C/041/002 Incoming

#4884

Canyon Fuel Company, LLC
A Subsidiary of Bowie Resource Holdings, LLC

Sufco Mine
Kenneth E May
General Manager
597 South SR24
Salina, Utah 84654
(435) 286-4400
Fax (435) 286-4499

May 1, 2015

Permit Supervisor, Utah Coal Regulatory Program
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, UT 84114-5801

Re: Clean Copies of Amendment to MRP to Construct Waterway and Re-Paving of Parking Area Adjacent to Office Building, Task ID# 4884, Sufco Mine, Canyon Fuel Company, LLC, Permit Number C/041/0002

Dear Sirs:

Please find enclosed with this letter clean copies of an amendment to the Sufco Mine Permit to address the addition of a waterway and re-paving of the asphalt parking area adjacent to the mine's office building.

Moving drawings from the text portion of Chapter 5 required the pagination to be revised for Pages 10 and 11, these pages have now been designated as blank within the permit. Pages 5-58 thru 5-61 have been includes to enable the pagination to match what is currently within the permit/

The reclamation costs were originally included with this amendment, however the entire bond has now been revised and submitted is association with deficiencies from the Division's Midterm review.

If you have questions or need addition information please contact Vicky Miller at (435)286-4481.

CANYON FUEL COMPANY, SUFCO Mine

Kenneth E May

Kenneth May
General Manager

Encl.

cc: DOGM Correspondence File

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MAY 05 2015
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APPLICATION FOR COAL PERMIT PROCESSING

Permit Change ☒ New Permit ☐ Renewal ☐ Exploration ☐ Bond Release ☐ Transfer ☐

Permittee: Canyon Fuel Company, LLC
Mine: Sufco Mine **Permit Number:** C/041/0002
Title: Clean Copies of Amendment to Construct Waterway and Repaving of Office Parking Lot, Task ID#4884
Description, Include reason for application and timing required to implement:

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

☐ Yes ☒ No 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ ☐ increase ☐ decrease.
☐ Yes ☒ No 2. Is the application submitted as a result of a Division Order? DO# _____
☐ Yes ☒ No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
☐ Yes ☒ No 4. Does the application include operations in hydrologic basins other than as currently approved?
☐ Yes ☒ No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes ☒ No 6. Does the application require or include public notice publication?
☐ Yes ☒ No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
☐ Yes ☒ No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
☐ Yes ☒ No 9. Is the application submitted as a result of a Violation? NOV # _____
☐ Yes ☒ No 10. Is the application submitted as a result of other laws or regulations or policies?
Explain: _____
☐ Yes ☒ No 11. Does the application affect the surface landowner or change the post mining land use?
☐ Yes ☒ No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
☐ Yes ☒ No 13. Does the application require or include collection and reporting of any baseline information?
☐ Yes ☒ No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes ☒ No 15. Does the application require or include soil removal, storage or placement?
☐ Yes ☒ No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
☒ Yes ☐ No 17. Does the application require or include construction, modification, or removal of surface facilities?
☐ Yes ☒ No 18. Does the application require or include water monitoring, sediment or drainage control measures?
☐ Yes ☒ No 19. Does the application require or include certified designs, maps or calculation?
☐ Yes ☒ No 20. Does the application require or include subsidence control or monitoring?
☒ Yes ☒ No 21. Have reclamation costs for bonding been provided?
☐ Yes ☒ No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
☐ Yes ☒ No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you. (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations herein.

