testing. Loads are also subject to random load inspections.

1.) In order to comply with R.C.R.A 40 CFR Part 261.3, the following lab analyses from an approved laboratory are required to characterize the waste:

- Toxicity Characteristics Leaching Procedure (TCLP)-R.C.R.A 8 Metals
- pH Test
- Paint Filter Test

2.) If Bio-solids are accepted, Bannock County must be notified at least 24 hours prior to shipment.

3.) Each load or series of loads must also be accompanied by a signed Waste Tracking/Source Profile Form.

4.) Bio-solids must be placed where directed by County personnel

Tipping Fees:
In-County loads are charged at a rate of $29.00/Ton, and out-of-County loads at $40.00/Ton.

Hours:
The Bannock County Landfill accepts Bio-solids between the hours of 7:00am and 5:00pm, Monday through Saturday.

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

4.17 SUMP WASTE

On a case-by-case basis, the Landfill will accept Sump Waste that qualifies as a non-hazardous waste under the exemption provided in 40 CFR 261.4(b)(10). Laboratory test results proving this qualification must be submitted to the Bannock County Solid Waste Management Department for approval prior to waste acceptance. Bannock County's Sump Waste Acceptance Policy, which is given on the following page, is subject to change without notice and the Landfill reserves the right to require additional testing prior to disposal of Sump Waste or to reject any Sump Waste that the Landfill determines may potentially pose an unreasonable risk or environmental concern to Landfill operations.

The acceptance procedure for Sump Waste is as follows:

1. Before Sump Waste is delivered to the Landfill, prior written notification must be given to the Solid Waste Management Department. Notification shall include test results from a State of Idaho-approved laboratory, location of the Sump Waste, and quantity of material. No out-of-county Sump Waste will be accepted by the Landfill.
2. Unacceptable Sump Waste will not be accepted, and owners/transporters will be referred to DEQ for further guidance. Unacceptable Sump Waste conditions include, but are not limited to, the following:
    a. Sump Waste that contains any RCRA-listed hazardous material that is not exempted by 40 CFR 261.4
    b. Sump Waste that poses a health and/or safety risk to personnel at the Landfill
    c. Sump Waste that contains "free product" or is in a slurry form (see Liquid Waste Disposal)
3. All samples must be analyzed in a State of Idaho-approved laboratory using test methods approved by EPA and DEQ including, but not limited to: benzene, toluene, ethylbenzene, and total xylenes (BTEX); and, toxicity characteristic leaching procedure (TCLP) – metals, volatiles, and pesticides. Sample methods shall be in accordance with EPA procedures and are subject to review and approval by the Landfill. The amount of sampling required will be determined on a case-by-case basis by the Bannock County Solid Waste Management Department. The burden of proof that Sump Waste material is acceptable for final disposal falls to the generator of the waste material as prescribed by EPA regulations.
4. Representative samples for testing shall be collected by a qualified professional in the field of sampling, testing, removal, handling, and characterization of Sump Waste.
5. Sump Waste that does not meet the criteria for a hazardous waste as stated in 40 CFR 261.24, and is in conformance with items 1. through 4. above, may be accepted for final disposal at the Landfill.
    a. Sump Waste accepted for final disposal at the Landfill shall be used as daily cover material and worked into existing soil cover on the working face of the current operating cell. Accepted Sump Waste shall not be stock-piled for any significant length of time prior to being used as cover.

Bannock County Solid Waste

1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

Sump Waste Policy

FAILURE TO COMPLETE ALL REQUIREMENTS MAY RESULT IN LOAD REFUSAL

Bannock County accepts sump waste free of liquids at the Fort Hall Mine Landfill. Acceptance is dependent on the review of source and lab data which is representative of the sump waste. All appropriate source information and lab work must be submitted to Bannock County for review prior to shipment. A certified lab analysis is good for 24 months from the date of testing. Landfill has the right to refuse loads and/or require additional testing. Loads are also subject to random load inspections.

In order to comply with the Resource Conservation Recovery Act (RCRA) 40 CFR 261.31-33 lab analyses of representative samples of the waste from the sources listed below must be provided. Possible constituents of concern include heavy metals, chlorinated solvents and pesticides. Reported laboratory concentrations must be screened against EPA's Table 1 Maximum Concentration of Contaminants for the Toxicity Characteristic (40 CFR 261.24), see attached sheet.

Source	**Laboratory Analysis Required**
Shop/car wash sump sludge	TCLP 1311 for RCRA 8 metals, Flashpoint, TPH 8015 MOD, GRO, DRO, ORO, Method 9095A (Paint Filter Liquids Test)
First time controlled sumps and all uncontrolled sumps	(require these additional tests): TCLP 8260 for volatile organic compounds, TCLP 8081 for chlorinated pesticides, TCLP 8151A for chlorinated herbicides
Storm water catchment sediments	Exempted from RCRA: (or TCLP 1311 for RCRA 8 metals and/or TPH 8015 MOD, GRO, DRO,ORO if BCL wants to require analysis)
Source Unknown	TCLP 8260 for volatile organic compounds, TCLP 1311 for RCRA 8 metals, 7471 for mercury, TPH 8015 MOD, GRO, DRO, ORO, Flashpoint, TCLP 8270C for semi volatile organic compounds,

TCLP 8081 for chlorinated pesticides,
TCLP 8151A for chlorinated herbicides

Total Petroleum Hydrocarbon (TPH) Criteria

All PCS from any source must also meet the Bannock County Landfill TPH acceptance criteria of

Gasoline PCS	100 mg/kg (ppm) or less TPH GRO
Diesel PCS	3,000 mg/kg (ppm) or less TPH DRO
Lube Oil PCS	3,000 mg/kg (ppm) or less TPH ORO
Mineral Oil PCS	3,000 mg/kg (ppm) or less TPH
Used Oil PCS	3,000 mg/kg (ppm) or less TPH

Additional Criteria

1. All appropriate source information and lab work must be submitted to Bannock County for review prior to shipment. If the PCS is accepted, Bannock County must be notified at least 12 hours prior to shipment.
2. Bannock County has the right to refuse loads and/or require additional testing. Loads are also subject to random load inspections.
3. Polychlorinated Biphenyl (PCB) wastes are not accepted
4. All PCS from any source must also meet the paint filter test
5. Each load must be accompanied by a signed Waste Tracking/Source Profile Form.
6. PCS must be placed where directed by county personnel.

Fees:
$29 per/ton *in-county*
$40 per/ton *out-county*

Thank you for your cooperation.
For additional information, please contact us at (208) 236-0607.

5.0 WASTE COMPACTION & PLACEMENT

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(2) Provide for daily cover as provided in 40 CFR 258.21. Alternative materials or cover frequency other than daily cover may be used only as specified by the MSWLF plan of operation.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

Idaho Statute 39-7415: Standards for Closure.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(07) Closure Requirement.

(08) Closure Plan Application.

(11) Tier III Processing Facilities.

(13) Tier III NMSWLFs.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(21) Cover Material Requirements.

40 CFR 258 (Subpart F): Closure and Post-Closure Care.

(60) Closure Criteria.

(61) Post-closure Care Requirements.

5.1 FILL SEQUENCE

All municipal solid waste is disposed of in Cell 4 and all household waste is disposed of in Cell 2.

Waste filling commenced in the lowest area within the Cell 2 expansion. Waste was placed in 2-foot layers. Waste was unloaded and pushed out onto the drainage/operations layer. Close supervision was provided during placement of the initial six feet of waste on the operations layer. Long items and objects with potential to penetrate the operations layer and liner are sorted from the waste.

Heavy vehicles, or those with high contact pressure, do not operate directly on the drainage/operations layer.

Initially, the entire cell bottom was filled with waste to a shallow depth to allow vehicles greater maneuvering flexibility within the cell. Filling then proceeded uniformly within the Cell 2 footprint. Lifts 12 to 15 feet in thickness were constructed, then covered with 12 inches of intermediate cover, until the entire footprint is brought to the same elevation. This process is repeated in a step-wise fashion until final grade of the Cell 2 footprint is reached. It is important the footprint be brought to grade uniformly to avoid unbalanced loading on the sloping liner. An unbalanced load can result in slope instability and the risk of slippage or liner failure.

5.2 PLACEMENT

Wastes are to be unloaded, leveled, and compacted under direction of the operator and waste screeners. Operators and screeners perform additional questioning and inspection for unacceptable materials before, and in conjunction with, waste unloading. The working face is maintained large enough to accommodate the expected user volume and compacted to reduce blowing litter and minimize daily cover operations.

Waste is generally unloaded along the working face of the previously constructed cell, then leveled and compacted. The waste is spread in layers two feet or less in thickness in order to achieve maximum compaction. Compaction equipment traverses the entire length of the working face, making three to five passes. Six inches of daily cover or tarps are placed over the waste every day.

5.3 COMPACTION DENSITY

The desired density from a compactor is at least 1,200 lbs/yd^3, and in some cases a density of 1,800 lbs/yd^3 can be achieved. Normally, the density settles in the range of 1,400 – 1,600 lbs/yd^3.

6.0 DAILY COVER

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(2) Provide for daily cover as provided in 40 CFR 258.21. Alternative materials or cover frequency other than daily cover may be used only as specified by the MSWLF plan of operation.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(11) Tier III Processing Facilities.

(13) Tier III NMSWLFs.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(21) Cover Material Requirements.

6.1 CELLS 2 & 4

The daily operation cover material is retrieved from stockpiles. Alternative cover material is available from slopes and excavations from various locations around the landfill property. Six inches of cover is placed over the working face every night that the Tarp System and tarps are not used. The Tarp System is used an average of seven days per week unless weather conditions are too extreme (high winds or heavy snow).

The Tarp System was approved as an Alternate Daily Cover by Idaho Department of Environmental Quality (IDEQ) on August 13, 2001. Use of the Tarp System was approved with the following conditions:

1. Maintain a daily record of operational conditions (tarp use, inspections, maintenance, repairs, replacements; soil cover and depth; comments on extenuating site conditions or weather conditions, etc.; reasons why the tarp was not used). We are no longer required to do this.
2. Maintain firebreak zones by periodic application of soil cover following the protocol established during the trial period. That is, apply a soil cover at intervals not to exceed every five working days. If the application interval is five days, the soil cover thickness shall be a minimum of twelve inches. If the soil application interval is less than five days, a six-inch cover thickness is adequate.
3. Maintain the working face at a size small enough to allow complete coverage by the tarp(s) or provide a supplemental soil cover, a minimum of six inches thick, to obtain complete coverage.
4. Maintain a stockpile containing a two-week supply of soil to be used as cover material in the event of unforeseen situations.

5. During the trial period, there was a stipulation to keep one or more extra tarp panels on hand to be used in the event that the panels being used became ripped or otherwise rendered unusable. For future operations, maintaining extra panels is optional. However, a soil cover must be substituted if panels become unusable.

With respect to condition 5, the trial period has been completed. The County currently has three (3) tarp machines, and each tarp machine has two (2) 30' x' 107' tarps. In cases of emergency, or if a tarp has been damaged, two replacement tarps are kept on hand.

6.2 CELL 3

To comply with state and federal regulations, an application of six (6) inches of compacted soil as a cover layer is placed on the exposed waste as necessary to prevent nuisance and vector conditions. When the maximum depth of the landfill area or one of the "cells" is reached, the cell will be covered with twelve (12) inches of compacted soil as an intermediate cover. As necessary, intermediate cover is also placed in-between lifts to provide erosion control and structural stability. Within 7 days of closing the cell, an 18-inch final cover layer of compacted soil with a 6-inch layer of soil planted with native grasses will be constructed

7.0 SCAVENGING & SALVAGING

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(10) Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

To promote human health and safety salvaging and scavenging are prohibited at the Fort Hall Mine Landfill (FHML). IDAPA 58.01.06 law prohibits scavenging at any facility. Waste material deposited at the landfill working face is for final disposal.

Public salvaging is not allowed at the landfill. It is unsafe and delays land filling operations and creates unsanitary conditions. The accumulation of salvage at a disposal site often results in vector problems and unsightliness, which are detrimental to public acceptance of the operations.

The Solid Waste Management supports and encourages recycling, particularly steel. At the FHML we have an appliance recycling program. To supplement this program the department uses employees and laborers of the Pocatello Women Correction Facility to gather steel from the working face of Cell 2 and Cell 4. This work is conducted under direct supervision of department staff.

8.0 NUISANCE & ENVIRONMENTAL CONTROLS

Idaho Statute 39-110: Registration of Persons Engaged in Operations or Construction where Air Pollution is a Factor - Reports.

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(3) Provide disease vector control as provided in 40 CFR 258.22.

(5) Ensure that MSWLF units do not violate any ambient air quality standard or emission standard from any emission of landfill gases, combustion or any other emission associated with a MSWLF unit as provided in 40 CFR 258.24.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.01: Rules for the Control of Air Pollution in Idaho.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(04) Operating Plan.

(11) Tier III Processing Facilities.

(13) Tier III NMSWLFs.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(22) Disease vector control.

(24) Air criteria.

8.1 DUST

Dust can be harmful to employees and to landfill machinery and is controlled by:

- Minimizing earthwork during windy conditions;
- Immediately covering excessively dusty or powdery wastes with other waste or daily cover;
- Using water to dampen dusty waste, cover material, and roadways; and
- Reducing vehicle speeds on access roads during dry, windy conditions.

Dust Guard is applied to all main haul roads once per year. Water trucks are used to wet dirt or gravel surfaced roads throughout the facility. As detailed in Section 11.3 entitled “Leachate Ponds – Dust Control for Lined Areas”, leachate pumped from the leachate collection pond is used for wetting areas only within the lined areas of Cell 2 and Cell 4, including the working face, road surfaces, intermediate cover areas and daily cover areas. Potable water is taken from a fire hydrant for wetting all roads outside the lined landfill area.

8.2 ODORS

Odors are controlled in active areas by applying daily and intermediate soil cover or tarps. Potential odors associated with "turn-over" in the leachate pond are minimized due to the presence of the Enhanced Evaporation System (see the Section 11.2 entitled "Leachate Ponds – Enhanced Evaporation"). This system provides oxygenation to the leachate which provides some level of treatment as well as odor reduction.

8.3 NOISE

Noise levels of on-site equipment are controlled using proper mufflers. The impact of traffic noise on nearby residences is minimized by limiting the daily operating hours of the landfill to normal working hours. A reduced speed limit on the access road reduces both noise and litter.

8.4 VECTORS

Vectors that can create health hazards and nuisances include flies, mosquitoes, rodents, and birds. Under 40 CFR 258.22, Bannock County prevents or controls on-site populations of the environment. This regulation is intended to prevent the facility from being a breeding ground, habitat, or feeding area for disease vector populations. Preventive measures, such as proper spreading and compaction of the refuse and application of daily cover material, are used to control vector populations. Cover requirements can be found in Section 6.0 of this Plan.

9.0 OPEN BURNING

Idaho Statute 39-110: Registration of Persons Engaged in Operations or Construction where Air Pollution is a Factor - Reports.

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(5) Ensure that MSWLF units do not violate any ambient air quality standard or emission standard from any emission of landfill gases, combustion or any other emission associated with a MSWLF unit as provided in 40 CFR 258.24.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.01: Rules for the Control of Air Pollution in Idaho.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(04) Operating Plan.

(11) Tier III Processing Facilities.

(13) Tier III NMSWLFs.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(24) Air criteria.

Infrequent burning of agricultural wastes, land clearing waste diseased trees, and waste from emergency cleanup operations is permitted by RCRA Subtitle D regulations and the state Act, which allows open burning provided that the requirements under Section 110 of the Clean Air Act are not violated. The County, however, does not intend to burn these materials but rather dispose of them in the appropriate manner at the landfill.

10.0 LANDFILL GAS SYSTEM

Idaho Statute 39-110: Registration of Persons Engaged in Operations or Construction where Air Pollution is a Factor - Reports.

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(1) Provide disease vector control as provided in 40 CFR 258.22.

(4) Implement a program of routine methane monitoring and control as provided in 40 CFR 258.23.

(5) Ensure that MSWLF units do not violate any ambient air quality standard or emission standard from any emission of landfill gases, combustion or any other emission associated with a MSWLF unit as provided in 40 CFR 258.24.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.01: Rules for the Control of Air Pollution in Idaho.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(04) Operating Plan.

(11) Tier III Processing Facilities.

(13) Tier III NMSWLFs.

40 CFR 60.752(b): Standards for Air Emissions from Municipal Solid Waste Landfills.
40 CFR 60.754(a): Test Methods and Procedures.
40 CFR 60.757(a): Reporting Requirements.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(22) Disease vector control.

(23) Explosive Gases Control.

(24) Air criteria.

10.1 GAS COLLECTION SYSTEM

The Fort Hall Mine Landfill (FHML) has an active landfill gas (LFG) collection system, which was installed on a voluntary basis since the landfill is not currently subject to mandatory LFG collection under New Source Performance Standards (NSPS).

The initial LFG collection system consisted of 41 LFG collection wells, 19 in the "old" landfill and 22 in Cell 2, six (6) of which are buried and 1 horizontal-including the collection well installed on the upstream end of the leachate collection line (see attachment F), along with the associated collection and header piping needed to transport the LFG from the collection well to the LFG Flare and Internal combustion engine/generator. As of 2017, there are 19 LFG wells in Cell 1

and 27 LFG gas wells in Cell 2 that are operational, and 3 LFG wells in Cell 4 that will soon be operational by the end of 2018.

The LFG well field and other facilities will be expanded as appropriate and the "as-constructed" information related to the collection system is available for review at the Solid Waste Department offices.

Idaho Department of Environmental Quality (IDEQ) issued the "Permit-to-Construct" for the LFG collection system, flare and engine/generator in April 2010 and the Tier 1 "Operating" Permit in July 2013. A “Permit-to-Construct” for the first generator has been approved by the Idaho Department of Environmental Quality (IDEQ), and another “Permit-to-Construct” for a second generator should be approved by the end of year 2018.

All records, manuals, reports and other data required for the LFG Collection system are kept separately at the Bannock County Solid Waste Department Offices and are available for review during normal Solid Waste Department working hours.

10.2 GAS MONITORING PROGRAM

The purpose of the landfill gas monitoring program, as described in the following section and section 14.7, is to collect data to satisfy the requirements of 40 CFR 258.23, to prevent gas accumulations that could become dangerous to landfill personnel, to evaluate the effectiveness of landfill gas collection and flaring, to determine the extent of gas migration, and to assist in determining when post-closure activities are no longer necessary. Results of the monitoring program are reviewed quarterly by the Assistant Public Works Director.

To comply with 40 CFR 258.23(a), explosive gas concentrations measured in the probes located at the point of compliance will not exceed the lower explosive limit (LEL) for methane gas. If explosive gas levels in the probes exceed this limit, the County will take corrective action as specified in Section 14.5 of this Plan entitled “Emergency Situations – Explosive Gases”. The landfill gas monitoring program will commence for perimeter LFG migration monitoring probes as they are completed and will continue throughout the active life of the probe, the landfill’s closure period and post-closure period or until the landfill has stabilized. Stabilization of the landfill must be approved by the state.

All gas monitoring wells are identified by red poles.

10.3 GAS PROBES

The LFG perimeter migration monitoring probes were installed the summer of 1998 (see attachment F).

All well probes were sampled initially for gas pressure, temperature, combustible gas (explosive gas), hydrogen sulfide, carbon monoxide and oxygen concentrations. Barometric pressure and ambient air temperature are measured during each monitoring event. All sampling results are recorded and filed in the landfill “Operating Record.”

A portable gas detection instrument is used in the field to measure landfill gas. The instrument will detect explosive gas concentrations from slightly above zero percent to 100 percent of the

LEL, and concentrations of hydrogen sulfide, methane and oxygen in parts per million (ppm). Gas samples are drawn into the instrument by an electric air-sampling pump. Calibration procedures recommended by the manufacturer are followed.

Measurements at each probe were taken twice daily immediately after the probes were installed for a period of one week. Daily measurements provided information on fluctuations of gas quality. Since no gas concentration was found after one week of daily sampling, a monitoring frequency of once per week for a month, once per month for a quarter, and quarterly thereafter was implemented in accordance with 40 CFR 258.23(b).

Probe-sampling frequencies will be revised as gas concentrations decrease. Any change in sampling frequency will be coordinated with and approved by the Southeastern Idaho Public Health Department.

10.4 NEW SOURCE PERFORMANCE STANDARDS (NSPS)

In accordance with 40 CFR 60.752(b) when the landfill capacity becomes equal to or greater than 2.5 million megagrams (MMg) or 2.5 million cubic meters, which is equivalent to 2.76 million tons, the landfill is required to calculate non-methane organic compounds (NMOC) emissions rate for the landfill.

The design capacity of the FHML was 3.703 MMg (4.082 million tons) in 2010, and with the potential to extend the design capacity to 7.31 MMg (8.058 million tons) upon certification and design approval of Cell 4, causing the landfill to be subject to the NSPS found in 40 CFR Part 60.

The landfill NMOC emissions rate was calculated utilizing the equation identified in 40 CFR 60.754(a)(i) and utilizing the Tier 2 sampling procedures identified in 40 CFR 60.754(a)(3). The results of these calculations were less than 50 MMg per year threshold, and the FHML is not expected to exceed 50 MMg per year until 2024.

Based on this initial testing, FHML will provide an annual report of the NMOC emissions, to IDEQ and the Environmental Protection Agency (EPA), in accordance with 40 CFR 60.757(a)(3)(b), and will retest the NMOC concentration at the landfill every five years in accordance with 40CFR 60.754(a)(3).

The FHML annual NMOC emissions reports are available for review at the Solid Waste Department offices.

11.0 LEACHATE PONDS

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(7) Design, construct and maintain a run-on/run-off control system as provided in 40 CFR 258.26.

(8) Prohibit the disposal on noncontainerized liquids or sludges containing free liquids in MSWLF units except as provided in 40 CFR 258.28.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(11) Tier III Processing Facilities.

(13) Tier III NMSWLFs.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(26) Run-on/run-off Control Systems.

(27) Surface Water Requirements.

(28) Liquids Restrictions.

11.1 CONTROL SYSTEM

The leachate control system consists of a permeable drainage layer, perforated collection pipe, and collection sumps.

Leachate produced by Cell 2 and Cell 4 is managed by the following methods of Enhanced Evaporation, Dust Control, and disposal at the Wastewater Treatment Facility, as described in the following sections.

11.2 ENHANCED EVAPORATION

The leachate collection pond is equipped with an enhanced evaporation system consisting of a Gorman-Rupp centrifugal pump capable of producing 250 gallons per minute (gpm) at 180 feet total dynamic head driven by a 25 horse power (hp) electric pump.

- This pressurizes a 4-inch main manifold distribution line installed along the northeast long side of the leachate pond.
- The pump re-circulates the leachate and it runs down the liner evaporating.
- The system is operated continually or on an automatic timer during the months of April through October or as weather conditions permit.
- The system is monitored daily.

11.3 DUST CONTROL FOR LINED AREAS

The same pumping system identified above pressurizes a 4-inch outlet installed as a water truck fill spout.

Leachate is pumped into water trucks and is placed only within the lined area in Cell 2 and Cell 4. Leachate is used in the lined area for dust control on roads and on intermediate cover surfaces.

When the hauling of leachate is complete, the water truck is flushed with clean city water which is also placed within the lined area of Cell 2 and Cell 4 for dust control.

11.4 DISPOSAL AT WASTEWATER TREATMENT FACILITY

As identified in the "Final Revisions to the Preliminary Engineering Report", June 1993, leachate may be disposed at an approved publicly owned treatment works (POTW).

Following the application for and receipt of necessary permits from the City of Pocatello Water Pollution Control Department, leachate from the Fort Hall Mine Landfill may be hauled to the designated site listed in current permits.

12.0 EVENTS

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(1) Implement a program for detecting and preventing disposal of regulated hazardous wastes as provided in 40 CFR258.20.

(8) Prohibit the disposal of noncontainerized liquids or sludges containing free liquids in MSWLF units except as provided in 40 CFR 258.28.

(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.

(11) Tier III Processing Facilities.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

(20) Procedures for Excluding the Receipt of Hazardous Waste.

(28) Liquids Restrictions.

12.1 HHW EVENT STAGING

Household hazardous waste (HHW) is accepted only at the Fort Hall Mine Landfill (FHML) from 9:00am – 3:00pm during certain days of the year. These dates can be found on the Bannock County Landfill webpage.

HHW collection events are staged inside the recycling building at the FHML. Primary containment is achieved through the use of impervious tarps affixed to the concrete floor in all areas where unloading and handling of waste takes place.

Department of Transportation (DOT) approved barrels are available for the bulk storage of items collected. The handling room is equipped with explosion proof wiring and is ventilated with a high volume exhaust fan. A polyethylene tarp covers the floor at all times HHW is present in the room. Conditionally Exempt quantity generator (CEQG) wastes are handled and stored in this room. The access door to this room is labeled with appropriate signage prohibiting smoking and combustion sources and warning of the presence of potentially hazardous materials.

Un-loaders screen wastes to make certain only household wastes are present. Driver and passengers are required to remain in the vehicle while wastes are unloaded onto sorting tables.

Wastes are sorted in the presence of experienced personnel into broad categories of flammable liquids/sludge; latex paints and non-flammable liquids; corrosives or caustics; automotive fluids; batteries; and poisons/pesticides.

As noted earlier, HHW may be stored temporarily in the lock-up room. Ultimately however, flammable liquids/sludge is bulked into barrels for short-term storage, as are corrosives/caustics; automotive fluids; alkaline batteries; and poisons/pesticides.

Latex paints and non-hazardous, non-flammable liquids are bulked with absorbent material into barrels for final disposal in Cell 2 or Cell 4.

Lab packs for corrosives, caustics, poisons, pesticides and other materials requiring special handling are prepared by individuals experienced and certified in hazardous waste management.

Accumulated lab packs and barrels of flammable liquids and sludge are removed off-site by a hazardous waste contractor for final disposal at least every 90 days. All disposal locations utilized by the contractor are approved Treatment, Storage or Disposal (TSD) facilities permitted by appropriate state and/or federal agencies.

12.1.1 HHW EVENTS PERSONNEL

Personnel trained to recognize and handle potentially hazardous materials conduct HHW collection events. CEQG events are conducted by contractors fully trained and certified to handle and dispose of regulated quantities of hazardous waste materials.

Inmates provide assistance with HHW collection events. Inmates are given a detailed safety briefing prior to each event. Their responsibilities are limited to unloading vehicles, bulking flammable liquids, solids and latex paint, and other such activities that do not require a high level of technical expertise in handling hazardous waste materials.

12.1.2 PERSONAL PROTECTIONS & SAFETY

The provisions of Section 3.2 entitled “Health and Safety” in this Plan shall apply to the HHW collection program. In addition, the following procedures and requirements apply:

- Protective Clothing: All personnel assisting with HHW and/or CEQG events are required to wear protective clothing including, but not limited to, TYVEK or equivalent protective coveralls, shoe covers, and latex or butyl rubber gloves.
- Eye protection
- Respiratory Protection: Particulate filter masks and half and full-face respirators capable of filtering PM-10 emissions and organic vapors are available at all times and are provided upon request to participants. The HHW program manager may, at his/her discretion, require the use of respiratory protection if conditions warrant.
- Emergency Equipment: Several fire extinguishers rated for chemical fires are available during each collection event. Two “Spill Containment packages” including absorbent material, barriers, neutralizing agents, etc. are available during each collection event.

12.2 LITTER CONTROL PROGRAM

Litter along the roadways to the FHML Site and also all of the landfill property will be collected and disposed of into the working face of either Cell 2, Cell 3, or Cell 4. Employees will perform litter control with the assistance of the inmates from the Pocatello Women’s Correction Center.

Several permanent and portable wind fences have been placed in several areas of the landfill to prevent further blowing of debris.

12.3 FREE DAYS

Bannock County Landfill offers free days to the residents on certain days in the summer depending on the areas of the county. Dumpsters are provided in designated areas except in the City of Inkom. The calendar of free days can be found on the Bannock County Landfill webpage. The hours for the free days are 7:00am – 5:00pm at the Fort Hall Mine Landfill and from 8:00am – 4:00pm at all other locations where dumpsters are located, excluding the City of Inkom who must haul the waste to the Landfill.

13.0 EMERGENCY SITUATIONS

Idaho Statute 39-110: Registration of Persons Engaged in Operations or Construction where Air Pollution is a Factor – Reporting.
Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

(1) Implement a program for detecting and preventing disposal of regulated hazardous wastes as provided in 40 CFR 258.20.
(5) Ensure that MSWLF units do not violate any ambient air quality standard or emission standard from any emission of landfill gases, combustion or any other emission associated with a MSWLF unit as provided in 40 CFR 258.24.
(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.

IDAPA 58.01.01: Rules for the Control of Air Pollution in Idaho.
IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

(03) General Operating Requirements.
(11) Tier II Processing Facilities.
(13) Tier III MNSWLFs.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.
(20) Procedures for Excluding the Receipt of Hazardous Waste.
(23) Explosive Gases Control.
(24) Air Criteria.

