



RPM, Inc.

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October 8, 2021

Colorado Division of Reclamation, Mining and Safety  
Attn: Mr. Patrick Lennberg  
1313 Sherman St, Rm 215  
Denver, CO 80203

Re: Technical Revision, Wildlife Island, Pueblo West Pit, File No. M1977-573

Dear Mr. Lennberg,

Attached for your review is a Technical Revision (TR) for the Pueblo West Pit, Wildlife Island (Island). The TR is a subset to TR5 which has previously been approved. This TR, once approved, will allow the Island to be part of the site's reclamation, and describes how the Island will be reclaimed.

In TR 5, you asked in part, *"Please provide the details on how the reservoir's island will be seeded."* We have copied our response to you in our October 31, 2018, Adequacy Response here for consistency:

- "We will attempt to transport a rototiller onto the Wildlife Island if it can be done safely. Once the surface is tilled up, we will broadcast seed the Wildlife Island with the TR-05 seed mix. (We are asking the approved seed mix to be revised, as discussed below.) We will then hand drag or lightly rake the area to slightly cover the seed. If transporting a rototiller cannot be done safely onto and off the Wildlife Island, we will broadcast seed the Wildlife Island and rake the seed in."

Following are additional aspects of how we propose to address Island reclamation:

- No additional grading is proposed. The island is surrounded by water, and we are not able to practically get a dozer onto the Island.
- Only those areas of the Island which can be safely accessed will be seeded. A determination as to what is safe to seed will be left to the Reclamation Contractor to determine.
- Given the Island is likely of a better grade of plant growth material than the surrounding reservoir lands, no soil amendments will be added.
- We will need to seed the Island when access is available. We will have to work with the Reclamation Contractor to determine when that will be. We will do our best to seed in the very late fall or winter if the reservoir surface is frozen sufficiently to gain access to the Island. However, the soil can not be frozen. Another option is to try to gain access



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when the water level is down sufficient to cross via dry land since that end of the reservoir is the shallowest.

- We would like the option to seed sorghum early in the spring in the year the remainder of the site will be seeded (excluding the Island). If the decision to use sorghum as a nurse or cover crop, it will be killed with an appropriate herbicide or mowed sufficient to prevent it going to seed.
  - The perennial seed mix will then be seeded in the very late fall or early winter. If sorghum is used as a nurse or cover crop, no mulch will be applied.
  - It has been suggested we seed up to 10 PLS of the proposed perennial seed mix along with the sorghum. We would like to include this option. We will make the decision to seed the perennial seed mix and to seed sorghum prior to spring. We will keep the DRMS informed as to our final decision on sorghum and if to include the perennial seed in the spring seeding.

**Existing Seed Mix for the Pueblo West Gravel Pit:**

Species	Best on soil types (SCL)	Saline Soil	(5) Annual Avg. Precip. 12.9"	Alkali Soil	Expected performance	Variety	PLS lbs./Acre
Blue grama	Any	Ok	8+	Ok	Ok	-	1.0
Streambank wheatgrass	S - C	Ok	8+	?	Ok	Critana	3.0
Sideoats grama	Any	Low	6+	Ok	Ok	Vaughn	1.0
Buffalo grass	L - C	?	10+	Ok	Ok	-	1.5
Galleta grass	Any	?	5+	Ok	Ok	Viva	2.0
Sand dropseed	G - S	Yes	8+	Ok	Ok	-	0.25
<b>Total:</b>							

1. G = Gravelly, S = sand, Si = silt, C = clay, L = loam
2. The species labeled as marginal are included, given they are native to the area and/or based on reasonable performance at other sites.
3. Under "Annual Avg. Precap.", the number in the species row is the lower end of the precipitation range for the species.

As part of this TR, we are requesting the seed mix be changed from the existing mix to the following proposed seed mix. The following seed mix was developed from an adjacent, undisturbed area. We determined what the soils groups are on the adjacent area, then looked up

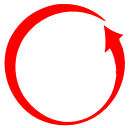


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the corresponding Ecological Site Description (ESD) for the two soil types. That gave us two possible ESD's. We obtained what appear to be the dominate grasses, forb, and shrub species for each of the two ESD's. Once we had a list of possible plant species, we looked up the plant specific characteristics found on the Natural Resource Conservation Service (NRCS) website.

We further refined the plant species list based on the plant species characteristics and the site conditions as to the lowest precipitation the species will survive under, the type of soil at the site, the ability to tolerate salty and/or sodic soils. The following list of plant species appear to be the most likely to establish on the site. The list will be used on the Island and the surrounding land.