KENNETH E. MAY
Print Name

Sign Name, Position, Date 5/1/15

Subscribed and sworn to before me this 1 day of May, 2015

Notary Public

My commission Expires: _____, 20___ }
Attest: State of Utah } ss:
County of Sevier

JACQUELYN NEBEKER
Notary Public
State of Utah
My Commission Expires 03/24/2019
COMMISSION NUMBER 681827

For Office Use Only:	Assigned Tracking Number:	Received by Oil, Gas & Mining
		RECEIVED MAY 05 2015 DIV. OF OIL, GAS & MINING

Form DOGM- C1 (Revised March 12, 2002)

APPLICATION FOR COAL PERMIT PROCESSING
Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: Canyon Fuel Company, LLC
Mine: Sufco Mine **Permit Number:** C/041/002
Title: Clean Copies of Amendment to Construct Waterway and Repave Office Parking Area, Task ID#4884

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

Add	Replace	Remove	DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☐ Add	☐ Replace	☐ Remove	M&RP
☐ Add	☒ Replace	☐ Remove	Chapter 5, TOC - Pages v, vi, vii and Page 5-60
☒ Add	☐ Replace	☐ Remove	Appendix 5-12 - Office Parking Lot Details
☐ Add	☒ Replace	☐ Remove	Chapter 5, Pages 5-10 & 5-11, "page left intentionally blank"
☒ Add	☐ Replace	☐ Remove	Appendix 5-11, Figures5-0C &5-0D
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
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Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.	Received by Oil, Gas & Mining
May 1, 2015	RECEIVED MAY 05 2015 DIV. OF OIL, GAS & MINING

Form DOGM - C2 (Revised March 12, 2002)

CHAPTER 5

ENGINEERING

LIST OF TABLES

LIST OF FIGURES

LIST OF PLATES

LIST OF PLATES

LIST OF APPENDICES

(Appendices appear in Volume 6)

Appendix

LIST OF APPENDICES

(Appendices appear in Volume 6)

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The primary sediment pond has 2H:1V to 3H:1V inslopes (Plate 7-5). The overflow pond has 2H:1V to 3H:1V inslope (Plate 7-5A) The waste rock disposal site sedimentation pond has a 3H:1V inslope (Volume 3 of this M&RP). Surface erosion would be minimized by the flatness of the inslopes.

In the event of a storm, rapid drawdown in the primary sedimentation pond would be restricted to the vertical distance between the spillway and the peak water level, a distance of 0.20 ft (Plate 7-5). The maximum drawdown in the overflow pond during a storm event is 0.74 ft (Plate 7-5A). The maximum drawdown in the waste rock disposal site sedimentation pond during a storm event is 1.1 ft (Appendix II, Volume 3). Drawdown of this size is not significant and, given the flatness of the inslopes, is not of erosional concern.

During decant of the sedimentation ponds, flow is controlled and is unlikely to cause surface erosion.

5.3.3.4 Embankment Faces

Embankment inslopes and outslopes were revegetated following construction of the sedimentation ponds. Riprap was also placed on the upstream faces of the embankments near the discharge structures.

5.3.3.5 Highwalls

No highwalls are located below the water lines of the sedimentation ponds.

5.3.3.6 MSHA Criteria

No sedimentation ponds in the permit area meet the size criteria of 30 CFR 216(a).

5.3.3.7 Pond Operation and Maintenance Plans

Each sedimentation pond is designed in accordance with R645-301-740. Details of these designs are presented in Chapter 7 and in Volume 3.

The sedimentation ponds are operated as containment structures, with primary and emergency spillways to discharge water during a storm that exceeds the design capacity. Excess water following a runoff event is held in the ponds until the suspended sediment settles. Water is decanted in accordance with the discharge permit and 40 CFR 434 effluent limitations.

The decant devices for the three sedimentation ponds consist of an inverted section of 12-inch diameter iron pipe connected to iron pipe at the primary sediment pond, an inverted section of 24-inch CMP pipe connected to an 18-inch pipe at the overflow pond and an inverted section of 12-inch CMP connected to 12-inch CMP pipe at the Waste Rock Disposal Site. Outflow from the decant

devices is controlled by locked gate valves. Keys to the locks are maintained at the mine office. Details of the design of these decant devices are provided in Chapter 7.

Inspections of the sedimentation ponds are conducted on a quarterly basis (see Section 5.1.4.3). Maintenance that is required to keep the ponds in good working condition is performed as soon as practical following discovery of a maintenance need.

