

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:	
Proctor Pit	M-2009-054	Gravel and sand	Otero	
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:	
Surety-Related Inspection	Amy Eschberger	February 18, 2015	12:00	
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERAT	TION:	
ALL-RITE PAVING & REDI-MIX, INC.	Herb Pearson	112c - Construction Regular Operation		

REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:
Surety Related	Yes	\$192,836.00
DATEOF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
WEATHER: Clear	INSPECTOR'S SIGNATURE:	SIGNATURE DATE: March 3, 2015

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problemsor possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS <u>Y</u>	(FN) FINANCIAL WARRANTY Y	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>N</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>NA</u>
(PW) PROCESSING WASTE/TAILING <u>Y</u>	(SF) PROCESSING FACILITIES <u>NA</u>	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS <u>Y</u>	(SP) STORM WATER MGT PLAN <u>N</u>	(SB) COMPLETE INSP Y
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION N	(RS) RECL PLAN/COMP Y
(AT) ACID OR TOXIC MATERIALS <u>NA</u>	(OD) OFF-SITE DAMAGE <u>Y</u>	(ST) STIPULATIONS <u>NA</u>

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This was a Surety-Related inspection of the Proctor Pit (Permit No. M-2009-054) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) in response to a Surety Reduction request (SR-01) that was received by the Division on February 02, 2015. Mr. Herb Pearson, representative of the Operator, All-Rite Paving and Redi-Mix, Inc., was present for the inspection. This site is located approximately 4 miles southwest of Rocky Ford, Colorado in Otero County, on land owned by Dwight and Julie Proctor. The site is accessed by an approximately 18 foot wide dirt haul road that runs southwest from Co Rd Ee for approximately 2,500 feet before entering the site from the northeast.

The Operator holds both a 112c permit (Permit No. M-2009-054) and a 111c permit (Permit No. M-2004-055) for this site. The 112c permit is for 51.00 acres, with a current bond of \$192,836.00. The 111c permit is for 30.00 acres, with a current bond of \$75,000.00. The 111c permit area lies completely within the northern portion of the 112c permit area. According to the M-2009-054 permit application, the Operator had intended to replace the 111c permit with the 112c permit. However, a release request was never submitted for the 111c permit. In previous inspection reports, the Division recommended that the Operator submit a Final Release request for the 111c permit. On February 02, 2015, the Division received a Full Release request (SL-01) for the 111c permit (M-2004-055) along with the Surety Reduction request (SR-01) for the M-2009-054 permit.

At the time of the inspection, the weather was cool, sunny, and clear, and the ground was dry. A permit sign was posted at the gated entrance off of Co Rd Ee (Photo 1). The boundary of the affected area was clearly delineated with markers made of PVC pipe (Photo 2). The site is in final reclamation. No equipment was present during the inspection. In the last inspection report, the disturbed acreage was incorrectly estimated to be approximately 30 acres. Recently, more accurate measurements show the disturbed acreage to be approximately 17.2 acres, including 16.2 acres for the main pit area and 1.0 acre for the access road (see enclosed map).

According to the approved Reclamation Plan for this site, the access road is to be reclaimed to rangeland with the rest of the disturbed land (see enclosed Reclamation Plan and Adequacy Review Response #1). However, it should be noted here that the Division recently spoke with the landowners of the permit area regarding the requests that were submitted, and Mr. Proctor indicated that they may be interested in having the road remain. If this is the case, then the Operator would need to submit a Technical Revision to update the Reclamation Plan and Reclamation Plan Map to exclude the access road from the reclamation plan. The Operator would also need to include in the revision a signed and dated letter from the landowners requesting that the haul road not be reclaimed. Upon approval of this revision, the Operator could submit a Surety Reduction request to eliminate the costs for reclaiming this haul road.

The Operator has completed a significant amount of reclamation work since the last inspection was conducted on May 08, 2014. Since that time, all stockpiles have been removed from the site or used for reclamation, except for one very small stockpile of what appeared to be waste rock - which Mr. Pearson believed the landowner is using. In addition, most of the disturbed area has been graded to a nearly flat surface (Photos 3-5). The north- and northwest-facing mined wall located along the southern and southeastern edges of the pit has been backfilled and graded to gradients of mainly 4H:1V (Photo 6).

