



CITY OF RAPID CITY

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TO: Public Works Committee

FROM: Karley Halsted, P.E., Engineering Project Manager

DATE: April 16, 2010

RE: Appeal of Denial for an Exception to Waive the Requirement to Meter Stormwater Flows to Historic Rates
Lot L-1BR, Marshall Heights Tract

An application was submitted by Gary Renner requesting an exception to waive the requirement to meter stormwater flows to historic rates for a proposed 4,380 square foot addition to the existing building located at 127 Knollwood Drive.

The City of Rapid City Drainage Criteria Manual, states "The intent of the Drainage Criteria Manual is to mitigate the impact from uncontrolled stormwater runoff in urbanized environments". The requested exception will allow development of the property without detention and the downstream impact could result in increased stormwater runoff, soil erosion and sedimentation.

The site is located in the Knollwood Drainage Basin. The proposed expansion to the existing building will include the removal of existing pavement, restoration of pavement for parking, installation of sidewalk and the construction of a 4,380 square foot addition to the facility. At this time no drainage improvements are proposed. The proposed addition is an extension of an existing 17,500 square foot building. The drainage that currently collects in the parking lot is carried by the grade to Knollwood Drive. By means of the curb and gutter in Knollwood Drive and Maple Avenue, the drainage is then conveyed to the regional facility located north east of the intersection of Knollwood Drive and Maple Avenue. The Knollwood Drainage Basin Master Plan for this area identified that the detention cell is adequately sized and does not require expansion. However, granting this exception can result in increased stormwater runoff, soil erosion and sedimentation. Additionally, there are improvements being made by the Public Works Department further downstream to correct capacity problems within this drainage basin.

The applicant has indicated that limitations in grade, open space, and the absence of storm sewer on Knollwood Drive renders the site incapable of providing the required stormwater detention. Staff has identified at least one possible option for addressing the on-site detention to meter stormwater from the site at historic rates. For example, the open space located at the north side of the lot, directly west of the driveway, could be utilized for a detention pond which



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would then outflow to the curb line in Knollwood Drive. This option would require the relocation of a sign, water and sewer services. This option would provide detention, with minimal site grading, without rerouting the existing path of the stormwater.

Staff Recommendation: Staff recommends denial of the exception to waive the requirement to meter stormwater flows to historic rates.