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JUL 29 2015



July 28, 2015

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Mike Cunningham Division of Reclamation, Mining and Safety 1313 Sherman Street Room 215 Denver, CO 80203

Adequaly Response

RE: Revised 112 Hard Rock Application for Sullivan Aggregate Pit M-2015-017

Mike:

The enclosed material (2 copies) is the response to the adequacy review for the 112 permit application that was filed in March for JRS Mining LLC for the Sullivan Aggregate Pit. Since many items have been revised, it is much simpler to provide a fully revised application, which has been done. The permittee for this operation is JRS Mining LLC, which currently has a 110 operation on their owned property in Park County Colorado just northwest of Fairplay. The operation is planned as a gold placer operation with sand and gravel mining as well.

Copies have also been provided to the County Attorney Herbert Lee Phillips and the County Clerk's office.

Please call me if you have any questions.

Sincerely,

neg fewicki

Greg Lewicki, P.E. Greg Lewicki and Associates

CC: Todd Sullivan CC: Herbert Lee Phillips (Park County)

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY Department of Natural Resources

1313 Sherman St., Room 215 Denver, Colorado 80203 Phone: (303) 866-3567 FAX: (303) 832-8106



HARD ROCK/METAL MINING REGULAR (112) OPERATION RECLAMATION PERMIT APPLICATION PACKAGE

APPLICABILITY:

This application package is for a mining operation that will not be a Designated Mining Operation, which affects 10 acres or more, or extracts 70,000 tons or more of mineral, overburden or combination of the two per calendar year. If you plan to conduct a mining operation which meets these criteria, please follow the instructions provided in this package and Rules 1.4.1, 1.4.5, 6, 7 and 8, as required, of the Mineral Rules and Regulations. See Rule 1.1(12) for a definition of "Designated Mining" operation.

FILING REQUIREMENTS

The Mineral Rules and Regulations (the Mined Land Reclamation Act, Section 34-32-101, <u>et seq</u>., C.R.S., and 2 CCR 407-1) of the Colorado Mined Land Reclamation Board (the "Board") regulate the permitting, operational and reclamation requirements for all non-coal mining operations in Colorado. It is your obligation to comply with the Act and Regulations. You are encouraged to obtain and review a copy of the Rules, available for \$8.00 from the Division of Reclamation, Mining and Safety (the "Office"). In order to submit your application properly, it is recommended that you review the Act and:

Rule 1.1	Definitions;	
Rule 1.4.1	General Provisions of the Application Review and Consideration Process;	
Rule 1.4.5	Specific Requirements for Regular 112 and 112d Mining Operations;	
Rule 1.6	Public Notice Procedures;	
Rule 3.1	Reclamation Performance Standards;	,
Rule 3.3.1	Operating without a Permit - Penalty;	i i
Rule 4	Performance Warranties and Financial Warranties;	
Rule 6	Permit Application Exhibit Requirements;	
Rule 6.2	General Requirements of Exhibits;	
Rule 6.4	Specific Permit Application Exhibit Requirements; and,	
Rule 6.5	Geotechnical Stability Exhibit.	

To apply for a Reclamation Permit for a Regular Operation, one (1) completed signed and notarized **gray original** and **one** (1) **copy of the gray original** (Section 34-32-112(1)(a), C.R.S. 1984, as amended) of the Regular Operation (112) Application Form, **two** (2) **copies of Exhibits A-S** and Geotechnical Stability Exhibit (Rule 6.5), **two** (2) **copies of Addendum 1** - Notice requirements (described in Rule 1.6.2(1)(b), and an **application fee MUST** be submitted to the Office. Review of the application and exhibits will **NOT** begin until all required information is submitted. The Office will then review the submitted information for adequacy. This package contains the required application form and directions for preparing Exhibits as outlined and described in Rules 6.4 and 6.5.

It is recommended that you contact the agencies listed under "<u>Compliance With Other Laws</u>" prior to submitting the application to the Office. You must send a notice, on a form approved by the Board, to the local board of county commissioners and, if the mining operation is within the boundaries of a soil conservation district, to the board of supervisors of the soil conservation district, prior to filing the application. A copy of these "Notice of Filing Application" forms have been attached for your use. You must include proof of such mailings with the application at the time the application is submitted to the Office for filing (Rules 1.6.2 and 1.6.5).

Upon filing the application, place for public review a copy of the application, less confidential items, with the clerk and recorder of the county or counties in which the affected land is located. Any changes or additions made to an application following submittal must be filed with the county clerk and recorder. You must also provide the Office with an affidavit or receipt demonstrating that the change was filed with the county clerk and recorder no later than the close of business on the day the change was filed with the Office (Rule 1.8.1). The copy of the application and any changes or additions placed at the office of the county clerk and recorder, but shall be retained there for at least sixty (60) days after a decision on the application by the Office and be available for inspection during this period. At the end of this period, the application may be reclaimed by the applicant or destroyed (Rule 1.6.2(2)).

Prior to the Office making an approval decision (consideration of the application), you must submit proof of publication and proof of all required notices. Proof of notice may be by submitting return receipts of a certified mailing or by proof of personal service (Rules 1.6.2 and 1.6.5).

APPLICATION REVIEW PROCEDURES:

When the Office receives the application form, all required exhibits and the application fee, the Office will set a date for consideration of the application. This date will be within 90 days of the date of submittal. The date set for consideration may be extended, pursuant to Rule 1.4.5(3), if you change or make additions to the application (Rule 1.8).

The Office may schedule an informal conference on the application. You may also request an informal conference. Please consult Rule 1.4.6 for the procedures on informal conferences.

During the 90-day review period, the Office will review your application to determine if it is technically adequate and meets the requirements of the Act and Mineral Rules and Regulations. You will be notified if any deficiencies exist and will be asked to respond prior to the date set for consideration of the application.

The Office will issue its decision on or before the date set for consideration of the application. The decision will be either to: (1) approve; (2) approve with conditions; (3) deny; or, (4) set the application for a hearing before the Board. Any conditions upon approval, unless agreed to by the applicant, shall be treated as a denial. The grounds for denial, approval with conditions, or approval over an objection will be set forth in writing (Rule 1.4.8).

A hearing will automatically be scheduled if the Office's decision is: (1) denial; (2) approval when objections have been received; (3) approval with conditions when these are unacceptable to the applicant; or, (4) the Office chooses to set a hearing because of a decision requiring Board policy.

In the event the Office sets an application for a hearing without issuing a decision, the Office will issue a recommendation to the Board and will identify the issues raised in the adequacy review or by objections filed with the Office. The Office will mail a copy of the recommendation to all parties to the hearing (Rule 1.4.5(6)).

PERFORMANCE AND FINANCIAL WARRANTIES:

A performance warranty and a financial warranty, in an amount determined as a part of the application review, must be submitted to the Office prior to permit issuance. If the applicant is a unit of state or county government, then only a performance warranty is required. Several different types of financial warranties are allowed by the law. Please review Rule 4 to determine which type of financial warranty you desire to use. You may obtain the appropriate forms during the application review period. A financial warranty should <u>NOT</u> be submitted until a decision on the application has been made.

COMPLIANCE WITH OTHER LAWS:

Compliance with the Act and Rules and Regulations of the Mined Land Reclamation Board does not in any way relieve you of the responsibility to comply with all other applicable state and federal laws (Section 34-32-115(4)(c) and 109(5), C.R.S. 1984, as amended). At a minimum, you <u>MUST</u> contact the following agencies to determine whether or not you need to comply with their legal requirements:

- The Colorado Historical Society regarding properties of historical significance including the need for an archeological survey, procedures for requesting a file search, and inventory forms to identify structures;
- o Colorado Division of Water Resources with regard to the administration of water rights;
- Colorado Department of Health, Water Quality Control Division, with regard to the discharge of pollutants into the water of the State;
- Colorado Department of Health, Air Pollution Control Division, with regard to the need for a fugitive dust permit;
- o U.S. Bureau of Land Management or the U.S. Forest Service for proposed operations on federal lands;
- o U.S. Army Corps of Engineers regarding a dredge and fill (404) permit; and
- The County Planning Department for the county or counties in which the proposed operation is located (Section 34-32-109(6), C.R.S.1984, as amended) requires a mining operator to be responsible for assuring that the mining operation and the post-mining land use comply with local land use regulations and any master plan for extraction adopted pursuant to Section 34-1-304.

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PERMIT APPROVAL:

An applicant will not be issued a reclamation permit until notified by the Office that this application <u>and</u> the required performance and financial warranties have been approved. Alternatively, an automatic approval will occur where the Office fails to notify the applicant/operator that the application has been denied. This decision must be made one hundred twenty (120) calendar days from the date the application was submitted. However, the performance and financial warranties must be submitted and approved by the Office before the permit will be issued even if you receive an automatic approval. NO MINING OPERATIONS SHALL BEGIN UNTIL A PERMIT IS ISSUED (Rule 4.1(2)).

NOTICE REQUIREMENTS:

Within ten (10) days after filing, mail or personally serve a copy of the notice described in Rule 1.6.2(1)(c) to all owners of record of surface rights to the affected land and all owners of record of lands that are within 200 feet of the boundary of the affected land (Rule 1.6.2(1)(d)(1) and (ii)). In addition, you must publish four consecutive times in a newspaper of general circulation, in the locality of the proposed mining operation, the notice described in Rule 1.6.5. A copy of a form which includes all required information for the notice has been attached for your use. You will need to provide the Office proof of notice prior to the decision date. Proof of notice may be by submitting return receipts of a certified mailing or by proof of personal service (Rules 1.4.1(4), 1.4.2(4)(c) and 1.6.2(1)(d)).

NOTE TO COMMENTORS/OBJECTORS:

It is likely there will be additions, changes, and deletions to this document prior to final decision by the Office. Therefore, if you have any comments or concerns you must contact the applicant or the Office prior to the decision date so that you will know what changes may have been made to the application document.

The Office is not allowed to consider comments, unless they are written, and received prior to the end of the public comment period. You should contact the applicant for the final date of the public comment period.

If you have questions about the Mined Land Reclamation Board and Office's review and decision or appeals process, you may contact the Office at (303) 866-3567.

COMPLETION OF MINING:

Upon completion of any phase of reclamation, you should consult Rule 3.1 for reclamation standards and 4.16 for details on how to request a reclamation responsibility release from the Board.

STATE OF COLORADO

DIVIS Depart	ION OF R ment of Nat	ECLAMATION, MINING A	ND SAFETY		ç	
1313 S Denve Phone	iherman St., r, Colorado : (303) 866-3	Room 215 80203 3567				COLORADO DIVISION OF
FAX: (303) 832-81	06	HARD ROCK/ME	TAL MINING		MINING
			REGULAR OPER	ATION (112)		SAFETY
		RE	CLAMATION PERMIT	APPLICATION F	ORM	
The a Geot one (A-S, Exhi proce	Permit Permit application echnical S 1) complet the Geote bits should essing, ple	There is a Fil New Application (Rule 1 Conversion Application # M n for a Regular Operation tability Exhibit and Adden ted, signed and notarized g echnical Stability Exhibit, d <u>NOT</u> be bound or in a ase provide the information	e Number Already Assign .4.5) Amen (Rule 1.11) (provide for Reclamation Permit contain adum 1; and, (3) the applicat gray original and one (1) con- and Addendum 1, and a con- 3-ring binder; maps should be in the format and order of GENERAL OPERATION early, in the space provide	ned to this Operation dment Application r amendments and of ns three major parts ation fee. When you py of the completed heck for the applic l be folded to 8 1/2 described in this for N INFORMATIO led, all information	ion (Rule 1.10) conversions of existing p s: (1) the application form u submit your application application form, two (2) ation fee described unde "X 11" or 8 1/2" X 14" m. N n described below.	ermits) ; (2) Exhibits A-S, , be sure to include o copies of Exhibits r Section 4 below. size. To expedite
				eu, <u>au</u> mioi matto	a described below.	
•	Applic	ant/operator name: <u>JF</u>				
	1.1	Type of organization (c	orporation, partnership, etc	:.): Limited Liab	inty Company	
2.	Opera	tion name (pit, mine or s	site name): Sullivan Ag	gregate Pit		
J.	Permi	tted acreage (new or exis	sting site):		42.68	permitted acres
	3.1	Change in acreage (+ o	r -)			acres
	3.2	Total acreage in Permit	area			acres
i.	Fees: 4.1 4.2 4.3 4.4 4.5	New Application New Quarry Application Milling Application (N Amendment Fee Conversion to 112 oper	n on-DMO) ration (set by statute)		\$2,156.00 \$2,674.00 \$3,565.00 \$1,783.00 \$1,725.00	application fee quarry application milling application amendment fee conversion fee
.	Prima	ry commoditie(s) to be r	nined: placer gold			
	Name	of owner of surface of a	ffected land: JRS Mini	ng LLC	-	
7.	Name	of owner of subsurface If 2 or more owners, re	r ights of affected land: _ fer to Exhibit O.	IRS Mining LLC		
8.	Туре с	of mining operation:	placer Surfac	ce	Underground	In-situ
Mine	Office of d Land Recli	amation	Denver • Grand Ju	unction • Durango	,	Office of Active and Inactive Mi

9. Location Information: the <u>center</u> of the area where the majority of mining will occur lies in:

9.	Location information: the <u>center</u> of the area where the majority of mining will occur lies in:
	COUNTY: Park
	PRINCIPAL MERIDIAN (check one):
	SECTION (write number): S 32
	TOWNSHIP (write number and check direction): T <u>9</u> North South South
	RANGE (write number and check direction): $R \frac{77}{1}$ East West
	QUARTER SECTION (check one):
	QUARTER/QUARTER SECTION (check one):
	GENERAL DESCRIPTION (miles and direction from nearest town and approximate elevation):
	3000 feet northwest of Town of Fairplay Elevation is 10050 feet.
10.	<u>Primary Mine Entrance Location</u> (report in either Latitude/Longitude <u>OR</u> UTM): Latitude/Longitude:
	Example: (N) $39^{\circ} 44' 12.98''$ (W) $104^{\circ} 59' 3.87''$
	Latitude (N): deg $\frac{39}{13}$ min $\frac{13}{13}$ sec $\frac{57}{.58}$ (2 decimal places)
	Longitude (W): deg <u>106</u> min <u>00</u> sec <u>57</u> <u>.58</u> (2 decimal places)
	OR
	Example: (N) 39.73691° (W) -104.98449°
	Latitude (N) (5 decimal places)
	Longitude (W) (5 decimal places)
	OR
	Universal Tranverse Mercator (UTM)
	Example: 201336.3 E NAD27 Zone 13 4398351.2 N
	UTM Datum (specify NAD27, NAD83 or WGS 84) Nad 83 Zone 13
	Easting
	Northing
11.	Primary future (Post-mining) land use (check one): General Agriculture (GA) Cropland (CR) Pastureland (PL) Rangeland (RL) Forestry (FR) Residential (RS) Recreation (RC) Developed Water Resources (WR) Solid Waste Disposal (WD)
12.	Primary present land use (check one): Pastureland (PL) Cropland (CR) Pastureland (PL) Rangeland (RL) Forestry (FR) Residential (RS) Recreation (RC) Developed Water Resources (WR)

13. <u>Correspondence Information</u>:

APPLICANT/OPERATOR (n	ame, address, and phone of na	ne to be used on p	permit)
Individual's Name:	Todd Sullivan		_ _{Title:} Manager
Company Name:	JRS Mining LLC		
Street/P.O. Box:	850 N Davidson Street		P.O. Box:
City:	Eloy		,,
State:	Arizona		_ Zip Code: <u>85131</u>
Area Code:	(863) Telepl	one: 660 0763	
Fax Number:	() Telepl	ione:	
PERMITTING CONTACT	if different from applicant/ope	ator above)	
Individual's Name:	Greg Lewicki		_Title:
Company Name:	Greg Lewicki and Assoc	iates	
Street/P.O. Box:	11541 Warrington Court		P.O. Box:
City:	Parker		
State:	<u>CO</u>		_ Zip Code:
Area Code:	(<u>303</u>) Telepl	none: 346 5196	
Fax Number:	(<u>303</u>) Telepl	none: 346 6934	
INSPECTION CONTACT			
Individual's Name:	Todd Sullivan		_ _{Title:} Manager
Company Name:	JRS Mining LLC		
Street/P.O. Box:	850 N Davidson Street		_P.O. Box:
City:	Arizona		
State:	Arizona		_ Zip Code:
Area Code:	(863) Telep	none: 660 0763	
Fax Number:	() Telep	hone:	
CC: STATE OR FEDERAL I	ANDOWNER (if any)		
Agency:	None		
Street:			
City:			
State:			Zip Code:
Area Code:	() Telep	hone:	
CC: STATE OR FEDERAL	LANDOWNER (if any)		
Agency:	None		
Street:			
City:			
State:			Zip Code:
Area Code:	() Telep	hone:	

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14.	Primary future (Post-mining) land use (check one):	
	Cropland (CR) Pastureland (PL)	General Agriculture (GA)
	Rangeland (RL) Forestry (FR)	Wildlife Habitat (WL)
	Residential (RS) Recreation (RC)	Industrial/Commercial (IC)
	Developed Water Resources (WR)	Solid Waste Disposal (WD)
15.	Primary present land use (check one):	F -1
	Cropland (CR) Pastureland (PL)	General Agriculture (GA)
	Rangeland (RL) Forestry (FR)	Wildlife Habitat (WL)
	Residential (RS) Recreation (RC)	Industrial/Commercial (IC)
	Developed Water Resources (WR)	
16.	Method of Mining: Quarry (QR) Solution (SO)	
	16.1 <u>Other</u> : Briefly explain mining method (e.g. Placer, truck/shovel).	
	Surface mining with dozer, loader and trucks feeding trom	nel or screen and placer
	Sold concentrate is collected on the sluice and later furthe	r concentrated by hand on
	site. No chemicals are used.	
17.	On Site Processing: Solution (SO) Chemical (Clean Solution (SO) Vat Leach (V	H) <u> </u>
	List any designated chemicals or acid-producing materials to be used or stored	I within permit area:
	Screening and Washing Only	
Descri	ption of Amendment of Conversion:	
	If you are amending or converting an existing operation, provide a brief narra	tive describing the proposed change(s):

Maps and Exhibits:

Two (2) complete, unbound application packages must be submitted. One complete application package consists of the signed original application form and the set of maps and exhibits referenced below as Exhibits A-S and the Geotechnical Stability Exhibit. Each exhibit within the application must be presented as a separate section. Begin each exhibit on a new page. Pages should be numbered consecutively for ease of reference. If separate documents are used as appendices, please reference these by name in the exhibit.

With each of the signed application forms, you must submit a corresponding set of the maps and exhibits as described in the following references to Rule 6.4, 6.5, and 1.6.2(1)(b):

EXHIBIT A	Legal Description
EXHIBIT B	Index Map
EXHIBIT C	Pre-Mining and Mining Plan Map(s) of Affected Lands to include the location of any recorded
	easements
EXHIBIT D	Mining Plan
EXHIBIT E	Reclamation Plan
EXHIBIT F	Reclamation Plan Map
EXHIBIT G	Water Information
EXHIBIT H	Wildlife Information
EXHIBIT I	Soils Information
EXHIBIT J	Vegetation Information
EXHIBIT K	Climate Information
EXHIBIT L	Reclamation Costs
EXHIBIT M	Other Permits and Licenses
EXHIBIT N	Source of Legal Right-To-Enter [See Subparagraph 6.3.7]
EXHIBIT O	Owners of Record of Affected Land (Surface Area) and Owners of Substance to be Mined, to
	include holders of any recorded easements.
EXHIBIT P	Municipalities Within Two Miles
EXHIBIT Q	Proof of Mailing of Notices to County Commissioners and Soil Conservation District
EXHIBIT R	Proof of Filing with County Clerk and Recorder
EXHIBIT S	Permanent Man-Made Structures
RULE 1.6.2(1)(b)	ADDENDUM 1 - Notice Requirements (sample enclosed)
RULE 6.5	Geotechnical Stability Exhibit

The instructions for preparing Exhibits A-S, Addendum 1, and Geotechnical Stability Exhibit are specified under Rule 6.4, 6.5, and Rule 1.6.(2)(1)(b) of the Mineral Rules and Regulations. If you have any questions on preparing the Exhibits or content of the information required, or would like to schedule a pre-application meeting you may contact the Office at 303-866-3567.