The western edge of the site drops down approximately 10 feet to the adjacent land. This appears to be a feature of the pre-mining topography. The Operator has graded this slope to approximately 4H:1V (Photos 7-9). A low-lying berm was constructed along the western edge of the lower elevation disturbed area. This berm appears to help slow surface runoff that flows westward from the higher elevation pit area. The northern edge of the site sits approximately 5 feet above the adjacent land. This northern slope has gradients of approximately 2.5H:1V to 2H:1V (Photo 10). All slopes on site show some evidence of erosion, including several rills and a few small

gullies. The Division understands that the earthwork was recently completed at this site; however, in its current condition, the site is very susceptible to erosion. <u>The Division recommends the Operator be sure to repair any</u> erosion damage before applying the plant growth medium, and work quickly to revegetate the disturbed land.

During the last inspection, no topsoil stockpiles were observed on site. During the recent inspection, it did not appear that any topsoil had been replaced on the disturbed land. The approved Reclamation Plan (see enclosed) states that soil and manure (in a 2:1 ratio, respectively) would be imported to the site and disked into the replaced overburden to create a grass growth medium. In accordance with this plan, the Division has included in the revised bond calculation (see enclosed) costs for importing the growth media, using the loading and hauling costs proposed by the Operator in the approved plan. Also included in the revised bond calculation are costs for applying the growth media on and revegetating the 17.2 acres of disturbed land.

After reassessing current liability at this site, the Division believes that a surety reduction is reasonable. The required Financial Warranty for this site was calculated to be \$72,550.00, which is a reduction of \$120,286.00. The Surety Reduction request (SR-01) will be approved for Permit No. M-2009-054 (see enclosed Approval Letter). The Division received one written comment regarding this request during the public comment period that ended on February 26, 2015. This comment was submitted by the landowners on February 24, 2015, and has already been sent to the Operator. The landowners wished to state for the record their concern that the site be reclaimed in a timely fashion. The Division informed the landowners (via telephone conversation) that proper and timely reclamation of the site will be monitored by the Division via routine inspections. The Division agreed to send the landowners a copy of this inspection report.

The Division will also approve the Full Release request (SL-01) that was submitted for Permit No. M-2004-055, as the disturbed land associated with this permit is included in the M-2009-054 permit area. Please be advised that the Division is required to wait 30 days after the release decision is made to allow for appeals. If no appeals are received within this 30-day period, the Division will then send the Operator the Approval Letter and any warranty forms associated with the M-2004-055 release.

PHOTOGRAPHS



Photo 1. View of permit sign posted at gated entrance off of Co Rd Ee.



Photo 2. View of marker located at northern permit boundary.



Photo 3. View looking northeast from top of southern mined slope, showing site has been graded to nearly flat. Note only one very small stockpile remains (indicated).



Photo 4. View looking north from top of southern mined slope, showing site has been graded to nearly flat.



Photo 5. View looking northwest from top of southern mined slope, showing site has been graded to nearly flat.



Photo 6. View of southern mined wall that was backfilled and graded to 4H:1V.



Photo 7. View looking north from western edge of site, showing slope gradient of approximately 4H:1V.



Photo 8. View looking west from western edge of site, showing disturbance at lower elevation. Note low-lying berm constructed along western edge of this disturbance.



Photo 9. View looking southwest from western edge of site, showing slope gradient of approximately 4H:1V. Note low-lying berm constructed along western edge of lower elevation disturbance.



Photo 10. View looking east from northern edge of site, showing slope gradients of approximately 2.5H:1V to 2H:1V.

Inspection Contact Address

Jodi Ricker ALL-RITE PAVING & REDI-MIX, INC. P.O. Box 165 Canon City, CO 81215

- Enclosure(s): Map of site showing disturbed areas Approved Reclamation Plan Adequacy Review Response #1 Revised Bond Calculation Approval Letter for M-2009-054 Surety Reduction request (SR-01)
- CC: Herb Pearson All-Rite Paving & Redi-Mix P.O. Box 1128 La Junta, CO 81050

Dwight & Julie Proctor 24625 County Road 23 La Junta, CO 81050

Tom Kaldenbach, DRMS

M-2009-054 / Proctor Pit

Blue Line = Disturbed Area (Pit), 16.2 acres Purple Line = Disturbed Area (Access Road), 1.0 acre

Total Disturbed Area = 17.2 acres

M2009-054 M2004-055

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Exhibit E – Reclamation Plan

<u>Overview</u>

The post-mining use of the Proctor Pit will be rangeland. Reclamation calls for stabilization and cover of disturbed areas in accordance with standards that will accommodate the proposed post-mining use. The permit area will be reclaimed using concurrent reclamation techniques.

