ACY

M-1980-131
M-2008-022

Findings of Violation Order and Administrative Order for Compliance
Docket No: CWA-08-2010-0035

Proposed Mitigation Plan

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MINING AND SAFETY

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INTRODUCTION

Elam Construction, Inc. (Elam) is proposing to reclaim a portion of the Bunn Ranch Gravel Pit in order to mitigate for impacts to wetlands at the Breeze Basin Gravel Pit, both near Craig, Colorado (Appendix A, Figure 1, USGS Quad Maps Attached). The project would create a minimum of 2.34 acres of functional wetlands in order to mitigate for 0.78 acres of wetlands impacted as described in the Findings of Violation and Administrative Order for Compliance, Docket No. CWA-08-2010-0035 (hereafter referred to as "the Order"), issued by the Environmental Protection Agency (EPA) on September 27, 2010.

This document is a proposal to satisfy requirements set forth in the Order, with the objective to detail the procedure for the creation of approximately 3 acres of wetland to replace wetland functions and values impacted at the Breeze Basin Gravel Pit. Furthermore, it is intended to preserve and protect these areas from potential impacts or development in the future.

I. PROJECT DESCRIPTION

A. Location of Project

The Breeze Basin Gravel Pit (the violation area) is located at 5801 Highway 394 Craig, Colorado, in Section 3, T6N, R90W, 6th P.M. The project area can be accessed from Highway 40 by turning south on Hwy 789 and following this road approximately 1 mile south across the Yampa River to Hwy 394. Travel approximately four miles east on Hwy 394, where the property can be accessed through the Brennise property driveway at 5801 Hwy 394 (Figure 2 and quad sheet Ralph White Lake, Colorado). The project area consists of a 62-acre mining permit area; the property has been historically utilized as agricultural and grazing pasture land.

The Bunn Ranch Gravel Pit (the proposed mitigation site) is located east of Craig, Colorado, in Section 6, T6N, R90W, 6th P.M., approximately 3.25 miles downstream of the Breeze Basin Pit. Because access to the site is only available through a working gravel pit, all visitors are required to check in at Elam's main office and be guided through the pit to the proposed mitigation site. The Elam Construction office is located at 1848 East 1st Street in Craig, Colorado. The property borders Moffat County and City of Craig land to the south and west, and Elam owner property to the north (Figure 3 and quad sheet Craig, Colorado).

B. Summary of Overall Project

4B Land & Livestock, LLC, was granted a permit to mine the Breeze Basin Gravel Pit on Dec. 4, 2008 (permit #M-2008-022). Elam has leased the right to operate the pit. Meetings with the Corps of Engineers (COE) indicated that the mining plan, as presented, did not require a COE permit as long as controls were observed (i.e., No Fill Zone) to ensure that there was no fill placed in the wetland footprint (COE 2009; WWE 2008).

Unfortunately, an internal miscommunication resulted in fill being inadvertently placed in a wetland, violating the Clean Water Act (CWA). The COE notified the EPA and the EPA issued Scott and Sheila Brennise, 4B Land and Livestock LLC, and Elam Construction, as responsible parties, a Findings of Violation and Administrative Order for Compliance, CWA-08-2010-0035. Elam has assumed full responsibility for the violation and all actions required

to satisfy the Order (Appendix D). The Order finds Elam, as the responsible party, was in violation of the CWA and adversely impacted 0.78 acres of wetlands and stipulates that the wetland impacts shall be mitigated at ratio of no less than 3:1, for a minimum of 2.34 acres. After removing any inadvertently placed fill, Elam has ceased all operations in the violation area. Elam has retained WestWater Engineering, Inc. (WWE) to establish a mitigation plan and supervise all aspects work required to satisfy the Order.

WWE evaluated the existing conditions and continuing operations at the Breeze Basin Pit along with several nearby potential mitigation sites owned by Elam. After careful consideration, WWE proposes that a higher quality functional wetland can be constructed on a portion of the Bunn Ranch Pit, approximately 3.25 miles downriver from the Breeze Basin Pit. The Bunn Ranch Pit is operating under a gravel mining permit (Permit No. M-1980-131) issued on December 15, 1980. The site is located on the western edge of the Bunn Ranch property and borders property owned by the City of Craig. Elam is willing to place a deed restriction on the property to ensure established wetlands will have a buffer and will be protected in the future (Figure 3).

C. Responsible Parties

Elam Construction, Inc., is the primary responsible party and will act on behalf of Scott R. and Sheila M. Brennise and 4B Land & Livestock, LLC. Elam is responsible for compliance with the Order and in the process of developing and implementing the mitigation. WWE was selected by Elam to prepare and implement the Mitigation Plan. Table 1 provides contact information for the responsible parties.

Table 1. Contact Information for Responsible Parties

Responsible Party	Primary Contact	Address	Phone Number and E-mail address
Elam Construction, Inc.	Todd Bauer, President	556 Struthers Ave Grand Junction, CO 81501	970-242-5370 970-245-7716 (fax) Todd.bauer@elamconstruction.com
Scott R. and Sheila M. Brennise	Elam Construction (refer to information above)	5801 Highway 394 Craig, CO 81625	970-824-4767 sbrennise@aol.com
Scott R. Brennise, Registered Agent, 4B Land & Livestock, LLC	Elam Construction (refer to information above)	5801 Highway 394 Craig, CO 81625	970-824-4767 sbrennise@aol.com
WestWater Engineering, Inc.	Mike Klish, Nicholas Jaramillo,	2516 Foresight Cir. Grand Junction, CO 81505	970-241-7076 970-241-7097 (fax) amw@westwaterco.com

The mitigation site is owned by Elam, who will be responsible for the implementation of the mitigation plan, and the long-term management and protection of the area. WWE will oversee the implementation of the mitigation plan, and conduct the required five (5) years of monitoring and reporting once construction is complete.

D. Jurisdictional Areas to be Filled

Wetlands that were excavated at the Breeze Basin pit will be reclaimed as per the reclamation plan submitted to the Colorado Division of Reclamation, Mining, and Safety (DRMS) (Appendix C).

E. Types, Functions and Values of the Jurisdictional Areas

The Breeze Basin pit is located on a property owned by Scott and Sheila Brennise and 4B Land & Livestock, LLC (Scott Brennise, registered agent). Wetlands delineated on the Brennise property consist of fringe wetlands along the Yampa River and wet meadow wetlands associated with an oxbow of the Yampa River (WWE 2008). Although there is no direct connectivity remaining with the Yampa River, these oxbow wetlands persisted from overflow flooding from the Deep Cut Ditch that flows southwest through the neighboring property (Figure 4). These wetlands provided some function of flood attenuation and ground water recharge. The land is used primarily for grazing pasture. The single structure, low diversity wetland provides some grazing habitat for livestock and big game, and limited habitat for birds and aquatic species.

II. GOALS OF MITIGATION

A. Goals of the proposed mitigation are:

(1) To more than offset the functions and values lost as a result of the wetland fill associated with the Breeze Basin Pit. This would be accomplished by constructing a higher value wetland that provides more functions than were available at the Breeze Basin hay field/pasture. In addition to higher functions and values, the mitigation site will be a minimum of three times the area of the Breeze Basin violation.

(2) To provide a mitigation area that can be protected from unanticipated disturbances by incorporating a deed restriction for the property.

(3) To provide a mitigation area that will include habitat for the many wildlife species that are present along the Yampa River corridor, while providing for control of exotic plants and fish species.

The following discussion helps to identify the types of habitat to be created at the proposed mitigation site.

B. Types of Habitat to be created

The Yampa River corridor supports abundant and diverse wildlife populations due to its size, habitat diversity, and relatively undeveloped and intact habitat complexes. The Craig area is home to large pronghorn, mule deer, and elk herds; the river corridor provides year-round pronghorn and deer habitat and winter range for all of these species. Riparian habitat along the river is also essential winter range to a number of wildlife species and provides habitat for many resident and migratory bird species.

Numerous bird species potentially occupy habitat within the project area (Appendix E). Multiple vegetation communities in the riparian zone, which support a wide range of plant species, afford suitable bird habitat. The vegetation communities in the project area provide nesting and foraging habitat for a variety of migratory birds from mid-April to mid-July

and/or during spring and fall. Appendix E contains a list of birds that have been observed in the Craig Southeast block (Breeding Bird Atlas Explorer 2010; Kingery 1998).

The Yampa River drainage, as well as the gravel pits and wetland areas east of the mitigation area, provides suitable habitat for waterfowl. The existing riparian corridor along the drainage, with its perennial water regime and vegetation, attracts both resident and migratory waterfowl species. Populations fluctuate over the course of a year, with numbers increasing in spring and fall as migratory birds use the habitat as temporary resting and feeding areas.

The end result of the project will be approximately one acre of open water surrounded by approximately three acres of associated wetlands. Properly designed and constructed, these two features could provide a significant amount of waterfowl habitat. Waterfowl, especially puddle ducks, prefer shallow water and the associated emergent vegetation for feeding and nesting. Gently sloping banks on the lake should provide emergent vegetation along the banks to a width of several feet; this type of shoreline will provide quality habitat for waterfowl and shorebirds.

Common nesting and summer resident species include Canada Goose, Mallard, Gadwall, and Cinnamon and Blue-winged Teal (Appendix E). Nesting occurs along the riparian corridor most commonly in undisturbed wetland habitats and in upland areas adjacent to aquatic habitats. Construction of the proposed wetlands will result in the creation of valuable habitat for songbirds as well.

The species most likely affected by project construction include the American Bittern, Willow Flycatcher and Veery that may nest in the project area. Sensitive birds that may occur in the proposed mitigation area are summarized in Table 2.

The Bald Eagle is listed by the Colorado Division of Wildlife (CDOW) as a threatened species. It was recently (2007) delisted as a Federal threatened species. In northwest Colorado, Bald Eagles most commonly nest in cottonwood trees along major rivers including the Yampa River. The same pair often reuses nests each year. Bald Eagles feed on fish, small mammals, waterfowl and often carrion including winter-kill deer and elk carcasses.

CDOW National Diversity Information Source (NDIS) (2010) records show 2 roost sites along the Yampa River within 1 mile of the proposed mitigation area. Roost trees and communal roost sites are sensitive habitats traditionally used by Bald Eagles during winter migratory periods.

Three active Bald Eagle nests are currently found within 0.5 mile of the project area along the Yampa River. CDOW recommends temporal restrictions on construction within 0.5 mile of Bald Eagle nest sites from 15 October – 31 July to prevent disruption of the annual nesting cycle. Some raptor species, including bald eagles, habituate and tolerate human activity, particularly in situations where nests are located in an area of ongoing human activity. Bald Eagles nesting in the vicinity of the mitigation site have been successful in producing young despite long-term gravel mining operations nearby.

The Yampa River riparian zone is high quality habitat for nesting and wintering Bald Eagles. Figure 5 depicts the nesting and roosting areas used by the eagles along the Yampa River. Buffers for each of the roost areas are included.

Table 2. Sensitive bird species that may be occur in the project area

Common Name	Scientific Name	Status[1]	Vegetation Community			Habitat & Breeding Records
			Piñon-juniper	Sage brush	Grassland/ riparian	
American Bittern	*Botaurus lentiginosus*	BCC			x	Builds nests in reeds or cattails in wetland areas. Listed as possible breeder in Moffat County.
Bald Eagle	*Haliaeetus leucocephalus*	BCC, CSC	x	x	x	Nests primarily in large cottonwoods. 3 active nests within ½ mile of mitigation site.
Brewer's Sparrow	*Spizella breweri*	BCC		x	x	Breeds primarily in sagebrush shrublands Confirmed breeder in Moffat County.
Sandhill Crane	*Grus canadensis*	CSC		x	x	Nests in flooded pastures, marshes and wet meadows. Confirmed breeder in the Craig area of Moffat County.
Veery	*Catharus fuscescens*	BCC			x	Breeds and nests in moist, dense riparian thickets. Probable breeder in Craig area of Moffat County.
Willow Flycatcher	*Empidonax traillii*	BCC			x	Nests in riparian thickets, favors willows near water. Confirmed breeder in Moffat County.
Yellow-billed Cuckoo	*Coccyzus americanus*	BCC, CSC			x	Primarily nests in cottonwoods in riparian areas. Not known to breed in Moffat County.

[1]BCC=Federal Bird of Conservation Concern; CSC=CDOW species of concern

The project area is situated in previously fragmented mule deer habitat. The area has been affected by historic ranching activities and previously mined gravel pits. The result is habitat which supports fewer mule deer than surrounding habitat that has not been as affected by human activities.

The creation of new habitat will add approximately 7 acres of terrestrial upland and wetland area that will provide forage for mule deer. The long-term environmental consequences are difficult to quantify; in the near term, mule deer would likely utilize habitat created by the project. The long term result of this project is creation of habitat that would support a few additional individuals in the deer population.

The additional 7 acres of vegetation created by the project will affect the elk population in the area; however, effects will likely be less than those affecting mule deer. The overall elk population should benefit slightly from the additional habitat provided by the project.

In addition to wildlife of the Yampa River corridor, Ecological Society of America (ESA) listed species habitat was also considered. Table 3 is the current U.S. Fish and Wildlife Service (USFWS) list of species for Moffat County (USFWS 2008). While the mitigation site includes no habitat for black-footed ferret, bonytail, Canada lynx, Colorado pikeminnow, humpback chub, Mexican spotted owl, or razorback sucker, the site does include potential habitat for Yellow-billed Cuckoo and Ute ladies'-tresses. To date, the site has not been surveyed for Yellow-billed Cuckoo during the nesting season.

Table 3. Moffat County Threatened and Endangered Species List

Common Name	Scientific Name	Status
Black-footed ferret	*Mustela nigripes*	E
Bonytail©	*Gila elegans*	E
Canada lynx	*Lynx canadensis*	T
Colorado pikeminnow©	*Ptychocheilus lucius*	E
Humpback chub©	*Gila cypha*	E
Mexican spotted owl	*Strix occidentals lucida*	T
Razorback sucker©	*Xyrauchen texanus*	E
Ute ladies'-tresses orchid (Yampa River floodplain)	*Spiranthes diluvialis*	T
Yellow-billed cuckoo	*Coccyzus americanus*	C

Symbols: © - There is designated critical habitat for the species within the county.
T - Threatened
E - Endangered
C - Candidate

Fish species known to occur in the Yampa River near the mitigation project area include flannelmouth sucker (*Catostomus latipinnis*), bluehead sucker (*Catostomus discobolus*), mountain whitefish (*Prosopium williamsoni*), white sucker (*Catostomus commersonii*), rainbow trout (*Oncorhynchus mykiss*), brown trout (*Salmo trutta*), northern pike (*Esox lucius*), smallmouth bass (*Micropterus dolomieu*), largemouth bass (*Micropterus salmoides*), bluegill (*Lepomis macrochirus*) and black crappie (*Pomoxis nigromaculatus*) (Elmblad 2010, pers. comm.). The first three species are native to the Yampa River and the rest are non-native. The non-native fishes can compete with native fishes for habitat and very piscivorous species such as northern pike will prey on them.

The USFWS is concerned that northern pike have established a reproducing population in the Yampa River that is impeding recovery of the endangered fishes. USFWS is particularly concerned that northern pike are using backwater channels and off-channel ponds along the Yampa River upstream of Craig for breeding and rearing young (Gelatt 2010, pers. comm.). The mitigation site lies in this area. Patty Gelatt with USFWS recommended that ponds constructed in this area be no deeper than 18 inches so fish in them will winterkill annually and not be a source of recruitment to the Yampa River populations.

Yampa River fish can be expected to access the mitigation site pond during high river flows and could become stranded when flows recede. Constructing the pond to a maximum depth of 18 inches should assure that they will die annually when the pond winterkills from oxygen depletion. Fish species expected to use the pond for breeding or refuge from high flows in the river are non-native northern pike, largemouth bass, bluegill and black crappie (Elmblad 2010, pers. comm.). Native fishes are less likely to use the pond because they inhabit riverine habitats. Under that scenario, the pond could become a one way fish trap for removing non-native fishes from the Yampa River. As the pond ages it is expected to become overgrown with submergent aquatic vegetation and no longer provide fish habitat.

Black-footed Ferret: The last historic record of a black-footed ferret in Colorado was in 1946. This species ranged statewide and its habitat included the eastern plains, the mountain parks and the western valleys – grasslands or shrublands that supported prairie dogs *(Cynomys* spp.*)*, the ferret's primary prey. However, records indicate that black-footed ferrets seem never to have been abundant in Colorado (Fitzgerald et al. 1994).

In a cooperative effort, state and federal wildlife biologists have established two major black-footed ferret colonies: one at Coyote Basin, which straddles the Colorado-Utah border west of Rangely, and another at the BLM's Wolf Creek Management Area southeast of Dinosaur National Monument near Massadona, Colorado (CDOW 2007a).

Bonytail: Critical habitat occurs in the lower Yampa and Green Rivers.

Canada Lynx: The lynx was listed in 1973 by the CDOW as a state endangered species and is federally-listed as a threatened species. The lynx is a large, bob-tailed cat, three-feet long with a black-tipped tail only about one-eighth the total length, and only about half the length of its huge hind foot; weights are 20 to 30 pounds.

In Colorado, lynx habitat is found in dense sub-alpine forest and willow-choked corridors along mountain streams and avalanche chutes, where its favored prey species, the snowshoe hare *(Lepus americanus)* is usually most abundant. Lynx also eat some carrion and capture ground-dwelling birds (like grouse) and small mammals. Lynx are active throughout the year; their large hind feet help them move across deep snow. Colorado is near the southern limit of their range, where they are found at elevations from approximately 4,600 ft to 9,000 ft.

Lynx were reintroduced in Colorado from 1999 through 2004. The CDOW fitted translocated lynx with radio-transmitters to monitor movements after release. Many of these lynx ranged widely, which is often a result when translocated individuals are released into unfamiliar habitat. Since the initial releases, lynx have been radio-tracked over a wide range in Colorado, Utah, Wyoming, and New Mexico (CDOW 2007b). Several radio-telemetry

locations from marked lynx were recorded in Routt and Moffat counties. Typically these lynx stay in an area only a short time in an area and then move on.

Colorado Pikeminnow: Critical habitat extends 15 miles up the White River from the Green River confluence. The upper terminus of critical habitat for Colorado pikeminnow is the State Highway 394 bridge crossing of the Yampa River (Federal Register 1994), which is several miles downstream from the wetland mitigation site (Elmblad 2009, pers. Comm.).

Humpback Chub: Critical habitat occurs in the lower Yampa and Green Rivers.

Mexican spotted owl: Inhabits canyon and montane forest habitats across a range that extends from southern Utah and Colorado, through Arizona, New Mexico, and west Texas, to the mountains of central Mexico (USFS 2010).

Razorback Sucker: Critical habitat occurs in the lower Yampa River and Green River.

Ute-ladies'-tresses orchid: Occurs along riparian edges, gravel bars, old oxbows, high flow channels, and moist to wet meadows along perennial streams. It typically occurs in stable wetland and seepy areas associated with old landscape features within historical floodplains of major rivers. It also is found in wetland and seepy areas near freshwater lakes or springs.

Yellow-billed Cuckoo: Habitat consists of lowland riparian forests and urban areas with tall trees. The Cuckoo is an uncommon local summer resident in western valleys, primarily from Mesa County southward, with a single record in Routt County.

B. Time lapse

Following initial establishment of wetland vegetation, the site will begin to provide the desired wetland functions and values. Wetland establishment is expected to take one year. It may take up to five years to reach the desired plant cover and diversity. When this bench mark has been achieved the long-term goal habitat will be considered to have been achieved.

III. FINAL SUCCESS CRITERIA

A. Vegetation

1. Re-vegetation success will be determined by comparing the total vegetative cover of all desirable plant species present at the site on the basis of a visual assessment and statistical data accumulated during the monitoring period. All native plants, except for those considered to be weedy by the Colorado State Extension Service, are considered to be desirable.
2. To be considered successful, the total vegetative cover in wetland and uplands will be composed of desirable species.
3. Projected cover in each planting zone, wetland Zone 1, wetland transition Zone 2, and upland Zone 3 will be at least 80%. Each of the three habitat types will be monitored on the ground each year.
4. In wetlands, vegetation must be dominated (greater than 50% relative cover) by species considered to be facultative (FAC), facultative wetland (FACW) or obligate (OBL)

wetland plants. Dominant species will be determined using the 50/20 rule and the COE hydrophytic vegetation dominance test (COE 2008a).

5. At least 50% total survival cover of the tree/willow cuttings will have lived through at least two consecutive growing seasons during the monitoring period and will have increased average stem length by at least six inches.
6. The presence of no more than 5% total vegetative cover consisting of weedy species, as defined by the State noxious weed list.

B. Hydrology

1. To be considered successful, monitoring wells have maintained consistent water elevation within the constructed wetlands.
2. Primary indicators of achieving adequate water balance will be the extent of capillary fringe and the condition of vegetation.

C. Soils

1. To be considered successful, the rate of soil erosion present at the site must be less than or equal to that of the surrounding area.
2. Formation of redoximorphic soil conditions, i.e., oxidation along root channel and pore spaces in capillary fringe and anaerobic reducing conditions at or below the water table, will indicate successful creation of wetland conditions.

IV. PROPOSED MITIGATION SITE

A. Location and Size

1. The proposed mitigation site is located in the southwest corner of Elam's 215 acre Bunn Ranch Gravel Pit. Elam has proposed imposing a deed restriction on an approximately11.3 acre portion of the property to allow comprehensive reclamation to take place and ensure protection of the created wetlands. The proposed wetland mitigation area is in a small pond within the deed restriction area. The pond is a remnant of past mining operations and the current surface water area is 3.62 acres. Elam has been gradually filling this pond with overburden over the past few years. The original reclamation plan approved by the DRMS identifies the post mine land use for the Bunn Ranch Pit, which includes the proposed mitigation site as Private Recreation (fishing, picnicking and boating). Once the EPA approves this mitigation plan for the construction of wetlands, a Technical Revision will be submitted to the DRMS to designate the 11.3 acres of the Deed Restricted Area as constructed wetlands. This will remove the 11.3 acres from a "Private Recreation" land use and designate it as "Wetlands". No residential use or development of the property will be allowed. No grazing of livestock within the Property will be allowed. A gated wildlife friendly fence will be constructed along the east boundary and connected to existing fences to restrict domestic grazing. The remaining Bunn Ranch Pit property will retain a post mine land use of Private Recreation. The approximate 11.3 acres of the proposed deed restriction area includes nearly 4.5 acres of riparian flood plain, over 600 feet of river front and wetland fringe, and 3.5 acres of transitional wetlands and upland. This site is discussed in further detail in below (subsection vii.—Site 7).

2. The site selection process evaluated prospective mitigation areas based on each site's potential to be protected and its capability of being reclaimed to a functional wetland. Factors considered included proximity to the river, habitat connectivity, land use, neighboring land use, presence of hydrology, availability of supplemental hydrology, remoteness from disturbance, and size. Alternate site locations were discussed in meetings with COE with the purpose of evaluating each site and its capability of providing the highest quality wetland. Areas evaluated for mitigation potential are described below and depicted in (Figure 7).

    a. Site 1 is located on the northern edge of the Breeze Basin violation area. This area has been disturbed and is currently being used as stockpile area for topsoil removed from the gravel pit. This area is approximately 3 acres in size and has access to hydrology from the river and Deep Cut Ditch. One concern with this area is that lies within the 100 flood plain of the Yampa River. Site 1 is located on agricultural grazing land and it would be difficult to protect the established wetlands long term.

    b. Site 2 is the violation site at the Breeze Basin pit where wetlands existed originally. The oxbow has been excavated, and to reclaim this area would require extensive work and significant expansion of the original wetland area. This area would have access to hydrology from the Deep Cut Ditch; however, to create a self sustaining wetland a significant portion of this area would have to be graded near the ground water table. Groundwater depletion from the adjacent pit could be a difficult obstacle to overcome. This area would be adjacent to an active gravel pit, as mining operations continue to the south across the permitted mining boundary. There would not be a buffer adjacent to the reestablished wetland or self sustaining hydrology until the gravel pit is reclaimed.

    c. Site 3 is the Breeze Basin pit area where mining operations will continue for the next few years. The reclamation plan for Breeze Basin Pit calls for a 30 acre+/- pond that will have fringe wetlands associated with its banks. The area of the fringe wetlands would be approximately 1.5 acres. Wetland area would have to be expanded by creating shelves, islands, or peninsulas in the pond to compensate for the 3:1 replacement ratio. The time lapse between the reclamation of the gravel pit and the creation of wetlands would increase temporal loss of wetland functions.

    d. Site 4 is a reclaimed gravel pit and existing pond created by Elam. The site has not been released from DRMS and is still considered an active portion of the Bunn Ranch Pit. This site remains active for access to minable properties to the north and the east. The idea was proposed to fill portions of the pond and create shelf, island, and peninsula wetland areas. Some of the existing functioning wetlands would have to be disturbed to utilize this site for mitigation. This site would be subject to future disturbance from adjacent mining operations.

    e. Site 5 is located at the northern edge of the Bunn Ranch Pit. This area has been mined out and consists of a series of ponds that are bordered by large berms on the north and east that protect the entire property from spring flooding. Areas to the north and east are future potential mining sites. Adjacent areas to the south and west will be part of a large scale reclamation pending site release to DRMS of the entire 215 acre parcel. There is adequate space and hydrology to develop wetland

mitigation; however, this site is susceptible to disturbances from planned mining and reclamation activities.

f. Site 6 is a mined pit that is no longer active. The pit has been left open and exposes and water. The current surface area of the pond is approximately 3 acres. The site is located just west of an asphalt plant and is frequently used for stockpiling and aggregate material sorting. This site is subject to heavy vehicle traffic and would be difficult to protect.

g. Site 7 is a mined pit in the southwest corner of the property. This area is periodically used to stockpile overburden and topsoil and is away from most day to day activity at the mine. The site provides access to a potential mining area to the north. An existing two-track road to the mining area to the north and around the mitigation area will be maintained. The center of the mitigation area consists of a small pond, currently 3.6 acre surface area. Elam has been gradually filling this pond with overburden over time. Under the submitted reclamation plan this area was to be returned to pasture land when it is reclaimed. Elam has expressed interest in creating wetlands in this corner of the property and imposing deed restrictions to ensure its protection (Appendix B). The deed restriction area, (Figure 7), is approximately 11.3 acres and includes at least 600 lineal feet of Yampa River front and 4.5 acres of riparian floodplain, in addition to any created wetland or reclaimed upland area. Although the deed restriction area encompasses a portion of the Yampa River and its riparian flood plain, no work will occur in this area. All construction will occur in upland above the natural flood plain of the River. No COE permitting will be required in the proposed mitigation area. The site appears to be suitable for wetlands establishment and is secluded from potential disturbances. Site 7 is the preferred mitigation area by WWE and the COE. With successful implementation of the plan, the mitigation site is expected to provide a higher quality wetland than the violation site.

3. The mitigation site is zoned and administered under Section 460 of "H-I" HEAVY INDUSTRIAL DISTRICT of the Moffat County land use code.

   The "H-I" District is intended to provide for the manufacture, fabrication and/or processing of any commodity, including those that usually create excessive amounts of smoke, noise, fumes, vibration, or other deleterious effects. Where possible, the District shall not abut a residential or business district. All regulations for this District are deemed the minimum necessary for the mutual protection of industrial users and for the securing of the health, safety and general welfare of the public.

