

PULGAS CREEK MITIGATION DESIGN CONCEPT

APPENDIX J

to the
Alexandria Center for Life Science Project Final EIR

Memorandum

Re: Pulgas Creek Mitigation Design Concept
Alexandria Center for Life Sciences, San Carlos, California

Date: November 22, 2024

To: Toon Jordan, Alexandria Real Estate Equities, Inc.

CC: Greg Arifian and Mark Quito, Freyer & Laureta, Inc.

From: Jeffrey Tarantino, P.E., Freyer & Laureta, Inc.

Freyer & Laureta, Inc. (F&L) is providing this Pulgas Creek Mitigation Design Concept Memorandum to Alexandria Real Estate Equities (ARE) to provide an overview of the planned mitigation measures for the proposed Alexandria Center for Life Sciences (ACLS) located in the City of San Carlos, California. The purpose of this memorandum is to transmit conceptual exhibits presenting the proposed improvements for the ACLS site-wide master plan that both address the existing flooding and stabilizing the existing creek banks.

As described in the Master Plan Pulgas Creek Analysis Report, the project team proposes the following improvements to the site and Creek to address the flooding as well as Creek slope stability. The planned improvements include:

- Improvements between Industrial Road and the proposed Central Green area required to mitigate existing flooding conditions without adversely impacting offsite areas include:
 - Creek top and bottom widened to be integrated into the ACLS site design to increase conveyance capacity within the ACLS site
 - The proposed creek top of bank elevation is kept similar to existing elevation or lowered to reduce the risk of causing flooding offsite.
 - Central Green landscape area depressed at center of the site for flood detention purposes.
- All proposed and existing slopes are improved to reduce the long term risk of erosion using a combination of Geoweb panels, riprap, native planting, and vegetated retaining stair walls.
- All pedestrian walkways along the Creek within the flood mitigation & ecology zone will be elevated above the ground on a boardwalk.

We have attached the following exhibits to present the conceptual creek mitigation strategies:

- Exhibit EO-L1.01 is Illustrative Landscape Site plan for the ACLS site and we have indicated three locations where cross sections are presented on subsequent sheet. The creek improvements for flood mitigation described above occur at Cross Section 1 and Cross Section 2.
- Exhibit 1 presents Cross Section 1 including a markup from the previous creek improvement preliminary design indicating that the current proposal will both lower the top of bank on the ACLS property and widen the creek. A complimentary landscape illustrative cross section is provided as well.

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- Exhibit 2 is similar to Exhibit 1 for Cross Section 2
- Exhibit 3 presents Cross Section 3, which is consistent with the previous creek improvements preliminary design.

Please call me contact me at (650) 619-3226 or tarantino@freyerlaureta.com with any questions.

Attachments.

1. Exhibit EO-L1.01: Illustrative Landscape Site Plan
2. Exhibit 1: Pulgas Creek Improvement Cross Section 1
3. Exhibit 2: Pulgas Creek Improvement Cross Section 2
4. Exhibit 3: Pulgas Creek Improvement Cross Section 3

Landscape Architecture Site Plan Legend

- LOW**
- Limit of Work
 - Property Line
 - Center Line
- MATCHLINE**
- Match Line
 - Structure Above
 - Street Light, See Lighting Drawings
 - Proposed Tree
 - Bike Parking