13.1 EMERGENCY PROCEDURES

Emergencies may occur at the landfill and landfill employees are trained to respond to them in an efficient and timely manner. Employee training stresses protecting public health, maintaining environment quality, and resuming normal operation of the facility as quickly as possible. Pre-planning for an emergency saves valuable time in the event of a hazard. Prior arrangements with the local police and fire departments and local contractors for anticipated needs will be made and documented in this Plan. The posted emergency response directory includes telephone numbers and locations of local police, state police, fire department, ambulance and rescue services, poison control center, hospitals, supervisor of operations, power of authority, local health authority, and the Idaho Department of Environmental Quality (IDEQ) or the Environmental Protection Agency (EPA) for oil spills and hazardous wastes. Emergency Contacts and an Evacuation Plan are posted at the Employee Information Center next to all material safety data sheets (MSDS) sheets in the hallway of the administration building, at the generator office, and at the scale house (see Attachment I).

13.2 EMERGENCY SITUATION RESPONSE

When an emergency situation is apparent, the response will be to:

- Assess the condition and its impact upon human lives, public health, the environment, and the operation of the facility.
- Provide for the safety/first aid of all persons on-site at the time of event.
- Call for police, fire department, or medics, if necessary.
- Contain and prevent the spreading of the hazard by constructing physical barriers, if appropriate.
- Notify the supervisor, and other appropriate County personnel, utilities, and regulatory agencies to receive direction as soon as possible.
- Restore the facility to normal operation.

Remedial efforts will continue until the facility is restored to its normal operating condition and all dangers to human health and the environment have been eliminated.

The following sub-sections describe possible events that may require corrective action as well as immediate and follow-up response procedures.

13.3 EARTHQUAKES

If an earthquake should occur at the landfill, the first priority will be to respond to any life-threatening situations and provide first aid for any injured persons. Once immediate action to ensure public safety is taken, all operating landfill equipment will be shut down. Damages resulting from the earthquake will be assessed to determine any further action. If the earthquake damages the facility so that structures or equipment are out of service, the refuse may need to be rerouted to another facility.

13.4 HIGH WINDS

The effect of high winds would be the toppling of power poles and blowing of debris. Should a power pole be damaged, the local power authority and the supervisor will be immediately notified.

13.5 EXPLOSIVE GASES

Under 40 CFR 258.23, Bannock County will take specific actions, as found in Section 14.7, if explosive methane gas levels exceed the limits specified under this regulation. These limits are described in the “Gas Monitoring Program” from Section 10.2 of this Plan. If excess levels are detected, Bannock County will immediately take all necessary steps to ensure protection of human health and will notify the state IDEQ director. Within seven days of detection, Bannock County will place in the Operating Record of the landfill the explosive gas levels detected and a description of the steps taken to protect human health. Within 60 days of detection, Bannock County will implement a remediation plan for the explosive gas releases, place a copy of the Plan in the Operating Record, and notify the State IDEQ director that the Plan has been implemented. The Plan will describe the nature and extent of the problem and the proposed remedy.

13.6 EXPLOSIONS

If an explosion occurs, the following steps are followed:

1. Immediately call the supervisor
2. Assess the scene
3. Keep all personnel at a safe distance,
4. Follow the steps of the Emergency Situation Response as outlined in above in Section 13.2

The gates to the landfill will be closed to all but emergency vehicles. Further explosions may be prevented by isolating the source of explosion and eliminating ignition sources.

13.7 FIRES

Equipment fires and landfill fires can occur at a disposal site. In case of major fire, personnel will immediately call a supervisor and begin to evacuate all public to a safe location. The supervisor will notify appropriate agencies and assign personnel to man the entrance gate. The gates will be closed to all but emergency vehicles. All fires will be assessed to determine course of action needed. Below are descriptions of the types of fires and necessary actions for each type.

13.7.1 EQUIPMENT FIRES

Equipment fires generally are started by electrical failure and subsequent spreading to oil and grease on the machine and to refuse in the area. In case of minor fire, personnel will use fire extinguishers located in each vehicle and in the scale house, while exercising care not to put them at risk.

13.7.2 TYPES OF LANDFILL FIRES

The most common types of fires occur at the surface, where fuel and oxygen are abundant. These fires can burn between the surface and one foot below ground. The other type smolders below ground and can extend down to 40 feet.

Surface Landfill Fires

A surface fire can start if the facility accepts hot objects (for example, barbeque coals or other ashes) or overdraws the landfill gas collection system. Also arson, spontaneous combustion, or a discarded cigarette can start fires. To keep fires small and manageable, immediate action is necessary. Actions may include using heavy equipment to remove the burning material to a safe area, the application of soil to suffocate the fire, or the use of suppression agent and firefighting activities. If no action is taken, significant amounts of rancid and toxic smoke will be generated from burning surface trash. Toxicity of this smoke depends on the composition of the waste stream.

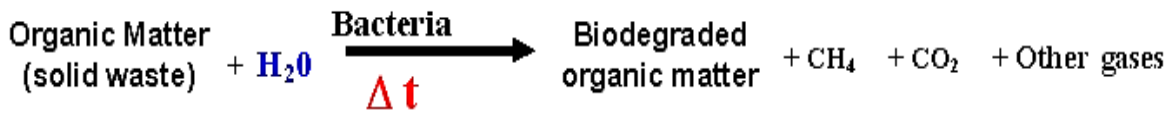
Subsurface Landfill Fires

A subsurface fire typically starts from overdrawing a gas collection system or spontaneous combustion. These fires are more likely to burn slowly without visible flame or large quantities

of smoke and are characterized by rapid oxidation of an organic waste. The waste tends to oxidize around the extraction well, in the influence zone of the extraction well, or near a surface feature that allows oxygen to enter the waste. Subsurface fires in gas collection systems are detected by elevated temperature at the well head or by the detection of soot in the gas collection system. At times, underground combustion/oxidation will go undetected until a sinkhole or smoke appears. Normally you will never see an actual flame during this type of fire unless the subsurface fire is excavated and exposed to the atmosphere.

13.7.3 HOW SPONTANEOUS COMBUSTION OCCURS

In spontaneous combustion, waste material is heated by chemical oxidation and biological decomposition. The resulting heat causes the material to reach the point of ignition. This type of rapid oxidation in a municipal or construction/wood waste facility is directly related to the amount of moisture present in the fill. The bacteria--both aerobic and anaerobic--present in organic matter require water to biologically breakdown organic matter. As shown in the equation below, as organic material is biodegraded, heat is produced along with other constituents.



Equation Text Description: In the presence of bacteria, organic matter (solid waste) and water react to produce increased heat (delta t), methane (CH4) gas and carbon dioxide (CO2) gas as well as other gases and degraded organic material.

With the correct conditions present, spontaneous combustion can occur in household trash or at construction debris facilities. This type of combustion will produce excessive amounts of carbon monoxide (CO) and other trace toxic gases due to incomplete oxidation.

13.7.4 DETECTING SUBSURFACE FIRES

When determining if a subsurface fire exists, one must have visual confirmation or other conditions present. Generally a subsurface fire can be confirmed by:

- Substantial settlement over a short period of time
- Smoke or smoldering odor emanating from the gas extraction system or landfill
- Levels of CO in excess of 1000 parts per million (ppm)
- Combustion residue in extraction wells and/or headers
- Increase in gas temperature in the extraction system (above 140° Fahrenheit) or
- Temperatures in excess of 170° Fahrenheit.

To confirm a subsurface fire by using CO, the results must be acquired through quantitative laboratory analysis. Most field portable equipment only have qualitative abilities and are susceptible to cross-sensitivity with high temperatures, humidity, and other constituents of

landfill gas (for example, volatile organic compounds, hydrogen sulfide, etc.). As a result, landfill gas containing these conditions and constituents may produce artificially high carbon monoxide readings when using portable monitors. If a subsurface fire is confirmed or questioned, contact the supervisor immediately.

13.7.5 EMPLOYEE HEALTH AND SAFETY RISKS

Subsurface landfill fire can create many types of life threatening conditions. These conditions must be communicated to all site personnel and anyone who is involved in the project. Site hazards may include slips, trips, and falls; confined space issues; carbon monoxide and toxic gas exposures; possible cave-ins due to the void spaces; and burn issues from the elevated temperatures. Safety protocols and considerations related to subsurface landfill fires should be implemented for site workers.

13.7.6 SUPPRESSION METHODS

As with any fire, once one side of the fire tetrahedron collapses the chemical reaction will stop. Landfill fires can be extinguished by smothering with soil, using heavy equipment and a suppressant agent, or simply temporarily shutting down the gas extraction system. No one method will work for all conditions. Each suppression plan will be unique due to site-specific conditions. At times, only an interim cap will prevent the extension of the fire, while other times the use of heavy equipment and foam is preferable. This will be determined by landfill personnel.

13.8 HAZARDOUS WASTE

If a hazardous or dangerous substance is discovered at the landfill, management personnel and Southeastern Idaho Public Health Department will be notified. All flames or other sources of ignition (e.g., operations equipment) will be turned off if the material is discovered on the working face. Once the working face has been evacuated, management personnel will initiate the state of Idaho's Hazardous Material's Response plan by calling 1-800-632-8000. The State Hazardous Materials team will help determine the characteristics of the substance of concern and if it is safe to resume operations. No site users or personnel will enter or work in areas near the substance until the substance and its characteristics have been identified and its safety verified.

If a regulated hazardous waste or PCB waste, as defined in Section 4.2 of this Plan, is discovered during routine load screening operations at the facility, Bannock County will follow notification procedures required by 40 CFR 258.20, Procedures for Excluding the Receipt of Hazardous Waste. Bannock County will immediately notify the EPA Regional Administrator when a hazardous waste has been discovered at the landfill. The County may also notify the Idaho State Director or his designee (IDEQ-PRO), but is not required to if the State is not authorized under Subtitle C of RCRA, as Idaho currently is not. If the waste cannot be returned to the hauler, Bannock County will ensure the waste is treated, stored, or disposed of in accordance with RCRA and applicable state requirements by working with the Pocatello Regional Office of the DEQ.

14.0 SITE MONITORING & REPORTING

Idaho Statute 39-110: Registration of Persons Engaged in Operations or Construction Where Air Pollution is a Factor – Reports.
Idaho Statute 39-7410: Ground Water Monitoring Design.
Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:

- *(1) Implement a program for detecting and preventing disposal of regulated hazardous wastes as provided in 40 CFR 258.20.*
- *(4) Implement a program of routine methane monitoring and control as provided in 40 CFR 258.23.*
- *(5) Ensure that MSWLF units do not violate any ambient air quality standard or emission standard from any emission of landfill gases, combustion or any other emission associated with a NSWLF unit as provided in 40 CFR 258.24.*
- *(10)Comply with operating procedures established by the board for implementation by the districts which are intended to assure operations which protect the public health and maintain the integrity of the landfill design.*

Idaho Statute 39-7414: Assessment Monitoring and Corrective Action.

IDAPA 58.01.01: Rules for the Control of Air Pollution in Idaho.
IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.

- *(03) General Operating Requirements.*
- *(05) Ground Water Monitoring Requirements.*
- *(11) Tier III Processing Facilities.*
- *(13) Tier III NMSWLFs.*

40 CFR 98 (Subpart HH): Municipal Solid Waste Landfills – Greenhouse Gas Reporting Program.
40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.

- *(20) Procedures for Excluding the Receipt of Hazardous Waste.*
- *(23) Explosive Gases Control.*
- *(24) Air Criteria.*
- *(26) Run-on/run-off Control Systems.*
- *(27) Surface Water Requirements.*

40 CFR 258 (Subpart E): Ground-water Monitoring and Corrective Action.

14.1 FIELD ACTIVITIES

Field activities conducted at the Fort Hall Mine Landfill (FHML) are described in detail in this document. Standard field activities include waste screening at the gate and at designated areas at Cell 2, Cell 3, and Cell 4 waste spreading and compaction with landfill equipment, application of cover materials, minor earthmoving and road-building construction, leachate pond and ground water sampling.

Field activities will also include the operation and maintenance of landfill gas perimeter migration monitoring probes.

14.2 SITE INSPECTION & MAINTENANCE

The landfill facility is inspected the first of each month. Inspections are performed by the Landfill Manager. The objective of these regular inspections is to identify and correct irregular conditions before they impede operations or become a danger to human health or the environment. A record is made for each inspection showing the date and time of inspection, the inspector's printed name and signature, observations, and the date and nature of any repairs or corrective actions. Records are maintained at the site for at least three years following the inspection. The Operations Inspection Form, contained in Attachment B, is used for this.

14.3 SURFACE WATER CONTROL SYSTEM

The surface water control system consists of perimeter drainage ditches, culverts, and retention ponds. Ditches and culverts are regularly inspected and cleaned, when necessary, and repaired if erosion is noted. Sediment is removed as necessary from the ponds, and the outlet-control structure is inspected for blockage. The retention ponds were designed by the County to accommodate the estimated runoff volume of a 100-year storm.

Temporary erosion control measures are necessary during landfill earth-moving operations specifically for new construction. The landfill's contractor for the construction is responsible for the placement and control of the erosion measures. The landfill has a Stormwater Pollution Prevention Plan (SWPPP) that all landfill personnel are required to maintain, which may include the use of temporary berms, straw bales, plastic sheeting, and ditches to control surface water runoff and erosion of bare earth.

14.4 SURFACE WATER SAMPLING

Any discharge of pollutants from the landfill units into surface water will comply with regulations developed under the Clean Water Act, Section 402 National Pollutant Discharge Elimination System (NPDES) permits. As a result, surface water sampling for the site will be conducted in accordance with requirements for landfills under the state NPDES storm water-permitting program.

14.5 GROUND WATER SAMPLING & LABORATORY ANALYSIS

A Ground Water Monitoring Plan was prepared as a separate document and was approved by the Idaho Department of Environmental Quality (IDEQ) on October 8, 1993 for Cell 1, Cell 2, and Cell 3, and a Plan was approved by IDEQ for Cell 4 on March 6, 2008 (see Attachment A). The plan was prepared to meet requirements of 40 CFR Parts 258, Subpart E, Ground Water Monitoring and Corrective Action, and section 39-7414 of the Act. The plan addresses requirements for documentation of ground water sample collection, handling and analysis of samples, Quality Assurance/Quality Control measures, analytical methods, and interpretation of analytical results. These requirements ensure samples are taken in a consistent, acceptable

manner that minimizes the possibility of introducing outside contamination and cross-contamination of the samples.

Landfill employees are informed of the location of the monitoring sites to insure safe access and the protection of the wells. All ground water sampling wells are identified by orange poles.

14.6 GREENHOUSE GAS REPORTING

Since FHML has calculated CH_4 emissions in excess of 25,000 metric tons of $CO_r e$ per year, as determined by 40 CFR Part 98, subpart HH, the landfill is required to complete annual emissions reporting related to Greenhouse Gas (GHG).

The GHG annual reports are submitted to the Environmental Protection Agency (EPA) prior to March 31st of each year using the EPA's electronic reporting tool, maintained separately from the landfill operating reports, and are available for review at the Bannock County Solid Waste Offices during normal Solid Waste Department working hours.

14.7 GAS MONITORING IN FACILITIES

Buildings and structures on-site, including administration offices, fuel and maintenance building, Freon building, Noxious Weed/Mosquito Control building, Noxious Weed/Mosquito Control office, air stripper building and the scale house are equipped with stationary explosive gas detection units. Other facilities including scale pits, recycling building, groundwater monitoring well casings and leachate sumps are monitored using a portable explosive gas meter.

Although 40 CFR 258.23(b) requires a minimum of quarterly monitoring in facility structures (excluding gas-control system components), explosive gas concentrations at structures are monitored continually to protect personnel. Monitoring is performed both inside and underneath structures that have crawl spaces. Results are recorded and kept on file in the landfill Operating Record.

40 CFR 258.23(b) limits explosive gas concentrations in facility structures (excluding gas-control systems) to below 25 percent of the lower explosive limit (LEL), ventilation will be increased within the space and a continuous monitoring and alarm system installed. Continuous monitoring and alarm systems consist of a remote detector and controller/alarm for each detection point. Detectors are periodically calibrated according to manufacturer's recommendations to maintain an adequate level of safety. If explosive gas concentration in facility structures exceeds 25 percent of the LEL, the County will take corrective action as specified in the "Emergency Situations – Explosive Gases" found in Section 13.5 of this Plan.

Any structures built on or adjacent to the old and new fill areas will be equipped with continuous monitoring and alarm system.

15.0 DOCUMENTATION

Idaho Statute 39-7412: Standards for Operation. Owners or operators of all MSWLF units shall:
(9) Establish an operating and recordkeeping procedure as provided in 40 CFR 258.29.

IDAPA 58.01.06(013): Applicable Requirements for Tier III Facilities.
(03) General Operating Requirements.
(04) Operating Plan.
(09) Documentation Requirements.
(11) Tier III Processing Facilities.
(13) Tier III NMSWLFs.

40 CFR 258 (Subpart C): Criteria for Municipal Solid Waste Landfills – Operating Criteria.
(29) Recordkeeping Requirements.

15.1 RECORDS & REPORTS

The landfill's records and reporting system make it possible to comply with regulatory requirements and will have an important bearing on future planning for the landfill. Subtitle D, Title 40 CFR part 258.29, Record-keeping requirements, requires that Bannock County record and retain a number of landfill records and reports near the facility in an Operating Record. Bannock County's Operating Record is placed in the administration building at the landfill and will remain there through the landfill's operating life.

When a document required by Subtitle D is placed in the Operating Record, Bannock County will notify the state director of this action. All information in the Operating Record will be furnished upon request to the state director or will be made available at all reasonable times for inspection by the state director.

Other records are required by the various federal and state health and safety regulations. Additional landfill operations records, such as Daily Operations Reports and Vehicle Inspection Records, are also part of the Operating Record. Subtitle D records and additional recommended landfill operations records and reports are described in the following sub-section.

15.1.1 RECORDS & REPORTS REQUIRED BY SUBTITLE D

Bannock County will place in the landfill or any location restriction, demonstration required under Subpart B, "Location Restrictions". There are no location restrictions for the Fort Hall Mine Landfill.

To monitor daily climatic conditions, a Davis Instruments "Vantage Pro 2" is installed at the landfill office. The weather information is downloaded via a "weather link" system to a server located in the main office. The data is saved to the hard drive on a daily basis and backed up on a "jump drive" each week.

The weather monitoring system measures temperatures, wind direction, wind speed, barometric pressures, dew point, high and low humidity, and precipitation.

Bannock County has in place in the landfill administration building; hazardous waste inspection records, personnel training documentation, and notification procedures for the Regulated Hazardous and polychlorinated biphenyl (PCB) Waste Detection and Prevention Program required under Part 258.29. "Procedures for Excluding the Receipt of Hazardous Waste." Adhering to the sub-section on Procedures for Excluding the Receipt of Hazardous Waste in this Plan, Bannock County will generate the required documentation for this regulation. A standard inspection form is used to satisfy this regulation.

Bannock County will place in the landfill administration building, gas monitoring results from the routine methane-monitoring program and any remediation plans required under Part 258.23, "Explosive Gases Control."

Bannock County will place in the landfill administration building, landfill design documentation for placement of leachate or gas condensate in a landfill unit as required under Part 258.28, "Liquids Restrictions." Cell 2 and Cell 4 are both designed with a composite liner and leachate collection system required under this regulation. The design documents to be issued for these systems will satisfy this regulation.

Bannock County has and will continue to have in place any demonstration, certification, finding, monitoring, testing, or analytical data required by Subpart E, "Ground Water Monitoring and Corrective Action" in the landfill administration building. This record is maintained according to procedures outlined in the Ground Water Monitoring Plan.

Bannock County has in place in the landfill administration building the Closure and Post-Closure Plans and any monitoring, testing, or analytical data required under Parts 258.60, "Closure Criteria", and part 258.61, "Post-Closure Care Requirements." The Closure and Post-Closure Plans required under this rule are provided as a separate document from this Plan. Continuation of environmental monitoring and site inspection record-keeping procedures developed during the operations phase will satisfy requirements for records during the post-closure phase.

Bannock County has in place in the landfill administration building record cost estimates and financial assurance documentation required by Subpart G, "Financial Assurance Criteria." Additional financial assurance documents have been submitted to the Idaho Department of Environmental Quality (IDEQ) for approval and upon their acceptance, these items will also be placed in the Operating Record.

15.2 PERMANENT LANDFILL OPERATING RECORDS & REPORTS

Daily Operations Reports, which include information about weight, number of vehicles, and waste type assist Bannock County in analyzing customer usage and landfill life, and provide a place for documentation if problems occur. The vehicle scales and computer assist in generation of such reports. A Daily Operations Report is contained in Attachment C.

To monitor daily climatic conditions, a Davis Instruments “Vantage Pro 2” is installed at the landfill office. The weather information is downloaded via a “Weatherlink” system to a Server that is located in the office area. The weather monitoring system measures high/low temperatures, wind direction, wind speed, barometric pressure, dew point, high and low humidity, and precipitation. The data is backed up on a server daily.

Hazardous waste and PCB waste inspection forms assist in documenting the random inspections required under Subtitle D. The form reminds the inspector what information is to be collected from the customer and how the load will be inspected. Filling out the form while performing the inspection, emphasizes to customers, that Bannock County is committed to preventing disposal of hazardous waste in their landfill.

Use of the Operations Inspection Form, described in the preceding section of this plan, assists in documenting Bannock County’s effort to maintain the landfill and will assist Bannock County in identifying potential problems before they become serious.

Equipment and vehicle inspection records are used to prevent serious breakdown and possible shutdown of landscaping operations. A form, including machine number and operator, gauge readings, any maintenance performed, and problems facilitate the process for operators.

Standard landfill gas monitoring records are used. These forms include sampling location (well probe number) and data such as explosive gas concentration and pressure, barometric pressure and ambient temperature.

Waste placement and site utilization records are beneficial for allowing comparison of actual waste placed to planned quantities. Correlations between volume and weight of refuse received, in-place density, and space used can be made. A waste placement history and record of special waste locations may be of assistance if environmental pollution occurs, complaints are made, or suits are filed.

ATTACHMENTS

INDEX

ATTACHMENT A: IDEQ & SOUTHEASTERN IDAHO DISTRICT HEALTH DEPARTMENT – LETTERS OF APPROVAL

DIVISION OF
ENVIRONMENTAL QUALITY

South Arthur, Pocatello, ID 83204-3380, (208) 236-6160

October 8, 1993

Mr. Tom Katsilometes, Chairman
Board of County Commissioners
Bannock County Courthouse
624 E. Center
Pocatello, ID 83201

RE: Fort Hall Canyon Landfill --- DEQ Approval of the Final Design and Ground Water Monitoring Plans

Dear Mr. Katsilometes:

The purpose of this letter is to issue approval for the Final Design and Ground Water Monitoring Plans pursuant to Idaho Code § 39-7411 for the referenced municipal solid waste landfill unit. Upon review of the plans, revisions and supporting documentation, the Fort Hall Canyon Landfill has demonstrated compliance with the applicable standards.

On March 17, 1993, Bannock County published notice that the Final Design Plan had been submitted and provided an opportunity for public comment until April 15, 1993. On September 1, 1993, Bannock County published notice that the Ground Water Monitoring Plan had been submitted and provided an opportunity for public comment until September 29, 1993. DEQ has received no written comments from the public and understands that the County received none as well.

The information necessary to review compliance with Design and Ground Water Monitoring requirements was considered sufficient for approval on October 8, 1993. However, a provision was made in the DEQ letter of September 13, 1993 such that a narrative regarding previously specified items is to be submitted in an "As-Built" document. The purpose of the provision is to assist the County (and the contractor) in meeting the compliance deadline of October 9, 1993. DEQ considers December 15, 1993 to be a reasonable deadline for submission of the "As-Built" document unless other arrangements are made.

The Final Design and Ground Water Monitoring Plans for the Fort Hall Canyon Landfill are hereby approved for compliance with Idaho Code § 39-7411, this the 8th day of October 1993.

As a reminder, Idaho Code § 39-7411 (7) requires the County to publish notice of this approval in a newspaper of general circulation.

We appreciate the Commissioner's commitment to this project.

Sincerely,

George Spinner
Regional Administrator

cc: Terry Bailey — Bannock County
John Holroyd — Brown and Caldwell-Eugene,OR
David Muckerman — Brown and Caldwell-Boise,ID
Tom Mullican — DEQ-EIRO
Katie Sewell — DEQ-Boise

Southeastern District Health Department

Healthy People in Healthy Communities

August 25, 2003

Bannock County Solid Waste Dept.
Therese Wight
1500 N. Fort Hall Mine Road
Pocatello, ID 83204

RE: Landfill operating plan

Dear Therese:

The purpose of this letter is to inform you that the August 2003 Fort Hall Canyon Landfill Operations Plan appears adequate for recertification under the Idaho Solid Waste Facilities Act.

Thank you for your promptness. If you have any questions please call me.

Sincerely,

S. Dee Johnson, EHS

C: Steven J. Pew, EHS
Environmental Health Director

Tom Mullican, DEQ

61-03

55 East 1st South • Soda Springs, Idaho 83276 • Phone: (208) 547-4375 • Fax: (208) 547-4398

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

FILE COPY

444 Hospital Way, #300 • Pocatello, Idaho 83201 • (208) 236-6160

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

November 13, 2008

Board of County Commissioners
Bannock County Idaho
P.O. Box 4016
Pocatello, ID 83205

Subject: **Approval of the Design and Groundwater Monitoring Plans for the Bannock County Landfill Expansion.**

On behalf of Bannock County, Cascade Earth Sciences (CES) submitted final versions of the Design Report and Groundwater Monitoring Plan dated July 2008 to this office for review and approval. Late in the review process, it was discovered that the statutory requirement for public notice of the submittal to the Department of Environmental Quality (DEQ) had been overlooked. This resulted in a delay in the approval process. However, all requirements pursuant to the Idaho Solid Waste Facilities Act have now been met. The Design Report and the Groundwater Monitoring Plan are hereby approved.

Although the documents are approvable as written, Bannock County may wish to consider the following observations made during the final review:

1. Regarding Preliminary Technical Specification Comment #6, the specified transmissivity requirement for the geo-composite applies to the entire geo-composite, not just its geonet component.

2. Regarding Preliminary Drawing Comment #10, it is still recommend that the gas collection outlet be located (or relocated as soon as possible) to above the highest point in the gas collection system to maximize gas collection efficiency.

3. Regarding Preliminary Drawing Comment #12, leak detection/containment should be provided for the entire length of the line or not at all.

For your information, there were no comments received by this office during the statutory public notice period associated with the review and approval process. Also, as a reminder, § 39-7411 (7) of the Idaho Solid Waste Facilities Act requires the County to publish notice of this approval in a newspaper of general circulation.

The excellent communication between the parties involved in this process is greatly appreciated. I may be contacted at 208-236-6160 if you have questions or need assistance.

Sincerely,

Thomas W. Mullican

Thomas W. Mullican
Hydrogeologist/Solid Waste

cc: Via U.S. Mail
Dan Copeland, Superintendent, Bannock County Road & Bridge Dept., Pocatello
Therese Wight, Bannock County Solid Waste Dept., Pocatello
George Spinner, Cascade Earth Sciences, Pocatello

Via E-mail
Peter Bair, DEQ State Office, Boise
Dean Ehlert, DEQ State Office, Boise
Steve Pew, Southeast District Health Dept., Pocatello

file: Solid Waste, Bannock County, Fort Hall Mine Landfill

CES
Cascade Earth Sciences
A valmont COMPANY

Conserving Resources. Improving Life.

444 Hospital Way, Ste. 520
Pocatello, ID 83201

Ph: 208.233.6565
Fax: 208.233.6566

December 16, 2010

Thomas W. Mullican
Idaho Department of Environmental Quality
444 Hospital Way, #300
Pocatello, ID 83201

Subject: Addendum #3 to the Bannock County Landfill Site Certification Plan for Municipal Solid Waste Landfill Expansion

Dear Mr. Mullican:

On behalf of Bannock County, CES is submitting Addendum #3 to the Bannock County Landfill Site Certification Plan (Plan). The purpose of Addendum #3 is to certify all of the current Bannock County property at the Landfill. A history of certification is provided below.

