

**Final Environmental Assessment and Habitat Conservation Plan  
for the Briargate Development  
Located Along Upper Pine Creek,  
Colorado Springs, El Paso County, Colorado**

**Prepared for:**

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## **2.0 PURPOSE AND NEED FOR ACTION**

The purpose of this Environmental Assessment/Habitat Conservation Plan (EA/HCP) is to evaluate the environmental impacts of the issuance of a Section 10 permit, which will authorize development of portions of the Briargate property. The EA/HCP complies with the requirements of NEPA and Section 10 of ESA, as amended.

Potential impacts to listed threatened and endangered species expected from completion of the proposed alternative are limited to the modification of approximately 83.93 acres of PMJM habitat. A complete description of potential impacts from the proposed action to endangered species is provided in Section 5.0, Environmental Consequences. Any incidental “taking” of PMJM resulting from the completion of the proposed development will not appreciably reduce the likelihood of the survival and recovery of the species in El Paso County.

## 3.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT

### 3.1 VEGETATION

#### 3.1.1 Upland

Vegetation found throughout the uplands of the entire project area is typical of the Front Range of Colorado and of El Paso County east of Interstate 25. The upland community consists predominantly of grasses and forbs such as blue grama (*Bouteloua gracilis*), buffalo grass (*Buchloe dactyloides*), needle-and-thread (*Stipa comata*), Canada wild rye (*Elymus canadensis*), prairie sage (*Artemisia ludoviciana*), orange paintbrush (*Castilleja integra*), senecio (*Senecio* spp.), and Canada thistle (*Cirsium arvense*). Transitional areas away from the creek's edge and adjacent to the drainage way contain patches of slender wheatgrass (*Agropyron trachycaulum*), western snowberry (*Symphoricarpus albus*), diffused knapweed (*Acosta diffusa*), wild licorice (*Glycyrrhiza lepidota*), and yucca (*Yucca glauca*). Throughout most of the South Fork drainage, very little shrub cover is present with the exception of some small patches of snowberry found approximately 0.25 mile to the north of the drainage. On the hills overlooking the North Fork drainage, established upland shrubs exist, which include shrub bunches consisting of such species as Gambel's oak (*Quercus gambelii*), choke cherry (*Prunus virginiana*), and skunkbrush sumac (*Rhus trilobata*).

#### 3.1.2 Riparian

On-site vegetation associated with areas along the channel of the main branch of Pine Creek includes reed canary grass (*Phalaris arundinacea*), field horsetail (*Equisetum arvense*), Nebraska sedge (*Carex nebraskaensis*), Baltic rush (*Juncus balticus*), and cattails (*Typha latifolia*). Woody species in the riparian zone include narrow-leaf cottonwood (*Populus angustifolia*), coyote willow (*Salix exigua*), peach-leaf willow (*Salix amygdaloides*), western snowberry, and choke cherry. Much of the same vegetation has been identified within the banks of the North and South Forks. In addition to these species found along the main channel of Pine Creek, black locust (*Robinia pseudoacacia*) is also found along the North Fork.

The difference between the main channel and the two forks is quite apparent as seen in Figure 4. While the main channel of Pine Creek provides good quality habitat for PMJM as it flows through the golf course, the habitat quality changes significantly from the confluence of the two forks upstream.

The South Fork above the point of confluence, according to Stoecker (1998), "is an ephemeral drainage, very dry and sandy. Shrubs are present, but there is little herbaceous understory." No PMJM were trapped in this location in 1997 (Stoecker 1997, 1998). Farther upstream, riparian vegetation, including forbs and shrubs, becomes more apparent as one approaches an existing wetland. Upstream to the approximate intersection of the Briargate Parkway and Union Boulevard, the riparian vegetation is relegated to an area within the defined channel of

the creek. Above this, all shrubby vegetation disappears with the dominant vegetation being Nebraska sedge found in the bottom of the channel.

In contrast, after a brief absence of a defined channel and riparian vegetation, as seen in Figure 4, the North Fork becomes densely vegetated with the above-mentioned vegetation.

Closer to the confluence of the North and South Forks, the riparian shrub vegetation along both channels disappears, creating a vegetation separation from the upper reaches of the two forks and the lower portions of the main creek. This separation is apparent in Figure 4, an aerial photograph of the project area taken approximately 2 months after the PMJM was listed in 1998. At the time the PMJM was listed, this break in vegetation was originally thought to also be a significant break in PMJM habitat. When listed in 1998, the definition of PMJM habitat was associated directly with wetland habitat. However, due to the lack of wetland vegetation, the U.S. Army Corps of Engineers (Corps) determined that the area above the confluence of the two forks was not a jurisdictional waters of the United States under the *Clean Water Act* (CWA) (USACOE 1999). Based on this determination, it was felt that PMJM habitat was not present along the North and South Forks, immediately upstream from their confluence. The lack of PMJM habitat in this area was again affirmed by the USFWS (1998b) when it gave clearance under Section 9 of the ESA for the extension of Briargate Parkway. In that letter granting clearance, USFWS stated its agreement that at the proposed road crossing of the South Fork of Pine Creek, "that Preble's habitat is not present within the subject area."

In an effort to connect this void, the Applicant and USFWS, in a separate action, have agreed to create new habitat between the two forks and the main channel. Once completed, a vegetative corridor will connect the two forks with the main channel, providing a passageway between the known populations of mice.

## 3.2 WILDLIFE

Wildlife found throughout the Briargate Development project area is typified by those species commonly found along Colorado's Front Range and El Paso County. Though no specific surveys were conducted for any animals on the property besides those for PMJM, wildlife expected to utilize the area include the following common bird species: red-tailed hawk (*Buteo jamaicensis*), black-billed magpie (*Pica hudsonia*), western meadowlark (*Sturnella neglecta*), vesper sparrow (*Pooecetes gramineus*), house finch (*Carpodacus mexicanus*), and spotted towhee (*Pipilo maculatus*). Common mammals include mule deer (*Odocoileus hemionus*), pronghorn antelope (*Antilocapra americana*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and deer mice (*Peromyscus maniculatus*).

## 3.3 CANDIDATE, THREATENED, OR ENDANGERED SPECIES

The USFWS lists ten species of animals and plants, currently or formerly residing in El Paso County, as Federally Endangered, Threatened, Proposed for Listing, or Candidate for Listing. These include three species of birds - bald eagle (*Haliaeetus leucocephalus*), Mexican spotted

owl (*Strix occidentalis lucida*), and mountain plover (*Charadrius montanus*); three species of mammals - black-footed ferret (*Mustela nigripes*), PMJM, and black-tailed prairie dog (*Cynomys ludovicianus*); two fish species - greenback cutthroat trout (*Onchorynchus clarki stomias*) and Arkansas darter (*Etheostoma cragini*); and two plants - Colorado butterfly plant (*Gaura neomexicana coloradensis*) and Ute ladies'-tresses (*Spiranthes diluvialis*). Of these ten species, the PMJM and mountain plover potentially could be found in the general area of the Briargate Development project. Specific federal status for each of the ten listed species is presented in Table 1.

**Table 1. Current Status of Federally Listed Species in El Paso County, Colorado.**

Species	Scientific Name	Federal Status
Bald eagle	<i>Haliaeetus leucocephalus</i>	Threatened
Mexican spotted owl	<i>Strix occidentalis lucida</i>	Threatened
Mountain plover	<i>Charadrius montanus</i>	Proposed Threatened
Black-footed ferret	<i>Mustela nigripes</i>	Endangered
Preble's meadow jumping mouse	<i>Zapus hudsonius preblei</i>	Threatened
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	Candidate Species
Greenback cutthroat trout	<i>Onchorynchus clarki stomias</i>	Threatened
Arkansas darter	<i>Etheostoma cragini</i>	Candidate Species
Colorado butterfly plant	<i>Gaura neomexicana coloradensis</i>	Threatened
Ute ladies'-tresses	<i>Spiranthes diluvialis</i>	Threatened

### 3.3.1 Preble's Meadow Jumping Mouse

The PMJM is a localized subspecies of the meadow jumping mouse (*Zapus hudsonius*) and inhabits similar habitats as the western jumping mouse (*Zapus princeps*) in Colorado. The only apparent habitat difference between the western jumping mouse and PMJM is that the PMJM is found at elevations below 7,600 feet above sea level while the western jumping mouse is found at higher elevations (6,000 to 11,500 feet above sea level). The more common meadow jumping mouse's known range is from the northeastern United States, west to northwestern Wyoming, and north into Canada and Alaska (Whitaker 1987), with isolated populations occurring in Colorado, New Mexico, and Arizona (Fitzgerald, Meaney, and Armstrong 1994).

Previous distribution reports of the PMJM date back to the 1940s with observations along creeks and drainages within the South Platte River drainage basin (Warren 1942), but there is no mention of observations within the Arkansas River drainage basin. In the past, little has been done to identify PMJM populations or to understand their hibernation habits, and the current status of the mouse in Colorado is poorly known (Meaney et al. 1997). With little information pertaining to the population status and ecology of the PMJM, as well as a petition to file a lawsuit against the USFWS to promote listing of the subspecies, the PMJM was listed as threatened under the ESA effective 12 June 1998 (USFWS 1998a).

PMJM surveys conducted within the past 4 years have identified populations in seven Front Range counties in Colorado and five counties in southern Wyoming. Data collected by independent biologists since 1995 are currently being used to identify distribution boundaries, as well as to identify vegetation differences between capture sites. Information on PMJM habits is also being studied, including hibernation patterns and habitat use. As mentioned earlier, PMJM appears to prefer habitats associated with wet, moist meadows and riparian areas (Bakeman 1997; Meancy et al. 1997; USFWS 1998a). Within the proposed project area, these habitat preferences would correlate with the riparian/wetland and transition habitats along the upper portions of the North and South Forks of Pine Creek.

### **3.3.1.1 Status of PMJM and PMJM Habitat within the Pine Creek Watershed**

Over the past century and most likely before that, the Pine Creek drainage has been disturbed and impacted in ways that have altered the original ecology of the stream. This, in turn, has undoubtedly changed the quantity and quality of habitat for the PMJM, assuming that the mouse has occupied the drainage for this period of time. When looking at the PMJM habitat along Pine Creek from the origination seeps to the confluence with Monument Creek, it appears the habitat has been severely fragmented since the PMJM listing in 1998, thus potentially separating existing PMJM populations along Pine Creek from those found along Monument Creek.

As early as 1902 (and possibly earlier), human-influenced impacts to Pine Creek's ecology and subsequent PMJM habitat have been occurring as is evident by some of the potential barriers found along the creek's channel.

Starting from the confluence with Monument Creek, the first potential barrier and impact to the habitat was the construction of the Interstate 25 crossing and the adjacent frontage road. This construction impacted areas within 300 feet of the Federal Emergency Management Agency (FEMA) 100-year floodplain standard used today. Rip-rap was placed directly in the channel and the area currently does not support any riparian vegetation. The upland areas were equally impacted by the disturbance and permanent removal up upland vegetation. Currently, the Colorado Department of Transportation (CDOT) is working to widen the bridge over the creek to accommodate current and projected increases in traffic use.

Immediately upstream of Interstate 25, a bridge crossing was constructed over the creek in 1902. It appears that the crossing was originally built for the railroad, although recently, a water pipeline was installed over the creek along the eastern side of this crossing. Just as with Interstate 25, this project impacted what little riparian vegetation existed in the area along with all upland vegetation in the direct path of the crossing. Adjacent to the creek along the eastern bank, a parking lot for Regis University has been constructed within the floodplain plus a 300-foot boundary deemed to be habitat by the USFWS. Further downstream, residential homes are located within this same boundary.

Throughout this stretch of creek downstream to the confluence, besides the aforementioned barrier impacts, it also appears that the creek originally cut down through the upper horizons of soil to bedrock exposing many vertical feet of unvegetated soil and parent material. In

many cases, it is evident that the past erosive nature of the creek has eliminated most, if not all, of the riparian vegetation and PMJM habitat usually found along streams in this area.

Further upstream, additional houses and commercial businesses have been constructed on the cliff banks overlooking the creek, all within the floodplain plus the 300-foot boundary used to delineate PMJM habitat. Closer to the creek's crossing of Academy Boulevard, hotels and their associated parking lots have been constructed up to the creek's edge, thus eliminating most of the riparian vegetation usually found along creeks in the immediate area. Once the creek reaches Academy Boulevard, the PMJM habitat becomes even more heavily impacted. Within the past 20 years, the interchange for Interstate 25 and Academy Boulevard has been constructed and reconstructed to accommodate the region's increased traffic use and, in all cases, the project has permanently impacted PMJM habitat. The latest upgrade to the crossing included the construction of an in-line energy dissipation structure on the downstream side of the bridge. Upstream of the crossing, the channel was lined with rock rip-rap and stabilized by installing grade-control structures used to slow down the water and subsequently allow sediment to drop out. Immediately adjacent to these impacts, as with the downstream side, commercial businesses and their parking lots have been built up to the creek's edge. All of these previous impacts have essentially eliminated much of the original riparian vegetation found along Pine Creek.

Upstream, approximately 2,000 feet from Academy Boulevard, and parallel to Interstate 25, the Pine Creek channel has been concrete-lined in an attempt to stabilize the banks and reduce erosion along Interstate 25. The concrete-lined reach extends for approximately 2,500 feet and effectively eliminates all riparian vegetation in this area. The remainder of the reach up to a siltation pond constructed by CDOT, located between Interstate 25 and State Highway 83, has been heavily impacted over the years due to construction and widening of the Interstate and highway. It appears that some of the vegetation has grown back sufficiently to provide marginal PMJM habitat, although Interstate 25 is well within the 300-foot boundary considered to be habitat. Besides its proximity to the Interstate and commercial development, the area within this reach is also mowed by CDOT as part of their roadside maintenance program.

From the CDOT siltation pond upstream approximately 0.5 mile, Pine Creek was disturbed and altered when State Highway 83 was constructed over the creek using box culverts. It was again disturbed and impacted when CDOT widened the highway a few years ago. Due to these past highway construction activities, there are still areas along the highway that have never been revegetated and have begun eroding, contributing sediment to the Pine Creek channel. Much of this sediment has ended up in the pond downstream, although the evidence of erosion can be seen on both sides of the bridge.

Upstream from the Highway 83 crossing, Pine Creek passes underneath Briargate Parkway through a box culvert. As with the downstream highway crossing, impacts to mouse habitat are evident on either side of the bridge. Immediately above the crossing is a stormwater detention pond. The pond was created in the early 1990s to reduce peak flow rates in the creek. Since construction of the pond impacted wetlands, mitigation for the loss of those wetlands, plus mitigation for impacts to wetlands elsewhere from nearby projects, was

achieved through the creation of a sediment trap along with an approximately 4.4-acre pond basin where wetlands were created. Currently, the dominant vegetation in the pond is cattail, a vegetation type not frequented by PMJM (Bakeman 1997; USFWS 1999). The Applicant owns and maintains the detention pond and plans are scheduled to increase the size of the pond as permitted by the Corps, permit CO-99-30072. The permit also requires the Applicant to enhance the habitat in and around the pond for the purpose of improving habitat available to known PMJM populations within the creek corridor. This entire action was approved after Section 7 consultation with the USFWS (2000). The permit was a result of the Biological Opinion issued by USFWS stating that the proposed activities would not jeopardize the existence of the PMJM as long as the recommended mitigation conditions were followed.

Above the detention pond, the creek flows through the Pine Creek Golf Course, which was created in the mid-1980s. Currently, the golf course is owned by the Applicant, but is operated by a separate company. In some areas, the course was constructed within 15 feet of the wetland boundary along the creek, well within the riparian habitat, although most of the disturbance has occurred in the upland habitat adjacent to the creek, also within the 300-foot boundary from the FEMA 100-year floodplain PMJM habitat boundary imposed by the USFWS. Within the golf course, there are two pedestrian/golf cart bridges crossing Pine Creek. Construction of these bridges involved permanent impacts to the riparian habitat. Bordering the southeast side of the golf course, in the upland areas away from the creek and outside of the PMJM habitat boundary, construction has already begun for the future development of an office park. Along the northwest side of the golf course, residential single-family homes have been constructed in the upland areas of the PMJM habitat over the past 10 years. Throughout this reach, the uplands and many parts of the riparian area have been impacted and no longer exist, although PMJM are known to inhabit the lush riparian corridor that remains. Much of this remaining riparian habitat appears to be of good quality, most likely a result from the additional watering it receives from the golf course.

Reaching the western boundary of the proposed project, in the middle of the golf course, Pine Creek flows under Chapel Hills Drive. The Chapel Hills Drive bridge, an 85-foot long by 50-foot wide concrete culvert, was constructed in early 1998, prior to the PMJM listing, and incorporated suggestions made by the Corps and USFWS regarding minimizing impacts to the affected wetlands and PMJM habitat. Bridge construction at this site has, at least temporarily, impacted not only the adjoining upland areas, but also the riparian habitat along the stream.

Although Pine Creek and its associated riparian corridor appear to be fragmented throughout the entire drainage, PMJM have been identified throughout the drainage at the following locations along Pine Creek:

- Within the proposed project boundary near the downstream extents of both the North and South Forks.
- Downstream of the Chapel Hills bridge within the golf course and within the detention pond located upstream of Briargate Parkway.
- Between Briargate Parkway and State Highway 83.

- Throughout the reach between State Highway 83 and Academy Boulevard.
- Throughout the reach from Academy Boulevard to Interstate 25.
- At the confluence with Monument Creek.

In June and July 1999, Dr. Robert Stoecker conducted surveys for the PMJM throughout the proposed project area (Stoecker 1999). Results of those surveys indicate that PMJM are present in the lower portions of the North Fork and South Fork of the upper Pine Creek drainage. Five PMJM were trapped in the South Fork above the USFWS-approved crossing of Briargate Parkway. An additional five PMJM were trapped immediately above and adjacent to areas previously impacted by residential and infrastructure development in the North Fork. Additional transects were trapped farther upstream along both forks with no additional mice identified. Bakeman (2001) surveyed a stretch of the upper North Fork of Pine Creek near the proposed crossing of Powers Boulevard with no success in trapping any PMJM. However, reports from the trapping season for 2001 have indicated that PMJM were identified at the proposed CDOT crossing of Powers Boulevard (Plage 2001).

Currently, within the project boundary, approximately 211.03 acres of available PMJM habitat exist. This total can be broken down within the following areas: Area 1, consisting of 22.07 acres of available PMJM habitat, can be found in the area from the confluence of the North and South Forks downstream to the western project boundary at Chapel Hills Drive; Area 2 is found within the entire drainage basin of the North Fork of Pine Creek and provides approximately 109.37 acres of currently available habitat; and Area 3 consists of the area within the South Fork of Pine Creek basin and provides 79.59 acres of available PMJM habitat.

### **3.3.2 Mountain Plover**

Mountain plover, listed by the USFWS as a proposed threatened species, is one of few shorebirds that live in the open high plains and semi-arid regions of the west away from open water (Terres 1991). This species of plover winters throughout the far west and southwest then migrates to nesting areas in Colorado, Wyoming, and Montana from mid-March to mid-May (Terres 1991). Requisite nesting habitat for the species consists of prairie areas containing short vegetation, bare ground, and flat topography. Mountain plover shows strong affiliation for sites that have been heavily grazed but will also attempt to breed on fallow and cultivated fields that mimic natural habitats. With restricted amounts of nesting habitat within the region, the stronghold for the species is located in northeastern Colorado, mainly in Weld County. On their breeding range, mountain plovers feed on insects found in areas of dry shortgrass prairies, long distances from water, or in sandy, sagebrush and cactus covered terrain (Terres 1991). Mountain plovers are not known to inhabit the immediate area of the proposed project site, and none were detected during general reconnaissance of the project site. Thus, it is unlikely that the proposed project activities will adversely affect mountain plover or its habitat.

### 3.3.3 Other Species

Bald eagles typically inhabit large open water bodies throughout their breeding season in order to fish or scavenge. The nearest large water body to the project area (Rampart Reservoir) lies approximately 10.0 miles west of the Briargate Development project. Therefore, the regular occurrence of bald eagles on or immediately adjacent to the project site during the breeding season is considered extremely unlikely. During migration and the winter months, eagles will utilize areas away from water, especially to scavenge upon dead animals. However, migration and winter use by eagles within the project area is considered to be minimal to nonexistent due to the high degree of human impact in the area and low density of prey species. This lack of proper nesting and foraging habitat suggests that the regular occurrence of bald eagles on or immediately adjacent to the project site is highly unlikely.

The Mexican spotted owl is known to occur in Mexico, west Texas, New Mexico, Arizona, Utah, and Colorado. In the northern portion of its range, the spotted owl uses slickrock canyons; towards the south, the species' habitat affinities graduate more towards forested mountains and canyons. Potential spotted owl habitat in El Paso County is restricted to the mountainous and canyonland areas on the western edge of the county and away from the Briargate project area; the nearest potential spotted owl habitat to the project site is approximately 7 miles to the west.

Black-footed ferrets historically ranged across the entire Great Plains; however, isolation and reduction in the number of prairie dog (*Cynomys* sp.) colonies, its primary food source, has eliminated the black-footed ferret from the vast majority of its former range. Currently, the ferret is only known to occur in areas of reintroduction efforts in Wyoming, South Dakota, Arizona, Montana, and western Colorado/eastern Utah. No prairie dog colonies are located on or immediately adjacent to the proposed project. The extreme rarity of the species and the lack of potentially suitable habitat suggest that no significant adverse affects to black-footed ferrets would occur as a result of the proposed development project.

The black-tailed prairie dog is a small rodent that forms and lives in large, social colonies throughout the mixed prairie of Colorado east of the continental divide (Fitzgerald, Meaney, and Armstrong 1994). Though common throughout its ranges within the state, the prairie dog has been proposed for listing due to its decrease in population size and the amount of available habitat. Although this may be true, the USFWS has stated that while the species warrants protection under the ESA, protection of the species will be precluded, thus the prairie dog will not be added to the list. However, USFWS will review the species status on a yearly basis. Currently, no prairie dog colonies exist within the project boundary, thus no impacts will occur as a result of the proposed project.

Once thought extinct, the greenback cutthroat trout is endemic to Colorado and is currently found only in headwater drainages of the Arkansas and South Platte Rivers. It is extremely unlikely that this fish would be found in Pine Creek since all naturally occurring populations in the state are found in streams located in the foothills and mountains, above natural barriers, which prevent exotic species from populating the same stream area; Monument Creek and its tributary Pine Creek do not fall into this geographic area.

The Arkansas darter has a very limited habitat range and is only found in tributaries to the Arkansas River (Woodling 1985). Within Colorado, this fish has been identified in areas associated with seeps adjacent to Fountain Creek in southern El Paso County (Woodling 1985). Due to the southern range of this species within the county, it is very unlikely that the Arkansas darter inhabits any of the drainages within the project boundary.

The Colorado butterfly plant, listed as threatened, is known to occur within sub-irrigated, alluvial soils of drainage bottoms surrounded by mixed-grass prairie along the mountain front from Castle Rock, Colorado to Cheyenne, Wyoming (CNPS 1997). Habitat somewhat matching that of the butterfly plant may be found in the drainage bottom of Pine Creek, however, this species is not known to occur this far south. During wetland and other biological surveys of the project area by personnel knowledgeable in identifying this species, no specimens of this species were identified. Based upon this information, it is not likely that this species occupies the Pine Creek drainage.

The Ute ladies'-tresses is an orchid found in wet meadows and meandering wetlands associated with major streams (CNPS 1997). Visual observations were made by biologists knowledgeable in the habitat requirements of this species during wetland surveys. No habitat of this type was found in the Pine Creek drainage and no specimens of this species have been identified throughout the area, thus it is unlikely that this orchid species exists within the project's boundaries.

### **3.4 WETLANDS**

Wetlands and other areas of jurisdiction under Section 404 of the CWA were delineated in August/September 1998, October 1999, February 2000, and July 2001. The first delineation, conducted by Erik Olgerson Partnership (1998), defined jurisdictional waters above Chapel Hills Drive that were contiguous with those previously delineated downstream. Results of that delineation identified areas protected under the jurisdiction of the CWA that extended up to and ended 3,400 feet upstream of Chapel Hills Drive, an area in the approximate vicinity of the confluence of the two forks. Above this area, no jurisdictional waters were identified. This determination was confirmed by the Corps during field visits on 5 and 7 January 1999 and later submitted in writing (USACOE 1999). During 1999, 2000, and 2001, SWCA Environmental Consultants (SWCA) conducted delineations farther upstream along both forks and within the interior between the two forks. Results of the delineation determined that although wetlands were present along both forks, the delineated areas within the North and South Forks were not contiguous and were fragmented in nature (SWCA 2001). In May 2001, the delineations were submitted to the Corps for determination of jurisdiction under the CWA. A jurisdictional determination agreeing with the submittal was received from the Corps, dated 7 August 2001. A year later, by letter dated 6 August 2002, the Corps notified the Applicant that some of the areas originally delineated as jurisdictional had recently been determined to be non-jurisdictional, and that some new areas of jurisdiction needed to be added to the delineation report. Results of the delineation and maps of the jurisdictional wetlands, including the 6 August 2002 amendment, are presented in Appendix A.

### **3.5 GEOLOGY AND SOILS**

The subject area is characterized by gently rolling hills, typical of the foothills between the Great Plains to the east and the Front Range of the Rocky Mountains to the west. Pine Creek originates from seeps on the eastern portion of the property and drains to the southwest from the North and South Forks to a confluence near the western portion of the subject area. Stock ponds throughout the property were previously constructed along this portion of the Upper Pine Creek drainage to support past and present ranching operations and to control erosion.

Four soil types are present within the North Fork of the Upper Pine Creek drainage: (1) Blakeland loamy sand, 1 to 9 percent slopes; (2) Peyton-Pring complex, 8 to 15 percent; (3) Truckton-Blakeland complex, 9 to 20 percent; and (4) Ustic Torrifluvents, loamy (U.S. Department of Agriculture [USDA] Soil Conservation Service [SCS] 1981). All four soils are characterized as deep and well drained. One additional soil type occurs within the South Fork of the Pine Creek drainage: Bresser sandy loam, 3 to 5 percent, which is also a deep, well drained soil. These soils do not appear on the list of Hydric Soils of the United States (USDA-SCS 1981).

### **3.6 CURRENT AND EXISTING LAND USE**

Throughout most of the project area, there have been previous land uses and disturbances that are still evident and some of which are occurring today (Figures 4 and 5). Below is a brief description of these areas.

Beginning in the eastern portion of the property where the headwaters of Pine Creek and its two forks originate, the project area has been historically and currently used for cattle grazing. Stock ponds found throughout the property were constructed years ago for the purpose of creating water sources for the ongoing cattle operation. Today, cattle grazing primarily occurs across the eastern one-third of the property.

Found in this same area is a silica sand quarry used to supply silica for sand blasting throughout the United States. The operation consists of three pits where the silica is quarried: two pits are located southeast of the North Fork and one pit is located northwest of the North Fork, adjacent to the existing golf course

Crossing the entire property near the silica quarries is a high voltage aerial power line and a buried AT&T fiber optic cable including an out-of-service coaxial cable.

Along the southern property boundary, near the proposed extension of Union Boulevard, a small area bordering the South Fork was previously used as a dumping ground for broken concrete and asphalt.

Throughout the project area, stormwater detention ponds have previously been constructed in strategic locations to capture and control the release of stormwater runoff from the surrounding areas. The first pond, Detention Pond PC-B, is located on the downstream extent of the South Fork. Located in the upland between the two forks near the future intersection of

Briargate Parkway and Union Boulevard, approximately 700 feet north of the South Fork, is a stormwater detention pond known as Detention Pond PC-C. Detention Pond PC-E is located on the downstream extent of the North Fork. Currently, the bottoms of all three ponds have not been reclaimed or revegetated.

Farther to the west, construction of a residential development has begun. This development includes the USFWS-approved construction of the crossing of Briargate Parkway and the South Fork (USFWS 1998b), as well as the construction of residential homes and associated infrastructure in the area between the North and South Forks.

Just north of this area is the Pine Creek Golf Course and clubhouse, constructed in the mid-1980s. It is within this area that the North and South Forks converge to form the main branch of Pine Creek. From this location to the western boundary of the project located at Chapel Hills Drive, Pine Creek flows through the middle of the golf course. In some cases, the riparian corridor is no wider than 70 feet with the average width being 100 feet below the confluence. It should be noted that Stoecker (1997) identified one PMJM below the confluence of the two forks near the crossing of Chapel Hills Drive.

### **3.7 ADJACENT LAND USE**

As is the situation in much of northern El Paso County, new residential and commercial development has increased in recent years, with the Briargate project area being no different. Currently, the proposed project area is bordered by development on three sides (Figure 5).

Starting to the north, along the drainage divide between Pine Creek and Kettle Creek, adjacent land use is primarily undeveloped in the northeastern portion, although development of residential homes is expected later this year. Further to the west along the drainage boundary, the area is currently under development or has been previously developed for residential use within the past 15 years. Along this portion of the project boundary, fairways from the Pine Creek Golf Course enter the proposed project area, forming the northwestern project boundary.

The western boundary is defined by Chapel Hills Drive; most of the adjacent land is currently under development or has been developed for residential use within the past 15 years. Located along the west side of Chapel Hills Drive, near the intersection with Old Ranch Road, is a middle school and associated athletic fields. From the crossing of Pine Creek south along Chapel Hills Drive to the intersection with Briargate Parkway, the adjacent property has been previously developed into part of the Pine Creek Golf Course and commercial office buildings.

Land use along the southern project boundary, again, is primarily residential with Academy International Elementary School located atop the hill overlooking the South Fork of Pine Creek. Drainage from the school site does drain into the project area.

### **3.8 AIR QUALITY**

The Applicant and/or the future developer will be required to obtain a county air quality permit and all state construction permits in order to proceed with construction. For the two types of permits, the Applicant will have to develop an emission control plan and will be responsible for controlling fugitive dust leaving the project site. Recommendations for controlling dust include watering roads and exposed areas, covering trucks, covering piles of dirt, creating windbreaks, controlling vehicle speed within the construction areas, road cleaning, and minimization of the amount of disturbance happening at one time.

### **3.9 WATER RESOURCES AND WATER QUALITY**

Water quality on the Briargate property is presently estimated to be in good quality and condition. The defined channels of the North and South Forks of Pine Creek originate within the project boundary. Currently, each drainage is relatively undeveloped except for minor impacts from local silica mining and some residential development along the western portions of the North Fork. Residential development construction upstream of the project boundary along the South Fork may be increasing the amount of sediment making its way into the drainage way. Best management practices are used on all construction projects along the creek.

### **3.10 CULTURAL RESOURCES**

On 12 April 2001, a request was submitted to the Colorado State Historic Preservation Office (SHPO) to conduct a site file search of the subject property. Results of the SHPO search identified no known sites of cultural and/or historical significance or sites that are eligible to be listed on the National Register of Historic Places within the Briargate property. As per an additional request from USFWS, SHPO was again requested to review the project in a letter dated 2 April 2002. SHPO responded by stating that since there was a federal undertaking with this project, Advisory Council regulations, 36 CFR 800 (the regulations that state how a federal undertaking must be handled under the National Historic Preservation Act of 1966, last amended in 2002) must be followed in consultation with their office (SHPO 2002). In addition, should unidentified cultural resources be discovered during construction, all activities must halt until the site can be evaluated in terms of the National Register criteria, 36 CFR 60.4, in consultation with their office (SHPO 2002).

On 19 December 2002, during the initial public comment period, USFWS requested that a Class III inventory of the property be conducted in accordance with Section 106 of the National Preservation Historic Act. In preparation for the survey, previous cultural and historic surveys by CDOT were identified as being conducted throughout the project area in 1976 and 1995 in preparation for the construction of the proposed Powers Boulevard. Although three sites were identified in the project area during the surveys, those sites have been destroyed since they were first recorded in 1976 (Gooding 1977).

In January 2003, a Class III inventory was conducted within the project boundary. This inventory was limited to those areas not previously disturbed and areas that fell outside previously inventoried CDOT corridors. Two historic isolated finds and one prehistoric find were identified (SWCA 2003). None of the finds were determined to be significant. The result of this inventory and the two inventories conducted for CDOT support the general conclusion “that the area is characterized by a low density archaeological record and that this part of the prehistoric landscape was used on a nonintensive, sporadic basis during the prehistoric period” (SWCA 2003). Historic use of the landscape did not produce much in terms of material remains and involved primarily intensive livestock grazing (SWCA 2003).

## **4.0 ALTERNATIVES**

This section describes and addresses the alternatives that have been considered for the proposed project, including the no action alternative, the preferred alternative – construction of the Briargate Development, and inclusion in the El Paso County regional planning process.

### **4.1 ALTERNATIVE 1 – NO ACTION**

The no action alternative would involve abandonment of the proposed Briargate Development. No changes in the existing PMJM habitat conditions would occur, thus requiring no application for incidental take. Monies spent on property acquisitions, previous construction of utilities, streets, drainage facilities, and planning by the Applicant would be lost with little opportunity for a return of investment. This loss would also include all the monies and time already put towards the issues associated with PMJM. The proposed preservation of PMJM habitat along Kettle Creek would not occur and the potential for future development along the creek would continue to exist.

Without the acquisition of the Section 10 permit, the Applicant and the many businesses that rely on it for construction work and developed real estate would face further significant business and economic challenges, including possible employee lay offs. Also, portions of major streets that are important to regional transportation would not be completed.

### **4.2 ALTERNATIVE 2 – PROPOSED (PREFERRED) ALTERNATIVE**

Alternative 2 would consist of residential, commercial, and light industrial development along and between the North and South Forks of Pine Creek as well as areas south of the main channel of Pine Creek (Figure 6). Associated with the development would be infrastructure construction such as roads, sanitary sewer lines, stormwater sewer lines, stormwater detention ponds, and stormwater discharge points along the creek corridor as well as a community park located along the South Fork. Once completed with an approximate 20-year build-out schedule, approximately 1,040 acres (46%) would be residential, 620 acres (28%) would be office and commercial sites, 60 acres (3%) would be schools and parks sites, and 460 acres (21%) would be left as open space including parks and the golf course of which approximately 178 acres will remain in a natural state.

In addition to the construction, this alternative would include the long-term preservation, through deed restrictions, of 153.48 acres (211.03 acres of existing PMJM habitat minus 57.55 acres of permanently-impacted area) of existing and enhanced PMJM habitat, plus the preservation of 19.14 acres of open space adjacent to and outside of PMJM habitat throughout the project area. As a final means of protecting habitat for PMJM, and as a means to help with the long-term recovery of the species while protecting critical habitat, the Applicant is proposing to protect an additional 186 acres of mouse habitat and natural buffer along the Kettle Creek drainage, approximately 0.5 mile to the northwest of the project boundary. Previous surveys throughout the area have identified a large, distinct, healthy population of PMJM along the Kettle Creek corridor. This is one of the few PMJM populations within El

Paso County that is not subject to immediate pressures from habitat loss. A detailed description of the proposed Kettle Creek Preserve is provided in Section 7.3.2.

In Figure 6, the project impacts have been separated into three distinct areas: Area 1, which is located along the main channel of Pine Creek, below the confluence of the two forks; Area 2 – the North Fork of Pine Creek; and Area 3 – the South Fork of Pine Creek. Within the three areas, blue- and gray-shaded areas represent property disturbed within the PMJM habitat boundary (FEMA 100-year floodplain plus 300 feet) as currently defined by the USFWS. These disturbances had occurred prior to the June 1998 listing of the mouse. Tan-shaded areas on the map represent the remaining areas of PMJM habitat within the current habitat boundary. Diagonal hatched areas represent areas of proposed temporary disturbance to PMJM habitat and the crosshatched areas depict locations of proposed permanent disturbance and impacts.

Alternative 2 has been selected as the preferred action since it will allow the Applicant to continue with the proposed development of the property while the conservation plan and other actions by the Applicant allow for enhancements and restoration of PMJM habitat within the Pine Creek drainage as well as the protection of a valuable piece of riparian/PMJM habitat offsite in Kettle Creek.

The following subsections describe the impacts that are proposed for each individual area and the impacts are illustrated on Figure 6 and summarized in Table 2.

**Table 2. Alternative 2 Impact Acreage Summary.**

<b>Impact</b>	<b>Area 1 (acres)</b>	<b>Area 2 (acres)</b>	<b>Area 3 (acres)</b>	<b>Total (acres)</b>
Temporary Impacts	3.67	22.50	0.21	26.38
Permanent Impacts	2.34	17.38	37.83	57.55
<b>Total Impact (acres)</b>	<b>6.01</b>	<b>39.88</b>	<b>38.04</b>	<b>83.93</b>

#### **4.2.1 Area 1**

Much of the terrain within and surrounding Area 1 has been previously disturbed by the creation of the Pine Creek Golf Course constructed in the mid-1980s, prior to the listing of the mouse. The remaining 22.07 acres of Area 1 that have been left as PMJM habitat have been confined to an 80-foot wide strip in the main channel immediately above Chapel Hills Drive.

Within the creek channel and riparian zone, four storm sewer stilling basins and one spillway from an existing pond will be constructed. Each of these discharge points will be constructed using rip-rap as a means of dissipating the water's energy, thus reducing erosion from the stormwater entering the creek channel. Construction of these facilities will permanently impact 0.57 acre of PMJM habitat.

## COVER SHEET

Title of Proposed Action: Issuance of an Endangered Species Act Section 10(a)(1)(B) permit for the Briargate Development, located along Upper Pine Creek, Colorado Springs, El Paso County, Colorado.

Unit of the U.S. Fish and Wildlife Service Proposing the Action: Regional Director, Region 6, U.S. Fish and Wildlife Service, Lakewood, Colorado.

Legal Mandate for Proposed Action: Endangered Species Act of 1973, as amended, Section 10(a)(1)(B), as implemented by 50 CFR 17.32.

Document Author: SWCA Environmental Consultants, 8461 Turnpike Drive, Suite 100, Westminster, Colorado 80031.

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## **LIST OF ACRONYMS**

%	percent
BMP	Best Management Practices
CDOT	Colorado Department of Transportation
CDOW	Colorado Division of Wildlife
Corps	U.S. Army Corps of Engineers
CWA	Clean Water Act
EA	environmental assessment
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
GID	General Improvement District
HCP	Habitat Conservation Plan
NEPA	National Environmental Policy Act
PMJM	Preble's meadow jumping mouse
RHCP	regional habitat conservation plan
ROW	rights-of-way
SCS	Soil Conservation Service
SHPO	State Historic Preservation Office
SWCA	SWCA Environmental Consultants
TPL	Trust for Public Lands
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

## **1.0 ENVIRONMENTAL ASSESSMENT**

The proposed Briargate Development, owned by La Plata Investments, LLC (Applicant) involves the development of commercial/retail and residential building sites within the general vicinity of the upper Pine Creek watershed. The entire development is located east of Interstate 25, within the northeast quadrant of the City of Colorado Springs, El Paso County, Colorado (Figure 1). The project boundary encompasses the upper North and South Forks of Pine Creek as well as the upper reaches of Pine Creek proper, located in portions of Township 12 South, Range 66 West, W2 of Section 25, S2 and NE4 of Section 26, S2 of Section 27, SE4 of Section 28, NE4 of Section 33, N2 of Section 34, NW4 of Section 35, and NW4 NW4 of Section 36. The entire project area is approximately 2,180 acres in size (Figures 2 and 3). All of the aforementioned waterways ultimately drain into Monument Creek to the southwest of the proposed project area.

The Briargate Development project is surrounded by the drainage divide between Pine Creek and Kettle Creek on the north, the drainage divide between Pine Creek and Cottonwood Creek on the south, the Applicant's property boundary on the east, and by Chapel Hills Drive on the west (Figures 3 and 4). Currently, approximately 46 percent (%) of the property is under construction or has been previously disturbed (Figure 5).

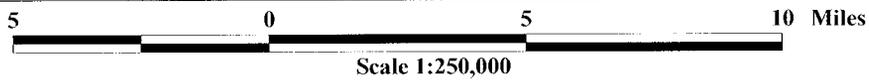
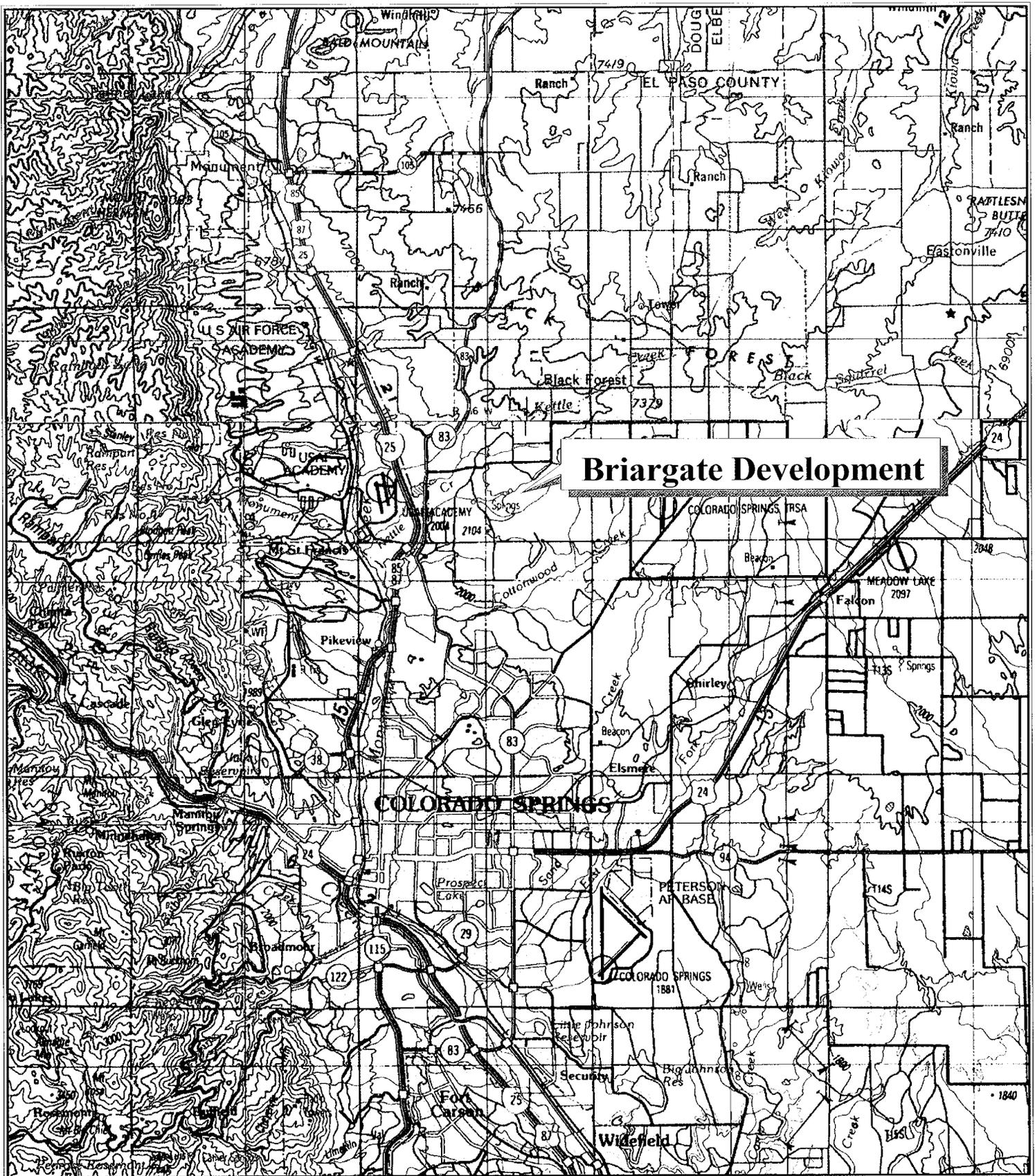
In June 1998, the United States Fish and Wildlife Service (USFWS) listed the Preble's meadow jumping mouse (*Zapus hudsonius preblei*) (PMJM) as threatened under the Endangered Species Act of 1973 (ESA). According to previous studies, PMJM prefers habitats associated with wet, moist meadows and riparian areas (Bakeman 1997; Meaney et al. 1997; USFWS 1998a). Upon review of biological information submitted by the Applicant and other sources, the USFWS has determined that the proposed project would result in the incidental take of PMJM. Thus, the Applicant has submitted the necessary 3-200 Form for a permit under Section 10 (a)(1)(B) of the ESA for incidental taking. Under the ESA, take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct."

