TOWN OF ERIE
PLANNING COMMISSION MEETING
December 2, 2020

SUBJECT: **General Business:**
Redtail Ranch Sketch Plan

PURPOSE: Review and comment on a Sketch Plan application for a residential subdivision proposing 898 residential lots.

A Sketch Plan represents a generalized land use plan and layout for the area proposed to be included within a subdivision. A Sketch Plan application is required to allow for an early, informal evaluation of a proposed subdivision before detailed planning and engineering work has occurred. The Sketch Plan is not part of a formal application for approval of a subdivision and any comments made by the Town in reaction to a Sketch Plan shall not be binding on the Town's consideration of any subsequent Preliminary or Final Plat application, nor result in a vested property right under this UDC or State Statute.

CODE REVIEW: Erie Municipal Code, Title 10

DEPARTMENT: Planning and Development Department

PRESENTER: Audem Gonzales, Senior Planner

STAFF RECOMMENDATION: See Attachments for Staff and Referral Agency Comments

SUMMARY AND BACKGROUND OF SUJECT MATTER:

Owner: Stratus Redtail Ranch LLC
8480 E. Orchard Road, Suite 1100
Greenwood Village, CO 80111

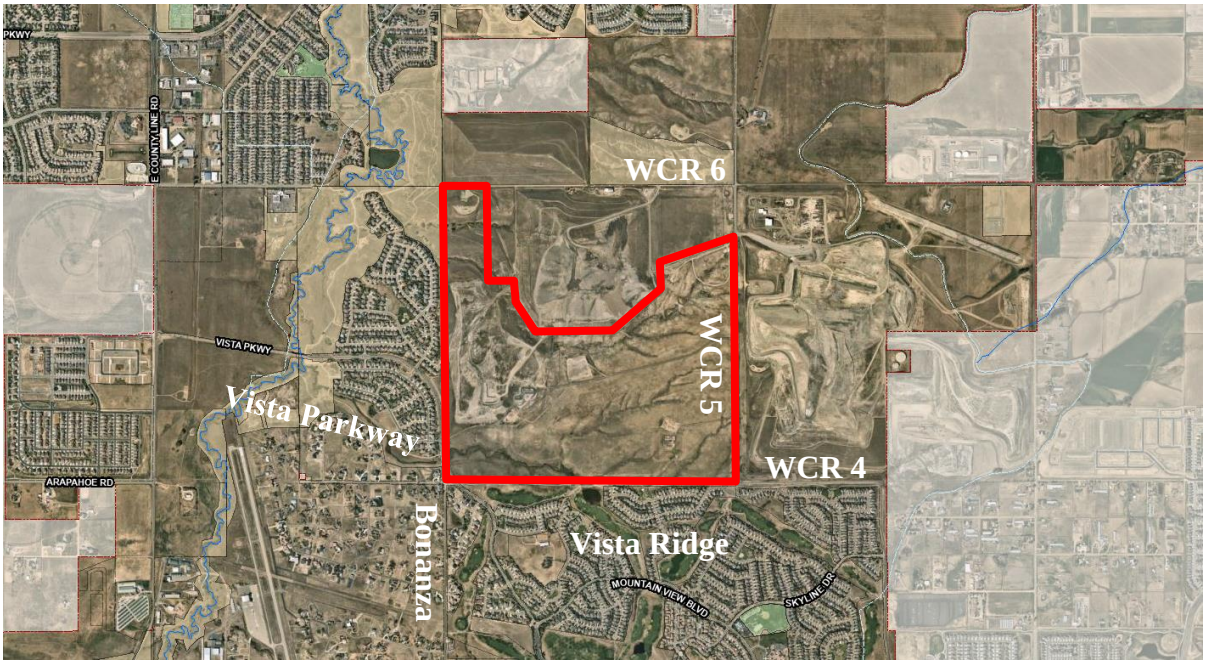
Applicant: Terracina Design
10200 E. Girard Ave. Suite A-314
Denver, CO 80231

Existing Conditions:

Future Land Use:	Landfill and Rural Residential - RR
Zoning:	Public Land Institution – PLI and Low Density Residential - LR
Project Size:	~411 Acres
Existing Use:	Vacant property and Oil and Gas Facilities

Location:

The subject property is located between Weld County Road 5 and Vista Parkway and is situated north of the Vista Ridge Subdivision.