Sediment is removed from the ponds when it accumulates to 60 percent of the design sediment storage volume. This removed sediment is disposed of in the waste-rock disposal area.

5.3.4 Roads

5.3.4.1 Location, Design, Construction, Reconstruction, Use, Maintenance, and Reclamation

Control of Damage to Public or Private Property. All roads used by SUFCO Mine were designed in accordance with applicable county, UDOT, and U.S. Forest Service standards. By designing according to these standards, damage to public or private property has been minimized.

Road Surfacing. The surface of the mine access road consists of asphalt with a rock-chip wear surface (see Section 5.2.7.2). All ancillary roads are unimproved dirt roads. No acid- or toxic-forming materials have been used in the road surfaces.

Appendix 5-11 contains design drawing and information pertaining to the paving of an area in the upper mine yard and the repair and re-paving of the area between the shop/warehouse and the ambulance garage/Dodge Shop/steam bay/dog house and repaving of an area behind the shop/warehouse building. The areas to be paved will also have three segments of concrete ditch with drop drains. The drop drain will direct surface runoff into existing culverts, which discharge water into the sediment pond for treatment.

A fourth drop drain located in the left hand corner of the site plan drawing (Appendix 5-11) will collect water and direct the water through a drain pipe, inserted through a concrete wall to the lower yard. In the second phase of the paving and drainage installation the drain pipe through the concrete wall will be connected to a pipeline and connected to an existing pipeline. The water will proceed per the permitted drainage plan, through the yard to the sediment pond.

The design of the Type 2 junction box has a single inlet/outlet, the design of the Type 3 junction has multiple inlets/outlets, the dimensions are the same for either box see the Site Drainage Detail Sheet drawing G-9 in Appendix 5-11 for the dimensions.

Sufco Parking Lot (Constructed 1950's) - A plan has been provided in Appendix 5-12 for the replacement of the asphalt in parking area adjacent to the mine office building. After removal and prior to replacing the asphalt, the area will be re-graded to slope to the center of the parking area where an installed concrete waterway will assist in directing precipitation/water into structures in the permitted drainage plan to the sediment pond.

If necessary a grade ring will be added to the existing manhole to bring the manhole cover up to the grade of the replaced asphalt.

Due to the limited knowledge of the material beneath the existing asphalt there is uncertainty to whether existing material or acquired untreated base course will be used. Existing native material will be used for the construction base when it's characteristics meet compaction standards, however when required untreated base course (0-8") will be used. Excess native material generated during the regrading of the parking lot area depending on it quality will be hauled to the waste rock site and either mixed with the waste or placed on the subsoil pile. The area to be re-paved ties into existing features on each end which will require the grade to be similar to the grade prior to the repaving and installation of the concrete waterway. The reclamation cut/fill calculations for this area should remain unchanged.

Slope Stability. The stability of the mine access road embankment has been evaluated where the road enters the permit area. Results of this evaluation are presented in Appendix 5-8. This analysis indicates that the access road embankment has a minimum safety factor of 1.7 under static conditions. This value exceeds the safety factor of 1.3 required by R645-301-534.130.

An evaluation of the stability of the sedimentation-pond access road embankment is presented in Appendix 5-8. This evaluation indicates that the minimum static safety factor of the sedimentation-pond road embankment is 1.7. This value also exceeds the safety factor of 1.3 required by R645-301-534.130.

All other roads in the lease area are owned and maintained by the U.S. Forest Service. No stability problems have been noted on these roads.

5.3.4.2 Environmental Protection and Safety

Safety and environmental protection were primary concerns during the design and reconstruction of the mine access road and construction of the sedimentation-pond access road. The grade, width, and surface materials used for the roads were selected to be appropriate for the planned duration and use of the roads.

