

MEMO



Date: June 26, 2024

To: City of Salem
Community Development

From: Natalie G. Janney, P.E.

RE: **Liberty West Apartments**
Preliminary Storm Response Comments



Renew date: 6.30.2025

In response to the Incomplete Letter we received for the Liberty West Apartments, we were given comments on the preliminary stormwater design per our request. Based on these comments, some revisions have been made to the preliminary stormwater design and report. This memo will list the comments received and the responses (shown in **RED**).

5.44 ft ponded water. Total facility exceeds 6-ft listed in PWDS 4.5.

5.44 feet of water does not exceed 6 feet. The past application of this standard has been maximum 6 feet of water depth, not overall pond depth.

Area draining to facility only 5.3 acres. Additional 0.8 acres should be included in the report.

The overall project and predeveloped calculations were done for the entire 6.72 acres. The analysis was redone for 0.8 acres draining offsite, undetained. The pond facility is able to overdetrain to offset the sloped areas draining offsite. The orifice diameters, elevations, and release rates are included in the report.

Overflow should not discharge over sidewalk.

An additional catch basin overflow has been added to the interior of the pond, set at the same RIM elevation as the pipe overflow in the control structure. This will provide an outlet should the control structure or the outlet to the control structure become clogged. The notch in the pond wall is still suggested, as it provides an additional somewhat controlled outlet should there be a failure of the emergency overflow. If that were to happen, it would be better to have a controlled, armored outlet (as proposed). At that point, flowing over the sidewalk shouldn't be a concern, but rather repairing whatever is causing all the failures.

PWDS 4.5(b)(3)D(i) requires a 20' setback from structures.

A memo from the geotechnical engineer is being provided to justify a lesser setback, which is allowed in Section 4.5(b)(3)D(i).

PWDS 4.5(b)(3)E(vi) requires upstream sedimentation manhole.

Sedimentation manholes have been provided for both inlet locations.

RIM set too low for the facility to provide water quality treatment.

This facility is providing detention and flow control only. Water quality is provided in a downstream facility, as specified in the preliminary storm report.

Slope shown is 1V:1.6H. PWDS 4.5(b)(3)D(iii) states: Surrounding slopes shall not exceed ten percent. Minimum distance from the edge of pond water surface to the top of a slope greater than 15 percent shall be 200 feet, unless a geotechnical report is submitted to and approved by the City. PWDS 4.5(b)(3)G(iv) pond embankments max slope 3:1.

This language assumes a flat area for the slope to build a stormwater facility and that is not the case for many sites left in Salem. The memo provided from the geotechnical engineer states that the soils can handle the pond design. In addition, the existing site has an existing slope in this area of 15%, which would make limiting the slope to 10% infeasible. No embankment is proposed.