

MARTWAY MIXED USE – STORMWATER DRAINAGE MEMORANDUM

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DATE: March 16th, 2018
RE: Martway Mixed Use Apartments
6045 Martway
Mission, Kansas 66202
CFS Project No. 17-5085

On behalf of the owners of the Martway Mixed Use development, CFS Engineers, P.A., requests a waiver from stormwater management based on the minimal change in surface runoff characteristics between the pre and post-development site conditions. The site is bounded on the north by Martway Street, on the south by Rock Creek, and along the east and west by low-rise commercial/office buildings. Johnson Drive and Mission's downtown shopping strip is located less than a quarter mile to the north. The Sylvester Powell Jr. Community Center is located to the northwest. The Mission Aquatic Center is located across Rock Creek to the southeast.



**Site Location Map, Mission, Kansas
Proposed Martway Mixed Use Development**

The proposed 1.667 acre site calls for the removal of three existing single story office buildings and parking lots along the southern side of Martway Street between Beverly Avenue and Dearborn Street and replacing them with a multi-story apartment complex building with office space and parking on the lower level. The apartment building would be elevated to provide

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parking at ground level. The changes between the pre and post-development impervious surface area was less than 5,000 sq ft per the APWA 5600, and was measured as follows:

Pre-Development Conditions:

Total Site Area = 1.667 acres

Impervious Surface = 1.415 acres/61,653 sqft

84.9% Impervious

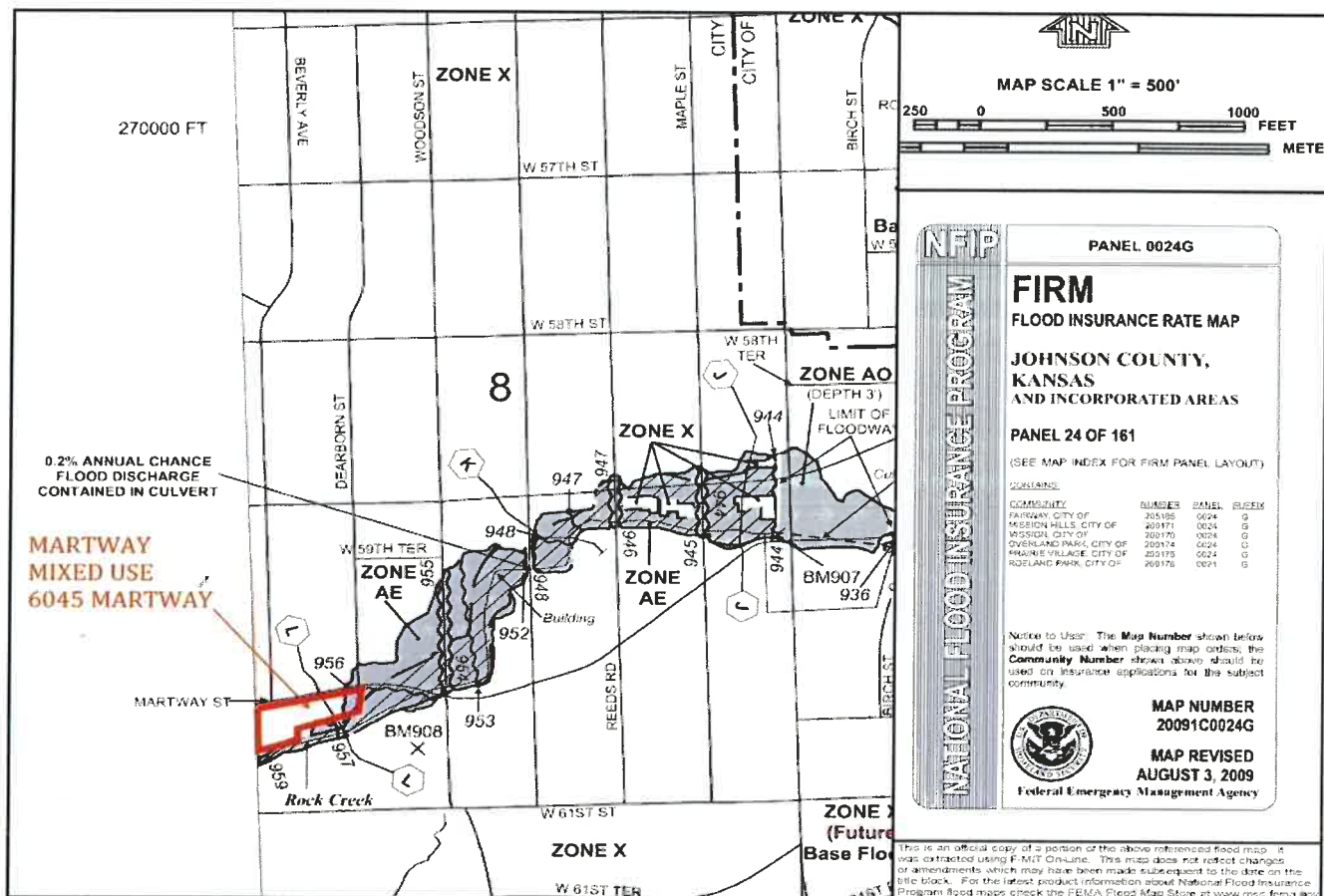
Post-Development Conditions:

