



Staff Report

Meeting Date: December 11, 2017

Presented by: Carolyn Roan, Water Resource Manager
Anastasia Urban, Development Services Manager

APPLICATION SUMMARY:

Project Name: Santa Fe Park North – Use by Special Exception

Case Number: ENG17-0005

Application type: Use by Special Exception

Location: 7875 S. Santa Fe Drive
(Southwest Corner of Santa Fe Drive and Mineral Avenue)

Size of Property: 33.34 acres

Applicant: Jeff Wikstrom, Evergreen

Applicant's Representative: Mike Moore, Harris Kocher Smith

Owner: Kenton C. Ensor, Jr

Applicant Request: The applicant is requesting a Floodplain Use by Special Exception for modification of the Jackass Gulch floodplain.

PROCESS:

➤ [Floodplain Use by Special Exception](#)
(decision by Planning Commission)

Subdivision Exemption

(administrative review and approval for ownership purposes for separation of the north and south parcels)

Future applications anticipated:

Plat of Subdivision(s)

(to be processed in accordance with Title 11 of the Littleton Municipal Code)

Site Development Plan

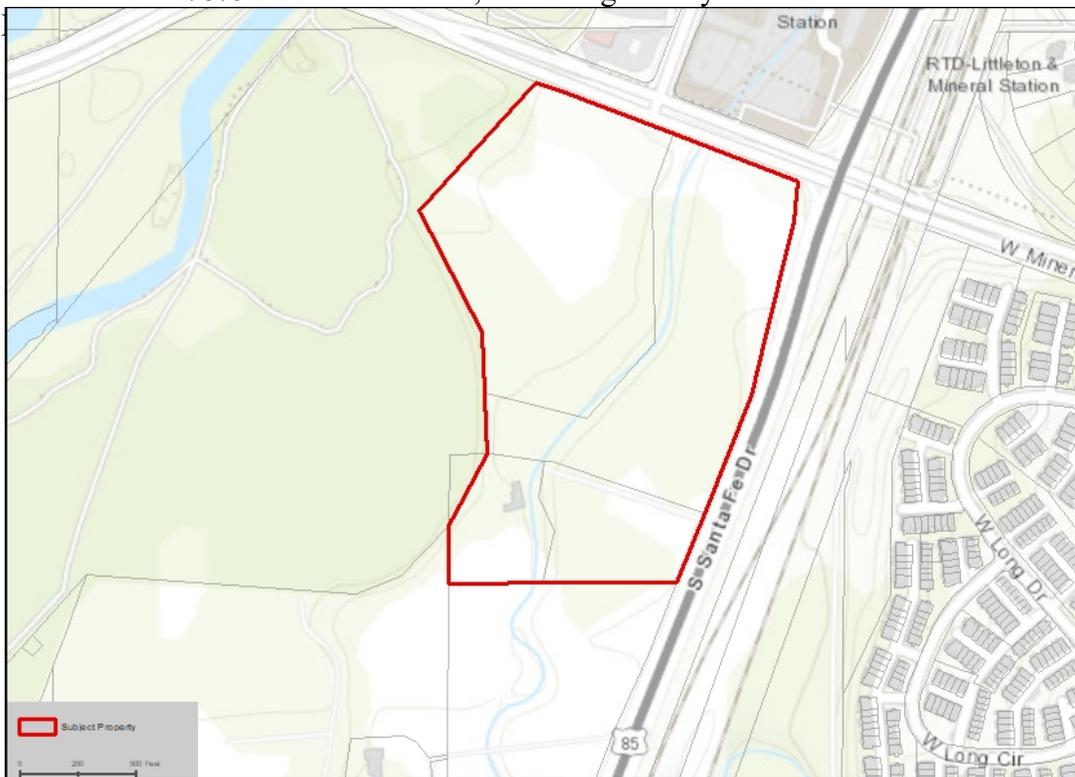
(administrative review)

A Use by Special Exception calls for a Regulatory decision. This regulatory decision requires that the planning commission must base its decision on the applicant's compliance with the Use by Special Exception regulations, specified in Littleton Municipal Code Section 10-6 for development in a floodplain.

Approval of the Use by Special Exception will allow for modification of the floodplain. It does not grant zoning approval for construction of any specific development. There is an existing Planned Development (PD) for this site that was approved in 1985, and an amendment in 1993 to add a golf course use to the existing PD. Currently, there is a Subdivision Exemption being processed to legally divide the lot for ownership purposes. Future preliminary and final plat(s) will be submitted and processed in accordance with Title 11 of the Littleton Municipal Code. All other site improvements will be reviewed and approved through the Site Development Plan process.

