Appendix A Bond Addendum Summary

	PR-9		PR-10		TR-130	
DIRECT COST SUMMARY			**I and J Pit Mine Plan**			
Activity		Costs		Costs		Costs
Regrade		$ 14,322,436		$ 535,304		$ 1,630,781
Topsoil Replacement		$ 4,685,072		$ 166,849		$ 214,901
Facilities Removal		$ 829,523		$ -		$ -
Revegetation		$ 1,797,133		$ 58,374		$ 81,095
Miscellaneous		$ 1,001,173		$ -		$ -
Total		**$ 22,635,336**		$ 760,527		**$ 1,926,777**
Reclamation not yet Bond Released Cost		$ 1,072,724		$ 130,483		$ 93,617
(RNYBR) 1048.41 Acres, See table below summary DRMS supplied values for PR9			RNYBR, 126 acres		RNYBR, 90.4 acres	
Total Direct Cost		**$ 23,708,060**		**$ 891,009**		**$ 2,020,393**
INDIRECT COSTS						
Public Liability Ins (2.02%)	2.02%	$ 457,234		$ 17,998		$ 40,812
Contractor Perf Bond (1.05%)	1.05%	$ 237,671		$ 9,356		$ 21,214
Contractor Profit (10%)	10.00%	$ 2,263,534		$ 20,387		$ 202,039
Job Superintendent		$ 146,991		$ 89,101		$ 46,885
Total Indirect Cost		**$ 3,105,430**		**$ 136,842**		**$ 310,951**
DRMS Admin Expense (6.90%)		**$ 1,561,838**	(5.92%)	**$ 61,349**		**$ 138,516**
PR09 Worst Case Bond Estimate Total		**$ 27,302,604**	**PR-10 Worst Case Bond Est.**	**$ 1,089,200**	**TR-130 Worst Case Bond Est.**	**$ 2,469,860**
Acreage Change		**1.2**		**155.0**		**61.20**

Acres	Cost/Acre	%
1584.59	$ 17,230.07	100%
175.00	$ 6,892.03	40%
562.40	$ 2,584.51	15%

Phase Bond Release Area Cost Accounting	
PR9 Worst Case Bond Estimate Total	$ 27,302,604
Phase I Bond Release	$ 1,206,106
Phase II Bond Release	$ 1,453,531

		Accrued Total Bond		Accrued Total Bond	
Grand Total Bond Estimate	**$ 29,962,241**		**$ 29,968,404**		**$ 32,438,263**
DRMS RNYBR adjustment added to Trapper Bond Estimate	$ 31,034,965				
DRMS CIRCES Total Bond Estimate	**$ 28,879,204**				

Direct cost RNYBR

	PR-9				PR-10				TR-130			
	Acres	$/Acre	**Total Cost**		Acres	$/Acre	**Total Cost**		Acres	$/Acre	**Total Cost**	
Topsoil Acres	258.29	$ 2,720.89	$	702,778.47	31.5	$ 2,720.89	$	85,708.04	22.6	$ 2,720.89	$	61,492.17
Revegetation Acres	258.29	$ 831.80	$	214,846.23	31.5	$ 831.80	$	26,201.70	22.6	$ 831.80	$	18,798.70
Re-seed revegetated area (assume 17.5% Failure Rate)	790.12	$ 145.57	$	115,014.14	94.5	$ 145.57	$	13,755.89	67.8	$ 145.57	$	9,869.66
Site Maintenance	1048.41	$ 38.23	$	40,085.17	126.0	$ 38.23	$	4,816.98	90.4	$ 38.23	$	3,455.99
			$	**1,072,724**			**$**	**130,483**			**$**	**93,617**

Revision: TR-130

Approved:

Table A-1.1
TR-130 Bond Determination for Worst Case Year 2022

Activity			Cost ($)	
Direct Costs				
Regrade		$	1,630,781	
Topsoil Replacement		$	214,901	
Facilities Removal		$	-	
Revegetation		$	81,095	
Miscellaneous		$	-	
Additional 90.4 acres (topsoil + Reveg); See table below summary		$	93,617	
Total		**$**	**2,020,393**	
Indirect Costs				
Overhead and Profit:				
Public Liability Insurance	2.02%	**$**	**40,812**	
Contractor Perf Bond	1.05%	**$**	**21,214**	
Job Superintendent *		**$**	**46,885**	*
Contractor Profit	10.0%	**$**	**202,039**	
Total		**$**	**310,951**	
Total Direct + Indirect Costs		**$**	**2,331,344**	
Financial warranty processing (legal/related costs):	$ 500.00	$	500	
Engineering Work and/or contract/bid prep: 3.27% of contract:	3.27%	$	76,235	
Reclamation Management and/or Administration; 2.65% of contract:	2.65%	$	61,781	
Total		$	138,516	
Worst Case Bond Estimate Total		**$**	**2,469,860**	

% Un-topsoiled affected Acres Proposed	25%
% Un-revegetated affected Acres Proposed	25%

Direct cost for additional 90.4 acres (Topsoil & Re-vegetation)

	Acres		$/Acre **			Total Cost
Topsoil Acres	22.6	$	2,721		$	61,492
Revegetation Acres	22.6	$	832		$	18,799
Re-seed revegetated area (assume 17.5% Failure Rate)	67.8	$	146	*	$	9,870
Site Maintenance	90.4	$	38		$	3,456
Cost Summary					**$**	**93,617**

* 17.5% of revegetation cost per acre

** Cost/Acre from PR-10 Circes 9/25/2020

Table A-2 Equipment Unit Costs & Correction Factors

Unit costs taken from RN-07 DRMS Circes Estimate dated 7/10/2017 and an update provided by DRMS on 5/31/2022

Table A-2.1 Fleet Cost - Regrading Pits

Fleet 1 - Dozer Only

Equip	Ownership Cost/Hour	Oper. Cost Cost/Hour	Attachments	Operator	Total	
triple shift						
Cat D11T - 11U	**$ 274.04**	**$ 273.21**	**$ -**	**$ 41.30**	**$ 588.55**	From DRMS update June 2022
Light Plant (50% of time)	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
Total	**$ 274.04**	**$ 273.21**	**$ -**	**$ 41.30**	**$ 588.55**	
Dozer Fleet size	**2**	Dozers		**Fleet cost/hour**	**$ 1,177.10**	

Fleet Cost - Regrading Pits

Truck/Trackhoe

Equipment	Units Required	Ownership Cost/Hour	Oper. Cost Cost/Hour	Operator ($/hr)	Ripper Utilization NA	Cost ea. ($/hr)	Total Cost ($/hr)	
single shift								
CAT 6090	1	**$ 23.07**	**$ 930.15**	**$ 37.32**		**$ 990.54**	**$ 990.54**	100%
Komatsu 830E	3	**$ 222.38**	**$ 210.26**	**$ 34.67**		**$ 467.31**	**$ 1,401.93**	100%
Motor Grader (Cat 16M)	1	**$ 70.80**	**$ 28.16**	**$ 28.56**		**$ 127.52**	**$ 127.52**	50%
Support (Load Area) Cat D11T-11SU	1	**$ 274.04**	**$ 273.21**	**$ 41.30**	**$ -**	**$ 588.55**	**$ 588.55**	0%
Support (Dump Area) Cat D11T-11SU	1	**$ 274.04**	**$ 273.21**	**$ 41.30**	**$ -**	**$ 588.55**	**$ 588.55**	100%
Water Truck- Water Tanker, 14000 Gal.	1	**$ 103.16**	**$ 67.28**	**$ -**		**$ 170.44**	**$ 170.44**	50%
Total		**$ 967.49**	**$ 1,782.27**	**$ 183.15**		**$ 2,932.91**	**$ 3,867.53**	