Area Calculations

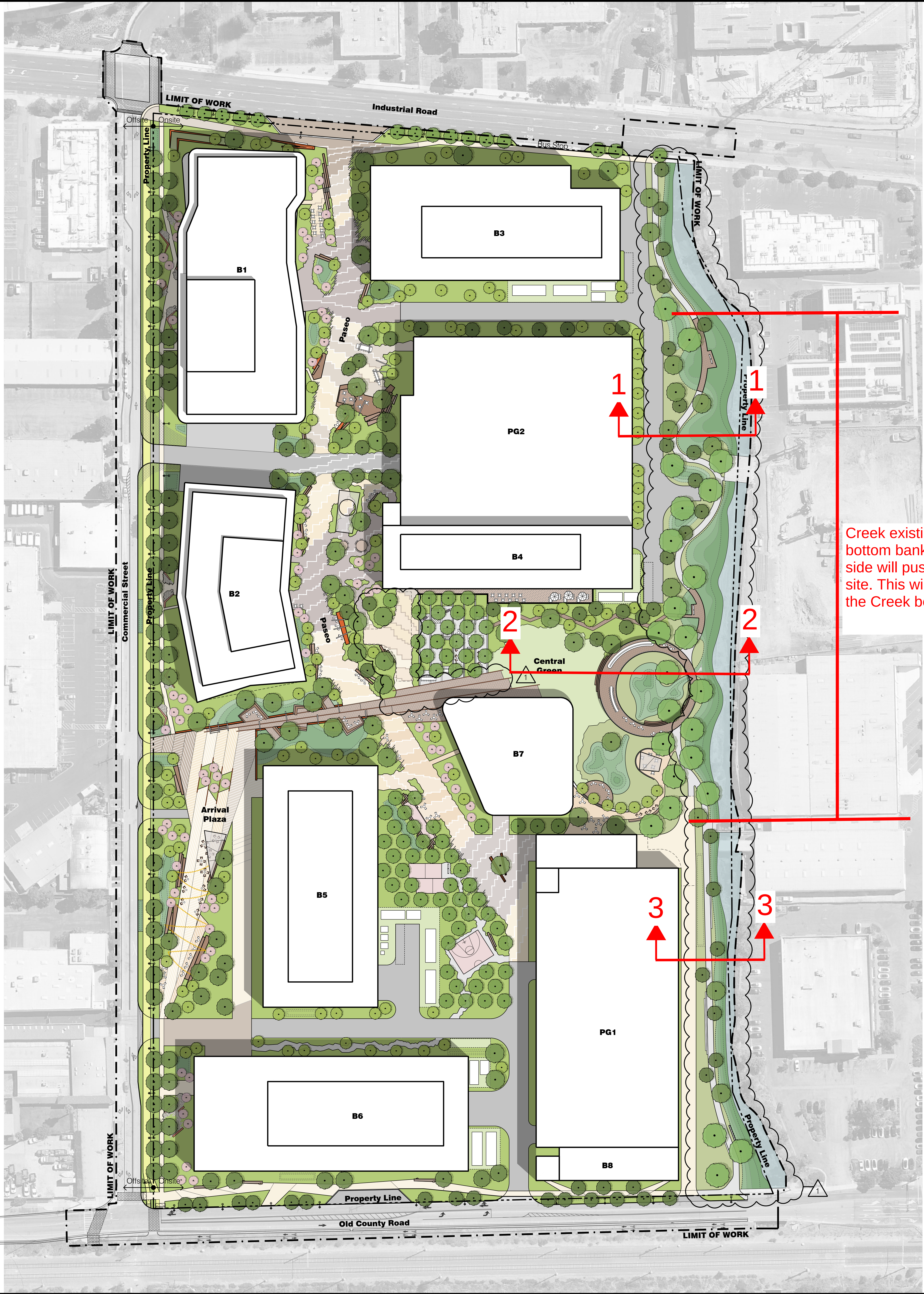
Total Project Area	1,103,287 SF
Landscaped Areas (Planting Exclusive Zones)	323,671 SF

Tree Quantity Requirements

Trees Required	221
Trees Proposed	517

ADDITIONAL NOTES:

- Tree quantity requirements per San Carlos Municipal Code section 18.18.070 for Industrial Districts



Creek existing top and bottom bank on project side will push into the site. This will expand the Creek bottom.



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San Francisco, CA 94111
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Date	Description
09/06/2024	SITE PLAN SUBMITTAL
11/08/2024	SITE PLAN SUBMITTAL - RESPONSE 1

