Goodsprings Trails Study

CLARK COUNTY NEVADA

Findings Report #1 | March 27, 2009

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Introduction

This findings report summarizes the issues that have been identified during the preliminary phases of the Goodsprings Trail Study which was initiated in December 2008. The Goodsprings Trail Study began with field work, research and analysis, and a public meeting in the early winter of 2008. The culmination of these efforts was a set of analysis maps (**Appendix 1**) and a preliminary set of draft alternative trail alignments – Draft I Alignment Alternatives (**Appendix 2**). In February 2009, these preliminary alternatives were distributed to a number of different stakeholders for review and comment. During this period, the planning team also contacted several other organizations and entities about specific issues which had been identified during the research and analysis phase of the trail study. Following the synthesis of all stakeholder comments and the results of the interim site visit (February 2009) and subsequesnt research, the planning team refined the preliminary alternatives and produced a second set of alternative alignments – Draft II Alignment Alternatives (**Appendix 3**).

The issues that the Draft II Alignment Alternatives responded to and outstanding issues that may impact the feasibility of the trail development in the Goodsprings area are outlined in **Table 1** on the following page and summarized in the remainder of this findings report.

Members of the Planning Team and the Goodsprings Trail Committee walk the historic Yellow Pine Railroad berm outside Goodsprings, NV.

Table 1: Summary of Issues Identified During the Research and Analysis Phase of the Goodsprings Trail Study

#	Issue	Commenting Organization or Entity
1	Impact to historic and cultural resources ❖ Integrity of historic railroad berm and the possibility of putting a portion of the trail alignment on top of the berm. ❖ Artifacts	❖ **State Historic Preservation Office (SHPO)** ❖ **Bureau of Land Management (BLM)**
2	Impact to visual resources	❖ **Bureau of Land Management (BLM)**
3	Potential trail alignment within the Large Scale Tortoise Translocation Area	❖ **Clark County Desert Conservation Program** ❖ **U.S. Fish & Wildlife Service**
4	Abandoned mines within the study area	❖ **State of Nevada Division of Minerals** ❖ **Bureau of Land Management (BLM)**
5	Southern Nevada Supplemental Airport development and the planned modified retention facilities within the study area	❖ **Clark County Department of Aviation** ❖ **Bureau of Land Management (BLM)**
6	Portions of proposed trail alignment within utility ROW	❖ **Kern River Gas Transmission Company** ❖ **Valley Electric Association** ❖ **NV Energy**
7	Potential Use of NDOT ROW for a portion of the trail alignment and other program elements	❖ **Nevada Department of Transportation (NDOT)**
8	Potential solar energy development	❖ **NONE TO DATE**
9	Potential wind energy development	❖ **NONE TO DATE**
10	Sensitive and threatened species	❖ **Bureau of Land Management (BLM)**

Note: To date all of these entities have been successfully contacted except NV Energy.

Issue Summary

The following is a summary of the issues outlined in **Table 1**. When applicable, a description of how this issues was resolved or accommodated in the alignment alternatives is given.

Issue #1: Impact to Historic and Cultural Resources

Integrity of historic railroad berm and the possibility of putting a portion of the trail alignment on top of the berm.

The historic Yellow Pine Railroad is the central emphasis of this trail study. The railroad corridor, stretching from Jean to Goodsprings, and then on to the historic Yellow Pine Mine, serves as the foundation for the trail corridor. From its inception, this project was conceived as a rails-to-trails initiative and a major purpose of the trail when built would be to educate visitors on the unique history of the Town of Goodsprings and its mining heritage.

The Yellow Pine Railroad berm looking northwest towards Goodsprings.

Currently, the condition and integrity of the railroad berm varies at different locations throughout the project area. Along most of the railroad corridor the berm is still highly visible and easy to distinguish. However, in some locations the berm has succumbed to the forces of time, nature, and human intervention and has all but disappeared from the surrounding desert landscape. An important focus of the proposed trail alignments in both the Draft I & II Alignment Alternatives was

to highlight the berm from various perspectives by locating the trail beside the berm in some locations and on top of the berm in others. However, it was important to verify if locating the trail on top of the berm will jeopardize the integrity of this historic resource due to the grading or stabilization that may be necessary when building the trail.

Rockwork along the berm is highly visible in some locations.

Comments Received by Organization/Entity:

A. State Historic Preservation Office (SHPO)

1. SHPO emphasized their support of rails-to- trails projects and their importance in preserving the country's railroad heritage while offering a unique recreation and educational experience to visitors.
2. The only caveat placed on a trail being located directly on top of the berm was the opinion that a natural surface trail would be preferable to a soft or hard surface trail.
3. The reason that a natural surface trail is preferable is that it is more likely that a natural surface trail would preserve the integrity of the berm and would require the least amount of engineering in terms of grading and installation.
4. SHPO reemphasized their support for the project and explained that if a soft or hard surface was preferable to a natural surface trail that their office would work closely with BLM during the NEPA process.

B. Bureau of Land Management (BLM)

1. A Class III cultural resource inventory and mitigation of any affected historic properties will be required prior to the establishment of trails or use of the historic railroad berm. I hope enough funding has been acquired to accomplish this.

Trail Corridor Implications (Draft II Alternatives):
All three alternatives show portions of the trail on top of the berm, however these locations are limited and most utilize the natural surface of the berm and will require minimal grading and engineering. Of the three Draft II Alternatives, only Alternative 1 locates a soft surface trail on top of the berm. A soft surface application (such as crushed rock) is shown on this alternative on the stretch of trail between Jean and Goodsprings. However, if locating such a trail on top of the berm proves to be a significant issue, a soft surface trail could be located to the side of the berm instead. As this planning effort moves forward, the Planning Team will investigate the cost and implications of performing a Class III cultural resource inventory and include this cost in the final implementation plan.

One purpose of applying a soft surface in this location rather than a natural surface is the alignment of the trail through the Tortoise Translocation Area. In an effort to keep users on the trail in this area, it may be beneficial to pave the trail in this location in order to distinguish it from the surrounding landscape. Another important consideration was the use of the trail by bicyclists. A soft surface trail, while not ideal for road bikers, offers a more substantial surface to ride upon than a natural surface trail. The only other alternative for road cyclists in Alternative 1 is to use the existing road ROW along SR 161.

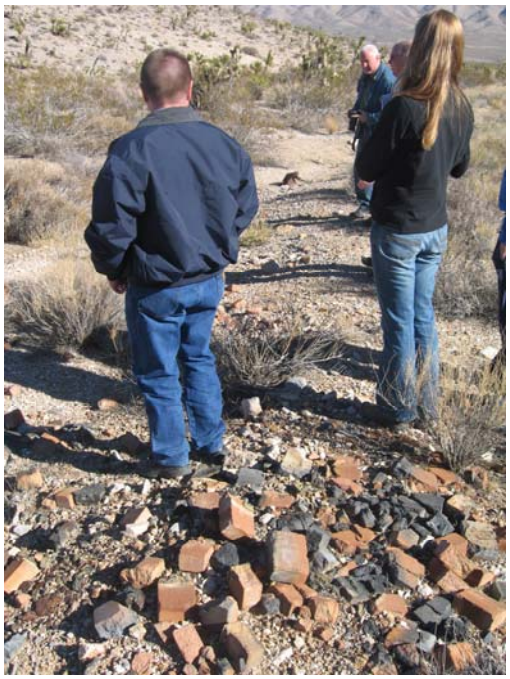
<u>Artifacts</u>
The project area is located in an area rich in history and many artifacts remain which are valuable in that they speak to the unique history of the area. It is important to protect these resources while inviting visitors to experience this unique cultural landscape.

Comments Received by Organization/Entity:

None to Date

Trail Corridor Implications (Draft I & II Alternatives):
On both the Draft I and 2 Alternatives, an effort was made to protect important cultural and historic resources. In all of the alternatives, the trail is terminated at a point that is a significant distance from the Yellow Pine Mine and this terminus will be signed and posted to discourage users from proceeding beyond it. Signs will also explain the importance of leaving artifacts where they are for the benefit of future users.

All alternatives avoid the accident site pictured below by pulling the trail off the historic alignment and away from the artifacts that are located here. It is important to note that the accident site is not labeled on the alternative maps or the analysis maps in order to not publicize its existence to potential artifact collectors or vandals.



Accident Site

Railroad Pin

One of several "Can Dumps" within the study area.

When the trail is developed, it will be important to develop a system for cataloguing and preserving historic artifacts that are located within the trail alignment. A display of these artifacts could potentially be displayed in Goodsprings and could be used to help interpret the history of the area to visitors.

Overall, the research performed to date indicates that the existence of historic artifacts (including the railroad berm) will not pose an impediment to the construction of a trail within the study area. However, the location of historic and cultural resources may impact the final alignment of the trail and the Class III inventory recommended by BLM in the comments above may need to be successfully completed prior to or in conjunction with any future trail planning and design projects within the study area.

Issue #2: Impact to Visual Resources

The following statement is from the BLM Comment Log (**Appendix 4**):

The proposed project, a non-motorized trail study for a rails-to-trail project, is located in Class II and III VRM areas as identified in the Las Vegas RMP, signed October 1998.

Class II VRM Objective. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III VRM Objective. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Comments Received by Organization/Entity:

A. Bureau of Land Management (BLM)

1. The proposed view points are primarily southwest and southeast from Vista Point, Goodsprings, and Goodsprings Mining District. Are trail users restricted from looking in the other directions or are these points of significant view? If so, why?
2. The maps submitted do not show all of the existing infrastructure, and may communicate a pristine viewshed. Several power lines, gas line and plant facilities are within the proposed viewshed.

3. The maps don't show proposed facilities, such as the Table Mountain wind project, The Southern Nevada Supplemental Airport and related modified retention basin, Desert Express Rail line. The modified retention basin is within a mile of the proposed trails. These projects, as well as other proposed renewable energy projects will need to be addressed in the cumulative impacts section of a NEPA document.
4. The trail study dated 2/12/09 does not indicate if the trail is going to be groomed or just posted. If groomed, what are the proposed dimensions of the surface disturbances for the trails and the picnic areas?

A wild horse below Mt. Potosi.

View looking southeast from vista point.

View of the utility corridor along SR 161 looking northwest towards Goodsprings.

Trail Corridor Implications (Draft II Alternatives):
In all three alternatives the trails and related facilites in the Goodsprings area respect the area's open and relatively unobstructed viewsheds. The trails will be designed and sited to be unobstrusive and will not detract from the character of the surrounding desert landscape.

The following statements respond to BLMs expressed concerns by number:

1. Important viewsheds are indicated on the alternative maps with two arrows indicating the direction of significant views. The arrows are not meant to imply restriction of views in other directions, but are merely indicating which direction contains the view which will most likely interest a visitor.

2. The Draft II Alternatives and the Analysis Maps contain all existing infrastructure mentioned above (See **Appendix 1, 2, & 3**).

3. These Items are either illustrated on the Analysis Maps or have been left off all maps intentionally at the request of the controlling entity.

4. As the trail study moves forward and a preferred alignment is determined, the details of trail surfacing, width, and trailhead layout will be further developed. Preliminary examples will be in included in presentation materials for the second public meeting.

Issue #3: Potential Trail Alignment within the Large Scale Tortoise Translocation Area (LSTS)

The southeast portion of the study area contains a portion of a LSTS administered by Clark County Desert Conservation Program. This area also contains a significant portion of the historic railroad berm. All three of the alternatives in the Draft I maps show the trail alignment going through this area.

Comments Received by Organization/Entity:

A. Desert Conservation Program (DCP)

1. Although the DCP is highly supportive of trails and Goodsprings efforts, it is our recommendation that the proposed trail system avoid the LSTS altogether.
2. Construction impacts from either paving or soft-surfacing the trail will lead to unnecessary impacts to habitat in the LSTS.
3. If approved, this would add two new LSTS fence breaches, one at the Jean trailhead and the other at the LSTS boundary seven miles northwest. Cattle guards and possibly gates would have to be installed at these new locations. These locations would add additional fencing monitoring and maintenance requirements to the DCP's responsibilities for LSTS fencing and unnecessarily increase opportunities for tortoises to exit the LSTS.
4. Traffic (foot, equestrian and motorized and non-motorized) from the trail could lead to introduction of invasive weeds.
5. Trail users could increase the presence of trash, which degrades habitat and attracts coyotes and ravens (natural predators of tortoise).
6. Tortoises translocated to the LSTS are largely animals that were previously domesticated. Tortoises in the LSTS have been observed approaching humans and this could make the animals more susceptible to collection by humans visiting the LSTS.
7. The USFWS translocates tortoises every spring and fall into the LSTS. Trail users may unintentionally disrupt translocation activities.
8. If approved, the DCP recommends that there be required signage explaining the sensitivity of the LSTS and what to do if a trail user encounters a tortoise.

Note: See **Appendix 5** for original comment letter DCP.

B. Bureau of Land Management (BLM)

1. The proposed trail would cross through the Desert Tortoise Large Scale Translocation Site (LSTS). The LSTS is where wild and pet desert tortoises turned into the Desert

Tortoise Transfer and Holding Facility at the Desert Tortoise Conservation Center are released. Since spring of 1997, over 7,000 desert tortoises have been released into the 40 sq. mi. LSTS. This raises concerns about the compatibility of the proposed recreational uses and management of a very high density population of a listed species.

2. The LSTS is surrounded by a desert tortoise exclusion fence. Cattle guards are installed on all roads entering the area to ensure that tortoises cannot escape from the LSTS. A cattle guard or equivalent structure would need to be installed where the trail crosses the fence line. This would need to be maintained by the ROW holder.
3. Recreational users may collect tortoises they observe. David Grandmaison, AZ Game and Fish, presented a paper at the DT Council Symposium on Feb 20, 2009 reporting a study they conducted on human-tortoise interactions. They observed 474 human-tortoise interactions at 38 sites where they placed a tortoise along a road. 8% of people encountering a tortoise attempted to collect it illegally. ''A biologically significant number of tortoises are collected by motorists. Collectors generally indicated ignorance of protection status.'' (Grandmainson, 2009) 44% moved the tortoise off the roadway, 38% slowed or stopped to observe the tortoise, and 9% got out of the vehicle to observe. While it may be awkward to carry a tortoise by hand or bike through the LSTS, up to 8% of those folks encountering them may consider trying it. The data also suggests that a large percentage of people encountering desert tortoises will harass the animal if it is in the way or threatened with injury by a vehicle. Bike riders and hikers (who assume bike riders may encounter a tortoise) may act in a similar manner to people in cars in the same situation.
4. Recreational users may travel off the trail into the LSTS habitat, creating informal use trails that fragment habitat and would require future restoration efforts.
5. To ensure no take (harm or harassment) of desert tortoises occurs by the casual user, I recommend that the trail, if approved, include educational displays that users can read even while traveling on a bike so they do not violate the Endangered Species Act or damage habitat out of ignorance. We also should discuss how we are going to determine if these measures are effective or should be modified. If habitat damage or tortoise harassments/poaching is found to increase, then modifications to trail management may need to take place.
6. Alternatives that site the trail along the highway (either inside or outside the LSTS fence) would have less effect on the species as tortoises generally are found in less density near a highway. Outside the LSTS would be preferred from a tortoise management perspective. Although the DCP is highly supportive of trails and Goodsprings efforts, it is our recommendation that the proposed trail system avoid the LTS altogether.

