




COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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.

MINE NAME: Southway Pit	MINE/PROSPECTING ID#: M-1981-153	MINERAL: Sand and gravel	COUNTY: Costilla
INSPECTION TYPE: Monitoring	INSPECTOR(S): Wallace H. Erickson	INSP. DATE: January 23, 2013	INSP. TIME: 12:40
OPERATOR: Southway Construction Company, Inc.	OPERATOR REPRESENTATIVE: Roy Burtraw	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$56,500.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Cloudy	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: February 1, 2013

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or 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>NA</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(SB) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</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 inspection occurred as part of the Division's routine monitoring program for permitted operations. The Southway Pit is approved for 20 acres affected land for the extraction of construction materials. Affected lands will be reclaimed to support wildlife habitat. The Division holds \$56,500 financial warranty. This report is accompanied by five photographs and an updated reclamation cost estimation totaling \$56,500.67.

Public access to the permit area is controlled by locked gate and barbed wire fence. Mining activities were dormant during the inspection. Site conditions appeared consistent with the descriptions provided in the approved permit and 2012 annual report. The pit area exhibited internal drainage. Reclamation materials were stockpiled along the south side of the pit area and on the pit floor. The Operator has commenced backfill and grading of pit highwalls at the west end of the pit area to slopes not steeper than 3H:1V. Other portions of the pit highwalls were estimated at 1H:1V slope and ranging from 10 to 20 feet high.

Based on observations made during the inspection and recorded in this report the Division has reviewed the current cost of reclamation totaling \$56,500.67. Please find enclosed 16 pages of summary, drawing and tasks sheets utilized by the Division to estimate the current cost of reclamation. Therefore, the existing \$56,500 financial warranty appears sufficient to ensure the completion of reclamation.

No problems or possible violations were observed.

Response to this inspection report should be addressed to Wally Erickson at the Division's office in Durango at 691 County Road 233, Suite A-2, Durango, CO 81301, phone (970) 247-5469.

