



May 23, 2024

John Nichols
Nichols Gravel Pit L.L.P.
P.O. Box 285
Mesa, CO 81643

RE: Nichols Gravel Pit, Permit No. M-1981-013, Proposed Surety Increase SI-5 (05-2024)

Dear Mr. Nichols:

This reclamation cost update was in response to the site inspection conducted on May 14, 2024. The inspection documented reclamation work conducted on site compared to the Divisions October 25, 2023 inspection. An initial estimate was provided on November 13, 2023. This estimate has since been updated to reflect current site conditions.

Below is a table summarizing input values. Changes from the 2023 calculation are in red. This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation plan.

Task	Form Used	Description
01a	Dozer	Reduce all slopes to 2H:1V or less = 10,624 BCY North Slope Cut/Fill: 300 LF of 30'H 1:1, 100' push = 625 BCY Fence Corner Backfill: 400LF of 30'H 1:1, 200'push = 6,667 CCY SE Corner Cut/fill: 400 LF of 20'H Near vert, 100' push = 1,110 BCY South bench: 600 LF of 40'H 1:1, 10' push = 2,222 BCY
02a	Truck	Transport overburden (2 ft over 3.5 ac) to pit floor 11,293 CCY Only 3.5 ac of lower pit floor need overburden replaced.
02b	Dozer	Grade transported overburden 12,705 LCY, 50' push



03a	Truck	Truck approx. half of topsoil to north side of pit = 9,000 LCY 900 LF haul (21ac @ 6" = 16,940 CCY)
03b	Dozer	Spread transported topsoil 6" over 21 ac = 20,582 LCY, 100' push, partially consolidated
05a	Reveg	Reveg pit floor 9.5 ac
06a	Reveg	Reveg pit slopes 16.5 ac,
06b	Reveg	Trees on 1 ac with 40% failure-No changes
07a	Mob	No equipment changes
07b	Mob	No equipment changes

Discussed within the inspection report are several potential changes to the Reclamation Plan which affect bonding. Until such time as the TR is submitted and approved these changes cannot be taken into account. Based on the current Reclamation Plan the Division has estimated the total required bond amount to be \$156,574 which is a \$41,100 increase over the \$115,474.00 currently held. Please either submit a TR prior to June 14, 2024, or the Division will issue the Surety Increase as calculated. Note that the Divisions annual inflationary increase goes into effect on July 1, 2024. So, any bonds calculated after that date are likely to increase. Please reach out if you have any questions.

Sincerely,



Amy Yeldell
Environmental Protection Specialist

Ec:
Travis Marshall, Senior EPS, Grand Junction DRMS

COST SUMMARY WORK

Task description: Post 2024 rec work

Site: Nichols Gravel Pit

Permit Action: 05-2024

Permit/Job#: M1981013

PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 5/23/2024

County: Mesa

Filename: M013-ACY

User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Reduce highwalls to 2H:1V	DOZER	2	11.29	\$9,608
02a	Haul overburden to lower pit floor	TRUCK1	1	25.64	\$14,341
02b	Grade transported overburden on 3.5 ac lower pit floor	DOZER	2	8.75	\$7,442
03a	Haul topsoil to north side of pit	TRUCK1	1	23.31	\$13,036
03b	Spread 6" topsoil over 21 ac	DOZER	2	15.32	\$13,035
05a	Reveg 9.5 ac pit floor to pasture alfalfa	REVEGE	1	16.00	\$20,125
06a	Reveg on 16.5 ac pit slopes	REVEGE	1	24.00	\$32,163
06b	Reveg on 1 ac PJ	REVEGE	1	10.00	\$3,422
07a	Initial Mobilization	MOBILIZE	1	4.50	\$9,268
07b	Secondary Mobilization	MOBILIZE	1	4.50	\$2,168
<u>SUBTOTALS:</u>				143.31	\$124,608

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 71.66
Profit: 10.00

Total = \$2,517

Total = \$1,308

Total = \$4,663

Total = \$12,461

TOTAL O & P = \$20,950

CONTRACT AMOUNT (direct + O & P) = \$145,558

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 5.00

\$7,278

CONTINGENCY: 3.00

Total = \$3,738

TOTAL INDIRECT COST = \$31,966

TOTAL BOND AMOUNT (direct + indirect) = \$156,574

BULLDOZER WORKTask description: **Reduce highwalls to 2H:1V**Site: **Nichols Gravel Pit**Permit Action: 05-2024Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 01AState: ColoradoAbbreviation: NoneDate: 5/23/2024County: MesaFilename: M013-01aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$425.34Total Fleet Cost/Hour: **\$850.67****MATERIAL QUANTITIES**Initial Volume: 10,624Swell factor: 1.180Loose volume: **12,536 LCY**Source of estimated volume: Grade all slopes fo 2H: 1V or less and blendSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 852.6 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -25 %Average site altitude: 5,500 feetMaterial weight: 2,400 lbs/LCYWeight description: Clay and gravel - Dry**Job 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	(SSD-AC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.958	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6509

