
Subject Stormwater Calculations

Project Name McCarrons Water Treatment Plant Process Improvement Project
Saint Paul Regional Water Services

Attention City of Maplewood

From Robert Townsend

Date 01/18/2022

To whom it may concern,

This memo contains the stormwater runoff quantities for the proposed McCarrons Water Treatment Plant Process Improvement Project at the Saint Paul Regional Water Services.

The proposed project is within the existing Treatment Plant and the stormwater discharges to existing ditches and storm sewer network. The project encompasses relocation of an existing infiltration basin, with a proposed stormwater and infiltration basin.

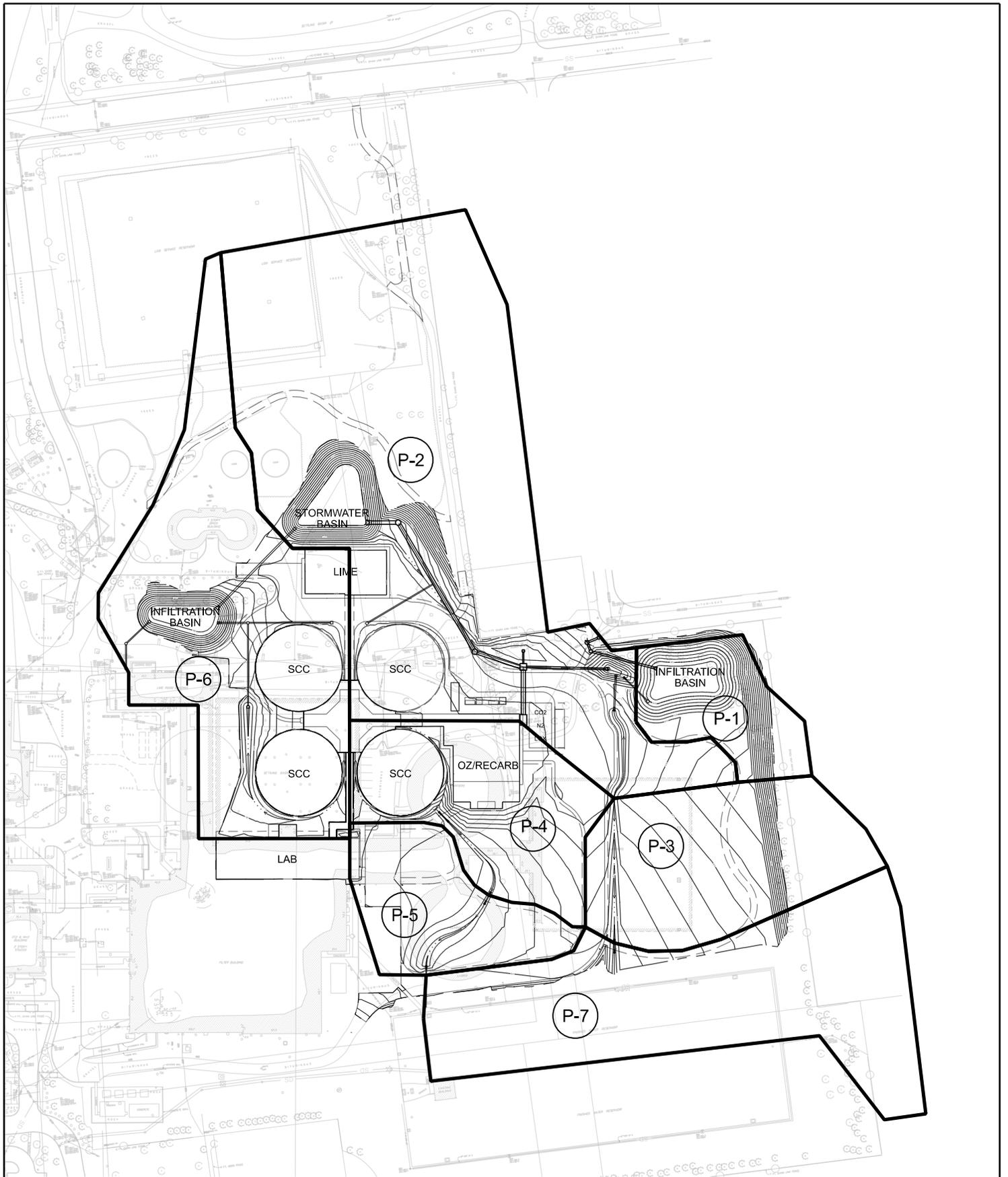
The water quality and runoff rate requirements are set by the City of Maplewood, and the Captiol Region Watershed District.

The northern part of the project encompasses a new stormwater and infiltration basin while also accommodating discharges from the Fenton-Beaumont Drainage from the Wester Hills area neighborhood to the northeast which encompasses an underground rate-control system under Fenton Avenue which discharged into rate-control and infiltration basin. The existing infiltration basin will be relocated as part of this project. The northern part of the project also takes offsite flows from an underground. The southern part of the project discharges to an existing site ditch. The following table shows the runoff quantities for each discharge point during the 10 and 100-year storm events.

Discharge Point	10-yr Event Discharge (CFS)	100-yr Event Discharge (CFS)
Existing site storm sewer, west of project	4.04	7.81
Existing site ditch/storm sewer, southwest of project	5.72	12.50

The project will prepare a full drainage report documenting calculations along with additional narrative and documentation.

Attachment: McCarron Drainage Basin Map



McCARRON DRAINAGE BASIN MAP