

FIELD FENCE - NATURAL AREAS PARKS

PART 1 - GENERAL

1.1 Description

- A. The City requires the services of a contractor to provide materials and labor to construct and install various fencing in three sites on two tracts (SEE EXHIBIT A):
- A.1. Rancho Diana - 23,000 linear feet of 1775-6, six (6') foot high Stay Tuff field fencing constructed with H bracing of three 3" schedule 40 posts with a deadman brace on the lead side. Braces will be constructed with heavy duty brace bands and 2 3/8" steel receiver ends with a bolt through design. The fence will also have green t-posts driven into the ground every twelve (12) ft on center and 2 3/8" schedule 40 line posts set in concrete every seventy two (72) feet on center. Maximum brace spacing will be three hundred (300) feet. Job to include removal and disposal of existing fence, and installation of four (4) creek crossings (see attached), and five (5) 12' double drive-through gates. Materials, spacing, footings, and labor to match specifications below. The job includes clearing trees and brush in a 6 ft path completely within and starting on the property line. Cut material may be mulched in place or distributed into the woods, but not left in piles.
- A.2. Rancho Diana – Install 1,500 linear feet of 2096-3, eight (8) feet high field fencing with a three (3) inch spacing. Fence to be constructed of double three (3) inch schedule 40 "H" bracing with 2-3/8 inch cross bracing. A single three (3) inch line post will be set in the ground every sixty (60) feet on center with t-posts driven into the ground every twelve (12) feet on center, and installation of a four (4) feet wide walk gate. All material will be galvanized and all braces are to be welded complete at all joints. Work includes clearing of brush sufficient to install fencing.
- A.3. Woodland Hills – Install 5,145 linear feet of six (6) feet high nine (9) gauge chain link fencing with no top rail or barbed wire, constructed of three (3) inch schedule 40 terminal posts, two (2) inch schedule 40 line posts set in concrete every ten (10) feet on center and 1 5/8 inch schedule 40 brace rail. In place of the top rail there will be a seven (7) gauge coil spring tension wire at the top of the fence as well as at the bottom of the fence. Braces will consist of truss rods and 1 5/8 inch pipe and will not exceed three hundred (300) feet intervals in the fence line. Work to include removal and disposal of the existing fence, clearing of trees and brush in a six (6) feet path along the fence line (cut material may be mulched in place or distributed into the woods, but not left in piles), as well as the

installation of two (2) creek crossing, one (1) twelve (12) feet drive gate and one (1) four (4) feet walk gate.

- B. The requirements of this project include the furnishing of all labor, material and equipment specified herein or on the drawing or required for completion of the work. It is impractical to show or specify required work in every detail. This must be determined by the Contractor prior to submittal of his/her bid by careful examination of the specifications and the site.
- C. Contractor must visit the site and familiarize himself/herself with the project scope and be held responsible to have examined the site and be satisfied as to the extent of the work and conditions which he/she will be obligated to perform.
- D. All cuts, scrapes or other damage to oak trees that exposes cambium shall be painted with tree wound paint or latex paint within thirty (30) minutes of injury as per City ordinance.

1.2 Quality Assurance

- A. Comply with all applicable local, state and federal requirements regarding material, methods of work and the disposal of excess and waste material.
- B. Contractor will ensure the integrity of the construction of the new fence and all work specified herein shall be performed only by experienced, qualified workers.

1.3 Job Conditions

- A. Contractor shall provide protection necessary to prevent damage to existing improvements and shall repair existing improvements damaged by construction operations in a manner acceptable to owner. Cost of repair and restoration of damaged items will be at Contractor's expense.
- B. During the contract and upon completion of the work, Contractor shall remove from the site all excess materials, debris, tools, and equipment. Debris and refuse must be properly disposed. The entire work area shall be cleaned to existing conditions.

PART 2 - MATERIALS

2.1 Field Fence

- A. Dimensions shown for pipe, roll-formed and H-sections are outside dimensions.