5.3.4.3 Primary Roads

General. The only primary road (outside of the disturbed area boundary) used or maintained by SUFCO Mine is the mine access road. The extension of this primary road within the disturbed area boundary is know as the truck loop road. This road was designed and constructed in consultation with the U.S. Forest Service in a manner that provided protection to fish, wildlife, and related environmental values. The road is being maintained by SUFCO Mine to meet its design standards throughout the life of the mining and reclamation activities. Catastrophic events are repaired as soon as practical after the damage occurs.

The mine access road was designed and reconstructed and is used and maintained in a manner that prevents damage to public or private property. Only nonacid- and nontoxic-forming materials were used to surface the road. The road embankments have a minimum static safety factor in excess of 1.3. Any portion of the road within the permit area that is
not to be retained for use under an approved post-mining land use will be reclaimed immediately after it is no longer needed for mining and reclamation operations.

Road Alignment. The reconstructed mine access road was located generally along the alignment of the former dirt road. The former road location had been in existence for many years and had not experienced major stability problems. Thus, the road is located on the most stable available surface, giving consideration also to safety and environmental protection.

Road Surfacing. The mine access road is surfaced with asphalt with a rock-chip wear surface. This surface was designed to account for the anticipated volume of traffic as well as the weight and speed of vehicles using the road. No problems have been encountered with the road surface since its construction in 1977.

Road Maintenance. The mine access road is maintained by SUFCO Mine in cooperation with the county and UDOT. As required, SUFCO Mine repairs the road surface, blades the adjacent drainage ditches, fills potholes, and resurfaces the road. Where necessary, minor reconstruction of road segments will occur, together with revegetation of road cuts and fills and removal of brush.

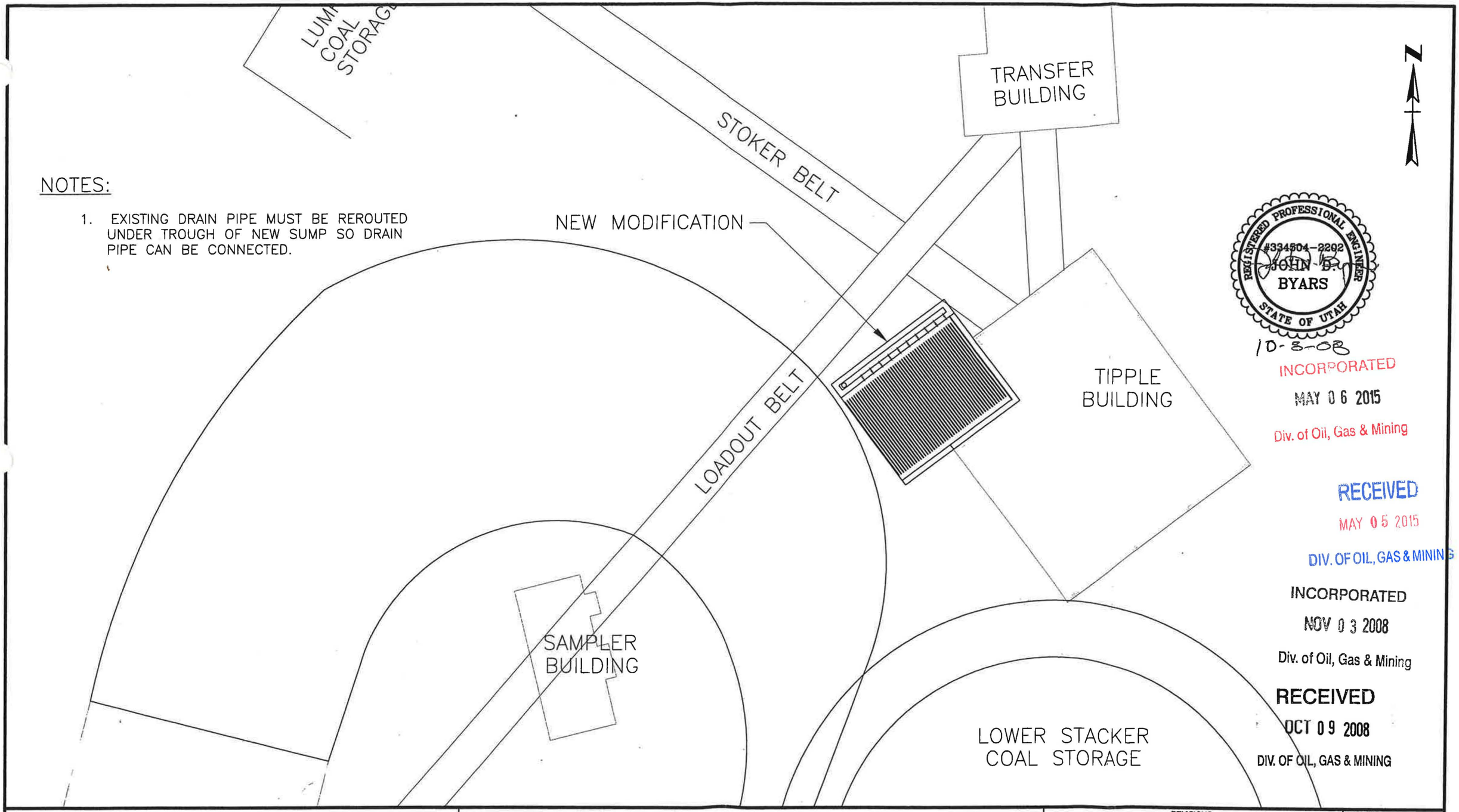
Road Culverts. All culverts along the mine access road were installed and are maintained in accordance with manufacturers recommendations. Thus, these culverts have sustained the vertical soil pressure, the passive resistance of the foundation, and the weight of vehicles using the road. No evidence of structural problems has been observed with the culverts.