C. U.S. Fish and Wildlife Service (USFWS)

1. We generally agree with the comments to be provided separately by Marci Henson, Clark County Desert Conservation Program Manager. However, if a selection is ultimately made among the three proposed alternatives, we have fewer issues with trail alternative #1 and #3 with respect to the Large-Scale Translocation Site (LSTS) which was established for the desert tortoise.
2. Any portion of the trail within the LSTS should NOT be paved (e.g., alternative #2 should not be selected), in order to minimize damaging use that might veer off-trail into the LSTS.
3. Motorized uses should be restricted along the entire extent of any reaches of trail that enter the LSTS to prevent such use from also entering the LSTS, whether or not the LSTS portion of the trail is paved.
4. We would prefer to see an interpretive site within the LSTS portion of the trail, perhaps at the Jean trailhead, if not at BOTH ends of the LSTS stretch.
5. "Tortoise translocation" is identified as a possible topic for one or more of the interpretive sites, but we prefer that the topic focus on tortoise natural history, in general, and do's and don'ts relative to wild and captive tortoises, specifically, rather than translocation. These would be more useful educational messages, especially in dealing with the important issues raised in Marci Henson's letter.
6. Moving the LSTS fence just to the south of the trail is an acceptable option.

Tortoise fence surrounding LSTS.

Trail Corridor Implications (Draft II Alternatives):
On the Draft II Alternatives the trail alignment through the LSTS has been eliminated on all options except Alternative 1. Due to original purpose of the project as a rail-to-trail project, the County and the Planning Team felt it was important to show the trail following the historic railroad berm in at least one of the options. This alignment is important to members of the community and it is important that at least one of the options showcases this possibility. At the same time, the Planning Team recognized the adverse impacts of locating the trail within the LSTS (outlined in the comments above) and understands the need to develop options which locate the trail outside of this area.

The following adjustments were made to the trail alignment in the Draft II Alternatives:

- Alternative 2: The trail has been relocated to use a portion of the NDOT ROW along the north side of SR 161. A natural surface path has also been included in this alternative which is pulled further off the road and provides a more remote visitor experience.

- Alternative 3: The trail along the berm and through the LSTS has been removed and only the trail along the north side of SR 161 is shown.

Issue #4: Abandoned Mines within the Study Area

The study area is within not only a historic mining area but also an active one. While the area is currently used by recreationists, it is important to recognize the dangers inherent in both abandoned and active mining claims and the implications which these dangers have on future users of the trail corridor. Abandoned mines pose a particular threat as they are often targeted by artifact and rock hunters. When unsecured, these mines pose a significant threat to curious people who do not understand the hazards posed by such areas.

View of the historic Yellow Pine Mine.

Comments Received by Organization/Entity:

A. State of Nevada Division of Minerals (SNDM)

1. The trail study is strongly supported by Bill Durban (Chief, Southern Nevada Operations).
2. While dangerous mines are in the study area this should not preclude locating a trail corridor in the area.
3. Precautions, such as contacting mine owners and encouraging them to safely and properly close abandoned mines, should be pursued as the project moves forward.
4. Opportunities to educate trail users on the danger of approaching mines (active and abandoned) are strongly encouraged.

5. Most abandoned mines in the study area have been back-filled.
6. No dangerous mining operations are located in the area of Bird Spring Mountains.

B. Bureau of Land Management (BLM)

1. As stated before the liability associated with terminating or approaching patented mining land or abandoned mine lands (AML) can be significant. In addition to the patented lands there are numerous mine workings throughout and there is a possibility of additional unknown mine hazards. Without knowing the legal descriptions, LR2000 cannot be run to determine how many active mining claims exist in the trail's footprint.
2. Chris Ross (NSO) and Bill Durbin (NV Division of Minerals) are both aware of this project. Durbin is providing input regarding the safety issues of trails leading people to or near abandoned mine hazards. Durbin states, ''The proposed trail extends from Goodsprings to a terminus near the Yellow Pine/Prairie Flower mines. There are numerous abandoned mine openings in the areas surrounding the rail trail which are on patented mining claims. Las Vegas office staff is re-checking and updating ownership information on these claims so that the planning group can notify them of the project and solicit input in terms of potential liability and other concerns.''
3. Trails that lead to or past mining hazards could pose a liability for the BLM. This issue will need to be explored thoroughly. I will forward this information to Chris Ross, our State Lead for Abandoned Mine Lands.

Trail Corridor Implications (Draft II Alternatives):

As part of the trail study and before the next public meeting (scheduled for May 1, 2009) Clark County intends to contact the owners of mines within the project area and inform them of this trail study. This letter will also direct them to Bill Durban at the Division of Minerals and encourage them to safely close all abandoned mines if they have not already done so.

In addition, the project team has received the latest inventory of mines from the Division of Minerals and has determined that the mines on this list have been secured by barricading, enclosure/fencing, sealing or backfilling and do not pose a significant threat to trail users. See **Appendix 6** for a list of these inventoried mines.

Issue #5: Southern Nevada Supplemental Airport Development

In the Ivanpah Valley Airport Public Lands Transfer Act of 2002 (Public Law 106-362), Congress directed the Department of the Interior to convey approximately 6,000 acres in the Ivanpah Valley (the "Airport Site") to Clark County, for the purpose of constructing a new supplemental commercial service airport (the "Southern Nevada Supplemental Airport"). Two years later, in the Clark County Conservation of Public Land and Natural Resources Act of 2002, Congress directed that an additional 17,000 acres surrounding the Airport Site (the "Noise Compatibility Area") be transferred to the County upon final approval of the airport. Planning for the new airport is currently underway. FAA and BLM, acting as joint lead agencies, are currently conducting the required federal environmental reviews for the airport project, and the agencies currently predict that a final environmental impact statement for the new airport will be published in 2013. As part of this project, Clark County has proposed to construct several modified retention facilities to provide adequate flood control for the new airport. One of those proposed facilities, the Goodsprings Modified Retention Facility, is directly north of the LSTS on the south side of SR 161, and therefore within the study area.

The Clark County Department of Aviation plans to use the excavated material from the Goodsprings Modified Retention Facility for the construction of the airport. In order to transport this material, Clark County plans to construct a temporary conveyor belt system within the southern NDOT ROW for SR 161 that will transport the excavated material (an estimated 7 million cubic yards of dirt) to the Airport Site. Clark County estimates that the conveyor belt will be in place between the Goodsprings Modified Retention Facility and the Airport Site for less than six months.

As noted above, under federal law, Clark County will have the right to acquire the 17,000 acre Noise Compatibility Area upon final approval of the airport. This land includes the area proposed by the planning team for a possible trailhead as well as a portion of the proposed trail corridor.

Comments Received by Organization/Entity:

A. Clark County Department of Aviation

1. The Clark County Department of Aviation expressed a willingness to work with the Planning Team.
2. Timing of trail construction could coincide with dismantling of the conveyor belt system along SR 161. One possibility is that the trail could utilize this same corridor.
3. The Goodsprings Modified Retention Facility, which is proposed to be located on the south side of SR 161 and adjacent to the LSTS, may represent a significant impediment to a trail alignment located along the south side of SR161.
4. Crossing the Goodsprings Modified Retention Facility in this location would likely be cost-prohibitive.

B. Bureau of Land Management

1. The maps don't show proposed facilities, such as the Table Mountain wind project, The Southern Nevada Supplemental Airport and related modified retention facilities, Desert Express Rail line. One modified retention facility is within a mile of the proposed trails. These projects, as well as other proposed renewable energy projects will need to be addressed in the cumulative impacts section of a NEPA document.
2. The Ivanpah Noise Compatibility area is near the project area. Also, need to consider potential issues with the planned modified retention facilities around Ivanpah.

Trail Corridor Implications (Draft II Alternatives):
While the location of the Goodsprings Modified Retention Facility is not shown on the Draft II maps, Alternative 1 for the trail has been adjusted to accommodate the existence of this facility. On this alternative, the trail is located on top of the historic berm and follows the alignment of the berm to Goodsprings. However, the trail has been relocated off of the berm to utilize the existing NDOT ROW for a portion of its alignment until it passes the proposed modified retention facility. The trail is then repositioned on top of the berm until it crosses SR 161. The conveyor belt system will likely preclude any trail alignment in this area until after its removal. At this time Alternative 1 is the only alternative where this issue may be a concern.

Issue #6: Portions of proposed trail alignment within utility ROW.

The trail corridor crosses a number of different utility corridors. The planning team has contacted the appropriate utility companies and has made the Draft I Alternatives available for their review and comment. Of the three utilities contacted, two have responded to date. Both Kern River Gas Transmission Company and Valley Electric Association have expressed support for the trail and do not see any problems with the alignments as shown on the Draft I and II Alternatives. The third utility, NV Energy, has been contact, but we have not received any comments at this time.

There are also two BLM designated utility corridors within the study area. These corridors are known as "BLM Resource Management Plan Designated Utility Corridor" and "Programmatic EIS Utility Corridor". These corridors both pass through Goodsprings at different locations. The BLM Resource Management Plan Designated Utility Corridor was designated in the 1998 BLM Resource Management Plan (RMP). Currently there is not a shape file available for this corridor. The Programmatic EIS Utility Corridor was designated by BLM in 2008 in the Final Utility Corridor EIS. This corridor is shown on the analysis map in **Appendix 1**.

View of one of the utility corridors on the north side of SR 161 looking northwest towards Goodsprings.

Comments Received by Organization/Entity:

A. Kern River Gas Transmission Company

1. The trail is compatible with the pipeline and we don't anticipate significant impact on our easement .
2. The only potential issue identified was the depth of the pipeline at points where the trail crosses it. The depth at these locations is estimated to be 5-10' deep.
3. Due to the shallow nature of pipeline in this area non-motorized use is preferable.
4. During construction, Kern River would like to have an inspector present to ensure any excavating activity was completed safely.

B. Valley Electric Association

1. The trail is compatible with the transmission lines.
2. Only suggestion would be that no metal object be placed within the utility corridor.

C. NV Energy

No Comments to Date

Trail Corridor Implications (Draft I & II Alternatives):
While the contacted utilities do not anticipate any issues with the trail corridor utilizing portions of their ROW, it is important to note that the existence of two BLM ROW corridors within the project area may represent a potential conflict to submitting and obtaining a right-of-way for the trail project.

On another note, the visual impacts of the overhead transmission lines have been an important consideration for the Planning Team in developing the draft alignments. When possible, an effort has been made to pull the trail away from these corridors as they tend to dominate the landscape and detract from the visitor experience of the desert.

Issue #7: Potential Use of NDOT ROW for a portion of the trail alignment and other program elements.

The NDOT ROW within the project area is shown in **Appendix 7**. All alternatives show either a portion of the trail or other supporting facilities within this ROW. In all three alternatives, these supporting facilities include a small three car parking area or pull off area located immediately to the north of SR 161 as the road enters Goodsprings. The location of this parking area differs between the three alternatives, but both locations are within the 100' ROW. Other trail segments utilize the 400' ROW located along the SR 161 corridor from Jean to Goodsprings.

This parking area will feature an informational kiosk (also within this 100' ROW on all three alternatives). The trail ties into this kiosk which will welcome visitors to Goodsprings and explain the history of the Yellow Pine Mine (the historic mill site is directly across the road from this location). The kiosk will also provide visitors with information on the Historic Walking Tour through town and will identify the location of the trailhead at the fire station.

View of 100' NDOT ROW as it SR 161 enters Goodsprings.

Comments Received by Organization/Entity:

A. Nevada Department of Transportation (NDOT)

1. Do not foresee any problem/issues regarding utilizing the NDOT ROW along SR 161 for the trail.
2. A revocable permit would be issued.
3. Traffic #'s for the highway should be available on the NDOT website.
4. Refer to standards in MUTCD manual for road crossings, etc.
    - Part 9 (Specific to Bicycles)

Trail Corridor Implications (Draft I & II Maps, Preferred Alignment Alternative):
Locating amenities such as the kiosk in the NDOT ROW eliminates private property issues as the trail enters town. The ROW is significant enough that the trail alignment can be positioned a safe distance away from the road. More exact locations for these facilities will be determined during the next phase of this project. At this time, the Planning Team will consult with NDOT to ensure that these facilities are indeed feasible in their proposed locations. Potential ingress and egress issues may exist and will be addressed on the Preferred Alignment Alternative (To be completed after Public Meeting #2).

Issue #8: Potential Solar Energy Development

A portion of the study area contains land which has been identified by BLM for potential solar energy fields. This area is located in the southeast corner of the study area (See **Appendix 1**). This type of development is new to BLM and the agency is still in the process of developing a programmatic EIS for solar projects. However, solar developers may currently apply for rights-of-way in this area under the existing BLM right-of-way application process.

The Planning Team estimates that the possibility of a developer requesting a right-of-way application within our project area is likely two years away from the point of right-of-way application submittal. Implementation of such a project is probably at least three to five years away from the point of right-of-way application submittal.

Furthermore, it is important to note that a search of the water rights in the area, revealed that there are hardly any available water rights within the study area. This is important when considering the future implication of possible solar field development because (using current technology) such development requires large amounts of water. The feasibility of solar development within our project area appears, therefore, to be low. This supposition is confirmed by a search of the BLM's LR2000 database. A search of this database indicated that no ROW applications currrntly exist within the study area.

Comments Received by Organization/Entity:

None to Date

Trail Corridor Implications (Draft I & II Maps):
A portion of the trail alignment on all three alternatives goes through the area identified by BLM for solar development. However, no comments were received from BLM on this issue and the current lack of activity (coupled with the areas lack of available water rights) seems to indicate that future solar development may have minimal impact on the study area. At this time, this issue is not significant enough to warrant alteration of the proposed alignment alternatives.

Issue #9: Potential Wind Energy Development

The study area contains several areas which has been identified by BLM for potential wind energy fields. These areas are not located within the trail alignment on any of the proposed alternatives (See **Appendix 1**).

Comments Received by Organization/Entity:
None to Date

Trail Corridor Implications (Draft I & II Maps):
No comments were received from BLM on this issue. At this time, this issue is not significant enough to warrant alteration of the proposed alignment alternatives

Issue #10: Sensitive and Threatened Species

According to the Nevada Natural Heritage Program there are four sensitive species and one threatened species (desert tortoise) listed within the project area. See Issue #2 for details on the desert tortoise and issues as they pertain to the LSTS.

Desert Tortoise

Penstemon bicolor

Comments Received by Organization/Entity:

A. Bureau of Land Management (BLM)

1. At some point, a habitat assessment of the project area will be needed for rare plants. Two-toned penstemon (Penstemon bicolor var. bicolor), a BLM sensitive species, is known to occur in the project vicinity. Habitat for this species includes areas with disturbance active washes, road and trail edges. Depending on the results of the assessment, surveys and mitigation might be required.

