Environmental Assessment & Public Notice for Public Comment

- Environmental Assessment & supporting documents
- Public Notice for Public Comment package
  - Notice Area List
  - Notice Area Map
  - Form Checklist
  - PN- Letter to applicant
  - PN- Letter to editor
  - PN- Certificate of service
  - PN- Invoice & tear sheet
  - PN- Return mail
  - Public Comment files

Environmental Assessment & Public Notice for Public Comment

NOTICE AREA

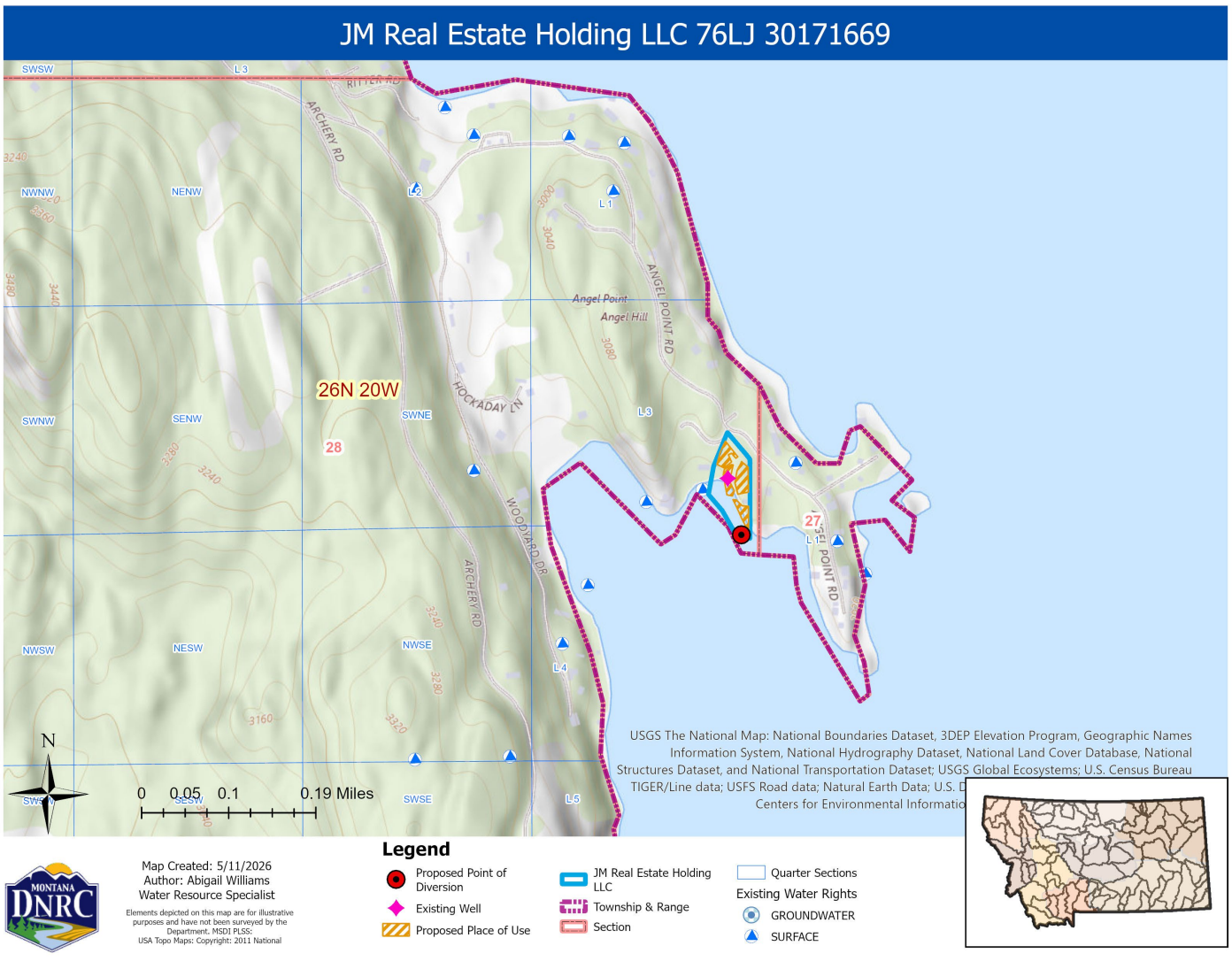
Application No. 76LJ 30171669 Regional Office # 08

