EXHIBIT D

Mining Plan

General

The Parsons Mine property is located in the East½ of the Southeast¼ of Section 25, Township 6 North, Range 67 West of the 6th PM; in the West½ of the Southwest¼ of Section 30, Township 6 North, Range 66 West of the 6th PM; in the Northeast¼ of Section 36, Township 6 North, Range 67 West of the 6th PM; and in a portion of the Northwest¼ of Section 31, Township 6 North, Range 66 West, of the 6th PM. The site is directly south of Weld County Road 64½ and Weld County Road 25 bisects the property. The property contains a significant commercial deposit of sand and gravel located near the Cache La Poudre River.

The permit boundary will encompass approximately 381 acres, with mining activities anticipated to disturb approximately 189 acres of the site. The remaining unmined acres will be used for overburden and topsoil stockpiles, offsets from existing structures, property lines and waterways, and internal road and conveyor access.

Agricultural uses surround the property with the exception of some reclaimed gravel mining ponds that are southeast of the property and lined storage being created west of the property.

The site has been drilled during sampling episodes from March of 2002 to April of 2007, and testing has been performed to verify the sand and gravel deposits are commercially marketable. Based on test results, it is estimated that the overburden will amount to approximately 1,865,000 cubic yards. Overburden exists to an average depth of approximately 7 feet over the entire site. All overburden needed for the construction of the final reclamation slopes will remain on-site. The average depth of sand and gravel is 13 feet across the site and mining at the site is intended to progress down to bedrock.

The groundwater level lies approximately 5 to 15 feet below natural ground level, on average. The deposit is therefore classified as a wet alluvial deposit. However, mining operations will be carried out following dewatering.

The site is owned by Martin Marietta and Livingston Leigh Livestock of Weld County, LLC. Martin Marietta has a lease to mine the Livingston Leigh Livestock of Weld County, LLC property. Martin Marietta exercised the option to purchase the Sally A. Parson's property since the initial approval of this permit. The site will be mined in five phases. These phases are neither representative of the maximum area of disturbance nor do they limit disturbance to a particular phase.

The mineral rights in the portions of the site that fall in Section 36 are owned by the Colorado State Board of Land Commissioners. This affects portions of the land owned by Martin Marietta and Livingston Leigh Livestock of Weld County, LLC.

Methods of Mining

The typical mining procedure for all phases will be as follows. Any areas slated for protection will be identified in the field to assure that mining operations will be set back as appropriate. Initially, the topsoil and overburden will be stripped with scrapers and stockpiled in the designated stockpile areas identified in Exhibit C. Overburden will also be used to construct berms and as fill in the reclamation slopes. Overburden and stockpiled topsoil will be seeded as appropriate to prevent erosion. Prior to mining, a dewatering trench will be constructed around the perimeter of each phase. A sump hole will be created at the lowest point of each dewatering trench. The sump holes and dewatering trenches will allow sediment to settle before the water is pumped to the Cache La Poudre River using a groundwater discharge pump in accordance with Colorado/NPDES discharge permit regulations. Pipes transporting the water from the mine will discharge the dewatering water directly into the river, the cottonwood gallery adjacent to the river, and/or the wetlands adjacent to active mining areas to maintain appropriate soil moisture during the growing season. Water may also be pumped into adjoining cells. The drainage swales will be designed when the Final Drainage Report is prepared for Weld County. Water may also be pumped into adjoining cells.

When the alluvium is sufficiently dry, front-end loaders will excavate the material and deposit it on conveyors. The mining face will be nearly vertical to 0.5:1 slope. The conveyors will transport the material to be processed at the plant site which is located in the northeast corner of the Parsons Mine site.

The plant site contains the crushing, screening, and washing equipment used for the processing of the raw materials. The processed materials will be transported to other sites to be used in concrete and asphalt plants and delivered offsite for commercial and government projects.

All surface water within the mine areas will drain internally. The Preliminary Drainage Report prepared for Weld County (see Exhibit G, Attachment G-4) provides details of the conveyance of both off-site and on-site surface water through the site. Direct precipitation falling on a mine cell is collected in the perimeter dewatering trench and pumped out. There will not be any uncontrolled releases of surface water and sediment from mining areas. Storm water collected in the open mine will be managed in accordance with Colorado/NPDES discharge permit requirements. Sediment generated from localized storm water runoff and surface drainage will be managed according to the Stormwater Management Plan, enclosed in Exhibit G (Attachment G-3).

