

Commissioners:

Darryl Glenn (President)

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Planning and Community Development

Craig Dossey, executive Director

10-25-18

John Maynard

[Jmaynard@nescolorado.com](mailto:Jmaynard@nescolorado.com)

Dear Applicant and/or Consultant:

Subject: Meadowlake Ranch Sketch Plan SKP-18-4- Review 1

**The purpose of this letter is to provide you with the review agency responses to the above named development application that have been received to-date by Planning and Community Development.**

**You are encouraged to directly contact those agencies that did provide review comments if the comments require additional action by the applicant/applicant’s representative. You are also encouraged to directly contact those agencies that did not provide review comments if such response is required by state statutes and the El Paso County Land Development Code.**

**EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT**

The Sketch plan is being reviewed within the criteria listed in the address the review and approval criteria in Section 7.2.1.D, and Chapter 8 of the Land Development Code (2018) and the procedures manual.

**Planning**

1. Staff received a letter from the FAA in opposition to this application, please address. Please note that the adjacent airport land is acknowledged in the current Code as GA-O (General Aviation Overlay).
2. The Falcon Peyton Small Area Plan (2008) identifies the Meadowlake Airport in Section 4.4.3, *Meadow Lake Airport Area*, page 4-23 and in Section 2.8.4, *Air Travel*, page 2-61. The airport is also included in the goals and principles identified in Section 3.5, *Transportation* on page 3-2. The sketch plan area is also depicted as a Proposed Urban Density Development on the Recommendations Map. Section 4.4.5, *Highway 24 Corridor*, would also apply to the land area proposed for development. Please address in the letter of intent.

1. See uploaded redlines in EDARP.
2. Geology and soils and wastewater study report shall be required with subsequent preliminary plan that meets the Land Development Code (2018), as amended. A review by the CGS is required with subsequent preliminary plans.
3. Please note that a sketch plan approval does not authenticate a “vested property right” associated with the land use. The County Attorney’s office (Lori Seago) has advised staff vesting cannot occur with a sketch plan. It may be requested with a PUD or more specific plan.
4. Water Resources report meeting the requirements of Chapter 8.4.7 of the Code shall be submitted with the preliminary plan and shall include water quality.
5. A visual impact analysis typically includes the impacts from the propose development to adjacent properties. I do not see the need to address this due to the proposed industrial and commercial uses near the existing commercial airport to the south. Required buffers with zone district boundaries across the highway and adjacent to vacant residential properties should be depicted on the sketch plan.

**Engineering Division**

See uploaded comments in EDARP.

**ELPASO COUNTY ENVIRONMENTAL SERVICES**

The El Paso County Environmental Division has completed its review of the above referenced submittal. Our review consisted of the following items: wetlands, federal and state listed threatened or endangered species, general wildlife resources and noxious weeds.

1. A completed U.S. Army Corps of Engineers (USCOE) permit shall be provided to the Planning and Community Development Department prior to project commencement. Alternatively, a letter from a qualified wetland scientist indicating why such a permit is not required for this project may be acceptable. The applicant is hereby on notice that the USCOE has regulatory jurisdiction over wetlands. It is the applicant’s responsibility, and not El Paso County’s, to ensure compliance with all applicable laws and regulations, including, but not limited to, the Clean Water Act.
2. The project may interfere with mule deer and swift fox habitat. Information regarding wildlife protection measures shall be provided including fencing requirements, garbage containment, and riparian/wetland protection/buffer zones, as appropriate. Information can be obtained from Colorado Parks and Wildlife.

It is strongly recommended that the applicant obtain the necessary approvals from all federal, state and county agencies as a part of their planning process.

We appreciate the opportunity to comment on this project. If you have any questions or concerns, please contact me at (719) 520-7879.

**ELPASO COUNTY PARKS DEPARTMENT**

Request by N.E.S., Inc on behalf of Mr. Dan Ferguson for approval of the Meadowlake Ranch Sketch Plan. The 307.3 acre property is currently zoned A-35 and is located between Eastonville Road and East Highway 24, northwest of the intersection of Judge Orr Road. The property is located within the bounds of the Falcon/Peyton Small Area Plan, and includes proposed areas of urban residential, rural residential, commercial, and light industrial land uses.