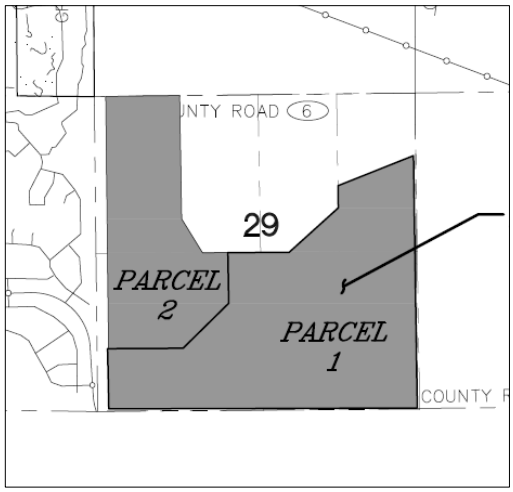


Adjacent Land-Use/Zoning:

	ZONING	EXISTING LAND USE
NORTH	Public Land Institution	Denver Regional Landfill and Vacant Property
SOUTH	PD (Vista Ridge)	Single Family Development
EAST	PD	Front Range Landfill
WEST	PD (Vista Pointe)	Single Family Development

SITE SPECIFIC DEVELOPMENT INFORMATION:

Parcel 1 was annexed into the Town of Erie under the Pratt II Annexation in 2007. The property is zoned LR – Low Density Residential. Parcel 2 was annexed into the Town of Erie under the Denver Regional Landfill Annexation in 2007. The property is zoned PLI – Public Land Institution.



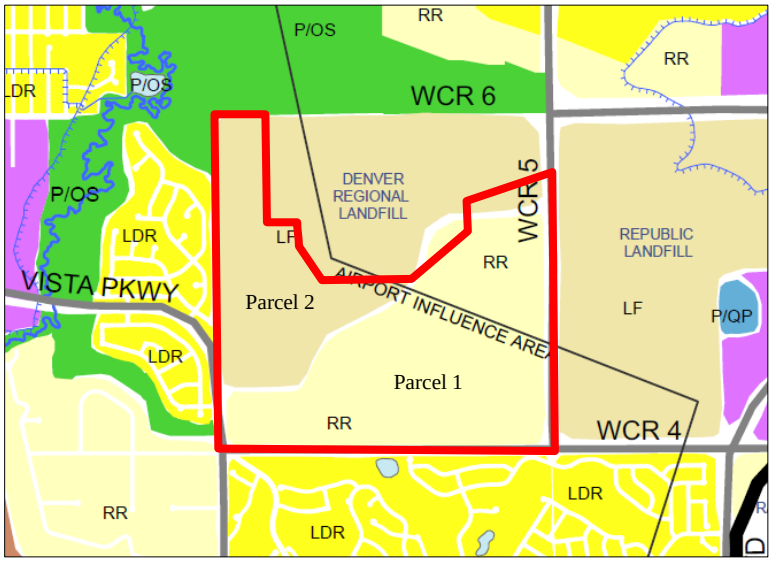
The Sketch Plan proposes developing the overall property with 898 residential units, which includes single-family detached, duplex and townhome products. The project also includes two pocket parks, a neighborhood park, dedicated open space, private open space, and a spine trail.

Existing features within the sketch plan area include three oil and gas facilities and a large environmental contamination site.