Water rights at the site will be used for dust control operations along the roads, stockpiles and berms. The water balance discussed in Exhibit G estimates the gallons per week necessary to limit dust emissions. The water will be supplied using a 2,500 gallon water truck.

No explosives are planned to be used.

Overburden

Topsoil and overburden will be stripped with scrapers or a dozer and placed separately in temporary stockpiles within the permit area limits. The topsoil will be segregated and stored separately from the overburden material as required by Rule 3.1.9(1). The topsoil will be placed in berms around the perimeter of the mine cells and will also serve as visual barriers where appropriate (see Exhibit C). The berms along the plant site and north perimeter will have an average height of 6 to 8 feet tall

and are not expected to exceed 15 feet in height; they will have maximum 3:1 (horizontal:vertical) side slopes. The berms along the west side of County Road 25 will have an average height of 4 feet. The topsoil stockpiles will be protected from wind and water erosion by vegetative cover (see Seed Mix, Exhibit E). The stockpiles will be broadcast seeded and incorporated into the weed control program. Weed control consists of monthly inspections and, if necessary, chemical treatments in the applicable fall and spring seasons. Topsoil stockpiles that will be in place for more than 180 days will be vegetated depending on the seeding "window" parameters for dryland grass, which are typically between September and April.

The overburden stockpiles will be continuously rotating. Initially, a portion of a phase will be stripped and the overburden stockpiled temporarily within the permit boundaries. Once the deposit has been mined from the stripped portion, the temporary stockpile will be removed and used for reclamation. The remaining portion of the cell will then be stripped and the overburden will be stockpiled on the mine floor or placed immediately in the reclamation slope. There will be no permanent stockpiles at this site; all extra overburden will be used to create undulating shorelines.

Commodities to be Mined

The primary commodity to be mined will be aggregate and a secondary commodity will be gold. Martin Marietta will supply local, county, and state governments, as well as private industry with aggregate from this facility. If gold is to be mined it will be used for commercial purposes.

Offsets

Martin Marietta will maintain mining offsets from sensitive areas designated for protection and all structures according to the Geotechnical Slope Analysis included in the Stability Exhibit. Setbacks were determined for each boundary and vary from 25 feet to 46 feet from structures. See Exhibit S and the Stability Exhibit for specifics. The Whitney Ditch, which traverses the north edge of the property boundary, will need to be relocated to accommodate additional right-of-way required for road improvements. Martin Marietta will relocate the ditch prior to the mining process and is working with the Ditch Company to obtain a formal agreement. There are some individual property lateral ditches will be eliminated. Some of the laterals are on the property owned by Martin Marietta so no consent agreement to mine through these laterals will be necessary. For the laterals on the property owned by Livingston Leigh Livestock of Weld County, the lease agreement that Martin Marietta has with the property owner addresses the right to mine through lateral ditches (please see lease agreements provided in Exhibit N).

Roads and Conveyors

Preparation for mining for each phase will include a 15' wide gravel access road around the perimeter of the cell. Any additional short-term haul access will be constructed with 6" of native sand and gravel from the floor of the mine. These gravel roads will be removed and reclaimed as mining and reclamation is completed for each phase. These areas have been included in the permitted acreage.

The majority of the material will be transported from the mining face to the processing area via conveyors. There are two proposed conveyor crossings of County Road 25. The northern most crossing (between Phases IA and 2) will be utilized during the mining of Phase 2 and the southern-most crossing (between Phases 4A/4B and 3) will be utilized during the mining of Phases 4A

through 5C and the adjacent Windsor East Permit M-2022-042. Each conveyor crossing will be enclosed in 100-foot spans, approximately 17 feet in height over the county roads. A conveyor will also cross the Cache La Poudre River. The conveyor bridges are composed of steel; the footings are anchored in concrete. Details for the conveyor bridges can be found in Exhibit C. Upon completion of mining operations, the conveyors will be removed and all areas affected by the conveyors will be restored to their original condition. There is also the potential for a conveyor tunnel to be constructed under "O" Street if "O" Street is constructed prior to the completion of mining of Phase *SC*.