Adjusted unit production: 554.96 LCY/hr

Adjusted fleet production: **1109.92** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.766/LCY

Total job time: **11.29** Hours

Total job cost: **\$9,608**

TRUCK/LOADER TEAM WORKTask description: Haul overburden to lower pit floorSite: Nichols Gravel PitPermit Action: 05-2024Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 5/23/2024County: MesaFilename: M013-02aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

Equipment Description	
Truck Loader Team -Truck:	Cat 730
-Loader:	CAT 966H
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:**Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$108.06	\$65.69	NA	NA	NA	NA
Operating cost/hour:	\$71.88	\$48.09	NA	NA	NA	NA
%Utilization-ripper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$24.82	\$35.97	NA	NA	NA	NA
Unit Subtotals:	\$204.76	\$149.75	NA	NA	NA	NA
Number of Units:	2	1	0	0	0	0
Group Subtotals:	Work: \$559.27		Support: \$0.00		Maint: \$0.00	

Total work team cost/hour: \$559.27**MATERIAL QUANTITIES**Initial volume: 11,293

CCY

Swell factor: 1.125Loose volume: 12,705

LCY

Source of estimated volume: 3.5 ac @ 24"Source of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**

Truck Payload (weight) Basis:

Material weight: 2,650 Pounds/LCYDescription: Decomposed rock - 25% Rock, 75% EarthRated Payload: 62,000 PoundsPayload Capacity: 23.40 LCY

Truck Bed (volume) Basis:

Struck Volume:	17.10	LCY
Heaped Volume:	22.10	LCY
Average Volume:	19.60	LCY
Adjusted Volume:	22.10	LCY

Final Truck Volume Based on Number of Loader Passes: 19.50 LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.000	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	4.875	LCY

Job Condition Corrections:

Site Altitude (ft.): 5500 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 4 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 3/4" to 6" diameter 0.00	0.000	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(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:		-0.080	minutes
Adjusted Loader Cycle Time:		0.420	minutes
Net Load Time per Truck:		1.360	minutes

Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.360	Minutes	Adjusted for site altitude:	1.360	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

Truck Travel (Haul & Return) Time:
penetration 4.0

Road Condition: Rutted dirt, little maintenance, no water, 1" tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	4.00	4.00	1774	0.359

Haul Time: **0.359** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	4.00	4.00	2855	0.272

Return Time: **0.272** minutesTotal Truck Cycle Time: **3.591** minutes

Loading Tool unit
 Production 596.94 LCY/Hour Adjusted for job efficiency: 495.46 LCY/Hour
 Truck Unit Production
325.81 LCY/Hour Adjusted for job efficiency: 270.43 LCY/Hour
 Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 540.85 LCY/Hour
 Adjusted single truck/loader team production: 495.46 LCY/Hour
 Adjusted multiple truck/loader team production: **495.46** LCY/Hour

JOB TIME AND COSTFleet size: 1 Team(s) Total job time: **25.64** HoursUnit cost: \$1.129 /LCY Total job cost: **\$14,341**

BULLDOZER WORKTask description: Grade transported overburden on 3.5 ac lower pit floorSite: Nichols Gravel PitPermit Action: 05-2024Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 02BState: ColoradoAbbreviation: NoneDate: 5/23/2024County: MesaFilename: M013-02bUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$425.34Total Fleet Cost/Hour: **\$850.67****MATERIAL QUANTITIES**Initial Volume: 12,705Swell factor: 1.000Loose volume: **12,705 LCY**Source of estimated volume: Approx. 2 ft over 3.5 acres of lower pit floorSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 5,500 feetMaterial weight: 2,650 lbs/LCYWeight description: Decomposed rock - 25% Rock, 75% Earth**Job 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	(SSD-AC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5187

Adjusted unit production: 726.18 LCY/hr

Adjusted fleet production: **1452.36** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.586/LCY

Total job time: **8.75** Hours

Total job cost: **\$7,442**

TRUCK/LOADER TEAM WORKTask description: Haul topsoil to north side of pitSite: Nichols Gravel PitPermit Action: 05-2024Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 5/23/2024County: MesaFilename: M013-03aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