Seal / Signature

NOT FOR CONSTRUCTION

Project Name

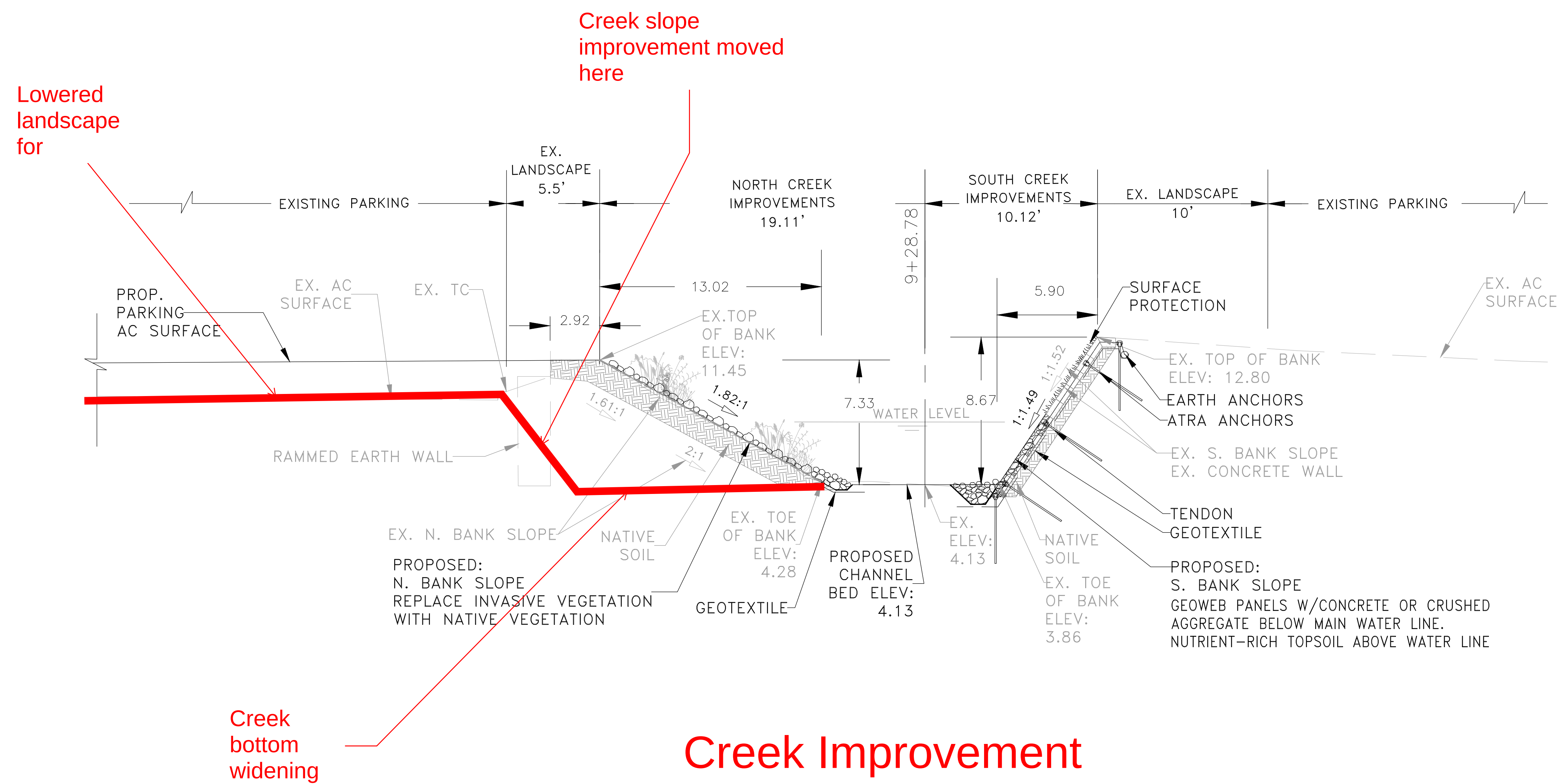
Project Number
033.3426.000.