All existing on-site roads are shown on Exhibit C, Pre-Mining Plan. Any existing gravel access roads shared with ongoing oil and gas production or farming activities will remain in place once mining and reclamation are complete. The roads will be maintained by the operator to provide required access to the various activities on the property. Existing roads are typically 12' to 15' wide, gravel access lanes. Some of the roads may be relocated to accommodate mining activities. Relocated access lanes will be constructed with 6" of native sand and gravel from the floor of the mine and remain in place once mining and reclamation are complete.

The main access to the site will be off of County Road 25 on the west side of Phase 1A. There will be a paved loop lane into the site as shown and dimensioned on page 4 of Exhibit C.

Mine Schedule

The Parsons Mine operation will process approximately 750,000 - 1,000,000 tons of aggregate per year along with the processing of material on the Windsor East Permit M-2022-042. At this rate, Martin Marietta anticipates mining and reclaiming the site in approximately 20 years; however, the rate of mining and overall life of the mine is dependent upon demand and market conditions.

The mine phases are depicted in Exhibit C. The phases depicted in Exhibit C are used to indicate the direction of mining. These phases are neither representative of the maximum area of disturbance nor do they limit disturbance to a particular phase.

Phase Overview

Phase IA will be stripped of overburden to the sand and gravel layer below. The processing plant will be set up at this elevation. Phase IA will also be the location of the fresh water pond (approximately 5 acres) and temporary silt storage pond (approximately 2 acres) until the permanent silt storage ponds (in Phases 1B and IC) are completed. Phase IA will actually be mined last as the processing plant will be used through the mining of Phase 5C and Permit M-2022-042.

Phases 1B and IC will be the first Phases to be mined as they will be the location of the silt storage ponds needed for the duration of the mine. Due to the location of an active Bald Eagle's nest within % mile of a portion of Phase 1C and within ½ mile of a portion of Phase 1C and all of Phase 1B, mining will be restricted per discussions with the Colorado Division of Wildlife and US Fish and Wildlife, as outlined in Exhibit H in the section titled "General Effect on Wildlife Due to Mining Operations." Phase 2 will then be mined followed by Phase 3 and so on until Phase *SC* and then Martin Marietta will return to mine Phase IA. Each Phase will be reclaimed following mining.

Equipment
The following equipment and facilities are anticipated to be utilized in this operation:

Loaders (3)
Diesel Powered Generator Set as needed (2)
Dozer (1)
Scrapers (6)
Grader (1)
Backhoe (1)
Water Truck (1)
Pumps as needed (2)

Structures
Conveyors and Feeders
Office (1)
Portable Toilet (2)[1]
Crushing Plant
Wash Plant
MCC Building
Fuel Storage Tank
Maintenance Shop
Trash Dumpster
Scale House
Scale

[1] These portable toilets are not shown on Exhibit C because they will move around the site depending on where they are needed during the various phases of the mining operation. Per the Weld County USR-1657 for the Parsons Mine, portable toilets may be utilized on sites that are temporary locations of the working face and portable processing equipment for up to six months at each location.

EXHIBIT E

Reclamation Plan

Design intent
This site will be mined and reclaimed to create a diverse, stable and sustainable environment. There are significant opportunities to enhance wildlife habitat and the natural aesthetics of the Cache la Poudre River riparian corridor. The reclamation plan is designed to accommodate these opportunities.

Existing riparian vegetation and wetlands have been identified and will be monitored and protected throughout mining and reclamation. Mining activities will be set back an appropriate distance from all areas designated for preservation. All mining activities will be set back a minimum of 200' from each side of the river. The only activities within the riparian corridor will include: controlled dewatering discharge consistent with a CDPHE permit; appropriately managed grazing of livestock; weed management; ongoing oil and gas production and maintenance activities; and a conveyor.

The conveyor over the Cache la Poudre River will be installed in the location indicated on Exhibit C. Support structures for the conveyor will be placed outside the banks of the river and jurisdictional wetlands along the bank. The conveyor will include containment to assure that material does not spill into the river or adjacent wetlands during transport. Any additional conveyors that cross identified wetlands will be supported outside the delineated areas and include containment to limit spill into the wetlands. All other surface activities will take place outside the protected areas.

Excavation associated with mining activities will be set back a minimum of25' from existing wetlands. Wetlands will be clearly delineated with silt fencing and access from roads, stockpiles and maintenance activities will be set back a minimum of 10' from silt fencing.