Equipment Description	
Truck Loader Team -Truck:	Cat 730
-Loader:	CAT 966H
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:**Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$108.06	\$65.69	NA	NA	NA	NA
Operating cost/hour:	\$71.88	\$48.09	NA	NA	NA	NA
%Utilization-ripper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$24.82	\$35.97	NA	NA	NA	NA
Unit Subtotals:	\$204.76	\$149.75	NA	NA	NA	NA
Number of Units:	2	1	0	0	0	0
Group Subtotals:	Work: \$559.27		Support: \$0.00		Maint: \$0.00	

Total work team cost/hour: \$559.27**MATERIAL QUANTITIES**Initial volume: 9,000

CCY

Swell factor: 1.215Loose volume: 10,935

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**Truck Payload (weight) Basis:Material weight: 1,600

Pounds/LCY

Description: Top SoilRated Payload: 62,000

Pounds

Payload Capacity: 38.75

LCY

Truck Bed (volume) Basis:

Struck Volume:	17.10	LCY
Heaped Volume:	22.10	LCY
Average Volume:	19.60	LCY
Adjusted Volume:	22.10	LCY

Final Truck Volume Based on Number of Loader Passes: 19.50 LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.000	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	4.875	LCY

Job Condition Corrections:

Site Altitude (ft.): 5500 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 4 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 3/4" to 6" diameter 0.00	0.000	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(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:		-0.080	minutes
Adjusted Loader Cycle Time:		0.420	minutes
Net Load Time per Truck:		1.360	minutes

Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.360	Minutes	Adjusted for site altitude:	1.360	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

Truck Travel (Haul & Return) Time:
penetration 4.0

Road Condition: Rutted dirt, little maintenance, no water, 1" tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	900.00	0.00	4.00	4.00	1774	0.697

Haul Time: **0.697** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	900.00	0.00	4.00	4.00	2855	0.483

Return Time: **0.483** minutesTotal Truck Cycle Time: **4.140** minutes

Loading Tool unit

Production 596.94 LCY/Hour Adjusted for job efficiency: 495.46 LCY/Hour
Truck Unit Production 282.61 LCY/Hour Adjusted for job efficiency: 234.57 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 469.13 LCY/Hour
Adjusted single truck/loader team production: 469.13 LCY/Hour
Adjusted multiple truck/loader team production: **469.13** LCY/Hour

JOB TIME AND COSTFleet size: 1 Team(s) Total job time: **23.31** HoursUnit cost: \$1.192 /LCY Total job cost: **\$13,036**

BULLDOZER WORKTask description: Spread 6" topsoil over 21 acSite: Nichols Gravel PitPermit Action: 05-2024Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 03BState: ColoradoAbbreviation: NoneDate: 5/23/2024County: MesaFilename: M013-03bUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$425.34Total Fleet Cost/Hour: **\$850.67****MATERIAL QUANTITIES**Initial Volume: 20,582Swell factor: 1.000Loose volume: **20,582 LCY**Source of estimated volume: 6" topsoil over 21 acSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 852.6 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 5,500 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(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:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7877

Adjusted unit production: 671.59 LCY/hr

Adjusted fleet production: **1343.18** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.633/LCY

Total job time: **15.32** Hours

Total job cost: **\$13,035**

REVEGETATION WORKTask description: Reveg 9.5 ac pit floor to pasture alfalfaSite: Nichols Gravel PitPermit Action: 05-2024Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 5/23/2024County: MesaFilename: M013-05aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
8-24-24, 10-15-15, 10-20-20	100.00	pound	\$0.60	\$60.33
			Total Fertilizer Materials Cost/Acre	\$60.33

Application

Description	Cost /Acre
Push rotary spreader (MEANS 32 01 90.13 0110)	\$117.61
Total Fertilizer Application Cost/Acre	\$117.61

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Golden West Blend	10.00	48.21	\$25.50
Totals Seed Mix	10.00	48.21	\$25.50

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.01	\$4.01
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$863.58

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$74.46
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$284.85

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:	9.5	Cost /Acre:	\$1,696.69
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,405.93
*Selected Replanting Work Items:	SEEDING,MULCHING		
Initial Job Cost:	\$16,118.56		
Reseeding Job Cost:	\$4,006.90		
Total Job Cost:	\$20,125		
Job Hours:	16.00		

REVEGETATION WORKTask description: Reveg on 16.5 ac pit slopesSite: Nichols Gravel PitPermit Action: 05-2024Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 5/23/2024County: MesaFilename: M013-06aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

