C/007/005 Incoming

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

Skyline Mine #5252
Gregg A. Galecki, Environmental Engineer
HC35, Box 380
Helper, Utah 84526
(435) 448-2636
Fax (435) 448-2632 #5254

RECEIVED
OCT 14 2016
DIV. OF OIL, GAS & MINING

October 3, 2016

Mr. Daron R. Haddock
Division of Oil, Gas, and Mining
1594 West North Temple
Salt Lake City, Utah 84114-5801

RE: Clean Copies, Canyon Fuel Company, LLC, Skyline Mine, C/007/0005, Task IDs 5252, 5254

Dear Daron:

Attached to this letter are two (2) clean copies of information necessary to add a concrete slab to the BC-4 belt take-up and a catwalk to the existing Fuel Bay at the main Mine site, and revegetation updates requested by Cheryl Parker. Included are an updated Surface Facilities map (Plate 3.2.1-1_Rev14_8-1-16) showing the location of the new structures, and modified bond sheets to accommodate demolition/removal of the structures. The concrete slab being added to the BC-4 belt take-up is a 10 ft by 10 ft by 1.5 ft slap. A diagram for the catwalk is included in the application and is intended to be included with the "Fuel Storage 22" demolition bond sheet. The two (2) structures add a total of approximately $371 to the demolition portion of the reclamation bond. In addition, the revegetation summary sheet has been updated by request of Cheryl Parker. There is adequate funding in the current bond to cover this modification.

Attached to this cover letter are completed C1 and C2 forms. In addition, two clean versions of the M&RP modified bond information located in Chapter 4, Section 4.3, and Plate 3.2.1-1.

If you have any questions regarding this information, please call me at (435) 448-2636.

Sincerely:

Gregg A. Galecki
Canyon Fuel Company, LLC.
Environmental Engineer – Skyline Mines

APPLICATION FOR COAL PERMIT PROCESSING

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

Permittee: Canyon Fuel Company, LLC

Mine: Skyline Mine **Permit Number:** C/007/005

Title: Bond modification, Task ID 5252, 5254

Description, Include reason for application and timing required to implement:

Addition of Catwalk at Fuel Bay, a 10x10 concrete slab at BC-4 belt Take-up, Reveg. Updates per C. Parker

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?

Information submitted electronically in Adobe Acrobat .pdf format. (This number includes 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.

Corey Heaps
Print Name

Corey Heaps, GM, 10/3/16
Sign Name, Position, Date

Subscribed and sworn to before me this 3RD day of Oct, 20 16

Kathleen Atwood
Notary Public

My commission Expires: 12-02, 2019

Attest: State of Utah } ss:
County of Carbon

KATHLEEN ATWOOD
NOTARY PUBLIC • STATE OF UTAH
COMMISSION# 686430
COMM. EXP. 12-02-2019

For Office Use Only:	Assigned Tracking Number:	Received by Oil, Gas & Mining
		RECEIVED OCT 14 2016 DIV. OF OIL, GAS & MINING

Form DOGM- C1 (Revised 3/22/2010)

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

Permittee: Canyon Fuel Company, LLC
Mine: Skyline Mine **Permit Number:** C/007/005
Title: Clean Copies; Bond Modification - Catwalk, BC-4 Take-up slab, C.Parker reveg updates. Tasks 5252, 5254

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.

			DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☐ Add	☒ Replace	☐ Remove	Chapter 4, Section 4.3, Bond Total page, Demolition Total Page, Conveyors (8) Total 09, Fuel Storage 22 (including walkway design), Earthwork Total Page, Southwest Fork 06, Revegetation Costs (8 total sheets)
☐ Add	☒ Replace	☐ Remove	Chapter 3, Plate 3.2.1-1
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	

Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.	Received by Oil, Gas & Mining
Two (2) clean copies of the information is being submitted for incorporation.	RECEIVED OCT 14 2016 DIV. OF OIL, GAS & MINING

Skyline Mine TC/007/005
Task 5252, 5254

Total Required Bond Amount
2014 Dollars

Revised September 2016

Bonding Calculations

Direct Costs

Subtotal Demolition and Removal	$2,091,939	
Subtotal Backfilling and Grading	$1,343,339	
Subtotal Revegetation	$313,143	
Direct Costs Subtotal	$3,748,422	