Total Site Area = 1.667 acres

Impervious Surface = 1.455 acres/63,397 sqft (1,743 sqft increase)

87.3% Impervious

Under the APWA Section 5601.3.A.3, “Remodeling, repair, replacement or other improvements to any existing structure or facility and appurtenances on sites smaller than two acres that does not cause an increased area of impervious surface on the site in excess of 10 percent of that previously existing.” The 1.667 acre site is smaller than two acres and the 1,743 sqft increase in impervious surface from 84.9% to 87.3% does not exceed the allowable 5,000 sqft increase limit allowed by the APWA.



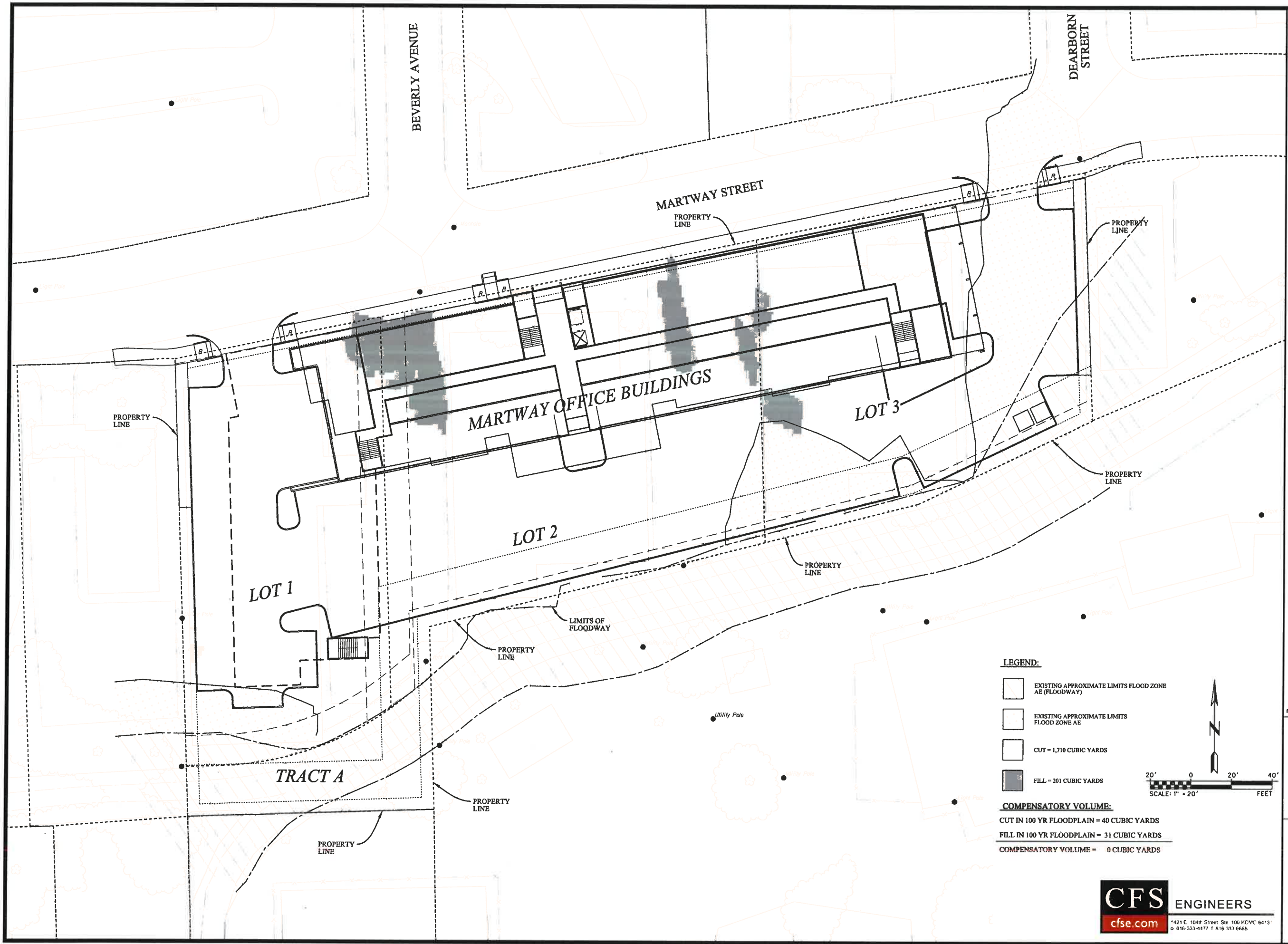
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Stormwater runoff from the site's proposed parking lot and building roofs would be collected and drained directly into Rock Creek flowing eastwards along the rear of the property. The FEMA FIRM Panel 20091C0024G indicates that a small portion of the site is designated within 100-year flood zone AE from flooding during the 100-year storm event. The 6,250 sqft of business space on the ground floor would be set along the northern side of the site fronting Martway Street, and would be out of the FEMA 100-year flood zone. The upper floor apartments would be constructed on raised piers above the ground floor parking lot and would be one story above the FEMA 100-year flood zone.