Applicant's Name JM Real Estate Holdings LLC

Indian Reservation [ ] Yes [X] No If yes, Reservation _____

Irrigation District [ ] Yes [X] No If yes, District _____

Specialist Abigail Williams Date 5/14/2026



Water Right Owner	Water Right No. (Basin ID, and Number)
Applicant: JM Real Estate Holdings LLC	76LJ 30171669
Consultant: Core Water Consulting	N/A
1CFC	KRO STANDARD NOTICE CONTACTS
1FWS	
1FWP	
1WQB	
1PPL	
1WWP	
1DSL	
2FWP	
2BIA	
8KAL	
1BRW	
8CON	
STEPHEN K VIELLEUX	76LJ 45108 00
ELIZABETH J SMITH; MATTHEW K SMITH	76LJ 14233 00
BOSSLER ANGEL POINT PROPERTY LLC	76LJ 216005 00
DAVA MURRAY; PATRICK W MURRAY	76LJ 30026217
KATHRYN B EDWARDS	76LJ 30022744
HARRIS, CHRIS LEE & DEBRA KAY AB LIVING TRUST	76LJ 114567 00
DAVA MURRAY; PATRICK W MURRAY	76LJ 30026218
MAGNOLIA WUFENGENSIS LLC	76LJ 93173 00
CHRISTOPHER ELARDO; KIMBERLY ELARDO; PAUL D WACHHOLZ	76LJ 93088 00
KLINGLER-MUHLESTEIN TRUST	76LJ 72114 00
KLINGLER-MUHLESTEIN TRUST	76LJ 29857 00
GOOSE POINT LAND CO LLC	76LJ 46291 00
CLARK, RONALD AND BARARA LIVING TRUST; KRISTINA CATHERINE, RYAN FAMILY TRUST	76LJ 69758 00
BONNIE L ROSS; ROSS, BRIAN M & SHANNON C TRUST	76LJ 45044 00
CROMER FAMILY REVOCABLE TRUST; CROMER, DIANE M TRUST	76LJ 30049096
PHILLIP N GILBERTSON	76LJ 14584 00
GILBERTSON, PAUL A REVOCABLE TRUST	76LJ 6331 00
RJS 47 TRUST	76LJ 14234 00
WRIGHT TRUST	76LJ 38730 00
ARLENE D ROSS; MICHAEL A ROSS	76LJ 27736 00
KOESTNER FAMILY PARTNERSHIP	76LJ 32988 00
CROMER FAMILY REVOCABLE TRUST; CROMER, DIANE M TRUST	76LJ 30049095
CAMERON G HAWORTH; LESLIE A HAWORTH	76LJ 14146 00
JON FETVEIT; SHERILL FETVEIT	76LJ 30051597
1523528 ALBERTA INC	76LJ 114565 00
DAVA MURRAY; PATRICK W MURRAY	76LJ 46269 00
PALS CABINS AT LAKESIDE I LLC	76LJ 140138 00
PUBLISHED: DAILY INTER LAKE Legal land description of notice area: Sec 27 and 28 of T26N R20W Flathead County**	

**If owner listed twice, only one notice sent.*

***Notice area: Notice sent to active and severed water rights on Flathead Lake within a 0.6-mile radius from the proposed point of diversion.*

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. APPLICANT/CONTACT NAME AND ADDRESS:

JM REAL ESTATE HOLDING LLC
PO BOX 1109
LAKESIDE MT 59922-1109

2. TYPE OF ACTION:

Surface Water Application for Beneficial Water Use Permit No. 76LJ 30171669

3. WATER SOURCE NAME:

Flathead Lake

4. LOCATION AFFECTED BY PROJECT:

SESENE Section 28, Township 26N, Range 20W, Flathead County, Montana.