To allow for the anticipated 20-year build-out period, the Applicant is requesting that the duration of the permit be for a period of 30 years from the date of issuance. This time frame will allow the proposed construction and disturbances to take PMJM and/or its habitat within the project boundaries defined in this document. Once the Section 10 permit has expired, any anticipated take within the project boundary would require consultation with and authorization of the USFWS, possibly through the assessment of impacts and the issuance of a new permit.

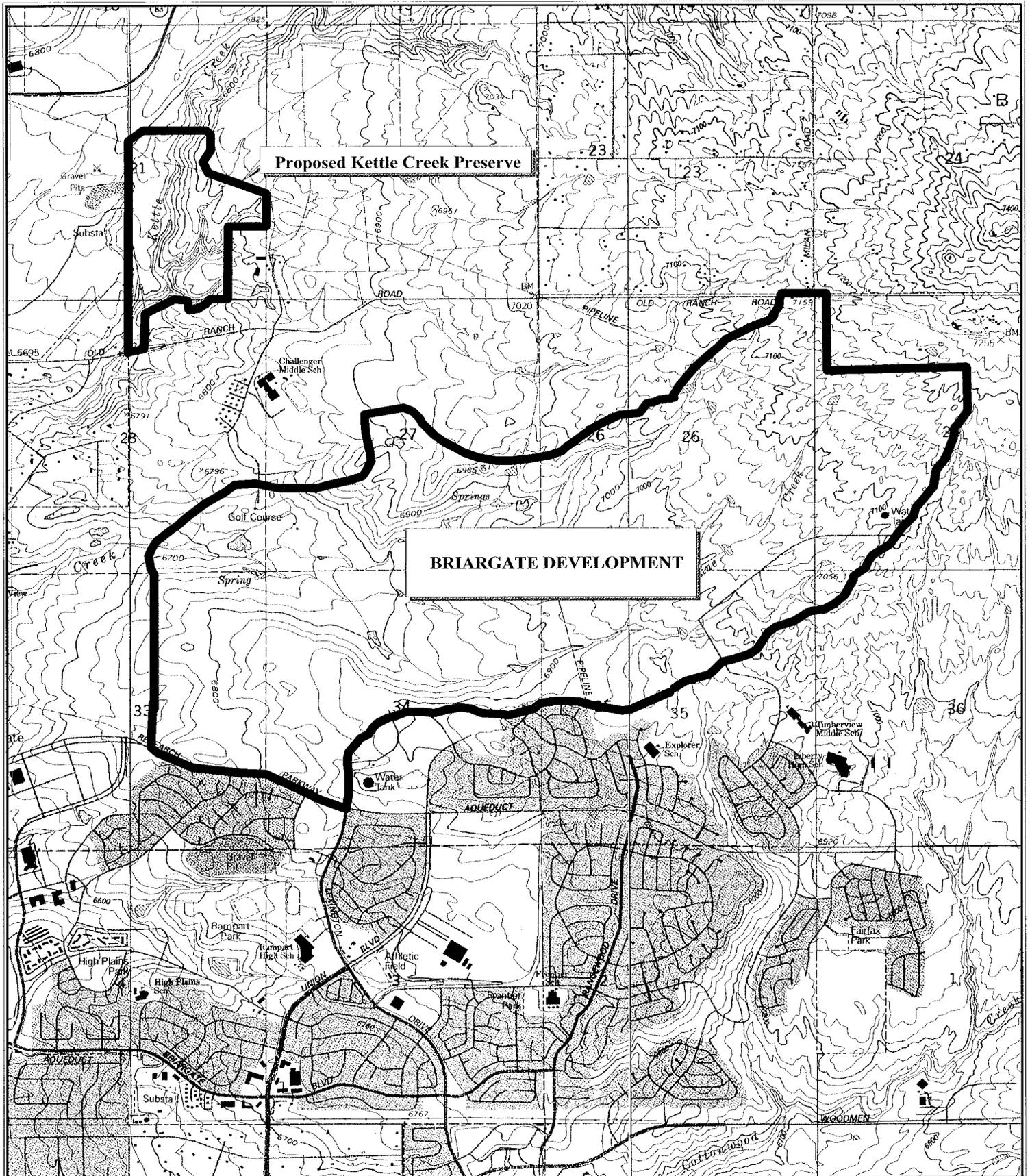
This document also provides the required National Environmental Policy Act (NEPA) documentation for a federal action and the components of a Habitat Conservation Plan (HCP) as mandated by Section 10 of the ESA.

## **1.1 TERM OF PERMIT**

The Applicant is requesting that the duration of the Section 10 permit be for a period of 30 years from the date of issuance. This time frame will allow for the proposed completion and build-out of the Briargate Development. During this period, the Applicant will be allowed to take PMJM either directly or through disturbance of PMJM habitat as defined in this document. After the termination of the 30-year period, any new developments that may involve the take of PMJM within the project boundary would be required to prepare an additional Section 10 permit.



**Figure 1. General location of the Briargate Development, El Paso County, CO.**



**Figure 2. Briargate Development Project Location, El Paso County, CO.**

Spanning the creek in an area previously disturbed by the construction of the golf course, a golf cart crossing will be reconstructed, thus no PMJM habitat will be impacted as a result of this construction. Between Chapel Hills Drive and the cart crossing, four stream channel stabilization structures will be constructed along with three additional stabilization structures above the cart path. Due to the size of these necessary structures and the associated temporary access roads, a total disturbance of 0.80 acres (0.25 acres of permanent impact plus 0.55 acres of temporary impacts) will occur. All of the temporarily disturbed areas will be reclaimed and revegetated immediately following construction using native species endemic to the area.

In addition to the in-channel work, the Applicant is proposing to permanently impact 1.52 acres of upland habitat for the construction of a commercial development. Grading for this development, as well as for other infrastructure including roads accessing the site, within Area 1 will temporarily impact approximately 3.12 acres. All temporarily impacted areas will be reclaimed using native species immediately following the completion of the construction project. Details concerning the mitigation are provided in Section 7.0 of this document.

Total impact to Area 1 equals 3.67 acres of temporary impacts and 2.34 acres of permanent impacts to PMJM habitat. A break down of impacts in Area 1 is presented in Table 3. A map showing the locations of the impacts is provided in Figure 6.

**Table 3. Impact Summary for Area 1.**

<b>Cause of Impact</b>	<b>Temporary Impacts (acres)</b>	<b>Permanent Impacts (acres)</b>	<b>Total Acreage</b>
Drainage (in-channel)	0.55	0.82	1.37
Commercial Development	3.12	1.52	4.64
<b>Total Impacts (acres)</b>	<b>3.67</b>	<b>2.34</b>	<b>6.01</b>

#### **4.2.2 Area 2**

The North Fork of Pine Creek encompasses approximately 109.37 acres of PMJM habitat. Proposed construction within the drainage, creating a permanent impact of 1.21 acres, consists of the construction of two rip-rap lined storm water outfalls, two rip-rap lined pond outfalls, and small rip-rap areas associated with proposed channel grade control structures. Temporary impacts within the drainage channel will consist of the construction of 15 to 20 stream channel stabilization/grade control structures and the creation of a stormwater detention pond. This construction will temporarily impact 15.43 acres of PMJM habitat. The pond will be constructed in such a manner as to allow PMJM to pass around the pond during a 100-year storm event, without being inundated. As with all temporarily disturbed areas, areas disturbed by construction will be revegetated immediately upon completion of the project.

Impacts associated with the construction of multi-family residential neighborhoods along the North Fork will total 7.07 acres of temporary impacts and 16.17 acres of permanent impacts.

The temporary impacts will occur from storm and sanitary sewer line construction as well as cut-and-fill operations associated with the grading of residential housing lots. Permanent impacts will occur from the construction of Royal Pine Drive and the housing lots.

Within Area 2, the total impact amount will equal 39.88 acres, of which 22.50 acres will be temporary in nature allowing for the impacted habitat to be immediately reclaimed with native vegetation following construction in that area.

It is anticipated that the proposed construction along the North Fork will permanently impact 17.38 acres of PMJM habitat within the 100-year FEMA floodplain plus 300-foot habitat boundary. Mitigation for this impact will be addressed in Section 7.0 of this HCP.

A summary of the impacts from the proposed project within the North Fork drainage is provided in Table 4 and shown in Figure 6.

**Table 4. Impact Summary for Area 2 - North Fork of Pine Creek.**

<b>Cause of Impact</b>	<b>Temporary Impacts (acres)</b>	<b>Permanent Impacts (acres)</b>	<b>Total Acreage</b>
Residential Development	7.07	16.17	23.24
Drainage (in-channel)	15.43	1.21	16.64
<b>Total Impacts (acres)</b>	<b>22.50</b>	<b>17.38</b>	<b>39.88</b>

Also, within this area, the CDOT has proposed to construct the extension of Powers Boulevard across the North Fork (Figure 6). While the impacts from this project are expected to total approximately 6.41 acres of proposed PMJM habitat (1.60 ac temporary and 4.81 ac permanent), the Applicant is not responsible for providing mitigation for this project, thus the impact acreages from the CDOT project are not included in the Applicant's mitigation totals. It is expected that CDOT will be responsible for addressing its impacts and all of the necessary consultations with the Corps and USFWS.

### **4.2.3 Area 3**

Within the proposed project boundary along the South Fork (an area including 79.59 acres of PMJM habitat) the Applicant is proposing to deed to the City of Colorado Springs approximately 13.73 acres of PMJM habitat for park land to be used as playing fields. This land is located near the southwest corner of Union Boulevard and Briargate Parkway. Access to the park from the residential communities to the south will be along existing trails already considered non-habitat due to their disturbed state. Mitigation for the proposed park disturbance is provided for within this HCP. Once the mitigation is completed under this HCP and the parcel is deeded to the city, the Applicant will have no control over future uses of the land and all future impacts outside of those currently proposed to PMJM habitat and consultations under the ESA will be handled directly by the city.

The remaining PMJM habitat will be impacted by the development of commercial areas, as well as the grading and construction associated with the expansion of Briargate Parkway. This construction will result in the permanent loss of 24.10 acres of PMJM habitat and the temporary impact of 0.21 acre of habitat (Table 5). As stated previously, all temporarily disturbed areas will be revegetated using native species immediately following construction.

**Table 5. Impact Summary for Area 3 – South Fork Pine Creek.**

<b>Cause of Impact</b>	<b>Temporary Impacts (acres)</b>	<b>Permanent Impacts (acres)</b>	<b>Total Acreage</b>
Community Park	0.00	13.73	13.73
Commercial Development	0.21	24.10	24.31
<b>Total Impacts (acres)</b>	<b>0.21</b>	<b>37.83</b>	<b>38.04</b>

### **4.3 ALTERNATIVE 3 – PARTICIPATE IN THE EL PASO COUNTY REGIONAL HCP**

This alternative assumes that the Applicant will wait until El Paso County’s Section 10 permit is approved and that the proposed project will fall within the stipulations of the Regional HCP (RHCP). Upon approval of the RHCP, construction of the Briargate Development would proceed as planned and all impacts to the PMJM would be covered under the county’s Section 10 permit.

Waiting for this plan to be approved would mean that the earliest the Applicant could begin construction of the proposed Briargate Development would likely be spring 2005. As stated in Alternative 1, this would have severe economic impacts on the Applicant, as well as on the many people it employs.

Besides the economic impact, Alternative 3 would mean that the county’s RHCP would already account for the potential impacts that would occur from the Briargate Development. If that were the case, the Applicant would have no incentive to preserve the 186 acres of excellent habitat on Kettle Creek. This in turn would make the property potentially unavailable for inclusion into the RIICP while also allowing for future impacts from development. As in Alternative 1, monies that the Applicant would have also put towards the fencing and signing of the property, the restoration of the existing horse trails, and the control of noxious weeds on the Kettle Creek Property would not be available. Management and use of the property would potentially remain as a pasture for the horse boarding operation on the neighboring property.

## **5.0 ENVIRONMENTAL CONSEQUENCES**

### **5.1 ALTERNATIVE 1 – NO ACTION**

For purposes of this analysis, the no action alternative would mean the abandonment of the entire project, including all proposed mitigation.

The no action alternative would allow for no further immediate impacts to wildlife, including PMJM, vegetation, wetlands, geography, or cultural resources. However, abandonment of the proposed project would have immediate and long-term impacts to many of the resources.

Currently, some areas outside of, but adjacent to, PMJM habitat have been graded in anticipation of future construction. By stopping the project, these areas would be left as is, allowing for some of the noxious weeds to become more established while decreasing the value for wildlife. These unvegetated sites could contribute to air quality concerns from dust and erosion problems as well as contribute to a decrease in surface water quality. Construction plans call for the development of stormwater detention ponds to help treat and release stormwater; however, the no action alternative would potentially eliminate the construction of all remaining ponds, thus allowing for the potential for increased sediment loading into Pine Creek.

The improvements to PMJM habitat, in both the Pine Creek and Kettle Creek drainages, would also be abandoned, thus creating no benefit to PMJM. No preservation and protection of the Kettle Creek drainage would also mean that potential impacts from future development would still be a possibility.

In addition to the ecological impacts from this alternative, the Applicant, its employees, and other entities reliant upon the Applicant would be subjected to the economic impacts due to discontinuation of the project. Not only would the Applicant risk losing the potential to earn a return on its investment, Alternative 1 would also increase the chances of the Applicant losing all monies previously spent addressing PMJM issues. Additionally, the Applicant would have to breach previously signed agreements and contracts with CDOT, El Paso County, and other developers. Regional transportation would be negatively impacted, as major arterial streets could not be completed.

While this alternative does not directly impact PMJM, it also does not provide for any improvements to its habitat nor does it allow the Applicant to see a return on its investment.

## **5.2 ALTERNATIVE 2 – PROPOSED (PREFERRED) ALTERNATIVE**

### **5.2.1 On-Site**

#### **5.2.1.1 Vegetation**

The proposed action would result in the total surface disturbance of approximately 83.93 acres of PMJM habitat, of which 26.38 acres would be temporary and the remaining 57.55 acres permanent (Table 2). Of the 211.03 total acres of habitat currently available to PMJM within the project boundary, this equates to 12.5% being temporarily impacted and 27.3% being permanently impacted for a total impact of 38.8% of the available PMJM habitat. However, the areas temporarily impacted will be immediately reclaimed on-site, thus the total loss of PMJM habitat would be equal to the permanently impacted acreage – 57.55 acres (27.3%).

#### **5.2.1.2 Wildlife**

Wildlife that inhabits the area planned for development would be displaced to adjacent areas, which could result in increased competition for nesting, foraging, breeding, and feeding areas. Landscape vegetation will provide habitat for those species of wildlife suited for coexistence with urban development. A significant portion of the project area will not be developed, as shown in Figure 6. It is anticipated that the undeveloped areas will continue to provide habitat for many of the species currently inhabiting the area. Undetermined negative or positive effects associated with the promotion of urban wildlife species and human activities associated with the proposed development may result in negative impacts to certain species while others may be unaffected or positively affected by this development.

#### **5.2.1.3 Threatened and Endangered Species**

Only the PMJM has been identified within the project boundary.

For defining impacts of the proposed project on PMJM, as per the recommendation of the USFWS, the Applicant has defined PMJM habitat as that area located within 300 feet of the designated FEMA 100-year flood plain along the North Fork, South Fork, and main channels of Pine Creek. Approximately 22.07 acres of PMJM habitat have been identified along the main channel of Pine Creek (Area 1), 109.37 acres along the North Fork (Area 2), and 79.59 acres have been identified along the South Fork (Area 3), totaling 211.03 acres of existing PMJM habitat in the proposed project area.

Ten individuals were captured along the North and South Forks of Pine Creek in 1999 (Stoecker 1999), five along each drainage. All of the individuals were captured at the extreme lower end of the channels in areas where no further habitat was defined immediately downstream. Due to the break in habitat between the main channel of Pine Creek and the upper two forks and the distance between the two areas (approximately 1,900 feet), it appears that the two small populations identified by Stoecker (1999) are isolated from the populations previously identified downstream.

Both Stoecker (1997, 1999) and Bakeman (2001a) trapped the upper reaches of the North Fork with no success, both expressing that the upper reaches did not appear to provide optimum habitat for PMJM. However, reports from USFWS state that during the 2001 trapping season, Bakeman identified PMJM along the North Fork in the area where CDOT has proposed to construct the Powers Boulevard crossing (Plage 2001 Bakeman 2001b). Stoecker (1997 and 1999) has also trapped the upper portions of the South Fork with no success. In 2001, a site visit was made by the Corps, USFWS, Colorado Division of Wildlife (CDOW), the Applicant, and SWCA to determine the extent of PMJM habitat within the South Fork drainage. The agreed upon limits of habitat along the South Fork are depicted in Figure 6.

**5.2.1.4 Wetlands**

Areas subject to jurisdiction under Section 404 of the CWA have been identified throughout the entire project area. Between 1999 and the summer of 2002, wetland delineations were conducted throughout the project area. Results of these delineations and concurrence from the Corps are presented in Appendix A.

Approximately 14.46 acres of jurisdictional waters, protected under the CWA, have been identified throughout the project area. Of that total area, approximately 1.84 acres of wetlands were identified along the main channel, 5.41 acres of wetlands along the North Fork above the existing Detention Pond PC-E, and 5.79 acres of wetlands along the South Fork of Pine Creek immediately above the existing Detention Pond PC-B for a total wetland acreage within PMJM habitat of 13.04 acres. Another 0.448 acres of wetlands were identified in the uplands between the North and South Forks. The remainder of the acreage, 0.98 acres, equates to the amount of other jurisdictional waters besides wetlands that include stream channel (approximately 700 linear feet) and open water. A detailed map of the jurisdictional areas and the proposed mitigation are shown in Figure 7.

Temporary and permanent impacts to wetlands, both inside and outside of PMJM habitat, are expected to occur from the proposed action. Taking into account impacts to all jurisdictional waters for the entire project, the breakdown of impacts is as follows:

**Table 6. Wetland Impact Summary.**

Area	Temporary Impacts – Non-jurisdictional	Temporary Impacts – Wetland	Permanent Impacts – Non-jurisdictional	Permanent Impacts - Wetland	Total
Area 1		0.340		0.343	0.683
Area 2		0.369	0.006	1.080	1.455
Area 3		0.004		2.538	2.542
Isolated Areas				0.448	0.448
<b>Total</b>	<b>0.00</b>	<b>0.713</b>	<b>0.006</b>	<b>4.409</b>	<b>5.128</b>

The impacts to wetlands and other jurisdictional waters (0.713 acres temporary and 4.407 acres permanent) will be mitigated by on-site and immediate restoration of the temporarily disturbed areas (0.713 acres) and by the creation of new wetlands within the bottom of detention pond PC-C and in the bottom of the proposed detention pond PC-F (6.90 acres total) (Figure 7). For impacts to jurisdictional waters, the Corps generally requires a 1:1 ratio of mitigation. It is anticipated that the restoration efforts of 0.713 acres and the wetland creation of 6.90 acres in the two detention pond bottoms will allow for more than enough to mitigate for the 5.128 acres of total impacts expected from the proposed project. This ratio will be used only for purposes of the Section 404 application submitted to and reviewed the Corps.

However, for purposes of this plan, USFWS requires a higher mitigation ratio for impacts to PMJM habitat. Thus, the Applicant will mitigate for impacts to 4.674 acres of wetlands within those areas deemed PMJM habitat at a ratio of 1.5:1. This mitigation will be included and discussed in the HCP (Section 7.0).

Disturbances to existing wetlands will be minimized by the implementation of Best Management Practices (BMPs) as required by state and federal stormwater runoff regulations and by conditions outlined in Section 404 of the CWA.

Impacts to wetlands throughout the entire project area and proposed wetland mitigation will be reviewed by the Corps in a separate Section 404 application process following the guidelines defined in CWA.

#### **5.2.1.5 Geography and Soils**

No significant geologic alterations are anticipated by the proposed action.

#### **5.2.1.6 Current and Existing Land Use**

Over time, the current livestock grazing operation and the silica quarry operation will no longer be in existence. Once construction begins in the areas in which these operations have existed, the cattle will be removed and the quarry closed.

#### **5.2.1.7 Adjacent Land Use**

Current and adjacent land use throughout the local region has been geared toward recreational, residential, commercial, and light industrial use. No change in this trend is expected from the proposed project.

It is anticipated that there will be some new construction associated with the new cart pat that will occur in areas of existing disturbance located in the vicinity of the golf course. Since this area was disturbed prior to the listing of the mouse and no PMJM habitat currently exists in the area, there will be no additional impacts from this construction.

#### **5.2.1.8 Air Quality**

The proposed project will contribute to increased local traffic and noise as well as increased emissions due to the increasing number of vehicles accessing the area. There will be a temporary increase in fugitive dust as construction proceeds but it is expected to decrease once construction is complete.

#### **5.2.1.9 Water Resources and Water Quality**

Stormwater runoff and other surface water will be directed to appropriate stormwater detention ponds where sediment content will be reduced prior to entering the stream system. All water exiting the detention ponds will be discharged back into Pine Creek through energy dissipation facilities. Peak flow rates released from the detention facilities will be less than historic peak flow rates during large rainfall events.

Subsurface ground water may be altered by the increase in impervious cover in the form of paved roads and parking lots. Some of the water that would have infiltrated into the ground, restoring underground seeps, will now become surface water runoff, ending up in the above-mentioned detention ponds. However, it is anticipated that water infiltration into the ground water source from additional irrigation of landscaped areas will likely offset this potential loss.

No significant impacts to water quality are expected to occur from the proposed action. City, county, and federal standards require that the Applicant be in compliance with all necessary permit and regulations.

#### **5.2.1.10 Cultural Resources**

According to a site file search and review by SHPO, and a Class III pedestrian inventory, no known registered and/or significant historic or archaeological sites exist within the project boundary. Thus, no impacts are expected to occur to any significant site of historical value. Shall a historic or archaeological site be discovered during construction, all impacting activities will be a halted until the site is evaluated by SHPO.

### **5.2.2 Off-Site**

#### **5.2.2.1 Vegetation**

No off-site impacts to vegetation are expected.

#### **5.2.2.2 Wildlife**

Wildlife using areas outside of the project area are expected to have increased competition for nesting, foraging, breeding, and feeding areas due to displacement of animals from areas within the project boundary.

### **5.2.2.3 Threatened and Endangered Species**

Off-site impacts to PMJM are not anticipated. The Applicant has designed and planned the proposed project to minimize the impact to the riparian corridor downstream of the project boundary where PMJM have previously been identified. A portion of the protected area, as mentioned before, was developed into a golf course in the mid-1980s. Stormwater being discharged from the proposed detention ponds will be released at or below historic flows during large rainfall events, thus reducing the erosive nature of the water. While the duration of high discharge flows may increase, the flow rates of water in the channel will be controlled. Construction of the grade-control structures will assist in stabilizing the stream channel, thus allowing for the established streamside vegetation to remain, providing necessary cover for the mouse. In addition, the additional water that may make it to the creek will allow the successful enhancement and restoration along the channel as proposed in the HCP, Section 7.0.

### **5.2.2.4 Wetlands**

No off-site impacts to jurisdictional waters are expected to occur. As stated above, all stormwater leaving the project site will be controlled and released at or below historic levels during large rainfall events.

### **5.2.2.5 Geology and Soils**

No off-site impacts to geologic or soil resources are anticipated.

### **5.2.2.6 Current and Existing Land Use**

No off-site impacts to current and existing land uses are anticipated.

### **5.2.2.7 Adjacent Land Use**

There will be no significant alterations to existing or proposed off-site land uses as a result of the proposed action.

### **5.2.2.8 Air Quality**

Fugitive dust from the project site may migrate away from the project area. If this should occur, the construction area will be immediately watered down to prevent any further dust particles from leaving the construction site as per the state and county air quality permits that must be obtained for the project.

### **5.2.2.9 Water Resources and Water Quality**

Off-site surface and ground water resources are not expected to be adversely impacted by the proposed action. Immediate surface runoff leaving the project area may increase due to the increase in impermeable surfaces. However, effort will be made to direct all runoff to detention ponds where the water will be allowed to deposit any sediment loads and potentially be filtered by the wetland created in the pond bottoms. Stormwater runoff leaving the site prior to the construction of the described detention ponds will be controlled as per

requirements of the state-issued stormwater discharge permit and associated pollution prevention plan. Thus, all surface water leaving the project site will be controlled in an approved manner either by detention ponds or BMPs.

#### **5.2.2.10 Cultural Resources**

No off-site impacts to cultural resources are expected.

### **5.2.3 Cumulative Impacts**

The Applicant believes that the proposed action, as described, will not have a long-term affect on PMJM survival to the population on or adjacent to the Briargate property. Much of the surrounding area throughout the drainage was previously impacted and developed for a golf course, office parks, residential homes, and highway construction prior to the listing of the PMJM. Many other projects have been completed since then including construction of infrastructure for residential areas. Still, after these impacts, recent surveys have identified PMJM in the Pine Creek drainage. While the long-term impacts to the mouse are unknown at this time, short-term impacts to the corridor, upstream, downstream, and outside of the project boundary do not appear to have had an adverse affect on the survival of PMJM, again as PMJM have been identified in the reaches of the North and South fork of Pine Creek as recently as 2001.

Approximately 200 acres of land located upstream from and outside of the project area contribute runoff to Pine Creek. The majority of this land is currently undeveloped. The existing and proposed land uses for the area located upstream from the project area range from rural residential and open space to arterial roadways and commercial development. A portion of the land has been master planned. The remainder of the property is expected to maintain its rural residential characteristics as single family homes on lots of 5 acres and greater.

The Applicant believes that construction phase of the proposed business campus, including development for commercial, light industrial/office, and open space will not affect PMJM due to the mitigation proposed in Section 7.0. However, in contrast, the creation of residential areas will increase the chance of predation of PMJM by domestic cats and increased human presence in PMJM habitat, thereby impacting the mouse.

## **5.3 ALTERNATIVE 3 – PARTICIPATE IN THE EL PASO COUNTY REGIONAL HCP**

Waiting for El Paso County to complete the RHCP would involve many of the same impacts addressed for Alternative 1. Initially, there would be no immediate or new impact to PMJM or its habitat. However, by waiting for the county's permit to be approved, the long-term impacts to water quality, wetlands, vegetation, wildlife, and air quality could have a secondary impact on the mouse. Besides impacts to the environment, the Applicant would have to close down its business, laying off approximately 30 employees, while potentially breaching contracts and agreements with CDOT, El Paso County, and other developers.

Regional transportation would be negatively impacted and in turn would have a negative affect on quality of life and economic development in the region.

## **6.0 ALTERNATIVE ANALYSIS**

Alternative 1, the No Action alternative, would result in the abandonment of the proposed Briargate Development. This alternative was rejected for three reasons: 1) the Applicant believes that the development as proposed in this HCP can occur without endangering the survival of the PMJM; 2) the proposed preservation of 186 acres along Kettle Creek, an area known to be inhabited with a distinct, healthy population of PMJM, would not be permanently protected from future impacts and development pressures; and 3) abandonment of the proposed project would result in the loss of significant monies invested in the property, in project planning involving PMJM, and previous infrastructure construction, and would result in severe economic hardship for the Applicant as described below.

While developing this HCP, the Applicant has slowed planned developments, additional monies have been spent on ESA compliance, financing and infrastructure activities have been delayed, marketing plans have been affected, and committed funds have been placed in jeopardy. The Applicant estimates that the gross costs of direct investment in habitat preservation, increased and unanticipated costs due to PMJM mitigation efforts, commitments for the future preservation and mitigation efforts, and the time value of money during the development of this HCP is approximately \$2 million.

The Applicant had been working, initially with the Corps as lead federal agency under a Section 7 consultation for the lower Pine Creek reach and currently with USFWS under a Section 10 permit for the upper Pine Creek reach, on the preservation of the PMJM and its habitat since the mouse was first discovered on land owned by the Applicant in 1998.

The Applicant's planned business activities have been altered in an attempt to comply with the ESA. The Applicant has made significant investment in infrastructure for the development of the Briargate and Pine Creek Master Planned Communities in Colorado Springs and has made commitments to both local and state governmental authorities for future infrastructure development. The source of repayment for those investments for future infrastructure development is solely from the resulting land sales opportunities. The ability to recover those investments made in good faith to the City of Colorado Springs, CDOT, and others is delayed until a Section 10 permit can be obtained.

For the Applicant, a delay in infrastructure development in the portion of the south branch of Pine Creek and the planned extensions of both Briargate Parkway and Union Boulevard is the main economic issue. Until a Section 10 permit is obtained, the Applicant is unable to extend these roadways. Without these connections, the Applicant:

- Cannot issue the planned \$20 million Briargate General Improvement District (GID) Bonds for the construction of Briargate Parkway and Powers Boulevard connections. Bond underwriters and investors insist that the permit be in hand to allow for land sales before the bonds are issued. Future land sales by the Applicant will be the primary source of repayment for the planned bonds. The secondary source of repayment, ad valorem property taxes, will not materialize if the land is not sold and

improved. The Applicant is in jeopardy of losing known bond investors that have expressed interest in the investment. In addition, the Applicant may already have lost the current window of opportunity for favorable interest rates.

- Cannot feasibly construct Powers Boulevard from Research Parkway to Briargate Parkway, since the Applicant cannot issue the GID debt. This roadway has been contemplated since annexation in 1980, and further became the construction responsibility of the developer in 1986. In conjunction with CDOT, the Applicant has already agreed to construct this phase using CDOT plans as soon as possible. CDOT has committed state funds to reimburse the Applicant for the additional costs required to construct to CDOT's plans and now this project that may be in jeopardy of loss if the Applicant cannot connect the Research Parkway to Briargate Parkway section in a reasonable time frame.
- Cannot make the connection from existing Union Boulevard north to Briargate Parkway. The funds for this completion were an approved "SCIP" referred measure in Colorado Springs in 1999. The funds already approved and set aside for this street construction are also at jeopardy of loss if the approval of the HCP is not obtained in a reasonable time period.

The Applicant has incurred the following unanticipated cost increases as a result of complying with the ESA:

- In order to continue operations in Pine Creek, the Applicant performed a directional bore under the South Pine Creek area to provide the water pressure and volumes for continued development. This \$120,000 effort will have no continued value once Union Boulevard is completed.
- The Applicant will commit funds for future costs involved in the enhancement, preservation, and maintenance of PMJM habitat along Pine Creek and Kettle Creek.
- Legal council expenses, consultant costs and expenses, as well as direct employee time committed to the process of obtaining the necessary permits has been a significant capital outlay.

The Applicant's activities have consequences, such as the following, for others in the Briargate Area:

- The Applicant provided 18 acres of land to Penrose/Centura Health Care in Colorado Springs for a medical care facility at the intersection of Briargate Parkway and Austin Bluffs Parkway. Penrose has no ability to begin construction on this much needed health care facility in northern Colorado Springs until the Applicant can provide the extension of Briargate Parkway to Austin Bluffs Parkway with the transportation and utility connections.
- The Applicant and the Pine Creek builders have committed significant funds in the marketing and amenities of the Pine Creek development area. The investments include model homes, the advertising plan, on-site sales people, and early landscaping and roadway construction. These costs were incurred with the expectation that these

investments would provide for sales of real estate. Many of these investments are expensive and are both time- and people-sensitive. Without a timely permit issuance, much of this investment is at risk of loss, and several employees necessary for the execution of the sales and marketing plan will be laid off.

The following Applicant activities have been delayed in Briargate as a result of the need to comply with the ESA:

- The Applicant has been in the planning stages of the Briargate Crossing, a mixed-use community that will be completed at the intersection of Powers Boulevard and Briargate Parkway. The current economic conditions have yielded several interested buyers for this real estate (that will provide capital for the repayment of the above-mentioned bonds.) Without the timely approval of the HCP, the opportunity of these current interested buyers and the resulting cash flow may be lost, or at least deferred for a period of time.
- The Applicant has been in the planning stages of the Johnson Ranch community east of Powers Boulevard. This property cannot be accessed without extending roadways that cross land currently identified as habitat for the PMJM. The Applicant is geared up for the commencement of this development, which is delayed while a Section 10 permit is being obtained.
- Due to the significant planning and time to deliver real estate to the market, the Applicant's activities for 2003 have been delayed. The real estate that is economically feasible to develop without the USFWS permit is diminished to the point that business opportunities and activities are now affected. Without an approval of the HCP in early 2003, the Applicant will be forced to close operations until a permit is obtained, which will impact the cost of operating the business as well as employees.

Based upon this analysis, Alternative 1 has been rejected.

Alternative 3, participating in the El Paso County RHCP, was rejected based upon the anticipated schedule for completion of the El Paso County RHCP. As of fall 2002, the county's anticipated schedule for having a draft of the RHCP ready for public review and issuance of the Section 10 permit, exceeds the amount of time the Applicant can wait to be included and covered under their permit due to economic reasons. Adjusting to this schedule is not realistic for the Applicant to take advantage of the current real estate market. Due to economic demand and previous contractual obligations to CDOT and El Paso County for the construction of Powers Boulevard, the Applicant would be at risk of economic loss and potential lawsuits due to breach of these contracts. Many of the same economic impacts discussed above for Alternative 1 would occur if Alternative 3 were further pursued.

Potentially, Alternative 3 would also have a negative effect on the PMJM by delaying or abandoning of the proposed enhancement, restoration, and preservation. The proposed preservation and enhancement of the Kettle Creek property might be abandoned since the mitigation necessary for the proposed project may be covered under the RHCP.

Based upon the proposed mitigation, including the enhancement, restoration, and preservation of PMJM habitat, as well as the economic benefit to the Applicant and its employees, Alternative 2 has been chosen as the preferred alternative. Even though the proposed Briargate Development will impact approximately 83.93 acres of PMJM habitat, of which 57.55 acres will be permanent, and the remaining 26.38 acres of impacts will be temporary, the Applicant feels that the mitigation proposed in Section 7.0 of the HCP will not only offset these impacts, but create a higher quality habitat for PMJM while allowing the Applicant to recover the economic cost already incurred in this project. The mitigation proposed will enhance 10.9 acres of habitat on-site within Area 2 and restore another 3.93 acres in Area 1, 22.50 acres in Area 2, and 0.21 acres in Area 3. In addition, Alternative 2 provides for the on-site preservation of 153.48 acres in the Pine Creek drainage and the enhancement, restoration and preservation of approximately 186 acres along Kettle Creek. To assist with the preservation of the Kettle Creek area, the Applicant has also proposed to provide a monetary endowment to help manage the preserved area along Kettle Creek. These measures to mitigate for the impacts to the mouse are presented and discussed in more detail in Section 7.3.2.

In determining the proposed impacts, the Applicant analyzed the different scenarios of impacts versus the cost of mitigation and the anticipated financial return from the project. Based upon this analysis and the monies previously spent on PMJM-associated issues, the Applicant felt that Alternative 2 would allow the chance to recapture those previous costs and earn a profit on the future investments in the project, while developing a mitigation plan that would ultimately benefit the mouse and help support the county-wide RHCP.

## **7.0 HABITAT CONSERVATION PLAN**

### **7.1 MITIGATION PLAN**

As part of the proposed action, an HCP has been proposed to minimize the potential take of PMJM within the project boundary by enhancing habitat along the North Fork and insuring the long-term protection of valuable, undeveloped PMJM habitat in an adjacent creek drainage. This HCP will attempt to assure that the proposed action does not reduce the potential for survival and recovery of the PMJM in the wild, as mandated by requirements of 50 CFR Part 17.22(b)(1)(iii). The mitigation plan includes the subjects discussed in the following subsections.

### **7.2 GOALS AND OBJECTIVES**

The Biological Goal of this HCP is to provide for the long-term conservation of the PMJM on Pine and Kettle Creeks while allowing the Applicant to carry out otherwise lawful activities on private property. The Biological Objectives to achieve this goal are: (1) enhancement and restoration of existing PMJM habitat along the North Fork of Pine Creek; (2) protection of the existing habitat found within all three areas in the Pine Creek drainage by placing deed restrictions on the remaining PMJM habitat; (3) enhancement/restoration, enhancement, preservation, and long-term protection of the occupied PMJM habitat identified on Kettle Creek; and (4) provide an endowment to TPL to provide for the long-term management of the Kettle Creek Preserve.

The goal and objectives of this HCP involve mitigation for the 83.93 acres of impacts to PMJM habitat expected from the proposed project. Of this total, 57.55 acres are permanent impacts and the remaining 26.38 acres are temporary. To accomplish the mitigation, the Applicant is proposing to conduct enhancement/restoration procedures on 136.00 acres of PMJM habitat located along Kettle Creek, enhance an additional 50.00 acres adjacent to the PMJM habitat along Kettle Creek, enhance 10.90 acres of PMJM habitat along the North Fork (Area 2), preserve and sign approximately 19.14 acres of non-habitat buffer along the North Fork, and restore 26.38 acres of habitat in Areas 1, 2, and 3 (Table 7). Together, this mitigation will occur on a total of 242.42 acres.

Based upon an average mitigation ratio of 1.5:1 suggested by USFWS, the 83.93 acres of impacts would need to be mitigated by applying the proposed mitigation techniques to 125.90 acres. By applying this and other ratios to the proposed mitigation acreages, the Applicant believes that proposed mitigation will account for the impacts to 136.82 acres of impacts, approximately 10.92 acres more than are necessary. For details of this breakdown, please refer to Table 7.

As a final form of mitigation, the Applicant is proposing to place deed restrictions on all the above mention areas as well as the remaining, undeveloped PMJM habitat found along Pine Creek; an area totaling 339.48 acres (153.48 acres on Pine Creek plus 186 acres on Kettle Creek). As a way to finance the management of the Kettle Creek parcel, the Applicant has

also come to an agreement with TPL, who will take over the deed to the property once the enhancement/restoration is completed, to provide them with an endowment for management of the property. Details of this proposed mitigation is found in the following section (Section 7.3).

By completing the proposed mitigation, the Applicant will accomplish the following: 1) enhancement and restoration of existing PMJM habitat along the North Fork of Pine Creek; 2) protection of the existing habitat found within all three areas in the Pine Creek drainage by placing deed restrictions on the remaining PMJM habitat; (3) enhancement/restoration, enhancement, preservation, and long-term protection of the occupied PMJM habitat identified on Kettle Creek; and 4) an endowment to TPL to provide for the long-term management of the Kettle Creek Preserve. Together, this mitigation will help provide protected habitat to be used in calculations for the RHCP and help insure the long-term survival of the species.

Success of the mitigation plan will be determined once the standards of success have been reached as described in Section 7.3.3. Timing for the start of mitigation is dependent upon the approval of the Section 10 permit. However, it is expected that mitigation efforts could begin as early as the spring of 2003. A more detailed discussion of the proposed schedule is presented in Section 7.3.5.

## **7.3 MITIGATION ACTIVITIES**

The activities proposed in this HCP were discussed with representatives of the USFWS from both regional and state offices during a site visit on 29 May 2002. Discussions and ideas from the site visit were used in the design of the mitigation plan in an effort to address the goals and objectives discussed above. Based upon the input from USFWS, the Applicant is optimistic that the proposed mitigation will help offset the impacts to PMJM habitat. Mitigation outlined in this plan will occur in several ways; habitat enhancement and restoration both along Pine Creek and Kettle Creek, preservation of the Kettle Creek Preserve, long-term habitat protect through deed restrictions, and an endowment to be used for the management of the Kettle Creek Preserve.

### **7.3.1 On-site (Pine Creek Drainage)**

#### **7.3.1.1 Enhancement**

During the above mentioned site visit with USFWS, the Applicant and USFWS discussed the possibility of controlling the patches of noxious weeds identified along the banks of the North Fork. Both groups agreed that the value of the previously created habitat area downstream would be greatly enhanced if weeds were controlled in the existing habitat. As a result, the Applicant has proposed to spray for noxious weeds throughout the upland area from the existing Detention Pond PC-E at the lower end of the North Fork, upstream to the point of the proposed stormwater outfall on the north bank (Figure 8).