The 2013 El Paso County Parks Master Plan shows one existing and two proposed regional trail connections, as well as two proposed bicycle routes impacted by the project. The existing Rock Island Regional Trail is located immediately adjacent the southeast property boundary, running southwest-northeast along the northern side of East Highway 24. The proposed Eastonville Primary Regional Trail is located along the western boundary of the property, preliminarily located along either side of Eastonville Road. The Eastonville Regional Trail provides connectivity to the Meridian Ranch development, as well as Falcon Regional Park, located approximately 1.25 miles to the north. The proposed Judge Orr Secondary Regional Trail traverses east/west along the southern property boundary and will provide connectivity to Meridian Ranch to the west. Furthermore, the proposed Curtis Road and Judge Orr Road Bicycle Routes run east/west adjacent to the northern and southern property boundaries, respectively. Dedicated public right-of-ways already exist along the aforementioned bicycle routes, so no easement requests are necessary at those locations; however, the applicant is advised that multi-model transportation options will be developed within the right-of-ways in the future.

The Meadowlake Ranch Sketch Plan currently shows 24.4 acres of open space, dedicated primarily to the protection of an existing drainage and wetlands area. This constitutes approximately 8% of the total project area of 307.3 acres. At this time, no other open space areas, parks, or trails are depicted in the Sketch Plan, nor is there mention of them in the Letter of Intent. Dependent on the final zoning classification, Meadowlake Ranch may or may not be obligated to conform to the El Paso County Land Development Code 10% open space requirement.

Staff recommends that the developers, through forthcoming preliminary plans and final plats, designate and provide to El Paso County 25-foot trail easements along Eastonville Road, as well as along Judge Orr Road for the purpose of construction and maintenance of the Eastonville Primary Regional Trail and the Judge Orr Secondary Regional Trail, respectively. Staff also encourages the developers to consider the addition of open spaces, neighborhood,and community parks, so as to provide recreational opportunities for residents and visitors of Meadowlake Ranch. Furthermore, staff encourages the developers to construct internal trail systems that link residents not only to these possible neighborhood and community parks, but also to the County’s surrounding regional trail system.

**Recommended Motion (Sketch Plan):**

Recommend to the Planning Commission and the Board of County Commissioners that the approval of Meadowlake Ranch Sketch Plan includes the following conditions: (1) the developer is encouraged to explore urban park options in the form of additional open space areas, trails, community parks, neighborhood pocket parks or other recreational opportunities; (2) designate and provide to El Paso County a 25-foot trail easement along Eastonville Road, that allows for public access, as well as construction and maintenance by El Paso County of the Eastonville Primary Regional Trail; (3) designate and provide to El Paso County a 25-foot trail easement along the north side of Judge Orr Road, that allows for public access, as well as construction and maintenance by El Paso County of the Judge Orr Secondary Regional Trail; (4) the easements shall be shown on all forthcoming preliminary plans and final plats, and the aforementioned easements shall be dedicated to El Paso County on the forthcoming final plat(s); (5) fees in lieu of land dedication for regional and urban park purposes will be calculated upon review of forthcoming preliminary plans and final plats, and will be required at time of the recording of the forthcoming final plats. A park lands agreement may be an acceptable alternative to urban park fees provided the agreement is approved by the County and executed prior to recording the forthcoming final plats.

**COLORADO STATE FOREST SERVICE**

The primary wildland fuel type for this proposal is grassland with scattered trees having a low wildfire hazard potential. No special fire mitigation plans or other actions are necessary for final approval by the Colorado State Forest Service.

**ELPASO COUNTY CONSERVATION DISTRICT**

The El Paso County Conservation District Board of Supervisors have no comments at this time

**MOUNTAIN VIEW ELECTRIC ASSOCIATION INC**

This area is within MVEA certificated service area. MVEA will continue to serve this area according to our extension policy. Connection requirements may include provisions for necessary line extensions and or other system improvements, and payment of all fees under MVEA line extension policy. Information concerning these requirements can be obtained by contacting the Engineering Department of MVEA.

MVEA has no objection to the proposed Sketch Plan.

MVEA has existing facilities near and within this parcel of land. If there is any removal or relocation of facilities it will be at the expense of the applicant. Easements for existing facilities along with new utility easements will be required on the Preliminary Plan and Final Plat in order to serve.

If additional information is required, please contact our office at (719) 495-2283.