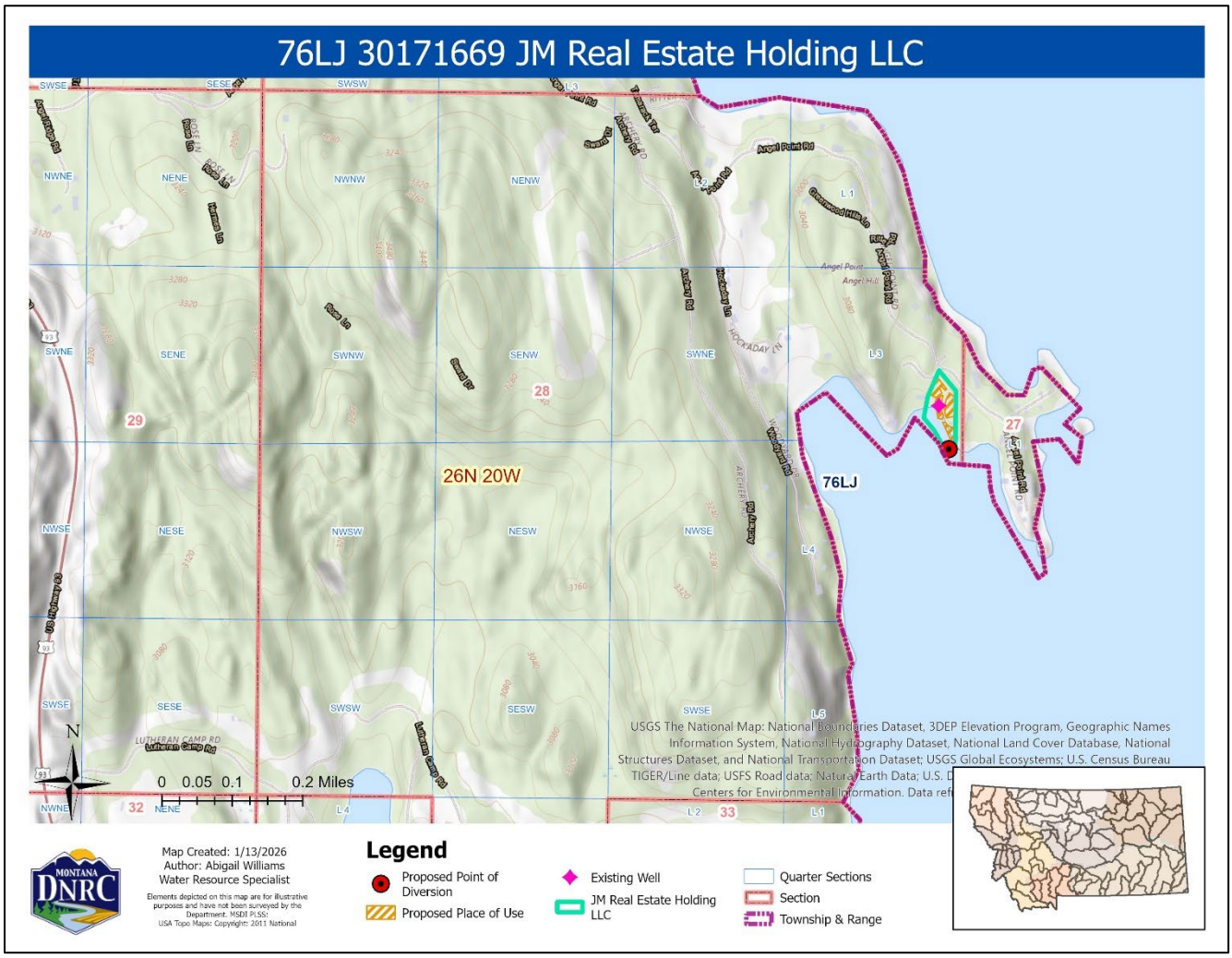


Figure 1. Map of the proposed place of use and points of diversion.

