



# Innovative Process Engineering

Water and Waste Solutions

18490 Dunes Lake Lane  
Monument, CO 80132  
May 11, 2020

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El Paso County Planning  
2880 International Circle  
Colorado Springs, CO 80910

RE: Letter of Intent for Wissler Ranch HOA – Construction of Cistern

This letter of intent describes the proposed construction at the Wissler Ranch HOA easement adjacent to Wissler Ranch Road. The Wissler Ranch subdivision has experienced one fire in the recent past that destroyed a residence. The HOA has an easement that currently houses a subsurface cistern containing 10,000 gallons of water with a Fire Department Connection (FDC). The HOA, in cooperation with Tri-Lakes Fire District, has hired a Contractor to expand that capacity by 40,000 gallons so that fire fighting equipment would have ready access to water for firefighting. The Contractor has engaged Innovative Process Engineering, PLLC to complete the design and permitting.

The easement is adjacent and contained in the parcel 6102008001 known as 4370 Wavy Oak Drive, which is a 31.45 acre parcel owned by the HOA. The easement is approximately 130' by 60', or 7,800 square feet. A drawing of the easement and the improvements contained in it is attached to this document.

The design for the new 40,000 gallon cistern will include a low-head pump connecting to a hydrant in the easement, facilitating access to the water by Tri-Lakes Fire. The location of the proposed hydrant is shown on the drawing. All items constructed on the easement will be located more than 30 feet from the centerline of the road, thus being outside of the Right-Of-Way and on private property.

The construction activities will disturb far less than 1 acre of land and excavation will be far less than 500 cubic yards of material.

Once construction is completed, the cistern will be filled with hauled water. Any impairment of the asphalt currently in place will be repaired at that time. There will also be additional asphalt placed in a roughly triangular shape to provide a transition from Wissler Ranch Road to the turnoff. The asphalt placement will follow the same specification as in the SF-96026 pavement design document. Access by larger vehicles such as fire engines and water trucks will be accomplished by hose connection.

It is expected that once construction and filling are completed, access to the cistern for maintenance will be performed by parking pickup trucks in the pullout.

The cistern will have a small vault containing two low-pressure pumps nearby, also in the easement. The pumps will have two sources of power: 230VAC service in nearby 100A breaker box; and a propane-powered backup generator.

Typical operation is expected that upon being called to an active fire, the firefighting trucks typically arrive with several thousand gallons of water stored internally in each vehicle. If the effort requires additional water, the vehicles would be able to drive to the cistern and activate the pumps and refill at a rate from 250 to 500 gallons per minute. This would save at least 15 minutes of driving away to an alternate location for refilling, thus potentially saving lives and/or structures. Based on the estimated vehicular tank volume, the two cisterns, (one new and one existing), would allow for 6 to 8 refills before emptying.

Please feel free to contact me at 720-775-0076 with any questions.