   Elam Construction, Inc. has legal and equitable interest in the (11.78) acres it is proposing to mitigate and resolve violations found at its Breeze Basin Pit CWA -08-2010-0035. As stated previously, the Bunn Ranch location is part of an active aggregate mining operation permitted under DRMS permit number (M-1980-131). The location is currently managed as part of the permit and is currently following the reclamation plan attached as Appendix D which includes appropriate bonding held in escrow by DRMS that will lead to its ultimate disposition as a reclaimed upland pasture. If the mitigation is accepted through the violation resolution process, Elam

will also be required to submit a technical revision with appurtenant bonding requirements to fulfill its conversion to a wetland mitigation area.

Elam Construction, Inc. also holds title to the property sufficient to record the proposed deed restrictions identified in Appendix B. In addition to the proposed deed restrictions; Elam Construction, Inc. owns the necessary water rights required for the establishment of wetland and aquatic habitat on the property.

V. IMPLEMENTATION PLAN

A. Rationale for Expecting Implementation Success

The selected mitigation site includes desirable characteristics that make it suitable as a mitigation area: (1) the site can be graded such that the ground water is within a foot of the soil surface, (2) the site has access to supplemental irrigation if needed, (3) the site is located in an area that can be separated from other activities and should be much less vulnerable to unanticipated disturbances, and (4) the site is located adjacent to the flood plain of the Yampa River and will visually blend with the vegetation of the flood plain.

WWE and WWE's employees have extensive experience in designing wetland mitigation sites in western Colorado. Examples include the Plateau Creek Pipeline wetland mitigation site; many small mitigation sites for road crossings, pipeline crossings, and facility sites; and wetland mitigation banks that require conversion of uplands to wetlands. WWE recognizes the critical need to understand the hydrology of a site and the need to design wetlands for the hydrology of a site rather than to try to change or create hydrology. In our experience, wetland soils typically develop on sites with wetland hydrology. Most irrigation ditches begin to develop wetland soil characteristics (anaerobic conditions, gley colors) within a few years of first use.

B. Responsible Parties

1. Elam will be responsible for all construction activities, WWE will be on site during all phases of construction to oversee all aspects of final grading and planting.

C. Site Preparation

1. Excavation and re-grading around the water surface edges will be a minimum of 100 feet from the Yampa River. The applicant will install all pertinent erosion and sedimentation controls prior to any surface disturbances. Silt fences, straw bales and/or berms will be erected around the mitigation area so that there will not be a release of sediments during storm events. Site storm waters will be handled as specified in the Storm water Management Plan (SWMP) for the site (Appendix D).

2. Suitable topsoil will be stripped from around the existing open water area. Stockpiles of topsoil will be established east of the project area. All topsoil material will be stripped and stockpiled using bulldozers, motor graders, tracked excavators and front-end loaders.

3. Samples of topsoil will be sent to Colorado State University (CSU) Soil Laboratory to be analyzed for suggested amendments.

4. Grading will consist of reducing the berms on the west and south side of the existing open water area. Overburden will be used in the open water to construct a shelf at or just below the water surface. Slopes of the shelf will be at approximately 80:1 and irregularly contoured and compacted in preparation of topsoil (Figure 8).

5. Grading from the current water surface out to the uplands in all directions, will be no less than 10:1.

6. The remaining water surface area of the pond will be approximately 1 acre.

7. Upon completion of final grading all surfaces, upland and wetland, will receive at least 8 inches of topsoil.

8. Approximately 10,000 cubic yards of top soil will be mixed with at least 3,000 cubic yards of organic material (cow manure).

9. A minimum of eight inches of amended topsoil, borrowed on-site, will be placed over all areas disturbed during construction. Seeding will be limited to those areas that have been disturbed.

10. Topsoil will not be placed while frozen or muddy conditions exist.

11. Topsoil will be compacted to the appropriate tilth, density, consistency, and friability to provide a suitable growth medium for sprouting and seedling survival. Compaction methods, including equipment to be utilized, will be supervised by WWE.

12. All areas will be graded to drain. The maximum slope steepness will be 10H:1V unless otherwise shown on the project drawings or approved in writing by the project engineer. Wetland shelves will terminate 1 foot below the water surface and be cut to at a 3:1 slope.

13. The final surface of the topsoil will be graded to a relatively smooth surface using mechanical or hand raked methods.

14. Mineral amendments prescribed by CSU Soil Laboratory will be applied in preparation of planting.

15. The seedbed will be prepared by contour cultivating 4-to 6-inches deep with a harrow or disc. All other areas that have been disturbed or compacted by equipment will be scarified to receive seed.

16. No excess material has been estimated, any additional material will be brought in from existing stockpile locations in the neighboring gravel pit.

D. Planting Plan

1. Once the site has been constructed to final grade, planting zones will be established and flagged. Planting zones were determined in relation to the low water table elevation, measured in October 2010, is 6,171.5. Zones will allow for some overlap of seed mixes (Figure 6).

2. Zone 1 will consist of wetlands within the existing waterline boundary, elevation 6,169 ft mean sea level (msl) to 6,172 ft msl.

3. Zone 1 will be broadcast seeded with wetland seed mix and augmented with transplanted plugs if available.

4. Zone 2 will consist of the woody wetland transition zone from the water table elevation to three feet above the water table, elevation 6,171 ft msl to 6,174 ft msl. Zone 2 will be broadcast seeded with transition seed mix along with, willow, Wood's rose, and dogwood cuttings.

5. Cuttings will be planted on eight-foot centers.

6. Channels will be disked or plowed six-inches deep and four-inches wide for willow fascines and fences.

7. Zone 3 will consist of the upland transition zone from three feet above the water table to extent of grading, elevation 6,173 ft msl to 6,179 ft msl.

8. Zone 3 will be broadcast seeded with upland seed mix along with deep planted cottonwood poles.

9. Cottonwood poles will be planted on 16-foot centers and holes will be drilled with an auger to within 1 foot of the groundwater table.

E. Willow, Dogwood, and Assorted Riparian Shrubs

1. Cuttings will be 2 to 3 feet long and a minimum 3/8 inch and maximum 1 inch top diameter.

2. Willow cuttings will be planted with the top end up at 4± foot intervals along the down gradient edge of the planting strip.

3. Willows, dogwood, assorted riparian shrub cuttings will be cut locally within a week of planting. Cuttings will be stored in full water buckets treated with root stimulator until planting.

F. Cottonwoods

1. Cottonwood pole cuttings will be 4 to 8 feet in length and a minimum of 0.75 inch and a maximum of 1.5 inch top diameter.

2. Cottonwood pole cuttings will be planted top end up at 16± foot intervals approximately 5 feet up gradient from the willow plantings in Zone 2.

3. Cottonwood pole cuttings will be cut locally within a week of planting. Cuttings will be stored in full water buckets treated with root stimulator until planting.

4. *Cottonwood seedlings will only be used if adequate pole cuttings cannot be obtained.*

5. *Size - Seedlings will be at least 12 inches tall with a well developed root system. Bare root or containerized stock will be used based on availability.*

6. *Planting - Seedlings will be planted at 16± foot intervals approximately 5 feet up gradient from the willow plantings in Zone 2.*

7. It is recognized that survival of willow and cottonwoods could be severely affected by deer and/or beavers. Therefore, the proposed planting spacing is approximately 2 to 3 times denser than the expected survival rate.

G. Seeding

1. All disturbed areas in the restoration/creation site will be seeded after the pole and cutting plants are complete.
2. Seeding will take place after August 1 and before November 1 or after April 1 and before June 1. Just prior to seeding, areas of compacted soil will be cultivated to form an acceptable seedbed.

H. Application Rate, Method, and Mulch

1. Seed in each zone will be applied at the rate of 80 seeds (PLS) per square foot.
2. Seed will be broadcast spread at the applicable rates PLS/per acre.
3. Rice hulls (bulk/inert filler) will be added to the wetland (zone 1) seed mix to assist with consistency of application rate to bring the seed mix up to 20lbs per acre.
4. All broadcast seed will be raked into the soil after application.
5. Certified weed-free straw mulch will be inspected and bound with twine as regulated by the Weed Free Forage Act, CRS Title 35, Article 27.5, and administered by the Colorado Department of Agriculture. Mulch will be accompanied by a certificate of compliance as defined in the rules and regulations of the aforementioned Act.
6. A uniform depth of certified weed free straw mulch will be applied to all seeded areas. Mulch will be applied at the rate of 2,000 lbs/acre.
7. Mulch will be crimped in place by shovel or other applicable means.

I. Seed Mixes by Planting Zone

Zone 1: Wetland Emergent Herbaceous

Species	PLS lbs/acre
Baltic rush (*Juncus balticus*)	0.05
Bluejoint reedgrass (*Calamagrostis canadensis*)	0.25
Nebraska sedge (*Carex nebrascensis*)	1.00
Olney threesquare (*Schoenoplectus americanus*)	1.00
Creeping spikerush (*Eleocharis palustris*)	0.75
Hardstem bulrush (*Schoenoplectus acutus var. acutus*)	1.00
Total	4.05

Zone 2: Wetland Transitional Terrestrial Herbaceous

Species	PLS lbs/acre
Streambank wheatgrass (*Elymus lanceolatus ssp.*)	10.00
Timothy (*Phleum pratense*)	1.75
Fowl bluegrass (*Poa palustris*)	0.75
American mannagrass (*Glyceria grandis*)	2.0
Tufted hairgrass (*Deschampsia cepitosa*)	2.0
Total	16.50

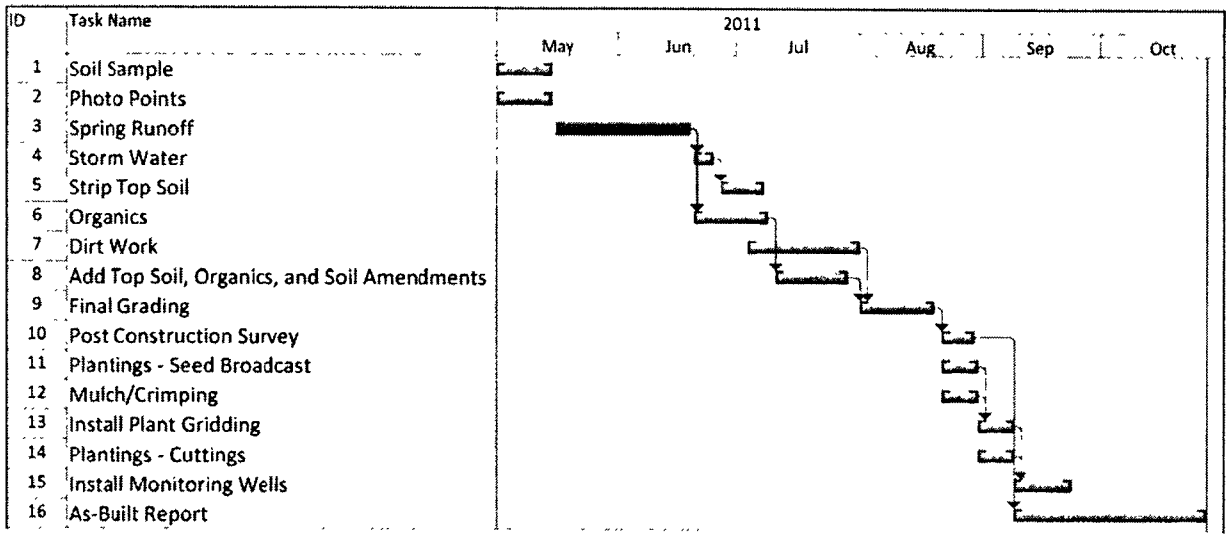
Zone 3: Upland Terrestrial Herbaceous

Species	PLS lbs/acre
Bluebunch wheatgrass (*Pseudoroegneria spicata ssp.*)	5.00
Western wheatgrass (*Pascopyrum smithii*)	5.00
Mountain brome (*Bromus marginatus*)	7.00
Great basin wildrye (*Leymus cinereus*)	5.00
Indian ricegrass (*Achnatherum hymenoides*)	3.00
Total	25.00

1. Planting Zones depicted in Figure 6.
2. Grass seed will be obtained from the same or previous year's crop. Certified weed-free seed will be used. All seed will be free of prohibited noxious weeds (as defined by the State), and will contain no greater than 1% other weeds.
3. Seed will be furnished and delivered premixed in the indicated proportions. Seed bag tags, or the equivalent, will be provided for each delivery of seed. Tags will show the guaranteed percentages of purity, weed content, germination, net weight, date of seed testing, and date of shipment.

J. Schedule

Table 4. Implementation Plan Schedule



K. Irrigation Plan

1. Elam has the available water rights to pump 2.5 cfs out of the Anna Branch Canal. The timeline and the total quantities needed, will dictate the method of withdrawal from the source and how the water is distributed onsite.
2. Irrigation water may be used in the first few years to initiate plant growth and root development and also to deter invasive weeds, exotics and invasive establishment, i.e., Tamarisk and Russian olive.

L. As-Built Conditions

1. A report will be submitted to the EPA within 6 weeks of completion of construction. The report will include:
2. As built surveyed topography contours of the mitigation area, including water surface area.
3. Locations of installed monitoring wells.
4. Location of installed protection measures, i.e., fencing.
5. Location of irrigation pump and supply line
6. Locations of as-built planting zones.
7. Copies of seed bag tags, showing purity, weed content, germination, net weight, date of seed testing, and date of shipment.
8. Copies of cuttings receipt, showing quantities and date of harvest.
9. Date of planting/seeding.
10. Details describing any deviation from original plans.

VI. MAINTENANCE DURING MONITORING PERIOD

A. Maintenance Activities

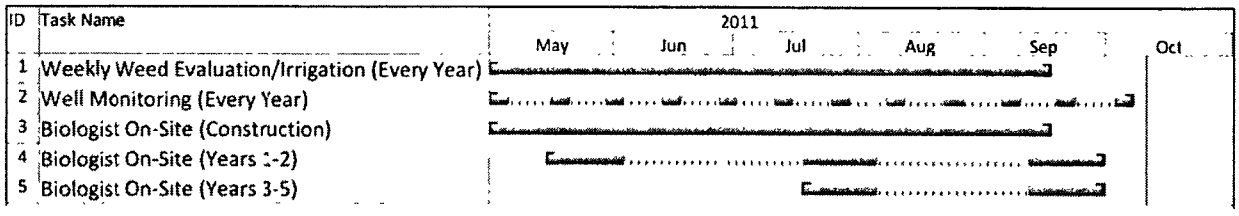
1. Maintenance and Monitoring will occur for a period of five years following the completion of mitigation work. The monitoring period can be reduced only if annual reporting demonstrates that all success criteria have been met for two consecutive years and have been verified by an EPA/COE site inspection.
2. Weekly site visits will be conducted by designated Elam personnel to evaluate for the presence of noxious weeds and every other week water well measurements will be taken.
3. No less than three site visits will be conducted during the first two years by a WWE biologist. Site visits will be conducted biannually for the following three years of monitoring (Table 5).
4. Site visits will include inspection of erosion, damage due to herbivores, plant health and coverage, monitoring of groundwater table, weed infestations, erosion, and irrigation.

B. Responsible Parties

1. Elam will be responsible for weekly monitoring and reporting to WWE in between scheduled visits by WWE personnel.

C. Schedule

Table 5. Maintenance Schedule



VII. MONITORING PLAN

A. Performance criteria

1. Prior to any surface disturbing activity, at least six permanent photo documentation points will be installed at the mitigation site. Initial pre-construction photographs will be taken along with post-construction and monitoring photos and then catalogued and archived.

2. Re-vegetation success will be determined by comparing the total vegetative cover of all desirable plant species present at the site on the basis of a visual assessment and statistical data accumulated during the monitoring period. All native plants, except for those considered to be weedy by the Colorado State Extension Service, are considered to be desirable.

3. To be considered successful, the total vegetative cover in wetland and uplands will be composed of desirable species. If the site has not attained this standard within three years, Elam will be required to take corrective action.

4. In wetlands, vegetation must be dominated (greater than 50% relative cover) by species considered to be facultative (FAC), facultative wetland (FACW) or obligate (OBL) wetland plants (COE 1987), by the second year. If the site has not attained this standard Elam will take corrective action.

5. For each year of the five-year monitoring period for the wetland areas, at least 80% of the woody and herbaceous species must be alive and judged to be of moderate or better vigor.

6. The mitigation areas must have a minimum vegetation cover (excluding trees) of 25% the first year, 50% the second year, 75% the third and forth years, and a minimum of 80% for the fifth year of the monitoring period.

7. The rate of soil erosion present at the site must be less than or equal to that of the surrounding area. If soil erosion is noticeably greater than that of the surrounding area at any point in time, immediate corrective action may be called for.

8. The presence of more than 5% total vegetative cover anywhere within the deed restriction area consisting of weedy species, as defined by the State noxious weed lists, at any point in time may require corrective action to prevent infestation.

B. Monitoring Methods

1. Acting as the environmental consultant, WWE will conduct on-site evaluations and consultation prior to and during construction, replanting, seeding operations, and monitoring periods.

C. Vegetation

1. Photo points will be established at the mitigation site. Enough photo points should be installed so that all portions of the reclamation/restoration areas are clearly visible and progress can accurately documented (COE 2008b), at least six. Each photo plot will be permanently established using Rebar, PVC or other permanently placed material, global positioning system (GPS), and identified on the map with an azimuth of shot identified (Figure 9).

2. A 20 by 50-cm quadrant frame (or plot) will be systematically placed along permanently located transects. Attributes monitored consist of canopy cover, frequency, and composition (see Appendix F for Data sheets). Each plot will be individually photographed. Vegetative measurements and related terminology are defined in standard sampling references (Cochran 1977; Daubenmire 1959; Greig-Smith 1964).

D. Hydrology

1. Water monitoring wells will be installed to replace open pit wells currently onsite (Figure 10).

2. Water table elevation will be measured at each monitoring well beginning in early spring (April 1) through the end of the hydrograph period (approximately November 15) of each year. These readings will be taken approximately every two weeks throughout this period. The threshold for saturation levels will be at the 12 to 18 inch sub-surface level.

3. Inundated areas will be recorded via GPS and mapped on a detailed hydrology map.

4. Soil saturation levels will be observed, i.e., capillary fringe, for the development of redoximorphic features and hydrophytic root development.

E. Soils

1. Monitoring for sulfidic odor establishment as an indicator of reducing conditions.

2. Monitoring for positive, alpha, alpha dipiradyl test again as an indicator for reducing conditions and wetland soil development.

3. Presence of oxidized root channel formation. As plant species composition changes, changes in the soil formations will also be occurring.

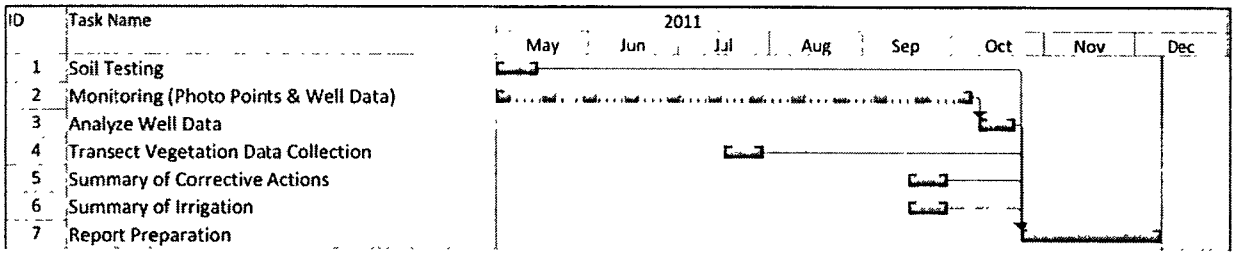
4. Saturated conditions as a surrogate for anticipated changes in soil development, within 12 to 18 inches of the water table and criteria as described above.

F. Annual Reports

1. Annual reports including a summary of observations, progress, potential problems, corrective actions taken, and photo documentation will be submitted to the EPA by December 1st of each year, until the site has been released by the EPA and COE.

G. Schedule

Table 6. Monitoring Plan Schedule



VIII. COMPLETION OF MITIGATION

A. Notification of completion

1. Once success criteria have been met and verified, a final report and settlement agreement will submitted to the EPA and COE.
2. Any final site inspections will be scheduled through the EPA and COE as necessary.

B. COE confirmation

1. Upon final and satisfactory completion of all specifications outlined in this plan the COE District Engineer and EPA Regional Administrator will sign and date the settlement agreement releasing the site as being in compliance with the Findings of Violation Order CWA-08-2010-0035.

IX. CONTINGENCY MEASURES

A. Initiating procedures

1. Contingency measures are an active part of monitoring, any indication of deviation or undesired trends trigger immediate corrective measures, i.e., weeds, undesired species, unexpected alterations in hydrology.

B. Alternative locations for contingency mitigation

1. In the event the site demonstrates that it is incapable of sustaining the proposed mitigation plan anytime during construction, a process of reevaluation of the alternatives described in IV.1.b will begin and the most suitable site will be selected.

C. Funding mechanism

The Bunn Ranch Pit near Craig, Colorado is a sand and gravel pit permitted by the State of Colorado DRMS, formerly the Mined Land Reclamation Division of the Department of Natural Resources. The Bunn Ranch Pit was issued Permit Number M-1980-131 on December 15, 1980.

The DRMS requires that all permit holders post a financial warranty, naming the DRMS as the insured, in an amount sufficient to reclaim the operation should the operator default in their obligation. These financial warranties must remain current for the life of the permit. The current financial warranty for the Bunn Ranch Pit is $158,355.00

As mentioned above, the Bunn Ranch Pit was permitted in 1980. The Reclamation Plan identifies multiple ponds with curving shore lines and slopes of 3-horizontal to 1-vertical. The post mine land use is described as private recreation, which includes fishing, picnics and boating. A Technical Revision was applied for, and approved in 2003 for repair to the bank of the Yampa River and to construct inlet and outlet channels.

Once the mitigation plan is approved by the EPA to be constructed at the Bunn Ranch Mitigation Area, a Technical Revision (TR-002) must be submitted to the DRMS identifying the proposed wetlands to become part of the Reclamation Plan. Once the TR is submitted to and determined to be a complete application by the DRMS, there is a minimum 30-day period before approval is granted by the DRMS. As part of the submittal, a cost estimate is provided to the DRMS to construct the wetlands. The DRMS, as part of their review process, will generate an independent cost estimate. As part of the DRMS approval, the operator (Elam) must provide additional financial warranty to the DRMS in the amount stipulated by the DRMS to adequately cover the construction costs of the wetlands (Table 7). This increase in financial warranty must again remain in effect for the life of the mining permit, which includes final acceptance of all reclamation activities.

Table 7. Wetland Mitigation Construction Costs

Item	Description	Quantity	Units	Unit Cost	Total Cost
1	**Pond dewatering** - provide pump capable of dewatering pond and maintain through placement of fill	1	LS	$6,400.00	$6,400.00
2	**Removal and stockpile topsoil** - salvage existing topsoil from around pond area; topsoil to be reused	2,000	CY	$5.60	$11,200.00
3	**Unclassified Excavation** - obtain fill material from designated onsite location, included excavation, transport to pond, placement within pond area	4,000	CY	$5.75	$23,000.00
4	**Embankment** - Place material from existing berm around pond within pond area	10,460	CY	$7.50	$78,450.00
5	**Soil Amendment** - furnish cow or horse manure and mix thoroughly with topsoil	3,000	CY	$8.00	$24,000.00
6	**Topsoil Placement** - place topsoil to a depth of 8 inches within designated planting area	4,800	CY	$4.25	$20,400.00
7	**Woody Vegetative Material**				
7A	Furnish cuttings of woody shrub components (60% willow, 20% dogwood, 20% assorted riparian shrubs)includes labor, scoping and material to harvest and deliver to project site	1,400	EA	$19.10	$26,740.00

Table 7. Wetland Mitigation Construction Costs

Item	Description	Quantity	Units	Unit Cost	Total Cost
7B	Furnish Cottonwood Poles; includes labor, scoping and material to harvest and deliver to project site	450	EA	$66.00	$29,700.00
7C	Installation of woody vegetative material - includes labor and equipment	40	HR	$300.00	$12,000.00
8	**Seed Mix**				
8A	Wetland Seed Mix - furnish and broadcast seed mix	3	AC	$400.00	$1,280.00
8B	Transition Seed Mix - furnish and broadcast seed mix	1	AC	$60.00	$84.00
8C	Upland Seed Mix - furnish and broadcast seed mix	4	AC	$180.00	$684.00
9	Straw mulch - furnish, place and crimp certified weed free straw mulch	7	AC	$500.00	$3,500.00
10	**Erosion Control** - provide required erosion control around disturbed areas to comply with Stormwater Management Plan	1	LS	$5,000.00	$5,000.00
11	**Monitor Wells** - Furnish equipment, labor and materials to install three monitor wells to a depth of 12 feet. Wells shall consist of 2 inch diameter slotted PVC pipe	3	EA	$200.00	$600.00
12	**Construction Management** - provide qualified construction manager to maintain compliance with approved construction drawings	1	LS	$15,000.00	$15,000.00
13	**Construction Surveying** - provide accurate layout in compliance with construction drawings	1	LS	$6,000.00	$6,000.00
14	**Mobilization** - mobilization and demobilization of equipment and labor necessary to perform work	1	LS	$6,500.00	$6,500.00
TOTAL					**$270,538.00**

D. Responsible Parties

1. Elam will be responsible for all technical revisions submitted to DRMS and any adjustments to the bond amount that come about as a result of these changes.

