BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

*** * * * * * ***

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 43Q 30161830) BY LORENZ CONSTRUCTION, LLC AND) MARSICH INVESTMENTS INC)	**PRELIMINARY DETERMINATION TO GRANT PERMIT**

*** * * * * * ***

On December 29, 2023, Lorenz Construction, LLC and Marsich Investments Inc (Applicants) submitted Application for Beneficial Water Use Permit No. 43Q 30161830 to the Billings Regional Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for 394 GPM and 132.9 AF for multiple domestic, and lawn and garden irrigation. The Department published receipt of the application on its website. The Department sent the Applicants a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated June 26, 2024. The Applicants responded with information dated July 23, 2024, and September 5, 2024. The application was determined to be correct and complete as of October 30, 2042. A preapplication meeting was held between the Department, with Mark Elison, Jill Lippard, and Veronica Corbett present for the Department, and Scott Worthington of In Site Engineering, consultant for the Applicants on September 26, 2023. An Environmental Assessment for this application was completed on June 14, 2024.

INFORMATION

The Department considered the following information submitted by the Applicants, which is contained in the administrative record.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Attachments
    - Pre-application meeting form dated September 26, 2023
    - ARM 32.121.121(3)(e) and (h) 72-hour aquifer testing requirements variance request letter from Scott Worthington, consultant, to Mark Elison, DNRC Billings Regional Manager, dated October 5, 2023

  - ARM 32.121.121(3)(e) and (h) 72-hour aquifer testing requirements variance request approval letter from Mark Elison to Scott Worthington, dated October 18, 2023
  - Well log report for GWIC ID 329173
  - Aquifer Test Data Form 633 in electronic and paper format for one 25-hour pump test
- Addenda
  - Form 600-ATA Aquifer Testing Addendum
- Maps:
  - Topographic maps showing the general location of Serenity Subdivision and the proposed point of diversion (POD) and place of use (POU)
  - Preliminary plat map of proposed Serentiy Subdivision, dated September 8, 2023

Information Received after Application Filed

- Emails dated January 19, 2024, through January 30, 2024, between Veronica Corbett and Scott Worthington, discussing proposed volume and flow rates necessary for each purpose, proposed POD/POU discrepancies, and the existing supplemental flood irrigation right (Statement of Claim 43Q 45860-00)
- Pump curve and pump specs received from Scott Worthington on January 12, 2024
- Emails dated March 19, 2024, through April 16, 2024, between Jake Mohrmann, Water Sciences Bureau Chief, Kathy Olsen, Regional Operations Manager, and Scott Worthington, discussing fluctuations in the flow rate during pump testing
- ARM 36.12.121(3)(a) constant discharge rate variance request letter from Scott Worthington to Mark Elison dated April 16, 2024
- ARM 36.12.121(3)(a) constant discharge rate variance approval letter from Kathy Olsen to Scott Worthington, dated April 16, 2024
- DNRC Ownership Update, Severed Water Right, Form 643, received July 18, 2024, signed by Lorenz Construction, LLC and Marsich Investments Inc. severing the overlapping flood irrigation water right Statement of Claim 43Q 45860-00 from the place of use
- DNRC Ownership Update, Severed Water Right, Form 643, received September 5, 2024, signed by Sarah F. Kindsfather and Kyle A. Kindsfather severing the overlapping flood

irrigation water right Statement of Claim 43Q 45860-00 from the place of use

Information within the Department's Possession/Knowledge

- Groundwater Permit Report by Jake Mohrmann, dated April 17, 2024
- Groundwater Permit Application Technical Report by Veronica Corbett, Water Resource Specialist, dated October 30, 2024
- DNRC Canyon Creek @ ZooMontana Gage 43Q 05900 (period of record: 5/5/2016-11/27/2022)
- Hydrology of the West Billings Area: Impacts of Land-Use Changes on Water Resources, John Olson & Jon Reiten (2002), Montana Bureau of Mines and Geology, Report of Investigation 10
- DNRC Water Calculation Guide
- DNRC water rights database
- Irrigation Water Requirements (IWR) program created by US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) 2003
- The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Billings Regional Office at 406-247-4415 to request copies of the following documents.
    - DNRC Technical Memorandum: Variance – Yellowstone River Terrace Level 3 Aquifer Properties Memo, dated March 1, 2022

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, MCA). For the purposes of this document, Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; AF/YR means acre-feet per year, POU means place of use, and POD means point of diversion.

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicants propose to divert groundwater from the Yellowstone River Terrace 2 alluvial aquifer, by means of 58 wells, averaging 45 ft in depth. Water will be diverted from January 1 to December 31 for multiple domestic use, and from May 1 to October 31 for lawn and garden irrigation, at 394.0 GPM up to 132.9 AF. The Applicants propose 58 points of diversion in the NE of Section 28, Township 1S, Range 25E, Yellowstone County. One (1) well will be located on each of Lots 1-57 and one (1) well will be located on the Park lot in the proposed Serenity Subdivision. These points of diversion will serve 57 residential lots and one (1) park area in a 60-acre subdivision, with an average lot size of 0.964 acres. The 58 wells will provide domestic water to 57 homes, lawn and garden irrigation to approximately 0.72 acres per lot totaling 41.203 acres, and lawn and garden irrigation for one park lawn of approximately 4.3 acres. Total irrigated acres cover approximately 45.5 acres. The place of use is generally the NE Section 4, T1S, R25E, Yellowstone County. Multiple domestic use will account for 50 GPM and 19.15 AF of the requested flow rate and volume while lawn and garden irrigation and irrigation of a 4.3-acre community park account for the remaining 344.0 GPM and 113.8 AF of the requested appropriation.

2. Serenity Subdivision is located near Canyon Creek (2,600 ft away) and the Yellowstone River (8,000 ft away).

3. The Applicants request 132.9 AF of which 81.6 AF will be consumed and 51.3 AF will return to the source aquifer as identified in the Department Groundwater Permit Report.

4. The proposed permit is not supplemental to any other water rights. There is an overlapping flood irrigation water right, Statement of Claim 43Q 45860-00. DNRC Ownership Update, Severed Water Right, Form 643 was submitted to the Department on July 18, 2024, and September 5, 2024, to sever Statement of Claim 43Q 45860-00 from the place of use. The entire historical place of use may be irrigated in a manner consistent with historical practices. The Applicants do not intend to use irrigation water under Statement of Claim 43Q 45860-00 within the proposed Lots 1-57 or the park lot of the Serenity Subdivision. However, the 16.441-acre Lot 58 of the Serenity Subdivision could be irrigated as it was historically under Statement of Claim 43Q 45860-00. Lot 58 is labeled as “future development”.

PRELIMINARY MATTERS

FINDINGS OF FACT

5. Statement of Claim 43Q 45860-00 is an irrigation right with a historical place of use which covers the entirety of the proposed subdivision and acres of adjacent land, totaling 107 AC of claimed historical irrigation. Statement of Claim 43Q 45860-00 is considered associated with the proposed appropriation because they share a place of use. The Applicants do not intend to use Statement of Claim 43Q 45860-00 on the approximately 61 acres which will be developed into Lots 1-57 or the park lot of the proposed Serenity Subdivision.