- September 2004 -- The Site Certification Plan for the proposed landfill expansion was submitted to the Idaho Department of Environmental Quality (DEQ). The Plan included certification of expansion acreage including property planned to be acquired/traded with the Bureau of Land Management (BLM). Public notices of the Plan were published in the Idaho State Journal.
- October 26, 2004 -- A letter from the DEQ to the County lists several items that needed to be included in the Plan.
- June 2005 – On behalf of the County, CES provided the additional information as an addendum to the Plan, thereafter referred to as Addendum #1.
- August 9, 2005 -- A letter from the DEQ provided contingent approval of the Plan. Final approval was contingent upon completion of the property transaction with the BLM.
- 2008 – Because the acquisition of property from the BLM was taking longer than planned, there was a concern that the expansion Cell #4 may need to be used before the transaction was completed.
- January 30, 2008 -- A letter from the DEQ advised the County that the simplest and most expedient way to complete the certification process is for Bannock County to submit an amendment to the August 2004 Site Certification application showing the county-owned property boundaries at that time (minus the planned acreage to be acquired from the BLM) and associated buffer zones.
- February 5, 2008 -- On behalf of the County, CES submitted Addendum #2 to the Plan for certification of only the property owned by the County at that time.
- March 6, 2008 -- A letter from the DEQ to the County removed the contingency from the August 2005 certification (i.e., Site Certification was provided for the existing County owned property).
- March 23- 25, 2008 -- A Public Notice of Addendum #2 was published in the Idaho State Journal.
- March 2009 -- The County acquired property from the BLM. As a good faith gesture, the County offered to donate some County owned property along Ft. Hall Mine Creek to the BLM resulting in a change of the property boundaries.

- February 19, 2010 -- The County deed donating property to the BLM is recorded.
- November 30, 2010 – On behalf of the County, CES contacted the DEQ to determine the correct process for certifying the County property within the revised property boundaries. On December 3, 2010, the DEQ advised CES that an Addendum #3 to the 2004 Site Certification Plan was appropriate.

The following figures are attached:

- CES Figure 1 – Revised Site Certification Map Showing Landfill Property Boundaries and Monitoring Well Locations. This is a scaled map showing other relevant property features such landfill structures, topography and buffer distances between the landfill cells and property boundaries.
- CES Figure 2 – Site Map Showing New Cell 4 Location Within Existing Landfill Boundary Showing 200' Buffer Zone. This figure is from the February 5, 2008 Addendum #2 application and shows the landfill property certified in 2008. This figure is provided as a reference for comparison of the change in property boundaries since 2008.
- Bannock County Figure – Bannock County Landfill Property. This figure shows the legal parcels within the landfill property boundaries.

CES has reviewed the August 2005 Site Certification Plan to determine if the change in property boundaries have significantly changed site location considerations related to: regional and local geology, airport proximity, critical habitat, proximity to adjacent land, planning and zoning, proximity to parks, wetlands, surface water, groundwater, faults and seismic impact zones and unstable areas. Because the 2005 Site Certification Plan already included site location considerations of the property that has been acquired from the BLM, and Addendum #1 addressed additional questions from DEQ related to site location of that additional property, it is our determination that the site location considerations have not changed.

In accordance with Idaho Code § 39-7408 (2) (g), within 10 days following certification from the director, Bannock County shall publish a notice in the Idaho State Journal informing the public that certification of the revised property (site) has been approved and provide proof of notification to the DEQ.

If you have any questions, please contact me at (208) 233-6565. As always, your assistance during the Bannock County Landfill expansion and certification process is greatly appreciated.

Sincerely,
CASCADE EARTH SCIENCES

George Spinner
Project Manager

Att: CES Figure 1 (2010) Revised Site Certification Map Showing Landfill Property Boundaries and Monitoring Well Locations
CES Figure 2 (2008) Site Map Showing New Cell 4 Location within Existing Landfill Boundary Showing 200' Buffer Zone
Bannock County Figure: County Landfill Property (2010)
c: Therese Wight, Tim Shurtliff, Dan Copeland – Bannock County
PN: 2009230005
Doc: Cvr Ltr DEQ Addendum #3 Revised Site Certification Plan All of County Property Including Property Acquired from BLM.doc

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

444 Hospital Way, #300 • Pocatello, Idaho 83201 • (208) 236-6160

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

March 6, 2008

Dan Copeland, Superintendent
Bannock County Road & Bridge Department
5500 S. 5th
Pocatello, ID 83204

Subject: **Site Certification Approval for the Expansion of the Bannock County Fort Hall Mine Landfill.**

Dear Dan:

By letter from this office dated August 9, 2005, the Department of Environmental Quality (DEQ) granted a contingent Site Certification approval for the above referenced landfill. At that time, Bannock County was planning to acquire additional property from the Bureau of Land Management (BLM) for future expansion. The approval was contingent upon the property transfer to the county. By letter dated February 5, 2008, Cascade Earth Sciences, on behalf of Bannock County, submitted to this office an addendum to the Site Certification application. The addendum explains that the property transfer with BLM has taken longer than anticipated and that Bannock County has decided that the Site Certification is to only include the property currently owned by the county. Given this scenario, there is no longer a need for the contingency regarding property transfer and the Site Certification application meets the statutory requirements of Idaho Code § 39-7407 . Therefore, this office is removing the contingency and Site Certification is hereby approved.

As a reminder, Idaho Code § 39-7408 (2)(g) states the following:

> Within ten (10) working days of receipt of certification from the director, the applicant shall publish notice in the newspaper provided for in subsection (d) of this section, informing the public that certification of the site has been approved.

Please give me a call at 208-236-6160 if you have questions or need assistance.

Sincerely,

Thomas W. Mullican

Thomas W. Mullican
Hydrogeologist/Solid Waste

cc: George Spinner, Cascade Earth Sciences, Pocatello
Therese Wight, Bannock County Solid Waste Department, Pocatello
Dean Ehlert, DEQ State Office, Boise
Dee Johnson, Southeastern District Health Department, Soda Springs

file: Solid Waste, Bannock County, Fort Hall Mine Landfill

Thomas Mullican

From: Thomas Mullican

Sent: Tuesday, April 06, 2010 10:29 AM

To: Williams Jay (jay.williams@cascade-earth.com)

Cc: Dan Copeland (danc@co.bannock.id.us); Spinner, George; Tom Hepworth; Michael Stambulis; (theresem@bannockcounty.us)

Subject: Bannock County Landfill Cell 4 Area Collector Material

Jay,

On behalf of Bannock County, you requested a modification to the previously approved design plan for the Cell 4 expansion of the Fort Hall Mine Landfill. Specifically, the design modification involves the use of reject gravel rather than a geonet as drainage material for the landfill cell. By email dated March 25, 2010 you submitted gradation and permeability test results for the gravel material supporting the proposed design change. By email dated April 5, 2010 you provided the department responses to our review questions. By this email correspondence, the Department of Environmental Quality Pocatello Regional Office is approving the requested design change. This message serves as documentation of the department's approval and should be entered into the official operating record for the subject landfill.

Please give me a call or send an email if you have questions or need assistance. Thank you.

Tom

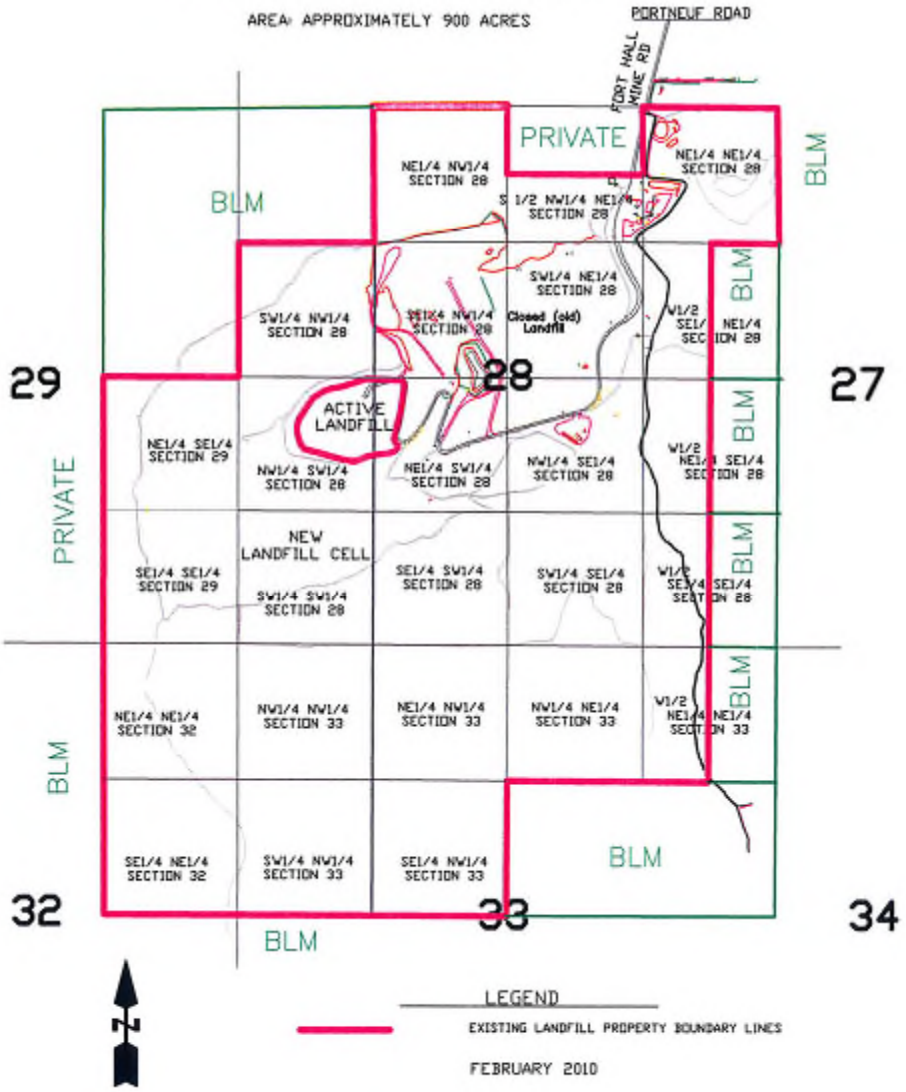
Thomas W. Mullican
Environmental Hydrogeologist
444 Hospital Way, #300
Pocatello, ID 83201
Tel. 208-236-6160
Fax. 208-236-6168
E-mail Thomas.Mullican@deq.idaho.gov

FILE:
PROGRAM SOLID WASTE
COUNTY BANNOCK
SUBJECT FORT HALL MINE LANDFILL

BANNOCK COUNTY LANDFILL PROPERTY

LOCATED IN SECTIONS 28, 29, 32 AND 33
TOWNSHIP 7 SOUTH, RANGE 35 EAST, B.M.

AREA: APPROXIMATELY 900 ACRES



FEBRUARY 2010

Southeastern District Health Department

Healthy People in Healthy Communities

January 3, 2011

11-01

Bannock County Solid Waste Department
Therese Marchetti
1500 N. Fort Hall Mine Road
Pocatello, ID 83204

Dear Therese:

This letter is to inform you that the operations plan that was submitted for recertification (dated October 2010) appears adequate for recertification under the Idaho Solid Waste Facilities Act. Thank you for making the changes to the document that we had discussed concerning the alternate cover.

If you have any questions, please feel free to contact me.

Sincerely,

Steve Pew, REHS
Environmental Health Director

C: Ed Marugg, REHS
District Director

1901 Alvin Ricken Drive * Pocatello, Idaho 83201 * Phone: (208) 233-9080 * Fax: (208) 234-7169

Southeastern Idaho Public Health

13-16

November 21, 2013

Therese Marchetti
Solid Waste Manager
Fort Hall Mine Landfill
1500 N Fort Hall Mine Rd.
Pocatello, ID 83204

Dear Therese:

Southeastern Idaho Public Health has completed the review of the Fort Hall Mine Landfill Operations Plan dated November 2013. Bannock County has completed the required public comment period and no comments were received regarding the plan. As written the plan is approved and recertified for another 3 years.

Should you have any questions or comments, please feel free to contact me.

Sincerely,

Steve Pew, REHS
Environmental Health Director

C: Maggie Mann
District Director

Dan Copeland
Director, Bannock County Public Works

Tom Mullican
DEQ

Southeastern Idaho Public Health

15-10

November 30, 2015

Kiel Burmester
Bannock County Landfill
1500 N. Fort Hall Mine Road
Pocatello, ID 83204

Dear Kiel:

Southeastern Idaho Public Health and completed the review of the Fort Hall Mine Landfill Operations Plan. Thank you for incorporating changes that were asked for and completing the public comment period. The plan is now recertified for three more years.

Should you have any questions or comments, please feel free to contact me.

Sincerely,

Steve Pew, REHS
Environmental Health Director

C: Maggie Mann
District Director

Ralph Oborn
DEQ

Dan Copeland
Bannock County

Bannock County Solid Waste
1500 N. Fort Hall Mine Road
Pocatello, Idaho 83204
Ph. (208) 236-0607

February 5, 2018

Steve Pew
Environmental Health Director
Southeastern Idaho Public Health Department
1901 Alvin Ricken Drive
Pocatello, Id. 83201
208-239-5257

Subject: Addendum #1 to Fort Hall Mine Landfill Operations Plan 2015

Dear Steve,

Fort Hall Mine Landfill would like to submit three changes to currently approved 2015 operations plan for your approval.

1. **Composting**

Our composting project is a joint venture with the City of Pocatello and has been a great way to recycle and reuse waste at the landfill. Due to lack off sales on compost we are receiving more compostable material than we are selling and our composting area is getting full to capacity. Fort Hall Mine Landfill would like to reuse this product as a cover material when sales are low to free up space in composting area. Compost used as cover material will save air space by reusing and repurposing a waste that would normally be placed in the landfill. This cover material will be a topsoil material that will limit vectors and have fire break capabilities.

2. **Petroleum Contaminated Soil**

a. **Applicable Regulations**

i. **Title 40: Protection of Environment; Part 261—Identification and Listing of Hazardous Waste; 261.24, Toxicity Characteristic; and 261.4 Exclusions**

Petroleum contaminated soil (PCS) may result from cleanup of a leaking petroleum storage tank or from cleanup of accidental releases. Soil contaminated with petroleum may contain constituents significant enough to be classified as a hazardous waste under criteria of 40 CFR 261.24. To avoid classifying media and debris contaminated by accidental leaks or releases, the EPA has approved an exemption from RCRA hazardous waste requirements under 40 CFR 261.4(b)(10). This section states, in part:

(b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:

(10) Petroleum contaminated media and debris that fail the test for Toxicity Characteristics of Section 261.4 (Hazardous Waste Codes D018 through D043 only) and are subject to the corrective action under part 280 of this chapter.

b. How Bannock County Landfill Fulfills Requirements

i. Landfill Acceptance Policy

On a case-by-case basis, the Landfill will accept petroleum-contaminated soil (PCS) from cleanups or other events if the PCS qualifies as a non-hazardous waste under the exemption provided in 40 CFR 261.4(b)(10). Laboratory test results proving this qualification must be submitted to the Bannock County Solid Waste Management Department for approval prior to waste acceptance. Bannock County's PCS Acceptance Procedure, provided attachment is subject to change without notice and the Landfill reserves the right to require additional testing prior to disposal of PCS or to rejecting any PCS waste that the Landfill determines may potentially pose an unreasonable risk or environmental concern to Landfill operations.

ii. Acceptance Procedure

The acceptance procedure for PCS is as follows:

1) Before PCS is delivered to the Landfill, prior written notification must be given to the Solid Waste Management Department. Notification shall include test results from a State of Idaho-approved laboratory, location of the PCS, and quantity of material.
2) Unacceptable PCS will not be accepted, and owners/transporters will be referred to DEQ for further guidance. Unacceptable PCS conditions include, but are not limited to the following:

    a. PCS that contains any RCRA-listed hazardous material that is not exempted by 40 CFR 261.4
    b. PCS that poses a health and/or safety risk to personnel at the Landfill
    c. PCS that contains "free product" or is in a slurry form (see Liquid Waste Disposal)

3) All samples must be analyzed in a State of Idaho-approved laboratory using test methods approved by EPA and DEQ including, but not limited to: benzene, toluene, ethylbenzene, and total xylenes (BTEX); and, toxicity characteristic leaching procedure (TCLP)-metals, volatiles; and pesticides. Sample methods shall be in accordance with EPA procedures and are subject to review and approval by the Landfill. The amount of sampling required will be determined on a case-by-case basis by the Bannock County Solid Waste Management Department. The burden of proof that PCS material is acceptable for final disposal falls to the generator of the waste material as prescribed by EPA regulations.

4) Representative samples for testing shall be collected by a qualified professional in the field of sampling, testing, removal, handling, and characterization of PCS. Depending on the situation and factors surrounding the generation of the PCS, the Landfill may require certification of an Idaho-registered Professional Geologist (P.G.), a Professional Engineer (P.E.), or other professional with the proper qualifications.

5) PCS that does not meet the criteria for a hazardous waste as stated in 40 CFR 261.24, and is in conformance with items 1. through 4. above, may be accepted for final disposal at the Landfill.

    a. PCS accepted for final disposal at the Landfill shall be used as daily cover material and worked into existing soil cover on the working face of the current operating cell. Accepted

PCS shall not be stocked-pilled for any significant length of time prior to being used as cover.

6) This program refers only to PCS. Under no circumstances will this program be adapted to other hazardous substances.

3. Sump Waste

a. Applicable Regulations

i. Title 40: Protection of Environment; Part 261—Identification and Listing of Hazardous Waste; 261.24, Toxicity Characteristic; and 261.4 Exclusions

If the sump is associated with engine washing or degreasing processes, used oil or used antifreeze spills or disposal, or the use or spilling of hazardous chemicals/ materials, or is located in an area where there are no controls on who has access to the sump, the knowledge of process nonhazardous determination is not allowed. In this case, a sample of the sump waste may have to be submitted to a laboratory for chemical analysis.

Chemical analysis is generally used for determining the following hazardous waste characteristics:

Flash point to determine ignitability
pH to determine corrosivity
Toxicity Characteristic Leaching Procedure (TCLP) to determine toxicity
If pesticides are associated with the sump, a pesticide scan test also is required.

Preliminary screening tests, which tend to be less expensive, may be used as part of the determination. If the results reveal concentrations of total metals in excess of TCLP levels, however, additional samples and analyses for the TCLP level of the specific metals involved may be necessary to determine if the sump waste is hazardous.

How Bannock County Landfill Fulfills Requirements

i. Landfill Acceptance Policy

On a case-by-case basis, the Landfill will accept Sump Waste that qualifies as a non-hazardous waste under the exemption provided in 40 CFR 261.4(b)(10). Laboratory test results proving this qualification must be submitted to the Bannock County Solid Waste Management Department for approval prior to waste acceptance. Bannock County's Sump Waste Acceptance Procedure, provided attachment is subject to change without notice and the Landfill reserves the right to require additional testing prior to disposal of Sump Waste or to rejecting any Sump Waste that the Landfill determines may potentially pose an unreasonable risk or environmental concern to Landfill operations.

ii. Acceptance Procedure

The acceptance procedure for Sump Waste is as follows:

1) Before Sump Waste is delivered to the Landfill, prior written notification must be given to the Solid Waste Management Department. Notification shall include test results from a State of Idaho-approved laboratory,

location of the Sump Waste, and quantity of material. No out-of-county Sump Waste will be accepted by the Landfill.

2) Unacceptable Sump Waste will not be accepted, and owners/transporters will be referred to DEQ for further guidance. Unacceptable Sump Waste conditions include, but are not limited to the following:

   a. Sump Waste that contains any RCRA-listed hazardous material that is not exempted by 40 CFR 261.4
   b. Sump Waste that poses a health and/or safety risk to personnel at the Landfill
   c. Sump Waste that contains "free product" or is in a slurry form (see Liquid Waste Disposal)

3) All samples must be analyzed in a State of Idaho-approved laboratory using test methods approved by EPA and DEQ including, but not limited to: benzene, toluene, ethylbenzene, and total xylenes (BTEX); and, toxicity characteristic leaching procedure (TCLP)-metals, volatiles; and pesticides. Sample methods shall be in accordance with EPA procedures and are subject to review and approval by the Landfill. The amount of sampling required will be determined on a case-by-case basis by the Bannock County Waste Management Department. The burden of proof that Sump Waste material is acceptable for final disposal falls to the generator of the waste material as prescribed by EPA regulations.

4) Representative samples for testing shall be collected by a qualified professional in the field of sampling, testing, removal, handling, and characterization of Sump Waste.

5) Sump Waste that does not meet the criteria for a hazardous waste as stated in 40 CFR 261.24, and is in conformance with items 1. through 4. above, may be accepted for final disposal at the Landfill.

   a. Sump Waste accepted for final disposal at the Landfill shall be used as daily cover material and worked into existing soil cover on the working face of the current operating cell. Accepted Sump Waste shall not be stocked-pilled for any significant length of time prior to being used as cover.

The following policies are attached:

- Compost operations plan language change
- Petroleum Contaminated Soils Policy
- Sump Waste Policy

If you have any questions, please contact me at (208)236-7408. As always your assistance is greatly appreciated.

Thanks.

Kiel Burmester
Assistant Director
Bannock County Public Works

Southeastern Idaho Public Health

18-01

February 27, 2018

Kiel Burmester
Bannock County Solid Waste
1500 N. Fort Hall Mine Road
Pocatello, ID 83204

Dear Mr. Burmester:

This letter is in regard to your proposed Addendum #1 to the Fort Hall Mine Landfill Operations Plan dated February 5, 2018. As submitted the addendum is approved. Please incorporate the revision into the operations plan when it is submitted for recertification.

Sincerely,

Steve Pew, REHS
Environmental Health Director

C: Maggie Mann
District Director

Mike Reas, REHS

Ralph Oborn, DEQ

Southeastern
Idaho Public Health

December 7, 2018

Kiel Burmester
Bannock County Solid Waste
1500 N. Fort Hall Mine Road
Pocatello, ID 83204

Dear Mr. Burmester:

This letter is in regard to the Fort Hall Mine Landfill Operations Plan that was submitted for recertification. As submitted the plan is approved for three more years.

Should you have any questions, please feel free to contact me.

Sincerely,

Mike Reas, REHS
Environmental Health Specialist

C: Maggie Mann
District Director

Steve Pew, REHS

Amanda Hardy, DEQ

Bannock County • 1901 Alvin Ricken Dr. • Pocatello, Idaho 83201 • Phone 208.233.9080 • Fax 208.234.7169
siphidaho.org • twitter.com/siphidaho • facebook.com/siphidaho
Every day, in every way, empowering & improving health!

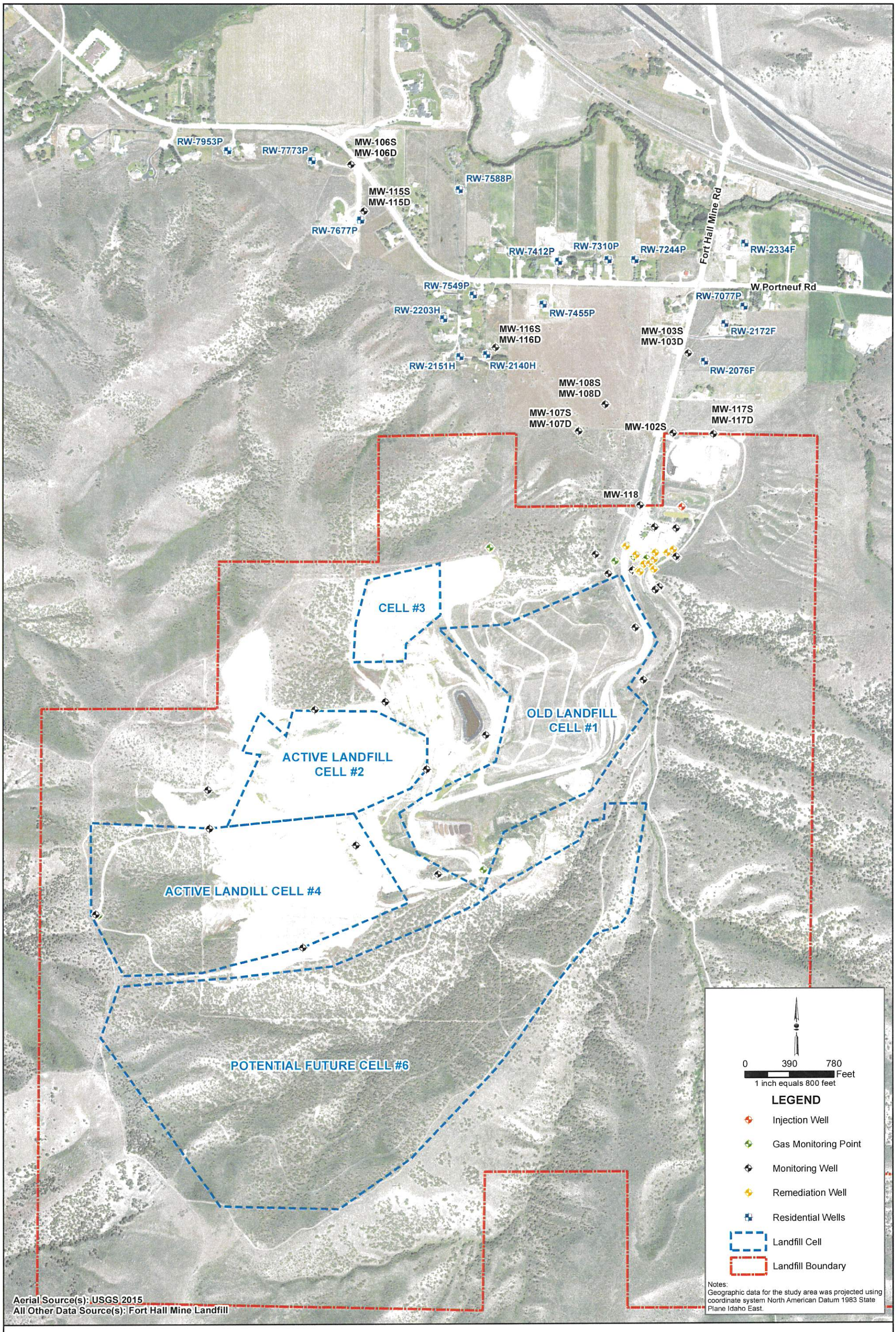


FIGURE 1-2
OFFSITE DOMESTIC WELLS AND LANDFILL MONITORING WELLS
FORT HALL MINE LANDFILL OFFSITE GROUNDWATER MONITORING WORK PLAN
BANNOCK COUNTY, IDAHO

0 400 800 Feet

1 inch equals 800 feet

LEGEND

- Injection Well
- Gas Monitoring Point
- Monitoring Well
- Remediation Well
- Landfill Cell
- Landfill Boundary

Notes:
Geographic data for the study area was projected using coordinate system North American Datum 1983 State Plane Idaho East.

Fort Hall Mine Rd
W Portneuf Rd
MW-103S
MW-103D
MW-117D
MW-117S
MW-102S
DETAIL A
GMP-4
CELL #3
Cell #4 Leachate Pond
Cell #2 Leachate Pond
MW-109D
MW-109S
MW-9
MW-8
OLD LANDFILL CELL #1
MW-7
ACTIVE LANDFILL CELL #2
MW-13
MW-12
MW-5A
MW-6A
MW-4
GMP-6
ACTIVE LANDILL CELL #4
MW-4A
GMP-5R
MW-3A
POTENTIAL FUTURE CELL #6

Aerial Source(s): USGS 2015
All Other Data Source(s): Fort Hall Mine Landfill

DETAIL A

0 150 300 Feet

1 inch = 300 feet

MW-118
INJ-1R
MW-120S
MW-120D
MW-119S
MW-119D
RW-2
MW-121
RW-3
RW-4
RW-5
RW-10
MW-113S
MW-113D
GMP-3
GMP-2
GMP-1
MW-112S
MW-112M
MW-112D
RW-1
MW-111D
MW-111S
MW-105S
MW-105D
RW-9R
RW-16
RW-15
RW-17
MW-1
MW-101S
RW-9
MW-104S
MW-104D
MW-110D
MW-110S

FIGURE 2

LANDFILL SITE MAP

FORT HALL MINE LANDFILL
BANNOCK COUNTY, IDAHO

ATTACHMENT B: OPERATIONS INSPECTION FORM

Stormwater Industrial Monthly Routine Facility Inspection Report & Monthly Sub-Tile D Inspection

General Information			
Facility Name	Bannock County Landfill		
NPDES Tracking No.	IDR05C119		
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information	208-236-0607		
Inspector's Qualifications	Supervision – Bannock County Landfill Certified Construction Site Erosion and Sediment Control Requirements		

Weather Information

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snow ❑ High Winds
❑ Other: Temperature:

Have any previously unidentified discharges of pollutants occurred since the last inspection? ❑Yes ❑No
If yes, describe:

Are there any discharges occurring at the time of inspection? ❑Yes ❑No
If yes, describe:

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	Structural Control Measure	**Control Measure is Operating Effectively?**	**If No, In Need of Maintenance, Repair, or Replacement?**	**Corrective Action Needed and Notes** (identify needed maintenance and repairs, or any failed control measures that need replacement)
1	**Retention Pond**	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
2	**Retention Pond**	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
3	**All Pipe Lines**	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
4	**All Inlets Along Pipe Lines**	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
5	**All Dissipaters**	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
6	**Leachate Pond**	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
7		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
8		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
9		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
10		❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

Areas of Industrial Materials or Activities exposed to stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	**Material loading/**unloading **and storage areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
2	**Equipment operations and maintenance areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
3	**Fueling areas – Bulk storage area**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
4	**Outdoor vehicle and equipment washing areas**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
5	**Waste handling and disposal areas- erosion, exposed refuse, ponded water, leachate seeps**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
6	**Erodible areas – erosion, vegetation, infiltration ability & debris**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
7	**Fire Hydrant**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
8	**Salt storage piles or pile containing salt**	❑Yes ❑No ❑ N/A	❑Yes ❑No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
9	**Dust generation and vehicle tracking**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
10	**Ditch Lines**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
11	**Slope Erosion**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
12	**Final Cover – cracks, erosion, leachate seeps, lack or excessive vegetation, settlement, ponded water**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
	Area/Activity	**Inspected?**	**Controls Adequate (appropriate, effective, and operating)?**	**Corrective Action Needed and Notes**
13	**Groundwater Monitoring Wells – piezometers, access to well, security, well apparatus condition**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
14	**Storage Facilities**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
15	**Haul & Access Roads – Safety & directional routing, condition, excess dust, passable width**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
16	**Perimeter & Debris Fence – condition, debris**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
17	**Survey Marker Integrity**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
18	**Emergency Equipment – fire extinguishers, methane meters, telephones, posted list of emergency telephone numbers, first aid kits, fire alarm system**	❑Yes ❑No ❑ N/A	❑Yes ❑No	
19		❑Yes ❑No ❑ N/A	❑Yes ❑No	
20		❑Yes ❑No ❑ N/A	❑Yes ❑No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
21		❑Yes ❑No ❑ N/A	❑Yes ❑No	
22		❑Yes ❑No ❑ N/A	❑Yes ❑No	
23		❑Yes ❑No ❑ N/A	❑Yes ❑No	
24		❑Yes ❑No ❑ N/A	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the 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."

