



Christopher J. Brink, AICP
Director

Community Development Department
316 North Park Avenue, Room 445
Helena, Montana 59623

Phone: 406-447-8490
Direct: 406-447-8445
Email: cbrink@helenamt.gov

helenamt.gov

December 9, 2022

Jeremy Fadness, P.E.
WWC Engineering
1275 Maple Street, Suite F
Helena, Montana 59601

Delivery via email to:
jfadness@wwcengineering.com

RE: Preliminary Plat, 2nd Sufficiency Review
with Annexation
West Side Woods Phased Major Subdivision

Dear Mr. Fadness;

As the subdivider's listed agent, you are being provided notification that the preliminary plat application has been deemed *insufficient for review* at this time, per MCA Section 76-3-604 (2)(a)—(b):

...(a) Within 15 working days after the reviewing agent or agency notifies the subdivider or the subdivider's agent that the application contains all of the required elements as provided in subsection (1), the reviewing agent or agency shall determine whether the application and required elements contain detailed, supporting information that is sufficient to allow for the review of the proposed subdivision under the provisions of this chapter and the local regulations adopted pursuant to this chapter and shall notify the subdivider or, with the subdivider's written permission, the subdivider's agent of the reviewing agent's or agency's determination.

(b) If the reviewing agent or agency determines that information in the application is not sufficient to allow for review of the proposed subdivision, the reviewing agent or agency shall identify the insufficient information in its notification.

Please address the following items and elements noted below and resubmit the required information.

Items determined insufficient

Transportation Systems comments are as follows:

1. Please submit deviation/variance requests for all proposed deviations from City Engineering Standards or City Code requirements; including but not limited to:
 - The 100-foot radius horizontal curve at the construction of Hauser Blvd at Overlook Estates. This has been included as part of the submittal and the deviation is relevant to both the preliminary plat and the annexation request.
 - The alignment of Flowerree Court and Flowerree Street (see Engineering Standards 5.2.5, "Two streets meeting a third street from opposite sides shall meet at the same point, or their centerlines shall be off-set at least 125'.")
2. The asphalt road width for Local Road - Typical Section 1 and Typical Section 2, should be 32' as was shown in the first submittal. Although the width is different from the Engineering Standards, this will not be considered a deviation because the IFC requires an unobstructed roadway width of not less than 20 feet, for emergency vehicles. (This 32 foot width includes two 10-foot travel lanes and two 6-foot wide on street parking lanes.)

3. TIS Comments:

- Page 1. Executive Summary. Reference to the TIS evaluation being conducted according to the "Transportation Research Board's Highway Capacity Manual (HCM) - Special Report 209" remains. All HCM references should be reviewed and verified.
- Appendix D. LOS Modeling. All HCS TWSC Reports say "HCS7" and "TWSC Version 7.9.5". The intersection LOS analysis should utilize latest edition, HCS 2022 (version 8.1 released 12/15/21, or newer). The references have been changed in the body of the report but all HCS data/worksheets should be reviewed and verified.
- Page 16. Queuing Analysis. Queuing analysis language and Table 11 reference year 2027. It is assumed this is intended to reference year 2029 for full project buildout. Should be reviewed and verified.
- Appendix D. LOS Modeling. HCS reports refer to year 2027 analysis. It is assumed that this is intended to reference year 2029 for full project buildout. Should be reviewed and verified.

Public Works comments are as follows (Please confer with Public Works staff regarding sufficiency or general review applicability):

1. Water – Cross Town Connector Main - The existing City of Helena 24-inch diameter steel water main crossing the proposed subdivision, known as the cross-town connector, must be kept at its current burial configuration, and kept so that it is no shallower than 6.5 feet below ground surface (BGS) and no deeper than 7.5 feet BGS and its current alignment must be maintained. No additional fill shall be placed on top of its current alignment that will put it greater than 7.5 feet BGS. No cut shall occur on top of its current alignment that will put it less than 6.5 feet BGS. Its future accessibility for maintenance, repair and replacement must be ensured in perpetuity without undue impacts to private property/residences, water, sewer and/or transportation infrastructure.
2. Water – Cross Town Connector Main - The City makes no claims or assertions as to the condition or overall integrity of the Cross Town Connector main and any damage or adverse impacts to this main or its appurtenances as a result of the proposed development shall be the sole responsibility of the developer.
3. Water – Hauser Boulevard 10 Inch Water Main - The existing ten-inch water main proposed for multiple connections to the proposed subdivision located on Hauser Boulevard is approximately 123 years in age and currently has no known connections. The City makes no claims or assertions as to the condition or overall integrity of this main. The developer shall connect to this main at their own risk and shall mitigate, repair, replace and remedy any damage and/or impact(s) to this water main and any associated infrastructure and residences/private property as a result of their development of the subdivision, disturbance and/or installation of connection(s) to this main. This includes having City personnel tap and or install connections to this main.
4. Sanitary Sewer – Downstream Sanitary Sewer Capacity - The wastewater capacity analysis presented in the development PER does not use a minimum Manning coefficient of $n = 0.013$ as required by the City of Helena Engineering Standards Section 3.4.1. When the reviewer ran the capacity analysis using the submitted numbers from the PER and the Manning coefficient as per City standards, it was found that 74-75 downstream sewer mains exceeded 50% capacity post development.