Inspection Contact Address

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

Enclosure: 5 photos;
Reclamation cost estimation totaling \$56,500.67

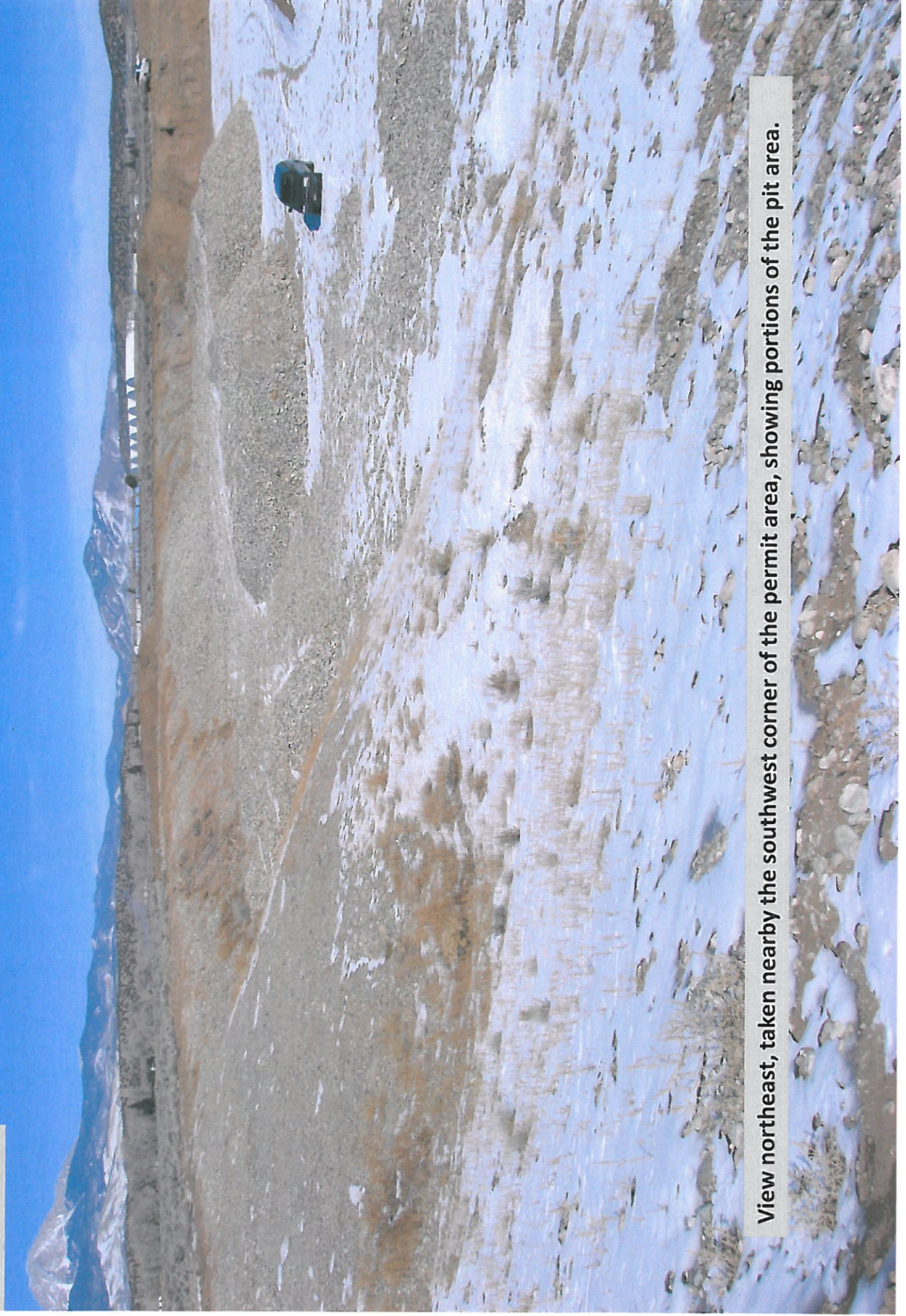
ec w/enclosures: Russ Means, DRMS GJFO

Southway Pit
M-1981-153
January 23, 2013



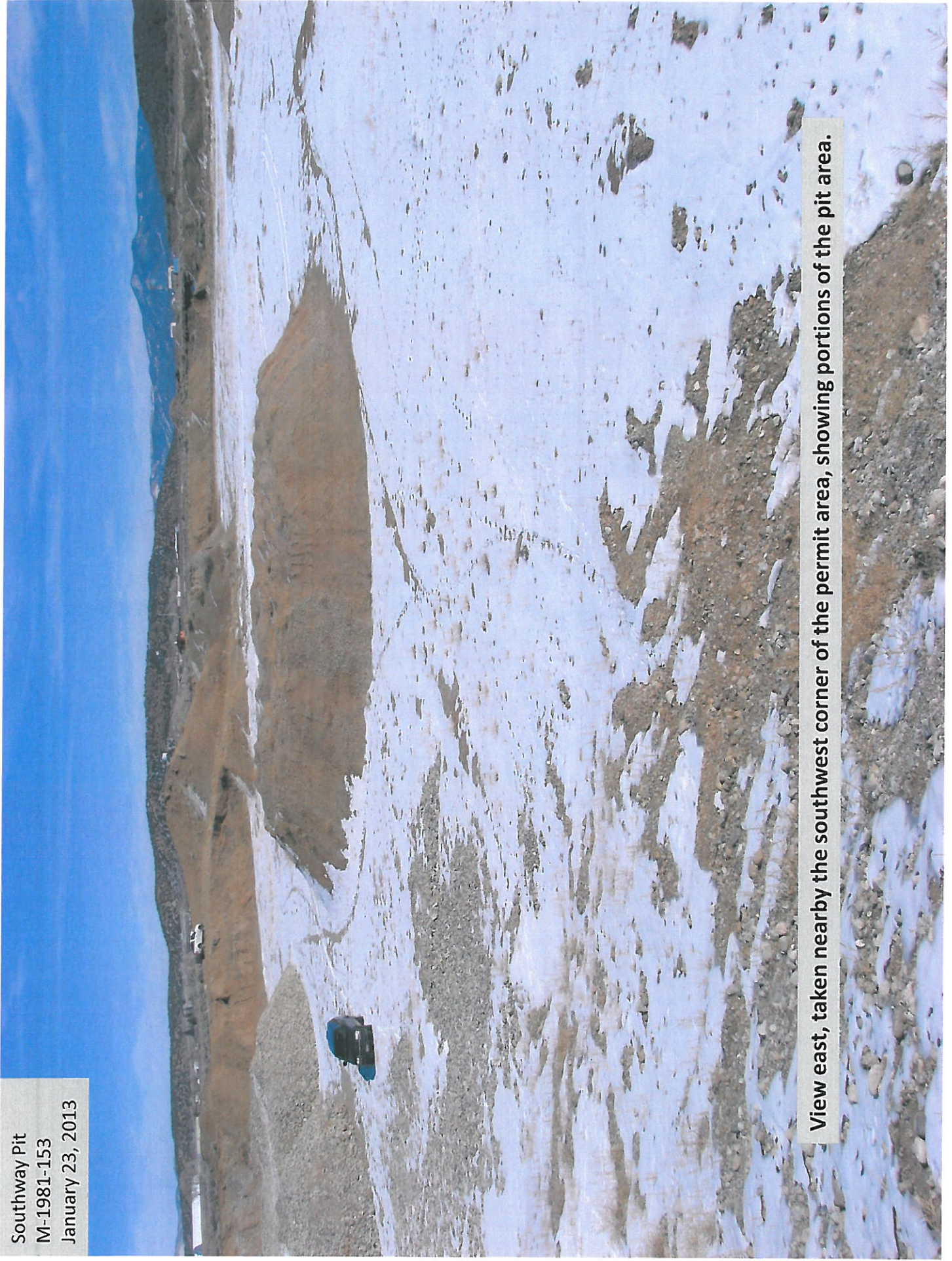
View north, taken nearby the southwest corner of the permit area, showing portions of the pit highwall which have been backfilled and graded.

Southway Pit
M-1981-153
January 23, 2013



View northeast, taken nearby the southwest corner of the permit area, showing portions of the pit area.