Sincerely,

Cathy Hansen-Lee

Engineering Administrative Assistant

**FALCON FIRE PROTECTION DISTRICT**

**The Falcon Fire Protection District provides the following comment(s) and note(s) on the proposed Sketch Plan.**

**COMMENTS:**

**Final Plat Review Required:**

All Final Plats shall be submitted to the Falcon Fire District for final review and approval prior to construction.

**FEES:** The Falcon Fire Department collects a cost recovery fee of $429.00 per final plan associated with this preliminary development plan review. At time of Final Plat review a payment shall be made to the Falcon Fire Department located at 7030 Old Meridian Road, Falcon Colorado. Please be advised that the fire hydrant/water plan or the construction document will not be reviewed by the Falcon Fire Department until this fee is received.

**Notes:**

**WIDTH:** Fire apparatus access roads shall have an unobstructed width of not less than 20-feet except for approved security gates.

**FIRE LANE MARKING:** No parking fire lane sign/striping shall be provided as follows on all fire access roads;

Less than 28 feet Both Sides

28 feet to 34 feet One Side

More than 34 feet Not Required

**VERTICAL CLEARANCE:** Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13-feet 6-inches.

**LOADING:** Fire apparatus access roads shall be designed, constructed and maintained to support the imposed loads of fire apparatus weighing at least 75,000-pounds.

**SURFACE**: Fire apparatus access roads shall be surfaced so as to provide all-weather driving capabilities by means of asphalt, concrete or other approved driving surfaces. Gravel roads or other alternatives may be acceptable; however, PE stamped engineered specifications for such alternatives, showing that the loading specifications and all weather surface capabilities have been met or exceeded must be submitted to the Falcon Fire Department for review.

**DEAD-END ACCESS:** Dead-end fire apparatus access roads in excess of 150-feet shall be provided with a turnaround meeting the requirements of the International Fire Code.

**BRIDGES AND ELEVATED SURFACES**: Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge or elevated surface shall be constructed and maintained in accordance with AASHTO-Standard Specification for Highway Bridges.

**GRADES:** Grades for fire apparatus access roads shall be no more than 10% maximum grade.

**GATES.** Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. The minimum gate width shall be 20 feet or as wide as necessary to facilitate the required minimum turning radius.

2. Gates shall be of the swinging or sliding type.

3. Construction of gates shall be of materials that allow manual operation by one person.

4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.

5. Electric gates shall be equipped with a KNOX (TM) key system installed in an approved manner. Electronically operated gates shall have a failsafe, manually operated, KNOX (TM) key override switch.

6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or a KNOX ™ padlock.

7. Locking device specifications shall be submitted for approval by the fire code official.

**WATER SUPPLY:** Required water supplies for fire protection either temporary or permanent shall be made available as soon as combustible material arrives on site.

The portion of the development that is protected by wells and sceptics will need to provide a plan for providing fire water. Either hydrants or cisterns are expectable fire water supply sources.

**HYDRANT REVIEW:** A separate water/hydrant plan shall be submitted to the Falcon Fire Department, 7030 North Meridian Road in Falcon, Colorado for review is prior to submittal of construction plans.

**WATER PLANS**: The water/hydrant plans for this development/site will be required to have the range of the gross square footages (including all floors, lofts, garages, basements, mezzanines, etc.) of the structures to be constructed. This information will be used to determine the fire flow requirements for the development. Water plans cannot be reviewed if this information is not provided. Ensure that the water/hydrant plans indicate adequate fire flow requirements for the sizes of structures being constructed.

**TIMING OF INSTALLATION:** Fire department access roads shall be made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided.

**ACCESS FOR FIREFIGHTING:** Approved vehicle access for firefighting shall be provided to all construction/demolition sites. Vehicle access shall be provided to within 100-feet of temporary or permanent fire department connections (FDC). Vehicle access shall be provided by either temporary or permanent roads capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

**STREET SIGNS:** Temporary or permanent street signs shall be installed at each street intersection when construction of roadways allows passage by vehicles.

**PIKES PEAK REGIONAL BUILDING DEPARTMENT**

Regarding a request for approval of a sketch plan for Meadowlake Ranch, Enumerations has the following comments: 1. The developer should submit a list of proposed street names to Justin Annan ([jannan@elpasoteller911.org](mailto:jannan@elpasoteller911.org)) or Glenn West ([gwest@elpasoteller911.org](mailto:gwest@elpasoteller911.org)) so that as each phase is gets closer to approval, the street names are already approved. 2. The letter of intent seem to imply that the residence currently on the property will remain once the development is under way. Depending upon the final street configuration and access to the home, it may be necessary for the existing residence to change its address. Enumerations will comment to this as needed whenever the appropriate phase comes through for comment. 3. Enumerations will have more specific comments as each section of the overall development is submitted for review. Floodplain has no comment to this submittal.