Reclamation Process

Reclamation will consist of establishment of slopes, re-spreading of soil, seeding, and management prior to release. Maximum slopes will accommodate cattle movement. The 47 acres of seeded ground will be incorporated into the open range of the owner's property.

Due to the intermittent nature of the mining, only estimates for the timing of the reclamation are given. The mining will progress to the south and east from the original disturbances. Generally, an area will be reclaimed when all the resource is removed and the mining face has moved to the limit of mining. Parts of the pit floor will be reclaimed when they are longer needed for circulation or the gravel processing plant. The operator expects that reclamation will be performed in three to five year intervals.

The existing disturbed area is the exception to this general rule, as this area will serve as the initial gravel processing plant site for mining and as the site for an asphalt plant, if one is set on the property. Therefore this area will be the last to be reclaimed concurrently with the southern sections of the pit. The access road will be reclaimed at the end also.

Phase	Mining (Years from commencement of operations)	Active Reclamation (Years from commencement)
111 Permit	Complete	16 - 18
New	1 to 15	4 to 18

Estimated Reclamation Schedule

Topsoil Preservation

The gravel resource is covered by a thin layer of sandy loam zero to four inches in depth. This soil material is low in organic content and is more correctly referred to as overburden. The overburden stripped prior to mining will be primarily placed on vertical sideslopes of the pit ready to be reclaimed. If no ready sideslope is available, the overburden will be stockpiled on the north edge of the pit in the reclamation material stockpile. Since this stockpile will be replenished with overburden and imported dirt/manure as material is available, the operator will not temporarily seed the pile.

Final Grading

Final proposed contours in mined areas are shown on the Reclamation Plan Map (Exhibit F). In general, slope contours at the pit edge will descend at 4H:1V from the top of slope to the pit floor. The pit floor will be a continuous surface at the bottom of the slopes and sloped at approximately 1% grade downward to the north. Where contours are established with backfill, mechanical compaction will be used to ensure stable side slopes.

Topsoil Replacement

The overburden and/or reclamation material will be re-distributed across the site on all disturbed surfaces. A plant growth medium of three to five inches will be provided in the reclaimed condition. Final planting surfaces will be established by disking or other mechanical preparation to ensure mixing of soil horizons and adequate opportunity for seed contact.

Revegetation

The site will be seeded be in accordance with the Natural Resource Conservation Service recommendations for the area (see Table E-1).

A weed free grass hay mulch will be applied to the seedbed at the rate of two tons per acre. This mulch will then be crimped by a disk into the soil. A fertilizer of 40 pounds per acre each of nitrogen (N_2) and available phosphorus (P_2O_5) will be applied.

Grass seed will be applied with a grass drill. Grass seeding will be accomplished from October 15 to April 1. This grass seed will be drilled directly into the mulched seedbed.

Maintenance

Areas with low seed germination will be reseeded and mulched with the next new seeding area.

The landowner intermittently grazes cattle on this 960-acre parcel. When present, the cattle congregate at the two water tanks, where they are also fed daily. One water tank is noted on Exhibit C-1 and the other tank is to the west. Due to the cattle habits of congregating around the water tank, the operator does not expect significant damage to growing grass. If cattle do move onto the reclaimed land, the operator will install a one-wire electric fence around the impacted area.

Weed Control Plan

Noxious weeds will be controlled both during mining and reclamation. The predominant weeds on the site now are thistle, bindweed, and yucca. Initially any emerging weeds will be mowed in the spring and early summer prior to the formation of seed heads. If this method is not effective, the West Otero Timpas Conservation District will be consulted for a chemical spraying plan.

Seed Mix

The seed mix will be as follows.

