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COMMUNITY SERVICES DEPARTMENT

PARK OPERATIONS ~ ENVIRONMENTAL SERVICES ~ RECREATION/CULTURAL SERVICES

April 21, 2022

Kari Parsons Project Manager El Paso County Development Services Department 2880 International Circle Colorado Springs, CO 80910

Subject: Sand Creek Channel Design and Construction Documents, Review #4 (CDR-20-004)

Hello Kari,

The Park Operations Division of the Community Services Department has performed a 4th review of the Sand Creek Channel Design and Construction Documents and has the following additional comments of behalf of El Paso County Parks.

Staff has reviewed the recently submitted Construction Documents and is pleased to see that many previously-submitted El Paso County Parks comments have been addressed through the inclusion of the "15' Maintenance Trail" along the west side of Sand Creek. Also acknowledged and greatly appreciated are the numerous longitudinal profiles of the Sand Creek Regional Trail on the west side of the creek, as well as the additional maintenance access trail along the east of the creek. Through previous discussions with the applicant's representative, N.E.S., Inc., it has been understood that the Sand Creek Regional Trail will be collocated with the western maintenance trail, thus the reason for the wider trail surface.

One feature, however, seems to be missing from the plans. During discussions with N.E.S., Inc., staff asked for plans that depicted the grading/alignment for the trail connection from the west side of Sand Creek to the sidewalk on the southern side of Briargate Parkway, as the trail will not go under Briargate Parkway at the bridge. The current plans show the trail ending at Briargate, with no grading to the west up to the sidewalk. Staff would appreciate grading plans that show this critical connection, as well as any plans for the trail connection on the north side of Briargate Parkway.

Lastly, staff would also greatly appreciate a condensed plan set that shows the 15' Maintenance Trail/Sand Creek Trail depicted in a manner as to stand out from the surrounding grading contours and other symbology, perhaps through the use of color. As it is viewed now, the plan is difficult to read for the purposes of following the trail route. The aforementioned trail connection at Briargate Parkway could be included in this special plan set. There is no need to include other plan details, such as demolition or stormwater controls, other than those associated with the final trail alignment through the project area.



The following comments and recommendations were submitted administratively on November 23, 2021. At that time, staff was concerned that previously submitted comments (see below, Page 2) were not integrated into the latest iteration of the Sand Creek Channel Design documents.

"The current Construction Documents show a much higher level of detail in regard to slopes, profiles, and details of the actual stream channel and drop structures. Included in the plans are two "Maintenance Access Trails," located on both the east and west side of Sand Creek. While the maintenance access trail on the east side of the creek has been engineered into the side slopes of the creek, the access trail on the west side is only partially engineered, and at times seems to disappear.

Moreover, I have highlighted the proposed Sand Creek Primary Regional Trail corridor on the attached plans. This trail corridor has not been engineered into the plans, as recommended in previous comments below. Furthermore, the west-side maintenance access/trail corridor is not depicted in locations north of Briargate Boulevard. El Paso County Parks staff is agreeable to the colocation of the maintenance access trail and the regional trail corridor, but this modification would necessitate a redesign of the western slopes of Sand Creek, as well as redesignation and dedication of the regional trail corridor easement to El Paso County. The maintenance access/trail corridor should be designed similarly to that of the maintenance access trail on the east side of Sand Creek. If this is to be the acceptable solution, the west-side maintenance access/trail corridor must be engineered into these Construction Documents, as is the case with the east-side access trail.

EPC Parks staff reminds the applicant that the Sand Creek Primary Regional Trail is a part of the 2013 El Paso County Parks Master Plan and is thus an integral feature of the overall El Paso County Strategic Plan. The applicant has made good effort to show the proposed trail corridor on previous Sterling Ranch sketch plans, preliminary plans, and final plats, and has designated the regional trail easements through separate BoCC-approved documents, as noted in previous comments below. This effort to design a stable and sustainable Sand Creek channel should not jeopardize previous efforts to solidify the Sand Creek Primary Regional Trail alignment through Sterling Ranch."

