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March 4, 2008

File No. 039610-0001

VIA FEDEX

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 07-AFC-1
1516 Ninth Street, MS-4
Sacramento, California 95814-5512

Re: Victorville 2 Hybrid Power Project: Docket No. 07-AFC-1

Dear Sir/Madam:

Pursuant to California Code of Regulations, title 20, sections 1209, 1209.5, and 1210, enclosed herewith for filing please find a copy of the Desert Tortoise Translocation Plan for the above-referenced project.

Please note that the enclosed submittal was filed today via electronic mail to your attention and to all parties on the CEC's current electronic proof of service list.

Very truly yours,

Paul E. Kihm
Senior Paralegal

Enclosure

cc: CEC 07-AFC-1 Proof of Service List (w/encl. via e-mail)
Michael J. Carroll, Esq. (w/encl.)

INLAND ENERGY, INC.

South Tower, Suite 606
3501 Jamboree Road
Newport Beach, CA 92660
(949) 856-2200 / Fax (949) 856-2313
www.inlandenergy.com

Thomas M. Barnett
Executive Vice President

March 3, 2008

Mr. John Kessler
Ms. Misa Ward
California Energy Commission
1516 Ninth Street, MS 52
Sacramento, CA 95814-5512

Ms. Tonya Moore
California Department of Fish and Game
Region 6-Inland Deserts Region
12550 Jacaranda Ave.
Victorville, CA 92595-3602

Mr. Ray Bransfield
U.S. Fish and Wildlife Service
1493 Portola Road #B
Ventura, CA 93003

RE: Victorville 2 Hybrid Power Project Desert Tortoise (*Gopherus agassizii*) Translocation Plan

Dear Mr. Kessler, Ms. Ward, Ms. Moore, and Mr. Bransfield:

Attached please find the Victorville 2 Hybrid Power Project Desert Tortoise (*Gopherus agassizii*) Translocation Plan (Translocation Plan). The Translocation Plan is being provided to you for agency review and approval as part of the CEC Licensing Process; the California Endangered Species Act Section 2081 incidental take permit process; and in support of the federal Endangered Species Act Section 7 Biological Opinion issued for the Project on January 23, 2008.

The Translocation Plan anticipates issuance of remaining permits for the Project in May 2008, with surface disturbance beginning July 1, 2008. While Inland Energy, LLC appreciates the time constraints on translocation of desert tortoises based on ambient weather conditions, we would like to request that the agencies consider alternatives to

waiting until September/October 2008 to translocate any desert tortoises that may be found in the main power block area, which must be cleared in July 2008 if the Project is to remain on schedule. Because we anticipate a very few, if any desert tortoises will actually be found on this portion of the Project site, we are hoping to reach an agreement with the agencies that would allow any such tortoises to be relocated prior to September/October 2008 to avoid Project delays that will amount to as much as $650,000 dollars for each and every day of delay. Given the disproportionality between the few number of tortoises that are expected (if any) and the high cost of delay, we are soliciting your cooperation in exploring any potential alternatives that may exist should this scenario occur.

Please call me at (949) 856-2200 or Arrie Bachrach at (805) 388-3775 if you have any questions or need additional information. We very much appreciate your assistance with this matter.

Sincerely,

Thomas M. Barnett

Attachment: Victorville 2 Hybrid Power Project Desert Tortoise (*gopherus agassizii*) Translocation Plan, February 2008

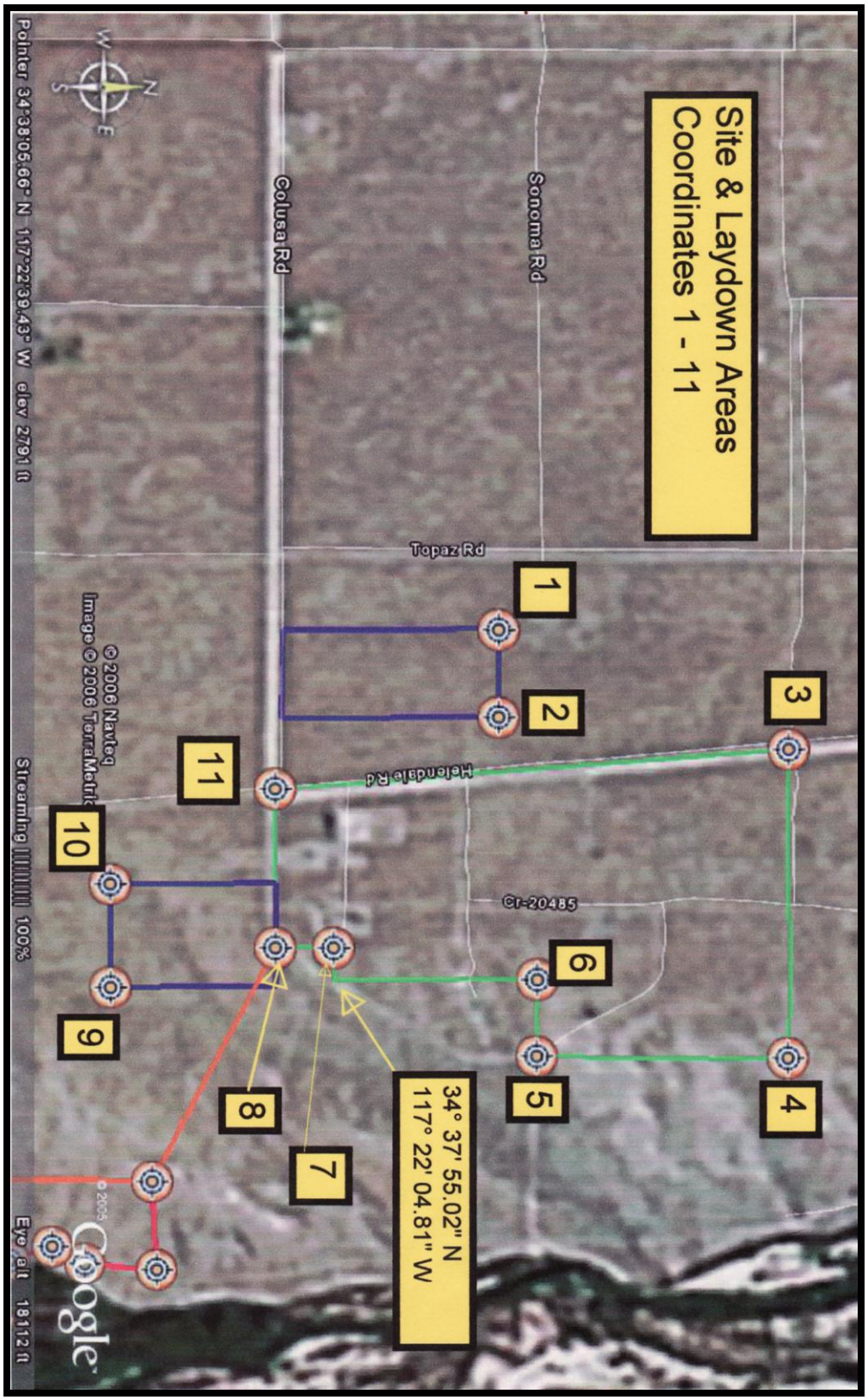
cc: Ms. Anita Lee, U.S. Environmental Protection Agency
Mr. Curt Taucher, CA Dept. of Fish and Game
Mr. Jon B. Roberts, City Manager, Victorville
Mr. Tony Penna, Inland Energy, Inc.
Mr. Mike Carroll, Latham & Watkins
Ms. Kim McCormick, Law Offices of Kim McCormick
Mr. Arrie Bachrach, ENSR

VICTORVILLE 2 HYBRID POWER PROJECT

DESERT TORTOISE (Gopherus agassizii) TRANSLOCATION PLAN

APPENDIX 1.

Aerial Photography and Global Positioning System (GPS) Mapping of Victorville 2 Hybrid Power Plant Project Area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Colusa Rd
Sonoma Rd
Topaz Rd
Helendale Rd
Cr-20485
1
2
3
4
5
6
7
8
9
10
11
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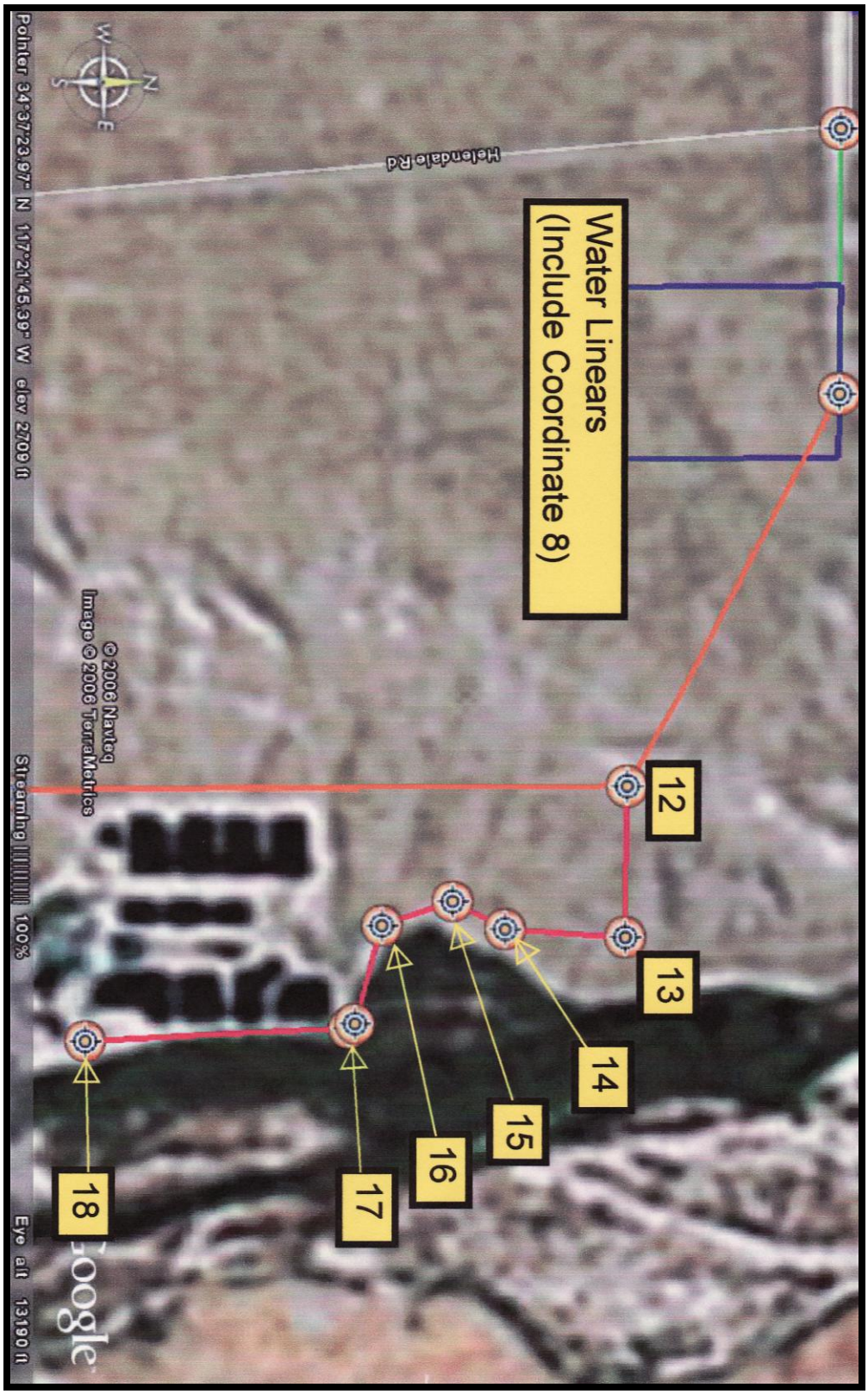
117° 22' 04.81" W
Pointer 34°38'05.66" N 117°22'39.43" W elev 2791 ft
Streaming 100%
Eye alt 18112 ft
Google