Common Name Grasses	Variety	PLS	Percent of Mix (%)
Side Oats grama	Vaughn	4.5	50
Blue grama	Lovington	0.75	25
Western wheatgrass	Arriba	1.6	10
Sand dropseed	Native	0.03	5
Galleta grass (carpopsis)	Native	0.2	5
Switchgrass	Blackwell	0.25	5
TOTALS		7.33	100

Table E-1: Permanent Seed Mix for Final Reclamation







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REFERENCES: TOPOGRAPHICAL CONTOURS FROM USGS DEM FOR MANZANOL COLORADO 7.5' QUADRANGLE.

NATIVE GRASS SEED MIX					
SPECIES	VARIETY ¹	PLS ² (LBS/ACRE)	PERCENT OF MIX ³ (%)		
SIDE OATS GRAMA	VAUGHN	4.5	50		
BLUE GRAMA	LOVINGTON	0.75	25		
WESTERN WHEATGRASS	ARRIBA	1.6	10		
SAND DROPSEED	NATIVE	0.03	5		
GALLETA GRASS (CARPOPSIS)	NATIVE	0.2	5		
SWITCHGRASS	BLACKWELL	0.25	5		
TOTAL		7.33	100		

NOTES:

1. AVAILABILITY MAY DICTATE THE NEED FOR SUBSTITUTION OR OMISSION.

2. PURE LIVE SEED POUNDS PER ACRE; RATES SHOWN ARE FOR DRILL SEEDING. DOUBLE RATES FOR BROADCAST SEEDING.

3. PERCENT OF MIX CALCULATED ON A SEEDS-PER-SQUARE-FOOT BASIS.

4. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE LAND PLANNER (BANKS AND GESSO, LLC; 303-274-4277)

B. 1 /	778		
1212	388	and the	-
1 1 8			-
		COOL NUMBER	

1. COMMON MINING PHASE BORDERS RECLAIMED WITH LATER PHASE NEAR VERTICAL HIGH WALL REMAIN TEMPORARILY.

2. TWO EXISTING STOCKPILES ON SITE USED FOR RECLAMATION

3. RECLAMATION SOIL MEDIUM CONSISTS OF OVERBURDEN, REJECT MATEIRIAL, AND / OR MANURE.

4. RECLAMATION SOIL SPREAD 3 TO 5 INCHES OVER GRADING SURFACE.

5. STORMWATER BASIN AREA WILL BE GRADED OVER TO BLEND WITH THE SLOPE AND SEEDED.

6. RECLAIMED SLOPES ARE A MAXIMUM OF 4:1

7. THE ENTIRE AFFECTED LAND WILL BE RECLAIMED TO RANGELAND FOR THE POST MINING USE.

M-2009-054

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PREPARED UNDER THE SUPERVISION OF: NAME DATE DATE TITLE

EXHIBIT F: RECLAMATION PLAN MAP

3	FENCE AND SETBACK	DRF	10/16/09	PREPARED BY:		APPLICANT:		PI	ROJECT:		
2	NOTE 7 PER ADEQUACY REVIEW	DRF	9/30/09	BANKS	AND GESSO, LLC.	ALL-RITE PAVING	& REDI-MIX, INC.	PRC	CTOR PIT		
1	PER OWNER REVIEW	DRF	6/3/09	720 KIPLING ST., SUITE 117P.O. BOX 165DRMS 112 APPLLAKEWOOD, COLORADO 80215CANON CITY, CO 81215OTERO COUNT		P.O. BOX 165 CANON CITY, CO 81215		2 APPLICATIO	COUNTY		
0	ISSUED FOR REVIEW	DRF			505) 2/4-42/7				OLORADO		
REV.	DESCRIPTION	BY	DATE	JOB NO	DATE	SCALE	DRAWN BY	DESIGNED BY	APPROVAL	REV	SHEET
	REVISION			09002	5/6/09	1"=200'	DRF	GT	PB		



720 Kipling St., Suite 117 Lakewood, Colorado 80215

(303) 274-4277 Fax (303) 274-8329 www.banksandgesso.com

October 16, 2009

Division of reciametion, Mining and Safety

Mr. Jared Ebert Division of Reclamation, Mining and Safety 1313 Sherman Street - Room 215 Denver, CO 80203

RE: Answers to Adequacy Review #1, File # M-2009-054 Proctor Pit, Otero County All-Rite Paving and Redi-Mix

Dear Mr. Ebert,

Following are the responses of the applicant to the comments raised in your September 22, 2009 Adequacy Letter #1:

6.4.4 Exhibit D – Mining Plan

 Concerning the Special Operations permit (M-2004-055), once the 112 permit is issued and a properly executed performance and financial warranty is in place for the 112 operation, the operator will need to submit a full Performance and Financial Warranty release request for the M-2004-055 permit in accordance with Rule 4.17 of the Construction Materials Rules and Regulations.