$ 2,465.60 without truck cost

$ 3,867.53 with 3 trucks

Table A-2.2 **Drill and Blast Equipment Costs**

Drill and Blast Equipment Costs

Equip	Ownership Cost/Hour	Oper. Cost Cost/Hour	Attachments	Operator	Total
single shift					
Drilling Equip.	$ 96.39	$ 131.63	0	$ -	$ 228.02
Cat D10T Dozer	$ 169.60	$ 166.94	0	$ 41.30	$ 377.84
Bulk Truck	$ 128.47				$ 128.47
Cap Truck	$ 15.24				$ 15.24
Total work team cost/hour					$ 749.57

$0.22 per cubic yard (Trapper Budget cost)

Table A-2.3. **Equipment costs for Regrading Roads**

Fleet Cost

Equipment	Ownership Cost/Hour	Oper. Cost Cost/Hour	Attachments*	Operator	Total
single shift					
Cat D10T w/ripper	$ 169.60	$ 166.94	0	$ 41.30	$ 377.84
Light Plant	0	0	0	$ -	$ -
Total	169.6	166.94	0	$ 41.30	$ 377.84
Dozer Fleet size	4 Dozers			**Fleet cost/hour**	$ 1,511.36

* Ripper costs included for ripping, omitted for grading

Table A-2.4 **Impoundment Regrade Equipment Costs**

Fleet Cost

Equip	Ownership Cost/Hour	Oper. Cost Cost/Hour	Attachments	Operator	Total
Cat D10T w/ripper	$ 169.60	$ 166.94	0	$ 41.30	$ 377.84
(semi -U blade)					
Light Plant	0	0	0	$ -	$ -
Total	169.6	166.94	0	$ 41.30	$ 377.84
Dozer Fleet size	2 Dozers			**Fleet cost/hour**	$ 755.68

Table A-2.5 **Regrading Diversions**

Fleet Cost Equip	Ownership Cost/Hour	Oper. Cost Cost/Hour	Attachments	Operator	Total
Cat D8T (8SU) (semi -U blade)	**83.81**	**66.17**	**7.55**	**$ 41.85**	**$ 199.38**
Total	**83.81**	**66.17**	**7.55**	**$ 41.85**	**$ 199.38**
Dozer Fleet size	**4**	Dozers		**Fleet cost/hour**	**$ 797.52**

Table A-2.6 **Topsoil replacement fleet costs**

Scrapers

Equipment	Units Required	Ownership Cost/Hour	Oper. Cost Cost/Hour	Operator ($/hr)	Cost ea. ($/hr)	Total Cost ($/hr)	
single shift							
Cat 637 G w/push-pull	8	**$ 223.48**	**$ 193.77**	**$ 30.90**	**$ 448.15**	**$ 3,585.20**	8 Scrapers
Motor Grader	1	**$ 70.80**	**$ 56.31**	**$ 28.56**	**$ 155.67**	**$ 155.67**	
Support (Load Area) Cat D10 -10SU	1	**$ 169.60**	**$ 166.94**	**$ 41.30**	**$ 377.82**	**$ 377.82**	
Support (Dump Area) Cat D10 -10SU	1	**$ 169.60**	**$ 166.94**	**$ 41.30**	**$ 377.82**	**$ 377.82**	
Water Truck	1	**$ 11.70**	**$ 9.00**	**$ 21.12**	**$ 41.82**	**$ 41.82**	
Total		**$ 645.18**	**$ 592.96**	**$ 163.18**	**$ 1,401.28**	**$ 4,538.33**	**$ 567.29**
						$ 953.13	