**Table 7. Mitigation Acreage Summary for the Briargate Development.**

**Required Mitigation = 83.93 (Impacted Acres 57.55 + 26.38) x 1.5 = 125.90 acres needed**

Mitigation Site	Mitigation Type	Site Treatment	Mitigation Site Size (acres)	Mitigation Ratio	Mitigation Credit (acres)
Pine Creek (Area 1)	Restoration	Stabilize, Vegetate, Fence, and Signage	3.67	1:1	3.67
Pine Creek (Area 2)	Restoration	Stabilize, Vegetate, Fence, and Signage	22.50	1:1	22.50
Pine Creek (Area 3)	Restoration	Stabilize, Vegetate, Fence, and Signage	0.21	1:1	0.21
Pine Creek (Area 2)	Enhancement	Weed Control, Over Seeding, Shrub Planting, Fence, and Signage	10.90	1.5:1	7.27
Pine Creek (Area 2) Buffer	Preservation	Fence and Signage	19.14	0.00	0.00
Kettle Creek Preserve Habitat	Restoration/Enhancement	Fence to Restrict Public Access Remove Domestic Animal Grazing Stabilize/Reclaim Trail Areas Weed Control, Seed Bare Areas, and Signage	136.00	1.5:1	90.67
Kettle Creek Preserve Buffer	Enhancement	Fence to Restrict Public Access, Remove Domestic Animal Grazing, Stabilize/Reclaim Trail Areas, Weed Control, Seed Bare Areas, and Signage	50.00	4:1	12.50
<b>Summary</b>					
Project Wide	Restoration		26.38		26.38
	Enhancement		60.90		19.77
	Preservation		19.14		0.00
	Restoration/Enhancement		136.00		90.67
<b>Total</b>			<b>242.42</b>		<b>136.82</b>

- NOTES:**
1. The mitigation sites included in the above table are outside of the sites proposed to be enhanced for the benefit of the PMJM in the Habitat Creation and Enhancement Plan For Establishing Between the North, South, and Main Forks of Pine Creek, Colorado Springs, by SWCA
  2. All of the sites included in the above table are proposed to be protected by deed restrictions and managed for PMJM use.

During previous site visits, noxious weeds such as thistle (*Cirsium* spp.) and diffuse knapweed (*Centaurea diffusa*) have been identified throughout the area with thistle being the dominant weed species in many of the areas, however, no in-depth survey has been conducted. Thus, it is likely that other weed species may exist on the property. The objective of the weed control plan will be to reduce the density of these and any other noxious weed species identified. The goal will be to reduce the density of these species to a point where the noxious weeds will account for 5% or less of the total aerial cover.

While there are many different ways to attempt to control noxious weeds, for the purposes of this project, chemical application appears to be the most effective and efficient way of reaching the desired goal of weed density reduction in the mitigated areas. Thus, the Applicant proposes to utilize a licensed weed control company to apply the herbicide Plateau®. This herbicide, when applied at the correct and recommended mixture and the recommended time of year, can target many different weed species and other woody plants, leaving existing grasses. This chemical was chosen by the USFWS (2002) because of its success of controlling the identified weeds; its low mobility rate in soil; its low toxicity to fish, mammal, and bird species; and the fact that non-target plants are tolerant of chemical drift during application.

For maximum results in controlling and reducing the weeds, the infested upland areas will be treated once in the early spring (mid to late April) prior to the emergence of PMJM, and once during the early fall after 15 October. After the first year of treatments, additional weed spraying will occur only as a spot treatment in those areas deemed necessary. Follow-up herbicide applications during the following growing seasons will be conducted on an as-needed basis until success is achieved. Should significant areas of noxious weeds be identified during the following growing seasons, the areas will be treated with the same herbicide and applied from hand-held and/or backpack sprayers.

The herbicide will be applied to areas identified as being infested with noxious weeds, using a tractor and/or four-wheel all-terrain vehicle with an attached tank. Smaller areas and areas near water and riparian vegetation will be treated using hand-held and/or backpack sprayers. During the application process, the Applicant believes that by using these methods of application, the operator can have a better control of where the herbicide is being applied, thus the chances for wind drift and inadvertent spraying of trees, shrubs, and wetlands will be decreased. If necessary, individual trees and shrubs will be covered during applications. Again, the goal of spraying is to reduce the density of noxious weeds, not to control or kill existing or newly planted trees and shrubs as well as the existing riparian vegetation along Pine Creek.

As a second step in the enhancement process, over seeding using native grass species will occur during the first spring after the HCP is approved in those areas not treated for noxious weeds. Seeding in the areas treated for weeds will be conducted during the late fall following the last herbicide treatment. The seeding will help increase the aerial cover and species composition of native grass species in an effort to increase cover for the mouse and possibly increase the food source for PMJM. Seeding will be conducted by tractor, drill seeding a minimum of three species listed in the recommended mixture at the rates proposed in Table 8.

In areas where tractors cannot gain access, the area will be broadcast seeded using a minimum of three species listed in the mixture in Table 8, but at a rate double that presented.

Along the North Fork, in addition to the seeding, the Applicant has proposed transplanting up to 20 clumps of Gamble's oak from near-by areas of disturbance along the north side of the habitat boundary to areas within the PMJM habitat boundary where no upland shrubs currently exist. Each shrub clump would cover approximately 200 square feet and consist of eight to ten individual oak bushes.

As a final precaution, the Applicant will install a view fence along the perimeter of the PMJM habitat and adjacent buffer area as a way of preventing human access to the area (Figure 8). Along the fence, at a spacing of 300 feet, signs will be installed stating that the area behind the fence is closed to all public use and that mowing is prohibited for the purpose of wildlife habitat protection.

The total enhancement of Area 2, when completed, will include over seeding native grass seed, noxious weed control, and native shrub transplanting of 10.90 acres of habitat (Figure 8 and Table 7). In addition, an additional 19.14 acres of buffer will be fenced and signed, then protected with deed restrictions.

#### **7.3.1.2 Restoration**

All on-site areas (Areas 1, 2, and 3) within the defined PMJM habitat boundary on the Briargate Development project where temporary impacts occur will be replanted immediately following the completion of the construction phase in that area. The impacted areas will be revegetated using native shrubs and grass species. Seeding of the impacted areas will occur by drill seeding a minimum of three species listed in Table 8. Should drill seeding not be a feasible option, broadcast seeding will occur using a minimum of three species from the recommended species listed in Table 8, but are at a rate twice that mentioned in the table. The species listed in Table 8 were compiled by consulting with the CDOW, U.S. Natural Resource Conservation Service, U.S. Army Corps of Engineers, and other private biological consultants currently working with PMJM.

Restoration of PMJM habitat in the bottoms of the existing and proposed detention ponds (Figures 7 and 8) will occur by a combination of reseeding and planting of established plants (2 ½" container size) as recommended by the Colorado Department of Natural Resources native plant revegetation guide (1998). Wetland species to be used are shown in Table 9. It is anticipated that by planting established plants at the rates listed in Table 9, then supplementing the plantings with seeding, the bottom of the pond will become a uniformly vegetated wetland within two to three years.

The sides of the ponds will be vegetated with native upland grasses (Table 8) and upland shrubs (Table 10). All other restored upland areas associated with the ponds will be reclaimed using the upland species.

In areas where pre-listing disturbances, such as gravel roads, have been removed, riparian and upland vegetation will also be restored to blend in with the adjacent natural plant communities using native plant species listed in Tables 9 and 10.

Native species that are proposed for mitigation are listed in the following tables along with planting and seeding rate recommendations. Areas where restoration will occur are illustrated on Figure 8.

The proposed planting rates per acre are based on using an individual species or any combination thereof. Naturally, upland shrubs in the Pine Creek drainage do not cover an entire acre and in most areas are relatively scarce within PMJM habitat, thus it is anticipated that all mitigation shrub plantings will comprise of small groups of like shrubs, planted in clumps throughout the area, with an increase in clumps occurring closer to the riparian areas, at a rate equal to 500 plant per acre. Clumps of different species of shrubs will comprise of five to ten 5-gallon potted shrubs. It is anticipated that approximately 50 total clumps will be planted per acre where enhancement is taking place. Prior to planting the clumps, the shrub species used for each clump will be approved by USFWS.

**Table 8. Native Grass Seeds Recommended by the Colorado Division of Wildlife and the U.S. Natural Resource Conservation Service.**

Common Name	Scientific Name	Growth Season	Minimum Seeding Rate (PLS lbs/acre)
Switchgrass	<i>Panicum virgatum</i>	Warm	3
Yellow indianguass	<i>Sorghastrum nutans</i>	Warm	5
Big bluestem	<i>Andropogon gerardi</i>	Warm	6
Prairie sandreed	<i>Calamovilfa longifolia</i>	Warm	4
Sideoats grama	<i>Bouteloua curtipendula (Vaughn)</i>	Warm	5
Sand dropseed	<i>Sporobolus cryptandrus</i>	Warm	1
Indian ricegrass	<i>Achnatherum hymenoides</i>	Cool	6
Canada wildrye	<i>Elymus canadensis</i>	Cool	11
Western wheatgrass	<i>Pascopyrum smithii</i>	Cool	8

PLS = pure live seed

Based on the proposed impacts, restoration will occur on 3.67 acres in Area 1 where temporary impacts will occur due to grading, cut-and-fill operations, and construction of grade-control structures (Table 7). Restoration of 22.50 acres in Area 2 will take place in areas impacted by the construction of the detention pond, construction of infrastructure, initial grading for the construction of Royal Pine Drive, cut-and-fill operations associated with the construction of residential homes located on the north side of the North Fork, the restoration of the few small existing roads crossing the habitat, and construction of grade-control

structures (Table 7). Restoration efforts along the South Fork in Area 3 will be limited to 0.21 acre from fill operations along Union Boulevard (Table 7).

**Table 9. Recommended Native Wetland Species to be used for Mitigation.**

Common Name	Scientific Name	Planting Rate
Coyote willow (potted)	<i>Salix exigua</i>	700 – 5-gal/acre
Coyote willow (staked)	<i>Salix exigua</i>	19,360/acre
Bluestem willow (potted)	<i>Salix irrorata</i>	700 – 5-gal/acre
Peach-leaf willow (potted)	<i>Salix amygdaloides</i>	700 – 5-gal/acre
Baltic rush (seed)	<i>Juncus Balticus</i>	1.5 lbs/acre
Baltic rush (plant)	<i>Juncus Balticus</i>	1000 – 2.5"/acre
Torrey rush (seed)	<i>Juncus torreyi</i>	1.7 lbs/acre
Torrey rush (plant)	<i>Juncus torreyi</i>	1000 – 2.5"/acre
Colorado rush (seed)	<i>Juncus confusus</i>	1.3 lbs/acre
Colorado rush (plant)	<i>Juncus confusus</i>	1000 – 2.5"/acre
Nebraska sedge (seed)	<i>Carex nebrascensis</i>	1.5 lbs/acre
Nebraska sedge (plant)	<i>Carex nebrascensis</i>	1000 – 2.5"/acre

**Table 10. Recommended Native Upland Shrubs to be used for Mitigation.**

Common Name	Scientific Name	Planting Rate of 5-gal plants/Acre/spp*
Snowberry	<i>Symphoricarpus albus</i>	500
Gambel's oak	<i>Quercus gambelii</i>	500
Choke cherry	<i>Prunus virginiana</i>	500
Skunkbrush	<i>Rhus trilobata</i>	500
Wild rose	<i>Rosa woodsii</i>	500
Shrubby cinquefoil	<i>Potentilla fruticosa</i>	500
Golden currant	<i>Ribes aureum</i>	500

\* Planting rate based upon the use of one species to cover one acre. Since all planting rates are the same, to cover one acre, 500 plants of any combination may be used. For areas where less than an acre will be covered, clump size will be based upon a rate equivalent to 500/ac using single species and/or a combination of the above listed species.

### 7.3.1.3 Preservation

Along the north side of the lower North Fork of Pine Creek, outside of PMJM boundary, the Applicant proposes to preserve approximately 13.10 acres to be left as open space adjacent to PMJM upland habitat (Figure 8). Adding this to the existing habitat adjacent to the creek would create a PMJM habitat area approximately 600 feet wide, which includes both the upland and riparian component of PMJM habitat. Although non-symmetric, there are no studies that show that PMJM will not use habitat that is asymmetrical. Throughout the project area, additional parcels of natural open space adjacent to PMJM habitat totaling 6.04 acres are also proposed for preservation (Figure 8). Therefore, a grand total of 19.14 acres of natural open space will be protected adjacent to the North Fork (Area 2), insuring long-term preservation for use by the mouse.

In addition, all properties remaining as PMJM habitat in the Pine Creek drainage, approximately 153.48 acres, will be deed restricted and managed for PMJM use only (see Attachment D). These areas will be fenced and signed explaining the need for limited access to the parcels due to the presence of an endangered species. The deed restriction will state that “it is the primary purpose of this restriction to foster management of the riparian zone and the wildlife habitat contained thereon in such a manner as best benefits the Preble’s Meadow Jumping Mouse (PMJM).” Conditions of the restriction include, “Except as explicitly described in the Plan, no alterations will occur in the area described as Preble’s meadow jumping mouse (“PMJM”) habitat areas that would adversely impact PMJM’s habitat, including but not limited to dumping or placing soil or other material, such as trash, mowing, removal or destruction of vegetation (with the exception of weed control), excavation or removal of soil, and activities detrimental to flood control, water conservation or erosion control.”

### 7.3.2 Off-site (Kettle Creek Preserve)

The Applicant proposes to permanently preserve off-site approximately 186 acres along Kettle Creek, approximately 0.5 mile to the northwest of the Briargate Development project. Throughout the entire Kettle Creek property, approximately 1.25 miles of Kettle Creek, 1,500 feet of the northern tributary, and 2,500 feet of the southern tributary will be preserved (Figure 9). The two on-site perennial tributaries enter into the creek in the southern portion of the property.

Areas immediately along Kettle Creek support dense riparian communities dominated by coyote willow and herbaceous wetlands forbs and grasses. Side slopes contain dense slopes of Gambel's oak (*Quercus gambelii*) and ponderosa pine intermixed with grassy openings. Upland areas are open with some scattered oak and yucca present throughout. The riparian communities found within the confines of the tributary channel are very well established with species such as coyote and peach-leaf willow, cattail, cottonwood, ponderosa pine, and numerous mesic grass species. Based upon field observations, the water level in both tributaries, while spring fed, does not fluctuate in the same manner as the levels in Kettle Creek. Within the creek, surface water levels have been known to rise over two feet in a matter of minutes due to stormwater runoff up stream while the levels in the tributaries remains at a constant state.

Currently the property is used as grazing and trail-riding pasture for a horse boarding operation and the property has been severely impacted by those operations. Many upland areas have been grazed to the point where virtually no vegetation remains. Numerous horse trails are evident across the property and traverse the riparian bottoms. These horse trails are typically bare and devoid of vegetation. Many areas on the property are also experiencing relatively high levels of erosion, due to the soil substrate and geology, but also in part to the heavy horse use.

Previous PMJM surveys throughout the area have identified a large, distinct, and healthy population of PMJM along the Kettle Creek corridor. This is one of the few PMJM populations within El Paso County that has not been subjected to the immediate pressures from habitat loss from adjacent impacts.

Downstream of the proposed Kettle Creek Preserve Area (Figure 8), the land has been lightly impacted by the development of residential homes on 5- to 35-acre lots. Due to the immediate topography, all of the houses in this reach are mostly out of the area considered PMJM habitat. Surveys by El Paso County have identified PMJM within this reach (Bonar 2001). Upstream of the proposed Kettle Creek mitigation site, the next 3 to 4 miles of Kettle Creek are relatively undisturbed.

In 1999, SWCA conducted PMJM surveys along portions of the creek and tributaries of the proposed Kettle Creek Preserve Area for the Applicant. With over 1,200 trap nights recorded for the area, 49 PMJM were identified with the highest capture rates found along the south tributary. Prior to trapping, this drainage was viewed as a Potential Mouse Protection Area (USFWS 1998c). Since the initial discovery of PMJM in this drainage, other surveys have identified PMJM above and below the proposed preservation area (Bakeman 2001; Bonar 2001). In an effort to identify crossings for the proposed Powers Boulevard, CDOT contracted Mark Bakeman to survey areas upstream of the proposed Kettle Creek Preserve for PMJM. In 2001, Bakeman concurred with El Paso County and SWCA that PMJM were present at good densities within the Kettle Creek drainage. Since that time, representatives from the City of Colorado Springs, El Paso County Environmental Services Department, CDOW, and TPL have all toured the property. Each group has identified that the existing PMJM habitat along Kettle Creek does not connect to habitat along the Monument Creek corridor due to past activities associated with the U.S. Air Force Academy and from the construction of Interstate 25. This in turn has created a distinct isolated population of PMJM that appears to be surviving without genetic influx from the Monument Creek population. Therefore, all agree that this segment of Kettle Creek is a very important preservation parcel, not only from an open space perspective, but also from the standpoint of preserving some of the most diverse PMJM habitat in the county. By preserving this parcel, the Applicant believes that this could be the first step in preserving other parcels of habitat along the Kettle Creek corridor, assisting the county in preserving enough habitat to maintain the county's conservation goals to be defined in the upcoming El Paso County RHCP.

The relatively high population of PMJM on the property indicates that protection of this stretch of stream is important to the long-term sustainability of PMJM in the area. Enhancing and restoring livestock impacted areas on the property is essential to maintaining a healthy

population of PMJM on the property. Photographs of various areas on the Kettle Creek property are included in Appendix B.

### **7.3.2.1 Enhancement**

As part of the proposed mitigation for the Kettle Creek Preserve, the Applicant has proposed to immediately cease all horse use, including grazing and trail riding within the parcel. By removing this pressure, the entire site should be enhanced by allowing the existing vegetation to recover and by decreasing the amount of erosion caused trail riding through the area.

Following the elimination of grazing, all interior fences used for the horse boarding operation will be removed and the perimeter fence repaired and/or replaced. Once the perimeter fence is completely upgraded, signs will be placed every 300 feet along the fence line explaining the reasons for the closure to human access and the need to protect wildlife habitat behind the signs. The fencing in conjunction with the signs is intended to eliminate public access for horseback riding, all-terrain vehicle use along the creek bottom, and recreational hiking through the area.

The next phase of enhancement would involve the control of noxious weeds throughout the property. Once the HCP is approved, the Applicant would identify all areas of noxious weed outbreaks and provide a map to USFWS in the annual mitigation report described in Section 7.3.3. Following identification, the infested areas would be sprayed using the methodology and herbicide described in Section 7.3.1.1. Once sprayed, the sites will be monitored for any re-growth. Should additional weed outbreaks be identified throughout the mitigation process, the site would be treated on an as-needed basis until success has been achieved. Once the Applicant deeds over the property to the entity that will be responsible for the long-term management of the property, as described in Section 7.3.2.3, control of noxious weeds will be as per the Colorado Noxious Weed Act.

Following the first season of weed spraying, over-seeding of areas lacking vegetative cover due to erosion and/or over grazing will occur. The seeding of native grass species (Table 8) is anticipated to help increase aerial cover of desirable species and would be conducted in the same manner as described for Area 2, mentioned above. By seeding the bare, over grazed areas, and by removing the grazing pressure from horses, the overall health of the resource will improve and the value as PMJM habitat will improve.

The actual amount of bare ground and over grazed areas to be seeded is unknown at this time, however, it is anticipated that enhancement procedures will occur mainly in the upland areas overlooking the creek. Due to the topography, it appears that the horses have not be able to gain full access to the entire riparian area, thus these areas have not be highly impacted. The one exception is those areas where trails have been deeply worn into numerous crossings of the creek. Restoration of these areas will be described in Section 7.3.2.2.

### **7.3.2.2 Restoration**

Restoration efforts in the Kettle Creek Preserve will concentrate on the horse trails found throughout the property. Approximately 0.50 acres of trail will be restored by stabilizing the

soils and reducing stormwater erosions by using straw bales, seeding the impacted areas using a minimum of three of the species listed in Table 8, then possibly stabilizing the seeded area with a biodegradable matting to reduce long-term soil erosion and increase seed germination.

### **7.3.2.3 Preservation**

In addition to the mitigation proposed on-site, the Applicant will preserve approximately 186 acres of PMJM habitat and adjacent buffer area along Kettle Creek known as the Kettle Creek Preserve (Figure 9). The preserve will be protected initially by a deed restriction (See Section 7.3.1.3 and Attachment D) placed immediately on the property once the HCP is approved. In the near future, TPL will then form a new, non-profit organization that will hold the deed and manage this property for the sole purpose of protecting and managing PMJM habitat. Once the new organization is formed, the Applicant will fully transfer the deed to the property to the newly formed organization for long-term management and protection.

By preserving a population such as the one found on Kettle Creek, impacts to the population from events such as floods, fire, and disease should not impact the viability of other populations found throughout the region. The preservation also removes the possibility of future development pressures that may impact PMJM. As a condition of the conservation deed restriction, the Applicant agrees to not transfer its development rights to other parcels in the vicinity.

As seen in Figure 9, two strips of existing utility line easements cross the property: one from east to west, and the other from north to south along the west property boundary. The land containing the utility easements will be included in the proposed conservation easement and will ultimately be deeded to a non-profit entity for management as a natural preserve. The conservation easement will restrict the rights of the applicant and their successors to develop the land contained in the utility easements but will not restrict the rights of others to construct and maintain utilities as granted by the existing easement agreements. Current easement agreements allow the utility companies to access the rights-of-way for maintenance, repair, and operation of the existing utility structures. Also included is the permission to cut, trim, control or eliminate by herbicide, and to remove trees, brush, overhanging branches and other obstructions which may injure or interfere with the company's use, occupation and the operation maintenance of the utility system. Finally, the agreement states that "no building or above grade structures will be erected or constructed upon said Right-of-way and Easement."

Future construction and maintenance of utilities within the portions of the existing easements that lie within the PMJM habitat will be subject to the provisions of the ESA. Owners of utilities will be responsible for consultation and mitigation for future disturbances (if any occur) associated with construction and maintenance of their respective utilities within the PMJM habitat.

### **7.3.2.4 Endowment**

In addition to the initial conservation easement placed on the property, the Applicant has proposed to provide a monetary endowment to TPL for the initial management of the property until the new non-profit organization can be organized. Based on calculations by TPL

(Appendix C) and agreed to by the Applicant, both parties have agreed on an endowment of \$129,567.00 to be used for the defense, preservation, and management of the Kettle Creek Preserve. TPL based this amount on the vast experience their organization has with other such easements. This endowment will be used to maintain the periphery fencing, provide for long-term monitoring of the PMJM population, and defend the easement from violations of the easement restrictions.

### **7.3.3 Monitoring & Standards of Success**

Both enhanced and restored sites, including those at Kettle Creek, will be monitored annually for a period of three growing seasons or until success is achieved. Permanent photo points will be established for use in documenting before and after photographs that will be included in annual monitoring reports. Random vegetative sampling of the area will be conducted to verify habitat improvements and success. Permanent transect lines will be randomly placed perpendicular to the North and South Forks of Pine Creek throughout the project site. A 1-square-meter quadrat will be placed every 5 meters along the downstream side of each transect with the total number of quadrats sampled totaling 150 for the Pine Creek area and 50 for the Kettle Creek area. Within each quadrat, a list of each plant species identified will be kept for use in determining species composition. In addition, within each quadrat, percent canopy cover will be measured in an attempt to show PMJM habitat enhancement. During the first growing season, the same measurements will be made to establish a baseline for measuring improvement. At this time, the location of photo points will be determined and permanently marked for future reference. Findings of the monitoring evaluation will be documented in an annual report, submitted to the USFWS by 30 November each year during the monitoring program until success is achieved.

Standards for success of herbaceous vegetation and desirable species in restored areas will be equal to or greater than 60% aerial cover, while noxious weeds will comprise 5% or less of the total aerial cover. Of the total cover, 50% or greater will be as a result of native species. Within areas of enhancement, the standard for success will be based upon a baseline of 50% cover with the following goals: by the end the monitoring program, there will be a 25% increase in aerial cover by native species and aerial cover by noxious weeds will be no greater than 5% of the total cover. Shrub survival for both upland and riparian areas will be 75%, as measured by a full shrub inventory where each individual shrub planted will be inspected to verify survival. All mitigation transect sites will be permanently marked and registered with a survey coordinate.

Interim remediation during the monitoring period will consist of replacing plants/shrubs as required to meet the success standards. The USFWS will be notified of any necessary remediation activities in the annual monitoring report.

### **7.3.4 Efforts to Minimize Impacts**

In an effort to minimize and reduce the amount of impact to PMJM habitat while staying in compliance with the ESA, the Applicant has reduced the amount of land that had originally

been scheduled to be developed under a 1998 Master Plan. Originally, the Applicant had agreed to donate a 109-acre parcel of land near the future intersection of Briargate Parkway and Union Boulevard to the City of Colorado Springs to be used as a community park with numerous ball fields and infrastructure to support the park. This agreement was accepted by the City Planning and Zoning Department in March 1998 under filing number CPC MPA 98-0007. Due to the protection of the PMJM and its habitat in the community park area, the Applicant, in agreement with the city, agreed in 2003, to reduced the size of the usable portions of the parcel to a total impact area of 13.73 acres; a decrease in impacts of 95.27 acres (see Figure 10).

The newer 2000 Master Plan for the Briargate Development (Figure 11) had planned for development to occur into areas well within the PMJM boundary. Because of the process of obtaining a Section 10 permit, the Applicant pulled back the permanent development lines away from the riparian corridor, reducing the impact to PMJM habitat by approximately 74 acres. Figure 12 depicts, in green, those areas where additional open space was created, by reducing the development potential in an effort to reduce and minimize the impacts to PMJM habitat.

### **7.3.5 Mitigation Conclusion**

The Applicant believes that the appropriate measures have been taken to insure the overall survival of the local PMJM population. The Applicant, upon consultations with the Corps, USFWS, and CDOW, felt that money to be used towards mitigation would be best utilized by preserving and enhancing an off-site parcel of land where healthy populations of PMJM exist versus spending the same amount of money on restoring and enhancing habitat along Pine Creek and the North and South Forks where habitat is clearly fragmented, limiting the interaction between existing PMJM populations. Overall, the proposed plan would maintain a majority of the habitat within the Pine Creek drainage while preserving a large parcel of land agreed upon by the local agencies as an ecologically significant area in the overall preservation of PMJM habitat.

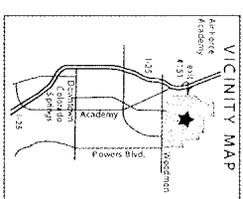
In summary, the proposed project currently contains 211.03 acres of PMJM habitat within the Pine Creek drainage. Of that amount 26.38 acres will temporarily impacted and another 57.55 acres permanently impacted. All temporary impacts will be restored to PMJM habitat, thus, once the proposed project is completed, 153.48 acres of PMJM habitat will remain in the Pine Creek drainage. To mitigate for all 83.93 acres of impact (temporary and permanent), using an average mitigation ration of 1.5:1, approximately 125.90 acres of mitigation would be needed. However, of that amount, 26.38 acres would be mitigated by restoring the disturbance in place, making the total amount of additional mitigation necessary equal to 99.52 acres. Table 11 depicts some of these numbers in a different manner.

# Briargate MASTER PLAN

## LEGEND

-  RESIDENTIAL VERY LOW (R-VL) 0.109 DUGROSS ACRES
-  RESIDENTIAL LOW (R-L) 2.345 DUGROSS ACRES
-  RESIDENTIAL LOW-MEDIUM (R-LM) 3.57599 DUGROSS ACRES
-  RESIDENTIAL MEDIUM-HIGH (R-MH) 12.2499 DUGROSS ACRES
-  RESIDENTIAL MEDIUM-HIGH (R-MH) 12.2499 DUGROSS ACRES
-  COMMERCIAL (MC, CC, R, C, RHC)
-  OFFICE (OI)
-  OFFICE/INDUSTRIAL/RESEARCH & DEVELOPMENT (OR)
-  GOVERNMENT/UTILITIES (GU, U, PS)
-  PUBLIC/INSTITUTIONAL/PARKS, C, ASSEMBLY, HOSPITAL
-  SCHOOL (HS, MS, ES)
-  OPEN SPACE / PARK / GOLF COURSE (OS, NP, CP, GC)
-  IMPLEMENTED MASTER PLAN AREA
-  TRAILS
-  NEW PARK 2003

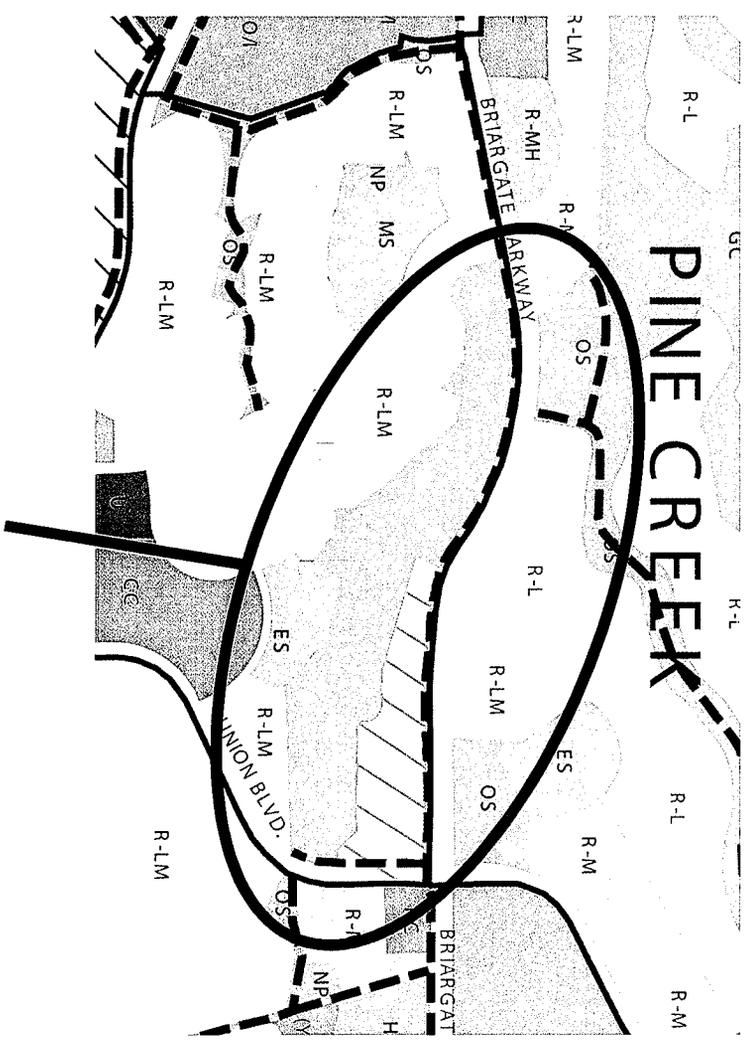
APPROVED MAY 4, 2000  
BY CITY OF COLORADO SPRINGS  
SUBJECT TO CHANGE



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www.pinecreek.com

**NORTH**  
NOT TO SCALE

**NES, Inc.**

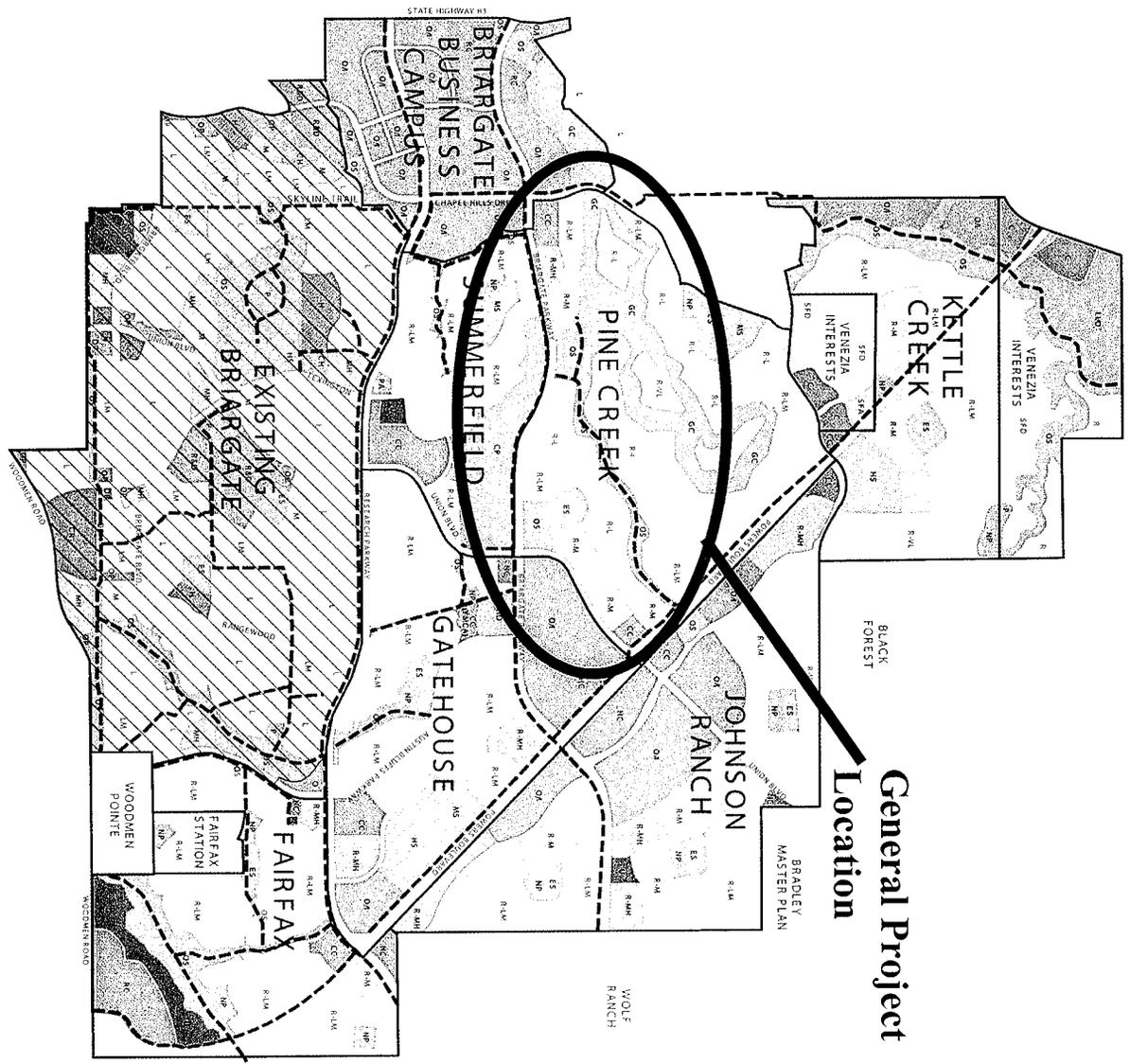


**Park Area**

Figure 10. Proposed 1998 Community Park overlaid with the new 2003 Proposed Community Park Boundary.

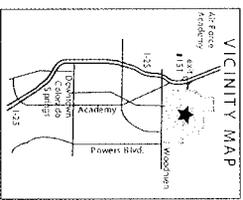
# Briargate MASTER PLAN

General Project  
Location



## LEGEND

- RESIDENTIAL VERY LOW (R-VL 0.1-0.99 DU/gross acre)
- RESIDENTIAL LOW (R-L 2.2-99 DU/gross acre)
- RESIDENTIAL LOW-MEDIUM (R-LM 3.5-7.99 DU/gross acre)
- RESIDENTIAL MEDIUM (R-M 8.1-199 DU/gross acre)
- RESIDENTIAL MEDIUM-HIGH (R-MH 12.24-99 DU/gross acre)
- COMMERCIAL (C-C, P-C, H-C)
- OFFICE (O)
- OFFICE/INDUSTRIAL/RESEARCH & DEVELOPMENT (OIR)
- GOVERNMENT/UTILITIES (G, U, PS)
- PUBLIC/INSTITUTIONAL/PUBLIC ASSEMBLY-MULTI-PURPOSE (P, I, A, S, E, S)
- SCHOOL (S, HS, ES)
- OPEN SPACE/PARK/GOLF COURSE (OS, NP, CP, GC)
- IMPLEMENTED MASTER PLAN AREA
- TRAILS



APPROVED MAY 4, 2000  
BY CITY OF COLORADO SPRINGS  
SUBJECT TO CHANGE

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NORTH  
NOT TO SCALE

N.E.S., Inc.

Figure 11. Briargate Master Plan (2000).

■ PROPOSED PMJM HABITAT OR OPEN SPACE WITHIN AREA IDENTIFIED FOR RESIDENTIAL OR COMMERCIAL DEVELOPMENT ON 2000 BRIARGATE MASTER PLAN. (84 AC)  
 ■ EXISTING OR PROPOSED DEVELOPMENT WITHIN AREA SHOWN AS OPEN SPACE ON BRIARGATE MASTER PLAN. (10 AC)



1200 600 0 1200 2400



SCALE: 1" = 1200'



**J.R. ENGINEERING**

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PINE CREEK HCP  
 CHANGES TO OPEN SPACE IN LAND PLAN  
 JOB NO. 28717.45  
 9/23/02  
**FIGURE 12**

To accumulate this amount of acreage for mitigation, the Applicant is proposing to enhance 10.90 acres within the Pine Creek drainage, thus mitigating for 7.27 acres of impacts. In addition, enhancement of the 136-acre PMJM habitat within the 300-foot PMJM boundary along Kettle Creek and its tributaries would equal mitigation for 90.67 acres of impacts. An enhancement of an additional 50.00 acres of buffer habitat in the Kettle Creek Preserve will be calculated at a 4:1 ratio, thus equaling mitigation for 12.50 acres of impacts. All of these acreages together total mitigation credit for 110.44 acres (136.82 acres minus 26.38 acres), well over the 99.27 acres needed (Tables 7 and 11).

Off-site, the 186-acre Kettle Creek Preserve will be fenced, signed, all grazing removed, and the habitat enhanced and restored.

Together with the 153.48 acres of remaining PMJM habitat along the Pine Creek drainage, 136 acres of PMJM habitat along Kettle Creek, plus 50 acres of buffer along Kettle creek, plus 19.14 acres of open space along the North Fork of Pine Creek, totaling 358.62 acres will be placed under a deed restriction (Appendix D), providing long-term protection of the habitat and adjacent buffers.

Furthermore, the 186-acre Kettle Creek Preserve, with a market value of over \$2.5 million, will be given by the Applicant to the newly created PMJM habitat management organization to not only mitigate for the proposed impacts, but also to provide a secure and protected place for long-term survival of the PMJM. Along with the land preservation, the Applicant will provide a \$129,567.00 endowment for the management of the preserve.

In addition, due to the protection and long-term management by TPL of the Kettle Creek Preserve and the restoration of the existing habitat within the Pine Creek drainage, the Applicant is helping to assure the continued preservation of habitat and existence of PMJM in El Paso County, which will in turn assist the county in reaching and maintaining the proposed population goals to be published when the RHCP is completed.

As a result of avoidance and minimization of impacts to PMJM habitat have been reduced by approximately 169 acres. Those areas where avoidance and minimization measures can not be utilized, that Applicant feels that the proposed mitigation will help offset impacts to the PMJM occurring as a result of the proposed Briargate Development.

### **7.3.6 Schedule**

Upon approval of the Section 10 permit, the Applicant proposes to immediately start on the proposed fencing and signage around the Kettle Creek property. By the spring of 2003, weed control will commence, ending by the fall of 2003. During the late fall of 2003, seeding will begin. Beginning in the spring of 2004, shrub planting will be conducted. During the following growing seasons, monitoring of the previous year's mitigation will proceed until success is achieved. Each year, no later than 30 November, the Applicant will submit a report detailing the mitigation efforts of the previous growing season.

It is anticipated that the standards of success described in Section 7.3.3 will be met by the end of the 2006 growing season. If success is not achieved by that time, the Applicant, in consultation with USFWS, will re-evaluate the proposed mitigation, either opting to design a new mitigation plan, which would require an amendment to the HCP or continue with the existing plan until success is obtained.

### **7.3.7 Funding**

Successful conservation planning requires that sufficient funding be made available to implement the HCP and to insure completion and success of this plan. The Applicant is committed to providing the necessary funding, during the life of the project, to insure successful completion of the proposed mitigation. The Applicant will make the necessary annual appropriations for funding the HCP provisions through its internal annual budgeting process. As a further guarantee of this commitment the Applicant has provided a Letter of Credit from a federally chartered FDIC insured bank, cash escrow, or other financial assurance (see Appendix E). The Applicant is committed to covering any costs necessary to attain mitigation success as defined in Section 7.3.3, even beyond what is held in a Letter of Credit or other financial assurance if necessary. The Applicant will estimate the cost of mitigation as proposed by the HCP and will forward its estimate to USFWS for approval of the amount. The beneficiary of the Letter of Credit or other financial assurance will be an USFWS approved entity capable of carrying out the mitigation in the event that the Applicant is unable to complete the mitigation. As secondary beneficiary, the Applicant proposes that USFWS be listed.

### **7.3.8 Access**

Access to all areas of mitigation and all areas left as PMJM habitat will be restricted. The Applicant has proposed to construct a view fence between PMJM habitat and areas where residential homes are constructed (Figure 8). In those areas where no fence is proposed, signs notifying the public of the access closure will be placed every 300 feet. The signs will include the following wording: "No Public Access or Mowing Beyond this Point – Wildlife Habitat Preservation Area."

During the construction of the proposed project, construction contractors and their employees will be educated by a La Plata representative prior to any construction on the need to stay within certain areas and the reasons behind protecting PMJM habitat. Orange construction fencing will delineate areas off-limit to construction personnel and a representative of the contractor will monitor the construction site to insure no violations of the permit occur.

Table 11. Mitigation Summary Table.