Responsibilities as a Permittee:

Upon application approval and permit issuance, this application becomes a legally binding document. Therefore, there are a number of important requirements which you, as a permittee, should fully understand. These requirements are listed below. Please <u>read and</u> <u>initial</u> each requirement, in the space provided, to acknowledge that you understand your obligations. If you do not understand these obligations the please contact this Office for a full explanation.



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1. Your obligation to reclaim the site is not limited to the amount of the financial warranty. You assume legal liability for all reasonable expenses which the Board or the Office may incur to reclaim the affected lands associated with your mining operation in the event your permit is revoked and financial warranty is forfeited;

2. The Board may suspend or revoke this permit, or assess a civil penalty, upon a finding that the permittee violated the terms or conditions of this permit, the Act, the Mineral Rules and Regulations, or that information contained in the application or your permit misrepresent important material facts;

3. If your mining and reclamation operations affect areas beyond the boundaries of an approved permit boundary, substantial civil penalties, to you as permittee can result;

4. Any modification to the approved mining and reclamation plan from those described in your approved application requires you to submit a permit modification and obtain approval from the Board or Office;

5. It is your responsibility to notify the Office of any changes in your address or phone number;

6. Upon permit issuance and prior to beginning on-site mining activity, you must post a sign at the entrance of the mine site, which shall be clearly visible from the access road, with the following information (Rule 3.1.12):

a. the name of the operator;

b. a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and,

c. the permit number.

7. The boundaries of the permit boundary area must be marked by monuments or other markers that are clearly visible and adequate to delineate such boundaries prior to site disturbance.

8. It is a provision of this permit that the operations will be conducted in accordance with the terms and conditions listed in your application, as well as with the provisions of the Act and the Mineral Rules and Regulations in effect at the time the permit is issued.

9. Annually, on the anniversary date of permit issuance, you must submit an annual fee (**\$633**), and an annual report which includes a map describing the acreage affected and the acreage reclaimed to date (if there are changes from the previous year), any monitoring required by the Reclamation or Environmental Protection Plans to be submitted annually on the anniversary date of the permit approval. Annual fees are for the previous year a permit is held. For example, a permit with the anniversary date of July 1, 1995, the annual fee is for the period of July 1, 1994 through June 30, 1995. Failure to submit your annual fee and report by the permit anniversary date may result in a civil penalty, revocation of your permit, and forfeiture of your financial warranty. It is your responsibility, as an operator, to continue to pay your annual fee to the Office until the Board releases you from your total reclamation responsibility.

10. For joint venture/partnership operators: the signing representative is authorized to sign this document and a power of attorney (provided by the partner(s)) authorizing the signature of the representative is attached to this application.

NOTE TO COMMENTORS/OBJECTORS:

It is likely there will be additions, changes, and deletions to this document prior to final decision by the Office. Therefore, if you have any comments or concerns you must contact the applicant or the Office prior to the decision date so that you will know what changes may have been made to the application document.

The Office is not allowed to consider comments, unless they are written, and received prior to the end of the public comment period. You should contact the applicant for the final date of the public comment period.

If you have questions about the Mined Land Reclamation Board and Office review and decision or appeals process, you may contact the Office at (303) 866-3567.

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Certification:

As an authorized representative of the applicant, I hereby certify that the operation described has met the minimum requirements of the following terms and conditions:

1. This mining operation will not adversely affect the stability of any significant, valuable and permanent man-made structure(s) located within two hundred (200) feet of the affected lands. (However, where there is an agreement between the applicant/operator and the persons having an interest in the structure that damage to the structure is to be compensated for by the applicant/operator (Section 34-32-115(4)(d), C.R.S. 1984, as amended), then mining may occur within 200 feet. Proof of an agreement must be submitted to the Office prior to the decision date.)

2. No mining operation will be located on lands where such operations are prohibited by law (Section 34-32-115(4)(f), C.R.S. 1984, as amended);

3. As the applicant/operator, I do not have any mining/prospecting operations in this state of Colorado currently in violation of the provisions of the Mined Land Reclamation Act (Section 34-32-120, C.R.S. 1984, as amended) as determined through a Board finding.

4. I understand that statements in the application are being made under penalty of perjury and that false statements made herein are punishable as a Class 1 misdemeanor pursuant to Section 18-8-503, C.R.S 1984, as amended.

This form has been approved by the Mined Land Reclamation Board pursuant to section 34-32-112, C.R.S., of the Mined Land Reclamation Act. Any alteration or modification of this form shall result in voiding any permit issued on the altered or modified form and subject the operator to cease and desist orders and civil penalties for operating without a permit pursuant to section 34-32-123, C.R.S.

Signed and dated this <u>22</u> day of <u>July</u>	, <u>2015</u>
JRS Mining LLC	If Corporation Attest (Seal)
Applicant/Operator or Company Name	
Signed:	Signed: Corporate Secretary or Equivalent Town/City/County Clerk
Title:Mgr	
State of Colordo	
County of hange () ss.	
The foregoing instrument was acknowledged before me this 22	_day of join 2015.
by Torici Sullivan as Manager	of JRS Mining LLC
PATRICIA STOINSKI	Pat Stind
STATE OF COLORADO NOTARY ID 20014036869 MY COMMISSION EXPIRES JANUARY 13, 2018	Notary Public
Samesaa saaa ahaa ahaa ahaa ahaa ahaa ahaa	wiy commission expires:

SIGNATURES MUST BE IN BLUE INK

Certified Mailings to Adjacent Owners within 200 feet of the Proposed Permit Area (This includes the Public Notice and the Application Form)

S. Postal Service ⊧rtified Mail Receipt	9407 1118 9956 2382 5289 12 ARTICLE ADDRESS TO: Alan and Joanne Vansteenberghe PO Box 651 Fairplay CO 80440-0651 WWW	Postage per piece Certified Fee Return Receipt Fee Total Postage & Fees: Postmark Here	\$0.48 3.30 2.70 \$6.48	 Postal Service rtified Mail Receipt 	9407 1118 9956 2382 5150 66 ARTICLE ADDRESS TO: Mary Ellen and Lawrence Gilliland PO Box 499 Silverthorne CO 80498-0499	Postage per piece \$0.48 Certified Fee 3.30 Return Receipt Fee 2.70 Total Postage & Fees: \$6.48
U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5634 87 ARTICLE ADDRESS TO: Brian and Slyvia Cranmer 218 Jackson Avenue Ft Collins CO 80521-2445 WWW	FEES Postage per piece Certified Fee Return Receipt Fee Total Postage & Fees: Postmark Here	\$0.48 3.30 2.70 \$6.48	U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5579 50 ARTICLE ADDRESS TO: Daniel Shawe Trustee Helen Shawe Family Trust 7390 W. Eastman Place, Unit 318 Lakewood CO 80227-5045	FEES Postage per piece \$0.48 Certified Fee 3.30 Return Receipt Fee 2.70 Total Postage & Fees: \$6.48 Postmark. Here
U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5665 63 ARTICLE ADDRESS TO: Donald Petersen Jessie Petersen PO Box 1898 Fairplay CO 80440-1898	FEES Postage per piece Certified Fee Return Receipt Fee Total Postage & Fees: Postmark Here	\$0.48 3.30 2.70 \$6.48	U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5607 45 ARTICLE ADDRESS TO: Kevin Shea 1610 Yates St Denver CO 80204-1035	FEES Postage per piece \$0.48 Certified Fee 3.30 Return Receipt Fee 2.70 Total Postage & Fees: \$6.48 Postmark Here

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S. Postal Service ertified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5819 17 ARTICLE ADDRESS TO: Anthony Mavricolas 218 Leeward Island Clearwater FL 33767-2305	Postage per piece Certified Fee Return Receipt Fee Total Postage & Fees: Postmark Here	\$0.48 3.30 2.70 \$6.48	S. Postal Service rtified Mail Receipt	9407 1118 9956 2382 5844 51 ARTICLE ADDRESS TO: Roy Jackson PO Box 2134 Fairplay CO 80440-2134	Postage per piece Certified Fee Return Receipt Fee Total Postage & Fees: Postmark Here	\$0.48 3.30 2.70 \$6.48
U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5086 79 ARTICLE ADDRESS TO: Jack Allen P.O. Box 398 Fairplay CO 80440-0398	FEES Postage per piece Certified Fee Return Receipt Fee Total Postage & Fees:	\$0.48 3.30 2.70 \$6.48	U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5804 60 ARTICLE ADDRESS TO: James G. Andrews 8772 Carr Loop Arvada CO 80005-1565	FEES Postage per piece Certified Fee Return Receipt Fee Total Postage & Fees: Postmark Here	\$0.48 3.30 2.70 \$6.48
U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5199 96 ARTICLE ADDRESS TO: High Speed Aggregate Inc 2253 Augusta Court Greenwood Village CO 80111	FEES Postage per piece Certified Fee Return Receipt Fee Total Postage & Fees: Postmativ Here	\$0.48 3.30 2.70 \$6.48	U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5045 41 ARTICLE ADDRESS TO: Playfair Land Company LLC 158 Glenwood Drive Metairie LA 70005-3912	FEES Postage per piece Certified Fee Return Receipt Fee Total Postage Fees: Postmark Here	\$0.48 3.30 2.70 \$6.48

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S. Postal Service rtified Mail Receipt	9407 1118 9956 2382 2064 07 ARTICLE ADDRESS TO: Gene V. Coker and Lynda S. Coker 4560 Ponte Vedra Drive SE Marietta GA 30067-4636	Postage per piece \$0.48 Certified Fee 3.30 Return Receipt Fee 2.70 Total Postage & Fees: \$6.48 Postmark Here
U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2355 3332 15 ARTICLE ADDRESS TO: Thomas S. and Kathleen Greising PO Box 203 Fairplay CO 80440-0203	FEES Postage per piece \$0.48 Certified Fee 3.30 Return Receipt Fee 2.70 Total Postage & Fees: \$6.48
U.S. Postal Service Certified Mail Receipt	ARTICLE NUMBER 9407 1118 9956 2382 5013 11 ARTICLE ADDRESS TO: Fairplay Winding River Ranch LLC 1449 Dunsford Way Broomfield CO 80020-1235 ACCOMPANY SUBJECT	FEES Postage per piece \$0.48 Certified Fee 3.30 Return Receipt Fee 2.70 Total Postage & Fees: \$6.48 Postmärk Here

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Damage Waivers Sent and Certified Receipts for all Structures within 200 feet of the proposed Permit Area Boundary

Todd Sullivan JRS Mining, LLC 850 N Davidson St. Eloy, AZ 85131

July 20, 2015 RE: JRS MINING, LLC

Colorado Department of Transportation Headquarters Office 4201 E. Arkansas Avenue Denver, CO 80222

To Whom It May Concern:

JRS Mining, LLC intends to expand their mining operation on property they control in Park County, Colorado in Section 32 of T9S and R77W.

The Division of Reclamation, Mining and Safety requires that a damage waiver be sent to all owners of structures within 200 feet of the mine affected area. You have been identified as the owner of a structure within this distance. It is nearly impossible that the operation could affect your structure, however, the Division requires that this waiver be sent. *This waiver is a commitment from the mine operator that if, for any damage resulting to the structure as a result of any type of mine activity, the mine operator will repair or contract for the repair or replacement of the structure.* The waiver is a guarantee of protection for the structure for you as the owner.

Structure(s) List within the 200 feet distance of the mine affected area

1. State Highway 9, a two lane paved highway owned by CDOT

2. Paved bike path on north side of Highway 9 (following old narrow gage train bed) within ROW of CDOT Highway 9, owned by CDOT but maintained by Park County 3.

This agreement is to demonstrate to you that JRS Mining, LLC will replace or repair any structures that you own which are damaged by the operation and within 200 feet of the affected area of the permit. It is important to document all structures within 200 feet. Please help us ensure that all structures owned by you are listed above. If you believe that additional structures are within the 200 feet to the John Sullivan property or the JRS Mining, LLC property, please add them to the list above. If there are any questions, I can be contacted at 863-660-0763.

Signed:

Date

Printed Name:

CERTIFICATION

The Permitee, JRS Mining, LLC by Todd Sullivan, as Operator, does hereby certify that (structure owner) shall be compensated for

any damage from the proposed mining operation to the above listed structure(s) located on or within 200 feet of the proposed affected area described within the letter attached to this agreement, of the Reclamation Permit for Sullivan Aggregate Pit, Permit File Number M-2015-007.

This form has been approved by the Colorado Mined Land Reclamation Board pursuant to its authority under the Colorado Land Reclamation Act for the Extraction of Construction Materials and the Colorado Mined Land Reclamation Act for Hard Rock, Metal, and Designated Mining Operations. Any alteration or modification to this form shall result in voiding this form.

NOTARY FOR PERMIT APPLICANT

ACKNOWLEGED BY:
Applicant TRS Miningle Representative Name Todd Schlivan
Date 7-22-15 Title Manager
STATE OF Coloraclo)
COUNTY OF $ParK$) ss.
The foregoing was acknowledged before me this $\frac{\partial 2}{\partial 2}$ day of $\frac{\partial 2}{\partial 2}$, 2015, by
Toda Sulivan as manager of JRS Mining LLC.
Re Stowler My Commission Expires: 1/13/18 Notary Public

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NO N	INTARY PUBLIC
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STA STA	TE OF COLORADO
NOT	DY ID 20014036889
11017	111 10 200 14000000
IN MY COMMISS	SION EXPIRES JANUARY 13, 2018
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NOTARY FOR STRUCTURE OWNER WITHIN 200 FT OF REVENUE MINE AFFECTED AREA

ACKNOWLEGED BY:	
Structure Owner	Name
Date	Title
STATE OF)	
) ss. COUNTY OF)	,
The foregoing was acknowledged b	before me this day of, 20, by
as	of
	My Commission Expires:
Notary Public	

Todd Sullivan JRS Mining, LLC 850 N Davidson St. Eloy, AZ 85131

June 25, 2015 RE: JRS MINING, LLC

Donald and Jessie Petersen P O Box 1898 Fairplay, CO 80440

Dear Donald and Jessie,

JRS Mining, LLC intends to expand their mining operation on property they control in Park County, Colorado in Section 32 of T9S and R77W.

The Division of Reclamation, Mining and Safety requires that a damage waiver be sent to all owners of structures within 200 feet of the mine affected area. You have been identified as the owner of a structure within this distance. It is nearly impossible that the operation could affect your structure, however, the Division requires that this waiver be sent. *This waiver is a commitment from the mine operator that if, for any damage resulting to the structure as a result of any type of mine activity, the mine operator will repair or contract for the repair or replacement of the structure.* The waiver is a guarantee of protection for the structure for you as the owner.

<u>Structure(s) List within the 200 feet distance of the mine affected area</u>
1. Home and associated structures located southwest of the permit area owned by
Petersens in Parcel Schedule 11837
2. Groundwater well owned by Petersens , located near their home

3.

This agreement is to demonstrate to you that JRS Mining, LLC will replace or repair any structures that you own which are damaged by the operation and within 200 feet of the affected area of the permit. It is important to document all structures within 200 feet. Please help us ensure that all structures owned by you are listed above. If you believe that additional structures are within the 200 feet to the John Sullivan property or the JRS Mining, LLC property, please add them to the list above. If there are any questions, I can be contacted at 863-660-0763.

Signed:

Date

Printed Name:_____

CERTIFICATION

The Permitee, JRS Mining, LLC by Todd Sullivan, as Operator, does hereby certify that (structure owner) shall be compensated for

any damage from the proposed mining operation to the above listed structure(s) located on or within 200 feet of the proposed affected area described within the letter attached to this agreement, of the Reclamation Permit for Sullivan Aggregate Pit, Permit File Number M-2015-007.

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NOTARY FOR PERMIT APPLICANT

ACKNOWLEGED BY:
Applicant <u>TRS Mining (Ic Representative Name</u> <u>Todd Sulliva</u>
Date <u>7-22-15</u> Title <u>Manager</u>
STATE OF Colorado)
COUNTY OF <u>Park</u>) ss.
The foregoing was acknowledged before me this 22 day of 3024 , 2015 , by
Todd Solivan as Manager of JRS Minne LLC.
Pal Stand My Commission Expires: 113/2018

PATRI	CIA STOINSKI
NOT	TARY PUBLIC
NOTAR	Y ID 20014036889
MY COMMISSION	EXPIRES JANUARY 13, 2018

NOTARY FOR STRUCTURE OWNER WITHIN 200 FT OF REVENUE MINE AFFECTED AREA

Structure Owner	Name
Date	Title
STATE OF)
COUNTY OF)) \$\$.
The foregoing was acknowled	ged before me this day of, 20, by
26	of

Todd Sullivan JRS Mining, LLC 850 N Davidson St. Eloy, ΛΖ 85131

July 20, 2015 RE: JRS MINING, LLC

Harold and Martha Miller 69 Deerfield Circle Florissant, CO 80816

Dear Harold and Martha Miller,

JRS Mining, LLC intends to expand their mining operation on property they control in Park County, Colorado in Section 32 of T9S and R77W.

The Division of Reclamation, Mining and Safety requires that a damage waiver be sent to all owners of structures within 200 feet of the mine affected area. You have been identified as the owner of a structure within this distance. It is nearly impossible that the operation could affect your structure, however, the Division requires that this waiver be sent. This waiver is a commitment from the mine operator that if, for any damage resulting to the structure as a result of any type of mine activity, the mine operator will repair or contract for the repair or replacement of the structure. The waiver is a guarantee of protection for the structure for you as the owner.

Structure(s) List within the 200 feet distance of the mine affected area 1. Wood Fence and gate owned by Harold and Martha Miller, north of Mining Area #1, in Parcel Schedule 11800 2.

3.

This agreement is to demonstrate to you that JRS Mining, LLC will replace or repair any structures that you own which are damaged by the operation and within 200 feet of the affected area of the permit. It is important to document all structures within 200 feet. Please help us ensure that all structures owned by you are listed above. If you believe that additional structures are within the 200 feet to the John Sullivan property or the JRS Mining, LLC property, please add them to the list above. If there are any questions, I can be contacted at 863-660-0763.

Signed: _____

Printed Name:_____

Date

CERTIFICATION

The Permitee, JRS Mining, LLC by Todd Sullivan, as Operator, does hereby certify that (structure owner) shall be compensated for any damage from the proposed mining operation to the above listed structure(s) located on or within 200 feet of the proposed affected area described within the letter attached to this agreement, of the Reclamation Permit for Sullivan Aggregate Pit, Permit File Number M-2015-007.

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NOTARY FOR PERMIT APPLICANT

LOUDIOUU DODD DU

ACKNOWLEGED BY:
Applicant JPS Mining LC Representative Name Todd Solliver
Date 7-22-15 Title Manager
STATE OF Colorado)
COUNTY OF Park) ss.
The foregoing was acknowledged before me this $\frac{22}{22}$ day of $\frac{104}{20}$, 2015 , by
Todd Sulivan as manager of Jes Mining LLC.
Pal Shouse My Commission Expires: 1/13/2018
Notary Public
PATRICIA STOINSKI NOTARY PUBLIC STATE OF COLORADO NOTARY ID 20014036889 MY COMMISSION EXPIRES JANUARY 13, 2018

NOTARY FOR STRUCTURE OWNER WITHIN 200 FT OF REVENUE MINE AFFECTED AREA

Structure Owner	Name
Date	Title
STATE OF	
COUNTY OF) 55.
The foregoing was acknowled	ged before me this day of, 20, 1
26	of

e

Todd Sullivan JRS Mining, LLC 850 N Davidson St. Eloy, AZ 85131

June 25, 2015 RE: JRS MINING, LLC

Adam Guthrie PO Box 6362 Dillon Colorado 80435

Dear Adam Guthrie

JRS Mining, LLC intends to expand their mining operation on property they control in Park County, Colorado in Section 32 of T9S and R77W.

The Division of Reclamation, Mining and Safety requires that a damage waiver be sent to all owners of structures within 200 feet of the mine affected area. You have been identified as the owner of a structure within this distance. It is nearly impossible that the operation could affect your structure, however, the Division requires that this waiver be sent. This waiver is a commitment from the mine operator that if, for any damage resulting to the structure as a result of any type of mine activity, the mine operator will repair or contract for the repair or replacement of the structure. The waiver is a guarantee of protection for the structure for you as the owner.

Structure(s) List within the 200 feet distance of the mine affected area

1. wood fence 2.

2.

3.

This agreement is to demonstrate to you that JRS Mining, LLC will replace or repair any structures that you own which are damaged by the operation and within 200 feet of the affected area of the permit. It is important to document all structures within 200 feet. Please help us ensure that all structures owned by you are listed above. If you believe that additional structures are within the 200 feet to the John Sullivan property or the JRS Mining, LLC property, please add them to the list above. If there are any questions, I can be contacted at 863-660-0763.