- B. Fabric: Various – see **Part 1 - GENERAL**
- C. Furnish one-piece fabric widths. Fabric finish - galvanized, ANSI/ASTM A-392, Class I, with not less than 1.2 oz. zinc per square foot of surface.
- D. Framework: Galvanized steel, ANSI/ASTM A-120 or ANSI/ASTM A-123, with not less than 1.8 oz. zinc per square foot of surface.
- E. Hardware and Accessories: Galvanized ANSI/ASTM A-153, no aluminum accessories or ties. All attachment points should be bracket and band .
- F. Terminal Post: minimum size and weight as follows:
- G. 3” OD galvanized steel pipe, schedule 40, 5.79 lbs. per linear ft. minimum
- H. 2 3/8” OD galvanized steel pipe, schedule 40, 2.72 lbs. per linear ft. Line posts shall be 72 feet on center, or closer where needed. The job also includes green t-posts driven into the ground at 12 ft on center.
- I. Wire Ties: use galvanized wire ties spaced 15” o.c. for tying fabric to rails and braces, use galvanized hog rings spaced 18” o.c. for tying fabric to tension wire, No aluminum ties will be accepted.
- J. Braces: braces shall be installed at all corner, tension, terminal and gateposts and shall be extended to adjacent line post if necessary, and galvanized.
- K. Gates: gates shall be constructed of same fabric, framework, hardware, and terminal posts as fence or better if recommended by fence manufacturer. Gate locations to be determined by owner. Gate center pin and latch to be heavy duty, industrial quality.
- L. Post Cap: All round posts shall have galvanized post caps.

2.2 Concrete Footing

- A. Concrete Footing: concrete footing shall be at least 24” and at least twelve inches (12”) diameter with at least 2500 PSI concrete or better if recommended by fence manufacturer. Footing holes shall be straight sided or bell-bottom. In no case shall they be wider at their top than their middle or bottom. All footings must comply or exceed these specifications.

PART 3 - EXECUTION

3.1 Concrete Footings: Any changes to footing depths as a result of existing site conditions noted by contractor during site inspection shall be outlined on enclosed bid.

3.2 Fence Installation: comply with recommended procedures and instructions of fencing manufacturer. The fence shall be true to line, taut and firmly fastened and shall comply with the best practice for fence construction of this type. Fabric mesh direction shall be kept square and plumb.

3.3 Gates: gates shall open not less than one hundred eighty (180) degrees, and at least ninety (90) degrees in either direction from closed position. Center pin shall be secured with pin receiver or cement or galvanized steel pipe at surface level.

