

September 17, 2018

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



**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: Nichols Gravel Pit, Permit No. M-1981-013, Reclamation Costs Update and Notice of Surety Increase (SI-4)***

Dear Mr. Nichols:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed).

Division calculations estimate the cost to reclaim the above referenced site to be \$115,473.89 rounded up to \$115,474.00. This is an increase of \$42,874.00 over the \$72,600.00 currently held by the Division. This estimate is based on conditions observed during the July 26, 2018 inspection. ***Therefore, pursuant to Section 34-32.5-117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.*** The additional amount needs to be accepted prior to **Friday, November 16, 2018**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us

Sincerely,

**Amy Yeldell**  
Environmental Protection Specialist

Ec: Wally Erickson, Senior EPS, Grand Junction DRMS

Enc: Financial Warranty Cost Estimate



## COST SUMMARY WORK

Task description: Post inspection update

Site: Nichols Gravel Pit

Permit Action: SI-4

Permit/Job#: M1981013

### PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 9/14/2018

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	13.29	\$5,507.00
02a	Distribute overburden over 8.5 ac pit floor	DOZER	2	88.76	\$36,783.00
03a	Spread 6" topsoil on 8.5 ac pit floor	DOZER	2	11.83	\$4,900.00
04a	Spread topsoil on 11.5 ac pit slopes and highwall rim	DOZER	2	6.09	\$2,523.00
05a	Reveg 8.5 ac pit floor to pasture alfalfa	REVEGE	1	16.00	\$13,862.00
06a	Reveg on 11.5 ac pit slopes	REVEGE	1	20.00	\$17,586.00
06b	Reveg on 1 ac PJ	REVEGE	1	10.00	\$3,664.00
07a	Initial Mobilization	MOBILIZE	1	4.50	\$4,112.00
07b	Secondary Mobilization	MOBILIZE	1	4.50	\$1,876.00
<b><u>SUBTOTALS:</u></b>				<b>174.97</b>	<b>\$90,813</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 87.49  
Profit: 10.00

Total = \$1,834.42

Total = \$953.54

Total = \$6,390.78

Total = \$9,081.30

TOTAL O & P = \$18,260.04

CONTRACT AMOUNT (direct + O & P) = \$109,073.04

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00

Total = 500.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 5.41

\$5,900.85

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$24,660.89

**TOTAL BOND AMOUNT (direct + indirect) = \$115,473.89**

**BULLDOZER WORK**Task description: **Reduce highwalls to 2H:1V**Site: **Nichols Gravel Pit**Permit Action: **SI-4**Permit/Job#: **M1981013****PROJECT IDENTIFICATION**Task #: **01A**State: **Colorado**Abbreviation: **None**Date: **9/14/2018**County: **Mesa**Filename: **M013-01a**User: **ACY**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**Horsepower: **310**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.23	NA

Total unit Cost/Hour: **\$207.20**Total Fleet Cost/Hour: **\$414.41****MATERIAL QUANTITIES**Initial Volume: **12,500**Swell factor: **1.180**Loose volume: **14,750 LCY**Source of estimated volume: **Approx. 3000LF 30'H 1:1 to 2:1**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **852.6 LCY/hr**Materials consistency description: **Compacted fill or embankment 0.9**Average push gradient: **-25 %**Average site altitude: **5,500 feet**Material weight: **2,400 lbs/LCY**Weight 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: \$0.373/LCY

Total job time: **13.29** Hours

Total job cost: **\$5,507**

**BULLDOZER WORK**Task description: **Distribute overburden over 8.5 ac pit floor**Site: **Nichols Gravel Pit**Permit Action: **SI-4**Permit/Job#: **M1981013****PROJECT IDENTIFICATION**Task #: **02A**State: **Colorado**Abbreviation: **None**Date: **9/14/2018**County: **Mesa**Filename: **M013-02a**User: **ACY**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**Horsepower: **310**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<b><u>Utilization %</u></b>
Ownership Cost/Hour:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.23	NA

Total unit Cost/Hour: **\$207.20**Total Fleet Cost/Hour: **\$414.41****MATERIAL QUANTITIES**Initial Volume: **27,427**Swell factor: **1.000**Loose volume: **27,427 LCY**Source of estimated volume: **Approx. 2 ft over 8.5 acres**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **300 feet**Unadjusted hourly production: **291.4 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push gradient: **-5 %**Average site altitude: **5,500 feet**Material weight: **2,650 lbs/LCY**Weight description: **Decomposed rock - 25% Rock, 75% Earth****Job Condition Correction Factor**

		<b><u>Source</u></b>
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	(SSD-AC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5302

Adjusted unit production: 154.50 LCY/hr

Adjusted fleet production: **309** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$1.341/LCY