Response: Per your direction, the operator will request a full Warranty release request for M-2004-055.

2. According to the mining plan, the active mining area will be approximately 5-10 acres in size. The pit highwall was measured during the December 15, 2008 inspection and found to be 1,200 feet in length. For the remainder of the operation, at the point of maximum disturbance how long will the mining highwall be?

Response: The volumes to backfill to the mining faces are a product of the parameters in the table below.

Mining Face or Highwall	Average Height in Feet	Length in Feet	Slope	Cubic Yards
Existing Disturbance Area – Backfill western mining face	9	500	4:1	3,000
Area South of Ex. Dist. – Backfill eastern mining face	2.5	300	4:1	139
Area South of Ex. Disturbance – Backfill southern mining face	11.5	550	4:1	5,388
Area South of Ex. Disturbance – Backfill western mining face	14 11	500 100	4:1	7,260 896
TOTAL		1,950		··

At the point of maximum disturbance in Exhibit L, the mining highwall of varying heights is 1,950 feet as noted above.

3. According to the Reclamation Plan, an asphalt plant may be constructed in the permit area. Please show where the proposed asphalt plant will be located in the permit area on the mining map. Also, please explain how the surface and ground water system will be protected from contamination from the asphalt plant operation.

Response: The operator eliminates the asphalt plant from this application.

6.4.5 Exhibit E – Reclamation Plan

1. Tamarisk has been observed at other mine sites close to this one and in the surrounding area. Please submit a plan to monitor and treat a potential infestation of Tamarisk trees.

Response: Tamarisk, if it occurs, will be controlled per the "Weed Management Guideline for Tamarisk and Russian Olive, Minerals Program", published February 8, 2006 by the Division. A copy is enclosed.

2. Please explain how the access road will be reclaimed.

Response: The access road will be scarified or disked and the road base/soil material will be spread to eliminate evidence of a road. The grading, topsoiling, and revegetation will be completed per Exhibit E.

3. In the topsoil preservation section of the reclamation plan, it states, "Since this stockpile will be replenished with overburden and imported dirt/manure as material is available, the operator will not temporarily seed the pile". In accordance with Rule 3.1.9 (1) and (6) the stored topsoil/overburden and imported growth medium will need to be protected from erosion. Since

temporary vegetation will not be established on these piles, please explain how they will be protected from wind and water erosion.

Response: To control erosion, the stored overburden, imported soil, and imported manure stockpiles will be broadcast seeded each year between October 15 and November 30 with the following seed mix:

Common Name Grasses	Variety	PLS/ac
Western Wheatgrass	Arriba	4.0
Rye	Annual	8.0

6.4.6 Exhibit F – Reclamation Plan Map

1. Please portray the proposed land use for each of the affected land. This could be a note on the Reclamation Plan map that states the entire affected land will be reclaimed to Rangeland for the post mining land use.

Response: Please refer to Note 7 on the Reclamation Plan Map for a note on post mining land use. A revised copy of Exhibit F is enclosed.

6.4.12 Exhibit L – Reclamation Costs

1. What will be the dimensions (height, length and width) of the asphalt plant, and what material will it be made from? Will this plant be built on a concrete pat/foundation? If so, what will be the dimensions (length, width and depth) of the pad?

Response: The operator eliminates the asphalt plant from this application.

2. Based on the "point of maximum reclamation" described in Exhibit L and the plan for importing growth media to augment the topsoil, the Division will need to hold a bond for importing this material. Based on the December, 2008 inspection, it appeared little to no topsoil/growth media was stockpiled on the site for reclamation. Is this still the case? If not, please estimate how much growth media is currently on the site for reclamation.

Response: There is no growth medium on the site now. The existing northern and southern stockpiles will be used for backfilling the mining faces.