Signed:

Date

Printed Name:_____

CERTIFICATION

The Permitee, JRS Mining, LLC by Todd Sullivan, as Operator, does hereby certify that (structure owner) shall be compensated for

any damage from the proposed mining operation to the above listed structure(s) located on or within 200 feet of the proposed affected area described within the letter attached to this agreement, of the Reclamation Permit for Sullivan Aggregate Pit, Permit File Number M-2015-007.

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NOTARY FOR PERMIT APPLICANT

ACKNOWLEGED BY:
Applicant TRS Mining LL c Representative Name Tod Sullivan
Date 7-22-15 Title Managet
STATE OF <u>Coloracle</u>)
COUNTY OF Park) ss.
The foregoing was acknowledged before me this $\frac{22}{32}$ day of $\frac{322}{4}$, 2015, by
Todd Sulivan as manager of JRS Mining, LLC.

Patrue Storie My Commission Expires: 1/13/18

Notary Public

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2	STATE OF COLORADO
ð	NOTARY ID 2001 4020000
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NOTARY FOR STRUCTURE OWNER WITHIN 200 FT OF REVENUE MINE AFFECTED AREA

Structure Owner	Name	
Date	Title	
STATE OF	_)	
COUNTY OF) ss.	
The foregoing was acknowled	dged before me this day of, 20	, by
2	s of	

Todd Sullivan JRS Mining, LLC 850 N Davidson St. Eloy, AZ 85131

July 20, 2015 RE: JRS MINING, LLC

Brian and Sylvia Cranmer 218 Jackson Avenue Ft. Collins, CO 80521

Dear Brian and Sylvia,

JRS Mining, LLC intends to expand their mining operation on property they control in Park County, Colorado in Section 32 of T9S and R77W.

The Division of Reclamation, Mining and Safety requires that a damage waiver be sent to all owners of structures within 200 feet of the mine affected area. You have been identified as the owner of a structure within this distance. It is nearly impossible that the operation could affect your structure, however, the Division requires that this waiver be sent. *This waiver is a commitment from the mine operator that if, for any damage resulting to the structure as a result of any type of mine activity, the mine operator will repair or contract for the repair or replacement of the structure.* The waiver is a guarantee of protection for the structure for you as the owner.

Structure(s) List within the 200 feet distance of the mine affected area 1. Driveway and garage owned by Sylvia and Brian Cranmer in parcel 6282 2.

This agreement is to demonstrate to you that JRS Mining, LLC will replace or repair any structures that you own which are damaged by the operation and within 200 feet of the affected area of the permit. It is important to document all structures within 200 feet. Please help us ensure that all structures owned by you are listed above. If you believe that additional structures are within the 200 feet to the John Sullivan property or the JRS Mining, LLC property, please add them to the list above. If there are any questions, I can be contacted at 863-660-0763.

Signed:

Date

Printed Name:

CERTIFICATION

The Permitee, JRS Mining, LLC by Todd Sullivan, as Operator, does hereby certify that (structure owner) shall be compensated for any damage from the proposed mining operation to the above listed structure(s) located on or within 200 feet of the proposed affected area described within the letter attached to this agreement, of the Reclamation Permit for Sullivan Aggregate Pit, Permit File Number M-2015-007.

This form has been approved by the Colorado Mined Land Reclamation Board pursuant to its authority under the Colorado Land Reclamation Act for the Extraction of Construction Materials and the Colorado Mined Land Reclamation Act for Hard Rock, Metal, and Designated Mining Operations. Any alteration or modification to this form shall result in voiding this form.

NOTARY FOR PERMIT APPLICANT

amoun name pu

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ACKNOWLEGED BY:
Applicant TRS Milling Représentative Name Autom
Date 7-22-15 Title Monager
STATE OF Colorada)
COUNTY OF $Park$) ss.
The foregoing was acknowledged before me this $\frac{22}{2}$ day of $\frac{3024}{4}$, 2015, by
Todd Solivan as Monager of JRS Mining LLC
Per Stand My Commission Expires: 1/13/18
PATRICIA STOINSKI NOTARY PUBLIC STATE OF COLORADO NOTARY ID 20014036889 MY COMMISSION EXPIRES JANUARY 13, 2018

NOTARY FOR STRUCTURE OWNER WITHIN 200 FT OF REVENUE MINE AFFECTED AREA

ACKNOWLEGED BY:

Structure Owner	Name	
Date	Title	······································
STATE OF)		
COUNTY OF)	SS.	
The foregoing was acknowledge	d before me this day of	, 20, by
as	of	
	My Commission Expires:	

Notary Public

Todd Sullivan JRS Mining, LLC 850 N Davidson St. Eloy, AZ 85131

July 20, 2015 RE: JRS MINING, LLC

Century Link 100 Century Link Drive Monroe, LA 71203

To Whom It May Concern,

JRS Mining, LLC intends to expand their mining operation on property they control in Park County, Colorado in Section 32 of T9S and R77W.

The Division of Reclamation, Mining and Safety requires that a damage waiver be sent to all owners of structures within 200 feet of the mine affected area. You have been identified as the owner of a structure within this distance. It is nearly impossible that the operation could affect your structure, however, the Division requires that this waiver be sent. This waiver is a commitment from the mine operator that if, for any damage resulting to the structure as a result of any type of mine activity, the mine operator will repair or contract for the repair or replacement of the structure. The waiver is a guarantee of protection for the structure for you as the owner.

<u>Structure(s) List within the 200 feet distance of the mine affected area</u>
1. Buried phone lines on the south side of Highway 9 and along the north side of Platte Drive, owned by Century Link.
2.

3.

This agreement is to demonstrate to you that JRS Mining, LLC will replace or repair any structures that you own which are damaged by the operation and within 200 feet of the affected area of the permit. It is important to document all structures within 200 feet. Please help us ensure that all structures owned by you are listed above. If you believe that additional structures are within the 200 feet to the John Sullivan property or the JRS Mining, LLC property, please add them to the list above. If there are any questions, I can be contacted at 863-660-0763.

Signed:

Date

Printed Name:_____
CERTIFICATION

The Permitee, JRS Mining, LLC by Todd Sullivan, as Operator, does hereby certify that (structure owner) shall be compensated for any damage from the proposed mining operation to the above listed structure(s) located on or within 200 feet of the proposed affected area described within the letter attached to this agreement, of the Reclamation Permit for Sullivan Aggregate Pit, Permit File Number M-2015-007.

This form has been approved by the Colorado Mined Land Reclamation Board pursuant to its authority under the Colorado Land Reclamation Act for the Extraction of Construction Materials and the Colorado Mined Land Reclamation Act for Hard Rock, Metal, and Designated Mining Operations. Any alteration or modification to this form shall result in voiding this form.

NOTARY FOR PERMIT APPLICANT

ACKNOWLEGED BY:

			-11	11
Applicant JRS Milling	Represen	tative Name _	Todd Su	liven
Date 7-22-15	Title	man	ager	
STATE OF <u>(olorado</u>) COUNTY OF Park) ss.			·	

The foregoing was acknowledged before me this $\frac{1}{2}$ day of $\frac{1}{2}$, $\frac{1}{2}$, by

Todd S	ulivan as_	Munucer of	JES Mining LLC.
Pe	Stand	My Commission Expires:	1/13/18
Nede - Dublin			

Notary Public

<u>م</u>	
8	PATRICIA STOINER
8	NOTARY PUPUS
8	STATE OF COLODADO
	NOTARY ID 2004 402000
8	MY COMMISSION SYDIPEO INVITABLES
Q.,	TOORDINGSTON CAPINES JANUARY 13, 2018

NOTARY FOR STRUCTURE OWNER WITHIN 200 FT OF REVENUE MINE AFFECTED AREA

ACKNOWLEGED BY:

Structure Owner		Name	
Date		Title	
STATE OF)		
COUNTY OF) \$5.		
The foregoing was ac	knowledged before	me this day of	, 20, by
	as	of	
	Му	Commission Expires:	
Notary Public			

Todd Sullivan JRS Mining, LLC 850 N Davidson St. Eloy, AZ 85131

June 25, 2015 RE: JRS MINING, LLC

Xcel Energy 41 Nicollett Mall Minneapolis, MN 55401

To Whom It May Concern:

JRS Mining, LLC intends to expand their mining operation on property they control in Park County, Colorado in Section 32 of T9S and R77W.

The Division of Reclamation, Mining and Safety requires that a damage waiver be sent to all owners of structures within 200 feet of the mine affected area. You have been identified as the owner of a structure within this distance. It is nearly impossible that the operation could affect your structure, however, the Division requires that this waiver be sent. This waiver is a commitment from the mine operator that if, for any damage resulting to the structure as a result of any type of mine activity, the mine operator will repair or contract for the repair or replacement of the structure. The waiver is a guarantee of protection for the structure for you as the owner.

Structure(s) List within the 200 feet distance of the mine affected area 1. Power poles and overhead power line along north side of Platte Drive owned by Xcel Energy

Overhead power line along Highway 9 owned by Excel Energy
.

This agreement is to demonstrate to you that JRS Mining, LLC will replace or repair any structures that you own which are damaged by the operation and within 200 feet of the affected area of the permit. It is important to document all structures within 200 feet. Please help us ensure that all structures owned by you are listed above. If you believe that additional structures are within the 200 feet to the John Sullivan property or the JRS Mining, LLC property, please add them to the list above. If there are any questions, I can be contacted at 863-660-0763.

Signed:

Date

Printed Name:_____

CERTIFICATION

The Permitee, JRS Mining, LLC by Todd Sullivan, as Operator, does hereby certify that (structure owner) shall be compensated for

any damage from the proposed mining operation to the above listed structure(s) located on or within 200 feet of the proposed affected area described within the letter attached to this agreement, of the Reclamation Permit for Sullivan Aggregate Pit, Permit File Number M-2015-007.

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NOTARY FOR PERMIT APPLICANT

ACKINUWLEGED BY:
Applicant JRS Mining 4 Representative Name Todd Schlven
Date 7-22-15 Title Manager
STATE OF <u>Colorach</u>) ss. COUNTY OF <u>Park</u>)
The foregoing was acknowledged before me this $\frac{22}{2}$ day of $\frac{3024}{2024}$, 2015, by
Todd Solivan as Manager of JES Mining LLC.

My Commission Expires: 11312018

Notary Public

ACKNOWLECED DV.

Ş	PATRICIA STOINSKI
	NOTARY PUBLIC
Ş	NOTARY ID 20014036889
Í.	MIT CUMMISSION EXPIRES JANUARY 13, 2018

NOTARY FOR STRUCTURE OWNER WITHIN 200 FT OF REVENUE MINE AFFECTED AREA

Structure Owner	Name
Date	Title
STATE OF)	
COUNTY OF)	SS.
The foregoing was acknowledge	d before me this day of, 20, b
96	of

Todd Sullivan JRS Mining LLC 850 N Davidson St. Eloy, AZ 85131

July 23, 2015 RE: JRS MINING, LLC

Rock N Pine LLC c/o Mark Balderson PO Box 1518 Fairplay, CO 80440

Mr Mark Balderson:

JRS Mining LLC intends to expand their mining operation on property they control in Park County, Colorado in Section 32 of T9S and R77W.

The Division of Reclamation, Mining and Safety requires that a damage waiver be sent to all owners and easement holders of structures within 200 feet of the mine affected area. You have been identified as the easement holder of a structure within this distance. It is nearly impossible that the operation could affect your structure, however, the Division requires that this waiver be sent. This waiver is a commitment from the mine operator that if, for any damage resulting to the structure as a result of any type of mine activity, the mine operator will repair or contract for the repair or replacement of the structure. The waiver is a guarantee of protection for the structure for you as the owner.

Structure(s) List within the 200 feet distance of the mine affected area 1. access easement for Rock N Pine LLC through the JRS Mining property 2.

3.

This agreement is to demonstrate to you that JRS Mining LLC will replace or repair any structures that you own or have easement rights for which are damaged by the operation and within 200 feet of the affected area of the permit. It is important to document all structures within 200 feet. Please help us ensure that all structures owned by you are listed above. If you believe that additional structures are within the 200 feet to the John Sullivan property or the JRS Mining LLC property, please add them to the list above. If there are any questions, I can be contacted at 863-660-0763.

Signed: _____

Date

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*

Printed Name:_____

CERTIFICATION

The Permitee, JRS Mining LLC by Todd Sullivan, as Operator, does hereby certify that _________(structure owner) shall be compensated for

any damage from the proposed mining operation to the above listed structure(s) located on or within 200 feet of the proposed affected area described within the letter attached to this agreement, of the Reclamation Permit for Sullivan Aggregate Pit, Permit File Number M-2015-007.

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NOTARY FOR PERMIT APPLICANT

ACKNOWLEGED BY:

Applicant	Represe	ntative Name	
Date	Title		
STATE OF)		
COUNTY OF) ss.)		
The foregoing was acknow	vledged before me th	is day of	, 20, by
	as	of	,
Notary Public	My Comn	nission Expires:	·

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CERTIFIED MAIL® RECEIPT 5 il On TH 5490 福田 FA Fees (c 9000 leceip! (hardcopy Return Receipt (elec Certified Mail Restricted Del Adult Signature Required 0640 ostage Total Postage and Fees 701.5 ROCK N PINE LLC 40 MANKBALDERS PSon Hog UP) 38 T FAIRPLAY, CO 80440 (Domestic) (FAIRPLAY, CO 80440) (Weight:0 Lb 0.80 Oz) (Expected Delivery Day) (Monday 07/27/2015) \$3.45 Certified (@@USPS Certified Mail #) (70150640000654901459) \$2.80 Return (@@USPS Return Receipt #) Receipt (9590940305565173754591) \$0.49 (Forever) Purple Heart PSA 2012 (Unit Price:\$0.49) \$7.23 Total \$20.23 (\$13.00) Cash Change For tracking or inquiries go to USPS.com or call 1-800-222-1811. Order stamps at usps.com/shop or call 1-800-Stamp24. Go to usps.com/clicknship to print shipping labels with postage. For other information call 1-800-ASK-USPS. ***** Get your mail when and where you want it with a secure Post Office Box. Sign up for a box online at ***** usps.com/poboxes. All sales final on stamps and postage Refunds for guaranteed services only Thank you for your business HELP US SERVE YOU BETTER Go to: https://postalexperience.com/Pos



Sullivan Aggregate Pit JRS MINING LLC

112 PERMIT TO COLORADO MINED LAND RECLAMATION DIVISION AND PARK COUNTY, COLORADO

March, 2015 Revised for Adequacy July 2015

By:



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JRS Mining LLC - SULLIVAN AGGREGATE PIT LIMITED IMPACT 112 OPERATION

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INTRODUCTION

The Sullivan Aggregate Pit site is located immediately northwest of the town of Fairplay in Park County and was initially mined for placer gold by many different methods dating back to the 1860's. Sluicing, hydraulicking, and other methods were employed over many decades. All of this old mining was done without any salvage of topsoil and without any regard to reclamation of the site. For decades, the site lay dormant. From 2003 to 2012, Todd Sullivan, John Sullivan and JRS Mining LLC acquired historic property in 3 parcels resulting in a total of 45 Acres zoned mining. The permit area is 42.68 acres.

In 2014, JRS Mining LLC received a 110 Permit (M- 2013-074) to mine and sell gravel from the site utilizing many of the piles that were left by the old placer operations. Placer gold was also produced from some of the gravels on site as part of this 2014 permit.

The 112 Permit of 2015 was undertaken to include a larger portion of the property in the mining area, add room for the water storage ponds into the permit area which gets water from the Platte City Placer Ditch (also known as the Westerman Ditch) for the 2 cfs mining water rights owned by Todd Sullivan of JRS Mining LLC. This water right is used in the mining operation.

JRS Mining intends to sluice gravels for gold and then screen and sort materials including rocks and gravel for use in the development of adjoining property, internal use and commercial sales. Rock, sand & gravel sales may take place over the life of the mine. There are a variety of post-mine uses, as described in the Reclamation Plan.

LEGAL DESCRIPTION - EXHIBIT A

The site is approximately 1500 yards northwest of downtown Fairplay. A legal description is shown on Map C-1 which is included in Appendix D.

The total permit area is 42.68 acres.

LEGAL DESCRIPTION

Starting at the NE corner of Section 32, Township 9 South and Range 77 West, 6th PM, then

- N 70°06'56" W a distance of 953.13'to the point of beginning;
- thence N 66°42'01" W a distance of 810.23';
- thence N 66°22'12" W a distance of 523.48';
- thence N 62°38'25" W a distance of 420.87';
- thence N 61°47'24" W a distance of 243.27';
- thence N 59°58'56" W a distance of 279.54';
- thence S 00°12'45" E a distance of 210.73';
- thence S 88°17'01" E a distance of 322.14';
- thence S 00°04'11" E a distance of 256.54';
- thence S 05°38'41" E a distance of 33.31';
- thence S $64^{\circ}27'21''$ E a distance of 30.70';
- thence S 47°35'46" E a distance of 56.53';
- thence S 50°40'27" E a distance of 109.79';
- thence S 78°30'06" E a distance of 332.09';
- thence S 47°53'03" E a distance of 170.06';
- thence S 61°41'14" E a distance of 121.95';
- thence S 70°39'27" E a distance of 97.52';
- thence S 50°02'09" E a distance of 124.54';
- thence S $67^{\circ}52'33''$ E a distance of 99.33';
- thence S 44°09'50" E a distance of 39.30';
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- thence S 50°03'19" E a distance of 43.08';
- thence S 46°15'39" E a distance of 106.18';
- thence S 11°28'33" E a distance of 96.68';
- thence S 15°23'32" E a distance of 112.62';
- thence S 38°26'14" E a distance of 72.00';
- thence S 37°25'38" E a distance of 142.04';
- thence S 62°41'09" E a distance of 34.40';
- thence S 01°02'26" W a distance of 93.49';
- thence S 00°22'30" W a distance of 354.22';
- thence N 88°41'39" W a distance of 659.72';
- thence S 01°13'03" W a distance of 114.37';
- thence S 53°41'37" E a distance of 60.25';
- thence S 32°01'06" E a distance of 51.34';
- thence S 26°38'12" E a distance of 56.86';
- thence S $13^{\circ}53'50''$ E a distance of 67.33';
- thence S 05°50'32" W a distance of 167.72';
- thence S $13^{\circ}05'19''$ E a distance of 71.67';
- thence S 34°14'34" E a distance of 55.29';
- thence S 48°08'23" E a distance of 87.15';
- thence S 88°09'50" E a distance of 438.88';
- thence S 00°05'47" W a distance of 323.62';
- thence N 88°03'03" E a distance of 211.35';
- thence N 87°29'50" E a distance of 66.77';
- thence N 83°58'28" E a distance of 103.26';
- thence S 88°27'34" E a distance of 77.58';
- thence S 59°42'29" E a distance of 58.80';
- thence S 36°50'54" E a distance of 71.34';
- thence S $31^{\circ}54'30''$ E a distance of 35.38';
- thence S 65°02'24" E a distance of 74.14';
- thence N 00°25'55" W a distance of 1217.39';
- thence S 65°16'36" W a distance of 65.29';
- thence S 79°20'18" W a distance of 52.00';

thence N 87°33'09" W a distance of 73.53'; thence N 53°44'15" W a distance of 129.48'; thence N 39°36'06" W a distance of 127.05'; thence N 59°56'08" W a distance of 146.46'; thence N 13°20'21" E a distance of 23.64'; thence N 21°29'57" E a distance of 109.63'; thence N 22°05'34" E a distance of 169.98'; thence N 22°08'21" E a distance of 424.99'; which is the point of beginning, having an area of 1859234.32 square feet, which is 42.682 acres

All surface and minerals within the permit area are owned as follows:

- a) JRS Mining LLC 100% owner of the parcel north of the River Schedule Number 47300.
- b) John Sullivan 100% owner of Schedule 11655, which also has absorbed Schedule 11850. This is the area south of the River.

All right of entry information is provided in Appendix A.

No portion of the permit area includes the Rock N Pine Property, where JRS Mining LLC is 50% owner.

There are two entrances to the mine. One is approximately 1/2 mile north of Fairplay on Hwy 9 and the other is on Platte Drive, as shown on Map C-1.

INDEX MAP - EXHIBIT B

Map B-1, enclosed below, is an index map which shows the general location of the site. Scale is1 inch = approximately 2.8 miles.



