

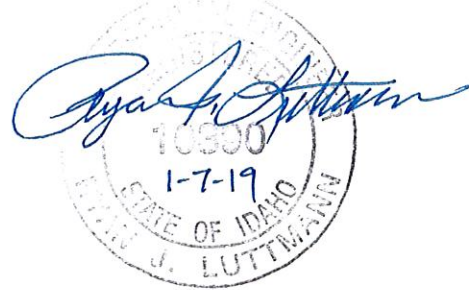
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JAN 08 2019

**PLANNING OFFICE
CITY OF PONDERAY**

MEMO

To: Erik Brubaker, Ponderay Planning Director
From: Ryan Luttmann, P.E.
Date: January 7, 2019
Re: Tucker Taylor, LLC – Site Modifications



In September 2018, I met with you to discuss the potential of site modifications and the necessary work to be completed and submitted to the City for the Taylor and Sons Chevrolet that is owned by Tucker Taylor, LLC. The discussion was associated with a desire by the property owner to expand the paved area and modify the retention swale with vertical walls to reduce the footprint of the swale area while providing equivalent storage capacity. It was my understanding that the applicant would be required to provide the following:

- A revised site plan with the revised swale volume calculations. A new stormwater manage plan would not be required for the site.
- The revised site would still be required to maintain the 10% green space requirement and the swale area would continue to be included in the allowable 10% of the landscaped area.

Included with this memorandum is a copy of the proposed site plan revisions that are based on the April 28, 2010 plans that were prepared by Ruen-Yeager and Associates and approved by the City. The expansion of the paved area is intended to accommodate the turning movements of a WB-50 truck around the proposed service building expansion and relocate some of the existing parking area for this property.

10% Landscape Area Calculations:

The new impervious area created by the expansion of the existing asphalt area is 4,769 SF as shown on sheet 3 of 3. The calculations included in the City's file that were prepared by the architect in 2010 indicated that the landscape area required was 13,282.6 SF (10% of the 132,826 SF of property) and that 18,273 SF of landscape area was provided, which exceeded the requirement by 4,990.4 SF. The proposed new impervious area of 4,769 SF is less than 4,990.4 SF and therefore, the 10% can still be provided for the site with the proposed modifications to convert some of the existing landscape area to asphalt.

Swale Volume Calculations:

The City files did not yield a copy of the original stormwater calculations from 2010. Based upon the existing bottom swale area of 5,950 SF at an elevation of 2121.00, the vertical wall location, the swale slope contours and the overflow rim elevation of 2121.97 we calculated the existing storage volume of the retention swale to be 6,416 CF.

The proposed new impervious area proposed for the site is 4,769 SF. To retain and treat the first ½" of additional impervious surface area, the storage volume for the swale should include an additional 199 CF. The proposed minimum retention volume is 6,416 CF + 199 CF = 6,615 CF.

The proposed new bottom swale area has been designed to provide 6,359 SF of infiltration area at a base elevation of 2121.00 SF. The storage depth required to provide a retention volume of 6,615 CF is 1.04 ft. The grate elevation of the outlet structure would need to be raised approximately 7/8 of an inch. If the outlet grate remains at 2121.97, the additional 409 SF of impervious base swale area will provide additional infiltration area and vertical walls accommodate the additional storage requirements associated with the new impervious area.