XII. REFERENCES

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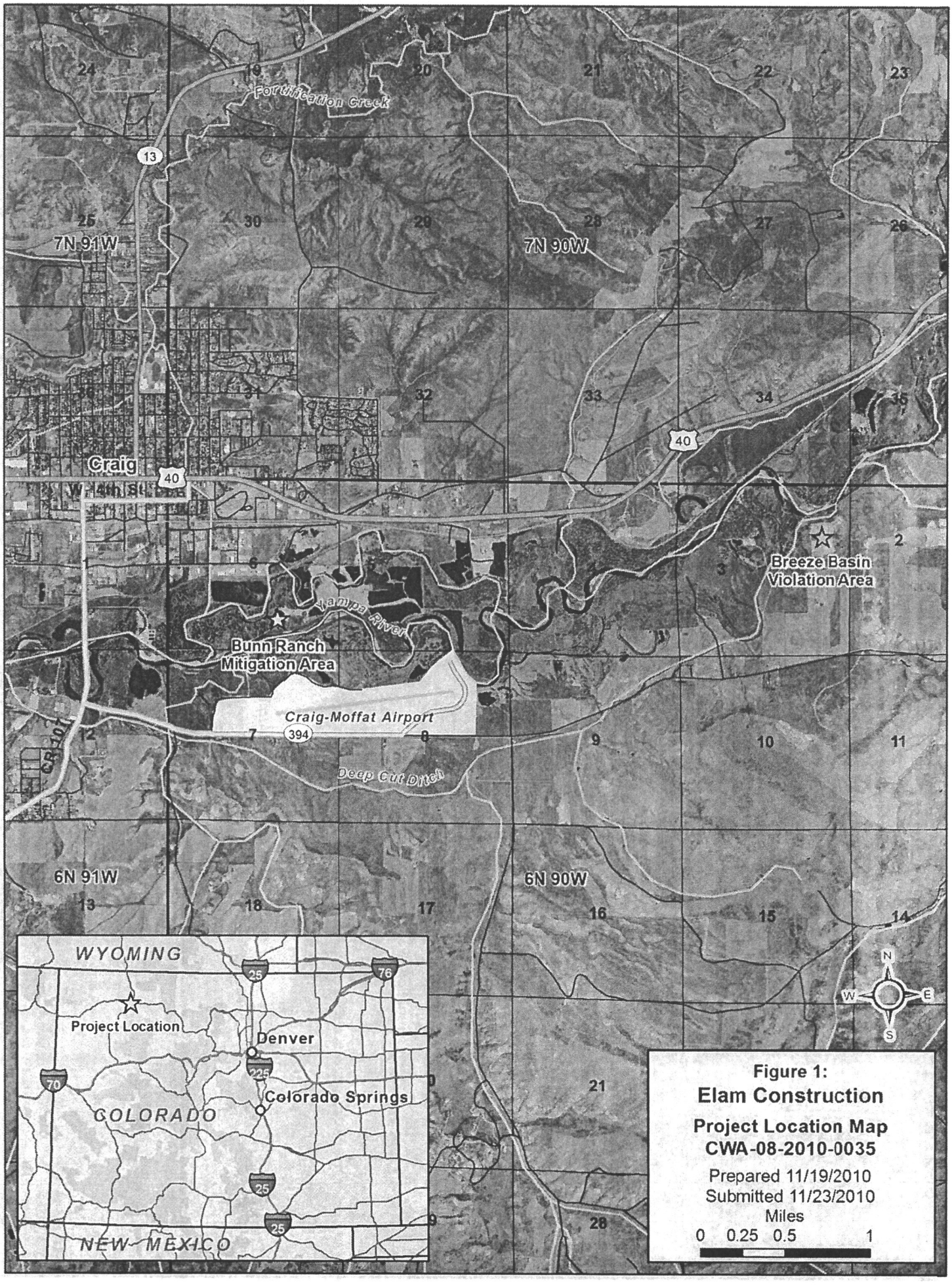
APPENDIX A

FIGURES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Craig
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Bunn Ranch
Mitigation Area
Yampa River
Craig-Moffat Airport
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CR 10
Deep Cut Ditch
Breeze Basin
Violation Area
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6N 90W
WYOMING
COLORADO
NEW MEXICO
Project Location
Denver
Colorado Springs
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Figure 1:
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Project Location Map
CWA-08-2010-0035
Prepared 11/19/2010
Submitted 11/23/2010
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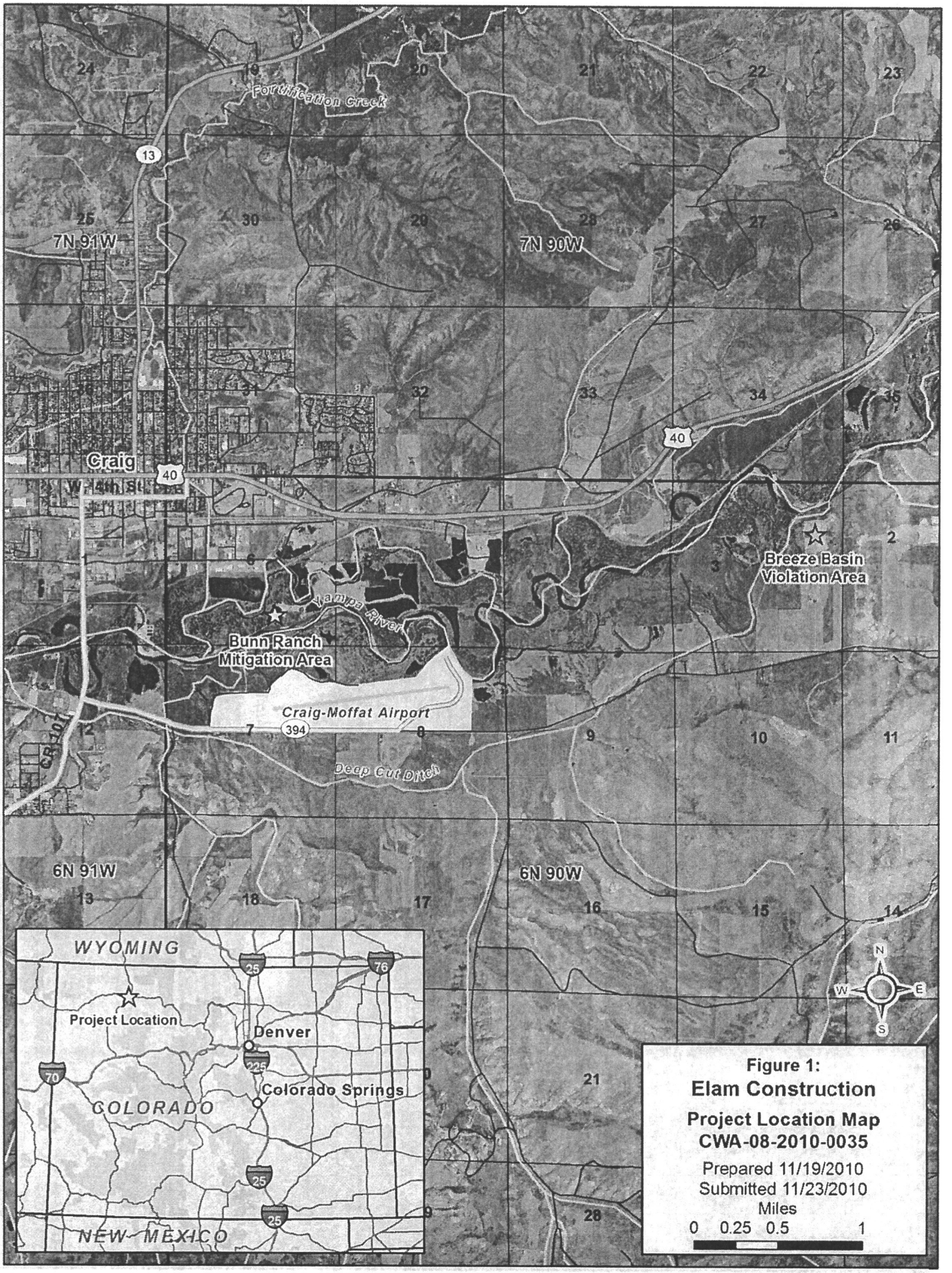
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Mitigation Area
Yampa River
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394
CR 10
Deep Cut Ditch
Breeze Basin
Violation Area
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COLORADO
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Project Location
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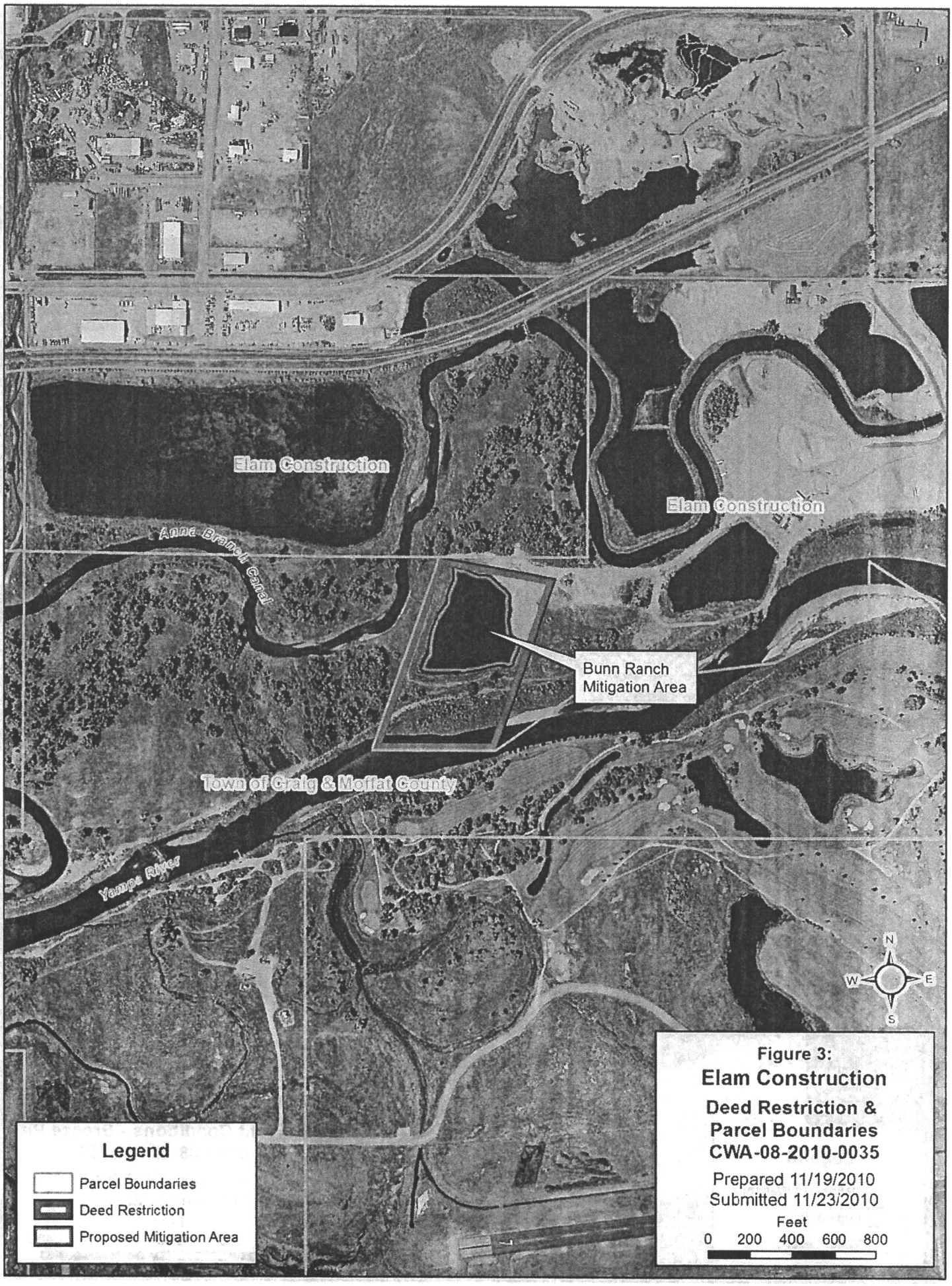
Elam Construction
Elam Construction
Anne Bramel Canal
Bunn Ranch
Mitigation Area
Town of Craig & Moffat County
Yampa River
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Legend
Parcel Boundaries
Deed Restriction
Proposed Mitigation Area
Figure 3:
Elam Construction
Deed Restriction &
Parcel Boundaries
CWA-08-2010-0035
Prepared 11/19/2010
Submitted 11/23/2010
Feet
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Yampa River
Deep Cut Ditch
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Legend
Delineated Wetlands
Edge of Pit
Water Level
Figure 4:
Elam Construction
Current Conditions - Breeze Pit
CWA-08-2010-0035
Prepared 11/19/2010
Submitted 11/23/2010
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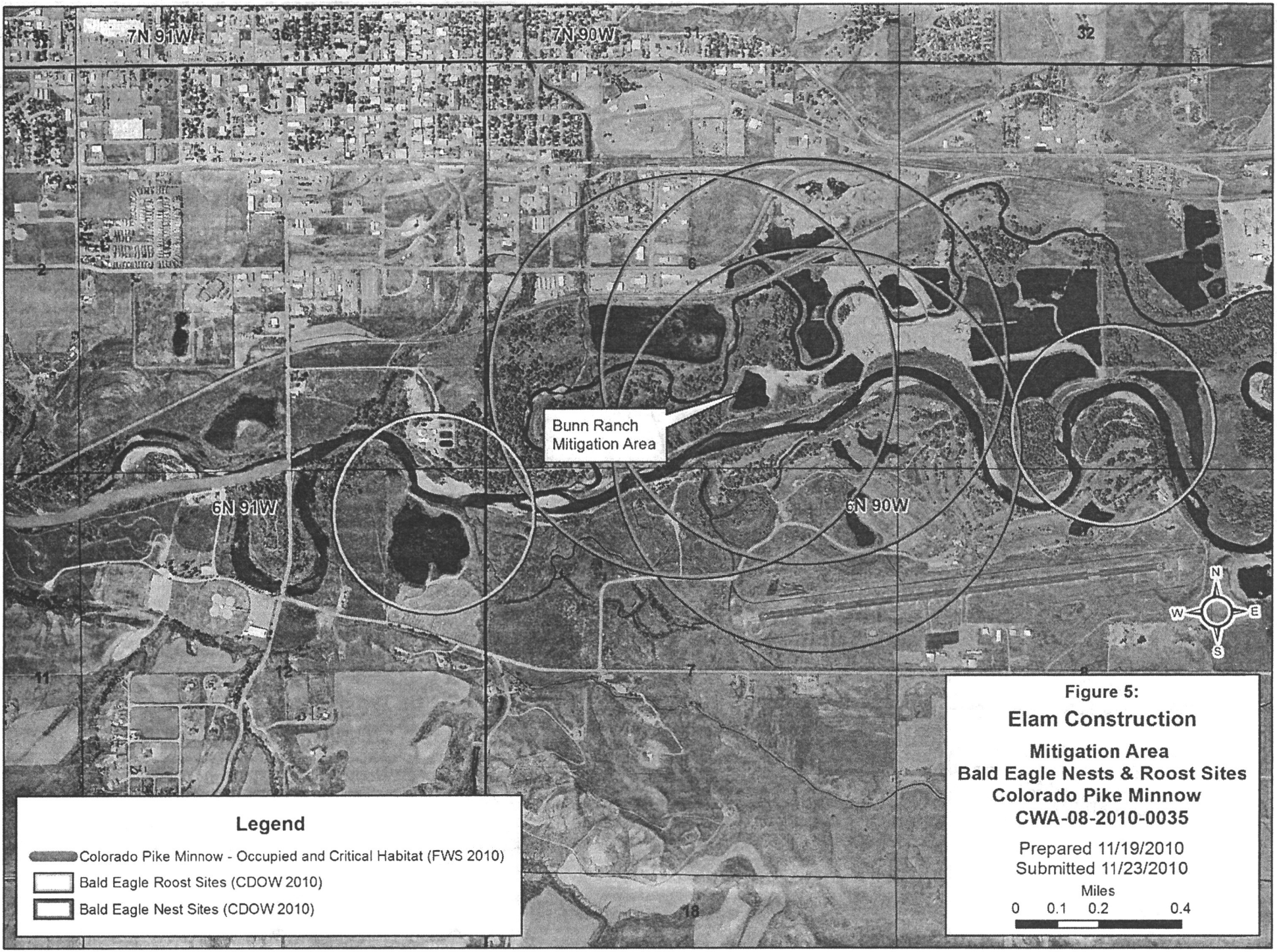
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Bunn Ranch
Mitigation Area
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6N 90W
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7
18
Legend
Colorado Pike Minnow - Occupied and Critical Habitat (FWS 2010)
Bald Eagle Roost Sites (CDOW 2010)
Bald Eagle Nest Sites (CDOW 2010)
Figure 5:
Elam Construction
Mitigation Area
Bald Eagle Nests & Roost Sites
Colorado Pike Minnow
CWA-08-2010-0035
Prepared 11/19/2010
Submitted 11/23/2010
Miles
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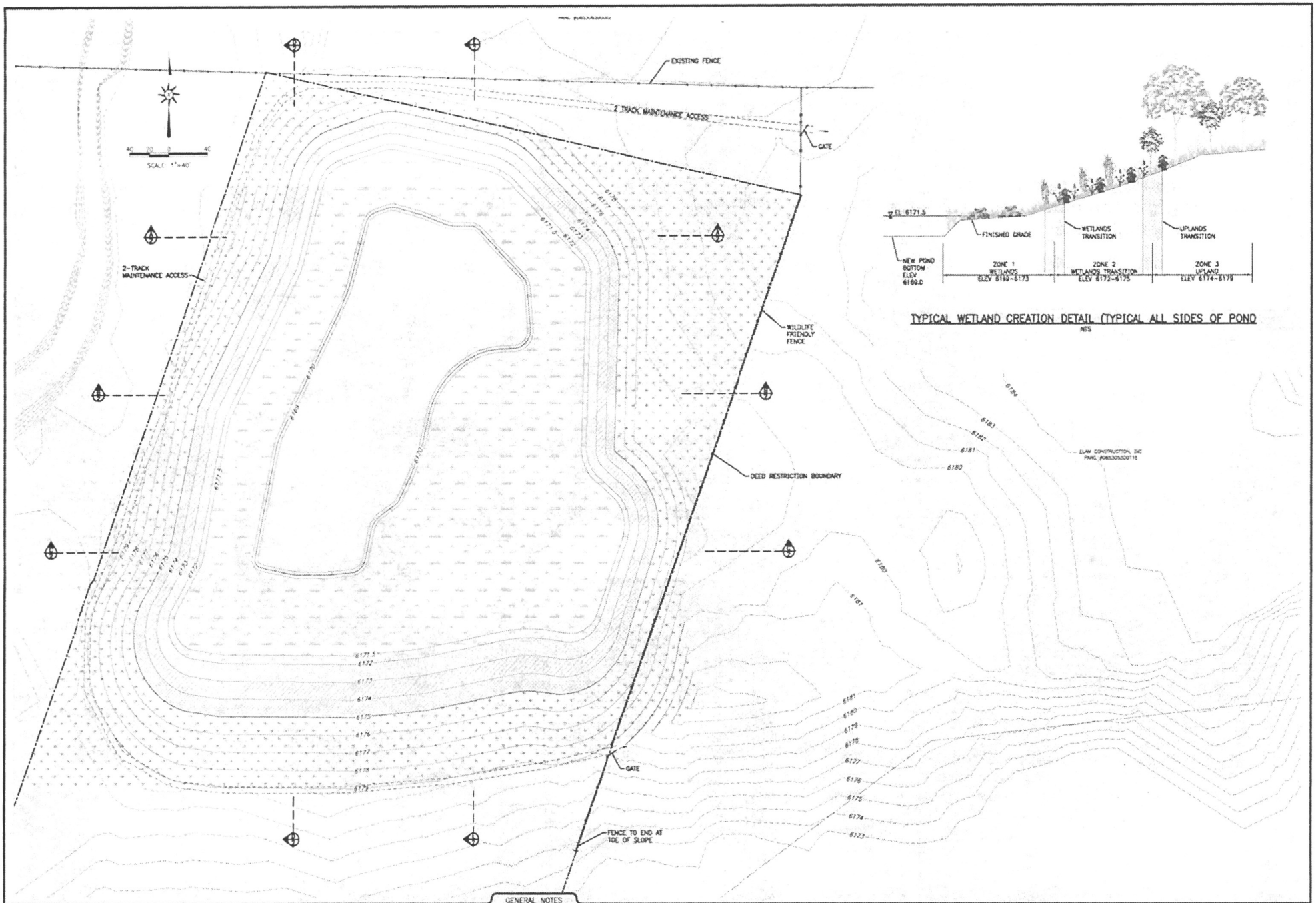

TYPICAL WETLAND CREATION DETAIL (TYPICAL ALL SIDES OF POND

NTS

GENERAL NOTES

SCALE: HORIZONTAL 1"=40'
VERTICAL N/A

REVISIONS	DATE
PREPARED	11/18/2010
SUBMITTED	11/23/2010

KEY:

- FINISHED GRADE CONTOURS
- ZONE 1 – WETLANDS 2.76 ACRES
- WETLANDS TRANSITION ZONE 0.45 ACRES
- ZONE 2 – WETLANDS TRANSITION 0.47 ACRES
- UPLANDS TRANSITION ZONE 0.48 ACRES
- ZONE 3 – UPLANDS 3.3 ACRES

WestWater Engineering
2516 Foresight Circle, #1
Grand Junction, CO 81505
(970) 241-7076

PROPOSED MITIGATION SITE

FIGURE 6
PLANTING PLAN
CWA-08-2010-0035

Design by:	Drafted by:	Date:	Project No.	Sheet
BFF	JCG	11-10	036.001.003	4 of 4

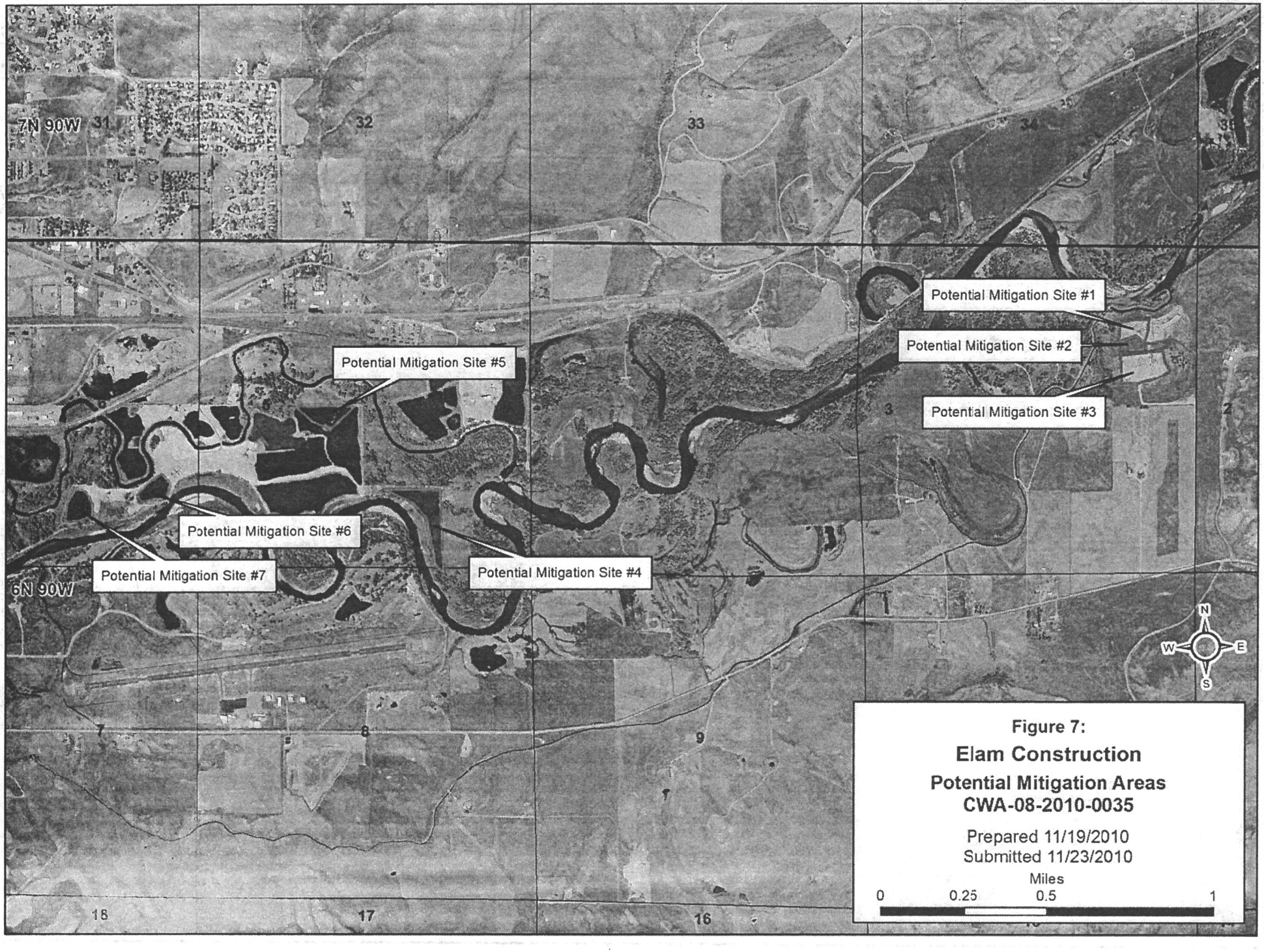

Figure 7:

Elam Construction

Potential Mitigation Areas
CWA-08-2010-0035

Prepared 11/19/2010
Submitted 11/23/2010

Miles

0 0.25 0.5 1

GENERAL NOTES

SCALE: HORIZONTAL 1"=40'
VERTICAL N/A

REVISIONS	DATE
PREPARED	11/19/2010
SUBMITTED	11/23/2010

KEY:
- - - - EXISTING CONTOURS

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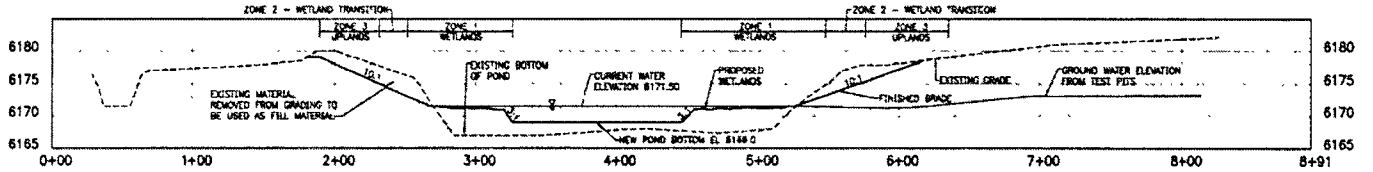
Grand Junction, CO 81505
(970) 241-7076

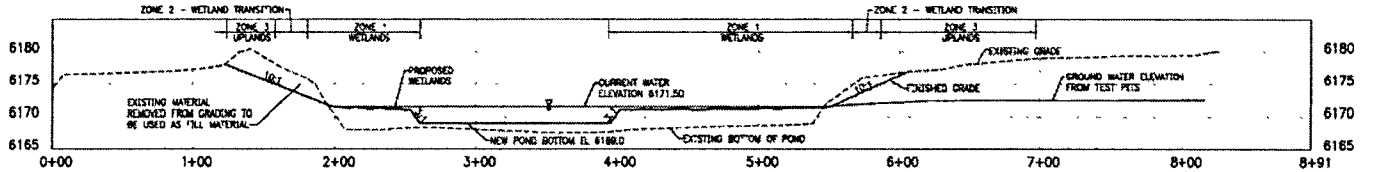
PROPOSED MITIGATION SITE

FIGURE 8
EXISTING CONTOURS
CWA-08-2010-0035

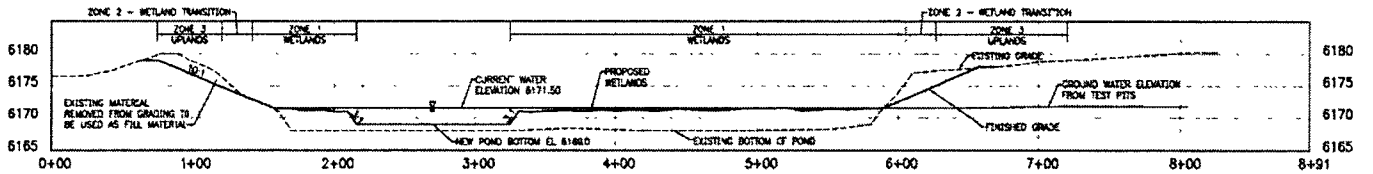
Design by:	Drafted by:	Date:	Project No.	Sheet
WF	JCG	11-10	036.001.003	1 of 4



