

# **Wilson Estates**

## **Wildland Fire Safe Plan**

**Prepared for:**

**Ann Wilson**

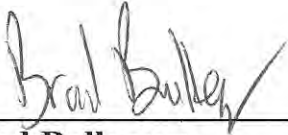
**Prepared by:**

**CDS Fire Prevention Planning  
William F. Draper  
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4645 Meadowlark Way  
Placerville, CA 95667**

**September 2, 2011**

Wilson Estates

Approved by:



\_\_\_\_\_  
**Brad Ballenger**  
**Fire Marshal**  
**El Dorado Hills Fire Department**

9/27/11

\_\_\_\_\_  
**Date**



\_\_\_\_\_  
**Chris Anthony, Battalion Chief**  
**Fire Prevention**  
**California Department of**  
**Forestry and Fire Protection**

9/20/11

\_\_\_\_\_  
**Date**

Prepared by:



\_\_\_\_\_  
**William F. Draper**  
**RPF 898**

9/27/11

\_\_\_\_\_  
**Date**



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## **I. PURPOSE AND SCOPE**

Communities are increasingly concerned about wildfire safety. Drought years coupled with flammable vegetation and annual periods of severe fire weather insure the potential for periodic wildfires.

The purpose of this plan is to assess the wildfire hazards and risks of the Wilson Estates subdivision, to identify measures to reduce these hazards and risks and protect the native vegetation. There are light fuel hazards and gentle topography associated with this proposed project both on and adjacent to the project.

The possibility of large fires occurring when the subdivision is complete will be greatly reduced. However, small wildfires in the open space areas and on the lots may occur due to the increase in public uses.

Incorporation of the fire hazard reduction measures into the design and maintenance of the future parcels will reduce the size and intensity of wildfires and help prevent catastrophic fire losses. State and County regulations provide the basic guidelines and requirements for fire safe mitigation measures and defensible space around dwellings. This plan builds on these basic rules and provides additional fire hazard reduction measures customized to the topography and vegetation of the development with special emphases on the interface of homes and wildland fuels.

The scope of the Wilson Estates Wildland Fire Safe Plan recognizes the extraordinary natural features of the area and designs wildfire safety measures which are meant to compliment and become part of the community design. The Plan contains measures for providing and maintaining defensible space around future homes and open space areas. Plan implementation measures must be maintained in order to assure adequate wildfire protection.

Homeowners who live in and adjacent to the wildfire environment must take primary responsibility along with the fire services for ensuring their homes have sufficient low ignitability and surrounding fuel reduction treatment. The fire services should become a community partner providing homeowners with technical assistance as well as fire response. For this to succeed it must be shared and implemented equally by homeowners and the fire services.

## **II. FIRE PLAN LIMITATIONS**

The Wildland Fire Safe Plan for the Wilson Estates subdivision does not guarantee that wildfire will not threaten, damage or destroy natural resources, homes or endanger residents. However, the full implementation of the mitigation measures will greatly reduce the exposure of homes to potential loss from wildfire and provide defensible space for firefighters and residents as well as protect the native vegetation. Specific items are listed for homeowner's attention to aid in home wildfire safety.

### **III. WILSON ESTATES WILDLAND FIRE SAFE PLAN**

#### **1. PROJECT DESCRIPTION**

The Wilson Estates subdivision is located along the south side of Malcolm Dixon Road in the El Dorado Hills area. The subdivision is approximately midway between Salmon Falls Road and Green Valley Road off of Malcolm Dixon Road. New roads will be built to serve this new development. These roads running through the subdivision are proposed to be 24' wide of travel surface. A new roadway will be constructed to connect Green Valley Road and Malcolm Dixon Road. This new connector road will be a part of the realignment of Malcolm Dixon Road. Lot F represents this new road. All roads will be constructed to El Dorado County Department of Transportation (DOT) standards or as approved on the tentative map. All new lots shall be served by El Dorado Irrigation District (EID) for domestic water supply, fire sprinklers and fire hydrants. This project consisting of 28.18 acres is planning to split parcels APN: 126-070-22, 23 and 30 into 58 residential lots. Each lot will be a minimum of 8,611 square feet in size. Lots 57 and 58 at the east end of the development will share a 20' driveway and be approximately 24,800 square feet each. Residential fire sprinklers shall be required by the California Residential Building Code unless otherwise amended. Fire hydrant location shall be determined after consultation with the Fire Department and meeting the standard established. The proposed fire hydrant locations are at the intersections of each cul-de-sac and at the driveway for lots 57 and 58.