Southway Pit
M-1981-153
January 23, 2013



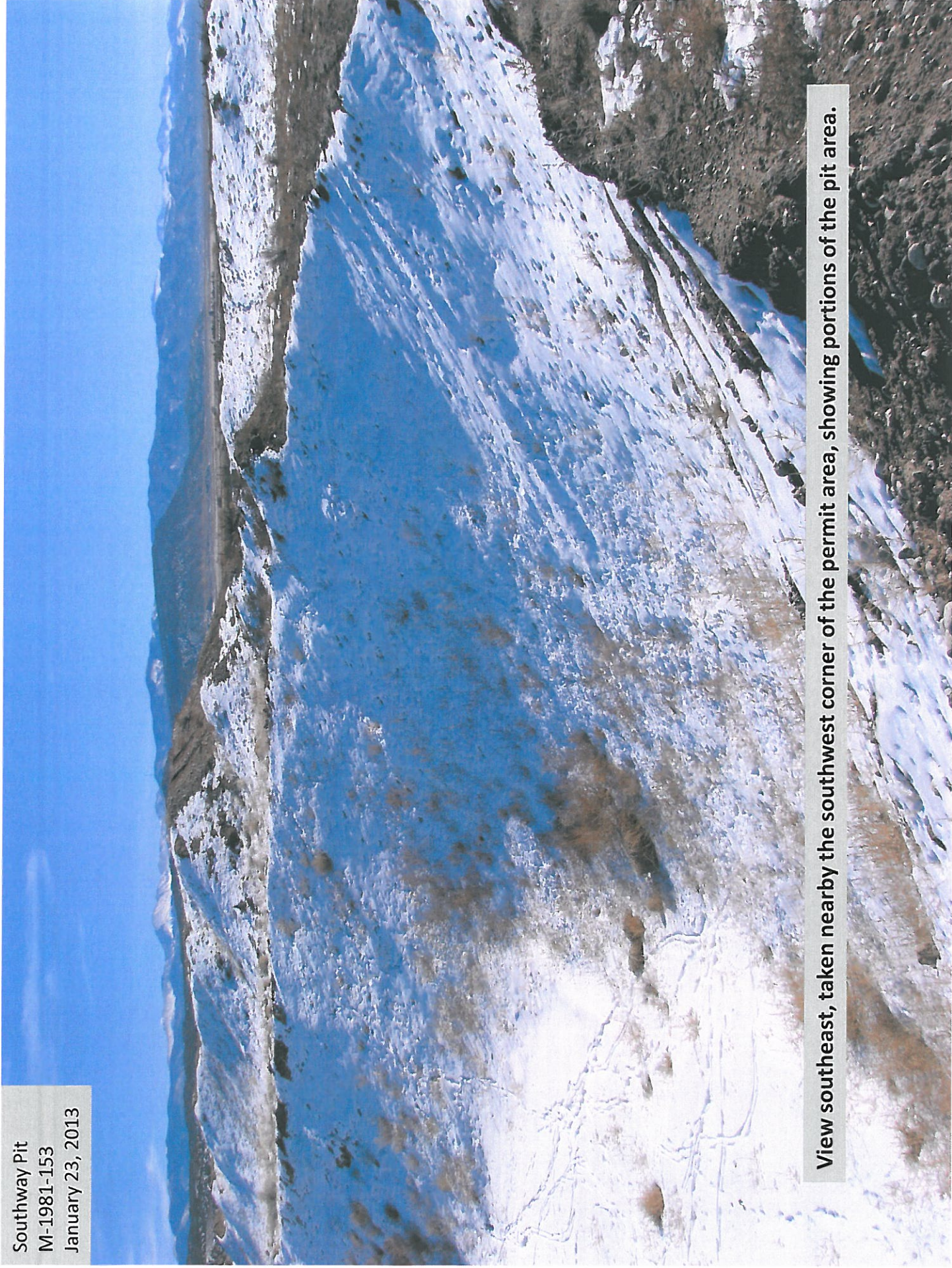
View east, taken nearby the southwest corner of the permit area, showing portions of the pit area.

Southway Pit
M-1981-153
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View east, taken nearby the southwest corner of the permit area, showing portions of the pit area.

Southway Pit
M-1981-153
January 23, 2013



View southeast, taken nearby the southwest corner of the permit area, showing portions of the pit area.

COST SUMMARY WORK

Task description: Summary of cost for reclamation tasks

Site: Southway Pit

Permit Action: Routine update

Permit/Job#: M1981153

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 2/1/2013

County: Costilla

Filename: M153-000

User: WHE

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Highwall reduction from 1H:1V to 3H:1V	DOZER	1	9.11	\$1,878.30
002	Grade & Rip pit floor, prepare for topsoil replacement	DOZER	1	20.93	\$4,347.22
003	Topsoil replacement for south portions of affected lands	DOZER	1	14.31	\$2,925.11
004	Topsoil replacement for north portions affected lands	LOADER	1	56.96	\$5,914.00
005	Spread topsoil, finish grade north portions of affected land	DOZER	1	9.20	\$1,880.92
006	Revegetate 20 acres affected lands	REVEGE	1	20.00	\$23,537.50
007	Haul reclamation equipment to and from job site	MOBILIZE	1	4.00	\$4,100.08
<u>SUBTOTALS:</u>				134.51	\$ \$44,583.13

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 44.70
Profit: 10.00

Total = \$900.58

Total = \$468.12

Total = \$2,923.83

Total = \$4,458.31

TOTAL O & P = \$8,750.84

CONTRACT AMOUNT (direct + O & P) = \$53,333.97

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00
Engineering work and/or contract/bid preparation: 0.00
Reclamation management and/or administration: 5.00