Over the 18.5 acres of new mining area (per Adequacy Response #2), we expect to recover two inches (0.166 feet) of overburden soil, which will be disked into the imported soil and manure to produce the grass growth media.

The below table calculates the amount of soil and manure, in a 67% to 33% proportion respectively, which will be imported to accomplish the grass growth media in Exhibit L.

Import of G	Import of Grass Growth Media					
Recover overburden	(18.5 ac) (43560) / 27	0.166 foot depth	(4,955)			
Exhibit L	Existing Disturbance Area	Topsoil Replacement	7,222			
Exhibit L	Area South of Existing Disturbance	Topsoil Replacement	4,033			
Exhibit L	Area West of Existing Disturbance	Topsoil Replacement	807			
	Net Import		7,107			

The below table indicates the cost to import the above volume of soil and manure. This material will be found at cattle feed lots, agricultural land leveling projects, ditch cleaning projects, and construction sites in the Rocky Ford area and within an average of 15 miles from the Proctor Pit.

ltem	Volume in CY	Unit Cost	Distance	Cost
Load on truck	7,107	\$0.25/CY		\$1.777
Haul to Proctor Pit	7,107	\$0.15/CY/mile	15 miles	\$15,991
Total Cost				\$17,768

This cost is added to the revised Exhibit L enclosed.

Publication and Notices

1. In accordance with Rule 1.6.2 (d) & (e) and Rule 1.6.5, within ten (10) days after the application was deemed complete and submitted, you must have published a notice in a newspaper of general circulation in the locality of the proposed mining operation once a week for four (4) consecutive weeks. Also, immediately after the first publication you were to mail a copy of the notice to all owners of record of surface and mineral right holders of any recorded easements and all owners of record of lands that are within 200 feet of the boundary of the affected land.

Response: Enclosed is the Proof of Newspaper Publication, proof of notice to land owners and interest holders of record, and sign posting affidavit.

Having not received a copy of a written objection, may we assume that none have arrived?

COST SUMMARY WORK

Task de	escription:	Cost Summary								
Site:	Proctor I	Pit		Pe	ermit Action: <u>S</u>	R-01 201	5 Permit	Job#: <u>M2009054</u>		
Ī	PROJECT	<u>IDENTIFICAT</u>	ION							
	Task #:	000	State:			Abbreviation:	None			
	Date:2/23/2015County:OteroFilename:M054-000Use:AME									
	User:	AME								
	Ag	gency or organizatio	n name: DRN	MS						
<u>1</u>	TASK LIST (DIRECT COSTS)									
Tock					Form	Fleet	Task			
Task	Descrip	tion			Used	Size	Hours	Cost		
001	Import (Growth Media (13,8	75 CY)		DEMOLISH	1	0.00	\$31,739.06		
002	Spread g	growth media acros	s 17.2 acres, 6 in	ı deep	SCRAPER1	1	21.81	\$6,220.00		
003	Reveget	ate 17.2 acres			REVEGE	1	68.80	\$16,047.00		
004	Mobiliz	ation/Demobilizatio	n		MOBILIZE	1	8.63	\$5,186.00		
					<u>SUBTC</u>	DTALS:	99.24	\$59,192		
Ī	NDIREC	T COSTS					·			
<u>(</u>	<u> DVERHEA</u>	<u>D AND PROFIT:</u>								
	L	iability insurance:	2.02%				Total = S	\$1,195.68		
	P	Performance bond:	1.05%				Total = S	\$621.52		
	Jo	ob superintendent:	0.00 hrs				Total = 2	\$0.00		
		Profit:	10.00%				Total =	\$5,919.20		
				001			ALO&P =	57,736.40		
				CON	TRACT AMOU	NT (direc	t + O & P) =	66,928.40		
I	LEGAL - E	NGINEERING - PF	ROJECT MANA	GEMEN	Г:					
	Financ	cial warranty proces	sing (legal/relate	ed costs):	500.00		Total =	500.00		
	Engir	neering work and/or	contract/bid pre	paration:	0.00%		Total = S	\$0.00		
	Rec	lamation manageme	ent and/or admin	istration:	5.00%			\$3,346.42		

