



**DC Ranch Association  
Board Report 10-5-2020 #1**

**Subject Matter: Common Area Fire Fuel Management  
Firewise Program**

**Background:** Through the years at DC Ranch only a minimal amount of work has been done to provide defensible space in common areas adjacent to residential lots. And this type of work was only done if a resident voiced concern. For the most part, these areas have remained untouched. The areas of most concern are those that border neighborhoods in Desert Parks, Desert Camp, Country Club and Windgate/Horseshoe (Parks). In these areas of the community, natural open space areas have been left to grow right up to (and in some cases over) the wall and/or view fence of the residential lots.

The National Fire Protection Association (NFPA) writes "The Firewise Research around home destruction vs. home survival in wildfires point to embers and small flames as the main way that a majority of homes ignite in wildfires. Embers are burning pieces of airborne wood and/or vegetation that can be carried more than a mile through the wind can cause spot fires and ignite homes, debris and other objects. There are methods for homeowners to prepare their homes to withstand ember attacks and minimize the likelihood of flames or surface fire touching the home or any attachments. Experiments, models and post-fire studies have shown homes ignite due to the condition of the home and everything around it, up to 200 feet from the foundation. This is called the Home Ignition Zone (HIZ)."

Our intention is to address areas of concern, highlighted on the attached map, by clearing vegetation five feet from the wall and/or view fence, then the next 15 feet is cleaned to remove dead and dying landscape as well as ladder fuels. The Scottsdale Fire Marshall recommends this approach to achieve "defensible space" between common areas and residential homes. This work would also provide accessibility to the fire department when needed.

Other than flood, fire is the predominate safety concern for the community. Two years ago, we developed a storm water management plan to address concerns regarding the proper functionality of the community's washes and culverts. Much time and effort, as well as dollars, were expended to address this risk management concern. Now that the plan is in place, the timing is right to put our focus on fire fuel management. As the old saying goes "there's never a problem until there's a problem."

In 2019 we met with representatives from Scottsdale Fire and the Fire Marshall to develop a scope of work (attached) to model an area of the community to quantify the amount of work and expense required to convert areas of concern to fire-safe areas. We then used a section of the Estates (Desert Parks) as a model for the work. The pictures below show the model area and completed work.



2019 Before

2019 After

One Year Later



The modelling program allowed us to formulate project budgets for neighborhoods that need the work. Those costs are as follows:

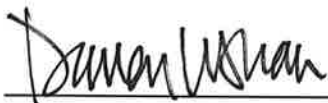
Planning Unit	Linear Feet	Price Per Foot	Total Estimate
Pu 1	20,756.00	4.02	\$83,437.00
Pu 2	49,972.00	4.02	\$200,887.00
Arcadia	8,431.00	4.02	\$33,892.00
T4B	1,207.00	4.02	\$4,852.00
5.9	4,835.00	4.02	\$19,436.00
Horseshoe	8,889.00	4.02	\$35,733.00
Windgate	838.00	4.02	\$3,368.00
Country Club	5,936.00	4.02	\$23,862.00
	100,864.00		\$405,467.00

The proposed plan is to schedule fire fuel management work over the next three years for the neighborhoods where there is concern. After the initial work, clean up efforts would take place on a three-year rotation, at about half the cost of the initial work. Funding would be provided from each neighborhood's reserve fund. The table below shows the project's cost over the first three-year period.

Parcel/Neighborhood	2021	2022	2023
Country Club		\$23,862	
Horseshoe	\$55,169		
Windgate		\$3,368	
T.4B			\$4,852
T.7	\$33,892		
1.11			\$30,608
1.13		\$14,882	
1.14		\$15,026	
1.17		\$14,721	
1.18		\$8,200	
2.3			\$13,862
2.9			\$20,441
2.10		\$23,256	
2.13/2.14	\$78,221		
2.15			\$13,016
2.17/.2.18/2.19			\$52,091
Total	\$167,282	\$103,315	\$134,870

This proposed work addresses safety concerns related to fires in common areas that could impact residential homes.