6. DNRC Ownership Update, Severed Water Right, Form 643, was received by the Department on July 18, 2024, signed by Lorenz Construction, LLC and Marsich Investments Inc. Research by the Department determined Sarah F. Kindsfather and Kyle A. Kindsfather should be co-owners of Statement of Claim 43Q 45860-00 based on their owning a parcel within the historical place of use. An Ownership Update Correction, OUID # 265171, was processed to add Sarah and Kyle Kindsfather to Statement of Claim 43Q 45860-00. A second DNRC Ownership Update, Severed Water Right, Form 643, was received by the Department on September 5, 2024, signed by Sarah and Kyle Kindsfather. Statement of Claim 43Q 45860-00 is severed from the historical place of use by Lorenz Construction, LLC, Marsich Investments Inc., and Sarah & Kyle Kindsfather. The parcel owned by Sarah and Kyle Kindsfather, as well as Lot 58 of the proposed Serenity Subdivision, labeled as “Future Development”, may continue to be irrigated in a manner consistent with historical practices under Statement of Claim 43Q 45860-00.

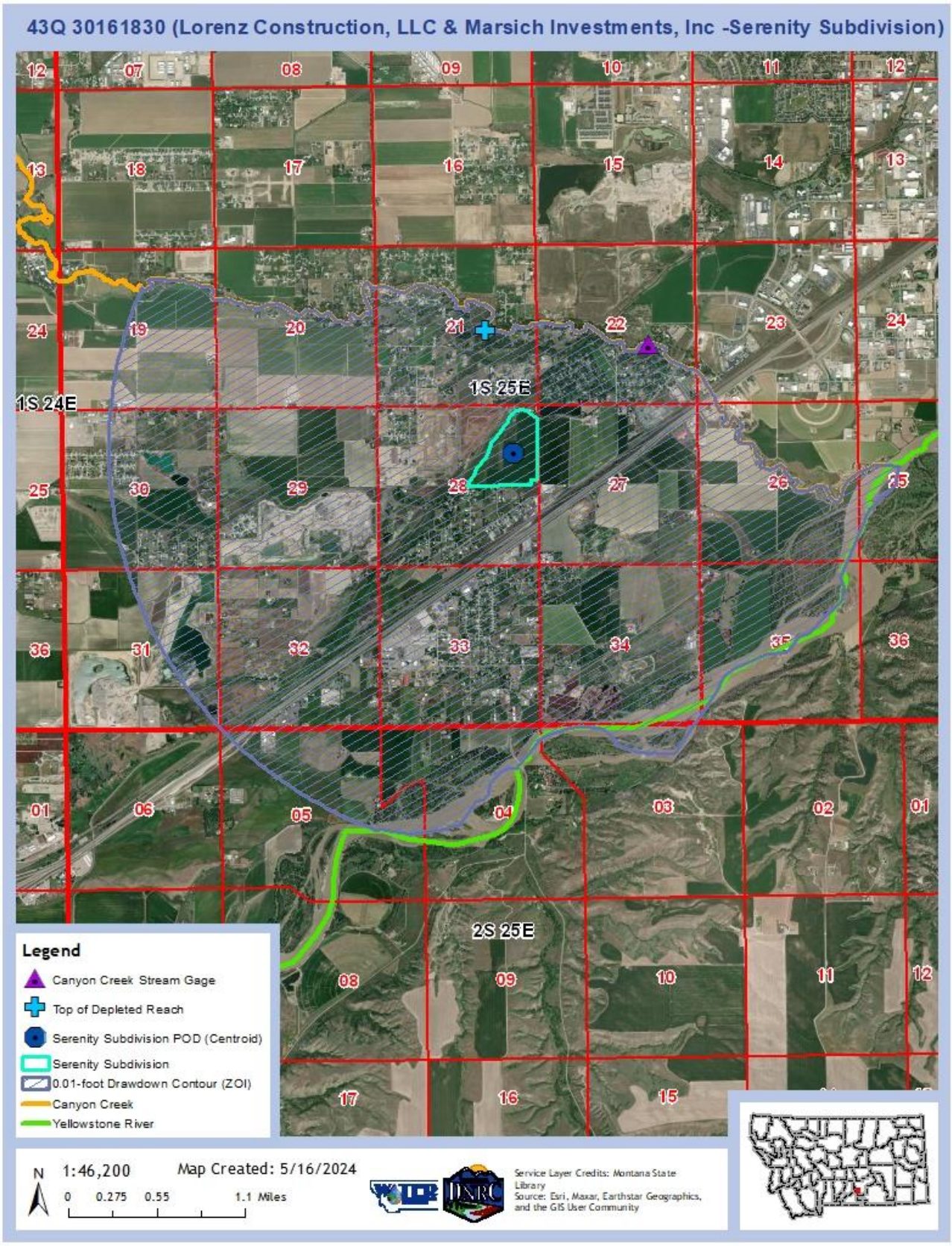

Figure 1. Project area for Groundwater Permit Application No. 43Q 30161830

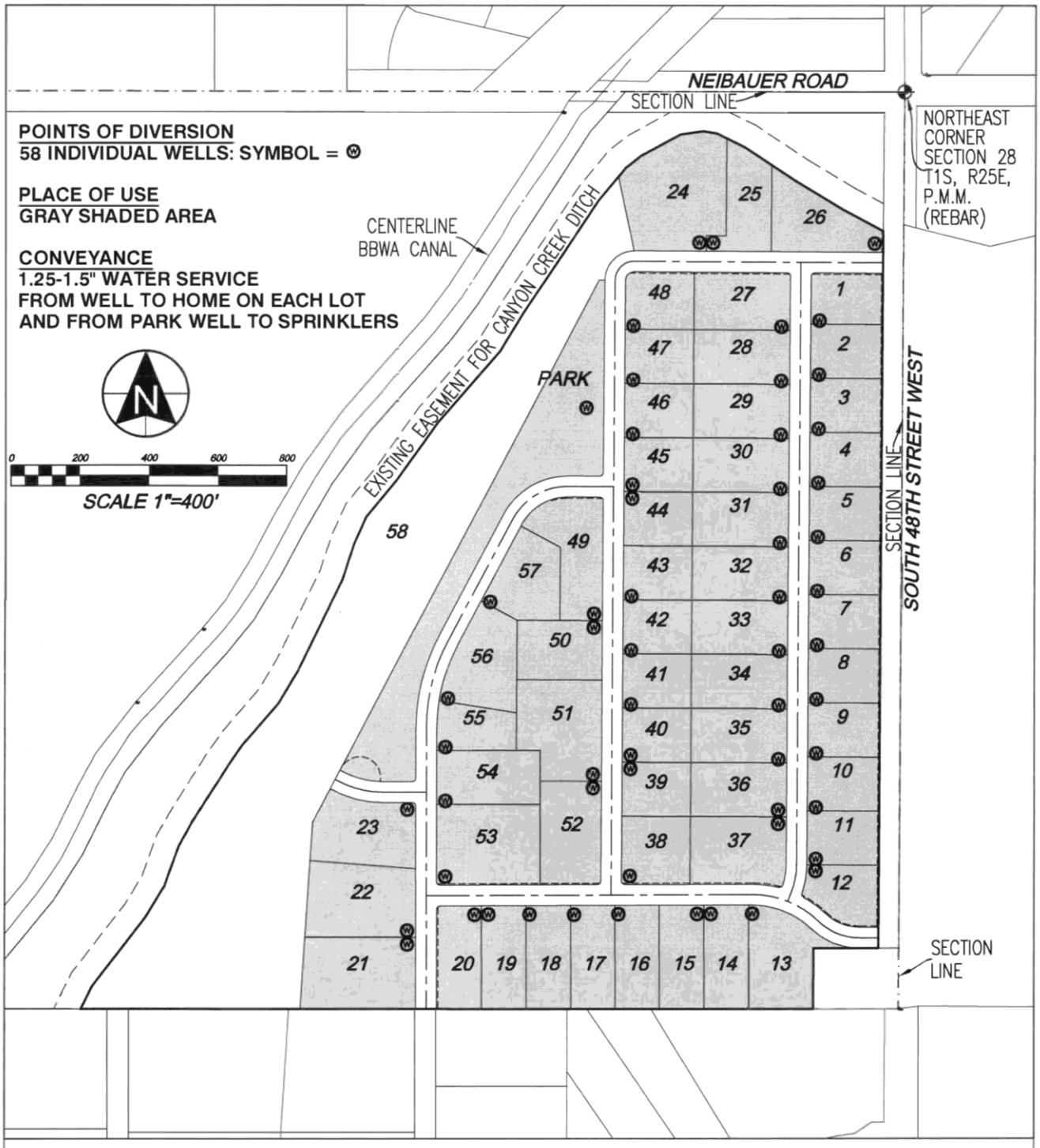

Figure 2. Proposed Serenity Subdivision plat

85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

GENERAL CONCLUSIONS OF LAW

7. The Montana Constitution expressly recognizes in relevant part that:

> (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
> (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
> (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, § 3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

> (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
> (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

8. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. *See* § 85-2-102(1), MCA. An Applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

> … the department shall issue a permit if the Applicant proves by a preponderance of evidence that the following criteria are met:
> (a) (I) there is water physically available at the proposed point of diversion in the amount that the Applicant seeks to appropriate; and
> (ii) water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the

records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

(b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an Applicant's plan for the exercise of the permit that demonstrates that the Applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) the Applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the Applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit;

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permit holder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The Applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, "the Applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the Applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies." Section 85-2-311(5), MCA

(emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. *Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation*, 2009 MT 181, ¶ 21. The Department is required grant a permit only if the § 85-2-311, MCA, criteria are proven by the Applicant by a preponderance of the evidence. Id. A preponderance of evidence is "more probably than not." *Hohenlohe v. DNRC*, 2010 MT 203, ¶¶ 33, 35, 357 Mont. 438, 240 P.3d 628.

9. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

> (1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, "uncontrolled development of a valuable natural resource" which "contradicts the spirit and purpose underlying the Water Use Act."); *see also, In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers* (DNRC Final Order 1988)(conditions in stipulations may be included if it further compliance with statutory criteria); *In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick* (DNRC Final Order 1994); Admin. R. Mont. (ARM) 36.12.207.