Print name and title: _____

Signature:_____Date:_____

ATTACHMENT C: DAILY INSPECTION FORM

A	B	MC
License #		

DATE:
TIME:
EMPLOYEE

	Antifreeze		Construction/misc		Mattress
	Asphalt		Dirt		Oil
	Auto Parts		Furniture		Paint/cans
	Battery		Household Waste		Pesticides
	Cardboard		Liquids/misc		Sheetrock
	Compost		Lumber		Solvents
	Concrete		Manure		Tires

	Other	

Follow Up Procedures: _____

_____

_____

ATTACHMENT D: HHW VOLUNTEER OUTLINE & SAFETY GUIDELINES

Household Hazardous Waste Collection
Volunteer Orientation Outline/Safety Guidelines

Safety is number 1 priority. Be cautious at ALL times.
No smoking, eating or drinking while working!

Know your assigned job duties and ask questions if you do not understand something. We are dealing with Household Hazardous Wastes. Paint, oil and latex (separated), Used oil, antifreeze, pesticides, unusual materials like Mercury, acid, etc.

- **Paint is the main item.**

  Oil based paint is put into a 50 gallon barrel.

  Pesticides, acids, hazardous chemicals should be placed in the assigned areas.
- **Bannock County Landfill Employees are in charge.**

  We will make work assignments with the assistance of the Bannock County Deputy.
- **Protective clothing is required. Coveralls, latex gloves, and safety glasses are required at all times.**

  When you take a break, remove all safety gear.

  Wash hands thoroughly before eating, drinking or smoking.

  Take breaks as needed.

  If odors or heat begin to bother you, let a landfill employee know at once.

  Clean up spills as soon as possible with absorbent material. Place absorbent material in garbage.

  Watch levels in the 50 gallon barrels. Do not overfill them.
- **When unloading vehicles watch for anything out of the ordinary or unusual such as Leaking or unmarked containers etc.**

  Do not unload these items without getting the approval of a Landfill Employee.
- **Do NOT mix any chemicals together.**
- **Be sure you are aware of the locations of the fire extinguishers.**
- **Emergency shower & eye wash stations can be found in the Hazardous Waste Building and the Main Office Building.**
- **In case of emergency follow the emergency exit directions.**
  Stay away from the area until a supervisor informs you it is safe to return.

Do not be afraid to ask questions. It is better to ask, than to have an emergency!

I have received a Safety Orientation about handling household hazardous wastes. I have read the above requirements and agree to comply with the instructions on this sheet and to protect myself at all times.

PRINT NAME: _____

SIGNATURE: _____ **DATE:** _____

ATTACHMENT E: REFRIGERATION (CFC) REMOVAL FORM

REFRIGERANT REMOVAL TRACKING/DISPOSAL FORM - REQUIRED FOR EVERY UNIT

Date Month/Day/Year	Unit Type Codes REF = Refrigerator FZR = Freezer RAC = Room Aircond OTH = Other types	Description and or Serial Number	Gas Type	Tank Wt Before	Tank Wt After	Weight Recovered	Tech Initials	Comments Disposal/ condensor unit

ATTACHMENT F: LANDFILL GAS MIGRATION MONITORING PROBES & GAS COLLECTION WELLS

Fort Hall Mine Landfill

Landfill Gas Migration Monitoring Probes

`.

PURPOSE

There are six landfill gas migration monitoring probes installed at locations on the perimeter of the Ft. Hall Mine Landfill facility. Landfill gas migration probes are installed to provide a means to detect the movement of landfill gas (LFG) into facility structures or off-site, and to comply with regulatory requirements,

By providing advance warning of the movement of potentially explosive gas into areas habituated by landfill employees and users, the installation of perimeter monitoring probes complements stationary explosive gas monitoring devices installed in facility structures.

PROBE LOCATIONS

The landfill complex is relatively isolated from residential areas; distance and geological barriers provide substantial protection against off-site migration of LFG into areas of concern.. There are no residential areas within two miles to the north and east of the landfill. Residential areas to the west in the Mink Creek drainage ***are*** several thousand feet distant and are separated from the landfill property by a large ridge and several small canyons. Residential areas nearest the landfill to the north constitute the highest area of concern relative to off-site migration.

As indicated on the attached Site Plan, three probes (GMP-1, 2, and 3) are slightly up gradient from the landfill administration area. A fourth (GMP-4) is located on the ridge west of the administration area. These probes will be placed in a relatively straight line generally east to west and will provide early detection in case of LFG migration toward structures in the administration area or residential areas further to the north.

Steep terrain limits locations for probe Installation In areas south, west and east of the landfill complex. Two additional probes, as indicated on the map are located in these directions respectively. GMP-5 was installed near MW-12 west of Phase 1. GMP-6 was installed to the south of the landfill complex near MW-4.

Following Installation, LFG migration probes were located using standard surveying or satellite triangulation with GPS equipment.

SAMPLING FREQUENCIES

Probes will be sampled initially for combustible gas (explosive gas) concentration. Barometric pressure and ambient air temperature will be measured during each monitoring event. All sampling results will be recorded and filed in the landfill "Operating Record".

An indicator capable of measuring percent of the lower explosive limit (LEL.) of combustible gases present and concentrations of carbon monoxide, hydrogen sulfide and oxygen will be used for field sampling. Manufacturer's procedures for sampling and instrument calibration will be followed.

Measurements were taken at each probe twice daily. Immediately following probe installation for a period of one *week.* Since no gas or very low concentrations were detected following one week of intensive sampling, a monitoring frequency of quarterly thereafter was implemented in accordance with 40 CFR 258.23 (b).

LEGEND:

- PAVED ROAD
- GRAVEL ROAD
- H——H 12" HDPE HEADER LINE
- C——C 6" HDPE COLLECTOR LINE
- L——L 4" HDPE LATERAL LINE
- H–W 6" HDPE HORIZONTAL WELL
- LANDFILL CELL LINER OR LIMITS
- PERMANENT LFG WELL LOCATION
- TEMPORARY LFG WELL LOCATION

N W E S

150 0 150 300

SCALE
1 IN = 300 FT

CELL 1 LIMITS
CELL 2 LINER
CELL 4 LINER
MAIN OFFICE
SHOP BUILDING
LOWER SUMP
LFGE BUILDING
CELL 1
CELL 2
CELL 4
CELL 2 & 4 ACCESS RD
COMPOST AREA

O-10-80-400 O-10-80-300 O-10-80-200 O-10-80-100
O-10-70-400 O-10-70-300
O-10-60-400 O-10-60-300 O-10-60-200
O-10-50-200
O-10-40-200 O-10-40-100 O-10-40-50 O-10-40-40
O-10-30-200 O-10-30-100
O-10-20-200 O-10-20-100
O-10-10-100

A-10-25T-500T A-10-25T-400T A-10-25T-300T A-10-25T-200T A-10-25T-100T A-10-25T-50
A-10-23T-600T A-10-23T-500T A-10-23T-400T A-10-23T-300T A-10-23T-200T A-10-23T-100T
A-20-40-400 A-20-40-300 A-20-40-200 A-20-40-100
A-20-30-300 A-20-30-200 A-20-30-100
A-10-30-100 A-10-30-200
A-10-20-100 A-10-20-200 A-20-20-100 A-20-20-200
A-10-10-100

C4-H-A C4-H-B C4-H-C C4-H-D H–W M–H

FILE NAME:	2018 LFG Operations Map.dwg
PROJECT #:	A020(167)
DRAWING DATE:	6/18/2018
DRAWING SCALE:	1:1
DESIGNED	A. THOMAS
CHECKED:	J. BARTON
DETAILED:	A. THOMAS
CHECKED:	J. BARTON

HORIZONTAL SCALE: 1"=300' (11X16 ONLY)

VERTICAL SCALE: N.T.S.

BANNOCK COUNTY SOLID WASTE DEPARTMENT

2018 LFG WELL MAP

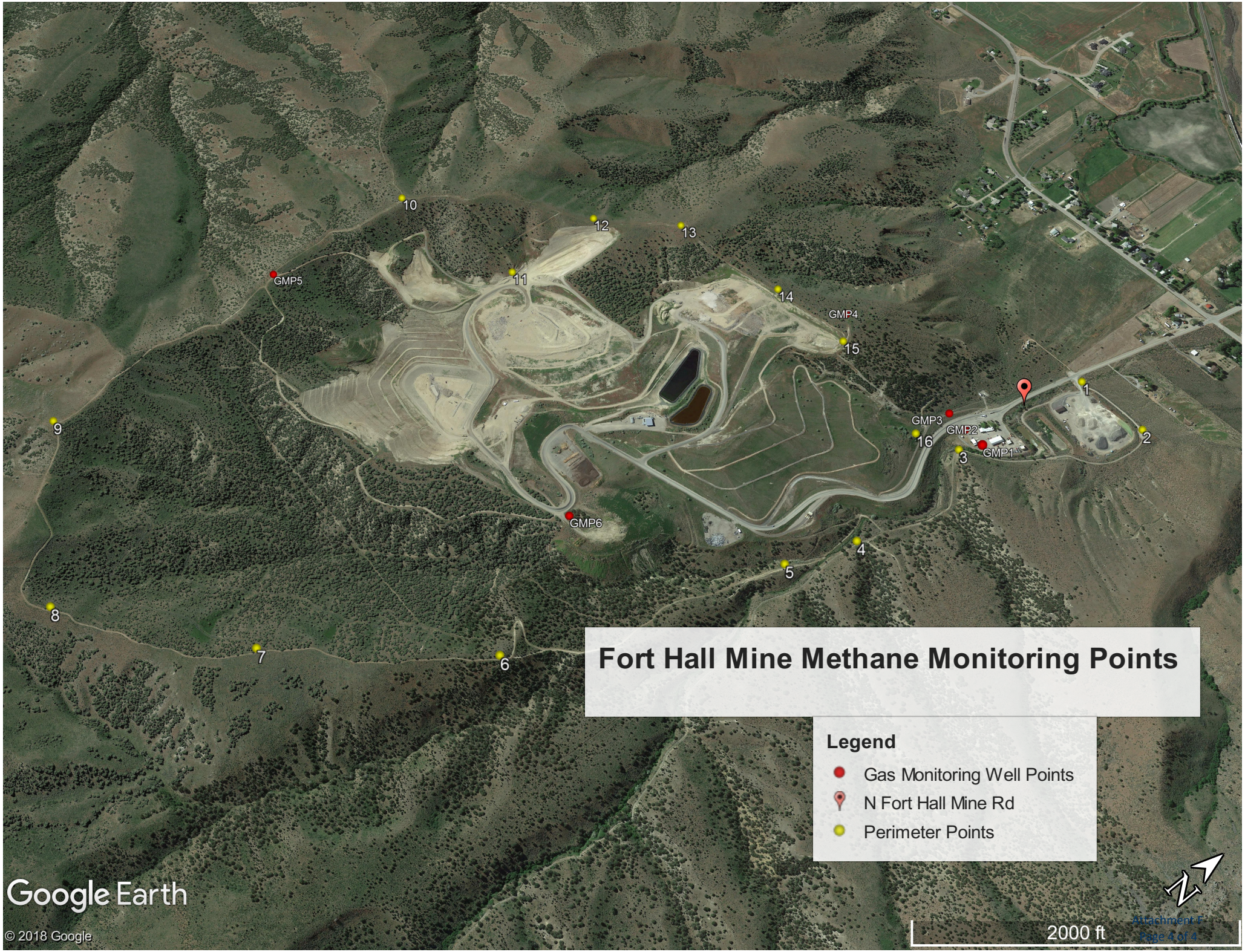
PARAGON Consulting, Inc.
FREIBURGER-BARTON-KAES

157 W. 4TH STREET
KUNA, ID 83634
PHONE: (208) 922-9138
FAX: (208) 922-9168

NO.	DATE	BY	REVISIONS DESCRIPTION
1			
2			
3			
4			
5			
6			

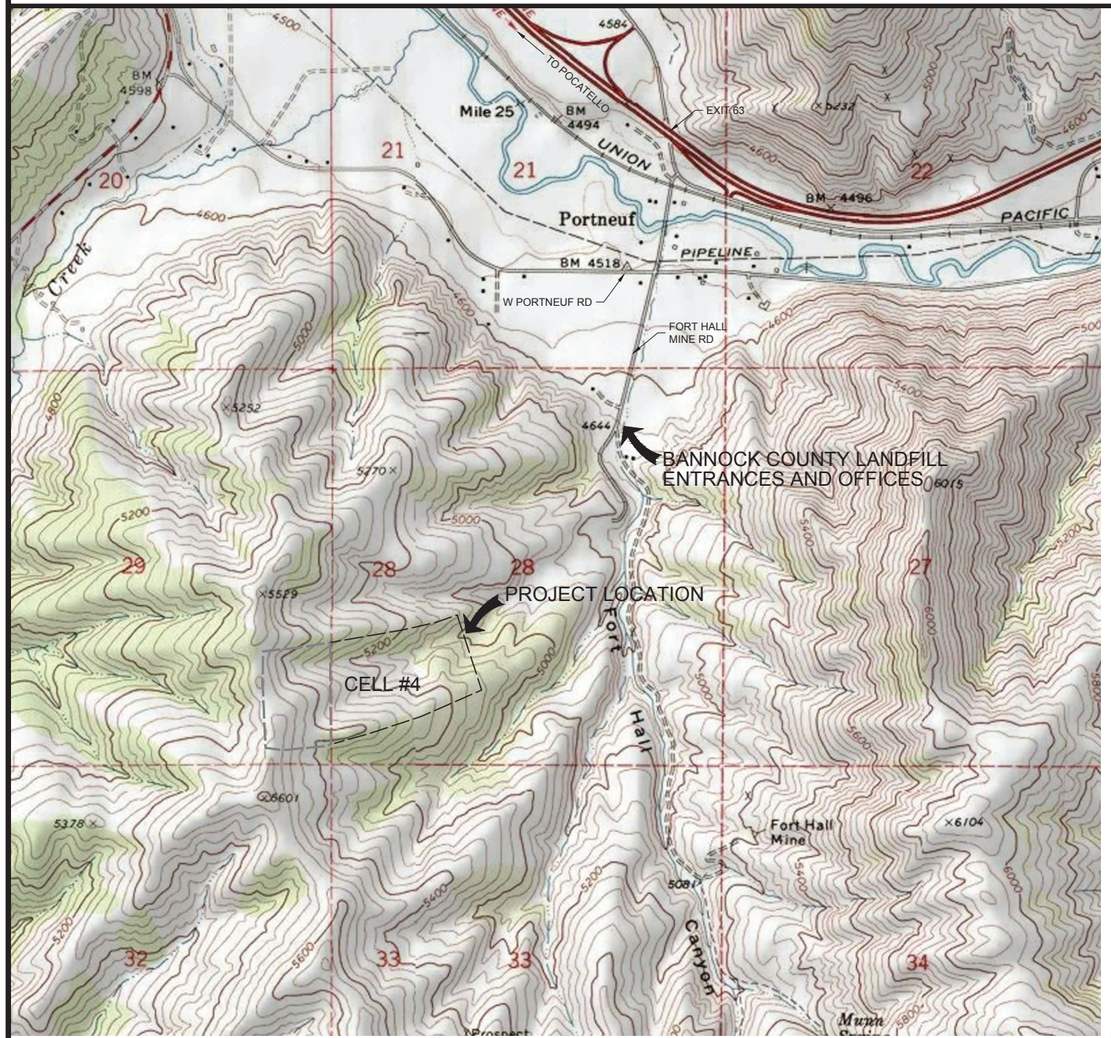
SHEET NO. 1

P:\Projects\BCSWD-001-18\CAD\2018 LFG Operations Map


GMP5
10
12
13
11
14
GMP4
15
1
GMP3
GMP2
16
GMP1
3
2
9
GMP6
4
5
8
7
6
Fort Hall Mine Methane Monitoring Points
Legend
Gas Monitoring Well Points
N Fort Hall Mine Rd
Perimeter Points
Google Earth
© 2018 Google
2000 ft

ATTACHMENT G: CURRENT ENGINEERING DESIGN

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

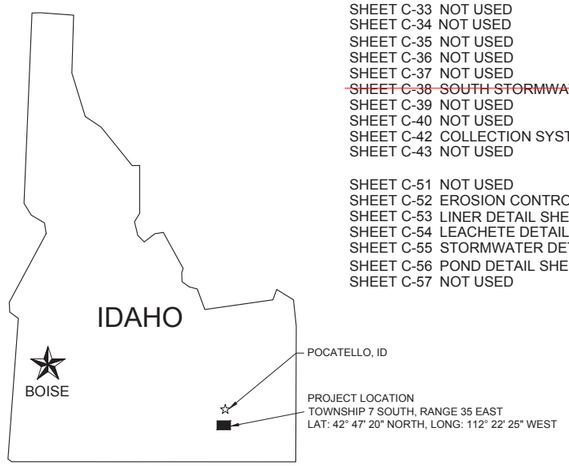


SITE LOCATION

0 2000 FEET

SCALE

INDEX OF DRAWINGS



AS-BUILT
9/9/16

PROFESSIONAL ENGINEER REGISTERED 9/9/2016 14952 STATE OF IDAHO TYSON L. KNUDSEN

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 G1 AB.dwg Billings, Kyle 9/9/16

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Changed sheet titles due to profile changes	JW	6/1/09
2	As-Builts	GRKB	2/12/13
3	Revsions - 2014 Topo	GRKB	3/19/2015
4	-	-	MO/DAY/YR
5	-	-	MO/DAY/YR

DES. BY JW
DRG. BY DEO
CHK. BY JW
DATE CREATED 6/3/04
JOB No. 2523048

CASCADE EARTH SCIENCES
A Valmont Industries Company
CALL 1-800-728-8322
FOR NATIONAL OFFICE LOCATIONS

VICINITY MAP & SHEET INDEX

LANDFILL EXPANSION

SHEET G-1

GENERAL

EXISTING EQUIPMENT OR MATERIALS TO BE REMOVED	
TO BE BUILT FOR FUTURE REMOVAL	
NEW FACILITIES (SOLID)	
EXISTING	
NEW BACKGROUND	
PROPERTY LINE, PHANTOM LINE OR MATCH LINE	
CENTERLINE	
HIDDEN LINE OR FUTURE IMPROVEMENTS	
WATER SURFACE	

@	AT
& OR ℄	AND
ø	ROUND OR DIAMETER
∠	ANGLE
℄	CENTER LINE
ℙ	PLATE OR PROPERTY LINE
(2)	NOTE DESIGNATION
W/	WITH
W/O	WITHOUT

CIVIL SYMBOLS and LEGEND

	NATURAL GROUND OR GRADE
	GRANULAR MATERIAL SUCH AS CRUSHED ROCK OR GRAVEL
	HDPE IN PLAN
	EXISTING PAVEMENT IN PLAN
	PAVEMENT IN PLAN
	GRAVEL IN PLAN
	CONCRETE IN PLAN
	RAILROAD
110	MAJOR CONTOURS
	MINOR CONTOURS
110	FINISH GRADE CONTOURS
+ 120.0	EXISTING SPOT ELEVATION
+ 110.50	FINISH GRADE SPOT ELEVATION
× TP 100 B 100	TEST PIT NUMBER BORE HOLE NUMBER
+	NORTHING AND EASTING GRID TICKS

	EDGE OF WATER; FLOWLINE WITH DIRECTIONAL ARROW
3:1	SLOPE (3 HOR. TO 1 VERT.)
	CUT OR FILL SLOPE; ARROWS POINT DOWN SLOPE
	HYDRANT
	BURIED VALVE
MH	MANHOLE
CB	CATCH BASIN
	UTILITY POLE
	SURVEY MONUMENT
	SURVEY CONTROL POINT
	TREES, SHRUBS OR HEDGE
	TREES, SHRUBS OR HEDGE DEMO
N E	COMMONWEALTH PLANE COORDINATE
W	WATER WELL
	SWALE OR DEPRESSION

	CRUSHED ROAD BASE
	CONCRETE
	EARTH NATIVE MATERIAL & FILL
	EXISTING GRAVEL ACCESS ROAD
	TRAPEZOIDAL CANAL
	EXISTING FENCE
	PROPOSED FENCE
12+00 13+00 14+00	NEW TRANSMISSION MAIN/ PIPELINE
	EXISTING PIPELINE
	CELL BOUNDARY
	PRESSURE GAUGE
	AIR/VACUUM RELEASE VALVE
	EXISTING STORM DRAIN
	DRAINAGE INLET
SEE DETAIL 1 C-1	INDICATES DETAIL 1 ON SHEET C-1

AS-BUILT
6/4/15

PROFESSIONAL ENGINEER REGISTERED 9/9/2016 14952 STATE OF IDAHO TYSON L. KNUDSEN

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 G2 AB.dwg Billings, Kyle 6/4/15

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	As-Builts	GRKB	2/12/13
2	Revisions - 2014 Topo	GRKB	3/19/2015
3	-	-	MO/DAY/YR
4	-	-	MO/DAY/YR
5	-	-	MO/DAY/YR

DES. BY JW
DRG. BY DEO
CHK. BY JW
DATE CREATED 01/10/05
JOB No. 2523048

CASCADE EARTH SCIENCES
A Valmont Industries Company
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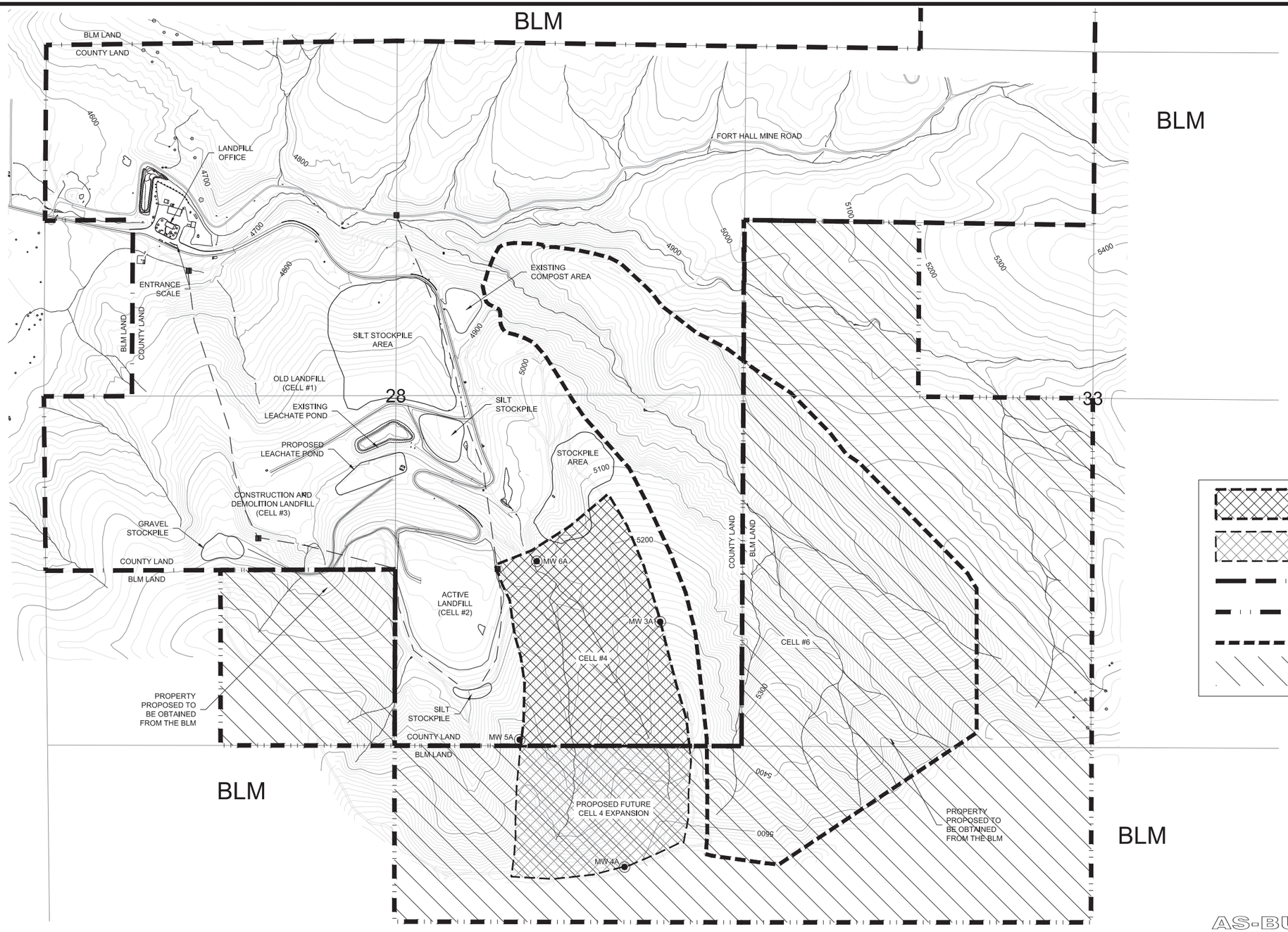
FOR NATIONAL OFFICE LOCATIONS

SYMBOLS AND LEGENDS

LANDFILL EXPANSION PROJECT

SHEET
G-2



AS-BUILT
9/9/16

PROFESSIONAL ENGINEER
REGISTERED
9/9/2016
14952
STATE OF IDAHO
TYSON L. KNUDSEN

TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 G3 AB.dwg Billings, Kyle 9/9/16

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	As-Builts	GRKB	2/12/13
2	Revisions - 2014 Topo	GRKB	3/19/2015
3	-	-	MO/DAY/YR
4	-	-	MO/DAY/YR
5	-	-	MO/DAY/YR