Indirect Costs

Mob/Demob	$374,842	10.0%
Contingency	$187,421	5.0%
Engineering Redesign	$93,711	2.5%
Main Office Expense	$254,893	6.8%
Project Management Fee	$93,711	2.5%
Subtotal Indirect Costs	$1,004,578	26.8%

Total Cost 2014	**$4,753,000**	
Escalation factor		*5*
Number of years		*0.019*
Escalation	*$479,715*	
Reclamation Cost Escalated	$5,232,715	
Reclamation Bond Amount (rounded to nearest $1,000) 2019 Dollars	**$5,233,000**	

Posted Bond March 18, 2015	$5,799,000	
Difference Between Cost Estimate and Bond	$566,000	
Percent Difference	9.76%	

INCORPORATED

OCT 18 2016

Div. of Oil, Gas & Mining

Errors in permittee's total sheet: indirect should be updated, escalation should be held constant at $479,715, TOTAL rec bond amount in 2019 $5,455,000

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Shop Warehouse 01																			277833
	Administration Bld 02																			27154
	Mine No 1 Transfer Tower 03																			44106
	BC 2 Drive House 04																			9422
	BC 3 Drive House 05																			42220
	Crusher Raw Coal 06																			20778
	Truck Loadout 07																			4807
	Railcar Loadout 08																			23377
	Conveyors 8 total 09																			114289
	Water Tanks Two 10																			2252
	Pump House 11																			1601
	Well House Three 12																			4756
	Water Treatment Bld 13																			17830
	Misc Storage Bld 14																			8386
	Overland Conveyor 15																			95092
	Guard Rail 16																			18269
	Rock Dust Bld 17																			7075
	Overland Dust Collector 18																			1525
	Substation 19																			2609
	Power Line 20																			528
	Cap Magazine 21																			38
	Fuel Storage 22																			1347
	Propane Tanks 23																			1820
	Stacking Tube 24																			7346
	Reclaim Tunnel 25																			60762
	Slope Proctection Apron 26																			23345
	Concrete Lined Ditch 27																			1175
	Raw Coal Silo 28																			21081
	Parking Area Middle 29																			3262
	Truck Loadout Foundation 30																			310
	Road Pad Lower 31																			5054
	Silo Rail Loadout 32																			186868
	Loadout Foundation RR 33																			7683
	Pavement Rail Loadout 34																			48718
	Steel 35																			11075
	James Canyon 36																			126205
	Culvert Backfilling 37																			9041
	Channel Construction 38																			520548
	Equipment 39																			237900
	Portal Face Door 40																			6297
	Concrete Building 41																			2274
	Winter's Quarters Ventilation 42																			54782
	North of Graben Bleeder Shaft 43																			17181
	Swens Canyon Ventilation Facility 44																			13917
	Total																			2,091,939

INCORPORATED
OCT 18 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Conveyors 8 total 09																			
	Deduct 50% no interior walls																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02 41 16 13 0100	0.3	/CF													357960	CF	53894
	Structure's Vol. Demolished																0.3	3977	CY	
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	City Services	City Service Price	4.33	/CY													3977	CY	17220
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			70914
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Upper Terrace Area																			
	Concrete Demolition																			
	Demolition Cost	Nielson Concrete <15"	Nielson Quote	13.75	CY													47	CY	646
	Concrete's Vol. Demolished																1.3	61	CY	
	Loading Cost	Front end Loader 3 CY	31 23 16 42 1300	1.67	/CY													61	CY	102
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 20 1014	2.95	/CY													61	CY	180
	Disposal Costs	On site disposal	02 41 16 17 4200	8.65	/CY													61	CY	528
	Subtotal																			1456
	Middle Terrace Area																			
	Concrete Demolition																			
	Demolition Cost	Nielson Concrete <15"	Nielson Quote	13.75	CY													62	CY	853
	Concrete's Vol. Demolished																1.3	81	CY	
	Loading Cost	Front end Loader 3 CY	31 23 16 42 1300	1.67	/CY													81	CY	135
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 20 1014	2.95	/CY													81	CY	239
	Disposal Costs	On site disposal	02 41 16 17 4200	8.65	/CY													81	CY	701
	Subtotal																			1928
	Lower Terrace Area																			
	Concrete Demolition																			
	Demolition Cost	Nielson Concrete <15"	Nielson Quote	13.75	CY													90	CY	1238
	Concrete's Vol. Demolished																1.3	117	CY	
	Loading Cost	Front end Loader 3 CY	31 23 16 42 1300	1.67	/CY													117	CY	195
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 20 1014	2.95	/CY													117	CY	345
	Disposal Costs	On site disposal	02 41 16 17 4200	8.65	/CY													117	CY	1012
	Subtotal																			2790
	Acces Raod Area																			
	Concrete Demolition																			
	Demolition Cost	Nielson Concrete <15"	Nielson Quote	13.75	CY													1200	CY	16500
	Concrete's Vol. Demolished																1.3	1560	CY	
	Loading Cost	Front end Loader 3 CY	31 23 16 42 1300	1.67	/CY													1560	CY	2605
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 20 1014	2.95	/CY													1560	CY	4602
	Disposal Costs	On site disposal	02 41 16 17 4200	8.65	/CY													1560	CY	13494
	Subtotal																			37201
	Total																			114289