Location	Existing PMJM Habitat Area (acres)	Temporary Impact to Area (acres)	Permanent Impacts to Area (acres)	Total Impacts to Area (acres)	Enhancement to Areas (acres)	Restoration to Areas (acres)	Future Habitat to be Preserved (acres)
Pine Ck. (Area 1)	22.07	3.67	2.34	6.01		3.67	19.73
Pine Ck. (Area 2)	109.37	22.50	17.38	39.88	10.90	22.50	91.99
Pine Ck. (Area 3)	79.59	0.21	37.83	38.04		0.21	41.76
<b>Total</b>	<b>211.03</b>	<b>26.38</b>	<b>57.55</b>	<b>83.93</b>	<b>10.90</b>	<b>26.38</b>	<b>153.48</b>
North Fork Buffer Area (Non-habitat adjacent to Area 2)							19.14
<b>Total</b>							<b>19.14</b>
Kettle Creek (PMJM habitat)	136.00				136.00		136.00
Kettle Creek Buffer (Non-habitat)					50.00		50.00
<b>Total</b>	<b>136.00</b>				<b>186.00</b>		<b>186.00</b>
<b>Grand Total (acres)</b>	<b>347.03</b>	<b>26.38</b>	<b>57.55</b>	<b>83.93</b>	<b>196.90</b>	<b>26.38</b>	<b>358.62</b>

### **7.3.9 Foreseeable Events**

It is the belief of the Applicant and SWCA biologists that no foreseeable events, such as wildfire, drought, 100-year storm events, and 500-year storm events, will affect the completion of the proposed mitigation plan. PMJM have evolved with such events, thus these natural events will have no long-term effect on the PMJM. It is also anticipated that the proposed mitigation will not be affected by such events. Should one of these events occur prior to reaching the standard of success, the Applicant has the ability to adapt the management plan, with the approval of the USFWS, and will reseed and replant those areas where deemed necessary in order to obtain the success standard proposed in this HCP throughout the life of the permit.

Should other events occur, including wildlife browsing and vandalism, as proposed above, adaptive and remedial measures will be taken to ensure the proposed standards of success throughout the life of the permit.

### **7.3.10 Unforeseeable Events**

In the event that some catastrophic act of nature and/or man render the proposed mitigation plan unattainable, the Applicant, in consultation with the USFWS, will implement an adaptive program to assure that mitigation for the proposed impacts is completed. In designing the adaptive program, at no time will the USFWS require additional monetary and/or land compensation above and beyond that proposed in the HCP. In the case that additional measures are required, those measures will not be applicable without the consent of the Applicant.

## **7.4 AMENDMENT PROCEDURES**

If necessary, the HCP and the Section 10 permit may be amended as long as the cumulative effects of the amendment do not significantly change the criteria contained in this HCP. All proposed amendments will be approved by USFWS prior to implementation.

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**APPENDIX A  
Wetland Report**



WATERS OF THE U.S. DELINEATION  
FOR THE PROPOSED BRIARGATE  
DEVELOPMENT, LOCATED ALONG THE  
NORTH AND SOUTH FORKS OF UPPER  
PINE CREEK, COLORADO SPRINGS, EL  
PASO COUNTY, COLORADO

Prepared for

THE U.S. ARMY CORPS OF ENGINEERS

Submitted by

LA PLATA INVESTMENTS

Prepared by

SWCA ENVIRONMENTAL CONSULTANTS

September 2002



**Waters of the U.S Delineation for the  
Briargate Development Located Along  
the North and South Forks of Upper Pine Creek,  
Colorado Springs, El Paso County, Colorado**

**Prepared for:**

**U.S. Army Corps of Engineers  
Southern Colorado Project Office  
720 North Main Street, Room 205  
Pueblo, Colorado 81003-3046**

**On behalf of:**

**La Plata Investments  
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**September 2002**

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## 1. INTRODUCTION

SWCA, Inc. was requested by La Plata Investments to conduct a waters of the U.S. delineation, including wetlands, along the North and South forks of Pine Creek within the Briargate Development property, Colorado Springs, El Paso County, Colorado. This assessment was conducted to ensure that proposed development plans comply with federal regulations concerning water quality as set forth under the Clean Water Act (CWA) of 1972.

The U.S. Army Corps of Engineers (Corps) enforces Section 404 of the CWA, which regulates the discharge of dredged or fill material into all waters of the U.S., including wetlands. Such waters are known as “jurisdictional waters of the U.S.” and have been defined to include not only obvious water bodies such as rivers, lakes, harbors, and bays, but also less obvious bodies of water such as intermittent streams, wetlands, and even stock tanks when they occur in drainages.

Pursuant to Section 404 of the CWA, the Corps defines wetlands in 33 CFR 328.3b as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The 1987 Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987) states that jurisdictional wetlands possess three essential characteristics: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. For an area to be classified as a jurisdictional wetland under the federal guidelines, all of the above criteria must be met.

Current proposals regarding impacts from a proposed action to jurisdictional waters of the U.S., including wetlands, totaling more than 1/2 acre or a length of stream greater than 300 linear feet, require the prior acquisition of an individual Section 404 permit issued by the Corps. A Section 404 permit application may require the completion of a federal Environmental Assessment or Environmental Impact Statement as required by the National Environmental Policy Act (NEPA). During review of the permit application, the Corps is required by law to consult with other federal, state, and local agencies with interest regarding the potential impacts of the proposed project. These agencies may include the U.S. Fish and Wildlife Service (USFWS), the Environmental Protection Agency, and various state, county, and city governments. Conservation recommendations from various agencies may be included as conditions of the 404 permit issued by the Corps.

Impacts to jurisdictional waters from small-scale draining or filling totaling more than 1/10 acre but less than 1/2 acre, and not exceeding 300 linear feet, are typically authorized under a Nationwide Permit. A pre-construction notification must be provided to the Corps for impacts of this size before development can begin. The Corps has 45 days to respond with either a notice to proceed or, in rare cases, they may require an individual permit. If no response is received within 45 days, the applicant may proceed under authorization of a Nationwide Permit.

If impacts to jurisdictional water total less than 1/10 acre, the action is generally permitted under a Nationwide Permit and no pre-construction notification with the Corps is required. However, some Nationwide Permits have special reporting requirements, which must be met.

## II. PROJECT AREA DESCRIPTION

The project area is located in the northern part of Colorado Springs, El Paso County, Colorado (Figure 1). This portion of the Briargate Development project encompasses only the North and South forks of Pine Creek. The subject area is bounded by residential and commercial development to the north, south, and west, and relatively undeveloped land to the east.

### 1. Topography and Soils

The subject area is characterized by gently rolling hills, typical of the foothills between the Great Plains to the east and the Front Range of the Rocky Mountains to the west. Pine Creek originates from seeps on the eastern portion of the property and drains to the southwest from the north and south forks to a confluence just west of the subject area. Stock ponds have previously been constructed along this portion of the Upper Pine Creek drainage to support past and present ranching operations and to control erosion.

Four soil types are present within the north fork of the Upper Pine Creek drainage: (1) Blakeland loamy sand, 1 to 9 percent slopes; (2) Peyton-Pring complex, 8 to 15 percent; (3) Truckton-Blakeland complex, 9 to 20 percent; and (4) Ustic Torrifluvents, loamy (USDA Soil Conservation Service 1981). All four soils are characterized as deep and well drained. One additional soil type occurs within the south fork of the drainage, Bresser sandy loam, 3 to 5 percent, which is also a deep, well drained soil. These soils do not appear on the list of Hydric Soils of the United States (USDA Soil Conservation Service 1991).

### 2. Vegetation

Two major vegetation communities are present within the subject area: (1) an upland prairie community, and (2) a wetland drainage community. The upland prairie community predominantly consists of grasses and forbs such as blue grama (*Bouteloua gracilis*), buffalo grass (*Buchloe dactyloides*), needle-and-thread (*Stipa comata*), Canada wild rye (*Elymus canadensis*), and prairie sage (*Artemisia ludoviciana*). Some transitional upland areas adjacent to the drainageways contain patches of slender wheatgrass (*Agropyron trachycaulum*), snowberry (*Symphoricarpos albus*), diffuse knapweed (*Acosta diffusa*), wild licorice (*Glycyrrhiza lepidota*) and yucca (*Yucca glauca*).

The dominant wetland vegetation differs significantly between the north and south forks of the Upper Pine Creek drainage. Wetland areas within the north fork are dominated by coyote willow (*Salix exigua*), peach-leaved willow (*Salix amygdaloides*), narrowleaf cottonwood (*Populus angustifolium*), and sedges (*Carex* spp.). The dominant wetland vegetation within the south fork consists of Baltic rush (*Juncus balticus*), broad-leaved cattail (*Typha latifolia*), and sedges with only a small portion of the drainage dominated by coyote willow.

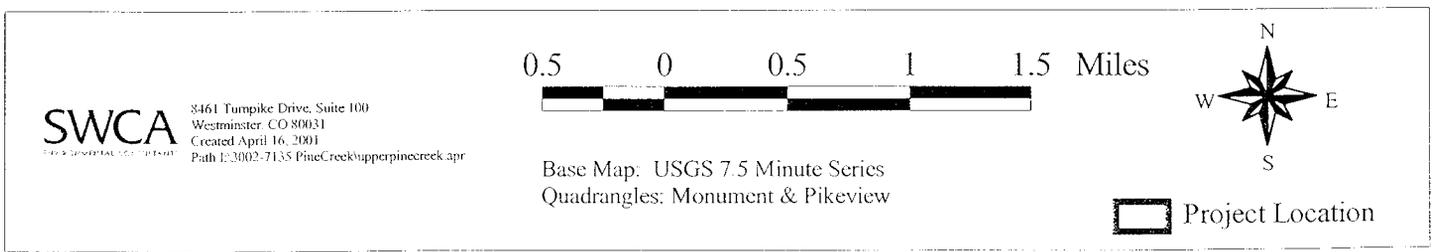
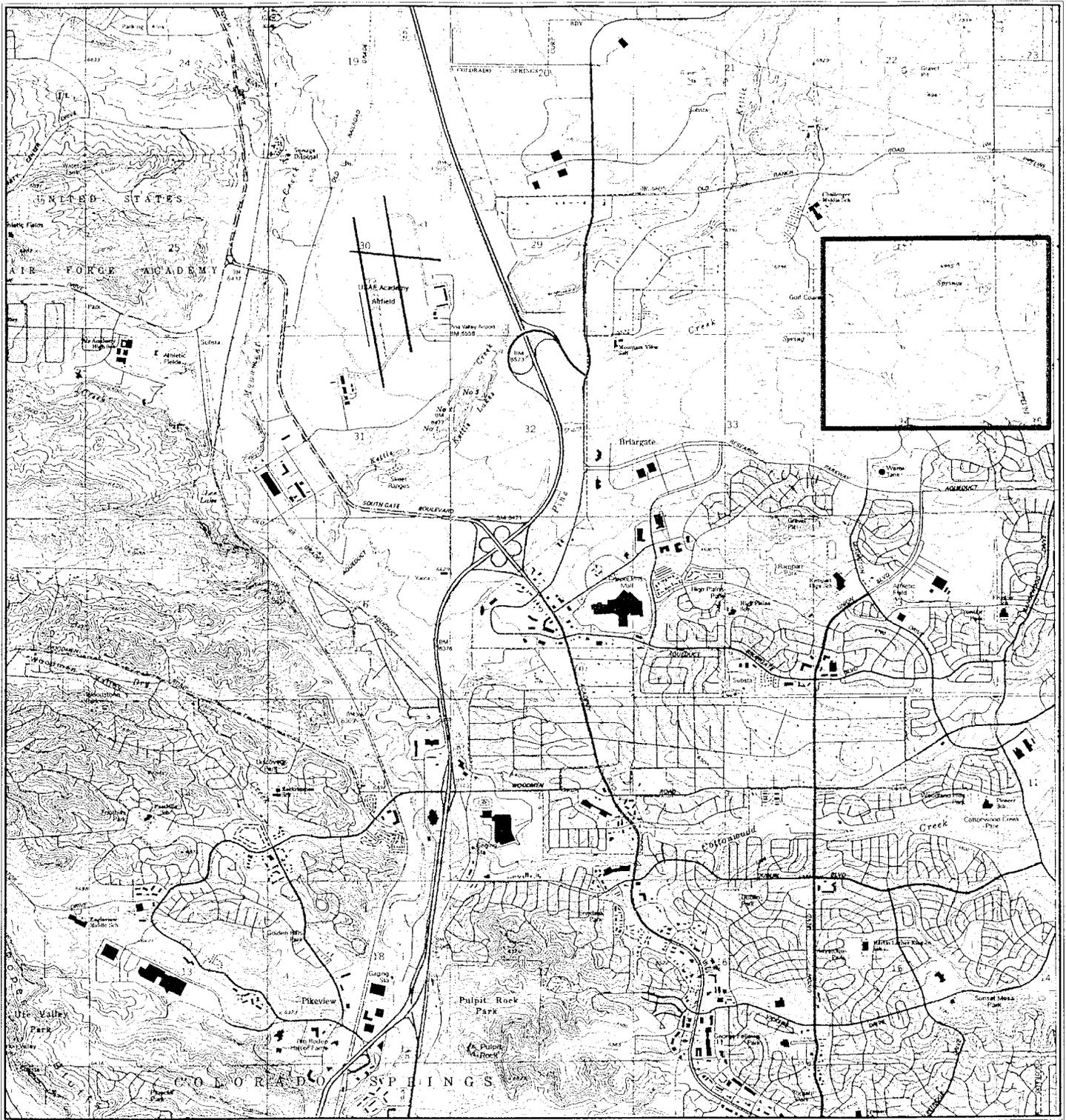


Figure 1. Location of the Briargate Development along the north and south forks of Upper Pine Creek, El Paso County, Colorado.

### III. METHODS

SWCA biologists conducted a delineation of potential jurisdictional waters of the U.S., including wetlands, within the North and South forks of the Pine Creek drainage between 30 September and 8 October 1999. Potential wetland areas outside of the main drainage were delineated on 22 February 2000. The delineation followed the technical standards and procedures recommended in the 1987 Corps of Engineers Wetland Delineation Manual. A boundary delineation was conducted along all potential waters of the U.S. Approximate boundaries were identified where wetland obligate and facultative vegetation were no longer the dominant species and upland vegetation had become more prevalent. The soil and hydrology were also analyzed at sample plots where the wetland boundary was questionable using vegetation indicators (Appendix A). Information from sample plots was used to visually delineate the wetland boundary in areas with similar characteristics. Wetland boundaries were flagged in the field and then surveyed and mapped by JR Engineering (Appendix B).

At each sample plot a vegetation analysis (percent ground cover by species) was performed for each vegetation stratum (herbaceous, shrubs, and trees). Vegetation strata included the following: (1) herbaceous layer (herbaceous plants including grasses, forbs, ferns, fern allies, herbaceous vines, and tree seedlings); (2) shrub layer (<3 inches Diameter at Breast Height (DBH) and >1 meter in height); and (3) Trees (>3 inches DBH). The percent cover by species was determined using a 5-foot radius for the herbaceous layer and a 30-foot radius for the shrub layer and trees. Once the percent cover was determined for each stratum, hydrophytic vegetation was considered present if greater than 50 percent of the dominant vegetation was obligate, facultative wetland, or facultative. The *National List of Plant Species that Occur in Wetlands: Central Plains (Region 5)* (Reed 1988) was referenced to determine the wetland indicator status for each plant.

Soil pits were dug at each sample plot to a depth of 12 inches. The soil was then inspected for the presence of hydric soil indicators. The soil hue, value, and chroma were determined using the Munsell Soil Color Charts (Munsell Color 1992).

The final determination made at each sample plot was hydrology. To satisfy the wetland hydrology category, either one primary hydrology indicator or two secondary hydrology indicators must be present. Primary indicators include visual observation of inundation, visual observation of soil saturation, watermarks, drift lines, sediment deposits, and drainage patterns in wetlands. Secondary indicators include oxidized root channels associated with living roots, water-stained leaves, local soil survey data. The soil pits were left open to allow for the stabilization of the apparent high water table, if present.

Sample plots that exhibited positive indicators of hydrophytic vegetation, hydric soils, and wetland hydrology were identified as wetlands.

## IV. RESULTS

SWCA identified potential jurisdictional waters of the U.S., including wetlands, under the definition prescribed by the Corps, within both the North and South forks of the Pine Creek drainage and in isolated areas between the two forks (Appendix B). Approximately 6.41 acres of jurisdictional waters are present within the North Fork of the Upper Pine Creek. Of this, 5.41 acres are jurisdictional wetlands. Approximately 6.21 acres of jurisdictional waters are present in the South Fork of which 5.79 acres are wetlands. An additional 1.84 acres of potential jurisdictional wetlands are located in isolated pockets between the two forks. Data sheets for sample plots are located in Appendix A.

### 1. North Fork

The North Fork of Pine Creek supports approximately 5.41 acres of jurisdictional wetlands (Figure 2). The majority of wetland areas in the North Fork were saturated or inundated during the field visit and supported mostly wetland obligate and facultative vegetation. Dominant species included coyote willow, Baltic rush, and toad rush (*Juncus bufonius*). These wetland areas are represented by sample plots D2, D6, and D11 (Appendix A) (Figures 6, 5, and 4 respectively).

Four stretches of non-wetland jurisdictional waters of the U.S. are also located within the north fork. A detention pond is located at the west end of the north fork (Figure 3). Adjacent to the detention pond is a non-wetland area dominated by various grasses interspersed with wormwood (*Artemisia campestris*), snowberry, western ragweed (*Ambrosia psilostachya*), coyote willow, Arkansas rose (*Rosa arkansana*), Baltic rush, and toad rush (Sample plots D8, D9, and D14, Appendix A) (Figure 3). A short distance up stream is another non-wetland area represented by sample plot D7 and D 13 (Figure 3). Kentucky bluegrass (*Poa pratensis*) and white geranium (*Geranium richardsonii*) dominate this area. Additional sample plots were conducted within these two areas on 3 July 2001 to update the wetland boundaries (Sample plots D13 and D14). Both areas currently support an abundance of wetland vegetation; however, indicators of hydrology and hydric soils were absent. Mid-way upstream are two additional non-wetland areas represented by sample plots D4, D5, D10, and D12 (Figures 4 and 5). Both areas support vegetation such as coyote willow, toad rush, Baltic rush, and western ragweed; however, no indicators for a hydric soil were observed at those locations. An approximately one-foot wide jurisdictional channel runs through each non-wetland area.

### 2. South Fork

The South Fork of Pine Creek supports five distinctly separate wetland areas totaling approximately 5.79 acres (Figure 2). Vegetation in the western most wetland (Figure 7) is dominated by coyote willow. A non-jurisdictional area supporting vegetation dominated by various grasses such as blue grama, buffalo grass, and three-awn interspersed with prairie sage (Figure 7) separates this wetland from the upstream portions. Two small wetland areas are located within this non-jurisdictional area. One area is a narrow trench on the south side of the drainage and supports scouring rush (*Hippochaete laevigata*), western ragweed, and switchgrass (*Panicum virgatum*) (Sample plot C3). The second, larger wetland is located just west of the large pond and supports peach-leaf willow

(*Salix amygdaloides*), Baltic rush, scouring rush, and broad-leaved cattail (Sample plot B10). The remaining two wetland areas predominantly support Baltic rush, broad-leaved cattail, and switchgrass (Sample plots B3, B4, and B5). These two wetland areas are separated by a road and a small non-jurisdictional area (Figures 8 and 9). Vegetation in this area is dominated by blue grama, three-awn, needle-and-thread, Canada wild rye, and slender wheatgrass (Sample plots A3 and B7).

### 3. Other Areas

Nine isolated pockets located between the North and South forks, with a combined total of 1.84 acres, satisfied the three criteria for potential jurisdictional wetlands under the definition prescribed by the Corps (Figures 4, 5, 11, 12, and 13). The wetland in Figure 4 is located approximately 225 feet from the south edge of the North Fork jurisdictional waters. The wetland in Figure 5 is located approximately 300 feet from the south edge of the North Fork. The remaining seven wetland areas are all located greater than 450 feet from either drainage. The majority of these areas predominantly support Baltic rush with a few areas also supporting patches of western snowberry.

## V. CONCLUSION

Based on field investigations conducted by SWCA biologists and a Corps representative, it appears that 14.46 acres of jurisdictional waters, including wetlands, are present on the Briargate property along Upper Pine Creek. An SWCA biologist and a representative from the Corps conducted a recent site visit to update the delineation on 3 July 2001. According to the Corps letter dated July 5, 2001, all wetlands and waters within the North and South forks of Pine Creek and all wetland pockets are considered as “tributary” to Pine Creek and are therefore regulated under provisions of Section 404 of the CWA. On August 7, 2001, the Corps concurred with these findings of waters of the U.S. within the North and South forks of Pine Creek (Appendix C). On August 6, 2002, the Corps amended the jurisdictional waters on the North and South forks of Pine Creek to exclude several wetlands determined to be isolated and to add several areas identified by Colorado Department of Transportation as jurisdictional waters (Appendix D).

Based on the development plan provided by JR Engineering, impacts to some of these delineated areas are anticipated. As previously mentioned, if development plans call for the filling of wetland areas on the property (inclusive of all areas) greater than 0.5 acres, an individual Section 404 permit must be obtained from the Corps in order for development to lawfully proceed. If development is proposed to impact 0.10-0.5 acres of jurisdictional waters, a pre-construction notification must be submitted to the Corps. If the Corps has not responded within 45 days of receipt of the notification, it is assumed that development can take place under a Nationwide Permit. Impacts of less than 0.10 acres are typically authorized under the Nationwide Permit.

Please realize that the above descriptions are only general and that there may be other permits required before proceeding with construction. For instance, the Clean Water Act also requires a National Pollution Discharge Elimination System (NPDES) permit for any land disturbance greater than 5 acres. This permit application requires that development of a Stormwater Management Plan for the property. The intent of the permit is to protect “waters of the U.S.” from stormwater runoff

and erosion from the construction site.

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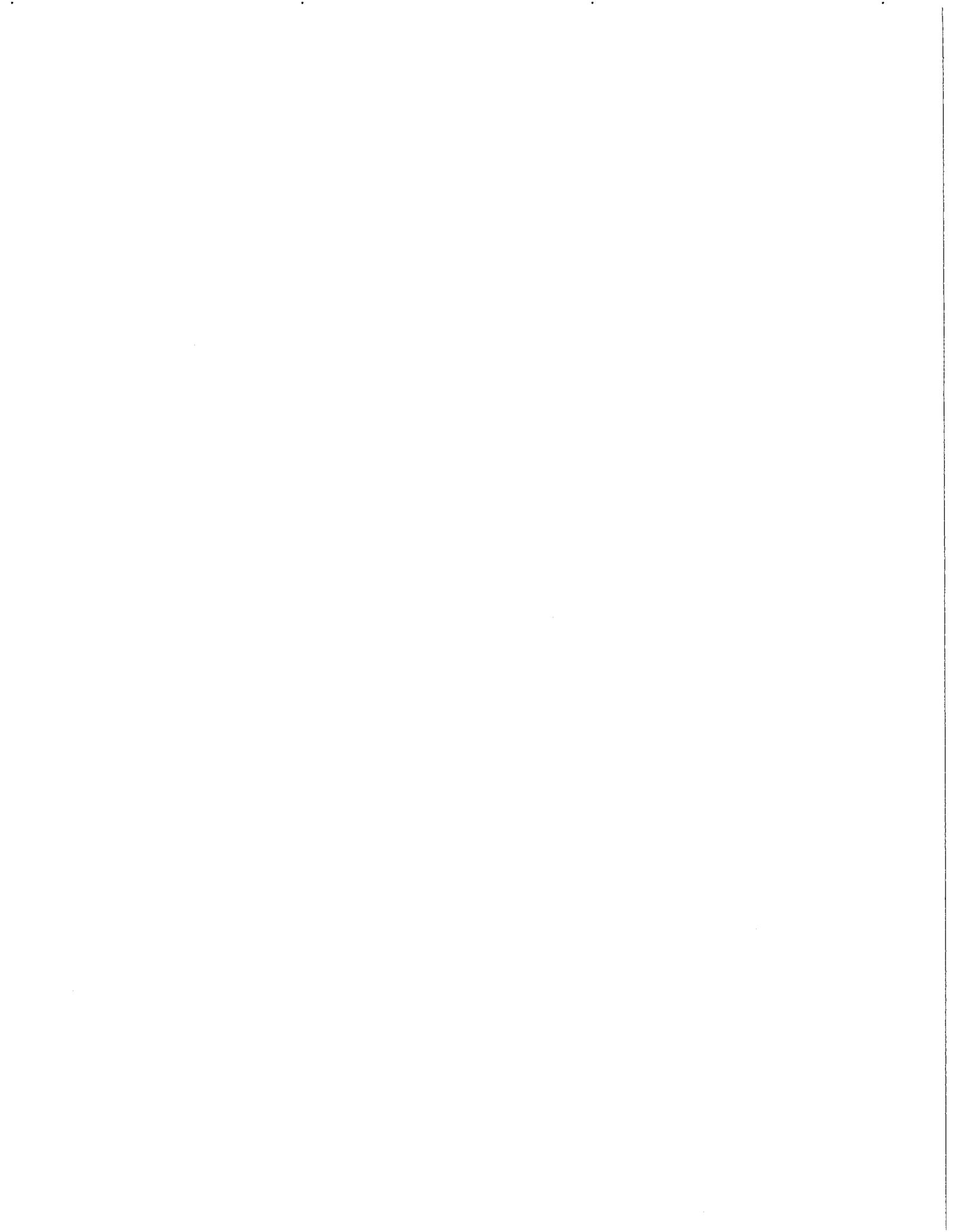
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**APPENDIX A**  
**Data Sheets for Wetland Sample Plots**



DATA FORM  
ROUTINE WETLAND DETERMINATION  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: <u>La Plata Investments</u> Investigator: <u>SWCA, INC.</u>	Date: <u>9/30/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes <input checked="" type="radio"/> No <input type="radio"/></span> Is the area a potential Problem Area? (If needed, explain on reverse.) <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span>	Community ID: _____ Transect ID: <u>2</u> Sample ID: <u>1</u>

VEGETATION

Dominant Plant Species	Stratum Indicator
1 <u>Juncus balticus</u>	<u>Herb OBL 70%</u>
2 _____	_____
3 _____	_____
4 _____	_____
5 _____	_____
6 _____	_____
7 _____	_____
8 _____	_____
9 _____	_____
10 _____	_____
11 _____	_____
12 _____	_____
13 _____	_____
14 _____	_____
15 _____	_____
16 _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 70%

Remarks:  
> 50% of the dominant species observed were FAC, FACW, and/or OBL.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input checked="" type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>Sufficient hydrology indicators were observed</u>



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project Site: <u>Upper Pine Creek, South Fork</u>	Date: <u>10/2/99</u>
Applicant/Owner: <u>LaPlata Investments</u>	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>1</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>2</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Juncus balticus</u>	<u>Herb OBL</u>	9. _____	
2. <u>Ambrosia psilostachya</u>	<u>Herb FAC</u>	10. _____	
3. <u>Agropyron trachyculm</u>	<u>Herb FACU</u>	11. _____	
4. <u>Elymus canadensis</u>	<u>Herb FACU</u>	12. _____	
5. <u>Artemisia ludoviciana</u>	<u>Herb FACU</u>	13. _____	
6. <u>Bouteloua gracilis</u>	<u>Herb NL</u>	14. _____	
7. _____		15. _____	
8. _____		16. _____	

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-). 45%

Remarks:  
Less than 50% of the dominant species observed were FAC, FACW, and/or OBL.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>No hydrology indicators were observed.</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		10YR 4/2	-	-	Silt Loam
4-12		7.5YR 3/2	-	-	loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled does not appear to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?    Yes <u>No</u> (Circle) Wetland Hydrology Present?        Yes <u>No</u> Hydric Soils Present?                Yes <u>No</u>	Is this Sampling Point Within a Wetland?    Yes <u>No</u> (Circle)
Remarks: None of the 3 criteria were observed at this sample location	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: <u>La Plata Investments</u> Investigator: <u>SWCA, Inc.</u>	Date: <u>10/4/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>4</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>3</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1 <u>Euthamia occidentalis</u> Herb	<u>OBL</u> 25%	9 _____	_____
2 <u>Bouteloua gracilis</u> Herb	<u>NL</u> 15%	10 _____	_____
3 <u>Stipa comata</u> Herb	<u>NL</u> 10%	11 _____	_____
4 <u>Calamovilfa longifolia</u> Herb	<u>NL</u> 40%	12 _____	_____
5 _____	_____	13 _____	_____
6 _____	_____	14 _____	_____
7 _____	_____	15 _____	_____
8 _____	_____	16 _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 25%

Remarks:  
Less than 50% of the dominant species observed were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pitt: _____ (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>No indicators of hydrology were observed</u>



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u>	Date: <u>10/4/99</u>
Applicant/Owner: <u>La Plata Investments</u>	County: <u>El Paso</u>
Investigator: <u>Sueci, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>2</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>4</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1 <u>Typha latifolia</u> Herb	<u>OBL</u> 30%	9 _____	_____
2 <u>Euthamia occidentalis</u> Herb	<u>OBL</u> 5%	10 _____	_____
3 <u>Phalaris acutidens</u> Herb	<u>FACW+</u> 20%	11 _____	_____
4 <u>Andropogon gerardii</u> Herb	<u>FAC-</u> 5%	12 _____	_____
5 <u>Elymus canadensis</u> Herb	<u>FACU</u> 5%	13 _____	_____
6 <u>Calamovilfa longifolia</u> Herb	<u>NL</u> 10%	14 _____	_____
7 <u>Echinochloa crus-galli</u> Herb	<u>FACW</u> 25%	15 _____	_____
8 _____	_____	16 _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 80 %

Remarks:  
 Greater than 50% of the dominant species observed were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>1</u> (in.) Depth to Free Water in Pft: _____ (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>Hydrology indicators were observed</u>

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
<u>0-3</u>		<u>N 2.5/</u>	-	-	<u>Sandy loam</u>
<u>3-12</u>		<u>5YR 2.5/1</u>	-	-	<u>loamy sand</u>
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <u>The profile sampled appears to have indicators of a hydric soil</u>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	(Circle) Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: <u>All 3 criteria were observed at this location</u>	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project Site: <u>Upper Pine Creek, South Fork</u>	Date: <u>10/2/97</u>
Applicant/Owner: <u>La Plata Investments</u>	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input checked="" type="radio"/> No <input type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>4</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>5</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1 <u>Juncus balticus</u>	<u>Herb OBL 75%</u>	9 _____	_____
2 <u>Echinochloa crus-galli</u>	<u>Herb FACW 10%</u>	10 _____	_____
3 <u>Agropyron trachycaulum</u>	<u>Herb FACU 2%</u>	11 _____	_____
4 <u>Elymus canadensis</u>	<u>Herb FACU 5%</u>	12 _____	_____
5 _____	_____	13 _____	_____
6 _____	_____	14 _____	_____
7 _____	_____	15 _____	_____
8 _____	_____	16 _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 85%

Remarks:

Greater than 50% of the dominant species observed were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pft: <u>12</u> (in.) Depth to Saturated Soil: <u>10</u> (in.)	
Remarks: <p>Hydrology indicators were observed</p>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
<i>0-1</i>		<i>10YR 4/2</i>	<i>10YR 3/2</i>	<i>many/coarse</i>	<i>loamy sand</i>
<i>1-5</i>		<i>10YR 4/2</i>	<i>-</i>		<i>Sandy loam</i>
<i>5-10</i>		<i>5G 4/1</i>	<i>-</i>		<i>Sand</i>
<i>10-12</i>		<i>5G 4/1</i>	<i>-</i>		<i>Sandy clay</i>
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input checked="" type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <i>The profile sampled appears to have indicators of a hydric soil</i>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes    No    (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes    No Hydric Soils Present? <input checked="" type="radio"/> Yes    No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes    No    (Circle)
Remarks:  <i>All 3 criteria were observed at this location</i>	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
ROUTINE WETLAND DETERMINATION  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: _____ Investigator: <u>SWCA, Inc.</u>	Date: <u>10/4/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____ Transect ID: <u>FF</u> Sample ID: <u>10</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Salix amygdaloides</u>	<u>Shrub FACW 15%</u>	9. _____	_____
2. <u>Buchloe dactyloides</u>	<u>Herb FACU 45%</u>	10. _____	_____
3. <u>Elymus canadensis</u>	<u>Herb FACU 5%</u>	11. _____	_____
4. <u>Stipa comata</u>	<u>Herb NL 5%</u>	12. _____	_____
5. <u>Artemisia frigida</u>	<u>Herb NL 10%</u>	13. _____	_____
6. <u>Bouteloua gracilis</u>	<u>Herb NL 10%</u>	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 15%

Remarks:  
Less than 50% of the dominant species observed were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>Sufficient hydrology was not observed at this location</u>



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: <u>La Plata Investments</u> Investigator: <u>Joanne Stewart and Tracy Brown, SWCA Inc.</u>	Date: <u>9/30/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;">X Yes No</span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes XNo</span> Is the area a potential Problem Area? (If needed, explain on reverse.) <span style="float: right;">Yes XNo</span>	Community ID: _____ Transect ID: <u>8</u> Sample ID: <u>1</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	%	Dominant Plant Species	Stratum	Indicator	%
1 <u>Chondrosium gracile</u>	<u>herb</u>	<u>NL</u>	<u>10%</u>	9 _____			
2 <u>Stipa comata</u>	<u>herb</u>	<u>NL</u>	<u>5%</u>	10. _____			
3 <u>Agropyron trachycaulum</u>	<u>herb</u>	<u>FACU</u>	<u>5%</u>	11. _____			
4 <u>Loium Perenne</u>	<u>herb</u>	<u>FACU</u>	<u>70%</u>	12. _____			
5. _____				13. _____			
6 _____				14. _____			
7 _____				15. _____			
8 _____				16. _____			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-) 0%

Remarks:  
 Less than 50% of the dominant species were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: <u>3</u> (in) Depth to Free Water in Pft: _____ (in) Depth to Saturated Soil: _____ (in)	
Remarks: Indicators of hydrology were observed	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture; Concretions Structure, etc.
0-1		10YR 5/2			Fine sand
2-9		10YR 3/1			Sandy Clay
9-12		2.5 YR 2.5/1			Silty clay
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks:					
The profile samples appears to have indicators of a hydric soil.					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes XNo (Circle)	
Wetland Hydrology Present?	XYes No	(Circle)
Hydric Soils Present?	XYes No	Is this Sampling Point Within a Wetland? Yes XNo
Remarks:		
Not all 3 criteria were observed at this site		

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: <u>La Plata Investments</u> Investigator: <u>SWCA, Inc.</u>	Date: <u>9/30/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	
Community ID: _____ Transect ID: <u>2</u> Sample ID: <u>2</u>	

VEGETATION

Dominant Plant Species	Stratum Indicator
1. <u>Lolium perenne</u>	<u>Herb FACU 95%</u>
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____
11. _____	_____
12. _____	_____
13. _____	_____
14. _____	_____
15. _____	_____
16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 0

Remarks:  
Less than 50% of the dominant species observed were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input checked="" type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: <u>0.5</u> (in.) Depth to Free Water in Pft: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Indicators of hydrology were observed</u>	

SOILS

Map Unit Name (Series and Phase) _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture Concretions Structure, etc.
0-2		10YR 4/1	—	—	Silt
2-12		10YR 2/1	—	—	clay
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks:					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?    Yes <u>No</u> (Circle) Wetland Hydrology Present? <u>Yes</u> No Hydric Soils Present? <u>Yes</u> No	(Circle) Is this Sampling Point Within a Wetland?    Yes <u>No</u>
Remarks:	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u>	Date: <u>9/30/99</u>
Applicant/Owner: <u>La Plata Investments</u>	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="radio"/> No <input type="radio"/>	Transect ID: <u>3</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input checked="" type="radio"/> No <input type="radio"/>	Sample ID: <u>3</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Typha latifolia</u>	<u>Herb</u> <u>OBL</u> <u>15%</u>	9. _____	_____
2. <u>Carex sp.</u>	<u>Herb</u> _____ <u>75%</u>	10. _____	_____
3. _____	_____	11. _____	_____
4. _____	_____	12. _____	_____
5. _____	_____	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 90%

Remarks:  
Greater than 50% of the dominant species observed were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input checked="" type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pft: <u>2</u> (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>Hydrology indicators were observed</u>

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-3		10YR 3/2	---	---	Silt
3-4		N 2.5/	---	---	Silty sand
4-12		10YR 3/2	---	---	sand
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input checked="" type="checkbox"/> Sulfidic Odor		<input checked="" type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil.					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)
Remarks: All three criteria were observed at this location	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: _____ Investigator: <u>SWCA, Inc.</u>	Date: <u>9/30/99</u> County: <u>El Paso</u> State: <u>Colorado</u>						
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td>Yes <input type="radio"/> No <input checked="" type="radio"/></td> <td>Community ID: _____</td> </tr> <tr> <td>Yes <input checked="" type="radio"/> No <input type="radio"/></td> <td>Transect ID: <u>3</u></td> </tr> <tr> <td>Yes <input checked="" type="radio"/> No <input type="radio"/></td> <td>Sample ID: <u>4</u></td> </tr> </table>	Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____	Yes <input checked="" type="radio"/> No <input type="radio"/>	Transect ID: <u>3</u>	Yes <input checked="" type="radio"/> No <input type="radio"/>	Sample ID: <u>4</u>
Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____						
Yes <input checked="" type="radio"/> No <input type="radio"/>	Transect ID: <u>3</u>						
Yes <input checked="" type="radio"/> No <input type="radio"/>	Sample ID: <u>4</u>						

VEGETATION

Dominant Plant Species	Stratum Indicator		Dominant Plant Species	Stratum Indicator
1. <u>Carex sp</u>	<u>Herb</u>	<u>75%</u>	9. _____	_____
2. <u>Typha latifolia</u>	<u>Herb</u>	<u>OBL 15%</u>	10. _____	_____
3. _____	_____	_____	11. _____	_____
4. _____	_____	_____	12. _____	_____
5. _____	_____	_____	13. _____	_____
6. _____	_____	_____	14. _____	_____
7. _____	_____	_____	15. _____	_____
8. _____	_____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 90%

Remarks: Greater than 50% of the dominant species observed were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: <u>10</u> (in.) Depth to Saturated Soil: <u>Surface</u> (in.)	Remarks: <u>Indicators of hydrology were observed</u>

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture/Concretions Structure, etc.
0-3		N 2.5/1	—	—	organic matter / Sand
3-6		10YR 3/1	10YR 2/1	Few, coarse	loamy sand
6-8		10YR 3/1	—	—	sandy
8-9		N 2.5/1 + 10YR 4/1	—	—	sand
9-12		<del>N</del> 3	—	—	silty loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol		<input checked="" type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils			
<input checked="" type="checkbox"/> Sulfidic Odor		<input checked="" type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes    No    (Circle)	(Circle)
Wetland Hydrology Present? <input checked="" type="radio"/> Yes    No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes    No
Hydric Soils Present? <input checked="" type="radio"/> Yes    No	
Remarks: All 3 criteria were observed	

Approved by HQUSACE 2/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek South Fork</u> Applicant/Owner: _____ Investigator: <u>SWCA, Inc.</u>	Date: <u>12/1/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes <input checked="" type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/>
Community ID: _____ Transect ID: <u>R</u> Sample ID: <u>S</u>	

VEGETATION

Dominant Plant Species	Stratum Indicator
1. <u>Juncus balticus</u>	<u>Herb OBL 45%</u>
2. <u>Panicum virgatum</u>	<u>Herb FAC 45%</u>
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____
11. _____	_____
12. _____	_____
13. _____	_____
14. _____	_____
15. _____	_____
16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 90%

Remarks:  
Greater than 50% of dominant species were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pitt: <u>10</u> (in.) Depth to Saturated Soil: <u>1</u> (in.)	Remarks: <u>Hydrology indicators were observed</u>

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture; Concretions, Structure, etc.
0-2		10YR 3/1	-	-	organic layer
2-5		5B 4/1	N 2.5/	many, coarse	loamy sand w/ organic matter
5-12		5GY 5/1	7.5YR 5/8	many, fine	loamy sand
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)		
Remarks: The profile sampled appears to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydroponytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)
Remarks:	

Approved by HCUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u>		Date: <u>10/4/93</u>
Applicant/Owner: _____		County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>		State: <u>Colorado</u>
Do Normal Circumstances exist on the site?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Transect ID: <u>B</u>
Is the area a potential Problem Area? (If needed, explain on reverse.)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>7</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1 <u>Bromopsis inermis</u>	<u>Herb NT</u>	9 _____	_____
2 <u>Elymus canadensis</u>	<u>Herb FACU</u>	10 _____	_____
3 <u>Ambrosia psilostachya</u>	<u>Herb FAC</u>	11 _____	_____
4 <u>Agropyron trachycaulum</u>	<u>Herb FACU</u>	12 _____	_____
5 _____	_____	13 _____	_____
6 _____	_____	14 _____	_____
7 _____	_____	15 _____	_____
8 _____	_____	16 _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 25%

Remarks:  
Less than 50% of the dominant species observed were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>2</u> (in.) Depth to Free Water in Ft.: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Hydrology indicators were observed</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4		7.5YR 5/3	-	-	Sand, concretions
4-9		10YR 3/2	-	-	Sandy loam, concretions
9-12		10YR 2/2	-	-	Sandy loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input checked="" type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrochytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> (Circle) Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soils Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is this Sampling Point Within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)
Remarks: Not all 3 criteria were observed at this location	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
ROUTINE WETLAND DETERMINATION  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: _____ Investigator: <u>SICF, Inc.</u>	Date: <u>10/2/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____ Transect ID: <u>15</u> Sample ID: <u>8</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Equisetum laevigata</u>	<u>Herb FACW 90%</u>	9. _____	_____
2. _____	_____	10. _____	_____
3. _____	_____	11. _____	_____
4. _____	_____	12. _____	_____
5. _____	_____	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 90%

Remarks:  
Greater than 50% of the dominant species observed were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>Hydrology indicators were observed</u>



DATA FORM  
ROUTINE WETLAND DETERMINATION  
(1987 CCE Wetlands Delineation Manual)

Project Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: _____ Investigator: <u>SWCA, Inc.</u>	Date: <u>10/4/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;"><input checked="" type="radio"/> Yes <input type="radio"/> No</span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span> Is the area a potential Problem Area? <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span> (If needed, explain on reverse.)	Community ID: _____ Transect ID: <u>3</u> Sample ID: <u>9</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1 <u>Juncus balticus</u>	<u>Herb OBL 25%</u>	9 _____	_____
2 <u>Carex nebrascensis</u>	<u>Herb OBL 25%</u>	10 _____	_____
3 <u>Epilobium angustifolium</u>	<u>Herb FAC 10%</u>	11 _____	_____
4 <u>Lolium multiflorum</u>	<u>Herb NL 10%</u>	12 _____	_____
5 _____	_____	13 _____	_____
6 _____	_____	14 _____	_____
7 _____	_____	15 _____	_____
8 _____	_____	16 _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 60%