LOCATION:

The site is located at 7875 S. Santa Fe Drive, which is generally located at the southwest corner of Santa

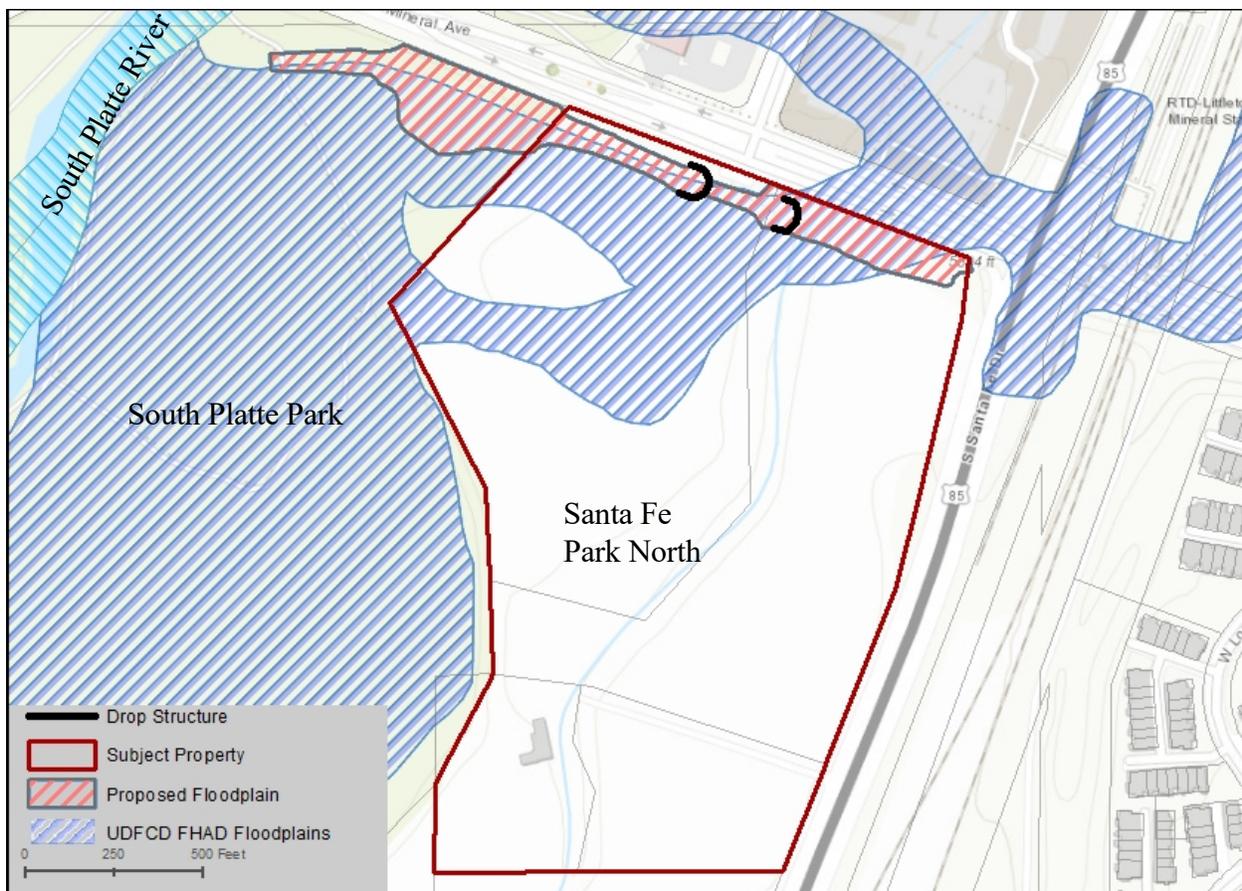


BACKGROUND:

The subject property has historically been used for agricultural type uses and has not been developed, although the site has an approved Planned Development (PD) plan. Jackass Gulch drains from the east through a storm sewer in the northeast corner of the Santa Fe Drive/ Mineral Avenue intersection. That 60-inch diameter storm sewer flows under Mineral Avenue to an outfall in South

Platte Park. Flows in excess of storm sewer capacity potentially pond in the Santa Fe Drive and Mineral Avenue intersection and then split; with a portion entering the RTD parking lot on the north, and the remainder continuing across the subject property until reaching the South Platte River. Due to the existing flat topography of the site and lack of a defined channel, the existing floodplain is spread out across a large portion of the property, as can be seen in the image below. South Platte Park is on the downstream (west) side of the subject property. As previously noted, this application is located within that portion of 100-yr flood flows which exceed the capacity of the storm sewer for Jackass Gulch, a 60-inch pipe located in Mineral Avenue.