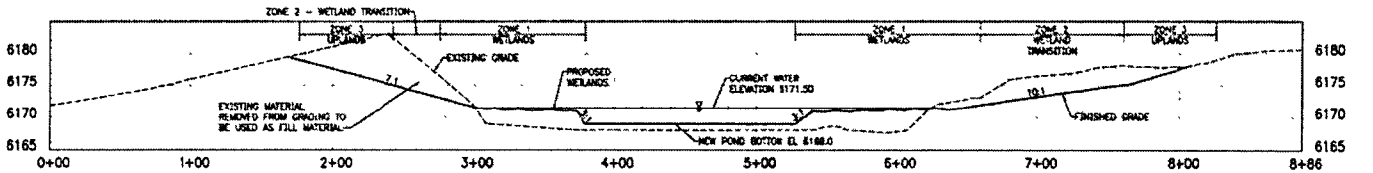
SECTION A-A



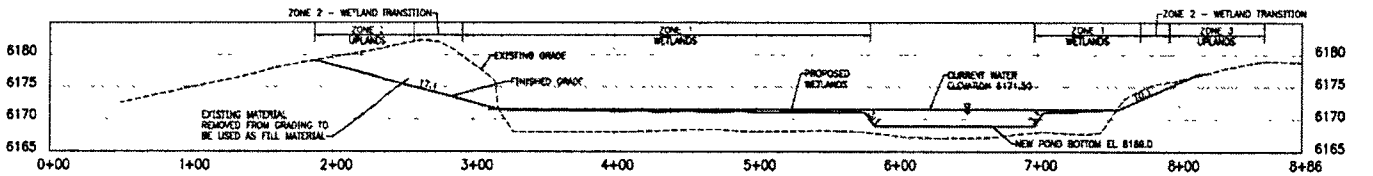
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

GENERAL NOTES

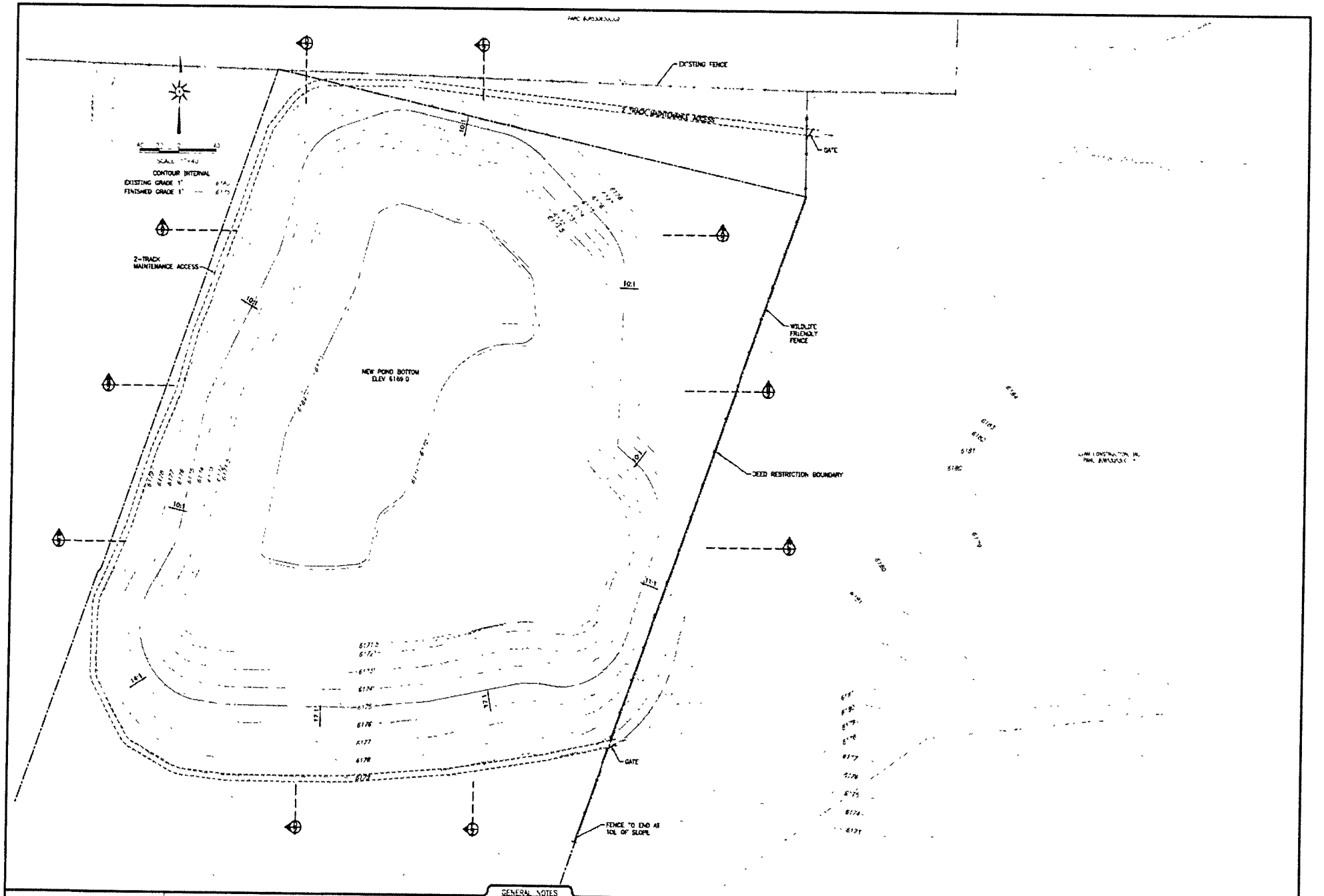
SCALE HORIZONTAL 1"=40'
VERTICAL 1"=5'

REVISIONS	DATE
PREPARED	11/18/2010
SUBMITTED	11/23/2010

WestWater Engineering
2515 Foresight Circle, #1
Grand Junction, CO 81505
(970) 241-7075

PROPOSED MITIGATION SITE
FIGURE 8A
CROSS SECTIONS
CWA-08-2010-0035

Design by:	Drafted by:	Date:	Project No.	Sheet
BEF	JCG	11-10	036.001.003	3 of 4



GENERAL NOTES

SCALE: HORIZONTAL 1"=40'
VERTICAL N/A

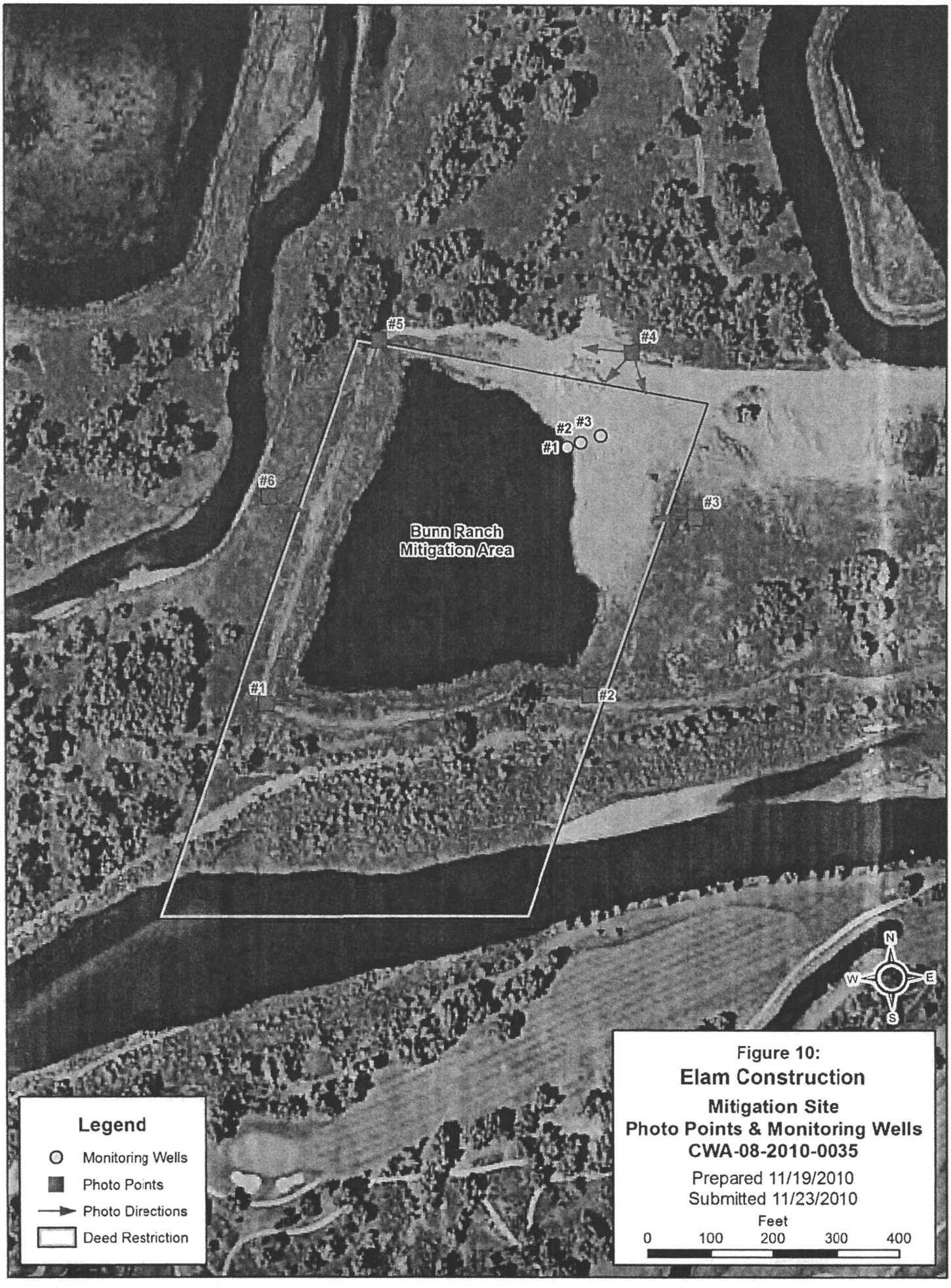
REVISIONS	DATE
PREPARED	11/19/2010
SUBMITTED	11/23/2010

KEY.
- - - - EXISTING CONTOURS
——— FINISHED CONTOURS

WestWater Engineering
2318 Foresight Circle, #1
Grand Junction, CO 81505
(970) 241-7076

PROPOSED MITIGATION SITE
FIGURE 9
GRADING PLAN
CWA-08-2010-0035

Design by:	Drafted by:	Date:	Project No.	Sheet
BFF	JCS	11-10	036.001.003	2 of 4


#5
#4
#2
#3
#1
#6
#3
Bunn Ranch
Mitigation Area
#1
#2
N
W
E
S
Legend
Monitoring Wells
Photo Points
Photo Directions
Deed Restriction
Figure 10:
Elam Construction
Mitigation Site
Photo Points & Monitoring Wells
CWA-08-2010-0035
Prepared 11/19/2010
Submitted 11/23/2010
Feet
0
100
200
300
400

APPENDIX B

PROPOSED DEED RESTRICTIONS

STATE OF COLORADO)
)
COUNTY OF MOFFAT)

DECLARATION OF RESTRICTIVE COVENANTS

ELAM CONSTRUCTION, INC. [(DECLARANT)] MAKES THIS DECLARATION OF RESTRICTIVE COVENANTS THIS _____ DAY OF _____, 20___.

RECITALS

WHEREAS, Declarant owns real property in Moffat County, Colorado, on which gravel, sand and aggregate materials have been mined, stored and transported, a small portion of which real property is more particularly described in Exhibit A, attached hereto, and made a part hereof (Exhibit A being for all purposes herein the "Property"); and

WHEREAS , it is the specific intent of the Declarant that this Declaration of Restrictive Covenants apply only to the Property described in Exhibit A and no other part of the Declarant's real property; and

WHEREAS, Declarant desires to create and maintain the wetland character of the Property by limiting opportunities for commercial development and uses, except as appropriate for the development and maintenance of wetland and aquatic habitat and except as required in the development, exercise and maintenance of any and all water rights, now decreed or otherwise and all associated ditches and structures used in connection with said water rights; and

WHEREAS, the Property will serve as compensatory mitigation under Federal law as approved by the U.S. Environmental Protection Agency and U.S. Army Corps of Engineers, Sacramento District, and the Declarant has agreed to place certain Restrictive Covenants on the Property, and only on the Property, in order that the Property shall remain substantially in its reclaimed condition forever except as provided otherwise herein.

NOW THEREFORE, Declarant hereby declares that the Property, and only the Property, shall be held, transferred, conveyed, leased, occupied or otherwise disposed of and used subject to the following Restrictive Covenants, which shall run with the Property and be binding on all successors, assigns, lessees, or other occupiers and users.

A. **PURPOSE.** It is the purpose of these Restrictive Covenants to preserve and protect, in perpetuity, the natural, ecological, wildlife habitat, scenic, open space, and aesthetic features and values of the Property. In furtherance of the foregoing objective, these Restrictive Covenants identify certain uses of the Property which are consistent or inconsistent with such objective and which are therefore allowed or prohibited. Reserved Rights as identified below are illustrative only and are not intended to be limiting.

1. Prohibited Uses and Practices on the Property ("Restrictions"). The following uses and practices are inconsistent with the purposes of these Restrictive Covenants, and shall be prohibited on the Property:

(i) General. Except as may occur by natural forces and except as appropriate for the development and maintenance of wetland and aquatic habitat in accordance with the agreed upon mitigation plan and in the exercise and maintenance of decreed and other water rights and ditches, there shall be no filling, flooding, excavating; no removal of natural materials; no dumping of materials; and, no alteration of the topography in any manner.

(ii) Waters and Wetlands. In addition to the General restrictions above, there shall be no draining, dredging, damming or impounding; no changing the grade or elevation, impairing the flow or circulation of waters, reducing the reach of waters; and, no other discharge or activity requiring a permit under applicable clean water or water pollution control laws and regulations, as amended, except as may occur by natural forces and except as appropriate for the development and maintenance of wetland and aquatic habitat and in accordance with the agreed upon mitigation plan and in the development, exercise and maintenance of any and all water rights, now decreed or otherwise and all associated ditches and structures used in connection with said water rights as set forth in Section 2.

(iii) Trees/Vegetation. There shall be no disturbance of any living vegetation, including clearing, burning, cutting or destroying of trees or vegetation, except as may occur by natural forces and except as (a) expressly authorized in the Reserved Rights, (b) appropriate for the development and maintenance of wetland and aquatic habitat, and (c) appropriate for annual maintenance of ditches and land and in the exercise of decreed and other developed water rights; there shall be no planting or introduction of invasive or noxious species of trees or vegetation.

(iv) Uses. No industrial or commercial activity shall be undertaken or allowed other than those activities, without limitation, as permitted under Section 2, and as appropriate for the development and maintenance of wetland and aquatic habitat and in the development, exercise and maintenance of any and all water rights, now decreed or otherwise and all associated ditches and structures used in connection with said water rights, including, but not limited to, motorized vehicles which would result in the degradation of the land or the wildlife habitat thereon and winter maintenance of access road and pedestrian trails other than designated maintenance trails. No residential use or development of the Property will be allowed. No grazing of domestic livestock will be allowed. Uses for recreation and educational purposes will be allowed to the extent that they do not significantly impair or interfere with the conservation values of the Property as approved by the Declarant.

2. Rights Retained by Declarant ("Reserved Rights"). The Declarant retains all of the customary rights of ownership including, but not limited to, it's present right to access, to control access to, and to use the Property for all purposes not prohibited by these Restrictive Covenants.

Notwithstanding the foregoing Restrictions, Declarant reserves for Declarant, its heirs, successors, administrators, and assigns the following Reserved Rights and those activities, without limitation, relating to agriculture, recreation, education, and as appropriate for the development and maintenance of wetland and aquatic habitat and in the development, exercise and maintenance of any and all water rights, now decreed or otherwise and all associated ditches and structures used in connection with said water rights.

(i) Landscape Management. Declarant reserves the right to conduct such activities on the Property as are necessary or convenient, and generally consistent with the overall purpose of these Restrictive Covenants and with preserving the natural condition of the Property. Such activities include, but are not limited to, controlled burning and such reasonable steps as are necessary to control or prevent (a) severe erosion or damage to the Property or portions thereof, and (b) significant detriment to existing or permitted uses; access to, repair, and maintenance of fences, ditches, ponds, and water control structures; and installation and replacement of trees, shrubs, forbs, and grasses; and as appropriate for the development and maintenance of wetland and aquatic habitat and in the development, exercise and maintenance of any and all water rights, now decreed or otherwise and all associated ditches and structures used in connection with said water rights. Best management practices are specifically allowed for the control of noxious species.

(ii) Wildlife Management. Declarant reserves the right to take all reasonable actions designed to preserve, maintain and enhance wildlife habitats.

(iii) Recreation. Declarant reserves the right to approve and engage in passive recreational activities, including but not limited to, hunting and fishing, with cumulatively small impacts, which are not prohibited by these Restrictive Covenants or by law, and are consistent with the continuing natural condition of the Property.

(iii) Road Maintenance. Declarant reserves the right to maintain existing roads, trails or walkways. Maintenance shall be limited to: removal or pruning of dead or hazardous vegetation; application of permeable materials (e.g., sand, gravel, crushed aggregate) necessary to correct or impede erosion; grading; replacement of culverts, water control structures, or bridges; and, maintenance of roadside ditches.

B. GENERAL PROVISIONS

1. Notification. Any notice, request for approval, or other communication required under these Restrictive Covenants shall be delivered (a) in person, (b) by certified mail, postage prepaid, return receipt requested, or (c) by facsimile, to the following addresses (or such addresses as may be hereafter specified by notice pursuant to this paragraph):

Declarant:

ELAM CONSTRUCTION, INC.
Elam Construction, Inc.
556 Struthers, Avenue
Grand Junction, Colorado 81501
Telephone Number: (970) 242-5370
Fax Number: (970) 245-7716

U.S. ARMY CORPS OF ENGINEERS
Susan Bachini Nall
U.S. Army Corps of Engineers
Colorado West Regulatory Branch
400 Rood Avenue, Room 142
Grand Junction, CO 81501-2563
Telephone Number: (970) 241-1199, ext. 16
Fax Number: (970) 241-2358

U.S. ENVIRONMENTAL PROTECTION AGENCY
Monica Heimdal, 8ENF W
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202
Telephone Number: (303) 312-6359
Fax Number: (303) 312-7202

2. Restrictions. The Declaration of Restrictive Covenants shall be binding on Declarant's successors, assigns, lessees, or other occupiers and users.

3. Other Reserved Rights. It is expressly understood and agreed that this Restrictive Covenants does not grant or convey to members of the general public any rights of ownership, entry or use of the Property. This Declaration of Restrictive Covenants is created solely for the protection of the Property, and only the Property, and for the consideration and values set forth above, and Declarant reserves the ownership of the fee simple estate and all rights appertaining thereto, including without limitation the rights to exclude others and to use the Property for all purposes not inconsistent with this Declaration of Restrictive Covenants.

4. Severability Provision. Should any separable part of this Declaration of Restrictive Covenants be found void or unenforceable by a court of competent jurisdiction, the remainder shall continue in full force and effect.

5. Covenants to Run. These covenants run with the land and benefit and burden all of the Property.

6. Modification. This Declaration of Protective Covenants may be modified or terminated only with the written agreement of the Declarant and the U.S. Environmental Protection Agency.

IN WITNESS WHEREOF, the Declarant has duly executed this Declaration of Restrictive Covenants the date written above.

DECLARANT Elam Construction, Inc.

By: Todd Bauer, President

EXHIBIT A
DESCRIPTION OF RESTRICTIVE AREA

A parcel of land lying in the SW 1/4 of the SE ¼ of Section 6, Township 6 North, Range 90 West of the 6th Principal Meridian, Moffat County, Colorado, and being more particularly described as follows:

Beginning at the S1/4 Corner of Section 6, Township 6 North, Range 90 West of the 6th Principal Meridian thence N 25°11'34" E 1,450.59 feet to the Point of Beginning thence along the following courses; S 70°53'36" E 566.75 feet; thence S 19°06'24" W 726.25 feet to a point on the centerline of the Yampa River, thence along the approximate centerline of the Yampa River S 76°15'50" W 181.91 feet; thence S 79°44'30" W 43.59 feet; thence N 89°48'36" W 397.39 feet; thence leaving said centerline of the Yampa River N 19°06'24" E 975.12 feet to the Point of Beginning.

Deed Restriction Area contains approximately 11.3 acres.

Explanation of acreage difference:

The Proposed Mitigation Plan, submitted November 23, 2010 discusses a Deed Restrictive Area for the Mitigation Site that encompasses 11.78 acres. This acreage was calculated based on a property line that was obtained from the County Assessor's office. Elam has, since the original submittal, obtained a survey of the Bunn Ranch Property. This survey more accurately defines the southern boundary of the Elam/Bunn Ranch property than previously assumed. Most notably, the southern boundary of the property and restrictive area follows the curved alignment of the Yampa River. This correct alignment of the southern boundary accounts for the difference in acreage.

APPENDIX C

BREEZE BASIN RECLAMATION, MINING AND STORMWATER PLAN

AND

BUNN RANCH RECLAMATION, MINING AND STORMWATER PLAN

Breeze Basin Mining Plan

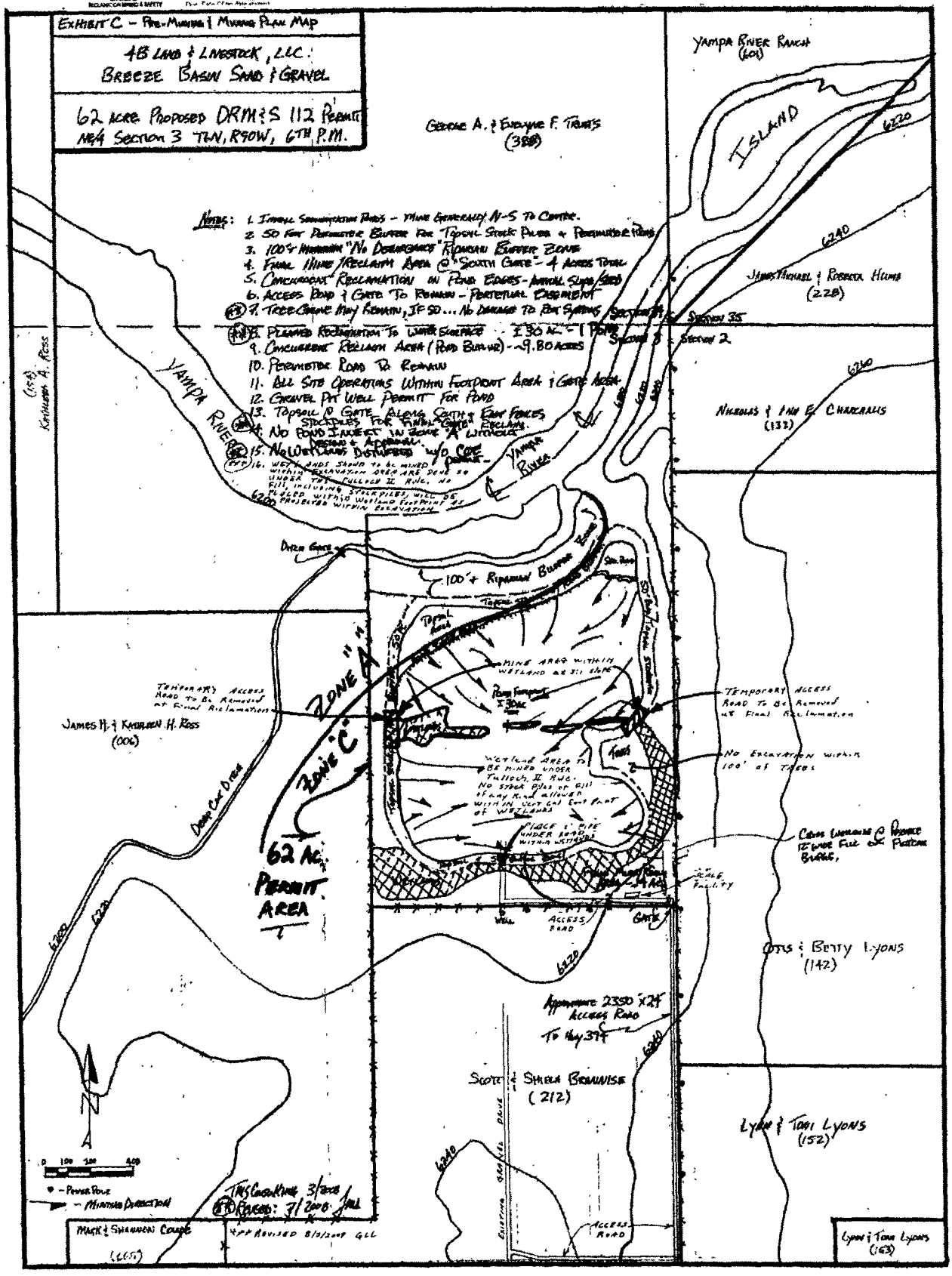


EXHIBIT D – Mining Plan

(a) Description of the method(s) of mining to be employed in each stage of the operation as related to any surface disturbance on affected lands;

The mine area, as shown on the attached maps, totals approximately 62 acres. Current site use is for pasture/stock grazing. All disturbed areas will be reclaimed to developed water resource (2 pond areas) for evaporation only. All site mining, processing and temporary stockpiling will be within the excavation footprints of the planned ponds. Each pond water surface will be required to have a gravel pit well permit and any excavation/pond edges will be a minimum of 100 feet from the Yampa River, Deep Cut Ditch and residential water supply well as per the Colorado Division of Water Resources District Engineer.

Mining/process activities may take place in any of the 2 pond footprint areas at anytime in order to establish the initial 2 separate water surfaces as soon as possible for stormwater control and to be able to dewater from one pond area to the other to assist in the mining operations. Stormwater/sediment pond/trenches will initially be dug in each pond footprint (on approximate northern ends of ponds). They can either be expanded into the mining/operations area as aggregate is removed and the pond water surface develops or be kept separated from the main excavation pit areas to be used as sedimentation ponds for that specific pond. Once established, each pond can also be used to receive pumped water from the other, as operations dictate, to assist in mine pit dewatering activities.

Concurrent reclamation is planned for all the pond edges as each excavation/pond footprint area is developed over time. The total planned final exposed water surface area for both ponds is 35.9 acres (Pond #1-19.80 ac. and Pond #2 – 16.10 ac.). Excavation depths may range from 0 to +25 feet below ground level (BGL). Ground water levels are seasonal with a possible upper limit of 1.5 to 3 feet (April –June) and a lower limit of >6 feet BGL. The aggregate mining operations will intercept groundwater at an average depth of 4 to 6 feet BGL depending on the ground level elevation (the site is relatively flat) and the seasonal water table fluctuations. Estimated water surface elevation will average 6194 feet AMSL.

Topsoil averages 0 to 8 inches in thickness across the pasture. Topsoil will be removed and temporally stockpiled around the pond footprint limits for use in the planned concurrent pond edge reclamation activities and for any 3:1 bank slope stabilization to 10 feet below the average water surface elevation. **Topsoil would only be stripped as and when necessary to expand both the excavation and/or operations areas within pond footprints.** Depending on the average topsoil thickness across the site there may be some surplus topsoil since most site

reclamation is for pond areas. Any surplus topsoil will be incorporated into the pond edge reclamation or may be used by applicant for other farm/ranch reclamation areas.

Aggregate materials will be removed via dragline or excavator from just below the stripped topsoil surface and processed or stockpiled in an adjacent prepared operations area of approximately 3 to 4 acres. The size of any operations area would be dependent on the amount of room needed for any production stockpiles for large volume projects. All operations will be within the pond/excavation footprint areas. All excavated areas within the pond footprint will become a pond water surface or < 3:1 sloped pond edge. The final operations area at the site will be an approximate 3 acre area located between the site gate and the southern end of both ponds. This approximate 3 acre area will be the only area requiring reclamation at the completion of site mining activities. All pond edges and perimeter roads will have been completely reclaimed and constructed by the end of final pond excavation. With a 50 foot wide maximum pond perimeter topsoil stockpile/road "halo" or "buffer" area, a total of 9.80 acres will have been concurrently reclaimed.