The proposed parking lot plan has a total of 142 spaces (including four ADA accessible spaces and one ADA van-accessible space). Superimposing the 100-year FEMA floodplain elevations from Rock Creek onto the proposed parking lot grading indicated that 53 spaces would be within the floodplain limits, however, no space would have more than the allowable 7 inches of water during the 100-year event.

A circular professional engineer seal for Lucas N. Williams, Kansas, License No. 20382, dated 5/16/18. The seal is stamped in blue ink and is partially obscured by a large, stylized blue signature that reads "Lucas N. Williams".

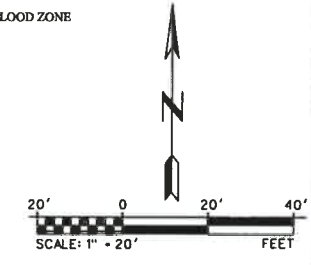


LEGEND:

- EXISTING APPROXIMATE LIMITS FLOOD ZONE AE (FLOODWAY)
- EXISTING APPROXIMATE LIMITS FLOOD ZONE AE
- CUT = 1,710 CUBIC YARDS
- FILL = 201 CUBIC YARDS

COMPENSATORY VOLUME:

CUT IN 100 YR FLOODPLAIN = 40 CUBIC YARDS
FILL IN 100 YR FLOODPLAIN = 31 CUBIC YARDS
COMPENSATORY VOLUME = 0 CUBIC YARDS



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KS PE # 20382

Martway Mixed Use

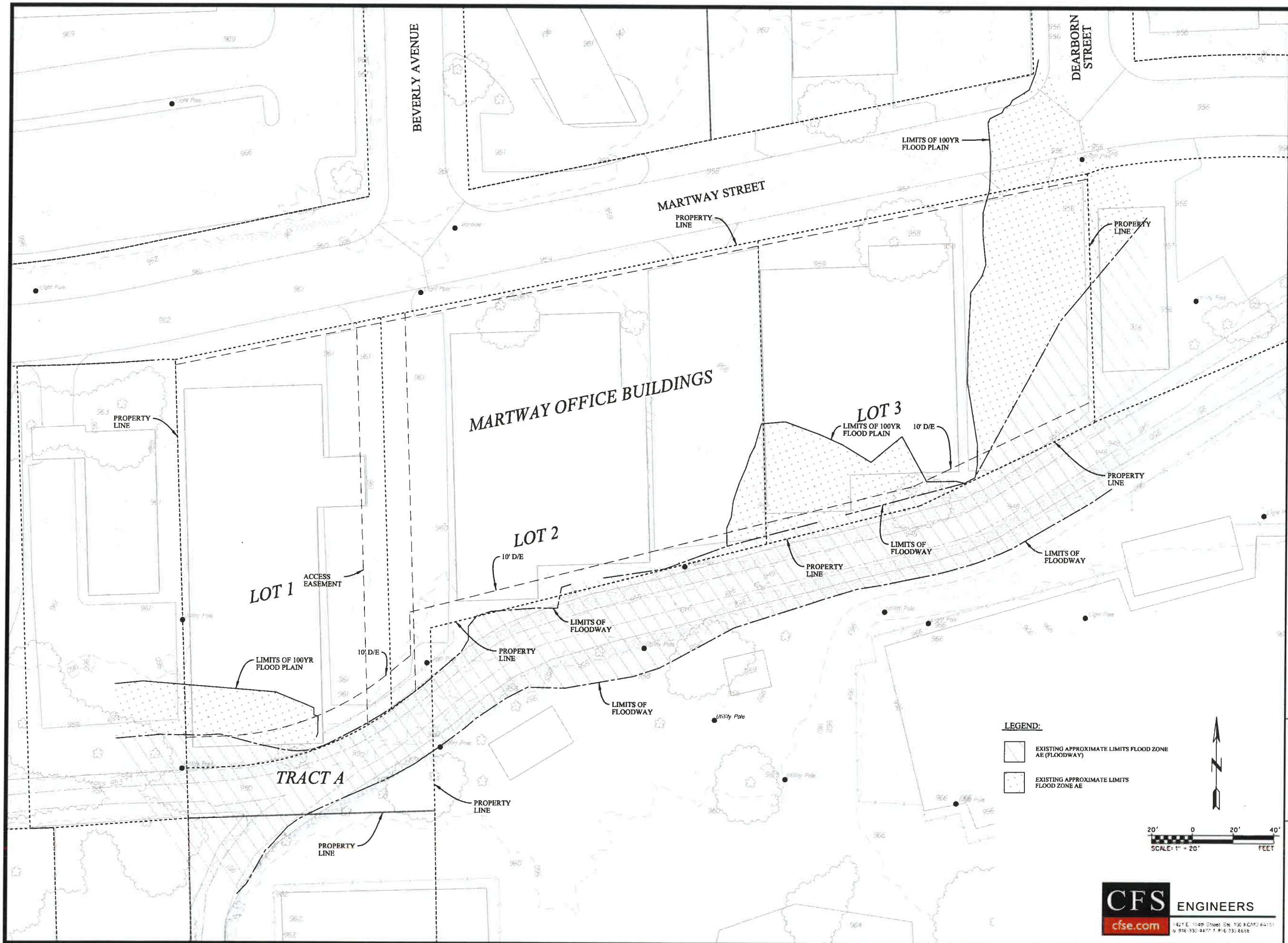
6009 - 6045 Martway
Mission, KS 64202

REV	ISSUE	DATE
	PRELIM. DEV. PLAN SUBMITTAL	07.12.2017
	FINAL DEV. PLAN SUBMITTAL	09.15.2017
	REV. PRELIM. DEV. PLAN SUBMITTAL	11.06.2017
	REV. PRELIM. DEV. PLAN SUBMITTAL	03.16.2018