5. NARRATIVE SUMMARY OF THE PROPOSED PROJECT, PURPOSE, ACTION TO BE TAKEN, AND BENEFITS:

The Applicant proposes to divert water from Flathead Lake by means of a pump affixed to the private dock at a rate of 22.0 gallons per minute up to 3.08 AF to irrigate 1.23 acres of lawn and garden from May 15th to September 30th.

The proposed point of diversion is located in the NENESE Section 28, Township 26N, Range 20W, Flathead County, Montana. The proposed place of use is located in the SESENE Section 28 Township 26N, Range 20W, Flathead County, Montana (Figure 1)

The project is in the Flathead River Basin (76LJ) in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

The DNRC shall issue a water use permit if the Applicant proves the criteria in 85-2-311 MCA are met.

6. AGENCIES CONSULTED DURING PREPARATION OF THE ENVIRONMENTAL ASSESSMENT:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (DFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MDEQ): Clean Water Act Information Center
- U.S. Natural Resource Conservation Service (NRCS): Web Soil Survey
- U.S. National Park Service (NPS) Water Rights Branch

Part II. Environmental Review

1. ENVIRONMENTAL IMPACT CHECKLIST:

PHYSICAL ENVIRONMENT

1.1 WATER QUANTITY, QUALITY AND DISTRIBUTION

Water Quantity - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The Applicant proposes to divert water from Flathead Lake which is not identified on the DFWP list of chronically or periodically dewatered streams.

Determination: No significant impact.

Water Quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Flathead Lake: MDEQ Clean Water Act Information Center's 2020 Water Quality Information report lists Flathead Lake as:

i. Water Quality Category 5: Waters where one or more applicable beneficial uses have been assessed as being impaired or threatened, and a TMDL is required to address the factors causing the impairment or threat;

ii. Use Class A-1: Waters classified as suitable for drinking, culinary and food processing purposes after conventional treatment for removal of naturally present impurities;

iii. Flathead Lake is assessed as "Fully Supporting" of Agriculture, Drinking water, and Primary Contact Recreation. It is assessed that Flathead Lake is "Not Fully Supporting" of Aquatic Life due to Mercury, Polychlorinated Biphenyls (PCBs), Nitrogen, and Phosphorus. A TMDL has not been completed for the Mercury nor the Polychlorinated Biphenyls (PCBs) impairment. A TMDL was established or approved by EPA on March 31, 2002 for Nitrogen and Phosphorus with a Nutrient Management Plan.

The proposed diversion of water to irrigate lawn and garden is not expected to significantly affect the water quality on the source.

Determination: No significant impact.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: N/A, project does not involve groundwater.

1.2 DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The Applicant proposes to divert water from Flathead Lake at a rate of 22.0 GPM up to 3.08 AF to irrigate 1.23 acres of lawn and garden from May 15th to September 30th by means of a Grundfos 22SQE submersible motor. The pump is hung in a 4-inch well casing that is permanently affixed to the existing private dock. The well casing is 14 feet long with 4 feet of perforated intervals at the end to allow lake water intake. The pump outlet is connected to a 280 feet long 1 ¼- inch PVC pipe that runs from the dock above ground to the crawl space of the main home. Once in the crawl space the pressure in the system is maintained by two pressure tanks and the flow rate is controlled by a VFD set to a target pressure of 65 PSI. The irrigation system will be controlled via a Rainbird sprinkler control system designed to have one zone operating at a time. The system consists of 10 irrigation zones in total. The irrigation zones are designed to have a flow rate demand of 20.0 GPM, and the additional 2 GPM will provide additional spray distance for the rotors as the spray distance is dependent upon the flow rate and pressure in the system.

The Applicant calculated a TDH of 234 feet for the system and will utilize a VFD with an output pressure of 65 PSI and flow rate of 22.0 GPM. The Applicant provided the pump curve for the Grundfos 22SQE submersible motor demonstrating that the pump is capable of producing 22.0 GPM at the TDH calculated.

Determination: No significant impact.

1.3 UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and Threatened Species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern" in the project area that could be impacted by the proposed project. Five animal species (Table 1) were identified within the project area. Of these species, the Grizzly Bear (*Ursus arctos*) and the Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. This area is already developed. It is not anticipated that any species of concern will be impacted by the proposed project. Flathead Lake has a sufficient amount of water to support and maintain existing populations

of Bull Trout, if they should exist there currently. The project will not create any barriers to the migration of fish or wildlife.