Lots A, B and C consists of approximately 7.58 acres and is open space. The open space buffers this development from adjacent properties and Green Valley Road. A masonry sound wall is being proposed for all the lots on the south side of the subdivision. This would include lots 24, 25, 31, 32, 42-48, 50-56, and 58. Non-combustible fencing may be incorporated into the masonry wall at the cul-de-sacs and the ends. A minimal fuel hazard reduction zone along the non-combustible fencing will be required. A 10' zone will be needed in lots A, B and C where they border adjacent properties or roadways if not landscaped. Annual maintenance is essential for keeping fire safe conditions viable. A Community Service District (CSD), Lighting and Landscaping District (LLD) or Zone of Benefit/Home Owners Association shall be established and be responsible for the maintenance of this zone.

The El Dorado Hills Fire Protection Department provides all fire and emergency medical services to this project. The California Department of Forestry and Fire Protection (CAL FIRE) has wildland fire responsibility in this state responsibility area (SRA).

#### **2. PROJECT VEGETATION (FUELS)**

For wildfire planning purposes the vegetation is classified as follows:

- (a) ground fuels- annual grasses and downed limbs (Brush)
- (b) overstory- scattered blue oaks.

The property has terrain with gentle south facing slopes. Slopes are up to 10%. The tree canopy is open grown oaks. These trees typically have limbs and canopy reaching the ground creating ladder fuels. Ladder fuels will need to be eliminated. Limbing of trees is important to reduce their susceptibility from a ground fire. Tree spacing is a critical component to attaining the required fire safe clearances. A separation of the brush fuels and trees are essential for creating the defensible space around the residence. Specific guidelines for fuel hazard reduction are addressed in the mitigation measures.

### **3. PROBLEM STATEMENTS**

#### **A. The brush fuels on the slopes will ignite and have a rapid rate of spread.**

Fire in the grass fuels on the slopes is the most serious wildfire problem for this project.

#### **B. Risk of fire starts will increase with development.**

The greatest risk from fire ignition will be along roads and on open space lots as human use on these areas increases.

#### **C. Provisions must be made to maintain all fuel treatments.**

The wildfire protection values of fuel reduction are rapidly lost if not maintained. Continued review of potential ladder fuels to maintain a fire safe environment is very important. Annual maintenance by June 1 of each year is necessary.

#### **D. Typical home design and siting often does not recognize adequate wildfire mitigation measures.**

A review of many wildfires has conclusively shown that most home losses occur when: (1) there is inadequate clearing of flammable vegetation around a house, (2) roofs are not fire resistant, (3) homes are sited in hazardous locations, (4) firebrand ignition points and heat traps are not adequately protected and (5) there is a lack of water for suppression.

### **4. GOALS**

- A. Modify the continuity of high hazard vegetation fuels.
- B. Reduce the size and intensity of wildfires.
- C. Ensure defensible space is provided around all structures.
- D. Design fuel treatments to minimize tree removal.
- E. Ensure fuel treatment measures are maintained.
- F. Identify fire safe structural features.
- G. Help homeowners protect their homes from wildfire.

### **5. WILDFIRE MITIGATION MEASURES**

Wildfire mitigation measures are designed to accomplish the Goals by providing and maintaining defensible space and treating high hazard fuel areas. Fire hazard severity is reduced through these mitigation measures. The Wildland Fire Safe Plan places emphasis on defensible space around structures.

The residential construction materials, fire hydrant location and fuel treatments will be extremely important in the development of these new lots. Residential lots will have a 10' setback from the rear property line and only a 5' setback on the sides. Open space fuel treatment zones shall be at least 10' from all rear property lines of this development along the masonry and non-combustible fencing.

All residences shall be required to have NFPA 13D fire sprinkler systems unless the law is amended.

This subdivision is in a Moderate Fire Hazard Severity Zone. Wildland-Urban Interface Fire Areas Building Standards will be required in new construction. These standards address roofing, venting, eave enclosure, windows, exterior doors, siding, and decking.

