

#### 18450 E. 28th Ave. Aurora, Colorado 80011 T 303-363-1000 • F 303-363-4101

Serial #: 153501-AC-DRMS-L001

August 12, 2016

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

Attn: Eric Scott

Re: Front Range Feed Lot Borrow – Permit M2016-041

Subj: Adequacy Review Documents

Attach: Revised Permit Application Items

Dear Mr. Scott:

Ames has received your letter dated on August 11, 2016 requesting additional and/or revised elements for Ames' 111 permit application. Please see below the list of revised or new items attached to this letter.

An Equal Opportunity Employer

- Revised application page 1 revising permit boundary size to match the bond provided
- Revised Exhibit B Site Description changing the size of the permit boundary area
- Revised Exhibit C Mining Plan changing the size of the permit boundary area
- · Revised Exhibit D Reclamation Plan changing the size of the permit boundary area and bond amount
- Revised Exhibit E Mining Map showing requested info and revised map style
- Revised Exhibit E Reclamation Map showing requested info and revised map style
- New Exhibit with proposed Seed Mix Design
- Copy of Notice Posted on Property for Review

If you have any questions or concerns regarding this information, please do not hesitate to contact me.

Sincerely,

Dustin Williams Project Manager



# 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



#### CONSTRUCTION MATERIALS

#### **SPECIAL (111) OPERATION**

#### RECLAMATION PERMIT APPLICATION FORM

The application for a Construction Materials Special 111 Operation Reclamation Permit contains four major parts: (1) the application form; (2) Exhibits A-L, Addendum 1, and any sections of Exhibit 6.5 (Geotechnical Stability Exhibit), as required by the Office, and outlined in Rules 6.1, 6.2, 6.3, 6.5, and 1.6.2(1)(b); (3) the application fee; (4) the Performance Warranty and if required a Financial Warranty. When you submit your application, be sure to include one (1) **completed, signed and notarized ORIGINAL** and one (1) copy of the completed application form, two (2) copies of Exhibits A-L, Addendum 1, appropriate sections of Exhibit 6.5 (Geotechnical Stability Exhibit), as required, a check for the application fee described under (4) below, and the fully executed Performance Warranty and Financial Warranty, if required. Exhibits should **NOT** be bound or in 3-ring binders; maps should be folded to 8 2" X 11" or 8 2" X 14" size. To expedite processing, please provide the information in the format and order described in this form.

## GENERAL OPERATION INFORMATION Type or print clearly, in the space provided, all information described below

1.1	Type of organization (corporat	ion, partne	rship, etc	.):					
<u>Oper</u>	ration name (pit, mine or site nan	<u>ne):</u>						$\sim$	
<u>Pern</u>	nitted acreage:		,				γ.		Permitted
New	Application:							\$898.00	_ Applicati
<u>Prim</u>	ary commoditie(s) to be mined:								
<u>Nam</u>	e of owner to the surface of affec	ted land:							
Nam	e of owner to the subsurface righ	ts of affec	ted land:						
Туре	e of mining operation:	ırface [	Unc	lerground		In-situ			
Loca	tion information: The center of t	he area wl	nere the n	najority of	mining	will occur:			
		COUNTY	<u>-</u>			1			
PRIN	NCIPAL MERIDIAN (check one):	L	6th (0	Colorado)		10th (Nev	w Mexico		Ute
SEC	ΓΙΟΝ (write number):		S						
TOW	NSHIP (write number and check of	lirection):	T		Ц	North _	<b></b> _	South	
RAN	GE (write number and check direc	tion):	R		Ш	East _	<u> </u>	West _	_
QUA	RTER SECTION (check one):			_ NE _	Щ	NW _		SE	sw
OUA	RTER/QUARTER SECTION (che	ck one):		NE	I	NW		SE _	sw

Applicant: Ames Construction, Inc.

Name of Site: Front Range Feed Lots Borrow

Date: July 27, 2016

#### **EXHIBIT** B – Site Description

(a) Existing Vegetation and soil characteristics of the site area.

The 8 acres of the permit site are presently rangeland. Existing vegetation is sparse and consists predominately of grasses.

The site soils have been classified by the United States Department of Agriculture as a Valent Sand in attached report.

(b) List of permanent man-made structures within 200 feet of affected area:

There are no permanent man-made structures within 200 feet of the affected area.