Sketch Plan Development Data:

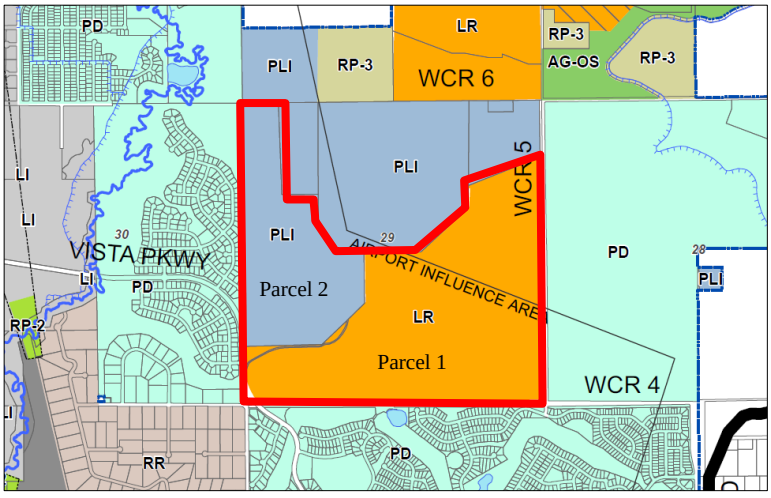
- Sketch Plan Size: ~411 acres
- Residential Development:
  - Single Family Detached: 630 units
  - Duplex 168 units
  - Townhome 100 units
  - **Total** **898 units**
- Amenities:
  - Pocket Parks: 2.3 acres (two pocket parks)
  - Neighborhood Park: 8.4 acres
  - Dedicated Open Space: 44.1 acres
  - Private Open Space: 110.0 acres (includes contamination area)
- Other Elements:
  - Oil and Gas Facilities: 70.7 acres (three separate operation areas)
  - Contamination Area: ~16 acres
  - Public ROW: 56.3 acres

Compliance with Town of Erie Comprehensive Plan:



The property consists of two separate parcels. Parcel 2 is designated on the Comprehensive Plan, Land Use Map as Landfill. Currently, the Comprehensive Plan does not designate residential development for Parcel 2. A Comprehensive Plan Amendment is required to request residential at this location. Parcel 1 is designated as RR - Rural Residential. RR areas provide for a rural setting for large-lot, very low density single-family housing. Rural Residential limits future density to 0-2 dwelling units per acre. The proposed density on Parcel 1 is 2.2 dwelling units per acre, which generally conforms to the Comprehensive Plan. An Annexation Agreement was entered into for Parcel 1 (via Pratt II Annexation), which limited the maximum amount of units and future density to 587 units and 2.2 dwelling units per acre. This sketch plan application conforms to that density.

Compliance with Town of Erie Zoning:



The Redtail Ranch Sketch Plan area is zoned both Public Land Institution (Parcel 2) and Low Density Residential (Parcel 1). The LR zoned area would allow residential development at a density of 5 du/ac, however, the Annexation Agreement restricts the maximum density to 2.2 du.ac. The applicant is proposing 898 dwelling units total within Redtail Ranch. 587 units are located on Parcel 1 (zoned LR), which would yield a density of 2.2 du/ac. That density is consistent with the current zoning and Annexation Agreement. Parcel 2 currently is not zoned for residential. A rezone to a residential zone district or PD zone would be required to allow for residential on Parcel 2. Parcel 2 is shown on the Sketch Plan with a proposed density of ~ 2.1 du/ac.