**COLORADO PARKS AND WILDLIFE**

Colorado Parks and Wildlife (CPW) has reviewed the sketch plans for the Meadowlake Ranch located on the northwest corner of Judge Orr Road and US Highway 24. This area included within the Development boundaries will sustain numerous wildlife species including deer, pronghorn, coyote, fox, raptors, songbirds, and numerous small mammals. CPW makes the following recommendations.

CPW recommends the following Best Management Practices when working in or near aquatic habitats:

* Drainages should be crossed perpendicular to the flow of the stream
* Use existing road crossings and existing stream crossings for vehicles and other construction equipment instead of building new roads and stream crossings
* The width of construction should be minimized within the 100-year floodplain,
* Stream bank, wetland restoration/improvement should be performed, where necessary
* Vehicle and equipment crossing of creeks/streams should be made in locations that will cause the least erosion of banks and sedimentation.

We would request that all areas of disturbance near stream crossings and any exposed soils above the ordinary high water mark be re-vegetated with a native seed mix. This will contribute to the replacement of lost riparian vegetation values and minimize establishment of noxious weeds. The placement of willow sprigs or bare root stock should also be considered along the banks, especially in those areas which have been disturbed. We recommend planting of vegetation along the bank to help reduce and control erosion and contribute to bank stability over the long term. The site should be monitored for a period of at least two growing seasons. Any stands of noxious weeds that become established should be controlled with appropriate mechanical and/or chemical methods suitable for the proposed location.

CPW recommends using a clean fill material, if needed, that would be conducive to growing

native vegetation that will help stabilize the banks. Non-native vegetation can overrun native vegetation and can become problematic. A seed mixture of native grasses is also recommended to provide a good support system in the soil.

CPW further recommends crossing riparian corridors and streams at a perpendicular angle, in order to reduce impacts to natural resources, as well as spanning the corridors with structures located outside the riparian and stream zone. CPW recommends avoiding treed areas of cottonwood and willow, as these areas provide bird and wildlife habitat. During construction, stream crossing by construction vehicles should be avoided. CPW requests that any new service roads that are proposed for construction in conjunction with the project avoid crossing creeks or stream beds to avoid impacts to wildlife and habitat. If any new access or maintenance roads will be constructed that cross stream habitat, CPW would like to be consulted on best management practices and options for construction to minimize impacts. A construction design for any new or reconstructed riparian crossing that actively minimizes barriers to fish passage at all water levels and mitigates any existing barriers where possible would minimize the negative impact of the project on native fish species.

As for more general construction protocols, CPW recommends low speeds for construction vehicles to avoid wildlife collisions. Where new roads are required, CPW recommends that these single-purpose roads are gated to reduce traffic disruptions to wildlife. If any temporary (e.g., construction) or permanent fencing is proposed, CPW recommends that it is the

wildlife-friendly fencing that allows young to cross, and does not include high-tensile hogwire.

With the design of the open space areas in the project, CPW recommends a 100 foot buffer zone be permanently placed around the creeks and ponds. If a trail is constructed near the creek or ponds, it should be a minimum of 100 feet from the edge. This buffer zone will offer wildlife utilizing the creek and ponds less disturbance by development and decrease the likelihood of human and wildlife encounters. The existing native riparian vegetation around the creeks, the ponds and in the drainage ways should be kept intact for wildlife habitat and to increase ground stabilization.

If trails are placed too close to areas utilized by wildlife it creates disturbances resulting in reduced wildlife viewing opportunities. CPW recommends constructing trails on the outer edges of open space areas. This minimizes wildlife disturbance and creates increased wildlife viewing opportunities. Trails near creeks and drainage areas should cross perpendicular rather than run parallel to these critical wildlife habitat areas. Crossings should occur in areas that have the least usage by wildlife in order to have minimal impacts on wildlife.