APPENDIX 5-11

Upper Mine Yard Details

APPENDIX 5-12

Office Parking Lot Details



NOTES:

1. EXISTING DRAIN PIPE MUST BE REROUTED UNDER TROUGH OF NEW SUMP SO DRAIN PIPE CAN BE CONNECTED.

REGISTERED PROFESSIONAL ENGINEER #334504-2202 JOHN D. BYARS STATE OF UTAH

10-3-08

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Canyon Fuel Company, LLC
SUFCO Mine
397 South 800 West - Salina, UT 84654
(435) 286-4480 Phone
(435) 286-4499 Fax

Figure 5-0C – Tipple Building Modification

Location Exhibit

SCALE: NONE	DATE: July 2008	DRAWN BY: J.G.C.	ENGINEER: J.D.B.	CHECKED BY: A.R.

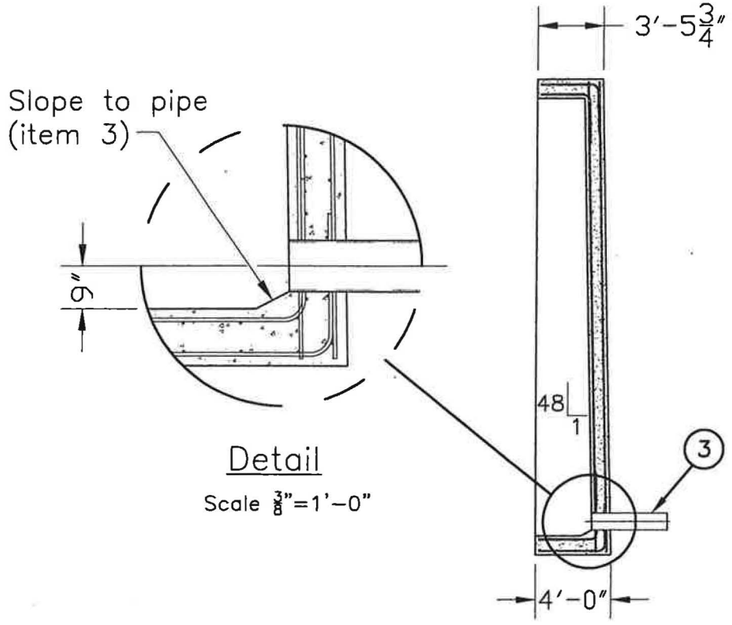
FILE NAME: H:\DRAWINGS\TIPPLE\Sump\Tipple Sump.dwg

