

Girardi - DNR, Chris <chris.girardi@state.co.us>

Costilla Pit-Inspection Report and Cost Estimate

1 message

Girardi - DNR, Chris <chris.girardi@state.co.us>

Thu, May 29, 2025 at 9:47 AM

To: Paul Bottini <paul@southwayco.com>

Cc: PFM Consulting <pfmconsultingcompany@gmail.com>, Jared Ebert - DNR <jared.ebert@state.co.us>

Hello Mr. Bottini,

Attached to this email is the Division's Inspection Report for the inspection conducted back in April for the Costilla Pit, permit number M-1987-040.

Also attached is the Division's Cost Estimate to complete reclamation, as a Surety Increase is warranted after evaluating the current reclamation liability.

A hard copy will not be sent unless requested. Please feel free to contact me if you have any questions.

Thanks,

Chris Girardi

Environmental Protection Specialist Intern



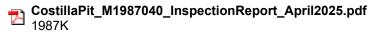
P: (720) 793-3041

Physical: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216

chris.girardi@state.us.co | https://drms.colorado.gov/

2 attachments



CostillaPit_UpdatedCostEstimate_April2025.pdf 235K



MINE NAME.

MINERALS PROGRAM INSPECTION REPORT PHONE: (303) 866-3567

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.

MINERAL

COUNTY.

MINE/PROSPECTING ID#.

WHILE INABLE:		MINE/PROSPECTING ID#:	WIINEKAL:	COUNTY:	
Costilla Pit		M-1987-040	Sand and gravel	Costilla	
INSPECTION TYPE:		WEATHER: Clear	INSP. DATE:	INSP. TIME:	
Monitoring			April 23, 2025	11:00am	
OPERATOR:		OPERATOR REPRESENTATIVE:	TYPE OF OPERA	ΓΙΟΝ:	
Southway Construction Company, Ir	ıc.	Paul Bottini	110c - Construction	Limited Impact	
REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:		
Normal I&E Program		Complete Bond	\$59,992		
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:		
NA		None	None		
INSPECTOR(S): INSPE		PECTOR'S SIGNATURE: SIGNATURE DATE:		E:	
Chris Girardi		us Dirardi	May 29, 2025		
			•		

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Gen. Compliance With Mine Plan

PROBLEM: The first period of Temporary Cessation (TC) has expired as of November 21, 2021.

CORRECTIVE ACTIONS: The Operator will need to apply for a second five (5) year period of Temporary Cessation in accordance with Rule 1.13.5(1)(b) and Rule 1.13.5(3) of the Construction Materials Rules and Regulations, initiate final reclamation, or begin mining again. Please either submit an application for a second period of Temporary Cessation, a notice of initiation of final reclamation, or a plan to begin mining operations by the corrective action date.

CORRECTIVE ACTION DUE DATE: 6/27/25

INSPECTION TOPIC: Signs & Markers

PROBLEM: The mine identification sign was not posted at the entrance of the mine site. This is a problem for failure to post a mine identification sign as required by Section 3.1.12(1) of the rule. The Operator shall, at the entrance of the mine site post a sign, which shall be clearly visible from the access road, with a minimum size equaling one hundred and eighty-seven (187) square inches, such as eleven (11) inches in height and seventeen (17) inches in width, with appropriate font size, with the following: the name of the Operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number.

PERMIT #: M-1987-040 INSPECTOR'S INITIALS: CMG INSPECTION DATE: April 23, 2025

CORRECTIVE ACTIONS: The operator shall, at the entrance of the mine site, post a sign which shall be clearly visible from the access road with the following: the name of the operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number. The operator shall submit photo documentation that a proper sign has been posted by the corrective action date.

CORRECTIVE ACTION DUE DATE: 6/27/25

OBSERVATIONS

The Costilla Pit was inspected on April 23, 2025, by Chris Girardi with the Division of Reclamation, Mining, and Safety ("DRMS" or "Division") as part of the DRMS routine monitoring inspection program. The site was last inspected on October 7, 2016, as part of a routine monitoring inspection. Paul Bottini represented Southway Construction Company, Inc. (Operator) during the inspection. Jodi Schreiber with PFM Consulting LLC was also present during the inspection. The weather was clear.