Suitable habitat for nesting raptors and migratory birds may also exist within the project area. CPW recommends the use of preconstruction surveys to identify raptor nests within the project area and implement appropriate restrictions. Care should be taken to avoid the destruction of active dens and nests while constructing structures, ponds, and trails. Possible dens or nests should be monitored for species activity. CPW would be concerned if trees and snags were removed for the development. The main concern with removal of trees is that these trees may be currently occupied or historic nest sites. Please take care to avoid removal of trees with occupied nests. For raptors, an active nest is any nest that is frequented or occupied by a raptor during the breeding season or which has been active in any of the five previous breeding seasons. Many raptors use alternate nests in various years; therefore, a nest may be active even if it is not occupied in a given year. Removal or relocation of any active raptor or migratory bird nest will require consultation with CPW and US Fish and Wildlife Service prior to disturbance. Active and potential nest sites and winter night roosts should be considered when evaluating disturbance during construction.

Further along in the process, when fences are designed into the project, CPW recommends the developers consult our publication *Hanophy, Wendy* “Fencing with Wildlife in mind.” (*CPW.state.co.us. 2009*). Fences can cause many problems for wildlife, including death, entanglements, and barriers to movements. The publication is available on our website and we would be happy to provide a link to the PDF specifically. The use of privacy fencing, chain link fencing, and other exclusionary fencing should be at least 6 feet high and should be restricted to the immediate area surrounding the buildings or within the designated building envelope and should not be used as a method to designate boundaries of larger lot sizes (> 1 acre). Fencing outside the immediate building envelope or area surrounding the buildings on larger lots within the known range of elk, deer and pronghorn should be a maximum top height of 42” with at least 12” spacing between the top two wires or rails and a bottom wire or rail at least 16” above the ground to allow passage of juvenile animals and pronghorn antelope. It is also recommended that the top and bottom wires be a twisted barbless type or smooth wire or rail construction. Construction of ornamental wrought iron fencing with

closely spaced vertical bars (<12”) and sharp projections extending beyond the top horizontal bar should be strongly discouraged in areas where deer and pronghorn are known to occur.

This type of fencing typically ensnares deer and pronghorn by the hips when trying to squeeze through and impales animals attempting to go over the top. It should be noted that it is very distressing to find wildlife in or impaled on fences.

Other interactions with wildlife should be considered after the project is completed. The following is a list of general recommendations the CPW would like to be taken into consideration with the residential side of this development in order to avoid nuisance conflicts with wildlife. Many times these conditions can be enforced through the local Homeowner’s Association or through covenants.

Pets should not be allowed to roam free and fences should be installed to decrease or eliminate this problem. It is strongly encouraged that dog kennels have a top enclosure, regardless of the height of the kennel. Dogs and cats chase or prey on various wildlife species. One benefit to keeping animals under control is that they are less likely to bother other people, be in roadways or become prey for coyotes, foxes, eagles, hawks or owls.

Feeding of all wildlife should be prohibited, with the exception of songbirds. The use of bird feeders, suet feeders, and hummingbird feeders are discouraged. However, if feeders are used, they should be placed so they are inaccessible to raccoons or skunks and other wildlife species that might cause damage or threaten human safety. It is illegal to feed big game including deer and pronghorn.

Trash should be kept indoors until the morning of trash pickup. Skunks, raccoons, and other scavenging wildlife are attracted to garbage and do become habituated. Pet food is also attractive to scavengers, so pets should be fed inside. If pets are fed outside, feeding should occur only for a specified period of time and food bowls returned afterwards to a secure site for storage. Pet food left outside attracts various wildlife species which in turn attracts predators. Barbecue grills should be placed in a secure area when not in use.

When landscaping lots, it is strongly recommended that native vegetation be used, as wildlife can be attracted to ornamental and floral landscaping features. Planting of trees and shrubs that are attractive to native ungulates (deer and pronghorn) should incorporate the use of materials that will prevent access and damage (fencing, tree guards, trunk guards, etc.).

CPW appreciates being given the opportunity to comment. Please Feel free to contact District Wildlife Manager Aaron Berscheid at 719-439-9601 or [aaron.berscheid@state.co.us](mailto:aaron.berscheid@state.co.us) should you have any questions or require additional information.

Sincerely,



Frank McGee

Area Wildlife Manager

**WOODMEN HILLS METRO**

Meadowlake Ranch is not within the Woodmen Hills Metropolitan District's boundaries. It is adjacent to the District's boundaries and providing water and wastewater service could be accomplished. However, the property would have to be included into the District. Details would be determined in the inclusion process.