- (c) Water resources in the area of the proposed borrow.
  - Box Elder Creek is 1.40 miles away and should not be a concern for the site.
  - Ground water is expected to be deeper than 10' feet deep, no dewatering or ground water mitigation needed.
- (d) Wildlife assessment.

Not required for 111 Special Operations.

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#### **EXHIBIT C** – Mining plan

(a) Commencement and Duration of Borrow Operation

The borrow operation is for a single specific project. Operations would begin on September 6, 2016 and would be complete by November 30, 2017.

This time window includes the following phases:

- 1. Topsoil salvaging and haul road construction;
- 2. Excavation and hauling of the borrow materials,
- Excavation from the existing road brought back into the borrow hole
- 4. Closing of the borrow final grading of the slopes, topsoil placement, and completion of the reclamation plan.
- (b) Topsoil replacement depth.

The existing topsoil conditions in the area show an average of 3 inches. This topsoil will be stockpiled and respreads at the end at the depth or thicker.

## (c) Overburden

The borrow materials do not have any overlying overburden or waste materials.

(d) Thickness of deposit to be mined

A ten foot thickness maximum of borrow material will be removed.

(e) Major Components of the mining operation.

The haul road through the permitted site and the area of borrow excavation are the only components of the mining operation.

Once the topsoil has been salvaged and the haul road constructed, excavation/hauling operations will begin. The borrow material will be excavated using large backhoes/loaders and placed directly into truck-trailer hauling units for transporting to the job site on WCR 49 immediately next to the borrow site

Excavation of the borrow materials will proceed in a west to east direction. The side slopes of the final excavation are to be at a maximum gradient of 3:1 (horizontal to vertical). As the borrow material is being removed, the excavation in the area of the final slopes will be done at this 3:1 gradient.

#### (f) Dimensions of land disturbance.

The area of land disturbance is rectangular in configuration. The dimensions of the disturbed area are roughly 600 feet x 580 feet, this includes the area of the topsoil berm at the top of the excavation slopes. These dimensions result in an area of 8.0 acres.

## (g) Haul road dimensions.

An existing haul road will be used to get to our permitted boundary.

## (h) Water use.

The only water to be used in conjunction with the borrow site operation, will be water applied to the on-site roads for dust control. Approximately 8,000 gallons of water per day will be used for dust control. The source of this supply will be the same as the project's water source along Weld County Road 49

(i) Groundwater/surface water occurrence or disturbance.

Ground water will not be encountered during this operation. Contamination of surface stormwater runoff will be controlled by diverting the runoff around the disturbed areas. This will be accomplished by perimeter berms of compacted soil around the excavation area.

(j) Existing water rights

Water rights will not be affected or impacted by the proposed borrow operation.

(k) Refuse and acid or toxic producing materials.

There are no known refuse, acid or toxic producing materials in the area of the proposed borrow. If they are encountered, borrow operations will cease and the materials will be contained in accordance with applicable laws and regulations.

(I) Measures to minimize disturbance to hydrologic balance, off-site damage and provide for a reclaimed area that has a stable configuration consistent with the proposed future land use.

Hydrologic balance - The proposed borrow operation impacts on the hydrologic balance will be minimal – groundwater will not be encountered (therefore, no dewatering). The reclaimed site will have a pervious cover of corn stalk and straw mulch which will not impact the pervious nature of the underlying sandy soils.

Off-site damage – The boundaries of the excavation area and haul road will be clearly marked to prevent off-site damage during the borrow activities. Through the use of perimeter berms to prevent stormwater from running through the disturbed areas, off-site damage due to contaminated stormwater runoff will be prevented. By conducting the borrow operations during the low precipitation months and in view of the sandy nature of the soils and gentle slope of the land, increased runoff flows are not anticipated. Completion of the

reclamation plan for the site will remove the potential for future off-site damage.

Stable configuration – The borrow area's slopes will be finished to a maximum 3:1 slope.

This slope gradient, the features of the reclamation plan and the natural properties of the site's soils will result in a stable configuration of the reclaimed site that be suitable for the intended future use – rangeland.

(m) On-site processing.

There will be no on-site processing of the borrow materials.

(n) Commodities to be extracted and their use

The only commodity to be extracted at this site is the sandy soil. The material will be used for fill purposes on a county highway improvement project along Weld County Road 49.