Through detailed engineering analysis and design, it is possible to modify the floodplain into a channel; which will increase the predictability of the floodplain during rain events and allow for development of the site, with decreased risk of building flooding.



PROPOSED PROJECT DETAILS:

The request is to modify the site by placing fill material and constructing a channel for Jackass Gulch along the south side of Mineral Avenue. The minor storm events remain contained in the storm sewer pipe, so the proposed channel is a flood overflow channel only. As such, the channel will rarely see stormwater flows in it. The channel is to be sized to accommodate the 100-year discharge of 1260 CFS (cubic feet per second), as

determined in the 1990 Flood Hazard Area Delineation (FHAD) study by UDFCD. Where the channel crosses beneath the new roadway extension of South Platte River Parkway (south side of Mineral), a concrete box culvert will be installed. To accommodate the elevation difference in the channel from its upstream to downstream end and maintain a stable gradient, some drop structures will be required. These drop structures are currently proposed to be constructed of grouted boulders that essentially act like mini waterfalls. Examples of drop structures are provided in Figure 1 below. The channel will be grass-lined and approximately 4' deep. Portions may be lined with a permanent erosion control blanket, which will be covered with grass. Figure 2 shows examples of grass-lined channels.

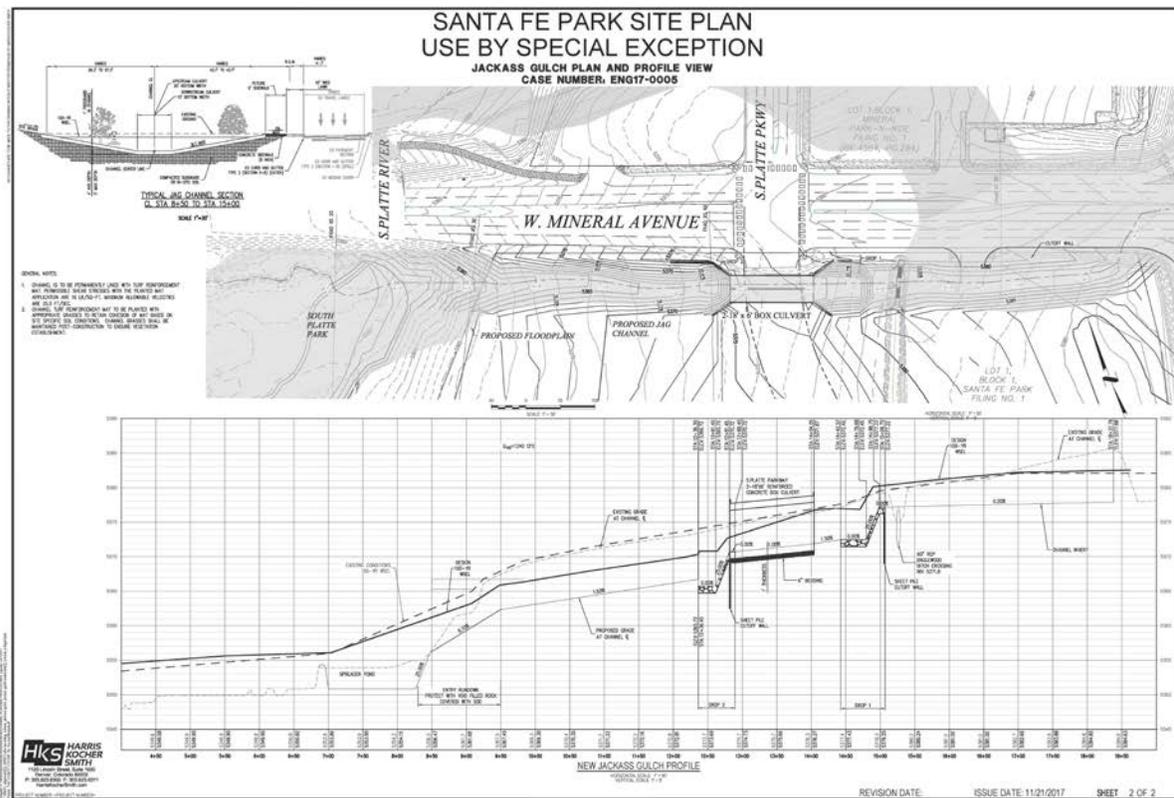


Figure 1 - Examples of grouted boulder Drop Structures



Figure 2 - Examples of Grass Lined Channels

The general location of this new channel will be at the north portion of the site, parallel to Mineral Avenue. Figure 3 shows the site plan with the proposed channel location. The Floodplain Use by Special Exception requires detailed hydraulic analysis to determine the feasibility of modifying the existing floodplain. If approved, the applicant will continue with final civil engineering construction drawings to be reviewed by staff and Urban Drainage Flood Control District prior to any construction commencing within the existing floodplain limits. The development team has worked closely with both city staff and South Suburban Parks and Recreation District to protect and improve certain natural features in South Platte Park. This will include a lateral spreading “pond feature” which will spread out the flows and reduce downstream erosion potential by lessening flow velocity and depth. Additional details and analysis of these conditions are addressed further below.



CRITERIA & STAFF ANALYSIS:

Following is a staff analysis of the proposed application. Criteria for a Floodplain Use by Special Exception is contained within Municipal Code Title 10, Chapter 6. **Section 10-6-1 (A)** describes the need for floodplain regulations. **Section 10-6-1 (B)** states the purpose, being to promote public health, safety and general welfare and minimize public and private losses due to flooding. Staff believes that the application as presented has no increase to risk in any of these categories. At the City’s request, the

applicant proposes a channel which extends into the southwest corner of the Mineral/Santa Fe intersection to assist in draining the ponding which has potential to occur there. This results in a larger channel and more flood flows onto the Santa Fe Park North property. To mitigate for potential increased erosion on downstream properties, the conceptual design includes a “spreader pond” feature within South Platte Park, which will disperse stormwater flows over a larger area.

Section 10-6-2 contains pertinent definitions of terms.

Section 10-6-3(A-F) describes applicability and basis. The proposal is located within the 100-year floodplain of Jackass Gulch (also referred to as No Name Gulch). This is a local floodplain, as delineated by Urban Drainage and Flood Control District (UDFCD) in the 1990 *Flood Hazard Area Delineation Study (FHAD) for Lower Dad Clark Gulch and DFA 0068*. This is not currently a floodplain mapped by Federal Emergency Management Agency (FEMA) because the drainage basin (area it drains) is less than 1 square mile in size, which is FEMA’s mapping threshold.