The Costilla Pit is a 110c sand and gravel operation that consists of 9.70 acres and is adjacent to the east of Garcia, CO. The approved post-mining land use is rangeland. The surrounding land is rural residential.

The site is accessed from the east of Highway 159 with a locked gate. A mine entrance sign was not present. This has been cited as a problem. In accordance with Rule 3.1.12, at the entrance of the mine site a clearly visible sign must be posted that displays the Operator and operation name, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board, and the permit number. The permit boundary is delineated with t-posts (see Photo 1).

General Compliance with Mining Plan:

The site is flat area located within a valley adjacent to the west of the Sange de Cristo Mountain Range. Vegetation has established across the site consisting of Rubber rabbitbrush, Sagebrush, Blue grama (see Photo 2). A minor amount of Mullein was observed, but not to the extent where weed mitigation is necessary. Wild horses were observed within the permit area (see Photo 1), as wild horses are prevalent in the area. The site was inactive at the time of the inspection. No equipment was observed onsite as the permit has not been operational for several years.

A stockpile was observed along the eastern permit boundary and showed evidence of dirt-bike tire tracks (see Photo 2). Tracks were also observed throughout the haul roads. According to the Operator, the site is commonly used as a recreational area for dirt bike and ATV riding. The southern portion of the permit area contains a larger pit approximately 3-acres in size and a smaller approximately 1-acre pit. The smaller pit is approximately seventeen (17) feet deep with slopes steeper greater than 3H:1V configuration with well-established vegetation along the slope and floor (see Photo 4). Animal dwellings were also observed along the pit slope. The larger pit is approximately fifteen (15) feet deep with relaxed side slope configurations of 4H:1V. A topsoil berm is located along the southern perimeter of the pit and appeared to be in stable condition (see Photo 5). According to the Operator, there hasn't been any hauling of material for approximately six to seven years. According to Annual Reports submitted by the Operator, the last date of activity at the site occurred in 2015.

The Mined Land Reclamation Board ("MLRB" or "Board") approved an application for Temporary Cessation (TC-1) for the site on November 16, 2016, during a Board hearing. The first period of temporary cessation (TC-1) expired as of November 16, 2021. The Operator will need to apply for a second five (5) year period of Temporary Cessation in accordance with Rules 1.13.5(1)(b) and Rule 1.13.5(3) of the Construction Materials Rules and Regulations, initiate final reclamation, or begin mining again. This issue is cited as a problem at the beginning of this report. According to the Operator, they would like to begin final reclamation. In addition, there are prospective buyers for the parcel and would like to convert the property into a recreational dirt-bike and ATV area. The Division noted that the currently approved post-mine land use is rangeland, and that a

PERMIT #: M-1987-040 INSPECTOR'S INITIALS: CMG INSPECTION DATE: April 23, 2025

conversion of the post-mine land use would require an amendment application.

Financial Warranty:

The Division currently holds a reclamation bond in the amount of \$40,354.07 for this operation. The Division has evaluated the reclamation liability for the site and determined that the reclamation liability is \$59,992. This is an increase of \$19,637.93 from the bond currently held. The Operator will have 14 days (June 11, 2025), from the issuance of this report to submit any questions regarding the updated cost estimate. If no questions are received, the Division will issue a Surety Increase notice. The Operator will have 60 days from the date of the notice to submit and obtain acceptance of the increase in financial warranty from the Division in accordance with Rule 4.2.1(2).

This concludes the DRMS' inspection report; a subset of photographs was taken during the time of the inspection are included below. If you need additional information or have any questions, please contact me at the Division of Reclamation, Mining, and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at 720-793-3041 or by email at chris.girardi@state.co.us.

PHOTOGRAPHS



Photo 1: T-post delineating eastern permit boundary, facing east.



Photo 2: View of stockpile along haul road, facing east.



Photo 3: View of stockpile material, facing southeast.



Photo 4: View of one acre pit with established vegetation, facing west.