Ron LeBlanc, MS, PE

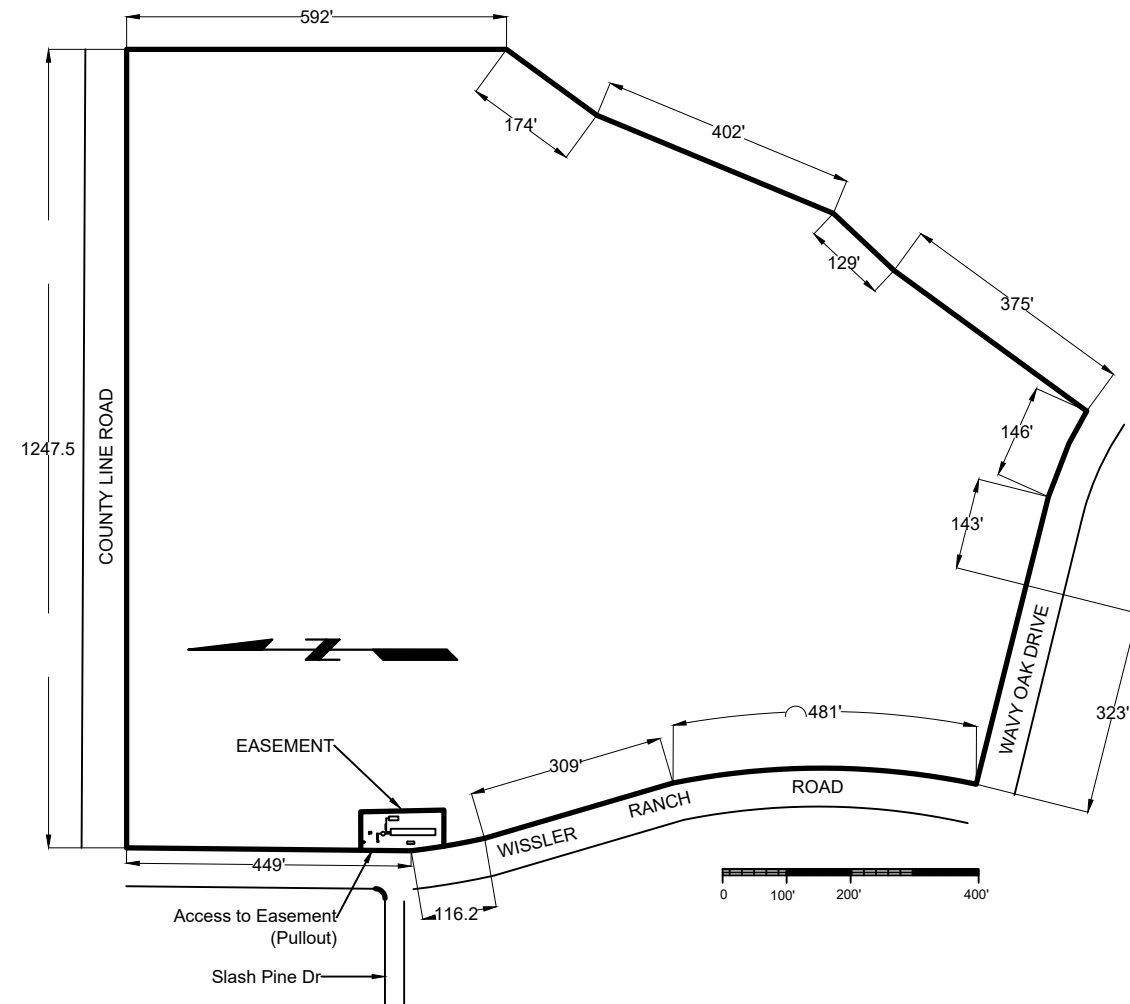
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New Hydrant Location

# WISSLER RANCH HOA

TAX ID: 6102008001  
 Address: 4370 Wavy Oak Drive  
 31.45 Acres  
 LEGAL: COMMON AREA WISSLER RANCH FIL NO. 2



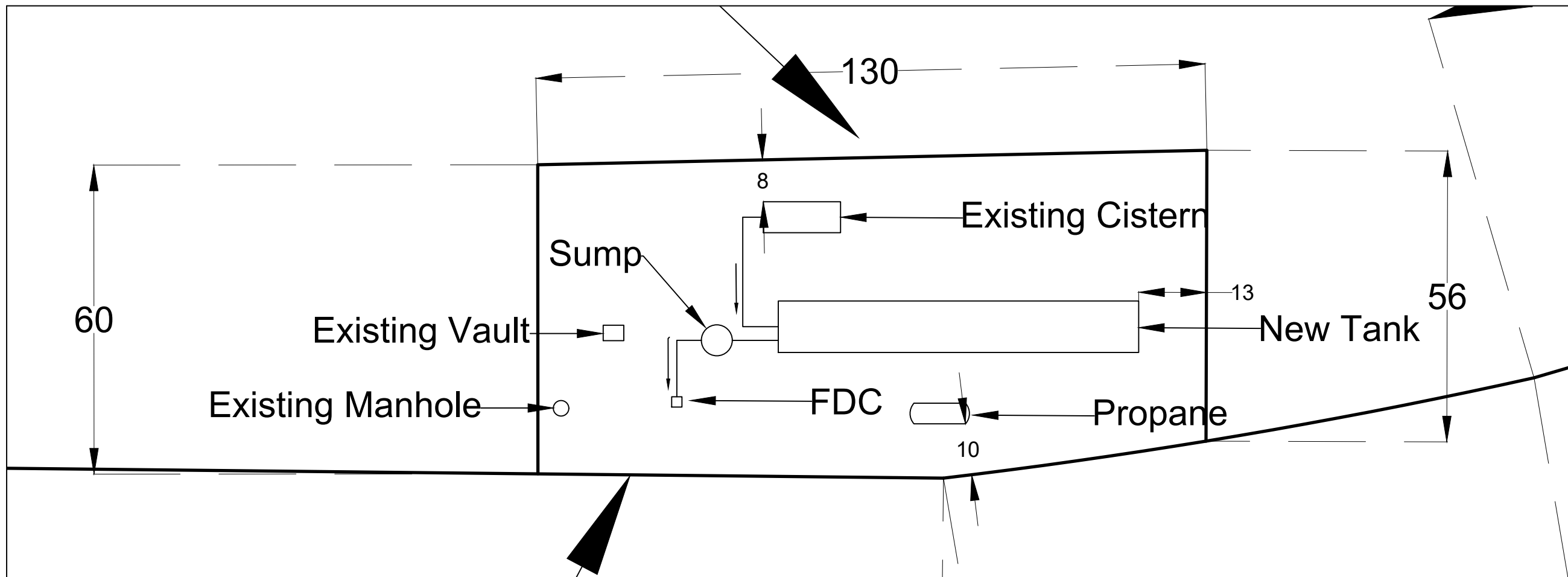
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*RON  
LeBLANC*