Section 10-6-4 describes the duties of the Floodplain Administrator in review of all floodplain development applications. With this application, the existing watercourse is proposed to be altered. For this application, no Federal State or local permits are required at this time. Future Grading Permit applications will require review by U.S. Army Corps of Engineers for potential impact to wetlands. Notification to FEMA is not required because this project is not located within a FEMA floodplain as noted above.

Section 10-6-5 describes the process for appeals to decisions by the floodplain administrator.

Since Jackass Gulch does not have a delineated Floodway (it is not uncommon to have a floodplain but not a studied and delineated Floodway), only **subsection (D)(4) of Section 10-6-6** applies. This provision limits the encroachment that can occur in the floodplain, similar to that with a designated Floodway. The maximum increase in 100-year water surface elevation is restricted to +0.5’. This application has changes in water surface elevation ranging from -3.52’ to +0.23’.

Section 10-6-7 describes the development allowable uses and restrictions within a floodplain. Subsection (A) references to the detailed development requirements of 10-6-8(B). Limiting uses within the floodplain are listed in Subsection (B), which do not apply to this application. Subsection C describes requirements for critical facilities. However, no critical facilities are proposed by this application.

Section 10-6-8 outlines the procedure and application contents for a Use by Special Exception. Since the eventual use of the subject property is for development requiring building permits, the development within the floodplain must be approved by the Planning Commission. The site plan requirements outlined in Subsection (A), generally consist of a plan view drawing, profile of the proposed channel, and section view of the proposed channel. The application has included these elements.

Subsection(A)(1) (e) requires review by affected agencies. The application has been sent to multiple jurisdictions (see attached Referral matrix), but only Urban Drainage and Flood Control

District (UDFCD) and South Suburban Parks and Recreation District (SSPR) had concerns warranting additional information.

- Urban Drainage and Flood Control District reviews the project in context of eligibility for their future maintenance, which is strongly encouraged by the City. UDFCD is satisfied with the conceptual design as presented. UDFCD requested additional hydraulic modeling detail to understand the proposed erosive forces in the channel. Much of the additional detail requested by UDFCD will be collected via final design and the Grading Permit process.
- SSPR had concerns regarding pedestrian access into South Platte Park and also the change in drainage flow patterns and potential for adverse impact in South Platte Park. The applicant's conceptual design will concentrate the flood flows into a channel rather than the existing condition of shallow overland flow. However, modifications to the design included a lateral spreading "pond feature" which will spread out the flows and reduce downstream erosion potential. This will also create an opportunity to release more water to existing wetlands, which are of concern to SSPR.
- While Arapahoe County raised the issue of a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR), neither of these FEMA map change processes will be required with this project because the floodplain is not FEMA regulated, and the change in water surface elevation does not warrant FEMA involvement. After construction, the City will request a Flood Hazard Area Delineation (FHAD) update with UDFCD to document the new floodplain shape and elevations. This process will take the place of a LOMR.