Trail Corridor Implications (Preferred Alignment Alternative):
As part of this trail study, BEC Environmental plans to conduct an analysis of the project area in late May in order to survey the trail alignment and study area for the existence and location of sensitive and threatened species. The trail alignment will be adjusted as necessary after this inventory is complete.

Summary

The majority of the issues outlined in this report have been addressed and resolved in the Draft II alignment alternatives. Other issues including the abandoned and active mining claims, the location of sensitive and threatened species, BLM Utility Corridors, and NDOT ROW issues will continue to be investigated by the planning team and may have implications for the Preferred Alignment Alternative.

At least one of the issues outline in this report may not be resolved within the scope and timeframe of this planning effort. While an effort was made to by the planning team to locate previous cultural resource inventories which may have occurred within the study area, none to date have been obtained. The Class III inventory recommended by BLM to investigate the possible constraints posed by the existence of historical artifacts within the project area will be an important consideration to include in future planning efforts.

At least one issue does not appear to impact the study area at this time but may in the future. The development of alternative energy appears to be an important focus of the new administration. As these efforts begin to take shape in Nevada, land designated for solar (and wind) energy development within the study area may become more attractive to developers. If this is the case, future planning efforts will need to resolve how these potential uses may impact the trail alignment.

APPENDIX 1

ANALYSIS MAPS

AMARGOSA VALLEY

ASH MEADOWS NATIONAL WILDLIFE REFUGE

DESERT NATIONAL WILDLIFE RANGE

SPRING MOUNTAINS NRA

PAHRUMP

RED ROCK CANYON NCA

LAS VEGAS

DEATH VALLEY NATIONAL PARK

LAKE MEAD NATIONAL RECREATION AREA

STUDY AREA

SLOAN NCA

CALIFORNIA

ARIZONA

NEVADA

LEGEND

- GOODSPRINGS TRAIL STUDY AREA
- INTERSTATE HIGHWAY
- US HIGHWAY
- STATE ROAD
- NATIONAL PARK SERVICE
- SMRA JEAN LAKE/ROACH
- PRIVATE LAND
- NATIONAL CONSERVATION AREA (BLM)
- DESERT TORTOISE CONSERVATION CENTER
- FOREST SERVICE
- BUREAU OF LAND MANAGEMENT
- FISH AND WILDLIFE SERVICE
- CONTEXT BOUNDARY OF REGIONAL ANALYSIS BOARD
- STATE BOUNDARY

N

0 5 10 20 30 Miles

GOODSPRINGS TRAIL STUDY

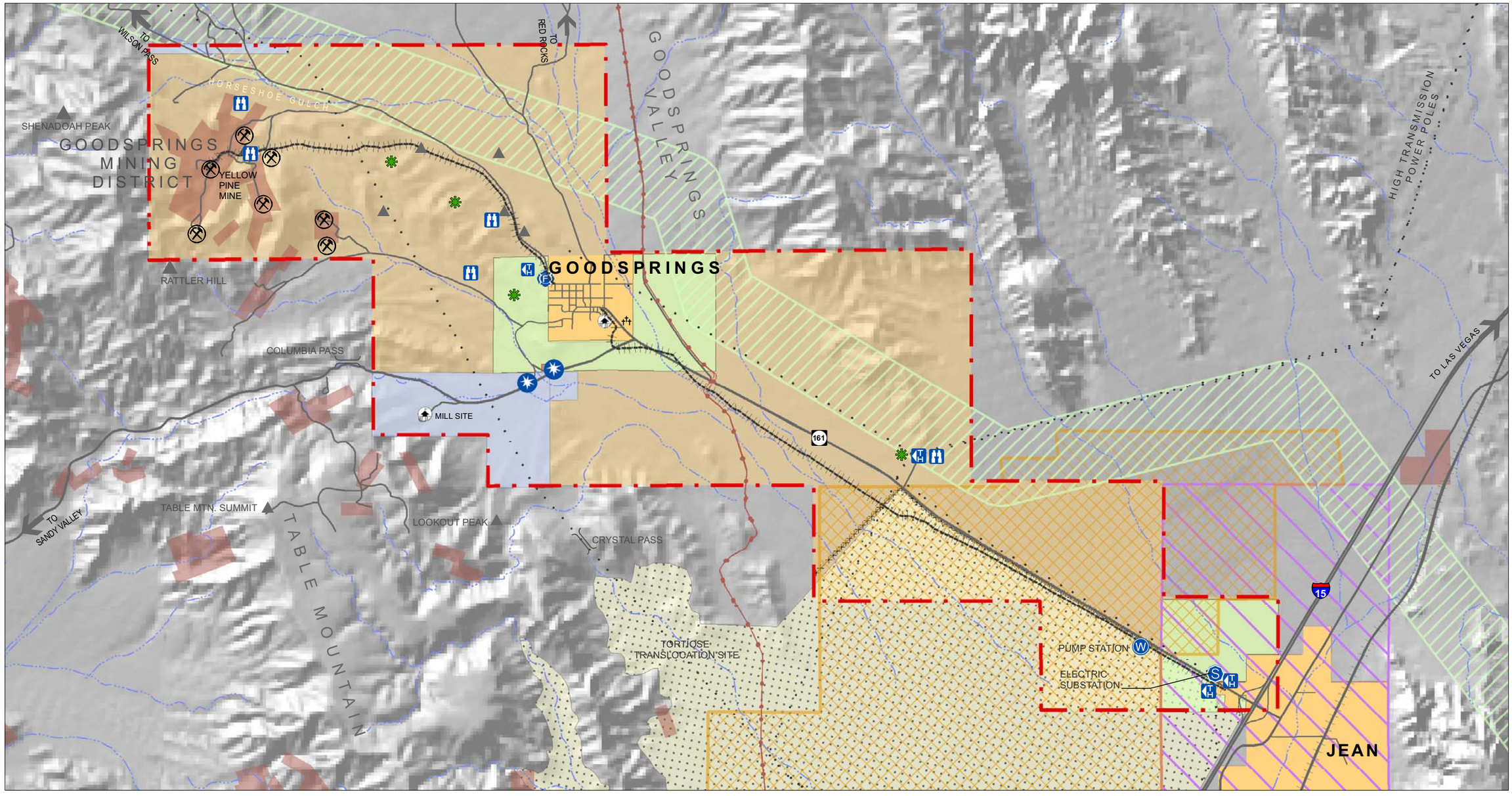
REGIONAL CONTEXT

SHAPINS

BeltCollins

APRIL 2009

CLARK COUNTY NEVADA



LEGEND

- STUDY AREA
- REGIONAL RAILROAD
- STATE ROAD
- COUNTY ROAD
- HISTORIC YELLOW PINE RAIL CORRIDOR
- WASH
- KERN RIVER PIPELINE
- POWER POLES
- POINT OF INTEREST
- MINE
- CITY OF GOODSPRINGS AND JEAN
- PRIVATE INHOLDING
- IVANPAH AIRPORT NOISE COMPATABILITY
- POTENTIAL SOLAR ENERGY
- POTENTIAL WIND ENERGY
- BLM DISPOSAL
- BUREAU OF LAND MANAGEMENT
- TORTIOSE TRANSLOCATION SITE
- WEST-WIDE ENERGY CORRIDOR
- DISTURBED SITES
- IMPRESSIVE VIEWS
- POTENTAIL TRAILHEAD
- PUMP STATION
- ELECTRIC SUBSTATION
- DANGEROUS INTERSECTION

N

0 0.5 1 2 Miles

GOODSPRINGS TRAIL STUDY

STUDY AREA ANALYSIS

SHAPINS
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APRIL 2009

CLARK COUNTY NEVADA

RED ROCK CANYON NCA

MOUNT POTOSI

COTTONWOOD PASS

SPRING MTNS NRA

DESERT TORTOISE CONSERVATION CENTER

LAS VEGAS

SLOAN CANYON NCA

BIRD SPRING

SHENADOAH PEAK

GOODSPRINGS

COLUMBIA PASS

TABLE MTN. SUMMIT

SANDY VALLEY

JEAN

BOULDER CITY

NEVADA

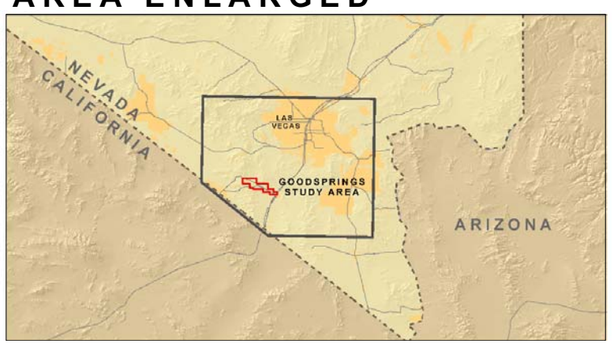
CALIFORNIA

DEVIL PEAK

PIUTE-ELDORADO VALLEY

SOUTH MCCULLOUGH WILDERNESS

AREA ENLARGED



LEGEND

- STUDY AREA
- STATE ROAD
- COUNTY ROAD
- PRIVATE LAND
- NATIONAL CONSERVATION AREA (BLM)
- DESERT TORTOISE CONSERVATION CENTER
- FOREST SERVICE
- BUREAU OF LAND MANAGEMENT
- SMRA JEAN LAKE/ROACH
- PUITE-ELDORADO VALLEY
- IVANPAH AIRPORT
- TORTOISE TRANSLOCATION SITE
- PASS
- POINT OF INTEREST

BLM 4WD ROADS USED FOR RECREATION

- NON-DESIGNATED TRAIL
- HORSE AND/OR BIKE
- MOTORIZED
- ATV TRAIL

EXISTING TRAILS

- HORSE AND/OR BIKE

PROPOSED TRAILS

- NON-DESIGNATED TRAIL
- HORSE AND/OR BIKE

N

0 2.5 5 10 Miles

GOODSPRINGS TRAIL STUDY

REGIONAL TRAILS ANALYSIS

SHAPINS

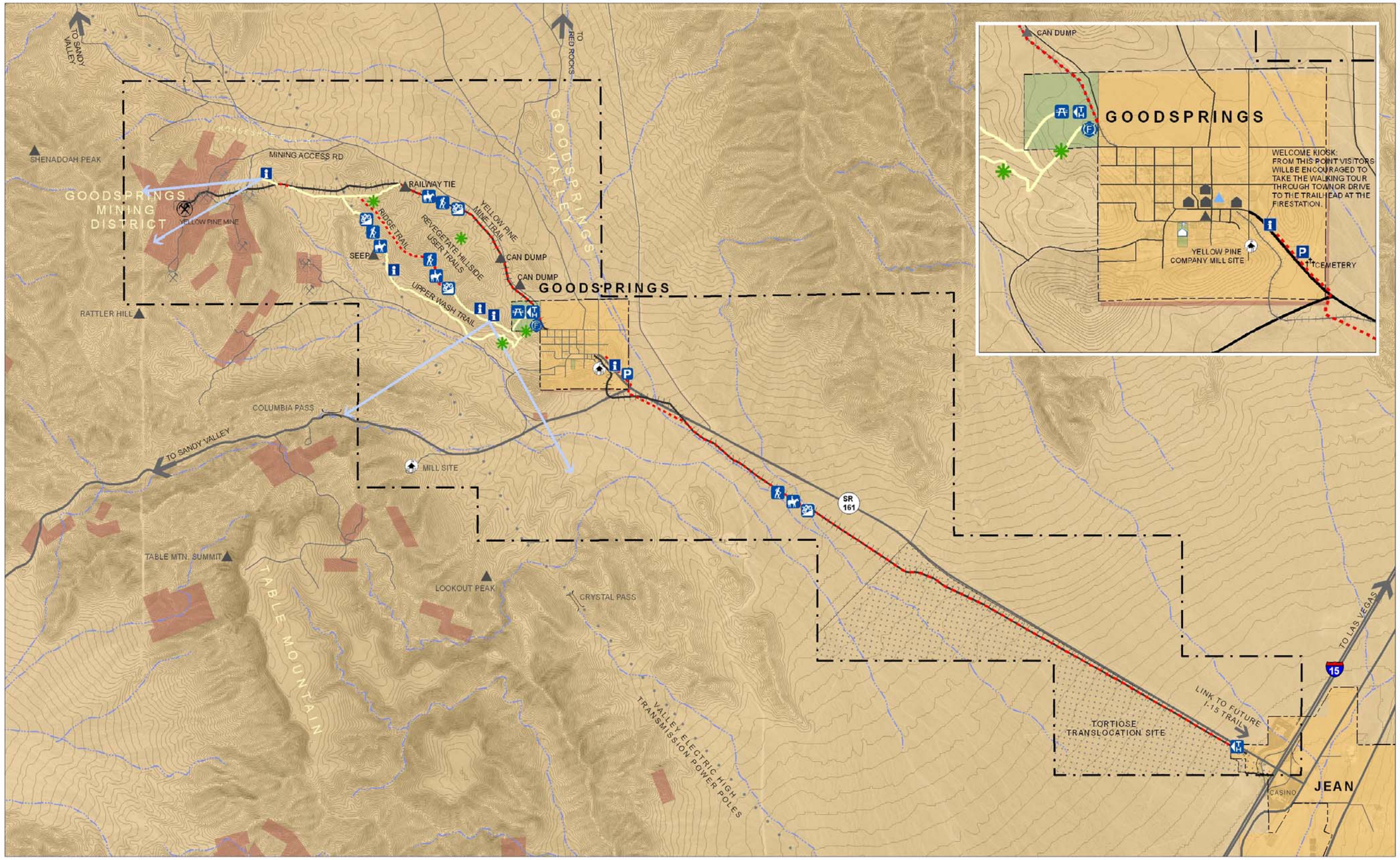
BeltCollins

APRIL 2009

CLARK COUNTY NEVADA

APPENDIX 2

DRAFT I ALIGNMENT ALTERNATIVES



LEGEND

- STUDY AREA
- CITY BOUNDARY
- STATE ROAD
- COUNTY ROAD
- HISTORIC YELLOW PINE RAIL CORRIDOR
- WASH
- 20 FT CONTOUR
- TORTIOSE FENCE
- TORTIOSE BOUNDARY
- PARKS AND SCHOOLS
- CITY OF GOODSPRINGS AND JEAN
- PRIVATE INHOLDING
- BUREAU OF LAND MANAGEMENT
- MINE
- MILL SITE
- PASS
- VALLEY ELECTRIC HIGH TRANSMISSION POWER POLES
- PARKING
- HIKING TRAIL
- EQUESTRIAN TRAIL
- MOUNTAIN BIKING TRAIL
- INTERPRETIVE AREA
- PICNIC
- POINT OF INTEREST
- POTENTIAL TRAILHEAD
- VIEW
- RESTORATION / REVEGETATION
- EXISTING ABANDONDED ROAD OR USER CREATED TRAIL
- POTENTIAL SOFT SURFACE TRAIL
- POTENTIAL PAVED TRAIL (MULTI-USE)
- SPRING
- BUILDING OF SIGNIFICANCE
- SCHOOL