EXHIBIT A-1. Part 1

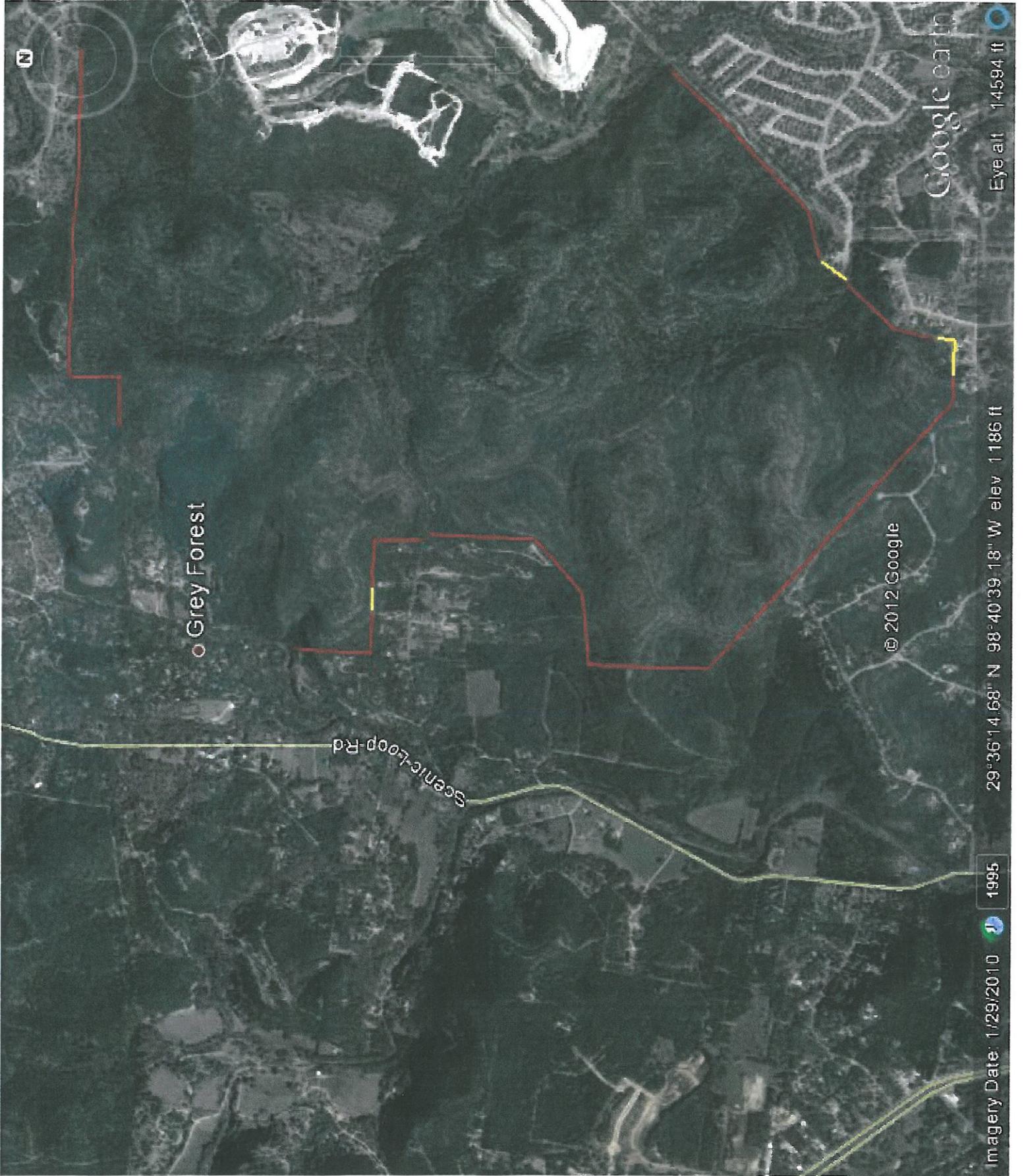


EXHIBIT A.1. Part 2

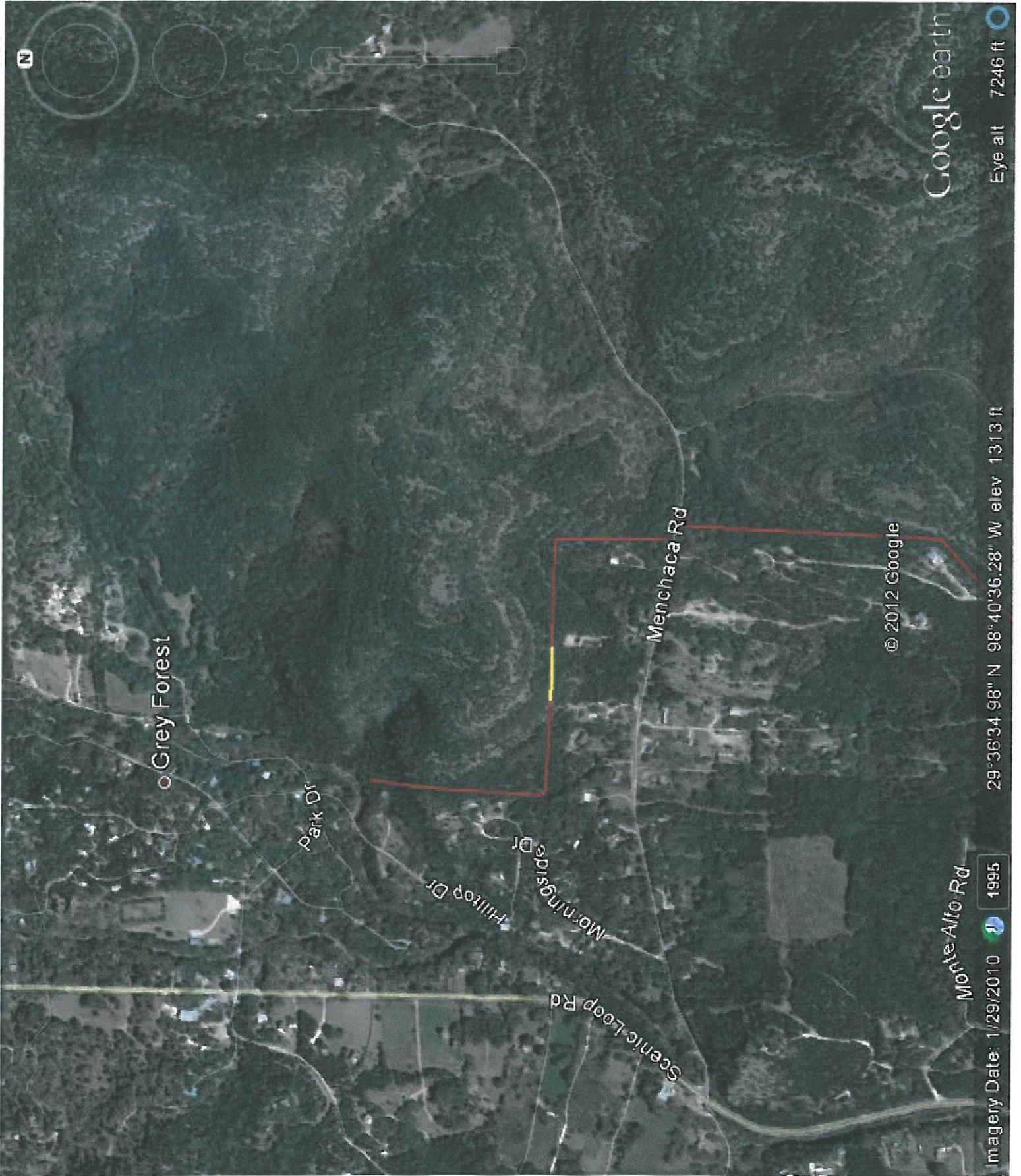


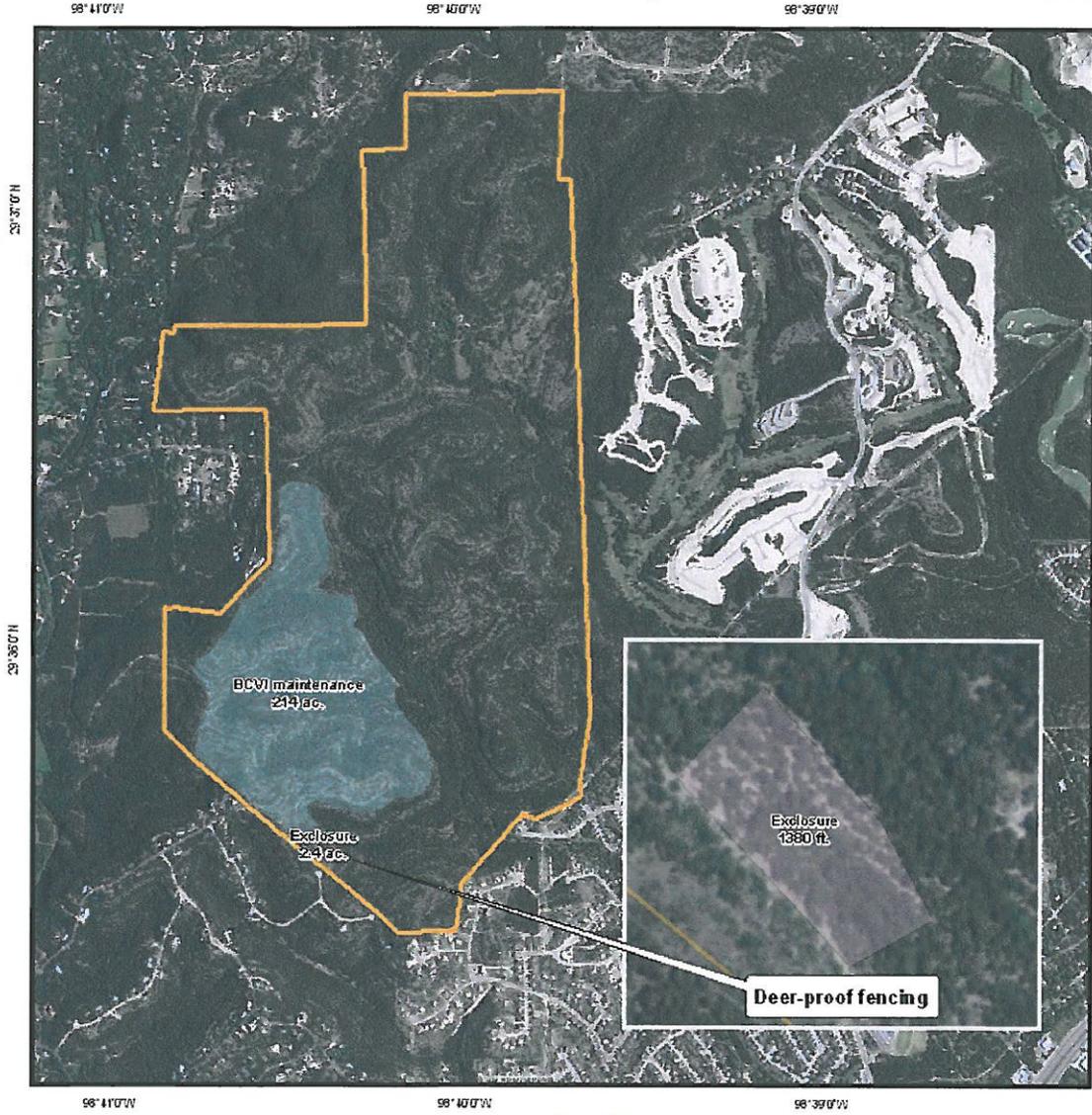
Exhibit A.2.



U.S. Fish & Wildlife Service
Partners for Fish and Wildlife

Project Proposal

Rancho Diana Natural Area
City of San Antonio, Parks and Recreation



Produced by: USFWS Ecological Services Austin TX
Date: 7/1/2011
Basemap: National Agriculture Imagery Program 2010
1:24,000

- Rancho Diana project boundary
- Streptanthus bracteatus* protection
- Black-capped Vireo habitat enhancement

EXHIBIT A.3.