The following comments were originally submitted in July 2020 as part of the agency review process:

"County staff reviewed the Sand Creek Bank Stabilization plans in January 2020 and was concerned that the necessary creek bank mitigation efforts would negatively affect the dedicated 25-foot trail easement (Record #218054786), and the County's ability to construct the trail in the future. At that time, staff concerns were as follows:

- 1. The Sand Creek Bank Stabilization Plans show the 25-foot trail easement throughout the length of the bank improvements. Along much of the trail's length, the designed side slope is set at a 3:1, or 33.3%, side slope. A trail could not be constructed along this embankment without the necessity of cut-fill grading and/or the addition of retaining walls on the uphill side of the trail. These types of grading requirements will need to be integrated into the Stabilization Plans.
- **2.** The Stabilization Plans also show a riprap outlet works located in the middle of the trail easement, between Stations 109 and 110. The trail would not be able to span this obstacle, so it is requested that the outlet works be located outside of the trail easement.
- **3.** The Stabilization Plans must integrate the trail bench into the proposed improvements, accounting for the fact that the trail will be 8 feet wide with 2-foot shoulders on either side. A 12-foot wide shelf would be the minimum requirement for proper trail construction, however a wider shelf at 14'-16'

would allow for additional shoulder, especially in locations where the trail is bordered by 3:1 armored slopes, thus presenting a potential safety hazard to trail users.

- **4.** The Stabilization Plans include language along the trail easement corridor that states, "Trail to be constructed with channel plans." EPC Parks requests clarification in regard to this statement, specifically regarding the timeliness of the trail bench construction as an integral feature of the overall project. In short, will the developer construct the trail bench based upon these current Stabilization Plans? Furthermore, are the aforementioned "Channel Plans" a separate document from these Stabilization Plans?
- **5.** Page GR02 of the Stabilization Plans shows a length of crusher fines trail with one section that reflects a 15% longitudinal grade, between Stations 98 and 99. The 15% grade is far too steep for a regional trail, as trails of this type should remain at less than 10% average. Furthermore, is the developer going to construct this length of trail, or is the crusher fine trail being shown for general reference?

Upon review of the current Sand Creek Channel Design and Construction Plans, staff has noted significant changes to the overall plan, many of which have relegated the dedicated Sand Creek Regional Trail easement to locations outside of the areas of major channel modifications. The designers have addressed safety concerns in those places where the trail is located within the channel, either through the use of guardrails and/or retaining walls, as noted in Sheet Detail GEC4 (Station 30+20). In most areas along the channel, the trail corridor is located above the channel, along slopes that are far more conducive to future trail construction.

The 2015 El Paso County Planning Commission and Board of County Commissioner summaries for the approval of the Sterling Ranch Phase I Preliminary Plan and Filing No. 1 Final Plat added requirements for the dedication to El Paso County of 25-foot wide regional trail easements along Sand Creek and Briargate Parkway for the construction, maintenance, and public access of the Sand Creek Primary Regional Trail and the Briargate Parkway extension. These trail easements, Instruments #218054786 and #218714151, were dedicated to El Paso County in May 2018, the latter of which will be directly impacted by the construction of the Briargate Boulevard bridge at Sand Creek. Please see the attached Homestead at Sterling Ranch Filing No. 2 Final Plat for highlighted sections of these trail easements.

Pages C202 and C204 of the Construction Documents show the Briargate Boulevard Bridge design, including the locations of the proposed 6-foot wide sidewalk and guardrails, while a detail on C222 provides the general cross-section for the guardrail and sidewalk on either side of the bridge. Staff understands the constraints of routing the previously recommended 10' concrete sidewalk and 5' gravel trail across the bridge, between the wingwalls and guardrails for Briargate Boulevard, and further recognizes that certain aspects of the sidewalk and adjacent gravel trail may need to be modified and possibly narrowed within the bounds of the bridge structure. Staff recommends the applicant and designers show the approaches of the sidewalk and adjacent trail on the C202 or C204 layouts."

These comments are being provided administratively and do not require Park Advisory Board endorsement.

Please let me know if you have any questions or concerns.

Sincerely,

Ross A. Williams Park Planner

Park Operations Division

Community Services Department

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