

# CITY OF LONGMONT | Planning Division Prairie Dog Management Permit Application

Upon submission of the Prairie Dog Management Permit Application, the City will determine if a minor or major prairie dog management permit is required. Please see the Prairie Dog Management Overview sheet for more details.

Date of application:June 13, 2025						
Applicant (First): Harv (Last): Gill						
OR:						
Applicant (Company Name): CivilArts - Daniel Alonzo						
Property address where prairie dogs a	re located (or directions from nearest cross					
streets):						
SE Corner of 9th Avenue and Allen Driv	ve					
County: Boulder Parcel N	Number: 131505100003					
•						
Parcel Size: 2.4 ac.	<u> </u>					
If applicable, please list additional add	resses, parcel numbers, and parcel sizes:					
1) Address:						
*	Parcel Size:					
2) Address:						
Parcel Number:	Parcel Size:					
385 KIMBARK STREET   LONGMONT, COLORADO 80501   T 303-651-8330   longmontcolorado.gov						

Updated: 05/05/2021

	Applicant Address: 1500 Kansas Avenue, Ste. 2-E						
	City: Longmont	State: CO	ZIP: 80501				
	Applicant's Email:dalonzo@civilarts.us						
	Applicant Phone: 303-682-1131						
	Applicant's Preferred Contact Method (for public posting– please check one)  Email Phone						
	Property Owner (if different from applicant):						
	(First) Gurdev	(Last):Gill					
	OR, (Company Name):						
	Property Owner Address:  204 William Street						
,	City: Superior	State: <u>CO</u>	ZIP: 80027				
	be completed by applicant:						
	xisting urban development: Tyes X No						
Estima	stimated number of prairie dogs:100						
Size of	Active Prairie Dog Habitat (AP	PDH): 1.8 ac.					
	Major → City issues the applicant the relocation forms. \$500 fee is required for the major permit.  Minor → This application serves as the permit for prairie dog management.						
What is	hat is the intended method of handling the prairie dogs? (Circle One)						
City-ap	ity-approved removal) extermination, donation, or live-trapping						

I hereby certify that the information submitt acknowledge and agree that the application defined in LMC 7.06.20. I understand that a of this permit. I also understand that the Cithe active prairie dog habitat size and cour	n is subject to all the terms and any false statements or omissio ity has permission to enter the p	ting the signed application, I conditions for Prairie Dog Control as ns may result in denial or revocation roperty, inspect the site, and confirm
Applicant Name (Printed):Daniel Alonzo,	PE	
Applicant Signature.		
INTERNAL OFFICE USE ONLY		
Approved by (Printed): Z. Blazek	Signature:	Date: 7.31.2025
	Pueblo. Permit valid for one	
Approved by (Printed): Z. Blazek Conditions of Approval: City approved removal / relocation to	Pueblo. Permit valid for one	
Approved by (Printed): Z. Blazek Conditions of Approval: City approved removal / relocation to	Pueblo. Permit valid for one	



# Black-tailed Prairie Dog Mapping and Population Estimate Memorandum

**Date:** June 12, 2025

To: Harv Gill – Gill Estates

**From:** Becky Burink – Pinyon Environmental, Inc.

Subject: Black-tailed Prairie Dog Mapping and Population Estimate

### Introduction

Gill Estates is proposing to develop a vacant property (study area) in Longmont, Boulder County, Colorado to create a residential subdivision. As part of this process, Gill Estates has contracted Pinyon Environmental, Inc. (Pinyon) to provide a report that fulfills City of Longmont's Prairie Dog Management Permit application requirements for the management of black-tailed prairie dogs (*Cynomys ludovicianus;* prairie dogs). Application requirements include a defined area of prairie dog habitat (APDH), and an estimate of the number of prairie dogs and methodology for the estimation (City of Longmont, 2021). This Black-tailed Prairie Dog Mapping and Population Estimate Memorandum (memo) has been prepared to provide this information to Gill Estates.

# **Study Area Location**

The study area is located in Longmont, Boulder County, Colorado (Figure 1) as shown on the U.S. Geological Survey (USGS) 7.5-Minute Quadrangle, Hygiene, 2022 (USGS, 2022). Table 1 describes the location, in detail, of the study area.