10. The Montana Supreme Court further recognized in *Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starner*, 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080 (1996), *superseded by legislation on another issue*:

> Nothing in that section [85-2-313], however, relieves an Applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an Applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order* (2011). The Supreme Court likewise explained that:

> .... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; *see also* Mont. Const. art. IX §3(1).

11. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. Section 85-2-311(6), MCA.

12. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

PHYSICAL AVAILABILITY

FINDINGS OF FACT

13. The existing production well and project site are located within the Yellowstone River Terrace Level 2 (Qat2) aquifer and are very near the mapped boundary of the Yellowstone River Terrace Level 3 (Qat3) and the Yellowstone River Terrace Level 2 aquifers mapped by Lopez in 2000 (Groundwater Permit Report). The Groundwater Permit Report discusses a relatively small area near the project vicinity where the aquifer may be less than 10 ft thick. Interpretation of recently completed well logs in the project vicinity (GWIC 315134 and GWIC 320904) on each side of the Qat3 and Qat2 aquifer boundary suggest that the two aquifers are hydraulically connected and have similar sand/gravel composition. Therefore, Department hydrologists determined it was appropriate to model the proposed groundwater development using Qat3 aquifer properties. The proposed project meets the parameters defined in the Yellowstone River Terrace Level 3 Aquifer Properties Memo, dated March 1, 2022, which allows the Applicants to forgo the

72-hour aquifer test if project is within the mapped boundaries of Qat3 and the Applicants agree to use the aquifer properties as defined in the memo.

14. The Applicants requested a variance from aquifer testing requirements under ARM 36.12.121(3)(e) and (h) on October 5, 2023, and instead proposed to complete one 24-hour drawdown and yield test at a flow rate of at least 87 GPM. This flow rate was intended to be approximately 1/5 of the proposed flow rate for the entire appropriation. The Department granted the variance request on December 18, 2023, and stipulated that an 8-hour drawdown and yield test as described in ARM 36.12.121(3)(f) would still be required on production wells until the total peak flow rate requested, 394 GPM, is achieved. One 25-hour drawdown and yield test was conducted on the existing production well at a flow rate of 100 GPM to 120 GPM. Data for this testing was submitted with the application on Aquifer Testing Report Form 633. During review of the 25-hour drawdown and yield test, Department hydrologists noted that the pumping was not maintained at a constant discharge rate as required by ARM 36.12.121(3)(a). An additional variance was requested by the Applicants on April 16, 2024, and was granted by Kathy Olsen, Regional Operations Manager, on April 16, 2024.

15. Modeling using the aquifer properties as described in the Yellowstone River Terrace Level 3 Aquifer Properties Memo and a normalized flow rate of 82.4 GPM required to produce the requested annual volume generated a distance-drawdown plot. The modeled 0.01-foot drawdown occurs at 13,400 ft from the proposed wells and the total width of the zone of influence (W) is 26,800 ft, truncated to the Canyon Creek constant head boundary to the east and north, and to the Yellowstone River constant head boundary to the south. The volume of total groundwater flux (Q) each year within the zone of influence as defined by 0.01 foot of drawdown is given by Q = TWi and is 643,200 ft^3/day (6,000 ft^2/day x 26,800 ft x 0.004 ft/ft) or 5,390 AF/YR.

16. The Department finds that the amount of groundwater physically available at the proposed point of diversion is 5,390 AF/YR.