Total = 500.00

Total = \$0.00

\$2,666.70

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$11,917.54

TOTAL BOND AMOUNT (direct + indirect) = \$56,500.67

BULLDOZER WORKTask description: Highwall reduction from 1H:1V to 3H:1VSite: Southway PitPermit Action: Routine updatePermit/Job#: M1981153PROJECT IDENTIFICATIONTask #: 001State: ColoradoAbbreviation: NoneDate: 2/1/2013County: CostillaFilename: M153-001User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8U
 Horsepower: 310
 Blade Type: Universal
 Attachment: 3-shank ripper
 Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$63.00</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$104.06</u>	<u>100</u>
Ripper op. Cost/Hour:	<u>\$1.63</u>	<u>25</u>
Operator Cost/Hour:	<u>\$37.41</u>	<u>NA</u>

Total unit Cost/Hour: \$206.11Total Fleet Cost/Hour: \$206.11MATERIAL QUANTITIES

Initial Volume: 7,704
 Swell factor: 1.000
 Loose volume: 7,704 LCY

Source of estimated volume: See attached drawing, "Highwall Reduction..."Source of estimated swell factor: NAHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 1,627.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -15 %Average site altitude: 7,850 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% EarthJob Condition Correction Factor

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>0.900</u>	<u>(CAT HB))</u>
Dozing method:	<u>1.100</u>	<u>(50% SL)</u>

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: 845.39 LCY/hr

Adjusted fleet production: **845.39** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.244/LCY

Total job time: **9.11** Hours

Total job cost: **\$1,878.30**

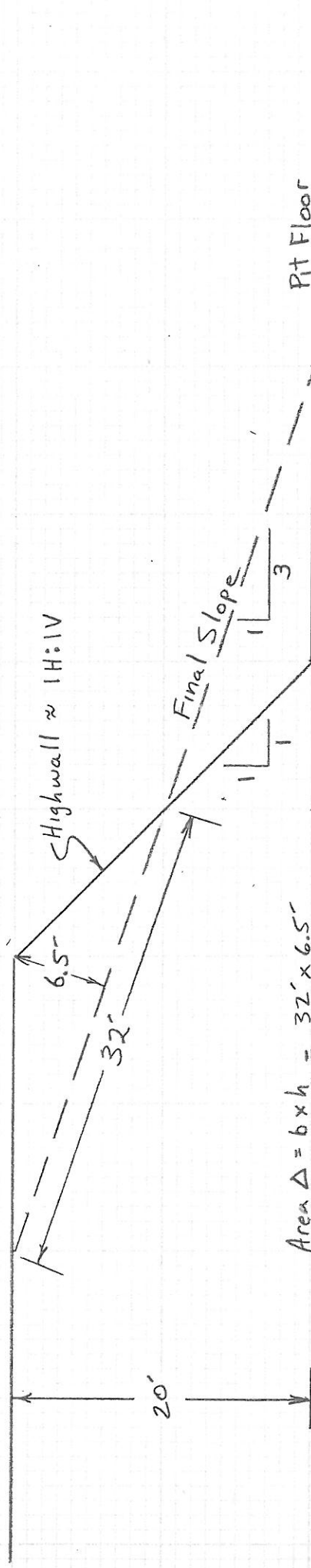
Highwall Reduction from 1H:1V to 3H:1V

Southway Pit

M-1981-153

2/1/13 WHE

Scale 1" = 10'



$$\text{Area } \Delta = \frac{b \times h}{2} = \frac{32' \times 6.5'}{2} = 104 \text{ sq ft}$$

According to the March 27, 2012 Annual Report, approximately 2000' of highwall needs reduction.

$$\begin{aligned} \text{Material Quantity} &= 104 \text{ sq ft} \times 2000' \\ &= 208,000 \text{ cu ft} \\ &= 7703.7 \text{ cy} \end{aligned}$$