Section 10-6-8(B) outlines specific requirements for development within floodplains. No buildings are proposed with the current application, but the applicant has committed to compliance with stated regulations at a future time with subsequent building permit applications and FHAD update. The proposed grading plan does demonstrate compliance with subsection **(B)(2)(a)** by indicating proposed building footprint elevations that are 1.0' above the proposed adjacent 100-year water surface elevations within the channel. Elevations will be verified with future updates to design and analysis. **Subsection B(2)(d)** also applies to this application, because fill material is being placed within the existing floodplain to both create the proposed channel and elevate the adjacent ground. The fill placement does not adversely affect efficiency of the watercourse **(1)**, and the placement is the minimum required to flood-proof future structures adjacent to the channel **(2)**, and because there is no floodway, item **(3)** does not apply. The fill materials that are located within the banks of the future channel will be adequately protected from erosion by grass cover or riprap, or an equivalent as determined by engineering analysis in final design **(4)**, and the Use by Special Exception will not result in increased flood heights or threats to public safety, public expense, create nuisances, nor conflict with other law or ordinance **(5)**.

Section 10-6-9 describes the procedures for variances from the floodplain regulations. No variances are proposed.

Section 10-6-10 addresses non-conforming existing buildings. This is not applicable to this project because the existing buildings are located outside of the floodplain.

Section 10-6-11 describes the requirement for the Certificate of Compliance (CoC) to be obtained after construction, to verify that the grading has been constructed in compliance with the floodplain regulations. This application will require a CoC after final grading and channel construction is complete.

PUBLIC NOTICE:

The applicant mailed public notice of the Use by Special Exception to all property owners within 700 feet of the site and signs were also posted on the site.

OUTSIDE REFERRAL AGENCIES:

Comments were received from various agencies including South Suburban Parks and Recreation and Urban Drainage and Flood Control District as described previously. All comments have been adequately addressed with the application. See attached outside referral agency matrix.

STAFF RECOMMENDATION:

Staff finds that in compliance with Section 10-6 of the City Code, the proposed Floodplain Use by Special Exception for Modification of the Jackass Gulch Floodplain at Santa Fe Park North meets the criteria for approval, with the stated conditions.

MOTION TO APPROVE

I move to approve PC Resolution 28-2017, concerning the Floodplain Use by Special Exception for Modification of the Jackass Gulch Floodplain at Santa Fe Park North (Case Number ENG17-0005) with the following conditions:

The Planning Commission may add any conditions of approval:

1. Prior to approval of the final construction drawings, maintenance and access agreements for construction of the stormwater feature on the South Platte Park parcel shall be drafted, executed and recorded.
2. Prior to construction of the floodplain improvements, the applicant shall obtain UDFCD Maintenance Eligibility approval for the channel.
3. Prior to construction of the floodplain improvements, the applicant shall obtain a grading permit.
4. Prior to construction of the floodplain improvements, final design construction drawings shall be submitted, reviewed and approved.
5. Prior to the issuance of the first building permit, the applicant shall prepare and record the final plat, with demonstrates compliance with the approved Use by Special Exception and the floodplain contained in a tract.
6. Prior to issuance of the issuance the first building permit, an as-built survey and report along with a Certificate of Compliance shall be submitted, reviewed and approved.
7. No building permits shall be issued for any lot encumbered by existing floodplain until such time the FHAD update has been completed by UDFCD.
- 8.

MOTION TO CONTINUE TO A DATE CERTAIN

I move to continue the public hearing on PC Resolution 28-2017, concerning the Floodplain Use by Special Exception for Modifications of the Jackass Gulch Floodplain at Santa Fe Park North to - _____ (*insert date*) in order to _____.

MOTION TO DENY

I move to deny PC Resolution 28-2017, concerning the concerning the Floodplain Use by Special Exception for Modification of the Jackass Gulch Floodplain at Santa Fe Park North. The foregoing denial is based on the findings that the proposed work:

Note: Identify criterion or criteria not met and adjust motion accordingly:

- 1.
- 2.