Note: Volume is in CY

9/2016 - Added 8 CY concrete for BC-4 Take-up Slab

Div. of Oil, Gas & Mining
OCT 18 2016
INCORPORATED

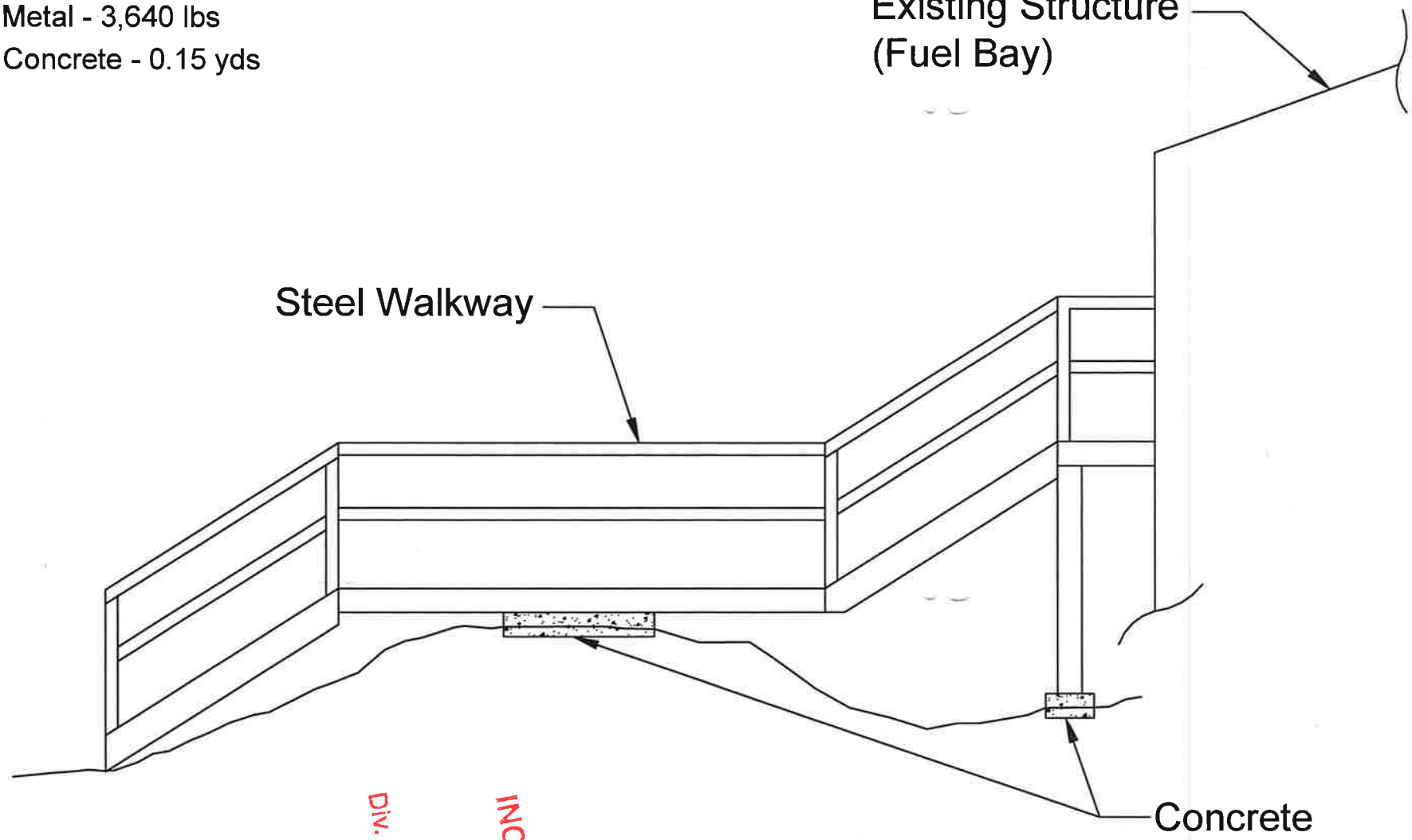
Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Fuel Storage 22																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0020	0.27	/CF													265	CF	72
	Structure's Vol. Demolished	Steel Walkway	05 05 05 0250	120	ea													1	ea	120
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	City Services	City Service Price	4.33	/CY													2	CY	9
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			201
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Nielson Concrete <15"	Nielson Quote	13.75	CY													37	CY	509
	Concrete's Vol. Demolished																1.3	48	CY	
	Loading Cost	Front end Loader 3 CY	31 23 16 42 1300	1.67	/CY													48	CY	80
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. tri	31 23 23 20 1014	2.95	/CY													48	CY	142
	Disposal Costs	On site disposal	02 41 16 17 4200	8.65	/CY													48	CY	415
	Subtotal																			1146
	Total																			**1347**