Water Linears
(Include Coordinate 8)
Helendale Rd
12
13
14
15
16
17
18
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Streaming 100%
Eye alt 13,190 ft
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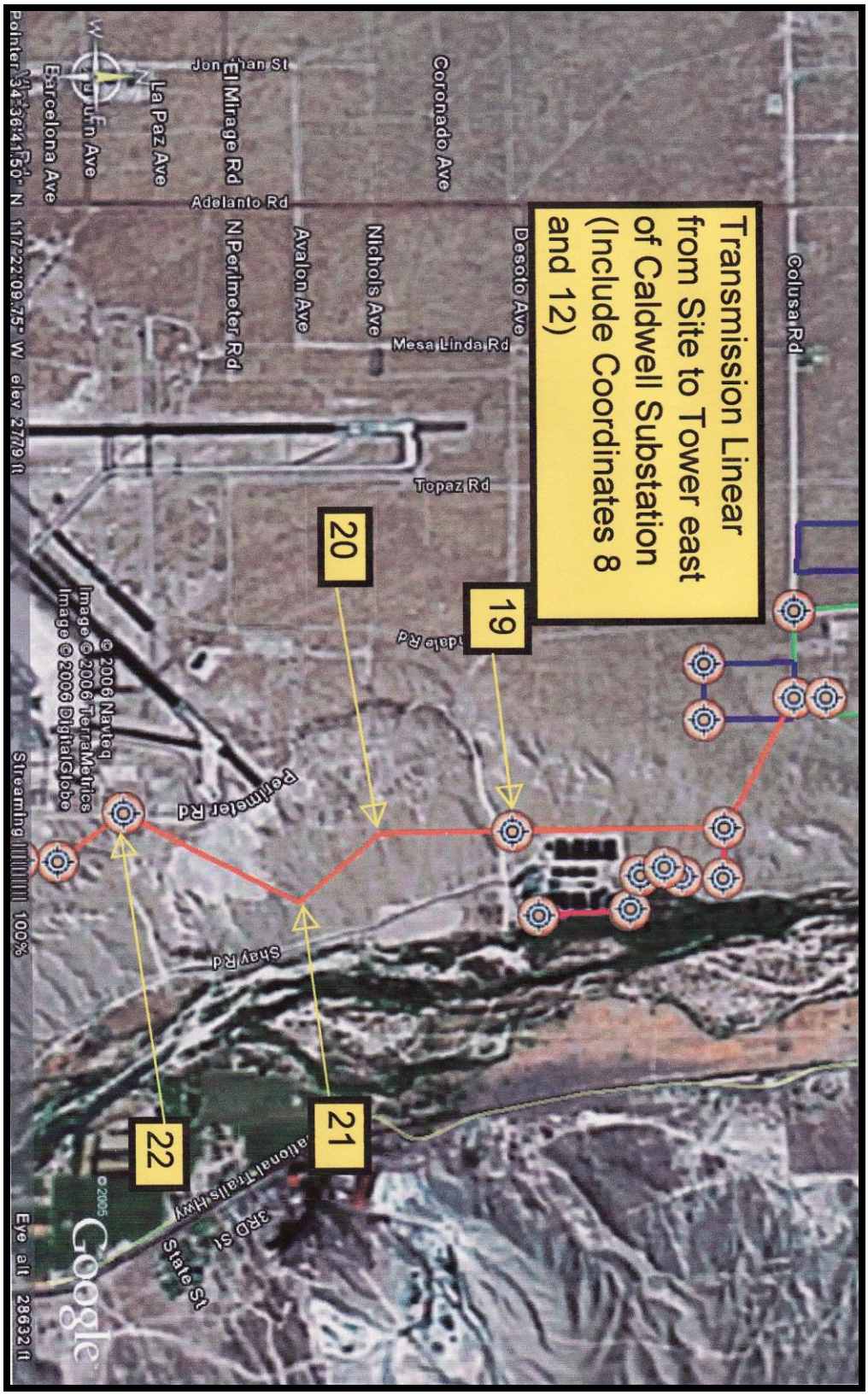
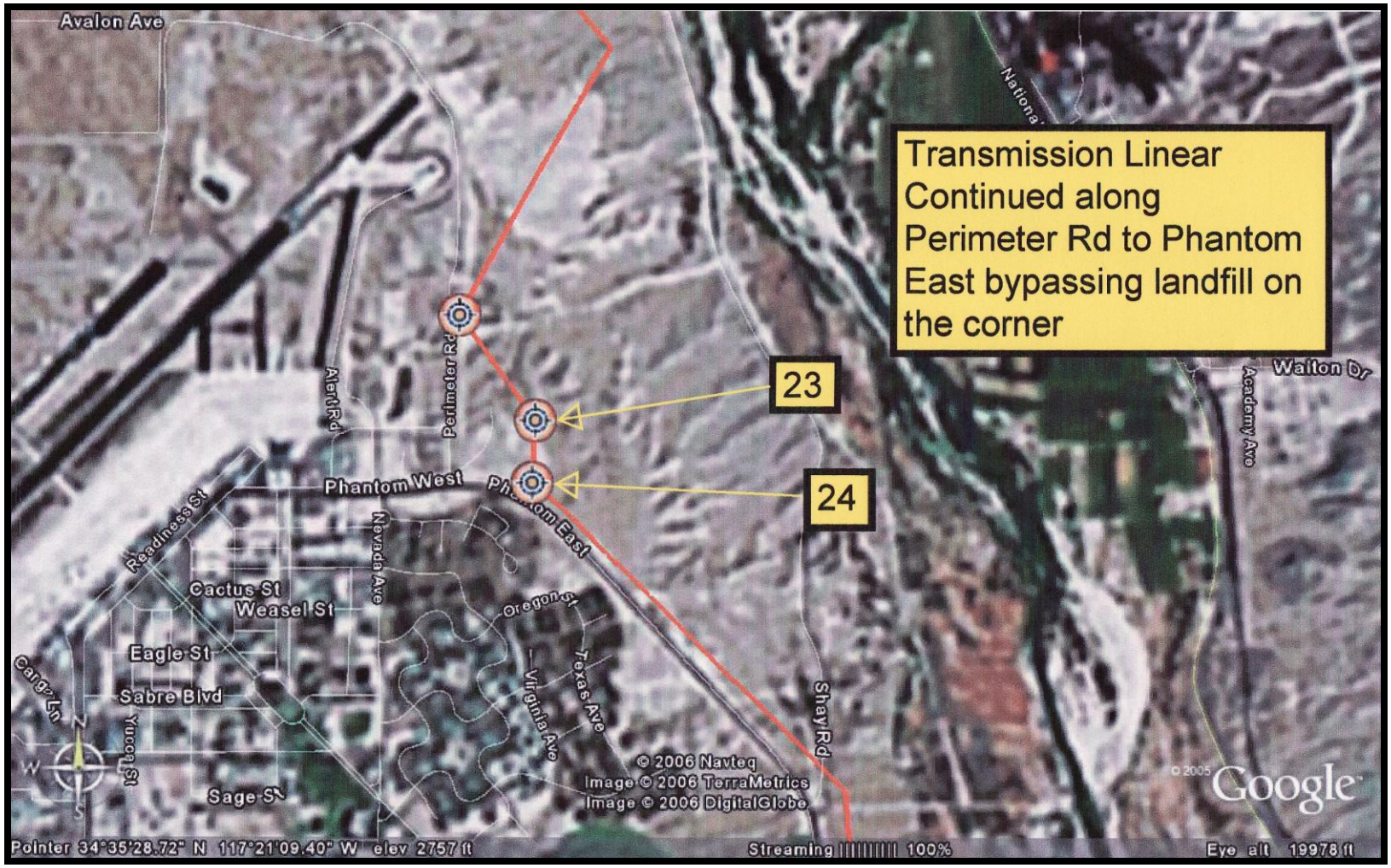
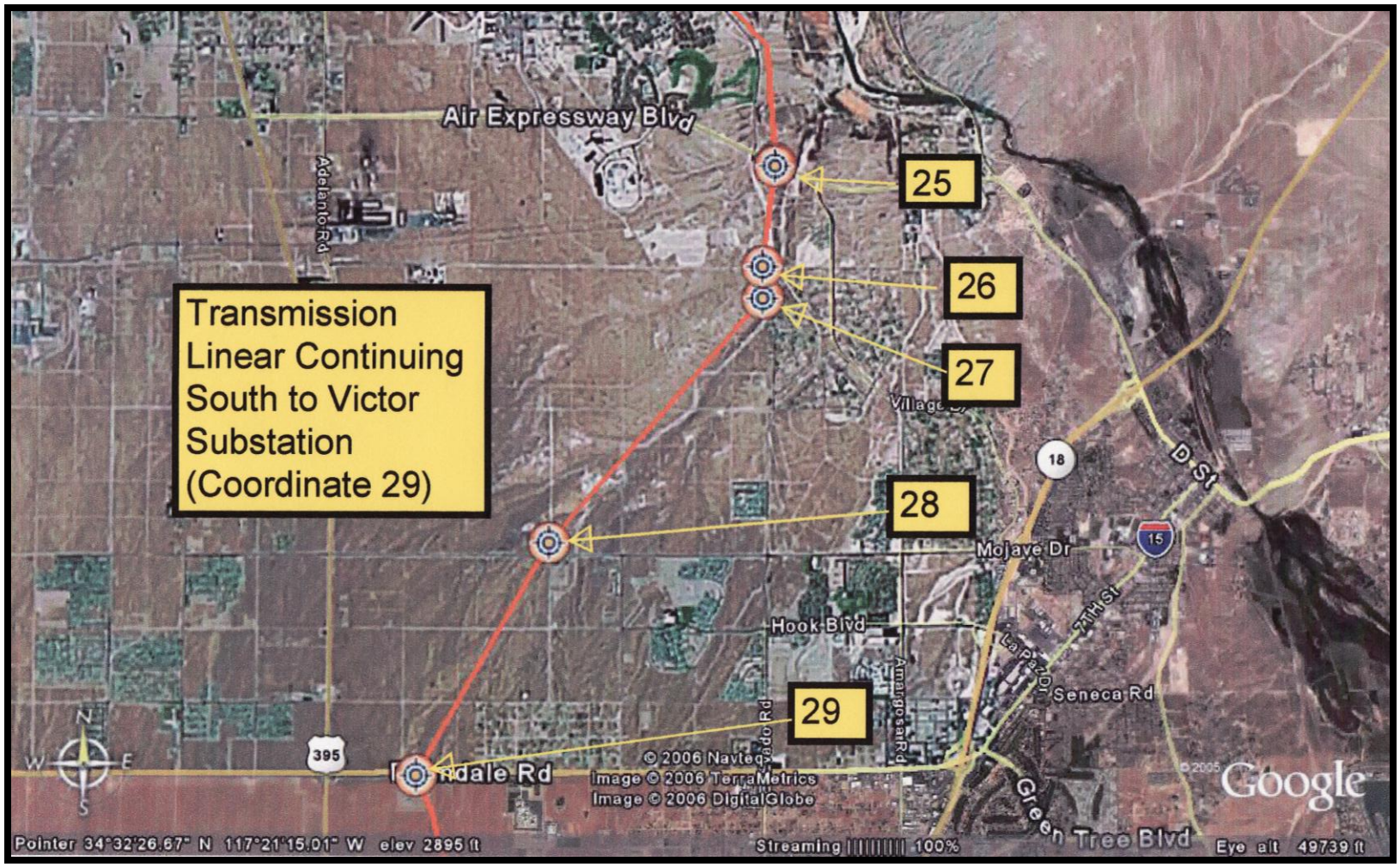
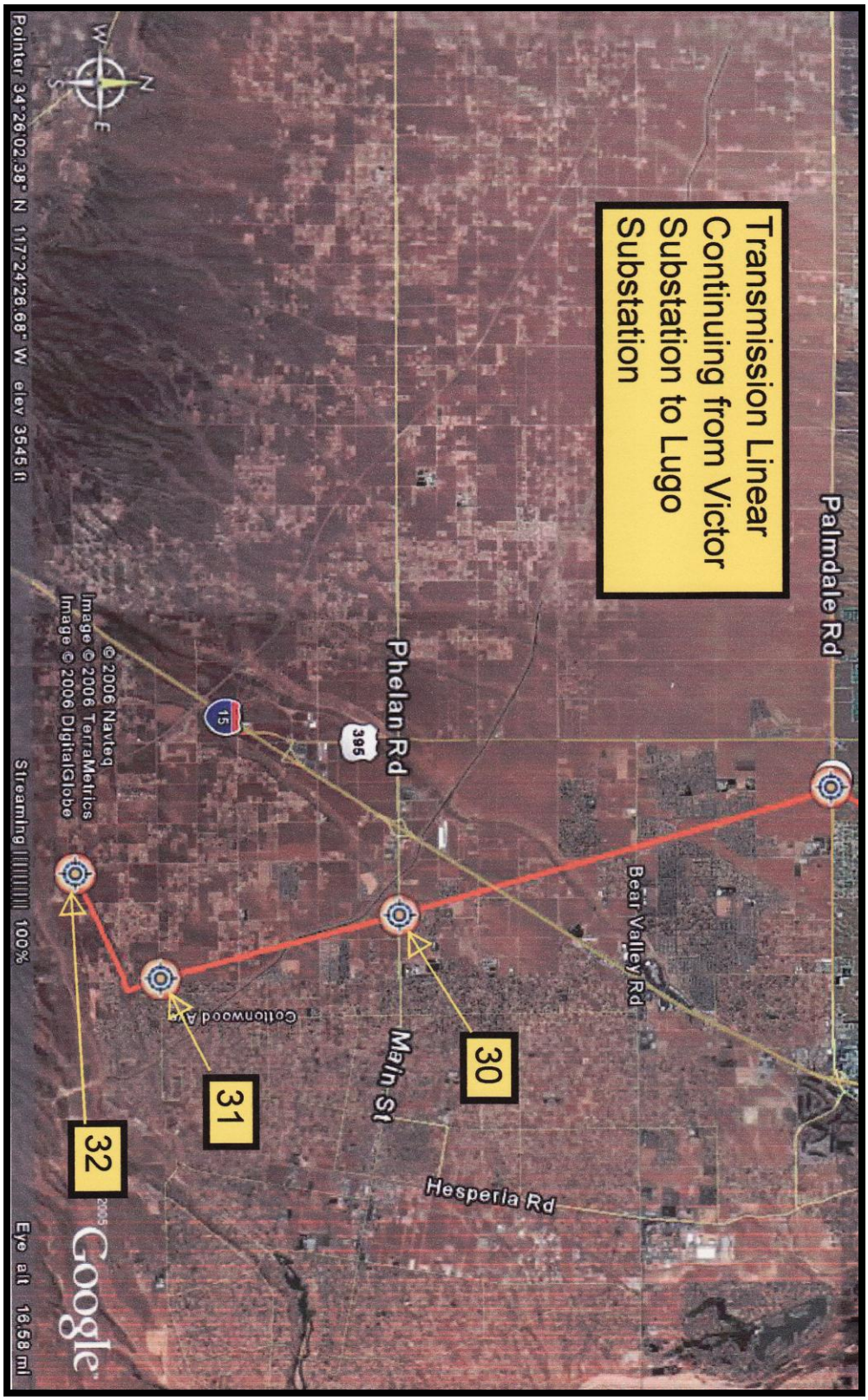

Transmission Linear from Site to Tower east of Caldwell Substation (Include Coordinates 8 and 12)
19
20
21
22
Colusa Rd
Coronado Ave
Desoto Ave
Mesa Linda Rd
Topaz Rd
Nichols Ave
Avalon Ave
N Perimeter Rd
Adelanto Rd
El Mirage Rd
La Paz Ave
Barcelona Ave
Perimeter Rd
Shay Rd
3RD St
State St
Google


Transmission Linear Continued along Perimeter Rd to Phantom East bypassing landfill on the corner
23
24
Avalon Ave
Perimeter Rd
Alert Rd
Phantom West
Readiness St
Nevada Ave
Cactus St
Weasel St
Eagle St
Sabre Blvd
Sage St
Yucca St
Cargo Ln
Oregon St
Virginia Ave
Texas Ave
Shay Rd
Academy Ave
Walton Dr
© 2006 Navteq
Image © 2006 TerraMetrics
Image © 2006 DigitalGlobe
© 2005 Google
Pointer 34°35'28.72" N 117°21'09.40" W elev 2757 ft
Streaming 100%
Eye alt 19978 ft


Air Expressway Blvd
Adelanto Rd
25
26
27
Transmission
Linear Continuing
South to Victor
Substation
(Coordinate 29)
18
D St
28
Mojave Dr
15
Hook Blvd
7TH St
La Paz Dr
Seneca Rd
Amargosa Rd
29
395
Rdale Rd
© 2006 Navteq
Image © 2006 TerraMetrics
Image © 2006 DigitalGlobe
Green Tree Blvd
Google
Pointer 34°32'26.67" N 117°21'15.01" W elev 2895 ft
Streaming 100%
Eye alt 49739 ft


Transmission Linear
Continuing from Victor
Substation to Lugo
Substation
Palmdale Rd
Phelan Rd
Bear Valley Rd
Main St
Hesperia Rd
Cottonwood Ave
15
395
30
31
32
Pointer 34°26'02.38" N 117°24'26.68" W elev 3545 ft
Streaming 100%
Eye alt 16.58 mi
© 2006 Navteq
Image © 2006 TerraMetrics
Image © 2006 DigitalGlobe
2005 Google

Victorville Coordinates

1. 34°38'12.00"N - 117°22'49.00"W
2. 34°38'12.00"N - 117°22'38.00"W
3. 34°38'42.00"N - 117°22'34.00"W
4. 34°38'42.00"N - 117°21'55.00"W
5. 34°38'16.00"N - 117°21'55.00"W
6. 34°38'16.00"N - 117°22'5.00"W
7. 34°37'55.00"N - 117°22'9.00"W
8. 34°37'49.00"N - 117°22'9.00"W
9. 34°37'32.00"N - 117°22'4.00"W
10. 34°37'32.00"N - 117°22'17.00"W
11. 34°37'49.00"N - 117°22'29.00"W
12. 34°37'36.00"N - 117°21'39.00"W
13. 34°37'36.12"N - 117°21'26.94"W
14. 34°37'28.38"N - 117°21'27.42"W
15. 34°37'24.96"N - 117°21'29.64"W
16. 34°37'20.34"N - 117°21'27.66"W
17. 34°37'18.14"N - 117°21'19.32"W
18. 34°37'0.90"N - 117°21'18.36"W
19. 34°36'55.92"N - 117°21'38.28"W
20. 34°36'30.71"N - 117°21'38.18"W
21. 34°36'15.31"N - 117°21'22.14"W
22. 34°35'42.80"N - 117°21'43.52"W
23. 34°35'30.43"N - 117°21'32.54"W
24. 34°35'23.12"N - 117°21'32.99"W
25. 34°34'2.29"N - 117°20'44.29"W
26. 34°33'25.73"N - 117°20'49.62"W
27. 34°33'14.29"N - 117°20'49.50"W
28. 34°31'46.02"N - 117°22'22.91"W
29. 34°30'23.16"N - 117°23'19.87"W
30. 34°25'36.54"N - 117°21'38.84"W
31. 34°22'59.54"N - 117°20'49.37"W
32. 34°22'4.95"N - 117°22'13.62"W

VICTORVILLE 2 HYBRID POWER PROJECT

DESERT TORTOISE (Gopherus agassizii) TRANSLOCATION PLAN

APPENDIX 2.