- (o) No incidental products will be mined at the borrow site.
- (p) No explosives will be used in the operations at the borrow site.

Applicant: Ames Construction, Inc.

Name of Site: Front Range Feed Lot Borrow

Date: July 27, 2016

#### **EXHIBIT D** – Reclamation Plan

At the conclusion of the excavation activities, the site will be reclaimed by grading the excavation slopes to a final gradient and the excavation bottom to a uniform level. The vegetative growth support material, temporarily stored in the perimeter berms, will be placed on the excavation slopes and bottom. The constructed access road will be removed and its' disturbed area included in the reclamation activities – unless the property owner requests it be left for his future use.

A detailed description of the Reclamation Plan is as follows:

(1)

(a) Overburden replacement

There is no overburden to salvage and/or replace at this operation.

(b) Reclaimed slope gradient

The reclaimed slopes will be constructed to a 3:1 gradient.

(c) Revegetation measures to reclaim the site.

Ames will be utilizing Arnolds Agg to seed and we will have them follow the reclamation plans the will utilized on the Weld County Road 49 Project.

Prior to the placement and incorporation of the soil amendments, the perimeter berm will be removed and the berm material (vegetative support materials) will be spread over the borrow slopes, bottom and site roadway

The revegetation measures would be performed in the fall of 2017.

- (d) There will be no features such as ponds, streams, roads or buildings remaining on the borrow area after reclamation.
- (e) All features have been previously addressed in the Reclamation Plan.
- (2) Cost estimate to reclaim the site.

The point of maximum disturbance to site will be when the excavation activities are finished. Due to the configuration of the borrow, reclamation activities would not begin until that time.

Since the excavation slopes were left at a 3:1 gradient during the borrow removal process, the remaining reclamation work would consist of removing the perimeter berms and placing the topsoil materials over the disturbed areas followed by the application of the recommended soil amendments, seed and mulch.

1. Placement of salvaged topsoil:

Quantity = 2,360 cubic yards

Equipment: Self-loading scraper (similar to CAT 623)

Dozer (similar to CAT D6)

Labor: 2 equipment operators and ½ time foreman

Production rate: 240 cubic yards per hour Hours required to complete = 2,360/130 = 10 hours

Equipment costs per hour = \$240.00

Labor costs per hour =  $\frac{$150.00}{}$ 

Total per hour = \$390.00

Equipment and Labor Total = 10 hours x \$ 390 = \$ 3,900

Mobilization: 2 pieces in and out = \$ 0.00 (Ames onsite for county road project already.

TOTAL for this item = \$ 3,900 or **\$ 1.65/cubic yard**. (No markup)

2. Seedbed preparation, application of soil amendments, seed and mulch.

The cost of performing these items, based on a quote from Arnold's Ag Group LLC is:

 Straw mulch
 \$ 500/acre

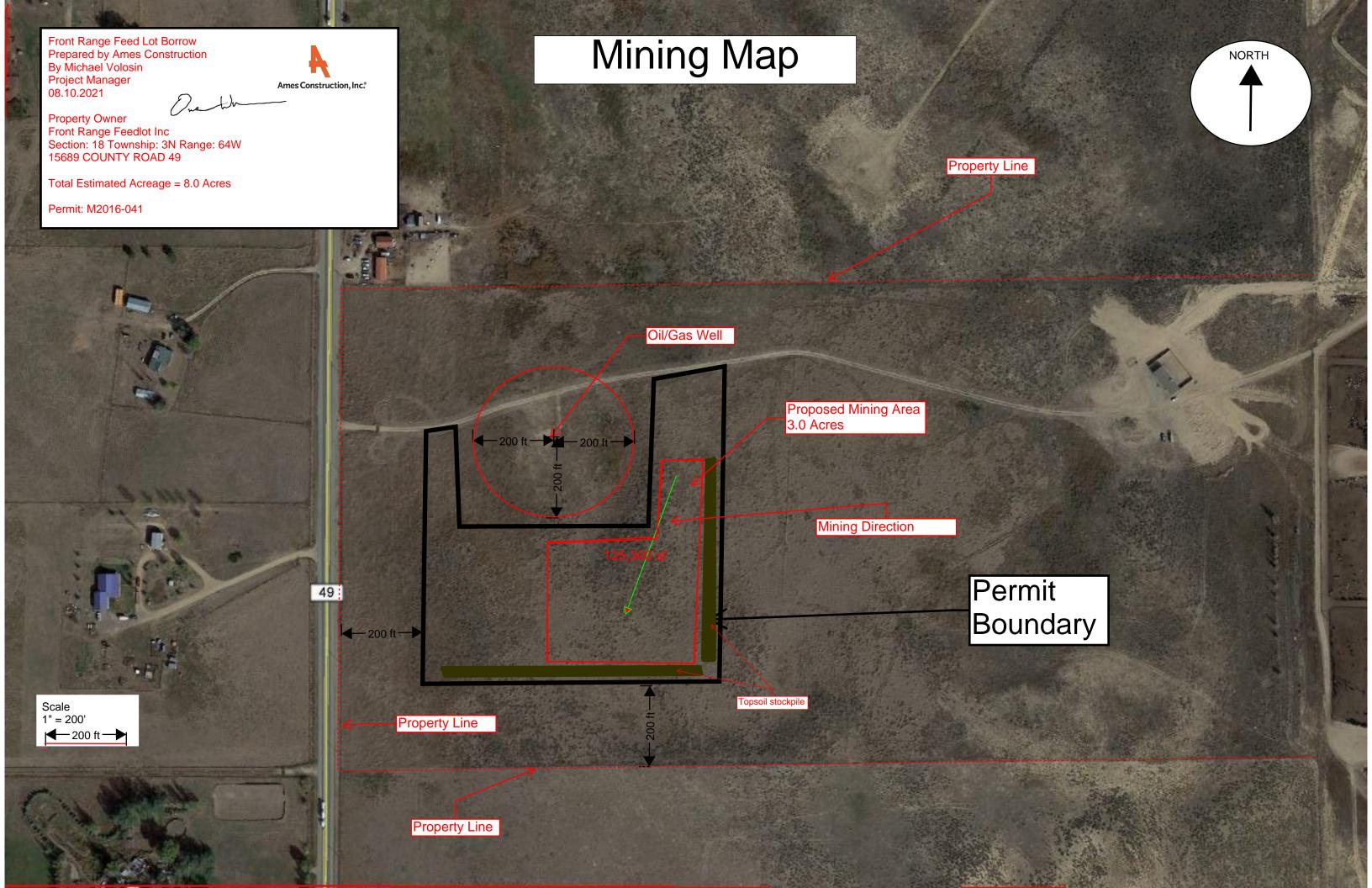
 Tackifier
 \$ 1100/acre

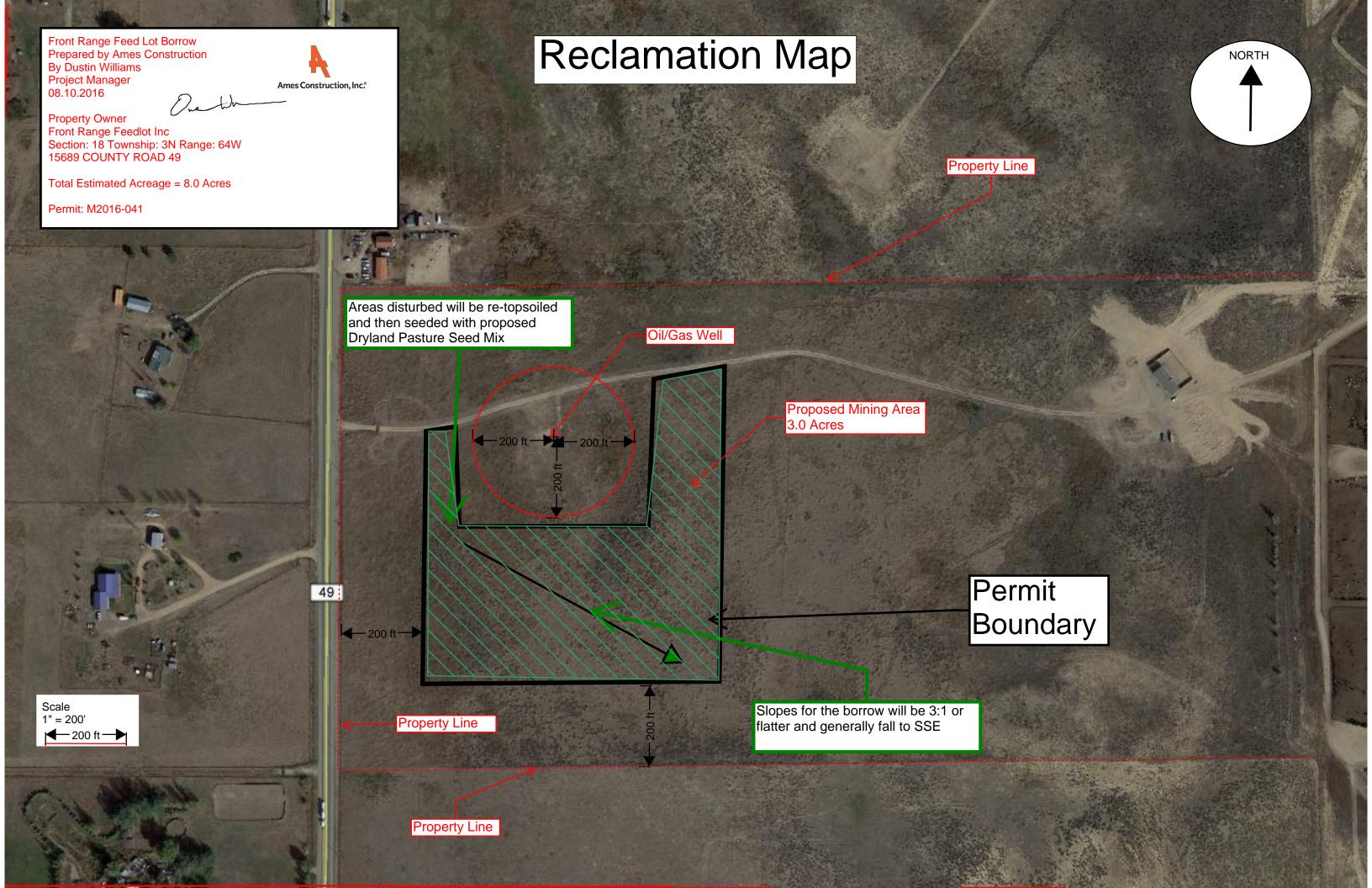
 Seed:
 \$ 375/acre

 Total =
 \$ 1,975/acre

TOTAL for this item = 8.0 acres x \$ 1,975/acre = \$ 11,850

Total Cost to reclaim site = \$3,900 + \$15,800 = \$19,700.0







# **Dryland Pasture Mix**

A premium mixture of introduced cool-season grasses for the Great Plains states and the Intermountain region. This mix is made up of drought-tolerant, dryland forage grasses that are excellent for moderate spring grazing and fall pastures. It works well for weed control and soil stabilization in erosion control areas. Our best selling mix!

25% Dahurian Wildrye, James 20% Forage Perennial Ryegrass, VNS 15% Orchardgrass, Profile 15% Smooth Brome, VNS 15% Russian Wildrye, Bozoisky 10% Intermediate Wheatgrass, Rush

## **Seeding Rate:**

20-25 lbs. per acre

### **Broadcasting Rate:**

30-35 lbs. per acre

Available in 50 lb. and 25 lb. bags

Buffalo Brand Seed is an independently owned seed company specializing in alfalfas, native grasses, forage grasses, turf grasses, small grains and annual forages. Our long-term success has been built upon putting family first while maintaining our commitment to exceed our customer's expectations at every opportunity. Buffalo Brand Seed has been supplying customers with high quality seed since 1958.

## **NOTICE**

This site is the location of a proposed construction materials operation. (Name of the Applicant/Operator)
, whose address and phone number is (Address and Phone Number of the Applicant/Operator)
, has applied for a Special 111 Operation Reclamation Permit with the Colorado Mined Land Reclamation Board.
Anyone wishing to comment on the application may view the application at the (County Name) Weld County
County Clerk or Recorder's Office, (Clerk or Recorder's Office Address) 1401 N. 17th Ave Greeley, CO 80631
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:
I, (Name of the Applicant/Operator) Ames Construction, Inc. hereby certify that I posted a sign containing the
above notice for the proposed permit area known as the (Name of Operation) Front Range Feed Lot Borrow ,on (Date
Posted)
Chh 7/28/16
SIGNATURE DATE
Ousth Williams
Ousth Williams Ames Construction