LEGAL AVAILABILITY

FINDINGS OF FACT

17. Water Sciences Bureau Chief Jake Mohrmann modeled the 0.01-foot drawdown contour at 13,400 ft from the proposed wells and the total width of the zone of influence as 26,800 ft, truncated to the Canyon Creek constant head boundary to the east and north, and to the

Yellowstone River constant head boundary to the south. There are 626 water rights within the zone of influence: eight (8) Exempt Rights, 567 Groundwater Certificates, 11 Provisional Permits, and 40 Statements of Claim. A list of these water rights is in the file under the Processing Forms and Correspondence flag. Of the 567 Groundwater Certificates, 82 do not have volumes recorded in the Department database. The volume for the 82 Groundwater Certificates was taken as the average of all Groundwater Certificates for which volumes were recorded at 2.91 AF/YR. Statements of Claim for Stock use were calculated as 0.034 AF/AU x number of AU for the period of diversion, per adjudication standards. Statements of Claim and Exempt Rights for Domestic were calculated as 1.5 AF, per adjudication standards. The zone of influence is covered by two climatic areas – High Consumptive Use (Climatic Area 1) and Moderately High Consumptive Use (Climatic Area 2). Statements of Claim for Irrigation were calculated based on the High Consumptive Use as this is the most conservative estimation technique, and using 60% efficiency, which results in 3.07 AF/AC. The total annual legal demand on groundwater within the zone of influence is 3,054.97 AF/YR as shown in Table 1.

Table 1. Comparison of the water supply and current legal demands for groundwater

Physically Available (AF/year)	Existing Legal Demands (AF/year)	Physically Available minus Existing Legal Demands (AF/year)
5,390.0	3,054.97	2,335.03

18. The amount of groundwater physically available is 5,390.0 AF/YR and the existing legal demands of groundwater total 3,054.97 AF/YR. The Department finds that the comparison shows that groundwater is legally available (5,390.0 AF – 3,054.97 AF = 2,335.03 AF).

19. Analysis by Jake Mohrmann concludes Canyon Creek is hydraulically connected to the source aquifer and would be depleted by this groundwater appropriation. The surface water depletion from the proposed wells is distributed as 100% to Canyon Creek. The estimated monthly depletions to Canyon Creek are described in Table 2.

Table 2. Modeled net depletion to surface water sources for proposed groundwater appropriation 43Q 30161830

Month	Total Consumption (AF)	Canyon Creek Net Depletion (GPM)	Canyon Creek Net Depletion (AF)
January	0.2	37.8	5.2
February	0.1	36.9	4.6
March	0.2	30.2	4.1
April	1.4	29.4	3.9
May	9.2	31.5	4.3
June	16.0	45.7	6.1
July	21.8	61.7	8.5
August	19.7	77.0	10.6
September	9.8	83.2	11.0
October	2.8	70.2	9.6
November	0.2	48.6	7.6
December	0.2	44.6	6.1
Total	81.6		81.6

20. Hydrologic modeling discussed in the April 17, 2024, Groundwater Permit Report indicate the surface water depletions impact the closest surface water source in a straight line from the location of appropriation. Thus, the start of the depleted reach is from a point on Canyon Creek at the E2 of Section 21, T1S, R24E, Yellowstone County, and the area of potential impact (AOPI) is downstream from that point. The AOPI was considered to the confluence of Canyon Creek and the Yellowstone River, which represents a significant hydraulic boundary.

21. The Department has operated a stream gage on Canyon Creek at ZooMontana (Gage No. 43Q_05900) in SENESE Section 22, T1S, R25E, since May 2016. Data from that gage was used to determine water availability.

22. To determine legal availability of water at the start of the depleted reach on Canyon Creek, all existing water rights between the gage and the start of the depleted reach were added to the mean monthly flow for the gage on Canyon Creek. There are two (2) water rights on Canyon Creek between the gage and the start of the depleted reach. The volume for irrigation rights with no specified volume was taken as 3.07 AF/AC based on Department standards for the low range of 60% efficiency flood irrigation in Climatic Area 1. All surface water legal demands on Canyon Creek fell within Climatic Area 1. Mean monthly volume is calculated as mean monthly flow times 1.98 times the number of days in a month. The monthly volume of existing legal demands was calculated by dividing the total volume by the total number of days in the period of use and then multiplying by the numbers of days within the period of use per month for each water right.

Table 3. Legal Demands on Canyon Creek between the gage and the start of the depleted reach

Water Right Number	Owners	Purposes	Flow Rate (GPM)	Flow Rate (CFS)	Acres	Volume (AF)	Period of Diversion
43Q 26726 00	Sally A Saunders	Irrigation	153.0	0.34	9.0	27.63*	06/01 to 09/30
43Q 39516 00	Randolph L Legare; Susan C Legare	Irrigation	264.0	0.58	15.0	46.05*	04/15 to 11/19

*Calculated by DNRC

Table 4. Physically available flow on Canyon Creek at start of the depleted reach by month (CFS)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Monthly Flow at Gage	11.75	13.16	24.02	43.52	132.67	150.63	98.21	109.17	156.60	128.74	26.48	14.07
Legal Demands Between Gage and the Start of the Depleted Reach	0.00	0.00	0.00	0.58	0.58	0.92	0.92	0.92	0.92	0.58	0.58	0.00
Physically Available Water at the Start of the Depleted Reach	11.75	13.16	24.02	44.10	133.25	151.55	99.13	110.09	157.52	129.32	27.06	14.07

Table 5. Physically available volume on Canyon Creek at start of the depleted reach by month (AF)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Monthly Volume at Gage	721.13	729.60	1474.29	2585.36	8143.10	8947.68	6028.15	6700.57	9302.11	7901.75	1573.06	863.86
Legal Demands Between Gage and the Start of the Depleted Reach	0.00	0.00	0.00	3.36	6.52	13.10	13.54	13.54	13.10	6.52	4.00	0.00
Physically Available Water at the Start of the Depleted Reach	721.13	729.60	1474.29	2588.73	8149.62	8960.79	6041.69	6714.11	9315.21	7908.27	1577.06	863.86

23. There are three (3) legal demands on Canyon Creek within the APOI. One is Statement of Claim 43Q 206480 00. The other two Statements of Claim are those described in Table 3. The three (3) water rights within the AOPI are described in Table 6. The volume for irrigation rights with no specified volume was taken as 3.07 AF/AC based on Department standards for the low end of 60% efficiency flood irrigation in Climatic Area 1. All surface water legal demands on Canyon Creek fell within Climatic Area 1. The distribution of flow rate and volume by month for these water rights is shown in Tables 7 and 8.