Remarks: Greater than 50% of the dominant species were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input checked="" type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pft: <u>5</u> (in.) Depth to Saturated Soil: <u>Surface</u> (in.)	Remarks: <u>Hydrology indicators were observed</u>

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1		10YR 4/3	—	—	Silty loam
1-2		N 2.5/	—	—	Silty loam
2-6		10YR 2/1	—	—	Sandy loam
6-8		10YR 3/2	—	—	loamy sand
8-9		10YR 2/1	—	—	loam
9-10		10YR 3/2	—	—	loamy sand
10-12		10YR 2/1	—	—	Silty loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	(Circle) Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks:	

Approved by HQUSAC 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u>	Date: <u>10/4/97</u>
Applicant/Owner: _____	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>B</u>
Is the area a potential Problem Area? (If needed, explain on reverse) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>10</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Salix amygdaloides</u> Shrub	<u>FACW</u> 15%	9 _____	_____
2. <u>Epilobium angustifolium</u> Herb	<u>FAC</u> 10%	10 _____	_____
3. <u>Juncus balticus</u> Herb	<u>OBL</u> 15%	11 _____	_____
4. <u>Equisetum laevigata</u> Herb	<u>FACW</u> 5%	12 _____	_____
5. <u>Typha latifolia</u> Herb	<u>OBL</u> 40%	13 _____	_____
6 _____	_____	14 _____	_____
7 _____	_____	15 _____	_____
8 _____	_____	16 _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 85%

Remarks: Greater than 50% of the dominant species were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: <u>0.25</u> (in.) Depth to Free Water in Pft: _____ (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>Hydrology indicators were observed</u>

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-1		2.5Y 2.5/1	—	—	Sandy loam
1-2		10YR 4/2	—	—	Sand
2-12		2.5Y 2.5/1	—	—	Loamy Sand
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes    No    (Circle)	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes    No    (Circle)
Wetland Hydrology Present? <input checked="" type="radio"/> Yes    No	
Hydric Soils Present? <input checked="" type="radio"/> Yes    No	
Remarks: All 3 criteria were observed	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
ROUTINE WETLAND DETERMINATION  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: _____ Investigator: <u>SWCA, Inc.</u>	Date: <u>10/4/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes <input type="radio"/> <input checked="" type="radio"/> No</span> Is the area a potential Problem Area? <span style="float: right;">Yes <input type="radio"/> <input checked="" type="radio"/> No</span> (If needed, explain on reverse.)	Community ID: _____ Transect ID: <u>4</u> Sample ID: <u>7</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Symphoricarpos albus</u> <u>Shrub</u>	<u>FACU</u> <u>25%</u>	9. _____	_____
2. <u>Agropyron trachycaulon</u> <u>Herb</u>	<u>FACU</u> <u>20%</u>	10. _____	_____
3. <u>Elymus canadensis</u> <u>Herb</u>	<u>FACU</u> <u>5%</u>	11. _____	_____
4. <u>Glycyrrhiza lepidota</u> <u>Herb</u>	<u>FACU</u> <u>5%</u>	12. _____	_____
5. <u>Juncus balticus</u> <u>Herb</u>	<u>OBL</u> <u>10%</u>	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 10%

Remarks: Less than 50% of the dominant species observed were OBL, FACW, and/or FAC.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other _____ <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pft: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Hydrology indicators were observed</u>	



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project Site: <u>Upper Pine Creek, South Fork</u> Applicant/Owner: _____ Investigator: <u>SWCA, Inc.</u>	Date: <u>10/5/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;"><input checked="" type="radio"/> Yes <input type="radio"/> No</span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes <input type="radio"/> <input checked="" type="radio"/> No</span> Is the area a potential Problem Area? <span style="float: right;">Yes <input type="radio"/> <input checked="" type="radio"/> No</span> (If needed, explain on reverse.)	Community ID: _____ Transect ID: <u>1</u> Sample ID: <u>3</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Equisetum laevigata</u> Herb	<u>FACW</u>	9. _____	_____
2. <u>Ambrosia psilostachya</u> Herb	<u>FAC</u>	10. _____	_____
3. <u>Elymus canadensis</u> Herb	<u>FACU</u>	11. _____	_____
4. <u>Panicum virgatum</u> Herb	<u>FAC</u>	12. _____	_____
5. _____	_____	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 90%

Remarks:  
Greater than 50% of the dominant species were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other  <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input checked="" type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: <u>1</u> (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: <u>Surface</u> (in.)	Remarks: <span style="font-size: 1.5em; margin-left: 40px;">Hydrology indicators observed</span>

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture; Concretions, Structure, etc.
<u>0-1</u>			<u>-</u>	<u>-</u>	<u>Organic mat</u>
<u>1-12</u>		<u>N 3/</u>	<u>-</u>	<u>-</u>	<u>Sandy loam</u>
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <u>The profile appears to have indicators of a hydric soil</u>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No    (Circle)	(Circle)
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Remarks:  <u>All 3 criteria were observed at this location</u>	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/5/99</u>
Applicant/Owner: _____	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input checked="" type="radio"/> No <input type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>D</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>1</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Salix exigua</u>	<u>Shrub OBL 5%</u>	9. _____	_____
2. <u>Elymus Canadensis</u>	<u>Herb FACW 40%</u>	10. _____	_____
3. <u>Agropyron trachycaulum</u>	<u>Herb FACW 40%</u>	11. _____	_____
4. _____	_____	12. _____	_____
5. _____	_____	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 5%

Remarks:  
Less than 50% of the dominant species observed were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input checked="" type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pft: <u>7</u> (in.) Depth to Saturated Soil: <u>5</u> (in.)	
Remarks: <u>Hydrology indicators observed</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture: Concretions, Structure, etc.
0-3		10YR 4/1	—	—	Sandy clay
3-12		10YR 4/1	—	—	Sand
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?    Yes <u>No</u> (Circle) Wetland Hydrology Present? <u>Yes</u> No Hydric Soils Present? <u>Yes</u> No	Is this Sampling Point Within a Wetland?    Yes <u>No</u> (Circle)
Remarks: Not all 3 criteria were observed at this location	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/5/99</u>
Applicant/Owner: _____	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input checked="" type="radio"/> No <input type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>2</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input checked="" type="radio"/> No <input type="radio"/>	Sample ID: <u>2</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Juncus balticus</u>	<u>Herb OBL</u>	9. _____	_____
2. <u>Agropyron trachycaulum</u>	<u>Herb FACW</u>	10. _____	_____
3. <u>Rumex crispus</u>	<u>Herb FACW</u>	11. _____	_____
4. <u>Veronica americana</u>	<u>Herb OBL</u>	12. _____	_____
5. <u>Salix exigua</u>	<u>Shrub OBL</u>	13. _____	_____
6. <u>Eleocharis sp.</u>	<u>Herb FACW/OBL</u>	14. _____	_____
7. <u>Epilobium angustifolium</u>	<u>Herb FAC</u>	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 75%

Remarks:  
 Greater than 50% of the dominant species were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: <u>1</u> (in) Depth to Free Water in Pit: _____ (in) Depth to Saturated Soil: _____ (in)	
Remarks: <u>Hydrology indicators were observed</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture; Concretions, Structure, etc.
0-1		2.5Y 2.5/1	—	—	Silty loam
1-12		10YR 4/1	—	—	loamy sand
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input checked="" type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil.					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	(Circle) Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: All 3 criteria were observed at this location	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/5/99</u>
Applicant/Owner: _____	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input checked="" type="radio"/> No <input type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>2</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>3</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Salix exigua</u>	<u>Shrub OBL</u>	9. <u>Unknown shrub</u>	<u>Shrub 30%</u>
2. <u>Populus deltoides</u>	<u>Shrub FAC</u>	10. <u>cultivated sp?</u>	_____
3. <u>Ambrosia psilostachya</u>	<u>Herb FAC</u>	11. _____	_____
4. <u>Agropyron trachynulum</u>	<u>Herb FACU</u>	12. _____	_____
5. <u>Bouteloua gracilis</u>	<u>Herb NL</u>	13. _____	_____
6. <u>Achillea lanu losa</u>	<u>Herb NL</u>	14. _____	_____
7. <u>Schizachyrium scoparium</u>	<u>Herb FACU</u>	15. _____	_____
8. <u>Rosa arkansana</u>	<u>Shrub NI</u>	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 10% shrub + 25% herbaceous

Remarks:  
Less than 50% of the dominant species were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>No hydrology indicators were observed</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture: Concretions, Structure, etc.
<u>0-5</u>	_____	<u>5YR 3/1</u>	<u>—</u>	<u>—</u>	<u>Silty loam</u>
<u>5-12</u>	_____	<u>7.5YR 5/1 +2.5/1</u>	<u>—</u>	<u>—</u>	<u>Sandy clay</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or <u>Low-Chroma Colors</u>		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <u>The profile sampled appears to have indicators of a hydric soil</u>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?    Yes <u>No</u> (Circle) Wetland Hydrology Present?        Yes <u>No</u> (Circle) Hydric Soils Present? <u>Yes</u> No	Is this Sampling Point Within a Wetland?    Yes <u>No</u> (Circle)
Remarks: <u>Not all 3 criteria were observed</u>	

Approved by HGUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/5/99</u>
Applicant/Owner: _____	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>D</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>7</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Ambrosia psilostachya</u> Herb	<u>FACW</u> 20%	9. _____	_____
2. <u>Verbastum thapsus</u> Herb	<u>NL</u> 20%	10. _____	_____
3. <u>Artemisia ludoviciana</u> Herb	<u>FACW</u> - 15%	11. _____	_____
4. <u>Geranium richardsonii</u> Herb	<u>NL</u> 10%	12. _____	_____
5. <u>Elymus canadensis</u> Herb	<u>FACU</u> 10%	13. _____	_____
6. <u>Bromus japonicus</u> Herb	<u>FACU</u> 10%	14. _____	_____
7. <u>Unknown Shrub</u> Shrub	_____ 30%	15. _____	_____
8. _____	_____	16. _____	_____
Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-):		<u>20% herbaceous</u>	
Remarks: <u>Less than 50% of the dominant vegetation is OBL, FACW, or FAC</u>			

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pft: <u>5</u> (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Indicators of Hydrology were observed</u>	



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/5/99</u>
Applicant/Owner: _____	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input checked="" type="radio"/> No <input type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>D</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>S</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Salix exigua</u>	<u>Shrub OBL 90%</u>	9. _____	_____
2. _____	_____	10. _____	_____
3. _____	_____	11. _____	_____
4. _____	_____	12. _____	_____
5. _____	_____	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 90%

Remarks:  
 Greater than 50% of dominant species observed were OBL, FACW, and/or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: <u>3</u> (in.) Depth to Saturated Soil: <u>1</u> (in.)	
Remarks: <u>Hydrology indicators were observed</u>	



DATA FORM  
ROUTINE WETLAND DETERMINATION  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/3/79</u>
Applicant/Owner: _____	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes <input checked="" type="radio"/> No <input type="radio"/></span>	Transect ID: <u>12</u>
Is the area a potential Problem Area? <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span> (If needed, explain on reverse.)	Sample ID: <u>6</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Salix exigua</u>	<u>Shrub OBL 100%</u>	9. _____	_____
2. <u>Juncus bufonius</u>	<u>Herb OBL 60%</u>	10. _____	_____
3. <u>Epilobium angustifolium</u>	<u>Herb FAC 5%</u>	11. _____	_____
4. <u>Poa pratensis</u>	<u>Herb FACU 20%</u>	12. _____	_____
5. _____	_____	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 100% shrubs + 65% herbaceous

Remarks:  
Greater than 50% of the dominant species observed were OBL, FACW, or FAC

HYDROLOGY

<p>___ Recorded Data (Describe in Remarks):</p> <p style="padding-left: 20px;">___ Stream, Lake, or Tide Gauge</p> <p style="padding-left: 20px;">___ Aerial Photographs</p> <p style="padding-left: 20px;">___ Other</p> <p>___ No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p style="padding-left: 20px;"><input type="checkbox"/> Inundated</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Saturated in Upper 12 Inches</p> <p style="padding-left: 20px;">___ Water Marks</p> <p style="padding-left: 20px;">___ Drift Lines</p> <p style="padding-left: 20px;">___ Sediment Deposits</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p style="padding-left: 20px;">___ Oxidized Root Channels in Upper 12 Inches</p> <p style="padding-left: 20px;">___ Water-Stained Leaves</p> <p style="padding-left: 20px;">___ Local Soil Survey Data</p> <p style="padding-left: 20px;">___ FAC-Neutral Test</p> <p style="padding-left: 20px;">___ Other (Explain in Remarks)</p>
Field Observations:	
Depth of Surface Water: _____ (in.)	
Depth to Free Water in Pit: <u>2</u> (in.)	
Depth to Saturated Soil: <u>Surface</u> (in.)	
Remarks: <u>Hydrology indicators were observed</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast:	Texture; Concretions, Structure, etc.
0-4		5B 4/1	—	—	Sand
4-9		5B 5/1	—	—	Sand
9-12		5G4 5/2	—	—	Sand
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrochytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No    (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	(Circle) Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: All 3 criteria were observed at this location	

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u> Applicant/Owner: <u>La Plata Investments</u> Investigator: <u>Joanne Stewart and Tracy Brown, SWCA Inc.</u>	Date: <u>10/8/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;">X Yes No</span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes XNo</span> Is the area a potential Problem Area? (If needed, explain on reverse ) <span style="float: right;">Yes XNo</span>	Community ID: _____ Transect ID: <u>0</u> Sample ID: <u>7</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	%	Dominant Plant Species	Stratum	Indicator	%
1. <u>Achillea lanulosa</u>	<u>herb</u>	<u>FACU</u>	<u>5%</u>	9 _____			
2. <u>Geranium richardsonii</u>	<u>herb</u>	<u>NL</u>	<u>15%</u>	10 _____			
3. <u>Salix amygdaloides</u>	<u>shrub</u>	<u>FACW</u>	<u>10%</u>	11 _____			
4. <u>Salix exigua</u>	<u>shrub</u>	<u>OBL</u>	<u>5%</u>	12 _____			
5. <u>Populus angustifolium</u>	<u>Tree</u>	<u>FACW</u>	<u>5%</u>	13 _____			
6. <u>Populus deltoides</u>	<u>Tree</u>	<u>FAC</u>	<u>5%</u>	14 _____			
7. <u>Poa pratensis</u>	<u>herb</u>	<u>FACU</u>	<u>35%</u>	15 _____			
8. <u>Prunus virginiana</u>	<u>shrub</u>	<u>FACU</u>	<u>5%</u>	16 _____			
Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): <u>30%</u>							
Remarks: Less than 50% of the dominant species were OBL, FACW, or FAC							

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required) : <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>5</u> (in.) Depth to Free Water in Pft: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: Indicators of hydrology were observed	



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/8/99</u>
Applicant/Owner: <u>La Plata Investments</u>	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>1</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>2</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Elymus canadensis</u>	<u>Herb FACU 15%</u>	9. _____	_____
2. <u>Artemisia canescens</u>	<u>Herb NL 10%</u>	10. _____	_____
3. <u>Poa pratensis</u>	<u>Herb FACU 20%</u>	11. _____	_____
4. <u>Schizachyrium scoparium</u>	<u>Herb FACU 20%</u>	12. _____	_____
5. _____	_____	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 450%

Remarks:  
Less than 50% of the dominant species were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Crift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: <u>&gt;12</u> (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks:	



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project Site: <u>Upper Pine Creek North Fork</u>	Date: <u>10/9/87</u>
Applicant/Owner: <u>La Plata Irr. Co.</u>	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <input checked="" type="radio"/> Yes <input type="radio"/> No	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? <input type="radio"/> Yes <input checked="" type="radio"/> No	Transect ID: <u>1</u>
Is the area a potential Problem Area? <input type="radio"/> Yes <input checked="" type="radio"/> No (If needed, explain on reverse.)	Sample ID: <u>7</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Salix exigua</u>	<u>Shrub OBL</u>	9. _____	_____
2. <u>Elymus canadensis</u>	<u>Herb FACW</u>	10. _____	_____
3. <u>Ambrosia psilostachya</u>	<u>Herb FAC</u>	11. _____	_____
4. <u>Artemisia campestris</u>	<u>Herb NL</u>	12. _____	_____
5. <u>Symphoricarpos albus</u>	<u>Shrub FACW</u>	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____
Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): <u>60%</u>			
Remarks: <u>Greater than 50% of the dominant species were OBL, FACW, or FAC</u>			

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: <u>&gt; 12</u> (in.) Depth to Free Water in Pft: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>hydrology indicators were observed</u>	

~~in pocket~~

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture; Concretions, Structure, etc.
0-1		2.5Y 4/2			loamy sand
1-4		2.5Y 5/2			sand
4-6		2.5Y 4/2			Sand
6-12		2.5Y 5/3			Sandy loam
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled does not appear to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)	(Circle)
Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	
Hydric Soils Present? <input type="radio"/> Yes <input checked="" type="radio"/> No	
Is this Sampling Point Within a Wetland? Yes <input checked="" type="radio"/> No	
Remarks:	

Approved by HQUSACE 3/32

PREPARED BY: SWCA, INC.

DATA FORM  
ROUTINE WETLAND DETERMINATION  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek North Fork</u> Applicant/Owner: <u>La Plata Investments</u> Investigator: <u>SWCA, Inc.</u>	Date: <u>10/8/99</u> County: <u>El Paso</u> State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes <input checked="" type="radio"/> No <input type="radio"/></span> Is the area a potential Problem Area? (If needed, explain on reverse.) <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span>	Community ID: _____ Transect ID: <u>D</u> Sample ID: <u>10</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Salix exigua</u>	<u>Shrub OBL 50%</u>	9. _____	_____
2. <u>Juncus balticus</u>	<u>Herb OBL 20%</u>	10. _____	_____
3. <u>Elymus canadensis</u>	<u>Herb FACW 5%</u>	11. _____	_____
4. <u>Rosa arkansana</u>	<u>Shrub NI 10%</u>	12. _____	_____
5. <u>Epilobium angustifolium</u>	<u>Herb FAC 5%</u>	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 75%

Remarks:  
*Greater than 50% of the dominant species were OBL, FACW, or FAC*

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: <u>8</u> (in.)	
Remarks: <div style="text-align: center; font-size: 1.2em;">Hydrology indicators were observed</div>	



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/18/99</u>
Applicant/Owner: <u>La Plata Investments</u>	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="radio"/> No <input type="radio"/>	Transect ID: <u>D</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input checked="" type="radio"/> No <input type="radio"/>	Sample ID: <u>11</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Percent	Dominant Plant Species	Stratum Indicator	Percent
1. <u>Eriogonum angustifolium</u>	<u>Herb</u>	<u>FAC</u>	5%	9. _____	_____
2. <u>Veronica americana</u>	<u>Herb</u>	<u>OBL</u>	5%	10. _____	_____
3. <u>Juncus bufonius</u>	<u>Herb</u>	<u>OBL</u>	40%	11. _____	_____
4. <u>Elymus canadensis</u>	<u>Herb</u>	<u>FACW</u>	2%	12. _____	_____
5. <u>Populus deltoides</u>	<u>Tree</u>	<u>FAC</u>	20%	13. _____	_____
6. <u>Lemna minor</u>	<u>Herb</u>	<u>OBL</u>	2%	14. _____	_____
7. <u>Unknown shrub</u>	<u>shrub</u>	_____	15%	15. _____	_____
8. <u>-cultivated sp?</u>	_____	_____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC): 72%

Remarks:  
 Greater than 50% of the dominant species were OBL, FACW, or FAC

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pft: <u>7</u> (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>Hydrology indicators were observed</u>	

SOILS

Map Unit Name (Series and Phase): _____		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type?    Yes    No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast:	Texture; Concretions, Structure, etc.
0-4		10YR 5/3 + N/3	—	—	loamy sand
4-6		10YR 5/3	—	—	Sand / organic matter
6-7		5GY 4/1	—	—	loam
7-12		5GY 5/1 + 2.5Y 5/3	—	—	loamy sand
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input checked="" type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)			
Remarks: The profile sampled appears to have indicators of a hydric soil					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No    (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No    (Circle)
Remarks: All 3 criteria were observed	

Approved by HQUSACE 2/82

PREPARED BY: SWCA, INC.

DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>10/8/99</u>
Applicant/Owner: <u>La Plata Investments</u>	County: <u>El Paso</u>
Investigator: <u>SWCA, Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? Yes <input checked="" type="radio"/> No <input type="radio"/>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? Yes <input type="radio"/> No <input checked="" type="radio"/>	Transect ID: <u>1</u>
Is the area a potential Problem Area? (If needed, explain on reverse.) Yes <input type="radio"/> No <input checked="" type="radio"/>	Sample ID: <u>12</u>

VEGETATION

Dominant Plant Species	Stratum Indicator	Dominant Plant Species	Stratum Indicator
1. <u>Tuncus bufonius</u>	<u>Herb OBL 70%</u>	9. _____	_____
2. <u>Tuncus balticus</u>	<u>Herb OBL 10%</u>	10. _____	_____
3. <u>Ambrosia psilostachya</u>	<u>Herb FAC 10%</u>	11. _____	_____
4. <u>Elymus canadensis</u>	<u>Herb FACW 3%</u>	12. _____	_____
5. _____	_____	13. _____	_____
6. _____	_____	14. _____	_____
7. _____	_____	15. _____	_____
8. _____	_____	16. _____	_____

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 90%

Remarks:  
Greater than 90% of the dominant species were OBL, FACW, or FAC.

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b> Depth of Surface Water: _____ (in.) Depth to Free Water in Pft: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>No hydrology indicators were observed</u>	



DATA FORM  
 ROUTINE WETLAND DETERMINATION  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Upper Pine Creek, North Fork</u>	Date: <u>July 3, 2001</u>
Applicant/Owner: <u>La Plata Investments</u>	County: <u>El Paso</u>
Investigator: <u>Joanne Stewart and Trent Miller, SWCA Inc.</u>	State: <u>Colorado</u>
Do Normal Circumstances exist on the site? <span style="float: right;">X Yes No</span>	Community ID: _____
Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes XNo</span>	Transect ID: <u>D</u>
Is the area a potential Problem Area? (If needed, explain on reverse) <span style="float: right;">Yes XNo</span>	Sample ID: <u>13</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator			Dominant Plant Species	Stratum	Indicator		
1. <u>Achillea lanulosa</u>	<u>herb</u>	<u>FACU</u>	<u>5%</u>		9. _____				
2. <u>Geranium richardsonii</u>	<u>herb</u>	<u>NL</u>	<u>15%</u>		10. _____				
3. <u>Juncus balticus</u>	<u>herb</u>	<u>OBL</u>	<u>20%</u>		11. _____				
4. <u>Salix exigua</u>	<u>shrub</u>	<u>OBL</u>	<u>20%</u>		12. _____				
5. <u>Populus angustifolium</u>	<u>Tree</u>	<u>FACW</u>	<u>5%</u>		13. _____				
6. <u>Populus deltoides</u>	<u>Tree</u>	<u>FAC</u>	<u>5%</u>		14. _____				
7. <u>Poa pratensis</u>	<u>herb</u>	<u>FACU</u>	<u>15%</u>		15. _____				
8. <u>Prunus virginiana</u>	<u>shrub</u>	<u>FACU</u>	<u>5%</u>		16. _____				
Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-):				50%					
Remarks: 50% of the dominant species were OBL, FACW, or FAC									

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other  <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations:  Depth of Surface Water: _____ (in.)  Depth to Free Water in Pft: _____ (in.)  Depth to Saturated Soil: _____ (in.)	
Remarks: No hydrology Indicators were observed	

SOILS

Map Unit Name (Series and Phase) : _____						Drainage Class: _____					
Taxonomy (Subgroup): _____						Field Observations Confirm Mapped Type? Yes No					
Profile Description:											
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture; Concretions, Structure, etc.						
0-12		7.5YR 3/2			Loamy sand						
Hydric Soil Indicators:											
<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors						<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)					
Remarks:											
The profile sampled does not appear to have indicators of a hydric soil.											

WETLAND DETERMINATION

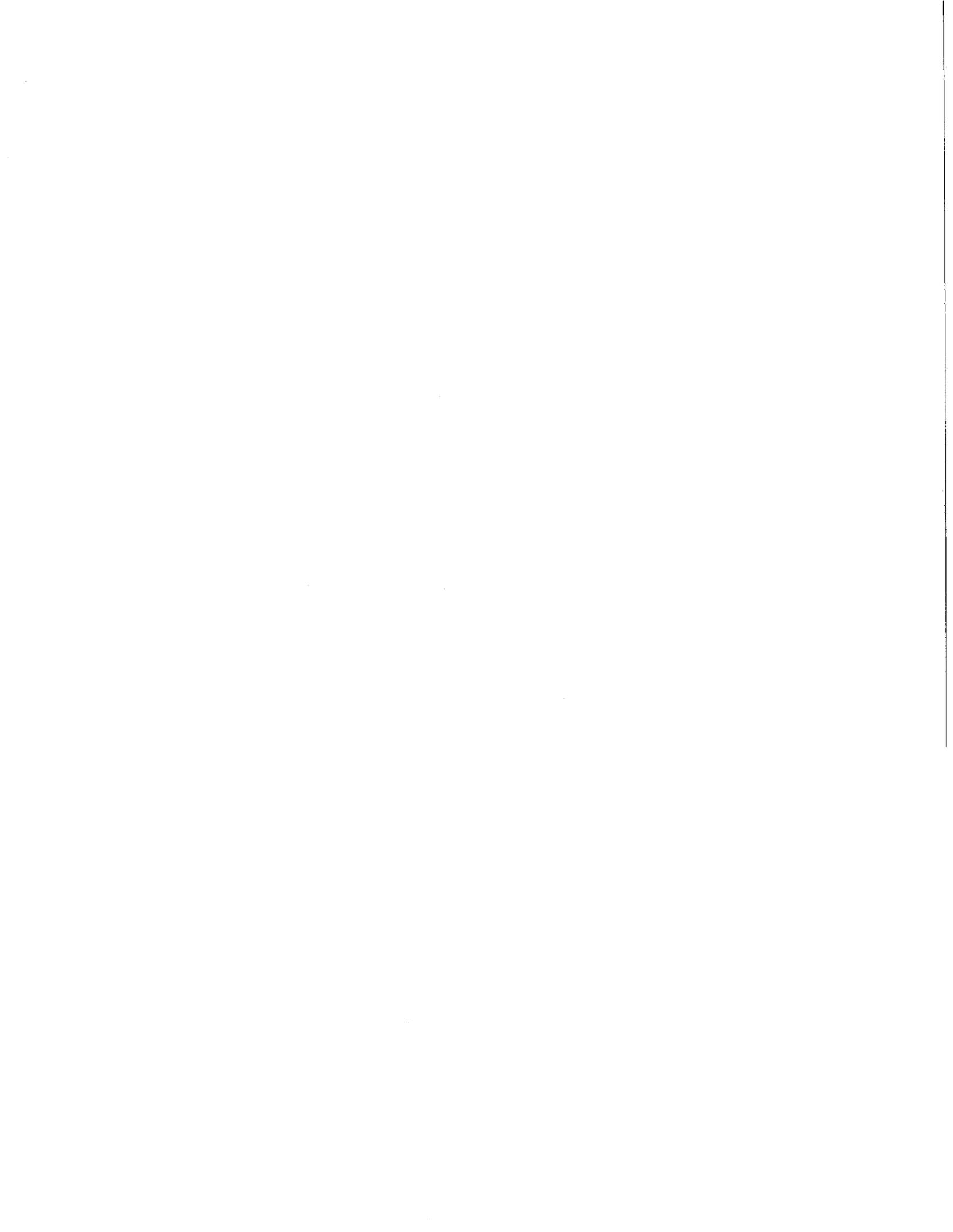
Hydrophytic Vegetation Present?	XYes	No	(Circle)		(Circle)
Wetland Hydrology Present?	Yes	XNo		Is this Sampling Point Within a Wetland?	Yes X No
Hydric Soils Present?	Yes	XNo			
Remarks:					
Not all 3 criteria were observed at this site					

Approved by HQUSACE 3/92

PREPARED BY: SWCA, INC.

## **APPENDIX B**

**Figures 2 through 13: Waters of the U.S./Wetland Delineation Maps**



**APPENDIX C**  
**Letters from the U.S. Army Corps of Engineers**



DEPARTMENT OF THE ARMY  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
SOUTHERN COLORADO REGULATORY OFFICE  
720 NORTH MAIN STREET, SUITE 205  
PUEBLO, COLORADO 81003-3046  
FAX (719) 543-9475

July 5, 2001

REPLY TO  
ATTENTION OF:

Operations Division  
Regulatory Branch

Mr. Trent A. Miller  
SWCA, Incorporated  
8461 Turnpike Drive, Suite 100  
Westminster, CO 80031

Dear Mr. Miller:

This replies to your May 4, 2001 letter requesting a Section 404 jurisdictional determination for isolated waters of the United States for the Briargate Development in the North and South Fork Pine Creek basins in Colorado Springs, El Paso County, Colorado. We have assigned Action No. 2001 00469 to this request.

We have evaluated your draft report entitled, "Delineation of Waters of the U.S. for the Proposed Briargate Development, Located along the North and South Forks of Upper Pine Creek, Colorado Springs, El Paso County, Colorado," dated May 2001 and I visited the site with you on July 3, 2001. We do not concur with your findings of isolated waters within the project site. North Fork Pine Creek, South Fork Pine Creek and all wetlands shown on Figure 2 of your report are tributary to Pine Creek and are not isolated waters. These waters are regulated under provisions of Section 404 of the Clean Water Act. A Department of the Army permit may be required for the discharge of dredged or fill material into these waters.

I understand that you will be submitting a final report to us to confirm the wetland and stream boundaries. If you have any questions, please feel free to contact me at (719) 543-6914 or by email at anita.culp@usace.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Anita E. Culp", is written over a large, stylized signature graphic.

Anita E. Culp  
Senior Project Manager



DEPARTMENT OF THE ARMY  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
SOUTHERN COLORADO REGULATORY OFFICE  
720 NORTH MAIN STREET, SUITE 205  
PUEBLO, COLORADO 81003-3046  
FAX (719) 543-9475

August 7, 2001

REPLY TO  
ATTENTION OF:

Operations Division  
Regulatory Branch

Mr. Trent A. Miller  
SWCA, Incorporated  
8461 Turnpike Drive, Suite 100  
Westminster, CO 80031

Dear Mr. Miller:

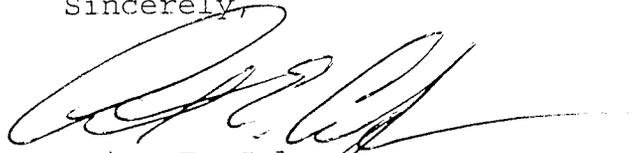
This replies to your July 30, 2001, letter requesting a Section 404 jurisdictional determination for waters of the United States for the proposed Briargate Development in North For Pine Creek and South Fork Pine Creek in Colorado Springs, El Paso County, Colorado. We have assigned Action No. 2001 00469 to this request.

We have evaluated the information you provided in your report, "Waters of the U.S. Delineation for the Proposed Briargate Development, located along the North and South Forks of Upper Pine Creek, Colorado Springs, El Paso County, Colorado" dated July 2001 and concur with your findings of waters of the United States within the project site. I visited the site on July 31, 2001. The North Fork Pine Creek and South Fork Pine Creek, their adjacent wetlands, and nine small wetlands which are tributary to the above streams are regulated under provisions of Section 404 of the Clean Water Act. The wetland and stream jurisdictional boundaries are as mapped on Figures 2 through 13 of your report.

This jurisdictional determination will be valid for 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date.

A Department of the Army permit may be required for the discharge of dredged or fill material into these waters. If you have any questions about this determination or permit requirements, please feel free to contact me at (719) 543-6914 or by email at [anita.e.culp@usace.army.mil](mailto:anita.e.culp@usace.army.mil).

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Culp', with a long horizontal flourish extending to the right.

Anita E. Culp  
Senior Project Manager

## **APPENDIX D**

**Amendment Letter from the U.S. Army Corps of Engineers**



DEPARTMENT OF THE ARMY  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
SOUTHERN COLORADO REGULATORY OFFICE  
720 NORTH MAIN STREET, SUITE 205  
PUEBLO, COLORADO 81003-3046  
FAX (719) 543-9475

August 6, 2002

REPLY TO  
ATTENTION OF:

Operations Division  
Regulatory Branch

Mr. Trent A. Miller  
SWCA, Incorporated  
8461 Turnpike Drive, Suite 100  
Westminster, CO 80031

Dear Mr. Miller:

Reference my August 7, 2001 letter verifying your jurisdictional determination for waters of the United States for the proposed Briargate Development in North Fork Pine Creek and South Fork Pine Creek in Colorado Springs, El Paso County, Colorado, Action No. 2001 00469.

In a note dated July 23, 2002, Mr. Vance Fossinger of JR Engineering requested reconsideration of the mapping in your report entitled, "Waters of the U.S. Delineation for the Proposed Briargate Development, located along the North and South Forks of Upper Pine Creek, Colorado Springs, El Paso County, Colorado" dated July 2001. We have also considered the jurisdictional mapping done by the Colorado Department of Transportation (CDOT) for their North Powers Boulevard expansion project. The wetlands as indicated on the enclosed drawing, "Figure 2, 2001 00469, revised by Corps of Engineers, 6 August 2002," are considered not jurisdictional and a Department of the Army permit will not be required for the discharge of dredged or fill material into these wetlands. The wetlands and nonwetland stream channel shown on the enclosed drawing, "2001 00469 (from CDOT mapping), revised by Corps of Engineers, 6 August 2002" is added to your mapping as jurisdictional waters.

This jurisdictional determination will be valid for 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date.

If you have any questions about this determination or permit requirements, please feel free to contact me at (719) 543-6914 or by email at anita.e.culp@usace.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read 'Anita E. Culp', written over a horizontal line.

Anita E. Culp  
Senior Project Manager

2 Enclosures:

1. Figure 2
2. CDOT Map

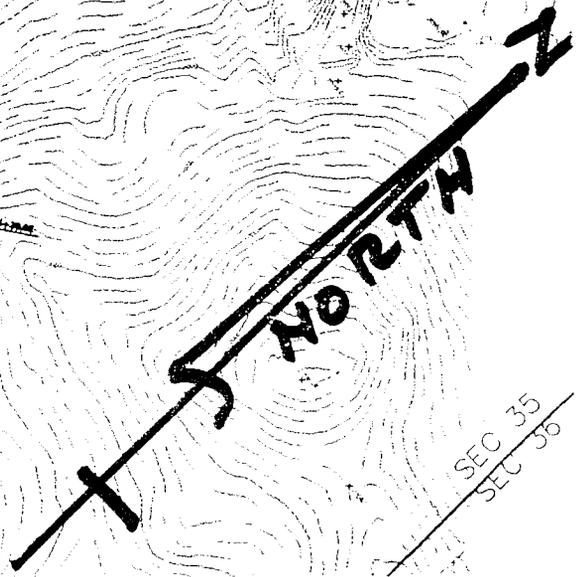
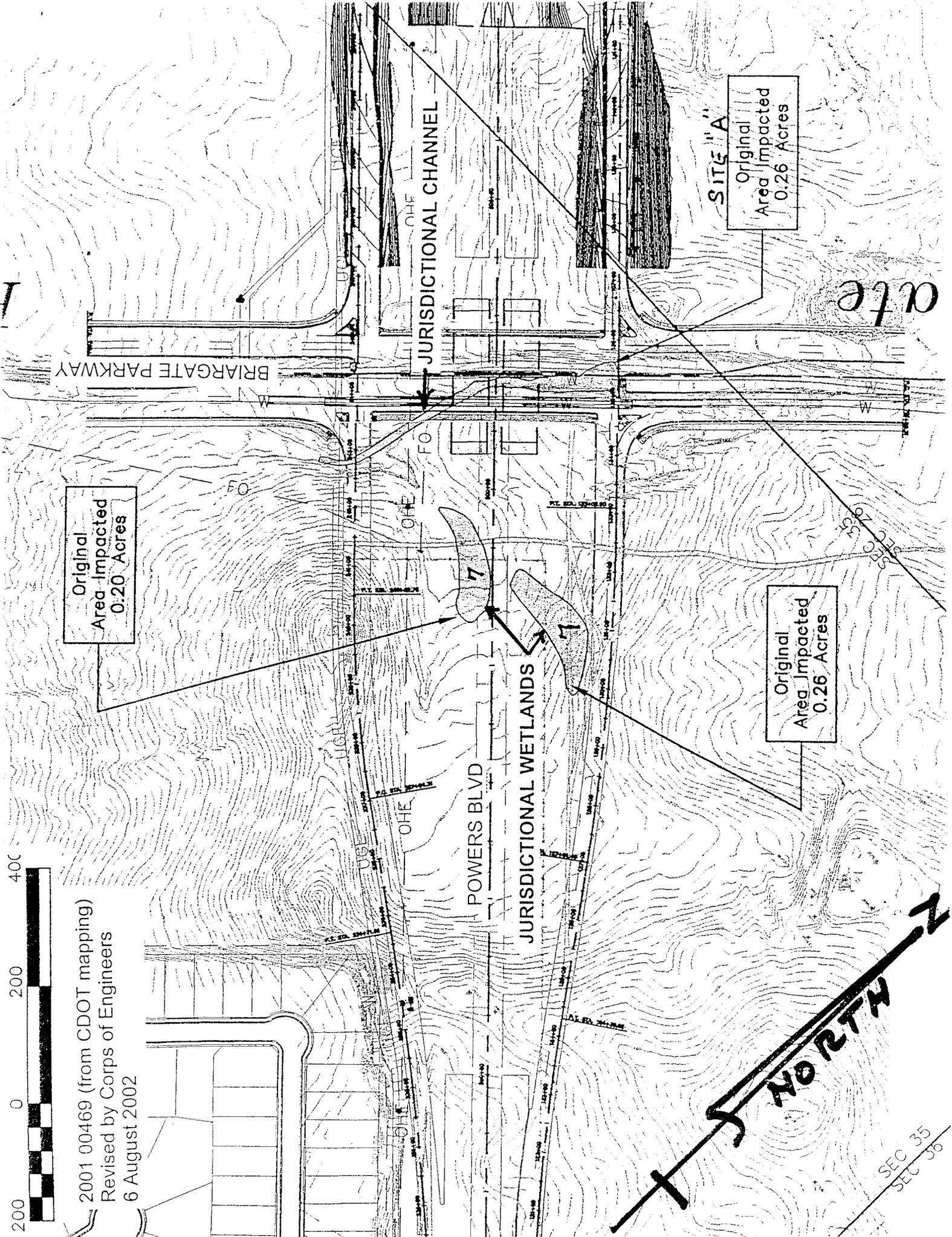
Copies Furnished (with enclosures):

Mr. Vancel S. Fossinger  
JR Engineering  
4310 ArrowsWest Drive  
Colorado Springs, CO 80907-3449

Mr. Thomas Taylor  
La Plata Investments, LLC  
2315 Briargate Parkway, Suite 100  
Colorado Springs, CO 80920



2001 00469 (from CDOT mapping)  
Revised by Corps of Engineers  
6 August 2002



SEC 35  
SEC 36

**APPENDIX B**  
**Photographs of Kettle Creek Property**

Proposed Kettle Creek Preserve, El Paso County, Colorado  
July, 2002



Photo 1. Example of riparian corridor of Kettle Creek.



Photo 2. Example of riparian and upland area on Kettle Creek.

Proposed Kettle Creek Preserve, El Paso County, Colorado  
July, 2002



Photo 3. Example of riparian corridor and upland area of Kettle Creek.

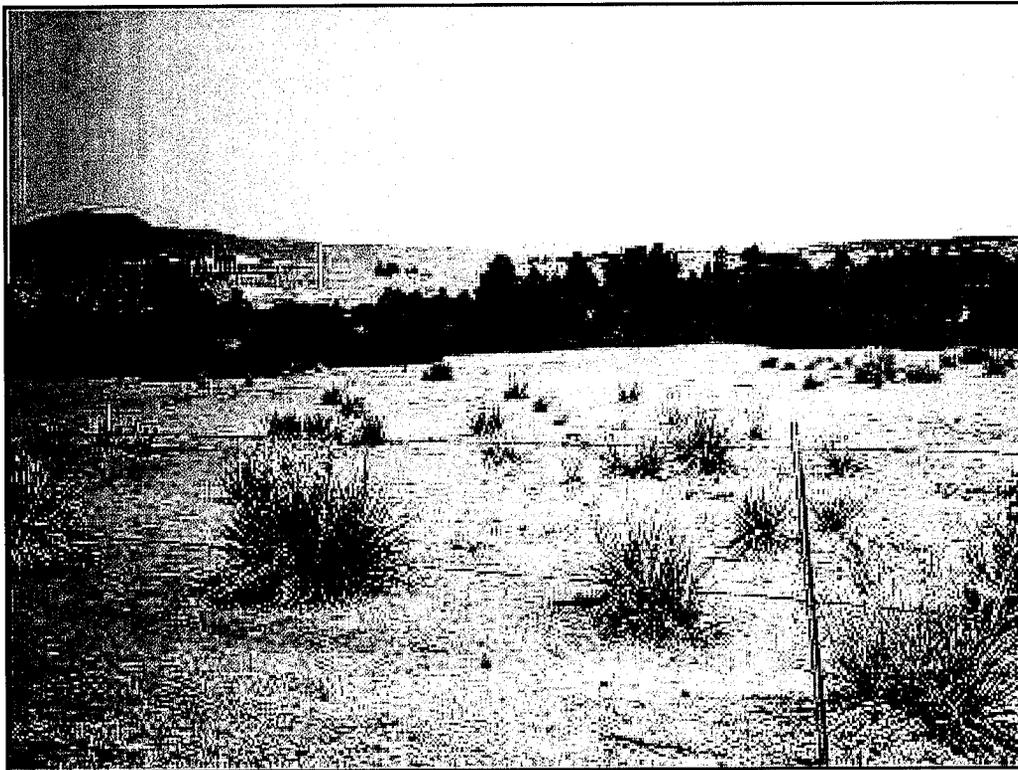


Photo 4. Example of heavily grazed upland area proposed for enhancement on the Kettle Creek Property.