REVISIONS				
NO.	DATE	REQ. BY	DWG. BY	REMARKS

SHEET NO. 1 of 2

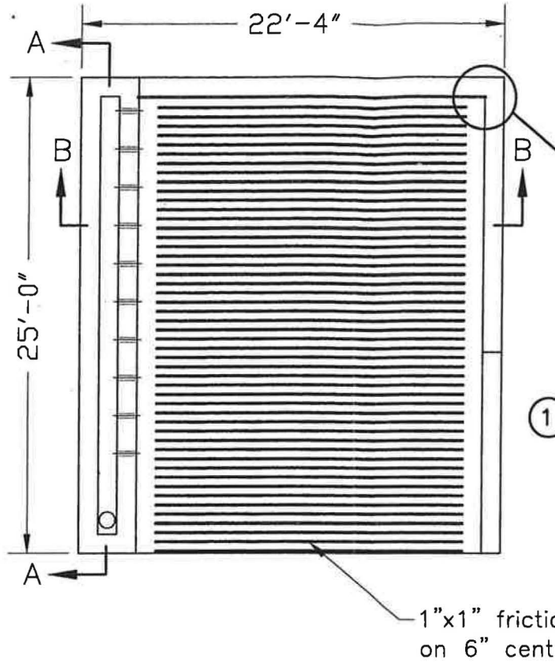
Bill of Materials

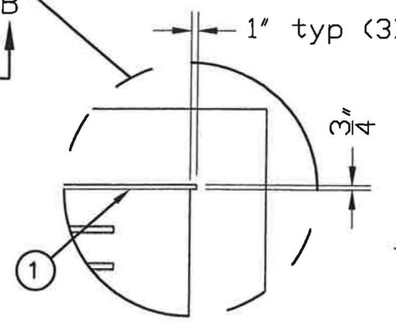
Item	Qty.	Mat'l	Description	Weight
1	1	stl	Pl, ¾" x 6'–0" x 18'–6"	3,393
2	10	pvc	Pipe, 4"sch 40 x 1'–0"	20
3	1	stl	Pipe, 10"sch 40 x 4'–0" (trim to length)	162



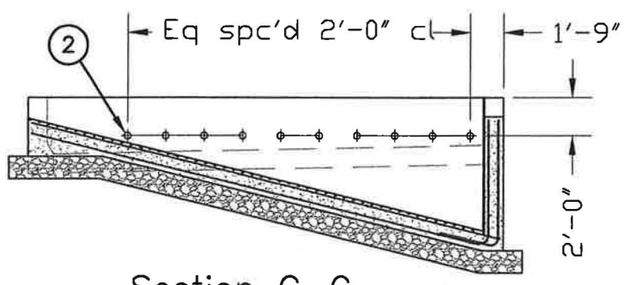
Detail
Scale ⅜"=1'–0"