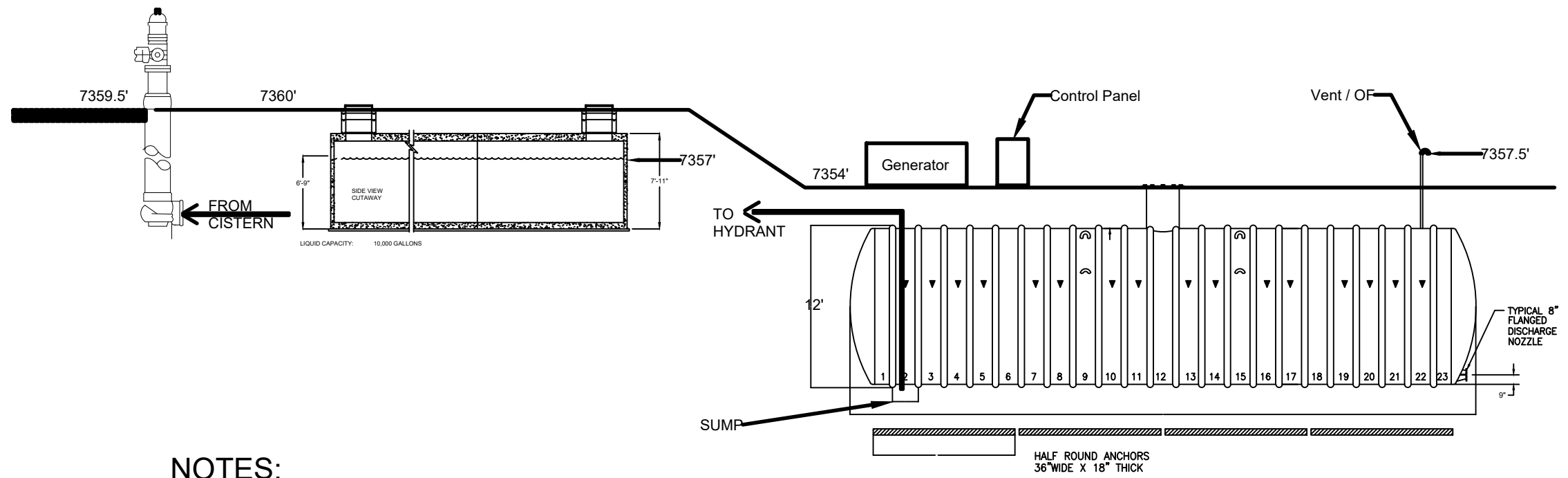
**Innovative Process  
Engineering, PLLC**  
Project 19050

Wissler Ranch HOA  
El Paso County, CO  
April 13, 2020

## SITE PLAN



<i>RON LeBLANC</i>	<b>Innovative Process Engineering, PLLC</b>	Wissler Ranch HOA	<h1>SITE Detail</h1>
	Project 19050	El Paso County, CO	
		April 13, 2020	



**NOTES:**

1. Elevations shown may be adjusted in the field during construction.
2. All equipment and piping should be buried sufficient for freeze protection.
3. Use 4" SCH 40 between pump and hydrant base
4. Use 5" x 2 1/2" x 2 1/2" hydrant

<i>RON LeBLANC</i>	<b>Innovative Process Engineering, PLLC</b>	Wissler Ranch HOA	<h1>Easment Elevation</h1>
		El Paso County, CO	
		May 12, 2020	