Clearance along the road and around structures is very important and necessary. Branches on remaining trees shall be pruned up 10 feet as measured on the uphill side of the tree. Brush shall be removed. Grasses shall be kept mowed to a 4 inch stubble annually by June 1. Any tree crown canopy over the driveways shall be pruned at least 15 feet up from the driveway surface.

The fuel treatment zone in the open space areas shall continue along the perimeter and be at least 10 feet wide or to the property line. This zone is in addition to the clearances required by state law. The State required Fire Safe clearances (PRC 4291) shall be implemented around all structures. Clearances may be required at the time of construction.

**More restrictive standards may be applied by approving El Dorado County Authorities. Approval of this plan does not by itself guarantee approval of this project. All provisions in this plan are subject to change and additional review until the project is filed and accepted by El Dorado County, Development Services.**

### **Mitigation Measures:**

- **Driveways shall be 12 feet wide. Driveways shall comply with the DOT weight standards.**
  - a. **Responsibility- homeowner**
- **All private driveway gates shall be inset on the driveway at least 30 feet from the road. Gate opening shall be 2 feet wider than the driveway unless exceptions are granted by the local Fire Department.**
  - a. **Responsibility- homeowner**
- **All homes shall have Class A listed roof covering.**
  - a. **Responsibility- homeowner**
- **Decks that are cantilevered over the natural slope shall be enclosed unless fire resistant.**
  - a. **Responsibility- homeowner (See Appendix C for guidelines)**
- **The houses shall be constructed with exterior wall sheathing that shall be rated noncombustible.**
  - a. **Responsibility-developer**
- **Windows and glass doors on the sides of the structure shall have tempered glass and fire resistant frames.**
  - a. **Responsibility-builder**
- **Rafter tails shall be enclosed with noncombustible material on the sides of the structure.**
  - a. **Responsibility-builder**
- **Gutters and downspouts shall be noncombustible.**
  - a. **Responsibility-builder**
- **Attic and floor vents shall be covered with ¼ inch, or less, noncombustible mesh and horizontal to the ground.**
  - a. **Responsibility-builder**

- All lots shall have a 10 foot setback from the rear property line for buildings and accessory buildings and a 30 foot setback from the center of the road or as determined by Development Services.
  - a. Responsibility- builder

**6. OTHER FIRE SAFE REQUIREMENTS**

- A. New roadway turn-around shall be constructed after consulting with El Dorado Hills Fire Department and DOT for specifications.
- B. If applicable, each new builder or property owner prior to construction shall be required to contact El Dorado County Planning Services/Building Department to have the residential fire sprinklers plans approved. All fire sprinkler systems shall be designed and installed by a licensed contractor.
- C. All road improvements shall be built to DOT standards or as approved with the Tentative Map.
- D. 10' fuel treatment zone along the perimeter of this subdivision shall be installed and annually maintained by June 1 to the Fire Safe specifications. Sidewalks and landscaping is acceptable in this zone.
- E. A Notice of Restriction shall be filed with the final parcel map which stipulates that a Wildland Fire Safe Plan has been prepared and wildfire mitigation measures must be implemented.
- F. The project shall meet all the Public Resource Codes 4290 as amended (the 1991 SRA Fire Safe Regulations- Article 2 Access, Article 3 Signing, Article 4 Water, Article 5 Fuels), County and Fire Department ordinances.
- G. The home/property owners are responsible for any future fire safe or building code changes adopted by the State or local authority.
- H. Only wood, fire rated composite deck material or noncombustible decking shall be allowed.
- I. All fencing adjacent to open space shall be noncombustible.
- J. The developer shall establish a Community Service District (CSD), Lighting and Landscaping District (LLD) or Zone of Benefit/HOA responsible for maintaining the open space lot.
- K. All vacant lots shall be treated to the standard established by the Weed Abatement Resolution of the Fire District.
- L. The El Dorado Hills Fire Department shall review the Fire Safe Plan every 5 years to determine if additional Fire Safe measures need to be implemented.

**7. OPEN SPACE GUIDELINES**

- A. Remove all dead trees within 100' of all property lines.