It is anticipated that there will be some limited disturbance just beyond the pond footprint perimeter areas. This additional disturbed area will be approximately 25 to 50 feet wide (max) and will be the area where topsoil will be temporally stockpiled and also where a perimeter road will be installed as part of concurrent pond edge reclamation. The 2 ponds will be separated by a 50 to 100 foot wide unexcavated strip of original pasture area and a road will be located along the strip between the 2 ponds connecting up with the perimeter roads.

The perimeter roads may be from 25 to 100 feet in distance from the east and west fences as they will follow the reclaimed pond edges. All concurrently reclaimed and other disturbed areas between the pond, on pond edges and adjacent perimeter roads will be seeded annually with the DRM&S grass seed mix. Landowner/applicant will include some other trees/shrubs, wetland and riparian vegetation varieties in the reclamation areas below road and to the water surface edges in order to establish more diverse habitat.

Reject material may be used along with the topsoil cover to slope the pond edges and provide an irregular shoreline and shallow water areas. After re-sloping the pond edge areas and topsoil placement, the perimeter road on each pond will be extended along the top/above the pond edge. Pond footprint areas that will be used for material processing and stockpiles will have topsoil stripped and stockpiled on excavation perimeters. These areas will eventually be excavated and developed to water surfaces as the pond water surface expands to planned pond(s) area limits.

The Pond #1 shoreline length is approximately 4745 feet and the Pond #2 shoreline is approximately 3792 feet. With a 50 foot wide maximum pond perimeter topsoil stockpile/road "halo" or "buffer" area, a total of 9.80 acres will be concurrently reclaimed. The perimeter area reclamation will have undisturbed pasture (or hillside - east side of site) outside the perimeter road, then a slightly raised road in the middle (approximately 10 feet wide) and then a maximum 3:1 slope to 10 feet below the average water surface elevation down to the pond edge. The average water level elevation is estimated to around 6194 feet AMSL.

Any and all topsoil found within the excavation/pond footprints at the site will be stripped (as necessary) and stockpiled as described above for use in site reclamation. Except for the 25 to 50 perimeter stockpiling/road zone, disturbance will be minimal to the adjacent remaining pasture areas out-side the excavation footprints. The planned site reclamation will provide additional wildlife habitat within the Yampa River Basin corridor.

Depending on local needs and market conditions, mining and processing for road-base, fill material and asphalt pavement may take from 5 to 15 years or longer. Processing operations may be temporally located at the site from time to time. Portable mobile process equipment for crushing, screening and asphalt production will be mobilized as necessary and will have all necessary construction and air permit for such equipment. Process equipments may be idle and stacked pending further use from time to time. The site is not visible from either the north (Hwy 40) or the south (Hwy 394) being effectively screened by the topography and large trees.

All areas of the site to be excavated are currently fenced pasture areas. All disturbed areas will be reclaimed to the water surfaces or to the pasture/road/riparian area surrounding then ponds. All stormwater will be contained under the site SWMP and general Stormwater Permit. Ditching, silt fencing, berms, bales and other site stormwater BMP's will be used as part of site stormwater controls. The area by the gate will be the final reclamation area at the site and will be less than 3 acres. Mining activities will begin in both pond areas on the north ends and expand south and towards the central road, then toward the site access gate area.

The access road and pond perimeter roads will have sufficient drainage and berms to allow for storm runoff and sediment retention. Topsoil stockpiles to be left for more than 1 growing season will be seeded with the USDA recommended seed mix via broadcast method for stabilization. Vehicle, haul truck and equipment speeds will be 15mph or less on the access road. The access road and gate will remain for the landowner/applicant as legal access to parcel and will require no reclamation.

Site Operations

It is anticipated that gravel extraction and material processing activities will commence upon completion of the entire permitting process, which is anticipated sometime in early July 2008. Access gate and initial road grading activities may commence as soon as the CDOT access permit is approved.

Anticipated hours of operation for process activities at the site would be M-F during daylight hours or at the direction of a specific public works Site/Project Engineer if extended hours or weekend production is necessary. Mining or reclamation work may be done on weekends as well. All processing equipment for crushing and/or asphalt production for this project will be mobile and self contained equipment. Products to be extracted and processed by the proposed operation include: crushed rock for base grade, general backfill and material for asphalt additives. Asphalt production equipment will be part of some types of activities at the site.

At times an average daily workforce of 1-4 personnel may be onsite to excavate material and operate the various types of processing equipment. The site may also be idle at time and have on activity. Sanitary facilities will be available onsite. A mobile truck scale and a temporary fuel storage facility may be part of an equipment mobilization to the site and both would be located in the prepared areas within the equipment operations area for that mobilization to the site (set-up areas will change as pond water surface expands). All processing equipment for sand and gravel and asphalt production has or will have current air permits as required by the State of Colorado. These permits apply to each equipment type to be moved onto and operated at the site.

The site is within the Craig/Moffat County Fire Protection /EMS District. All contractor site equipment and vehicles will be equipped with appropriate fire extinguishers and first aid. Cell telephones and contractor supplied radios (in all vehicles) will be available at all times. The site will operate under both OSHA and MSHA Federal Safety Standards.

(b) Earthmoving;

All topsoil material will be stripped and stockpiled using bulldozers, motor graders, tracked excavators and front-end loaders. All mined materials will be excavated and handled onsite using, track excavators, dragline, dozers, loaders and conveyors to feed the crusher/screening equipment spread and to temporarily stockpile processed materials. Front-end loaders will be used for stockpiling, loading process equipments and haul trucks.

(c) Water diversions and impoundments;

1. Mining will expose groundwater. Silt fences, straw bales and/or berms will be erected around active mining areas so that they will not release sediments during storm events. Site storm waters will be handled as specified in the Stormwater Management Plan (SWMP) for the site.

2. There will be 2 water impoundments created, Pond #1 -19.8 acres and pond #2 – 16.1 acres. Other than the creation of two (2) pond water surfaces, site operations will have little to no effect on water rights, drainage or hydrology of the area. Each pond will be required to have a gravel pit well permit and any excavation/pond edges will be a minimum of 100 feet from the Yampa River as per the Colorado Division of Water Resources District Engineer. (Copies of Gravel Pit Well Permit Applications are located in Exhibit M.)

3. There will be no disturbance within 100 feet of the Yampa River, Deep Cut Ditch and Brennise water well. If the well is affected, the landowner/applicant will have to deepen, repair and/or relocate the well as per the Exhibit S Damage Agreement (the well is a concrete "cistern type" - 5 feet in diameter and less than 30 feet deep with seasonal water level fluctuations).

4. There are no other wells in the proposed area or within 200 feet of the proposed area of operations. There are no planned inlets or outlets for creek waters. Silt fences and sediment retention berms or ditches will be maintained alongside roads and excavation areas to reduce erosion and limit runoff from storm events as necessary.

(d) The size of area(s) to be worked at any one time;

As stated above in Exhibit D-(a) Mining Plan – Description of Methods, The mine area, as shown on the attached maps, totals approximately 62 acres. Mining/process activities may take place in any of the 2 pond footprint areas at anytime in order to establish the initial 2 separate water surfaces as soon as possible for stormwater control and to be able to dewater from one pond area to the other to assist in the mining operations. Stormwater/sediment pond/trenches (approximately 10x50 feet) will initially be dug in each pond footprint (on the approximate northern ends of ponds). They can either be expanded into the mining/operations area as aggregate is removed and the pond water surface develops or kept separate from the main excavation pit areas to be used as sedimentation ponds/stormwater cutoff ponds for that specific pond. Once established, each pond can also be used to receive pumped water from the other, as operations dictate, to assist in mine pit dewatering activities.

Concurrent reclamation is planned for all the pond edges as each excavation/pond footprint area is developed over time. The total planned final exposed water surface area for both ponds is 35.9 acres (Pond #1-19.80 ac. and Pond #2 – 16.10 ac.). Excavation depths may range from 0 to +25 feet below ground level (BGL). Ground water levels are seasonal with a possible upper limit of 1.5 to 3 feet (April –June) and a lower limit of >6 feet BGL. The aggregate mining operations will intercept groundwater at an average depth of 4 to 6 feet BGL depending on the ground level elevation (the site is relatively flat) and the seasonal water table fluctuations. Estimated water surface elevation will average 6194 feet AMSL.

Aggregate materials will be removed via dragline or excavator from just below the stripped topsoil surface and processed or stockpiled in an adjacent prepared operations area of approximately 3 to 4 acres. The size of any operations area would be dependent on the amount of room needed for any production stockpiles for large volume projects. All operations will be within the pond/excavation footprint areas. All excavated areas within the pond footprint will become a pond water surface or < 3:1 sloped pond edge. The final operations area at the site will be an approximate 3 acre area located between the site gate and the southern end of both ponds. This approximate 3 acre area will be the only area requiring reclamation at the completion of site mining activities. All pond edges and perimeter roads will have been completely reclaimed and constructed by the end of final pond excavation. With a 50 foot wide maximum pond perimeter topsoil stockpile/road "halo" or "buffer" area, a total of 9.80 acres will have been concurrently reclaimed.

(e) Approximate timetable to describe mining operation;

Mining and crushing, screening and asphalt process activities will commence after all State and County Permits have been approved and issued (July 2008) and continue from 5 to 15 years or longer.

(f) Narrative describing nature of deposit to be mined and underlying stratum.

The soils in the area of the proposed operation area as mapped and described by the U.S.D.A. Soil Conservation Service consists of soils belonging to the following types (Soil Map and Non-Technical Soil Descriptions and Soil Tables are attached to Exhibit I – Soils Information). The soil types are listed in the order of their possible aggregate potentials as indicated in the soil description survey documents and from discussions with the landowner and from description of soil profile in the pit dug for installation of large diameter water supply well from the previous mined and disturbed site areas. Permit area soil types are as follows:

- **Apmay clay loam, 0 - 1 percent slopes – Moffat Soil map # 5**
  The 2 pond footprint/excavation areas are located on this soil type. Approximately 35.9 acres will be disturbed for the 2 water surfaces. Another 9.8 acres will be disturbed and reclaimed on the pond perimeters. The 2C Horizon of this soil is the target aggregate resource at site. The 2C Horizon material is very to extremely gravelly, non plastic sandy gravel with 15-40% - 2 inch diameter to 10 inch diameter rock. A sometimes thinning and discontinuous Apamy clay loam topsoil of 0 to 8 inches overlies the aggregate material. Average seasonal groundwater may be encountered from 3 to >6 feet BGL. The aggregate deposit is from 15 to > 25 feet in thickness and is derived from alluvial sources. The aggregate deposit reflects a series of lateral meander loops to the south which created a stacked river channel bottom and point bar depositional sequence.

- **Weed sandy loam, 1 – 12 percent slopes – Moffat Soil map # 209**
  This soil type is located on the toe-slope and hillside area to the east and northeast of the Pond #2 footprint excavation area. The hillside toe slope lies along the eastern permit boundary and portions of this soil type will be disturbed by some of pond area excavation and perimeter area concurrent reclamation and road installation. Weed loam soil has some outwash off the slope onto the Apmay clay loam topsoil in the flatter pasture and underlying Apmay 2C aggregate material. Approximately 3 acres of this soil type will be disturbed mostly by the concurrent pond edge reclamation along the eastside (of pond #2) perimeter road.

- **Fluvaquents – Moffat Soil map # 70**
  This soil type is shown on the Soil Survey map lying across the south end fence line of the 62 acre site. The Fluvaquents soils are generally found in lower flood plains, oxbows, or depressions in stream terraces (in this case a remnant oxbow). Water table is usually high and soils have a range in characteristic from coarse to fine - loamy sandy to clayey stratified, friable to blocky, hard to sticky and plastic with a basal gravelly C layer. The residential water supply well was installed in a pit located in the soil type and rock and gravel was observed to extend from the surface to >25 feet BGL. The area where this soil is shown on the soil map within the permit area has very thin and somewhat discontinuous topsoil/remnant Fluvaquents loam covering the underlying gravelly aggregate target materials. The landowner/applicant has stated the along the south fence the rock and gravel has very little cover soil (<2 inches) and at most places is on the surface. Most of this soil type (if present) will not be disturbed as it is mapped outside the pond footprint areas. A small portion will be disturbed and concurrently reclaimed within the final Pond 31 southern end and the pond edge/road perimeter area. About 1.5 acres of the final approximate 3 acre "final" operations area (by access gate – outside the

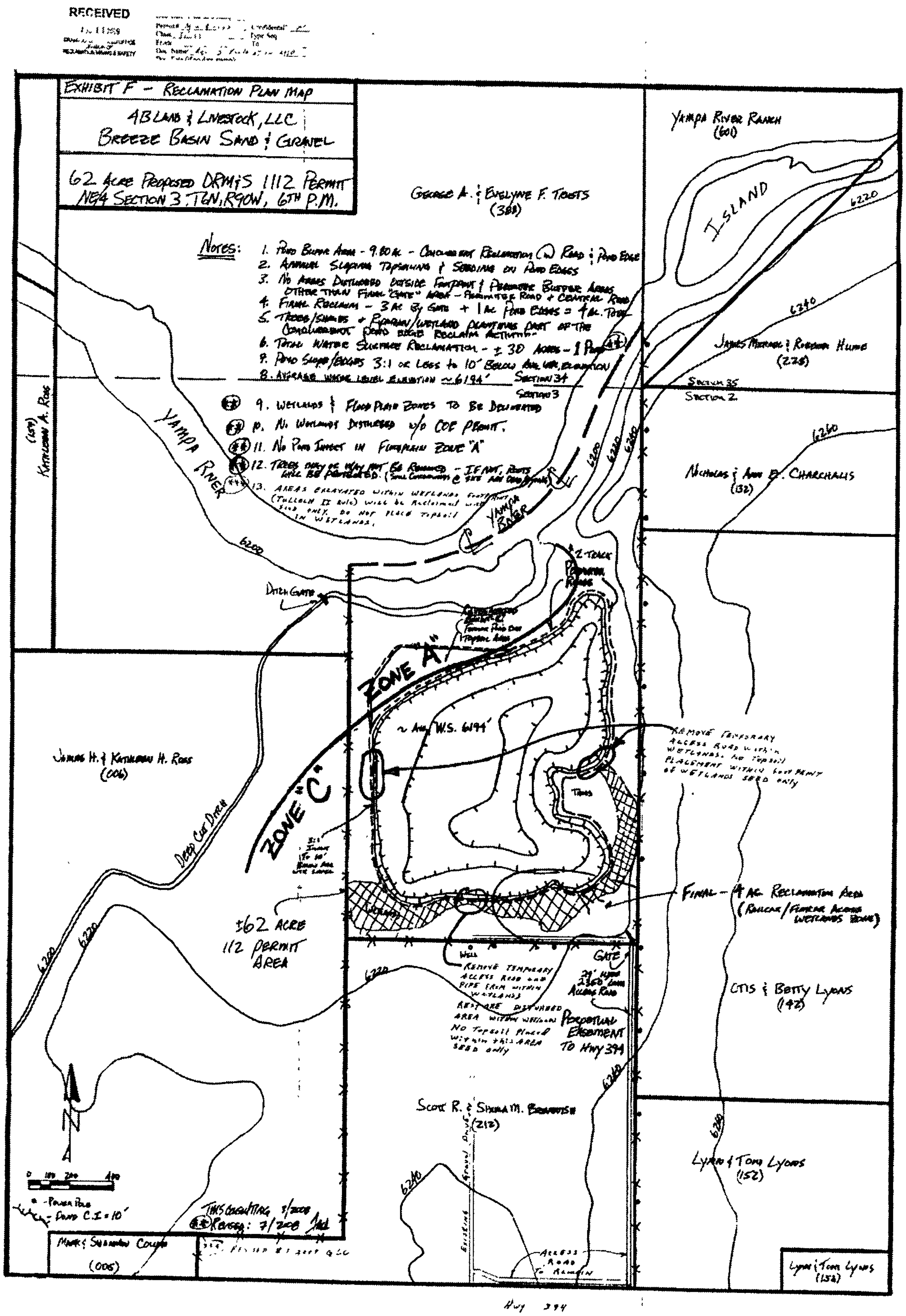
(g) Identify the primary and secondary commodities to be mined and/or extracted and describe the intended use.

The primary commodities to be mined and/or extracted are s rock/cobbles and gravel/sand to be crushed for road surfaces and backfill material and asphalt additives. In addition to crushed rock material some straight pit run and base fill material may be produced without processing through a crusher spread. Occasional larger rock, cobble and boulders, for drainage rock or landscape decorative use may be produced and stockpiled.

(h) Name and describe the intended use of all expected incidental products to be mined and/or extracted by the proposed operation.

Products to be mined and/or extracted by the proposed operation will be: Rock sand and gravel for crushed rock for use as base grade, backfill, and rock for concrete and asphalt material additives. Pit run and fill materials for sub-grade backfill and base grade use. Graded rock, sand and gravel for base fill and drainage fill type material. The intended use of these materials will be as various graded construction aggregates, asphalt additives and base course and fill material for road construction projects and general construction.

Breeze Basin Reclamation Plan



RECEIVED
EXHIBIT F – RECLAMATION PLAN MAP
4B LAND & LIVESTOCK, LLC
BREEZE BASIN SAND & GRAVEL
62 ACRE PROPOSED DRMS 1112 PERMIT
NE¼ SECTION 3, T6N, R90W, 6TH P.M.
NOTES:
2. ANNUAL SLOPING TOPSOILING & SEEDING ON POND EDGES
4. FINAL RECLAIM – 3 AC BY GATE + 1 AC POND EDGES = 4 AC. TOTAL
6. TOTAL WATER SURFACE RECLAMATION – ± 30 ACRES – 1 POND
9. POND SLOPE/EDGES 3:1 OR LESS TO 10' BELOW AVG. WL. ELEVATION
8. AVERAGE WATER LEVEL ELEVATION ~6194'
9. WETLANDS & FLOOD PLAIN ZONES TO BE DELINEATED
10. NO WETLANDS DISTURBED W/O COE PERMIT.
11. NO POND IMPACT IN FLOODPLAIN ZONE "A"
13. AREAS EXCAVATED WITHIN WETLANDS FOOTPRINT (TULLOCH II RULE) WILL BE RECLAIMED WITH SEED ONLY. DO NOT PLACE TOPSOIL IN WETLANDS.
SECTION 34
SECTION 3
SECTION 35
SECTION 2
YAMPA RIVER
YAMPA RIVER RANCH (60)
GEORGE A. & EVELYNE F. TRUSTS (388)
ISLAND
JAMES H. & KATHLEEN H. ROSS (006)
NICHOLAS & ANN B. CHARCHALIS (132)
OTIS & BETTY LYONS (142)
SCOTT R. & SHANA M. BENNISH (212)
LYNN & TOM LYONS (152)
LYNN & TOM LYONS (152)
DITCH GATE
2-TRACK
ZONE "A"
ZONE "C"
~ AVG. W.S. 6194'
REMOVE TEMPORARY ACCESS ROAD WITHIN WETLANDS. NO TOPSOIL PLACEMENT WITHIN FOOTPRINT OF WETLANDS SEED ONLY
FINAL – 4 AC. RECLAMATION AREA
±62 ACRE 112 PERMIT AREA
DEEP CUT DITCH
WELL
GATE
REMOVE TEMPORARY ACCESS ROAD AND PIPE FROM WITHIN WETLANDS
PERPETUAL EASEMENT TO HWY 394
6200
6220
6240
6260
6280
ACCESS ROAD TO REMAIN
HWY 394

EXHIBIT E – Reclamation Plan

(a) Description of the type of reclamation proposed to achieve the reclamation of affected land, reasons for reclamation type choice, amount of acreage and general discussion of methods.

As stated above in Exhibit D-(d) Mining Plan – Description of Methods,

The mine area, as shown on the attached maps, totals approximately 62 acres. Current site use is for pasture/stock grazing. All disturbed areas will be reclaimed to developed water resource (2 pond areas) for evaporation only. All site mining, processing and temporary stockpiling will be within the excavation footprints of the planned ponds until final site activities by the south access gate. Each pond water surface will be required to have a gravel pit well permit and any excavation/pond edges will be a minimum of 100 feet from the Yampa River, Deep Cut Ditch and residential water supply well as per the Colorado Division of Water Resources District Engineer.

Mining/process activities may take place in any of the 2 pond footprint areas at anytime in order to establish the initial 2 separate water surfaces as soon as possible for stormwater control and to be able to dewater from one pond area to the other to assist in the mining operations. Stormwater/sediment pond/trenches will initially be dug in each pond footprint (on approximate northern ends of ponds). They can either be expanded into the mining/operations area as aggregate is removed and the pond water surface develops or be kept separated from the main excavation pit areas to be used as sedimentation ponds for that specific pond. Once established, each pond can also be used to receive pumped water from the other, as operations dictate, to assist in mine pit dewatering activities.

Concurrent reclamation is planned for all the pond edges as each excavation/pond footprint area is developed over time. The total planned final exposed water surface area for both ponds is 35.9 acres (Pond #1-19.80 ac. and Pond #2 – 16.10 ac.). Excavation depths may range from 0 to +25 feet below ground level (BGL). Ground water levels are seasonal with a possible upper limit of 1.5 to 3 feet (April –June) and a lower limit of >6 feet BGL. The aggregate mining operations will intercept groundwater at an average depth of 4 to 6 feet BGL depending on the ground level elevation (the site is relatively flat) and the seasonal water table fluctuations. Estimated water surface elevation will average 6194 feet AMSL.

The size of any operations area would be dependent on the amount of room needed for any production stockpiles for large volume projects. All operations will be within the pond/excavation footprint areas. All excavated areas within the pond

footprint will become a pond water surface or part of the < 3:1 sloped pond edge. **Final operations at the site will be in an approximate 3 acre area located between the site gate and on/in the southern end of both ponds. This approximate 3 acre area along with remaining pond edges and road areas will be the only area requiring reclamation at the completion of site mining activities. All pond edges and perimeter roads will have been completely reclaimed and constructed by the end of final pond excavation.**

With a 50 foot wide maximum pond perimeter topsoil stockpile/road "halo" or "buffer" area, a total of 9.80 acres will have been concurrently reclaimed. All of the concurrently reclaimed and other disturbed areas between the pond, on pond edges and adjacent perimeter roads will be graded have topsoil replaced and seeded annually at a minimum with the approved DRM&S grass seed mix. (wetland and riparian varieties will be added etc...**All reclamation at the site will be concurrent with mining and any and all existing topsoil and/or usable cover soils will be stripped as necessary, when encountered, as mining activities progress.** Re-grading/sloping and seeding will be annual or as soon as possible depending on planting schedules.

Sufficient top soil should be available for reclamation to at least 8 inches. The approximate < 3 acre operations area located at the site access gate will be stripped and the topsoil will be stockpiled next to the south fence for final reclamation. The operations and stockpiling area at the gate will be the final reclamation area at the site. Generally, by that date, almost all pond edge reclamation will have been completed except for the final 750 t0 1000 feet of pond edges. **With the concurrent reclamation at the site, the final site reclamation area will be approximately 4.0 acres or less.** Final surfaces will be graded up to the access gate area, perimeter roads completed and reclamation will be complete.

(b) A Comparison of the proposed post mining land use to other land use in the vicinity and to adopted state and local land use plans and programs.

As stated above, all surrounding lands are currently used as pasture. The purpose of the project is to remove the aggregate, create water surface in 2 pond areas, slope, grade and reclaim the pond edges, install perimeter roads and have final reclamation at the SE corner of the site. An application for a special use conditional permit for extractive an industry has been filed with the Moffat County Land Use Department for the 62 acres within the proposed permit area. There are current similar mine operations on adjacent properties. The site access to the south will allow future access to a parcel that previously had no access to a public byway As such the gates and access road will remain after the completion of mining and reclamation activities at the site as an access to the reclaimed ponds and adjacent strips of remaining pasture.

(c) A description of how the Reclamation Plan will be implemented to meet each applicable requirement of Rule 3: Reclamation Performance Standards - Section 3.1.1 through Section 3.1.5

3.1.1 - Establishing Post-Mining Use: Post mine use will be for developed water resource, pasture and improved wildlife habitat

3.1.2 - Reclaiming Substituted Land: There are no previously mined lands to be substituted.

3.1.3 - Time Limit and Phased Reclamation: From 5 to 15 years or longer to mine and reclaim the site. No Mine Phases will expose and mine aggregate as needed and reclaim pond shorelines concurrently. Final reclamation of remaining 4 acres (Access Gate area and some shoreline) will be completed at the end of all site activities. Final site reclamation total area is 4 acres or less.

3.1.4 - Public Use: There will be no public use permitted at the proposed area of operations before, during or subsequent to the completion of mining activities and reclamation. The site is entirely on property owned by the applicant.

3.1.5 - Reclamation Measures - Materials Handling:

(1) Mining will proceed generally south and east from the pond #1 north end and south and west from the pond #2 north end. The extraction/removal of the gravel material using dozer (topsoil) and track excavator/dragline for underlying aggregate. Excavated material will be moved via truck or loader and be processed in either of the temporary operations areas located within either pond footprint area. Concurrent reclamation, including annual pond edge sloping topsoil replacement and seeding, to be done as mining progresses. Topsoil for pond edges will be stockpiled in perimeter buffer (50 feet max.) All mined pond edge areas sloped 3:1 or less and contoured and place topsoil across the final graded surfaces in minimum 8 inches in thickness.

(2) Backfilling may be part of the reclamation plan. Remnant pit run and non spec. reject and fines may be used to slope pond edges to provide irregular shorelines and shallows in the ponds (will be covered with topsoil and seeded etc...). Reject material may be used along with the topsoil cover to slope the pond edges and provide an irregular shoreline and shallow water areas. After re-sloping the pond edge areas and topsoil placement, the perimeter road on each pond will be extended along the top/above the pond edge. Pond footprint areas that will be used for material processing and stockpiles will have topsoil stripped and stockpiled on excavation perimeters. These areas will eventually be excavated and developed to water surfaces as the pond water surface expands to planned pond(s) area limits

(3) There will be no overburden or waste materials requiring replacement or compaction. There will be no acid forming or toxic materials generated by mining activities at the site.

(4) Stormwater control measures and Best Management Practices (BMPs) will be used to protect areas outside the affected area during both excavation and reclamation operations at the site. All site waters will be contained and directed to pond/ excavated areas. Topsoil will be placed on the final grade surface and seeded with the recommended seed mix to prevent erosion.

(5) Concurrent reclamation activities are planned along with normal site SWMP activities and other standard site maintenance. Reclamation will occur after excavation operations progress and water surfaces are developed. All concurrently reclaimed and other disturbed areas between the pond, on pond edges and adjacent perimeter roads will be seeded annually with the DRM&S grass seed mix. Landowner/applicant will include some other trees/shrubs, wetland and riparian vegetation varieties in the reclamation areas below road and to the water surface edges in order to establish more diverse habitat.

(6) There will be no acid forming or toxic materials produced by mining and/or reclamation activities at the proposed site.