Total job time: **88.76** Hours

Total job cost: **\$36,783**

**BULLDOZER WORK**Task description: Spread 6" topsoil on 8.5 ac pit floorSite: Nichols Gravel PitPermit Action: SI-4Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 9/14/2018County: MesaFilename: M013-03aUser: 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:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.23	NA

Total unit Cost/Hour: \$207.20Total Fleet Cost/Hour: **\$414.41****MATERIAL QUANTITIES**Initial Volume: 6,857Swell factor: 1.215Loose volume: **8,331 LCY**Source of estimated volume: 6" topsoil over 8.5 acSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 200 feetUnadjusted hourly production: 491.9 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average 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:	1.000	(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:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7161

Adjusted unit production: 352.25 LCY/hr

Adjusted fleet production: **704.5** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.588/LCY

Total job time: **11.83** Hours

Total job cost: **\$4,900**



**BULLDOZER WORK**Task description: Spread topsoil on 11.5 ac pit slopes and highwall rimSite: Nichols Gravel PitPermit Action: SI-4Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 9/14/2018County: MesaFilename: M013-04aUser: 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:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.23	NA

Total unit Cost/Hour: \$207.20Total Fleet Cost/Hour: **\$414.41****MATERIAL QUANTITIES**Initial Volume: 9,276Swell factor: 1.215Loose volume: **11,270 LCY**Source of estimated volume: 6" topsoil over 11.5 acSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 852.6 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: -25 %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:	1.000	(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:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.0856

Adjusted unit production: 925.58 LCY/hr

Adjusted fleet production: **1851.16** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.224/LCY

Total job time: **6.09** Hours

Total job cost: **\$2,523**

**REVEGETATION WORK**Task description: Reveg 8.5 ac pit floor to pasture alfalfaSite: Nichols Gravel PitPermit Action: SI-4Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 9/14/2018County: 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	\$0.32	\$32.00
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$32.00</b>

**Application**

Description	Cost /Acre
Push rotary spreader (MEANS 32 01 90.13 0110)	\$99.32
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$99.32</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$106.29
<b>Total Tilling Cost/Acre</b>	<b>\$106.29</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Golden West Blend	10.00	48.21	\$26.10
<b>Totals Seed Mix</b>	<b>10.00</b>	<b>48.21</b>	<b>\$26.10</b>

**Application**

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

**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.81	\$2.81
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$578.81</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$68.78
Power mulcher (MEANS 32 91 13.16 0350)	\$92.78
Weed spray, truck, non-aquatic area, nox. [DMG]	\$73.22
<b>Total Mulch Application Cost/Acre</b>	<b>\$234.78</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres:	8.5	Cost /Acre:	\$1,309.30
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,071.69
*Selected Replanting Work Items:	SEEDING,MULCHING		
Initial Job Cost:	<b>\$11,129.05</b>		
Reseeding Job Cost:	<b>\$2,732.81</b>		
Total Job Cost:	<b>\$13,862</b>		
Job Hours:	<b>16.00</b>		

**REVEGETATION WORK**Task description: Reveg on 11.5 ac pit slopesSite: Nichols Gravel PitPermit Action: SI-4Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 9/14/2018County: MesaFilename: M013-06aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

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

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$106.29
<b>Total Tilling Cost/Acre</b>	<b>\$106.29</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	3.00	9.71	\$21.00
Sand Dropseed	0.10	11.94	\$1.11
Sainfoin - Eski	1.00	0.44	\$3.05
Western Wheatgrass - Native	8.00	20.20	\$57.36
<b>Totals Seed Mix</b>	<b>12.10</b>	<b>42.29</b>	<b>\$82.52</b>

**Application**

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

**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.81	\$2.81
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$578.81</b>

**Application**

Description	Cost /Acre
Power mulcher (MEANS 32 91 13.16 0350)	\$92.78
Weed spray, truck, non-aquatic area, nox. [DMG]	\$73.22
<b>Total Mulch Application Cost/Acre</b>	<b>\$166.00</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 11.5                      Cost /Acre: \$1,200.84  
 Estimated Failure Rate: 30%                      Cost /Acre\*: \$1,094.55  
 \*Selected Replanting Work Items: SEEDING,MULCHING

Initial Job Cost: **\$13,809.66**  
 Reseeding Job Cost: **\$3,776.20**  
 Total Job Cost: **\$17,586**  
 Job Hours: **20.00**

**REVEGETATION WORK**Task description: Reveg on 1 ac PJSite: Nichols Gravel PitPermit Action: SI-4Permit/Job#: M1981013**PROJECT IDENTIFICATION**Task #: 06BState: ColoradoAbbreviation: NoneDate: 9/14/2018County: MesaFilename: M013-06bUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

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

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

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

**Application**

Description	Cost /Acre
	\$

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

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

**Application**

Description	Cost /Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</b>

**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)	\$26.00	\$2.40	\$1,248.00
Pine, Pinyon	48	Container, 1 gallon (MEANS)	\$28.52	\$2.40	\$1,368.96
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$2,616.96</b>