A combination of open water ponds, water storage, and wetlands and upland pastures will be created by the mining and reclamation process. Creative use of materials generated by mining and processing operations will enhance and compliment the existing riparian corridor. Silts will be used to form diverse silt basin wetlands. Excess overburden will be used to vary the shape and slopes of the finished unlined ponds. Native and adaptive plantings and ground covers will be used to restore and enhance all areas disturbed by mining activities.

This reclamation plan was developed based on:

- A thorough evaluation of the environmental resources and existing conditions on and adjacent to the property;
- The context of the property relative to existing and planned land uses in the area;
- The volume, depth and configuration of the mineral resource;
- The landowners' plans for the property; and
- The rules and policies of Weld County, the Colorado Division of Minerals and Geology and other applicable local, State and Federal agencies.

Key considerations include the following:

- The Cache la Poudre riparian corridor passes through the property. In addition, all wetlands on the site have been located and are identified on the pre-mining map. All efforts will be made to preserve and enhance the resources.
- All areas designated for preservation will be clearly identified during the mining and reclamation activities for each phase. Isolated wetlands will be delineated with perimeter silt fencing. The 200' setback from the river will be clearly marked in the field and silt fencing will be installed as necessary to implement the CDPHE Storm Water Management Plan for the site.
- Fourteen monitoring wells have been installed on the site to establish pre-mining groundwater levels. These wells and selected nearby private water wells will be used to monitor effects from mining and provide information for mitigation of potential impacts on groundwater levels and riparian vegetation, as necessary. Details of the monitoring and mitigation plans are provided in Exhibit G, Attachment G-1.
- Maintenance activities on the site will also include a comprehensive Weed Management Plan (see attached) to limit the spread of invasive species into the riparian areas and wetlands. In addition, managed grazing will also help to control invasive species and promote regeneration of native cottonwoods and willows within the riparian corridor. Concurrent reclamation will also widen, buffer and enhance the riparian corridor as each phase is mined and reclaimed.
- There is an existing bald eagle nest on an adjacent reclaimed gravel mine located south and east of the site. There are also raptor nests located on site along the Cache la Poudre River.
- The sequence and timing of mining and reclamation activities will be managed to limit impacts to the eagles and other raptors, during the nesting season.
- There is an opportunity to enhance wildlife habitat through the creation of a combination of open water ponds, silt basin wetlands, river corridor enhancement and shoreline plantings.
- Silts generated by the mining process can be utilized to create diverse wetlands and add diversity to the habitat along this portion of the river corridor.
- There are existing and planned oil and gas facilities on the site. Mining and reclamation activities will be managed to allow for continued operation and development of mineral resources. New drilling activities will be encouraged to utilize existing, disturbed areas at the maximum extent possible.
- There is significant overburden on this site. Excess material will be used as much as possible to create wetland benches adjacent to the river corridor, vary the slope and configuration of the open water ponds, create shorelines that are more irregular and limit the surface area of the ponds to minimize evaporative losses from the groundwater.
- Groundwater monitoring wells will be installed to establish pre-mining baseline water levels. Groundwater levels in the area of existing vegetation will be monitored. If levels drop below seasonal levels, dewatering water will be diverted to the areas to sustain existing vegetation to limits impacts during mining.
- We anticipate a slight modification to the Phase 2 pond upon review by the landowner's landscape designer.

Post-Mining Land Use

The post-mining land use, as proposed in this Reclamation Plan, consists of wetlands, enhanced riparian vegetation, unlined ponds, lined ponds and reclaimed upland areas.

All disturbed areas will be vegetated as appropriate with a native seed mix, as recommended by the Soil Conservation Service (recommended seed mixes below). These uses are compatible with the surrounding land uses and with the Weld County planning goals.

Martin Marietta will concurrently reclaim mine walls where mining has been completed according to the phases outlined in the Mine Plan. Reclamation, including regrading and seeding, will be completed within two to five years following the completion of mining or filling operations for each phase.
The mining and reclamation will leave no high walls on the property. No acid forming or toxic materials will be used or encountered in the mining. There will be no auger holes, adits, or shafts left on the site.