BULLDOZER WORKTask description: Grade & Rip pit floor, prepare for topsoil replacementSite: Southway PitPermit Action: Routine updatePermit/Job#: M1981153PROJECT IDENTIFICATIONTask #: 002State: ColoradoAbbreviation: NoneDate: 2/1/2013County: CostillaFilename: M153-002User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D8T - 8UHorsepower: 310Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$63.00	NA
Operating Cost/Hour:	\$104.06	100
Ripper op. Cost/Hour:	\$3.27	50
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$207.75Total Fleet Cost/Hour: \$207.75MATERIAL QUANTITIESInitial Volume: 12,100Swell factor: 1.000Loose volume: 12,100 LCYSource of estimated volume: (15ac)(43560sf/ac)(0.5'D) / 27 = 24,200 cySource of estimated swell factor: NAHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 1,627.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 7,850 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% EarthJob Condition Correction Factor

		<u>Source</u>
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: 578.24 LCY/hr

Adjusted fleet production: **578.24** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.359/LCY

Total job time: **20.93** Hours
Total job cost: **\$4,347.22**

BULLDOZER WORKTask description: Topsoil replacement for south portions of affected landsSite: Southway PitPermit Action: Routine updatePermit/Job#: M1981153PROJECT IDENTIFICATIONTask #: 003State: ColoradoAbbreviation: NoneDate: 2/1/2013County: CostillaFilename: M153-003User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D8T - 8UHorsepower: 310Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$63.00	NA
Operating Cost/Hour:	\$104.06	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$204.48Total Fleet Cost/Hour: \$204.48MATERIAL QUANTITIESInitial Volume: 8,067Swell factor: 1.000Loose volume: 8,067 LCYSource of estimated volume: (10ac)(43560sf/ac)(0.5'D) / 27 = 8,066.67 cySource of estimated swell factor: NAHOURLY PRODUCTIONAverage push distance: 100 feetUnadjusted hourly production: 931.6 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: -10 %Average site altitude: 7,850 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packedJob Condition Correction Factor

		<u>Source</u>
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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6053

Adjusted unit production: 563.90 LCY/hr

Adjusted fleet production: **563.9** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.363/LCY

Total job time: **14.31** Hours
Total job cost: **\$2,925.11**

WHEEL LOADER – LOAD AND CARRY WORKTask description: Topsoil replacement for north portions affected landsSite: Southway Pit Permit Action: Routine update Permit/Job#: M1981153**PROJECT IDENTIFICATION**

Task #: 004 State: Colorado Abbreviation: None
 Date: 2/1/2013 County: Costilla Filename: M153-004
 User: WHE

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine: CAT 950H Horsepower: 197
 Attachment 1: ROPS Cab Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$24.98	NA
Operating Cost/Hour:	\$43.03	100
Operator Cost/Hour:	\$35.82	NA
Total Unit Cost/Hour:	\$103.83	
Total Fleet Cost/Hour:	\$103.83	

MATERIAL QUANTITIES

Initial volume: 8,067 CCY Swell factor: 1.000
 Loose volume: 8,067 LCY

Source of estimated volume: (10ac)(43560sf/ac)(0.5'D) / 27 = 8066.67 cy
 Source of estimated swell factor: NA

HOURLY PRODUCTIONLoader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material up to 1/8" diameter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.010	minutes
Adjusted Basic Cycle Time:		0.490	minutes

Rolling Resistance – Road Conditions

Haul: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0
 Return: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

Haul and Return Time

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	600	-5.00	5.00	0.00	0.4032	(Cat HB)
Return Route:	600	5.00	5.00	10.00	0.6946	(Cat HB)

Total Travel Time: 1.0978 minutes
 Total Cycle Time: 1.5878 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 FactorsSite Altitude: 7850 feet

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

Unadjusted Hourly Unit Production: 170.62 LCY/Hour
 Adjusted Hourly Unit Production: 141.61 LCY/Hour
 Adjusted Hourly Fleet Production: 141.61 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s) Total job time: 56.96 Hours
 Unit cost: \$0.733 /LCY Total job cost: \$5,914.00