Photo 5: View of topsoil berm along pit, facing east.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

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

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

Inspection Contact Address

Paul Bottini Southway Construction Company, Inc. 117 White Pine Dr Alamosa, CO 81101

CC:

Jared Ebert, DRMS Jodi Schreiber, PFM Consulting LLC

COST SUMMARY WORK

Site:	Costilla	Pit	Permit A	Action:	2025 Update		Permit/Job	o#: <u>M198704</u>	0
1	PROJECT	IDENTIFICAT	<u>ION</u>						
	Task #:	000	State:	Colorado		Abbı	eviation:	None	
	Date:	5/22/2025	County:	Costilla			ame:	M040-000	
	User:	CMG							
	Agency or	r organization nai	me: DR	RMS					
<u>-</u>	TASK LIST	Γ (DIRECT CO	STS)						
Гask	7				Form	Fleet	Task		
	Descr	ription			Used	Size	Hours	Cost	
001		vall reduction to			DOZER	1	0.57	\$296	
002		ral grade and rip, ement	prepare for topsoi	il	DOZER	1	20.48	\$10,729	
003		oil replacement fo	or main pit area		DOZER	1	7.04	\$3,645	
004			eplacement for 5.7	7 acres	LOADER	$\frac{1}{1}$	35.24	\$3,838	
005		getate 9.7 acres at			REVEGE	1	10.00	\$20,114	
			oment to and from	iob site	MOBILIZE	1	5.40	\$5,457	
006	Haui								
006	'	TOTALS:					78.73	\$44,079	
<u>]</u>	SUBT		<u>:</u>				78.73	\$44,079	
<u>]</u>	SUBT INDIRECT	COSTS D AND PROFIT				Total =	78.73		
<u>]</u>	SUBT	COSTS D AND PROFIT Insurance:	2.02 1.05			Total = Total =	78.73	\$44,079 \$890 \$463	
<u>]</u>	SUBT NDIRECT OVERHEA Liability in Performan	T COSTS D AND PROFIT Insurance: Ince bond:	2.02				78.73	\$890	
<u>]</u>	SUBT NDIRECT OVERHEA Liability in	T COSTS D AND PROFIT Insurance: Ince bond:	2.02 1.05			Total =	78.73	\$890 \$463	
<u>]</u>	SUBT NDIRECT OVERHEA Liability in Performan Job superi	T COSTS D AND PROFIT Insurance: Ince bond:	2.02 1.05 42.95		TOTAL	Total = Total = Total =	78.73	\$890 \$463 \$3,405	
<u>]</u>	SUBT NDIRECT OVERHEA Liability in Performan Job superi	T COSTS D AND PROFIT Insurance: Ince bond:	2.02 1.05 42.95 10.00	Γ AMOUNT	TOTAL (direct + O & P	Total = Total = Total = O & P =	78.73	\$890 \$463 \$3,405 \$4,408	
<u>]</u>	SUBT ENDIRECT OVERHEA Liability in Performan Job superi Profit:	D AND PROFIT nsurance: nce bond: ntendent:	2.02 1.05 42.95 10.00		(direct + O & P)	Total = Total = Total = O & P =	78.73	\$890 \$463 \$3,405 \$4,408 \$9,166	
<u>]</u>	SUBT NDIRECT OVERHEA Liability in Performan Job superi Profit: LEGAL - E	D AND PROFIT nsurance: nce bond: ntendent: NGINEERING - warranty process	2.02 1.05 42.95 10.00 CONTRAC	AGEMENT:	(direct + O & P)	Total = Total = Total = O & P =	78.73	\$890 \$463 \$3,405 \$4,408 \$9,166	
<u>]</u>	SUBT INDIRECT OVERHEA Liability in Performan Job superin Profit: LEGAL - Elegan Financial y Engineerin	D AND PROFIT Insurance: Ince bond: Intendent: NGINEERING - warranty processing work and/or co	2.02 1.05 42.95 10.00 CONTRAC PROJECT MAN ing (legal/related ontract/bid prepar	AGEMENT: costs): ation:	\$500 4.25	Total = Total = Total = O & P =) =	- - - -	\$890 \$463 \$3,405 \$4,408 \$9,166 \$53,245	
<u>]</u>	SUBT INDIRECT OVERHEA Liability in Performan Job superin Profit: LEGAL - Elegan Financial y Engineerin	D AND PROFIT Insurance: Ince bond: Intendent: NGINEERING - warranty processing work and/or co	2.02 1.05 42.95 10.00 CONTRAC	AGEMENT: costs): ation:	(direct + O & P)	Total = Total = Total = O & P =) =		\$890 \$463 \$3,405 \$4,408 \$9,166 \$53,245	
<u>]</u>	SUBT INDIRECT OVERHEA Liability in Performan Job superin Profit: LEGAL - Elegan Financial y Engineerin	D AND PROFIT Insurance: Ince bond: Intendent: NGINEERING - warranty processing work and/or coon management and	2.02 1.05 42.95 10.00 CONTRAC PROJECT MAN ing (legal/related ontract/bid prepar	AGEMENT: costs): ation:	\$500 4.25	Total = Total = Total = O & P =) = T		\$890 \$463 \$3,405 \$4,408 \$9,166 \$53,245	
<u>(</u>	SUBT ENDIRECT OVERHEA Liability in Performan Job superi Profit: LEGAL - E Financial v Engineerin Reclamatic	D AND PROFIT Insurance: Ince bond: Intendent: NGINEERING - warranty processing work and/or coon management and	2.02 1.05 42.95 10.00 CONTRAC PROJECT MAN ing (legal/related ontract/bid preparand/or administrat	AGEMENT: costs): ation:	\$500 4.25 5.00	Total = Total = Total = O & P =) = T	Total =	\$890 \$463 \$3,405 \$4,408 \$9,166 \$53,245 \$500 \$2,263 \$2,662	