Table 1: Study Area Location Summary

Latitude, Longitude <sup>1</sup>	Section (S), Township (T) Range (R)	Elevation <sup>2</sup>
40.173096°, -105.133577°	S 5, T 2 North, R 69 West	5,020

<sup>&</sup>lt;sup>1</sup>Approximate center of study area (World Geodetic System of 1984)

# Methodology

This study involved mapping the APDH, defined as "the smallest possible area of a polygon encompassing all active prairie dog burrows on a study area" and estimating the population size of the colony on the study area. The population estimate was calculated using an established population estimate methodology and linear model described in Severson and Plum, 1998. This methodology includes conducting visual counts of above-ground individuals and using the maximum visual counts in the linear equation Y = 3.04 + 0.4X, where Y is the maximum visual count and X is the population estimate.

Prior to the site visit, Pinyon wildlife biologist Becky Burink conducted a desktop review of the study area using current and historic aerial and street-view imagery from Google Earth (Google Earth, 2025). A 660-foot buffer (reflecting the buffer distance recommended by CPW for Burrowing Owls) of the study area was also reviewed for potential prairie dog colonies.

<sup>&</sup>lt;sup>2</sup>Approximate elevation above mean sea level in feet



Following the desktop review, Becky visited the site with three other Pinyon surveyors on May 30, 2025, to map burrow boundaries and conduct visual counts of prairie dogs within the study area and 660-foot buffer. Becky took notes and photographs to document general study area and colony conditions. A Photographic Log is attached.

The surveyors conducted visual counts of prairie dogs within the colony. Due to visual obstructions within the study area, the study area was divided into sections; each section was surveyed by all four surveyors, with care taken to avoid double-counting prairie dogs when moving between sections. Prior to each section's survey, the surveyors allowed for an acclimation period of up to 30 minutes to desensitize the prairie dogs to the surveyors' presence. After this period, when prairie dogs no longer exhibited signs of disturbance, surveyors independently conducted visual counts of above-ground prairie dogs using binoculars and the naked eye. The maximum count at each section was used, and the totals from the three sections were summed for an overall maximum count.

A 660-foot buffer of the study area (corresponding to the buffer recommended by Colorado Parks and Wildlife to protect nesting Burrowing Owls) was assessed for Burrowing Owl habitat (i.e., prairie dog burrows). This buffer was reviewed during the desktop analysis and viewed from publicly accessible roads during the site visit.

#### Results

## **General Habitat and Colony Conditions**

The study area consists of a mostly open upland site surrounded by roads and residential development (Photographic Log, Photos 1 and 2). The interior of the study area consists of a single prairie dog colony (or APDH) approximately 1.8 acres in size (Figure 2). There is no adjacent open land into which the colony can expand. Much of the southern part of the study area consists of open areas dominated by weedy, herbaceous vegetation including goosefoot (*Chenopodium album*), hoary cress (*Lepidium draba*), curly dock (*Rumex crispus*), Canada thistle (*Cirsium arvense*), and field bindweed (*Convolvulus arvensis*) (Photographic Log, Photos 1 through 3). Trees in the northern part of the study area included elms (*Ulmus* sp.) (Photographic Log, Photo 4). A shipping container and shed are present near the center of the study area, as well as various other objects including trash, particularly in the northern part of the study area.

The 660-foot buffer of the study area consisted mainly of paved or otherwise developed areas, particularly residential development. No prairie dog burrows were observed via aerial imagery during the desktop analysis or during the site visit.

#### **Population Estimate**

The maximum visual count of prairie dogs within the entire colony was 43 individuals.

Severson and Plumb (1998) modeled prairie dog estimates with the linear equation Y = 3.04 + 0.4X, where Y is the maximum visual count and X is the population estimate. Using the inverse of this equation, X = (Y - 3.04)/(0.40), the estimated total population of the prairie dog colony is 100 individuals.



## **Conclusions and Recommendations**

Pinyon conducted APDH mapping and prairie dog colony mapping at the study area. The population of the colony is estimated to be 100 individuals.

As black-tailed prairie dog burrows provide potential habitat for Burrowing Owls, Pinyon recommends that Burrowing Owl surveys be conducted within the study area in accordance with CPW's Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls (CPW, 2021) if project activities occur within the study area during the Burrowing Owl nesting season (March 15 through October 31).

### Limitations

This report was prepared by Pinyon, at the request of and for the sole benefit of Gill Estates, the City of Longmont, or any entity controlling, controlled by, or under common control with Gill Estates and/or the City of Longmont. The conclusions and recommendations offered in this report are based on the data obtained from a limited number of samples, within a prescribed study area as described in the text. Thus, the nature and extent of variations outside this biological investigation may not become evident except through further investigation. It is possible that ecological conditions may change from those observed, particularly over time.