MAP B-1- GENERAL LOCATION MAP

PRE-MINING AND MINING PLAN MAPS OF AFFECTED LANDS - EXHIBIT C

Since extensive mining has occurred on the site since 1872, a pre-mining contour map of the site is unavailable, however, the existing contour can be seen from looking at the contour of the area on Map C-1. The contours of this Map are based on the contours interpolated from the USGS Topographic Map for the site, which includes all old historic mining. Therefore, Map C-1 represents the existing contour prior to new proposed mining in this 112 Permit. The contours of the site are not greatly different from the actual contours prior to any disturbance in the early 1800's.

The mining area basically slopes downward from the Highway 9 to the Middle Fork of the Platte River to the south and then uphill from the River southward again to Platte Drive on the west bordering the Gloria Z Mine to the north and west. Old placer mining exists on the property to the southeast and the Rock N Pine 10 acre permit exists to the southeast of Mining Area 1.

Map C-1 shows the approximate pre-mine contour, the recent Google image and pre-permit land uses of the site.

Map C-2 shows the details of the planned mine operation. All coordinates are in the State Plane System. Cross Sections of the mining and reclamation are also shown on this Map.

MINING PLAN - EXHIBIT D

Mining has taken place on the site since the 1860's in the areas shown on Map C-1. Various, hydraulicking, sluicing and other methods were employed. No topsoil was ever salvaged from these past operations and no final grading was ever done. An aerial image of the site in 1999 is enclosed below:



Picture 1 - Site Aerial from 1999

A small portion of the eastern part of the permit area was previously disturbed by early mining operations. There are minor portions of the old historic disturbances which are now included in the mining phases for the new operation. Since there are many variables that determine whether all areas get

mined, especially placer grades, it is not 100% definite that all areas shown in the mining plan will be mined. For this reason, JRS Mining cannot commit to reclaiming old historic disturbances that are never part of the new mining activity. Any old disturbances that become part of the new operation will be reclaimed according to the reclamation plan shown in Exhibit E. The Annual Report for each year will address the acreages of old disturbances that are part of the active operation and will be reclaimed under the new permit.

Section 1.0 General Description of Mining Activities

The site will have rock, sand and gravel mining, as well as gold placer mining. The primary material to be mined over the life of the mine will be boulders and gold placering. Placer activity may be more or less active in any given year. For this mining, excavation of loose gravel will take place to bedrock, or to the limit imposed by the mining slopes, or to 2 feet above ground water level, whichever is encountered first. The maximum mining slopes are 2.5H:1V. The depth to bedrock is expected to be from 25 feet to 60 feet from the surface. Any material that is excavated containing higher concentrations of gold will be transported to the wash plant, where the majority of the gold will be recovered. The material will be mined with loaders, track hoes and/or dozers, and the raw material will be hauled to the wash plant by trucks or loaders, which is shown on Map C-2. Any material that is low in gold will be treated as overburden and will be placed in the mined out area from the previous cut. The wash plant will consist of a hopper, a trommel screen, a sluice, and another finer screen to wash out fines up to 100 mesh. Sand and gravel washed from the sluice and screens may be delivered to stockpiles and sold as sand and gravel products or may be used for backfilling as part of reclamation.

As shown on Map C-2, four mining areas are planned for the gold/gravel excavation activity: Mining Areas 1, 2, 3 and 4.

Mining Sequence

The mining sequence will be as follows:

Mine Area 1 first, hauling all gold bearing material to the portable process plant located on the north side of the River. Any non-gold bearing material will be backfilled in the trailing end of the cut area.

Boulders may be individually excavated and sold directly. Some sand and gravel sales are possible but this is not anticipated to be any significant quantity. Gold bearing gravel will initially be screened within the pit and all material over $\frac{1}{2}$ " in size will remain in the pit and will be mixed with overburden in the backfill. Gold bearing material less than $\frac{1}{2}$ " will be transported to the process plant. There is an existing river crossing allowance from the US Army Corps of Engineers for the site but it will be moved to the new location shown on Map C-2. No documentation has been formulated for this old crossing but according to Todd Sullivan, (operator of JRS Mining LLC) the Corps inspected the crossing during the past operation of the 110 permit and deemed it to be acceptable. This crossing will not be used during the new operation, since the north side of the crossing is not within the permit area. The new crossing, as shown on Map C-2, is located to the west of the old crossing and is within the permit area on both sides.





This crossing requires a Nationwide Permit has been approved and which is enclosed below.



DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, OMAIIA DISTRICT DENVER REGULATORY OFFICE, 9307 SOUTH WADSWORTH BOULEVARD LITTLETON, COLORADO 80128-6901 ÷

June 12, 2015

SUBJECT: Nationwide Permit Verification – Action No. NWO-2015-01055-DEN, Gold Placer Road Crossing Middle Fork of the South Platte River

Todd Sullivan JRS Mining LLC 850 N Davidson Street Eloy, AZ 85131

Dear Mr. Sullivan:

Reference is made to the above-mentioned proposed project located at approximately latitude 39.230513888889, longitude -106.017825, in Park County, Colorado. The work as described in your submittal will consist of a new low water crossing for a gold placer mine that will go across the Middle Fork of the South Platte River northwest of Fairplay, Colorado. The existing grade of the river channel will not change, the rock will be placed in accordance with the existing grade, except that the road surface will be flat, resulting in a very slight drop to continue the grade below the crossing. To do this, 0.009 acre of impacts will occur to the stream bed of the Middle Fork of the South Platte River.

Based on the information provided, this office has determined that the work is authorized by the **Department of the Army Nationwide Permit (NWP) NWP 14 Linear Transportation Projects.**, found in the February 21, 2012, <u>Federal Register</u>. Enclosed is a fact sheet, which fully describes this Nationwide Permit and lists the General Conditions, and Colorado Regional Conditions, which must be adhered to for this authorization to remain valid.

Although an Individual Department of the Army permit will not be required for this work, this does not eliminate the requirement that any other applicable federal, state, tribal or local permits be obtained as required. Please be advised that deviations from the original plans and specifications of this project could require additional authorization from this office.

The applicant is responsible for all work accomplished in accordance with the terms and conditions of the nationwide permit. If a contractor or other authorized representative will be accomplishing the work authorized by the nationwide permit on behalf of the applicant, it is strongly recommended that they be provided a copy of this letter and the enclosed conditions so that they are aware of the limitations of the applicable nationwide permit. Any activity which fails to comply with all the terms and conditions of the nationwide permit will be considered unauthorized and subject to appropriate enforcement action.

This verification will be valid until March 18, 2017. In compliance with General Condition 30, the enclosed "Certification of Completed Work" form (blue) must be signed and returned to this office upon completion of the authorized work and any required mitigation.

Enclosed is a Preliminary Jurisdictional Determination (JD) which is a written indication that wetlands and waterways within your project area may be waters of the United States (enclosed). Such waters will be treated as jurisdictional waters of the US for purposes of computation of impacts and compensatory mitigation requirements. If you concur with the findings of the Preliminary JD, please sign it and return it to the letterhead address within two weeks. If you believe the Preliminary JD is inaccurate, you may request an Approved JD, which is an official determination regarding the presence or absence of waters of the US. If an approved JD is requested, the Corps will complete one and you may not begin work on the proposed project until after the Approved JD is complete. If you do not want the Corps to complete an Approved JD, you may proceed with the proposed project.

If there are any questions please feel free to contact Michael Stanley at (303) 979-4120 or by e-mail at Michael.G.Stanley@usacc.army.mil, and reference **Corps File No. NWO-2015-01055-DEN**.

Sincerel

Kiel Downing Chief, Denver Regulatory Office

Enclosure(s)

Copies Furnished: U.S. Fish and Wildlife Service Colorado Department of Public Health and Environment Environmental Protection Agency Colorado Parks and Wildlife

Greg Lewicki Greg Lewicki and Associates, PLLC 11541 Warrington Court Parker, CO 80138 All gold bearing gravel north of the River (Area 1) will be processed at the North Location, shown on Map C-2, located on relatively flat ground near the old access road. All gold bearing gravel south of the River (Areas 2, 3 and 4) will be processed at the South Location, shown on Map C-2, located on relatively flat ground west of the office/residence. In this way, the use of the River Crossing is minimized since gravel and tailings do not need to be hauled to the other side of the River. There will not be processing equipment at both locations at the same time. All equipment will move to the South Location from the North Location, and the North Location will be reclaimed prior to operation at the South Location. At either location, a sluice, possible trommel, Settling Pond and Fines Stockpile will be present. Minus ¹/₂" material will enter the sluice and the tailings will be collected in the Settling Pond, which will be cleaned out of tailings at the required intervals. Water will be pumped and recycled back to the sluice from this pond at each location. The makeup water will come from the Water Holding Pond south of the River. For the South Location, the Water Holding Pond will be very close to the plant. For the North Location, the makeup water will have to be transported across the River by an overhead suspended 3" HDPE line. This line will be buried along the access road to the New Crossing location. The line will be suspended above the River at a height well above any potential water users of the River. A wooden support beam may be used to suspend the water line, which is a distance of approximately 30 feet. The Fines Stockpile will hold the fine material excavated from the Settling Pond, which will be used for backfilling. The North Process Area is limited to 0.20 acres and the South Process Area is limited to 0.48 acres.

The sluice will use water from existing rights in the Platte City Placer Ditch. Tails from the Settling Ponds will be periodically excavated and hauled back to the pit as backfill, which will be mixed with other backfill material within the pit.

As new areas are mined, backfilling and topsoil replacement will occur on an ongoing basis. The total mining pit area not reclaimed or disturbed at any one time is limited to 0.9 acres.

The breakdown of acreages is shown in the following Table D-1 for various stages of the operation:

Disturbed Areas	Maximum	All units in Acres	
Disturbance Description	Mine Area 1 - North Side	Mine Areas 2,3,4- South Side	
Process Area	0.2	0.48	
Pit	0.9	0.9	
Old Highwall and Setlling Pond 3	0.18	0.18	
Water Holding Pond and Surge Pond	0.3	0.3	
Access Roads	1.9	1.9	
Topsoil Stockpiles	0.14	0.16	
Totals	3.62	3.92	
Max Area to Reclaim at one time = Total - Roads	1.72	2.02	

Table D-1 – Disturbed Area Breakdown in Permit Area

The disturbed areas shown above include area of the old 110 permit disturbance. All existing roads will be left in place at the end of mining. After Area 1 is mined, all mining on the north side of the River will be completed and the crossing of the River will only be used for maintenance of the reclamation and minor access. No gold bearing gravel or other excavated material will be transported through the River crossing.

As shown on Map C-2, there will be a 30' buffer from the edge of the permit boundary to the edge of excavation for each mining area. This boundary will be identified with survey stakes that are placed in the ground at a minimum interval of 150 feet. The stakes will be a minimum of 3 feet high with clearly visible color markings.

The maximum mining slope is 2.5H:1.0V, unless the a variance is requested and approved by the Division in a Technical Revision. Mining Area 2 and then Area 3 will then be mined in order. The Ditch Surge Pond and the Water Holding Pond will be left in place for the mining in these two areas since the Platte City Placer Ditch does not yet have to be moved. After the end of mining in Area 3, mining will then continue from the northern portion of Mining Area 4, working south toward the old Platte City Placer Ditch location. The Platte City Placer Ditch will be permanently diverted in the backfilled portion of Mining Areas 2 and 3, as shown on Map C-2. This ditch does supply users downstream of the permit property and must be maintained. The backfill can easily be controlled to meet the desired ditch grade and ditch dimensions. Map C-2 shows cross sections of how the Ditch will be diverted and then mined. There is no Ditch Company associated with this old Placer Ditch, therefore, the best way to ensure that the relocated Ditch is installed properly and will not affect users downstream, is for the proper commitments regarding the design of the diversion are made by the operator and that the Ditch relocation be constructed and inspected by the DRMS inspector and Water Commissioner from Colorado Division of Water Resources, based in Fairplay, to approve the diversion and inspect the Diversion prior to its use. See Exhibit S showing the conditions agreed to by the operator and the commitments made regarding the construction. Once the DRMS inspector and the Water Commissioner in Fairplay has approved the installation of the Diversion, the water will be cut into the new Ditch location. The old Ditch will be mined out and the land will be reclaimed. As Mining Area 4 is mined out, the water intake from the Platte City Placer Ditch will move to a new location slightly east of the location shown on Map C-2, closer to the house/mine office located in the permit area.

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It is likely that the sand and gravel and boulder operation will last for more than 20 years, although no significant sales are anticipated from this operation. Mining of the bank gravel will be conducted by track hoe excavator and a loader will be used to supplement this machine as needed. A road will be made to the excavation area to allow trucks to be loaded with the material to be taken to the gold recovery plant. The natural water level in the permit area will vary with location but is generally found at 50-75 ft from the surface. No mining activities will uncover ground water. If groundwater is encountered, the area will be immediately backfilled a minimum of 2.0 feet above the groundwater exposure.

As mining progresses, backfilling will be done concurrently, which will restore the landscape to its approximate pre-mine contour, or in the case of steep slopes, may be restored to milder slopes for stability and reclamation success. If gravel sales grow significantly, this will still be offset by swell in the mined material, which is expected to be over 20%. The cross sections shown on Map C-2 show the likely scenario for full backfill to the approximate pre-mine slope. If it is seen that there is some condition that will result in a backfilled slope that is different from the pre-mine slope, a Technical Revision will be submitted to address this change. Gravel sales are not expected to be significant since competition is fierce in the area.

The permit area is divided into various mining areas and other disturbances, as shown in Table D-1. As stated earlier, some minor portions of the mining areas have been disturbed by historic mining. Although they have been included in the mining areas, it is not 100% definite that they will be mined due to uncertainties in placer grades, etc. Therefore, JRS Mining commits to reclaiming any pre-law disturbance that has any new activity related to the new mine but JRS Mining cannot commit to reclaiming old areas that may never be newly mined. Map C-1 shows the old mining disturbances in the aerial image.

Section 2.0 General Geology of Site

The geology of the site is best described as the upper reach of the South Platte River in Pliestocene glacial moraine gravels mixed with some Quaternary gravels of recent age. Sand beds and claybeds are also interspersed with the alluvium. Depths of this material range from 30' to 100' within the permit area. These gravels overlay a bedrock of pre-Cambrian schist, gneiss and intrusive granite, which are also present in the mountains on both sides of the permit area. Only minor stratification has been seen in the gravels since boulders of 10"-15" size are found in some sand beds, probably from glacial meltwater. The gold veins in igneous rock on the south side of Hoosier Pass and in the upper basin of the South Platte drainage are the origin of the placers through thousands of years of glacial activity during the last ice age and subsequent erosion. Due to the fineness of the gold at the site (0.833 fine), the gold placer has been traced to gold from North Star Mountain in the Montgomery Deadwood area in the upper reach of the basin.

Section 3.0 Gold and Gravel Mine Facilities

The gold and gravel mine operation will consist of the following facilities:

- portable sluice plant
- trommel and portable screens
- existing office with well and facilities
- 1 office trailer
- equipment and material storage of skid for easy removal
- various plastic water lines delivering water from the pumps to wash plant
- front end loader Komatsu 320
- Cat 315 excavator
- Haul trucks of 25-ton capacity
- Water surge pond
- Water holding pond
- Settling ponds (3)

• 30 kw diesel generator with 5 gallon diesel tank with secondary containment built in (to power the trommel and pump at the Settling Pond to recycle water to the sluice)

No blasting will take place in this operation. No chemicals will be used. No fuel or oils will be stored on site and these liquids will be brought to the site by service truck. No crushing will be employed in the operation. Any gravel sales will simply be screened gravel from an in-pit screen plant. Any spills of fuel or other hazardous material will be reported to the Division as soon as they are discovered.

Section 4.0 Highwalls and Backfilling

As a result of extensive hydraulic mining done decades ago, one pre-law highwall exists in the permit area. This area is in the immediate area above the sluice location. See photo below:



Photo 1 – Old Highwall at Sluice Area

This highwall is approximately 100 feet long and 20-25 feet high at a slope of approximately 0.9H1.0V. Once the mining has terminated and the sluice is removed, this highwall will be backfilled to an

approximate slope of 2.2H:1.0V. Using the average height of 22 feet, this is a cross sectional area of 315.4 square feet and a volume of 1168 cubic yards.

Large rocks and wash plant reject will be used to correct the hillside slope back to minimum 3H:1V slope. Overburden and most of the washed material will likely be backfilled. The cross sections on Map C-2 shows that the approximate pre-mine slope will be restored for backfilling except in those cases where the existing landscape is steeper than 3H:1V. In those cases, 3H:1V will be restored, except in the case of the one highwall above the sluice, which will be restored to 2.2H:1.0V since it is too close to the River to reclaim a milder slope. Fines from the wash plant settling pond will be used to provide a subsoil material on the backfilled surface. This will provide better stability for Highway 9 than the current slope provides. A series of roads will remain to access different areas of the site.

Section 5.0 Tree Removal, Topsoil Removal and Stockpiling

As shown on the aerial image of Map C-2, many of these areas designated for disturbance contain pine trees and some aspens. A contractor will be hired to remove these tress. The aspens will be disposed of off-site while the pine trees will be cut and sold for lumber. The contractor will be completely in charge of this operation. Only one acre of tree removal will occur in advance of the topsoil removal operation.

Parts of the site was disturbed over a century ago and no topsoil was salvaged from these areas, which are shown on Map C-1. These areas total to 4.67 acres. All the topsoil uncovered by the new operation will be stockpiled and used to cap the reclaimed areas in preparation of replanting. The topsoil stockpile locations (Stockpiles 1-4) are shown on Map C-2. Topsoil Stockpile 4 is the topsoil that was salvaged from the previous 110 permit (M-2013-074). Approximately 300 cy were salvaged and this material is located around the perimeter of the Water Holding Pond. It is expected that the undisturbed areas will yield a topsoil salvage thickness of approximately 6 inches. This material will be used to cover all areas that are designated as wildlife habitat on Map F-1. The topsoil stockpiles will not be in place all at one time. Direct placement will be utilized to the extent possible for the efficiency of the operation as well as keeping the bond costs reasonable. For this reason, JRS Mining commits to having an area of no greater than 1.64 acres of topsoiling required at any one time during the life of the permit. Some areas will be left for roads, residence and commercial development, which will not be topsoiled. It is understood that

these areas will need to be topsoiled if commercial development of these areas has not been approved or completed at the time of bond release or at mine termination, the areas will be topsoiled according to the same requirements as the rest of the permit. There are approximately 4.67 acres of area within the disturbed area boundary that was historically mined and does not have topsoil to salvage. These areas are shown on Map B-3.

All fines collected in the Settling Pond will be removed by back hoe or similar equipment and will be temporarily stockpiled in the immediate area around the Settling Pond (uphill side). See Map C-2 for the location. The fines will be stored outside the 100 year floodplain in this area. Slopes will be no steeper than 2.5:1 and the fines will be used as substitute topsoil for reclamation either as topsoil for areas that have pre-law disturbance or as a subsoil underneath the topsoil that is salvaged from other undisturbed areas.

All topsoil fines piles will be constructed to 2.5H1V slopes and will be seeded and mulched if they are to be in place over one year. The temporary seed mix for any topsoil or substitute fines piles is given below:

Topsoil Stockpile Seed Mix	Lbs./acre
Slender Wheatgrass	6.0
Western Wheatgrass	6.0
Thickspike Wheatgrass	6.0
Perennial Rye Grass	3.0
Cicer Milkvetch	1.0
Utah Sweetvetch	1.0
Total	23.0

Section 6.0 Import of Material

No material of any type can be accepted by the Operator unless the attached form is filled out by the entity bringing the material to the site and the permittee. The form provides an assurance that all material brought to the site is inert and has no toxic or acid forming material above acceptable limits. The site is inert and has no toxic or acid forming material above acceptable limits. Acceptable material is defined as inert sand, select natural fill, gravel and rocks. The material will be brought to the site immediately to the active pit and will be immediately backfilled. There will be no stockpiling of the

imported material. The material will be placed in lifts not to exceed 12 inches and will be compacted to a reasonable level with front end loader, track hoe or dozer. This reasonable level is taken to mean 85% of maximum dry density. Annual inspections will report on the effectiveness of this compaction.

Affidavit for Import of Materials into JRS Mine

Date or Time Period of Import:

Description of Import Material:

Entity Providing Material to Pit (not the trucking Company):

I hereby certify that the material described above and brought to the Sullivan Aggregate Pit site is inert, which means it is free from any chemicals, toxic substances, acid forming material, or any other material which would violate the material waste disposal laws of the State of Colorado.