BULLDOZER WORK

	Task description:		Hig	hwall redu	ction to 3H:1	V		
:	Costilla P	it		Permi	t Action:	2025 Update	Permit/Job#:	M1987040
Ī	PROJECT II	DENTIF	CICATION	<u> </u>				
	Task #:	001		State:	Colorado		Abbreviation:	None
	Date:	5/22/20)25	County:	Costilla		Filename:	001
	User:	CMG		J				
	Agency or o	organizat	ion name:	<u> </u>	PRMS			
Ī	HOURLY E	QUIPMI	ENT COS	<u>T</u>				
	Basic Machi	ine:	Cat D10T	- 10SU				
	Horsepower	:	574			_		
	Blade Type:	;	Semi-Univ	versal				
	Attachment:		3-shank ri	pper				
	Shift Basis:	_	1 per day					
	Data Source	: _	(CRG)			_		
(Cost Breakdo	wn:			I	TT:'1' .' 0/		
	O	C4/II	¢255	7.20		<u>Utilization %</u> NA		
	Ownership (
	Operating C		r: \$196	0.93		100		
	Ripper own. Cost/Hour:	•	\$25.	02		NA		
	Ripper op. (ost/Hou	r: \$1.1	7		10		
	Operator Co					NA	 ,	
	operator co					1471		
	Total unit C	ost/Hour	:: \$519	0.10				
	Total Fleet (Cost/Hou						
N	MATERIAL	QUANT	FITIES					
	Initial Volu	me:	700					
	Swell factor		1.165					
	Loose volun		816 LCY					
	Source of es Source of es factor:			DRMS NA	Estimate by o	n Highwall dimens	ions	
<u>I</u>	HOURLY PI	RODUC	TION					
	Average pus	sh distan	ce:	50 feet				
	Unadjusted	hourly		2,748.7 L	CY/hr			
	production:	•						
	Materials co description:	onsistenc	у	Comp	oacted fill or e	mbankment 0.9		
	Average pus gradient:	sh	-15 9	%				
	Average site	altitude	. 772	0 feet				

Material weight:	2,900 lbs/LCY

Weight description: Decomposed rock - 50% Rock, 50% Earth

Job C	ondition	Correction Factor	Source
_		**	0.550

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5196

Adjusted unit production: 1,428.22 LCY/hr

Adjusted fleet production: 1428.22 LCY/hr

JOB TIME AND COST

 Fleet size:
 1 Dozer(s)