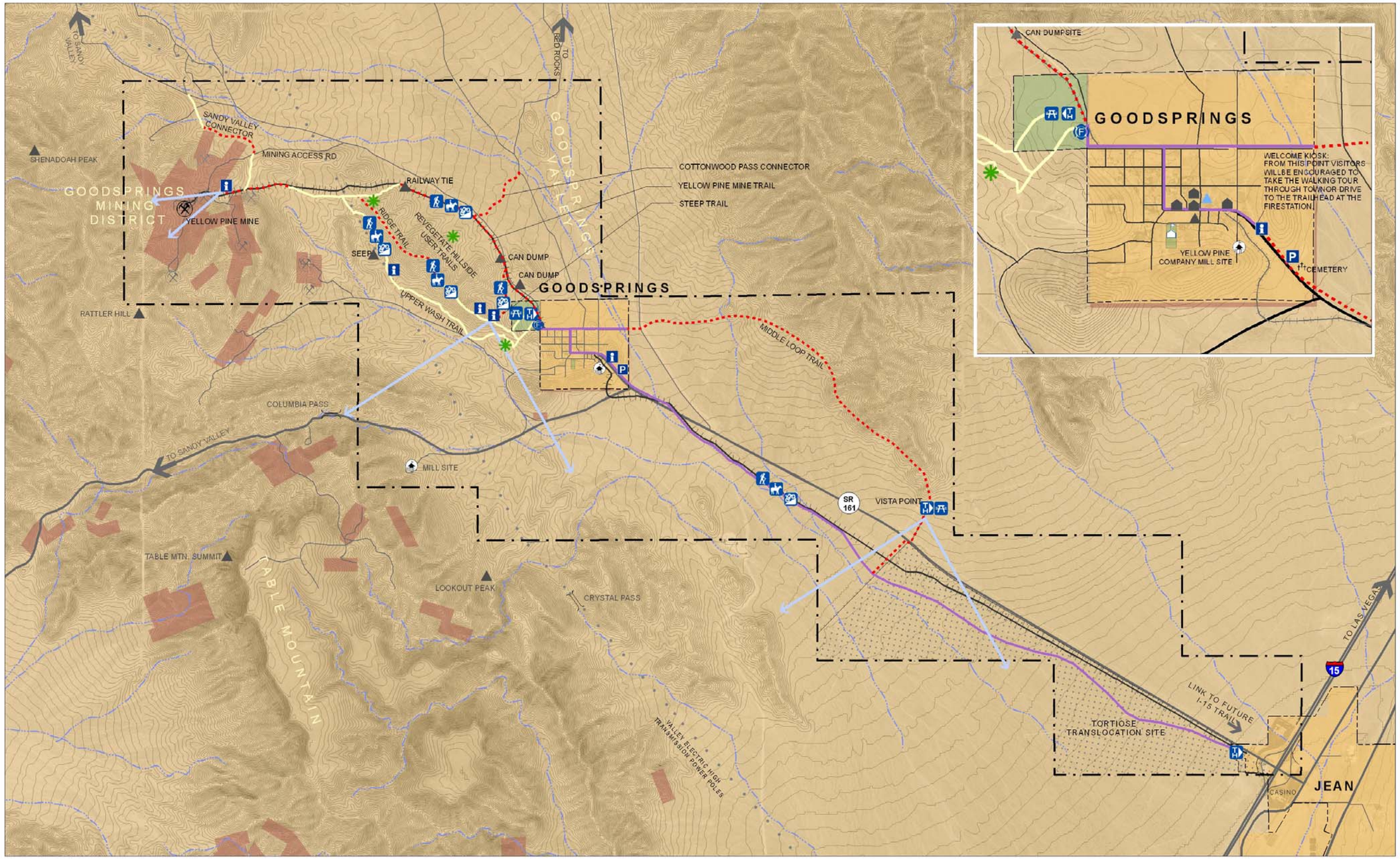
DRAFT I

N

0 1 2 3 Miles

GOODSPRINGS TRAIL STUDY
ALTERNATIVE ONE

SHAPINS
BeltCollins
02.17.09



LEGEND

- STUDY AREA
- CITY BOUNDARY
- STATE ROAD
- COUNTY ROAD
- HISTORIC YELLOW PINE RAIL CORRIDOR
- WASH
- 20 FT CONTOUR
- TORTIOSE FENCE
- TORTIOSE BOUNDARY
- PARKS AND SCHOOLS
- CITY OF GOODSPRINGS AND JEAN
- PRIVATE INHOLDING
- BUREAU OF LAND MANAGEMENT
- MINE
- MILL SITE
- PASS
- VALLEY ELECTRIC HIGH TRANSMISSION POWER POLES
- PARKING
- HIKING TRAIL
- EQUESTRIAN TRAIL
- MOUNTAIN BIKING TRAIL
- INTERPRETIVE AREA
- PICNIC
- POINT OF INTEREST
- POTENTIAL TRAILHEAD
- VIEW
- RESTORATION / REVEGETATION
- EXISTING ABANDONED ROAD OR USER CREATED TRAIL
- POTENTIAL SOFT SURFACE TRAIL
- POTENTIAL PAVED TRAIL (MULTI-USE)
- SPRING
- BUILDING OF SIGNIFICANCE
- SCHOOL

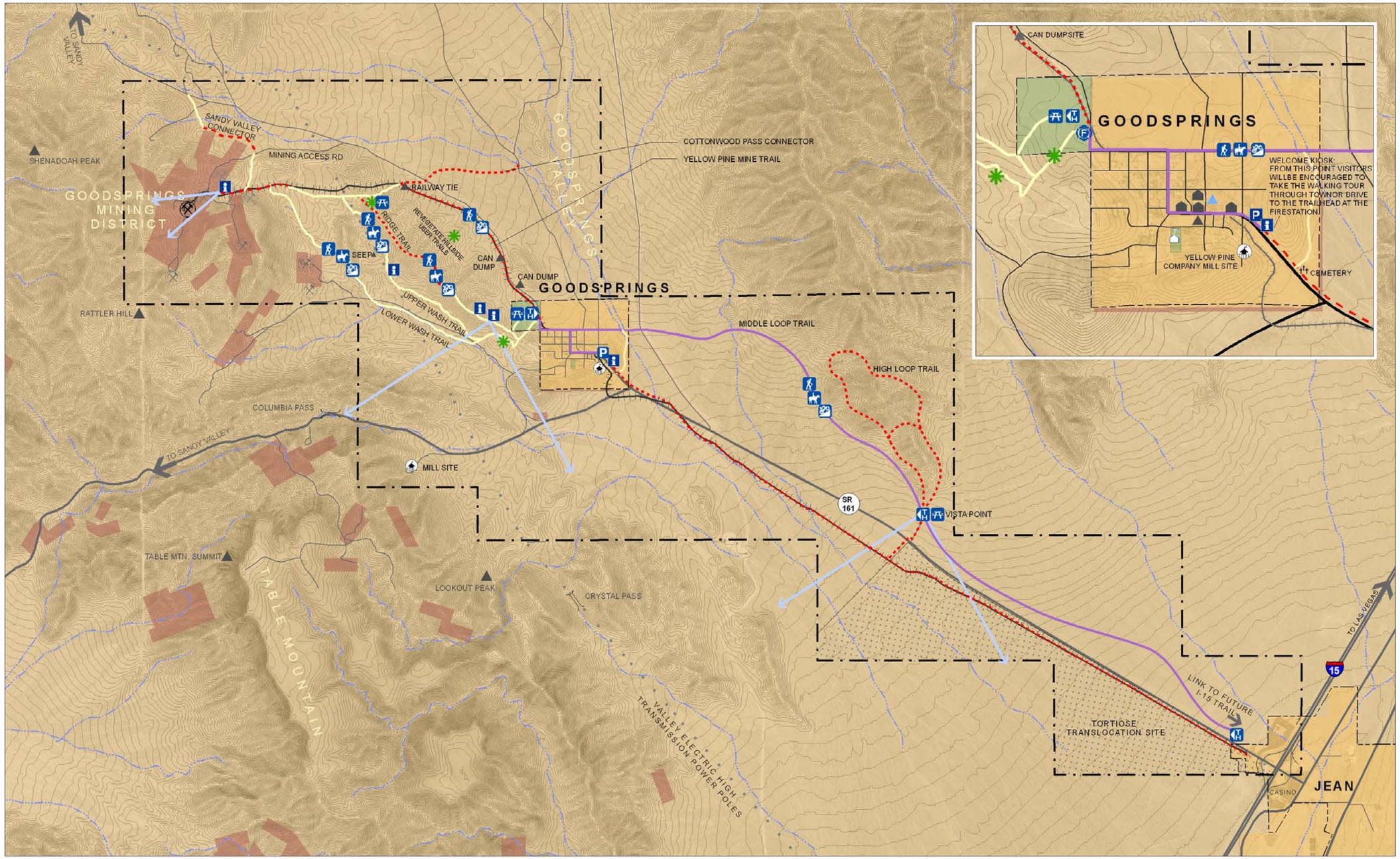
DRAFT I

N

Miles: 0 1 2 3

GOODSPRINGS TRAIL STUDY
ALTERNATIVE TWO

SHAPINS
BeltCollins
02.17.09
CLARK COUNTY NEVADA



LEGEND

- STUDY AREA
- CITY BOUNDARY
- STATE ROAD
- COUNTY ROAD
- HISTORIC YELLOW PINE RAIL CORRIDOR
- WASH
- 20 FT CONTOUR
- TORTIOSE FENCE
- TORTIOSE BOUNDARY
- PARKS AND SCHOOLS
- CITY OF GOODSPRINGS AND JEAN
- PRIVATE INHOLDING
- BUREAU OF LAND MANAGEMENT
- MINE
- MILL SITE
- PASS
- VALLEY ELECTRIC HIGH TRANSMISSION POWER POLES
- PARKING
- HIKING TRAIL
- EQUESTRIAN TRAIL
- MOUNTAIN BIKING TRAIL
- INTERPRETIVE AREA
- PICNIC
- POINT OF INTEREST
- POTENTIAL TRAILHEAD
- VIEW
- RESTORATION / REVEGETATION
- EXISTING ABANDONED ROAD OR USER CREATED TRAIL
- POTENTIAL SOFT SURFACE TRAIL
- POTENTIAL PAVED TRAIL (MULTI-USE)
- SPRING
- BUILDING OF SIGNIFICANCE
- SCHOOL

DRAFT I

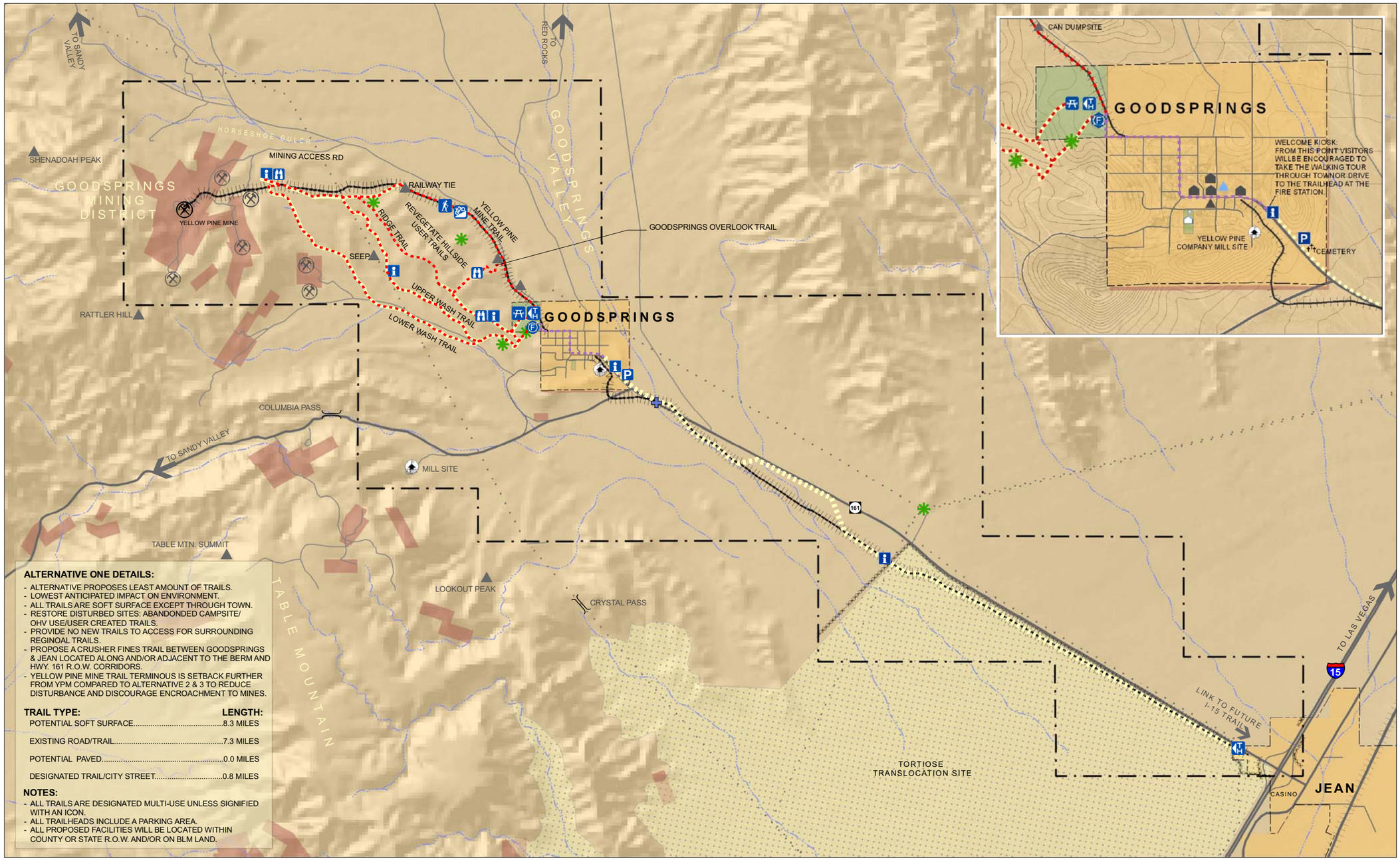
0 1 2 3 Miles

GOODSPRINGS TRAIL STUDY
ALTERNATIVE THREE

SHAPINS
BeltCollins
01.26.09

APPENDIX 3

DRAFT II ALIGNMENT ALTERNATIVES



ALTERNATIVE ONE DETAILS:

- ALTERNATIVE PROPOSES LEAST AMOUNT OF TRAILS.
- LOWEST ANTICIPATED IMPACT ON ENVIRONMENT.
- ALL TRAILS ARE SOFT SURFACE EXCEPT THROUGH TOWN.
- RESTORE DISTURBED SITES: ABANDONDED CAMPSITE/ OHV USE/USER CREATED TRAILS.
- PROVIDE NO NEW TRAILS TO ACCESS FOR SURROUNDING REGINOAL TRAILS.
- PROPOSE A CRUSHER FINES TRAIL BETWEEN GOODSPRINGS & JEAN LOCATED ALONG AND/OR ADJACENT TO THE BERM AND HWY. 161 R.O.W. CORRIDORS.
- YELLOW PINE MINE TRAIL TERMINOUS IS SETBACK FURTHER FROM YPM COMPARED TO ALTERNATIVE 2 & 3 TO REDUCE DISTURBANCE AND DISCOURAGE ENCROACHMENT TO MINES.