Guidelines for Desert Tortoise Translocation
(USFWS 1994)

Guidelines for Translocation from the "Desert Tortoise (Mojave Population) Recovery Plan" (Appendix B)

U.S. Fish and Wildlife Service (USFWS) 1994

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(1) Experimental translocations should be done outside experimental management zones. No desert tortoises should be introduced into DWMAs-at least until relocation is much better understood.

(2) All translocations should occur in good habitat where the desert tortoise population is known to be substantially depleted from its former level of abundance. Translocation of reproductively competent adults into depopulated areas can have beneficial effects on population growth. Before population growth can occur, however, individuals must establish home ranges and enter into any existing social structure. Desert tortoises should be periodically evaluated against a defined health profile (proportional weight/size, fecal scans, and blood panels).

(3) Areas into which desert tortoises are to be relocated should be surrounded by a desert tortoise-proof fence or similar barrier. The fence will contain the desert tortoises while they are establishing home ranges and social structure. If the area is not fenced, past experience suggests that most animals will simply wander away from the introduction site and eventually die. (Fencing s not cheap; estimates range from $2.50 to $5.00 per linear foot). Once animals are established some or all fencing can be removed and probably reused.

(4) The best translocations into empty habitat involve desert tortoises in all age classes, in the proportions in which they occur in a stable population. Such translocations may not always be possible, since young desert tortoises are chronically underrepresented in samples, often due to observer sampling error, and may now be actually underrepresented in most populations due to poor recruitment and juvenile survivorship during the last several years. Desert tortoises are smaller than the 7-year age-size class are particularly vulnerable to predation and may be a poor investment for translocation, unless predator exclusion (fencing, for example) is incorporated into such endeavors. Mature females would probably be the best sex/age class to introduce into below carrying capacity extant populations because of their high reproductive value (low potential mortality, high potential fecundity for many years).

(5) The number of desert tortoises introduced should not exceed the pre-decline density (if known). If the pre-decline density Is not known, introductions should not exceed 100 adults or 200 animals of all age classes per square mile in category 1 habitat (Bureau of Land Management designation for management of desert tortoise habitat) unless there is a good reason to believe that the habitat is capable of supporting higher densities. Post-introduction mortalities might be compensated by subsequent introductions if ecological circumstances warrant this action.

(6) All potential translocatees should be medically evaluated in terms of general health and indications of disease, using the latest available technology, before they are moved. All translocatees should be genotyped unless the desert tortoises are to be moved only very short distances or between populations that are clearly genetically homogeneous. All translocated animals should be permanently marked, and most should be fitted with radio transmitters so that their subsequent movements can be closely tracked.

(7) If desert tortoises are to be moved into an area that already supports a population—even one that is well below carrying capacity—the recipient population should be monitored for at least 2 years prior to the introduction. Necessary data include the density and age structure of the recipient population, home ranges of resident desert tortoises, and general ecological conditions of the habitat.

Areas along paved highways can serve as good translocation sites, if properly fenced. Many such areas support good habitats, but vehicle-caused mortalities and/or collecting have substantially reduced or totally extirpated adjacent desert tortoise populations. Any translocation sites should be isolated by a desert tortoise barrier fence or similar barrier next o the highway or road. The purpose of fencing the highway is obvious—to keep translocated animals from being crushed by vehicles on the road. However, fencing the other sides of the translocation area is critical for establishment. If a fenced area or strip of habitat approximately 0.125 to 0.25 mile wide is established along highways, some translocatees should establish home ranges and a social structure within this strip. When the inside fence is removed, the translocated desert tortoises and those from the extant population farther away from the road will eventually expand their home ranges into the remaining low-density areas. A second reason for inside fencing is to prevent any diseased, but asymptomatic, desert tortoises from infecting nearby, healthy populations. In the event that disease is an issue and a resident population is present nearby, double inside fencing should be considered.

VICTORVILLE 2 HYBRID POWER PROJECT

DESERT TORTOISE (Gopherus agassizii) TRANSLOCATION PLAN

AMEC Earth & Environmental
3120 Chicago Avenue, Suite 110
Riverside California 92507

February 2008

VICTORVILLE 2 HYBRID POWER PROJECT
DESERT TORTOISE (Gopherus agassizii) TRANSLOCATION PLAN

Prepared for:

City of Victorville
14343 Civic Drive
Victorville, California 92392
(760) 955-5029

On behalf of:

Inland Energy
14390 Civic Drive
Victorville California 92392
(760) 843-5450

And

ENSR Corporation
1220 Avenida Acaso
Camarillo, California 93012
(805) 388-3775

Prepared by:

AMEC Earth & Environmental, Inc.
3120 Chicago Avenue, Suite 110
Riverside California 92507
(951) 369-8060

Principal Investigator:
Thomas B. Egan
Senior Ecologist

AMEC Job #6554000228

February 2008

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1.0 INTRODUCTION

The Victorville 2 Hybrid Power Project (VV2 or Project) has been proposed by the City of Victorville for private land location in the western portion of California's Mojave Desert (Figure 1). This hybrid electrical power-generation facility will utilize several parabolic solar collector arrays and will be situated north of the Southern California Logistics Airport and west of the Mojave River (Figure 2). Linear utility features (Appendix 1) will connect to an existing gas pipeline, electrical transmission line, water distribution system and water treatment facility (AMEC 2007, 2008).

Project construction is scheduled to begin in summer 2008. These activities have the potential to adversely affect the desert tortoise (*Gopherus agassizii*), a state and federally listed threatened species. Site fencing following facility installation will preclude post-construction use of some habitat by this species. "Incidental take" permitting under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) has been initiated. Translocation of desert tortoises from permanently impacted Project acreage to suitable offsite lands, and temporary removal of all at-risk animals during Project construction, have been identified as key mitigation measures.

Two adult desert tortoises have been observed within the Project's proposed permanent disturbance footprint, with an additional four adult animals observed in the adjacent zone of influence. Hatchling, juvenile or other adult tortoises, and perhaps even viable tortoise eggs (though unlikely), may also be discovered during clearance surveys of the Project site. The translocation of two or more desert tortoises therefore is anticipated from the Project's proposed permanent disturbance area, with the potential removal of four or more animals out of harm's way in temporary disturbance areas.

Specific direction for desert tortoise translocation and removal of at-risk animals is discussed in this document. This direction and a selected translocation destination area will be subject to regulatory agency approvals prior to implementation.

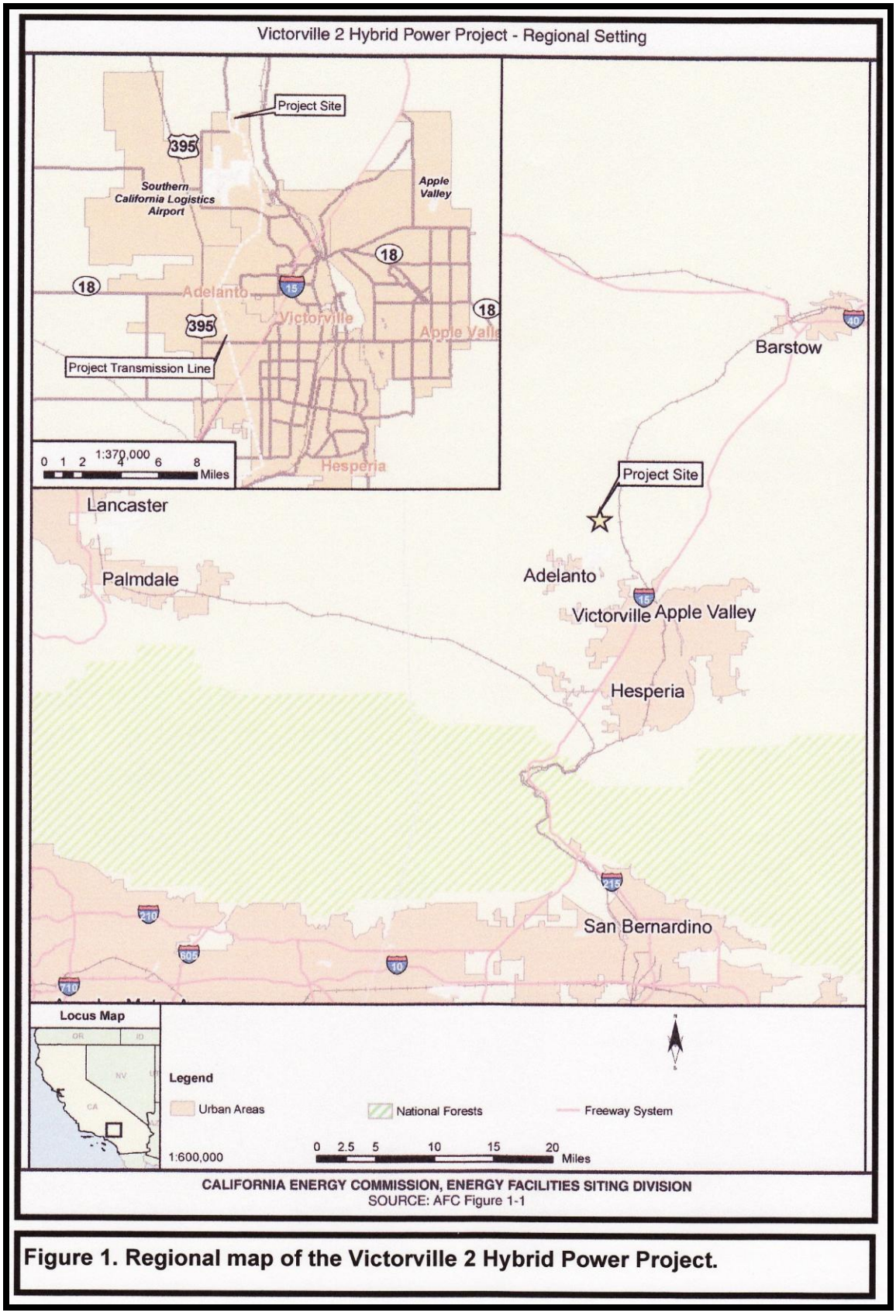

Figure 1. Regional map of the Victorville 2 Hybrid Power Project.

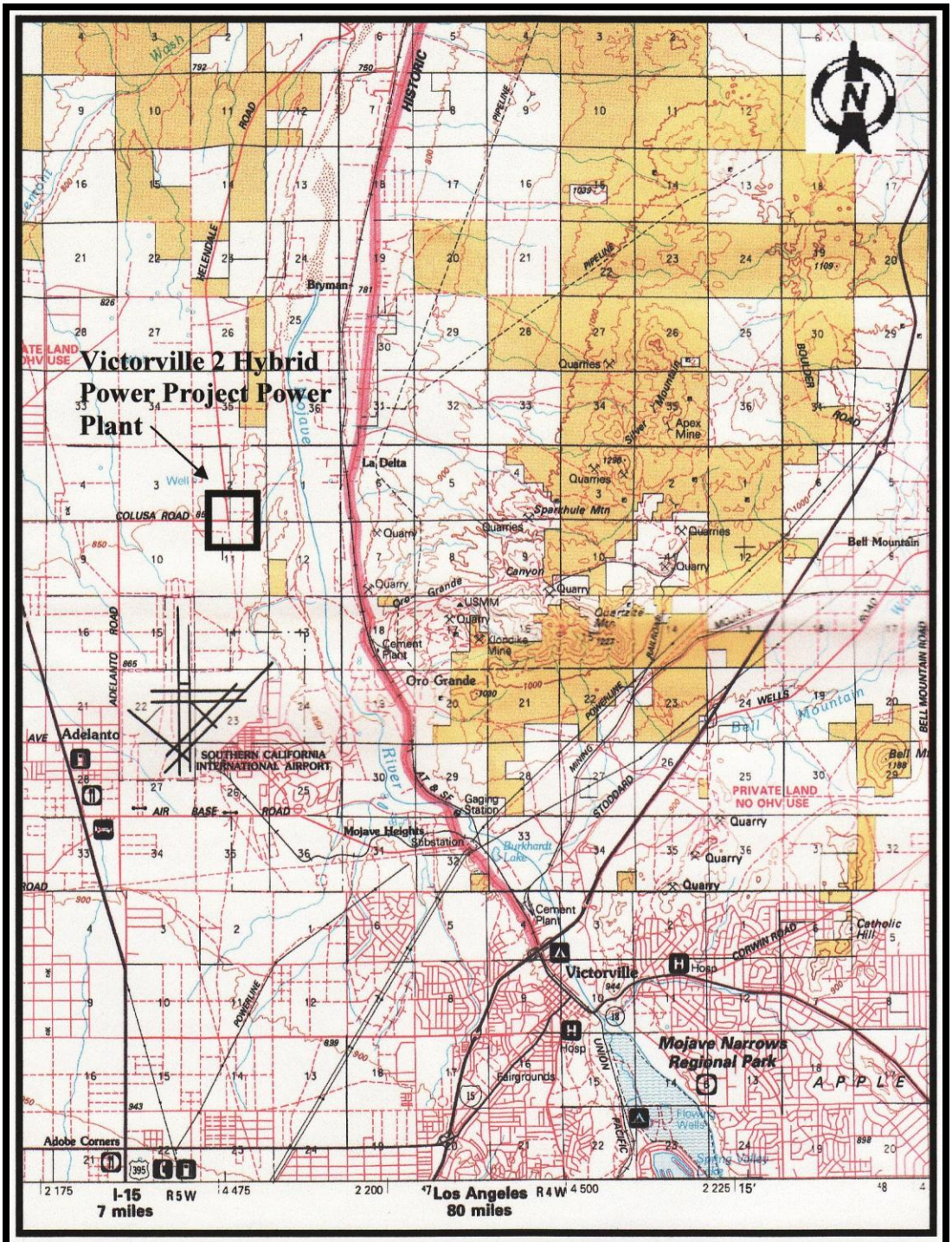

Figure 2. Land status of the Victorville 2 Hybrid Power Project plant proposed for private land location north of the Southern California Logistics Airport. Private lands are depicted in white and public lands are depicted in yellow; modified from the Bureau of Land Management (BLM) California Desert District's Victorville Desert Access Guide (1998).