Proposed Kettle Creek Preserve, El Paso County, Colorado  
July, 2002



Photo 5. Example of eroded trail on the Kettle Creek Property proposed for stabilization and seeding.



Photo 6. Example of extensively grazed upland area on the Kettle Creek Property proposed for enhancement.

**APPENDIX C  
TPL Endowment Worksheet**

## Trust for Public Land

### Worksheet Calculating the Costs of Stewardship and Defense of the Kettle Creek Preserve Conservation Easement and the Endowment Needed to Support it

#### Kettle Creek Preserve Conservation Easement

#### A. Assumptions

*Commentary:* The numbers in Section A are designed specifically for this easement and are called the assumptions. These assumptions are estimates drawn from experience.

##### 1. Staff and Overhead Costs

Annual salary (single parent, two children)	\$45,000.00
Hours worked per year (50 wks x 40 hrs/wk less 7 holidays x 8 hrs/day)	1,944
Salary per hour (annual salary / hours worked per year)	\$23.148
Overhead @39% / staff member / hour (benefits, rent, typing, phone, computer)	\$9.028

##### 2. Travel Costs for a Site Visit

Reimbursement per mile (as of 1.1.01 per IRS)	\$0.345
Average miles for a round trip (office to property and return)	130
Average vehicular speed for entire trip	70
Reimbursable travel expenses (lodging, parking)	\$25.00

##### 3. Monitoring Costs

Hard costs	
Film purchase and developing costs	\$16.00
Cost of annual supplies	\$10.00
Average long distance telephone costs/year	\$10.00
Staff time for Monitoring	
Average pre-monitoring time	1
Average time spent monitoring	3
Average post-monitoring time	4

#### **4. Frequency of Exercise of Reserved Rights, Management Plan updates etc.**

How often will reserved rights etc. be exercised in a 20-year period?

Therefore the likelihood of exercise of reserved right etc. in any one year is:

Average staff hours needed for exercise of reserved rights etc. per time

Number of site visits required to review change per time

#### **5. Annual Landowner Relations**

Staff time needed for annual landowner relations

Likely hard costs per landowner per year (e.g. newsletter, postage, etc.)

#### **6. Easement Violations**

Negotiations prior to obtaining counsel

How often will negotiations be anticipated in a 20-year period?

Therefore likelihood of negotiations in a 20 year period is:

Average staff hours needed for negotiations to head off violation

Number of site visits required to head off (stop) a violation

#### **7. Costs of defending an easement**

Staff time needed to defend an easement

Costs of obtaining legal counsel

Additional costs (e.g. expert witnesses etc.)

#### **8. Endowment Assumptions**

Average 30 year Treasury Bond rate of return (1978-97)

Average inflation rate (1978-97)

Therefore the Treasury Bond rate less the inflation rate is:

## B. Formulas

*Commentary:* The following computations are used to calculate the overall expenses for certain rates or activities used in the final calculation. Assumptions from Section A above are used in the formulas.

### 1. Hourly staff rate (including overhead)

Salary costs per hour

Overhead costs per staff member per hour

**Total:** Hourly staff rate

### 2. Travel Costs for Each Site Visit

*Commentary:* Only those costs associated with traveling to and from an easement have been calculated here.

Mileage reimbursement: mileage x reimbursement rate

Staff costs for travel time:

hourly staff rate x (mileage divided by average vehicular speed)

Reimbursable travel expenses

**Total:** Travel Costs for Each Site Visit

## C. Annual Expenses

*Commentary:* The following expenses add up to the annual costs for monitoring an easement. Either refer to the formulas in Section B or refer to the assumptions in Section A above.

### 1. Annual Monitoring Expenses

Pre-monitoring staff costs: hourly staff rate x staff time needed  
Monitoring staff costs: hourly staff rate x staff time needed  
Monitoring: hard costs  
Post-monitoring staff costs: hourly staff rate x staff time needed  
Travel costs for all site visits (2 per year; see formula #2 above)  
**Total Annual Monitoring Expenses**

### 2. Annual Landowner Relations Costs

Costs of staff time: hourly staff rate x hours needed  
Costs of supplies  
**Total Annual Landowner Relations Costs**

### 3. Per Year Cost of Exercise of Reserved Rights

Staff costs: hourly staff rate x hours needed  
Travel costs for each site visit (see formula #2 above) x # of visits  
Costs of exercise of reserved right every 20 years  
x percentage likelihood of right being exercised within 20 years)  
**Total:** Per year cost of exercise of reserved right

### 4. Per Year Cost of Negotiations Over Violations:

Staff costs: hourly staff rate x hours needed  
Travel costs for each site visit (see formula #2 above) x # of visits  
Cost of one negotiations over violations ever 20 years  
x percentage likelihood of negotiations within 20 years  
**Total:** Per year cost of negotiations

### Total Annual Expenses

## D. Endowment Needed to Fund Annual Expenses

*Commentary:* The following calculation gives the size of the endowment necessary to generate enough interest to:

- a. pay for the annual monitoring costs
- b. reinvest sufficient monies so the endowment will grow sufficiently to compensate for the effects of inflation.

Total Annual Costs (see above)

**divided by** the difference between Treasury Bond rate

and the interest rate (see assumption above where  $4.0\% = .040$ )

**Subtotal:** Endowment Needed

## E. Costs of Defending an Easement

*Commentary:* The future Prebles Meadow Jumping Mouse land trust must have adequate resources to defend easements against potential violations, in perpetuity. Such an endowment is crucial to its being a viable stewardship organization. The value of this easement to preservation of the Prebles Meadow Jumping Mouse depends crucially on the ability of the future land trust to enforce this and other easements.

Staff time needed to defend an easement x hourly staff rate  
Costs of obtaining legal counsel  
Additional costs

**Total:** Cost of Defending an Easement

Cost in any given year (10% likelihood)  
**divided by** the difference between Treasury Bond rate  
and the interest rate (see assumption above where 4.0% = .040)  
**Total:** Endowment Needed

## **F. Total Funds Needed to Accept, Monitor, and Defend the Easement**

Total: Stewardship Endowment Needed to Fund Annual Costs

Total: Costs of Defending an Easement

**Total:** Funds needed to accept, monitor and defend the easement

Note: The monies collected will be invested in a long term, secure, managed investment program  
The principal will never, ever be withdrawn.

**APPENDIX D  
Pine Creek and Kettle Creek  
Deed Restrictions**

NOTICE OF RESTRICTION

STATE OF COLORADO )  
 ) ss.  
COUNTY OF EL PASO )

KNOW ALL MEN BY THESE PRESENTS THAT:

LP47, LLC, d/b/a LA PLATA INVESTMENTS, a Colorado limited liability company, is the owner of that certain real property more particularly described in Exhibit A (the "Property") attached hereto and incorporated herein. The Property is shown on Exhibit B attached hereto and incorporated herein. The Property is subject to the "Final Environmental Assessment and Habitat Conservation Plan for The Briargate Development," located along upper Pine Creek, Colorado Springs, El Paso County, Colorado, dated February, 2003 (the "Plan"), prepared on behalf of La Plata Investments by SWCA, Inc. for the United States Fish and Wildlife Service ("USFWS"). In particular, it is the primary purpose of this Restriction to foster management of the Riparian Zone and the wildlife habitat contained therein in such a manner as best benefits the Preble's meadow jumping mouse ("PMJM"). Any purchaser of all or any part of the Property, or any person having an interest in or proposing to acquire an interest in all or part of the Property, is hereby notified of certain development restrictions affecting the Property, including the following, which are conditions of the Plan:

1. Except as explicitly described in the Plan, no alterations will occur in the area described as Preble's meadow jumping mouse ("PMJM") habitat areas that would adversely affect the biological value of the PMJM's habitat, including but not limited to dumping or placing soil or other material, such as trash, mowing, removal or destruction of vegetation (with the exception of weed control), excavation or removal of soil, and activities detrimental to flood control, water conservation or erosion control.
2. This restriction may not be removed without the prior written approval of the USFWS.

Executed this 27<sup>th</sup> day of February, 2003.

OWNER:

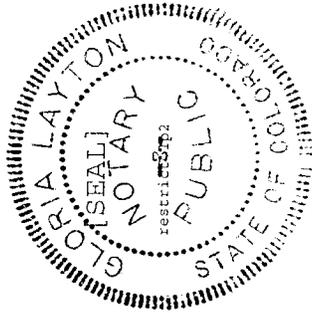
LP47, LLC

By *Scott E. Smith*  
Scott E. Smith, Manager

The foregoing instrument was acknowledged before me this 27<sup>th</sup> day of February, 2003 by Scott E. Smith as Manager of LP47, LLC.

Witness my hand and official seal.

My commission expires: September 13, 2004.



*Gloria Layton*  
Notary Public



**EXHIBIT "A"**

JR JOB NO. 9570.20 – 01  
DECEMBER 12, 2002  
PAGE 1 OF 2

**LEGAL DESCRIPTION:**

KETTLE CREEK PREBLE'S MEADOW JUMPING MOUSE PRESERVE  
BOUNDARY

A TRACT OF LAND BEING PORTIONS OF SECTION 22, THE EAST HALF OF SECTION 21, AND THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARING:**

THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BEING MONUMENTED AT THE SOUTH QUARTER CORNER BY A 2" BRASS CAP STAMPED "LS 6359" AND MONUMENTED AT THE SOUTHEAST CORNER OF SECTION 21 BY A 3-1/4" ALUMINUM CAP STAMPED "LS 10956", BEING ASSUMED TO BEAR N89°12'13"E, A DISTANCE OF 2642.18 FEET.

BEGINNING AT THE SOUTH QUARTER CORNER OF SAID SECTION 21; THENCE N00°14'40"W ON THE NORTH-SOUTH CENTERLINE OF SAID SECTION 21, A DISTANCE OF 3062.15 FEET;

THENCE S55°04'31"E, A DISTANCE OF 42.68 FEET;

THENCE N34°42'12"E, A DISTANCE OF 425.89 FEET;

THENCE N38°54'24"E, A DISTANCE OF 731.47 FEET;

THENCE N89°18'05"E, A DISTANCE OF 1256.71 FEET;

THENCE S14°19'38"E, A DISTANCE OF 19.85 FEET;

THENCE S33°13'25"E, A DISTANCE OF 184.63 FEET;

THENCE S54°37'12"W, A DISTANCE OF 297.96 FEET;

THENCE S26°57'20"W, A DISTANCE OF 512.77 FEET;

THENCE S13°34'04"E, A DISTANCE OF 841.34 FEET;

THENCE S69°21'22"E, A DISTANCE OF 976.90 FEET;

THENCE S13°01'15"E, A DISTANCE OF 680.00 FEET TO A POINT ON THE NORTHERLY LINE OF THE TRACT LAND DESCRIBED IN BOOK 5301 AT PAGE 824, RECORDS OF EL PASO COUNTY COLORADO;

THENCE ON THE BOUNDARY LINE OF SAID TRACT OF LAND THE FOLLOWING TWO (2) COURSES:

1. S89°06'30"W, A DISTANCE OF 1000.00 FEET;

2. S00°52'52"E, A DISTANCE OF 1562.35 FEET TO A POINT, ON THE NORTHERLY BOUNDARY LINE OF AN EASEMENT FOR KETTLE CREEK DETENTION POND "F", RECORDED UNDER RECEPTION NO. 201135067, EL PASO COUNTY, COLORADO;

THENCE ON SAID NORTHERLY BOUNDARY LINE OF SAID EASEMENT FOR KETTLE CREEK DETENTION FACILITY "F", THE FOLLOWING TWO (2) COURSES:

1. N45°25'31"W, A DISTANCE OF 128.35 FEET;

2. S68°18'30"W, A DISTANCE OF 405.00 FEET TO A POINT, SAID POINT BEING ON THE EASTERLY BOUNDARY LINE OF LOT 1 OF CREEKSIDE ESTATES FILING NO. 3, RECORDED IN PLAT BOOK G-5 AT PAGE 125, EL PASO COUNTY, COLORADO;

THENCE ON THE BOUNDARY LINE OF SAID CREEKSIDE ESTATES FILING NO. 3, THE FOLLOWING ELEVEN (11) COURSES:

1. N24°00'56"W, A DISTANCE OF 25.59 FEET;

2. S65°59'04"W, A DISTANCE OF 55.00 FEET TO A POINT OF CURVE;

3. ON THE ARC OF A CURVE TO THE RIGHT, WHOSE CENTER BEARS N24°00'56"W, HAVING A DELTA OF 30°41'00", A RADIUS OF 195.00 FEET, A DISTANCE OF 104.43 FEET;

4. N83°19'56"W, A DISTANCE OF 285.82 FEET;

5. N06°40'04"E, A DISTANCE OF 290.57 FEET;

6. S89°12'13"W, A DISTANCE OF 392.68 FEET;

7. S74°12'04"W, A DISTANCE OF 240.00 FEET;

8. S51°41'43"W, A DISTANCE OF 314.07 FEET;
9. S00°16'26"E, A DISTANCE OF 490.79 FEET;
10. S06°40'05"W, A DISTANCE OF 152.59 FEET;
11. S36°13'34"W, A DISTANCE OF 67.84 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF EXISTING OLD RANCH ROAD;

THENCE S78°58'03"W ON SAID NORTHERLY RIGHT-OF-WAY, A DISTANCE OF 91.26 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 28;  
THENCE N00°15'31"W ON SAID WEST LINE, A DISTANCE OF 965.81 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 186.59 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JONATHAN W. TESSIN, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEFS ARE CORRECT.



*Jonathan W. Tessin*  
33196

JONATHAN W. TESSIN, PROFESSIONAL LAND SURVEYOR  
COLORADO PROFESSIONAL LAND SURVEYORS BOARD  
FOR AND ON BEHALF OF J.W. TESSIN ENGINEERING, LLC

*February 27, 2003*  
DATE

NOTICE OF RESTRICTION

STATE OF COLORADO )  
 ) ss.  
COUNTY OF EL PASO )

KNOW ALL MEN BY THESE PRESENTS THAT:

LP47, LLC, d/b/a LA PLATA INVESTMENTS, a Colorado limited liability company, is the owner of that certain real property more particularly described in Exhibits A1, A2, A3, A4, A5 and A6 (the "Property") attached hereto and incorporated herein. The Property is shown on Exhibits B1, B2, B3, B4, B5 and B6 attached hereto and incorporated herein. The Property is subject to the "Final Environmental Assessment and Habitat Conservation Plan for The Briargate Development," located along upper Pine Creek, Colorado Springs, El Paso County, Colorado, dated February, 2003 (the "Plan"), prepared on behalf of La Plata Investments by SWCA, Inc. for the United States Fish and Wildlife Service ("USFWS"). In particular, it is the primary purpose of this Restriction to foster management of the Riparian Zone and the wildlife habitat contained therein in such a manner as best benefits the Preble's meadow jumping mouse ("PMJM"). Any purchaser of all or any part of the Property, or any person having an interest in or proposing to acquire an interest in all or part of the Property, is hereby notified of certain development restrictions affecting the Property, including the following, which are conditions of the Plan:

1. Except as explicitly described in the Plan, no alterations will occur in the area described as Preble's meadow jumping mouse ("PMJM") habitat areas that would adversely affect the biological value of the PMJM's habitat, including but not limited to dumping or placing soil or other material, such as trash, mowing, removal or destruction of vegetation (with the exception of weed control), excavation or removal of soil, and activities detrimental to flood control, water conservation or erosion control.
2. This restriction may not be removed without the prior written approval of the USFWS.

Executed this 27th day of February, 2003.

OWNER:

LP47, LLC

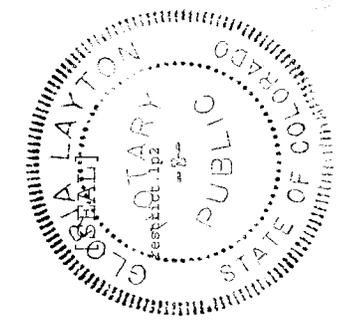


By \_\_\_\_\_  
Scott E. Smith, Manager

The foregoing instrument was acknowledged before me this 27th day of February, 2003 by Scott E. Smith as Manager of LP47, LLC.

Witness my hand and official seal.

My commission expires: September 13 2004.



\_\_\_\_\_  
Gloria Layton  
Notary Public

**“EXHIBIT A1”**

JOB NO. 8717.45 – 13  
FEBRUARY 26, 2003  
PAGE 1 OF 2

**LEGAL DESCRIPTION:** EA/HCP – LP47 OWNERSHIP PARCEL 1 (HCP AREA 1)

A TRACT OF LAND BEING PORTIONS OF THE SOUTH HALF OF SECTION 28 AND THE NORTH HALF OF SECTION 33, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

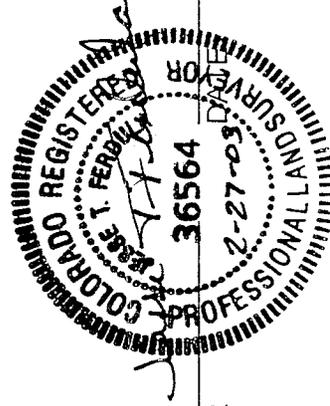
A LINE ON THE NORTHERLY RIGHT-OF-WAY LINE OF LEXINGTON DRIVE, AS PLATTED IN PINE CREEK VILLAGE CENTER FILING NO. 3, RECORDED UNDER RECEPTION NO. 99164240, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT THE EAST AND WEST ENDS BY 1-1/2" ALUMINUM SURVEYOR'S CAPS STAMPED "JR ENG PLS 17502," ASSUMED TO BEAR N84°07'19"E, A DISTANCE OF 231.97 FEET.

COMMENCING AT THE EAST END OF SAID RIGHT-OF-WAY LINE; THENCE N65°11'31"E, A DISTANCE OF 384.43 FEET TO THE POINT OF BEGINNING;  
THENCE N21°17'10"E, A DISTANCE OF 102.24 FEET;  
THENCE S62°52'58"E, A DISTANCE OF 225.31 FEET;  
THENCE S53°05'40"E, A DISTANCE OF 251.60 FEET;  
THENCE S65°49'20"E, A DISTANCE OF 128.33 FEET;  
THENCE S24°10'40"W, A DISTANCE OF 34.05 FEET;  
THENCE N58°28'12"W, A DISTANCE OF 32.53 FEET;  
THENCE N59°36'28"W, A DISTANCE OF 40.23 FEET;  
THENCE N64°24'26"W, A DISTANCE OF 98.50 FEET;  
THENCE N64°23'22"W, A DISTANCE OF 85.53 FEET;  
THENCE N61°52'54"W, A DISTANCE OF 104.20 FEET;  
THENCE N71°02'30"W, A DISTANCE OF 234.39 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 34,429 SQUARE FEET.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

**“EXHIBIT A2”**

JOB NO. 8717.45 – 11  
FEBRUARY 26, 2003  
PAGE 1 OF 2

**LEGAL DESCRIPTION:** EA/HCP – LP47 OWNERSHIP PARCEL 2 (HCP AREA 2)

A TRACT OF LAND BEING PORTIONS OF THE SOUTH HALF OF SECTION 27 AND 26, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE WESTERLY BOUNDARY LINE OF PINE CREEK FILING NO. 33, RECORDED UNDER RECEPTION NO. 202043124, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED ON THE NORTH AND SOUTH ENDS BY A 1-1/2" ALUMINUM SURVEYOR'S CAP STAMPED "JR ENG PLS 17502," BEING ASSUMED TO BEAR S45°09'04"E, A DISTANCE OF 293.58 FEET.

COMMENCING AT THE NORTHWEST CORNER OF LOT 13, AS PLATTED IN SAID PINE CREEK SUBDIVISION FILING NO. 33; THENCE ON THE WESTERLY BOUNDARY LINE OF SAID PINE CREEK SUBDIVISION FILING NO. 33, SAID POINT BEING THE POINT OF BEGINNING, THE FOLLOWING TWO (2) COURSES:

1. S45°09'04"E, A DISTANCE OF 282.29 FEET;
2. S39°43'25"E, A DISTANCE OF 61.86 FEET;

THENCE S59°40'37"W, A DISTANCE OF 169.79 FEET TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, WHOSE CENTER BEARS N43°51'26"W, HAVING A DELTA OF 16°03'08", A RADIUS OF 698.68 FEET, A DISTANCE OF 195.74 FEET TO A POINT ON THE EASTERLY BOUNDARY LINE OF PINE CREEK SUBDIVISION FILING NO. 24, AS RECORDED UNDER RECEPTION NO. 202014364;  
THENCE ON THE EASTERLY BOUNDARY LINE OF SAID PINE CREEK SUBDIVISION FILING NO. 24, THE FOLLOWING THREE (3) COURSES:

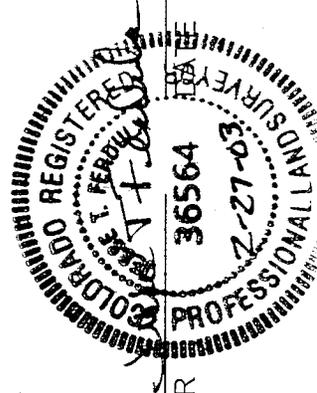
1. N48°05'47"W, A DISTANCE OF 111.39 FEET;
2. N23°06'36"W, A DISTANCE OF 185.40 FEET;
3. N34°59'49"W, A DISTANCE OF 85.06 FEET;

THENCE N68°05'16"E, A DISTANCE OF 146.26 FEET TO A POINT OF CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 20°05'00", A RADIUS OF 439.66 FEET, A DISTANCE OF 154.11 FEET TO A POINT ON CURVE, SAID POINT BEING ON THE WESTERLY BOUNDARY OF SAID PINE CREEK FILING NO. 33;  
THENCE S45°09'04"E, ON SAID BOUNDARY LINE, A DISTANCE OF 5.29 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 2.740 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



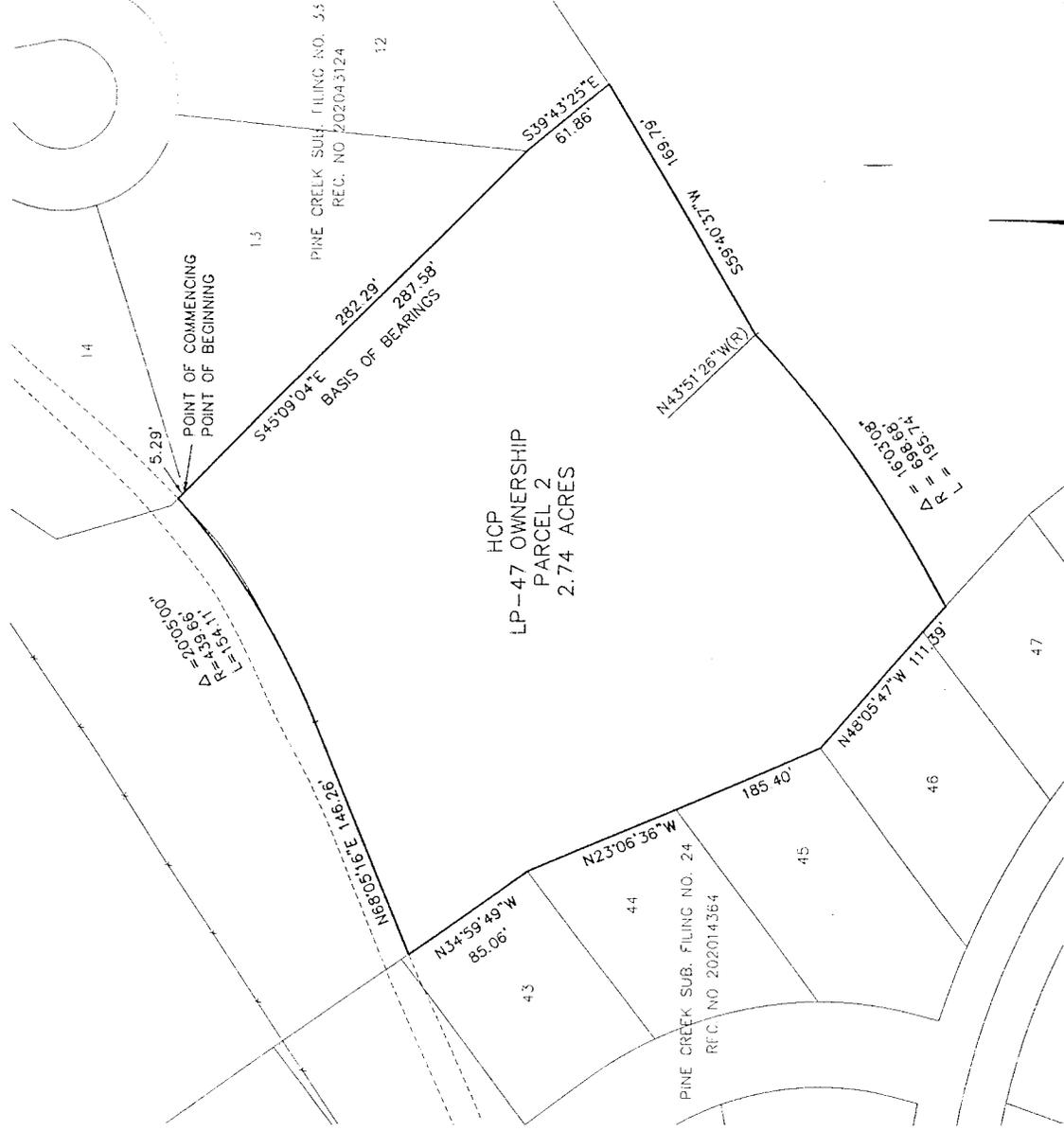
JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



**J·R ENGINEERING**  
A Subsidiary of Westrian

4310 ArroyoWest Drive • Colorado Springs, CO 80907  
719-593-2593 • Fax 719-528-6613 • www.jrengineering.com

EXHIBIT "B2"EA/HCP  
LP-47 OWNERSHIP PARCEL 2  
JOB NO. 28717.45  
SHEET 2 OF 2  
FEBRUARY 26, 2003



SCALE: 1" = 100'



JR ENGINEERING DOES NOT EXPRESS NOR IMPLY ANY WARRANTY WITH THE ABOVE WRITTEN LEGAL DESCRIPTION AND EXHIBIT. THE LEGAL DESCRIPTION WAS WRITTEN FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT DEPICT A MONUMENTED LAND SURVEY.

**“EXHIBIT A3”**

JOB NO. 8717.45 – 09  
FEBRUARY 26, 2003  
PAGE 1 OF 4

**LEGAL DESCRIPTION:** EA/HCP – LP47 OWNERSHIP PARCEL 3 (HCP AREA 2)

A TRACT OF LAND BEING PORTIONS OF THE SOUTH HALF OF SECTION 27 AND 26, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE PLAT OF PINE CREEK FILING NO. 16, AS RECORDED UNDER RECEPTION NO. 202032593, RECORDS OF EL PASO COUNTY, COLORADO.

COMMENCING AT THE NORTHWEST CORNER OF THE INTERSECTION OF ROYAL PINE DRIVE AND PINE MANOR DRIVE OF SAID PINE CREEK FILING NO. 16, SAID POINT BEING THE POINT OF BEGINNING;  
THENCE ON THE NORTHERLY RIGHT-OF-WAY LINE OF SAID PINE MANOR DRIVE, THE FOLLOWING SIX (6) COURSES:

1. S28°30'00"W, A DISTANCE OF 35.91 FEET TO A POINT OF CURVE;
2. ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 33°16'25", A RADIUS OF 470.00 FEET, A DISTANCE OF 272.95 FEET TO A POINT OF TANGENT;
3. S61°46'25"W, A DISTANCE OF 696.17 FEET TO A POINT OF CURVE;
4. ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 16°39'25", A RADIUS OF 780.00 FEET, A DISTANCE OF 226.76 FEET TO A POINT OF TANGENT;
5. S45°07'00"W, A DISTANCE OF 40.40 FEET TO A POINT OF CURVE;
6. ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 13°46'57", A RADIUS OF 745.00 FEET, A DISTANCE OF 179.21 FEET TO A POINT ON CURVE;

THENCE N31°06'03"W, A DISTANCE OF 16.03 FEET;

THENCE N17°00'00"E, A DISTANCE OF 136.48 FEET TO A POINT ON THE PROPOSED BOUNDARY OF PINE CREEK FILING NO. 17;

THENCE ON THE SAID PROPOSED BOUNDARY, THE FOLLOWING TEN (10) COURSES:

1. N51°00'00"W, A DISTANCE OF 298.55 FEET;
2. N15°00'00"W, A DISTANCE OF 191.48 FEET;
3. N02°00'00"E, A DISTANCE OF 158.60 FEET;
4. N63°00'00"W, A DISTANCE OF 56.57 FEET;
5. N79°00'00"W, A DISTANCE OF 173.90 FEET;
6. S88°30'00"W, A DISTANCE OF 95.22 FEET;
7. S75°00'00"W, A DISTANCE OF 104.91 FEET;
8. S50°30'00"W, A DISTANCE OF 292.49 FEET;
9. S57°00'00"W, A DISTANCE OF 160.21 FEET;
10. S33°00'00"E, A DISTANCE OF 111.45 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF PROPOSED PINE BROOK DRIVE;

THENCE ON SAID NORTHERLY RIGHT-OF-WAY LINE, ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 27°12'29", A RADIUS OF 325.00 FEET, A DISTANCE OF 154.33 FEET TO A POINT ON THE EASTERLY BOUNDARY OF PINE CREEK FILING NO. 13, RECORDED UNDER RECEPTION NO. 99028694, RECORDS OF EL PASO COUNTY, COLORADO;

THENCE ON SAID BOUNDARY, THE FOLLOWING NINE (9) COURSES:

1. N51°52'45"W, A DISTANCE OF 112.48 FEET;
2. S69°16'49"W, A DISTANCE OF 159.01 FEET;
3. S58°26'18"W, A DISTANCE OF 89.17 FEET;
4. S68°26'09"W, A DISTANCE OF 69.55 FEET;
5. N83°47'19"E, A DISTANCE OF 71.05 FEET;

6. S88°19'43"W, A DISTANCE OF 150.00 FEET;
7. S83°19'40"W, A DISTANCE OF 95.53 FEET;
8. S72°36'31"W, A DISTANCE OF 101.36 FEET;
9. S56°51'18"W, A DISTANCE OF 87.23 FEET;

THENCE N41°02'23"W, A DISTANCE OF 92.29 FEET;  
THENCE N10°46'01"W, A DISTANCE OF 83.38 FEET;  
THENCE S69°25'07"W, A DISTANCE OF 54.13 FEET;  
THENCE S73°40'01"W, A DISTANCE OF 79.11 FEET;  
THENCE S45°57'50"W, A DISTANCE OF 47.36 FEET;  
THENCE S55°00'29"W, A DISTANCE OF 113.64 FEET;  
THENCE N04°05'29"W, A DISTANCE OF 58.85 FEET;  
THENCE N04°32'40"E, A DISTANCE OF 75.66 FEET;  
THENCE N15°16'20"E, A DISTANCE OF 81.83 FEET;  
THENCE N25°13'55"E, A DISTANCE OF 84.96 FEET;  
THENCE N27°30'26"E, A DISTANCE OF 63.71 FEET;  
THENCE N47°31'46"E, A DISTANCE OF 65.40 FEET;

THENCE S56°19'12"W, A DISTANCE OF 137.94 FEET TO A POINT ON THE BOUNDARY OF PINE CREEK FILING NO. 33, RECORDED UNDER RECEPTION NO. 202043124, RECORDS OF EL PASO COUNTY, COLORADO;

THENCE ON SAID BOUNDARY, THE FOLLOWING FOUR (4) COURSES:

1. N36°07'44"E, A DISTANCE OF 295.11 FEET;
2. N65°00'00"E, A DISTANCE OF 395.61 FEET;
3. N58°30'00"E, A DISTANCE OF 456.48 FEET;
4. N21°30'00"E, A DISTANCE OF 419.51 FEET TO A POINT ON THE BOUNDARY OF PINE CREEK FILING NO. 33, BEING COINCIDENT WITH THE BOUNDARY OF PINE CREEK FILING NO. 32, RECORDED UNDER RECEPTION 201179208, RECORDS OF EL PASO COUNTY, COLORADO;

THENCE ON SAID BOUNDARY, THE FOLLOWING TWO (2) COURSES:

1. N63°30'00"E, A DISTANCE OF 616.07 FEET;
2. N53°00'00"E, A DISTANCE OF 195.30 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF HEARTWOOD DRIVE;

THENCE ON SAID RIGHT-OF-WAY LINE, THE FOLLOWING COURSE:

1. ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 15°57'18", A RADIUS OF 425.00 FEET, A DISTANCE OF 118.35 FEET TO A POINT ON THE WESTERLY BOUNDARY OF PROPOSED PINE CREEK SUBDIVISION FILING NO. 36;

THENCE ON SAID BOUNDARY, THE FOLLOWING NINETEEN (19) COURSES:

1. S05°00'00"W, A DISTANCE OF 215.33 FEET;
2. S30°00'00"W, A DISTANCE OF 92.84 FEET;
3. S73°08'22"W, A DISTANCE OF 98.96 FEET;
4. N77°59'20"W, A DISTANCE OF 132.83 FEET;
5. S88°00'00"W, A DISTANCE OF 175.19 FEET;
6. S76°53'51"W, A DISTANCE OF 169.41 FEET;
7. S00°00'00"W, A DISTANCE OF 115.04 FEET;
8. S54°34'03"E, A DISTANCE OF 20.50 FEET TO A POINT OF CURVE;
9. ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 80°39'27"A RADIUS OF 56.00 FEET, A DISTANCE OF 78.83 FEET;
10. S44°46'30"W, A DISTANCE OF 19.46 FEET;
11. S04°00'00"E, A DISTANCE OF 144.47 FEET;
12. N70°35'17"E, A DISTANCE OF 285.26 FEET;
13. N85°00'00"E, A DISTANCE OF 110.02 FEET;
14. S84°04'01"E, A DISTANCE OF 167.51 FEET;
15. N88°00'00"E, A DISTANCE OF 181.60 FEET;
16. N32°00'00"E, A DISTANCE OF 142.50 FEET;
17. S82°00'00"E, A DISTANCE OF 133.81 FEET;
18. S90°00'00"E, A DISTANCE OF 181.20 FEET;
19. N71°00'00"E, A DISTANCE OF 186.07 FEET TO A POINT ON THE WESTERLY LINE OF A PROPOSED TRACT ON THE WESTERLY BOUNDARY OF PROPOSED PINE CREEK SUBDIVISION FILING NO. 35;

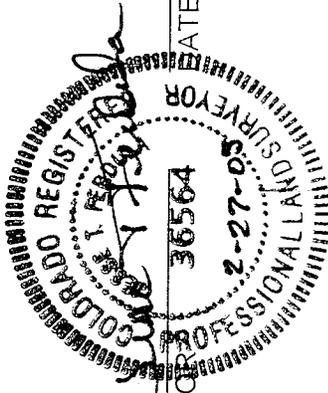
THENCE ON THE SAID WESTERLY BOUNDARY, THE FOLLOWING TWO (2) COURSES:

1. ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 22°23'38", A RADIUS OF 586.50 FEET, A DISTANCE OF 229.23 FEET TO A POINT OF TANGENT;
2. S61°30'00"E, A DISTANCE OF 774.91 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 58.340 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



**“EXHIBIT A4”**

JOB NO. 8717 45 – 03  
FEBRUARY 26, 2003  
PAGE 1 OF 3

**LEGAL DESCRIPTION:** EA/HCP – LP47 OWNERSHIP PARCEL 4 (HCP AREA 2)

A TRACT OF LAND BEING PORTIONS OF THE SOUTHWEST QUARTER CORNER OF SECTION 26 AND ALSO BEING THE SOUTHEAST QUARTER CORNER OF SECTION 27, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE LINE ON THE NORTHERLY RIGHT-OF-WAY OF PINE MANOR DRIVE, AS PLATTED IN PINE CREEK SUBDIVISION FILING NO. 16 UNDER RECEPTION NO. 202032593, RECORDS OF EL PASO COUNTY, COLORADO, THAT BEARS N61°46'25"E, BEING MONUMENTED AT THE WEST AND EAST ENDS BY 1-1/2" ALUMINUM CAPS STAMPED "JR ENG PLS 17502," HAVING A DISTANCE OF 696.17 FEET.

COMMENCING AT THE WEST END OF SAID NORTHERLY RIGHT-OF-WAY LINE; THENCE N03°42'37"W, A DISTANCE OF 1495.59 FEET TO THE POINT OF BEGINNING, SAID POINT ALSO BEING ON THE EASTERLY RIGHT-OF-WAY LINE OF PROPOSED ROYAL PINE DRIVE, COINCIDENT WITH THE PROPOSED BOUNDARY OF PINE CREEK SUBDIVISION FILING NO. 35; THENCE ON THE PROPOSED BOUNDARY OF PINE CREEK SUBDIVISION FILING NO. 35, THE FOLLOWING EIGHTEEN (18) COURSES:

1. S80°00'00"E, A DISTANCE OF 58.72 FEET TO A POINT OF CURVE;
2. ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 12°10'38", A RADIUS OF 200.00 FEET, A DISTANCE OF 42.51 FEET TO A POINT OF REVERSE CURVE;
3. ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 12°10'38", A RADIUS OF 200.00 FEET, A DISTANCE OF 42.51 FEET TO A POINT OF TANGENT;
4. S80°00'00"E, A DISTANCE OF 123.78 FEET TO A POINT ON CURVE;
5. ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 25°39'56", A RADIUS OF 275.00 FEET, A DISTANCE OF 123.19 FEET TO A POINT OF TANGENT;
6. S54°20'04"E, A DISTANCE OF 12.50 FEET;
7. S35°39'56"W, A DISTANCE OF 20.66 FEET TO A POINT OF CURVE;
8. ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 37°46'06", A RADIUS OF 200.00 FEET, A DISTANCE OF 131.84 FEET TO A POINT OF REVERSE CURVE;
9. ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 136°09'25", A RADIUS OF 56.00 FEET, A DISTANCE OF 133.08 FEET TO A POINT ON CURVE;
10. S27°16'37"W, A DISTANCE OF 130.09 FEET;
11. S74°15'04"E, A DISTANCE OF 140.34 FEET;
12. N44°59'08"E, A DISTANCE OF 138.18 FEET;
13. N37°18'00"E, A DISTANCE OF 110.04 FEET;
14. N50°25'57"E, A DISTANCE OF 113.76 FEET;
15. N26°33'26"E, A DISTANCE OF 111.40 FEET;
16. N42°33'42"E, A DISTANCE OF 221.60 FEET;
17. N42°36'20"E, A DISTANCE OF 188.51 FEET;
18. N15°05'29"E, A DISTANCE OF 209.78 FEET TO A POINT ON THE "A LINE" RIGHT-OF-WAY LINE OF POWERS BOULEVARD, AS SHOWN BY THE COLORADO DEPARTMENT OF TRANSPORTATION (PLANS BY URS);

THENCE ON SAID PROPOSED RIGHT-OF-WAY, THE FOLLOWING FIVE (5) COURSES:

1. S46°22'06"E, A DISTANCE OF 150.56 FEET;
  2. S15°44'10"E, A DISTANCE OF 61.65 FEET;
  3. S20°51'47"E, A DISTANCE OF 176.34 FEET;
  4. S37°59'01"E, A DISTANCE OF 376.46 FEET;
  5. S61°29'51"E, A DISTANCE OF 15.95 FEET;
- THENCE S30°04'20"W, A DISTANCE OF 182.56 FEET;  
THENCE S35°15'19"W, A DISTANCE OF 95.96 FEET;  
THENCE S17°56'43"W, A DISTANCE OF 105.21 FEET;

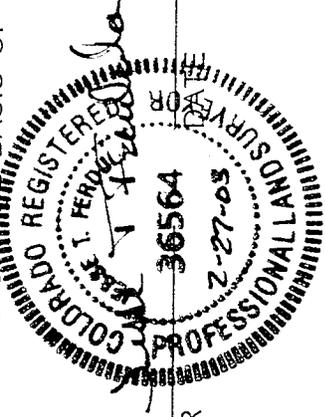
THENCE S30°12'30"W, A DISTANCE OF 114.67 FEET;  
THENCE S49°19'04"W, A DISTANCE OF 98.20 FEET;  
THENCE S45°34'12"W, A DISTANCE OF 229.28 FEET TO A POINT, SAID POINT BEING ON THE  
EASTERLY RIGHT-OF-WAY LINE OF PROPOSED ROYAL PINE DRIVE;  
THENCE NORTHWESTERLY AND NORTHEASTERLY ON SAID PROPOSED RIGHT-OF-WAY, THE  
FOLLOWING TWO (2) COURSES:

1. N61°30'00"W, A DISTANCE OF 750.56 FEET TO A POINT ON CURVE;
2. ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 67°45'04", A RADIUS OF 520.00  
FEET, A DISTANCE OF 614.89 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 18.400 ACRES.

#### LEGAL DESCRIPTION STATEMENT:

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



**"EXHIBIT A5"**

JOB NO. 8717.45 – 02  
FEBRUARY 26, 2003  
PAGE 1 OF 2

**LEGAL DESCRIPTION:** EA/HCP – LP47 OWNERSHIP PARCEL 5 (HCP AREA 2)

A TRACT OF LAND BEING A PORTION OF SECTION 26, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE LINE ON THE NORTHERLY RIGHT-OF-WAY OF PINE MANOR DRIVE, AS PLATTED IN PINE CREEK SUBDIVISION FILING NO. 16, UNDER RECEPTION NO. 202032593, RECORDS OF EL PASO COUNTY, COLORADO, THAT BEARS N61°46'25"E, BEING MONUMENTED AT THE WEST AND EAST ENDS BY 1-1/2" ALUMINUM CAPS STAMPED "JR ENG PLS 17502," HAVING A DISTANCE OF 696.17 FEET.