Description
ILLUSTRATIVE LANDSCAPE SITE PLAN

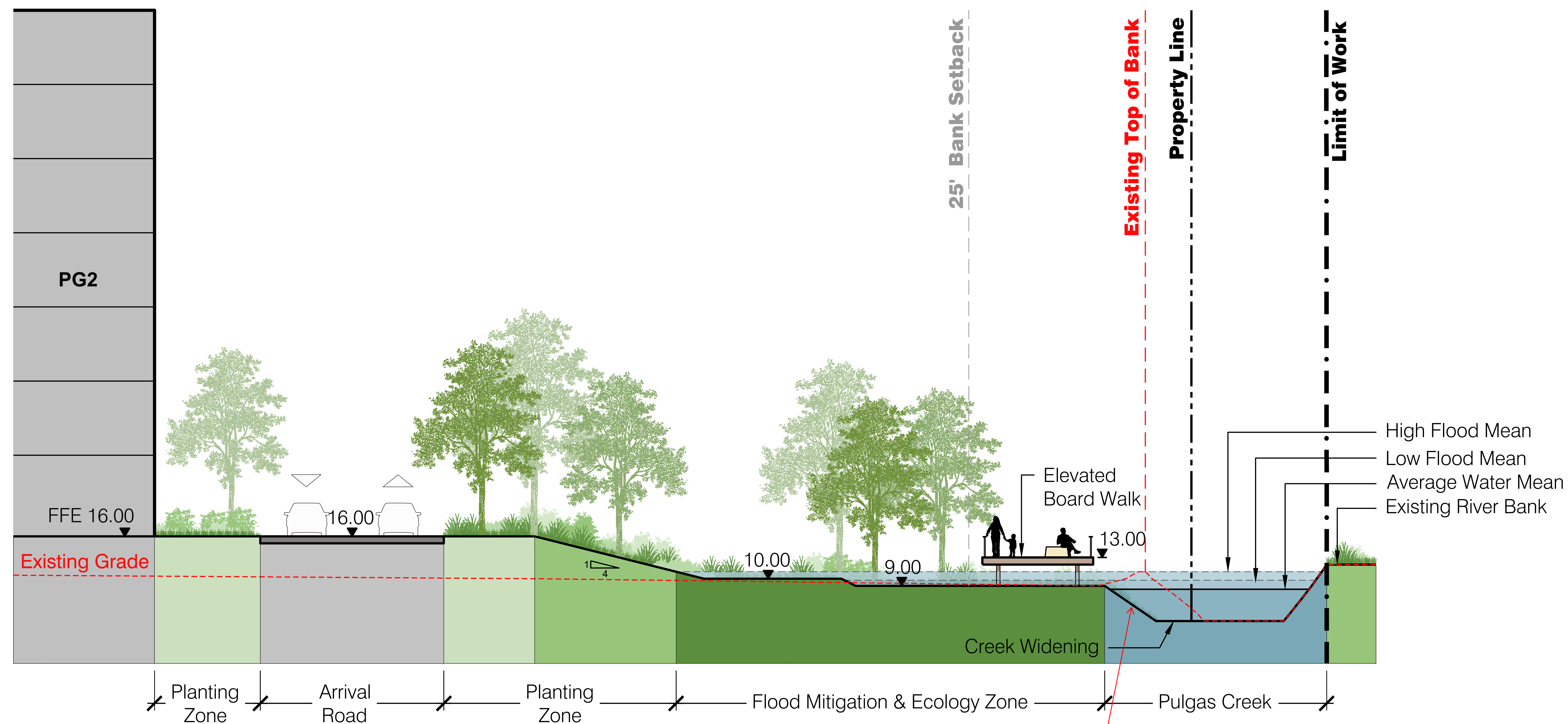
Scale

E0-L1.01

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