Table 6. Legal Demands on Canyon Creek within the area of potential impact

Water Right Number	Owners	Purposes	Flow Rate (GPM)	Flow Rate (CFS)	Acres	Volume (AF)	Period of Diversion
43Q 26726 00	Sally A Saunders	Irrigation	153.0	0.34	9.0	27.63*	06/01 to 09/30
43Q 39516 00	Randolph L Legare; Susan C Legare	Irrigation	264.0	0.58	15.0	46.05*	04/15 to 11/19
43Q 206480 00	Connie M Hanson; Jerome D Hanson	Irrigation	350.0	0.77	20	61.40*	04/15 to 11/04

*Calculated by DNRC

Table 7. Distribution of flow rate (CFS) of existing legal demands by month

Month	Days in Use	Flow Rate for 43Q 26726-00	Flow Rate for 43Q 39516-00	Flow Rate for 43Q 206480-00	Total (CFS)
April	16	*	0.58	0.77	**1.35**
May	31	*	0.58	0.77	**1.35**
June	30	0.34	0.58	0.77	**1.69**
July	31	0.34	0.58	0.77	**1.69**
August	31	0.34	0.58	0.77	**1.69**
September	30	0.34	0.58	0.77	**1.69**
October	31	*	0.58	0.77	**1.35**
November	19	*	0.58	0.77	**1.35**

***** No flow rate is shown for April, May, October and November for 43Q 26726-00 because the water right is not in use during those months per the periods of diversion and use

Table 8. Distribution of volume (AF) of existing legal demands by month

Month	Days in Use	Volume for 43Q 26726-00	Volume for 43Q 39516-00	Volume for 43Q 206480-00	Total (AF)
April	16	*	3.36	4.82	8.18
May	31	*	6.52	9.33	15.85
June	30	6.79	6.31	9.03	22.13
July	31	7.02	6.52	9.33	22.87
August	31	7.02	6.52	9.33	22.87
September	30	6.79	6.31	9.03	22.13
October	31	*	6.52	9.33	15.85
November	19	*	4.00	5.72	9.71

***** No volume is shown for April, May, October and November for 43Q 26726-00 because the water right is not in use during those months per the periods of diversion and use

The legal demands within the area of potential impact were subtracted from the physically available water at the start of the AOPI to determine if water is legally available.

Table 9. Physically available water minus legal demands on Canyon Creek by month (CFS)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Physically Available Water at Start of the Depleted Reach	11.75	13.16	24.02	44.10	133.25	151.55	99.13	110.09	157.52	129.32	27.06	14.07
Legal Demands within the Depleted Reach	0.00	0.00	0.00	1.35	1.35	1.69	1.69	1.69	1.69	1.35	1.35	0.00
Physically Available Water Minus Legal Demands	11.75	13.16	24.02	42.75	131.90	149.86	97.44	108.40	155.83	127.97	25.71	14.07

Table 10. Physically available water minus legal demands on Canyon Creek by month (AF)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Physically Available Water at Start of the Depleted Reach	721.13	729.60	1474.29	2588.73	8149.62	8960.79	6041.69	6714.11	9315.21	7908.27	1577.06	863.86
Legal Demands within the Depleted Reach	0.00	0.00	0.00	8.18	15.85	22.13	22.87	22.87	22.13	15.85	9.71	0.00
Physically Available Water Minus Legal Demands	721.13	729.60	1474.29	2580.55	8133.77	8938.65	6018.82	6691.24	9293.08	7892.42	1567.34	863.86

24. The Department finds that the flow rate and volume of water physically and legally available within the area of potential impact for Canyon Creek exceeds the modeled depletions in all months as shown in Tables 9 and 10.

25. The Department finds that groundwater is physically and legally available in excess of the proposed flow rate and volume of the appropriation, and the surface water physically and legally available exceeds the flow rate and volume of the modeled depletions.

ADVERSE EFFECT

FINDINGS OF FACT

26. The Applicants propose to restrict water use in the event of a water shortage. Restrictions could include limiting residential lot irrigation to limited days per week, decreasing the allowable irrigable acres per lot, or restricting water to domestic use only. Each of the 58 individual points of diversion can be completely shut off is valid call is made.

27. Using aquifer parameters in the April 17, 2024, Groundwater Permit Report and a monthly pumping schedule that accounts for domestic use and lawn and garden irrigation, modeled drawdown is greatest at the end of July in the fifth year of pumping and exceeds 1.0 foot in wells closer than 2,200 ft from the proposed wells. The 21 water rights in the source aquifer that are predicted to experience drawdown greater than 1.0-foot are listed in Table 11. For wells that have

a recorded static water level, the minimum available water column after predicted drawdown from the proposed appropriation is 8.24 ft. Drawdown for similar wells is expected to be comparable. Wells that are expected to experience 1.0-foot drawdown will have adequate available water in the water column for this appropriation to not create adverse effect.

Table 11. Groundwater rights predicted to experience greater than one foot of drawdown

Water Right Number	Distance (ft)	Well Depth (ft)	Well Static Level (ft)	Drawdown (ft)	Available Water Column (ft)
43Q 13409-00	346	30	5	3.05	21.95
43Q 30043915	988	28	8.5	1.84	17.66
43Q 30148549	1354	36	26.2	1.47	8.33
43Q 96603-00	1704	35	9	1.23	24.77
43Q 30116187	1937	26.5	17.16	1.1	8.24
43Q 66398-00	1991	35.5	14	1.07	20.43
43Q 109937-00	1991	32	19	1.07	11.93
43Q 30162561	2018	51	12.6	1.06	37.34
43Q 48211-00	2007	36	6	1.06	28.94
43Q 68380-00	2007	35	5	1.06	28.94
43Q 80823-00	2007	35	5	1.06	28.94
43Q 30070476	2007	31	14	1.06	15.94
43Q 43502-00	2068	37	4	1.03	31.97
43Q 7057-00	2083	30	10	1.03	18.97
43Q 69498-00	1354	26	UNK*	1.47	
43Q 109955-00	2007	24	UNK*	1.06	
43Q 103439-00	1354	UNK*	UNK*	1.47	
43Q 39051-00	1354	UNK*	UNK*	1.47	
43Q 208233-00	1388	UNK*	UNK*	1.44	
43Q 43501-00	2068	UNK*	UNK*	1.03	
43Q 30115174	2068	UNK*	UNK*	1.03	

UNK* - Missing values were not included in water right filing and thus are unknown

28. The volume of groundwater physically and legally available (2,335.03 AF/YR) exceeds the Applicants' proposed use (132.9 AF/YR).

29. Canyon Creek is considered hydraulically connected to the source aquifer. Table 2 shows the modeled monthly depletions to Canyon Creek by volume and flow rate. Surface water is physically and legally available in the AOPI in excess of all modeled monthly depletions.

30. Based on findings that surface and groundwater availability exceeds legal demands on depleted surface water sources, and the Applicants' plan to prevent adverse effect through proposed limits on irrigation and domestic use during times of water shortage or if valid call is

made, the Department finds that the proposed appropriation of up to 394 GPM and 132.9 AF will not cause adverse effect to other existing water rights or reservations.

ADEQUATE MEANS OF DIVERSION

FINDINGS OF FACT

31. An analysis of adequacy of diversion is modeled using the Theis solution (Groundwater Permit Report, 2024) with a Transmissivity (T) = 6,000 ft^2/day and Specific Yield (S_y) = 0.1. Predicted theoretical drawdown for the proposed wells were modeled for the period of diversion using the monthly pumping schedule identified in Table 12. Ten (10) modeled wells were evenly distributed throughout the proposed subdivision for forward modeling to represent the proposed 58 wells and to simulate the effects of interference drawdown. The assumed monthly pumping schedule shown in Table 12 was evenly distributed to the ten (10) modeled wells. The Applicants request a total of 113.8 AF for irrigation of 45.5 acres of lawn and garden, which uses DNRC's standard lawn and garden application volume of 2.5 AF per acre. The Applicants request 19.15 AF or 0.34 AF per home for domestic use, which is consistent with Montana Department of Environmental Quality standards. The requested lawn and garden irrigation volume was apportioned according to the monthly net irrigation requirement for the Billings WSO weather station listed in the IWR program.