2.0 BACKGROUND

Desert tortoise translocation in wildland habitats is a relatively new and incompletely-studied field. This technique is becoming increasingly necessary to mitigate incidental take of this species where urban growth is occurring. Research on desert tortoise translocation and the removal of at-risk animals from urban development areas have been recommended by the U.S. Fish and Wildlife Service (USFWS) in the "*Desert Tortoise (Mojave Population) Recovery Plan*" (1994). Several broad guidelines for translocation also have been recommended (Appendix 2).

Translocation of desert tortoises can have beneficial effects on population growth of the species (FWS 2004). One measure of success for translocated animals is the degree which desert tortoises establish home ranges and enter into existing desert tortoise social structure (Berry 1986). However, a more commonly used measure of translocation success is tortoise survival.

Tortoises are known to have survived for at least 24 months when excluded from a portion of their home range (e.g., Stewart and Baxter 1987, TRW 1998). Tortoises are also well known for their survival when placed into suitable, captive environments (St. Amant and Hoover 1978) and when rehabilitated captive tortoises have been released (Cook 1983). Stewart (1993) observed that survival rates and average movements did not differ between translocated tortoises and resident animals during an 18 month period. Mullen and Ross (1997) similarly observed no difference between resident and relocated tortoise survival, which involved an analysis of late spring animal releases.

Translocation mortality within one year of release has been found in one instance to be substantially correlated with a period of drought (Saethre et al. 2003]. Other stressors and various anthropogenic influences (Lovich and Bainbridge 1999) undoubtedly affect the survival of individual translocated animals.

Although relatively few studies have been conducted, there appears to be no adverse effects on resident tortoise populations into which translocated tortoises are moved (Nussear 2004).

Two large translocation efforts are currently being implemented in the Mojave Desert as part of the Fort Irwin National Training Center Expansion (Esque et al. 2005) and the Hyundai Test Track project in California City (Karl 2003). Data collected from the considerably smaller VV2 Project Translocation Program in an urban interface area could serve to augment knowledge generated by larger translocation efforts.

The studies completed to date suggest that desert tortoise translocation, if conducted appropriately and during periods of forage availability, can result in high survivorship (Nussear et al. 2000, Karl 2007). The season of translocated animal release appears to have a substantial impact on tortoise mortality. Cook's (1983) study illustrated this point, where six of the eight known translocated animal deaths recorded in one such effort occurred when animals were released during the summer. Late winter (Field et al. 2003), fall or early spring months (pers. comm. Dr. Alice Karl, 2007) appear to be conducive to high translocation survival rates.

Additional considerations can factor into long-term survival potentials following even successful translocations. Desert tortoises "*have complex social behaviors and intimate familiarity with their home ranges, which can be quite large*" (USFWS 1994). Those translocation efforts incorporating a portion of a tortoise's original home range may facilitate an animal's ability to locate suitable forage in dry years and/or successfully avoid predation over the long term.

However, translocation of a tortoise into non-impacted portions of a home range is not always an option in rapidly developing areas. For all translocation efforts, whether tortoises are moved only short distances or away from their home range, care must be taken to ensure the translocated animals are not placed into sub-optimal habitat or at-risk areas.

Translocation should be considered as part of a "tool box" for conserving at-risk desert tortoises, according to Management Goal F of the California Statewide Desert Tortoise Management Policy (BLM and CDFG 1992). A carefully implemented translocation program can contribute to conservation of the species and also has the potential to provide useful data for future translocation efforts (Karl 2003, Field et al. 2007).

3.0 GOALS

Three overall goals have been identified for the VV2 Project Translocation Plan. These overall goals include:

(1) Successful translocation of at-risk desert tortoises from the VV2 power plant site to a selected translocation area and careful relocation of at-risk tortoises in the Project's connected linear utility features during construction to suitable habitat located adjacent to the active work area;

(2) Minimization of the impacts of translocation on recipient desert tortoise populations; and

(3) Collection of monitoring data to contribute to the collective knowledge of translocation as a viable conservation technique.

4.0 TRANSLOCATION PLAN

All at-risk desert tortoises must be translocated from the permanent surface disturbance area of the VV2 Project's power plant site to a suitable offsite habitat, following issuance of incidental take approvals from state and federal regulatory agencies.

Desert tortoise exclusion fencing will be installed around the perimeter of the power plant site (permanent fencing) and two staging areas (temporary fencing) to prevent subsequent tortoise movement into the active work area. At-risk tortoises found in temporary surface disturbance areas associated with the staging areas and linear utility features, and which cannot be avoided, will be moved to an adjacent unrestricted location within the Project right-of-way, or to adjacent lands where approved by the respective landowner.

All activities described in this Translocation Plan will be consistent with the ESA Biological Opinion and the CESA Section 2081 incidental take permit issued for this Project, as affirmed in Section 4.1 below.

Pre-construction clearance surveys will be necessary in all Project site construction areas and material storage/equipment staging areas, as detailed in Section 4.2. Desert tortoise handling and transport, as explained in Section 4.3, will be necessary following initial Project site biological clearance surveys.

Animal health considerations to be evaluated in all desert tortoise handling endeavors of the VV2 Project are discussed in Section 4.4 of this plan. Public and private land options for desert tortoise translocation sites to be considered for this effort are presented in Section 4.5. Translocation site preparation needs and management are briefly outlined in Section 4.6. Lastly, Section 4.7 describes the monitoring and reporting tasks believed beneficial for this translocation effort.

4.1 Consistency with Recovery Plan and Incidental Take Permits

The techniques and translocation destination sites selected for use in this plan are based foremost upon ecological considerations, as well as upon information gleaned from previous desert tortoise translocations, offsite habitat availability and consistency with the Translocation Guidelines (Appendix 2) specified in the Desert Tortoise Recovery Plan (USFWS 1994).

Techniques identified in this document are consistent with the Desert Tortoise Recovery Plan to the degree feasible and will adhere to the ESA and CESA incidental take permits issued for the Project. No actions requiring tortoise handling, or that could result in incidental take, will occur until these permits are issued.

4.2 Occupied Habitat Clearance Surveys

Clearance surveys of occupied tortoise habitat in the Project's power plant and staging areas will be conducted in the September to October, 2008 timeframe. Permanent desert tortoise exclusion fencing (Figure 3) will be installed around the perimeter of occupied tortoise habitat prior to conducting these clearance surveys (Karl and Resource Design Technology 2006). Fence installation will be overseen by qualified biological monitors.

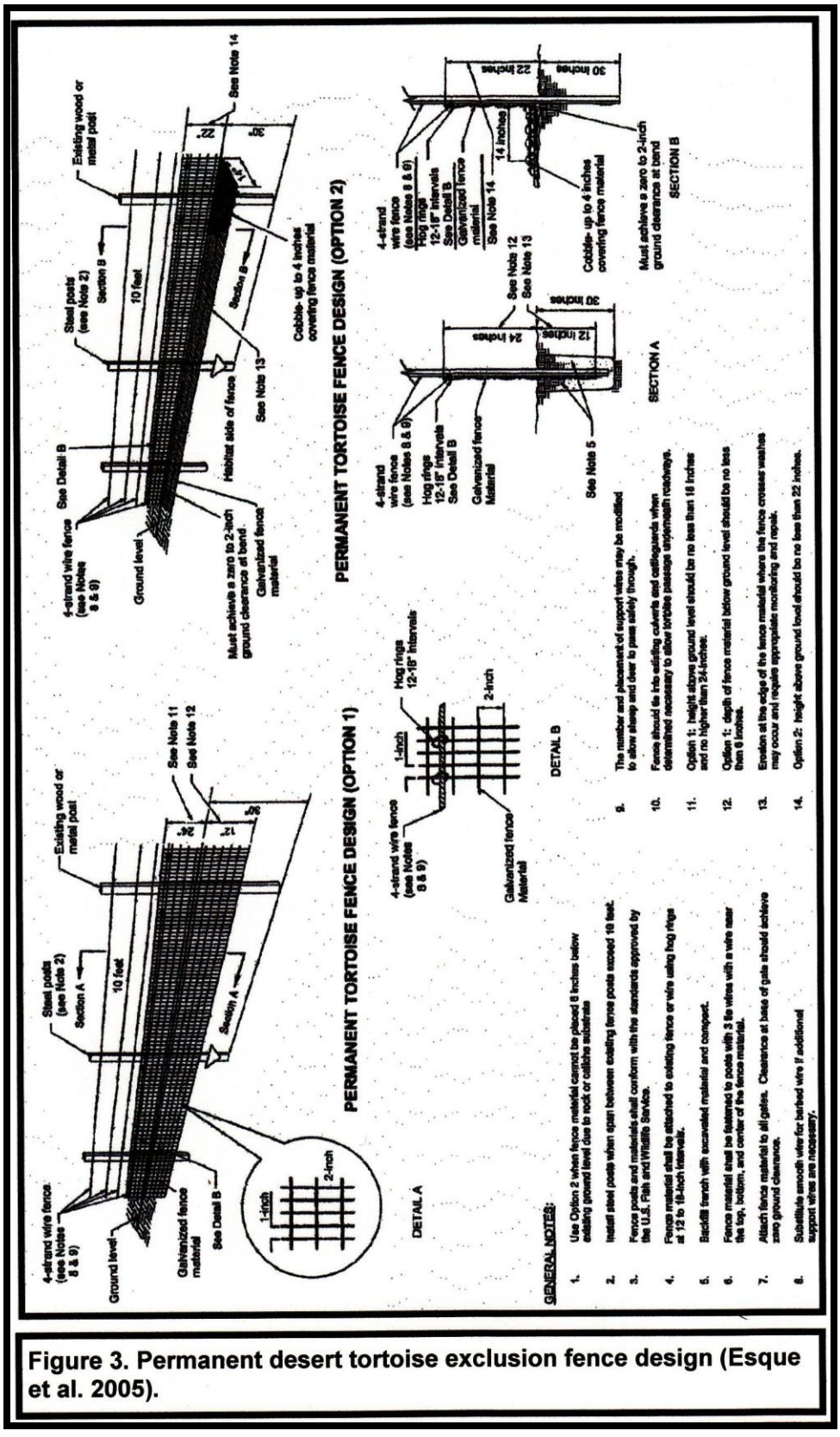

Figure 3. Permanent desert tortoise exclusion fence design (Esque et al. 2005).

Until site clearances have been completed, any temporary parking areas used by Project personnel will be first surveyed to ensure that no fresh tortoise burrows are present, then fenced using a temporary fence design, and re-surveyed to ensure that no tortoises have entered the enclosure. Temporary tortoise exclusion fencing will also be installed around the two primary equipment staging areas situated adjacent to the power plant site. Three-foot-wide, 1 by 2 inch mesh hardware cloth will be used as temporary fencing material, situated at 24" above ground, with the remaining material buried (http://www.fws.gov/ventura/sppinfo/protocols/DT Exclusion-Fence 2005.pdf.). Rebar will be used to secure this material every 4-5 feet and T-stakes will be placed every 8-10 feet along this fencing, or there will be a comparable design to ensure fence integrity. All installed fences will be monitored at least monthly, as well as during storms, with all necessary repairs made immediately.

Following site fencing, experienced biological monitors will perform a clearance survey of the Project site and staging areas. All clearances will occur when air temperatures at 5 cm above the ground surface are below 35°C, in accordance with established protocols (http://www.fws.gov/ventura/sppinfo/protocols/DT). Transect spacing between monitors will be appropriate for the vegetation present in the clearance area.

All burrows that could potentially host a tortoise are to be excavated with hand tools per the method prescribed by the Desert Tortoise Council's "*Guidelines for Handling Desert Tortoises during Construction Projects*" (1994, rev. 1999). At least three clearance passes should be made to consider the area effectively cleared of desert tortoises; with two of these clearance surveys coinciding with temperatures conducive to tortoise activity (Karl and Resource Design Technology 2006).

Where exclusion fencing is not installed for construction zones, such as along the linear utility features, surveys should be conducted immediately prior to construction taking place. Tortoises and burrows encountered should be mapped for further monitoring. Construction in these unfenced areas would be continually monitored by biologists who would remove tortoises out of harm's way to nearby suitable habitat (i.e., in the animals' home ranges). Those tortoises and the construction zone would continue to be monitored to ensure that the tortoises are not injured.

4.3 Desert Tortoise Handling and Transport

A biologist experienced with desert tortoise ecology and the principles of conservation biology will direct the VV2 construction monitoring and translocation efforts. Only persons permitted by USFWS and CDFG through the auspices of issued incidental take permits will handle desert tortoises. Handling will only be done using approved techniques (e.g., Desert Tortoise Council, 1994) that incorporate the most recent, pertinent research data (e.g., Brown 2003).

Animal gender, carapace length, mass, overall condition, capture site location and description will be recorded for all animals handled. All tortoises handled will also be photographed and closely examined for clinical signs of animal disease (discussed further in Section 4.4) at the time of capture. Each adult tortoise will then be fitted with a light-weight radio transmitter having a battery life of at least one year (e.g., Holohil model AI-2F).

While no tortoises or burrows are currently known to occur within the linear utility feature construction zones, clearance surveys will be conducted in these areas prior to surface disturbance to ensure no animals would be placed at-risk by Project work. Any tortoises discovered in proximity to linear utility areas during construction work will be closely monitored to ensure these animals do not enter into harm's way. These animals will not be moved unless found to be at-risk, and then will be moved to an unrestricted location within the Project right-of-way, or to adjacent lands where approved by the respective landowner; thereby allowing these animals to remain within their established home range. The use of temporary exclusion fence installation will be considered where necessary in linear utility areas to prevent tortoise entry into active construction areas.

Those tortoises identified during clearance surveys that are to be translocated, i.e., those residing within the main VV2 power plant site and associated staging areas, will be examined, measured and assigned a unique number upon capture. Conditional to incidental take permit approvals anticipated for May, 2008 issuance, desert tortoises will be marked using small epoxy number placement on the animal's shell. Blood samples of each tortoise to be translocated will also be acquired for use in animal health assessment.

Transmitter attachment (Boarman et al. 1998) will allow tortoises to be kept in place at the point of capture during blood testing and facilitate animal relocation following acquisition of blood testing results. Tortoises fitted with transmitters, if any, should be monitored at least monthly and batteries replaced as necessary. Following translocation and a planned telemetry monitoring period of approximately six months, transmitters would be removed according to regulatory agency-approved procedures.

Those tortoises found healthy and disease-free would be moved to the selected translocation site. Tortoises assessed as clinically ill or diseased (see Section 4.4) will be transported separately from healthy tortoises to an approved adoption entity or research facility, according to regulatory agency direction.

Transport of desert tortoises to the selected translocation site should only occur when ground temperatures consistently do not exceed 42°C, so that animals can safely find refuge in potentially unfamiliar areas without the added constraints of warmer temperatures.