Signature

Written Name of Signer

Signer's Position in Company

Company Bringing in Material

Date: _____

I hereby certify that the material described above and brought to the Sullivan Aggregate Pit site is inert, which means it is free from any chemicals, toxic substances, acid forming material, or any other material which would violate the material waste disposal laws of the State of Colorado.

Signature

Written Name of Signer

Signer's Position as Responsible Party for Permittee

Company

Date: _____

Section 7.0 Operation Schedule

The following operation parameters are forecast:

- 5 months per year operation (approx. 150 days per year) weather permitting
- active operation will be maximum 6 days per week, 10 hours per day
- move approximately 200 cubic yards per day, or 30,000 cubic yards per year, or 45,000 tons
- process approximately 200 cubic yards per day of gold bearing gravel through the wash
- plant
- a rock grizzly may be located in the active pit to avoid transporting large rock to the processing plant. A screen may also be located in the pit to size raw gravel for sale although it is expected that this activity may never occur.
- strip an average of 6" of topsoil on virgin areas and either directly respread on previously mined and regraded areas or place in a stockpile for use in reclamation. As stated previously, no more than 1.64 acres will need to be topsoiled at any one time. This is a firm commitment on the part of JRS Mining.
- Excavate fines from the Settling Pond and either directly place this material as subsoil or temporarily stockpile it next to the Pond and move it into the reclaimed areas on an ongoing basis.

It is expected that the swell of the virgin gravel material when mined will be 20%, however, since some material will potentially be sold as road base and other construction material, the net gain/loss in mining virgin areas is more or less zero. It is planned that all processed material will be backfilled in the mining operation. Reclamation plan details are described in Exhibit E. It is fully expected that approximate original contour will be reclaimed for all areas except the old pre-law highwall near the sluice, which will be restored to the milder slope of 2.2:1. A few other areas have pre-mine slopes of steeper than 3:1 and it is expected that these slopes will be restored to 3:1, based on the fact that little gravel sales are expected and the swell of the mined material will provide the additional volume to restore the 3:1 slope in those minor areas where the existing slope is not already 3:1.

The mining timetable for the operation is given below:

Mining Timetable - Operation

Task #	Description	Fime Needed in months
1	Install New River Crossing	1.0
2	Install Sediment Berms	
3	Complete set-up of North Location wash plant	1.0
4	Mine Area 1 and send gold bearing gravel to processing	55.0
	Plant, doing concurrent reclamation	
5	Move Processing Plant to South side of River	1.0
6	Mine Areas 2 and 3 and do concurrent reclamation	38.0
7	Start Mining Area 4 from the north and re-establish	22.0
	Platte City Placer Ditch in new location	
8	Finish Mining Area 4	22.0
9	Regrade site and sell remaining gravel stockpiles.	2.5
10	Remove all equipment from site.	0.5
11	Place substitute topsoil on regraded areas.	1.5
12	Place topsoil on prepared areas	1.0
13	Seed, mulch and place mulch in remaining reclaimed area	<u>1.0</u>
	Total 7	Time 146.5 months

Since the operation will only be active for 6 months per year average, therefore, the full gold mining operation will take approximately 24 years. Any gravel/boulder sales will be concurrent with gold mine operation.

Section 7.0. Sediment Control System for Operation

The permit area is basically divided into 4 mining areas, as well as the access road across the River and the Water Holding Pond near the Platte City Placer Ditch. The northern and southern areas primarily drain to the River. Pre-law areas have no new controls since the porous nature of the gravel provides good sediment control, since any runoff seeps in the ground from these areas.

There are other numerous depressions piles and valleys which trap runoff and infiltrate it into the ground. Due to extreme porous nature of the gravel the numerous depressions and the use of gravel berms, there should not be a problem with disturbed area runoff leaving the site. For this reason, no collection ditches are planned. Gravel berms of 3-4 feet height will be placed at the downhill portion of
all mining areas, if the areas are not trapped by the pit excavations themselves. These berms will have an approximate sideslope of 2H:1V. Therefore, the base of each berm is approximately 16.0 feet wide. All berms will be installed prior to any topsoil stripping or any other disturbance in a given area. It is not planned that the area south of the house/mine office will be mined, however, if any of this area is disturbed, a berm will be installed at the low point of this area as shown on Map C-2. Also, small mounds in the access road on both sides of the River Crossing will be made to trap road sediment from entering the River from the access road itself. No other sediment control facilities are planned for the permit area and none should be needed. Given the porous nature of the gravel and the vegetation in the undisturbed areas, the curve numbers are expected to be in the low 70's and the runoff for a 100 year event will be low and will back up against the berms and seep into the ground. During mining of an area, a depression will exist that will trap the sediment from that area. As the area is backfilled, the 3-4 feet high berm will be rebuilt so that the yet unvegetated backfilled areas will have sediment control.

The Settling Pond below each sluice will have a minimum surface area of 1500 square feet and will reach a depth of 20-30 feet at a grade of 2.0H:1.0V. The ponds will be completely incised in original ground. No dam will be built. There will be no discharge from the ponds since the water will be recycled into the sluice from the low end of the pond using a pump. Past experience in the area is that these ponds will not overflow into the Platte River. The Settling Ponds will be cleaned out as needed to remove fines and provide good volume for storage. As described in Section G, additional swales and berms will be installed on both sides of the access road leading to the River crossing to ensure that no runoff from the road enters the Therefore, a CDPHE discharge permit will not be needed. The operation will not be allowed to continue if the water in the Settling Ponds gets within 1.0 feet of the top of the Pond.

The Settling Pond 3 that has already been built near the old River Crossing on the south side of the River in old pre-law disturbance. It is within 80 feet of horizontal distance to the River. It is completely incised and is approximately 20-25 feet deep and there is no water in the Pond. This is true even at the very high water levels experienced in the early summer of 2015.



Photo 2- Settling Pond 3 showing no water present.

As shown on Map C-2, the Pond is located immediately outside the 100 year floodplain and it will trap sediment from the old highwall slope. The 100 year floodplain in this area will be marked with stakes to ensure that no part of the Pond or any other structure is placed in the floodplain. The Pond is more than adequate to contain the runoff from a 100 year event from the 0.39 acres above it that would drain to the pond. There will be a sediment berm above the highwall that limits the area that drains to the Pond. Additional area above the Sediment Berm will drain to the berm and will not be delivered to Sediment Pond 3. When mining is complete, the highwall will be backfilled and Sediment Pond 3 will be filled to original contour.

Given the Settling Ponds, Sediment Berms and road mounds, there will be no discharge from the site and no CDPHE discharge permit is needed.

Section 8.0 Access Roads

Two existing accesses are present on the site, one, which is a compacted dirt road that meets Highway 9 as shown on Map C-1, which will be the truck route for almost all activity in and out of the site. The access road in the permit area will be compacted dirt or gravel and approximately 30' in width. Water or magnesium chloride will be applied to this road (primarily by the gravel mine personnel) to keep dust down while mine vehicle traffic occurs. The second access is from Platte Drive, to get to the office and the well next to the office.

Section 9.0 Acreage Calculations

The total permit area and disturbed area are shown below. This is the total disturbed area, not the disturbed area exposed at any one time, which is much less.

The following Table D-2 describes the disturbed and undisturbed acreage types for the life of the operation.

Table D-2			
Permit Areas	Acreage	Comments	
Mine Area 1	10.12		
Mine Area 2	3.41		
Mine Area 3	3.73		
Mine Area 4	12.16		
Process Plant	0.48		
Roads	1.90	1.9 acres of roads will remain after reclamation	
Ponds	0.30		
Topsoil Stockpiles	1.80		
Old Highwall	0.18		
Other Disturbance	1.07	Fringe around excavation area and erosion protection	
Total Disturbed Area	35.15		
Undisturbed Area	7.53	Forested Area and Buffer at permit boundary	
Total Permit Area	42.68		

Table D-2 – Total Permit Areas

It should be noted that this total disturbed area is the total for the mine life. Only small areas of the excavated cuts will be disturbed at any one time since reclamation will be ongoing, therefore, the total area disturbed at any one time (other than roads) will be these cuts (0.9 acres) plus ancillary disturbance Sullivan Aggregate Pit March 2015 D-21

totaling only 1.6 acre in the worst case. Roads, ponds and other areas that will be left after reclamation will reduce the final area to be reclaimed. The Disturbed Area breakdown is given in Table D-1, which is presented earlier. Total Maximum disturbance at any one time for reclamation = 2.02 acres.

•

Section 10.0 Water Information, Rights and Augmentation

Todd Sullivan has 2.0 CFS from Sacramento Creek for placer mine purposes only dating back to 1860's. This right can be used from mid-May to mid-September of any given year. Todd Sullivan pledges this water right to JRS Mining LLC.

This right is proposed to be used to offset consumptive uses of the operation. The consumptive uses are as follows in Table D-3.

Table D-3		Consumptive Water Use
	Surface Pond Area (s	per Yr (ac-ft)
Settling Pond Exposure	1500	0.052
Holding Pond Exposure	3200	0.111
Surge Pond Exposure	706	0.024
Gravel sales (50,000 T/YR)	na	1.47
Road Watering	na	1.7
Sluice and Screen Operation	na	0.34
Total		3.697

This amount is far below the 2.0 cfs that is allocated for the project. The letter from the Division of Water Resources shows that the Applicant is the owner of 2 cfs of the Platte City Placer Ditch (WDID 2300764) which was decreed in Case Number CA1636 to divert this water from Sacramento Creek for placer mining purposes. This letter is attached on the following pages. This information was confirmed by Garver Brown, water Commissioner based in Fairplay, who is completely aware of what all placer operators are doing along the Middle Fork of the South Platte River.

The water will be taken off the Platte City Placer Ditch at the location shown on Map C-2. This water will flow in a small pipe to a Ditch Surge Pond, which is a small pond of no more than 50 square feet Sullivan Aggregate Pit March 2015 D-22

surface area. The purpose of this pond is to provide a small surge capacity so that there will be a steady flow to the Water Holding Pond. Both of these small ponds are lined with silt and clay and do not allow any significant water infiltration. The Water Holding Pond will have a 3"-5" diameter HDPE pipe that will be buried along the access road that will deliver the makeup clean water to the sluice for processing. Most of the water at the sluice will be recycled from the Settling Pond so that there will be no discharge from the Settling Pond or other area within the permit area.





MAY 04 2015

1313 Sherman Street, Room 824 Denver, CO 80203 TO : DIVISION OF RECLAMATION, MINING AND SAFETY

Response to Reclamation Permit Amendment Application Consideration

DATE:	April 30, 2015
TO:	Michael A. Cunningham, Environmental Protection Specialist
CC:	Division 1 Office, District 23 Water Commissioner
FROM:	Sarah Brucker, P.E. Str
RE:	Sullivan Aggregate Pit, File No. <u>M-2015-017</u> Applicant/Operator: JRS Mining, LLC Contact: Todd Sullivan, (863) 660-0763 Section 32, Twp 9 South, Rng 77 West, 6th P.M., Park County

CONDITIONS FOR APPROVAL

- The proposed operation does not anticipate exposing groundwater. Therefore, exposure of ground water must not occur during or after mining operations.
- The proposed operation will consume ground water by: evaporation, dust control, reclamation, water removed in the mined product, processing, other:
- The proposed operation will consume surface water by: \bigotimes evaporation, \bigotimes dust control, \square reclamation, \bigotimes processing, \bigotimes other: gravel sales. The use of the surface water must be in accordance with all terms and conditions of its decree.

COMMENTS: The subject application is for a surface mining operation on approximately 45.08 permitted acres just northwest of Fairplay, Colorado. The primary commodity to be mined at the site is placer gold, with secondary mining of rock, sand, and gravel. The site is proposed to be reclaimed to its current use of wildlife habitat upon completion of this mining operation.

Mining activities at the site are not anticipated to expose ground water. If ground water is encountered, the area will be immediately backfilled to a minimum of 2 feet above the ground water exposure.

Water for processing, dust control, materials handling, and all other consumptive uses at the site will come from the gravity takeoff on the Platte City Placer Ditch located in the NE¼ of the NE¼ of Section 32. The Applicant provided a breakdown of the estimated consumptive use at the site as follows:

Type of Use	Surface Area (square feet)	Consumptive Use (acre-feet/year)
Settling Pond Exposure	1,500	0.052
Holding Pond Exposure	3,200	0.111
Surge Pond Exposure	760	0.024
Gravel Sales (50,000 tons/year)		1.47
Road Watering	w = w x = w	1.7
Sluice and Screen Operation		0.34
Total	5,460	3.697

1313 Sherman Street, Room 821, Denver, CO 80203 P 303.866.3581 F 303.866.3585 www.water.state.co.us

Sullivan Aggregate Pit (M-2015-017) April 30, 2015

Based on information previously received by this office, the Applicant is the owner of 2 cfs of the Platte City Placer Ditch (WDID 2300764), which was originally decreed in case no. CA1636 to divert water from Sacramento Creek for placer mining purposes. The decreed season of use is the middle of May until the middle of September of each year. The use of the Applicant's 2 cfs must be in accordance with all terms and conditions of the decree entered in case no. CA1636.

If stormwater runoff is intercepted by this operation and is not diverted or captured in priority, it must be released to the stream system within 72 hours; otherwise the operator will need to make replacements for evaporation. The Applicant has indicated that due to the porous nature of the soils in the area, stormwater is anticipated to infiltrate into the ground within this timeframe.

The applicant may contact the State Engineer's Office with any questions.

i



1313 Sherman Street, Room 821, Denver, CO 80203 P 303.866.3581 F 303.866.3585 www.water.state.co.us

RECLAMATION PLAN - EXHIBIT E

Section 1. Introduction

Map F-1 shows the details of the site reclamation and the approximate contours that will be restored. The entire site will be restored for the primary use as high altitude wildlife habitat, commercial use and a minor area for residential use. Forestry will be a secondary use. The entire site will be reclaimed with the exception of a) some access roads will be left and b) some undisturbed areas will not need reclamation and c) some pre-law disturbance that may not be re-worked.

Table E-1	
Reclaimed Land Use	Area (Acres)
Residential	0.69
Commercial	6.63
Wildlife Habitat	26.07
Undisturbed Forest	7.40
Roads	1.89
TOTAL	42.68

The approximate acreage breakdown of the reclaimed land uses in permit area is as follows:

For reclamation, the Settling Pond will be filled in and all portable equipment will be moved off site. The office/house on the west property will also remain, and the Water Holding Pond and Surge Pond from Platte City Placer Ditch will also be filled in. There will be no water surfaces in the post-mine landscape. The site will be backfilled, graded and topsoiled on an ongoing basis.

The old pre-law highwall above the sluice location will be backfilled. This highwall is approximately 100 feet long and 20-25 feet high at a slope of approximately 0.9H:1.0V. Once the mining has terminated and the sluice is removed, this highwall will be backfilled to an approximate slope of 2.2H:1.0V. Using the average height of 22 feet, this is a cross sectional area of 315.4 square feet and a volume of 1168 cubic yards. The reclamation slope cannot be any milder since it could get close to the River floodplain. In any case, this slope is far better than the existing slope.

See illustration below:



The maximum disturbed pit area at any one time will be 0.9 acres, which will be reclaimed. The area of the sluice and Settling Pond will be 0.12 acres and the Water Holding Pond and Surge Pond will be 0.36 acres but will not be reclaimed. The roads shown on Map F-1 will be left for future use on the property. Topsoil that exists in stockpiles will be spread over the disturbed area on an ongoing basis to a depth of approximately 6 inches, which is the same as the topsoil stripping depth. The topsoil will then be drill seeded with approved alpine mix described later in this Section.

Section 2. Backfilling and grading

As described earlier in Exhibit D, the post-mine landscape depends upon how much sand and gravel can be sold from the site. The Plan assumes that a minor amount of gravel will be sold, therefore, the premine landscape will be primarily restored, except that the old hydraulicking steep slope at the sluice area will be made to be 2.2H:1V. Most of the pre-mine landscape is milder than 3:1 slope but a few areas may require additional backfilling to attain the 3:1 slope, which will be obtained by the swell of the bank material.

Care will be taken in the regrading to minimize erosion by keeping the gravel berms intact until revegetation is approved. This also ensures that there is no discharge from the site.

Section 3. Topsoiling

Since a portion of the area was disturbed pre-law and no topsoil was salvaged, it may not be possible to place 6 inches of pure topsoil back on the entire disturbed area. All areas that have never been disturbed and will be restored as wildlife habitat areas will receive approximately 6 inches of topsoil from new stripping of virgin soil. As much as is reasonably possible, fines from the Settling Pond will be placed on top of the backfill as a subsoil before the topsoil is placed, to provide a greater thickness as a plant growth medium. It is planned to place subsoil to a depth of 6 inches on the backfilled areas prior to topsoil placement, but this depth cannot be guaranteed since the amount of fines production is not exactly known. In any case, subsoil placement will result in a better total soil profile than the current undisturbed area soil, which is thin and rocky. Some topsoil and subsoil combination (approximately 6 inches total depth) will be placed on the commercial areas. No topsoil or subsoil will be placed on roads that are to remain. All topsoil on the property will be stockpiled for reclamation purposes and these stockpiles are shown on Map C-2.

It is understood that the commercial areas and residential areas cannot be released by the Division without topsoil until these post-mine uses have been accepted by Park County.

The areas to be reclaimed at any one time are shown below in Table E-2:

Та	abl	e	E-	-2
			-	_

Maximum Disturbed Areas		All units in Acres	
at One Time			
Disturbance Description	Mine Area 1 - North	Mine Areas 2,3,4-	
	Side	South Side	
Process Area	0.2	0.48	
Pit	0.9	0.9	
Old Highwall and Setlling	0.18	0.18	
Pond 3			
Water Holding Pond and	0.3	0.3	
Surge Pond			
Access Roads	1.9	1.9	
Topsoil Stockpiles	0.14	0.16	
Totals	3 62	3.92	
	5.02	0.02	
Max Area to Reclaim at one time = Total - Roads	1.72	2.02	

Section 4. Seeding and Mulching

The seed mix to be used for reclamation, together with tilling, weed spraying and application, is given on the following page. :

TILLING

Description		Cost /Acre
Subsoil scarification, (MEANS 32 91 13.23 3050)	······································	\$207.78
Weed control spraying (MEANS 31 31 16.13 3100)		\$145.20
	Total Tilling Cost/Acre	\$357.98

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Birdsfoot Trefoil - Empire	0.50	4.80	\$4.09
Big Bluegrass - Sherman	1.00	20.66	\$6.75
Mountain Brome - Bromar	6.00	9.64	\$19.98
Red Clover - Medium	1.00	6.20	\$1.81
White Dutch Clover - VNS	0.50	9.76	\$1.80
Sheep Fescue - Bighorn	1.00	15.61	\$3.00
Slender Wheatgrass - San Luis	4.00	14.60	\$14.52
Needlegrass, Green - Lodorm	4.00	16.62	\$21.12
Parry's Oatgrass	4.00	8.26	\$95.44
Prairie Junegrass	0.30	15.95	\$10.10
Timothy, Alpine - Native	0.50	14.92	\$13.25
Bluebunch Wheatgrass - Goldar	2.00	6.43	\$10.76
Totals Seed Mix	24.80	143.45	\$202.61
Application	<u>.I</u>		

Description		Cost /Acre
Broadcast seeding [DMG]		\$255.76
	Total Seed Application Cost/Acre	\$255.76

Section 6. Post-Reclamation Drainage and Surface Hydrology

The 3-4 feet high berms described in the Mining Plan will be present in the reclaimed area to provide sediment control during the revegetation period. Once an area has been deemed acceptable to be released from the permit, the 3-4 feet high berm will be removed and blended into the immediate terrain. This area will then be topsoiled and seeded. No ponds will be left after mining is complete.

The new River Crossing will remain after reclamation since the access road will remain on both sides of the River. The old River Crossing has no protruding boulders or rocks of any kind and it is proposed that this crossing be left in since there is actually nothing to remove. The same rocks which are in the River naturally are used for the Crossings, so that there is nothing to actually remove.

Once the berms are removed, the natural patterns of surface drainage will be restored. It is planned that the reclaimed site will be more stable than the existing site, which has some unreclaimed highwalls and steep slopes.