Table 12. Assumed monthly pumping schedule for the multiple domestic and lawn and garden irrigation wells

Month	IWR, Billings (in)	Domestic and Irrigation (AF)	Domestic and Irrigation (GPM)
January	0.0	1.6	11.9
February	0.0	1.5	11.9
March	0.0	1.6	11.9
April	0.4	3.4	25.7
May	2.7	14.5	105.8
June	4.8	24.3	182.9
July	6.6	32.6	238.1
August	6.0	29.6	215.8
September	2.9	15.3	115.6
October	0.8	5.4	39.3
November	0.0	1.6	11.9
December	0.0	1.6	11.9
Total	24.2	133	

32. The lawn and garden irrigation period of use is May 1 through October 31. The monthly pumping schedule was obtained by (1) distributing the multiple domestic diverted volume

throughout the year based on days in the month, and (2) apportioning the requested diverted lawn and garden irrigation volume based on the net irrigation requirement obtained through the IWR program.

33. The tested production well, GWIC ID 329173, was used to model the full domestic and irrigation uses across the subdivision. As identified in Table 13, total drawdown is the sum of interference drawdown and predicted drawdown with well loss. Well loss is calculated by dividing the predicted theoretical maximum drawdown by a well efficiency value. Well efficiency is calculated by dividing the modeled maximum drawdown of the pumping test by the maximum observed drawdown of the pumping test. The modeled interference drawdown from the ten (10) modeled wells is 1.5 ft. The aquifer adjacent to GWIC ID 329173 would experience a predicted total drawdown of 2.4 ft at the end of July of the first year of pumping leaving 19.7 ft of available water column above the bottom of the well. Similar available drawdown is expected for the other proposed production wells assuming all wells are completed to a comparable depth as GWIC ID 329173.

Table 13. Remaining available water column for GWIC ID 329173

Drawdown Estimate	**Well 1** (GWIC ID 329173)
Total Depth (ft)	45
Pre-Test Static Water Level (ft btc)	11.2
Available Drawdown Above Bottom of Well (ft)	33.8
Observed Drawdown of Aquifer Test (ft)	20.3
Modeled Drawdown Using Aquifer Test Rates (ft)	3.9
Well Efficiency (%)	19
Predicted Theoretical Maximum Drawdown at assumed monthly pumping schedule (Table 12) (ft)	2.4
Predicted Drawdown with Well Loss (ft)	12.6
Interference Drawdown (ft)	1.5
Predicted Total Drawdown at pumping schedule rate (ft)	14.1
Remaining Available Water Column (ft)	**19.7**

34. A 25-hr drawdown and yield test was conducted on GWIC ID 329173, beginning on November 29, 2023. The 25-hour drawdown and yield test pumped at a rate of 100 GPM to 120 GPM. The Applicants requested a flow rate of 394 GPM and the Department stipulated that additional 8-hr drawdown and yield tests must be completed on subsequent production wells until the total requested flow rate is reached. Therefore, the following condition will be added to the permit if it is granted:

IMPORTANT INFORMATION

THE APPROPRIATOR MUST PERFORM 8-HOUR DRAWDOWN AND YIELD TESTS ON EACH PRODUCTION WELL UNTIL THE REQUESTED FLOW RATE OF 394 GPM HAS BEEN ATTAINED. THE RESULTS OF THE 8-HOUR DRAWDOWN AND YIELD TESTS MUST BE SUBMITTED TO THE DEPARTMENT ON FORM 633 AS THE PRODUCTION WELLS ARE COMPLETED.

35. The tested production well is located in Lot 1 of the proposed Serenity Subdivision and will serve as the POD for that lot. The remaining 57 wells will be located in each of the 56 remaining lots and one (1) in the park lot. The existing well was drilled by a licensed well contractor and the system was designed by a professional engineer. The well has a 6” steel casing approximately 45 feet deep with a screened section approximately 5 ft in height from the bottom. The remaining wells will all be constructed with a similar depth and design as the production well in Lot 1. The

system is designed for a peak domestic flow averaging 7 GPM. Each individual well will be equipped with a typical submersible pump operated with variable frequency drives capable of pumping 1 GPM – 20 GPM. Water will be piped from each individual well to the home and irrigation infrastructure via buried water service lines.

36. The Department finds that the proposed means of diversion and conveyance are capable of diverting and conveying the flow rate and volume of water requested.

BENEFICIAL USE

FINDINGS OF FACT

37. The Applicants request 394 GPM (0.88 CFS) flow rate and 132.9 AF volume for multiple domestic and lawn and garden uses. Multiple domestic and lawn and garden are recognized as beneficial uses under the Montana Water Use Act. §85-2-102 (5), MCA.

38. The Applicants propose multiple domestic use for 57 dwellings and lawn and garden use for 57 residential lots and one (1) park lot. Water demand for domestic use was calculated with an estimated average of three (3) people per home at 100 gallons per person per day. Over one year, this amounts to 19.15 AF total (57 x 3 x 100 x 365 = 6,241,500 gallons/325,851 gallons = 19.15 AF) or 0.34 AF per residence for multiple domestic use. The DNRC Water Calculation Guide lists 100 gallons per day (GPD) per person for single family homes which is consistent with the requested volume. A volume of 19.15 AF/YR is requested for the multiple domestic use of this subdivision. The area of lawn and garden for the 57 lots is 41.203 acres. The average lot size is 0.96 acres, and an estimated 0.24 acres is considered un-irrigated by dwelling, driveway, patio, sidewalks, and other paved surfaces. Using the DNRC standard for lawn and garden irrigation, a volume of 103.00 AF (41.20 acres x 2.50 AF/AC = 103.00 AF) is requested for the residential lawn and garden irrigation of this subdivision. A park is also included in the subdivision. The park is 4.3 acres and the DNRC standard for lawn and garden irrigation will also be used there. A volume of 10.80 AF (4.30 AC x 2.50 AF/AC = 10.75 AF) is requested for lawn and garden irrigation of the park. In total, 19.15 AF is requested for multiple domestic use and 113.80 AF is requested for lawn and garden irrigation, totaling 132.90 AF (19.15 AF + 103.00 AF + 10.75 AF = 132.90 AF) of volume proposed. This volume of water is within DNRC standards for beneficial use.