DES. BY JW
DRG. BY DEO/TCE
CHK. BY JW
DATE CREATED 01/11/05
JOB No. 2523048

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A Valmont Industries Company
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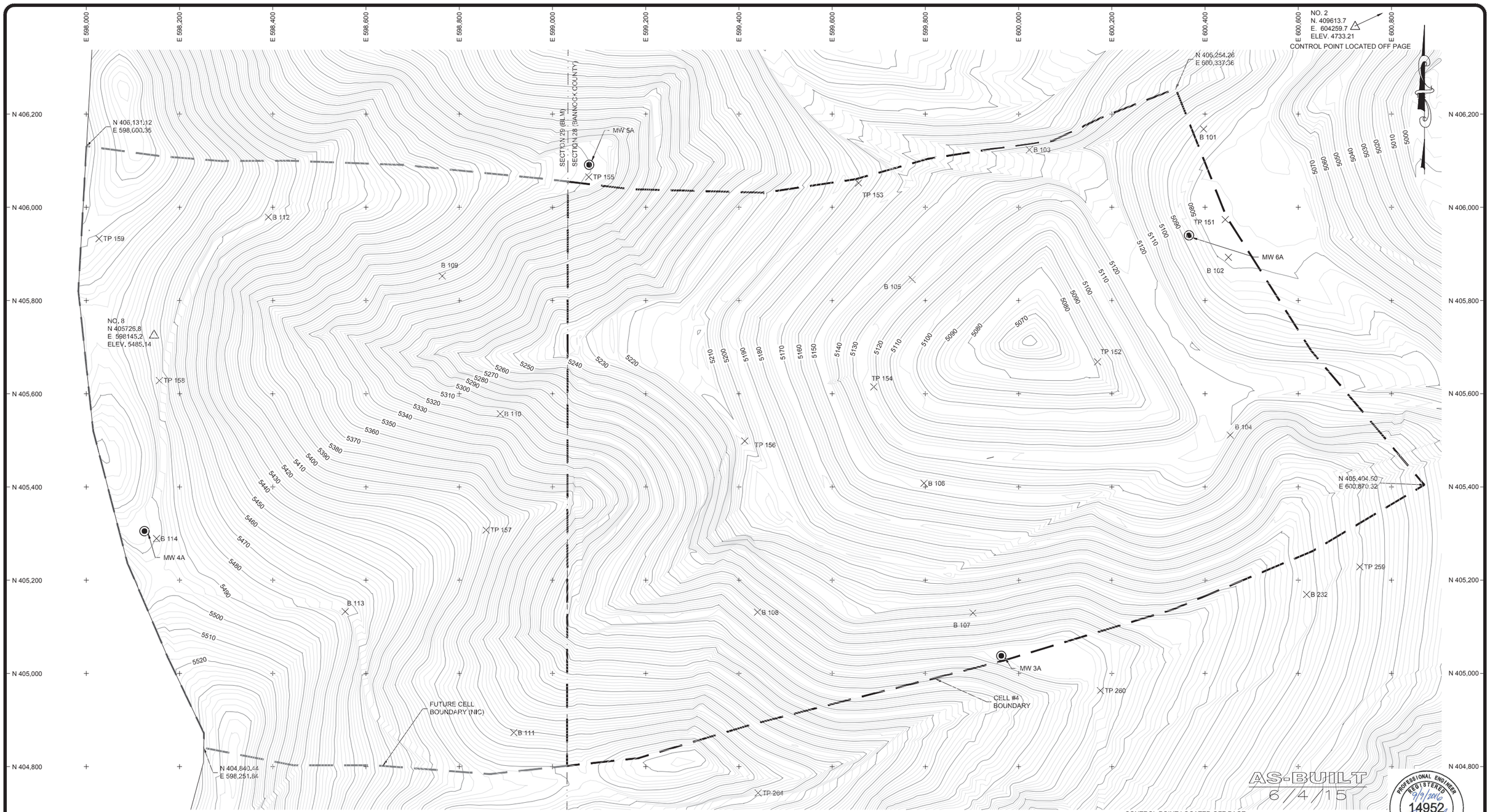
FOR NATIONAL OFFICE LOCATIONS

PROJECT AREA

LANDFILL EXPANSION

SHEET
G-3



TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 C1 AB.dwg Billings, Kyle 6/4/15

PROFESSIONAL ENGINEER REGISTERED 9/9/2016 14952 STATE OF IDAHO TYSON L. KNUDSEN

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Revisions - 2014 Topo	RKB	3/19/2015
2	-	-	MO/DAY/YR
3	-	-	MO/DAY/YR
4	-	-	MO/DAY/YR
5	-	-	MO/DAY/YR

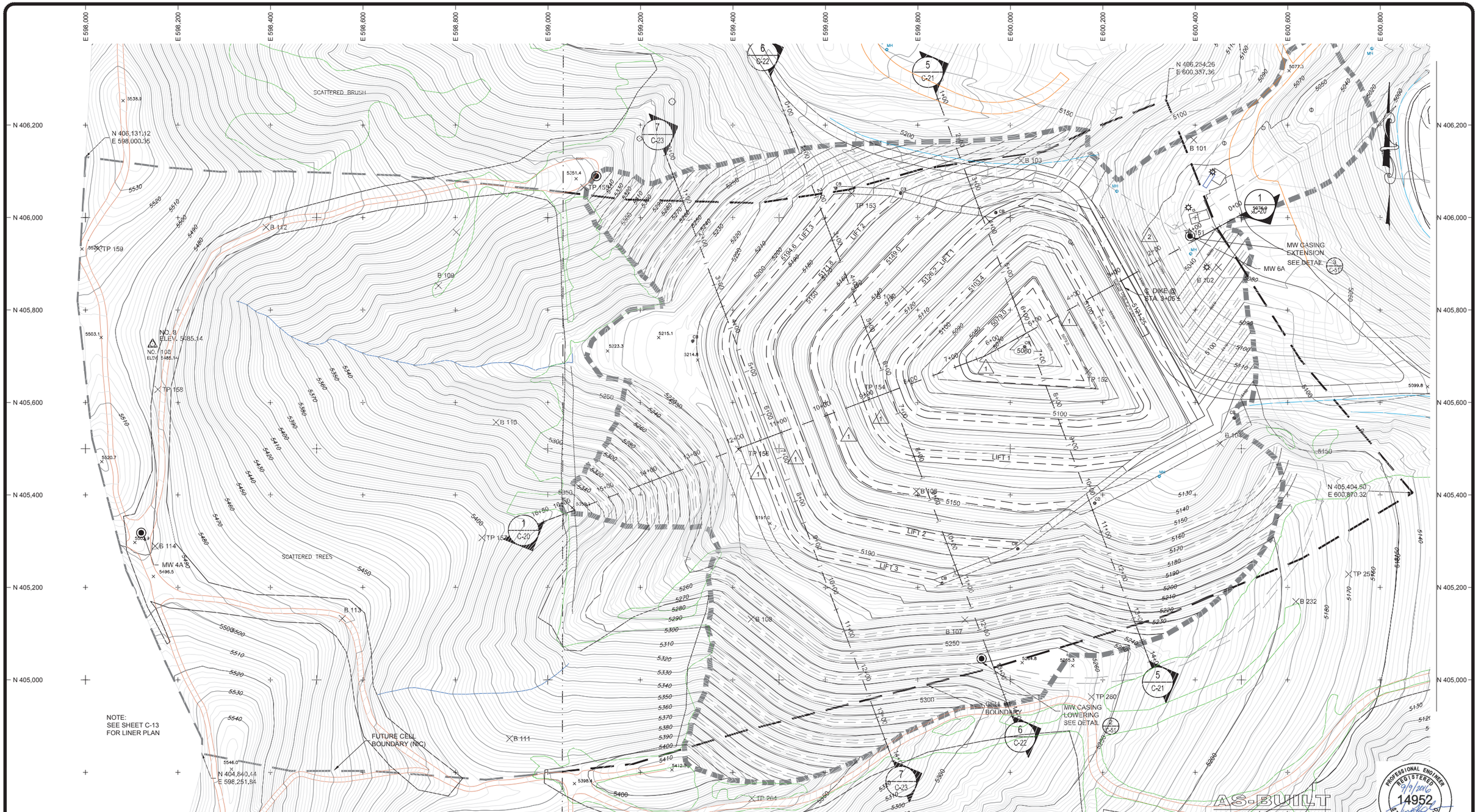
DES. BY TCE
DRG. BY TCE
CHK. BY JHW
DATE CREATED 5/16/05
JOB No. 2523048

CASCADE EARTH SCIENCES
A Valmont Industries Company
CALL 1-800-728-8322
FOR NATIONAL OFFICE LOCATIONS

EXISTING GROUND
CELL 4

LANDFILL EXPANSION

SHEET
C-1



TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002

S:\[WORKING DRAFTING]\2823017 BANNOCK COUNTY\2523048 AS-BUILTS-2016\2523048 C2-7 AB.DWG BILLINGS, KYLE 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION

BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Changed bench locations, sections and grading slopes to 3:1	8TCE	5/12/09
2	Changed exterior dike slope to 1:1, Raised dike to 5121.25	8TCE	7/31/09
3	As-Builts	6RKB	2/12/13
4	Revisions - 2014 Topo	6RKB	3/19/2015
5	-	-	MO/DAY/YR

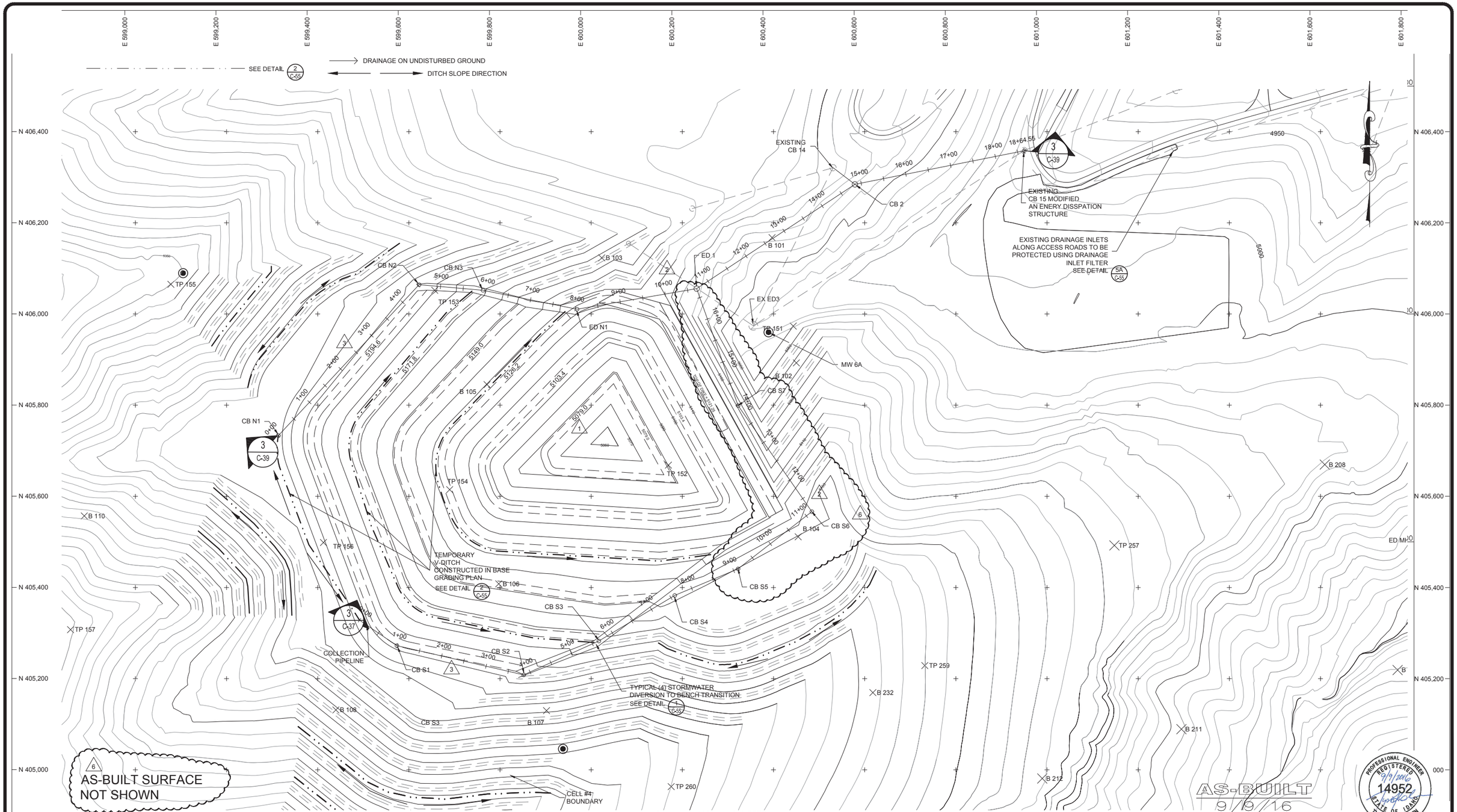
DES. BY 8TCE
DRG. BY 8JSG
CHK. BY JW
DATE CREATED 6/29/07
JOB No. 2523048

CASCADE EARTH SCIENCES
A Valmont Industries Company
CALL 1-800-728-8322
FOR NATIONAL OFFICE LOCATIONS

PHASE 1
BASE GRADING PLAN

LANDFILL EXPANSION

SHEET
C-2



TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002

S:\[WORKING DRAFTING]\2823017 BANNOCK COUNTY\2523048 AS-BUILTS-2016\2523048 C2-7 AB.DWG BILLINGS, KYLE 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION

BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Final grading changed per base grading & section change	8TCE	5/12/09
2	Dike raised to 5121.25, road and stormwater changed	8TCE	7/31/09
3	Stormwater Collection System changed per field verification	8TCE	8/25/09
4	As-Builts	6RKB	2/12/13
5	Revisions - 2014 Topo	6RKB	3/19/2015
6	2016 As-Builts	6RKB	9/9/2016

DES. BY 8TCE
DRG. BY 8JSG
CHK. BY JW
DATE CREATED 6/29/07
JOB No. 2523048

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A Valmont Industries Company
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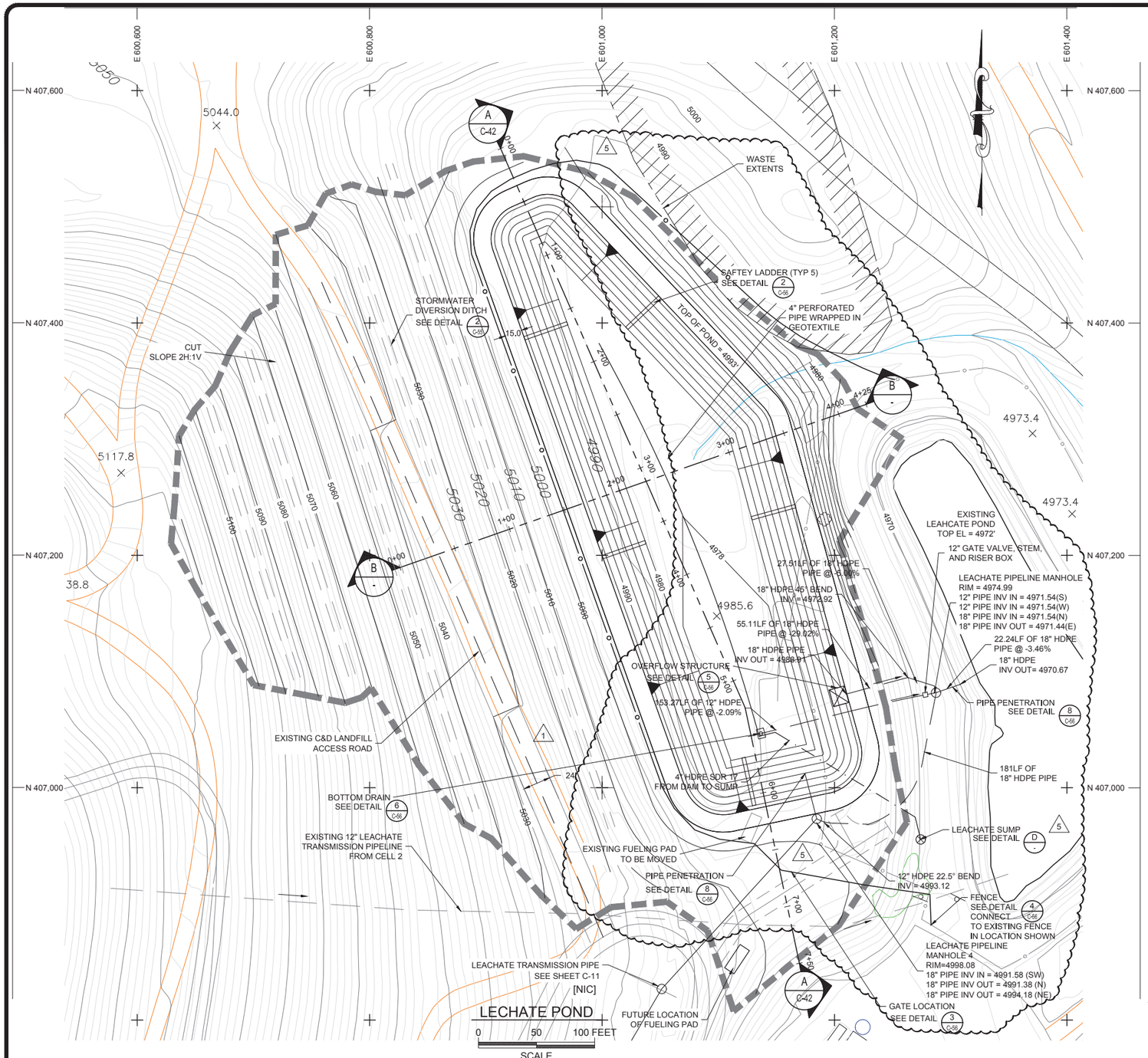
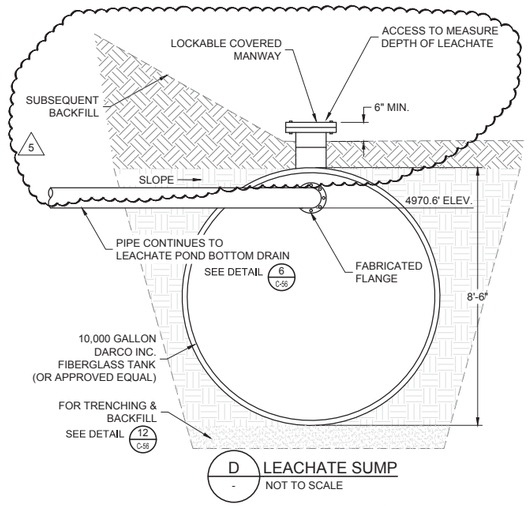
STORMWATER PLAN

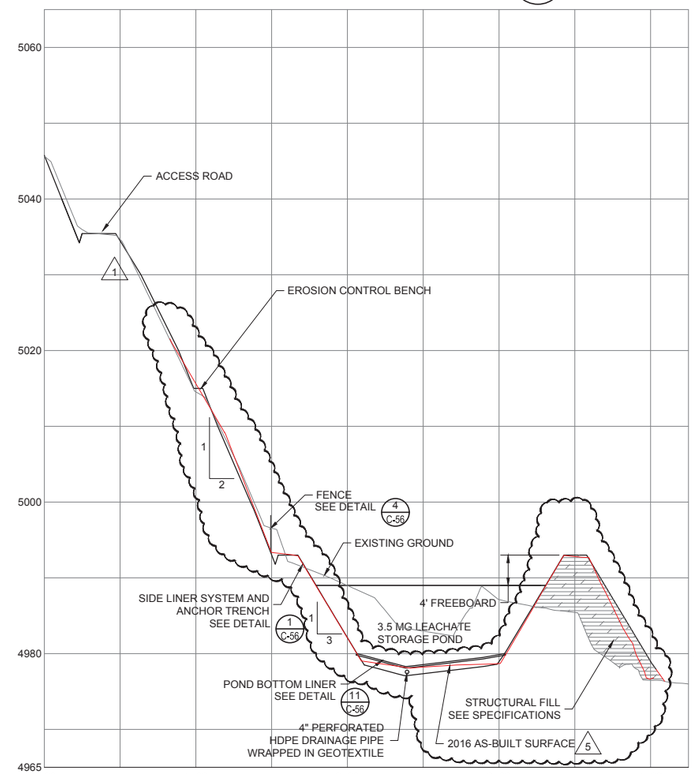
LANDFILL EXPANSION

SHEET C-5





D - LEACHATE SUMP
NOT TO SCALE



VOLUME NOTES:
CUT = 115,000 CY
STRUCTURAL FILL = 4,000 CY

B - LEACHATE POND CROSS SECTION
0 50 100 FEET
SCALE
5 X VERTICAL EXAGGERATION

AS-BUILT
9/9/16

PROFESSIONAL ENGINEER REGISTERED 9/9/2016 14952 STATE OF IDAHO TYSON L. KNUDSEN

TOPOGRAPHIC SURVEY PERFORMED BY DAVID KLATT ON 5/7/2007

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 C8,10-12,41,42 AB.dwg Billings, Kyle 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Re-graded C&D access road & pond cut slope.	STCE	2/20/09
2	As-Builts	GRKB	2/12/13
3	Revisions - 2014 Topo	GRKB	3/19/2015
4	Lechate Drainline Revisions	GRKB	10/06/2015
5	2016 As-Builts	GRKB	9/9/2016

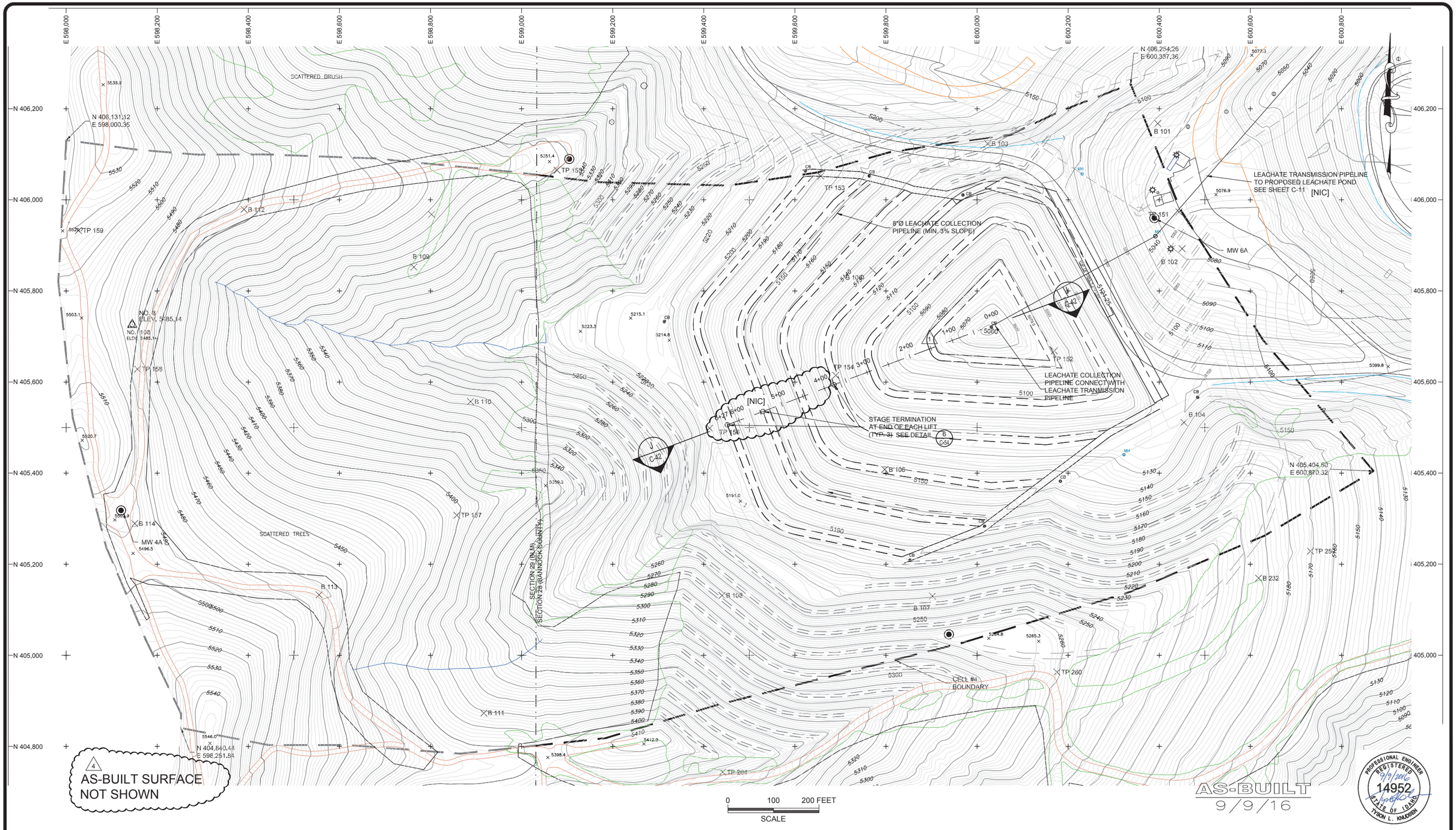
DES. BY TCE
DRG. BY TCE
CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

CES
CASCADE EARTH SCIENCES
A Valmont Industries Company
CALL 1-800-728-8322
FOR NATIONAL OFFICE LOCATIONS

LEACHATE POND PLAN

LANDFILL EXPANSION

SHEET
C-10



TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 C8,10-12,41,42 AB.dwg Billings, Kyle 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Changed Leachate Pipeline per grading changes	BTCE	5/28/09
2	As-Builts	GRKB	2/12/13
3	Revisions - 2014 Topo	GRKB	3/19/2015
4	2016 AS-BUILTS	GRKB	9/9/2016
5	-	-	MO/DAY/YR

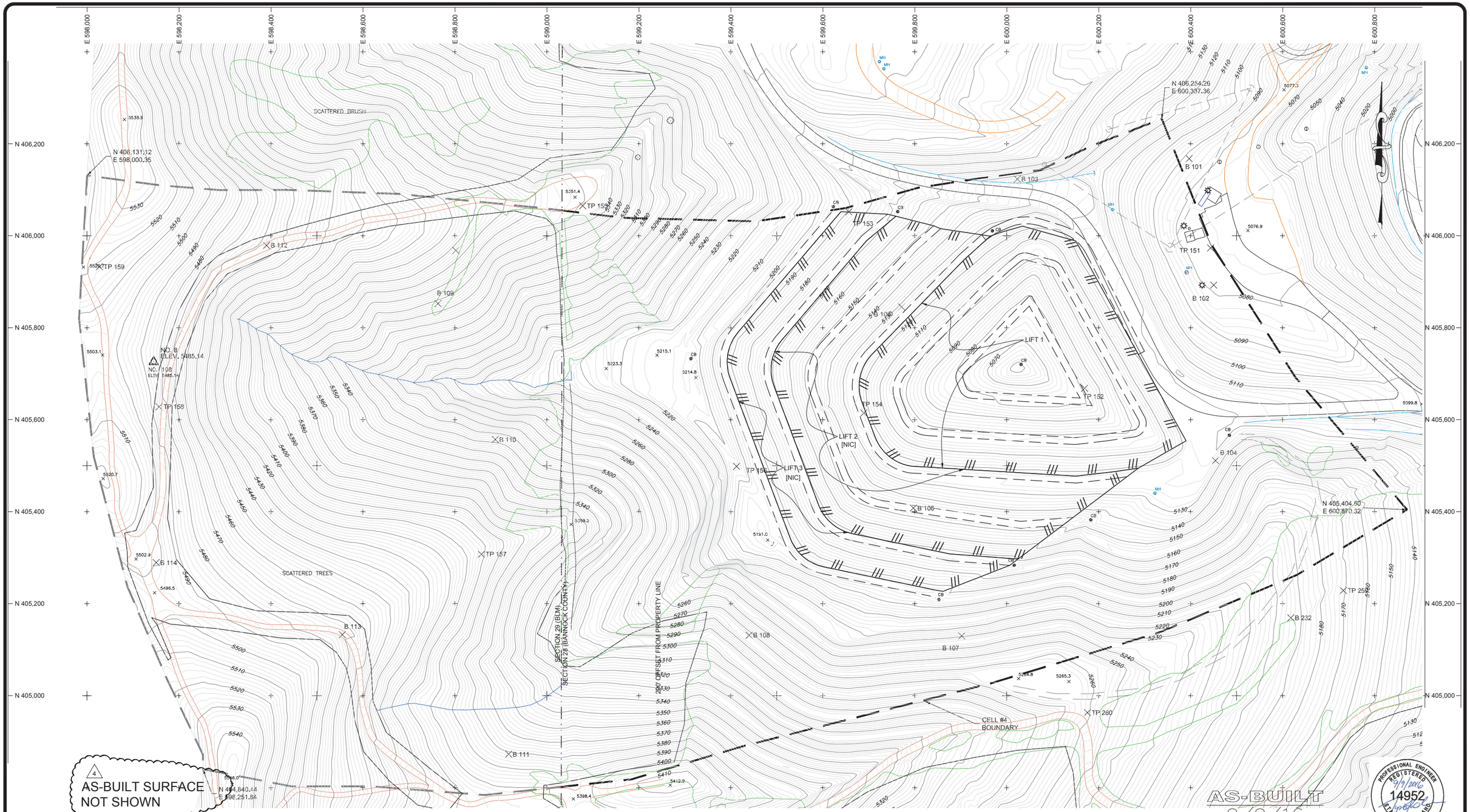
DES. BY TCE
DRG. BY TCE
CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

CASCADE EARTH SCIENCES
A Valmont Industries Company
CALL 1-800-728-8322
FOR NATIONAL OFFICE LOCATIONS

LEACHATE COLLECTION PIPELINE

LANDFILL EXPANSION

SHEET
C-12



TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002

S:\[WORKING DRAFTING]\2823017 BANNOCK COUNTY\2523048 AS-BUILTS-2016\2523048 C13 AB.DWG BILLINGS, KYLE 2/22/2010

BANNOCK COUNTY LANDFILL EXPANSION

BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Changed base Grading	-	MO/DAY/YR
2	As-Builts	RKB	2/12/2013
3	Revisiosn - 2014 Topo	RKB	3/19/2015
4	2016 AS-BUILTS	GRKB	9/9/2016
5	-	-	MO/DAY/YR