As is typical, broad cast seeding will be double the drill seed rate. No soils amendments are proposed for the Island for the reasons stated above. No mulch is proposed for the Island since we are unable to get a tractor and crimper on to the Island. One could hand crimp straw in. However, given the size of the area to seed, that is not practical. We will implement the approved noxious weed control program, as access conditions allow.



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### Replacement Seed Mix for the Pueblo West Gravel Pit:

Species	Best on soil types (1)	Saline Soil	Avg. Annual Precip. 12.9"	Alkali Soil	Performance	Variety	PLS lbs./Acre
<b>Grasses</b>							
Vine mesquite <u>Panicum obtusum</u>	G., S. - C., L.	None	8+	Medium	Marginal	-	1.0
Alkali sacaton <u>Sporobolus airoides</u>	Any	High	5+	High	Excellent	-	2.0
Blue grama <u>Bouteloua gracilis</u>	Any	Medium	8+	Medium	Good	-	1.0
Sideoats grama <u>Bouteloua curtipendula</u>	Any	Low	6+	Medium	Good	-	1.0
Western wheatgrass <u>Pascopyrum smithii</u>	Si, C, L	High	8+	High	Good	Ariba	2.0
Sand dropseed <u>Sporobolus cryptandrus</u>	G -S	Medium	7+	Medium	Good	-	0.25
<b>Forb</b>							
American vetch <u>Vicia americana</u>	G, S, Si	None	9+	Low	Marginal	-	2.0
<b>Shrub</b>							
Fourwing saltbush <u>Atriplex canescens</u>	Any	High	5+	High	Excellent	-	2.0
Sorghum <sup>(7)</sup>	-	-	-	-	Nurse Crop	-	(3.0)
<b>Total:</b>							<b>11.25</b>

1. G = Gravelly, S = sand, Si = silt, C = clay, L = loam
  2. Under "Annual Avg. Precap.", the number in the species row is the lower end of the precipitation range for the species.
  3. Italic font – in exiting and approved seed mix.
  4. American vetch appeared to be the most drought tolerant of the forb species and was chosen to add a forb to the seed mix.
  5. Fourwing saltbush was included since it is the only desirable shrub presently growing on the site and established via volunteer, self-establishment
- Respectfully.
6. To improve establishment, fourwing saltbush should be de-winged.
  7. Sorghum is not included in the PLS total.
  8. Seeding will result in an overlap with the shoreline seeding close to the reservoir water line.





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**Shoreline Reclamation Species**  
**(No change from approved list)**

Species	Best on soil types (SCL)	Saline Soil	Annual Avg. Precip. 12.9"	Alkali Soil	Performance	Variety	PLS lbs./Acre
<i>Tufted hairgrass</i> (2)	Any	Low	In the Wet Zone	Low	Ok	—	0.25
<i>Switchgrass</i> (2)	S - LC	Medium	In the Wet Zone	Low	Ok	-	1.0
<i>Tall wheatgrass</i> (2)	Any	Medium	In the Wet Zone	Medium	Ok	-	2.0
<i>Canada wildrye</i> (2)	Any	Medium	In the Wet Zone	Low	Marginal	-	2.0
<b>Total:</b>							<b>5.25</b>

1. Italic font are species presently approved for the site.
2. Shoreline reclamation species.
3. G = Gravelly, S = sand, Si = silt, C = clay, L = loam

We have not included a revised Reclamation Plan Map. The Reclamation Release Request for the Finger Lake area included a revised map showing the new permit boundary and the location of the Island. If you need another map, please let us know and we will provide you with a new map.

Respectfully,

H. Bruce Humphries

Regulatory Permits Management, Inc.  
Consultant for Castle Concrete

Enc: Technical Revision Request Form  
Technical Revision Application Fee

cc: Jerald Schnabel  
Castle Concrete Co



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# COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

## REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- M-1977-573 Site Name: Pueblo West Pit

County Pueblo TR# \_\_\_\_\_ (DRMS Use only)

Permittee: Continental Materials Corporation

Operator (If Other than Permittee): Castle Concrete Co., dba Castle Aggregate

Permittee Representative: HB Humphries, Regulatory Permit Management, Inc. (303) 854-7499

Please provide a brief description of the proposed revision: \_\_\_\_\_

Revised seed mix and reclamation plan for the Island. \_\_\_\_\_

As defined by the Minerals Rules, a Technical Revision (TR) is: "a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan." The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered "filed for review" until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input checked="" type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>



# Pueblo West, Addendum to the Reclamation Plan Map

Shallows

Island, added  
by this TR

Honor Farm Rd

Finger Lake Area

Goodnight Ave

96

Access Pueblo West



McCarthy Blvd



2000 ft

Google Earth

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