39. The Applicants request a maximum flow rate of 394 GPM (0.88 CFS) for the proposed subdivision. The maximum flow rate of 394 GPM is based upon predicted peak flows associated with multiple domestic and lawn and garden uses. The requested multiple domestic 19.15 AF volume averaged over the period of diversion is 12 GPM (19.15 AF x 43,560 ft^2/AC x 7.48 gal/ft^3 / 365 days x 1440 min = 11.8 GPM). Based on domestic peaking factors of 3 people per dwelling, the peak flow is 50 GPM for multiple domestic water use (4.172 peak factor x 12 GPM = 50.06 GPM). The requested 103.00 AF volume for the household lawn and garden irrigation averaged over the period of diversion is 186,465 GPD (103.00 AF x 43,560 ft^2/AC x 7.48 gal/ft^3 / 180 days = 186,446.48 GPD). Assuming lawn and garden irrigation may occur for 10 hours per day throughout the period of diversion, flow rate is calculated to be 311 GPM (184,446 GPD /10 hours / 60 min = 310.7 GPM). The requested 10.80 AF volume for park lawn and garden irrigation averaged over the period of diversion is 19,550 GPD (10.80 AF x 43,560 ft^2/AC x 7.48 gal/ft^3 / 180 days = 19,549.73 GPD). Assuming lawn and garden irrigation of the parkland may occur for 10 hours per day throughout the period of diversion, flow rate is calculated to be 33 GPM (19,550 GPD / 10 hours / 60 min = 32.58 GPM). Based on predicated peak flows, the total flow rate to support the multiple domestic and lawn and garden uses is 394 GPM (50 GPM + 311 GPM + 33 GPM = 394 GPM).

40. Severed Statement of Claim 43Q 45860-00 will not be used on the acres where lawn and garden irrigation from groundwater wells is being proposed, therefore the volume and flow rate requested for this beneficial use are acceptable.

41. The Department finds the proposed multiple domestic and lawn and garden uses are beneficial, and the requested flow rate of 394 GPM and volume of 132.9 AF are reasonably justified per ARM 36.12.1801(3).

POSSESSORY INTEREST

FINDINGS OF FACT

42. The Applicants signed the application form affirming the Applicants have possessory interest or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use.

CONCLUSIONS OF LAW

PHYSICAL AVAILABILITY

43. Pursuant to § 85-2-311(1)(a)(i), MCA, an Applicant must prove by a preponderance of the evidence that "there is water physically available at the proposed point of diversion in the amount that the Applicant seeks to appropriate."

44. It is the Applicant's burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-41I by Anson* (DNRC Final Order 1987) (Applicant produced no flow measurements or any other information to show the availability of water; permit denied); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.,* (DNRC Final Order 2005).

45. An Applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the Applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson* (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean* (DNRC Final Order 1994).

46. Use of published upstream gauge data minus rights of record between gauge and point of diversion adjusted to remove possible duplicated rights shows water physically available. *In the Matter of Application for Beneficial Water Use Permit No. 41P-105759 by Sunny Brook Colony* (DNRC Final Order 2001)

47. The Applicants have proven that water is physically available at the proposed point of diversion in the amount Applicants seeks to appropriate. Section 85-2-311(1)(a)(i), MCA. (FOF 13-16)

LEGAL AVAILABILITY

48. Pursuant to § 85-2-311(1)(a), MCA, an Applicant must prove by a preponderance of the evidence that:

> (ii) water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:
> (A) identification of physical water availability;
> (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

> (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

E.g., ARM 36.12.101 and 36.12.120; *Montana Power Co.*, 211 Mont. 91, 685 P.2d 336 (Permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

49. It is the Applicant's burden to present evidence to prove water can be reasonably considered legally available. *Sitz Ranch v. DNRC,* DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the Applicant. The Supreme Court has instructed that those burdens are exacting.); *see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston* (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on Applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005))(it is the Applicant's burden to produce the required evidence.); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007) (permit denied for failure to prove legal availability); *see also* ARM 36.12.1705.

50. Pursuant to *Montana Trout Unlimited v. DNRC*, 2006 MT 72, 331 Mont. 483, 133 P.3d 224, the Department recognizes the connectivity between surface water and ground water and the effect of pre-stream capture on surface water. *E.g., Wesmont Developers v. DNRC*, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 7-8; *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006) (mitigation of depletion required), *affirmed, Faust v. DNRC et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *see also Robert and Marlene Takle v. DNRC et al.*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994) (affirming DNRC denial of Applications for Beneficial Water Use Permit Nos. 76691-76H, 72842-76H, 76692-76H and 76070-76H; underground tributary flow cannot be taken to the detriment of other appropriators including surface appropriators and ground water appropriators must prove unappropriated surface water, *citing Smith v. Duff*, 39 Mont. 382, 102 P. 984 (1909), and *Perkins v. Kramer*, 148 Mont. 355, 423 P.2d 587 (1966)); *In the Matter of*

Beneficial Water Use Permit No. 80175-s76H by Tintzman (DNRC Final Order 1993)(prior appropriators on a stream gain right to natural flows of all tributaries in so far as may be necessary to afford the amount of water to which they are entitled, *citing Loyning v. Rankin* (1946), 118 Mont. 235, 165 P.2d 1006; *Granite Ditch Co. v. Anderson* (1983), 204 Mont. 10, 662 P.2d 1312; *Beaverhead Canal Co. v. Dillon Electric Light & Power Co.* (1906), 34 Mont. 135, 85 P. 880); *In the Matter of Beneficial Water Use Permit No.* 63997*-42M by Joseph F. Crisafulli* (DNRC Final Order 1990) (since there is a relationship between surface flows and the ground water source proposed for appropriation, and since diversion by Applicant's well appears to influence surface flows, the ranking of the proposed appropriation in priority must be as against all rights to surface water as well as against all groundwater rights in the drainage).

51. Because the Applicant bears the burden of proof as to legal availability, the Applicant must prove that the proposed appropriation will not result in prestream capture or induced infiltration and cannot limit its analysis to ground water. Section 85-2-311(a)(ii), MCA. Absent such proof, the Applicant must analyze the legal availability of surface water in light of the proposed ground water appropriation. *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (DNRC Final Order 2007) (permit denied); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 ; *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12.

52. Where a proposed ground water appropriation depletes surface water, Applicant must prove legal availability of amount of depletion of surface water throughout the period of diversion either through a mitigation /aquifer recharge plan to offset depletions or by analysis of the legal demands on, and availability of, water in the surface water source. *Robert and Marlene Takle v. DNRC*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006) (permits granted), *affirmed, Faust v. DNRC et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007 *)*(permit granted), *affirmed, Montana River Action Network et al. v. DNRC*, Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application*

for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions LLC (DNRC Final Order 2007) (permit denied for failure to analyze legal availability outside of irrigation season (where mitigation applied)); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009)(permit denied in part for failure to analyze legal availability for surface water depletion); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 (Court affirmed denial of permit in part for failure to prove legal availability of stream depletion to slough and Beaverhead River); *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12 ("DNRC properly determined that Wesmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator"; Applicant failed to analyze legal availability of surface water where projected surface water depletion from groundwater pumping); *In the Matter of Application for Beneficial Water Use Permit No. 76D-30045578 by GBCI Other Real Estate, LLC* (DNRC Final Order 2011) (in an open basin, Applicant for a new water right can show legal availability by using a mitigation/aquifer recharge plan or by showing that any depletion to surface water by groundwater pumping will not take water already appropriated; development next to Lake Koocanusa will not take previously appropriated water). Applicant may use water right claims of potentially affected appropriators as a substitute for "historic beneficial use" in analyzing legal availability of surface water under § 85-2-360(5), MCA. *Royston, supra*.