#### **Attachments**

Figure 1. Project Location
Figure 2. Active Prairie Dog Habitat
Photographic Log

#### References

- City of Longmont, 2021. Prairie Dog Management Permit Application. Available at: https://longmontcolorado.gov/wp-content/uploads/2024/07/Prairie-Dog-Management-Permit-Application\_June-2022-Update.pdf. Last updated May 2021.
- Colorado Parks and Wildlife (CPW), 2021. "Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls." Revised April 6, 2021. Available at: https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Recommended-Survey-Protocol-Burrowing-Owls.pdf.
- Google Earth Pro, 2025. Available at: https://www.google.com/earth/versions/. Accessed May and June 2025.
- Severson and Plumb, 1998. "Comparison of methods to estimate population densities of black-tailed prairie dogs," *Wildlife Society Bulletin* 26(4): 859-866.
- U.S. Geological Survey (USGS), 2022. "7.5-Minute Topographic Map. Hygiene, Colorado." Available at: https://ngmdb.usgs.gov/topoview/viewer.

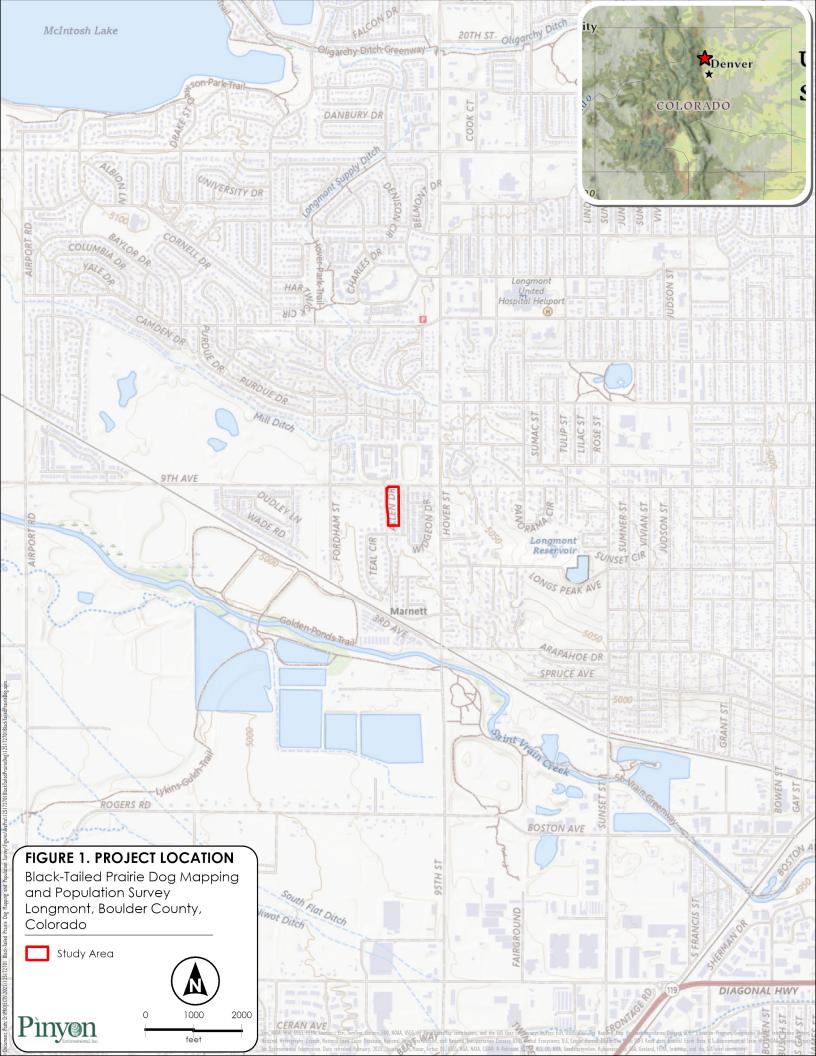






Photo 1. The property is a vacant lot dominated by weedy, herbaceous vegetation and a black-tailed prairie dog (Cynomys Iudovicianus) colony. Photo facing north from the southwestern portion of the property.



Photo 2. The property is bordered on all sides by residential development, limiting any future expansion of the colony. Photo taken in the southern portion of the property, facing east.



Photos taken June 4, 2025



Photo 3. The northern portion of the property included trees and a shipping container. Photo taken in the northern portion of the property, facing south.