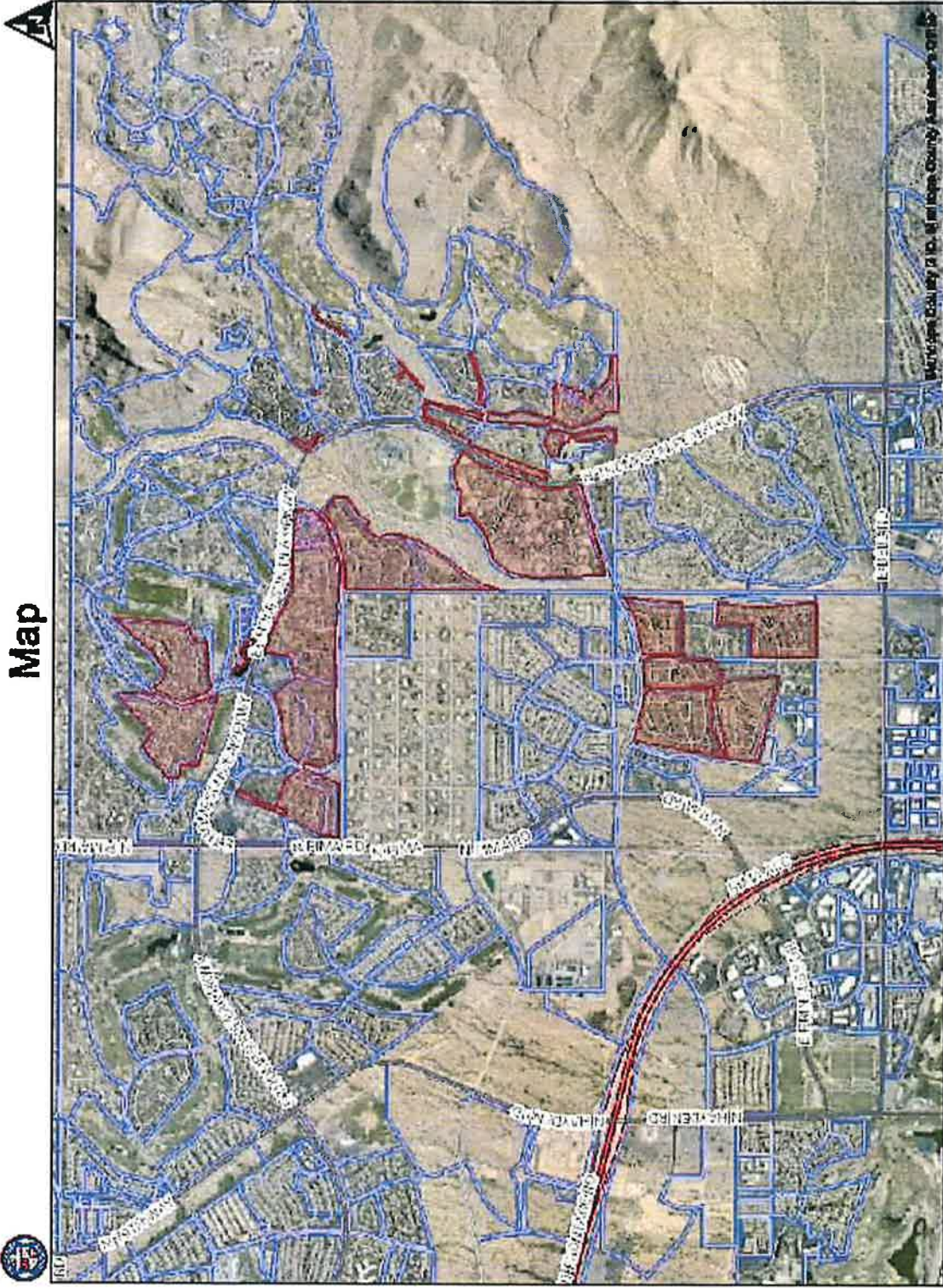
**Recommendation:** Formally approve the proposed fire fuel reduction work and fund the program as suggested in this report.




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Darren Shaw, Executive Director

Map



Mississippi County Planning Commission  
1000 Highway 100, P.O. Box 100, Hannibal, MO 64080

01/20/2014 10:00 AM



## Project Scope

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**Project Name: Fire-Wise Vegetation Management Model**

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**Project Manager: Ken Krause**

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### 1. Project Purpose Statement:

The purpose of this project is to obtain a sample of work that provides the processes, time requirements and costs associated with bringing a defined area of the community into conformance with fire-wise standards. The area of focus is defined as the naturally grown areas adjacent to the privacy walls at Planning Unit I, Parcel 1.18 (PU 1.18). The Estates. (See map)

### 2. Background:

DC Ranch is approaching its 20<sup>th</sup> year. Through the years, native vegetation bordering privacy and boundary walls has not been maintained to conform to fire-wise standards. Vegetation in these areas has been minimally maintained, generally in preparation for painting and other wall repair projects. With a heightened awareness, the Association is interested to learn more about the processes and costs to become a fire-wise certified community.

### 3. Objective:

Bring approximately 1,485' of natural areas bordering the privacy/boundary wall in PU 1.18 into conformance with fire-wise standards.

### 4. Project Team:

- Brad Bishop-Maintenance Service Director
- Ken Krause- Landscape Manager
- Rebecca Herro- DLC Landscape Chief development Officer
- Matt Jacobson-DLC Landscape Branch Manager

### 5. Organizational Requirements:

- Formal proposal for the scope of work provided herein.
- Certificate of liability insurance and W-9 on file.
- A fully executed contract.

### 6. Assumptions

- Crew size will remain consistent throughout the project.
- Efficient workflow will be achieved using equipment and an experienced work force.
- The project work will be divided equally between the north half, with path accessibility, and the south half, with no path accessibility.

## 7. Timeframe & Milestones

The project timeframe is five days.

## 7. Inclusions & Deliverables

- Initial defensible space requires five feet of clearance (all vegetation), from the privacy/boundary wall. Trees will remain.
- Trees within the initial defensible space will be lifted to 6'.
- An additional 15' will be cleared of dead and fallen vegetation, ladder fuels, and invasive species. This area will be designated as the **Fuel Reduction Zone (FRZ)**. Ladder fuels are defined as live or dead vegetation that allows a fire to climb up from the landscape or desert floor into the tree canopy. Common ladder fuels include tall grasses, shrubs, and tree branches, both living and dead.
- All Trees in the FRZ will be lifted to 4' above the ground.
- Shrubs within the FRZ will be separated with a minimum of 24" spacing in between.
- Total project area is 20' from the wall.

## 8. Critical Measurements

1. Per square foot cost of work, in both accessible and less accessible areas.
2. Weight of material removed daily and for the total project.
3. Daily progress measured and recorded on a square foot basis delineating between accessible and less accessible areas.