INCORPORATED
OCT 18 2016
Div. of Oil, Gas & Mining

Materials Added to Site:

Metal - 3,640 lbs

Concrete - 0.15 yds



INCORPORATED
OCT 18 2016
Div. of Oil, Gas & Mining

Skyline Mine
Walkway for Emulsion Tank Catwalk

Canyon Fuel Company, LLC
Skyline Mines

HCR 35 BOX 380, HELPER, UT. 84526 435-448-2832	DATE: 07/29/16	CK.BY: CGalecki	REVISION:
CAD FILE	SCALE: NTS	DR.BY: BBailey	0
DWG. NO.: 001			07/29/16

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/D s.	Units	Cost
Portal 01															68244
Water Tank 02															14042
Lower Terrace 03															487
Middle Bench 04															241429
Upper Bench West Fork 05															109472
Southwest Fork 06															51520.9
Loadout Faclities 07															195935
South Fork Portal Area 08															65234
Waste Rock Disposal 09															369737
Pond Enlargement Interim 10															17
Pond Diversion DU2 Interim 11															362
Interim Sediment Control 12															4449
Overland Conveyor 13															1651
James Canyon 14															0
Winter Quarters 15															151862
North of Groben Bleeder Shaft 16															68897
Swens Canyon Ventilation Facility 17															
Total															**1343339**

Notes: Revised equipment names

1333999

INCORPORATED
OCT 18 2016
Div. of Oil, Gas & Mining

	Reference Page	Reference Year	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Skyline Mine Mine Facilities Area **Southwest Fork 06**																	
D8T	(9-36)	(1st14	19375	100.25	0.1	55.4	286.77	1	286.77	$/HR					66	HR	18927
631G	(9-26)	(1st14	25955	162.1	0.1	55.4	395.93	1	395.93	$/HR					66	HR	26131
CLAB	0	0	0	0	0	0	36.65	1	36.65	$/HR					66	HR	2419
Foreman Average, Outside	0	0	0	0	0	0	51.9	1	51.9	$/HR					33	HR	1713
Pickup Truck Crew 4x4 1 ton	(20-17	(1st14	1105	19.8	0.1	41.95	70.64	1	70.64	$/HR					33	HR	2331
																	51521