**ELPASO COUNTY HEALTH DEPARTMENT**

Please accept the following updated comments from El Paso County Public Health (EPCPH) regarding the sketch plan referenced above:

* No immediate issues identified by EPCPH with the proposed sketch plan.
* Woodmen Hills Metropolitan District will provide water and wastewater services to the proposed urban and commercial areas. The rural residential area (2.5 acres+ lots) is proposed to have individual wells for water and onsite wastewater treatment systems (OWTS) for wastewater treatment. All current EPCPH OWTS regulations must be satisfied with each lot proposed.
  + El Paso County Public Health encourages planned walk-ability of residential and commercial areas. Consider appropriate connections to commercial areas through the use of sidewalks, and bike trails. Walk-ability features help reduce obesity and associated heart diseases.
  + Earthmoving activities Earthmoving activities greater than 25 acres require a Construction Activity Permit from the Colorado Department of Public Health and Environment, Air Pollution Control Division. Go to the El Paso County Public Health site <http://www.elpasocountyhealth.org/service/air-quality>for the link to the Colorado Department of Public Health and Environment, Air Pollution Control Division, for the permit application.
  + All water quality detention basins must have mosquito control included as a part of a maintenance plan to help control mosquito breeding habitat and minimize the potential for West Nile Virus in the area.

Mike McCarthy, R.E.H.S.

El Paso County Public Health

[mikemccarthy@elpasoco.com](mailto:mikemccarthy@elpasoco.com)

719-575-8602

21Oct2018

**COLORADO GEOLOGICAL SURVEY**

The Colorado Geological Survey (CGS) has completed its site visit and review of the above-referenced project. We understand the applicant proposes “to evaluate the feasibility of 85.5 acres of rural residential, 117 acres of urban density residential, 32 acres of commercial, and 93 acres of industrial land uses.” Well and septic systems are proposed for the rural residential portion of the development. The documents provided for our review included: Application and Letter of Intent (8.18), Master Development and Drainage Report (Terra Nova, 8.18), Sketch Plan (NES, 6.13.18), Preliminary Soil, Geology, Geologic Hazard, and Wastewater Study (Entech, 7.30.18) and various other documents.

Entech’s report contains a very good description of the site’s geology, surface and subsurface conditions and engineering properties, geologic hazards and development constraints. Entech’s recommendations regarding mitigation of hazards and constraints related to shallow bedrock, expansive soils, artificial fill, erosion, floodplain, ponded water, shallow groundwater, seasonal shallow groundwater and potentially seasonally shallow groundwater areas are prudent and should be strictly adhered to. We offer the following comments and recommendations.

Groundwater, perched water and foundation drainage recommendations. Groundwater was observed in six of the eight borings and in one of the two pits. Levels ranged from 5 to 12 feet below ground surface. The presence of active drainages, wetlands, and ponded water within the site indicate that groundwater and perched water should be expected to occur at very shallow depths, at least seasonally. Groundwater levels will fluctuate and perched water is likely to collect above clayey, less permeable soil layers, on top of the bedrock surface, and within foundation excavations (which tend to be more loosely backfilled than the surrounding natural ground), as a result of landscape irrigation, runoff from roofs and paved areas, and infiltration from septic systems, causing wet or moist conditions in the soils immediately surrounding basement walls and foundations.

Since lowermost floor and crawlspace levels must be located at least three feet above maximum anticipated groundwater levels, full-depth basements may not be feasible on all lots. Additional investigations will be necessary, and basements should be considered only on lots where site-specific water level observations (preferably monitored through a full spring-summer-fall cycle) indicate that the 3-foot separation between lowermost floor or crawlspace levels and maximum anticipated groundwater surface can be maintained.

Individual perimeter foundation drain systems should be constructed on all lots, to help prevent infiltration of perched water (on lots where basements are determined to be feasible), and to help control wetting of potentially collapsible (or loose) or expansive soils in the immediate vicinity of foundation elements. It is critical that the perimeter drains are sloped to discharge to an interior pumped sump or a gravity outlet that discharges water as far as possible away from all structures.

**Soil and bedrock engineering properties.**

Entech makes appropriate preliminary geotechnical recommendations based on the results of eight borings, and two test-pits, limited SPT’s (standard penetration tests, an in situ test indicating relative density) and limited laboratory testing. They have identified sporadic areas of expansive soils within the site. We concur with Entech’s recommendation that site specific, design-level geotechnical investigations be conducted for all proposed structures.