TOTAL INDIRECT COST = \$13,358.58

IMPORTATION OF GROWTH MEDIA

-	Task description:	Import Gro	wth Media (13,	875 CY)		
Site:	Proctor Pit		Permit Action:	SR-01 2015	Permit/.	Job#: M2009054
PROJE	CT IDENTIFICAT	ION				
Task #: Date:	001 2/23/2015	State: County:	Colorado Otero		Abbreviation: Filename:	None M054-001
User:	AME					
	Agency or orga	nization name:	DRMS			
UNIT CO	OSTS				Location adju	stment: 91.50 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Load on truck	13,875 CY	USER PROVIDED ITEM	13,875.00	CY	\$0.25	\$3,468.75
Haul to pit (13,875 CY x \$0.15/mi)(15 mi)	13,875 CY	USER PROVIDED ITEM	13,875.00	CY	\$2.25	\$31,218.75

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	0.00	(unadjusted):	\$34,687.50	location):	\$31,739.06

Page 1 of 2

SCRAPER TEAM WORK

Site: Proctor Pit		Permit	t Action:	SR-01 2015	Per	mit/Job#:	M20090)54
PROJECT IDEN	TIFICATION							
Task #: 002 Date: $2/23/2$ User: AME	015 Co	State: unty:	Colorado Otero		Abbre Fil	viation: _ ename: _	None M054-00)2
Agency or	organization name	DRM	IS					
HOURLY EQUI	PMENT			COSTSI	nift basis: <u>1 per d</u>	ay		
			Equipme	ent Description				
	-5	Scraper:	Cat 631	lG R DS XR Series II	1			
Suppo	ort Equipment -Loa	d Area:	NA	K D5 AK Series II	1			
	-Dum	p Area:	NA					
Koad Ma	untenance –Motor -Water	Grader: Truck:	NA NA					
Cost Breakdown:	Scraper Wo	rk Team		Support Equip	oment	Main	tenance E	quipmer
	Scraper	Do	zer	Load Area	Dump Area	Motor (Grader	water
%Utilization-machine:	100	10	00	NA	NA	NA	A	NA
Ownership cost/hour:	\$80.91	\$0.	00	NA	NA	NA	A	NA
Operating cost/hour:	\$170.75	\$0.	.00	NA	NA	NA	A	N
Ripper op. cost/hour:	NA	\$0.	.00	NA	NA	NA	A	N
Operator cost/hour:	\$33.56	\$0.	00	NA	NA	N/	A	<u> </u>
Unit Subtotals:	\$285.22	\$0.	.00	NA	NA	N/	A	N
Number of Units:	l	1		0	0	0		0
Group Subtotals:	Work:	\$285	5.22	Support:	\$0.00		Maint:	\$0.
l otal work team cos	t/nour: <u>\$285.22</u>							
MATERIAL QU	ANTITIES							
Initial volume:	11,420		CCY	Swell fact	or: 1.215			
Loose volume:	13,875		LCY					
Sou	rce of estimated vo	olume:	Division	of Reclamation, M	Aining & Safety			
Source	of estimated swell	factor:	Cat Hand	dbook				
HOURLY PROD	UCTION							
	<u> </u>			Scraper Bo	owl (volume) Bas	<u>is:</u>		
Material weight:	1,600 lbs/LCY			Struck	Volume: 24.00		LC	Y
Material description:	Top Soil			Heaped	Volume: 34.00			Y
Rated Payload:	81,600 pounds			Average V	Volume: 29.00		LC	Y

0.80 Minutes

0.70 Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	1.00	3.00	4.00	1667	0.41

Haul Time: 0.41 minutes

Site Altitude: 4404 feet

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	-1.00	3.00	2.00	2914	0.36
				Return Time:	0.36	minutes
			Total Scraper	team cycle time:	2.27	minutes
			Adjusted for	or job conditions:	636.21	LCY/Hour
			Selected Nur	nber of Scrapers:	1	Scraper(s)
	Adjusted	l single scrap	er team (unit) h	ourly production:	636.21	LCY/Hour
	Adjusted m	ultiple scrape	er team (fleet) h	ourly production:	636.21	LCY/Hour
Optimal	Unadjusted unit proo Number of Scrapers pe	LCY/Hour				
JOB TI	ME AND COST					
Fleet	size:1	Team(s)	То	otal job time:	21.81	Hours