note: Error in sheets, fix next midterm

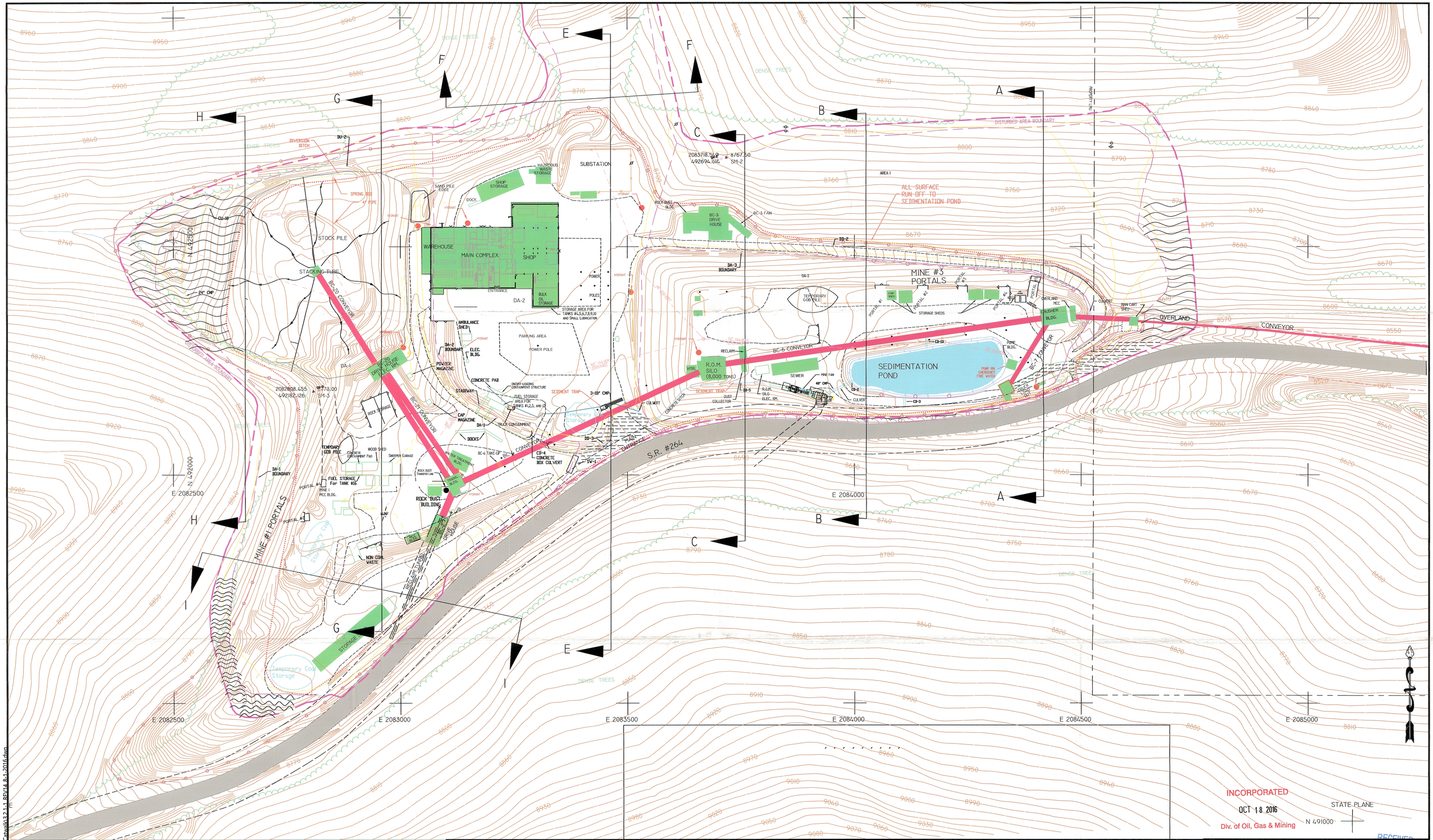
INCORPORATED
OCT 18 2016
Div. of Oil, Gas & Mining