• The site specific foundation investigations, including drilling, sampling, lab testing and analysis will be needed, once building locations are finalized to characterize soil and bedrock engineering properties such as density, strength, water content, and swell and consolidation potential; identify unstable and potentially moisture-sensitive (expansive and collapsible) soils and expansive claystone bedrock; determine depths to groundwater and bedrock; evaluate the feasibility of full-depth basements, if planned; identify overexcavation areas, if stabilization (of loose soils) is determined to be necessary; and provide earthwork, foundation, floor system, surface and subsurface drainage, and pavement recommendations for design purposes.

Thank you for the opportunity to review and comment on this project. If you have questions or require further review, please call 303-384-2654, or e-mail jlovekin@mines.edu.

Sincerely,

Jonathan R. Lovekin, P.G.

Senior Engineering Geologist

**Federal Aviation Administration (FAA)**

RE: Meadowlake Ranch Development, EA # EA17227 - File # SKP184

The Federal Aviation Administration, Denver Airports District Office (FAA) was notified by the Meadow Lake Airport Authority (MLAA) that El Paso County is considering approval of the above referenced residential development, Meadowlake Ranch. The FAA is opposed to residential uses of this proposed project. Due to the close proximity to Meadow Lake Airport’s Runway 15/33, residential uses of this proposed development could potentially have negative impacts on persons and property on the ground and the safety and utility of the National Airspace System.

Meadow Lake Airport is a busy General Aviation airport, with approx. 383 based aircraft and 65,000 annual operations (a take-off or landing). It is utilized by a variety of aircraft, ranging from small, single- engine propeller airplanes up to jet aircraft that operate during the day and night. The airport is a Federally-funded, public use airport that is required by Federal law to remain open to all types of aircraft 24 hours a day, 7 days a week.

The Federal Government has made a significant investment of public funds in the Meadow Lake Airport. Under the current Federal airport aid program, the FAA has provided over $7.5 million in development and planning grants to this airport. This investment requires the MLAA, as the airport sponsor, to comply with specific Federal obligations, known as Federal grant assurances. Among many other requirements, Federal grant assurances require MLAA to preserve and operate Meadow Lake Airport in accordance with FAA regulations and standards and to protect the airport from non-compatible land uses.

Incompatible land use at or near airports may result in the creation of hazards to air navigation and reductions in airport utility due to obstructions to flight paths or noise-related incompatible land use caused by residential construction development too close to the airport. FAA considers residential development adjacent an airport to be a non-compatible land use (see FAA Order 5190.6B, Airport Compliance Manual, Chapter 20, Compatible Land Use and Airspace Protection).

The southern boundaries of the proposed Meadowlake Ranch is less than 1,300 feet from the end of Runway 15/33 along the extended centerline of this runway. Runway 15/33 is the primary runway at Meadow Lake Airport, serving approx. 95 percent of the airport’s annual aircraft operations. This means residents of Meadowlake Ranch will be subject to an average of 95 overflights daily. These aircraft will be at low altitudes as they approach and depart the airport. In accordance with standard operating procedures, aircraft approaching and departing Runway 15/33 could be operating at altitudes lower than 400 feet above the proposed project. This is particularly the case over higher terrain to the north of the airport.

As a consequence of aircraft overflights, residents would be subjected to considerable “single-event” noise impacts from aircraft overflights, which residents are particularly sensitive to during nighttime hours. In addition, there could be visual (perceptual) impacts from aircraft operating into and out of the airport. While these types of operations represent safe and typical flight procedures, it may be disconcerting to many people due to a perceived hazard of low flying aircraft.

Further, there is no guarantee that noise levels at the proposed development will remain the same. The proposed development is so close to Meadow Lake Airport that any change to aircraft operations, and the type of aircraft that use the airport, could readily increase the amount of aircraft noise and overflight over the proposed development. Please be aware FAA would not support any Federal assistance to mitigate aircraft noise or incompatible land uses associated with this proposed development, including soundproofing, the acquisition of houses and relocation of residents. Per FAA policy, remedial noise mitigation measures for new non-compatible development constructed after October 1, 1998 are not eligible for Federal funding (see FAA Final Policy on Part 150 Approval of Noise Mitigation Measures: Effect on the Use of Federal Grants for Noise Mitigation Projects, dated April 3, 1998).