Section 7. Weed Control

The operator will take measures to ensure that the reclaimed land is free of weed infestations. Problem weeds will be monitored closely each spring for the first two years after reclamation to determine if they are invading the area. In the event that noxious weeds are observed on site, a weed control plan will be developed and submitted to the DRMS. Upon approval, the plan will be implemented as agreed. The Division will be consulted regarding any weed infestation area identified on site. It may be necessary to control weeds by mowing after the first year; the feasibility of chemical weed control methods will be studied should it be necessary. The plan may not contemplate total weed removal on the property. Past experience shows that some initial weed cover (especially non-noxious variety) in the first year following retopsoiling is beneficial to the reclamation effort in non-irrigated areas. Weeds tend to provide shade for new grasses, are a means of holding snow on the seedbed longer and protect it from wind and water erosion until the planted species have taken hold.

As lands are reclaimed, the Annual Reports submitted to the DRMS will evaluate any weed locations on the property and what measures should be taken to remediate the issue.

8. Revegetation Success Criteria

Since a portion of the area contains pre-law disturbance without topsoil salvage, it is suggested that revegetation on the reclaimed area should be deemed successful when the perennial vegetation in this area is self-sustaining, long lasting and is not dependent upon irrigation, soil amendments or fertilizer and adequate to control erosion. The vegetative cover will be approximately equal to that of the natural vegetation of the surrounding area for those areas that are newly disturbed. It is requested that the old Sullivan Aggregate Pit March 2015 E-6

highwall near the sluice location be reclaimed at a slope of 2.2H:1.0V. This slope has no topsoil available and is still reclaimed at a slope that is less than ideal due to the proximity of the River. For this reason, vegetation at this location should be deemed adequate when it is stable and adequate to control erosion for reasonable rainfall events. This is a pre-law slope that will be improved since it currently has no vegetation at all.

The topsoil replacement procedures and the revegetation plan outlined earlier should be more than adequate to achieve the goals of the reclamation plan. The majority of the site will be reclaimed using standard procedures for restoring rangeland although the true post-mining land use is commercial, open space and residential.

Due to the efforts of importing topsoil and using generated fines from the plant operations, the retopsoiling of the land will provide much better reclamation than the pre-permit condition where considerable areas were left with no grading, no topsoil and many gravel piles from old hydraulic mining operations.

The revegetated area will be monitored for success of reclamation until accepted by the Division. If revegetation failures occur prior to release, an analysis of the site will be made and the area will be revegetated again as necessary.

9. Monitoring Reclamation Success

Monitoring the reclamation on an ongoing basis will allow minor revisions to assure successful reclamation. The operator plans to use the local NRCS office in Park County to assist in determining the ability of the reclaimed land to control erosion. If minor changes or modifications are needed to the seeding and reclamation plan, revision plans will be submitted to the Division as required. It is hoped that the Division will provide assistance in evaluating the success of the ongoing reclamation process. All areas disturbed and reclaimed and any other important items regarding the reclamation will be submitted in the annual reports to the Division.

RECLAMATION PLAN MAP - EXHIBIT F

The Reclamation Plan Map is Map F-1, which is located in Appendix C.

WATER INFORMATION - EXHIBIT G

Section 1. Surface Water General Discussion

The site is located on a gravel terrace immediately south of the Middle Fork of the South Platte River. Although the terrace is primarily dry, water from Sacramento Creek and the Platte City Placer Ditch have been used for placer mining in the area since the 1860's. All of these waterways can be seen on Maps C-1 and C-2.

The Middle Fork of the South Platte is a high energy river at this location since the top of the watershed is only a few miles to the north at Hoosier Pass. The gravels in the banks and in the surrounding area have large rocks, cobbles and rocks of all sizes as well as some fines.

Sacramento Creek runs only intermittently; usually from spring thaw in May to October. In dry years, the Creek may dry up sooner than this date. When this happens, the Platte City Placer Ditch also dries up since its source is the Sacramento Creek west of the permit area.

The Middle Fork of the South Platte and Sacramento Creek are generally clear, without much sediment and without significant dissolved solids since fine sediment in the bottoms of these waterways have been carried downstream many years ago. No excavation for the mining operation will get closer than 100 feet to the closest bank to the Middle Fork. The Settling Pond and all other structures except the River Crossing will be out of the 100 year floodplain

Quaternary age flooding of the River produced the gravel deposits (with alluvial gold) that currently exist on the site. Glaciers played a large part in the surficial geology of the area. This is seen by the various hummocky moraines in the area as well as the carved steep drainages above the permit area.

Section 2. Water Supply for the Operation

Water for processing, dust control and materials handling and pond evaporation and all other consumptive uses will come from the gravity takeoff in the Platte City Placer Ditch as shown on Map C-2. This water is measured at the takeoff and is delivered to the Surge Pond and then the Mine Water Holding Pond, using small ditches. This Point of Diversion is regulated under the right owned by the Sullivan Aggregate Pit March 2015 G-1 landowner and allows water extraction up to 2.0 cfs. The gold operation has used this source in the past mining and processing activities.

Section 3. South Platte River and Floodplain

Upstream from the site, the Middle Fork of the South Platte River drains an area of approximately 48 square miles. This area has wet meadows in the floodplain, evergreen wooded sideslopes up to timberline and a substantial amount of land above timberline consisting of high altitude grasses and forbs among a significant amount of rocks with lichens. A number of lode gold mines existed in the basin, of which the Magnolia, Dollie Varden, Paris and Russia mines were the most famous. Much of the upstream basin is extremely steep, with 4 - 1400 feet high mountains in the area - Mt. Bross, Mt. Democrat, Mt. Lincoln and Mt. Cameron. Mosquito Gulch, which is a major stream draining the area west of the site, enters the Middle Fork contains the London Mine, Hock Hocking and other notable mines.

Water quality from the closest USGS gage (6693980), which is located immediately north of Fairplay and 3 miles south of the minesite revealed little information. The gage was only sampled for quality data once per year from 1978 to 1980 and very little data was gathered. An investigation into USGS and EPA reports on water quality in the South Platte River basin revealed that water quality at the upper reaches of the basin, near Alma, was good in spite of considerable past lode mining upstream from the Alma Placer. There were trace elements found in the upstream portions of the basin due to past lode mining but no problems with pH, suspended solids, dissolved solids, nitrogen, nitrates, pesticides and organic chemicals.

The London Mine, located upstream on Mosquito Creek, is known to contribute some lower pH water with some dissolved metals but this site's discharge is operating with a permit from the Water Quality Control Division and should always be in compliance. The flows from the contaminated water this mine are only 15-30 gallons per minute and this small amount is drastically diluted by the time the water gets to the River at the permit area. All of the USGS papers that evaluated the South Platte basin concluded that the water quality problems in the watershed occur much further downstream, with agricultural chemicals and urban development.

The 25 year peak flow for the drainage basin of the River just upstream of Mosquito Gulch is approximately 600 cfs. With the addition of Mosquito Gulch, the approximate peak flow for a 25 year event is 900 cfs. The FEMA 100 year floodplain is shown on Maps C-1, C-2 and Map F-1. It was taken from the FIRM Map 08093CO485C (Panel 485 of 1350) and the floodplain was scanned and registered into the CAD Map for the permit. The FEMA Map is included in Appendix C as Map C-3. The No mine facilities other than the River Crossing are located in the 100 year floodplain.

Since the mining operations and all associated activity will operate out of the River floodplain area and will not discharge into it, it is not expected that the activity presented in this application will increase any sediment, trace elements, dissolved solids or other water quality parameter in any way for the River. All runoff on the active site will seep into the active pits and gravel berms located throughout the disturbed area. The final plan incorporates the reclamation of the site, which will have revegetation on all areas disturbed.

Section 4. Surface Water Handling in the Permit Area

As described in the Mining Plan, the site will have no discharge due to the following items:

- 1- There will be depressions and porous gravel present in the excavated pits of the new operations.
- 2- The use of earthen berms of 3-4 feet height at the low point of all of the mining areas, as shown on map C-2. The berms will be employed before topsoil stripping and will remain until reclamation is deemed adequate and then they will be smoothed out into the adjacent terrain. Any water trapped behind the berms will infiltrate into the ground within 72 hours since the berms will be constructed from poorly sorted gravels located on site.
- 3- The southern portion of the area below the office will drain into a berm as shown on Map C-2. The area below this berm will be captured by the Settling Pond. No discharge will take place from this pond. Water from the pond will be recycled back to the sluice as needed for proper sluice operation.
- 4- The access road on the north side of the River Crossing will have (3)- 2 foot high swales to trap sediment and avoid a discharge. One will be near the top of the road where the road starts downward toward the River, the other is at the midpoint and the third is 2' vertically above the normal high water level in the River. The lowest swale will have 3 sides so that water cannot go around the swale to the River. All of these swales are shown on Map C-2. The south side access

road is at a much milder grade and very little of the road runoff will drain to the River. For this reason, only (1) - 2 feet high swale is needed. This swale is also 3-sided to prevent any runoff from reaching the River.

The area that drains to the northern 3-sided swale is 0.08 acres. This is the area to the middle swale over a width of 25 feet. The area draining to the south side crossing is 0.05 acres. The runoff from these areas are calculated below:

Assumptions:

using a curve number of 86 for unsorted gravel with no vegetation, a Type 2 - 100 year 24 hour storm of 3.0 inches,

Surveadd hydrologic calculations show the following:

North Side of Crossing

Runoff Curv	unoff Curve Number and Runoff							Thu Jul 23 12:17:15 2				
Project:	Project: JRS Mining					7 :	: Greg L			Date:	07/23/15	
Location: North Side Road Crossing Developed						Checked: Date:						
1. Runoff (Curve Numbe	er (CN))									
Cover description					CN		Soil G	roup	A	rea (Acre)		
porous grav	vel				86		С		0	.080		
CN (weighte	ed) :	86.0										
Total Area:	:	0.080	Acre									
2. Runoff												
Return Peri	iod:			100-Year								
Rainfall, I	P:			3.00	in							
Runoff, Q:				1.6625	in							
Runoff Volume: 0.0111			Acre-Ft									

This area of .011 acre feet is 17.7 cubic yards. Therefore, the lowest swale must be able to hold this volume to prevent a discharge. The swale and road will be created to contain this volume.

South Side of Crossing

Runoff Curve	noff Curve Number and Runoff							Thu Jul 23 12:32:26 20				
Project: JRS Mining Location: South Side Road Crossing Developed						By: Greg L Date: Checked: Date:					07/23/15	
1. Runoff Cu Cover descr porous grave	urve Numbe iption el	r (CN))		CN 86		Soil C	Group	A: 0	rea (Acre) . 050		
CN (weighted Total Area:	d):	86.0 0.050	Acre									
2. Runoff Return Perio Rainfall, P Runoff, Q: Runoff Volum	od: : me:			100-Year 3.00 1.6625 0.0069	: : 2	in in Acre-F	't					

This area of .0069 acre feet is 11.1 cubic yards. Therefore, the 3 sided swale must be able to hold this volume to prevent a discharge. The swale and road will be created to contain this volume. It should be kept in mind that all mine road runoff has never been subject to discharge permits at coal mines.

Once the mine is reclaimed, the ponds will be regraded and reclaimed.

Section 5. Groundwater

The proposed operations are in recent gravels of the upper reaches of the Middle Fork of the South Platte River. The area was glaciated in the last ice age and moraine deposits are also prevalent throughout the drainage basin to Fairplay. The gravels are approximately 50 to 130 feet thick in the permit area and are underlain by Pennslvanian sandstones and shales that have been turned upward at steep angles. The gravels are interbedded with conglomerate, sand and clay beds located above the bedrock. The alluvium immediately above the bedrock is most likely to have the highest concentration of alluvial gold. Upstream from the permit area, the mountains of the Mosquito Range are schist, gneiss and intrusive granite of Pre-Cambrian age. majority of the mining areas is expected to be encountered approximately 40-60 feet from the surface. No ground water will be exposed.

The water quality of the water in the alluvial gravel is good with acceptable pH, low dissolved solids and virtually no suspended solids. The lode gold deposits and old mines upstream have not contributed significant acid water and/or heavy metals or other ions of concern downstream. Past experience with excavations in this area have shown that the gravel below the water table is clean and free of any water quality issues.

There is a well within the permit area (owned by the Operator) called the Sullivan well, which is located at the office/house area. There is one other well within 600 feet of the permit boundary, which is the well adjacent to the residence southwest of the southwest portion of the permit area, as shown on Maps C-1 and C-2. This well will not be affected since no groundwater will be disturbed for this operation. The existing wells will be monitored and communication will be maintained with the landowner, Donald and Jessie Petersen. It is planned that well level measurements will be taken at least once per year from both wells and reported with the Annual Report to the Division.

Section 6. Water Consumption for the Operation and Water Rights

The proposed gravel operation will use water for dust suppression on roads and in plants, raw gravel screening and stockpiling as well as evaporation from the mine excavation pond, the plant settling pond and the infiltration pond. Water will also be consumed in gravel sales. The Table D-3 shows the consumptive uses predicted annually for the site. These uses are well within the 2.0 cfs water right that the permittee has for the property. As shown in Table D-3, water consumptive use annually is predicted to be 3.7 acre feet. No crushing will be employed.

WILDLIFE INFORMATION - EXHIBIT H

The following resources were used in evaluating wildlife impact:

- Essential Habitat for Threatened and Endangered Wildlife in Colorado Wildlife Management Section, DOW, Department of Natural Resources, State of Colorado, 1978.
- Colorado Bird Distribution Latilong Study, DOW (1978).
- Colorado Mammal Distribution Latilong Study, DOW (1978).
- Park County Select Species List, Wildlife Inventory Information, DOW (1977)
- Park County Wildlife Resolution, No. 31.
- Colorado Threatened or Endangered Wildlife Designation of Species DOW (1983).

The proposed mine site is located .2 miles northwest of the town of Fairplay, Park County, south of Colorado Highway 9 and immediately surrounding the Middle Fork of the South Platte River. The site is at the 10,100 foot level east of the crest of the Continental Divide, and a significant portion of the permit area has been significantly disturbed by years of previous on-site mining dating to the 1860's.

Vegetation surrounding the site and on the undisturbed portions of the site consists of the conifer overstory (Lodgepole pine and Bristlecone pine), Aspen (located on glacial moraines north and east of the site) and the herbaceous under-story (Kinnikinnick, mixed grasses and forbs). Pinewoods are found along the banks of the River and along portions of Sacramento Creek. Dry high altitude meadow exists on areas of the western side of the permit area.

Both cottontails and jackrabbits have been sighted, and there are elk, deer, coyote and fox present. The gravel tailing piles (which have been present for many years before initial permit approval in 1984), Colorado Highway 9 and the Town of Alma have acted as a deterrent to land migration for years for big game. The start-up of the mining operation would therefore not interrupt any migration routes.

Based on the referenced visual observations, and using the habitat types present on the site as described and seen on Map C-1, generalized descriptions of non-threatened and endangered wildlife species potentially present on the site were developed. Common mamalian species known to inhabit the area around the site include a number of rodents, snowshoe hares, white-tailed jackrabbits, coyotes, red fox, stripped skunks, badgers, mountain lion, bobcats, elk, mule deer and bighorn sheep.

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Avian species which could be expected on the site and in the nearby area are migratory fowl, including the common loon and horned grebe, raptors such as red-tailed hawks, golden eagles, prairie falcons and kestrels and a variety of passerines, including warblers and sparrows. Latilong data for applicable habitat types were reviewed, but no attempt has been made to enumerate a complete list of species based on historical surveys.

Reptile and Amphibian species are possibly present on the site, in spite of the elevation being over 10,000 feet, include tiger salamander and red-lipped prairie lizard. Due to the elevation and scarcity of permanent water bodies, reptilian and amphibian species can be highly variable and are not enumerated. No threatened or endangered species are known to occupy the site. Threatened and endangered species whose historical ranges include the mine site are listed as follows:

<u>Species</u> Greenback cutthroat trout Peregrine falcon Gray wolf - C.I. nubilus Grizzly bear Wolverine Lynx Bald eagle Whooping Crane

In 2014, the Denver Post reported that a wolverine was tracked using a radio collar to be wandering in the mountains west of Alma. It is believed that the wolverine is no longer in the area but this was a very unique event.

1. Significant Game Resources on the Affected Lands

Elk and deer use the flat portions of the undisturbed terraces above the river for wintertime habitat and grazing. These animals can also be seen at any time of year on the site although the old disturbed areas have little to offer these animals for forage and they do not spend much time there.

2. Significant Non-Game Resources on the Affected Lands

Bald eagles have not been sighted in the permit area and no nests have been seen within the vicinity of the permit area. Many hummingbirds are found in the area during the summer months.

3. Seasonal Use of the Affected Lands

As described in Item 1 above, elk and deer use the low undisturbed areas in the winter for grazing on the meadows that have not been disturbed as well as the undisturbed terrace areas in the southeast portion of the permit area.

4. Presence and Estimated Population of Threatened and Endangered species in the area.

Bald eagles are the only known threatened or endangered species to use the area. The area is too high an elevation for Gunnison Sage Grouse, and they never been seen in this area

5. Fish Resources

Although rare, cutthroat trout are possible in the South Platte River at this location. This is not an endangered or threatened species but is a species of special concern. Rainbow trout are also found at this location in the River. Fishing is a common activity upstream and downstream of the site and the water quality of the River must be maintained. For this reason, precautions have been taken to ensure that no runoff occurs from the site.

6. General Effects of the Operation on the Existing Wildlife of the Area

Due to the hydrologic controls on sediment and any other type of water contamination such as spills and leaks, all waters downstream will not be affected by the operation. Since a large portion of the prepermit lands were primarily a wasteland of abrupt slopes of bare gravel, past mining cuts, with no topsoil or vegetation, the reclamation plan proposed in this document will serve to increase wildlife use of the area by providing revegetated open space areas with a diverse vegetation and better sediment control for downstream flows. The permittee, will work with the local office of the Colorado Division of Parks and Wildlife to minimize any minor impacts that may occur during the mining and reclamation activity.

The following measures have been employed during mine operation:

 Protection of air quality will be maintained by washing all material on the trommel and screens with large amounts of water. Watering of permit area roads (or application of magnesium chloride) as necessary will take place but the daily production is very low and overall, it is a very small operation.
 Prevention of surface water discharge by utilizing infiltration as the means to remove runoff.
 Disturbance of wildlife may occur during the mining and reclamation activities of the undisturbed portions of the gold mine activity. However, the disturbance will be mitigated to the extent possible by minimizing the amount of acreage disturbed at any one time (0.9 acres of mining pit area). All existing roads will be utilized and no significant new roads are planned.

4) The reclamation operation will produce revegetated land in the old pre-law cuts which does not currently exist on the property. These areas will enhance the future wildlife use of the site and will also lessen slopes left by old hydraulic mining.

SOILS INFORMATION - EXHIBIT I

The following resources were used in developing soils information:

- Soil Conservation Service (SCS). 1976. Range Site Description for Dry Mountain Outwash (Code 316).

- Soil Conservation Service (SCS). 1976. Range Site Description for Mountain Outwash (Code 311).

- U.S. Dept. of Interior (1950), Gold Placers and their Geologic Environment in Northwestern Park County, Colorado, U.S.G.S. Bulletin 955-D.

Undisturbed soils in the permit area generally exhibit profile development to depths of 12 to 24 inches. Residual soils in the these areas have A horizons that are approximately four to six inches of dark brown sandy loam or loam. These soils have a light brown surface that is very gravelly. However, the gravels are usually in the fine gravel range (4mm to 20mm) instead of exhibiting the full range of gravels.

The soils over the area have B horizons about seven to ten inches thick usually of sandy loam, sand or loamy sand textures. Parent materials are generally from quaternary glacial till and alluvium, the most common are gneisses. The weathering of this material has led to the development of the generally sandy soils and cobbly profile occurring on site. The C horizon including weathered bedrock and gravel is encountered within 24-36 inches from the surface.

The placer mining in the area started in the 1860's and was intermittent through the years. No topsoil was ever salvaged from these activities. There are approximately 4.67 acres within the proposed disturbance area that have no soil from pre-law activities in the past. Also, approximately 300 cy of topsoil has been salvaged from the 2013 permit on the JRS Mining property. This topsoil has been stockpiled in Stockpile 4 around the Water Holding Pond.

The gold bearing gravels located in this area are primarily glacial in origin. These gravel deposits are judged to be the lateral and possibly some terminal moraines left by the last retreating glaciers appear to be largely unchanged by subsequent erosion actions east of the river. West of the river, where stream action and man have destroyed the distinctive structures of the gravel deposits, sands in the Alma

Mining District are largely granitic gneisses with a small percentage of sedimentary, volcanic and metamorphic materials. The sizing of the gravels is estimated in Table I-1.