Truck/Trackhoe Topsoil Replacement

Equipment	Units Required	Ownership Cost/Hour	Oper. Cost Cost/Hour	Operator ($/hr)	Cost ea. ($/hr)	Total Cost ($/hr)	
single shift							
CAT 385D L 18'-1" Stick	1	**$ 219.19**	**$ 176.71**	**$ 37.32**	**$ 433.22**	**$ 433.22**	
CAT 777F	4	**$ 175.01**	**$ 139.87**	**$ 33.71**	**$ 348.59**	**$ 1,394.36**	4 trucks
Motor Grader (Cat 16M)	1	**$ 70.80**	**$ 53.49**	**$ 28.56**	**$ 152.85**	**$ 152.85**	95 % utilization
Support (Load Area) Cat DI0T-10SU	1	**$ 169.61**	**$ 166.95**	**$ 41.30**	**$ 377.84**	**$ 377.84**	
Support (Dump Area) Cat D10T -10SU	1	**$ 169.61**	**$ 166.95**	**$ 41.30**	**$ 377.84**	**$ 377.84**	
Water Truck- Water Tanker, 2500 Gal.	1	**$ 11.70**	**$ 9.00**	**$ -**	**$ 20.70**	**$ 20.70**	50 % utilization
Total		**$ 815.92**	**$ 712.97**	**$ 182.19**	**$ 1,711.04**	**$ 2,756.81**	
						$ 1,362.45	Cost/HR without Cat 777

Table A-2.7 **Revegetation Unit Costs**

Rangeland with Shrubs: (From TR-124 Circes Estimate)		
Total Tilling Cost/Acre	**$**	**96.50**
Total Seed Mix Cost/Acre	**$**	**354.70**
Total Seed Application Cost/Acre	**$**	**232.00**
Total	**$**	**683.20**
Rangeland without Shrubs: (From RN-06 Circes Estimate)		
Total Tilling Cost/Acre	**$**	**-**
Total Seed Mix Cost/Acre	**$**	**354.70**
Total Seed Application Cost/Acre	**$**	**232.00**
Total	**$**	**586.70**

Table **Equipment costs for Erosion Control Ditches**

Fleet Cost						
	Ownership	Oper. Cost				
Equipment	**Cost/Hour**	**Cost/Hour**	**Attachments***	**Operator**		**Total**
single shift						
Cat D7R DS XR Series II SU	**52.99**	**48.22**	**0**	**$ 41.85**	**$**	**143.06**
Light Plant	**0**	**0**	**0**	**$ -**	**$**	**-**
Total	**52.99**	**48.22**	**0**	**$ 41.85**	**$**	**143.06**
Dozer Fleet size	**1**	Dozers		**Fleet cost/hour**	**$**	**143.06**
* Ripper costs included for ripping, omitted for grading						

Table A-2.8 **Dozer Correction Factors**

Correction Factor for Pits	**From TR-124 Circes Est.**		**Correction Factor for Pits**		
Downhill Push			**Uphill Push**		
Operator skill	0.750		Operator	0.8	
Mat Consistency	1.200		Mat Consistency	1	
Dozing Method	1.200		Dozing Method	1.17	
Visibility	0.800		Visibility	0.800	
Job Efficiency	0.830		Job Efficiency	0.790	
Spoil Pile	0.900		Spoil Pile	1.000	
Push gradient	1.225	see X-sect	Grade Adjustmen	1	see X-sect
Altitude:	1.000		Material Weight	0.98	
Material Weight	0.697		Efficiency	0.83	
Blade Type	1.000		Visibility	0.9	
Total	0.5511		**Total Correction**	0.69	

Correction Factor for Roads			**Correction Factor for Impoundments and Diversions**		
Operator skill	1.00		Operator skill	1.00	
Mat Consistency	1.00		Mat Consistency	1.00	
Dozing Method	1.00		Dozing Method	1.00	
Visibility	1.00		Visibility	1.00	
Job Efficiency	0.83		Job Efficiency	0.83	
Spoil Pile	0.80		Spoil Pile	0.80	
Push gradient	1.00	see X-sect	Push gradient	1.00	see X-sect
Altitude:	1.00		Altitude:	1.00	
Material Weight	1.000		Material Weight	1.000	
Blade Type	1.00		Blade Type	1.00	
Total	0.6640		**Total**	0.6640	

Note: In Circes, these correction factors are applied to each task (i.e. Cross-section).