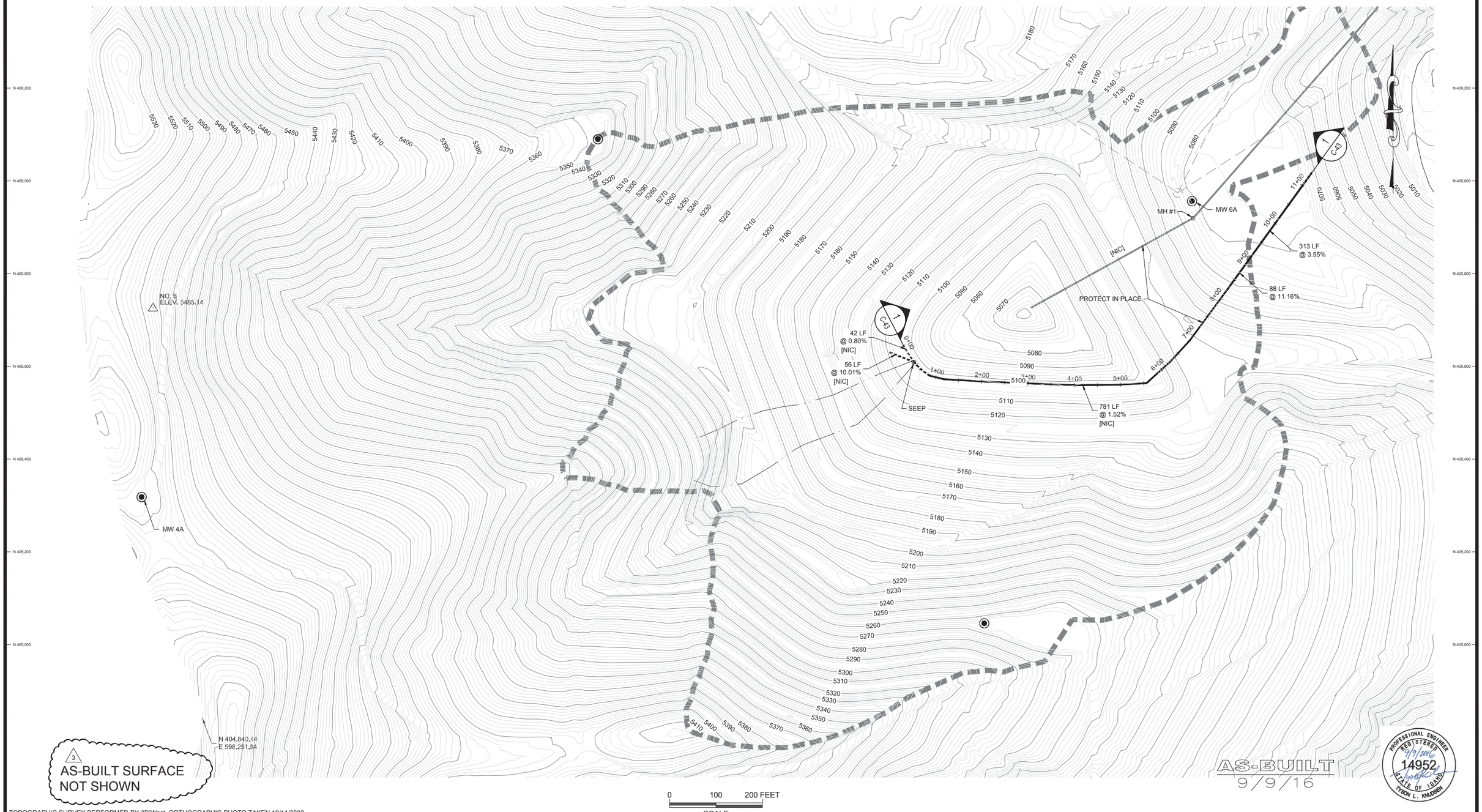
DES. BY 8TCE
DRG. BY 8JSG
CHK. BY JW
DATE CREATED 6/29/07
JOB No. 2523048

CASCADE EARTH SCIENCES
A Valmont Industries Company
CALL 1-800-728-8322
FOR NATIONAL OFFICE LOCATIONS

LIFT IDENTIFICATION

LANDFILL EXPANSION

SHEET
C-13



TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002

S:\[WORKING DRAFTING]\2823017 BANNOCK COUNTY\2523048 AS-BUILTS-2016\2523048 C14,43 AB.DWG BILLINGS, KYLE 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION

BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	As-Builts	GRKB	2/12/13
2	Revisions - 2014 Topo	RKB	3/19/2015
4	2016 AS-BUILTS	GRKB	9/9/2016

DES. BY JW
DRG. BY GJKR
CHK. BY GJW
DATE CREATED 12-16-2010
JOB No. 2523048

CASCADE EARTH SCIENCES
A Valmont Industries Company
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FOR NATIONAL OFFICE LOCATIONS

PHASE 1
DRAIN PLAN

LANDFILL EXPANSION

SHEET
C-14

LEGEND

PHASE 1 GRADING

EXISTING GROUND

EXCAVATION 10-07-08

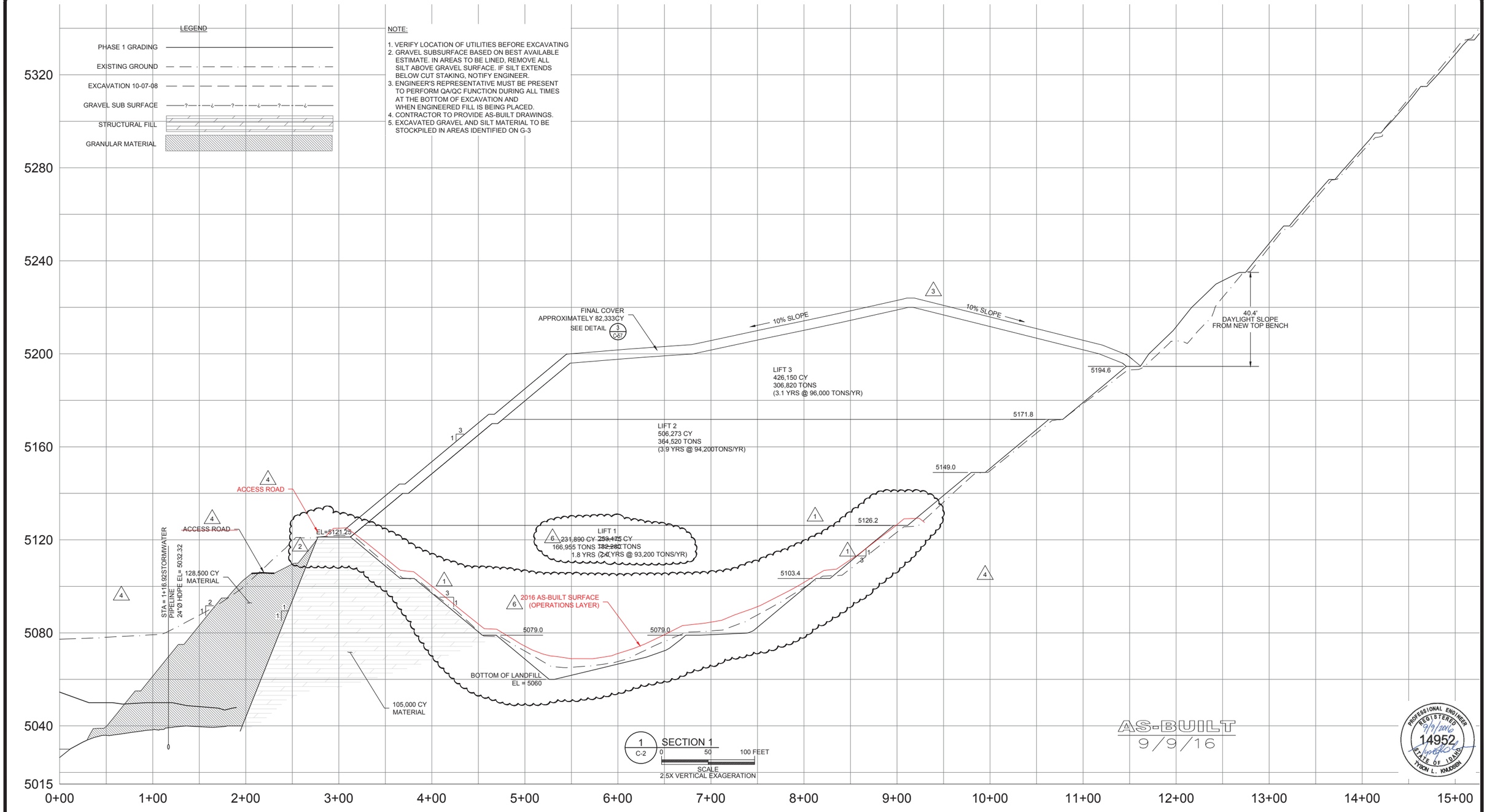
GRAVEL SUB SURFACE

STRUCTURAL FILL

GRANULAR MATERIAL

NOTE:

1. VERIFY LOCATION OF UTILITIES BEFORE EXCAVATING
2. GRAVEL SUBSURFACE BASED ON BEST AVAILABLE ESTIMATE. IN AREAS TO BE LINED, REMOVE ALL SILT ABOVE GRAVEL SURFACE. IF SILT EXTENDS BELOW CUT STAKING, NOTIFY ENGINEER.
3. ENGINEER'S REPRESENTATIVE MUST BE PRESENT TO PERFORM QA/QC FUNCTION DURING ALL TIMES AT THE BOTTOM OF EXCAVATION AND WHEN ENGINEERED FILL IS BEING PLACED.
4. CONTRACTOR TO PROVIDE AS-BUILT DRAWINGS.
5. EXCAVATED GRAVEL AND SILT MATERIAL TO BE STOCKPILED IN AREAS IDENTIFIED ON G-3



AS-BUILT
9/9/16

PROFESSIONAL ENGINEER
REGISTERED
9/9/2016
14952
STATE OF IDAHO
TYSON L. KNUDSEN

TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002,SUBSURFACE PROFILES ARE BEST AVAILABLE ESTIMATES BASED ON BORINGS REPORTED BY AMERICAN GEOTECHNICS ON 9/2004

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 C20-28,33,34 AB.dwg Billings, Kyle 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Inside dike slope from 3.5:1 to 3:1, grading changes to 3:1	8TCE	5/12/09
1	Added 10/7/08 Excavation surface	8TCE	5/12/09
2	Changed exterior dike slope to 1:1, dike height = 5121.25	8TCE	7/14/09
3	Sloped top of waste at 10%	8TCE	1/15/10
4	As-Builts	6RKB	2/12/13
5	Revisions - 2014 Topo	6RKB	3/19/2015
6	2016 AS-BUILTS	6RKB	9/9/2016

DES. BY TCE
DRG. BY 8JSG
CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

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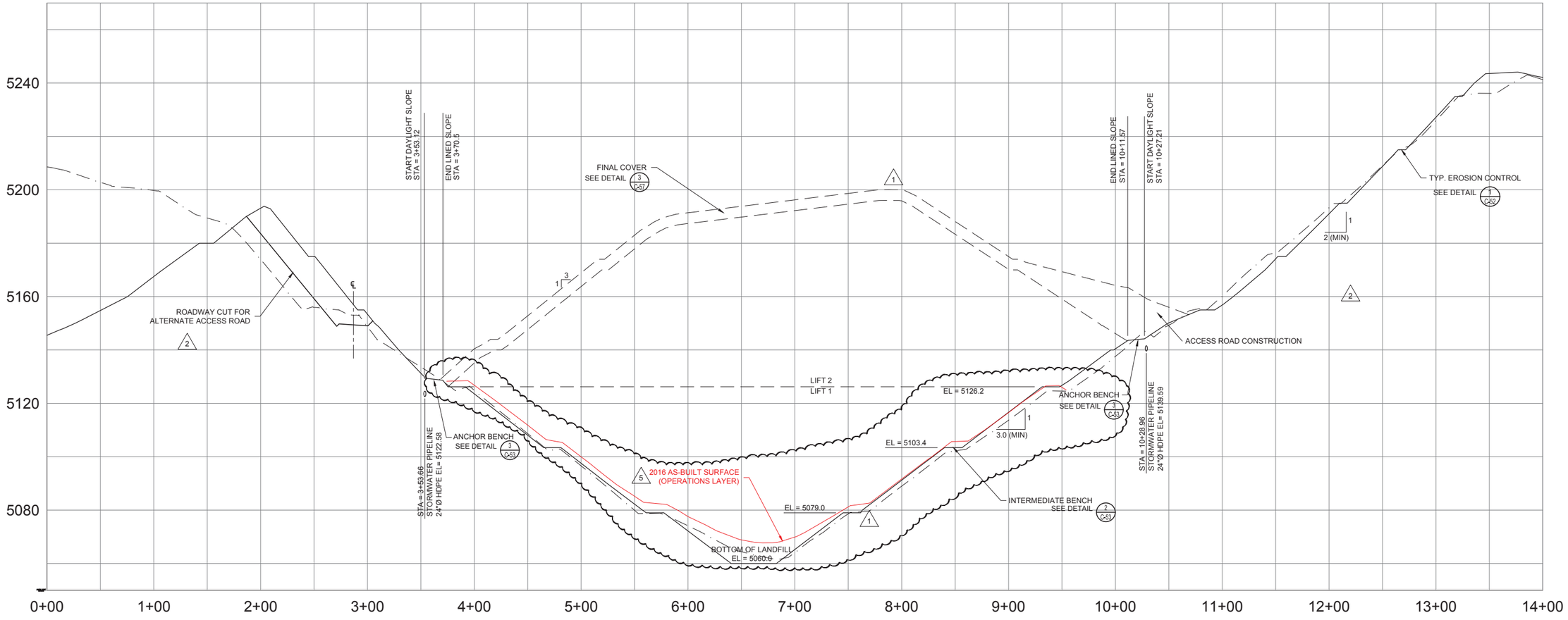
PHASE 1 PROFILE
SECTION 1

LANDFILL EXPANSION

SHEET
C-20



LEGEND

- PHASE 1 GRADING
- EXISTING GROUND
- GRAVEL SUB SURFACE
- STRUCTURAL FILL
- ROAD FILL

NOTE:

1. VERIFY LOCATION OF UTILITIES BEFORE EXCAVATING
2. GRAVEL SUBSURFACE BASED ON BEST AVAILABLE ESTIMATE. IN AREAS TO BE LINED, REMOVE ALL SILT ABOVE GRAVEL SURFACE. IF SILT EXTENDS BELOW CUT STAKING, NOTIFY ENGINEER.
3. ENGINEER'S REPRESENTATIVE MUST BE PRESENT TO PERFORM QA/QC FUNCTION DURING ALL TIMES AT THE BOTTOM OF EXCAVATION AND WHEN ENGINEERED FILL IS BEING PLACED.
4. CONTRACTOR TO PROVIDE AS-BUILT DRAWINGS.
5. EXCAVATED GRAVEL AND SILT MATERIAL TO BE STOCKPILED IN AREAS IDENTIFIED ON G-3

5 / C-2 SECTION 5

0 50 100 FEET

SCALE
2.5X VERTICAL EXAGERATION

AS-BUILT
9/9/16

PROFESSIONAL ENGINEER REGISTERED 9/9/2016 14952 STATE OF IDAHO TYSON L. KNUDSEN

TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002,SUBSURFACE PROFILES ARE BEST AVAILABLE ESTIMATES BASED ON BORINGS REPORTED BY AMERICAN GEOTECHNICS ON 9/2004

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BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Changed bench location & grading from 3.5:1 to 3:1	STCE	5/12/2009
1	Waste extents changed per grading change	STCE	5/12/2009
2	As-Builts	GRKB	2/12/2013
4	Revisions - 2014 Topo	GRKB	3/19/2015
5	2016 AS-BUILTS	GRKB	9/9/2016

DES. BY 8JSG
DRG. BY TCE
CHK. BY JW
DATE CREATED 6/21/2010
JOB No. 2523048

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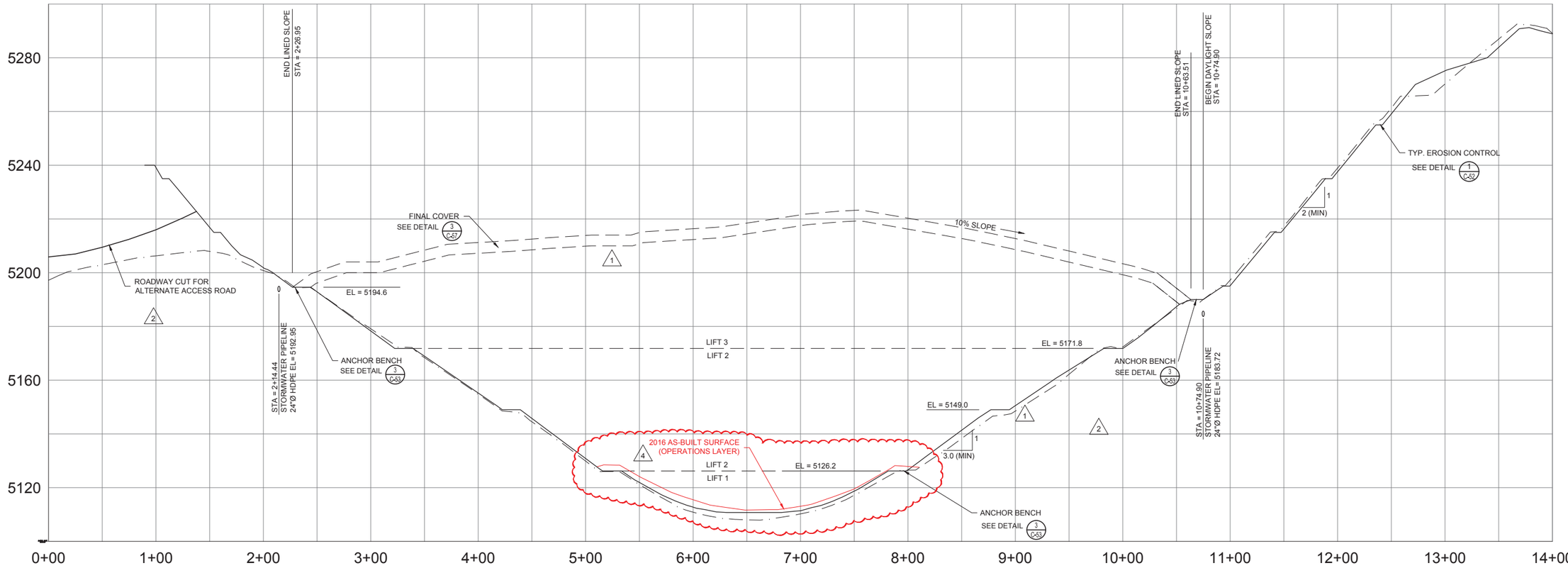
PHASE 1
SECTION 5
LANDFILL EXPANSION

SHEET
C-21



LEGEND

- PHASE 1 GRADING
- EXISTING GROUND
- GRAVEL SUB SURFACE
- STRUCTURAL FILL
- ROAD FILL

NOTE:

1. VERIFY LOCATION OF UTILITIES BEFORE EXCAVATING
2. GRAVEL SUBSURFACE BASED ON BEST AVAILABLE ESTIMATE. IN AREAS TO BE LINED, REMOVE ALL SILT ABOVE GRAVEL SURFACE. IF SILT EXTENDS BELOW CUT STAKING, NOTIFY ENGINEER.
3. ENGINEER'S REPRESENTATIVE MUST BE PRESENT TO PERFORM QA/QC FUNCTION DURING ALL TIMES AT THE BOTTOM OF EXCAVATION AND WHEN ENGINEERED FILL IS BEING PLACED.
4. CONTRACTOR TO PROVIDE AS-BUILT DRAWINGS.
5. EXCAVATED GRAVEL AND SILT MATERIAL TO BE STOCKPILED IN AREAS IDENTIFIED ON G-3

6 / C-2 SECTION 6

0 50 100 FEET

SCALE
2.5X VERTICAL EXAGERATION

AS-BUILT
9/9/16

PROFESSIONAL ENGINEER
REGISTERED
9/9/2016
14952
STATE OF IDAHO
TYSON L. KNUDSEN

TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002,SUBSURFACE PROFILES ARE BEST AVAILABLE ESTIMATES BASED ON BORINGS REPORTED BY AMERICAN GEOTECHNICS ON 9/2004

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BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Changed bench location & grading from 3.5:1 to 3:1	STCE	5/12/2009
1	Waste extents changed per grading change	STCE	5/12/2009
2	As-Builts	GRKB	2/12/2013
3	Revisions - 2014 Topo	GRKB	3/19/2015
4	2016 AS-BUILTS	GRKB	9/9/2016

DES. BY 8JSG
DRG. BY TCE
CHK. BY JW
DATE CREATED 6/21/2010
JOB No. 2523048

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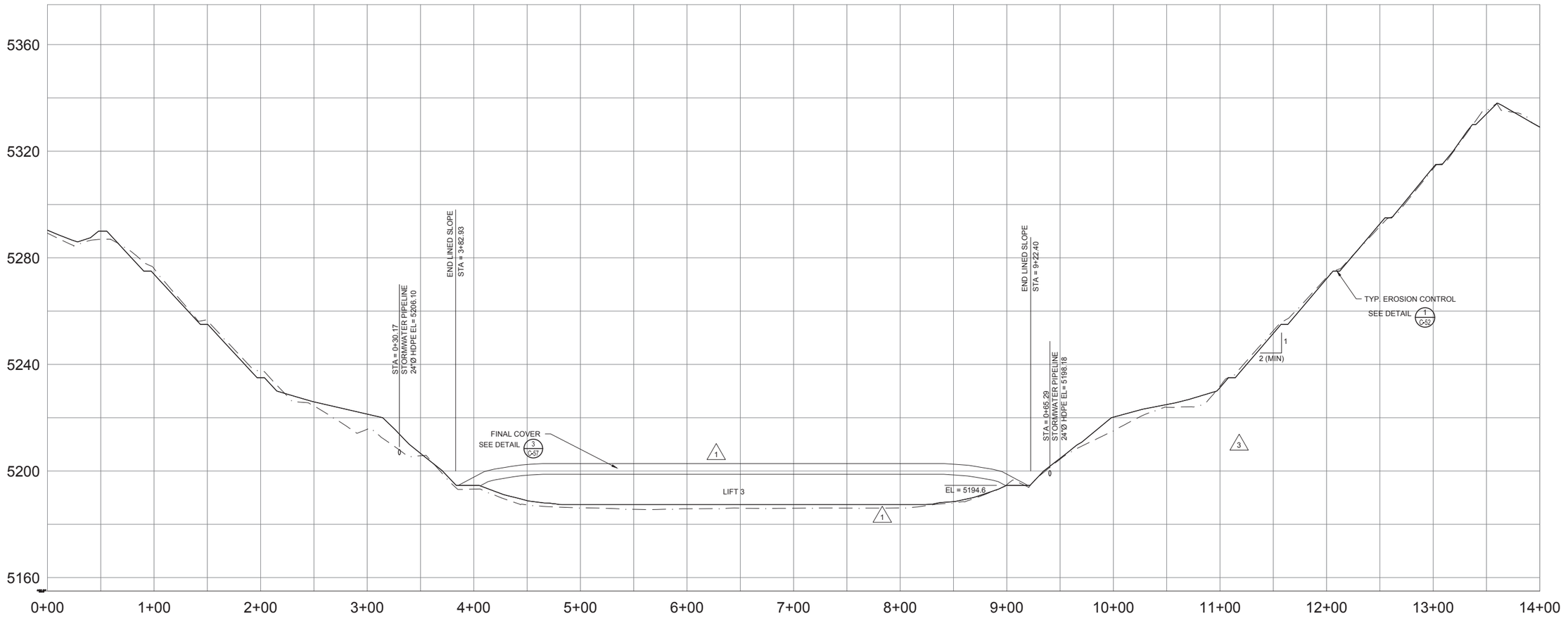
PHASE 1
SECTION 6

LANDFILL EXPANSION

SHEET
C-22



LEGEND

- PHASE 1 GRADING
- EXISTING GROUND
- GRAVEL SUB SURFACE
- STRUCTURAL FILL
- ROAD FILL

NOTE:

1. VERIFY LOCATION OF UTILITIES BEFORE EXCAVATING
2. GRAVEL SUBSURFACE BASED ON BEST AVAILABLE ESTIMATE. IN AREAS TO BE LINED, REMOVE ALL SILT ABOVE GRAVEL SURFACE. IF SILT EXTENDS BELOW CUT STAKING, NOTIFY ENGINEER.
3. ENGINEER'S REPRESENTATIVE MUST BE PRESENT TO PERFORM QA/QC FUNCTION DURING ALL TIMES AT THE BOTTOM OF EXCAVATION AND WHEN ENGINEERED FILL IS BEING PLACED.
4. CONTRACTOR TO PROVIDE AS-BUILT DRAWINGS.
5. EXCAVATED GRAVEL AND SILT MATERIAL TO BE STOCKPILED IN AREAS IDENTIFIED ON G-3

7 / C-2 SECTION 7

0 50 100 FEET

SCALE
2.5X VERTICAL EXAGERATION

AS-BUILT
9/9/16

PROFESSIONAL ENGINEER REGISTERED 9/9/2016 14952 STATE OF IDAHO TYSON L. KNUDSEN

TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002.SUBSURFACE PROFILES ARE BEST AVAILABLE ESTIMATES BASED ON BORINGS REPORTED BY AMERICAN GEOTECHNICS ON 9/2004

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BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Changed bench location & grading from 3.5:1 to 3:1	STCE	5/12/09
1	Waste extents changed per grading change	STCE	5/12/09
3	As-Builts	GRKB	2/12/13
4	Revisions - 2014 Topo	RKB	3/19/2015
5	-	-	MO/DAY/YR

DES. BY 8JSG
DRG. BY TCE
CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

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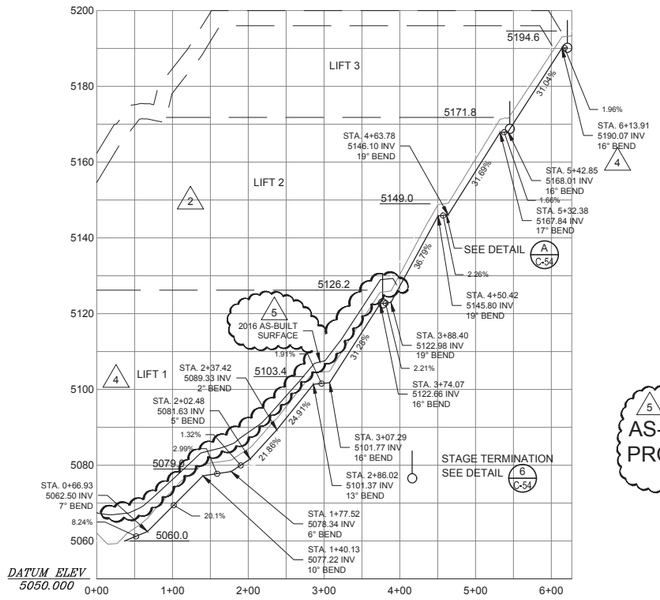
PHASE 1
SECTION 7
LANDFILL EXPANSION

SHEET
C-23

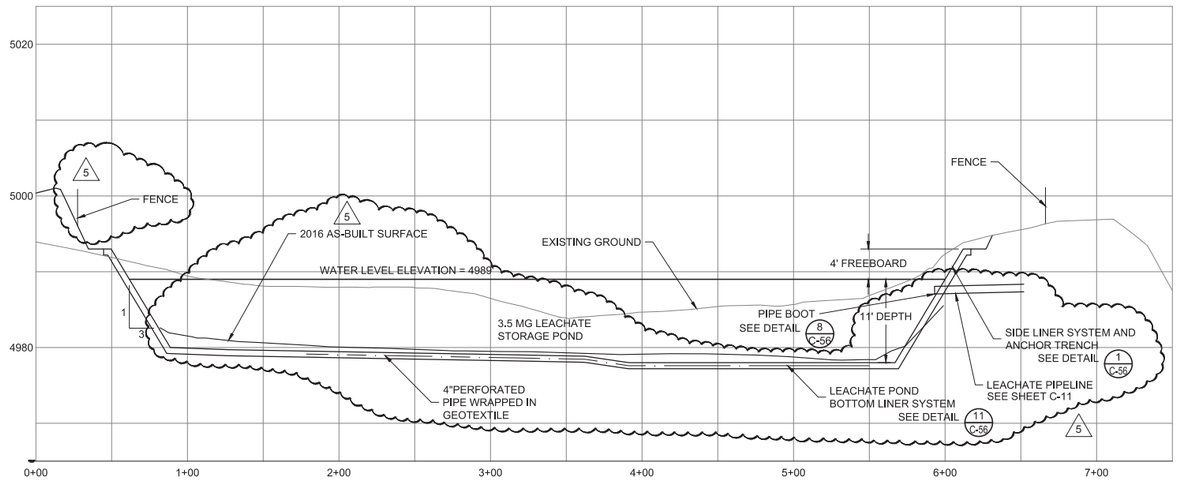


J C-12 LEACHATE COLLECTION PROFILE

0 100 200 FEET

SCALE
4 X VERTICAL EXAGGERATION

5 AS-BUILT PIPELINE PROFILE NOT SHOWN



A C-10 LEACHATE POND PROFILE

0 50 100 FEET

SCALE
5 X VERTICAL EXAGGERATION

AS-BUILT
9/9/16

PROFESSIONAL ENGINEER
REGISTERED
9/9/2016
14952
STATE OF IDAHO
TYSON L. KNUDSEN

TOPOGRAPHIC SURVEY PERFORMED BY 3DiWest, ORTHOGRAPHIC PHOTO TAKEN 10/11/2002

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 C8,10-12,41,42 AB.dwg Billings, Kyle 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Leachate Pipeline Change per grading change	STCE	5/28/09
2	As-Builts	GRKB	2/12/13
3	Revisions - 2014 Topo	GRKB	3/19/2015
4	Revisions to Lechate Pipeline	GRKB	9/25/2015
5	2016 As-Builts	GRKB	9/9/2016