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diame	Area	Volum	Weigh	Dens	Time	Numi	Unit	Quantity Factor	Unit	Cost
1	**South Facing Slopes 1H:3H or Greater**																		
	Seeding	South Facing Slope Seed 1H : 3H or gentler	Table 4.7-1	293.40	/AC					39.81						AC	39.81	AC	11,680
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					39.81						AC	1734	MSF	53,841
	Subtotal																		65,521
2	**North Facing Slopes**																		
	Seeding	North Facing Slopes Seed	Table 4.7-2	261.02	/AC					20.33						AC	20.33	AC	5,307
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					20.33						AC	886	MSF	27,510
	Subtotal																		32,817
3	**Riparian Habitat**																		
	Seeding	Riparian Habitat Seed	Table 4.7-3	66.73	/AC					0.04						AC	0.04	AC	3
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					0.04						AC	2	MSF	62
	Subtotal																		65
4	**Soth to West Facing Slopes**																		
	Seeding	South to West Facing Riparian Habitat Seed	Table 4.7-4	440.59	/AC					39.81						AC	39.81	AC	17,540
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					39.81						AC	1734	MSF	53,841
	Subtotal																		71,881
5	**North to East Facing Slopes**																		
	Seeding	North to East Facing Riparian Habitat Seed	Table 4.7-5	335.60	/AC					20.33						AC	20.33	AC	6,823
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					20.33						AC	886	MSF	27,510
	Subtotal																		34,333
6	**Waste Rock**																		
	Seeding	Waste Rock Slopes Seed	Table 4.7-6A	133.45	/AC					12.81						AC	12.81	AC	1,710
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					12.81						AC	558	MSF	17,326
	Subtotal																		19,035
7	**James Canyon**																		
	Seeding	Waste Rock Slopes Seed	Table 4.7-6A	133.45	/AC					4.85						AC	4.85	AC	647
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					4.85						AC	211	MSF	6,552
	Subtotal																		7,199
8	**Riparian Stem Supplement**																		
	Stems	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	Ea										9800	Ea	11074	EA	12,514
	Subtotal																		12,514
9	**Silt Fence Interim Vegetation**																		
	Stems	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	Ea	20000										ea	20000	EA	22,600
	Subtotal																		22,600
10	**Reveg Loadout Sediment Pond**																		
	Seeding	Riparian Habitat Seed	Table 4.7-3	66.73	/AC					0.3						AC	0.3	/AC	20
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					0.3						AC	13	MSF	404
	Subtotal																		424
11	**Winter Quarters Ventilation Facility Bond**																		
	South facing slopes																		
	Seeding	Final Reveg Seed Mix Rip Commun Win Qu Ven Fac	Table 4.7-9B	985.20	/AC					2.36						AC	2.36	/AC	2,325
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					2.36						AC	103	/MSF	3,198
	Tublings																		
	Quaking Aspen	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	ea					2.36			400			ea	400	ea	452
	Blue Elderberry	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	ea					2.36			400			ea	400	ea	452
	Subtotal																		6,427
12	**North of Graben Bleeder Shaft**																		
	REVEGETATION																		
	NOG																		
	South facing slopes																		
	Seeding	South facing slope seed mix	Table 4.7-10B	205.09	/AC					1.7						AC	1.7	/AC	349
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					1.7						AC	74	/MSF	2,298
	Tublings																		
	Quaking Aspen	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	ea					1.7			200			ea	200	ea	226
	red Elderberry	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	ea					1.7			20			ea	20	ea	23
	Mountain Snowberry	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	EA					1.7			100			ea	100	ea	113
	Subtotal																		3,008
13	**Swens Canyon Ventilation Facility**																		
	South facing slopes																		
	Seeding	Final Reveg Sage/Grass Swens Can Ven Fac south facing slope seed mix	Table 4.7-11B	280.64	/AC					9.7						AC	9.7	/AC	2,722
	Equipment	Hydro Spreader (equip. & labor) B-81/mulch & fertilizer	32 92 19.14 5800	31.05	/MSF					9.7						AC	423	/MSF	13,134
	Tublings																		
	Sagebrush	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	ea					9.7			400			ea	400	ea	452
	rabbitbrush	Bare root seedlings, 11" to 16" med. soil	32 93 43.10 0562	1.13	ea					9.7			400			ea	400	ea	452
	Subtotal																		16,760
	Revegetation																		
	25% of Initial Seeding																		21,060
	Subtotal																		21,060
	Total																		[illegible]

