

WATER & SANITATION REPORT

for

SAPPHIRE PLACE SUBDIVISION

Legally Described as:

PARCEL 2A OF CERTIFICATE OF SURVEY NO. 6689, RECORDS OF MISSOULA COUNTY, LOCATED IN THE NW ¼ OF SECTION 07, TOWNSHIP 13 NORTH, RANGE 19 WEST, PRINCIPAL MERIDIAN MONTANA, MISSOULA COUNTY, MONTANA. CONTAINING A TOTAL OF 18.73 ACRES, MORE OR LESS

Prepared For:

Cathcart Properties Inc., or Its Assigns
200 Reserve Blvd. Suite 300.
Charlottesville, VA 22901

Prepared By:

IMEG Corp.
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J.1 - Map. A vicinity map or plan that shows:

- a. The location, within 100 feet outside of the exterior property line of the subdivision and on the proposed lots, of flood plains; surface water features; springs; irrigation ditches;
A vicinity map is included in Section B showing the location of the property in relation to the surrounding area. A more detailed and extensive exhibit is provided in the Master Site Plans included in Section A showing all the required information outlined in section J.1, J.2, and J.3 of the subdivision application. The property is not currently within any designated floodplain areas. There are surface water features in the form of an irrigation ditch and evidence of a season pond used in conjunction with said ditch. There are no other surface water features on or within 100 feet of the property. There are no other small intermittent drainage ways located within 100 feet of the proposed subdivision.
- b. Existing, previously approved, and, for parcels fewer than 20 acres, proposed water wells and wastewater treatment systems; for parcels less than 20 acres, mixing zones;
All existing and previously approved water wells and wastewater treatment systems have been shown within 100 feet of the property boundary. The proposed subdivision will be served by the City of Missoula Water and Sewer. An Intent to Serve letter will be issued as part of the City Engineering Stage 3 Checklist submittal. A new water main will be extended from the existing water main located in the 40' Right-of-Way North of the property. A Gravity sewer main is proposed to serve the development. The proposed main will be gravity fed to the South. The storm water system will be comprised of onsite mitigation and infiltration based on the Missoula City requirements, see the Preliminary Grading and Drainage Engineering Design Report in Section D of this application for more details on the storm water system.
- c. The representative drainfield site used for the soil profile description; and The location, within 500 feet outside of the exterior property line of the subdivision, of all public water and sewer facilities.
Onsite wastewater systems utilizing drainfields are not proposed for this site. The location of existing public water and sewer facilities adjacent and surrounding the subdivision have been shown on the Sewer Septic Exhibit, Stormwater Exhibit, and Water Service Line Exhibit.

J.2 - Description. A description of the proposed subdivision's water supply systems, storm water systems, solid waste disposal systems, and wastewater treatment systems, including whether the water supply and wastewater treatment systems are individual, shared, multiple user, or public as those systems are defined in rules published by the Montana Department of Environmental Quality (DEQ).

See section J.1. B. above.

J.3 - Lot Layout. A drawing of the conceptual lot layout at a scale no smaller than 1 inch equal to 200 feet that shows all information required for a lot layout document in rules adopted by the Montana Department of Environmental Quality pursuant to 76-4-104, MCA.

A drawing of the Utility Construction Plans at a scale of 1 inch equals 200 feet that shows all of the information required pursuant to 76-4-104, MCA is included in Section D of this submittal.

J.4 - Suitability. Evidence of suitability for new on-site wastewater treatment systems that, at a minimum, include:

- d. A soil profile description from a representative drain-field site identified on the vicinity map that complies with standards published by the Montana Department of Environmental Quality;
No drainfields are proposed; this requirement is not applicable.
- e. Demonstration that the soil profile contains a minimum of 4 feet of vertical separation distance between the bottom of the permeable surface of the proposed wastewater treatment system and a limiting layer; and

No drainfields are proposed; this requirement is not applicable.

- f. In cases in which the soil profile or other information indicates that ground water is within 7 feet of the natural ground surface, evidence that the ground water will not exceed the minimum vertical separation distance of 4 feet.

No drainfields are proposed; this requirement is not applicable.

J.5 - Water Quantity. For new water supply systems, unless cisterns are proposed, evidence of adequate water availability:

- g. obtained from well logs or testing of onsite or nearby wells;
This is not applicable as Missoula Water, a regulated public water supply, is providing water to this proposed subdivision.
- h. obtained from information contained in published hydro-geological reports; or
This is not applicable as Missoula Water, a regulated public water supply, is providing water to this proposed subdivision.
- i. as otherwise specified by rules adopted by the Montana Department of Environmental Quality pursuant to 76-4-104, MCA.
This is not applicable as Missoula Water, a regulated public water supply, is providing water to this proposed subdivision.

- j. Demonstration that the soil profile contains a minimum of 4 feet of vertical separation distance between the bottom of the permeable surface of the proposed wastewater treatment system and a limiting layer; and

No drainfields are proposed; this requirement is not applicable.

- k. In cases in which the soil profile or other information indicates that ground water is within 7 feet of the natural ground surface, evidence that the ground water will not exceed the minimum vertical separation distance of 4 feet.

No drainfields are proposed; this requirement is not applicable.

J.6 - Water Quantity. For new water supply systems, unless cisterns are proposed, evidence of adequate water availability:

- l. obtained from well logs or testing of onsite or nearby wells;
This is not applicable as Missoula Water, a regulated public water supply, is providing water to this proposed subdivision.
- m. obtained from information contained in published hydro-geological reports; or
This is not applicable as Missoula Water, a regulated public water supply, is providing water to this proposed subdivision.
- n. as otherwise specified by rules adopted by the Montana Department of Environmental Quality pursuant to 76-4-104, MCA.
This is not applicable as Missoula Water, a regulated public water supply, is providing water to this proposed subdivision.

J.7 - Water Quality. Evidence of sufficient water quality in accordance with rules adopted by the Montana Department of Environmental Quality pursuant to 76-4-104, MCA.

This is not applicable as Missoula Water, a regulated public water supply, is providing water to this proposed subdivision.

J.8 - Impacts to groundwater quality. Preliminary analysis of potential impacts to ground water quality from new wastewater treatment systems, using as guidance rules adopted by the board of environmental review pursuant to 75-5-301, MCA and 75-5-303, MCA related to standard mixing zones for ground water, source specific mixing zones, and non-significant changes in water quality. The preliminary analysis may be based on currently available information and must consider the effects of overlapping mixing zones from proposed and existing wastewater treatment systems within and directly adjacent to the subdivision. Instead of performing the preliminary analysis, the sub-divider may perform a complete non-degradation analysis in the same manner as is required for an application that is reviewed under Title 76, Chapter 4.

The impacts to groundwater quality are not applicable for new wastewater treatment systems as the proposed wastewater treatment system for this subdivision is connection to the Missoula City sewer system. The wastewater from this subdivision will be processed and discharged to surface water at the Missoula Wastewater Treatment facility.

Prepared by:
IMEG.



Joe Dehnert, Land Use Planner