DES. BY TCE
DRG. BY TCE
CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

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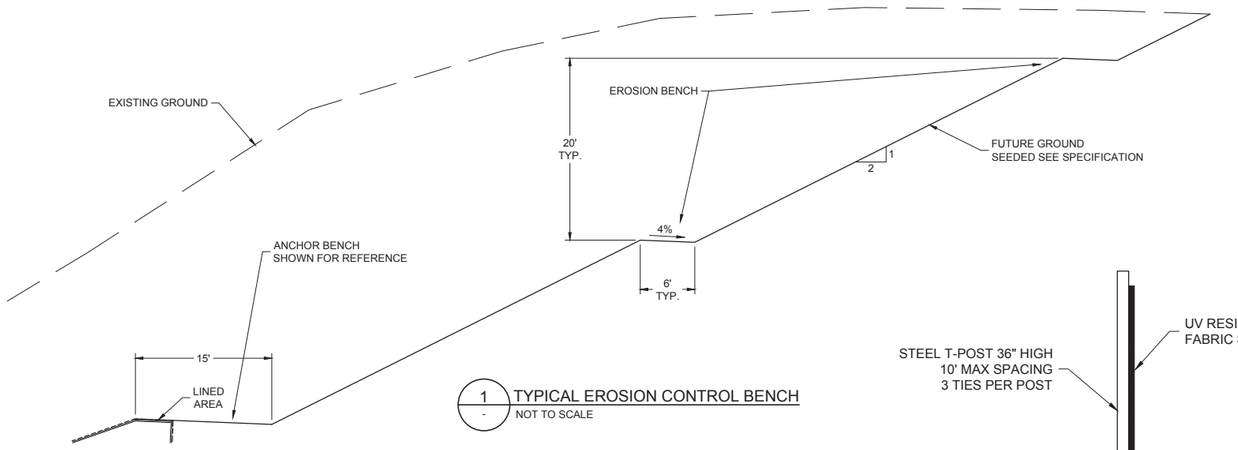
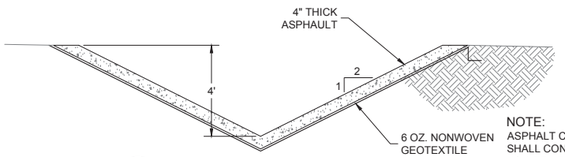
COLLECTION SYSTEM &
LEACHATE POND PROFILES

LANDFILL EXPANSION

SHEET
C-42

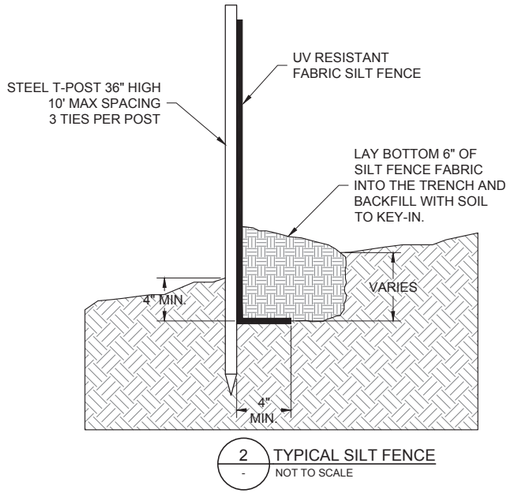


1 - TYPICAL EROSION CONTROL BENCH
NOT TO SCALE

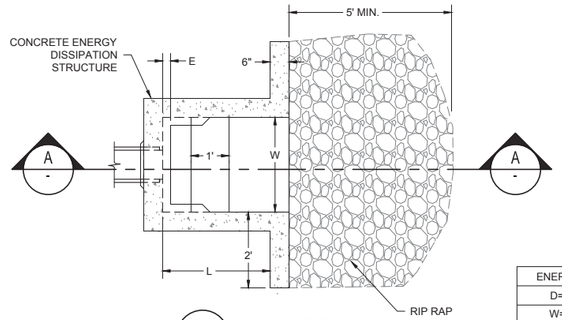


6 C-20 - TYPICAL ASPHALT LINED DITCH
NOT TO SCALE

NOTE:
ASPHALT CONCRETE PLANT MIX SHALL CONSIST OF CLASS III MIX AS DEFINED IN SECTION 405 OF THE ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, OR AS APPROVED BY THE ENGINEER.



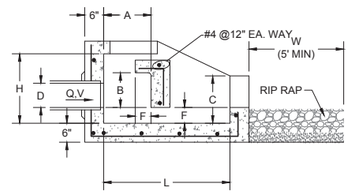
2 - TYPICAL SILT FENCE
NOT TO SCALE



5 C-5 - ENERGY DISSIPATOR (TYP.)
NOT TO SCALE

DRAWING NOTES:
1. ALL CAST-IN-PLACE CONCRETE SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN SECTION 703 IN 2007 ISPWC.
2. CONCRETE REINFORCEMENT SHALL MEET REINFORCING STEEL REQUIREMENTS AS SET FORTH IN SECTION 702 IN 2007 ISPWC.

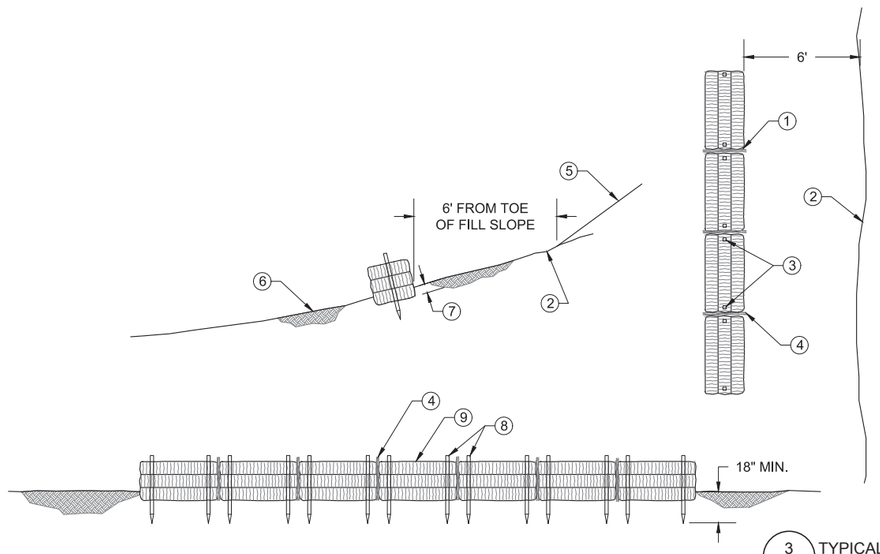
ENERGY DISSIPATOR A		ENERGY DISSIPATOR B	
D=	3'-0"	D=	3'-0"
W=	7'-0"	W=	8'-0"
L=	10'-0"	L=	10'-8"
F=	1'-2"	F=	1'-4"
E=	0'-7"	E=	0'-8"
H=	5'-3"	H=	6'-0"
A=	3'-6"	A=	4'-0"
B=	2'-8"	B=	3'-0"
C=	3'-6"	C=	4'-0"



A-A - SECTION A-A
NOT TO SCALE

GENERAL BMP NOTES

1. DRAINAGE INLET FILTER TO BE USED ON ALL DRAINAGE INLETS ON PROJECT SITE AND ON BANNOCK COUNTY LANDFILL ROADS DIRECTLY BELOW PROJECT SITE.
2. CONTRACTOR TO INSTALL TEMPORARY BMP's 1 WEEK PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO REMOVE TEMPORARY BMP's 2 MONTHS POST CONSTRUCTION.

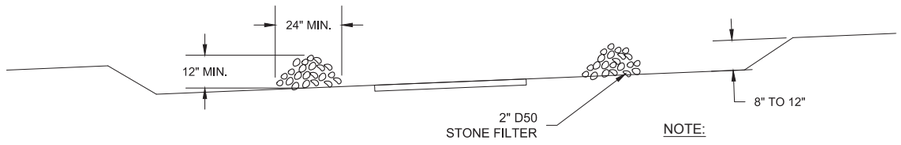


KEYED NOTES:

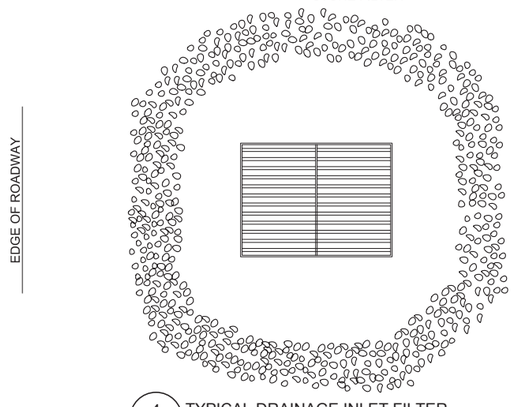
PLACE BALES END TO END.	1
TOE OF SLOPE.	2
(2) STAKES PER BALE MIN. 2" x 2" x 3'.	3
TAMP LOOSE STRAW INTO JOINTS.	4
FILL SLOPE.	5
UNDISTURBED SLOPE.	6
PLACE BALES APPROXIMATELY 6" INTO THE GROUND.	7
DRIVE STAKE THROUGH EACH BALE AT BUTTED ENDS	8
STRAW BALES.	9

STRAW BALE NOTE:
PLACE EROSION BARRIERS TO FOLLOW ALONG THE SLOPE CONTOUR. PLACE BALES WITH STRINGS ON SIDES TO PROLONG THE LIFE OF THE BARRIER. METAL POSTS MAY BE USED IN PLACE OF STAKES IN AREAS WHERE STAKES ARE UNSTABLE OR UNABLE TO BE DRIVEN.

3 - TYPICAL STRAW BALES
NOT TO SCALE



NOTE:
USE AS TEMPORARY SILT FILTER FOR DRAINAGE INLETS. MAINTAIN THROUGH CONSTRUCTION COMPLETION.



4 - TYPICAL DRAINAGE INLET FILTER
NOT TO SCALE

AS-BUILT
9/9/16

PROFESSIONAL ENGINEER
REGISTERED
9/9/2016
14952
STATE OF IDAHO
TYSON L. KNUDSEN

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 C51-C57 AB.dwg Billings, Kyle 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION

BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	As-Builts	6RKB	2/12/13
2	-	-	MO/DAY/YR
3	-	-	MO/DAY/YR
4	-	-	MO/DAY/YR
5	-	-	MO/DAY/YR

DES. BY TCE
DRG. BY TCE
CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

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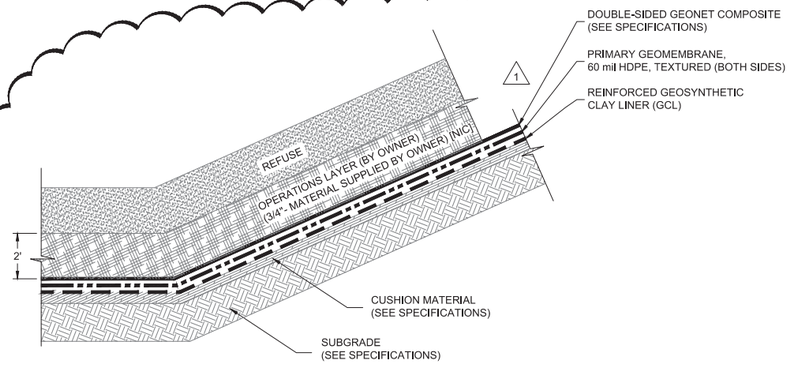
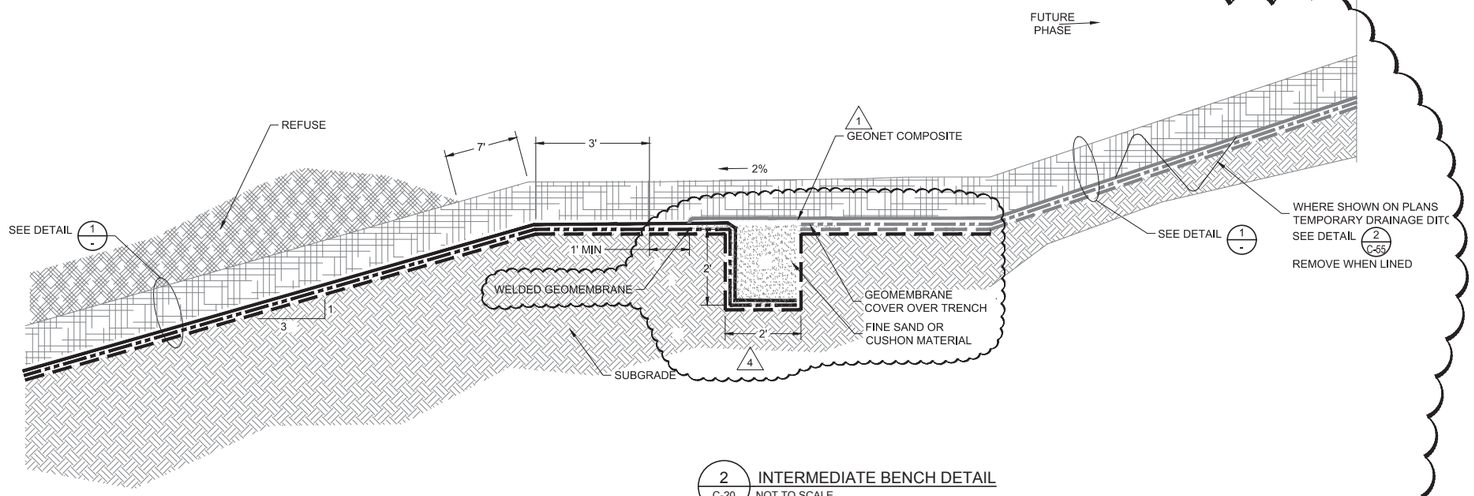
EROSIOIN CONTROL DETAIL SHEET

LANDFILL EXPANSION

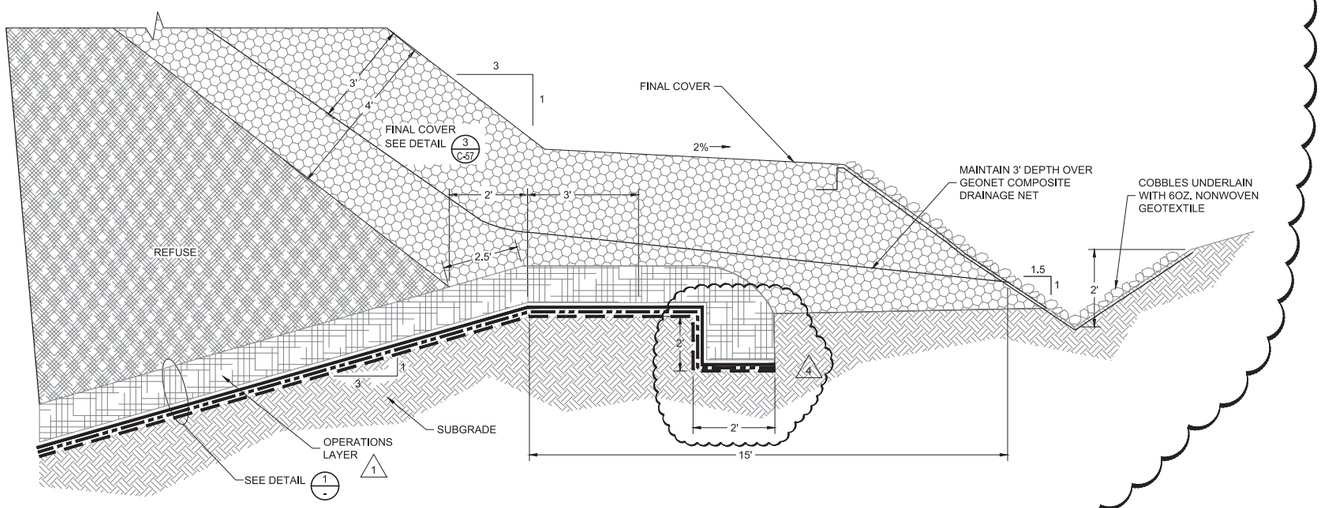
SHEET
C-52



1 / - LINER DETAIL
NOT TO SCALE



2 / C-20 INTERMEDIATE BENCH DETAIL
NOT TO SCALE



3 / C-20 ANCHOR BENCH DETAIL
NOT TO SCALE

AS-BUILT
9/9/16

PROFESSIONAL ENGINEER
REGISTERED
9/9/2016
14952
STATE OF IDAHO
TYSON L. KNUDSEN

S:\[Working Drafting]\2823017 Bannock County\2523048 As-Builts-2016\2523048 C51-C57 AB.dwg Billings, Kyle 9/9/2016

BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Changed liner configuration, removed drainage gravel	STCE	1/15/10
2	Revise Sections, add drainage gravel	GRKB	7/23/15
3	Area drain revisions	GRKB	1/11/16
4	2016 AS-BUILTS	GRKB	9/9/2016
5	-	-	MO/DAY/YR

DES. BY TCE
DRG. BY TCE
CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

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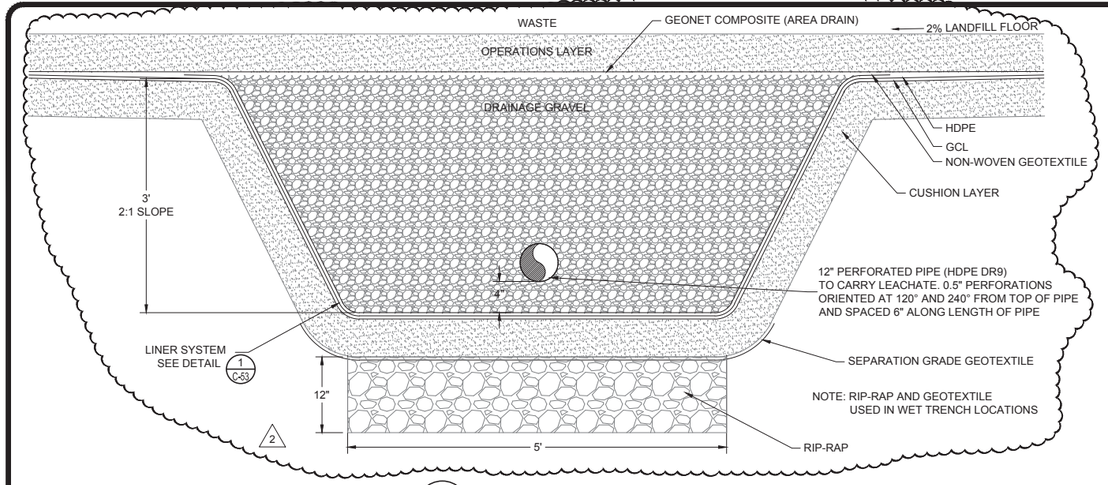
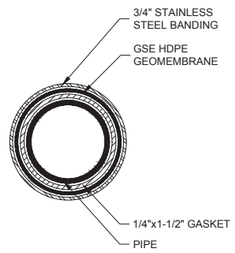
LINER DETAIL SHEET
LANDFILL EXPANSION

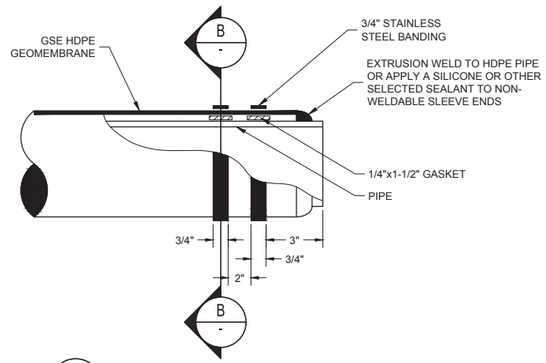
SHEET
C-53



A C-12 LEACHATE PIPE TRENCH
NOT TO SCALE

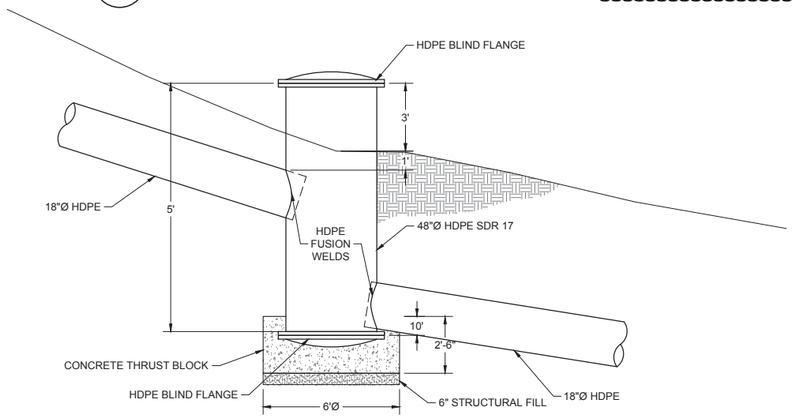


B - SECTION B
NOT TO SCALE



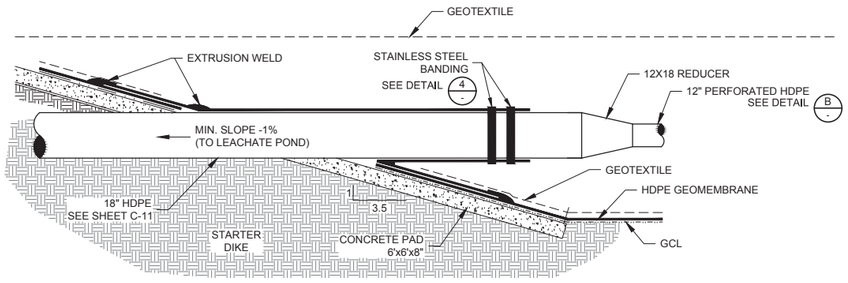
4 - HDPE PIPE PENETRATION SEAL
NOT TO SCALE

2
7 - NOT USED
NOT TO SCALE

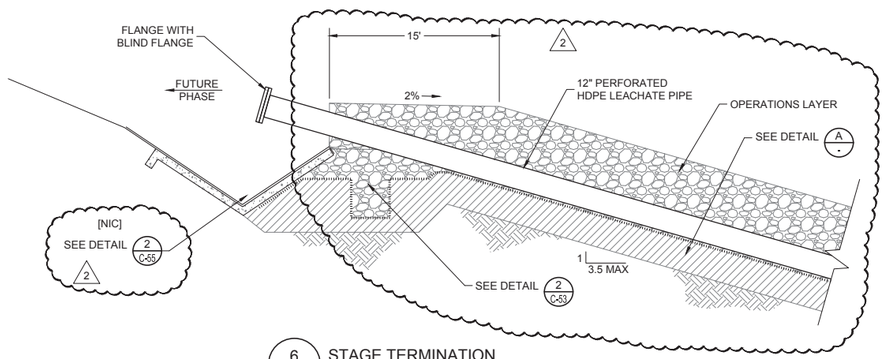


5 C-11 LEACHATE ENERGY DISSIPATOR [NIC]
NOT TO SCALE

2
2 C-22 NOT USED
NOT TO SCALE



3 C-11 LANDFILL LINER PIPE PENETRATION
NOT TO SCALE



6 C-12 STAGE TERMINATION
NOT TO SCALE

DRAWING NOTES:
1. ALL CAST-IN-PLACE CONCRETE SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN SECTION 703 IN 2007 ISPWC.
2. CONCRETE REINFORCEMENT SHALL MEET REINFORCING STEEL REQUIREMENTS AS SET FORTH IN SECTION 702 IN 2007 ISPWC.