Creek Improvement Section 1

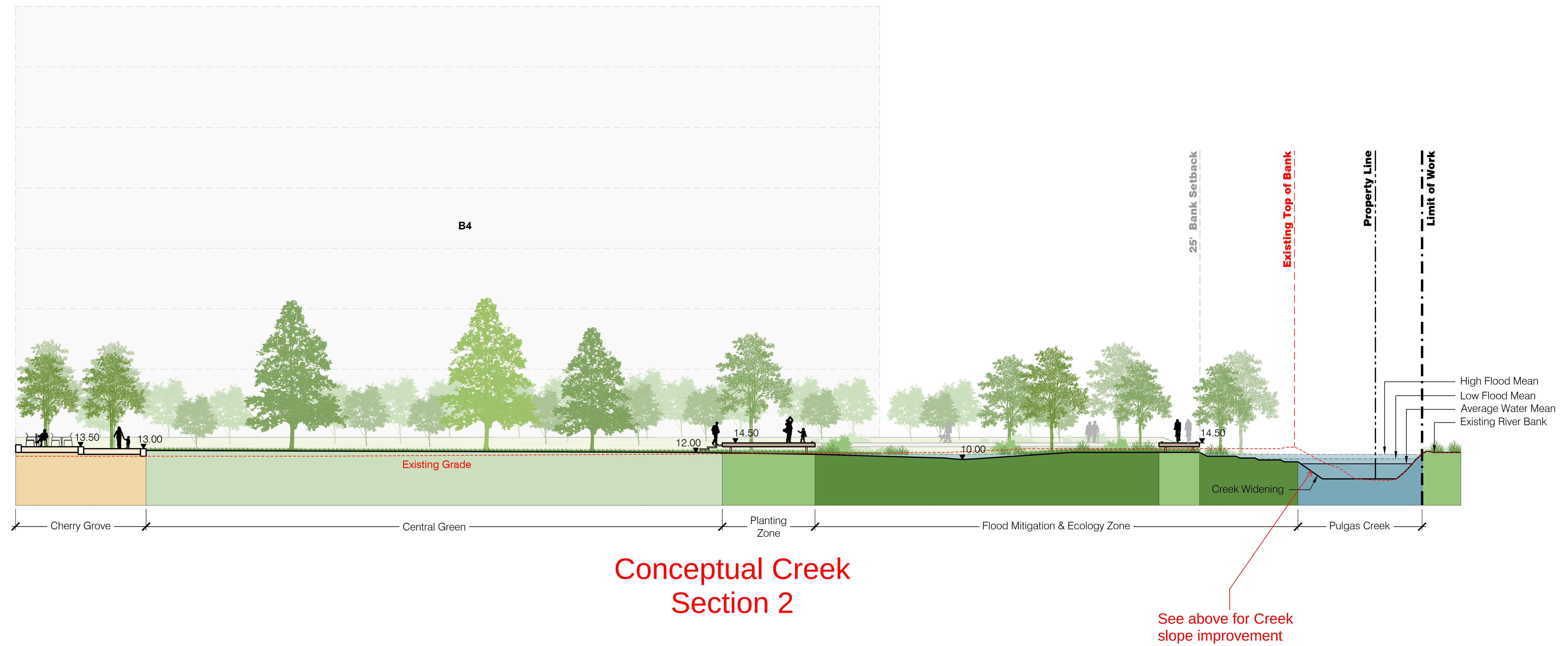
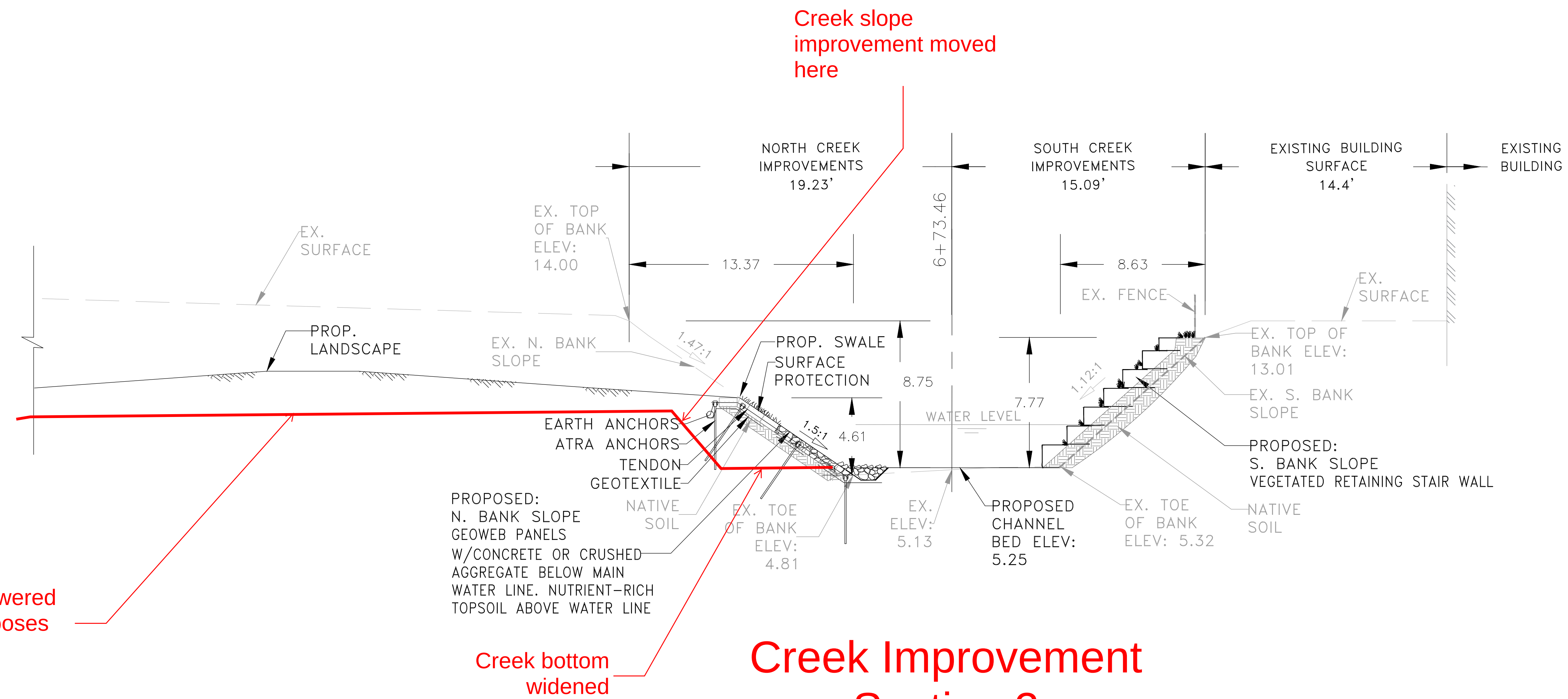