COMMENCING AT THE EAST END OF SAID NORTHERLY RIGHT-OF-WAY LINE; THENCE N21°22'48"E, A DISTANCE OF 1788.22 FEET TO THE POINT OF BEGINNING;

THENCE N79°51'37"E, A DISTANCE OF 83.74 FEET;  
THENCE N84°39'06"E, A DISTANCE OF 73.74 FEET;  
THENCE N73°24'04"E, A DISTANCE OF 80.21 FEET;  
THENCE N83°25'14"E, A DISTANCE OF 143.71 FEET;  
THENCE N88°55'51"E, A DISTANCE OF 122.78 FEET;  
THENCE S87°25'14"E, A DISTANCE OF 152.74 FEET;  
THENCE N69°39'12"E, A DISTANCE OF 329.51 FEET;  
THENCE N43°01'12"E, A DISTANCE OF 297.64 FEET;  
THENCE N85°46'07"E, A DISTANCE OF 599.11 FEET TO A POINT OF CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 24°46'36", A RADIUS OF 623.50 FEET, A DISTANCE OF 269.62 FEET TO A POINT OF TANGENT;  
THENCE S00°00'00"E, A DISTANCE OF 117.12 FEET;  
THENCE S22°38'09"W, A DISTANCE OF 150.66 FEET;  
THENCE S53°26'55"W, A DISTANCE OF 335.64 FEET;  
THENCE S37°46'07"W, A DISTANCE OF 227.21 FEET;  
THENCE S59°58'31"W, A DISTANCE OF 450.21 FEET;  
THENCE S70°31'22"W, A DISTANCE OF 399.72 FEET TO A POINT OF TANGENT, SAID POINT BEING ON THE "A LINE" RIGHT-OF-WAY LINE OF POWERS BOULEVARD, AS SHOWN ON THE COLORADO DEPARTMENT OF TRANSPORTATION (PLANS BY URS);  
THENCE ON SAID "A LINE" RIGHT-OF-WAY, THE FOLLOWING SIX (6) COURSES:

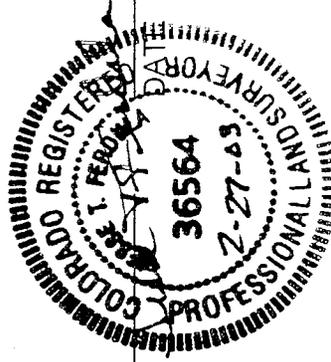
1. N53°27'02"W, A DISTANCE OF 43.31 FEET;
2. N55°04'11"W, A DISTANCE OF 187.40 FEET;
3. N35°41'51"W, A DISTANCE OF 261.39 FEET;
4. N60°52'55"W, A DISTANCE OF 264.18 FEET;
5. N62°57'16"W, A DISTANCE OF 202.55 FEET;
6. N49°52'19"W, A DISTANCE OF 51.75 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 23.630 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.

JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



**“EXHIBIT A6”**

JOB NO. 8717.45 – 14  
FEBRUARY 26, 2003  
PAGE 1 OF 3

**LEGAL DESCRIPTION:** EAVHCP – LP47 OWNERSHIP PARCEL 6 (HCP AREA 3)

A TRACT OF LAND BEING A PORTION OF THE NORTH HALF OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE COURSE ON THE WESTERLY BOUNDARY LINE OF LOTS 29, 30, 31 AND TRACT A, PINE CREEK SUBDIVISION FILING NO. 11, RECORDED UNDER RECEPTION NO. 99019870, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT BOTH ENDS BY 1-1/2" ALUMINUM SURVEYOR'S CAPS STAMPED "JR ENG RLS 17502," WHICH IS ASSUMED TO BEAR S35°32'20"E, A DISTANCE OF 266.30 FEET.

COMMENCING AT THE SOUTHERLY END OF SAID WESTERLY BOUNDARY, SAID POINT ALSO BEING ON THE NORTHERLY RIGHT-OF-WAY OF BRIARGATE PARKWAY; THENCE S43°11'56"E, A DISTANCE OF 1092.26 FEET TO THE POINT OF BEGINNING;  
THENCE S68°04'35"E, A DISTANCE OF 165.87 FEET;  
THENCE N60°19'31"E, A DISTANCE OF 99.22 FEET;  
THENCE N68°24'11"E, A DISTANCE OF 75.10 FEET;  
THENCE N73°36'53"E, A DISTANCE OF 65.35 FEET;  
THENCE N83°01'36"E, A DISTANCE OF 62.73 FEET;  
THENCE S69°39'09"E, A DISTANCE OF 307.40 FEET;  
THENCE S20°20'51"W, A DISTANCE OF 100.00 FEET;  
THENCE S65°21'44"E, A DISTANCE OF 905.66 FEET;  
THENCE S90°00'00"E, A DISTANCE OF 186.23 FEET TO A POINT ON A CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 86°16'22", A RADIUS OF 120.00 FEET, A DISTANCE OF 180.69 FEET;  
THENCE S03°43'38"E, A DISTANCE OF 44.85 FEET;  
THENCE N90°00'00"E, A DISTANCE OF 1123.36 FEET;  
THENCE S51°33'43"E, A DISTANCE OF 220.29 FEET;  
THENCE N88°56'41"E, A DISTANCE OF 129.58 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF UNION BOULEVARD;  
THENCE S00°02'52"E, A DISTANCE OF 64.38 FEET ON THE WESTERLY RIGHT-OF-WAY LINE OF UNION BOULEVARD TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 06°56'37", A RADIUS OF 730.00 FEET, A DISTANCE OF 88.47 FEET ON THE WESTERLY RIGHT-OF-WAY LINE OF UNION BOULEVARD;  
THENCE S64°54'53"W, A DISTANCE OF 390.02 FEET;  
THENCE S87°44'55"W, A DISTANCE OF 141.64 FEET;  
THENCE S84°30'20"W, A DISTANCE OF 414.98 FEET;  
THENCE N89°19'29"W, A DISTANCE OF 255.62 FEET;  
THENCE S77°52'06"W, A DISTANCE OF 296.23 FEET;  
THENCE N83°56'05"W, A DISTANCE OF 246.75 FEET;  
THENCE N64°10'58"W, A DISTANCE OF 371.17 FEET;  
THENCE N72°19'09"W, A DISTANCE OF 160.44 FEET;  
THENCE N85°58'33"E, A DISTANCE OF 165.43 FEET;  
THENCE N68°26'40"W, A DISTANCE OF 313.96 FEET;  
THENCE N54°12'01"W, A DISTANCE OF 51.51 FEET;  
THENCE N55°10'05"W, A DISTANCE OF 118.84 FEET;  
THENCE N40°06'05"W, A DISTANCE OF 156.07 FEET;  
THENCE N25°47'53"W, A DISTANCE OF 267.47 FEET;  
THENCE N47°24'41"W, A DISTANCE OF 244.30 FEET;  
THENCE N23°17'43"W, A DISTANCE OF 289.29 FEET;

THENCE S07°46'33"W, A DISTANCE OF 36.02 FEET;  
THENCE S19°02'26"W, A DISTANCE OF 17.34 FEET TO THE POINT OF BEGINNING;  
CONTAINING A CALCULATED AREA OF 42.020 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

NOTICE OF RESTRICTION

STATE OF COLORADO )  
 ) ss.  
COUNTY OF EL PASO )

KNOW ALL MEN BY THESE PRESENTS THAT:

ESCALANTE GOLF-PINE CREEK, LP, a Colorado limited partnership, is the owner of that certain real property more particularly described in Exhibits A1 and A2 (the "Property") attached hereto and incorporated herein. The Property is shown on Exhibits B1 and B2 attached hereto and incorporated herein. The Property is subject to the "Final Environmental Assessment and Habitat Conservation Plan for The Briargate Development," located along upper Pine Creek, Colorado Springs, El Paso County, Colorado, dated February, 2003 (the "Plan"), prepared on behalf of La Plata Investments by SWCA, Inc. for the United States Fish and Wildlife Service ("USFWS"). In particular, it is the primary purpose of this Restriction to foster management of the Riparian Zone and the wildlife habitat contained therein in such a manner as best benefits the Preble's meadow jumping mouse ("PMJM"). Any purchaser of all or any part of the Property, or any person having an interest in or proposing to acquire an interest in all or part of the Property, is hereby notified of certain development restrictions affecting the Property, including the following, which are conditions of the Plan:

1. Except as explicitly described in the Plan, no alterations will occur in the area described as Preble's meadow jumping mouse ("PMJM") habitat areas that would adversely affect the biological value of the PMJM's habitat, including but not limited to dumping or placing soil or other material, such as trash, mowing, removal or destruction of vegetation (with the exception of weed control), excavation or removal of soil, and activities detrimental to flood control, water conservation or erosion control.
2. This restriction may not be removed without the prior written approval of the USFWS.

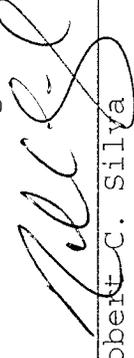
Executed this 27<sup>th</sup> day of February, 2003.

OWNER:

ESCALANTE GOLF-PINE CREEK, LP,  
a Colorado limited partnership

By: Escalante Golf Club, II,  
L.L.C., General Partner

By: Escalante Golf, Inc., Sole  
Member and Manager

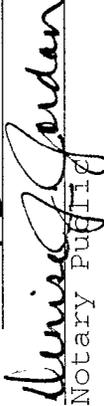
By:   
Robert C. Silva  
Vice President

The foregoing instrument was acknowledged before me this 27<sup>th</sup> day of February, 2003 by Robert C. Silva as Vice President of Escalante Golf, Inc., Sole Member and Manager of Escalante Golf Club, II, L.L.C., General Partner of Escalante Golf Pine Creek, LP, a Colorado limited partnership.

Witness my hand and official seal.

My commission expires: 8/3/03.

[SEAL]

  
Notary Public

**“EXHIBIT A1”**

JOB NO. 8717.45 – 01  
FEBRUARY 26, 2003  
PAGE 1 OF 4

**LEGAL DESCRIPTION:** EA/HCP-PCGC OWNERSHIP PARCEL 1 (HCP AREA 1)

A TRACT OF LAND BEING A PORTION OF THE SOUTH HALF OF SECTION 28, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE SOUTHERLY LINE OF LOTS 19 AND 20 (ALL INCLUSIVE) OF PINE CREEK FILING NO. 3, RECORDED UNDER RECEPTION NO. 98147293, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT THE WEST AND EAST ENDS BY 1-1/2" ALUMINIUM CAPS STAMPED "JR ENG PLS 17502," BEING ASSUMED TO BEAR N48°47'02"E, A DISTANCE OF 178.24 FEET.

COMMENCING AT THE SOUTHEASTERLY CORNER OF LOT 19 OF SAID PINE CREEK FILING NO. 3; THENCE S09°20'54"E, A DISTANCE OF 259.58 FEET TO THE POINT OF BEGINNING;

THENCE S01°20'20"W, A DISTANCE OF 29.65 FEET;  
THENCE N77°17'44"W, A DISTANCE OF 48.64 FEET;  
THENCE S68°23'51"W, A DISTANCE OF 42.54 FEET;  
THENCE N86°39'40"W, A DISTANCE OF 31.25 FEET;  
THENCE S74°00'54"W, A DISTANCE OF 103.19 FEET;  
THENCE S89°22'40"W, A DISTANCE OF 33.55 FEET;  
THENCE S66°57'49"W, A DISTANCE OF 58.65 FEET;  
THENCE S48°25'17"W, A DISTANCE OF 137.94 FEET;  
THENCE S64°09'28"W, A DISTANCE OF 34.09 FEET;  
THENCE S81°34'55"W, A DISTANCE OF 25.38 FEET;  
THENCE S63°27'34"W, A DISTANCE OF 24.94 FEET;  
THENCE S46°31'30"W, A DISTANCE OF 75.59 FEET;  
THENCE S33°43'07"E, A DISTANCE OF 16.75 FEET;  
THENCE S19°11'11"W, A DISTANCE OF 14.66 FEET;  
THENCE S83°49'38"W, A DISTANCE OF 35.37 FEET;  
THENCE N63°12'03"W, A DISTANCE OF 55.62 FEET;  
THENCE N73°19'03"W, A DISTANCE OF 29.12 FEET;  
THENCE N34°45'47"W, A DISTANCE OF 27.30 FEET;  
THENCE N85°14'29"W, A DISTANCE OF 20.77 FEET;  
THENCE S66°49'25"W, A DISTANCE OF 19.24 FEET TO A POINT OF CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 11°00'19", A RADIUS OF 523.94 FEET, A DISTANCE OF 100.64 FEET TO A POINT ON CURVE;  
THENCE N86°11'24"W, A DISTANCE OF 41.93 FEET;  
THENCE S73°37'38"W, A DISTANCE OF 16.47 FEET;  
THENCE S88°07'20"W, A DISTANCE OF 39.65 FEET;  
THENCE S23°59'07"W, A DISTANCE OF 26.02 FEET;  
THENCE N83°39'59"W, A DISTANCE OF 33.67 FEET;  
THENCE N46°02'09"W, A DISTANCE OF 37.46 FEET;  
THENCE S86°07'40"W, A DISTANCE OF 43.55 FEET;  
THENCE N73°21'10"W, A DISTANCE OF 16.75 FEET;  
THENCE N37°15'52"W, A DISTANCE OF 29.17 FEET;  
THENCE S90°00'00"W, A DISTANCE OF 18.07 FEET;  
THENCE S55°38'21"W, A DISTANCE OF 34.07 FEET;  
THENCE N59°57'29"W, A DISTANCE OF 21.18 FEET;  
THENCE S71°59'11"W, A DISTANCE OF 43.29 FEET;  
THENCE N63°27'34"W, A DISTANCE OF 43.65 FEET;  
THENCE S76°52'46"W, A DISTANCE OF 28.64 FEET;  
THENCE N53°09'34"W, A DISTANCE OF 37.17 FEET;  
THENCE S89°10'57"W, A DISTANCE OF 65.09 FEET;  
THENCE N46°21'46"W, A DISTANCE OF 28.26 FEET;

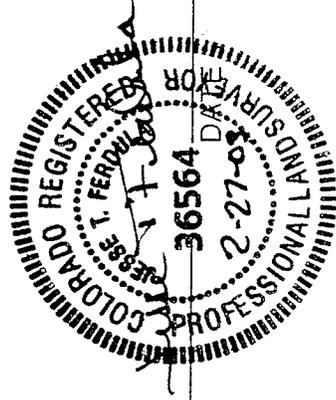
THENCE S86°00'48"W, A DISTANCE OF 40.07 FEET;  
THENCE N64°54'32"W, A DISTANCE OF 32.85 FEET;  
THENCE S80°05'03"W, A DISTANCE OF 37.75 FEET;  
THENCE N53°09'34"W, A DISTANCE OF 51.11 FEET;  
THENCE N75°25'47"W, A DISTANCE OF 98.24 FEET;  
THENCE S88°01'38"W, A DISTANCE OF 43.47 FEET;  
THENCE N70°46'24"W, A DISTANCE OF 47.94 FEET;  
THENCE N89°21'25"W, A DISTANCE OF 82.75 FEET;  
THENCE N86°09'58"W, A DISTANCE OF 93.05 FEET;  
THENCE N83°05'09"W, A DISTANCE OF 56.32 FEET;  
THENCE S68°03'39"W, A DISTANCE OF 62.14 FEET;  
THENCE N36°37'08"W, A DISTANCE OF 7.19 FEET TO A POINT OF CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 65°40'42", A RADIUS OF 56.10 FEET, A DISTANCE OF 64.31 FEET TO A POINT OF COMPOUND CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 07°49'44", A RADIUS OF 475.85 FEET, A DISTANCE OF 65.02 FEET TO A POINT ON CURVE;  
THENCE N48°05'51"W, A DISTANCE OF 35.19 FEET;  
THENCE N20°55'58"E, A DISTANCE OF 36.86 FEET;  
THENCE N72°52'28"E, A DISTANCE OF 24.58 FEET;  
THENCE N54°14'45"E, A DISTANCE OF 48.42 FEET;  
THENCE N88°36'07"E, A DISTANCE OF 46.66 FEET TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, WHOSE CENTER BEARS N22°39'35"E, HAVING A DELTA OF 20°50'52", A RADIUS OF 335.00 FEET, A DISTANCE OF 121.89 FEET TO A POINT ON CURVE;  
THENCE S69°27'51"E, A DISTANCE OF 22.53 FEET;  
THENCE N75°05'02"E, A DISTANCE OF 14.43 FEET;  
THENCE S77°29'03"E, A DISTANCE OF 34.28 FEET;  
THENCE S87°39'55"E, A DISTANCE OF 45.59 FEET;  
THENCE S81°52'43"E, A DISTANCE OF 19.72 FEET;  
THENCE N76°13'41"E, A DISTANCE OF 37.48 FEET;  
THENCE S87°12'12"E, A DISTANCE OF 30.58 FEET;  
THENCE N29°46'16"E, A DISTANCE OF 7.49 FEET;  
THENCE N57°33'24"E, A DISTANCE OF 36.35 FEET;  
THENCE S76°28'41"E, A DISTANCE OF 51.63 FEET;  
THENCE S86°37'00"E, A DISTANCE OF 47.21 FEET;  
THENCE S73°52'20"E, A DISTANCE OF 36.78 FEET;  
THENCE N88°46'57"E, A DISTANCE OF 38.52 FEET TO A POINT, SAID POINT BEING ON THE SOUTHERLY LOT LINE OF LOT 47 OF SAID PINE CREEK FILING NO. 3;  
THENCE S82°24'29"E, A DISTANCE OF 48.37 FEET;  
THENCE S69°27'51"E, A DISTANCE OF 39.71 FEET;  
THENCE S79°35'06"E, A DISTANCE OF 118.16 FEET;  
THENCE S72°04'21"E, A DISTANCE OF 62.61 FEET;  
THENCE S72°26'51"W, A DISTANCE OF 18.58 FEET;  
THENCE S71°48'26"E, A DISTANCE OF 57.60 FEET;  
THENCE N39°02'57"E, A DISTANCE OF 13.17 FEET;  
THENCE S80°32'51"E, A DISTANCE OF 21.86 FEET;  
THENCE N85°40'20"E, A DISTANCE OF 61.54 FEET;  
THENCE S73°37'38"E, A DISTANCE OF 16.47 FEET;  
THENCE S29°04'50"E, A DISTANCE OF 28.69 FEET;  
THENCE S69°47'42"E, A DISTANCE OF 18.82 FEET;  
THENCE N53°38'42"E, A DISTANCE OF 21.93 FEET;  
THENCE S83°40'00"E, A DISTANCE OF 33.67 FEET;  
THENCE N46°40'02"E, A DISTANCE OF 23.01 FEET;  
THENCE N69°14'27"E, A DISTANCE OF 73.37 FEET;  
THENCE N50°45'28"E, A DISTANCE OF 17.19 FEET TO A POINT, SAID POINT BEING ON THE SOUTHERLY LOT LINE OF LOT 41 OF SAID PINE CREEK FILING NO. 3;  
THENCE N89°57'40"E, A DISTANCE OF 57.29 FEET;  
THENCE S42°09'15"E, A DISTANCE OF 22.24 FEET;  
THENCE S86°38'13"E, A DISTANCE OF 15.83 FEET;  
THENCE S66°03'37"E, A DISTANCE OF 18.31 FEET;  
THENCE N89°45'58"E, A DISTANCE OF 33.62 FEET;  
THENCE S54°07'57"E, A DISTANCE OF 31.94 FEET;  
THENCE N66°20'26"E, A DISTANCE OF 57.86 FEET;  
THENCE N85°31'13"E, A DISTANCE OF 47.56 FEET;  
THENCE S80°19'17"E, A DISTANCE OF 38.67 FEET;  
THENCE S58°01'19"E, A DISTANCE OF 26.30 FEET;  
THENCE S75°05'02"E, A DISTANCE OF 57.73 FEET;  
THENCE N43°28'57"E, A DISTANCE OF 57.24 FEET;  
THENCE N77°01'01"E, A DISTANCE OF 54.91 FEET;

THENCE N43°47'07"E, A DISTANCE OF 57.88 FEET;  
THENCE N61°34'40"E, A DISTANCE OF 80.15 FEET;  
THENCE N77°01'08"E, A DISTANCE OF 38.92 FEET;  
THENCE N80°37'14"E, A DISTANCE OF 93.89 FEET;  
THENCE N56°20'17"E, A DISTANCE OF 10.52 FEET TO A POINT OF CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 57°48'25", A RADIUS OF  
154.46 FEET, A DISTANCE OF 155.84 FEET TO A POINT ON CURVE, SAID POINT BEING THE POINT OF  
BEGINNING;

CONTAINING A CALCULATED AREA OF 3.94 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



**“EXHIBIT A2”**

JOB NO. 8717.45 – 10  
FEBRUARY 26, 2003  
PAGE 1 OF 3

**LEGAL DESCRIPTION:** EA/HCP – PCGC OWNERSHIP PARCEL 2 (HCP AREA 1)

A TRACT OF LAND BEING A PORTION SECTIONS 27, 28, 33 AND 34, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE NORTHERLY RIGHT-OF-WAY LINE OF LEXINGTON DRIVE AS PLATTED IN PINE CREEK VILLAGE CENTER FILING NO. 3, RECORDED UNDER RECEPTION NO. 99164240, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT BOTH ENDS BY 1-1/2" ALUMINUM SURVEYOR'S CAPS STAMPED "JR ENG LTD RLS 17502," WHICH IS ASSUMED TO BEAR S84°07'19"W, A DISTANCE OF 231.97 FEET.

COMMENCING AT THE EASTERLY END OF SAID LINE; THENCE S84°07'19"W, A DISTANCE OF 93.94 FEET TO A POINT, SAID POINT BEING THE POINT OF BEGINNING;  
THENCE N07°46'55"E, A DISTANCE OF 408.55 FEET;  
THENCE N39°01'15"E, A DISTANCE OF 27.99 FEET;  
THENCE N17°40'04"E, A DISTANCE OF 23.39 FEET;  
THENCE N37°35'53"E, A DISTANCE OF 16.62 FEET;  
THENCE S85°36'21"E, A DISTANCE OF 26.45 FEET;  
THENCE S75°26'16"E, A DISTANCE OF 109.18 FEET;  
THENCE N85°40'20"E, A DISTANCE OF 80.55 FEET;  
THENCE S88°43'42"E, A DISTANCE OF 45.65 FEET;  
THENCE S87°00'03"E, A DISTANCE OF 58.09 FEET;  
THENCE N87°59'33"E, A DISTANCE OF 57.84 FEET;  
THENCE S87°30'47"E, A DISTANCE OF 22.50 FEET;  
THENCE N35°19'15"E, A DISTANCE OF 26.03 FEET;  
THENCE S58°01'19"E, A DISTANCE OF 9.56 FEET;  
THENCE S11°46'50"E, A DISTANCE OF 24.84 FEET;  
THENCE S59°03'48"E, A DISTANCE OF 23.65 FEET;  
THENCE S75°39'55"E, A DISTANCE OF 45.01 FEET;  
THENCE S84°49'51"E, A DISTANCE OF 78.71 FEET;  
THENCE S48°50'40"E, A DISTANCE OF 21.55 FEET;  
THENCE S84°33'56"E, A DISTANCE OF 42.79 FEET;  
THENCE S42°44'25"E, A DISTANCE OF 17.93 FEET;  
THENCE S83°59'50"E, A DISTANCE OF 19.37 FEET;  
THENCE N52°20'08"E, A DISTANCE OF 28.18 FEET;  
THENCE S65°34'45"E, A DISTANCE OF 12.25 FEET;  
THENCE N75°37'56"E, A DISTANCE OF 32.66 FEET;  
THENCE N51°57'25"E, A DISTANCE OF 77.26 FEET;  
THENCE N59°55'27"E, A DISTANCE OF 64.69 FEET;  
THENCE N51°47'45"E, A DISTANCE OF 42.59 FEET;  
THENCE N83°15'34"E, A DISTANCE OF 233.04 FEET;  
THENCE S59°57'29"E, A DISTANCE OF 66.78 FEET;  
THENCE S26°01'39"E, A DISTANCE OF 46.22 FEET;  
THENCE S10°38'31"E, A DISTANCE OF 38.44 FEET;  
THENCE S32°56'00"W, A DISTANCE OF 20.52 FEET;  
THENCE S67°05'24"E, A DISTANCE OF 28.63 FEET;  
THENCE N75°16'17"E, A DISTANCE OF 39.85 FEET;  
THENCE N90°00'00"E, A DISTANCE OF 42.59 FEET;  
THENCE S62°22'45"E, A DISTANCE OF 24.04 FEET;  
THENCE S21°03'29"E, A DISTANCE OF 28.22 FEET;  
THENCE S56°20'17"W, A DISTANCE OF 18.28 FEET;  
THENCE N77°55'04"W, A DISTANCE OF 14.52 FEET;  
THENCE S02°07'24"W, A DISTANCE OF 10.90 FEET;  
THENCE S75°06'01"W, A DISTANCE OF 7.76 FEET;  
THENCE S19°04'07"W, A DISTANCE OF 47.76 FEET TO A POINT ON CURVE;

THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 111°12'19", A RADIUS OF 15.00 FEET, A DISTANCE OF 29.11 FEET;  
THENCE N87°51'48"E, A DISTANCE OF 48.88 FEET;  
THENCE N77°19'18"E, A DISTANCE OF 3.66 FEET;  
THENCE S32°56'00"E, A DISTANCE OF 9.62 FEET;  
THENCE S69°09'57"E, A DISTANCE OF 22.79 FEET;  
THENCE N34°24'32"E, A DISTANCE OF 23.33 FEET;  
THENCE S48°33'24"E, A DISTANCE OF 33.82 FEET;  
THENCE S21°16'16"W, A DISTANCE OF 19.57 FEET;  
THENCE S00°00'00"E, A DISTANCE OF 18.24 FEET;  
THENCE S40°53'08"E, A DISTANCE OF 49.58 FEET;  
THENCE N45°01'51"E, A DISTANCE OF 11.47 FEET;  
THENCE S72°11'56"E, A DISTANCE OF 29.82 FEET;  
THENCE N48°23'48"E, A DISTANCE OF 12.21 FEET;  
THENCE N88°12'43"E, A DISTANCE OF 32.47 FEET;  
THENCE S63°27'34"E, A DISTANCE OF 21.86 FEET;  
THENCE N81°02'12"E, A DISTANCE OF 36.67 FEET;  
THENCE S76°49'53"E, A DISTANCE OF 55.18 FEET;  
THENCE N03°31'39"W, A DISTANCE OF 18.84 FEET;  
THENCE N82°42'36"E, A DISTANCE OF 62.61 FEET;  
THENCE S20°39'57"E, A DISTANCE OF 11.95 FEET;  
THENCE S10°47'23"E, A DISTANCE OF 43.25 FEET;  
THENCE S08°58'38"W, A DISTANCE OF 12.97 FEET;  
THENCE S37°53'21"W, A DISTANCE OF 7.69 FEET;  
THENCE S08°58'38"W, A DISTANCE OF 25.95 FEET;  
THENCE S20°46'55"E, A DISTANCE OF 20.92 FEET;  
THENCE S42°09'07"E, A DISTANCE OF 20.47 FEET;  
THENCE S16°48'05"W, A DISTANCE OF 70.06 FEET TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 34°06'01", A RADIUS OF 132.14 FEET, A DISTANCE OF 78.64 FEET;  
THENCE S50°54'06"W, A DISTANCE OF 56.21 FEET;  
THENCE S58°21'37"W, A DISTANCE OF 62.55 FEET;  
THENCE S77°58'26"W, A DISTANCE OF 86.89 FEET;  
THENCE N87°08'30"W, A DISTANCE OF 90.76 FEET;  
THENCE N78°06'13"W, A DISTANCE OF 89.72 FEET;  
THENCE N67°01'34"W, A DISTANCE OF 130.45 FEET;  
THENCE N62°58'55"W, A DISTANCE OF 59.78 FEET;  
THENCE S79°27'45"W, A DISTANCE OF 117.55 FEET;  
THENCE N84°34'02"W, A DISTANCE OF 86.29 FEET;  
THENCE N24°10'40"E, A DISTANCE OF 34.05 FEET;  
THENCE N65°49'20"W, A DISTANCE OF 128.33 FEET;  
THENCE N53°05'40"W, A DISTANCE OF 251.60 FEET;  
THENCE N62°52'58"W, A DISTANCE OF 225.31 FEET;  
THENCE S21°17'10"W, A DISTANCE OF 328.22 FEET TO A POINT ON CURVE ON THE NORTHERLY RIGHT-OF-WAY LINE OF LEXINGTON DRIVE;  
THENCE ON SAID NORTHERLY RIGHT-OF-WAY LINE, ON THE ARC OF A CURVE TO THE LEFT, WHOSE CENTER BEARS S26°47'37"W, HAVING A DELTA OF 32°40'19", A RADIUS OF 482.50 FEET, A DISTANCE OF 275.14 FEET TO A POINT OF TANGENT;  
THENCE S84°07'19"W, A DISTANCE OF 93.94 FEET ON SAID NORTHERLY RIGHT-OF-WAY LINE OF LEXINGTON DRIVE TO THE POINT OF BEGINNING;  
  
CONTAINING A CALCULATED AREA OF 15.63 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

NOTICE OF RESTRICTION

STATE OF COLORADO )  
 )  
 ) ss.  
COUNTY OF EL PASO )

KNOW ALL MEN BY THESE PRESENTS THAT:

ESCALANTE GOLF-PINE CREEK, LP, a Colorado limited partnership, is the owner of that certain real property more particularly described in Exhibits A1 and A2 (the "Property") attached hereto and incorporated herein. The Property is shown on Exhibits B1 and B2 attached hereto and incorporated herein. The Property is subject to the "Final Environmental Assessment and Habitat Conservation Plan for The Briargate Development," located along upper Pine Creek, Colorado Springs, El Paso County, Colorado, dated February, 2003 (the "Plan"), prepared on behalf of La Plata Investments by SWCA, Inc. for the United States Fish and Wildlife Service ("USFWS"). In particular, it is the primary purpose of this Restriction to foster management of the Riparian Zone and the wildlife habitat contained therein in such a manner as best benefits the Preble's meadow jumping mouse ("PMJM"). Any purchaser of all or any part of the Property, or any person having an interest in or proposing to acquire an interest in all or part of the Property, is hereby notified of certain development restrictions affecting the Property, including the following, which are conditions of the Plan:

1. Except as explicitly described in the Plan, no alterations will occur in the area described as Preble's meadow jumping mouse ("PMJM") habitat areas that would adversely affect the biological value of the PMJM's habitat, including but not limited to dumping or placing soil or other material, such as trash, mowing, removal or destruction of vegetation (with the exception of weed control), excavation or removal of soil, and activities detrimental to flood control, water conservation or erosion control.
2. This restriction may not be removed without the prior written approval of the USFWS.

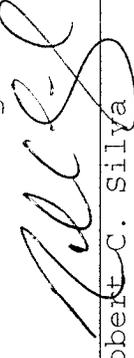
Executed this 27<sup>th</sup> day of February, 2003.

OWNER:

ESCALANTE GOLF-PINE CREEK, LP,  
a Colorado limited partnership

By: Escalante Golf Club, II,  
L.L.C., General Partner

By: Escalante Golf, Inc., Sole  
Member and Manager

By:   
Robert C. Silva  
Vice President

The foregoing instrument was acknowledged before me this 27<sup>th</sup> day of February, 2003 by Robert C. Silva as Vice President of Escalante Golf, Inc., Sole Member and Manager of Escalante Golf Club, II, L.L.C., General Partner of Escalante Golf Pine Creek, LP, a Colorado limited partnership.

Witness my hand and official seal.

My commission expires: 8/3/03.

[SEAL]

  
Notary Public



**“EXHIBIT A1”**

JOB NO. 8717.45 – 01  
FEBRUARY 26, 2003  
PAGE 1 OF 4

**LEGAL DESCRIPTION:** EA/HCP-PCGC OWNERSHIP PARCEL 1 (HCP AREA 1)

A TRACT OF LAND BEING A PORTION OF THE SOUTH HALF OF SECTION 28, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE SOUTHERLY LINE OF LOTS 19 AND 20 (ALL INCLUSIVE) OF PINE CREEK FILING NO. 3, RECORDED UNDER RECEPTION NO. 98147293, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT THE WEST AND EAST ENDS BY 1-1/2" ALUMINUM CAPS STAMPED "JR ENG PLS 17502," BEING ASSUMED TO BEAR N48°47'02"E, A DISTANCE OF 178.24 FEET.

COMMENCING AT THE SOUTHEASTERLY CORNER OF LOT 19 OF SAID PINE CREEK FILING NO. 3;

THENCE S09°20'54"E, A DISTANCE OF 259.58 FEET TO THE POINT OF BEGINNING;

THENCE S01°20'20"W, A DISTANCE OF 29.65 FEET;

THENCE N77°17'44"W, A DISTANCE OF 48.64 FEET;

THENCE S68°23'51"W, A DISTANCE OF 42.54 FEET;

THENCE N86°39'40"W, A DISTANCE OF 31.25 FEET;

THENCE S74°00'54"W, A DISTANCE OF 103.19 FEET;

THENCE S89°22'40"W, A DISTANCE OF 33.55 FEET;

THENCE S66°57'49"W, A DISTANCE OF 58.65 FEET;

THENCE S48°25'17"W, A DISTANCE OF 137.94 FEET;

THENCE S64°09'28"W, A DISTANCE OF 34.09 FEET;

THENCE S81°34'55"W, A DISTANCE OF 25.38 FEET;

THENCE S63°27'34"W, A DISTANCE OF 24.94 FEET;

THENCE S46°31'30"W, A DISTANCE OF 75.59 FEET;

THENCE S33°43'07"E, A DISTANCE OF 16.75 FEET;

THENCE S19°11'11"W, A DISTANCE OF 14.66 FEET;

THENCE S83°49'38"W, A DISTANCE OF 35.37 FEET;

THENCE N63°12'03"W, A DISTANCE OF 55.62 FEET;

THENCE N73°19'03"W, A DISTANCE OF 29.12 FEET;

THENCE N34°45'47"W, A DISTANCE OF 27.30 FEET;

THENCE N85°14'29"W, A DISTANCE OF 20.77 FEET;

THENCE S66°49'25"W, A DISTANCE OF 19.24 FEET TO A POINT OF CURVE;

THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 11°00'19", A RADIUS OF 523.94 FEET, A DISTANCE OF 100.64 FEET TO A POINT ON CURVE;

THENCE N86°11'24"W, A DISTANCE OF 41.93 FEET;

THENCE S73°37'38"W, A DISTANCE OF 16.47 FEET;

THENCE S88°07'20"W, A DISTANCE OF 39.65 FEET;

THENCE S23°59'07"W, A DISTANCE OF 26.02 FEET;

THENCE N83°39'59"W, A DISTANCE OF 33.67 FEET;

THENCE N46°02'09"W, A DISTANCE OF 37.46 FEET;

THENCE S86°07'40"W, A DISTANCE OF 43.55 FEET;

THENCE N73°21'10"W, A DISTANCE OF 16.75 FEET;

THENCE N37°15'52"W, A DISTANCE OF 29.17 FEET;

THENCE S90°00'00"W, A DISTANCE OF 18.07 FEET;

THENCE S55°38'21"W, A DISTANCE OF 34.07 FEET;

THENCE N59°57'29"W, A DISTANCE OF 21.18 FEET;

THENCE S71°59'11"W, A DISTANCE OF 43.29 FEET;

THENCE N63°27'34"W, A DISTANCE OF 43.65 FEET;

THENCE S76°52'46"W, A DISTANCE OF 28.64 FEET;

THENCE N53°09'34"W, A DISTANCE OF 37.17 FEET;

THENCE S89°10'57"W, A DISTANCE OF 65.09 FEET;

THENCE N46°21'46"W, A DISTANCE OF 28.26 FEET;

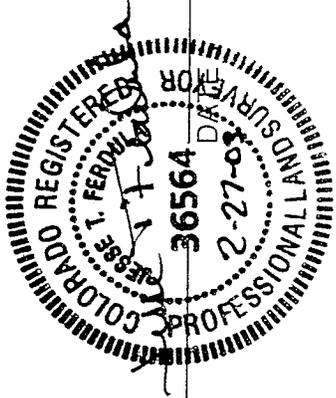
THENCE S86°00'48"W, A DISTANCE OF 40.07 FEET;  
THENCE N64°54'32"W, A DISTANCE OF 32.85 FEET;  
THENCE S80°05'03"W, A DISTANCE OF 37.75 FEET;  
THENCE N53°09'34"W, A DISTANCE OF 51.11 FEET;  
THENCE N75°25'47"W, A DISTANCE OF 98.24 FEET;  
THENCE S88°01'38"W, A DISTANCE OF 43.47 FEET;  
THENCE N70°46'24"W, A DISTANCE OF 47.94 FEET;  
THENCE N89°21'25"W, A DISTANCE OF 82.75 FEET;  
THENCE N86°09'58"W, A DISTANCE OF 93.05 FEET;  
THENCE N83°05'09"W, A DISTANCE OF 56.32 FEET;  
THENCE S68°03'39"W, A DISTANCE OF 62.14 FEET;  
THENCE N36°37'08"W, A DISTANCE OF 7.19 FEET TO A POINT OF CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 65°40'42", A RADIUS OF 56.10 FEET, A DISTANCE OF 64.31 FEET TO A POINT OF COMPOUND CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 07°49'44", A RADIUS OF 475.85 FEET, A DISTANCE OF 65.02 FEET TO A POINT ON CURVE;  
THENCE N48°05'51"W, A DISTANCE OF 35.19 FEET;  
THENCE N20°55'58"E, A DISTANCE OF 36.86 FEET;  
THENCE N72°52'28"E, A DISTANCE OF 24.58 FEET;  
THENCE N54°14'45"E, A DISTANCE OF 48.42 FEET;  
THENCE N88°36'07"E, A DISTANCE OF 46.66 FEET TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, WHOSE CENTER BEARS N22°39'35"E, HAVING A DELTA OF 20°50'52", A RADIUS OF 335.00 FEET, A DISTANCE OF 121.89 FEET TO A POINT ON CURVE;  
THENCE S69°27'51"E, A DISTANCE OF 22.53 FEET;  
THENCE N75°05'02"E, A DISTANCE OF 14.43 FEET;  
THENCE S77°29'03"E, A DISTANCE OF 34.28 FEET;  
THENCE S87°39'55"E, A DISTANCE OF 45.59 FEET;  
THENCE S81°52'43"E, A DISTANCE OF 19.72 FEET;  
THENCE N76°13'41"E, A DISTANCE OF 37.48 FEET;  
THENCE S87°12'12"E, A DISTANCE OF 30.58 FEET;  
THENCE N29°46'16"E, A DISTANCE OF 7.49 FEET;  
THENCE N57°33'24"E, A DISTANCE OF 36.35 FEET;  
THENCE S76°28'41"E, A DISTANCE OF 51.63 FEET;  
THENCE S86°37'00"E, A DISTANCE OF 47.21 FEET;  
THENCE S73°52'20"E, A DISTANCE OF 36.78 FEET;  
THENCE N88°46'57"E, A DISTANCE OF 38.52 FEET TO A POINT, SAID POINT BEING ON THE SOUTHERLY LOT LINE OF LOT 47 OF SAID PINE CREEK FILING NO. 3;  
THENCE S82°24'29"E, A DISTANCE OF 48.37 FEET;  
THENCE S69°27'51"E, A DISTANCE OF 39.71 FEET;  
THENCE S79°35'06"E, A DISTANCE OF 118.16 FEET;  
THENCE S72°04'21"E, A DISTANCE OF 62.61 FEET;  
THENCE S72°26'51"W, A DISTANCE OF 18.58 FEET;  
THENCE S71°48'26"E, A DISTANCE OF 57.60 FEET;  
THENCE N39°02'57"E, A DISTANCE OF 13.17 FEET;  
THENCE S80°32'51"E, A DISTANCE OF 21.86 FEET;  
THENCE N85°40'20"E, A DISTANCE OF 61.54 FEET;  
THENCE S73°37'38"E, A DISTANCE OF 16.47 FEET;  
THENCE S29°04'50"E, A DISTANCE OF 28.69 FEET;  
THENCE S69°47'42"E, A DISTANCE OF 18.82 FEET;  
THENCE N53°38'42"E, A DISTANCE OF 21.93 FEET;  
THENCE S83°40'00"E, A DISTANCE OF 33.67 FEET;  
THENCE N46°40'02"E, A DISTANCE OF 23.01 FEET;  
THENCE N69°14'27"E, A DISTANCE OF 73.37 FEET;  
THENCE N50°45'28"E, A DISTANCE OF 17.19 FEET TO A POINT, SAID POINT BEING ON THE SOUTHERLY LOT LINE OF LOT 41 OF SAID PINE CREEK FILING NO. 3;  
THENCE N89°57'40"E, A DISTANCE OF 57.29 FEET;  
THENCE S42°09'15"E, A DISTANCE OF 22.24 FEET;  
THENCE S86°38'13"E, A DISTANCE OF 15.83 FEET;  
THENCE S66°03'37"E, A DISTANCE OF 18.31 FEET;  
THENCE N89°45'58"E, A DISTANCE OF 33.62 FEET;  
THENCE S54°07'57"E, A DISTANCE OF 31.94 FEET;  
THENCE N66°20'26"E, A DISTANCE OF 57.86 FEET;  
THENCE N85°31'13"E, A DISTANCE OF 47.56 FEET;  
THENCE S80°19'17"E, A DISTANCE OF 38.67 FEET;  
THENCE S58°01'19"E, A DISTANCE OF 26.30 FEET;  
THENCE S75°05'02"E, A DISTANCE OF 57.73 FEET;  
THENCE N43°28'57"E, A DISTANCE OF 57.24 FEET;  
THENCE N77°01'01"E, A DISTANCE OF 54.91 FEET;

THENCE N43°47'07"E, A DISTANCE OF 57.88 FEET;  
THENCE N61°34'40"E, A DISTANCE OF 80.15 FEET;  
THENCE N77°01'08"E, A DISTANCE OF 38.92 FEET;  
THENCE N80°37'14"E, A DISTANCE OF 93.89 FEET;  
THENCE N56°20'17"E, A DISTANCE OF 10.52 FEET TO A POINT OF CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 57°48'25", A RADIUS OF  
154.46 FEET, A DISTANCE OF 155.84 FEET TO A POINT ON CURVE, SAID POINT BEING THE POINT OF  
BEGINNING;

CONTAINING A CALCULATED AREA OF 3.94 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

**“EXHIBIT A2”**

JOB NO. 8717.45 – 10  
FEBRUARY 26, 2003  
PAGE 1 OF 3

**LEGAL DESCRIPTION:** EA/HCP – PCGC OWNERSHIP PARCEL 2 (HCP AREA 1)

A TRACT OF LAND BEING A PORTION SECTIONS 27, 28, 33 AND 34, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE NORTHERLY RIGHT-OF-WAY LINE OF LEXINGTON DRIVE AS PLATTED IN PINE CREEK VILLAGE CENTER FILING NO. 3, RECORDED UNDER RECEPTION NO. 99164240, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT BOTH ENDS BY 1-1/2" ALUMINUM SURVEYOR'S CAPS STAMPED "JR ENG LTD RLS 17502," WHICH IS ASSUMED TO BEAR S84°07'19"W, A DISTANCE OF 231.97 FEET.