AS-BUILT
9/9/16

PROFESSIONAL ENGINEER
REGISTERED
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STATE OF IDAHO
TYSON L. KNUDSEN

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BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	As-Builts	GRKB	2/12/13
2	2016 AS-BUILTS	GRKB	9/9/2016
3	-	-	MO/DAY/YR
4	-	-	MO/DAY/YR
5	-	-	MO/DAY/YR

DES. BY TCE
DRG. BY TCE
CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

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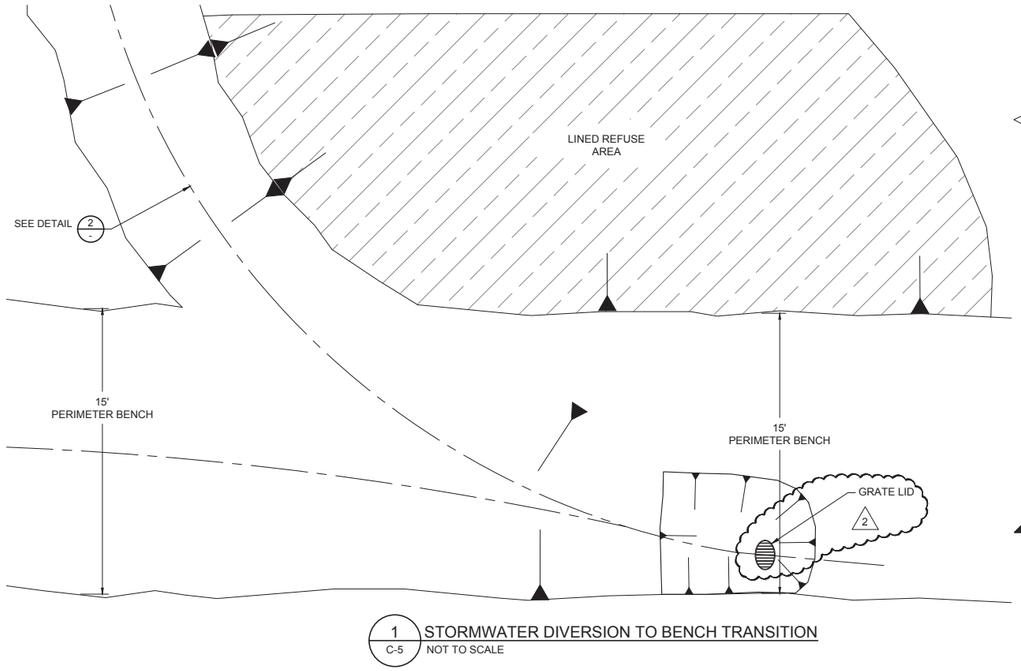
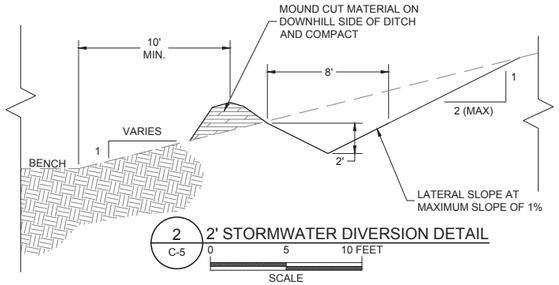
LEACHETE DETAIL SHEET

LANDFILL EXPANSION

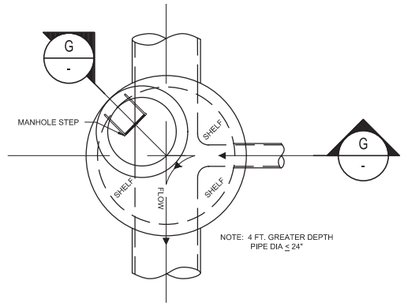
SHEET
C-54



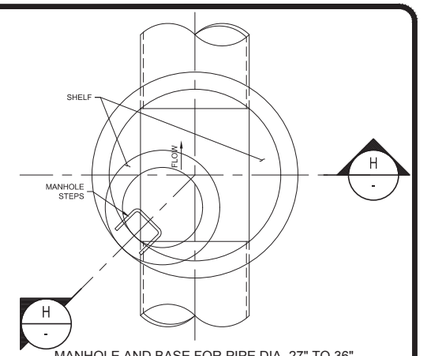
1 C-5 STORMWATER DIVERSION TO BENCH TRANSITION
NOT TO SCALE



2 C-5 2' STORMWATER DIVERSION DETAIL

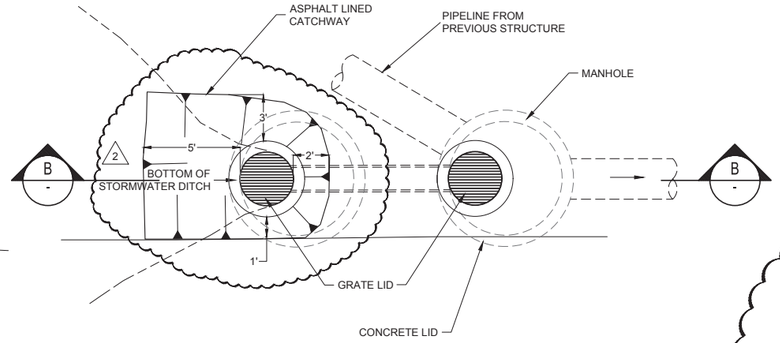


MANHOLE AND BASEFOR PIPE DIA. <24"

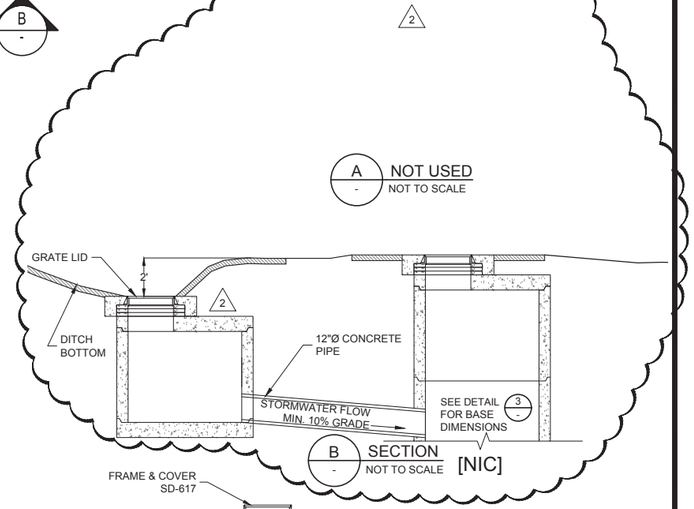


MANHOLE AND BASE FOR PIPE DIA. 27" TO 36"

3 C-37 STANDARD MANHOLE DETAIL
NOT TO SCALE



4 - CATCH BASIN DETAIL
NOT TO SCALE

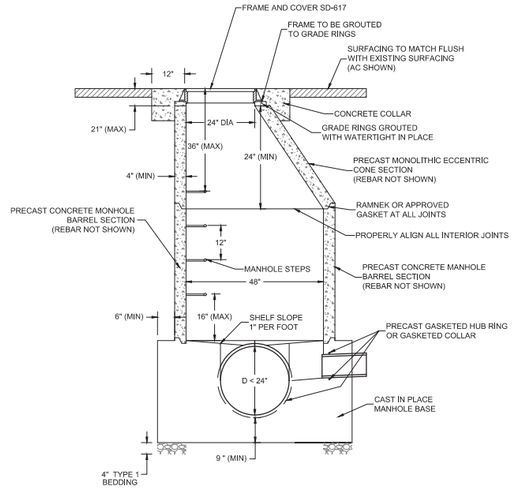


B - SECTION [NIC]
NOT TO SCALE

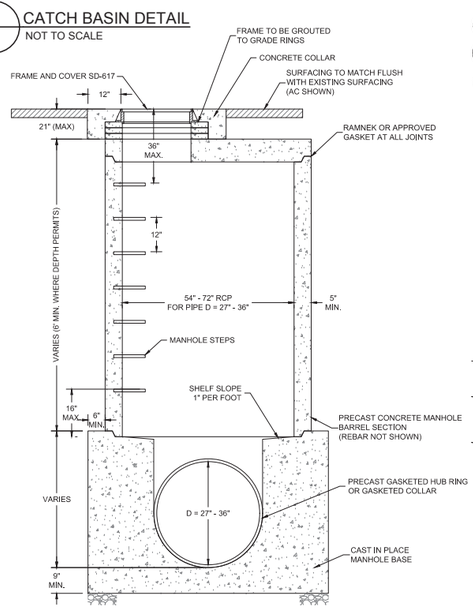
A - NOT USED
NOT TO SCALE

2
5 - NOT USED
NOT TO SCALE

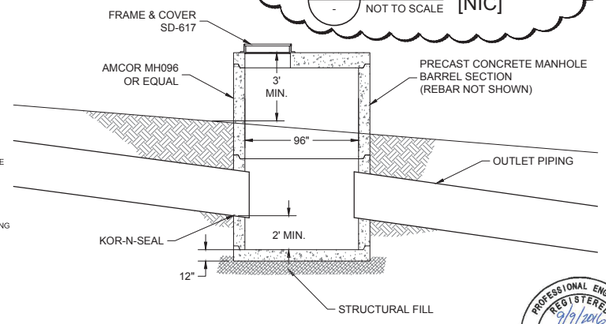
AS-BUILT
9/9/16



G - MANHOLE SECTION (PIPE DIA. <24") [NIC]
NOT TO SCALE



H - MANHOLE SECTION (PIPE DIA. 27" - 36") [NIC]
NOT TO SCALE



6 C-37 ENERGY DISSIPATOR [NIC]
NOT TO SCALE

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BANNOCK COUNTY LANDFILL EXPANSION
BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	As-Builts	GRKB	2/12/13
2	2016 AS-BUILTS	GRKB	9/9/2016
3	-	-	MO/DAY/YR
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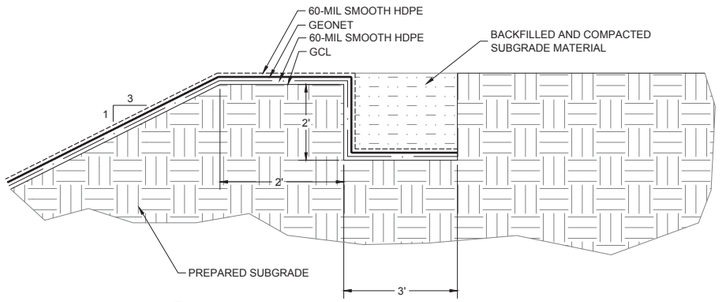
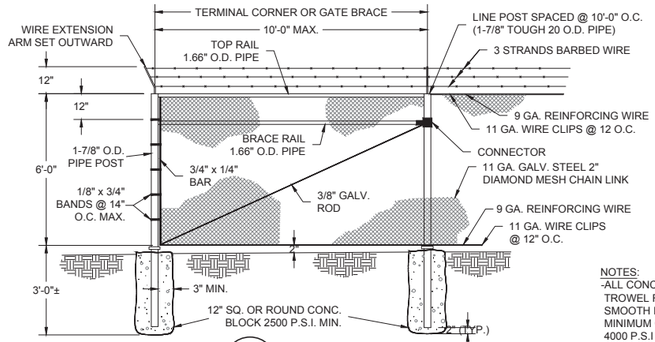
STORMWATER DETAIL SHEET
LANDFILL EXPANSION

SHEET C-55



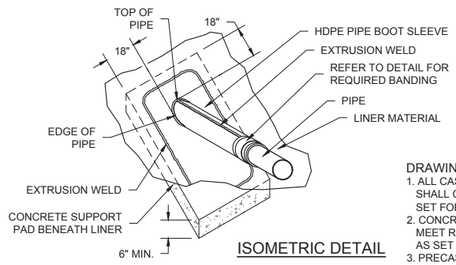
1 C-42 LEACHATE POND SIDE LINER SYSTEM AND TRENCH DETAIL

0 2 4 FEET
SCALE



4 C-10 FENCE DETAIL

NOT TO SCALE



ISOMETRIC DETAIL

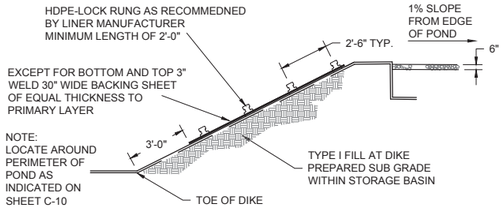
NOTES:
-ALL CONCRETE SURFACES TO BE STEEL TROWEL FINISHED WITH ROUND AND SMOOTH EDGES. MINIMUM CONCRETE STRENGTH 4000 P.S.I
-ALL DOUBLE LINER PIPE PENETRATIONS TO HAVE TWO BOOTS, ONE FOR LOWER HDPE LINER AND ONE FOR THE UPPER

DRAWING NOTES:
1. ALL CAST-IN-PLACE CONCRETE SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN SECTION 703 IN 2007 ISPWC.
2. CONCRETE REINFORCEMENT SHALL MEET REINFORCING STEEL REQUIREMENTS AS SET FORTH IN SECTION 702 IN 2007 ISPWC.
3. PRECAST CONCRETE SHALL MEET SPECIFICATIONS SET FORTH IN SECTION 704, 2007 ISPWC.

△4

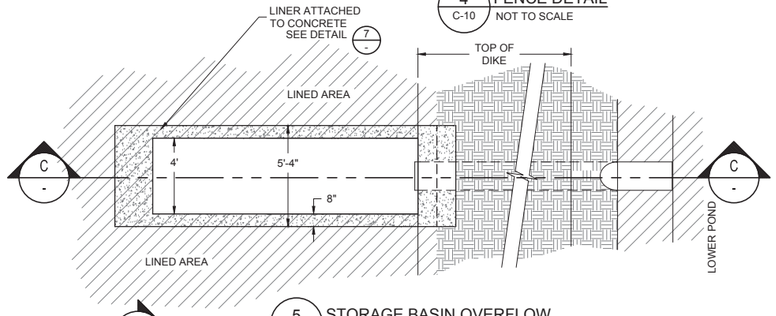
10 C-10 NOT USED

NOT TO SCALE



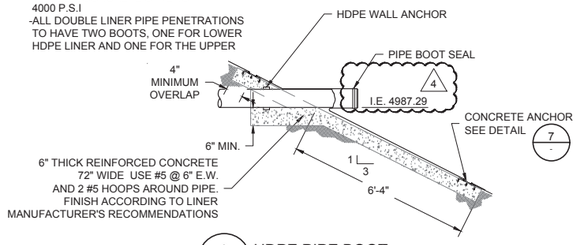
2 C-10 SAFETY LADDER DETAIL

NOT TO SCALE



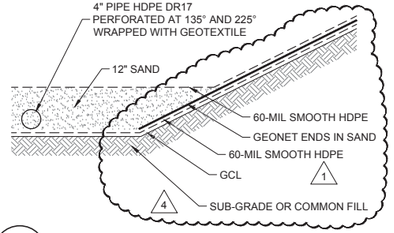
5 C-10 STORAGE BASIN OVERFLOW

0 4 8 FEET
SCALE



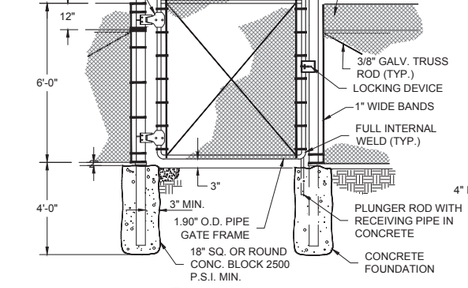
8 C-11 HDPE PIPE BOOT

NOT TO SCALE



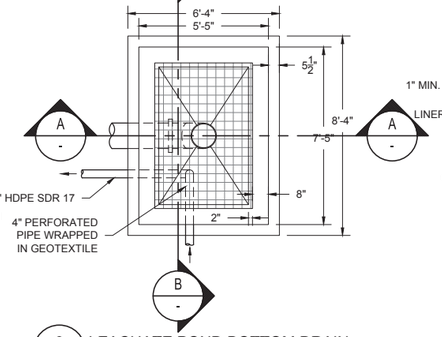
11 C-42 LEACHATE POND BOTTOM LINER SYSTEM

0 2 4 FEET
SCALE



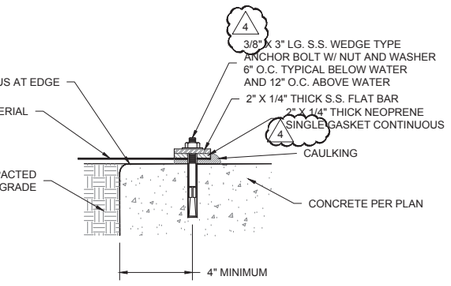
3 C-10 GATE DETAIL

NOT TO SCALE



6 C-10 LEACHATE POND BOTTOM DRAIN

NOT TO SCALE



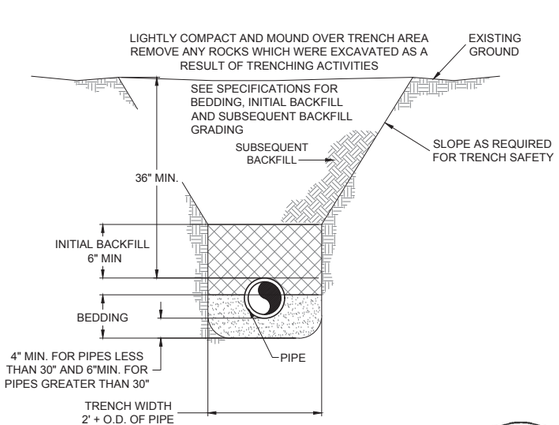
7 - LINER TO CONCRETE ATTACHMENT

NOT TO SCALE

△4

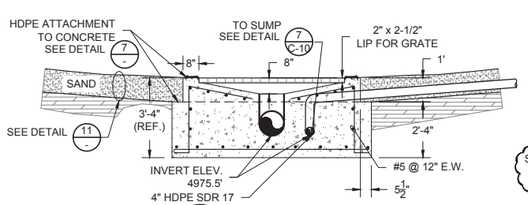
9 C-10 NOT USED

0 1 2 FEET
SCALE



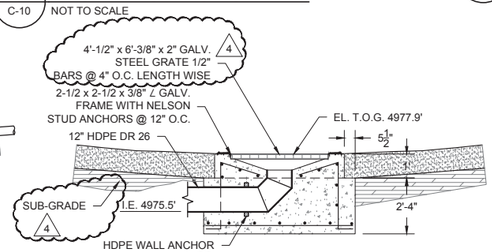
12 - TYPICAL PIPE TRENCH & BACKFILL

NOT TO SCALE



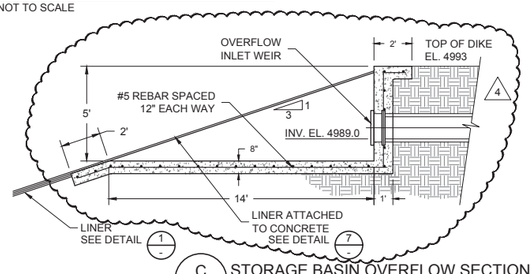
A - CROSS SECTION

NOT TO SCALE



B - CROSS SECTION

NOT TO SCALE



C - STORAGE BASIN OVERFLOW SECTION

0 4 8 FEET
SCALE

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BANNOCK COUNTY LANDFILL EXPANSION

BANNOCK COUNTY, IDAHO

REV #	DESCRIPTION	BY	DATE
1	Ended Geonet in Sand	STCE	1/15/10
2	As-Builts	GRKB	2/12/13
3	Lechate Drainline Revisions	GRKB	9/29/15
4	2016 AS-BUILTS	GRKB	9/9/2016
5	-	-	MO/DAY/YR

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CHK. BY JW
DATE CREATED 5/17/05
JOB No. 2523048

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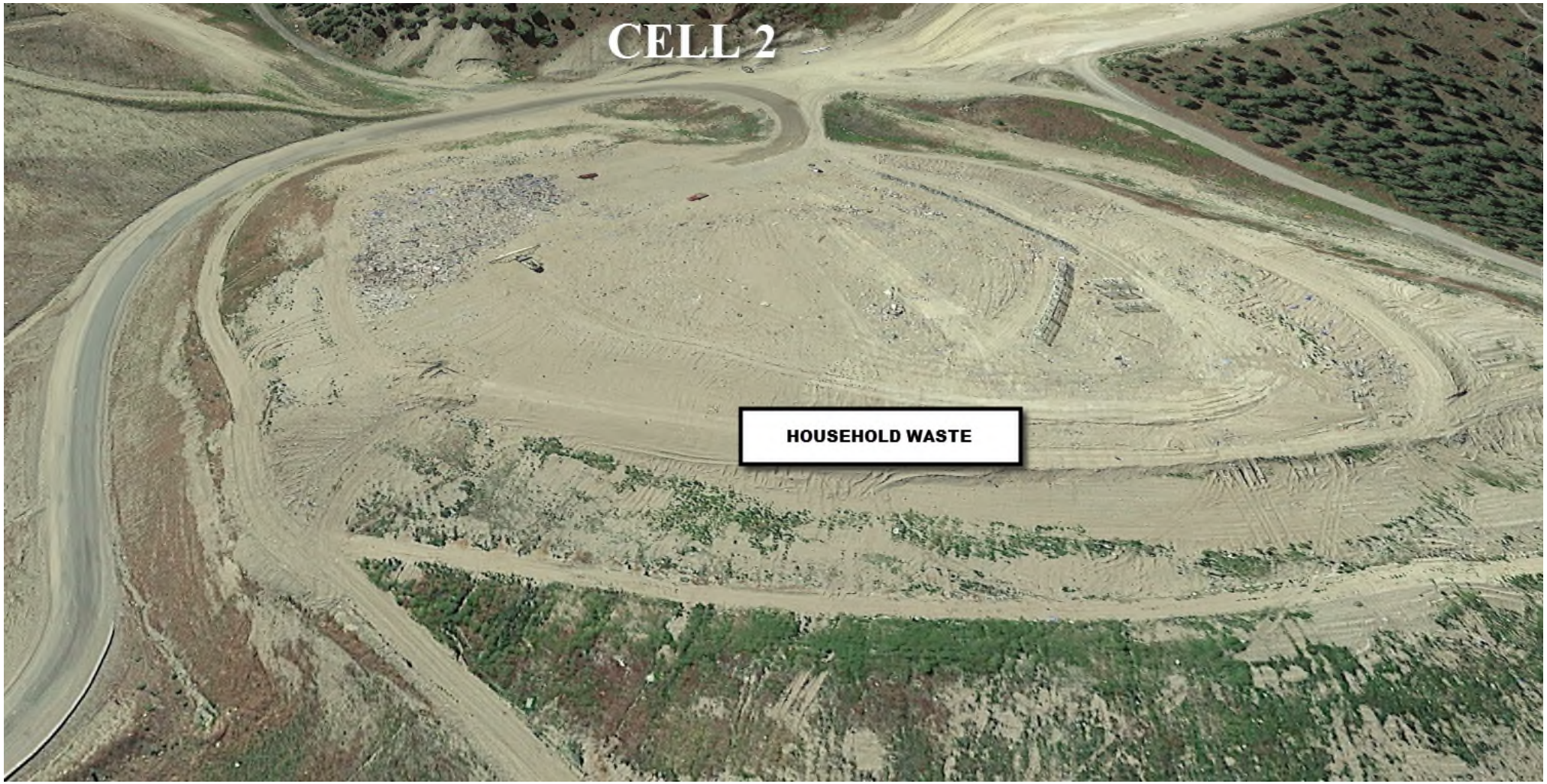
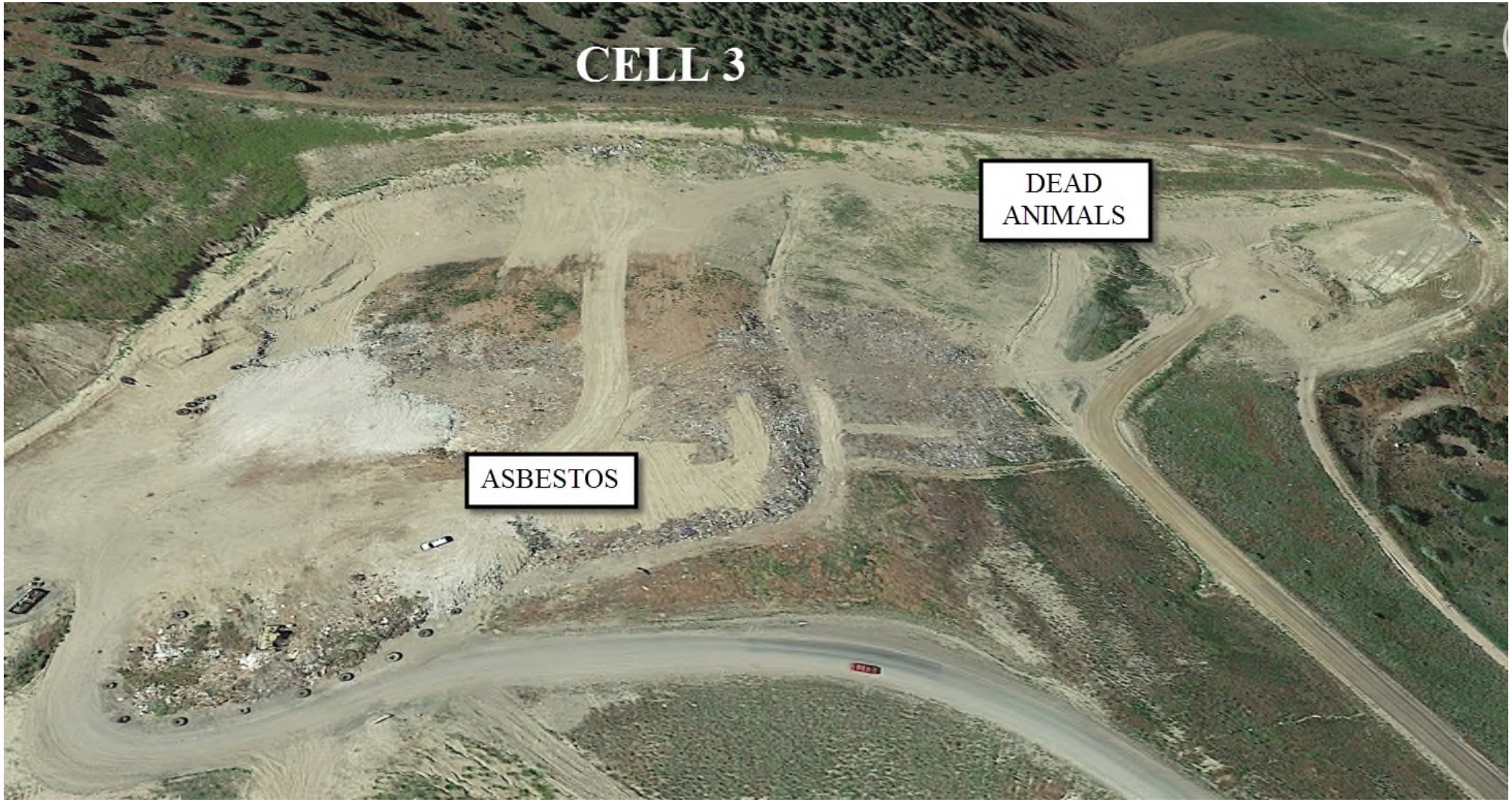
POND DETAIL SHEET

LANDFILL EXPANSION

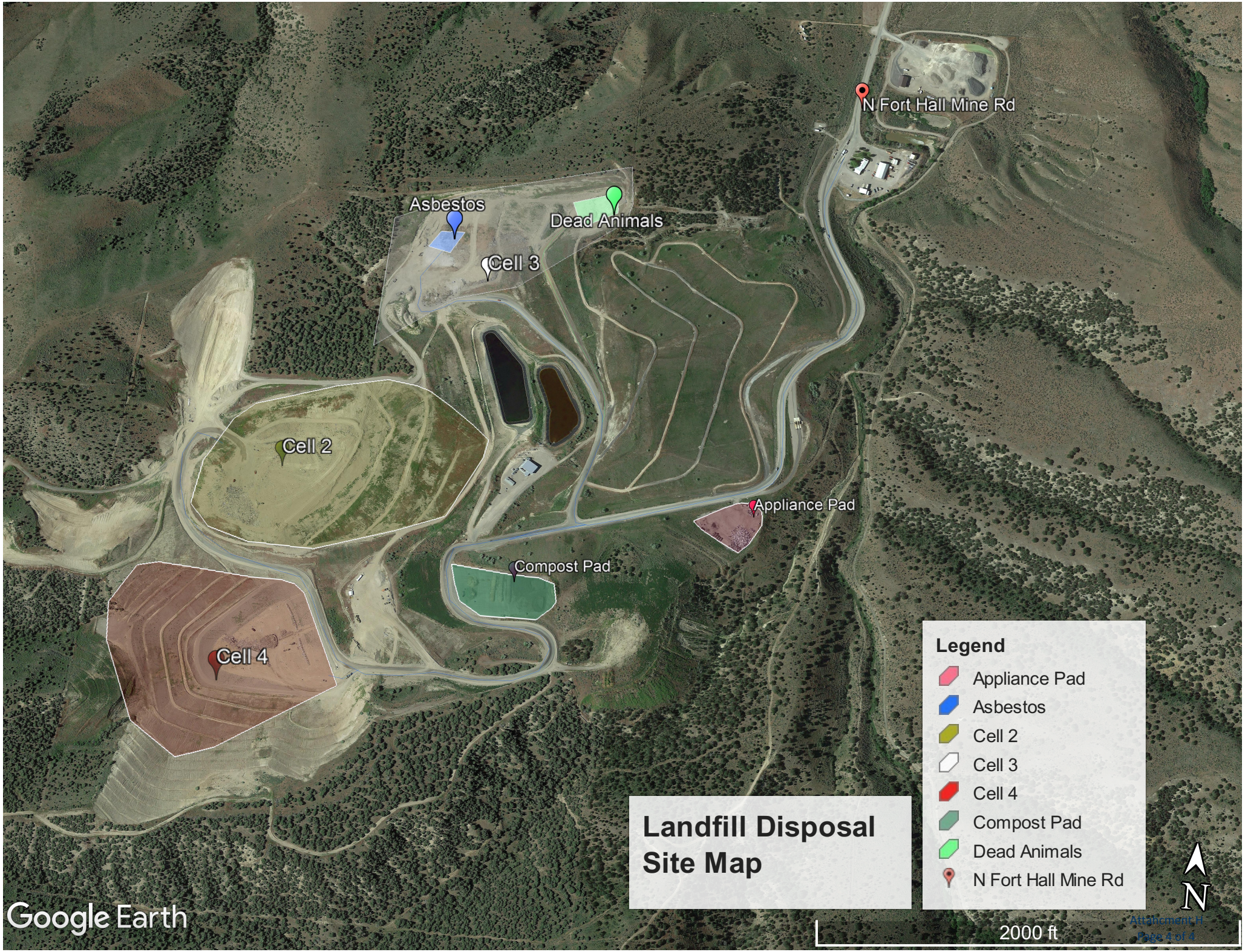
SHEET
C-56

ATTACHMENT H: CELL 2, CELL 3 & CELL 4


CELL 2
HOUSEHOLD WASTE


CELL 3
DEAD ANIMALS
ASBESTOS


CELL 4
COMMERCIAL WASTE


N Fort Hall Mine Rd
Asbestos
Dead Animals
Cell 3
Cell 2
Appliance Pad
Compost Pad
Cell 4
Landfill Disposal Site Map
Legend
Appliance Pad
Asbestos
Cell 2
Cell 3
Cell 4
Compost Pad
Dead Animals
N Fort Hall Mine Rd
N
2000 ft
Google Earth

ATTACHMENT I: EMERGENCY PLAN

EVACUATION PLAN

BANNOCK COUNTY FORT HALL MINE LANDFILL

Emergency meeting location: MAIN ENTRANCE GATE

Emergency Procedure: Immediately contact supervisor.

Supervisor on duty will:

- Contact 911 if needed for EMS, fire, and police.
- Assign an employee to main gate to keep public from entering.
- Notify all employees to evacuate public from all sites at landfill and confirm public has safely exited facility.
- Head count of employees at meeting location.

DIRECTION TO LANDFILL

GPS LATITUDE OF MINE: _____112° 22’20.945”W

GPS LONGITUDE OF MINE: ___42°47’6.4”N

Fort Hall Mine Landfill: From Pocatello take I-15 south, take exit 63 toward Portneuf Area, right on Hwy 91 for .1 mile, left on N. Fort Hall Mine Road, go .4 mile to the landfill scale house. They can direct you to the emergency area.

EMERGENCY CONTACTS:

EMS (if needed)	**911**
Office	**(208) 236 – 0607**
Kiel Burmester	**(208) 251 – 6488**
Brett Grayson	**(208) 251 – 3007**
Randy Kiggins	**(208) 201 – 3835**
Tim Abramson	**(208) 241 – 4247**
Debbie Norman	**(208) 236 – 7405**

ADVISE CONTACT WHAT THE EMERGENCY IS AND DIRECTIONS TO LANDFILL