Table 1. Species of Concern		
Species Group	**Common Name**	**Scientific Name**
Mammals	Grizzly Bear*	*Ursus arctos*
Birds	Pileated Woodpecker	*Dryocopus pileatus*
Fish	Bull Trout*	*Salvelinus confluentus*
Fish	Westslope Cutthroat Trout	*Oncorhynchus lewisi*
Invertebrates	Western Bumble Bee	*Bombus occidentalis*

**Listed as "Threatened" by the USFWS.*

Determination: No significant impact.

Wetlands & Ponds - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted. For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

N/A there are no wetlands in the proposed place of use or point of diversion.

Determination: No significant impact.

1.4 GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

The proposed irrigation of lawn and garden will not negatively impact the soil quality, stability, or moisture content in the project area. The soil type in the project area is, "Repp-Kingspoint-Rock outcrop complex with 40 to 80 percent slopes which came from colluvium derived from calcareous siltstone parent material. This soil has a moderately high to high capacity to transmit water. Soils in this area are non-saline to very slightly saline and are therefore not likely susceptible to saline seep.

Determination: No significant impact.

1.5 VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

It is not anticipated that this project will impact the existing vegetative cover as the home and lawn are already established and no construction is planned. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners, who must follow local noxious weed regulations.

Determination: No significant impact.

1.6 AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water from the Kootenai River.

Determination: No significant impact.

1.7 **HISTORICAL AND ARCHEOLOGICAL SITES** - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: N/A, project not located on State or Federal Lands.

1.8 **DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY -** *Assess any other impacts on environmental resources of land, water, and energy not already addressed.*

All impacts to land, water, and energy have been identified and no further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

1.9 **LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is consistent with planned land uses.

Determination: No significant impact.

1.10 **ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact.

1.11 **HUMAN HEALTH** - *Assess whether the proposed project impacts human health.*

This proposed use will not adversely impact human health.

Determination: No impact.

1.12 **PRIVATE PROPERTY** - *Assess whether there are any government regulatory impacts on private property rights. If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

No government regulatory impacts on private property rights.

Determination: No impact.

1.13 **OTHER HUMAN ENVIRONMENTAL ISSUES** - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* None identified.

(*b)* *Local and state tax base and tax revenues?* None identified.

(c) *Existing land uses?* None identified.
(*d)* *Quantity and distribution of employment?* None identified.
(e) *Distribution and density of population and housing?* None identified.
(f) *Demands for government services?* None identified.
(g) *Industrial and commercial activity?* None identified.
(h) *Utilities?* None identified.
(i) *Transportation?* None identified.
(j) *Safety?* None identified.
(k) *Other appropriate social and economic circumstances?* None identified.

2. SECONDARY AND CUMULATIVE IMPACTS ON THE PHYSICAL ENVIRONMENT AND HUMAN POPULATION:

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. DESCRIBE ANY MITIGATION/STIPULATION MEASURES:

None.

4. DESCRIPTION AND ANALYSIS OF REASONABLE ALTERNATIVES TO THE PROPOSED ACTION, INCLUDING THE NO ACTION ALTERNATIVE, IF AN ALTERNATIVE IS REASONABLY AVAILABLE AND PRUDENT TO CONSIDER:

The only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize the diversion of groundwater at this location.

Part III. Conclusion

1. PREFFERED ALTERNATIVE:

Issue a water use permit if the Applicant proves the criteria in 85-2-311 MCA are met.

2. COMMENTS AND RESPONSES:

None.

3. FINDING:

Based on the significance criteria evaluated in this EA, is an EIS required? ___**Yes** _**X**_**No**

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No significant impacts related to the proposed project have been identified.