Housing Mix:

UDC Section 10.6.7.D.1 details housing diversity requirements for proposed subdivisions within the Town. The Redtail Ranch sketch plan totals ~411 acres which would require one of the following housing mixes:

- 5 housing types
- 4 housing types and 1 housing type variation
- 3 housing types and 2 housing type variations

The sketch plan shows 3 housing types (duplex, townhome and single-family detached) and 3 housing type variations (alley loaded duplexes, single-family detached lot size: 5,000-9,999 SF and 10,000-39,999 SF)

Access/Streets:

Primary access into the site is proposed from Vista Parkway and Weld County Road 5 via a new Collector street. Secondary access is from Weld County Road 5 via a local street. The applicant will need to dedicate additional right-of-way for WCR 5 in order to meet Arterial Road standards. All proposed streets will be public while the private alleys and common drives are proposed to be privately owned and maintained. All public streets will need to meet Town of Erie standards and specifications. Town Engineering staff is recommending an amendment to the Annexation Agreement to eliminate the required road connection between Vista Parkway and Bonaza Drive.

Parks and Open Space:

The required dedications for parks and open space are based on Town of Erie Municipal Code standards. The table below details how these requirements are met with this sketch plan application:

	Required Acreage	Proposed Acreage
Pocket Park	1.29 acres	2.3 acres
Neighborhood Park	7.78 acres	8.4 acres
Community Park	12.97 acres	0 acres
Open Space	44.11 acres	44.1 acres

Town of Erie Parks and Recreation staff has concerns on the Neighborhood Park location shown adjacent to the contamination site and are recommending relocation. Parks referral comments shall be taken into account regarding this concern with a future Preliminary Plat application.

Trails/Pedestrian Connections

The sketch plan proposes a series of internal trails that connect different portions of the neighborhood. These trails are placed in private and public open space tracts. A Spine Trail is proposed to cross through the middle of the Redtail Ranch subdivision, connecting the neighborhood park, residential lots and adjacent properties. This

Spine Trail would connect Redtail Ranch to the Vista Pointe Subdivision and the future Sunset subdivision. Connections to the Vista Ridge subdivision are also being discussed. Details on how these connections are made would be determined during Preliminary Plat phase through detailed construction plans. Parks referral comments on trail alignments shall be taken into account with a future Preliminary Plat application.

Open Space and Trails Advisory Board:

The Open Space and Trails Advisory Board has provided the applicant with comments on the spine trail, neighborhood park and internal trails. These comments should be taken into account with a future Preliminary Plat application.

Natural Areas Inventory:

The Town of Erie Natural Areas Inventory Plan identifies two natural areas within the proposed project area. These include sites #127 ("Landfill South", ~80 acres) and #129 ("Landfill North", ~70 acres). Both are located within Parcel 1. Portions of #127 are proposed to be preserved as dedicated open space. #129 is located within much of the contaminated area/buffer area and is proposed as private open space on the sketch plan concept plans.

Undermining:

The site appears to contain undermining associated with the Columbine Mine. Further information will be required at the Preliminary Plat stage to determine any impacts due to undermining.

Oil/Gas Facilities:

There are three existing oil and gas facilities within the sketch plan area. The applicant has depicted the 350-foot residential lot setback and 150-foot right-of-way setback appropriately. A future Preliminary Plat application will require all Surface Use Agreement elements to be depicted on the plat such as easements, setbacks, buffers, access roads, etc.

Environmental Contamination Area:

A significant feature of the Redtail Ranch Sketch Plan proposal is an existing environmental contamination area. In 1984, multiple drums containing ~84,000 gallons of chemical waste from International Business Machines (IBM) were disposed on the site. Numerous environmental investigations have been completed to evaluate impacts stemming from the historical landfill and chemical disposal facility. Multiple cleanup activities have also taken place on the site. By February, 2018, 1,145 drums were excavated from the site. The Town of Erie requested that Pinyon Environmental, Inc. complete an independent third-party analysis of the site's environmental history, previously completed remediation work, proposed remediation work, and proposed mitigation measures. The Town also contracted with CGRS to review the Corrective Measures Design report submitted to Colorado Department of Public Health and Environment (CDPHE). Both consultants have provided reviews and recommendations on the suitability of the site to be developed for residential purposes. Below are those conclusions:

Pinyon Environmental Inc.