Unit cost: \$0.448 /LCY

Total job cost: **\$6,220**

REVEGETATION WORK

Task description:		Revegetate 17.2 a	acres			
te: Proctor I	Pit	Peri	mit Action:	SR-01 2015	Permit/Job#:	M2009054
PROJECI	<u>CIDENTIFI</u>	CATION State:	Colorado		Abbreviation	None
Date:	2/23/2015 AME	County:	Otero		Filename:	M054-003

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials	¢0.00
			Cost/Acre	⊅0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$98.01
Total Tilling Cost/Acre	\$98.01

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Switchgrass - Blackwell	0.25	2.23	\$1.33
Blue Grama - Lovington	0.75	12.24	\$8.15
Sand Dropseed	0.03	3.58	\$0.21
Sideoats Grama - Vaughn	4.50	14.77	\$50.58
Galleta	0.20	0.73	\$5.04
Western Wheatgrass - Arriba	1.60	4.04	\$5.89
Totals Seed Mix	7.33	37.60	\$71.19

Application

Description	Cost /Acre
Drill seeding (DRMS Cost Data)	\$88.20
Total Seed Ap	pplication Cost/Acre \$88.20

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
Total Mulch Materials Cost/Acre				\$530.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
Total Mulch Application Cost/Acre	\$65.89

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

Estimate *Selected Replanti	No. of Acres: ed Failure Rate: ng Work Items:	17.2 50% SEEDING	Cost /Acre: Cost /Acre*:	\$853.29 \$159.39
Initial Job Cost: Reseeding Job Cost: Total Job Cost: Job Hours:	\$14,676.59 \$1,370.75 \$16,047 68.80			

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task descripti	on: Mo	bilization/Demob	ilization					
: Proctor Pit		Permit A	Action: SR-01	2015	Pe	rmit/Job#:	M200	9054
PROJECT 1	DENTIFICAT	ION						
Task #:	004	State: Co	olorado		Abbr	eviation:	None	
Date:	2/23/2015 AME	County: Ot	ero		F	ilename:	M054-	-004
Ager	ncy or organization	n name: DRMS						
EQUIPMEN	NT TRANSPOR	AT RIG COST						
					Shift ba	usis:	1 per day	4
					Cost Data Sou	rce: (CRG Dat	a
Т	ruck Tractor Desc	ription: GEN	ERIC ON-HIGH	WAY TR	UCK TRACTO	DR, 6X4, I	DIESEL	POWERED,
7				400 HF	(2ND HALF,	2006)		
I	ruck Trailer Desc	ription: GENE	RIC FOLDING	GOUSEN (25T	50T AND 10	DECKEQU 10T)	UIPMEN	NI IKAILEK
Cost Breakdow	vn.			(201	,,			
<u>COSt Dieakuo</u>	<u></u>							
Available Rig	Capacities	0-25 Tons	26-50 Tons	51	+ Tons			
Owner	ship Cost/Hour:	\$16.63	\$18.37	\$	22.33			
Opera	ang Cost/Hour:	\$44.38 \$27.66	\$27.66	¢	27.66			
	lper Cost/Hour:	\$0.00	\$27.00	ې ۲	25.39			
Total	Unit Cost/Hour:	\$88.67	\$117.55	φ \$1	25.35			
NON ROAL	DABLE EQUIP	MENT:		ψı				
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return '	Ггір	DOT Permit
Description	Unit (TONS)	Cost/hr/ unit	Cost/hr/unit	Size	Cost/hr/ fleet	Cost/hr/	fleet	Cost/ fleet

Description	Unit	Cost/hr/ unit	Cost/hr/unit	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)				fleet		
Cat 631G	52.50	\$80.91	\$125.45	1	\$206.36	\$125.45	\$250.00
Cat D7R DS XR	35.93	\$0.00	\$117.55	1	\$117.55	\$117.55	\$250.00
Series II							
Drill/Broadcast	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Seeder with Tractor							
				Subtotals:	\$452.17	\$331.67	\$750.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
		Subtotals:	\$0.00	\$0.00

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	PUEBLO	
Total one-way travel distance:	50.00	miles
Average Travel Speed:	55.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$5,186.01	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$0.00	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.91	0.91
Return Time (Hours):	0.91	0.91
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.50	NA
Subtotals:	4.32	1.82

JOB TIME AND COST

Total job time: 8.64 Hours

Total job cost: ______\$5,186