- B. Remove all dead limbs from live trees that are within 10' of the ground.**
- C. Limb all trees within the open space lots at least 10' above the ground as measured on the uphill side of the tree.**
- D. Remove all dead limbs and trees laying on the ground within the open space lots.**
- E. Annually by June 1 cut or remove all grass and brush to a 4" stubble within 10' along the property lines adjacent to the residential lots and along streets.**
- F. Mature or multi stemmed oaks can present a serious wildfire problem if untreated. Treat the oaks as to the following specifications: (a) remove all dead limbs and stems and (b) cut off green stems at 10 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.**

## **V. Appendix**

## **APPENDIX A**

### **WILSON ESTATES FUEL TREATMENT SPECIFICATIONS For OAK WOODLAND Within The Designated Fuel Treatment Areas**

1. Leave all live trees where possible.
2. Remove all dead trees.
3. Remove all brush.
4. Prune all live trees of dead branches and green branches 10 feet from the ground as measured on the uphill side of the tree, except no more than 1/3 of the live crown is removed. All slash created by pruning must be disposed of by chipping or hauling off site.
5. Annually by June 1, reduce the grass or weeds to a 4 inch stubble in the open space by mowing, chemical treatment, disking or a combination of treatments.
6. Mature, multi stem Oak trees: remove all dead limbs and stems, cut off green stems at 10 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.

## **APPENDIX B**

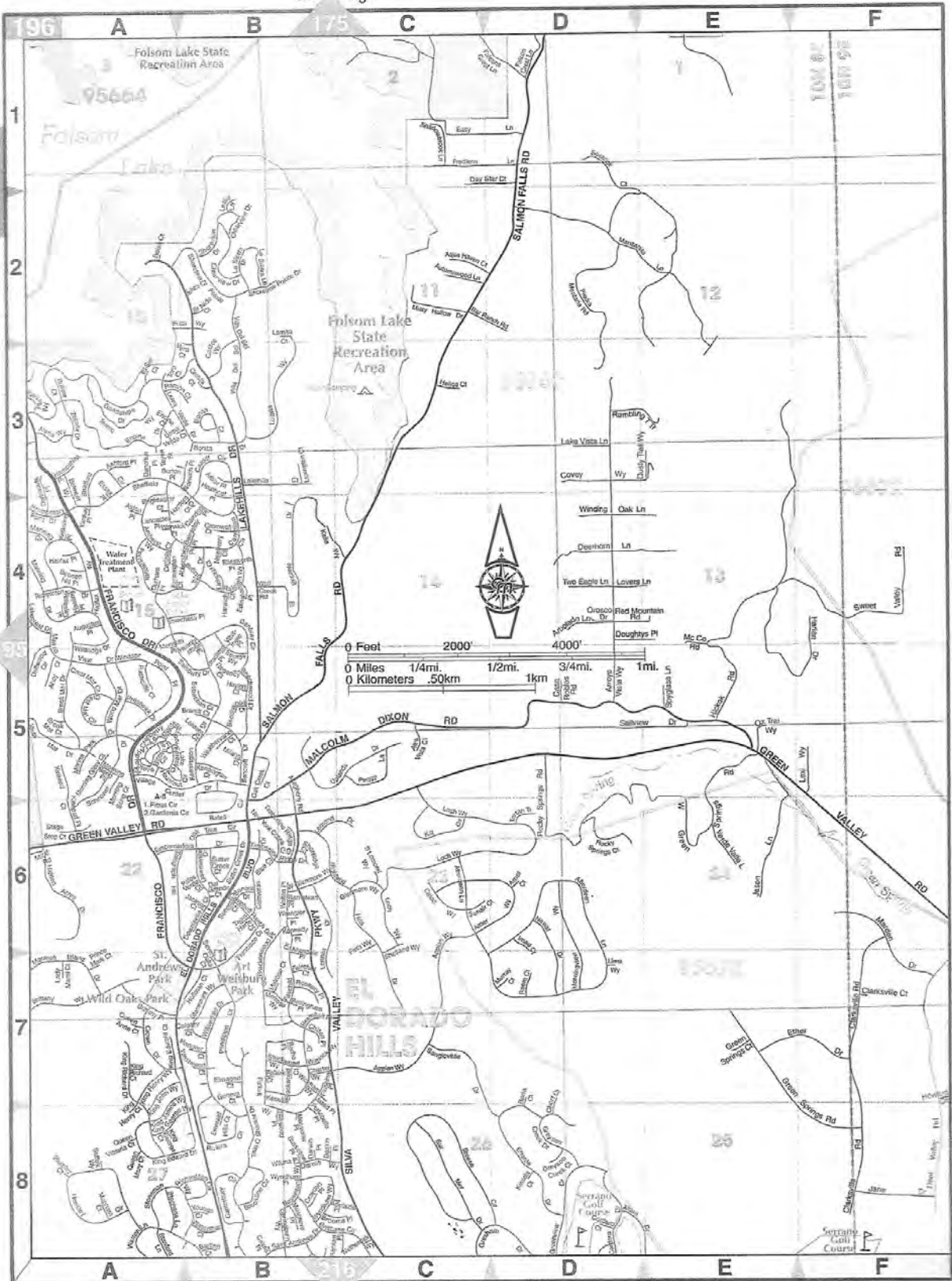
### **WILSON ESTATES ENCLOSED DECK GUIDELINES**