> "Pinyon has reviewed numerous reports summarizing the Site's history, site characterization, cleanup activities, and corrective measure plan, as detailed in the previous sections of this report. The Site has an extensive history of impacts associated with both on and off-site landfill operations. Over 1,100 buried IBM chemical drums and an area of approximately 16 acres of solid waste was buried at the Site. The drums and grossly contaminated soils around the drums have been excavated and removed from the Site. Other solid waste and impacted groundwater and potentially impacted soil gas remain on the Site. Groundwater at the Site generally flows from east to west with bedrock high points on the southern and central portions of the Site that restricts the flow.
>
> Geosyntec has submitted, and CDPHE has approved, a CMD which details the approaches that will be taken to remediate impacted soil and groundwater, and prevent the buried solid waste from further negatively impacting human health and the environment (Geosyntec, 2020a). The impact source areas (i.e., the areas where the drums were buried) will be remediated using an ISCO system and MNA, and the solid waste will be capped with an ET cover. Groundwater and soil gas monitoring are proposed to be completed for no less than a 30-year period. The monitoring and inspection requirements were summarized above.
>
> With such an extensive history of environmental issues at the Site, it cannot be guaranteed that mitigation measures will be protective of human health and the environment. However, it is Pinyon's opinion that although the solid waste will remain on Site, if properly implemented, the CMD adequately addresses and mitigates potential concerns associated with future residential development that would occur outside the buffer area. The main source of impacts at the Site were removed during the drum and impacted soil excavations. The proposed ISCO and MNA remediation programs, the capping of the solid waste areas, the proposed buffer area and use restrictions, the stormwater design plan, and the

short and long-term soil gas and groundwater monitoring should address the environmental and human health concerns associated with the former Site uses.

Pinyon recommends the following:

- At least one additional soil gas monitoring point should be installed to the west of the Cap Extent Area West, approximately 350 feet south of WCMW-25.

- Construction activities should be completed with a CDPHE approved Materials Management Plan (MMP) with the oversight of an environmental professional (MMP Supervisor) skilled in the identification and management of solid and/or hazardous wastes. The MMP supervisor should be 40-Hour Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations Trained with and current 8-hour OSHA annual update. Any suspect materials discovered during work should be immediately reported to the CDPHE. Should suspect environmental issues be identified in other areas of the development, it may be necessary to amend the CMD should other impacts be identified during the development of the property.

- Contractors doing work construction supporting development of the property should be educated on the environmental constraints at portions of the Site and be provided instructions to report suspect discoveries that may occur during the work.

- To support mitigation engineering at the Redtail site, Pinyon recommends that soil vapor be sampled at the wells scheduled for post-closure soil gas sampling—beginning early enough to inform the design process. The wells that should be part of this vapor sampling are those located between the creeks and the planned residential areas, particularly near the areas with remaining contamination (northeast corner of the Site). We assume that these wells have screens that extend above the top of the water table at the time of sampling.

- Soil vapor sampling should be completed under floor slabs as they are being constructed to monitor for potential slab-effects which can include concentrating soil vapors. This sampling should be continued as the structures are completed above the slabs to measure the effects of the increased upward pressure gradient that is caused by the enclosed structure. This sampling can be completed on a representative basis for each residential area and would likely focus on the residential structures located closest to the creeks.

- Each proposed residential structure should be constructed with a sub-slab vapor mitigation system to vent potential landfill gases and VOCs. These are often similar (or the same) in construction techniques as a radon venting system. Those systems should be designed to operate both passively and if

concerns are identified later, to be easily retrofitted to operate actively (i.e., with a blower, ideally explosion proof [intrinsically safe]). It may be beneficial to engage an environmental engineer during the structure design to incorporate a venting system, as retrofitting a venting system is more costly than incorporating into the original construction. Further, the environmental engineer should verify proper construction of the systems during and after construction to ensure proper function. Post-construction sampling in the system for the presence of landfill gases and VOCs should be considered, which can be the deciding factor on whether the system should operate passively or actively. This screening can likely be completed with field screening devises such as a PID and a four-gas landfill meter.