Tortoises moved to the selected translocation destination area will be transported via individual, sterilized tubs with taped, sterilized lids. Upon arrival at the selected translocation destination site, transported animals should be placed at artificial burrow entrances.

However, as artificial burrows are infrequently used by a tortoise readily, animals should only be moved when there is sufficient time and at an ambient temperature for the tortoise to either accept an artificial burrow or create/find another initial shelter site. All tortoises moved to the translocation destination site will be monitored to ensure shelter is acquired by the animal before being left on their own.

Juvenile tortoises discovered during clearance surveys that are to be translocated, if any, will be placed in a protective fenced enclosure at the selected translocation site. After a two-week acclimation period in the final translocation area, this protective enclosure will be modified (Morafka et al. 1997) to allow for animal departure. Following translocated animal departure, enclosure materials would be removed.

Desert tortoise nests identified during Project site clearance survey burrow excavation after April 15 will be moved to a microsite (e.g., shrub cover, soil type, substrate cover, direction relative to nearest shrub, if relevant) as similar to the locality found as possible (e.g., same degree of vegetative cover, plant species, soil substrate, aspect) in the selected translocation area, using standard techniques (e.g., Desert Tortoise Council, 1994). Any desert tortoise nests found between November and April are unlikely to be viable (Karl and Resource Design Technology 2006) and will not be moved during clearance surveys. Desert tortoise nests translocated, if any, will be protected according to the standard techniques cited above for facilitating optimum hatching success and carefully monitored.

Monitoring reports (Section 4.7) will be prepared by a designated biologist monthly for the duration of Project construction work. Project progress and mitigation measure implementation [see Table 1: Implementation Schedule] will be recorded; including the capture and release locations of all tortoises found, animal measurements, and other relevant data. A final mitigation report will also be prepared at the conclusion of Project construction, following translocation program completion, summarizing monitoring data.

4.4 Animal Health Considerations

Several diseases have been documented in wild desert tortoise populations in the Mojave Desert. These include an upper respiratory tract disease (URTD) commonly associated with *Mycoplasma agassizii* (Rostal and Lance 2003); as well as a similar disease complex connected to *Mycoplasma testudinium* and proliferative pneumonia (Jacobson and Berry 2004); a cutaneous dyskeratosis shell disease (Christopher et al. 2002, 2003), and a herpes virus (Origgi et al. 2002).

Upper respiratory tract disease and similar complexes are likely exacerbated by stress (M. Brown, pers. comm. to Tracy et al. 2004), which can be imposed on desert tortoises by drought, habitat degradation, poor nutrition and/or animal density (Saethre et al. 2003). It is also likely that certain levels of stress predispose desert tortoises to acquiring one or more of these diseases.

It is conceivable that the stress of translocation may either exacerbate existing disease or immunocompromise an animal to contract disease more easily. Other diseased animals must, however, be in the translocation area for healthy translocated tortoises to become infected. The current rate of infection in wild tortoise populations throughout the western Mojave Desert is unknown, but has been observed to be approximately 3-5 % in three sites located several miles northwest of the site (A. Karl, field notes).

Mycoplasma agassizii transmission involves direct contact with an infected tortoise (Brown *et al.* 2003). Desert tortoises are believed to be contagious during periods of acute phases, when they have clinical signs (Brown *et al.* 2003). Such signs include a mucous nasal discharge, wheezing, conjunctivitis, and lethargy.

According to Schumacher et al. (1997) positive clinical signs statistically correlate with positive serology (i.e., exposure to *M. agassizii*). A mucous nasal discharge was the clinical sign that was the most reliable predictor (93% of tortoises with a mucous nasal discharge were seropositive), although it could be caused by other pathogens. Positive serology [i.e., *M. agassizii*-specific antibodies detectable by an enzyme-linked immunosorbent assay (ELISA)] is indicative that a tortoise has been exposed to *M. agassizii* (Schumacher *et al*. 1993). While positive serology does not necessarily indicate an active infection by *M. agassizii,* it has generally been observed that seropositive tortoises are infected with *M. agassizii* (Drs. Lori Wendland and Mary Brown, University of Florida Mycoplasma Research Lab, pers. comm. Dr. Alice Karl, 2004).

All tortoises handled as part of this Translocation Plan will be examined for clinical signs of URTD symptoms, visible signs of herpes lesions and cutaneous dyskeratosis (Berry and Christopher 2001), with resulting data recorded for each animal. Blood sampling and ELISA tests for exposure to *M. agassizii* will be performed on all tortoises identified for translocation. Following initial blood sampling, tortoises will be fitted with transmitters and not moved until ELISA test results have been acquired, as described in Section 4.3 above. Verified ill tortoises will not be placed in situations where contagion can spread to healthy tortoises. Seropositive tortoises can survive in controlled environments where care is provided (Rostal and Lance 2003), and any such animals identified as part of this Translocation Plan will be placed in appropriate adoption or research facilities.

4.5 Translocation Scheduling

Project permits and approvals are currently anticipated to be finalized in May 2008. After careful consideration of planned Project work timetables and tortoise translocation temperature constraints, the following translocation schedule (Table 1) has been identified that would allow for a July 1, 2008 surface disturbance initiation date:

Phasing initial power plant/staging area surface disturbance to avoid all tortoise burrows and use areas during late spring and summer months, with final tortoise translocation completed in the cooler temperatures of late September or early October, 2008. Tortoise surveys involving a single pass would be conducted in April 2008 to ascertain a July through early September work zone excluding tortoise burrows and use areas. While this scheduling would not allow for active work throughout the entire construction footprint during late spring and summer months, it would allow for some construction activity to begin as scheduled in a manner not requiring the concurrent translocation of affected tortoises.

Accordingly, temporary tortoise exclusion fencing separating the active work area from occupied tortoise habitat would be installed following permit issuance in May, 2008. Similar fencing would be installed along the access route, in a manner not requiring tortoise handling/burrow excavation. The temporary fence-enclosed area would then be re-surveyed with two passes prior to work activities, to ensure that no tortoises are in the area. Fencing of remaining tortoise burrow/use areas would occur in late September or early October 2008, when ambient temperatures would be suitable for tortoise translocation. This fencing would be followed by two tortoise clearance survey passes and subsequent tortoise translocation.

Environmental protection and incidental take permit measures identified for the Project would be applied throughout all fencing and translocation work efforts. A 40 to 50 acre, fenced temporary holding area on a portion of the Project area, as described in Section 4.6, would be used for translocation needs should the final translocation area not be secured by late September, 2008.

Table 1. Implementation Schedule (2008-09) for the VV2 Translocation Program.

Task	Year 2008 Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Select translocation site option. Finalize private land transfer & management; or secure public land use approvals.												
Survey Project area. Determine initial work zones at power plant/staging areas avoiding tortoise burrows/use areas.												
Install fencing around initial work zones and along access road. Re-survey enclosures for tortoises prior to construction work.												
Soil disturbance in initial work zones.												
Install remaining tortoise exclusion fencing at power plant/staging areas and re-survey for tortoises.												
Conduct clearance surveys of power plant/staging area. Mark tortoises, affix transmitters, sample blood & complete ELISA testing. Healthy tortoises translocated & seropositive tortoises adopted.												
Monitor translocated tortoises.												
Construction work throughout entire Project area.												

Table 1 Continued. Implementation Schedule (2008-09) for the VV2 Translocation Program.

Task	Year 2008 Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Closely monitor work in linear utility areas. Move at-risk tortoises to approved location.					▨	▨	▨	▨	▨	▨	▨	▨
Monitor and maintain exclusion fences.					▨	▨	▨	▨	▨	▨	▨	▨
Monthly reporting.					▨	▨	▨	▨	▨	▨	▨	▨

Task	Year 2009 Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Construction work[1].	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	
Closely monitor work in linear utility areas. Move at-risk tortoises to approved location.	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	
Monitor and maintain exclusion fences.	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	
Remove temporary fencing & revegetate temporary impacts.											▨	
Monitor translocated tortoises.	▨	▨	▨									
Assess translocated tortoise health & remove transmitters.				▨								
Monthly reporting.	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	

[1] Power plant construction work within permanently fenced Project area.

4.6 Translocation Area Options and Considerations

Three translocation areas (Figure 4; modified from BLM 2005) have also been identified for healthy, disease-free tortoises translocated from the VV2 Project, where tortoises would remain as individuals of a wild population. These translocation area options include private or public lands situated proximal to, or at a distance from, the VV2 Project area. An onsite holding area contingency option has also been identified for considered use of these options, should securing the final translocation area not be completed by September, 2008. This short-term holding area would encompass 40-50 acres of suitable habitat in the immediate power plant vicinity and would be enclosed with temporary fencing to ensure translocated tortoise protection.

Health-compromised or seropositive tortoises, as explained previously in this document, would be translocated to captive locations associated with conservation, educational or research endeavors, or made available for adoption by approved entities. A 10-acre fenced "head-starting" natural area currently under construction at Edwards Air Force Base (Mark Hagan, pers. comm. 2008), with agency approval, could be considered for conservation, research and educational purposes.

Several factors must be considered in selecting an appropriate translocation area. Primary considerations include habitat suitability, parcel size and land availability in the western Mojave Desert. Location away from recreational/residential impact areas and outside desert tortoise critical habitat, or "Desert Wildlife Management Areas" (Figure 5, BLM 2005) in accordance with translocation guidelines for the species (Appendix 2), is desirable. The selected translocation area should be situated adjacent to large blocks of native habitat unlikely to be developed in the near future and must be protected.

Ideal translocation lands would include suitable habitat that encompasses the home range of tortoises affected by the Project. Public lands situated proximal to the Project are subject to disposal under a Land Tenure Adjustment (LTA) program (Figure 6; modified from BLM 2005). Private lands situated in proximity face considerable future development pressure (Figure 7). Lands located within Mohave ground squirrel (*Spermophilus mohavensis*) historic range (Figure 8; modified from BLM 2005) are also desirable, as compensatory habitat for this species may be required for the VV2 Project.

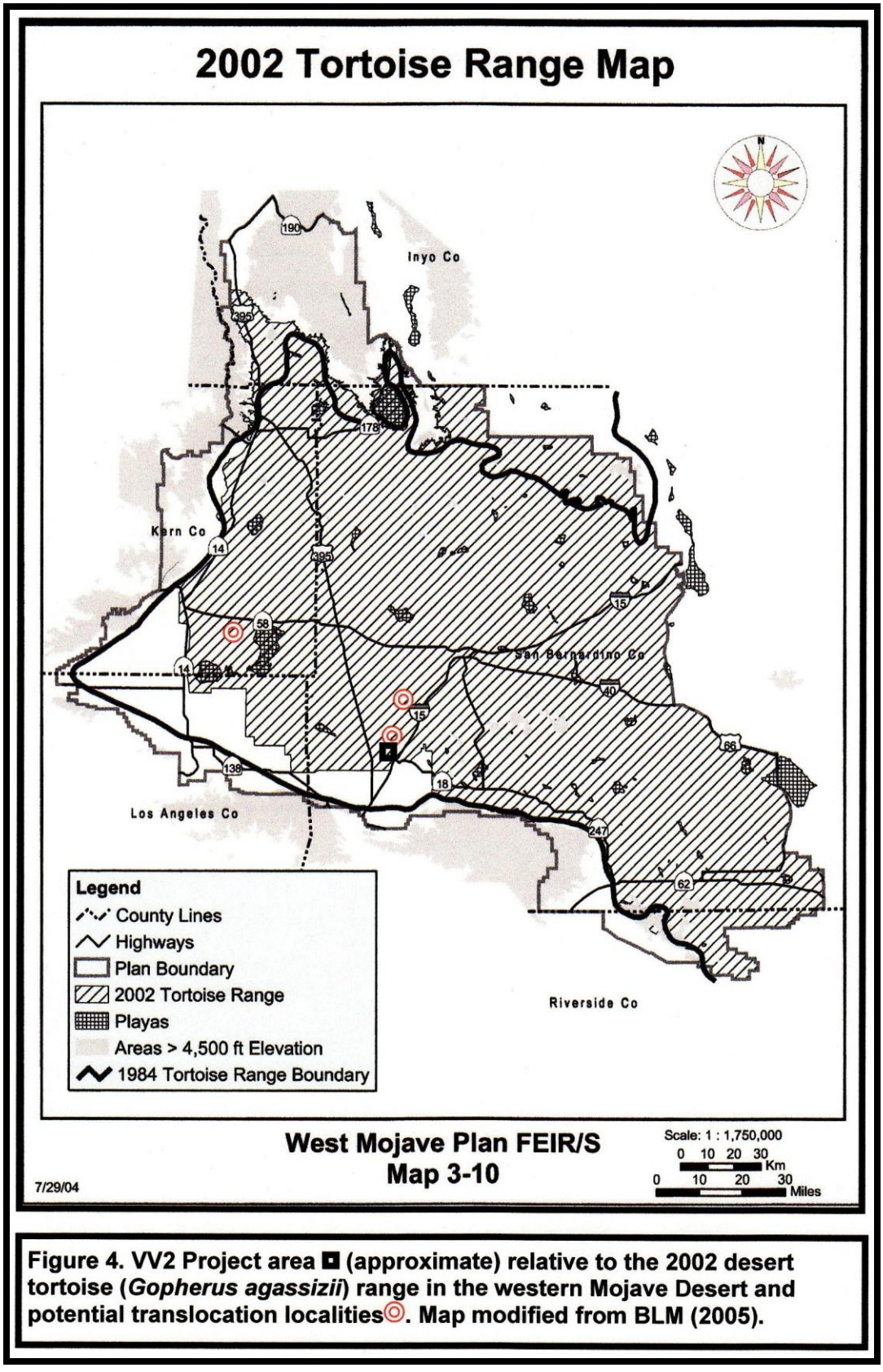

Figure 4. VV2 Project area ■ (approximate) relative to the 2002 desert tortoise (*Gopherus agassizii*) range in the western Mojave Desert and potential translocation localities◎. Map modified from BLM (2005).