**JOB TIME AND COST**

No. of Acres: <u>1</u>	Cost /Acre: <u>\$2,616.96</u>
Estimated Failure Rate: <u>40%</u>	Cost /Acre*: <u>\$2,616.96</u>
*Selected Replanting Work Items: <u>NURSERY</u>	
Initial Job Cost: <u><b>\$2,616.96</b></u>	
Reseeding Job Cost: <u><b>\$1,046.78</b></u>	
Total Job Cost: <u><b>\$3,664</b></u>	
Job Hours: <u><b>10.00</b></u>	



**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Initial Mobilization**Site: **Nichols Gravel Pit**Permit Action: **SI-4**Permit/Job#: **M1981013****PROJECT IDENTIFICATION**Task #: **07A**State: **Colorado**Abbreviation: **None**Date: **9/14/2018**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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
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 - 8SU	47.71	\$93.62	\$117.55	2	\$422.34	\$235.10	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00

Subtotals: **\$623.55** **\$412.44** **\$750.00****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	\$55.74	1	\$55.74	\$55.74

Subtotals: **\$55.74** **\$55.74**

**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 *	\$4,042.09	
'* two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	<u>\$69.68</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: \$4,112

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Secondary Mobilization**Site: **Nichols Gravel Pit**Permit Action: **SI-4**Permit/Job#: **M1981013****PROJECT IDENTIFICATION**Task #: **07B**State: **Colorado**Abbreviation: **None**Date: **9/14/2018**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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
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
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00

Subtotals: **\$201.21      \$177.34      \$500.00****ROADABLE EQUIPMENT:**

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

**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 *	\$1,875.61	
** two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	<u>\$0.00</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: \$1,876

September 17, 2018

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



**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: Nichols Gravel Pit, Permit No. M-1981-013, Explanation of Surety Increase (SI-4)***

Dear Mr. Nichols:

On July 26, 2018 the Colorado Division of Reclamation Mining and Safety (Division) inspected the above site. This reclamation cost update was based on site conditions observed during that inspection. The last Surety Increase (SI-3) was issued on March 30, 2009.

Typically the Division updates the reclamation cost estimate following a permit revision or a field inspection. It is Division obligation to periodically update its costs to ensure that the Financial Warranty adequately, reflects the actual current cost of fulfilling the requirements of the approved reclamation plan.

Making no changes to input values and replicating the 2009 calculation, staff estimates the bond to approximately be \$116,315. Furthermore the 2009 calculation only reclaims approximately 12 acres. Currently approximately 20 areas have been affected.

Below is a table summarizing input values that have been updated in Surety Increase (SI-4). This table does not account for price changes resulting from inflation or other RS Means cost changes.

Task	Form Used	Change	Justification
01a	Dozer	-	2009: 22,800 BCY backfill, 1500 LF of 25'H vertical, 60 ft push 2018: 12, 500 BCY Cut & Fill, 3000 LF of 30' 1:1, 100 ft push
02a	Dozer	-	2009: 2 ft over 9 ac (29,040 LCY) loose stockpile 2018: 2 ft over 8.5 ac ( 27,427LCY) consolidated stockpile
03a	Dozer	+	2009: 6" over 3 ac of slopes (3,663 LCY), 60 ft push 2018: 6" over 11.5 ac of slopes and highwall rim/buffer area (9,276 CCY), 100 ft push,
04a	Dozer	-	2009: 6" over 9 ac pit floor (10,890 LCY) 2018: 6" over 8.5 ac pit floor (6,857 CCY)



Task	Form Used	Change	Justification
05a	Reveg	-/+	2009: Reveg pit floor 9 ac w/ 40% failure, chisel plow 2018: Reveg pit floor 8.5 ac w/ 30% Failure, disk harrow, weed treatment 2-4D
06a	Reveg	-/+	2009: Reveg 3 ac pit slopes w/ 40% failure, chisel plow, Juniper and Pinyon planting (all 3 acres) 2018: Reveg 11.5 ac pit slopes w/ 30% failure, disk harrow, weed treatment 2-4D
06b	Reveg	-	2009:NA Trees included with slopes 2018: Trees on 1 ac with 40% failure
07a	Mob	+	2009: 1 Dozer, reveg tractor 2018: 2 Dozers (decreases job hrs), drill seeder tractor and power mulcher
07b	Mob	+	2009: None 2018: Secondary mobilization of reveg equipment
	Job super	-	2009: 140.16 hrs 2018: 87.49 hrs

Please feel free to contact me with any further questions. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@ state.co.us

Sincerely,



**Amy Yeldell**  
Environmental Protection Specialist

Ec:  
Wally Erickson, Senior EPS, Grand Junction DRMS