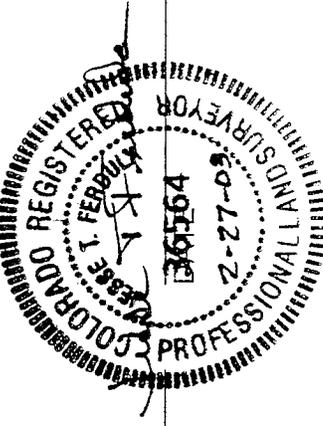
COMMENCING AT THE EASTERLY END OF SAID LINE; THENCE S84°07'19"W, A DISTANCE OF 93.94 FEET TO A POINT, SAID POINT BEING THE POINT OF BEGINNING;  
THENCE N07°46'55"E, A DISTANCE OF 408.55 FEET;  
THENCE N39°01'15"E, A DISTANCE OF 27.99 FEET;  
THENCE N17°40'04"E, A DISTANCE OF 23.39 FEET;  
THENCE N37°35'53"E, A DISTANCE OF 16.62 FEET;  
THENCE S85°36'21"E, A DISTANCE OF 26.45 FEET;  
THENCE S75°26'16"E, A DISTANCE OF 109.18 FEET;  
THENCE N85°40'20"E, A DISTANCE OF 80.55 FEET;  
THENCE S88°43'42"E, A DISTANCE OF 45.65 FEET;  
THENCE S87°00'03"E, A DISTANCE OF 58.09 FEET;  
THENCE N87°59'33"E, A DISTANCE OF 57.84 FEET;  
THENCE S87°30'47"E, A DISTANCE OF 22.50 FEET;  
THENCE N35°19'15"E, A DISTANCE OF 26.03 FEET;  
THENCE S58°01'19"E, A DISTANCE OF 9.56 FEET;  
THENCE S11°46'50"E, A DISTANCE OF 24.84 FEET;  
THENCE S59°03'48"E, A DISTANCE OF 23.65 FEET;  
THENCE S75°39'55"E, A DISTANCE OF 45.01 FEET;  
THENCE S84°49'51"E, A DISTANCE OF 78.71 FEET;  
THENCE S48°50'40"E, A DISTANCE OF 21.55 FEET;  
THENCE S84°33'56"E, A DISTANCE OF 42.79 FEET;  
THENCE S42°44'25"E, A DISTANCE OF 17.93 FEET;  
THENCE S83°59'50"E, A DISTANCE OF 19.37 FEET;  
THENCE N52°20'08"E, A DISTANCE OF 28.18 FEET;  
THENCE S65°34'45"E, A DISTANCE OF 12.25 FEET;  
THENCE N75°37'56"E, A DISTANCE OF 32.66 FEET;  
THENCE N51°57'25"E, A DISTANCE OF 77.26 FEET;  
THENCE N59°55'27"E, A DISTANCE OF 64.69 FEET;  
THENCE N51°47'45"E, A DISTANCE OF 42.59 FEET;  
THENCE N83°15'34"E, A DISTANCE OF 233.04 FEET;  
THENCE S59°57'29"E, A DISTANCE OF 66.78 FEET;  
THENCE S26°01'39"E, A DISTANCE OF 46.22 FEET;  
THENCE S10°38'31"E, A DISTANCE OF 38.44 FEET;  
THENCE S32°56'00"W, A DISTANCE OF 20.52 FEET;  
THENCE S67°05'24"E, A DISTANCE OF 28.63 FEET;  
THENCE N75°16'17"E, A DISTANCE OF 39.85 FEET;  
THENCE N90°00'00"E, A DISTANCE OF 42.59 FEET;  
THENCE S62°22'45"E, A DISTANCE OF 24.04 FEET;  
THENCE S21°03'29"E, A DISTANCE OF 28.22 FEET;  
THENCE S56°20'17"W, A DISTANCE OF 18.28 FEET;  
THENCE N77°55'04"W, A DISTANCE OF 14.52 FEET;  
THENCE S02°07'24"W, A DISTANCE OF 10.90 FEET;  
THENCE S75°06'01"W, A DISTANCE OF 7.76 FEET;  
THENCE S19°04'07"W, A DISTANCE OF 47.76 FEET TO A POINT ON CURVE;

THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 111°12'19", A RADIUS OF 15.00 FEET, A DISTANCE OF 29.11 FEET;  
THENCE N87°51'48"E, A DISTANCE OF 48.88 FEET;  
THENCE N77°19'18"E, A DISTANCE OF 3.66 FEET;  
THENCE S32°56'00"E, A DISTANCE OF 9.62 FEET;  
THENCE S69°09'57"E, A DISTANCE OF 22.79 FEET;  
THENCE N34°24'32"E, A DISTANCE OF 23.33 FEET;  
THENCE S48°33'24"E, A DISTANCE OF 33.82 FEET;  
THENCE S21°16'16"W, A DISTANCE OF 19.57 FEET;  
THENCE S00°00'00"E, A DISTANCE OF 18.24 FEET;  
THENCE S40°53'08"E, A DISTANCE OF 49.58 FEET;  
THENCE N45°01'51"E, A DISTANCE OF 11.47 FEET;  
THENCE S72°11'56"E, A DISTANCE OF 29.82 FEET;  
THENCE N48°23'48"E, A DISTANCE OF 12.21 FEET;  
THENCE N88°12'43"E, A DISTANCE OF 32.47 FEET;  
THENCE S63°27'34"E, A DISTANCE OF 21.86 FEET;  
THENCE N81°02'12"E, A DISTANCE OF 36.67 FEET;  
THENCE S76°49'53"E, A DISTANCE OF 55.18 FEET;  
THENCE N03°31'39"W, A DISTANCE OF 18.84 FEET;  
THENCE N82°42'36"E, A DISTANCE OF 62.61 FEET;  
THENCE S20°39'57"E, A DISTANCE OF 11.95 FEET;  
THENCE S10°47'23"E, A DISTANCE OF 43.25 FEET;  
THENCE S08°58'38"W, A DISTANCE OF 12.97 FEET;  
THENCE S37°53'21"W, A DISTANCE OF 7.69 FEET;  
THENCE S08°58'38"W, A DISTANCE OF 25.95 FEET;  
THENCE S20°46'55"E, A DISTANCE OF 20.92 FEET;  
THENCE S42°09'07"E, A DISTANCE OF 20.47 FEET;  
THENCE S16°48'05"W, A DISTANCE OF 70.06 FEET TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, HAVING A DELTA OF 34°06'01", A RADIUS OF 132.14 FEET, A DISTANCE OF 78.64 FEET;  
THENCE S50°54'06"W, A DISTANCE OF 56.21 FEET;  
THENCE S58°21'37"W, A DISTANCE OF 62.55 FEET;  
THENCE S77°58'26"W, A DISTANCE OF 86.89 FEET;  
THENCE N87°08'30"W, A DISTANCE OF 90.76 FEET;  
THENCE N78°06'13"W, A DISTANCE OF 89.72 FEET;  
THENCE N67°01'34"W, A DISTANCE OF 130.45 FEET;  
THENCE N62°58'55"W, A DISTANCE OF 59.78 FEET;  
THENCE S79°27'45"W, A DISTANCE OF 117.55 FEET;  
THENCE N84°34'02"W, A DISTANCE OF 86.29 FEET;  
THENCE N24°10'40"E, A DISTANCE OF 34.05 FEET;  
THENCE N65°49'20"W, A DISTANCE OF 128.33 FEET;  
THENCE N53°05'40"W, A DISTANCE OF 251.60 FEET;  
THENCE N62°52'58"W, A DISTANCE OF 225.31 FEET;  
THENCE S21°17'10"W, A DISTANCE OF 328.22 FEET TO A POINT ON CURVE ON THE NORTHERLY RIGHT-OF-WAY LINE OF LEXINGTON DRIVE;  
THENCE ON SAID NORTHERLY RIGHT-OF-WAY LINE, ON THE ARC OF A CURVE TO THE LEFT, WHOSE CENTER BEARS S26°47'37"W, HAVING A DELTA OF 32°40'19", A RADIUS OF 482.50 FEET, A DISTANCE OF 275.14 FEET TO A POINT OF TANGENT;  
THENCE S84°07'19"W, A DISTANCE OF 93.94 FEET ON SAID NORTHERLY RIGHT-OF-WAY LINE OF LEXINGTON DRIVE TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 15.63 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

NOTICE OF RESTRICTION

STATE OF COLORADO )  
                          ) ss.  
COUNTY OF EL PASO )

KNOW ALL MEN BY THESE PRESENTS THAT:

LP47, LLC, d/b/a LA PLATA INVESTMENTS, a Colorado limited liability company, is the owner of that certain real property more particularly described in Exhibits A1, A2, A3, A4, and A5 (the "Property") attached hereto and incorporated herein. The Property is shown on Exhibits B1, B2, B3, B4 and B5 attached hereto and incorporated herein. The Property is subject to a Habitat Creation and Enhancement Plan for Establishing Connection Between the North, South and Main Forks of Pine Creek, Colorado Springs, El Paso County, Colorado, dated September, 2002 (the "Plan"), prepared on behalf of La Plata Investments by SWCA, Inc. for the United States Fish and Wildlife Service ("USFWS"). The Plan was approved by the USFWS on or about February 27, 2003. Any purchaser of all or any part of the Property, or any person having an interest in or proposing to acquire an interest in all or part of the Property, is hereby notified of certain development restrictions affecting the Property, including the following, which are conditions of the Plan:

1. Except as explicitly described in the Plan, no alterations will occur in the area described as Preble's meadow jumping mouse ("PMJM") habitat areas that would adversely impact the PMJM's habitat, including but not limited to dumping or placing soil or other material, such as trash, mowing, removal or destruction of vegetation (with the exception of weed control), excavation or removal of soil, and activities detrimental to flood control, water conservation or erosion control.
  2. This restriction may not be removed without the prior written approval of the USFWS.
- Executed this 27th day of February, 2003.

OWNER:

LP47, LLC

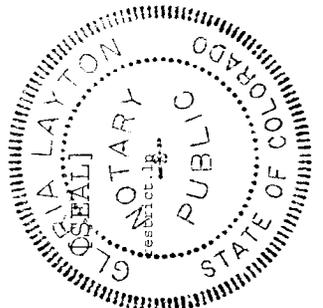
By  \_\_\_\_\_

Scott E. Smith, Manager

The foregoing instrument was acknowledged before me this 27<sup>th</sup> day of February, 2003 by Scott E. Smith as Manager of LP47, LLC.

Witness my hand and official seal.

My commission expires: September 13, 2004.



  
Notary Public

**“EXHIBIT A1”**

JOB NO. 8717.45 – 07  
FEBRUARY 26, 2003  
PAGE 1 OF 2

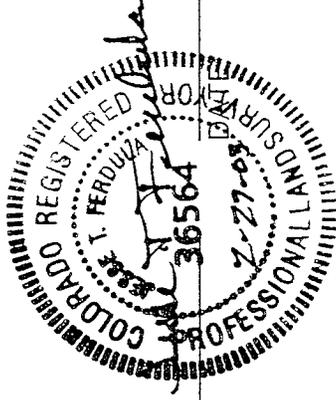
**LEGAL DESCRIPTION:** CC – LP47 OWNERSHIP PARCEL 1

TRACT "A", AS PLATTED IN PINE CREEK SUBDIVISION FILING NO. 24, RECORDED UNDER RECEPTION NO. 202014364, RECORDS OF EL PASO COUNTY, COLORADO.

CONTAINING A CALCULATED AREA OF 8.260 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



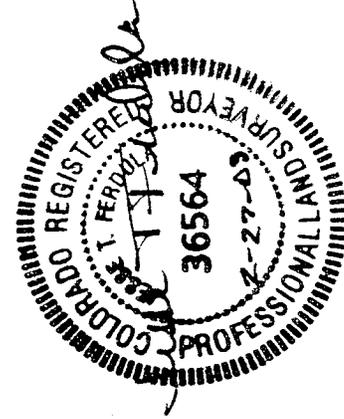
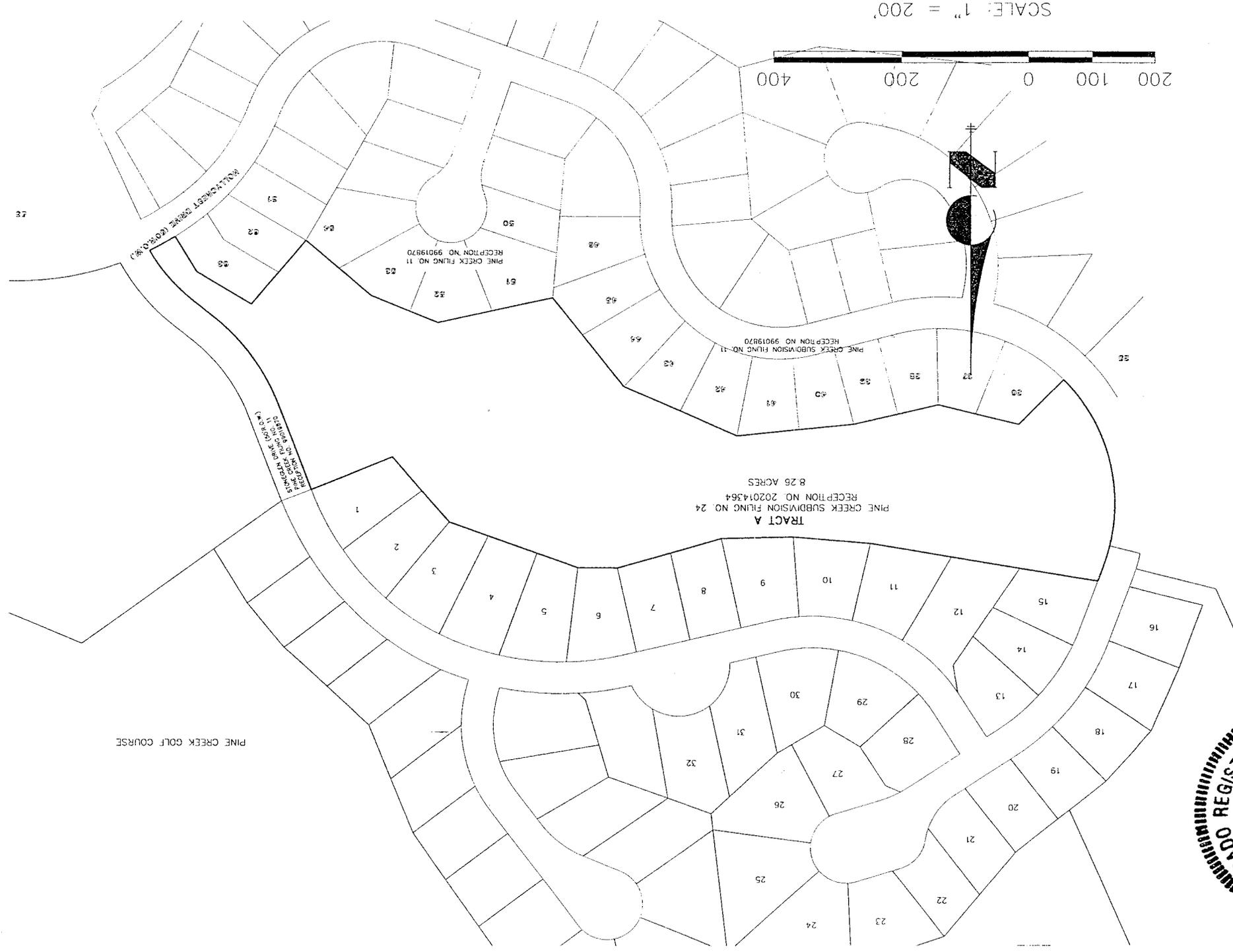
JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



**J·R ENGINEERING**  
A Subsidiary of Westrian

4310 ArrowsWest Drive • Colorado Springs, CO 80907  
719-593-2593 • Fax: 719-528-6633 • www.jrengineering.com

EXHIBIT "B1"  
CONNECTION CORRIDOR  
LP-47 OWNERSHIP PARCEL 1  
JOB NO. 8717.45-07  
SHEET 2 OF 2  
FEBRUARY 26, 2003



JR ENGINEERING DOES NOT EXPRESS NOR IMPLY ANY WARRANTY WITH THE ABOVE WRITTEN LEGAL DESCRIPTION AND EXHIBIT. THE LEGAL DESCRIPTION WAS WRITTEN FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT DEPICT A MONUMENTED LAND SURVEY.

**“EXHIBIT A2”**

JOB NO. 8717.45 – 08  
FEBRUARY 26, 2003  
PAGE 1 OF 2

**LEGAL DESCRIPTION:** CC – LP47 OWNERSHIP PARCEL 2

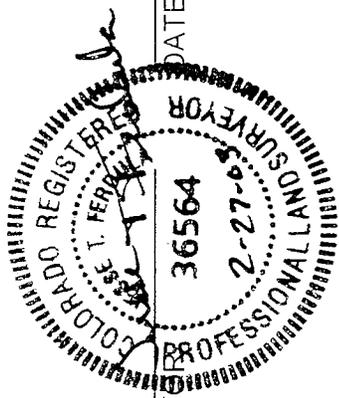
TRACT “B”, AS PLATTED IN PINE CREEK SUBDIVISION FILING NO. 24, RECORDED UNDER RECEPTION NO. 202014364, RECORDS OF EL PASO COUNTY, COLORADO.

CONTAINING A CALCULATED AREA OF 3.900 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.

JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

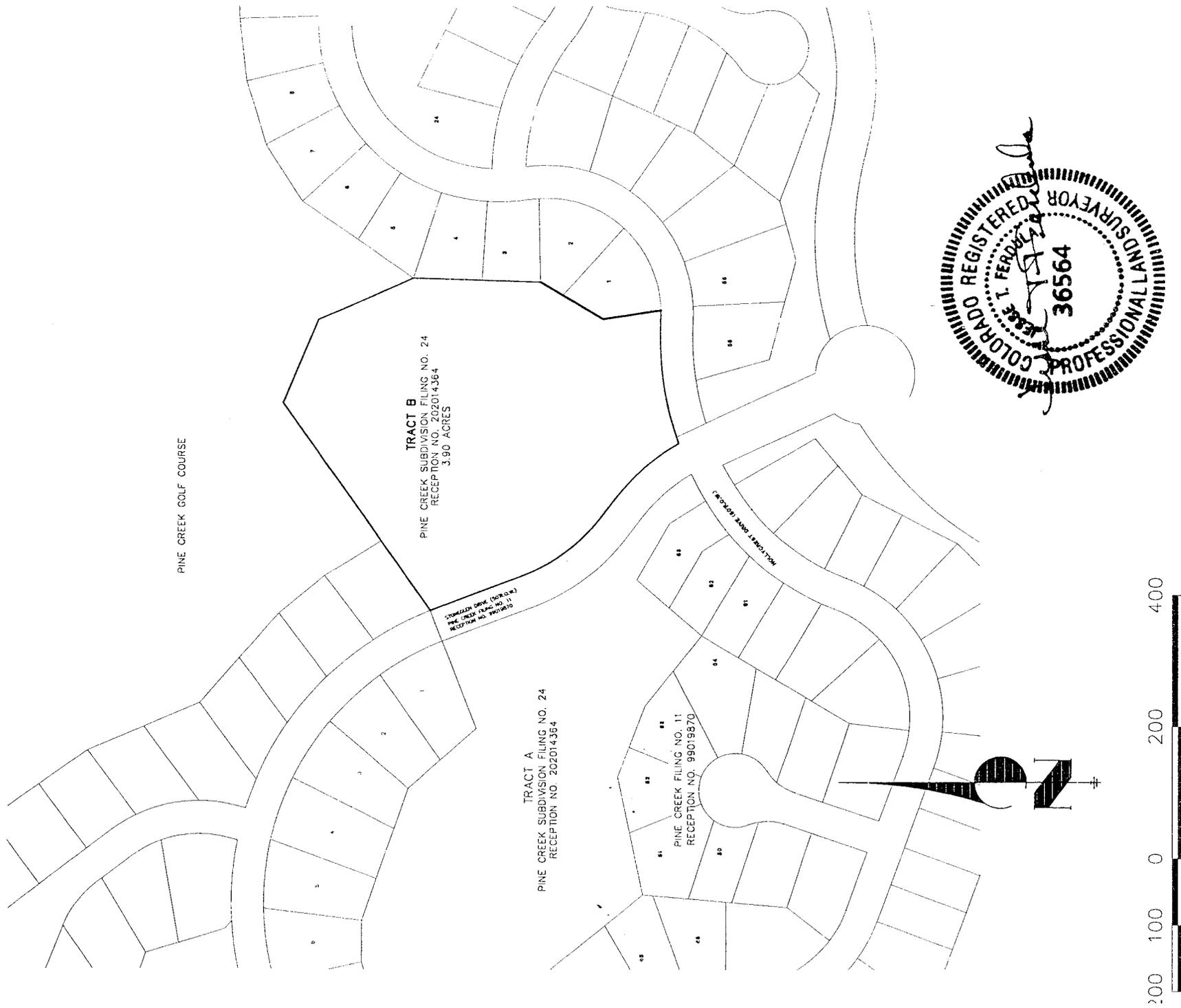




**JR ENGINEERING**  
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EXHIBIT "B2"  
CONNECTION CORRIDOR  
LP-47 OWNERSHIP PARCEL 2  
JOB NO. 8717.45-08  
FEBRUARY 26, 2003  
SHEET 2 OF 2



SCALE: 1" = 200'

JR ENGINEERING DOES NOT EXPRESS NOR IMPLY ANY WARRANTY WITH THE ABOVE WRITTEN LEGAL DESCRIPTION AND EXHIBIT. THE LEGAL DESCRIPTION WAS WRITTEN FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT DEPICT A MONUMENTED LAND SURVEY.

**“EXHIBIT A3”**

JOB NO. 8717.45 – 04  
FEBRUARY 26, 2003  
PAGE 1 OF 2

**LEGAL DESCRIPTION:** CC – LP47 OWNERSHIP PARCEL 3

A TRACT OF LAND BEING A PORTION OF THE SOUTH HALF OF SECTION 27, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE WESTERLY BOUNDARY LINE OF PINE CREEK FILING NO. 33, RECORDED UNDER RECEPTION NO. 202043124, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED ON THE NORTH AND SOUTH ENDS BY A 1-1/2" ALUMINUM SURVEYOR'S CAP STAMPED "JR ENG PLS 17502," BEING ASSUMED TO BEAR S45°09'04"E, A DISTANCE OF 293.58 FEET.

COMMENCING AT THE SOUTH END OF SAID BOUNDARY LINE; THENCE N70°45'43"E, A DISTANCE OF 246.67 FEET TO THE POINT OF BEGINNING;  
THENCE S47°31'46"W, A DISTANCE OF 65.40 FEET;  
THENCE S27°30'26"W, A DISTANCE OF 63.71 FEET;  
THENCE S25°13'55"W, A DISTANCE OF 84.96 FEET;  
THENCE S15°16'20"W, A DISTANCE OF 81.83 FEET;  
THENCE S04°32'40"W, A DISTANCE OF 75.66 FEET;  
THENCE S04°05'29"E, A DISTANCE OF 58.85 FEET TO A POINT ON THE BOUNDARY OF PINE CREEK FILING NO. 24, RECORDED UNDER RECEPTION NO. 202014364, RECORDS OF EL PASO COUNTY, COLORADO;  
THENCE ON SAID BOUNDARY, THE FOLLOWING FOUR (4) COURSES:

1. S54°23'23"W, A DISTANCE OF 243.04 FEET;
2. N31°33'14"W, A DISTANCE OF 100.37 FEET;
3. N39°21'50"W, A DISTANCE OF 90.08 FEET;
4. N48°05'47"W, A DISTANCE OF 72.06 FEET;

THENCE ON THE ARC OF A CURVE TO THE LEFT, WHOSE CENTER BEARS N27°48'18"W, HAVING A DELTA OF 16°03'08", A RADIUS OF 698.68 FEET, A DISTANCE OF 195.74 FEET TO A POINT ON CURVE;  
THENCE N59°40'37"E, A DISTANCE OF 169.79 FEET TO A POINT ON THE BOUNDARY OF SAID PINE CREEK FILING NO. 33;

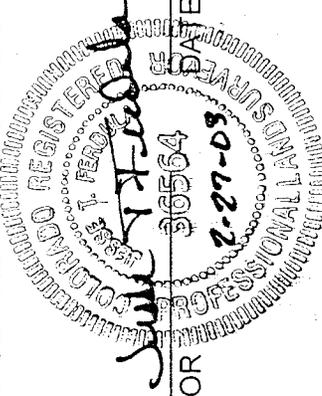
THENCE N56°19'12"E, ON SAID BOUNDARY, A DISTANCE OF 94.42 FEET;  
THENCE CONTINUING N56°19'12"E, A DISTANCE OF 137.54 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 2.090 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.

JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

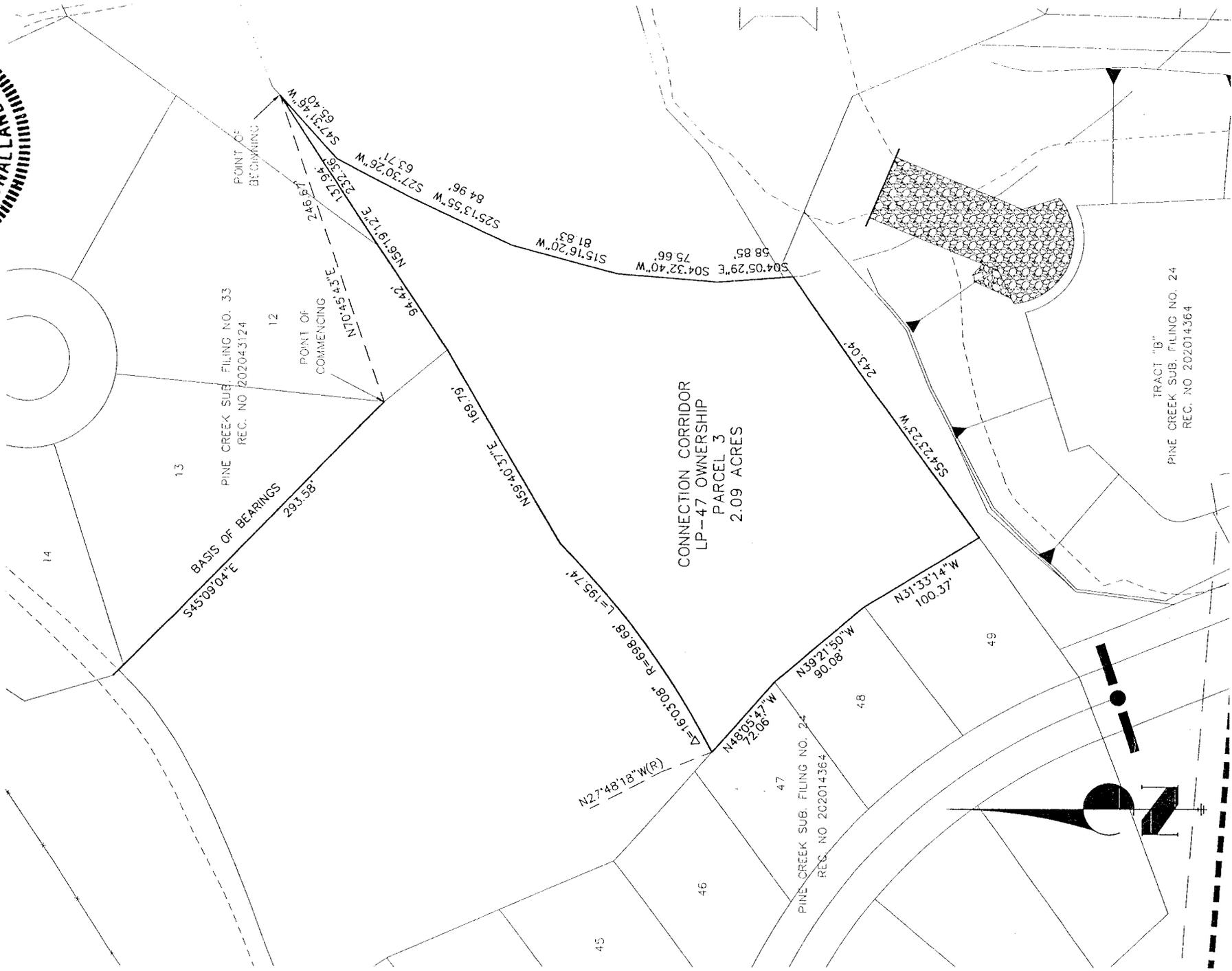
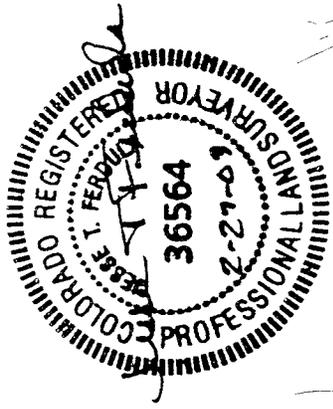




**J.R ENGINEERING**  
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EXHIBIT "B3"  
CONNECTION CORRIDOR  
LP-47 OWNERSHIP PARCEL 3  
JOB NO. 28717.45-04  
SHEET 2 OF 2  
FEBRUARY 26, 2003



SCALE: 1" = 100'

JR ENGINEERING DOES NOT EXPRESS NOR IMPLY ANY WARRANTY WITH THE ABOVE WRITTEN LEGAL DESCRIPTION AND EXHIBIT. THE LEGAL DESCRIPTION WAS WRITTEN FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT DEPICT A MONUMENTED LAND SURVEY.



**“EXHIBIT A4”**

JOB NO. 8717.45 – 05  
FEBRUARY 26, 2003  
PAGE 1 OF 2

**LEGAL DESCRIPTION:** CC – LP47 OWNERSHIP PARCEL 4

A TRACT OF LAND BEING A PORTION OF THE SOUTH HALF OF SECTION 27, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

THE NORTHERLY LINE OF LOTS 5 & 6 INCLUSIVE OF PINE CREEK SUBDIVISION FILING NO. 13, RECORDED UNDER RECEPTION NO. 99028694, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT THE NORTH AND SOUTH ENDS BY 1-1/2" ALUMINUM SURVEYOR'S CAPS STAMPED "JR ENG PLS 17502," ASSUMED TO BEAR S34°27'29"W, HAVING A DISTANCE OF 205.99 FEET.

COMMENCING AT THE NORTHERLY END OF SAID LINE, SAID POINT BEING THE POINT OF BEGINNING;

THENCE S34°27'29"W ON SAID LINE, A DISTANCE OF 205.99 FEET;

THENCE N23°34'33"W, A DISTANCE OF 158.02 FEET;

THENCE N67°04'09"W, A DISTANCE OF 136.98 FEET;

THENCE N55°00'29"E, A DISTANCE OF 99.98 FEET;

THENCE N45°57'50"E, A DISTANCE OF 47.36 FEET;

THENCE N73°40'01"E, A DISTANCE OF 79.11 FEET;

THENCE N69°25'07"E, A DISTANCE OF 54.13 FEET;

THENCE S10°46'01"E, A DISTANCE OF 83.38 FEET;

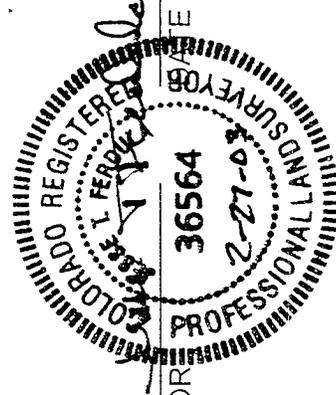
THENCE S41°02'23"E, A DISTANCE OF 92.29 FEET TO A POINT ON THE NORTHWESTERLY LINE OF LOT 7 OF SAID PINE CREEK SUBDIVISION FILING NO. 13;

THENCE S56°51'18"W ON SAID NORTHWESTERLY LINE, A DISTANCE OF 15.31 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 1.05 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.



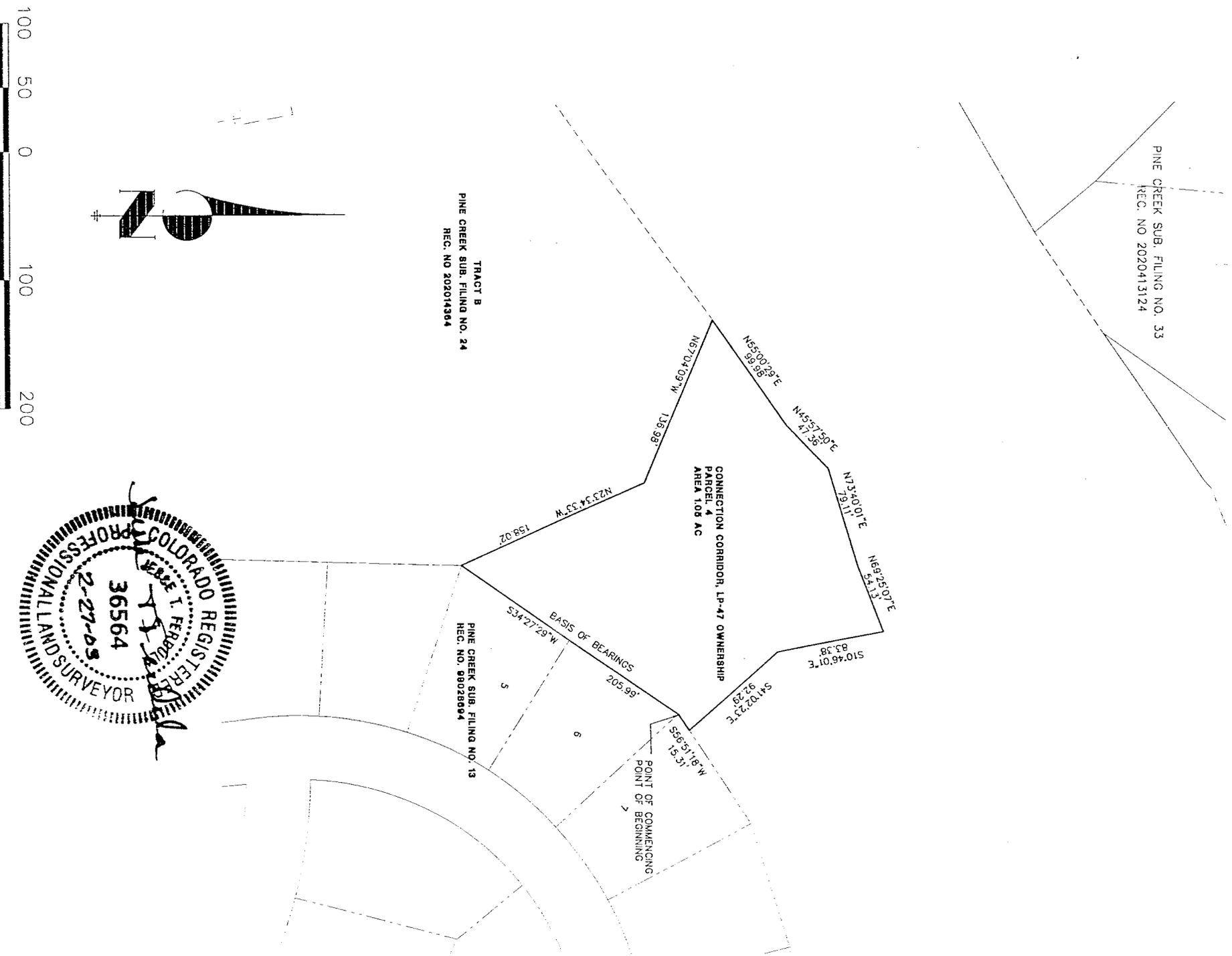
JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



**JR ENGINEERING**  
A Subsidiary of Westrian

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EXHIBIT "B4"  
CONNECTION CORRIDOR, LP-47  
PARCEL 4  
JOB NO 28717.45-05  
SHEET 2 OF 2  
FEBRUARY 26, 2003



JR ENGINEERING DOES NOT EXPRESS NOR IMPLY ANY WARRANTY WITH THE ABOVE WRITTEN LEGAL DESCRIPTION AND EXHIBIT. THE LEGAL DESCRIPTION WAS WRITTEN FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT DEPICT A MONUMENTED LAND SURVEY.



**"EXHIBIT A5"**

JOB NO. 8717.45 - 12  
FEBRUARY 26, 2003  
PAGE 1 OF 2

**LEGAL DESCRIPTION:** CC - LP47 OWNERSHIP PARCEL 5

A TRACT OF LAND BEING A PORTION OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, BEING DESCRIBED AS FOLLOWS:

**BASIS OF BEARINGS:**

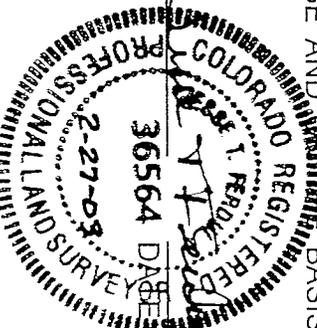
THE COURSE ON THE WESTERLY BOUNDARY LINE OF LOTS 29, 30, 31 AND TRACT A, PINE CREEK SUBDIVISION FILING NO. 11, RECORDED UNDER RECEPTION NO. 99019870, RECORDS OF EL PASO COUNTY, COLORADO, BEING MONUMENTED AT BOTH ENDS BY 1-1/2" ALUMINUM SURVEYOR'S CAPS STAMPED "JR ENG RLS 17502," WHICH IS ASSUMED TO BEAR S35°32'20"E, A DISTANCE OF 266.30 FEET.

COMMENCING AT THE SOUTHERLY END OF SAID WESTERLY BOUNDARY, SAID POINT BEING ON THE NORTHERLY RIGHT-OF-WAY LINE OF BRIARGATE PARKWAY, AS PLATTED IN SAID PINE CREEK SUBDIVISION FILING NO. 11; THENCE S71°27'28"W, A DISTANCE OF 536.13 FEET TO A POINT ON CURVE ON THE SOUTHERLY RIGHT-OF-WAY LINE OF SAID BRIARGATE PARKWAY, SAID POINT BEING THE POINT OF BEGINNING;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, WHOSE CENTER BEARS S06°20'22"E, HAVING A DELTA OF 32°38'13", A RADIUS OF 2517.50 FEET, A DISTANCE OF 1434.02 FEET ON THE SOUTHERLY RIGHT-OF-WAY LINE OF BRIARGATE PARKWAY;  
THENCE S63°42'10"E, A DISTANCE OF 688.48 FEET ON THE SOUTHERLY RIGHT-OF-WAY LINE OF BRIARGATE PARKWAY TO A POINT OF CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 00°43'03", A RADIUS OF 1582.50 FEET, A DISTANCE OF 19.82 FEET TO A POINT ON CURVE;  
THENCE S20°20'51"W, A DISTANCE OF 141.76 FEET;  
THENCE N69°39'09"W, A DISTANCE OF 264.75 FEET;  
THENCE S83°01'36"W, A DISTANCE OF 62.73 FEET;  
THENCE S73°36'53"W, A DISTANCE OF 65.35 FEET;  
THENCE S68°24'11"W, A DISTANCE OF 75.10 FEET;  
THENCE S60°19'31"W, A DISTANCE OF 99.22 FEET;  
THENCE N68°04'35"W, A DISTANCE OF 165.87 FEET;  
THENCE S19°02'26"W, A DISTANCE OF 17.34 FEET;  
THENCE S07°46'33"W, A DISTANCE OF 36.02 FEET;  
THENCE S22°55'09"E, A DISTANCE OF 173.61 FEET;  
THENCE N70°05'22"W, A DISTANCE OF 249.36 FEET TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE RIGHT, WHOSE CENTER BEARS N18°03'09"E, HAVING A DELTA OF 53°14'25", A RADIUS OF 359.56 FEET, A DISTANCE OF 334.11 FEET TO A POINT OF REVERSE CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, HAVING A DELTA OF 43°33'51", A RADIUS OF 82.65 FEET, A DISTANCE OF 62.84 FEET TO A POINT ON CURVE;  
THENCE N74°43'16"W, A DISTANCE OF 282.95 FEET;  
THENCE N75°01'49"W, A DISTANCE OF 151.03 FEET;  
THENCE N71°08'09"W, A DISTANCE OF 194.05 FEET TO A POINT ON CURVE;  
THENCE ON THE ARC OF A CURVE TO THE LEFT, WHOSE CENTER BEARS N17°27'23"E, HAVING A DELTA OF 75°26'12", A RADIUS OF 300.00 FEET, A DISTANCE OF 394.99 FEET TO THE POINT OF BEGINNING;  
CONTAINING A CALCULATED AREA OF 17.470 ACRES.

**LEGAL DESCRIPTION STATEMENT:**

I, JESSE T. FERDULA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY STATE THAT THE ABOVE LEGAL DESCRIPTION AND ATTACHED EXHIBIT WERE PREPARED UNDER MY RESPONSIBLE CHARGE AND ON THE BASIS OF MY KNOWLEDGE, INFORMATION AND BELIEF, ARE CORRECT.

JESSE T. FERDULA, PROFESSIONAL LAND SURVEYOR  
COLORADO P.L.S. NO. 36564  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



**APPENDIX E  
Letter of Credit**

**APPENDIX F**  
**Civil Penalty Agreement**