TRAIL TYPE:	LENGTH:
POTENTIAL SOFT SURFACE	8.3 MILES
EXISTING ROAD/TRAIL	7.3 MILES
POTENTIAL PAVED	0.0 MILES
DESIGNATED TRAIL/CITY STREET	0.8 MILES

NOTES:

- ALL TRAILS ARE DESIGNATED MULTI-USE UNLESS SIGNIFIED WITH AN ICON.
- ALL TRAILHEADS INCLUDE A PARKING AREA.
- ALL PROPOSED FACILITIES WILL BE LOCATED WITHIN COUNTY OR STATE R.O.W. AND/OR ON BLM LAND.

LEGEND

- STUDY AREA
- CITY BOUNDARY
- STATE ROAD
- COUNTY ROAD
- HISTORIC YELLOW PINE RAIL CORRIDOR
- REGIONAL TRAIL
- WASH
- TORTIOSE FENCE
- TORTIOSE BOUNDARY
- PARKS AND SCHOOLS
- CITY OF GOODSPRINGS AND JEAN
- PRIVATE INHOLDING
- BUREAU OF LAND MANAGEMENT
- MINE
- MILL SITE
- PASS
- WASH CROSSING
- POINT OF INTEREST
- SPRING
- RESTORATION / REVEGETATION
- MOUNTAIN BIKING TRAIL
- INTERPRETIVE AREA
- PICNIC
- PARKING
- HIKING TRAIL
- VIEW
- POTENTIAL TRAILHEAD
- BUILDING OF SIGNIFICANCE
- SCHOOL
- TRAIL ALONG CITY STREET
- POTENTIAL SOFT SURFACE TRAIL
- POWERLINE
- POTENTIAL NATURAL SURFACE TRAIL
- POTENTIAL TRAIL ADHERING TO EXISTING ROAD OR TRAIL
- POTENTIAL PAVED TRAIL (MULTI-USE)

DRAFT II

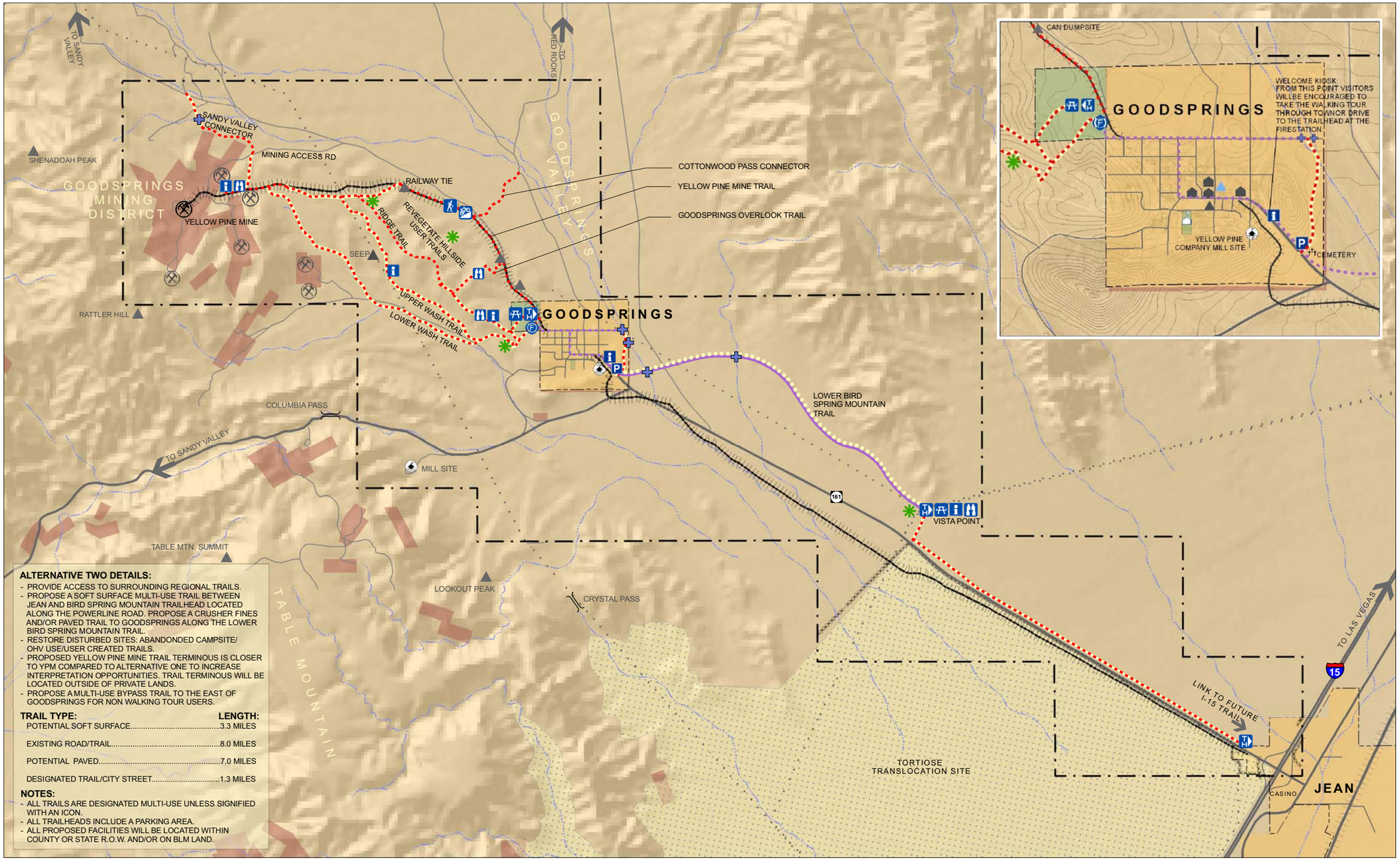
N

0 0.5 1 2 Miles

GOODSPRINGS TRAIL STUDY

ALTERNATIVE ONE

SHAPINS
BeltCollins
APRIL 2009
CLARK COUNTY NEVADA



ALTERNATIVE TWO DETAILS:

- PROVIDE ACCESS TO SURROUNDING REGIONAL TRAILS.
- PROPOSE A SOFT SURFACE MULTI-USE TRAIL BETWEEN JEAN AND BIRD SPRING MOUNTAIN TRAILHEAD LOCATED ALONG THE POWERLINE ROAD. PROPOSE A CRUSHER FINES AND/OR PAVED TRAIL TO GOODSPRINGS ALONG THE LOWER BIRD SPRING MOUNTAIN TRAIL.
- RESTORE DISTURBED SITES: ABANDONDED CAMPSITE/ OHV USE/USER CREATED TRAILS.
- PROPOSED YELLOW PINE MINE TRAIL TERMINOUS IS CLOSER TO YPM COMPARED TO ALTERNATIVE ONE TO INCREASE INTERPRETATION OPPORTUNITIES. TRAIL TERMINOUS WILL BE LOCATED OUTSIDE OF PRIVATE LANDS.
- PROPOSE A MULTI-USE BYPASS TRAIL TO THE EAST OF GOODSPRINGS FOR NON WALKING TOUR USERS.

TRAIL TYPE:	LENGTH:
POTENTIAL SOFT SURFACE	3.3 MILES
EXISTING ROAD/TRAIL	8.0 MILES
POTENTIAL PAVED	7.0 MILES
DESIGNATED TRAIL/CITY STREET	1.3 MILES

NOTES:

- ALL TRAILS ARE DESIGNATED MULTI-USE UNLESS SIGNIFIED WITH AN ICON.
- ALL TRAILHEADS INCLUDE A PARKING AREA.
- ALL PROPOSED FACILITIES WILL BE LOCATED WITHIN COUNTY OR STATE R.O.W. AND/OR ON BLM LAND.

LEGEND

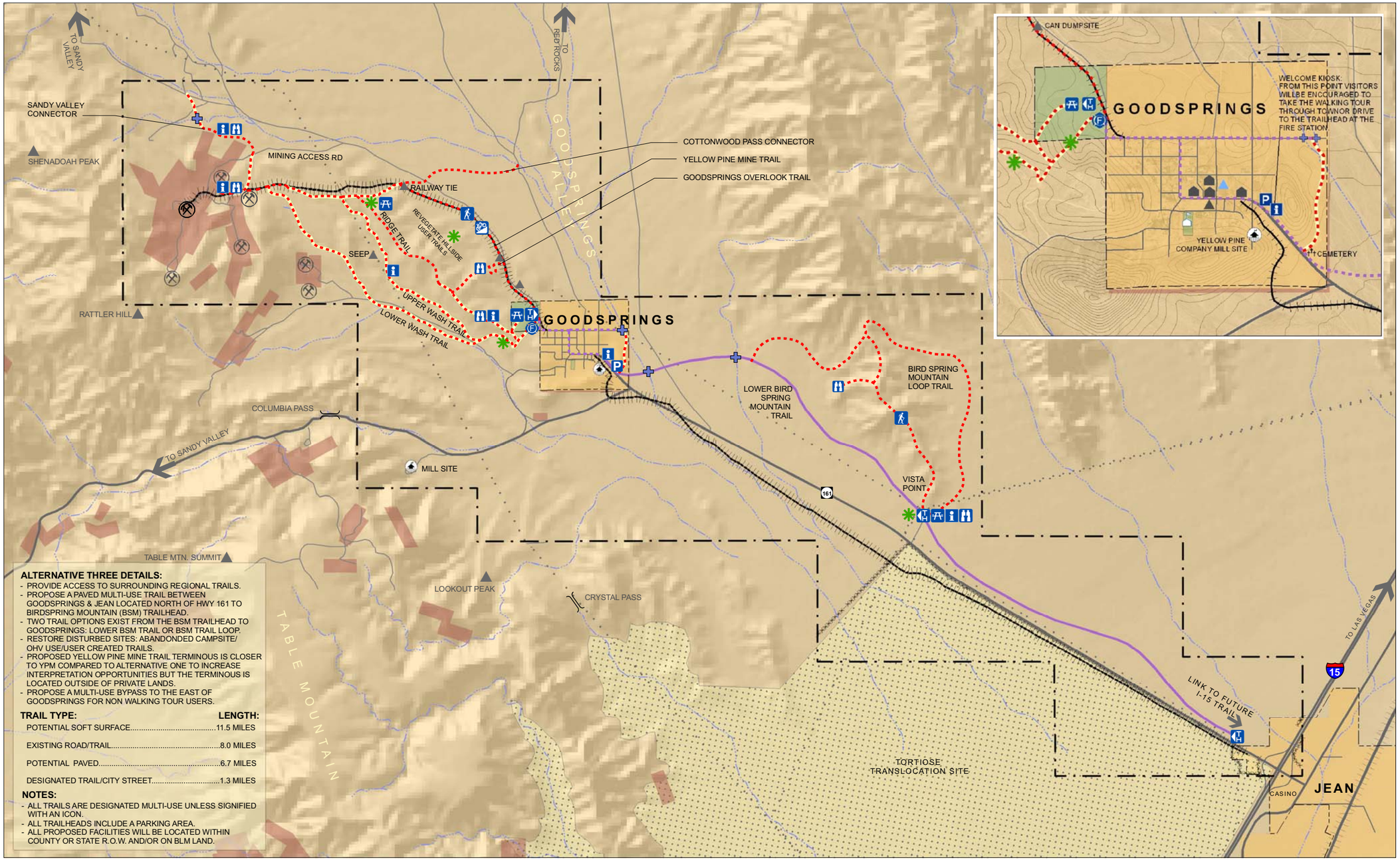
- STUDY AREA
- CITY BOUNDARY
- STATE ROAD
- COUNTY ROAD
- HISTORIC YELLOW PINE RAIL CORRIDOR
- REGIONAL TRAIL
- WASH
- TORTIOSE FENCE
- TORTIOSE BOUNDARY
- PARKS AND SCHOOLS
- CITY OF GOODSPRINGS AND JEAN
- PRIVATE INHOLDING
- BUREAU OF LAND MANAGEMENT
- MINE
- MILL SITE
- PASS
- WASH CROSSING
- POINT OF INTEREST
- SPRING
- RESTORATION / REVEGETATION
- MOUNTAIN BIKING TRAIL
- INTERPRETIVE AREA
- PICNIC
- PARKING
- HIKING TRAIL
- VIEW
- POTENTIAL TRAILHEAD
- BUILDING OF SIGNIFICANCE
- SCHOOL
- TRAIL ALONG CITY STREET
- POTENTIAL SOFT SURFACE TRAIL
- POWERLINE
- POTENTIAL NATURAL SURFACE TRAIL
- POTENTIAL TRAIL ADHERING TO EXISTING ROAD OR TRAIL
- POTENTIAL PAVED TRAIL (MULTI-USE)

DRAFT II

0 0.5 1 2 Miles

GOODSPRINGS TRAIL STUDY
ALTERNATIVE TWO

SHAPINS
BeltCollins
APRIL 2009
CLARK COUNTY NEVADA



ALTERNATIVE THREE DETAILS:

- PROVIDE ACCESS TO SURROUNDING REGIONAL TRAILS.
- PROPOSE A PAVED MULTI-USE TRAIL BETWEEN GOODSPRINGS & JEAN LOCATED NORTH OF HWY 161 TO BIRDSPRING MOUNTAIN (BSM) TRAILHEAD.
- TWO TRAIL OPTIONS EXIST FROM THE BSM TRAILHEAD TO GOODSPRINGS: LOWER BSM TRAIL OR BSM TRAIL LOOP.
- RESTORE DISTURBED SITES: ABANDONDED CAMPSITE/ OHV USE/USER CREATED TRAILS.
- PROPOSED YELLOW PINE MINE TRAIL TERMINOUS IS CLOSER TO YPM COMPARED TO ALTERNATIVE ONE TO INCREASE INTERPRETATION OPPORTUNITIES BUT THE TERMINOUS IS LOCATED OUTSIDE OF PRIVATE LANDS.
- PROPOSE A MULTI-USE BYPASS TO THE EAST OF GOODSPRINGS FOR NON WALKING TOUR USERS.

TRAIL TYPE:	LENGTH:
POTENTIAL SOFT SURFACE	11.5 MILES
EXISTING ROAD/TRAIL	8.0 MILES
POTENTIAL PAVED	6.7 MILES
DESIGNATED TRAIL/CITY STREET	1.3 MILES

NOTES:

- ALL TRAILS ARE DESIGNATED MULTI-USE UNLESS SIGNIFIED WITH AN ICON.
- ALL TRAILHEADS INCLUDE A PARKING AREA.
- ALL PROPOSED FACILITIES WILL BE LOCATED WITHIN COUNTY OR STATE R.O.W. AND/OR ON BLM LAND.