 Unit cost:
 \$0.363/LCY

Total job time: 0.57 Hours
Total job cost: \$296

BULLDOZER WORK

Task des	cription:	Gei	General grade and rip, prepare for topsoil replacement					
: Costill	la Pit		Permi	t Action:	2025 Update	Permit/Job#:	M1987040	
PROJEC'	T IDENT	IFICATION	<u>N</u>					
Task #:	002		State:	Colorado		Abbreviation:	None	
Date:	5/22/	2025	County:	Costilla		Filename:	000	
User:	CMC		y .					
Agency	or organiz	ation name:		ORMS				
HOURLY	EQUIPN	MENT COS	<u>T</u>					
Basic Ma	achine:	Cat D10T	- 10SU		_			
Horsepo		574						
Blade Ty		Semi-Uni	versal		<u> </u>			
Attachm		3-shank ri	pper					
Shift Bas	sis:	1 per day						
Data Sou	irce:	(CRG)			_			
Cost Break	kdown:				Utilization %			
Ownersh	nip Cost/H	our: \$257	7 30		NA			
	g Cost/Ho				100			
Ripper o								
Cost/Ho		\$25.	02		NA			
	ա. p. Cost/Ho	our: \$5.8	7		50			
	_							
Operator	· Cost/Hou	r: \$38.	39		NA			
	it Cost/Ho	sour: \$523						
Initial Vo	_	15,326 1.000						
	-		V					
Loose vo	oiume:	15,326 LC	I					
Co	of estimate	d waluma	(0.505)(12560af/aa)/1	PD) / 27 = 15 226 =	N7.		
	of estimate of estimate		(9.5ac)(Cat Har		(1'D) / 27 = 15,326 c	<u>y</u>		
factor:	ı esiiiiale	u swell	Саппаг	IUUUUK				
factor:								
HOURLY	PRODU	<u>CTION</u>						
			75.0					
	push dista		75 feet	CX 7/1				
	ted hourly		2,105.3 L	CY/hr				
production	on:		-					
Material descripti	s consister on:	псу	Comp	pacted fill or o	embankment 0.9			
Average		0 %						
gradient:		1 7.72	0.0					
Average	site altitud	de: 7,72	0 feet					

Material weight:	2,900 lbs/LCY

Weight description: Decomposed rock - 50% Rock, 50% Earth

Job Condition	Correction Factor	Source

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3554

Adjusted unit production:

748.22 LCY/hr

Adjusted fleet production: 748.22 LCY/hr

JOB TIME AND COST

 Fleet size:
 1 Dozer(s)

 Unit cost:
 \$0.700/LCY

Total job time: 20.48 Hours
Total job cost: \$10,729

BULLDOZER WORK

Task do	escription:	_Top	osoil replace	ement for ma	nt for main pit area					
: Cost	illa Pit		Permi	t Action:	2025 Update	Permit/Job#:	M1987040			
PROJE	CT IDENT	IFICATION	<u>N</u>							
Task #	: 003		State:	Colorado		Abbreviation:	None			
Date:		2025	County:	Costilla		Filename:	000			
User:	CMC		<i>y</i> -							
Agenc	y or organiz	ation name:	<u>D</u>	ORMS						
HOURI	LY EQUIPM	MENT COS	<u>T</u>							
Basic I	Machine:	Cat D10T	- 10SU		_					
Horsep	ower:	574								
Blade '	Туре:	Semi-Univ	versal							
Attach		3-shank ri	pper							
Shift E	Basis:	1 per day								
Data S	ource:	(CRG)			<u> </u>					
Cost Bre	akdown:				Utilization %					
Owner	ship Cost/H	our: \$257	7 30		NA					
	sing Cost/Ho				100					
Ripper										
Cost/H		\$25.	02		NA					
	op. Cost/H	our: \$0.0	0		0					
	or Cost/Hou				NA					
MATER	Fleet Cost/H RIAL QUA l Volume:		.93							
Swell		1.330								
	volume:	6,437 LCY								
Source	of estimate	d volume:			75'D) / 27 = 4840 c	у				
HOURI	LY PRODU	CTION								
			100.0							
	ge push dista		100 feet	CV/I						
	usted hourly		1,718.9 L	CY/hr						
produc	ction:									
Materi descrip	als consister	ncy	Conso	olidated stock	pile 1.0	_				
Averaş gradiei	ge push	-10 9	½							
	nt. ge site altitu	de: 7.72	0 feet							
Averas	ge she annu	de: /,/2	u ieei							

Material weight:	2,900 lbs/LCY

Weight description: Decomposed rock - 50% Rock, 50% Earth

Job Condition Correct	ction Factor	Source
·		

Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
		<u> </u>

Net correction: 0.5321

Adjusted unit production:
Adjusted fleet

914.63 LCY/hr

production: 914.63 LCY/hr

JOB TIME AND COST

 Fleet size:
 1 Dozer(s)