The purpose of enclosing the underside of decks that are cantilevered out over the natural slope is to help prevent heat traps and fire brands from a wildfire igniting the deck or fuels under the deck.

1. Does not apply to decks that are constructed using fire resistant materials such as concrete, steel, stucco etc.
2. Any deck shall not include combustible composite deck material.
3. This applies to decks one story or less above natural slopes.
4. Combustible material must not be stored under the deck.

See Page

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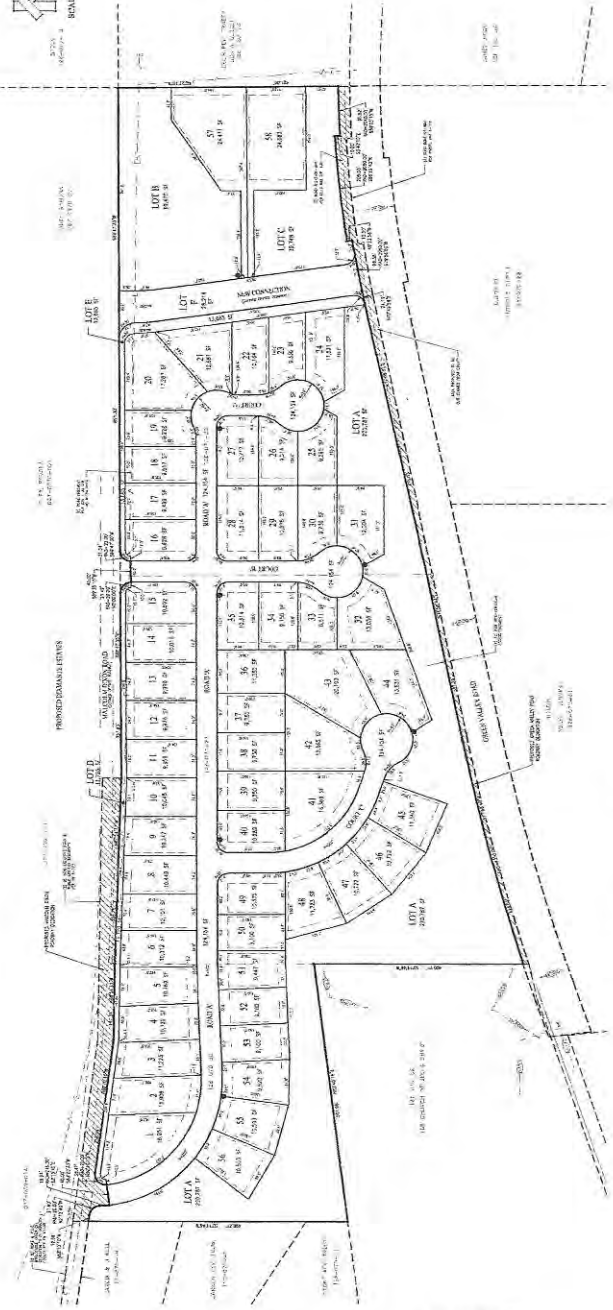
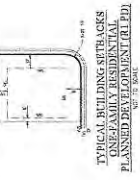
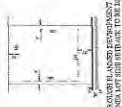