Table A-3.1	Summary of regrade costs						Page No.	8
Pit	Cubic Yards	Push/Haul Distance (ft.)	Productivity (cy/hr)	Correction Factor	Adjusted Productivity (lcy/hr)	Equipment Hours	Unit Cost ($/hr)	Total Cost($)
I Pit Middle	906,020	2,616	1,186	1.00	1186	255	$ 3,867.53	$ 984,847.97
J Pit West	887,125	2,616	1,186	1.00	1186	497	$ 3,867.53	$ 642,009.98
Total	**1,793,145**		**1,186**	**1.00**	**1186**	**752**	**$ 3,867.53**	**$ 1,626,857.95**

Drill and Blast	Cubic Yards	Benching $	Drilling $	Blasting $	Total $
None	-	$ -	$ -	$ -	$ -
Total	**-**	$ -	$ -	$ -	**$ -**

Description	Cubic Yards	Push Distance	Productivity (lcy/hr)	Correction Factor*	Adjusted Productivity (lcy/hr)	Equipment Hours	Unit Cost ($/hr)	Total Cost($)
Roads-Ripping								
Roads-Regrade								
Impoundments								
Diversions	829		800	0.664	531.2	3.1	$ 199.38	$ 539.44
Finish Grading*						79.9	$ 155.67	$ 3,383.25
								$ 3,922.69
Total Regrade Costs								**$ 1,630,780.64**

* Two Cat 16M Blades,2029.2 acres, 3.6782 acres per hour

Table A-4.6 **Regrading Pit - I Pit Middle** **Truck/Excavator**

Cross Section	BCY	Production (cyds/hr)	Excavator Hours	Fleet Hours	Number of Trucks	Fleet Cost ($/hr)	Total Cost($)
	906,020	1186	763.94	254.6	3.0	$ 3,867.53	$ 984,847.97
Total	**906,020**	1,186	764	255	3.0	$ 3,867.53	**$ 984,847.97**
							$ -

Table A-4.6 **Regrading Pit - J West Pit** **Truck/Excavator**

Cross Section	BCY	Production (cyds/hr)	Excavator Hours	Fleet Hours	Number of Trucks	Fleet Cost ($/hr)	Total Cost($)
E1,418,100	887,125	1186	166.00	497.0	3.0	$ 3,867.53	$ 642,009.98
Total	**887,125**	1,186	166	497	3.0	$ 3,867.53	**$ 642,009.98**

Table A-8.1 **Regrade Diversions**

Diversion	Length (ft)	Bottom Width (ft)	Depth (ft)	X-Sectiona Area (sq ft)	Volume (cyds)
J Pit Diversion	5570		0.42	4.02	829
Total	5570				829

Table A-8.2 **Regrade Diversions (cont.)**

Diversion	Volume (cyds)	Dozer Prod Rate	Correction Factor	Adjusted Prod Rate	Dozer Hours	Dozer Cost/HR	Dozer Cost	Blade Hours	Blade Cost $/HR	Blade Cost	Total Cost ($)
J Pit Diversion	829	800	0.664	531.2	1.6	$ 199.38	$ 311.16	1.6	$ 146.27	$ 228.28	$ 539.44
Total	829	800	0.664	531.2	1.6	$ 199.38	$ 311.16	1.6	$ 146.27	$ 228.28	$ 539.44

Table A-8.2A **Finish Grading**

Area (Acres)	Productivity Ac./HR	(Hours)	Graders No.	Adjusted Hours	($/HR)	Fleet $/HR	Cost ($)
79.94	3.6782	21.73	2.00	10.87	$ 155.67	$ 311.34	$ 3,383.25