Section A–A

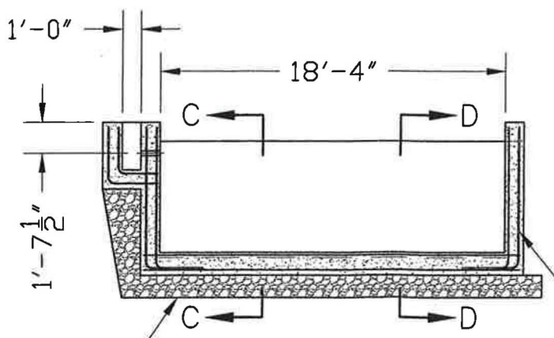




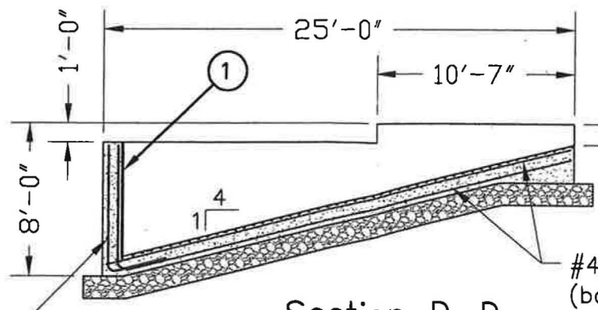
Detail
Scale ½"=1'–0"



Section C–C



Section B–B



Section D–D

#4 rebar on 6" centers
(bottom both ways)
#4 rebar on 12" centers
(top both ways)

Notes:

1. Connect 10" drain pipe to rerouted existing drain pipe by welding.
2. Rebar to be 2" below surface of concrete and 3" above granular borrow unless noted.
3. Concrete to be 1'–0" thick unless noted.

REGISTERED PROFESSIONAL ENGINEER #334504–2202 JOHN D BYARS STATE OF UTAH
10-8-08

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Canyon Fuel Company, LLC
SUFCO Mine
397 South 800 West - Salina, UT 84654
(435) 286-4480 Phone
(435) 286-4499 Fax

Figure 5–0D – Tipple Building Modification

Sump Details

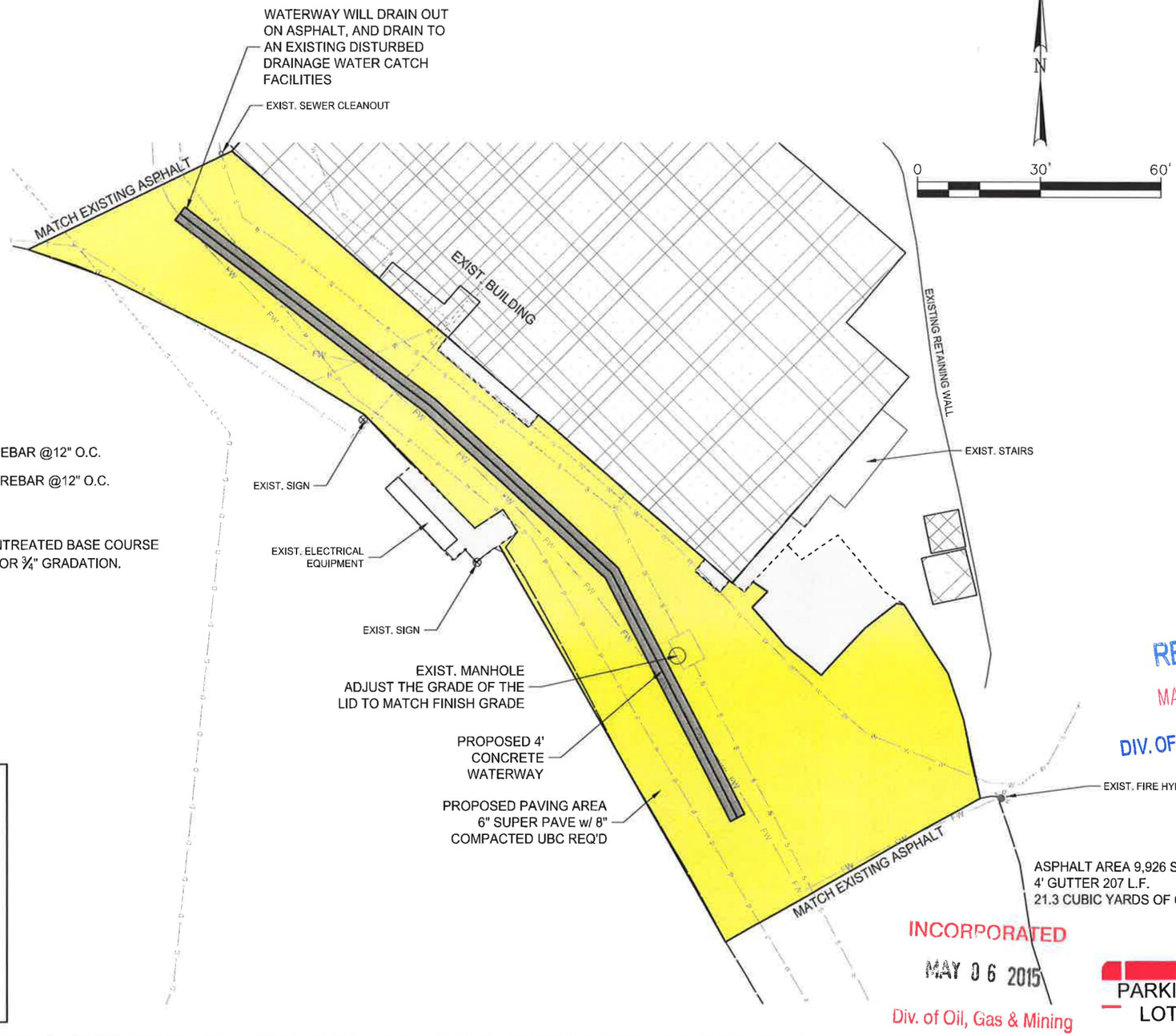
SCALE: 1/8 = 1'–0"	DATE: July 2008	DRAWN BY: J.G.C.	ENGINEER: J.D.B.	CHECKED BY: A.R.
FILE NAME: H:\DRAWINGS\TIPPLE\Sump\Tipple Sump.dwg				