LEGEND

- STUDY AREA
- CITY BOUNDARY
- STATE ROAD
- COUNTY ROAD
- HISTORIC YELLOW PINE RAIL CORRIDOR
- REGIONAL TRAIL
- WASH
- TORTIOSE FENCE
- TORTIOSE BOUNDARY
- PARKS AND SCHOOLS
- CITY OF GOODSPRINGS AND JEAN
- PRIVATE INHOLDING
- BUREAU OF LAND MANAGEMENT
- MINE
- MILL SITE
- PASS
- WASH CROSSING
- POINT OF INTEREST
- SPRING
- RESTORATION / REVEGETATION
- MOUNTAIN BIKING TRAIL
- INTERPRETIVE AREA
- PICNIC
- PARKING
- HIKING TRAIL
- VIEW
- POTENTIAL TRAILHEAD
- BUILDING OF SIGNIFICANCE
- SCHOOL
- TRAIL ALONG CITY STREET
- POWERLINE
- POTENTIAL NATURAL SURFACE TRAIL
- POTENTIAL TRAIL ADHERING TO EXISTING ROAD OR TRAIL
- POTENTIAL PAVED TRAIL (MULTI-USE)

DRAFT II

N

0 0.5 1 2 Miles

GOODSPRINGS TRAIL STUDY
ALTERNATIVE THREE

SHAPINS
BeltCollins
CLARK COUNTY NEVADA
APRIL 2009

APPENDIX 4

BLM COMMENT LOG

Project # 2009-162

make comment | upload photo | upload document

Case File # NVS010-A — **Good Springs Trail Study**

Project Lead:	Marilyn Peterson	**Project Type:**	**Other**	**Tiered Off: Biological Opinion #:**	
Activity:	Non-motorized trail study				
Applicant:	Clark County, Community of Good Springs	**Date Entered:**	18 Feb 2009	**Comments Due:**	**20 Mar 2009**
Contractor:	Shapins Belt Collins	**Charge Code:**		**Status:**	**Active**
Location:	Between Jean and Goodsprings			**Lat: Long:**	
Legal Description:					

Map: Hard copy map at my desk.
Maps and project description located at:
S:\LV Share\Recreation LVFO\Trail Planning\Las Vegas Field Office\Goodsprings

Total Length:	**Width:**	**Acres:**	**Images:**	0
Previous Disturbance Length:	**Width:**	**Acres:**	**Documents:**	1
New Disturbance Length:	**Width:**	**Acres:**		

Duration: 18 Feb 2009 to 30 Sep 2009

Proposed Action:

Clark County Nevada has SNPLMA dollars for Pre-proposal planning in the Goodsprings area. This trail feasibility study includes potential routes from Jean to Goodsprings, and from Goodsprings to the Goodsprings Mining District. They are proposing to utilize the historic railroad berm for the main trail.

I have attached the Trail Study showing the three alternatives.

I would like to compile a list of questions, concerns, and recommendations from the BLM. The trail study group will use your comments to evaluate and make changes to the feasibility study. They plan on having their second public meeting in early may.

Comments/Activity:

Comment | 20 Mar 2009 at 3:39:56 PM | Jeff Steinmetz | **Environmental Coord**
I have no comments at this time, but will when the EA is ready for review.

Comment | 18 Mar 2009 at 11:10:49 AM | Mark Chandler | **Visual**
The proposed project, a non-motorized trail study for a rails to trail project, is located in Class II and III VRM areas as identified in the Las Vegas RMP, signed October 1998.

Class II VRM Objective. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III VRM Objective. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

I reviewed of the maps submitted dated 01/26/09 and the trail study guide dated 2/12/09, my comments are as follows:
1) The proposed view points are primarily southwest and southeast from Vista Point, Good Springs, and Good Springs Mining District. Are trail users restricted from looking in the other directions or are these points of significant view? If so, why?
2) The maps submitted do not show all of the existing infrastructure, and may communicate a pristine view shed. Several power lines, gas line and plant facilities are within the proposed view shed.
3) The maps don't show proposed facilities, such as the Table Mountain wind project, The Ivanpah Airport and related detention basins, Desert Express Rail line. The detention basins are within a mile of the proposed trails. These projects, as well as other proposed renewable energy projects will need to be addressed in the cumulative impacts section of a NEPA document.
4) The trail study dated 2/12/09 does not indicate if the trail is going to be groomed or just posted. If groomed, what are the proposed dimensions of the surface disturbances for the trails and the picnic areas?

No Issues | 16 Mar 2009 at 3:03:09 PM | Sendi Kalcic | **Wilderness/Visual**
No issues with Wilderness.

Comment | 16 Mar 2009 at 2:30:05 PM | George Varhalmi | **Minerals**
As this is a preliminary phase to this project. As stated before the liability associated with terminating or approaching patented mining land or abandoned mine lands (AML) can be significant. In addition to the patented lands there are numerous mine workings throughout that mining districts and there is a possibility of additional unknown mine hazards. Without knowning the legal descriptions, LR2000 can not be run to determine how many active mining claims exist in the trail's footprint.

Comment | 16 Mar 2009 at 12:45:53 PM | Susanne Rowe | **Cultural/NAm/Paleo**
Chris Ross (NSO) and Bill Durbin (NV Division of Minerals) are both aware of this project. Durbin is providing input regarding the safety issues of trails leading people to or near abandoned mine hazards. Durbin states, "The proposed trail extends from Goodsprings to a terminus near the Yellow Pine/Prairie Flower mines. There are numerous abandoned mine openings in the areas surrounding the rail trail which are on patented mining claims. Las Vegas office staff is re-checking and updating ownership information on these claims so that the planning group can notify them of the project and solicit input in terms of potential liability and other concerns."

Comment | 12 Mar 2009 at 3:44:33 PM | Fred Edwards | **Vegetation T/E Plants**
At some point, a habitat assessment of the project area will be needed for rare plants. Two-toned penstemon (Penstemon bicolor var. bicolor), a BLM sensitive species, is known to occur in the project vicinity. Habitat for this species includes areas with disturbance active washes, road and trail edges. Depending on the results of the assessment, surveys and mitigation might be required.

Comment | 12 Mar 2009 at 3:37:58 PM | Fred Edwards | **Noxious Weeds**
At some point a noxious weed assessment will be needed to determine the potential for weeds to establish because of the project and potential consequences to adjacent BLM lands resulting from a noxious weed infestation in the project area.

Comment | 5 Mar 2009 at 5:11:43 PM | Susanne Rowe | **Cultural/NAm/Paleo**
(1) A Class III cultural resource inventory and mitigation of any affected historic properties will be required prior to the establishment of trails or use of the historic railroad berm. I hope enough funding has been acquired to accomplish this.

(2) Trails that lead to or past mining hazards could pose a liability for the BLM. This issue will need to be explored thoroughly. I will forward this information to Chris Ross, our State Lead for Abandoned Mine Lands.

No Issues | 4 Mar 2009 at 12:50:19 PM | Lisa Christianson | **Air Quality Specialist**

Comment | 25 Feb 2009 at 2:04:03 PM | Sarah Peterson | **Soil/Water/Riparian**
The Ivanpah Noise Compatability area is near the project area. Also, need to consider potential issues with the planned rention basins around Ivanpah.

Changed | 24 Feb 2009 | Marilyn Peterson
Map
from: Hard copy map at my desk. I will try to get electronic copy from contractor.

to: **Hard copy map at my desk.**
Maps and project description located at:
S:\LV Share\Recreation LVFO\Trail Planning\Las Vegas Field Office\Goodsprings

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Comment | 23 Feb 2009 at 3:37:41 PM | Carolyn Ronning | **Wildlife T/E Animals**
The following comments respond to potential effects of casual use on the proposed trail on existing T&E program uses of the area. Effects and permit requirements (such as BO coverage) are not included at this time. - Carrie

The proposed trail would cross through the Desert Tortoise Large Scale Translocation Site (LSTS). The LSTS is where wild and pet desert tortoises turned into the Desert Tortoise Transfer and Holding Facility at the Desert Tortoise Conservation Center are released. Since spring of 1997, over 7,000 desert tortoises have been released into the 40 sq. mi. LSTS. This raises concerns about the compatibility of the proposed recreational uses and management of a very high density population of a listed species.

- The LSTS is surrounded by a desert tortoise exclusion fence. Cattle guards are installed on all roads entering the area to ensure that tortoises cannot escape from the LSTS. A cattleguard or equivalent structure would need to be installed where the trail crosses the fenceline. This would need to be maintained by the ROW holder.

- Recreational users may collect tortoises they observe. David Grandmaison, AZ Game and Fish, presented a paper at the DT Council Symposium on Feb 20, 2009 reporting a study they conducted on human-tortoise interactions. They observed 474 human-tortoise interactions at 38 sites where they placed a tortoise along a road. 8% of people encountering a tortoise attempted to collect it illegally. "A biologically significant number of tortoises are collected by motorists. Collectors generally indicated ignorance of protection status." (Grandmainson, 2009) 44% moved the tortoise off the roadway, 38% slowed or stopped to observe the tortoise, and 9% got out of the vehicle to observe. While it may be awkward to carry a tortoise by hand or bike through the LSTS, up to 8% of those folks encountering them may consider trying it. The data also suggests that a large percentage of people encountering desert tortoises will harass the animal if it is in the way or threatened with injury by a vehicle. Bike riders and hikers (who assume bike riders may encounter a tortoise) may act in a similar manner to people in cars in the same situation.

- Recreational users may travel off the trail into the LSTS habitat, creating informal use trails that fragment habitat and would require future restoration efforts.

To ensure no take (harm or harassment) of desert tortoises occurs by the casual user, I recommend that the trail, if approved, include educational displays that users can read even while traveling on a bike so they do not violate the Endangered Species Act or damage habitat out of ignorance. We also should discuss how we are going to determine if these measures are effective or should be modified. If habitat damage or tortoise harassments/poaching is found to increase, then modifications to trail management may need to take place.

Alternatives that site the trail along the highway (either inside or outside the LSTS fence) would have less effect on the species as tortoises generally are found in less density near a highway. Outside the LSTS would be preferred from a tortoise management perspective.

Changed | 18 Feb 2009 | Marilyn Peterson
Activity
from: Non-motorized trail
to: **Non-motorized trail study**

APPENDIX 5

DCP RESPONSE LETTER

desert conservation
PROGRAM

RECEIVED
MAR 1 0 2009

March 11, 2009

Emily Patterson, ASLA
Shapins Belt Collins
1818 16th Street
Boulder, CO 80302-5456

Dear Ms. Patterson:

Thank you for the opportunity to provide comments on the Goodsprings Trail Study Maps, Alternative One, Two and Three.

Background
The Clark County Desert Conservation Program (DCP) implements the Clark County Multiple Species Habitat Conservation Plan (MSHCP) on behalf of Clark County, Nevada Department of Transportation and the Cities of Boulder City, Henderson Las Vegas, Mesquite and North Las Vegas, as mitigation for its Section 10 Incidental Take Permit for desert tortoise and 78 other species of concern. The DCP evaluated environmental and land use concerns with each alternative map, which included analyzing existing information for environmentally sensitive areas, wildlife, and plant species of concern.

The proposed use of converting the abandoned rail line that runs between Goodsprings and Jean to a soft surface trail will bisect the existing Large Scale Tortoise Translocation Site (LSTS) for approximately 7 miles.

All three proposed alternative maps have the proposed trail enter/exit the LSTS at Jean (65 feet within the LSTS boundary) and enter/exit the LSTS northwest of Jean (1,250 feet within the LSTS). This trail parallels State Route 161 (SR 161) that runs between Jean and Goodsprings.

Comments:
- Although the DCP is highly supportive of trails and Goodsprings' efforts, it is our recommendation that the proposed trail system avoid the LSTS altogether.
- Construction impacts from either paving or soft-surfacing the trail will lead to unnecessary impacts to habitat in the LSTS.
- If approved, this would add two new LSTS fence breaches, one at the Jean trail head and the other at the LSTS boundary seven (7) miles northwest. Cattle guards and possibly gates would have to be installed at these new locations. These locations would add additional fencing monitoring and maintenance requirements to the DCP's responsibilities for LSTS fencing and unnecessarily increase opportunities for tortoises to exit the LSTS.

- Traffic (foot, equestrian and motorized and non-motorized) from the trail could lead to introduction of invasive weeds.
- Trail users could increase the presence of trash, which degrades habitat and attracts coyotes and ravens (natural predators of tortoise).
- Tortoises translocated to the LSTS are largely animals that were previously domesticated. Tortoises in the LSTS have been observed approaching humans and this could make the animals more susceptible to collection by humans visiting the LSTS.
- The US Fish and Wildlife Service translocates tortoises every spring and fall into the LSTS. Trail users may unintentionally disrupt tortoise translocation activities.
- If approved, the DCP recommends that there be required signage explaining the sensitivity of the LSTS and what to do if a trail user encounters a tortoise.

Other Suggested Alternatives:

- Create a paved trail along either the eastbound or westbound lanes of SR161 or create a paved trail north of SR161 as shown in Alternative Three.

- Move the LSTS boundary fence to the south side of the abandoned rail line which would require moving the existing fence 65 feet to 1,250 feet south for approximately seven (7) miles.

Other Projects That Could Impact Proposed Trails:

- The BLM has accepted solar energy applications that may conflict with the proposed trails.

- The Clark County Department of Aviation is planning on building two large retention basins with access roads that may conflict with the proposed trails.

Again, thank you for the opportunity to comment. If you have any questions, or need additional information, please contact me at (702) 455-3118.