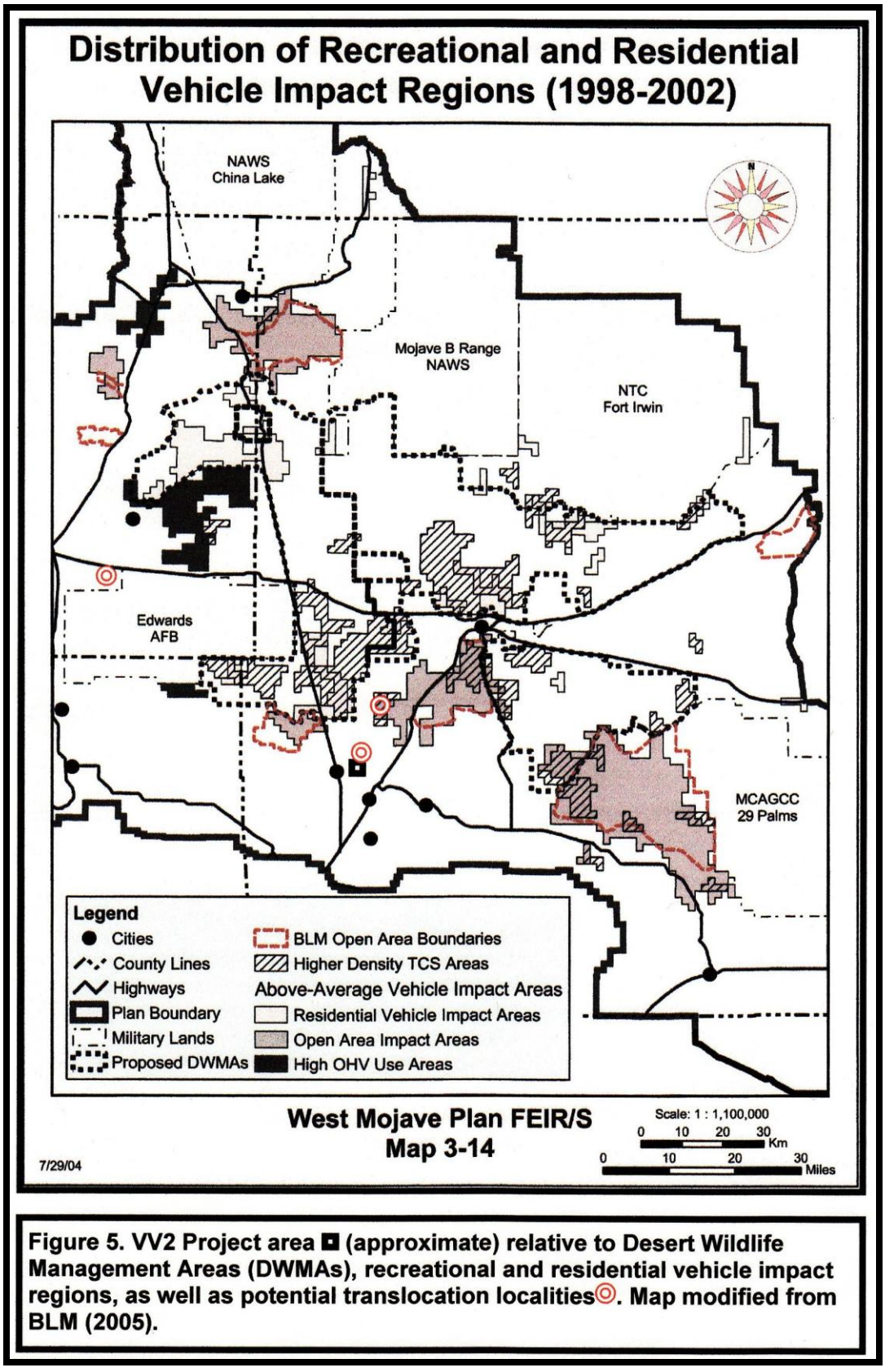

Figure 5. VV2 Project area ◘ (approximate) relative to Desert Wildlife Management Areas (DWMAs), recreational and residential vehicle impact regions, as well as potential translocation localities◎. Map modified from BLM (2005).

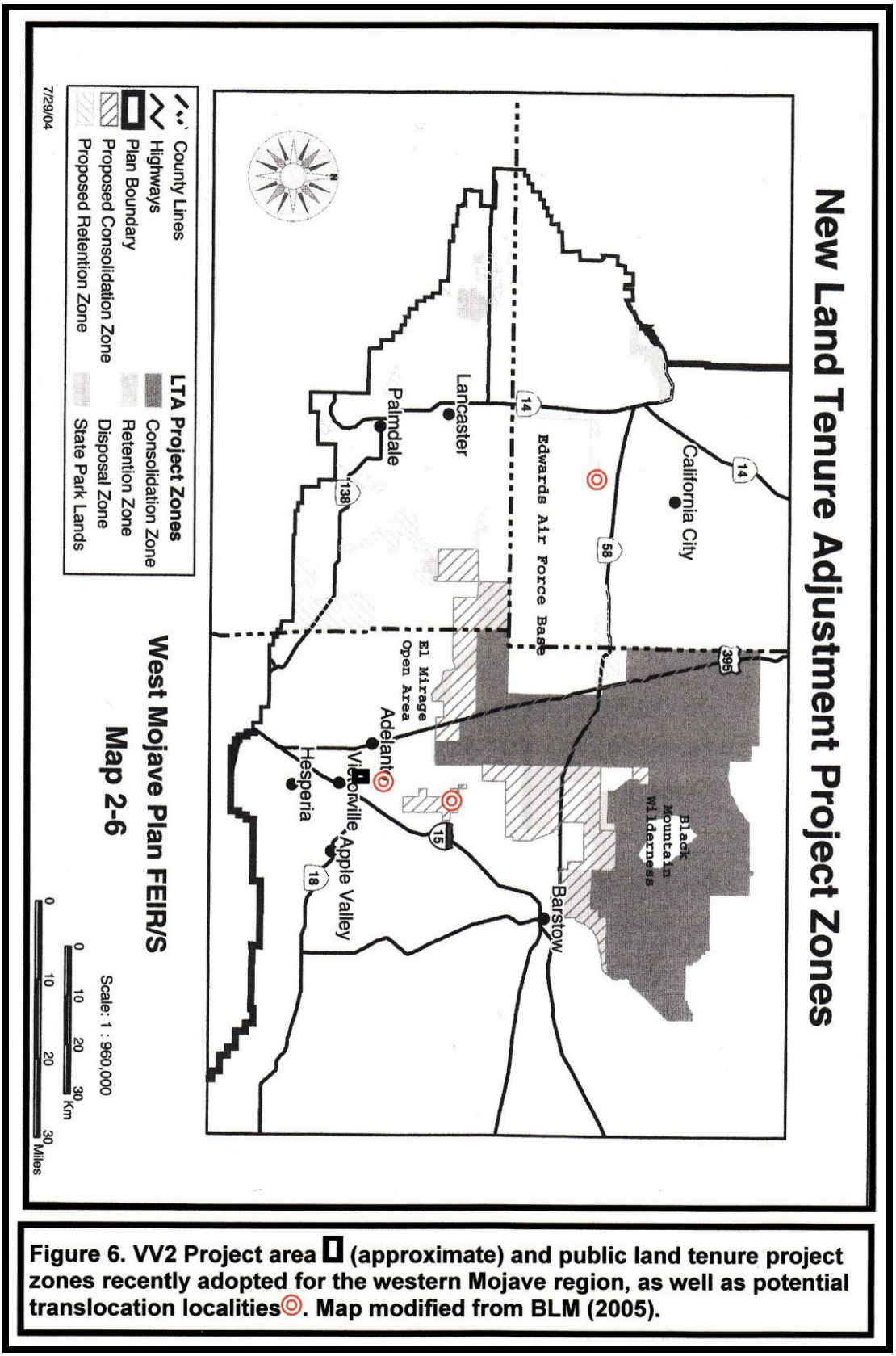

Figure 6. VV2 Project area ▯ (approximate) and public land tenure project zones recently adopted for the western Mojave region, as well as potential translocation localities◎. Map modified from BLM (2005).

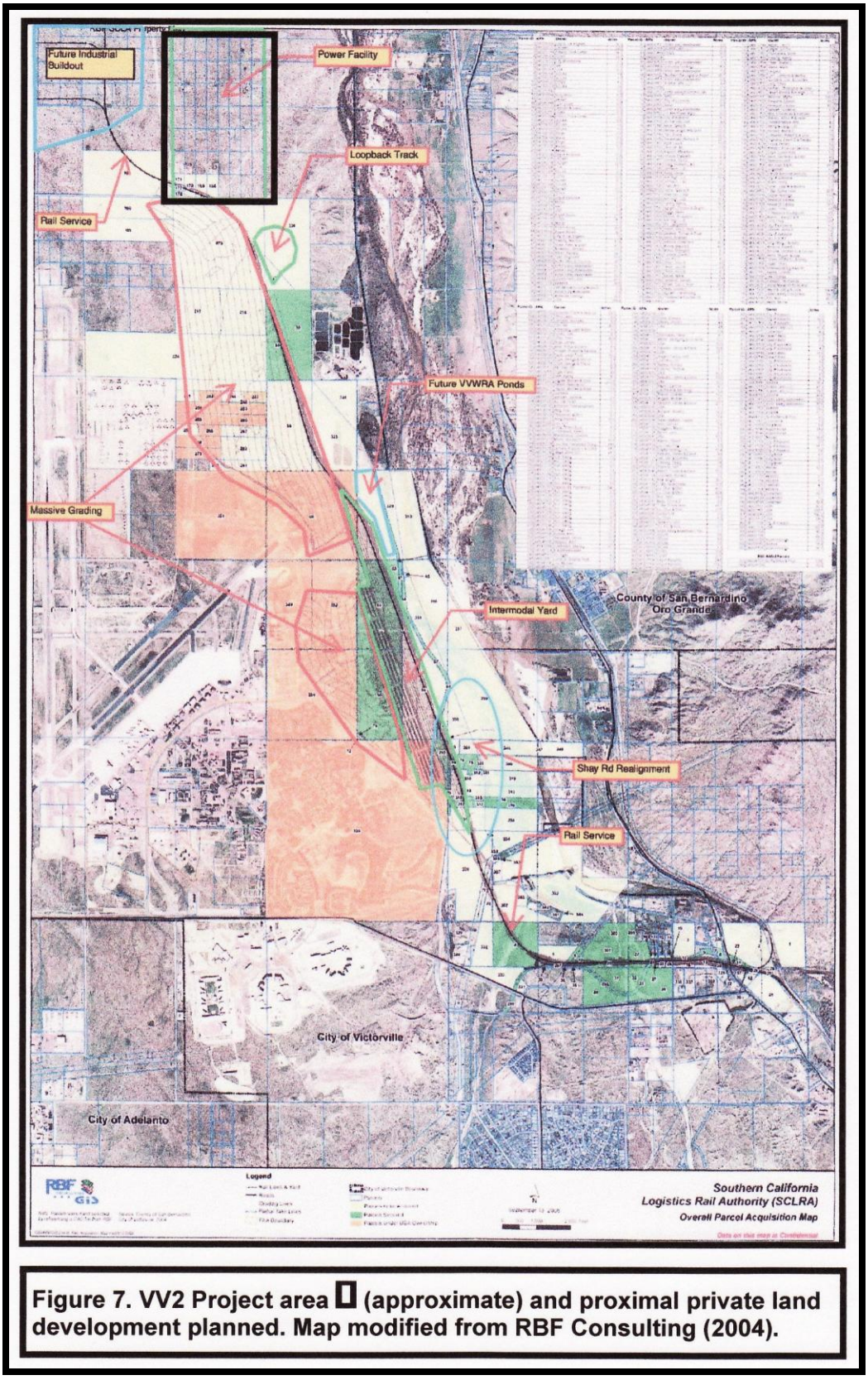

Figure 7. VV2 Project area ☐ (approximate) and proximal private land development planned. Map modified from RBF Consulting (2004).

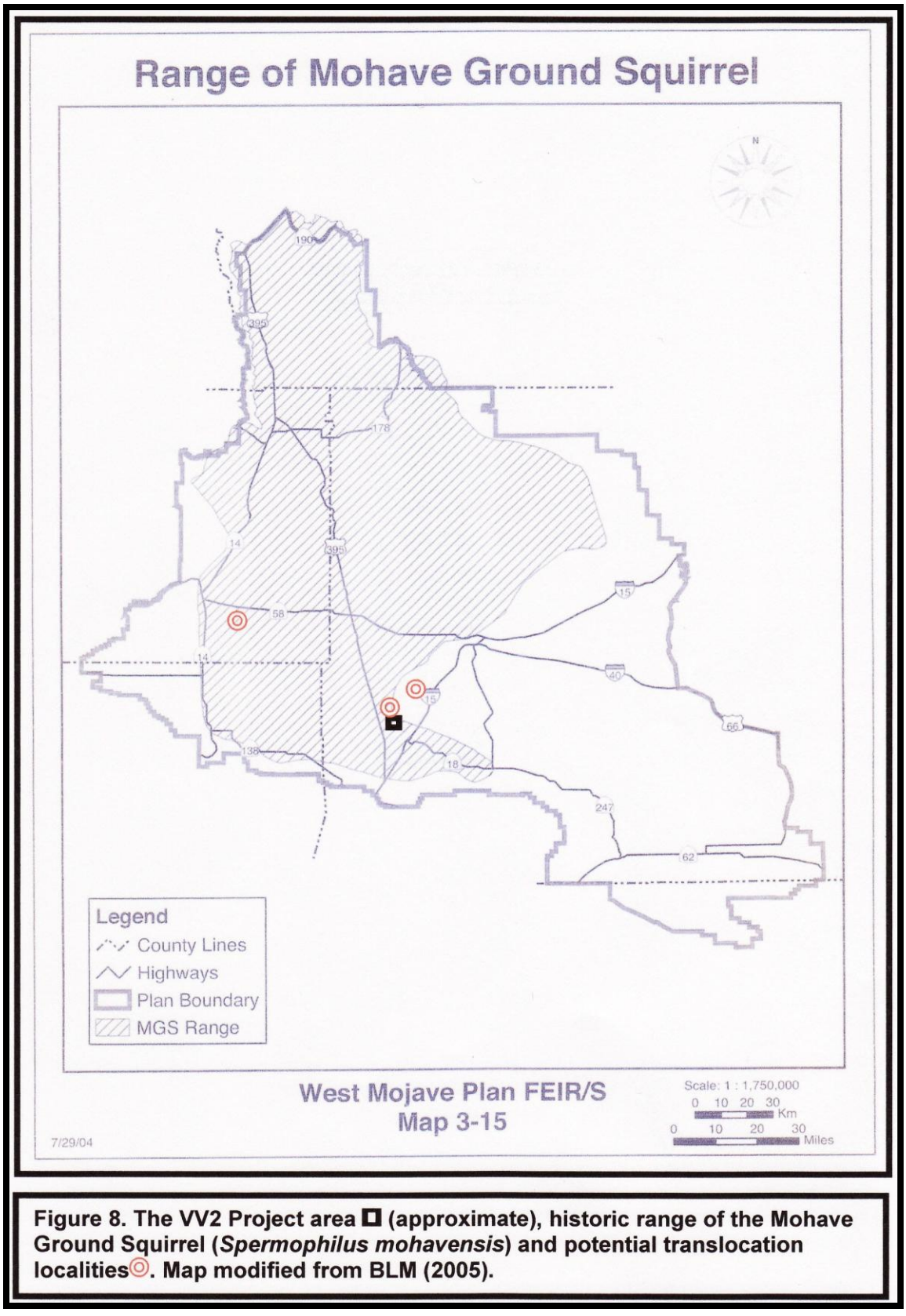

Figure 8. The VV2 Project area ◘ (approximate), historic range of the Mohave Ground Squirrel (*Spermophilus mohavensis*) and potential translocation localities◎. Map modified from BLM (2005).

Considerations in selecting a private land translocation site involve the time necessary to secure title to lands and the relative complexity of this task. Similarly, the time needed to fulfill BLM permitting requirements associated with the potential use of public land for translocation purposes or coordination tasks necessary for use of military lands are factors to be considered in selecting one of the translocation site options. The time and complexity of acquiring title to private lands, completing management agreements, and coordinating with various agencies can be considerable. Lands selected for translocation purposes must also be acquired and prepared prior to September, 2008.