Table A-9.1 **Summary of topsoil replacement costs**

Topsoil Replacement Area	Cubic Yards	Rate (cyds/hr)	Scraper/Truck Hours	Fleet Hours	Ave. Fleet Cost ($/hr)	Total ($)
I Pit	128,970	385	335	335	$ 4,538.33	$ 190,035.20
J Pit	16,875	385	44	5	$ 4,538.33	$ 24,865.73
						$ 214,900.93

Table A-10.4 **Calculations for time required for topsoiling - J Pit (with Scrapers)** Page No. 12

I Pit Extension

Route From	Cubic Yards	Production Rate (cyds/hr)	Adjusted* Productio (cyds/hr)	Scraper/ Hours	Fleet Hours	Fleet Cost ($/hr)		Total ($)		($/cy)
I Pit Middle	68,212	385	385	177.17	22.15	$	4,538.33	$	100,509.27	$ 1.47
I Pit East	60,758	385	385	157.81	19.73	$	4,538.33	$	89,525.93	$ 1.47
Total	128,970	385	385	335	42	$	4,538.33	**$**	**190,035.20**	$ 1.47

Table A-10.4 **Calculations for time required for topsoiling - J Pit (with Scrapers)**

J Pit

Route From	Cubic Yards	Production Rate (cyds/hr)	Adjusted* Productio (cyds/hr)	Scraper/ Hours	Fleet Hours	Fleet Cost ($/hr)		Total ($)		($/cy)
J pit	16,875	385	385	43.83	5.48	$	4,538.33	$	24,865.73	$ 1.47
Total	16,875	385	385	43.83	5.48	$	4,538.33	**$**	**24,865.73**	$ 1.47

Table A-11.1 **Summary of estimated revegetation quantities and costs.**

Postmining Land Use	Location	Acres	Unit Cost ($/acre) (1)	Total Cost ($)
Cropland		0		$ -
	Sub-Total	0.0		$ -
Rangeland w/o shrubs (below 6700' Elev.)	J Pit	10.46	$ 586.70	$ 6,136.88
	I Pit	79.94	$ 586.70	$ 46,900.85
	Sub-Total	90.40		$ 53,037.73
Rangeland w/shrubs (above 6700' Elev.)		0.0		
	Sub-Total	0.0		$ -
	Total Remaining Regrade	90.40	Acres	$ 53,037.73
Re-seed For Failure (2)				
Cropland re-seed		0	$ 137.20	$ -
Rangeland w/o shrubs re-seed		15.8	$ 586.70	$ 9,281.60
Rangeland w/shrubs re-seed		0	$ 683.20	$ -
	Sub-Total	15.8		$ 9,281.60
Other Costs				
Shrub Transplant	0 clumps	$ 11,627.50	per clump	$ -
Erosion Control Ditches	50,000 feet	$ 38.92	per 100 Feet	$ 19,458.00
Drainage Stabilization	25.7 acres (3)	$ 17,393.00	per acre (4)	$ 447,000.10
TOTAL				**$ 528,777.43**
				$ 5,849.30 Cost/Acre

(1) Unit Cost from Table 1.4-11
(2) Based on 17.5% failure rate of cropland (0.0 ac), rangeland w/o shrubs (429 ac) and rangeland w/shrubs (2,121 ac).
(3) 37,300 feet of re-established drainage, 30 feet wide.
(4) Trapper's actual cost for the year 2006.

Reseed Cost	Acres	$/Ac. *	Acres	Reseed Cost Cost/Acre	
From TR-130 A-11 Reveg Summary *	90.40	$ 69.81	90.40	$ 6,310.83	I & J Pit Without Shrubs
From TR-130 A-11 Reveg Summary *		$ 10.03	90.40	$ 906.71	Erosion Control Ditches (Total Acreage)
From TR-130 A-11 Reveg Summary *		$ 230.53	90.40	$ 20,839.93	Drainage Stabilization
				$ 28,057.47	Total J Pit "Other" Costs
			90.40	$ 53,037.73	N Pit Rangeland without shrubs
				$ 81,095.20	