(7) There will be no drill, auger holes adits or shafts at the proposed site. All mining activities will be of the surface variety using bulldozers, track excavators and loaders to excavate and process material from the pit area. **No explosives will be used in mining at the site.**

(8) **All disturbed areas will be reclaimed with slopes at 3:1 or less.** The areas will be graded to match the surrounding topography prior to topsoil/cover soil placement. Pond edges will be sloped 3:1 or less to a point approximately 10 feet below the average intercepted ground water elevation

(9) The owner's/operator's choice of reclamation is for developed water resource (some pasture and for more diverse habitat).

(10) There are no plans for the use of site generated or offsite inert structural backfill materials.

(11) There are no surface drainage systems within the proposed permit area. Stormwater controls and BMPs. Sedimentation pond structures will be utilized to prevent stormwater from entering any riparian and/or identified wetland areas to the north. Ponds will be used for storm water retention.

(12) There will be no unauthorized release of pollutants to the groundwater. Fuels and lubricants for equipment will be self-contained in most cases. Types will probably be diesel fuel, gasoline, lubricating oils, and engine coolants. Volumes will be the tank sizes of the various equipments. An onsite fuel and fluid storage area is contemplated. .Double wall tanks and/or other secondary containment for site hazardous materials (such as temporary fuel and lubricants for mobile process equipment) will be constructed. Additional containment will generally consist of a bermed enclosure of sufficient volume surrounding the temporary site fuel storage/materials area and containers/tanks. The location of the temporary enclosure will be in the "current at the time" operations area in pond footprint(s). It is anticipated that several mobilizations of contract process equipment will occur during the 5 to 15 years at the site. Some idle equipment may remain stacked onsite between periods of operation. Other than the bermed area, volumes of fuels and other lubricants and/or hazardous materials, as previously stated, will be that volume contained in the tanks and reservoirs of each separate equipment type.

All other applicable Rule 3: 3.1 Reclamation Performance Standards requirement concerns for Surface Water, Groundwater, Wildlife, Topsoiling, and Revegetation are explained in the appropriate "Exhibit" section of this application document. There are no buildings, located within the proposed permit area. Process equipment for crushing screening or asphalt production will be mobile and may be stacked between uses. Some material stockpiling will be done at the site. Stockpiles will be processed and or moved offsite as necessary and all remnant stockpiles will be removed from the site at the end of the site operations unless requested (or given permission) by the landowner that it remain.

There are no planned buildings or structures to be located within the proposed permit area. Appropriate signage will be posted at the site access (at north gate to access road – the actual site/property entrance) indicating the name of the operator, statement that a reclamation permit has been issued by the Colorado Mined Land Reclamation Board, and permit number. The boundaries of the affected area will be clearly delineated by steel posts and other appropriate markers (Fencing). A lockable steel access gate will controls ingress and egress to the site.

(d) Plans for topsoil segregation, preservation, replacement and revegetation. List of preferred species to be planted planting methods and time of planting.

Mining/process activities may take place in any of the 2 pond footprint areas at anytime in order to establish the initial 2 separate water surfaces as soon as possible

for stormwater control and to be able to dewater from one pond area to the other to assist in the mining operations. Stormwater/sediment pond/trenches will initially be dug in each pond footprint (on approximate northern ends of ponds). They can either be expanded into the mining/operations area as aggregate is removed and the pond water surface develops or be kept separated from the main excavation pit areas to be used as sedimentation ponds for that specific pond. Once established, each pond can also be used to receive pumped water from the other, as operations dictate, to assist in mine pit dewatering activities. **Concurrent reclamation is planned for all the pond edges as each excavation/pond footprint area is developed over time.**

All reclamation at the site will be concurrent with mining and any and all existing topsoil and/or usable cover soils will be stripped as necessary, when encountered, as mining activities progress. Temporary topsoil/cover soil stockpiles will be kept adjacent to pond perimeters or current active operations areas within the pond footprint limits. Re-grading/sloping and seeding will be annual or as soon as possible following cover soil/topsoil placement, depending on seasonal planting schedules.

The operations and stockpiling area at the gate will be the final reclamation area at the site. **With the concurrent reclamation at the site, the final site reclamation area will be located in the gate area and including the final pond edge reclamation will be approximately 4 acres less.** Generally, by that date, all cover and topsoil will have been replaced and seeded and a less than 3:1 slope established in all other pasture and pond edge disturbed areas. Final slopes will then be graded up the access gate area, covered and seeded. Pond perimeter road segments will be completed and vegetated due to the planned concurrent reclamation and seeding as soon as possible after final grade is complete.

The size of any operations area would be dependent on the amount of room needed for any production stockpiles for large volume projects. All operations will be within the pond/excavation footprint areas. All excavated areas within the pond footprint will become a pond water surface or part of the < 3:1 sloped pond edge. **Final operations at the site will be in an approximate 3 acre area located between the site gate and on/in the southern end of both ponds. This approximate 3 acre area along with remaining pond edges and road areas will be the only area requiring reclamation at the completion of site mining activities. All pond edges and perimeter roads will have been completely reclaimed and constructed by the end of final pond excavation.**

The 50 foot wide maximum pond perimeter topsoil stockpile/road "halo" or "buffer" area, a total of 9.80 acres will have been concurrently reclaimed. All of the concurrently reclaimed and other disturbed areas between the pond, on pond edges and adjacent perimeter roads will be graded have topsoil replaced and seeded

annually at a minimum with the approved DRM&S grass seed mix. (wetland and riparian varieties will be added etc...**All reclamation at the site will be concurrent with mining and any and all existing topsoil and/or usable cover soils will be stripped as necessary, when encountered, as mining activities progress.** Re-grading/sloping and seeding will be annual or as soon as possible depending on planting schedules.

Sufficient top soil should be available for reclamation to at least 8 inches. The approximate < 3 acre operations area located at the site access gate will be stripped and the topsoil will be stockpiled next to the south fence for final reclamation. The operations and stockpiling area at the gate will be the final reclamation area at the site. Generally, by that date, almost all pond edge reclamation will have been completed except for the final 750 t0 1000 feet of pond edges. **With the concurrent reclamation at the site, the final site reclamation area will be approximately 4.0 acres or less.** Final surfaces will be graded up to the access gate area, perimeter roads completed and reclamation will be complete.

1. **The methods of reclamation will be as per methods and seed mix used and recommended by the DRM&S for other similar local pasture areas as follows: 2-ton straw mulch/acre and weed control will be as necessary. Seedbeds will be firm and clean tilled as possible with the limited rocky surface material available at the site. Final slopes in unconsolidated material graded to no steeper than 3:1. Steeper slopes in competent bedrock may be steeper but should blend-in with the natural terrain and must be stable. All level areas and graded slopes to be seeded and vegetated.**

2. Species recommended or reclamation are: (Rate should be doubled for broadcast seeding)

Bluebunch Wheatgrass	**5.0 PLS per acre**
Western wheatgrass	**2.9 PLS per acre**
Crested Wheatgrass	**2.0 PLS per acre**
Indian Ricegrass	**1.0 PLS per acre**

A total of 44.0 PLS will be required for final Gate area 4.0 acres of reclamation.

After replacement of topsoil on areas scheduled for reclamation, seedbeds will be prepared using a disc type plow or spring rake harrow. Seedbeds will be firm and clean tilled. The seeding operation shall be by drill method. After seed application seedbeds will be mulched and crimped stated below in (f) (iii), at a

rate of 2000#/acre; weed control will be as necessary. Recommended seedbed preparation date is June 15 - July 15 recommended for seeding. Dormant seeding recommendations are from October 1 to April 30. Early October, just prior to the first hard freeze is recommended as the most appropriate time for dormant seeding. Seeding of stockpiled topsoil for stabilization will be broadcast and raked by hand using the same recommended seed mix as above at. Any other areas requiring broadcast seed application will be done at twice the recommended drill application rate.

(e) Plan or schedule indicating how and when reclamation will take place

(i) An estimate of the periods of time which will be required for the various stages or phases of reclamation.

All slope reclamation will be concurrent with surface re-grade and seed application scheduled as soon as possible.

(ii) A description of the size and location of each area to be reclaimed during each phase.

Concurrent reclamation will occur during all years of activity at the site for disturbed slope areas. The operations and stockpiling area at the gate and some remnant pond edges will be the final reclamation area at the site. **With the concurrent reclamation at the site, the final site reclamation will be located in the gate/final edge area and will be an area of 4.0 acres or less.** Generally, by that date, all cover and topsoil will have been replaced and seeded and a less than 3:1 slope established in all disturbed areas.

(iii) An outline of the sequence in which each stage or phase of reclamation will be carried out.

(1) Topsoil stockpile stabilization (broadcast seeding) will occur on topsoil stockpiles left longer than one growing season.

(2) After completion of all mining activities at the site the area will be graded. The grading will generally match the surrounding topography (flat pasture)

(3) Topsoil will be placed at a minimum of 8 inches or more if extra soil is available across all disturbed areas and seedbeds prepared, and the areas seeded and mulched/crimped.

(f) A description of the following:

(i) Final grading – specify maximum anticipated slope gradient or expected ranges thereof.

Current slopes across the site are flat (0-1% slopes). Reclaimed pond edge slopes will be at a maximum of 3:1 slope to 10 feet below the average water surface elevation and final grading will generally match the surrounding topography in disturbed areas. The average elevation across the site is 6210 feet AMSL and ranges from 6200 to 6220 at the gate "final" operations area. All areas will be graded to match the adjacent topography.

(ii) Seeding – specify types, mixtures, quantities, and expected time(s) of seeding and planting. Concurrent reclamation will use the same seed mix and planting methods.

Bluebunch Wheatgrass	**5.0 PLS per acre**
Western wheatgrass	**2.9 PLS per acre**
Crested Wheatgrass	**2.0 PLS per acre**
Indian Ricegrass	**1.0 PLS per acre**

A total of 44.7 PLS will be required for possible 4.0 acres of final site reclamation at the gate area. ** (also various trees/shrubs and wetland /riparian as selected by applicant/landowner as previously stated to provide a more diverse habitat.)

After replacement of topsoil on areas scheduled for reclamation, seedbeds will be prepared using a disc type plow or spring rake harrow. Seedbeds will be firm and clean tilled. The seeding operation shall be by drill method. After seed application seedbeds will be mulched and crimped stated below in (f) (iii), at a rate of 2000#/acre; weed control will be as necessary. Recommended seedbed preparation date is June 15 - July 15 recommended for seeding. Dormant seeding recommendations are from October 1 to April 30. Early October, just prior to the first hard freeze is recommended as the most appropriate time for dormant seeding. Seeding of stockpiled topsoil for stabilization will be broadcast and raked by hand using the same recommended seed mix as above at. Any other areas requiring broadcast seed application will be done at twice the recommended drill application rate.

(iii) Fertilization – if applicable, specify types, mixtures, quantities and time of application.

USDA has made a 40/40/0 fertilizer application recommendation. Straw mulch is to be applied at a rate of 2000#/acre and crimped with a disk; weed control will be as necessary. Application of mulch after seed application; seeding dates are June 15 to July 15 recommended for seeding. Dormant seeding recommendations are from October 1 to April 30.

(iv) Revegetation – specify types of trees, shrubs, etc., quantities, size and location.

There will be additional trees/shrubs planted; also wetlands varieties such as cattails and willows will be planted in pond edges.

(v) Topsoiling – Specify anticipated minimum depth or range of depths for those areas where topsoil will be replaced.

Stockpiled topsoil/cover soil will be replaced over the re-graded pond edges/final "Gate" area after ripping and final grade has been established to a thickness of 8 inches or more. Topsoil will be replaced on all disturbed surfaces. If additional topsoil is available it will be applied generally to a 10 inch thickness.

Breeze Basin SWMP

STORMWATER MANAGEMENT PLAN

FOR

Breeze Basin Sand & Gravel Pit

Moffat County, Colorado

COR

~~COG~~ – 500000

(# to be issued at later date)

COR-34-1469

Prepared by:

TMS Consulting,
Saguache, Colorado

For

4B Land & Livestock LLC
February - 2008

1.0 - INTRODUCTION

This construction stormwater management plan (SWMP) is intended to provide the information and guidance necessary to support the State of Colorado General Permit for Stormwater discharges associated with gravel and surface mining activities at the Sheehan Pit, Moffat County, Colorado. The primary objective of this SWMP is to identify Best Management Practices (BMPs) which, when implemented, will meet the terms and conditions of the general permit. The overall goal of the SWMP is to maintain surface-water quality by reducing pollutants in stormwater discharges. The intent of a fully implemented SWMP is to achieve compliance with Best Available Technology (BAT) and Best Convention Technology (BCT), as mandated by the Federal Clean Water Act. This SWMP identifies potential sources of stormwater discharges associated with the mining activities and describes the methods of implementing BMPs. All BMPs at the site will be temporary and will be moved in conjunction with the advance of mining activities (except for road ditches).

This SWMP contains the following sections: Site description in Section 2; BMPs for Stormwater Pollution Prevention including structural and non-structural controls in Section 3; Final Stabilization and Long-Term Stormwater Management in Section 4; Other Controls at the site in Section 5; and Inspection and Maintenance procedures in section 6.

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All areas of the site are currently classified as Pasture. All disturbed areas will be reclaimed to developed water resources (2 pond areas). No wet-lands, or other water resources will be affected by the site activities. All stormwater will be contained under the site SWMP and general Stormwater Permit to the excavated areas. Ditching, silt fencing, berms, bales and other site stormwater BMP's will be used as part of site stormwater controls.

The mine area, as shown on the map, totals approximately 62 acres. All site mining, processing and temporary stockpiling will be within the excavation footprint of the planned ponds. Each pond will be required to have a gravel pit well permit and any excavation/pond edges will be a minimum of 100 feet from the Yampa River as per the Colorado Division of Water Resources District Engineer. Mining activities may take place in any of the 2 pond footprint areas at any time in order to establish the initial 2 separate water surfaces for stormwater control and dewatering. Concurrent reclamation is planned for all the pond edges as each excavation footprint area is developed over time.

Aggregate materials will be removed via dragline or excavator. Topsoil will be removed from and temporally stockpiled around the pond footprint limits for use in the planned concurrent pond edge reclamation and for any 3:1 bank slope stabilization to 10 feet below the average water surface elevation. Pond footprint areas that will be used for material processing and stockpiles will eventually be excavated and developed to water surfaces as the pond areas expand to the planned area limits. Any and all topsoil found within the excavation/pond footprints at the site will be stripped (as necessary) and stockpiled as described above for use in site reclamation. Disturbance will be minimal to the adjacent remaining pasture areas outside the excavation footprints. The planned site reclamation will provide additional wildlife habitat within the Yampa River Basin corridor

Depending on local needs and market conditions, mining and processing for road base, fill material and asphalt pavement may take from 10 to 15 years or longer. Limited screening and crushing, asphalt production and material stockpiling operations may be temporally located at the site from time to time. Portable mobile process equipment for crushing, screening and asphalt production will be mobilized as necessary and will have all necessary construction and air permits for such equipment.

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There are plans to provide for a portable crusher or screening plant and to process asphalt material at this site. All material will be handled onsite using dragline, bulldozers and front-end loaders to temporarily stockpile and load to the relevant process equipment. Process/asphalt equipment will be mobile and sufficiently bermed when onsite. Material stockpiles may be produced and reduced on a daily basis or for longer term stockpiling and will be conveniently located adjacent to active mine pit areas as excavation activities progress or lower along the haul road. No refuse and acid forming or toxic materials will be involved in this operation. The operation will produce sand, gravel, and soil materials with no chemicals required for processing and refuse will not be generated. Sand and gravel are basically inert materials. Only by direct precipitation will stormwater enter the site. CDPHE Stormwater Permit requires 100% site containment.

3.1 - Structural Practices

Stormwaters (precipitation) and associated sediments entering active pit and haul/loading areas will be contained by using a combination of sediment retention berms, haul road ditches and silt fences (where necessary) As there will be no waste rock or disposal area stockpiles at this site it will only be necessary to install BMPs adjacent to the active areas of the site, along haul roads and at site access points

3.2 - Non-Structural Practices

Non-structural BMPs at the site will consist of preservation of existing vegetation adjacent to the exterior boundary of the area of mining operations (pond footprint areas) .All stormwaters to the active operations area which will be fully contained by the pond area. The ultimate reclamation for the disturbed area is for developed water resource, pasture and wildlife habitat improvements. (BMPs consisting of sediment retention berms, haul road ditches, and silt fences will be utilized to limit any stormwater impacts.)

3.3 - Materials Handling and Spill Prevention

Standard procedures will be utilized in storing and handling fuels (or any chemicals/fertilizers etc...) to minimize the potential for contact with stormwater and potential runoff into adjacent areas. Such procedures may include berming and lining around fueling and storage areas. Bags of fertilizer or other chemicals will be stored on pallets off the ground and will be covered or tarped as necessary prior to use on the site. Storage areas will be kept away from traffic patterns and drainageways. Adequate signage will be used for tanks, storage containers and the like. In the event of an accidental spill at the site or on haul roads, the appropriate authorities will be notified and the clean up of the spill will be initiated immediately. Existing clean soils in the vicinity of the spill that may be contaminated from such a spill will be removed for proper disposal and the contaminated soils will be replaced with additional clean soil and revegetated, as necessary

4.0 – Final Stabilization and Long-Term Stormwater Management

This section provides a description of the measures used to achieve final stabilization and measures to control pollutants in stormwater discharges after mining operations have been completed. In accordance with the guidance documentation (CDHPE, 1994), " final stabilization will be reached when all soil disturbing activities at the site have been completed, and uniform vegetative cover has been established with a density of at least 70 percent of pre-disturbance levels or equivalent permanent, physical erosion reduction methods have been employed."

There will be 2 ponds constructed as part of the reclamation activities at this mining site. There are no planned outfalls or culverts. The ultimate reclamation of the site is for ponds and pasture land Reclaim topography will be flat ~3% sloping to the north. DRM&G and Soil Conservation Service recommended seed mix and methods will be followed for concurrent reclamation along pond edges. Most final grade activities will take place as mining activities proceed. Efforts will be made to achieve final grade stabilization as soon as possible after excavation activities have been completed in any given area of the site.

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This section discusses other measures to control pollutants in stormwater discharges such as measures to limit off-site tracking of sediments and other possible waste materials. Also included are general plans for construction waste and debris disposal and "good housekeeping/operation and maintenance techniques" to reduce the potential for wastes coming in contact with stormwater.

Structural BMPs will be utilized to minimize the potential release of stormwater runoff and sediments from haul roads and mine pit areas. The mining operation will adhere to "good housekeeping procedures to maintain a relatively clean area so that the site will have less potential for stormwater contamination Such procedures may include the following: controlling drips and leaks from equipment and machinery, regular removal of trash/garbage and construction debris from the site, using proper clean-up techniques for accidental spills, storing materials properly at the site and minimizing the amount of materials stored, properly identifying and marking storage locations and refuse disposal locations, and properly maintaining portable toilet facilities.

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This section provides a description of the procedures to inspect and maintain the vegetation, erosion and sediment control measures and other BMPs identified in this construction SWMP. In accordance with the permit requirements, the entire stormwater management system will be inspected every 14 days during mining activities and after any significant precipitation or snowmelt event that causes significant erosion. The BMPs will be maintained in good and effective operating condition during mining activities.

During Mining and hauling activities at the site, silt fences (if used) ditches (where present) will be inspected for excessive sediment buildup that may infringe on the freeboard. If such excessive sediment buildup occurs, the sediment will be removed, as necessary. The stability of silt fences will be inspected for proper anchorage at the base, for verticality of the fence supports and for fabric tears or rips Appropriate repairs will be made as necessary if significant problems are noted. Inspections, testing, and preventive maintenance will be performed on all site equipment and operational systems. This program will aim toward prevention of failures by adjustment, repair or replacement of site equipment and /or structures All excavating and hauling equipment will be regularly inspected and maintained.

The administrators for the SWMP at this site will be Mr. Scott Brennise, owner of land parcel and 4B Land & Livestock LLC, and a designated contract operator employee. They will be responsible for the development, implementation, maintenance and revision of this SWMP.

Bunn Ranch Mining

EXHIBIT "D" 80-131

MINING PLAN

The Mining Plan and Timetable Map (Exhibit "C") portrays the sequence of excavation as projected based on estimated demand. The timeframes could vary depending on the business climate, but the sequential design appears to be the best method of extraction.

Excavation will be handled by scrapers and front end loaders. The material will transported for processing and stockpiling by either scrapers or field conveyors to the 1980-81 segment north of the Ana Branch. Topsoil will be stockpiled on various high points inside the perimeters of the pit area for replacement in reclamation. Overburden will be used to build a combination haul road and flood protection berm around the perimeter of the affected area as well as for backslope material. The flood protection berm and haul road will also protect stockpiled topsoil as well as the pit area from flooding. Backsloping in the excavated area will follow extraction and be an ongoing part of the operation. Topsoil will then be replaced at 8 to 12" to the waterline and be ready for reseeding. With this manner of operation, reclamation will be about one year behind extraction.

The Company plans to operate this project on a 50 acre floating bond. Disturbance areas are estimated as follows:

a. Major - stripping and excavation; 30 acres
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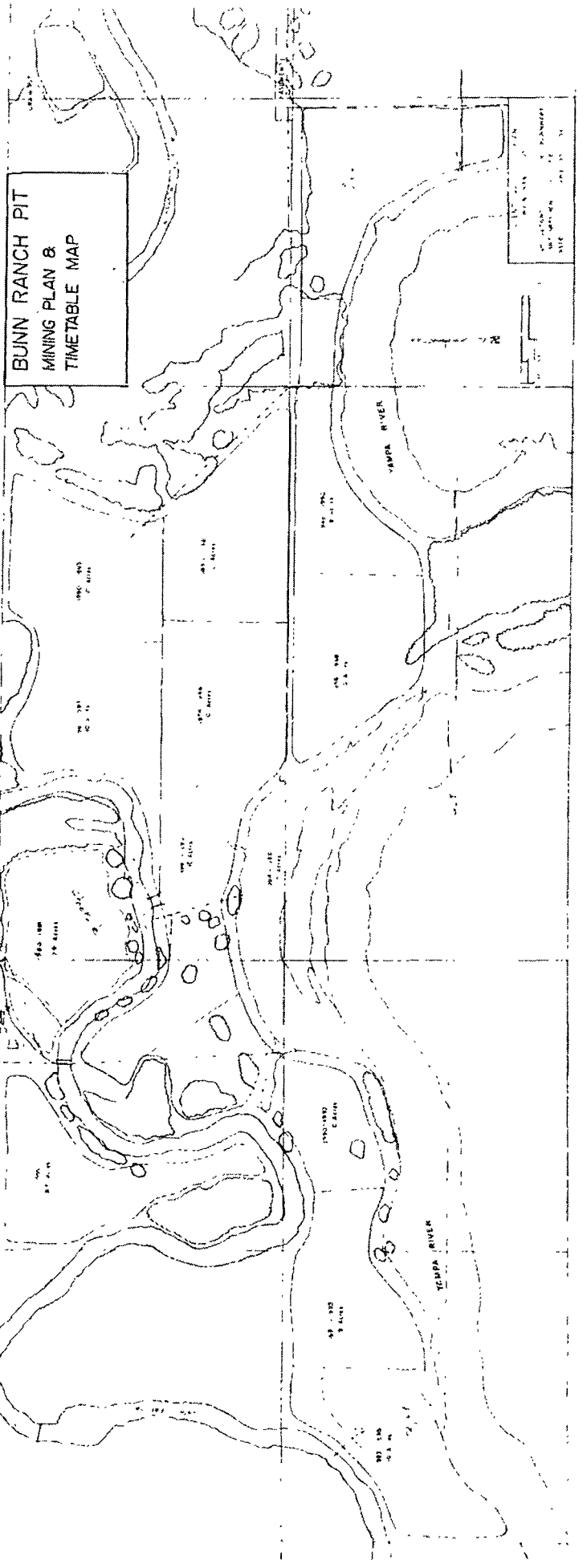
The end product will be a series of six tree lined lakes with gently curving shorelines. Lake size will vary from 8 to 50 acres.


BUNN RANCH PIT
MINING PLAN &
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Bunn Ranch Reclamation

EXHIBIT "E"

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This is a unique and exciting project that at the initiative of the operator will make adelightful area upon completion of reclamation. The entire parcel encompasses approximately 236 acres, but excavation is planned on only 133 acres of the total. The large tree growth will be left to enhance reclamation and rim the lakes. The Division of Wildlife describes this tree growth as a "mature deciduous forest with an overstory of Cottonwood trees and an understory of Box Elder being the dominant features." Their main comments regarding wildlife are "Althcugh the proposed development will result in a site specific reduction on local population levels of some wildlife spps., an overall increase in species diversification and relative abundance will be realized from the gravel operation."

As explained in the Mining Plan, Exhibit "D", topsoil will be stockpiled inside a combination haulroad and flood protection berm inside the pit perimeters to protect it from flooding. This berm/haulroad will be built from overburden from the pit area. Backsloping will be an ongoing part of extraction with topsoiling at 8 to 12 inches following that. This means that 12 to 18 months will be the limit for stockpile. Pit banks will be sloped at 3:1 to 10 feet below the water line and and 2:1 thereafter to the pit floor.When reclaimed, the majorportion of the pit area will be lakes with gently curving shorelines. Backslopes and adjacent bank areas will be reseeded with the following SCS recommended seed mix:

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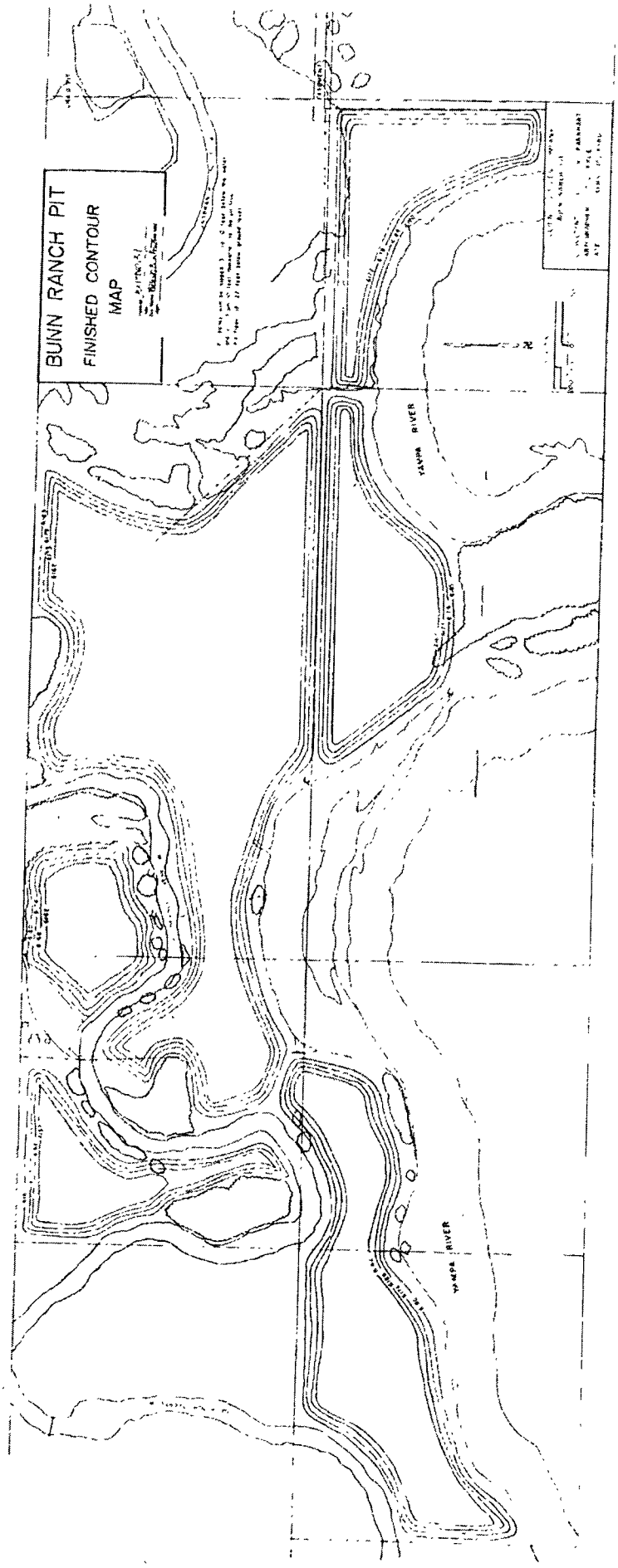
Their prognosis for establishment and maintenance of plant growth is excellent.

