

MEMORANDUM

TO: City of Sherwood FROM: Mike Gillette, PE

DATE: June 18, 2021

SUBJECT: Stormwater Analysis – Tonquin Road Yard

Overview:

The proposed project will clear and mass grade a property east of Tonquin Road into a future development area, to be constructed and permitted under a separate application. The property was annexed from Washington County last fall and is now within the City of Sherwood. The property is on the east side of Tonquin Road, just south of SW Oregon St, and north of the Tri County Gun Club.

The proposed project does not add any new impervious area to the site; therefore, stormwater treatment and detention facilities are not required. The proposed work involves mass grading the property to develop future areas for site development. Temporary gravel roads will be built for construction traffic, but these will be removed upon project completion.

During construction, the proposed mass grading activities have potential to add sediment to runoff leaving the site. Under existing conditions, runoff from the site sheet flows to a roadside ditch along the east side of Tonquin Road. This ditch flows north and eventually discharges to the wetlands through a series of culverts adjacent to Rock Creek west of Tonquin Road.

Settling Basin:

To mitigate the increased sediment load due to construction activities, a settling basin will be constructed along the west end of the development area (See Attachment 1 – Site Plan). This basin will capture construction runoff and allow sediment to settle out before the runoff discharges west down the slope to the existing conveyance ditch. The site discharge location and pathway will not change between existing and proposed conditions. Details of the settling basin are shown below:

Facility	Length (ft)	Bottom Width (ft)	Side Slopes (ft)	Overall Depth (ft)
Settling Basin	477	11	7.5 ft @ 3:1	2.5

Conclusion:

Since no impervious area is being added to the site, Clean Water Services standards for water quality, flow control, and hydromodification are not required to be met. The final condition of the site will be native subgrade material that will be graded to allow for future development of the site. Settling basins will be constructed to provide erosion and sediment control during construction activities. Runoff will discharge the site in the same manner as it does under existing conditions.

Attachments:

♦ Site Plan