REVISIONS

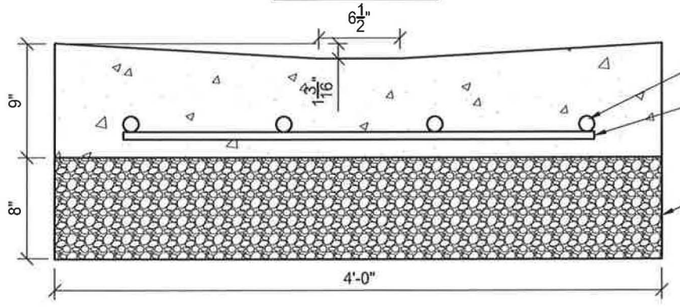
NO.	DATE	REQ. BY	DWG. BY	REMARKS

SHEET NO. 2of2

PROFESSIONAL ENGINEER
5/4/15
No. 9073281
JACOB D. SMITH
STATE OF UTAH



4'-0" WATERWAY



LEGEND

- PROPOSED - REPLACE EXISTING ASPHALT
- PROPOSED CONCRETE WATERWAY
- EXISTING OFFICE BUILDING
- EXISTING CONCRETE FLATWORK
- EXISTING EDGE OF CONCRETE
- EXISTING DISTURBED DRAINAGE PIPE
- EXISTING BURIED POWERLINE
- EXISTING BURIED TELEPHONE LINE
- EXISTING BURIED WATERLINE
- EXISTING BURIED SEWER LINE
- EXISTING BURIED FIRE WATER LINE

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MAY 06 2015
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PARKING LOT

Canyon Fuel Company, LLC
SUFCO Mine
597 South SR 24 - Salina, UT 84654
(435) 286-4880 Phone
(435) 286-4499 Fax

SUFCO PARKING LOT

GRADING PLAN

SCALE: 1" = 30'	DATE: 4/17/2015	DRAWN BY: J.K.M.	ENGINEER: J.B.	CHECKED BY: T.R.B.
FILE NAME: M:\PROJ\0514-002\dwg\Parking Lot Grading.dwg				PROJ: 0514-002

REVISIONS				
NO.	DATE	REQ. BY	DWG. BY	REMARKS

SHEET NO.
C101