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

Application

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

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	3.00	9.71	\$19.50
Sand Dropseed	0.10	11.94	\$0.98
Sainfoin - Eski	1.00	0.44	\$2.98
Western Wheatgrass - Native	8.00	20.20	\$48.00
Totals Seed Mix	12.10	42.29	\$71.45

Application

Description	Cost /Acre
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Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.01	\$4.01
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$863.58

Application

Description	Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$210.39

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:	16.5	Cost /Acre:	\$1,525.46
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,412.64
*Selected Replanting Work Items:	SEEDING,MULCHING		
Initial Job Cost:	\$25,170.09		
Reseeding Job Cost:	\$6,992.57		
Total Job Cost:	\$32,163		
Job Hours:	24.00		

REVEGETATION WORKTask description: Reveg on 1 ac PJSite: Nichols Gravel PitPermit Action: 05-2024Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 06BState: ColoradoAbbreviation: NoneDate: 5/23/2024County: MesaFilename: M013-06aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

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

Application

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

TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
			\$
Totals Seed Mix	0.00	0.00	\$0.00

Application

Description	Cost /Acre
	\$

Total Seed Application Cost/Acre	\$0.00
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MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

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

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Juniper, Rocky Mountain	48	Container, 1 gallon (MEANS)	\$24.20	\$2.40	\$1,161.60
Pine, Pinyon	48	Container, 1 gallon (MEANS)	\$26.72	\$2.40	\$1,282.56
Totals Nursery Stock Cost / Acre					\$2,444.16

JOB TIME AND COST

No. of Acres: <u>1</u>	Cost /Acre: <u>\$2,444.16</u>
Estimated Failure Rate: <u>40%</u>	Cost /Acre*: <u>\$2,444.16</u>
*Selected Replanting Work Items: <u>NURSERY</u>	
Initial Job Cost: <u>\$2,444.16</u>	
Reseeding Job Cost: <u>\$977.66</u>	
Total Job Cost: <u>\$3,422</u>	
Job Hours: <u>10.00</u>	

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Initial Mobilization**Site: **Nichols Gravel Pit**Permit Action: **05-2024**Permit/Job#: **M1981013****PROJECT IDENTIFICATION**Task #: **07A**State: **Colorado**Abbreviation: **None**Date: **5/23/2024**County: **Mesa**Filename: **M013-07a**User: **ACY**Agency or organization name: **DRMS****EQUIPMENT TRANSPORT RIG COST**Shift basis: **1 per day**Cost Data Source: **CRG Data**Truck 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:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

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 - 8SU	47.71	\$241.38	\$158.17	2	\$799.10	\$316.34	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
CAT 966H	25.80	\$65.69	\$82.29	1	\$147.98	\$82.29	\$250.00
Cat 730	25.19	\$108.06	\$82.29	2	\$380.70	\$164.58	\$500.00

Subtotals: **\$1,525.03** **\$727.79** **\$1,500.00****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	\$64.45	1	\$64.45	\$64.45
Light Duty Pickup, 4x4, 1 T. Crew	\$128.47	2	\$256.94	\$256.94

Subtotals: **\$321.39** **\$321.39**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION, CO	
Total one-way travel distance:	25.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost *	\$8,866.09	
** two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	\$401.74	
** one round trip, no haul rig:		

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.63	0.63
Return Time (Hours):	0.63	0.63
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.25	1.25

JOB TIME AND COST

Total job time: 4.50 Hours

Total job cost: \$9,268

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Secondary Mobilization**Site: **Nichols Gravel Pit**Permit Action: **05-2024**Permit/Job#: **M1981013****PROJECT IDENTIFICATION**Task #: **07B**State: **Colorado**Abbreviation: **None**Date: **5/23/2024**County: **Mesa**Filename: **M013-07b**User: **ACY**Agency or organization name: **DRMS****EQUIPMENT TRANSPORT RIG COST**Shift basis: **1 per day**Cost Data Source: **CRG Data**Truck 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:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

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
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00

Subtotals: **\$197.25** **\$164.58** **\$500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$128.47	2	\$256.94	\$256.94

Subtotals: **\$256.94** **\$256.94**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION, CO	
Total one-way travel distance:	<u>25.00</u>	miles
Average Travel Speed:	<u>40.00</u>	mph
Total Non-Roadable Mob/Demob Cost *	\$1,846.79	
** two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	<u>\$321.18</u>	
** one round trip, no haul rig:		

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.63</u>	<u>0.63</u>
Return Time (Hours):	<u>0.63</u>	<u>0.63</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>2.25</u>	<u>1.25</u>

JOB TIME AND COST

Total job time: 4.50 Hours

Total job cost: \$2,168