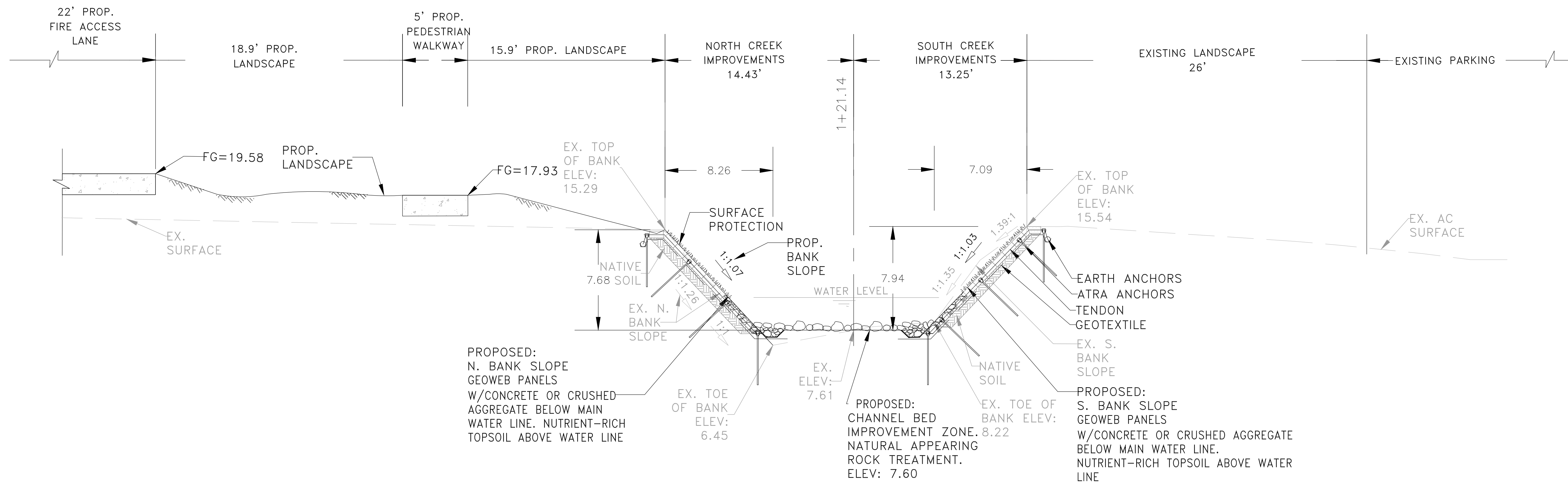
Conceptual Creek Section 1

See above for Creek slope improvement

DATE	DESCRIPTION

DATE:	05/10/2022
SCALE:	1"=4'
DESIGNED:	SR
DRAWN:	SR
CHECKED:	MQ
PROJ. ENGR:	MQ





Creek Improvement Section 3

DESCRIPTION

DATE

DATE: 05/10/2022
SCALE: 1"=4'

SHEET
3

JOB NO.
257001