For the proposed subdivision Phase I design flows presented in the PER (which could be low, due to flows measured during the COVID pandemic) and using a Manning coefficient of $n = 0.13$ as per City Design Standards, it was found that 74 downstream sewer mains exceeded 50% capacity, with 28 mains at 50-60%, and 46 at 61-75% capacity.

For the proposed subdivision Phase II design flows presented in the PER (which could be low, due to flows measured during the COVID pandemic) and using a Manning coefficient of $n = 0.13$ as per City Design Standards, it was found that 74 downstream sewer mains exceeded 50% capacity, with 25 mains at 50-60%, 48 at 61-75% capacity, and 1 main at over 75% capacity.

For the proposed subdivision Phase III design flows presented in the PER (which could be low, due to flows measured during the COVID pandemic) and using a Manning coefficient of $n = 0.13$ as per City Design Standards, it was found that 75 downstream sewer mains exceeded 50% capacity, with 23 mains at 50-60%, 39 at 61-75% capacity, and 13 mains at over 75% capacity.

For the proposed subdivision Phase IV design flows presented in the PER (which could be low, due to flows measured during the COVID pandemic) and using a Manning coefficient of $n = 0.13$ as per City Design Standards, it was found that 75 downstream sewer mains exceeded 50% capacity, with 20 mains at 50-60%, 38 at 61-75% capacity, and 17 mains at over 75% capacity.

A figure showing the impacted downstream sanitary sewer mains believed to be exceeding 50% capacity as per preliminary calculations for each of the proposed subdivision phases has been included.¹

The wastewater capacity analysis in the PER bases its flow assumptions on sewer flow readings taken during the COVID pandemic, when the schools and businesses were closed and much of the non-residential uses within the City were not contributing to wastewater flows. The flow numbers presented are not indicative of typical flows. The final design should be engineered/based on up to date and non-pandemic sanitary sewer flows. Calculations based on information presented in the PER for the proposed subdivision indicate that significant downstream impacts to the sanitary sewer collection system are likely to be expected because of the proposed subdivision.

The developer of the proposed subdivision will need to demonstrate and ensure that adequate downstream sanitary sewer collection system capacity exists within the existing City of Helena sanitary sewer system, upsize existing downstream sewer segments impacted by the proposed development as per City of Helena Engineering Standards Section 3.4.1 and/or mitigate potential impacts to the existing City of Helena Sanitary Sewer Collection System.

4. Water - Water Storage in the Malben High/Low/ Valley pressure zones will need to be analyzed as part of the infrastructure design of this subdivision. Finished water storage may be required to be constructed for a development of this size.

Jeremy Fadness, P.E
West Side Woods Phased Major
December 9, 2022
Page 4 of 4

Thank you for your submittal. We look forward to moving this project through the formal review and approval processes and we will work to expedite, when possible, the next phase of review and approval. Please do not hesitate to reach out to me directly at the number and email listed above. You may also reach out to a member of the planning staff.

Sincerely,



Christopher J. Brink, AICP
Director

CJB/cb

Cc: Derek Davis, Sussex Development
(derek@sussexconstruction)
File

Review and Submittal Timelines:

Original Submittal – 9/16/22
1st Completeness Review Sent – 9/22/22
1st Completeness Response – 9/23/22
Completeness Confirmed – 9/27/22
Sufficiency Review Started – 9/27/22
1st Sufficiency Review – 10/17/22
1st Sufficiency Review Response – 11/17/22
2nd Sufficiency Review – 12/09/22