



Re: **Chase Bank Stormwater Letter Report**

890 NE Langsford Rd.

Lee's Summit, MO 64063

Chase OVP #: 38200P354953

CSG Project #: JPM.27135

Date Issued: 1/04/2021

Existing Conditions:

The existing site is an old vacant gas station. The building has been removed, but the slab and foundations remain. Some of the tanks have been removed and that area left unpaved, but the majority of the lot is still paved. The existing lot sheet drains onto the neighboring property to the north via two shared driveways with some small perimeter areas draining directly offsite.

Proposed Conditions:

The proposed site is to be a bank building with associated parking and drive aisles. The overall impervious area of the site will be reduced by approximately 12%. The overall grading scheme is to mimic the existing surface drainage of the lot as much as possible. We will drain out of our one shared driveway with a flume draining to the second shared driveway location which is to be removed on our lot. There will be some small mostly unpaved perimeter areas that will drain directly offsite. Sheet C9 – Drainage Basin Maps of the plan set details the pre and post drainage areas.



Analysis:

The overall site reduction of impervious area results in a reduction in runoff from the existing conditions summarized below:

| Storm Event | Pre-Drainage Runoff (cfs) | Post-Drainage Runoff (cfs) | Change (cfs) | Change (percent) |
|-------------|---------------------------|----------------------------|--------------|------------------|
| 1 | 1.53 | 1.36 | -0.17 | -11.11% |
| 2 | 1.98 | 1.75 | -0.23 | -11.62% |
| 5 | 2.94 | 2.64 | -0.3 | -10.20% |
| 10 | 3.53 | 3.22 | -0.31 | -8.78% |
| 25 | 4.3 | 3.98 | -0.32 | -7.44% |
| 50 | 4.89 | 4.57 | -0.32 | -6.54% |
| 100 | 5.58 | 5.25 | -0.33 | -5.91% |

Since total runoff decreased for post-developed conditions, no detention measures are proposed to be implemented with this site development project.

This site also qualifies for exemptions to stormwater management per APWA 5600 5601.3-A-2&4.

Conclusion:

This project is designed to comply with Lee’s Summit drainage standards to the maximum extent practicable and will have no adverse impact to roadways, sewers, or abutting properties.

Sincerely,



Chad D. Fairbanks, P.E., LEED AP
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