Sincerely,

Marci D. Henson

Marci D. Henson
Program Manager

MDH/ree

APPENDIX 6

LIST OF INVENTORIED MINES

APPENDIX 6: List of Inventoried Mines within the Goodsprings Trail Study Area

HAZ_RANK	HAZ_TYPE	CLM_NAME	SEC_METHOD	REMARKS
5	A	IRON GOLD	BR	ADIT - FIRST 10' OF PORTAL TIMBERED - OPENING 4'W X 5'H - STRAIGHT 200' THEN Y'S. 20' PAST FORK ALONG RT BRANCH IS WINZE WITH GENTLE DECLINE FIRST 30', STEEPENS BELOW, TIMBER & LADDERS IN WINZE. DRIFT CONTINUES UNKNOWN DISTANCE, LEFT FORK ENDS AT SECOND
5	I	IRON GOLD	EN	DECLINE - COLLAR TIMBERED, REMAINS OF OLD LADDERS, 60 DEGREES FRIST 25-30' APPEARS TO STEEPEN TO NEAR VERTICAL, 4' X 5' EST 70-80' TO WATER
4	O	IRON GOLD	EN	GLORY HOLE - NEARLY VERTICAL - COLLAR OVAL - 12' X 15' SIMILAR DIMENSIONS DOWNWARD - EST 30' DEEP, NOT CLEARLY VISIBLE ON APPROACH.
4	I	IRON GOLD	EN	DECLINE - 50-55 DEGREES FIRST 15' - STEEPENS TO NEARLY VERTICAL - COLLAR TIMBERED - 4' X 8' - ROCK AND SOIL ERODING AROUND TIMER - APPROX 30' TO BOTTOM - MAY BE STOPE WORKINGS OR DRIFTS AT BOTTOM - NOT CLEARLY VISIBLE ON APPROACH.
4	A	LOVENA LODE	FI	ADIT - PORTAL MOSTLY BLOCKED BY CAVED ROCK - OPENING 5'W X 3'H - STRAIGHT FOR 8' BENDS SHARPLY TO RIGHT - LENGTH UNKNOWN - SMALL DUMP - ROCK AT PORTAL AND INSIDE ADIT - SOFT AND VERY LOOSE - NATURALLY CAVED.
4	S	IRON GOLD	EN	SHAFT - VERTICAL - POST WITH LADDER CHAINED TO IT AT COLLAR - COLLAR 10' X 15' EST 40' DEEP. T-POST AND CHAIN LINK FENCE IN GOOD CONDITION EXCEPT FOR SOUTH SIDE -
4	S	IRON GOLD	EN	SHAFT OR SMALL GLORY HOLE - TOP 7' VERTICAL - TAPERS EASTERLY TOWARD A CAVED SHAFT - CAN SEE IN ~20' - COLLAR OVAL 5' X 8'
6	I	LOVENA LODE	EN	DECLINE - 70-75 DEGREES - COLLAR OVAL 9' X 12' IN SOFT ALLUVUAL MATERIAL - REMAINS OF TIMBERS IN DECLINE - IRREGULAR SHAPE - PROBABLE STOPE WORKINGS AND LEVELS OFF OF DECLINE - EST 100' DEEP - 2 T-POST WITH BROKEN STRANDS OF BARBED WIRE ON UPHILL SIDE OF - SECURED - FENCE AS OF 3/17/99
4	A	IRON GOLD	FI	ADIT - PORTAL MOSTLY BLOCKED - OPENING 3.5'W X 1' H - SMALL DUMP - CAN SEE IN ~15' - ABUNDANT CAVE ROCK INSIDE.
6	S	COLUMBIA/EVERGREEN #485	EN	SHAFT - VERTICAL - COLLAR AND TOP 5' OF SHAFT TIMBERED - 5' X 7' X EST 100-150' DEEP.
4	A	RUTH SOUTH EXTENSION PATENT	FI	ADIT - PORTAL OPENING & ADIT 5'W X 6'H - STRAIGHT FOR 15' - 90 DEGREE BEND TO RIGHT - ADDITIONAL 15' LONG - BEND FULL OF MUCK & ANIMAL NESTS, GROUND BLOCKY AND LOOSE
3	S	RUTH SOUTH EXTENSION PSTENT	FI	SHAFT - VERTICAL - 7' X 9' X ~15' DEEP
5	A	RUTH	FI	ADIT - PORTAL PARTLY BLOCKED BY CAVED ROCK - OPENING 10'W X 6'H - STRAIGHT FOR 60' - TURNS LEFT - AT TURN IS 40' D VERTICAL WINZE WITH 15' OF DRIFT BEHIND - WINZE HAS TIMBER BARRICADE - ADIT CONTINUES PAST WINZE FOR 100' IN TO EXTENSIVE SERIES OF SHORT WI
4	I	RUTH	FI	DECLINE - 40-45 DEGREES - COLLAR 10' X 12' - DRIVEN DOWN 20-25' - PROBABLY INTERSECTS STOPE WORKINGS BELOW - DECLINE IRREGULAR IN SHAPE - AVG. 5'W X 9'H - APPEARS TO LEVEL OFF AT 25' DEPTH - COLLAR 15' NNW OF CL-486.
4	S	RUTH	EN	SHAFT - VERTICAL - COLLAR 12' X 12' X 10' DEEP - ENTRANCE TO STOPE AREA VISIBLE AT SW CORNER AT BOTTOM - MOSTLY PLUGGED BY MUCK - NOT CLEARLY VISIBLE ON APPROACH.
4	S	RUTH	EN	SHAFT - VERTICAL - COLLAR 15' DIA. TAPERS TO 8' X 8' - TIMBER LANDING AT 10' DEPTH IN POOR CONDITION - LADDER WITH HEAVY ROPE ATTACHED RESTS ON LANDING - OLD TIMBER AT COLLAR - TOTAL DEPTH ABOUT 30' - MAY TIE INTO CL-486 WORKINGS.
4	S	RUTH	EN	SHAFT - TOP 6' VERTICAL - TIPS TO 45-50 DEGREES - OLD LADDER, TIMBERS, AND CORRUGATED STEEL ORE CHUTE AT COLLAR - COLLAR 6' X 6' - LANDING AT 12' DEEP THEN DOWN INTO RAISE OR STOPE AREA ACCESSED BY CL-486 - ROCKS FALL EST. 30-40'.
4	I	RUTH	FI	DECLINE - 70 DEGREES - STOPE ACCESS - COLLAR MAX 5' X 10' - 8' DROP TO STOPE MUCK PILE - STOPE ENDS OR IS CAVED SOUTHWARD 10' SOUTH OF COLLAR - STOPE 15' WIDE - CAN SEE DOWN-DIP 25-30' - WORKINGS MAY TIE INTO CL-486 - STOPE CONTINUES NORTHWARD - INTERSECT
4	I	RUTH	FI	DECLINE - 65-70 DEGREES - COLLAR MAX 3' X 5' - LOCATED AT UPPER NORTHERN END OF STOPE AND 10' NORTH OF CL-491. 8' DROP TO MUCKPILE - HANGING WALL IS STULLED WITH TIMBER SUPPORTS - GROUND VERY FRACTURED.
4	I	RUTH	FI	DECLINE - 45-50 DEGREES - COLLAR 14' DIA. - TAPERS TO 6' X 6' - 15' DEEP TO STOPE ACCESS ADIT WHICH RUNS LEFT (SOUTHWARD) AT BOTTOM OF DECLINE - 25' NORTH OF CL-492.
5	S	RUTH	FI	SHAFT - 75 DEGREES AT COLLAR - STEEPENS TO NEAR VERTICAL - COLLAR ERODED - 20' X 20' - TAPERS TO 6' X 7' X EST 50' DEEP - ABOUT 20' NORTHEAST OF CL-493.

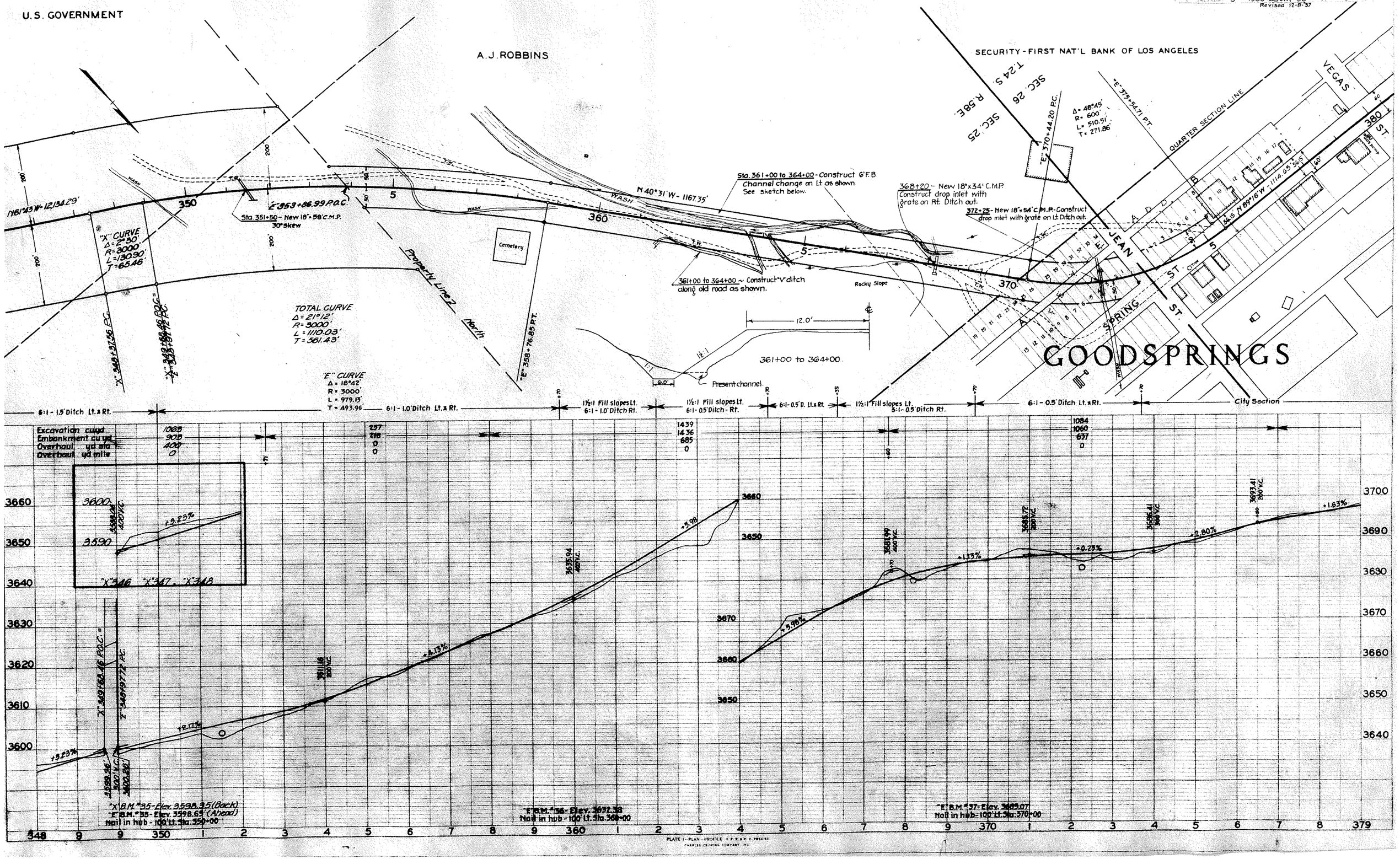
4	A	IRON GOLD #8	P	ADIT-PORTAL 4.5'WX6.5'H - FULLY OPEN. POSSIBLE SHAFT AT COLLAR NOW FILLED. INCLINED TIMBER FOUND IN MUCK AT PORTAL. ADIT AVG 4'WX5-5.5'H. SEVERAL CAVED AREAS-STRAIGHT ADIT ~100' LONG. BRECCIATED LIMESTONE WITH SCATTERED PYRITE. VERY LOOSE AND BROKEN
4	S	IRON GOLD #8	P	SHAFT- COLLAR TIMBERED (POOR CONDITION) REMAINS OF LADDERS, COLLAR 8'X8'-80 DEGREES TO VERTICAL-8' DOWN TO DRIFT (4'WX6'H) WITH UNKNOWN LENGTH. SHAFT CONTINUES DOWN TO 30' TO APPARENT STOPED AREA, APPEARS THAT WORKINGS WIDEN AT THIS DEPTH. SHAFT MAY GO
3	A	IRON GOLD #6	P	ADIT-AVG 4'WX6'H INCLUDING PORTAL 4'X6'X4' DEEP. START OF SHAFT OUTSIDE AND LEFT OF PORTAL. ADIT STRAIGHT - PACED ~300' LONG - 10' LONG SIDE DRIFT TO LEFT AT ~200'. GOOD SOLID GROUND EXCEPT FOR SMALL LOOSE SLABS ON LEFT SIDE AT PORTAL. BRECCIATED LIME
4	A	QUEEN, CONSORT PATENT	FI	ADIT - PORTAL AND WORKINGS 4-4.5'W X 6-6.5'H - STRAIGHT FOR FIRST 10' TURNS GRADUALLY LEFT - 50-60' LONG - DRIVEN IN GRAVELLY LIMESTONE ALLUVIUM, ENCOUNTERS ROCK AND SOFT SANDY LAYER AT 30', CAVING OCCURS AT 30'
3	S	IRON GOLD #33	P	SHAFT - 80 DEGREES TO VERTICAL - COLLAR 6'X15', START OF ADIT BEHIND SHAFT APPROX 4' LONG, SHAFT TAPERS TO 6'X6'X12' DEEP. LOCATED 12' EAST OF CL-604 AND SAME LOCATION. RESEARCHED 1/22/98, 1/12/2000, 2/6/2001
3	S	IRON GOLD #33	P	SHAFT - VERTICAL - PARTALLY TIMBERED, REMAINS OF OLD WINDCAS CRADLE AT COLLAR. COLLAR 5'X6', SHAFT IS 15' DEEP. LOCATED 25' SE OF CL-605 AND 5' HIGHER IN ELEVATION. RESEARCHED 1/22/98, 1/12/2000, 2/6/2001
7	S	HILO PATENT MS 4147	FI	SHAFT - VERTICAL - 4' X 4' - TIMBER AT COLLAR - NO DUMP - PROBABLE AIR SHAFT DRIVEN UP FROM BELOW IN YELLOW PINE MINE WORKINGS - EST 300'+ DEEP - T-POST AND WIRE FENCE IN FAIR CONDITION. NOT CLEARLY VISIBLE ON APPROACH. 1/20/98 NDOM STAFF FOUND FENCE WIRE
4	S	QUEEN, CONSORT PATENT	FI	SHAFT - VERTICAL - TIMBER AND CONCRETE COLLAR 4' X 8' - DRIVEN IN ALLUVIUM - ERODED AT DEPTH - EST 25' DEEP - REMAINS OF POST AND WIRE FENCE AT COLLAR - VANDALIZED - NOT CLEARLY VISIBLE ON APPROACH. SECURED - RE-SECURED WITH BACKFILL
3	A	FULL MOON PATENT MS 1854	EN	ADIT - LARGE DUMP - EXTENT UNKNOWN.
4	S	QUEEN, CONSORT PATENT	FI	"YELLOW PINE MINE". MAIN SHAFT - NOW CAVED TO WITHIN 6' OFSURFACE, WAS APPARENTLY OPEN BENEATH HOIST BUILDING AS THERE IS 6-8' SPACE BELOW CONCRETE FLOOR - COULD BE POTENTIAL HAZARD AS CONCRETE IS WEATHERED AND FRACTURED, FENCE AROUND SHAFT LOCATION HAS B
8	I	QUEEN, CONSORT PATENT (or BYBEE?)	FI	"YELLOW PINE MINE". DECLINE - 45 DEGREES - COLLAR 8'W X 10'H, SAME SIZE FIRST 20' - WIDENS INTO AT LEAST 2 VERY LARGE ROOMS - WELL OVER 100' DEEP, T-POST AND CHICKEN WIRE/BARBED WIRE FENCE VANDALIZED - OPEN, OLD TIMBER AND BROKEN LADDER AT COLLAR. SECURED - 5/29/91
6	A	QUEEN, CONSORT PATENT	FI	"YELLOW PINE MINE". ADIT - FIRST 30' WERE TIMBERED WITH FILL OVER TOP - MOSTLY CAVED - OPENING INTO ADIT FROM TOP MAKES IT ACCESSIBLE AT 30' - TIMBERED - 8' X 8', DUMP VERY LARGE INDICATING EXTENSIVE WORKINGS SECURED 5/29/91
4	S	YELLOW PINE, ETC., PATENT	EN	SHAFT - VERTICAL - COLLAR 35' DIAMETER, TAPERS TO APPROX 12' X 12' AT DEPTH OF 25', CAVED AND FILLED WITH ROCK AND COLLAPSED TIMBER, FENCE OF T-POSTS WITH CHICKEN WIRE AND BARBED WIRE IN GOOD CONDITION. "PRAIRIE FLOWER" MINE.
3	A	YELLOW PINE, ETC., PATENT	FI	ADIT - 3.5'W X 5'H X 12'LONG, 50YDS 5.4 DEGREES WEST OF CL-1348 - PROSPECT PIT (OR OLD TRASH DUMP) 30' NE OF PORTAL.
5	I	YELLOW PINE, ETC., PATENT	FI	DECLINE - 45 DEGREES - TOP 15' TIMBERED - 5'H X 10'W COLLAR - OVER 100' DEEP, ROTTED TIMBER AND LADDERS ON BOTTOM AT COLLAR, REMAIN OF HEADFRAME FOUNDATION NEARBY TO EAST.
6	O	YELLOW PINE, ETC., PATENT	FI	GLORY HOLE - COLLAR 20' DIAMETER, VERTICAL DROP OF 25' TO FIRST "SUBLEVEL", STOPING ALONG SHEAR ZONE OR VEIN TO NORTH, DRIVEN DOWN-DIP TO WEST FOR DEPTH OF APPROX 100'. PROBABLE TIE-IN TO CL-1350, WAS FENCED AT ONE TIME, 1 T-POST WITH WIRE ATTACHED TO IT
5	I	YELLOW PINE, ETC., PATENT	FI	DECLINE - 55-60 DEGREES - OLD TIMBERS ACCROSS COLLAR - COLLAR 8' X 8', CAN SEE DOWN APPROX 60' USING REFLECTED LIGHT, DECLINE TURNS AT 60' - MAY GO DEEPER.
7	I	YELLOW PINE, ETC., PATENT	FI	DECLINE - APPROX 70 DEGREES AND APPEARS TO STEEPEN WITH DEPTH, COLLAR 12' X 20' AND ACTIVELY ERODING, TAPERS TO 7' X 7', EST OVER 400-500' DEEP - ROCKS DROPPED COULD BE HEARD FALLING FOR 15 SECONDS - THIS IS A NASTY ONE!! WAS ONCE FENCED - ONLY 4 T-POSTS
4	S	YELLOW PINE, ETC, PATENT	FI	SHAFT - VERTICAL - 6' X 7' X 30' DEEP - EXPLORING A GRANITE STOCK - CAVED ADIT 20' S 20DEGREES W..
5	S	QUEEN CONSORT ETC., PAT MS4147	EN	SHAFT - VERTICAL - CONCRETE COLLAR 6' X 10' - APPROX. 50' DEEP, FENCED WITH 6" PIPE POSTS AND INTERMEDIATE T-POSTS, HEAVY CABLE, CHICKEN WIRE AND BARBED WIRE.
6	I	QUEEN CONSORT ETC MS 4147	FI	DECLINE - 67 DEGREES - TIMBERED TOP 10' - COLLAR 5' X 7' X 100' DEEP.