Although the frequency of aircraft accidents is comparatively very low, the numbers of aircraft using the concentrated airspace of airport approach and departure areas, together with the complexities of takeoff and landing operations, does mean that accidents are proportionately higher in those areas than in other locations farther away from airports. MLAA reports that aircraft annually make emergency landings in the area of the proposed development. Most of these aircraft can be towed back to the airport because they have landed in an open field. The most recent incident was on August 23, 2018, when an aircraft lost power and crashed in the area of the proposed development, approx. a X mile north of Runway 15/33. This aircraft sustained substantial damage. This is why the FAA strongly discourages the congregation of people under airport traffic patterns and approach and departure areas. The proposed Meadowlake Ranch development is within the approach and departure areas for Runway 15/33.

The FAA works with airport sponsors and their surrounding communities to keep approach and departures areas near an airport as clear as possible in order to protect people and property on the ground. In particular, land uses involving large congregations of people, including schools, churches and hospitals are strongly discouraged under approach and departures paths. The State of Colorado also has enacted similar requirements to protect persons and property near airports (see Colorado Revised Statute 24-65.1-202, Criteria for Administration of Areas of State Interest, and 43-10-133, Safe Operating Areas Around Airports).

In accordance with Title 14 of the Code of Federal Regulations (14 CFR) Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace, and Colorado state law, the developer of Meadowlake Ranch must request an airspace analysis of the proposed developed to determine potential aeronautical hazards in advance of construction to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. In particular, multi-storied buildings in the proposed development must be analyzed to determine to if they need to be lowered and/or lighted with obstruction lights.

FAA reviews construction proposals through the submittal of FAA Form 7460-1, Notice of Proposed Construction or Alteration. If any portion of the proposal is located within 20,000 feet of a public use runway (and breaks a 100:1 plane coming off the nearest point of the nearest runway); or, is more than 200 feet above ground level at any location, the FAA requires the project’s proponent to file a Form 7460-1. If the proposal does not meet any of the criteria above, it may still be necessary to file a Form 7460-1 if the structure requires an FCC license or there is a potential for navigational equipment interference. The FAA uses information provided on this form to conduct an aeronautical review to determine if the proposal will pose an aeronautical hazard and to minimize the adverse effects to aviation. FAA Form 7460-1 can be filed electronically at www.oeaaa.faa.gov.

For the reasons discussed above, the FAA cannot support the construction of residences so close to Meadow Lake Airport. We recommend El Paso County not approve residential development as proposed and explore alternative uses of this land that better conform with Federal, state and industry recommendations for compatible land uses near airports.

If you have questions regarding the above comments or would like to meet to discuss our concerns, please contact me at (303) 342-1259.

Sincerely,

John Bauer

Manager

FAA/Denver Airports District Office

cc: Darryl Glen, El Paso County Board

Leo Milan, Colorado Office of the Attorney General David Ulane, CDOT — Division of Aeronautics

Dave Elliot, Meadow Lake Airport Association

**Due to the number of comments and necessary revisions to the plan(s) an additional detailed review will be necessary. Please address the comments as listed above. A detailed letter needs to accompany the revisions to allow for an expeditious re-review timeframe. The letter should include each comment listed above and, immediately thereafter, include a response from the applicant addressing the comment.**

**If any review agency has an issue that needs resolution or requires a revision, you will need to provide the necessary documents, drawings, etc., to the Planning and Community Development Department in the form of a resubmittal. The Planning and Community Development Department will then forward the resubmitted items directly to the appropriate review agency. If you have any questions pertaining to specific agency comments please contact the appropriate agency directly.**

**PLEASE NOTE: The application cannot be scheduled for public hearing until and unless a final response has been received by Planning and Community Development from those agencies that are required (pursuant to state statute and the El Paso County Land Development Code) to provide such response (i.e.- State Engineer’s Office, County Attorney’s Office, County Health Department, etc).**

In order to be considered for the Planning Commission hearing, all outstanding issues must be resolved. Please contact me if you would like to schedule a meeting with myself or the multi-disciplinary team.

When all the comments have been addressed and corrections made please submit the required documents as requested in EDARP.

If you have any questions feel free to contact me at 520-6306.

Best Regards,

Kari Parsons

El Paso County Planning and Community Development Department

cc: Jeff Rice, Engineering

File: SKP-18-4