* Hay material only: assume 2 tons/ac (1 to 2 tons recommended in The Practical Guide to Reclamation in Utah pp.112-113)
*2014 R.S. Means and 2014 Nevada SRCE use $0.15/lb ($300/ton)

Note: MRP Hay costs vary from line item. Varies other errors in cell calcs

INCORPORATED
OCT 18 2016
Div. of Oil, Gas & Mining



LEGEND

DISTURBED AREA BOUNDARY: (AREA WITHIN WHICH RECLAMATION MUST TAKE PLACE)

AREA TRIBUTARY TO SEDIMENTATION POND:

SMALL AREA EXEMPTION:

ALTERNATIVE SEDIMENT CONTROL AREAS: (SEDIMENT CONTROLLED WITH STRAWBALES OR OTHER TECHNIQUES)

BEGINNING OR END OF DITCH:

DITCH SLOPE CHANGE:

NOTES

1. THE ALTERNATIVE SEDIMENT CONTROL AREAS WILL BE DISTURBED DURING PHASE 2 RECLAMATION.
2. THE DISTURBED AREAS ARE DESCRIPTIVE. AN ON THE GROUND SURVEY MADE IN 1985 DEFINES THE DISTURBED AREA AS 31.1 ACRES
3. SEE DRAWING 4.4.2-1A AND 4.4.2-1B FOR THE RECLAMATION PLAN AND CROSS SECTIONS.
4. NUMEROUS DEVICES SUCH AS PAVEMENT, TEMPORARY DRAINAGE AND GRADING CONTROLS, WHICH ARE NOT SHOWN ON THIS DRAWING ARE USED AS NECESSARY TO DIRECT RUNOFF TO THE PERMANENT DIVERSION FACILITIES SHOWN ABOVE.

I CERTIFY THAT THE INFORMATION CONTAINED HEREON IS CORRECT TO THE BEST OF MY KNOWLEDGE.

0 100 200 FEET

SEAL:

REGISTERED PROFESSIONAL ENGINEER
No. 8781250-2202
CRAIG WILLIAM BROWN
STATE OF UTAH

DATE	No.	REVISIONS	APPD. CHKD.	DES. DR.
6/9/99	1	ADDED SEDIMENT TRAPS, SPRING BOX AND PIPE	GT CWW	
4/27/01	2	ADDED FAN, DELETED FAN AND BUILDINGS	GT CWW	JLP
7/19/01	3	ADDED SEDIMENT TRAP TO UPPER YARD AT ENTRANCE TO MINE	GT CWW	JLP
1/30/06	4	ADDED MISSING TITLES TO BUILDINGS		GAG
7/13/06	5	ADDED TEMPORARY COAL STORAGE	GAG CWW	CTP
9/12/08	6	ADDED BC-3 FAN	ARB CWW	
3/18/09	7	ADDED OFF-LOADING CONTAINMENT STRUCTURES, REMOVED FUEL ISLAND	ARB CWW	
6/30/09	8	ADDED ROCK DUST TRANSFER LINE	ARB CWW	
3/9/10	9	ADDED AMBULANCE SHED	ARB CWW	
10/16/14	10	ADDED ASPHALT AT TRUCK LOADOUT	GAG CWW	

DATE	No.	REVISIONS	APPD. CHKD.	DES. DR.
10/27/14	11	ADDED CU-2a 48"CULVERT	GAG CWW	
04/22/15	12	ADDED 2 NEW SURFACE SHEDS	GAG CWW	
09/16/15	13	ADDED SWEEPER GARAGE		GAG BJB
8-1-16	14	ADDED Fuel Bay Catwalk; BC-4Take-up slab. REMOVED 30Kgal. propane tank	GAG GAG	

MINE SURFACE FACILITIES

PLOT PLAN

Canyon Fuel Company, LLC
Skyline Mines

P.O. BOX 380 HELPER, UTAH 84526
435-448-6463

CAD FILE: P:\PERMITS\SKY\...\3.2.1-1...

DATE: 6-30-06 | CK.BY: CWW/GAG
SCALE: 1" = 100' | DR.BY: STV
DWG. NO.: 3.2.1-1_REV14

REVISION: 14
8-1-2016

P:\PERMITS\SKY\WORKING\2016 Fuel Bay Catwalk\3.2.1-1_REV14_8-1-2016.dwg