 Unit cost:
 \$0.566/LCY

Total job time: 7.04 Hours
Total job cost: \$3,645

WHEEL LOADER – LOAD AND CARRY WORK

Costilla Pit	Costilla Pit Permit Action: 2025 Update		2025 Update	Permit/Job#:	M198704
PROJECT IDENTIFI	CATION				
Task #: 004	State:	Colora	do	Abbreviation:	None
Date: 5/22/202	County:	Costill		Filename:	000
User: CMG					
Agency or organization	on name: I	DRMS			
HOURLY EQUIPME	NT COST				
Basic Machine:	CAT 950H		Horsepower:	197	
Attachment 1:	ROPS Cab		Shift Basis:	1 per da	ıy
			Data Source:	(CRG)	
Cost Breakdown:					
See Divariate Will			Utilization %		
Ownership Cost/Hour	:: \$36.61		NA		
Operating Cost/Hour:	\$35.43		100		
Operator Cost/Hour:	\$36.85		NA		
Total Unit Cost/Hour	\$108.89		_		
Total Fleet Cost/Hour	·: \$108.89				
MATERIAL QUANT	<u>ITIES</u>				
Initial volume:	6,897	CCY	Swell factor:	1.000	
Loose volume:	6,897	LCY			
Source of estimated v	olume:	(5.7ac	c)(43560sf/ac)(0.75'D)	/ 27 = 6897 CY	
Source of estimated s		NA	(1.00000000000)	. 2, 00, 01	
HOURLY PRODUCT	TION				
<u>Loader Cycle Time:</u>	Unadjusted Basi maneuver):	ic Cycle Ti	ime (load, dump,	0.500	minutes
Cycle Time Factors				Factor (min.)	Source
Material:	Material up t	to 1/8" diai	meter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or 0.01	dozer pile	d 10 ft. high or less	0.010	(Cat HB)
Truck Ownership:	Common ow 0.04	nership of	trucks and loaders -	-0.040	(Cat HB)
Operation:	No adjustme		not applicable 0.00	0.000	(Cat HB)
Dump Target:	Nominal targ	get 0.00		0.000	(Cat HB)
	Net Cycle Ti			-0.010	minutes
	Adjusted Bas	sic Cycle T	Time:	0.490	minutes
Rolling Resistance – Ro	and Conditions				
	oad Continuits				
Haul:	Loose sand or				
Return:	Kutted dirt, litt	ie maintena	ance, no water, 2" tire p	penetration 5.0	

Haul and Return Time

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	300	0.00	10.00	10.00	0.4049	(Cat HB)
Return Route:	300	0.00	5.00	5.00	0.2543	(Cat HB)

Total Travel Time:	0.6592	minutes
Total Cycle Time:	1.1492	minutes

Load Bucket Capacity

Rated Capacity:	4.30	LCY (heaped)	
Bucket Fill Factor:	1.050	Other - moist loam	(100-110%) 1.050
Adjusted Capacity:	4.52	LCY	

Job Condition Correction Factors

Site Altitude: 7720 feet

		Source
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier

Unadjusted Hourly Unit Production:	235.73	LCY/Hour
Adjusted Hourly Unit Production:	195.66	LCY/Hour
Adjusted Hourly Fleet Production:	195.66	LCY/Hour

JOB TIME AND COST

Fleet size:	1	Loader(s)	Total job time:	35.25	Hours
Unit cost:	\$0.557	/LCY	Total job cost:	\$3,838	

REVEGETATION WORK

Task description:	Revegetate 9.7 ac	eres affect	ed lands				
: Costilla Pit	Permit A	action:	2025	Update	Po	ermit/Job#:	M1987040
PROJECT IDENTIF	FICATION						
Task #: 005 Date: 5/22/2 User: CMG	State: County:	Colorado Costilla)		_ Abbrev _ Filenam		None 000
Agency or organizat	ion name: DR	MS					
FERTILIZING							
Materials							
Description			Jnits / Acre	Unit	Cos	t / Unit	Cost /Acre
10-34-0, 18-46-0,	5-10-5	2	200.00	pound	\$0.5	1	\$102.32
					Mat	al Fertilizer erials t/Acre	\$102.32
Application							
Description							Cost /Acre
	eader (MEANS 32 01 90.	13 0120)					\$43.12
Total Fertilizer A	pplication Cost/Acre						\$43.12
TILLING							
Description	' deep (MEANS 32 91 13	22 6100)					Cost /Acre \$117.61
	• `	<u>23 0100)</u>					
Total Tilling Cos	//Acre						\$117.61
SEEDING							
Seed Mix					Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre

		••		. •	
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7 B	PΡ	11,	u	u	UII

Winter Fat

Totals Seed Mix

Blue Grama - Lovington

Indian Ricegrass - Paloma

Crested Wheatgrass - Nordan

Western Wheatgrass - Arriba

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64

0.90

1.25

1.00

8.00

0.50

11.65

14.69

4.05

4.59

20.20

1.27

44.80

\$24.98

\$25.67

\$5.31

\$72.27

\$23.36

\$151.59

Total Seed Application Cost/Acre	\$236.64
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MULCHING and MISCELLANEOUS

Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Total Mulch Application Cost/Acre	\$242.63

NURSERY STOCK PLANTING

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

JOB TIME AND COST

No. of Acres:	9.7	Cost /Acre:	\$1,879.47	
Estimated Failure Rate:	50%	Cost /Acre*:	\$388.23	
*Selected Replanting Work Items:	SEEDING			

Selected Replanting Work Items:

 Initial Job Cost:
 \$18,230.86

 Reseeding Job Cost:
 \$1,882.92
 Total Job Cost: \$20,114 Job Hours: 10.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

	Task description: Haul reclamation equipment to and from job site						
Site:	Costilla Pit		Permit Acti	on: 2025 U	pdate	Permit/Job#:	M1987040
]	PROJECT IDENT	<u>TIFICATION</u>					
	Task #: 006 Date: 5/22 User: CMC	/2025		olorado ostilla		Abbreviation:	None M040-006
	Agency or organiz	zation name:	DRMS				
]	EQUIPMENT TRA	ANSPORT RI	G COST				
	Shift basis: Cost Data Sourc	e:					er day G Data
	Truck Tractor I	Description:		RIC ON-HIGHWA P (2ND HALF, 20		ΓRACTOR, 6X4, Γ	DIESEL POWERED,
	Truck Trailer De	escription:	GENE	,	OOSENECK,	, DROP DECK EQ	UIPMENT
<u>(</u>	Cost Breakdown:						
=	Available Rig Ca	pacities (0-25 Tons	26-50 Tons	51+ Tons		
_	Ownership Cost/H		\$10.44	\$22.18	\$23.94		
_	Operating Cost/Ho	our: S	\$26.48	\$54.55	\$55.65		
_	Operator Cost/Hou	ur: S	\$22.52	\$22.52	\$22.52		
	Helper Cost/Hour:	: 5	\$0.00	\$23.53	\$23.53		

NON-ROADABLE EQUIPMENT:

\$59.44

Total Unit Cost/Hour:

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/unit	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)				fleet		
Cat D10T -	93.31	\$282.41	\$125.64	1	\$408.05	\$125.64	\$250.00
10SU							
CAT 950H	20.13	\$36.61	\$59.44	1	\$96.05	\$59.44	\$250.00
Drill/Broadcast	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$500.00
Seeder with							
Tractor							

\$125.64

Subtotals: \$705.02 \$303.96 \$1,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/	Fleet Size	Haul Trip	Return Trip
	unit		Cost/hr/ fleet	Cost/hr/ fleet
Lube Truck, 4x2, 190 HP	\$41.41	1	\$41.41	\$41.41
Generic 5-6 cy, 4x2	\$67.88	1	\$67.88	\$67.88

\$122.78

Subtotals:	\$109.29	\$109.29
Subjoiais:	3109.29	31U9.Z9

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	ANTONITO	
Total one-way travel distance:	30.00	miles
Average Travel Speed:	50.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$5,325.84	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$131.15	

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.60	0.60
Return Time (Hours):	0.60	0.60
Loading Time (Hours):	0.75	NA
Unloading Time (Hours):	0.75	NA
Subtotals:	2.70	1.20

JOB TIME AND COST

Total job time:	5.40	Hours
Total job cost:	\$5,457	