53. In analyzing legal availability for surface water, Applicant was required to evaluate legal demands on the source of supply throughout the "area of potential impact" by the proposed use under § 85-2-311(1)(a)(ii), MCA, not just within the "zone of influence." *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 6.

54. Use of published upstream gauge data minus rights of record between gauge and point of diversion adjusted to remove possible duplicated rights shows water physically available. Using same methodology and adding rights of record downstream of point of diversion to the mouth of the stream shows water legally available. *In the Matter of Application for Beneficial Water Use Permit No. 41P-105759 by Sunny Brook Colony* (DNRC Final Order 2001); *In the Matter of*

Application for Beneficial Water Use Permit No. 81705-g76F by Hanson (DNRC Final Order 1992);

55. Applicant has proven by a preponderance of the evidence that water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the Department and other evidence provided to the Department. Section 85-2-311(1)(a)(ii), MCA. (FOF 17-25.)

ADVERSE EFFECT

56. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an Applicant's plan for the exercise of the permit that demonstrates that the Applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. *See Montana Power Co.*, 211 Mont. 91, 685 P.2d 336 (1984) (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); *Bostwick Properties, Inc.*, ¶ 21.

57. An Applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an Applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. *Id.* ARM 36.12.120(5).

58. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 4 (2011).

59. In analyzing adverse effect to other appropriators, an Applicant may use the water rights claims of potentially affected appropriators as evidence of their "historic beneficial use." *See Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston*, 249 Mont. 425, 816 P.2d 1054 (1991).

60. It is the Applicant's burden to produce the required evidence. *E.g., Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 7 (2011) (legislature has

placed the burden of proof squarely on the Applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005). The Department is required to grant a permit only if the § 85-2-311, MCA, criteria are proven by the Applicant by a preponderance of the evidence. *Bostwick Properties, Inc.*, ¶ 21.

61. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a de minimis level of adverse effect on prior appropriators. *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, 8 (2011).

62. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Section 85-2-311(1)(b), MCA. (FOF 26-30)

ADEQUATE DIVERSION

63. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate.

64. The adequate means of diversion statutory test merely codifies and encapsulates the case law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

65. Water wells must be constructed according to the laws, rules, and standards of the Board of Water Well Contractors to prevent contamination of the aquifer. *In the Matter of Application for Beneficial Water Use Permit No.* 41I-105511 *by Flying J Inc.* (DNRC Final Order 1999).

66. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. Section 85-2-311(1)(c), MCA (FOF 31-36).

BENEFICIAL USE

67. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.

68. An appropriator may appropriate water only for a beneficial use. See also, § 85-2-301 MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. *E.g.*, *McDonald*; *Toohey v. Campbell* (1900), 24 Mont. 13, 60 P. 396. The amount

of water under a water right is limited to the amount of water necessary to sustain the beneficial use. *E.g.*, *Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds*, *Dee Deaterly v. DNRC* , Cause No. 2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); *Worden v. Alexander* (1939), 108 Mont. 208, 90 P.2d 160; *Allen v. Petrick* (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000).

69. Amount of water to be diverted must be shown precisely. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 3 (2011) (citing *BRPA v. Siebel*, 2005 MT 60, and rejecting Applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

70. It is the Applicant's burden to produce the required evidence. <u>*Bostwick Properties, Inc. v. DNRC*</u>, 2013 MT 48, ¶ 22, 369 Mont. 150, 296 P.3d 1154 ("issuance of the water permit itself does not become a clear, legal duty until [the applicant] proves, by a preponderance of the evidence, that the required criteria have been satisfied"); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); *see also Royston; Ciotti*.

71. Applicant proposes to use water for multiple domestic, and lawn and garden irrigation which are recognized beneficial uses. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence multiple domestic, and lawn and garden irrigation are beneficial uses and that 132.9 AF of diverted volume and 394 GPM is the amount needed to sustain the beneficial uses. Section 85-2-311(1)(d), MCA. (FOF 37-41)

<u>POSSESSORY INTEREST</u>

72. Pursuant to § 85-2-311(1)(e), MCA, an Applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a

point of diversion, conveyance, or place of use on national forest system lands, the Applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit.

73. Pursuant to ARM 36.12.1802:

> (1) An Applicant or a representative shall sign the application affidavit to affirm the following:
> (a) the statements on the application and all information submitted with the application are true and correct and
> (b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the Applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.
> (2) If a representative of the Applicant signs the application form affidavit, the representative shall state the relationship of the representative to the Applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.
> (3) The department may require a copy of the written consent of the person having the possessory interest.

74. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. Section 85-2-311(1)(e), MCA. (FOF 42)

PRELIMINARY DETERMINATION

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Beneficial Water Use Permit No. 43Q 30161830 should be GRANTED.

The Department determines the Applicants may divert groundwater, by means of 58 wells, approximately 45 feet deep, from January 1 to December 31 for multiple domestic use, and from May 1 to October 31 for lawn and garden irrigation, at 394 GPM up to 132.9 AF, from 58 points of diversion in the NE of Section 28, Township 1S, Range 25E, Yellowstone County in the Serenity Subdivision. The place of use is generally Serenity Subdivision in the NE Section 28, T1S, R25E, Yellowstone County.

The application will be subject to the following conditions, limitations, or restrictions:

THE APPROPRIATOR MUST PERFORM 8-HOUR DRAWDOWN AND YIELD TESTS ON EACH PRODUCTION WELL UNTIL THE REQUESTED FLOW RATE OF 394 GPM HAS BEEN ATTAINED. THE RESULTS OF THE 8-HOUR DRAWDOWN AND YIELD TESTS MUST BE SUBMITTED TO THE DEPARTMENT ON FORM 633 AS THE PRODUCTION WELLS ARE COMPLETED.

NOTICE

The Department will provide public notice of this application and the Department's Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for objections to this application pursuant to §§ 85-2-307, and -308, MCA. If this application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If this application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this application as herein approved. If this application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the application with such conditions as the Department decides necessary to satisfy the applicable criteria. Sections 85-2-310, -312, MCA.

DATED this 16th day of December, 2024.

Mark Elison, Manager
Billings Regional Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 16th day of December, 2024, by first class United States mail.

LORENZ CONSTRUCTION, LLC
2050 BROADWATER AVE, STE B
BILLINGS, MT 59102-4843
RODLORENZ@WTP.NET

MARSICH INVESTMENTS INC
4804 VERDE LANE
BILLINGS, MT 59106-2708

IN SITE ENGINEERING, PC
C/O SCOTT WORTHINGTON, PE
4231 CREEKWOOD DR
BILLINGS, MT 59106
SITEPROSCOTT@GMAIL.COM

Billings Regional Office, (406) 247-4415