- The PCMM Report will be submitted to CDPHE. If the Town desires, it should be requested that copies of the report also be submitted to the Town for review.

- The post-closure soil gas monitoring plan states that if methane concentrations exceeding 100% of the LEL are detected, CDPHE, the Town of Erie, and local emergency response authorities will be notified. It would be recommended that the CDPHE and Town of Erie be notified if 50% of LEL is detected, this way the issues can be addressed before becoming an explosion hazard.

- Pinyon was not provided groundwater or soil gas data for the areas of Parcel 2 that share a boundary with the Denver Regional Landfill; therefore, Pinyon cannot provide recommendations on the Parcel 2 design.

- For the ET cover system, in addition to inspections during the regularly scheduled intervals, the area should be inspected after substantial rain events until vegetation has taken hold. Rules regarding stormwater permits should be followed for this work.

- If underground utilities related to the current and historical oil and gas operations have not been mapped or searched, an investigation should be completed."

CGRS

"CGRS has reviewed the CMD, which includes a synopsis of the long environmental history of the Historical Landfill Site and adjacent properties. Most notably, the removal of over 1,100 drums and the associated remediation of impacts to soil and groundwater that have been completed since 2018. The CMD was prepared to address residual impacts to soil and groundwater at the Historic Landfill Site in preparation of a residential development on the Stratus Redtail Ranch Property to the south and Stratus Redtail Ranch 2 Property to the west-southwest of the Historic Landfill Site. The main components of the CMD were the remedial efforts to address impacts to groundwater via ISCO injections,

and to protect human health and the environment from residual impacts to soil at the Historic Landfill Site via development of an ET cover over the extents of the remaining solid waste areas. In addition to remedial efforts, the CMD outlines the post-closure monitoring plan for long-term groundwater monitoring and inspection of the ET cover.

The Historical Landfill Site has a long and extensive history of environmental impacts that pose risks to human health and the environment. If properly executed, maintained, and monitored the CMD could sufficiently minimize environmental risks within the East and West Cap Extents and the Buffer Area. However, the CMD does not address the nitrogen and selenium concentrations in groundwater in the downgradient POC monitoring well WCMW-25 and also does not include a POC well to the south of monitoring wells MW-3B and MW-22, which have elevated nitrogen, selenium, and COCs. Shallow groundwater at the Site is approximately 20-feet bgs, however, there are locations where groundwater is as shallow as one-foot bgs (Geosyntec 2020, section 2.3.3). As such, elevated concentrations of nitrogen and selenium in shallow groundwater may pose risks to human health and the environment and should be considered during development. To address nitrogen and selenium in groundwater, additional POC wells should be installed downgradient of WCMW-25 along the buffer area extent and cross gradient (south) of MW-3B and MW-22 to delineate the extent of nitrogen and selenium concentrations and the potential of migration onto the Stratus Redtail Ranch Properties. If additional POC wells contain elevated concentrations of nitrogen and selenium, a groundwater characterization program is recommended on the Stratus Redtail Ranch Properties prior to commencing development activities."

Next Steps:

To move forward with the concept presented in the Sketch Plan, the applicant will need to apply for the following land use applications:

a. Comprehensive Plan Amendment – only a portion of the site is currently eligible for residential development. Parcel 2 would need to be residentially designated on the Comprehensive Plan.
b. Planned Development (PD) Zoning – Parcel 2 is not zoned for residential development. Residential zoning or PD zoning is required for this area. Modifying lot dimensions, building orientations architecture, etc. also requires PD zoning. It is anticipated that this development would require PD zoning.
c. Annexation Agreement Amendment
d. Preliminary Plat
e. Final Plat
f. Site Plan – Townhome buildings require site planning