Reclamation Measures -Material Handling
Site reclamation measures are illustrated in Exhibit F. Reclamation of the site will include 8 lined or unlined open water ponds (60.0 acres), approximately 48.4 acres of wetlands and enhanced riparian areas and approximately 187.3 acres of upland (approximately 78.1 of these acres are within the mining limits and the remaining 109.2 acres are other disturbed areas within the permit boundary). These acreages may change over time as we mine material from Windsor East M-2022-042 and deposit additional silts in some of the smaller cells from washing the material.

The ponds will be reclaimed as lined water storage or un-sealed groundwater ponds. All mine walls will be re-graded with overburden material. Slopes above the post-mine high water level will be 4H:1V and slopes below the post-mine high water level will not exceed 3H:1V. Topsoil will be spread over the surface of the regraded slopes in all areas (except silt basin wetland) above the post-mining lake levels; all topsoil-covered surfaces will be revegetated with the appropriate seed mix.

We are needing to determine the amount of silt generated off of Windsor East M-2022-042 before we determine where all of the lined storage will be. Once designs for lined water storage are completed, an amendment will be submitted.

Scrapers will be used to place the backfilled overburden and topsoil. Using scrapers to layer the lifts at a maximum 3:1 slope ensures a stable configuration.

Disturbed areas associated with site access and the conveyor will be scarified, covered with topsoil, and revegetated. Topsoil will be replaced, where required, in reclaimed areas at a depth of approximately six to twelve inches.

Site grading will be performed to create stable topography and will be consistent with post-closure land uses. Reclamation quantities and costs are summarized in Exhibit L.

Water
Overburden and mine materials will be inert and impacts to local surface water or groundwater quality are not anticipated to occur as a result of mining activities. Martin Marietta will comply with all applicable Colorado water laws and all applicable Federal and State water quality laws and regulations and appropriate storm water management and erosion control to protect the river and existing riparian vegetation.

Wildlife

Presently, the area is used for farming and livestock grazing. There is significant habitat for many wildlife species along the river corridor. There is an existing bald eagle nest situated in an unstable dead cottonwood tree located on the south side of the river (on the adjacent property next to a reclaimed gravel pond). Phasing, configuration and timing of mining and reclamation activities have been designed to limit impacts to eagle habitat based on the current location of the nest. Several protection and enhancement measures will be incorporated into the operation and reclamation plans to protect the current active bald eagle nest:

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- No mining activity will be conducted within¼ mile of the nest throughout the year with the exception of development of an 18± acre wetland silt pond created just north of the river. The work to create this pond will be conducted over a 2 year period and will be limited to August 15 to October 15 to protect the occupied nest site. A wetland basin will be created through management of water and planting of native wetland plant species. The purpose of this silt basin is not only to dispose of smaller materials but also to develop a wetland adjacent to the river that will attract waterfowl and other wildlife species used as a food source for the eagles.
- The river corridor will be protected from all mining activity by a 200 foot buffer.
- Existing wetlands identified in 2007 will not be impacted by mining operations under the current Reclamation Plan. Any future changes to the Reclamation Plan that require an unavoidable impact to jurisdictional wetlands (such as a road crossing) would require coordination with the US Army Corp of Engineers and may involve obtaining the necessary permits under the Clean Water Act.
- Coordination will be conducted annually with the Colorado Division of Wildlife to monitor the eagle nesting location and activity. Protection measures will be reviewed and coordinated with the Colorado Division of Wildlife should the eagles relocate their nest.
- Coordination will be conducted annually with the Colorado Division of Wildlife to monitor the locations and activities of existing and new raptor nests.

Additional wildlife enhancement measures include:

- In consultation with the US Natural Resources Conservation Service (NRCS) or other qualified grazing specialists, develop and implement a suitable grazing plan for the riparian corridor that will promote restoration of a quality riparian pasture while discouraging colonization of the site by invasive plant species. This plan may involve limitations on the season of use and possibly a temporary rest.
- A weed management program will be undertaken to control noxious and invasive plant species and to replace those species with native and naturalized vegetation. Canada thistle *(Cirsium arvense)* and leafy spurge *(Euphorbia esula)* will be treated by a combination of mowing at regular intervals and herbicides used at the appropriate times and applications levels. Please see the attached Weed Management Plan.
- Riparian areas are one of the most important wildlife habitats in Eastern Colorado. This reclamation plan is being designed to maximize the upland riparian habitats by returning the mined areas to native upland habitats, native riparian habitats, and created wetlands. The plan will provide the most favorable habitats for wildlife through creation of edge by providing gentle slope transitions between riparian and wetland habitats and by limiting

open water adjacent to the riparian zone. Restoring these areas from upland cultivated fields to wetlands and native wetland and riparian species will allow restoration of important floodplain functions. This plan is in harmony with the goals of the 1998 Greeley Open Space System Plan associated with wetlands, riparian areas and floodplains.