**APN 126-070- 30 & 22 & 23**



# TENTATIVE MAP WILSON ESTATES

COUNTY OF EL DORADO STATE OF CALIFORNIA  
June, 2011



Lot No.	Gross Area (sq. ft.)	Net Area (sq. ft.)	Min. Lot Area (sq. ft.)
1	1,000	800	1,000
2	1,000	800	1,000
3	1,000	800	1,000
4	1,000	800	1,000
5	1,000	800	1,000
6	1,000	800	1,000
7	1,000	800	1,000
8	1,000	800	1,000
9	1,000	800	1,000
10	1,000	800	1,000
11	1,000	800	1,000
12	1,000	800	1,000
13	1,000	800	1,000
14	1,000	800	1,000
15	1,000	800	1,000
16	1,000	800	1,000
17	1,000	800	1,000
18	1,000	800	1,000
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20	1,000	800	1,000
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41	1,000	800	1,000
42	1,000	800	1,000
43	1,000	800	1,000
44	1,000	800	1,000
45	1,000	800	1,000
46	1,000	800	1,000
47	1,000	800	1,000
48	1,000	800	1,000
49	1,000	800	1,000
50	1,000	800	1,000



**OFFSITE ROADWAYS**  
200' WIDE RIGHT OF WAY  
100' WIDE RIGHT OF WAY

**ONSITE ROADWAYS**  
200' WIDE RIGHT OF WAY  
100' WIDE RIGHT OF WAY

**OWNERS OF RECORD**  
THE WILSON TRUST  
1000 WILSON DRIVE  
EL DORADO, CA 95762

**APPLICANT**  
WILSON TRUST  
1000 WILSON DRIVE  
EL DORADO, CA 95762

**ENGINEER**  
C/A Engineering & Surveying  
1000 WILSON DRIVE  
EL DORADO, CA 95762

**MAP SCALE**  
1" = 100'

**CONTOUR INTERVAL**  
CONTOUR INTERVAL - 5 FEET

**SOURCE OF TOPOGRAPHY**  
AERIAL PHOTOGRAPHY

**SECTION, TOWNSHIP AND RANGE**  
SECTION 10, TOWNSHIP 13 N, RANGE 12 E, S. 1/4, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50

**ASSESSOR'S PARCEL NUMBERS**  
APNs: 014-010-010, 014-010-011, 014-010-012, 014-010-013, 014-010-014, 014-010-015, 014-010-016, 014-010-017, 014-010-018, 014-010-019, 014-010-020, 014-010-021, 014-010-022, 014-010-023, 014-010-024, 014-010-025, 014-010-026, 014-010-027, 014-010-028, 014-010-029, 014-010-030, 014-010-031, 014-010-032, 014-010-033, 014-010-034, 014-010-035, 014-010-036, 014-010-037, 014-010-038, 014-010-039, 014-010-040, 014-010-041, 014-010-042, 014-010-043, 014-010-044, 014-010-045, 014-010-046, 014-010-047, 014-010-048, 014-010-049, 014-010-050

**PRESENT ZONING**  
R-PD

**PROPOSED ZONING**  
R-PD

**TOTAL AREA**  
21.3 ACRES

**TOTAL NUMBER OF PARCELS**  
50

**MINIMUM LOT AREA**  
8,000 SQ. FT.

**WATER SUPPLY and SEWAGE DISPOSAL**  
EL DORADO COUNTY WATER DISTRICT (CWP) AND EL DORADO COUNTY SANITATION DISTRICT (CSD)

**PROPOSED STRUCTURAL FIRE PROTECTION**  
EL DORADO COUNTY FIRE DEPARTMENT

**DATE OF PREPARATION**  
JUNE 2011

**PHASING PLAN NOTICE**  
THIS TENTATIVE MAP IS BEING PREPARED FOR THE PURPOSES OF PHASING THE DEVELOPMENT OF THE PROJECT IN ACCORDANCE WITH THE PHASING AND ZONING ACT (PUBLIC LAW 94-142).

**ENGINEER'S CERTIFICATE**  
I, THE ENGINEER, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA AND THAT I AM THE ENGINEER OF RECORD FOR THIS TENTATIVE MAP. I HAVE REVIEWED THE PLANS AND SPECIFICATIONS AND AM Satisfied THAT THEY COMPLY WITH THE REQUIREMENTS OF THE PHASING AND ZONING ACT (PUBLIC LAW 94-142).



1000 WILSON DRIVE, EL DORADO, CA 95762