

Beaver Dam Lake Management District

3rd Ave & Jeffery Blvd Stormwater Improvements

City of Cumberland, Barron County, Wisconsin

Prepared by Emmons & Olivier Resources, Inc.

Job No.: 00909-0022

Date: December 7, 2020

Table 1. Comparison of Pre- versus Post-Construction Nutrient Loading

Project Location Id No.	Location	BMP	Product	Implementation Date	Quantity	Units	Cost										
								P (lb/yr)					TSS (ton/yr)				
								Removal Rate (%) ¹	Pre-Construction Loading ³	Post-Construction Loading	Estimated Post-Construction from Grant Application	Removal Rate (%) ²	Pre-Construction Loading ³	Post-Construction Loading	Estimated Post-Construction from Grant Application		
1	2495 Jeffery Blvd. (Goldsmith)	Hydrodynamic Separator - Contech CDS	CDS2025-5-C-624280-10	10/15/2019	1	1	\$22,000.00	25%	18.4	4.6	8.5	8.7	80%	3348.0	2678.4	4936.9	2615.0
2	1265 Jeffery Blvd. (Cifaldi)	Hydrodynamic Separator - Contech CDS	CDS3020-6-C-624280-20	10/25/2019	1	1	\$29,300.00	25%	15.5	3.9			80%	2823.1	2258.5		
3	3rd Ave (City of Cumberland)	Hydrodynamic Separator - Contech CDS	CDS3030-6-C-624280-30	11/1/2019	1	1	\$34,000.00	25%	6.2	1.6	1.6	3.6	80%	1132.0	905.6	905.6	1100.0

1. P Removal Rate from Contech = 20% to 30%

2. TSS Removal Rate from Contech = 80%

3. The actual drainage for Project 1 increased from 26.82 acres to 70.70 acres, which was taken into account during the engineering & design phase.