- Wetlands created may become part of a wetland bank for the property to offset wetland impacts on other Martin Marietta projects.
- Wetlands created for nesting waterfowl will contain shallow open water (6-9") and gentle slopes (8:1). Shorelines will be irregular and gently sloping to maximize wetland growth and maintenance and provide suitable habitat for shorebirds and waterfowl.
- Mining operations will be phased with reclamation occurring concurrently.

However, some indigenous species may be temporarily displaced by the proposed mining activities. Please see Exhibit H for additional wildlife information.

Topsoiling

Topsoils in the proposed mine areas are predominantly Aquoll and Aquents, Colombo clay loam, Bankard sandy loam, Kim loam, Nunn clay loam, Otero sandy loam and Olney fine sandy loam. All suitable soil material will be salvaged for topsoil replacement. Topsoil will be replaced, where required, in reclaimed areas at a depth of approximately six to twelve inches.

The topsoil will be segregated and stored separately from the overburden material as required by Rule 3.1.9(1). The mine plan map depicts the location and configuration of the topsoil berms. The berms will be protected from wind and water erosion by vegetative cover if in place more than one year. The stockpiles will be broadcast seeded (please see the Seed Mix for Upland Areas) and will be incorporated into a weed control program. Weed control consists of monthly inspections and, if necessary, chemical treatments in the applicable fall and spring seasons.

Soil amendments are not expected to be required due to the nature of the soils. However, topsoil samples will be subjected to agricultural testing prior to reclamation to assess fertilizer requirements. The Soil Conservation Services (SCS) will be contacted periodically throughout reclamation for soil tests. SCS soil fertilizer recommendations, if any, will be followed.

Revegetation

Following topsoil replacement, reseeding will be performed according to SCS recommended practices. Based on SCS guidance for other local projects having similar surficial soils, the following revegetation procedures are anticipated

- Grass seed will typically be planted in unfrozen soil between October 1 and April 30.
- Grass seed will be planted with a grass drill, or where necessary, with a broadcast seeder.
- The proposed seed mix and application rates in pounds of pure live seed per acre are described on the following pages.
- Weed control practices will be implemented as required.

The above procedures may be modified as conditions dictate. If a significant invasion of noxious weeds occurs, the area will be mowed periodically for control. Weeds will be mowed before they go to seed during the first growing season. Mechanical control will be used as a first priority.

Chemical methods will be used only if no other alternative produces acceptable results.

In areas that are peripheral to the post-mining lake, marsh and aquatic plants are expected to establish themselves. The species of plants anticipated to occur naturally along the lake shoreline include cattails, willows, cottonwoods, and bulrushes. These plants should minimize shore erosion potential. The following are the proposed seed mixtures to be used on site where appropriate. However, availability may dictate the need for variety substitution.

Seed Mix for Upland Areas

Common Name	Scientific Name	Variety	% of Mix	PLS[1] Application Rate (lbs/ac)
Western Wheatgrass	Agropyron smithii	Arriba	17.0%	1.74
Sideoats Orama	Bouteloua curtipendia	Butte	17.5%	1.80
Mountain Brome	Bromus marginatus	Bromar	17.0%	1.74
Prairie Sandreed	Calamovilfa longifolia	Goshen	1.0%	0.48
Switchgrass	Panicum virgatum	Pathfinder	7.0%	0.67
Alkali Sacaton	Sporobolus airoides		1.0%	0.10
Needle and Thread	Stipa comata		13.0%	1.29
Northern Sweetvetch	Hedysarum boreale	Timp.	10.0%	1.02
Rocky Mountain Penstemon	Penstemon strictus	Bandera	5.0%	0.46
Scarlet Globemallow	Sphaeralcea coccinea	ARS2936	3.0%	0.26
Prairie Wildrose	Rosa Arkansana		8.5%	0.87
Total lbs/ac			100%	10.43

[1] Pure Live Seed pounds per acre; rates shown are for drill seeding; double rates for broadcast seeding.