On completion of reclamation this will make a delightful greenbelt area on the east edge of Craig at no cost to the taxpayers. The company will use this as a private recreation area primarily for fishing, picnicing and boating. There is no intent to have hunting on the property due to the proximity to the City of Craig.


BUNN RANCH PIT
FINISHED CONTOUR
MAP
YAKIMA RIVER
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Bunn Ranch SWMP

STORMWATER MANAGEMENT PLAN

FOR

Breeze Basin Sand & Gravel Pit

Moffat County, Colorado

COR

COG – 500000

(# to be issued at later date)

COR-34-1469

Prepared by:

TMS Consulting,
Saguache, Colorado

For

4B Land & Livestock LLC
February - 2008

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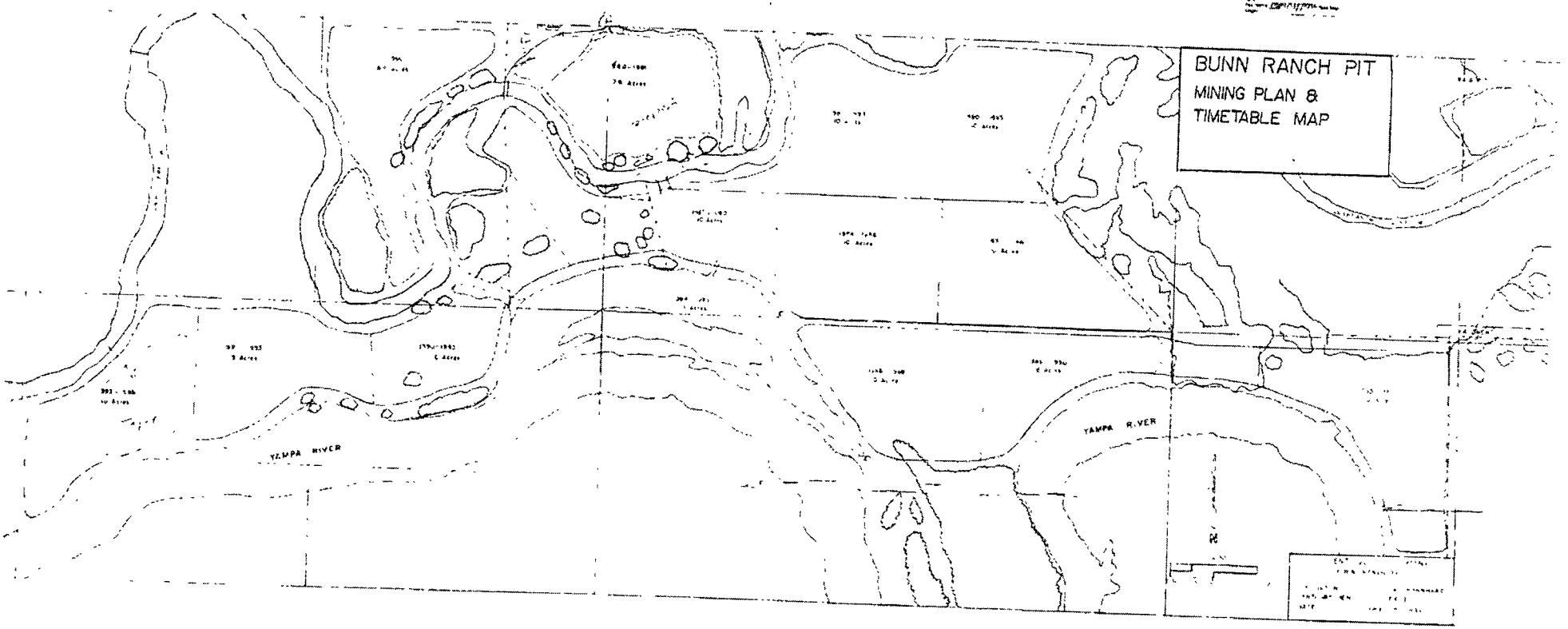
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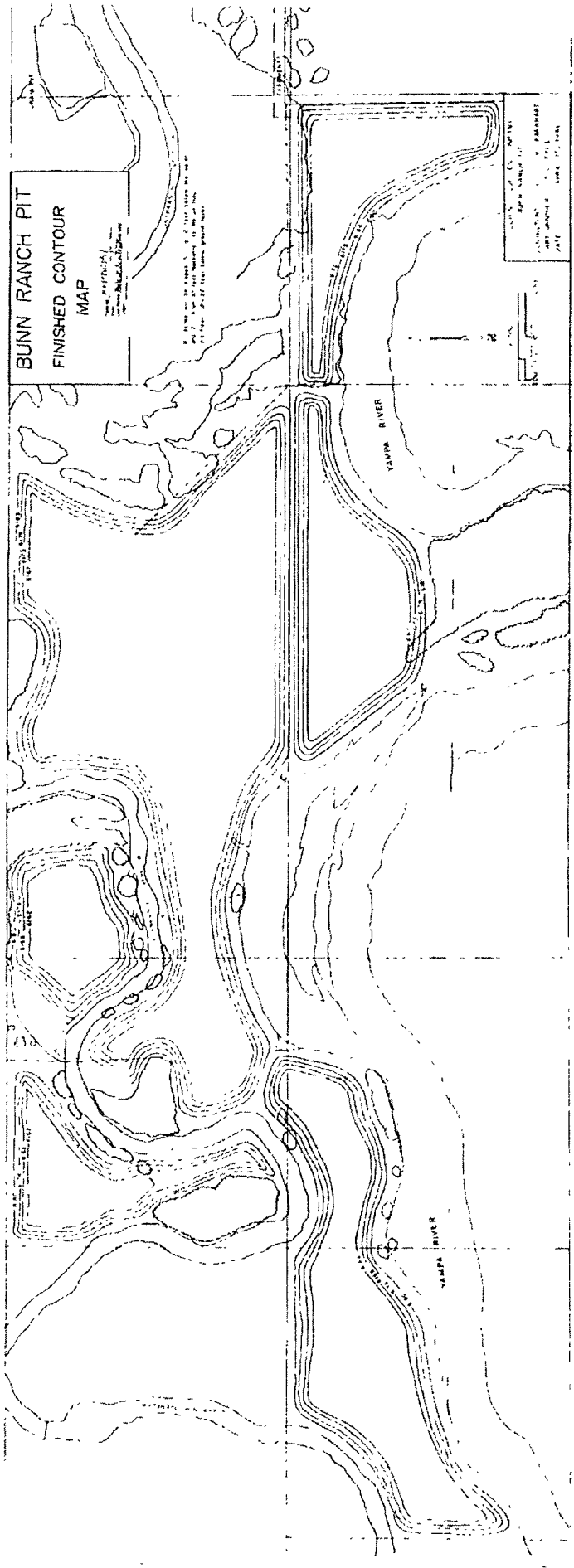
BUNN RANCH PIT
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MAP
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YAMPA RIVER

STORMWATER

MANAGEMENT PLAN

for

BUNN RANCH PIT

COG-500001

Prepared by:

Western Mobile Northern, Inc.
A Western Mobile Company

December 1993

TABLE OF CONTENTS

SECTION 1: DESCRIPTION OF INDUSTRIAL ACTIVITIES

The activities checked below are activities that are presently performed on-site or are expected to be present in the future.

☑STRIPPING

The overburden is removed and the material is either sold, hauled away or stockpiled. Stockpiles may be in the form of berms.

☐EXCAVATION - WET MINING ENVIRONMENT

(Check one)

☐Dragline:

Sand and gravel is excavated below water level and winrowed adjacent to the open water for the purpose of dewatering.

After sufficient dewatering has occurred, the pit run material can be conveyed or hauled by means of loader or trucks for final washing and screening.

☐Dredging - bucket type:

Material is excavated from below water level and directly conveyed to the plant for final washing and screening.

☐Dredging - pump type:

Material is sucked into an underwater pipeline and pumped to the surface. A booster pump is sometimes needed to pump the material through the pipeline to the first processing screen which is sometimes as high as 60' from the ground.

☑EXCAVATION - DRY MINING ENVIRONMENT

(Check one)

☑An alluvial deposit which intercepts ground water which is pumped down

☐A dry terrace deposit wherein ground water is not encountered.

When necessary, the water table in the mining area is lowered by means of dewatering ditches and pumps. Material can be excavated within the perimeter ditch without encountering ground water. Moist to dry sand and gravel can then be conveyed by means of loader, truck or conveyor belt to stockpiles or processing plant.

☐ASPHALT MANUFACTURING

A hot-mix asphalt plant blends together aggregate and asphalt cement to produce a hot, homogeneous asphalt paving mixture which is then hauled to off-site construction projects. The aggregate used can be a single material, such as a crusher run aggregate or a pit run material, or it can be a combination of coarse and fine aggregates, with or without mineral filler. The binder material used is normally asphalt cement but can also be an asphalt emulsion or one of a variety of modified materials. Various additives, including liquid and powdered materials, can also be incorporated into the mixture.

Activities at these sites may include the following: raw material unloading into stockpiles or storage tanks, raw material feed to plant, material batching, raw material storage area, recyclable asphalt disposal area, truck wash out, and water supply and settling lakes.

☐READY MIXED CONCRETE

These operations mix sand, gravel, cement, and water together to form ready mix concrete, which is hauled to off-site construction projects.

Ready Mixed concrete is produced at these locations by combining raw materials in a mixer, which can be stationary (central mix plant) or truck mounted. The raw materials are made up of sand, gravel, cement, water and additives. The sand and gravel is either stored in stockpiles located outside and fed into the plant via loader and conveyors, or it is directly stored in a series of hoppers located directly above the central plant. The remainder of the raw materials are stored in tanks to protect them from exposure to moisture and temperature until they are pumped into the mixer. Once the raw materials are fed into the mixer and combined to form ready mix concrete, the final product is removed from the site by truck.

Dry Batching is apportioning out and dumping the mix into the concrete truck or mixer while the cement truck continues to agitate at a lower speed to keep it from hardening before it arrives at the site.

Activities at these sites may include the following: raw material unloading into stockpiles or storage tanks, raw material feed to plant, material batching, raw material storage area, recyclable concrete disposal area, truck wash out, and water supply and settling lakes.

☑EQUIPMENT FUELING

Diesel and/or gasoline tanks are located on site for fueling of equipment. Off-site vendors refill tanks as needed.

SECTION 2: SITE MAP

The following numbers are used as a key for the map on the next page.

1 = Perimeter Control

2 = Excavated or Graded Areas

3 = Crushing Area

4 = Aggregate Washing Area

5 = Asphalt Production and Loadout Area

6 = Concrete Production and Loadout Area

7 = Asphalt Storage Area

8 = Concrete Storage Area

9 = Topsoil Stockpile Area

10 = Overburden Stockpile Area

11 = Aggregate Stockpile Area

12 = Petroleum Product Storage

13 = Lime Storage Area

14 = Asphalt Additive Storage

15 = Concrete Additive Storage

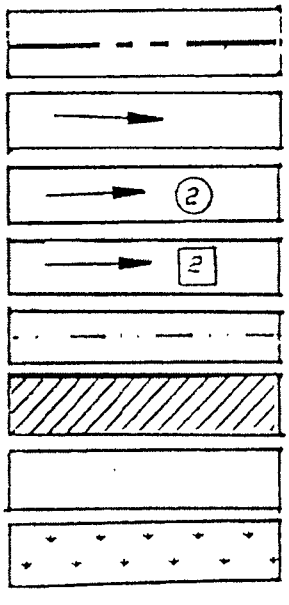
16 = Equipment Maintenance Area

17 = Equipment Wash-out Area

18 = Parking Areas

19 = Other _____

The following symbols are used as a key for the map on the following page.



= Property boundary

= Water flow direction

= Storm water outfall points

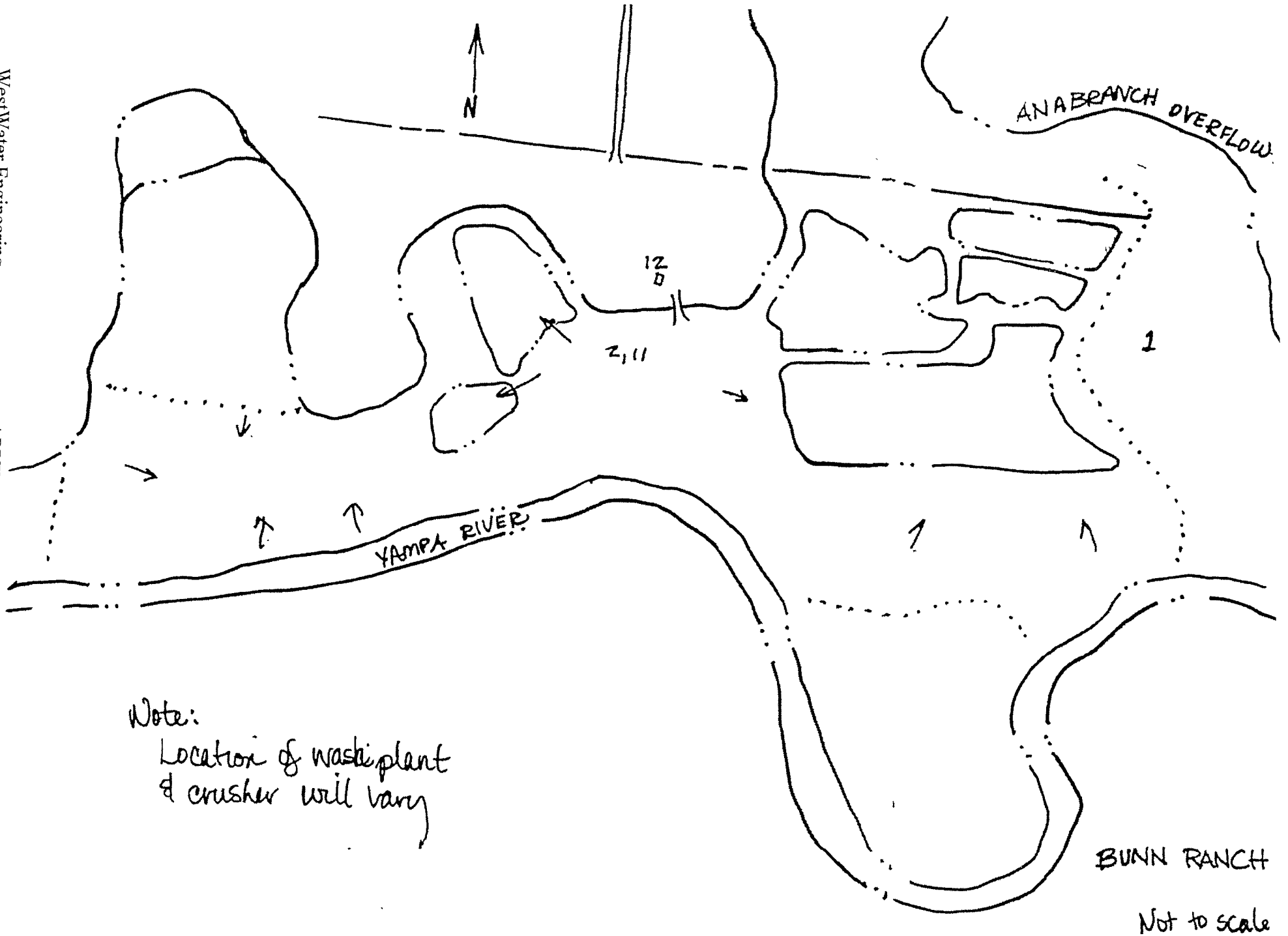
= Permitted discharge points for process water

= Surface water bodies

= Berms or embankments to prevent water flow

= Paved areas

= Grassed/seeded areas


N
ANABRANCH OVERFLOW
12
D
2,11
1
YAMPA RIVER
Note:
Location of wash plant
& crusher will vary
BUNN RANCH
Not to scale

SECTION 3: DESCRIPTION OF POTENTIAL POLLUTANT SOURCES, MATERIALS INVENTORY, RISK IDENTIFICATION AND ASSESSMENT, AND GOOD HOUSEKEEPING PRACTICES

KEY FOR SECTION 3 - TABLE A

Significant materials that have been treated, stored, or disposed of in a manner to allow exposure to storm water:

A = Significant material located on site

Methods of on-site storage or disposal:

B = Stock piling
C = Enclosed containers
D = Containment areas
E = Treatment plants
F = Other methods (fill in on chart)

Material management practices employed to minimize contact of the materials with storm water runoff:

G = Enclosed areas
H = Stored on impervious surfaces
I = Graded excavations
J = Stock pile revegetation
K = Detention/Retention Area
L = Berms
M = Other practices (fill in on chart)

(Extra blanks are provided for additional significant materials not included on Table 3A)

SECTION 3 - TABLE A: SIGNIFICANT MATERIALS, STORAGE METHODS & MANAGEMENT PRACTICES

DESCRIPTION OF SIGNIFICANT MATERIAL	ON-SITE	STORAGE METHODS					MANAGEMENT PRACTICES						
	A	B	C	D	E	F	G	H	I	J	K	L	M
Topsoil stock piles	X	X							X	X			
Overburden stock piles	X	X							X	X			
Sand and gravel stock piles	X	X							X				
Recyclable asphalt piles	X	X							X				
Recyclable concrete piles													
Salt piles													
Diesel fuel tanks	X		X									X	
Unleaded gasoline tanks													
Lubricating fluids													
Asphalt storage tanks													
Cement storage silo													
Lime storage silo													
Concrete additives													
Asphalt additives													

DESCRIBE MATERIAL LOADING AND ACCESS AREA

Material is either conveyed, placed into hoppers with a loader, or stored in silos and stockpiles.

SECTION 3 - TABLE B: LIST SIGNIFICANT SPILLS & LEAKS OF TOXIC OR HAZARDOUS SUBSTANCES

Date	Spill or Leak
	No reportable spills

Additional sheets may be attached if needed

SECTION 3 - TABLE C: STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

X	Industrial Activity	Direction of Flow	Potential Pollutants Present
X	Topsoil and overburden stock piling	see map	total suspended solids
X	Aggregate unloading	see map	total suspended solids
X	Aggregate feed to plant	see map	total suspended solids
X	Material batching for final product	see map	total suspended solids
X	Aggregate storage area	see map	total suspended solids
X	Aggregate washing	will vary	total suspended solids
X	Aggregate crushing	will vary	total suspended solids
	Recyclable concrete area		total suspended solids
X	Recyclable asphalt area	see map	total suspended solids
X	Petroleum storage for equipment and trucks	see map	hydrocarbons
	Truck wash out		pH, total suspended solids
X	Employee/Truck Parking Area	see map	hydrocarbons, total suspended solids
	Truck/Equipment Washing		oil and grease, hydrocarbons, total suspended solids
	Other		

SECTION 3 - TABLE D

SUMMARIZE ANY EXISTING DISCHARGE SAMPLING DATA DESCRIBING POLLUTANTS IN STORM WATER DISCHARGES

Data may be available. It was not included because the
storm duration, precipitation amounts, or actually sampling
locations are not available. Contact the Land Management
offices for more information (303) 657-4331.

SECTION 3 - TABLE E

DESCRIBE EACH PROPOSED SAMPLING POINT, SHOULD MONITORING BE REQUIRED

Sampling point	Description of Location
	not required

SECTION 4: SWMP ADMINISTRATION

Team Member/Title/Phone No.	Responsibilities
~~Name: Ken Bontrager~~	~~- assist in filling out the plan~~
Title: Plant Manager	- advice ~~Land Management~~ of changes
~~Phone No.: (303) 945-8672~~	~~- facility inspections~~
Todd Combs	
Name: ~~K.R. Weatherly~~	- review and certify plan, inspections,
Title: Area Manager	and annual reports
Phone No.: ~~(303) 945-8672~~	970-824-9491
Gayle Lyman	
Name: ~~Julie Goettemoeller~~	- complete plan and maps
Title: Land Management	- update plans as informed of changes
Phone No.: ~~(303) 657-4331~~	- summarize inspections and submit
970-242-5370	annual reports to CDH

GLL

SECTION 5: RISK IDENTIFICATION AND ASSESSMENT

Because of the nature of the activities within our industry, the potential for contributing pollutants is minimal.

Sources contributing pollutants to storm water discharges were covered in detail in:

Materials, methods, and management practices, Section 3 - Table A.

History of significant spills and leaks, Section 3 - Table B.

SECTION 6: PREVENTATIVE MAINTENANCE

DESCRIPTION	INSPECTION FREQ.	CLEANING FREQ.
Fuel & Oil Bunkers	as needed	as needed
Hot Oil System		
Waste Oil Tanks		
Catch Basins	as needed	as needed
Settl ng Ponds	as needed	as needed
Additive Storage		
Roadways & Loading Areas	as needed	as needed
Containment Devices (berms, ditches, etc.)	as needed	as needed
General Plant Conditions	as needed	as needed
Perimeter Erosion	as needed	as needed
Other		

SECTION 7: GOOD HOUSEKEEPING

Good housekeeping measures are an integral part of the materials management practices detailed in Section 3 and Section 9 of this document.

SECTION 8

ELAM CONSTRUCTION, INC.
SPILL RESPONSE PROCEDURES

SPILLS

A drop of oil or other petroleum product here or there in the normal course of business is not considered significant, and usually treated as a maintenance issue. However, any release that is greater than a small puddle on the ground must be handled as a spill and properly cleaned up. The contaminated soil material must be isolated immediately by digging or mopping up and placing on plastic, concrete, or in an open-top barrel.

SPILL RESPONSE

In the event of a spill, facility personnel will first take necessary measures to

- Stop the source of the release or spill
- Notify the nearest Elam Construction, Inc. Supervisor
- Contain the spill - using materials and equipment located on site.
- Spill response personnel must be outfitted with appropriate personal protective equipment, and ignition sources must be kept away from the spilled material. Any loaders, tankers, materials or other equipment will be available immediately from on site, other locations, or vendors as needed to contain all spills that threaten further contamination of soil or water.
- Ignition sources (cigarettes, flares, etc.) must be kept away from the spilled material

If the spill **cannot** be contained within the facility area utilizing available labor, equipment and materials, supervisory personnel are instructed to then notify the local emergency response agencies.

- Supervisors or Area Managers contact the following at Elam Corporate Headquarters As Soon As Possible:

  Environmental Affairs and/or Risk Managers

Gayle Lyman:		**Harold Elam:**	
Office	(970) 242-5370	Office	(970) 242-5370
Cell	(970) 260-9902	Cell	(970) 260-8957
Home	(970) 241-2630	Home	(970) 241-7451

Jim Harrison:		**Steve Kaspar:**	
Office	(970) 242-5370	Office	(970) 242-5370
Cell	(970) 260-8956	Cell	(970) 261-7653
Home	(970) 314-9379	Home	(970) 985-4093

If required, notifications to any regulatory agencies are to be made only by the Environmental, Safety Managers or Corporate Management. This restriction is necessary to prevent misinformation and to assure that notifications are properly conducted. A documented spill in excess of 25 gallons must be reported.

SECTION 9: BEST MANAGEMENT PRACTICES

The following practices are representative of measures employed within the Sand & Gravel Industry for limiting pollution associated with runoff. The specific practices listed below should not be construed as practices that are mandatory or that there is any need on the part of an operator to justify non-use of a particular practice. Obviously, the intent of BMP's is to effect a measure of control over the water quality of stormwater discharges. The practices selected by an operator to achieve this end may evolve with time.

PRACTICE EMPLOYED	AREA WHERE PRACTICE IS EMPLOYED	DATE OF IMPLEMENTATION
Vegetation Management:		
Buffer Strips	setbacks	pre 12/93
Temporary Seeding	natural growth in areas not used or disturbed	pre 12/93
Constructed Wetlands		
Revegetate as Practicable		
Other (Describe)		
Water Management: (Interim Measures)		
Straw Bales		
Silt Fences		
Detention Ponds	wash plant pond, settling ponds	pre 12/93
Rip Rapping		
Other (Describe)		
Water Management (Permanent Structural Controls):		
Site Grading	disturbed areas of site	pre 12/93
Upstream Flow Diversion		
Channel Improvements		
Overland Flow Routing		
On site Flow Diversion		
Flow Storage/Detention		
Berming	around fuel tank(s), along river	pre 12/93
Earth Dike		
Check Dams		
Pipe Slope Drain		
Sediment Trap Area		
Flow Attenuation Area		
Infiltration Area		
Water Bars		
Other (Describe)		

SECTION 10: EMPLOYEE TRAINING

Training which explores the goals and basic components of the SWMP will be conducted for upper level management (superintendents and foremen) on an annual basis. Such training will include:

Spill Prevention
Spill Response
Good Housekeeping Techniques
Materials Management
Sediment & Erosion Prevention

While operations are conducted on site it will be the responsibility of the superintendent or foreman in charge to train appropriate on-site personnel so that the goals of the SWMP are achieved.

SECTION 11 - FORM A
DETAIL OF NON-STORM WATER DISCHARGE
NOTE: DISCHARGE MEANS WATER THAT RUNS OFF THE PROPERTY

TYPES OF DISCHARGE	NO DISCHARGE	PERMITTED	UNPERMITTED	CONTROL MEASURES
Process Water Discharges:				
Transport Water				
Equipment Wash Water				
Dust Control (Roads)	X			
Sand & Gravel Wash Water	X			catch basins
Gravel Pit Dewatering		X		
Other_____				

OTHER INDUSTRIAL PROCESS DISCHARGE

Describe Source(s):

SANITARY WASTE DISCHARGE:

Exempt Discharges:	IDENTIFIED ON SITE	COMMENTS
Irrigation Return Flows		
Other Agricultural Discharges		
Fire Fighting Discharges		
Foundation Draining (SUMP)		
Springs		
Other_____		

ADDITIONAL COMMENTS: not applicable

SECTION 11 - FORM B
STORM WATER QUALITY CONTROL
TESTING FOR UNPERMITTED NON-STORM WATER DISCHARGES
(DO NOT INCLUDE EXEMPT DISCHARGES)

Testing does not refer to water quality sampling and analysis. Testing is the visual observation of non-storm water discharges. The intent of this portion of the SWMP is to detail any discharge sources which might contaminate your storm water discharges. Detail the observation for the presence of unpermitted storm water discharges. Prepare this page for each unpermitted discharge source.