TABLE I-1

Sizing Estimates of Gravels on the JRS site. Plus 24 inch rocks- few above 36 inches 10% Plus 6 inch rocks minus 24 inch rocks 10% Plus 2 inch rocks minus 6 inch rocks 30% Sands minus 2 inch rocks 40% Clays and very fine sands 10% Total 100%

Site Specific Soils

Map unit symbol	Map unit name	Rating
NOTCOM	No Digital Data Available	
Subtotals for Soil Survey Area		
Summary by Map Unit — Telle	r-Park Area, Colorado, Parts of Park and Teller Counties (CO638)	
Map unit symbol	Map unit name	Rating
7	Bassel very gravelly sandy loam, 15 to 55 percent slopes	В
8	Bassel-Reinecker complex, 15 to 55 percent slopes	в
28	Dumps, dredge tailings	
34	Fulvance cobbly loam, 20 to 50 percent slopes	С
47	Hodden sandy loam, 1 to 5 percent slopes	А
52	Hodden very gravelly sandy loam, 4 to 15 percent slopes	в
64	Lanswick loam, 1 to 5 percent slopes	в
75	Pits, gravel	
79	Platdon loam, frequently flooded, 0 to 3 percent slopes	B/D
84	Redspoon loamy fine sand, 5 to 20 percent slopes	В

All of these soils are shown on Map B-3 in Appendix C. The detailed information on all soils in the permit area is included in Appendix B.

Soil Salvaging

As described in the mining plan, all topsoil will be salvaged and used in reclamation. It is expected that total salvage depths in the virgin areas will average 4 to 8 inches and there will be no differentiation between the A,B, or C horizons. The soils are simply too thin to try to salvage them separately. Only Sullivan Aggregate Pit March 2015 I-2

minor pockets of suitable fines are available from the disturbed areas. Most of these area gravels were washed by past pre-law attempts to mine gold and the fine material for rooting no longer exists.

In addition to salvage of soils from virgin areas, substitute topsoil will be salvaged from the Settling Pond and the gravel washing operation. This material will be stored in a substitute subsoil stockpile

VEGETATION INFORMATION - EXHIBIT J

1. Site Description and Land Use Information

Existing Conditions

The following resources were used in identifying vegetation on site:

- Soil Conservation Service (SCS). 1977. Range Site Description for Dry Mountain Outwash (Code 316).

- Soil Conservation Service (SCS). 1976. Range Site Description for Mountain Outwash (Code 311).

- Soil Conservation Service (SCS) 1979. Land Use and Natural Plant Communities, Park County, Colorado (Map and Technical Guide Documents).

The site consists of three distinct vegetation communities which are easily seen in the aerial image of Map C-1. These are:

 Forest habitat type along the poorer soils along the bank of the Middle Fork of the South Platte River. The dominant conifer overstory (approximately 30-40 percent) consists of Lodgepole pine (Pinus contorta), some Spruce, and some aspen. The herbaceous understory layer consists mainly of Kinnikinnick (Arctostaphylos uva-ursi) with mixed grasses and forbs. These are primarily Arizona fescue, Mountain muhly and Spike fescue. This area coincides with Soil Map unit FA (Forested association with varying slopes). Most of this area will remain undisturbed.

2) The subalpine meadow in the relatively flat soils of the Map Unit UF, which exhibits primarily Arizona and Idaho fescues and funged sagebrush, with poa and muhly as subspecies. Indian ricegrass, and muttongrass. Other grasses not forming a major portion of the graminoid community are Idaho fescue (Festuca idahoensis), Spike fescue (Leucopoa kingii), and Junegrass (koeleria cristata). Shrubs also present were Mountain sagebrush (Artemisia Frigida), currant and shrubbry cinque-foil (Dateatilla fructicosa). In open and undisturbed parks, Pasture sagebrush (Artemisia frigida) is the dominant shrub.
3) Previously disturbed areas have very gravelly and cobbly material on the surface which provides little opportunity for natural revegetation. This area coincides with Soil Map unit MS (Mine soils), have very sparse vegetation cover but what grasses do occur are Foxtail barley, Bottlebrush squirreltail, and Blue wild-rye. These soils usually exhibit stands of rabbitbrush as well, in the areas that have been drastically disturbed, but still have an adequate plant-growth medium.

In areas that have adequate water, i.e. the previously hydraulicly mined draws or depressions, willow (Salix spp) is the dominant shrub. The graminoids that occur in these draws are knotweed (Polygonunspp.), Kentucky bluegrass (Poa pratensis) and what appears to be Blue wild-rye (Elymus glaucus).

Less frequent in occurrence are Mountain Bottlebrush squirreltail (Sitanion hystrix).

No wetlands will be disturbed as part of this operation.



Photo 3- from North side of River showing thin soil, (disturbed in foreground) with light grass and forb cover. Aspens and pines in background are on South side of River in the permit area. Old highwall is also seen.

CLIMATE INFORMATION - EXHIBIT K

The average elevation of the site is 10,060 feet above sea level. The summers are mild with usually an afternoon rain daily. The mild weather extends from about mid-May until the end of September. The winters in the area are usually severe and very cold. Wind gusts can be extreme at any month of the year.

The climate of northwestern Park County is semiarid with an average annual precipitation of 18 inches estimated by the State Climatologist Office. Approximately70 percent of the annual precipitation occurs as rain throughout the growing season. Some snow cover occurs but is usually light and drifted by wind. The frost free period is approximately 80 days and occurs from June 10 to August 30. The climatology data recorded at Leadville, Colorado, for the U.S. Department of Commerce indicated that the average annual precipitation is approximately 16.4 inches and the annual mean temperature is 35.2 degrees Fahrenheit. Leadville is not far from this site and sits at a similar elevation. There is weather data available for Fairplay, but NOAA only has this data for the year 2010. It is included after the data for Leadville.

Leadville Colorado Climate Data

	Avg. Degrees	Avg. Rainfall
	Fahrenheit	Inches
January	18.2	1.52
February	18.8	1.33
March	22.1	1.35
April	30.8	1.48
May	41.9	1.11
June	50.8	.93
July	56.8	1.92
August	54.5	1.96
September	48.1	1.22
October	38.6	1.05
November	26.3	1.05
December	19.2	1.49
Annual:	35.2	16.4

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RECLAMATION COSTS - EXHIBIT L

The worst case disturbance to be reclaimed will be while mining is occurring in Area 2, 3 and 4. The permittee makes the commitment to keep only 0.9 acres of pit area to be reclaimed at any one time.

During the life of the mine, the maximum disturbed area to be reclaimed is from Table D-2, which 0.9 acres of pit area, and 0.48 acres of process plant area (including the Settling Pond). A commitment has also been made to reclaim the old pre-law highwall near the old River Crossing. This area is 0.18 acres and will require 1168 cubic yards of backfill. Roads will remain after reclamation at the request of the landowner. The Water Holding Pond and surge Pond total 0.3 acres. Therefore, the total maximum disturbed area to be reclaimed is 2.02 acres. Other pit backfill will require 4700 cubic yards, therefore the total backfill is 5868 cubic yards.

All roads will remain for site access after reclamation. All other areas such as the residence, the water well and some sheds around the residence will remain after reclamation.

Table L-1		Worst Case			
	125 C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Reclamation			
		Costs			
Task Item	Cubic Yards	Price per CY	Cost per Acre	Cost	Acres
Backfilling	5868	1.5		\$8,802	
Grading			350	\$707	2.02
Soil Replacement	1629.5	2.3		\$3,748	2.02
(6")					
Seeding			300	\$420	2.02
Total Base Costs				\$13,677	
DRMS	30%			\$4,103	
Management					
Total Costs				\$17,780	
OTHER PERMITS AND LICENSES REQUIRED - EXHIBIT M

The following permits are needed for the site:

1) No Special Use permit from Park County at this time.

2) An APEN for emissions will be filed for the Fugitive dust from the site but it is believed that no permit will be required since annual production will be less than 70,000 tons.

3) No CDPHE NPDES permit is needed as there is no runoff for the 100 year event.

4) No fuel will be stored on site so no SPCC Plan is needed.

5) A Stormwater Management Plan is needed since the site have mining and reclamation activity although it will contain the 100 year 24 hour runoff.

6) A US Army Corps of Engineers will require a Nationwide Permit for the new River crossing. This Permit has been approved and is enclosed in Exhibit D.

7) A CDOT Highway access permit is needed for all accesses that will be used for the site. This permit has existed for many years. If significant gravel sales occur, the changes will be discussed with CDOT to determine if a new access permit is needed.

8) No APEN is needed for any generator or the process equipment since the amount of material processed daily is so small. The annual maximum tonnage excavated and processed is 45,000 tons or 30,000 cubic yards.

All permits required, including the APEN, will be provided to the Division as they are received.

SOURCE OF LEGAL RIGHT TO ENTER - EXHIBIT N

As shown on Map B-2, there are three parcels within the permit area. The North parcel is owned (surface and minerals) by JRS Mining LLC and is zoned for mining.

The surface and mineral owners of the property are JRS Mining LLC and John R Sullivan. The ownership documents for right of entry are presented in Appendix A.

Permit Area Parcel Breakdown					
County					
Parcel List					
Schedule	Owners	Acreage	Description	Zoning	Comments
#					
11655	John R Sullivan	27	Main parcel south of	Residentail	
			River	& Mining	
11850	John R Sullivan	Now part of	This former parcel was	Residentail	This parcel's right of
		Sch 11655	absorbed into	& Mining	entry is included in
			Schedule 11655. The		Schedule 11655.
			acrea of 27 acres		
			reflects this.		
47300	JRS Mining LLC	20	Parcel north of River	Mining	Sold to JRS in 2012

John R Sullivan has provided Right of Entry in a letter to JRS Mining LLC, which is attached in Appendix A. Park County Records are also attached in that Appendix which shows that JRS Mining LLC is the owner of parcel Schedule 47300, north of the River. Parcel Schedule 11850 was a separate parcel but was absorbed into Parcel 11655 in the year 2012. Park County Assessor's office verified that this is the case and apologized that the Schedule Map had not yet been updated to reflect this change. See e-mail in Appendix A from the Assessor's office.

The Assessor was also asked about the Map which shows that Schedules 11655 and Schedules 47300 are not exactly contiguous, leaving a small gap at the River itself. The Assessor verified that there is no Parcel between the two subject parcels and they were all one mining parcel in the past and have been subdivided. The Assessor's office and the County GIS Department supplied the following e-mail showing that they have owner rights across the River:

From: Cindy Jones <<u>CJones@parkco.us</u>> Date: July 14, 2015 10:35:58 AM MDT To: "<u>ToddSull@hotmail.com</u>" <<u>ToddSull@hotmail.com</u>> Subject: Your question on who owns the land

Good Morning,

You posed the question as to who the land that is under the river. According to the Assessor's office as long as the owner is the same on both side of the river that owner owns the land.

Hope this helps.

Cindy

Cindy Jones GIS Specialist 719-836-4287

Park County Colorado 1246 CR 16 Fairplay, CO 80440

Office closed on Fridays

OWNERS OF AFFECTED LAND AND MINED SUBSTANCE -EXHIBIT O

The surface and mineral owners of the property are JRS Mining LLC c/o John Sullivan 850 N Davidson St. Eloy, AZ 85131 (866)-535-7946

The adjacent landowners within 200 ft are listed below in Table O-1.

Parcel Schedule Number	Ownership Type	CAMA Address	Name 1	Name 2
2271	Private	5828 S DRY CREEK COURT	ZIGAN THEODORE	
11800	Private	69 DEERFIELD CIR	MILLER HAROLD O	MILLER MARTHA
45499	Private	PO BOX 6362	GUTHRIE ADAM	
7289	Private	8756 MEADOW CREEK DR	WOODS JEFFREY L	
45806	Private	PO BOX 2146	MILLER CRISELDA Y	MILLER MARK EDWARD
5068	Private	PO BOX 499	GILLILAND MARY ELLEN	GILLILAND LAWRENCE J
43796	Private	PO BOX 499	GILLILAND MARY ELLEN	GILLILAND LAWRENCE J
6149	Private	PO BOX 651	VANSTEENBERGHE ALAN	VANSTEENBERGHE JOANNE
13831	Private	7390 W EASTMAN PL UNIT 318	SHAWE DANIEL R TRUSTEE	SHAWE HELEN M FAMILY TRUST
6282	Private	218 JACKSON AVE	CRANMER SYLVIA S	CRANMER BRIAN K
4770	Private	1610 YATES	SHEA KEVIN G	
11837	Private	PO BOX 1898	PETERSEN DONALD F	PETERSEN JESSIE R
4340	Private	P.O. BOX 2134	JACKSON ROY D	
14619	Private	8772 CARR LOOP	ANDREWS JAMES GLEN	
14351	Private	218 LEEWARD ISLAND	MAVRONICOLAS ANTHONY	
30214	Private	158 GLENWOOD DR	PLAYFAIR LAND COMPANY LLC	
43376	Private	PO BOX 398	ALLEN JACK	
45807	Private	1449 DUNSFORD WAY	WINDING RIVER RANCH FAIRPLAY LLC	
*note data taken from Park County GIS: http://maps.parkco.us:3000/				

Table O-1: Surrounding Landowners within 200 ft of Permit Boundary

The respective boundaries of each parcel schedule number section along with the 200 ft extended permit boundary line are shown below in Map B-2.



MUNICIPALITIES WITHIN TWO MILES - EXHIBIT P

The Town of Fairplay is located within $\frac{1}{2}$ mile of the site.

PROOF OF MAILING NOTICES TO COUNTY COMMISSIONERS AND SOIL CONSERVATION DISTRICT - EXHIBIT Q

<u>Proposed Notifications to County Commissioners and Teller/Park Soil Conservation District</u> Notifications and accompanying permit forms has been sent to the Park County Soil Conservation District and the Park County Commissioners. See attached signed forms. 1541 Warrlugtun Court Jarker, CO_USA_80138

Greg Lewicki And Associates, PLLC

e (303) 346-5196 Fax: (303)-346-093-

February 28, 2015 Park County Commissioners 501 Main Street Fairplay, Colorado 80440

Dear Commissioners:

On behalf of JRS Mining, LLC, please see the enclosed notice for 112 permit application with the Colorado Division of Reclamation, Mining and Safety for the gold placer operation and gravel pit known as the Sullivan Aggregate Pit. The Colorado Division of Reclamation, Mining and Safety needs evidence that you received this notice. Therefore, please sign and date the box below. Please call me if there any questions. Thank you.

Sincerely,

Greg Lewicki

Greg Lewicki, P. E. Greg Lewicki and Associates

The application was received on the following date: <u>3/2/15 3'.15pm</u> Signed by: <u>Way Hawf</u> Park County

NOTICE OF FILING APPLICATION FOR COLORADO MINED LAND RECLAMATION PERMIT FOR REGULAR (112) CONSTRUCTION MATERIALS OPERATION

NOTICE TO THE PARK COUNTY COMMISSIONERS

JRS Mining LLC, whose address is 850 N Davidson Street, Eloy, Arizona, 85131 and phone is 863-660-0763, has applied for a Regular (112) Reclamation permit (M-1985-029) from the Colorado Mined Land Reclamation Board (the "Board") to conduct the extraction of construction materials and placer gold in Park County. The attached information is being provided to notify you of the location and nature of the proposed operation. The entire application is on file with the C o l o r a d o Division of Reclamation, Mining and Safety (the "Division") and the Park County Clerk or recorder.

The applicant/operator proposes to reclaim the affected land to wildlife habitat, and residential use Pursuant to Section 34-32.5-116(4)(m),.C.R.S., the Board may confer with the local Soil Conservation District before approving of the post-mining land use. Accordingly, the Board would appreciate your comments on the proposed operation. Please note that, in order to preserve your right to a hearing before the Board on this application, you must submit written comments on the application within ten (20) days after the last publication of this notice pursuant to Section 34-32-5-112(10),C.R.S.

If you would like to discuss the proposed post-mining land use, or any other issue regarding this application, please contact the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, Colorado 80203, (303) 866-3567.

11541 Warrington Court Parker, CO / USA / 80138

Greg Lewicki And Associates, PLLC

Phone (303) 340-5196 Fax: (303) 346-6934 F-Mailtinto a tewicki.hiz

February 27, 2015

Mary Menz

Teller Park Soil Conservation District 112 South Baldwin Street Woodland Park Colorado 80863-3126 Woodland Park Colorado 80863-3126 *800 Regenet* Dr. # 160

and

Dear Ms. Menz:

On belhaf of JRS Mining, LLC, please see the enclosed notice for 112 permit application with the Colorado Division of Reclamation, Mining and Safety for the gold placer operation and gravel pit known as the Sullivan Aggregate Pit. The Colorado Division of Reclamation, Mining and Safety needs evidence that you received this notice. Therefore, please sign and date the box below. Please call me if there any questions. Thank you.

Sincerely,

Greg Lewiski

Greg Lewicki, P. E. Greg Lewicki and Associates

The application was received on the following date: March 3, 2015

NOTICE OF FILING APPLICATION FOR COLORADO MINED LAND RECLAMATION PERMIT FOR REGULAR (112) CONSTRUCTION MATERIALS OPERATION

NOTICE TO THE TELLER-PARK SOIL CONSERVATION DISTRICT

JRS Mining LLC, whose address is 850 N Davidson Street, Eloy, Arizona, 85131 and phone is 863-660-0763, has applied for a Regular (112) Reclamation permit (M-1985-029) from the Colorado Mined Land Reclamation Board (the "Board") to conduct the extraction of construction materials and placer gold in Park County. The attached information is being provided to notify you of the location and nature of the proposed operation. The entire application is on file with the Colora do Division of Reclamation, Mining and Safety (the "Division") and the Park County Clerk or recorder.

The applicant/operator proposes to reclaim the affected land to wildlife habitat, and residential use Pursuant to Section 34-32.5-116(4)(m), C.R.S., the Board may confer with the local Soil Conservation District before approving of the post-mining land use. Accordingly, the Board would appreciate your comments on the proposed operation. Please note that, in order to preserve your right to a hearing before the Board on this application, you must submit written comments on the application within ten (20) days after the last publication of this notice pursuant to Section 34-32-5-112(10), C.R.S.

If you would like to discuss the proposed post-mining land use, or any other issue regarding this application, please contact the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, Colorado 80203, (303) 866-3567.

PROOF OF FILING WITH COUNTY CLERK - EXHIBIT R

Greg Lewicki And Associates, PLLC

1154: Warrington Court Parker, CO 115A 30138 Phone (305) 346-5196 Fux: (303)-346-6934 E-Mailtanfo/Jewicki.hiz

February 24, 2015

Debra Green Park County Clerk and Recorder 501 Main St. P.O. Box 220 Fairplay, CO 80440

Dear Ms. Green, Clerk and Recorder:

On behalf of JRS Mining, LLC, please see that the enclosed Application for a 112 permit with the Colorado Division of Reclamation, Mining and Safety for the gold placer operation and gravel pit known as the Sullivan Aggregate Pit is placed on public file. The Colorado Division of Reclamation, Mining and Safety needs evidence that you received this application. Therefore, please sign and date the box below. Thank you.

Sincerely,

Oreg Jewicke

Greg Lewicki, P. E. Greg Lewicki and Associates

The application was received on the following date: $MAC \supseteq$ 2015 Signed by:

PERMANENT MAN-MADE STRUCTURES - EXHIBIT S

The following is an inventory of man-made structures within 200 feet of the permit area. All of these structures are shown on Map C-1.