Seed Mix for Transitional Zone/Water's Edge

Common Name	Scientific Name	Variety	% of Mix	PLS[1] Application Rate (lbs/ac)
Western Wheatgrass	Agropyron smithii	Arriba	10.6%	1.45
Side Oats Orama	Bouteloua curtipendia	Butte	9.2%	1.24
Canada wildrye	Elymus canadensis	Mandan	18.1%	2.47
Basin wildrye	Elymus cinereus	Magnar	9.8%	1.34
Switchgrass	Panicum virgatum	Pathfinder	5.7%	0.78
Sand dropseed	Sporobolus cryptandrus		0.2%	0.03
Scarlet Globemallow	Sphaeralcea coccinea	ARS2936	3.8%	0.52
American vetch	Vica americana		42.6%	5.81
Total lbs/ac			100%	13.64

Seed Mix for Wetland Areas[2]

Common name	Scientific Name	% of Mix	PLS[1] Application Rate (lbs/ac)
American Sloughgrass	Beckmannia syzigachne	12%	0.96
Nebraska Sedge	Carex nebraskensis	10%	0.80
Saw Beak Sedge	Carex stipata	2%	0.16
Saltgrass	Disticillis stricta	5%	0.40
Spike Rush	Eleocharis palustris	5%	0.40
Canada Wildrye	Elymus canadensis	10%	0.80
Baltic Rush	Juncus balticus	2%	0.16
Torry's Rush	Juncus torrei	2%	0.16
Alkali Muhly	Muhlenbergia asperifolia	8%	0.64
Switchgrass	Panicum virgatum	12%	0.96
Hardstem Bulrush	Scirpus acutus	2%	0.16
Three-Square	Scirpus americanus	10%	0.80
Pale Bulrush	Scirpus pallidus	10%	0.80
Prairie Cordgrass	Spartina pectinata	8%	0.64
Arrowgrass	Triglochin maritima	2%	0.16
Total lbs/acre		100%	8.00

[1] Pure Live Seed pounds per acre; rates shown are for drill seeding; double rates for broadcast seeding.
[2] Silt basin wetlands will establish without seed/plantings.

Typical Shoreline Tree and Shrub Plant List

Common Name	Botanical Name	Mature Size (Height/ Spread)	Size at Planting	Quantity	% of Ht./ Caliper Standard	% of Total
Peachleaf Willow	Salix Amygdaloides	30'-40' 25'-60'	1½"	15	100%	40%
Cottonless Cottonwood	Populus Sargentii	70'-80' 50'-60'	2"	27	100%	60%
Chokecherry	Prunus Virginiana	15'-25' 15'-20'	5 gal.	15	100%	18.5 %
American Plum	Prunus Americanus	6-15'	5 gal			
Common Snowberry	Symphoricarpus albus	3-4'	5 gal			
Golden Current	Ribes aureum	3-6'				
Wild Rose	Rosa woodsii	3-6'				
Coyote Willow	Salix Exigua	6'-12' 4'-8'	5 gal.	18	100%	22%
Willow Staking				150	To add thicket/habitat at water's edge	
Redtwig Dogwood	Comus Stolonifera	6'-10' 6'-10'	5 gal.	15	100%	18.5 %
Western Sandcherry	Prunus Besseyi	4'-5' 5'-7'	5 gal.	33	100%	41%

WEED MANAGEMENT PLAN

Active mining areas within the Parsons Mine property will be actively managed for noxious weed control with a combination of chemical and mechanical methods. Site evaluations will be conducted and management plans developed and implemented annually in an effort to maintain control of and/or eradicate noxious weeds, including Canada Thistle, Musk Thistle, Field Bindweed, Salt Cedar, Russian Olive and Leafy Spruge. Efforts are will also be focused on Kochia and Cheatgrass prior to revegetation of reclaimed areas.

Areas outside of active mining areas will continue to be managed for agricultural production and grazing. Weed management will continue under the terms of the agricultural lease on the site. However, grazing will be managed and limited within the riparian corridor to allow native vegetation to reestablish. A revegetation plan to reestablish native grasses and enhance the riparian zone will also be initiated and include aggressive control of Kochia, Cheatgrass and other weeds, followed by grass drill seeding if necessary, to enhance reestablishment of native grasses.