1. Date of testing:

_____

2. Describe method of testing:

_____
_____
_____

3. Description of non-permitted discharge and source of water (i.e well water for dust control):

_____
_____
_____
_____

4. On-site drainage points observed during the test:

_____
_____
_____

5. Detail any pollution control measures for this source:

_____
_____
_____

NOTE: When your facility does not have access to an outfall, i.e manhole or other point of access, to the conveyance which receives the unpermitted discharge, you may not be able to preform the testing or observation required. If this is the case, explain why it is not feasible for you to provide the above information:

_____
_____
_____
_____

THIS FORM SHOULD BE FILLED OUT FOR ANY NEW DISCHARGES OBSERVED

APPENDIX D

LETTER OF RESPONSIBILITY

EPA4B AUTHORIZATION LETTER

October 5, 2010

Monica Heimdal, 8ENF-W
United States Environmental Protection Agency
Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

RE: CWA-08-2010-0035, Administrative Order for Compliance

Ms Heimdal,

4B Land and Livestock LLC hereby authorizes Elam Construction, Inc to act on their behalf in regards to the above referenced Administrative Order.

Sincerely,

Scott R. Brennise
4B Land & Livestock

EPA Compliance Letter

Elam CONSTRUCTION, INC.
556 Struthers Avenue
Grand Junction, CO 81501-3826
(970) 242-5370 Fax (970) 245-7716

October 7, 2010

Monica Heimdal, 8ENF-W
United States Environmental Protection Agency
Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

RE: CWA-08-2010-0035, Administrative Order for Compliance

Ms Heimdal,

As stated under Section III, Paragraph 2 of the Administrative Order for Compliance, Docket No. CWA-08-2010-0035, I am hereby informing the EPA our Intent to fully comply with this order.

I have enclosed letters from Scott and Sheila Brennise and 4B Land & Livestock authorizing Elam Construction to correspond with the EPA on their behalf. Elam Construction has accepted responsibility for this unfortunate incident, and we are asking the EPA to also recognize Elam as the sole Respondent.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Harold F. Elam
Vice President
Elam Construction, Inc.

Xc: Scott and Sheila Brennise
4B Land and Livestock, Scott Brennise

EPA Brennise Authorization Letter

October 5, 2010

Monica Heimdal, 8ENF-W
United States Environmental Protection Agency
Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

RE: CWA-08-2010-0035, Administrative Order for Compliance

Ms Heimdal,

The undersigned Scott and Sheila Brennise hereby authorizes Elam Construction, Inc to act on their behalf in regards to the above referenced Administrative Order.

Sincerely,

Scott R. Brennise

Sheila M. Brennise

APPENDIX E

PLANT AND ANIMAL SPECIES LISTS

APPENDIX E
Species known or expected to occur in or near the project area

Species Common Name	Species Scientific Name
ANIMALS	
Mammals	
American beaver	*Castor canadensis*
American Elk	*Cervus elaphus*
Badger	*Taxidea taxus*
Big brown bat	*Eptesicus fuscus*
Black bear	*Ursus americanus*
Black-tailed jackrabbit	*Lepus californicus*
Bobcat	*Lynx rufus*
Bushy-tailed woodrat	*Neotoma cinerea*
Common muskrat	*Ondatra zibethicus*
Common porcupine	*Erethizon dorsatum*
Coyote	*Canis latrans*
Deer mouse	*Peromyscus maniculatus*
Desert Cottontail	*Sylvilagus audubonii*
Dwarf shrew	*Sorex nanus*
Golden-mantled ground squirrel	*Spermophilus lateralis*
Hoary bat	*Lasiurus cinereus*
Least chipmunk	*Tamias minimus*
Little brown myotis	*Myotis lucifugus*
Long-eared myotis	*Myotis evotis*
Long-legged myotis	*Myotis volans*
Long-tailed vole	*Microtus longicaudus*
Long-tailed weasel	*Mustela frenata*
Merriam's shrew	*Sorex merriami*
Mink	*Mustela vison*
Montane shrew	*Sorex monticolus*
Montane vole	*Microtus montanus*
Mule Deer	*Odocoileus hemionus*
Northern grasshopper mouse	*Onychomys leucogaster*
Northern pocket gopher	*Thomomys talpoides*
Nuttall's Cottontail	*Sylvilagus nuttallii*
Pronghorn antelope	*Antilocapra americana*
Racoon	*Procyon lotor*
Red Fox	*Vulpes vulpes*
Ringtail	*Bassariscus astutus*

APPENDIX E
Species known or expected to occur in or near the project area

Species Common Name	Species Scientific Name
River otter	*Lutra canadensis*
Sagebrush vole	*Lemmiscus curtatus*
Silver-haired bat	*Lasionycteris noctivagans*
Southern red-backed vole	*Clethrionomys gapperi*
Striped Skunk	*Mephitis mephitis*
Thirteen-lined ground squirrel	*Spermophilus tridecemlineatus*
Townsend's big-eared bat	*Plecotus townsendii*
Water shrew	*Sorex palustrus*
Western jumping mouse	*Zapus princeps*
Western spotted skunk	*Spilogale gracilis*
White-tailed jackrabbit	*Lepus townsendii*
White-tailed prairie dog	*Cynomis leucurus*
Wyoming ground squirrel	*Spermophilus elegans*
Yellow-bellied marmot	*Marmota flaviventris*
Fish	
Black crappie	*Pomoxis nigromaculatus*
Bluegill	*Lepomis macrochirus*
Brown trout	*Salmo trutta*
Bluehead sucker	*Catostomus discobolus*
Channel catfish	*Ictalurus punctatus*
Colorado pikeminnow	Ptychocheilus lucius
Common carp	*Cyprinus carpio*
Cutthroat Trout	*Onchorhyncus clarki*
Fathead minnow	*Pimephales promelas*
Flannelmouth sucker	*Catostomus latipinnis*
Green sunfish	*Lepomis cyanellus*
Largemouth bass	*Micropterus salmoides*
Rainbow trout	*Onchorhyncus mykiss*
Northern pike	*Esox lucius*
Mountain whitefish	*Prosopium williamsoni*
Razorback sucker	*Xyrauchen texanus*
Roundtail chub	*Gila robusta*
Sand shiner	*Notropis stramineus*
Smallmouth bass	*Mycropterus dolomieu*
White sucker	*Catostomus commersonii*

APPENDIX E

Species known or expected to occur in or near the project area

Species Common Name	Species Scientific Name
Birds	
American Bittern	*Botaurus lentiginosus*
American Coot	*Fulica americana*
American Crow	*Corvus brachyrhynchos*
American Goldfinch	*Spinus tristis*
American Kestrel	*Falco sparverius*
American Robin	*Turdus migratorius*
Bank Swallow	*Riparia riparia*
Barn Swallow	*Hirundo rustica*
Belted Kingfisher	*Megaceryle alcyon*
Black-billed Magpie	*Pica hudsonia*
Black-capped Chickadee	*Poecile atricapillus*
Black-headed Grosbeak	*Pheucticus melanocephalus*
Blue-winged Teal	*Anas discors*
Brewer's Blackbird	*Euphagus cyanocephalus*
Brewer's Sparrow	*Spizella breweri*
Broad-tailed Hummingbird	*Selasphorus platycercus*
Brown-headed Cowbird	*Molothrus ater*
Bullock's Oriole	*Icterus bullockii*
Canada Goose	*Branta canadensis*
Canvasback	*Aythya valisineria*
Cinnamon Teal	*Anas cyanoptera*
Cliff Swallow	*Petrochelidon pyrrhonota*
Common Grackle	*Quiscalus quiscula*
Common Merganser	*Mergus merganser*
Common Nighthawk	*Chordeiles minor*
Common Yellowthroat	*Geothlypis trichas*
Downy Woodpecker	*Picoides pubescens*
Eastern Kingbird	*Tyrannus tyrannus*
European Starling	*Sturnus vulgaris*
Gadwall	*Anas strepera*
Gray Catbird	*Dumetella carolinensis*
Great-horned Owl	*Bubo virginianus*
Hairy Woodpecker	*Picoides villosus*
House Finch	*Carpodacus mexicanus*
House Sparrow	*Passer domesticus*
House Wren	*Troglodytes aedon*

APPENDIX E
Species known or expected to occur in or near the project area

Species Common Name	Species Scientific Name
Killdeer	*Charadrius vociferus*
Lesser Goldfinch	*Carduelis psaltria*
Mallard	*Anas platyrhynchos*
Marsh Wren	*Cistothorus palustris*
Mourning Dove	*Zenaida macroura*
Northern Flicker	*Colaptes auratus*
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*
Pied-billed Grebe	*Podilymbus podiceps*
Pine Siskin	*Carduelis pinus*
Plumbeous Vireo	*Vireo plumbeus*
Red-tailed Hawk	*Buteo jamaicensis*
Red-winged Blackbird	*Agelaius phoeniceus*
Sage Thrasher	*Oreoscoptes montanus*
Song Sparrow	*Melospiza melodia*
Sora	*Porzana carolina*
Spotted Sandpiper	*Actitis macularius*
Tree Swallow	*Tachycineta bicolor*
Veery	*Catharus fuscescens*
Vesper Sparrow	*Vireo plumbeus*
Warbling Vireo	*Pooecetes gramineus*
Western Kingbird	*Tyrannus verticalis*
Western Meadowlark	*Sturnella neglecta*
Western Wood-peewee	*Contopus sordidulus*
White-breasted Nuthatch	*Sitta carolinensis*
Willow Flycatcher	*Empidonax traillii*
Wilson's Phalarope	*Phalaropus tricolor*
Wilson's Snipe	*Gallinago delicata*
Yellow Warbler	*Dendroica petechia*
Yellow-headed Blackbird	*Xanthocephalus xanthocephalus*
Amphibians	
Bullfrog	*Rana catesbeiana*
Great Basin spadefoot	*Spea intermontana*
Northern leopard frog	*Rana pipiens*
Tiger salamander	*Ambystoma tigrinum*
Western chorus frog	*Pseudacris triseriata*

APPENDIX E
Species known or expected to occur in or near the project area

Species Common Name	Species Scientific Name
Woodhouse's Toad	*Bufo woodhousii*
Reptiles	
Gopher Snake/Bullsnake	*Pituophis catenifer*
Milk snake	*Lampropeltis triangulatum*
Plateau lizard	*Sceloporus undulatus elongatus*
Racer	*Coluber constrictor*
Sagebrush lizard	*Sceloporus graciosus*
Short-horned lizard	*Phrynosoma hernandesi*
Smooth green snake	*Liochlorophis vernalis*
Tree lizard	*Urosaurus ornatus*
Western rattlesnake	*Crotalus viridis*
Western terrestrial garter snake	*Thamnophis elegans*
PLANTS	
Graminoids	
American mannagrass	*Glyceria grandis*
Arctic rush	*Juncus arcticus*
Fowl mannagrass	*Glyceria striata*
Foxtail barley	*Hordeum jubatum*
Foxtail barley	*Hordeum jubatum*
Inland saltgrass	*Distichlis spicata*
Prairie cordgrass	*Spartina pectinata*
Switchgrass	*Panicum virgatum*
Western wheatgrass	*Pascopyron smithii*
Forbs	
Brook cinquefoil	*Potentilla rivalis*
Canada goldenrod	*Solidago canadensis*
Fendler's waterleaf	*Hydrophyllum fendleri*
Indian hemp	*Apocynum cannabinum*
Marsh-elder	*Cyclachaena xanthifolia*
Rocky Mountain iris	*Iris missouriensis*
Starry false Solomon's seal	*Maianthemum stellatum*
Western white clematis	*Clematis ligusticifolia*
Wild bergamot beebalm	*Monarda fistulosa*
Wild licorice	*Glycyrrhiza lepidota*

APPENDIX E
Species known or expected to occur in or near the project area

Species Common Name	Species Scientific Name
Wild mint	*Mentha arvensis*
Trees & Shrubs	
Bebb willow	*Salix bebbiana*
Big sagebrush	*Artemisia tridentata* ssp. *tridentata*
Black chokecherry	*Prunus virginiana*
Box-elder	*Acer negundo*
Desert indigobush	*Amorpha fruiticosa*
Fremont cottonwood	*Populus deltoides* ssp.*wizlizenii*
Golden currant	*Ribes aureum*
Great Plains false-willow	*Baccharis salicina*
Green rabbitbrush	*Chrysothamnus viscidiflorus*
Narrowleaf cottonwood	*Populus angustifolia*
Netleaf hackberry	*Celtis reticulata*
Peachleaf willow	*Salix amygdaloides*
Quaking aspen	*Populus tremuloides*
Rocky Mountain juniper	*Juniperus scopulorum*
Rubber rabbitbrush	*Chrysothamnus nauseosus*
Sandbar willow	*Salix exigua*
Shining willow	*Salix lucida*
Skunkbush sumac	*Rhus trilobata*
Stretchberry	*Forestiera pubescens*
Woods' rose	*Rosa woodsii*

APPENDIX F

EXAMPLES OF DATA COLLECTION SHEETS

Cover-Frequency Transect No.: __ of ___ Length _____ ___ Site ID: ___-___-___-___-___ ___ ___ ___ | ___ ___ ___ ___-___ ___ ___ ___ ___ | ___ ___ ___ ___-___ ___-___

Cover Classes: "10-Class" (below) Date: ___ | ___ | __ OBS: ___ AGCY RGN FOR QUADRANGLE CODE SEQ. NO. YR READ

Line	LF	Item	Description	Ocular%
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

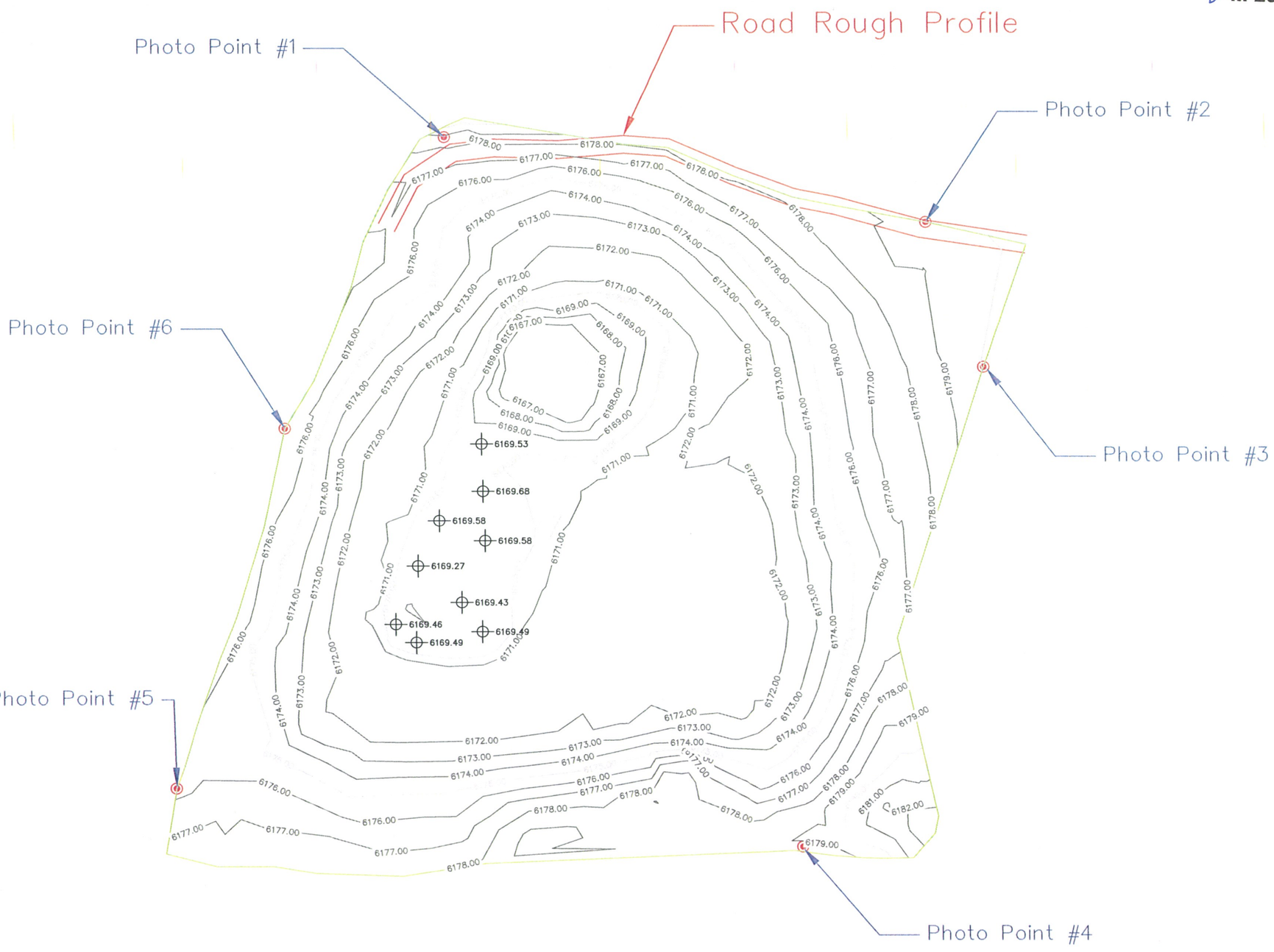
Code	Range
T	0-1%
0	1-5%
1	5-15%
2	15-25%
3	25-35%
4	35-45%
5	45-55%
6	55-65%
7	65-75%
8	75-85%
9	85-95%
A	95-99%
X	99-100%

AL	ALGAE
BR	BRYOPHYTE
CL	CRUST.LICH.
FA	FERN ALLIES
FB	FORB
FE	FERN
FO	FOL.LICH.
FR	FRUT.LICH.
FU	FUNGUS
GR	GRAMINOID
LC	LICHEN
LI	LIANA
SH	SHRUB
SS	SUBSHRUB
ST	SUCCULENT
TR	TREE
VI	HERB VINE

BARE	Bare soil
LITT	Litter and duff
FIGR	Fine gravel 2-5 mm
MEGR	Med gravel 5-20 mm
COGR	Course gravel 20-75
COBB	Cobble 7.5-25 cm
STON	Stone 25-60 cm
BOUL	Boulder >60 cm
BEDR	Bedrock
BAVE	Live basal vegetation
MOSSON	Moss on soil
LICHEN	Lichen on soil
WOOD00	Dead Org. < 1/4
WOOD01	Dead Org. 1/4 - 1"
WOOD13	Dead Org. 1-3"
WOOD37	Dead Org. 3-7"
WOOD71	Dead Org. 7-10"
WOOD10	Dead Org. >10"
COWPIE	Cowpie
DEERPE	Deer Pellets
ELKPEL	Elk Pellets

51

M-1980-131
M-2008-022



Breeze Basin Wetland (As Built)- Survey 11-26-2014

SURVEY MAP

BREEZE BASIN WETLAND

Elam Construction
Sandco Inc.
Smoothing The Way
Since 1956

GJ Pipe

556 Struthers Ave,
Grand Junction, CO 81501
Phone - (970) 242-5370
elamconstruction.com

NOTICE:
THIS SURVEY IS DESIGNED AND CREATED FOR ELAM CONSTRUCTION AND IT'S AFFILIATES AND IS NOT INTENDED FOR COMMERCIAL OR RESIDENTIAL RECREATION. THIS MAP IS FOR THE PURPOSE OF COLLECTING DATA FOR STOCKPILE INVENTORY AND CONSTRUCTION

NO.	BY	DATE	DESCRIPTION

PROJECT: Breeze Basin Wetland
FILE NAME: Breeze Basin – 11–26–14
DATE: 11–26–2014
DESIGNED BY: JONATHAN MUELLER
APPROVED BY:

SCALE:
1"=100'

SHEET: 1 OF 1

6

ELAM CONSTRUCTION, INC
PARC #085306300002

EXISTING FENCE

EXISTING 2 TRACK MAINTENANCE ACCESS

GATE

40 20 0 40
SCALE: 1"=40'

EXISTING 2-TRACK
MAINTENANCE ACCESS

WILDLIFE
FRIENDLY
FENCE

FENCE TO END AT
TOE OF SLOPE

ELAM CONSTRUCTION, INC

6170 6175 6180 6175 6170 6180 6170 6175 6179 6180 6181 6182 6183 6184 6180 6170 6175 6180 6175

M-1980-131
M-2008-022

GENERAL NOTES

SCALE: HORIZONTAL 1"=40'
VERTICAL N/A

REVISIONS	DATE
PREPARED	11/19/2010
SUBMITTED	11/23/2010
REVISED	7/27/2012

KEY:
- - - - EXISTING CONTOURS

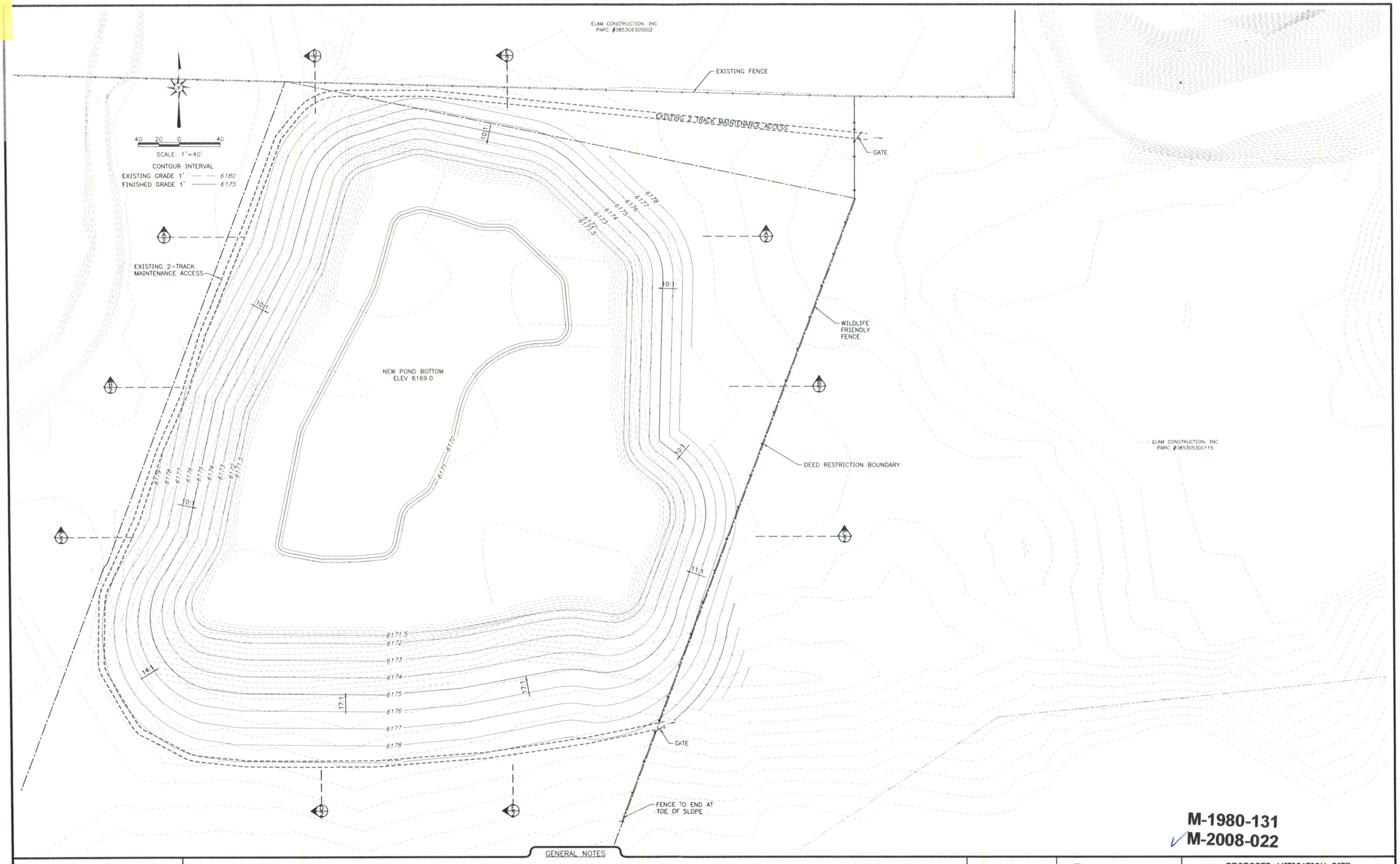
WestWater Engineering
2516 Foresight Circle, #1
Grand Junction, CO 81505
(970) 241-7076

PROPOSED MITIGATION SITE

FIGURE 8
EXISTING CONTOURS
CWA-08-2010-0035

Design by:	Drafted by:	Date:	Project No.	Sheet
BFF	JCG	11-10	036.001.003	1 of 4

4



GENERAL NOTES

SCALE:	HORIZONTAL 1"=40'	
	VERTICAL N/A	
REVISIONS	DATE	
PREPARED	11/19/2010	
SUBMITTED	11/23/2010	
REVISED	7/27/2012	

KEY:
- — — EXISTING CONTOURS
- ——— FINISHED CONTOURS

M-1980-131
✓M-2008-022

WestWater Engineering
2516 Foresight Circle, #1
Grand Junction, CO 81505
(970) 241-7076

PROPOSED MITIGATION SITE
FIGURE 9
GRADING PLAN
CWA-08-2010-0035

Design by:	Drafted by:	Date:	Project No.	Sheet
BFF	JCG	11-10	036.001.003	2 of 4

3

ELAM CONSTRUCTION, INC
PARC #085306300002

EXISTING FENCE

EXISTING 2 TRACK MAINTENANCE ACCESS

GATE

40 20 0 40
SCALE: 1"=40'

EXISTING 2-TRACK MAINTENANCE ACCESS

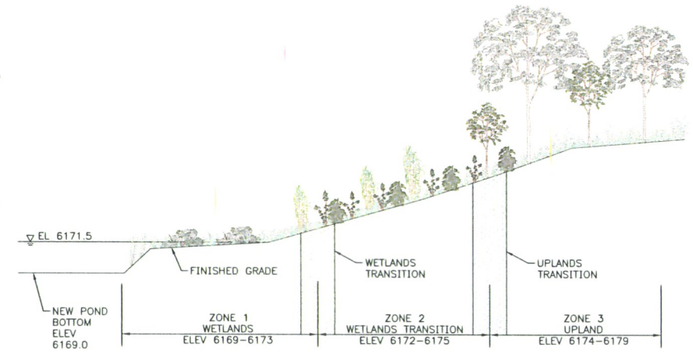
WILDLIFE FRIENDLY FENCE

DEED RESTRICTION BOUNDARY

GATE

FENCE TO END AT TOE OF SLOPE

ELAM CONSTRUCTION, INC
PARC #085305300115



TYPICAL WETLAND CREATION DETAIL (TYPICAL ALL SIDES OF POND
NTS

M-1980-131
M-2008-022

GENERAL NOTES

SCALE: HORIZONTAL 1"=40'
VERTICAL N/A

REVISIONS	DATE
PREPARED	11/19/2010
SUBMITTED	11/23/2010

KEY:
- FINISHED GRADE CONTOURS
- ZONE 1 – WETLANDS 2.76 ACRES
- WETLANDS TRANSITION ZONE 0.45 ACRES
- ZONE 2 – WETLANDS TRANSITION 0.47 ACRES
- UPLANDS TRANSITION ZONE 0.49 ACRES
- ZONE 3 – UPLANDS 3.3 ACRES

WestWater Engineering
2516 Foresight Circle, #1
Grand Junction, CO 81505
(970) 241-7076

PROPOSED MITIGATION SITE
FIGURE 6
PLANTING PLAN
CWA-08-2010-0035

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BFF	JCG	11-10	036.001.003	4 of 4

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556 STRUTHERS AVENUE

GRAND JUNCTION, CO 81501
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