BULLDOZER WORKTask description: Spread topsoil, finish grade north portions of affected landSite: Southway PitPermit Action: Routine updatePermit/Job#: M1981153PROJECT IDENTIFICATIONTask #: 005State: ColoradoAbbreviation: NoneDate: 2/1/2013County: CostillaFilename: M153-005User: WHEAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D8T - 8UHorsepower: 310Blade Type: UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$63.00	NA
Operating Cost/Hour:	\$104.06	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$204.48Total Fleet Cost/Hour: \$204.48MATERIAL QUANTITIESInitial Volume: 8,067Swell factor: 1.000Loose volume: 8,067 LCYSource of estimated volume: (10ac)(43560sf/ac)(0.5'D) / 27 = 8066.67 cySource of estimated swell factor: NAHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 1,627.0 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 7,850 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packedJob Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5390

Adjusted unit production: 876.95 LCY/hr
Adjusted fleet production: **876.95 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.233/LCY

Total job time: **9.20 Hours**
Total job cost: **\$1,880.92**

REVEGETATION WORKTask description: Revegetate 20 acres affected landsSite: Southway PitPermit Action: Routine updatePermit/Job#: M1981153PROJECT IDENTIFICATIONTask #: 006State: ColoradoAbbreviation: NoneDate: 2/1/2013County: CostillaFilename: M153-006User: WHEAgency or organization name: DRMSFERTILIZINGMaterials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.33	\$65.40
			Total Fertilizer Materials Cost/Acre	\$65.40

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$52.71
Total Fertilizer Application Cost/Acre	\$52.71

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
Blue Grama - Hachita	0.75	12.24	\$7.99
Crested Wheatgrass - Ephraim	1.50	6.89	\$3.35
Russian Wildrye - Bozoiisky	1.50	6.03	\$9.36
Pubescent Wheatgrass - Greenleaf	2.00	4.13	\$4.60
Yellow Sweet Clover - Madrid	0.50	2.98	\$1.28
Western Wheatgrass - Arriba	4.00	10.10	\$14.72
Totals Seed Mix	10.25	42.37	\$41.29

Application

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

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, 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 Stock Cost / Acre					\$0.00

JOB TIME AND COST

No. of Acres: 20
 Estimated Failure Rate: 25%
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU
 LCHING

Initial Job Cost: **\$18,830.00**
 Reseeding Job Cost: **\$4,707.50**
 Total Job Cost: **\$23,537.50**
 Job Hours: **20.00**

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: Haul reclamation equipment to and from job siteSite: Southway PitPermit Action: Routine updatePermit/Job#: M1981153PROJECT IDENTIFICATIONTask #: 007State: ColoradoAbbreviation: NoneDate: 2/1/2013County: CostillaFilename: M153-007User: WHEAgency or organization name: DRMSEQUIPMENT TRANSPORT RIG COSTShift basis: 1 per dayCost Data Source: CRG DataTruck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED, 400 HP (2ND HALF, 2006)Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT TRAILER (25T, 50T, AND 100T)Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8U	53.70	\$63.00	\$125.45	1	\$188.45	\$125.45	\$250.00
CAT 950H	20.13	\$24.98	\$88.67	1	\$113.65	\$88.67	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	2	\$256.51	\$177.34	\$500.00

Subtotals: **\$558.61** **\$391.46** **\$1,000.00**ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 30K GVW	\$32.79	1	\$32.79	\$32.79

Subtotals: **\$32.79** **\$32.79**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	ALAMOSA	
Total one-way travel distance:	30.00	miles
Average Travel Speed:	60.00	mph

Total Non-Roadable Mob/Demob Cost *	\$4,067.29
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$32.79
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.50	0.50
Return Time (Hours):	0.50	0.50
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.00	1.00

JOB TIME AND COST

Total job time:	4.00	Hours
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Total job cost:	\$4,100.08
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