

CITY OF SEGUIN

To: City Council
From: Melissa Reynolds, PE, MPA, CFM
Assistant City Manager | City Engineer
Date: July 21, 2026
Subject: Presentation and possible direction for staff for
Walnut Springs Bank Stabilization Design
Alternatives



It's real.

Historical Background

The Walnut Branch Spillway located just north of Nolte Street in Walnut Springs Park experienced damage during heavy rain events in 2021. Sediment has accumulated at the spillway, and it appears that the water in Walnut Branch now travels beneath the existing spillway structure, and the creek embankment has been compromised on the northeast side such that a large tree fell onto the spillway, causing further degradation of the embankment. Existing bank stabilization materials (limestone blocks) along the banks of Walnut Branch north and south of Nolte Street have also failed and fallen into the creek.

HDR Engineering, Inc. completed the Walnut Springs Spillway Repair and Bank Stabilization Preliminary Engineering Report in July 2024. The goal of the task order was to develop preliminary design report with options to address these failures with enough detail to use in final design along with opinions of probable engineering and construction costs as well as outlining appropriate permitting procedures with a proposed project timeline. A presentation of the PER was provided at the July 2, 2024 City Council Meeting.

Site 1 and Site 2 require structural bank stabilization, as noted in the PER.



Figure 1: Walnut Branch Linear Park (Site 1) and USACE Walnut Branch Ecosystem Restoration Project (Site 2)

Based on direction provided by City Council and the City's procurement policies (AF-2025-49), a Professional Services Agreement was executed with HDR Engineering, Inc. on August 5, 2025 for the engineering and permitting services required for the Walnut Springs Channel Stabilization Project. Additionally, the July 5, 2025 flood event introduced new failures to Walnut Branch.



Figure 2: Damage due to July 5, 2025 flood event

Direction is requested in order to complete the design of the Walnut Springs Bank Stabilization project. Aesthetic and project footprint options are identified below.

Option 1: Limestone Block Wall with Natural Channel Design



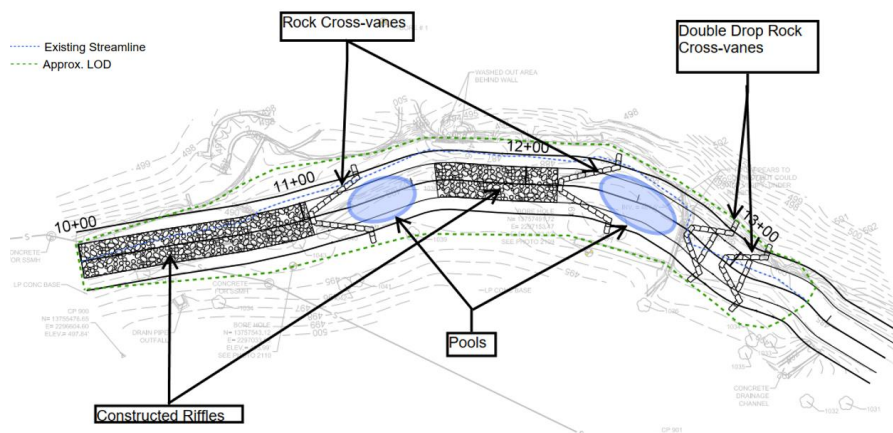
Figure 3: Limestone Block Wall Example

Option 2: Reinforced Concrete Retaining Wall with Finishings with Natural Channel Design



Figure 4: Reinforced Concrete Wall Examples

Note that Natural Channel Design is included in all alternatives.



ATTACHMENTS

1. Presentation