Most importantly, the selected translocation area must support sufficient habitat to support the number of translocated tortoises that will use it. This consideration is dependent on the characteristics of the recipient tortoise population, the number and sex of animals to be translocated and the habitat quality of the translocation area.

Recent two-year telemetry studies in the western Mojave Desert (Harless et al. 2007) using the minimum convex polygon and fixed kernel (i.e., a statistical approach to measuring home range size) home range estimators have estimated the average home range for males at 45 ha (111 acres) and at 16 ha (39 acres) for females [N = 35; 20 males and 15 females]. Another similar telemetry study (Berry et al. 2007) using a kernel estimator (95% mean size) estimated the average home range for males at 39.8 ha (98 acres) [SD=28.3 ha (70 acres)] and at 9.4 ha (23 acres) [SD=6.6 ha (16 acres)] for females [N = 27; 16 males and 11 females]. Only small portions of home ranges for some alpha males overlapped and core portions of their ranges were found to be isolated from each other. This study also found female tortoise core areas to be separated from each other; and core areas for both sexes to vary by season (Berry et al. 2007).

As the translocation of two or more desert tortoises is anticipated from the VV2 Project's permanent disturbance area, access to 100 acres or more may be preferable in providing an optimum home range habitat base for one male tortoise and perhaps a secondary female or male tortoise. A smaller acreage base however, may very well provide adequate habitat for a small number of translocated tortoises, especially if these lands contain high quality habitat and are situated adjacent to other suitable habitat.

Summarily, the amount and quality of habitat in an available land parcel and its configuration relative to other habitat can be a limiting factor in translocation site selection. Public or private ownership also has bearing on what approvals, land preparation tasks, and management funding may be required to secure such lands.

On the basis of these considerations, the three translocation areas identified to date which retain translocated tortoises in a wild status can be summarized as:

1. **Private lands located in proximity to the Project area (Figure 9).** With this option, proximal private land would be acquired and managed long-term for translocated tortoises by the CDFG, or by an entity approved by CDFG and commissioned by the VV2 Project to manage the land. Potential future development impacts (Figures 6-7) would have to be carefully considered with this option.

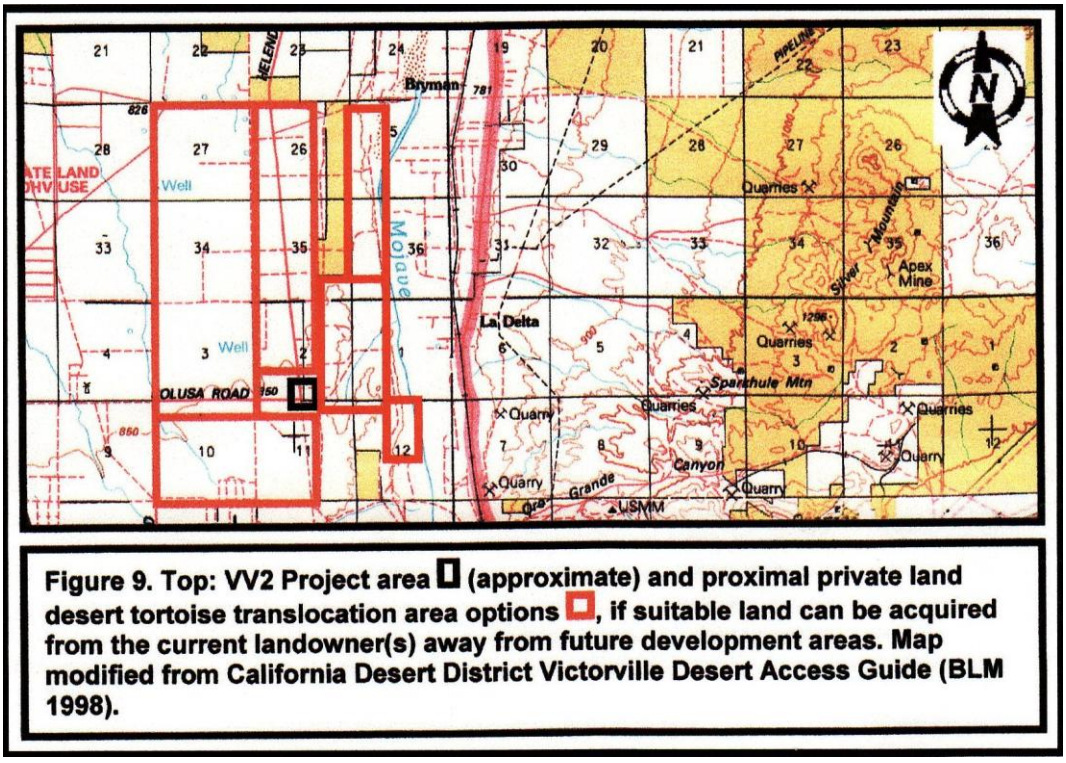

Figure 9. Top: VV2 Project area ▯ (approximate) and proximal private land desert tortoise translocation area options ▯, if suitable land can be acquired from the current landowner(s) away from future development areas. Map modified from California Desert District Victorville Desert Access Guide (BLM 1998).

If a suitable property could be acquired in this project-proximal locality, a conservation easement agreement or property title transfer could be finalized that defines the legal status of such land, subject to regulatory agency approvals.

This option would require a viable land management entity, an approved long-term management plan for acquired lands and the provision of a long-term property management endowment. An approved conservation easement or alternatively, a title transfer to CDFG, may also be required with this option.

Many private lands situated proximal to the Project that provide suitable desert tortoise habitat similarly provide habitat for the Mohave ground squirrel (MGS). If acquired translocation lands in the vicinity were managed according to management guidelines specified by CDFG, such translocation acreage would count towards fulfilling any MGS compensation habitat requirements associated with the Project.

2. **Private lands located in the western Mojave Desert, away from the Project area (Figure 10).** With this option, non-proximal private land would be acquired in the western Mojave Desert by the VV2 Project or by an entity approved by CDFG and commissioned by the VV2 Project to manage the land. Those considerations, management requirements and agency approvals described for translocation area option 1 above would similarly apply. Lands used for this purpose would have to be capable of supporting a small number of translocated tortoises.

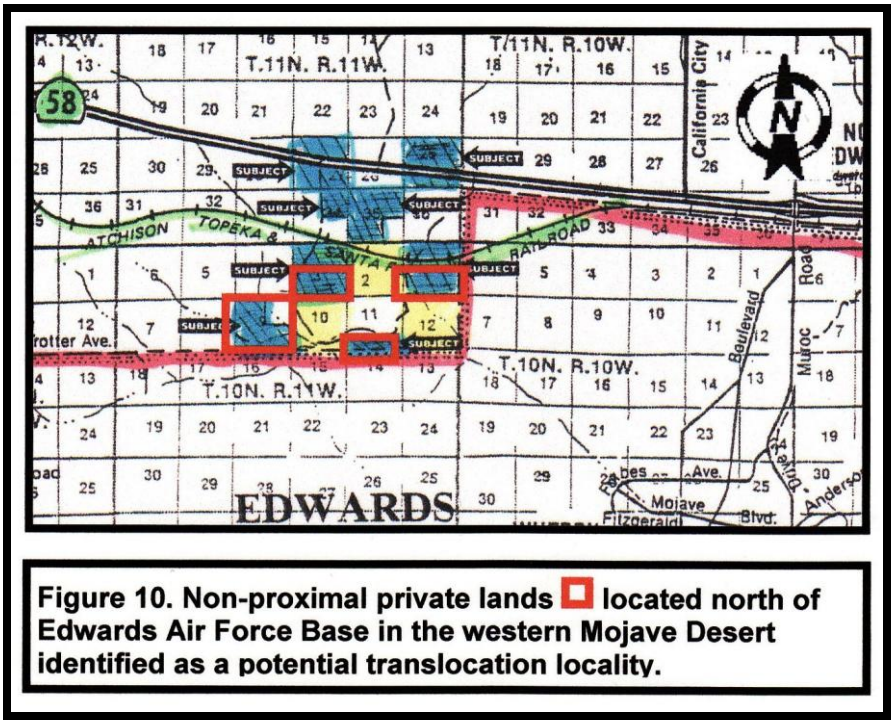

Figure 10. Non-proximal private lands ☐ located north of Edwards Air Force Base in the western Mojave Desert identified as a potential translocation locality.

Similar to option 1 above, a management endowment would be required in the use of a non-proximal private land translocation area. Should suitable MGS habitat be present on these lands, acquired acreage would count towards fulfilling any MGS compensation requirements. Organizations approved by regulatory agencies to provide mitigation banking services, including acquisition and management of private lands for conservation purposes, are known in the region.

3. **Public lands located in the vicinity of the VV2 Project area (Figure 11).** An agreement with the BLM's Barstow Field Office for use of public lands would be required for this option. Few large blocks of public land are located in the immediate VV2 Project area, although there are some smaller properties that may be adequate for the translocation of a few tortoises. Public lands in proximity are unclassified properties identified for disposal under the BLM's LTA Program or are limited use class public lands designated as desert tortoise critical habitat (Figure 6).

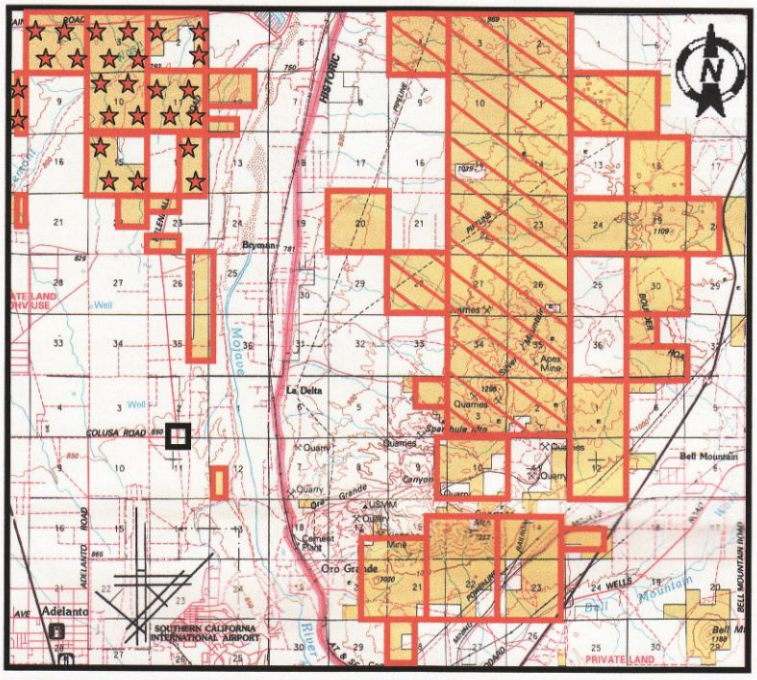

Figure 11. The VV2 Project area (approximate) and potential public land locality translocation options. Public lands (in yellow) both outside of desert tortoise critical habitat and designated for parcel retention per the current Land Tenure Adjustment Program (BLM 2005), are situated northeast of the Project. Map modified from California Desert District Victorville Desert Access Guide (BLM 1998).

Other limited use class public lands not designated as tortoise critical habitat do exist east of the Mojave River, as depicted in Figure 6. These lands could potentially serve as a viable desert tortoise translocation site, although they are situated outside currently recognized MGS habitat and in a high recreational use area (Figure 5).

A land tenure adjustment for those public lands situated proximal to the Project currently identified for LTA disposal may be needed to allay land disposition concerns, if these lands are considered for tortoise translocation. Realty processing fees, translocation area fencing and minimal monitoring costs would likely apply with use of any public land option, although habitat management endowment fees are seldom required for public lands relative to desert tortoises. Public lands also are seldom accepted by CDFG to satisfy MGS compensation acreage requirements.

In considering private land identified as potentially suitable for translocation of desert tortoises in the VV2 Project vicinity (Figure 9), it is important to note that varying development pressure is anticipated in the region (Figures 5-7). Private property located closest to the Project (Township 6 North, Range 5 West, Sections 1-3, 10-12; Township 7 North, Range 5 West, Sections 34, 35) which supports both MGS and tortoise habitat, is anticipated to face a high degree of adjacent land development pressure (BLM 2006). The use of these private lands as a permanent desert tortoise translocation area should be carefully considered in the context of this potential future development.

Private land located north of Edwards Air Force Base at Township 10 North, Range 11 West, Sections 1, 3, 9, 11; and Township 11 North, Range 11 West, Sections 25, 27, 34, 35 (Figure 10), which supports both MGS and tortoise habitat, is the preferred area for acquisition of compensation land and is unlikely to experience adjacent development pressure. However, some of these lands are situated near a portion of Highway 58 not currently fenced to exclude tortoises. Some of these potential translocation parcels are also bisected by an active railroad not currently fenced to exclude tortoises. Private properties located next to the Edwards Air Force Base boundary, away from both Highway 58 and the railroad, are preferred if this area is considered for translocation, to avoid potential sources of tortoise mortality.

Only a very few public land parcels are located in the immediate VV2 Project area and these are situated within designated desert tortoise critical habitat or in BLM's LTA disposal area (Township 7 North, Range 5 West, in Sections 26 and 35; and Township 6 North, Range 5 West, Section 12) , as depicted in Figure 11. A larger block of public lands is located east of the Mojave River, north of Silver Mountain and south of Brisbane Valley (Figure 12), that contains acreage identified for retention outside desert tortoise critical habitat (Township 7 North, Range 4 West, Sections 2, 3, 10-12, 14, 15, 22-24).

The above public lands are outside the range of MGS. Recreational use in this area is high, but suitable tortoise habitat is known to occur. BLM has identified this locality to potentially meet VV2 Project translocation needs (pers. comm. Dr. Larry LaPre, BLM, 2007).

Completion of a formal conservation easement or property title transfer to CDFG is usually required for use of private land translocation area. This generally entails the preparation of habitat characterization and hazardous material survey reports, as well as the provision of title processing fees (averaging $3,000/title deed). Real estate transfers or conservation easements for such purposes also necessitate the preparation of a property management plan and assignment of a commissioned entity to carry out plan prescriptions.

In addition, short-term habitat enhancements are sometimes needed for private lands to prepare conservation easement or transferred conservation properties for translocation and/or conservation management purposes. CDFG currently requires a fee $250/acre for short-term habitat endowment purposes. Third party mitigation banking entities often calculate such costs on a case-by-case basis.

The long-term management of any conservation easement or transferred property also entails various costs that require funding. CDFG currently requires a fee of $1,300/acre endowment for long-term habitat management of private/state land for desert tortoise and MGS. Third party mitigation banking entities generally require their own long-term habitat management endowment fee. However, the long-term endowment fee currently required by CDFG could conceivably be used for this purpose, with agency approval.

4.7 Translocation Site Management

Completion of a public land lease per BLM realty provisions and/or development of a Memorandum of Understanding with a local BLM field office would be necessary to utilize public lands for translocation purposes. Approval by BLM's California State Office is also required for any public land wildlife translocation.