4	A	COPPER GLANCE PATENT	BR	ADIT - PORTAL IN VERY SOFT, LOOSE GROUND, PARTLY BLOCKED BY SLOUGHED MATERIAL, OPENING 9'W X 5'H. FIRST 15' OF ADIT HALF FULL OF CAVED MATERIAL, IS APPROX 15' WIDE, NARROWS TO 3'W X 6'H IN MORE COMPETENT ROCK - STRAIGHT FOR APPROX 100' AND ENDS. 1/16/97 D
4	A	COPPER GLANCE PATENT	BR	ADIT - PORTAL IN VERY SOFT, LOOSE GROUND, PARTLY BLOCKED BY SLOUGHED MATERIAL, OPENING 9'W X 5'H. FIRST 15' OF ADIT HALF FULL OF CAVED MATERIAL, IS APPROX 15' WIDE, NARROWS TO 3'W X 6'H IN MORE COMPETENT ROCK - STRAIGHT FOR APPROX 100' AND ENDS. 1/16/97 D
5	A	COPPER GLANCE PATENT	FI	"GREEN COPPER" MINE. ADIT - PORTAL 5'W X 5.5'H - FOLLOWING OXIDIZED ZONE RICH IN COPPER CARBONATES (AZURITE, MALACHITE) AT 50' A WINZE (APPROX 55-60 DEGREES) WAS DRIVEN DOWN-DIP, EST 50-60' DEEP (FULL EXTENT UNKNOWN), NUMEROUS STOPED AREAS AND RAISES BEYO
3	A	COPPER GLANCE PATENT	FI	ADIT - PORTAL PARTLY BLOCKED - 6'W X 5.5'H X 10' LONG
3	A	COPPER GLANCE PATENT	BR	ADIT - PORTAL 7'H X 4'W X 20' LONG
3	A	COPPER GLANCE PATENT	BR	ADIT - PORTAL 7'H X 4'W X 20' LONG
5	I	COPPER GLANCE PATENT	BR	DECLINE - 57 DEGREES - COLLAR 5.5' X 6' - STEEPENS WITH DEPTH - APPROX 60' DEEP.
5	I	COPPER GLANCE PATENT	BR	DECLINE - 57 DEGREES - COLLAR 5.5' X 6' - STEEPENS WITH DEPTH - APPROX 60' DEEP.
4	I	TINTO, MIDDLESEX PATENT	EN	DECLINE - 60 DEGREES - COLLAR 5' X 5' WIDENS WITH DEPTH TO APPROX 7' X 7', 40' DEEP, REMAINS OF FALLEN HEADFRAME AT SURFACE
6	O	TINTO, MIDDLESEX PATENT (OR COPPER GLANCE PAT?)	EN	OPEN CUT - CROSS-CUTS MINERALIZED ZONE WITH EAST/WEST TREND - RIGHT CROSS-CUT IS DECLINE 35 DEGREES - 5'W X 5'H X 15' DEEP - LEFT CROSS-CUT GOES 5' TO WEST OF CROSS-CUT TO VERTICAL SHAFT - (SEE CL-1364) SECURED 7/10/92
6	O	TINTO, MIDDLESEX PATENT (OR COPPER GLANCE PAT?)	EN	OPEN CUT - APPROX. 25-30'L X 2-10'W ON EAST/WEST TRENDING MINERALIZED ZONE, AT EAST END OF OPEN CUT AT 20' BELOW SURFACE IS VERTICAL SHAFT 6' X 6' - APPROX 80' DEEP SECURED 7/10/92
4	A	TINTO, MIDDLESEX PATENT	BR	ADIT - PORTAL MOSTLY BLOCKED - OPENING 4.5'W X 2.5'H. GROUND SOFT AND BLOCKY, MAIN DRIFT 90'L, FORK TO LEFT AT 30' IS 8' LONG, ADIT AVERAGES 5.5-6'H X 4.5'W.
6	A	TINTO, MIDDLESEX PATENT	BR	MIDDLESEX MINE. ADIT - PORTAL FULLY OPEN - ADIT AVERAGES 7'H X 5.5-6'W, EXTENSIVE HAULAGE DRIFT, BRANCHES AT 95', LEFT BRANCE 50'L. RIGHT BRANCE CONTINUES FOR 135' TO ANOTHER FORK. LEFT HAND DRIFT 80'L. RIGHT HAND DRIFT WELL OVER 100'L. HAS DOGHOLES WITH
6	A	TINTO, MIDDLESEX PATENT	BR	ADIT - FIRST 30' WAS MINED TO SURFACE LEAVING A GLORY HOLE FROM 3-6' WIDE, WALLS HAVE CAVED MOSTLY BLOCKING ENTRANCE, ADIT APPROX 100' LONG WITH SEVERAL STOPE AREAS AND CROSSCUTS AT 65' IN FROM SURFACE IS A DECLINE - 55 DEGREES, 6' X 7'. EST 60' DEEP, POS
4	S	TINTO, MIDDLESEX PATENT	EN	SHAFT - VERTICAL - HEAVY TIMBER OVER COLLAR. COLLAR 8' X 6', 30' DEEP
3	A	TINTO, MIDDLESEX PATENT	P	ADIT - 6.5'H X 3.5'W X 17' LONG
3	I	TINTO, MIDDLESEX PATENT	P	DECLINE - 30 DEGREES - COLLAR OPENING 8'W X 5.5'H - FIRST 10' OF DECLINE SAME SIZE, TAPERS TO 4.5' X 5' - STEEPENS TO 50 DEGREES FOR 8' DEPTH - COULD EASILY BE CLIMBED OUT OF.
3	O	QUEEN, CONSORT PATENT	FI	EXPLORATION PIT - 150' L X 25' MAX X MAX 30' DEEP. 5' FROM EDGE OF ACCESS ROAD - NO BERM ALONG ROAD.
5	S	QUEEN, CONSORT PATENT	FI	SHAFT - 80 DEGREE - TOP 6' TIMBERED - COLLAR 4' X 7' - ABOUT 2/3 BLOCKED AT 10' DEPTH - EST 70-80' TO BOTTOM - VANDALIZED FENCE OF T-POST & WIRE - 1/27/2003 - DOM SITE VISIT SHOWED BACKFILLIND MATERIAL HAS SETTLED.
5	I	QUEEN, CONSORT PATENT	FI	DECLINE - 40 DEGREES - COLLAR 10'W X 6'H - OLD TIMBER AT COLLAR. APPEARS TO SHALLOW WITH DEPTH. APPROX 60' DEEP - MINOR STOPING ON BOTH LEFT & RIGHT SIDE WALLS.
3	I	QUEEN, CONSORT PATENT	FI	DECLINE - MOSTLY FILLED - 35-40 DEGREE - COLLAR 8'W X MAX 4.5'H X 10' DEEP.

6	I	QUEEN, CONSORT PATENT (or BYBEE?)	EN	DECLINE - 50 DEGREE - COLLAR 10W X 7'H, TAPERS TO 6' X 6' - TIMBER SETS AT 20' DEPTH, CAN SEE IN APPROX 80' PROBABLY GOES DEEPER. DUMP LARGE - T-POST & BARBED WIRE FENCE - WIRE NEEDS TO BE TIGHTENED. SECURED 5/29/91
5	S	QUEEN, CONSORT PATENT	FI	SHAFT - VERTICAL - COLLAR 6' X 3.5' X EST 50' DEEP.
6	I	QUEEN, CONSORT PATENT	EN	DECLINE - 60-65 DEGREES - OLD TIMBERS AT COLLAR. COLLAR 7' X 8' - STAYS CONSTANT WITH DEPTH. PROBABLY 400-500' DEEP. ROCK FELL 22 SECONDS BEFORE I COULD NO LONGER HEAR IT. FENCED WITH T-POST & BARBED WIRE IN GOOD CONDITION.
5	S	QUEEN, CONSORT PATENT	FI	SHAFT - VERTICLA - COLLAR 25' DIAMETER - TAPERS TO APPROX 6' X 8' AND SHALLOWS TO 65-70 DEGREES AT 20' DEPTH. 50' DEEP - T-POSTS & BARBED WIRE CAN BE SEEN AT BOTTOM OF SHAFT.
7	A	POCOHONTAS PATENT	EN	ADIT - PORTAL CAVING & PARTLY BLOCKED - OPENING MAX 6.5'WX3.5'H - ADIT VEERS RIGTH 8' INSIDE MAKES GRADUAL LEFT TURN - AT 40' IS A 6'X6' WINZE 70 DEGREE DECLINE - APPROX 50' DEEP, TIMBERED & LADDERS, ADIT STIPS 15' PAST WINZE, GROUND SOFT AND LOOSE SECURED 7/1/91
6	S	POCOHONTAS PATENT	EN	SHAFT - VERTICAL - 6'X6' - OLD TIMBERS & LOOSE ROCK PARTLY BLOCK OPENING, 50' DEEP. PROSPECT PIT AND 6' DEEP FILLED SHAFT LOCATED SOUTHWEST OF SHAFT AT 50' & 20' RESPECTIVELY. SECURED 7/1/91

APPENDIX 7

NDOT ROW



F.A.S.
3 1938 CLARK 53 A 9 125
Revised 12-8-37
U.S. GOVERNMENT
A.J. ROBBINS
SECURITY-FIRST NAT'L BANK OF LOS ANGELES
T.24 S. R.58 E.
SEC. 26
SEC. 25
QUARTER SECTION LINE
VEGAS
JEAN
SPRING
ST.
GOODSPRINGS
N 40°31' W - 1167.35'
N 61°43' W - 12,134.29'
"X" CURVE
Δ = 2°30'
R = 3000'
L = 130.90'
T = 65.46'
"E" 353+86.99 P.O.C.
Sta. 351+50 - New 18"x58' C.M.P. 30° skew
Sta. 361+00 to 364+00 - Construct 6' F.B. Channel change on Lt. as shown. See sketch below.
368+20 - New 18"x34' C.M.P. Construct drop inlet with grate on Rt. Ditch out.
372+25 - New 18"x54' C.M.P. - Construct drop inlet with grate on Lt. Ditch out.
361+00 to 364+00 - Construct "V" ditch along old road as shown.
Cemetery
Property Line 2 North
Rocky Slope
TOTAL CURVE
Δ = 21°12'
R = 3000'
L = 1110.03'
T = 561.43'
"E" 358+76.85 P.T.
"E" 370+44.20 P.C.
Δ = 48°45'
R = 600'
L = 510.51'
T = 271.86'
"E" 375+54.71 P.T.
N 89°16' W - 1114.65'
12.0'
361+00 to 364+00
Present channel.
"E" CURVE
Δ = 18°42'
R = 3000'
L = 979.13'
T = 493.96'
6:1 - 1.5' Ditch Lt. & Rt.
6:1 - 1.0' Ditch Lt. & Rt.
1½:1 Fill slopes Lt.
6:1 - 1.0' Ditch Rt.
1½:1 Fill slopes Lt.
6:1 - 0.5' Ditch - Rt.
6:1 - 0.5' D. Lt. & Rt.
1½:1 Fill slopes Lt.
6:1 - 0.5' Ditch Rt.
6:1 - 0.5' Ditch Lt. & Rt.
City Section
Excavation cu yd
Embankment cu yd
Overhaul yd sta
Overhaul yd mile
1065
905
400
0
257
218
0
0
1439
1436
685
0
1084
1060
637
0
"X" 346 "X" 347 "X" 348
"X" 349+68.46 P.O.C. =
"E" 348+97.72 P.C.
"X" 348+37.56 P.C.
"X" 349+68.46 P.O.C. =
"E" 348+97.72 P.C.
+3.23%
+2.17%
+4.13%
+5.98
+5.98%
+1.13%
+0.23%
+2.80%
+1.63%
"X" B.M. #35 - Elev. 3598.35 (Back)
"E" B.M. #35 - Elev. 3598.65 (Ahead)
Nail in hub - 100' Lt. Sta. 350+00
"E" B.M. #36 - Elev. 3632.38
Nail in hub - 100' Lt. Sta. 360+00
"E" B.M. #37 - Elev. 3685.07
Nail in hub - 100' Lt. Sta. 370+00
348 9 9 350 1 2 3 4 5 6 7 8 9 360 1 2 3 4 5 6 7 8 9 370 1 2 3 4 5 6 7 8 379
3660 3650 3640 3630 3620 3610 3600
3700 3690 3680 3670 3660 3650 3640
PLATE 1 - PLAN - PROFILE