- a) State Highway 9, a two lane paved highway owned by CDOT
- b) Power poles and overhead power line along north side of Platte Drive owned by Xcel Energy.

c) Platte City Placer Ditch, owned by no real company since it is not an irrigation ditch that is constantly maintained. There are definitely a few users downstream who have rights to the Ditch but there is no Company that supervises the Ditch. Garver Brown, Water Commissioner based in Fairplay, confirmed that this was the case. In order to account for the relocation of the Ditch on the JRS Mining property, the plans for the relocation were presented to Garver Brown, as well as the commitment that Garver Brown conduct an inspection of the new Ditch location prior to allowing water to enter it. Garver Brown cannot agree in writing that these terms are acceptable but he feels that they are acceptable. Since there is no Company that can give approval for the Ditch relocation, we propose that the attached commitments in the Ditch relocation be binding permit items which must be followed by the Applicant. These binding items are is attached to this Exhibit S.

d) Gloria Z Mine is adjacent to the permit area but there are no structures associated with the mine that are within 200 feet of the permit boundary. This property is owned by Playfair Land Company LLC in parcel 30214.

e) Home and associated structures located southwest of the permit area owned by Petersens in Parcel Schedule 11837.

f) Groundwater well owned by Petersons, located near their home in parcel 11837..

g) Overhead power line along Highway 9 owned by Excel Energy

h) wood fence owned by Adam Guthrie, north of Mining Area #1, in Parcel Schedule 45499

i) wood fence and gate owned by Harold and Martha Miller, north of Mining Area #1, in Parcel Schedule 11800.

j) buried phone lines on the south side of Highway 9 and along the north side of Platte Drive, owned by Century Link.

k) paved bike path on north side of Highway 9 (following old narrow gage train bed) within ROW of CDOT Highway 9, owned by CDOT but maintained by Park County

Sullivan Aggregate Pit March 2015 S-1

1) driveway and garage owned by Sylvia and Brian Cranmer in parcel 6282.

m) easement of approx.. 15 feet granted to Rock N Pine property and permit area through the JRS Mining property. This easement is shown on Map C-2, which was granted to Rock N Pine from the Court proceedings. This access is within the 112 permit area for JRS Mining but will not be used by JRS Mining in any way. It is an access road only for Rock N Pine and the permit area on that property.

All structures are shown on Map C-1.

As explained in subsequent Geotechnical Stability Exhibit, none of these structures can be damaged by the operation. Nevertheless, structure agreements are being sent to all structure owners within 200 feet of the permit boundary.

Binding Items for Relocation of the Platte City Placer Ditch

The Platte City Placer Ditch was created for placer mining and is not used for irrigation of any lands. Water from the Ditch can be used for placer mining only. The downstream owners of water rights were investigated with the help of the Water Commissioner in Fairplay (Garver Brown) and he stated that there is no information on the current owners or their contact information downstream of the Sullivan property. It is definitely known that there are downstream users and their rights must be protected. It appears that there are 2-3 owners downstream. The Rock N Pine property is not an owner of water rights in the Ditch. Information below show the details of the diversion of the Platte City Placer Ditch (otherwise known as the Westerman Ditch). The diversion will only take place on the Sullivan property northwest of Fairplay, Colorado. Map C-1 shows the location of the current ditch in relation to the properties. The enclosed Map C-2 shows the location of the existing Ditch and the proposed location of the Diversion. Map F-1 shows the relocated Ditch.

JRS Mining LLC understands that there are water right users downstream of the Sullivan property and their use of the Ditch must be maintained at all times. Since there is no Ditch Company overseeing the use of the Ditch, we feel that it is best if the following commitments to allow the permanent diversion of the Platte City Placer Ditch. JRS Mining LLC commits to all items listed below:

- 1- The diversion will be constructed while the existing Ditch is in place and functional.
- 2- At no time will downstream users ever be disrupted from the use of their water right.
- 3- The Mine plan is based on Mining Areas 2 and 3, leaving the existing Ditch in place. The mining slope will be 2.5:1, as shown on the cross sections of Map C-2. Backfilling and grading will constantly occur as mining takes place. When Areas 2 and 3 are mined out, and the area has been restored to approximate original contour, the Diversion will be constructed.
- 4- The Diversion will be constructed to the same grade, and the same cross sectional dimensions as the existing Ditch. Accurate surveying using a professional surveyor will be used to stake out the Diversion prior to the excavation.
- 5- The existing 24" culvert for the Ditch under the Sullivan access driveway will be replaced with a 36" culvert in the new driveway, even though the older culvert has not overtopped.
- 6- The bed lining of the Diversion will be the same as the existing Ditch, which will be a lining of rocks of 3" to 8" size so that no erosion will occur on the bed or the banks. The lining will also be installed on the banks, up to the same height as the top of the existing Ditch.
- 7- The start and end of the Diversion will be entirely on the Sullivan property and no sharp turns will be installed as part of the Diversion, as shown on Map C-2.
- 8- Prior to installation, DRMS will be called to inspect the Ditch and the water Commissioner from Fairplay will also be invited for input. The water can only be cut into the Diversion if the installation is fully approved after site inspection by the DRMS inspector and the Water Commissioner, if the Commissioner decides to participate.
- 9- After one year, an inspection of the Ditch will be made by a qualified engineer and a report will be filed to the Division which is attached to the Annual Report. If any immediate changes are needed, the DRMS will be notified immediately and a joint inspection will occur to determine the proper course of action.

Given the minor quantities that will be mined on a yearly basis, it may be at least 10 years before the Diversion is ready to be installed.

RULE 1.6.2(1)(b)

Prior to the initial application for the 112 Permit and prior to submittal of the Application of 2015, a sign was erected at the entrance to the site which contained all the required information regarding Rule 1.6.2(1)(b). Please see enclosed sign certification.

NOTICE

This site is the location of a new construction materials and gold placer operation, to be known as the Sullivan Aggregate Pit. JRS Mining LLC, whose address 850 N. Davidson Street, Eloy, Arizona, 85131 and phone number is (863) 660-0763, has applied for a Reclamation Permit with the Colorado Mined Land Reclamation Board. Anyone wishing to comment on the application may view the application at the Park County Clerk and Recorder's Office, 501 Main Street, PO Box 220, Fairplay, CO 80440, and should send comments prior to the end of the public comment period to the Division of Reclamation, Mining, and Safety, 1313 Sherman St, Room 215, Denver, Colorado 80203.

Certification:

1. <u>Satiff</u>, hereby certify that I posted a sign containing the above notice for the proposed permit area known as the Sullivan Aggregate Pit, on:

 $\frac{3-2}{15}$ Date Posted

The sign was posted at the start of the access road to the pit from Platte Drive immediately north of Fairplay.

GEOTECHNICAL STABILITY - EXHIBIT U

There are no buildings or other man-made structures that could be affected by any geotechnical stability issues at the JRS mine. The structures cited in Exhibit S are well away from the excavation area and no failure is possible that could affect these structures due to distance from the excavation and the cemented nature of the in situ gravel.

A minimum 30 foot buffer will be maintained from the permit boundary line to all excavations. A minimum 20 foot buffer will be maintained from the Platte City Placer Ditch to all excavations. The mining slope is 2.5H:1V, which is much milder than all other mines conducting this type of excavation. All reclaimed areas will be restored to a maximum slope of 3H:1V. The surface material of these reclaimed slopes will be topsoil. During placement of the backfill material, the operator will compact using standard earthmoving techniques. The backfilled material will be a GC classification, which is a poorly graded sand, gravel and clay. This material has an approximate angle of repose of 31 degrees. The GC classification has been selected since it has the lowest angle of repose of all of the sand and gravel mixtures. See Table 3.1 from Huang in this Section. The actual backfilled material will be a combination of +1/2 inch material from the screening operation, some finer overburden and some -1/2 inch fines from the sluice tails. These materials will be mixed to provide a more uniform backfill but the GC classification gives the most conservative angle for the slope stability analysis.

The worst case excavation is basically all pits, which are required to be excavated at a slope of 2.5H:1.0V. The cross sections on Map C-2 show various examples of these slopes. The stability of these slopes is addressed below. The only exception to this slope is the existing old pre-law highwall that exists on the south side of the old River Crossing. This location was hydraulicly mined in the past, which has left a slope of approximately 0.9H:1.0V. A photo of this slope is shown in Exhibit D. As steep as this slope is, it has not shown signs of instability during the 125 years since it was made. Nevertheless, this slope will be backfilled to an angle of 2.2H:1.0V to make it more stable, however, it cannot be made milder without encroaching on the 100 year floodplain of the River. There are no structures below this slope and this work would simply be done to make the site more stable.

Design factors for Stability of Mine Slope of 2.5H:1.0V

If a slope failure would occur, it would be extremely unlikely since the mining angle of 2.5H:1V is milder than the angle of repose of 31 degrees. The failure angle would be 21 degrees or 2.5H:1V. This angle is far milder than normal failure angles in material that gets strength from internal angle of friction. Figure 1, from Huang, shows typical internal angles of friction for various materials

		PROCTOR	COMPACTION			
UNIFIED CLASSIFICATION	SOIL TYPE	MAXIMUM DRY DENSITY pcf	OPTIMUM MOISTURE CONTENT %	AS COMPACTED Cohesion C _o Lef	SATURATED COHESION C _{BBI} LST	FRICTION ANGLE ¢ deg
GW	well graded clean gravels, gravel-sand mixture	>119	<13.3	•	•	>18
GP	poorly graded clean gravels, gravel sand mixture	>110	<12.4	•	•	>37
GM	silty gravels, poorly graded gravel-sand-silt	>114	<14.5	•		>14
GC	clayey gravels, poorly graded gravel-sand-clay	>115	<14.7	•	•	>31
SW	well graded clean sands, gravelly sands	119±5	13.3±2.5	0.41 ± 0.04	•	38±1
SP	poorly graded clean sands, sand-gravel mixture	110 ± 2	12.4 ± 1.0	0.24 ± 0.06	•	37±1
SM	silty sands, poorly graded sand-silt mixture	114±1	14.5±0.4	0.53±0.06	0.21+0.07	3ai±1
SM-SC	sand-silt-clay with slightly plastic fines	119±1	12.8±0.5	0.21 ± 0.07	0 15+0 06	33+3
SC	clayey sands, poorly graded sand-clay mixture	115±1	14.7±0.4	0.78+0.16	0 12+0 06	31+3
ML.	inorganic silts and clayed silts	103±1	19.2±0.7	0.70±0.10	0.09±*	32±2
ML-CL	mixtures of inorganic silts and clays	109±2	16.8±0.7	0.66±0.18	0.23±•	32±2
CL	inorganic clays of low to medium plasticity	108±1	17.3±3	0.91 ± 0.11	0.14 ± 0.02	28+2
OL.	organic silts and silty clays of low plasticity	•	•	•	+	•
MH	inorganic clayey silts, elastic silts	82±4	36.3±3.2	0 76+0 31	0 21 +0 09	75+3
СН	inorganic clays of high plasticity	94±2	25 5 ± 1 2	1.07+0.35	0 12+0.06	10+4
ОН	organic clays and silty clays	•	*	*	*	*

Table 3.1 Average Effective Shear Strength of Compacted Soils.

*denotes insufficient data, > is greater than, < is less than (After Bureau of Reclamation, 1973; 1 pcf=157.1 N/m³, 1 tuf=95.8 kPa)

Figure 1 – Material Properties for Slope Stability (from Huang)

The Factor of Safety (FOS) for gravel with a 21 degree slope in GC classified material with an assumed internal angle of friction of 34 degrees can be approximated by ignoring the cohesion component of the stability and simply evaluating the internal angle of friction as follows:

FOS =
$$\frac{\text{Tangent of Internal Angle of Friction}}{\text{Tangent of Actual Angle of Failure Surface}}$$
FOS =
$$\frac{\text{Tan 31}^{\circ}}{\text{Tan 21}^{\circ}} = \frac{.67}{.40} = 1.56$$

This factor of safety far exceeds the normal long term safety factor of 1.3, therefore the plan of extraction, as presented in this permit, is acceptable. In addition, the exposed 2.5H:1V gravel slopes will only be present for a short period of time, since the mine will be conducting contemporaneous reclamation. These backfilled slopes are at a slope of 3H:1V. The backfilled material will consist of overburden from previously excavated areas or reject fines, which is similar to the overburden.

Appendix A – Right of Entry

SPECIAL WARRANTY DEED

BATE 627-13 12.00

THIS DEED, Made this 25th day of June, 2012 between

Pinylair Properties, LLC, a Colorado Limited Liability Company, as to an andivided 20% interest and Jomes Properties, LLC, a Colorado Limited Liability Company, as to an undivided 30% interest and MAM Properties, LLC, a Colorado Limited Liability Company, as to an undivided 25% interest and MGS Properties, LLC, a Colorado Limited Liability Company, as to an undivided 25% interest

of the County of Fark and State of COLORADO, grantor(s), and

JRS Mining LLC, a Colorado Limited Linbülty Company

where legal address is als Todd Peddie Sullivan 850 N. Davidean Street Elroy, AZ 35131

of the County of

. State of Acuma, granted(a):

WITNESS, That the granter(s), for and is consideration of the sum of One Hundred Eighty Thousand Dollars and No/100's (3100.000.00), the security and sufficiency of which is hereby acknowledged, has granted, berguined, sold and conveyed, and by then events down must be static sold confirm, who the granted(s), his heirs and antigas forever, all the real property there presents does grant, bergain, soil, convey and confirm, uses the granter(s), his heirs and an together with improvements, if any, situate, lying and being in the County of Park, State of COLORADO, described as follows:

See Exhibit A attached hermo and made a part hermol.

Ď	he Fee	
5	15.00	
سب		

also known by street and comber as Hwy 9. Fairplay, CO 80440

TOGETHER with all and singular the hereditaments and appurasances desvente belonging, or in anywise appartaints and the revention and reversions, remainder and remainders, rents, issues and profits thereof, and all the estate, right, title, issue claim and demand whenever of the gracter(s), either in law or equity, of, in and to the above bargained premises, with the hereditements and appurtementors.

TO HAVE AND TO HOLD the said premises above bequized and described, with the appurtmentees, unto the genere(s). his hours, and assigns forever. The grantor(s), for himself, his heirs and personal representatives or successors, does covenant and agree that he shall and will WARRANT AND FOREVER DEFEND the above-burgained premises in the quiet and personable presentation of the grantor(s), his beits and assigns, against all and every person or persons claiming the whole or any part thereof, by, through or under the granter(s).

The singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all seaders.

IN WITHERS WHEREOF, the granter(s) has executed this deed on the date set forth above.

SELLERS: Signed in counterparts

Pinyfair Properties, LLC, a Colorado Limited Liability ezy

MAM Properties, LLC, a Colorade Limited Linbility

Jamec Properties, LLC, a Colorado Limited Linbility Севрену

mey-

By John A. Myrer, as momber manager

By: Craig A. Gardiner, as manager

MGS Properties, LLC, a Colorado Limited Linbility Сопрану

By: Michael Alfred Meyer, as manager

STATE OF COLOVADO

Company

By: John M. Styrbicki, as manger

) 82: 25 2013 by Je nd hefats me f The forege at i manur of Playfair Properties, LLC, a Colorado Limited Li 27 Mrull A THETTER. NOTARY Nelary Wuness my hand and official seal My Commission expires: 8.714 Cond

850 N Auroben St Eloy Az 8513/ John R Sullivan (address)

June 26, 2015

To whom it may concern:

I am the owner of Parcel Schedule 11655 which also includes Parcel Schedule 11850 in Park County, Colorado in Section 32, T95 and R77W. The area is 27.0 acres. This letter hereby allows Todd Sullivan (my father) and JRS Mining, LLC to access the property to conduct mining and reclamation operations as approved by all permits.

Signed: Date

Appendix B - Soil/Vegetation/Geology/Wildlife Data

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1) WATER-QUALITY ASSESSMENT OF THE SOUTH PLATTE RIVER BASIN, COLORADO, NEBRASKA, AND WYOMING--ENVIRONMENTAL SETTING AND WATER QUALITY OF FIXED SITES, 1993-95 *by* David W. Litke *and* Robert A. Kimbrough 1

ABSTRACT

In 1991, the U.S. Geological Survey (USGS) began full-scale implementation of the National Water-QualityAssessment (NAWQA) Program, with the objectives of describing the status and trends in the quality of a large, representative part of the Nation's surface- and ground-water resources and of providing a sound scientific understanding of the primary natural and human factors affecting the quality of these resources. The South Platte River Basin was among the first 20 NAWQA study units selected for study under the full-scale implementation plan.

Twelve fixed sites were established on streams in the South Platte River Basin to provide data to support the objectives of the NAWQA study. The sites were selected to represent forest land use (three sites), agricultural land use (three sites), urban land use (three sites), mixed urban/agricultural land use (two sites), and rangeland land use (one site). This report describes the environmental setting and hydrologic conditions at the sites, summarizes monthly data collected at the sites, discusses the effects of land use on concentrations, evaluates historical trends in concentrations at selected sites, and presents estimates of stream loads for selected constituents.

The 12 fixed sites were sampled monthly from March 1993 to September 1995. Constituents determined from monthly sampling included field measurements and concentrations of major constituents, organic carbon, nutrients, and suspended sediment. Concentration data were compared to stream standards as points of reference for water quality. There were occasional occurrences of constituent concentrations exceeding chronic stream-segment standards for sulfate, iron, nitrite, and un-ionized ammonia. However, there were more common exceedances

of chronic standards for manganese at one forest site, two urban sites, and on mixed urban/agricultural site. The U.S. Environmental Protection Agency (USEPA) recommended limit for total phosphorus concentrations in streams (0.1 milligrams per liter) for the control of eutrophication was exceeded at all urban, agricultural, and mixed urban/agricultural sites and at one forest site; the minimum measured phosphorus concentration at most of these sites also exceeded the recommended limit.

Land use was a statistically significant classifying variable for all of the water-quality constituents. For some constituents (specific conductance, water temperature, dissolved solids, and sodium), each land use was significantly different from all others. For other constituents (for example, nitrite plus nitrate), there were as few as two significant classes. *Water quality generally was best (significantly smaller median concentrations) for rangeland*

and forest land use. Mixed urban/agricultural land use had the poorest water quality (significantly larger median concentrations) among the land uses sampled, which was attributed to the combined inputs of urban and agricultural land use.

Seasonal Kendall trend tests on combined USGS and USEPA data for 1963-96 detected downward trends in salinity at sites along the South Platte River, whereas nitrate concentrations had upward trends. Streamflow had upward trends at sites along the river, but the salinity and nitrate concentration trends still were significant after being adjusted for variability in streamflow.

Daily loads were estimated at the fixed sites for dissolved solids, total nitrogen, total phosphorus, and suspended sediment for March 1993 to September 1995. Loads were largest at South Platte River near Kersey, Colorado, where streamflow also was largest; mean annual loads at this site for water years 1994-95 were 810,000 tons of dissolved solids, 510,000 tons of suspended sediment, 880 tons of total phosphorus, and 6,400 tons of total

nitrogen. The downstream pattern of mean annual loads along the South Platte River was similar for the four constituents; loads increased from Denver to Kersey, Colorado, and decreased from Kersey to North Platte, Nebraska.

1 U.S. Geological Survey, Box 25046, MS 415, Denver Federal Center, Lakewood, CO 80225

2) CONCENTRATION, DISTRIBUTION, AND COMPARISON OF SELECTED TRACE ELEMENTS IN BED SEDIMENT AND FISH TISSUE IN THE SOUTH PLATTE RIVER BASIN, USA, 1992-93 by Janet S. Heiny and Cathy M. Tate

ABSTRACT

During August-November 1992 and August 1993, bed sediment and fish liver were sampled in the South Platte River Basin and analyzed for 45 elements in bed sediment and 19 elements in fish liver. The results for aluminum, arsenic, cadmium, chromium, copper, iron, lead, manganese, selenium, silver, uranium, and zinc are presented here. All 12 trace elements were detected in bed sediment, but not all were detected in fish liver or in all species of fish. A background concentration of trace elements in bed sediment was calculated using the cumulative frequency curves of trace element concentrations at all sites. Arsenic, cadmium, copper, lead, manganese, silver, uranium, and zinc concentrations were greater than background concentrations at sites in mining areas or at sites that have natural sources of these elements. Trace element concentrations in fish liver generally did nct follow the same patterns as concentrations in bed sediment, although concentrations of aluminum and cadmium were higher in fish liver collected at mountain sites that had been disturbed by mining. Concentrations of aluminum, arsenic, cadmium, chromium, copper, iron, lead, silver, and zinc increased in bed sediments in urban areas. Iron, silver, and zinc concentrations in fish liver also increased in urban areas. Concentrations of cadmium, copper, silver, and zinc in fish liver increased in the agricultural areas of the basin. Downstream changes in trace element concentrations may be the result of geological changes in addition to changes in land use along the river.

Sullivan Aggregate Pit March 2015

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Appendix C - Map Exhibits

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I, Greg Lewicki, P.E., with over 28 year of experience in mine slope safety analysis in Colorado, certify that the mine plan and reclamation plan presented in this application will lead to stable slopes during and after mining and that there is no realistic threat of failure or to the stability of any structures outside of the permit area.

Greg Lewicki, P.E. P.E. # 20335 Date_____7/20/15















2/27/15

11541 Warrington Court Parker, CO USA 80138

1" = 150'

APPD

GL

Phone (303)-346-5196 E-Mail - info@lewicki.biz

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