Site-specific National Environmental Policy Act (NEPA) documentation would be required and any such lands must be managed per the agency's multiple-use mandate. BLM's West Mojave Plan (2005) has outlined long-term conservation objectives relative to the desert tortoise and MGS for lands to be retained in public ownership.

Acclimation to the selected translocation area by translocated tortoises would be facilitated if property habitat elements were similar to those found at the VV2 Project area. Any translocation area considered for the VV2 Project should be assessed on the ground for habitat suitability and potential long-term management constraints prior to a final selection being made.

4.8 Translocation Site Preparation

Once the translocation area is approved and acquired, a site characterization should be completed prior to moving tortoises onto the property. All tortoise sign occurring onsite and in the immediate (0.25 mile) zone of influence should be mapped and fully described. Fencing needs and other potential anthropogenic impact considerations should also be assessed at this time.

Two artificially-created burrows of approximately four to six feet-length should be prepared at the selected translocation site for each desert tortoise to be moved, using a gas-powered auger, prior to animal relocation. Concurrent with tortoise capture at the VV2 clearance area, surface soil and scat from each individual tortoise's capture burrow should be placed in the artificial burrow to which a tortoise will be introduced, to assist with acclimation (Karl and Resource Design Technology 2006).

Juvenile tortoises are more subject to depredation than are adults and should be provided with extended protection from predators if any are moved as part of the VV2 Project. Optimal protection can be facilitated through installation of a predator-proof enclosure. The size of the enclosure will depend on the number of tortoises found, but could start at 20 feet in diameter and be extended to approximately 50 feet if more than three juvenile tortoises are contained.

After these juvenile tortoises, if any, have become familiar with the site's odors and landmarks for two weeks, escape holes in the lower edge of the enclosure can be constructed (Morafka et al. 1997). Following juvenile tortoise departure, all enclosure material would be removed from the translocation site.

Closely monitoring tortoise movements immediately after translocation may facilitate the identification of potential problems at the selected site. Any management issues identified through this initial monitoring should be addressed in a timely fashion. Once tortoises have acclimated and established a home range at the translocation site, movement away from this use area is anticipated to be minimal. At the Hyundai Motor America Desert Tortoise Translocation Study Site, two of 14 translocated tortoises moved approximately 400 meters away from the fenced translocation site within 16 months following removal of the tortoise fencing (Karl 2007). At a second study site, two of 12 translocated tortoises subsequently moved offsite within approximately eight months following fence removal (Karl, field notes).

4.9 Translocation Animal Monitoring and Reporting

Monitoring of translocated tortoises will provide useful information for future translocation actions. Translocated desert tortoises would be monitored by qualified personnel using telemetry and casual observation for five days/month during September, October and November, 2008 as well as in March-April 2009. The focus of this monitoring effort would be to observe how translocated animals respond to their new habitat. Another primary emphasis of monitoring would be to ensure translocation site management issues are identified and rectified quickly. Monitoring observations would be reported to state and federal regulatory agencies on a monthly basis.

Information on animal movements, habitat use, behavioral interactions and survival of translocated tortoises would be recorded throughout the course of this monitoring effort. Overall health and movements of translocated tortoises would be tracked over a six month telemetry period, in comparison with health indices assessed at the point of capture. Survival over the monitoring period would be recorded.

While collected monitoring information would be considered anecdotal in nature, such data would be analyzed in a manner designed to formulate prescriptions for future translocations involving small numbers of tortoises.

Monthly reports would include an analysis of all pertinent desert tortoise health and habitat use observations, data on animal movements recorded from telemetry study, as well as any issues encountered in translocation property management. The Project's final translocation monitoring report would include recommendations on how to improve techniques and conservation property management to enhance translocation program success.

5.0 LITERATURE CITED

AMEC. 2007. Draft [accepted as final] Victorville 2 hybrid power project biological assessment. Document prepared for the City of Victorville and the Environmental Protection Agency in support of state and federal Endangered Species Act consultation requirements. AMEC Job # 6554000228.

AMEC. 2008. Victorville 2 hybrid power project biological assessment addendum. Document prepared for the City of Victorville and the Environmental Protection Agency in support of state and federal Endangered Species Act consultation requirements. AMEC Job # 6554000228.

Berry, K.H. 1986. Desert tortoise (*Gopherus agassizii*) relocation: implications of social behavior and movements. Herpetologica 42:113-125.

Berry, K.H. and M.M. Christopher. 2001. Guidelines for the field valuation of desert tortoise health and disease. Journal of Wildlife Diseases 37:427-450.

Berry, K.H., K. Anderson, and J. Mack. 2007. Dominance, gender, cover-sites and season: important factors in desert tortoise home range shape and size. Abstract. Page 4 *in* Proceedings of the 2007 (32nd Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Boarman, W.I., T. Goodlett, and P. Hamilton. 1998. Review of radio transmitter attachment techniques for turtle research and recommendations for improvement. Herpetological Review 29:26-33.

Brown, D.R., I.M. Schumacher, G.S. McLaughlin, L.D. Wendland, M.B. Brown, P.A. Klein, and E.R. Jacobson. 2003. Application of diagnostic tests for mycoplasmal infections of desert and gopher tortoises with management recommendations. Chelonian Conservation Biology 4(2):497-507.

Brown, M.B. 2003. Disinfection protocol. Unpublished report prepared for use at the University of Florida Mycoplasma research laboratory.

Bureau of Land Management (BLM). 1998. California Desert District Victorville. Special Edition Surface Management Status Desert Access Guide. U.S. Department of the Interior, Bureau of Land Management, Sacramento, California.

Bureau of Land Management (BLM). 2005. Final environmental impact report and statement for the West Mojave plan, a habitat conservation plan and California Desert Conservation Area plan amendment. Volume 1A. U.S. Department of the Interior, Bureau of Land Management, California Desert District, Moreno Valley, California.

Cook, J.C. 1983. Rehabilitation of the desert tortoise *Gopherus agassizii*. M.S. Thesis, California State Polytechnic Univ., Pomona. 54 pp.

Christopher, M.M., K.H. Berry, B.T. Henen, and K.A. Nagy. 2002. Clinical disease and laboratory abnormalities in free-ranging desert tortoises (*Gopherus agassizii*) in California (1990-1995). Abstract. Pp. 51-52 5 *in* A. McLuckie (ed.) Proceedings of the 2002 (25th Annual) Desert Tortoise Council Symposium, Palm Springs, California.

Christopher, M.M., K.H. Berry, B.T. Henen, and K.A. Nagy. 2003. Clinical disease and laboratory abnormalities in free-ranging desert tortoises in California (1990-1995). Journal of Wildlife Diseases 39:35-56.

Desert Tortoise Council. 1994 (rev. 1999). Guidelines for handling desert tortoises during construction projects. E.L. LaRue, Jr. (ed.) Wrightwood, CA. Unpublished report. 19 pp.

Esque, T.E., K.E. Nussear and P.A. Medica. 2005. Desert Tortoise Translocation Plan for Fort Irwin's Land Expansion Program at the U.S. Army National Training Center (NTC) & Fort Irwin. Report prepared for the U.S. Army National Training Center, Directorate of public Works by the Un.S. Geological Survey, Western Ecological Research Center, Las Vegas Field Office, Nevada. 122 pp.

Field, K.J. 1999. Translocation as a conservation tool applied to the desert tortoise: effects of the pre-release availability of water. Master's Thesis. University of Nevada, Reno.

Field, K.J., C.R. Tracy, P.A. Medica, R.W. Marlow and P.S. Corn. 2003. Spring, fall, or winter? Success of desert tortoise translocation as affected by season of release. Abstract. Pp. 107-108 *in* Proceedings of the 2003 (28th Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Field, K.J., C.R. Tracy, P.A. Medica, R.W. Marlow and P.S. Corn. 2007. Return to the wild: translocation as a tool in conservation of the desert tortoise (*Gopherus agassizii*).Biological Conservation Vol. 136, Issue 2:232-245.

Harless, M.L., A.D. Walde, D.K. Delaney, L.L. Pater, and W.K. Hayes. 2007. The effect of sampling effort on home range estimates of desert tortoises from the west Mojave Desert. Abstract. Page 18 *in* Proceedings of the 2007 (32nd Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Jacobson, E.R., and K.H. Berry. 2004. Necropsies of six desert tortoises (Gopherus agassizii) from California. Abstract *in* Proceedings of the 2004 (29th Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Karl, A.E. 1998. Reproductive strategies, growth patterns, and survivorship of a long-lived herbivore inhabiting a temporally variable environment. Ph.D. Dissertation. Univ. of California, Davis. 178 pp.

Karl, A. E. 2003. Hyundai Motor America Mojave Test Track Site. Desert tortoise translocation program. Appendix A *in* Sapphos Environmental, Inc. 2003. Environmental assessment/habitat conservation plan for issuance of an Endangered Species Section 10(a)1(B) Permit for the incidental take of the desert tortoise (*Gopherus agassizii*). Unpublished report prepared for the U.S. Department of the Interior, Fish and Wildlife Service, Hyundai Motor America and The City of California City.

Karl, A.E. and Resource Design Technology. 2006. Desert tortoise translocation study. Mesquite Regional Landfill . Submitted to the Los Angeles County Sanitation Districts, Whittier, California and the U.S. Department of the Interior, Fish and Wildlife Service, Carlsbad, California. 8 pp.

Karl, A.E. 2007 Hyundai Motor America Mojave Proving Grounds Desert Tortoise Translocation Study; 2006 annual summary. Submitted by Hyundai America Technical Center, Inc., to the U.S. Department of the Interior, Fish and Wildlife Service, Ventura, CA. 17pp.

Lovich, J.E. and D. Bainbridge. 1999. Anthropogenic degradation of the southern California desert ecosystem and prospects for natural recovery and restoration. Environmental Management. Vol. 24, No. 3, pp. 309-326.

Morafka, D.J., K.H. Berry, and E.K. Spangenberg. 1997. Predator-proof field enclosures for enhancing hatching success and survivorship of juvenile tortoises: a critical evaluation. Pp. 147-165 *in* the New York Turtle and Tortoise Society, Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles – an International Conference.

Mullen, E.B. and P. Ross. 1997. Survival of relocated tortoises: feasibility of relocating tortoises as a successful mitigation tool. Pp. 140-146 *in* the New York Turtle and Tortoise Society, Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles – an International Conference.

Nussear, K.E., C.R. Tracy, P.A. Medica, R.M. Marlow, M.B. Saethre, and P.S. Corn. 2000. Translocation as a tool for conservation of the desert tortoise: Nevada studies. Abstract. Pp. 26-30 *in* Proceedings of the 2000 (25th Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Nussear, K.E., T.C. Esque, and C.R. Tracy. 2002. Continuously recording body temperature in terrestrial chelonians. Herpetological Review 33:113-114.

Origgi, F., C.H. Romero, P.A. Klein, K.H. Berry, and E.R. Jacobson. 2002. Serological and molecular evidences of herpesvirus exposure in desert tortoises from the Mojave Desert of California. Abstract. . Pp. 30-31 *in* Proceedings of the 2002 (27th Annual) Desert Tortoise Council Symposium, Palm Springs, California.

RBF Consulting. 2004. Southern California Logistics Airport specific plan amendment and rail service project. Draft subsequent program environmental impact report prepared for the City of Victorville, California. City of Victorville Planning Department, Victorville, California

Rostal, D.C. and V.A. Lance. 2003. The history of upper respiratory tract disease in the eastern Mojave Desert tortoise: observations from the Desert Tortoise Conservation Center, Las Vegas, Nevada. Abstract. Page 147 *in* Proceedings of the 2003 (28th Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Saethre, M.B., T. C. Esque, P.A. Medica, R. Marlow, and C.R. Tracy. 2003. Determining the carrying capacity of desert tortoises. Page 149 *in* Proceedings of the 2003 (28th Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Schumacher, I.M., M.B. Brown, E.R. Jacobson, B.R. Collins, and P.A. Klein. 1993. Detection of antibodies to a pathogenic Mycoplasma in desert tortoises (*Gopherus agassizii*) with upper respiratory tract disease. Journal of Clinical Microbiology 31(6):1454-1460.

Schumacher, I.M., D. B. Hardenbrook, M.B. Brown, E.R. Jacobson, and P.A. Klein. 1997. Relationship between clinical signs of upper respiratory tract disease and antibodies to *Mycoplasma agassizii* in desert tortoises from Nevada. Journal of Wildlife Diseases 33(2):261-266.

St. Amant, J.A. and F. Hoover. 1978. State report – California. Department of Fish and Game, Part II. Page 23 *in* Proceedings of the 1978 (3rd Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Stewart, G.R. 1993. Movements and survival of desert tortoises (*Gopherus agassizii*) following relocation from the Luz Solar Electric Plant at Kramer Junction. Pp. 234-261 *in* K. Beaman (ed.) Proceedings of the 1992 (17th Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

Stewart, G.R. and R. Baxter. 1987. Final report and management plan for the desert tortoise (*Gopherus agassizii*) in the West and Sand Hill Training areas of the Twentynine Palms MCAGCC. Unpublished report prepared for the U.S. Dept. of the Navy. Contract N6247484RP00V48. 50 pp.

Tracy, C.R., K.E. Nussear, D.S. Wilson, K.J. Field, P.A. Medica, R.W. Marlow, M.B. Saethre, P.S. Corn, and E.T. Simandle. 2000. Translocation as a tool for conservation of the desert tortoise: is translocation a reasonable strategy for desert tortoises displaced by urban expansion? Page 36 *in* Proceedings of the 2000 (25th Annual) Desert Tortoise Council Symposium, Las Vegas, Nevada.

TRW. 1998. Efficacy of relocating desert tortoises for the Yucca Mountain Site Characterization Project. Unpublished report prepared for the U.S. Department of Energy, Office of Radioactive Waste Management, Washington, D.C. Contract No. B00000000-01717-5705-00032 REV 00.

United States Fish and Wildlife Service (USFWS). 1994. Desert tortoise (Mojave population) recovery plan. USFWS, Portland, Oregon. 73 pp plus appendices.

United States Fish and Wildlife Service (USFWS). 2004. Biological opinion for the proposed addition of maneuver training lands at Fort Irwin, California. Biological Opinion # 1-8-03-F-48. USFWS, Portland, Oregon.

STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	)	Docket No. 07-AFC-1
	)	
Application for Certification,	)	**ELECTRONIC PROOF OF SERVICE**
for the VICTORVILLE 2	)	**LIST**
HYBRID POWER PROJECT	)	
by the City of Victorville	)	**(revised September 6, 2007)**
	)	
	)	

☒ Transmission via electronic mail and by depositing one original signed document with FedEx overnight mail delivery service at Costa Mesa, California with delivery fees thereon fully prepaid and addressed to the following:

DOCKET UNIT

CALIFORNIA ENERGY COMMISSION
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DECLARATION OF SERVICE

I, Paul Kihm, declare that on March 4, 2008, I deposited a copy of the attached:

DESERT TORTOISE TRANSLOCATON PLAN

with FedEx overnight mail delivery service at Costa Mesa, California with delivery fees thereon fully prepaid and addressed to the California Energy Commission. I further declare that transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service List above.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 4, 2008, at Costa Mesa, California.

Paul Kihm