16.05.Martway

C201

CUT & FILL PLAN



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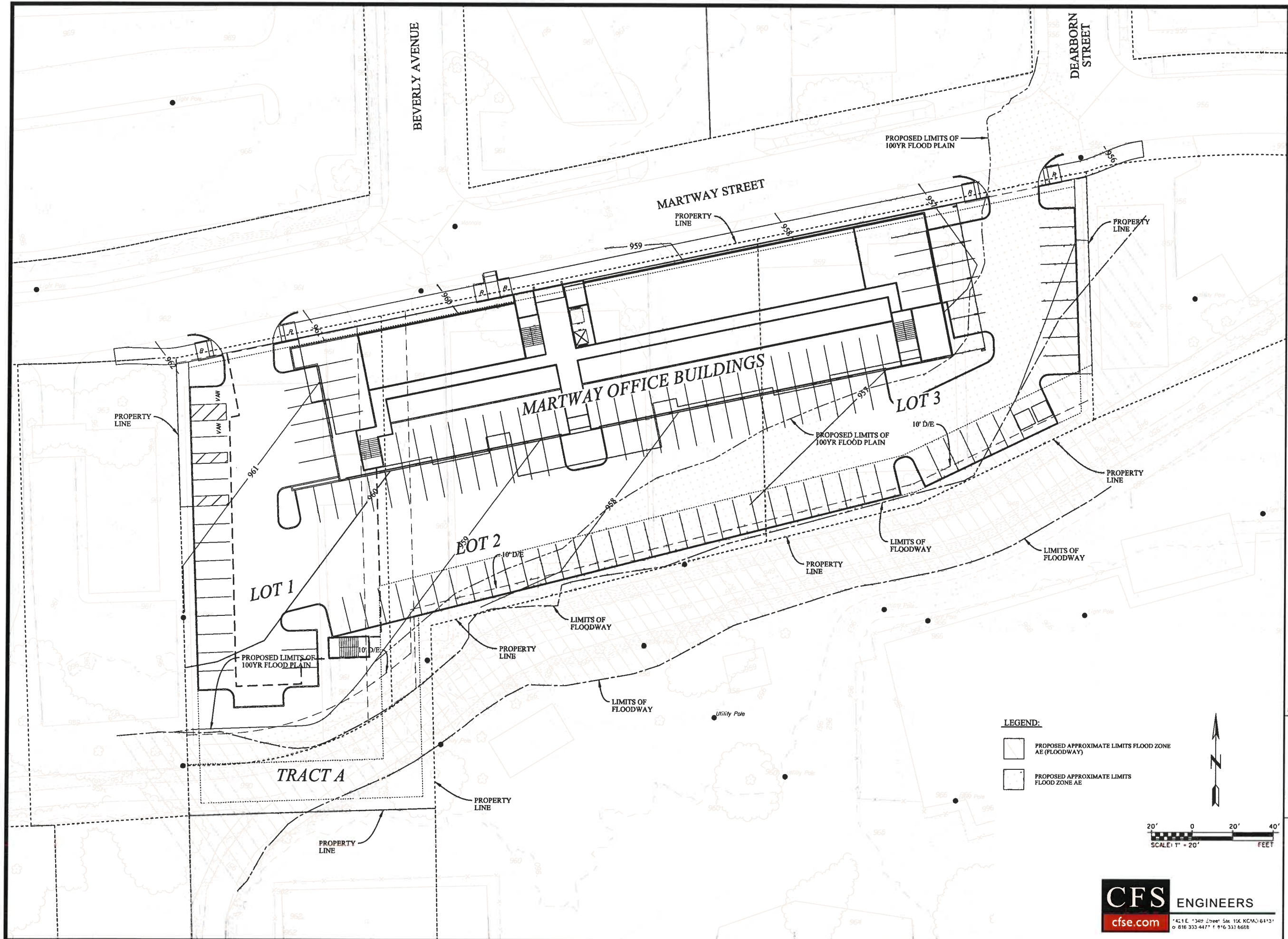
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C202

EXISTING FLOOD PLAIN PLAN

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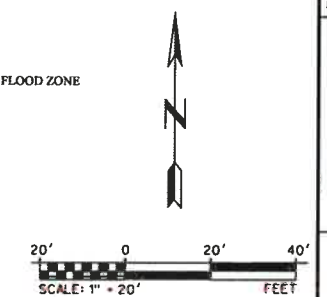


LUCAS W. WILLIAMS - ENGINEER
KS PE # 20382

Martway Mixed Use

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Mission, KS 64202

- LEGEND:
- PROPOSED APPROXIMATE LIMITS FLOOD ZONE AE (FLOODWAY)
 - PROPOSED APPROXIMATE LIMITS FLOOD ZONE AE



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REV	ISSUE	DATE
	PRELIM. DEV. PLAN SUBMITTAL	07.12.2017
	FINAL DEV. PLAN SUBMITTAL	09.15.2017
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16.05.Martway

C203

PROPOSED FLOOD PLAIN PLAN