4. NAME OF PERSON(S) RESPONSIBLE FOR PREPARATION OF EA:

Name: Abigail Williams

Title: Water Resource Specialist

Date: 04/15/2026

Montana Fish, Wildlife & Parks

FWP DEWATERING CONCERN AREAS

Revised, May 2005

The following is a list of Montana streams that support important fisheries or contribute to important fisheries (i.e., provide spawning and rearing habitats) that are significantly dewatered. Dewatering refers to a reduction in streamflow below the point where stream habitat is adequate for fish.

This is the third revision of the Dewatered Streams List compiled by FWP dated January 24, 1991 and last updated in May 2003. List entries and updates were provided by FWP regional fisheries biologists from field observations. Further revisions may be necessary as water use patterns change, and additional or more detailed information becomes available.

This revised list includes a total of 323 stream reaches on 314 streams, which are chronically dewatered, and 113 stream reaches on 109 streams, which are periodically dewatered. The reaches do not overlap between categories.

The two categories of dewatering are:

1. **Chronic dewatering** -- streams where dewatering is a significant problem in virtually all years; and

2. **Periodic dewatering** -- streams where dewatering is a significant problem only in drought or water-short years.

Most man-made dewatering occurs during the irrigation season (July-September). Although most dewatering is caused by irrigation withdrawals, a few of the listed waters are dewatered through dam regulation for agricultural and power production purposes or by natural causes.

Each listed stream shows the length (in miles) of the dewatered reach. For larger/longer streams, the boundaries of the dewatered reach (Point A - Point B) are given. For streams that have no reach boundaries given, the miles shown as dewatered are from the mouth upstream. All mileages are approximate.

The dewatered reaches shown are typical for the stream. However, the number of miles dewatered may vary from year to year depending upon the amount of water available in the stream system.

CHRONIC DEWATERING

STREAM AND REACH	MILES DEWATERED
Beaverhead-Red Rock River Drainage	
Beaverhead River: West Side Canal – mouth	39
Big Sheep Creek: BLM Boundary - Red Rock River	3
Blacktail Deer Creek: Axes Canyon Rd - Beaverhead River	5.5
Horse Prairie Creek: Red Butte - Clark Canyon Reservoir	15
Junction Creek: I-15 - Red Rock River	4
Rattlesnake Creek: Dillon/Argenta Rd - mouth	7.5
Red Rock River: Dell-Briggs Ranch	6
Subtotal for Drainage	80.0
Big Hole River Drainage	
Alder Creek	0.1
Big Hole River:	
Big Lake Creek - Swamp Creek	9
Glen Bridges - mouth	24.4
Birch Creek: Beaverhead/Willow Ditch - mouth	9.8
Governor Creek	5
Wise River: Wise River Ditch - mouth	5
Subtotal for Drainage	53.3
Bitterroot River Drainage	
Baker Creek	1
Bass Creek	1
Bear Creek:	
North Channel	4
South Channel	4
Big Creek	3
Bitterroot River: Corvallis-Stevensville	17
Blodgett Creek	2
Burnt Fork Creek	5
Carlton Creek	5
Chaffin Creek	2
Eightmile Creek	3
Kootenai Creek	2
Lolo Creek	3
Lost Horse Creek	4
Mill Creek	3
Mill Creek (Trib. to Lolo Creek)	0.5
O'Brien Creek	1.5
Reimel Creek	1
Rock Creek	5
Skalkaho Creek	4
South Fork of Lolo Creek	0.5
Sweathouse Creek	2

Dearborn River Drainage

Dearborn River: Bean Lake Canal – mouth	44
Middle Fork Dearborn River	4
Subtotal for Drainage	48

Flathead River Drainage

Lost Creek: 4 miles Above Lore Lake - Stillwater River	7
Mount Creek: Welcome Springs - mouth	5
South Fork Flathead River: Hungry Horse Dam - mouth	5.3
Walker Creek: Entire Length	7
Subtotal for Drainage	24.3

Flint Creek Drainage (Clark Fork)

Cow Creek	3
Douglas Creek	2
Flint Creek: Georgetown Lake - mouth	42.4
Gird Creek	1
Henderson Creek: USFS Boundary - mouth	4
Lower Willow Creek: Reservoir - mouth	9.4
Marshall Creek: USFS Boundary - mouth	5
Subtotal for Drainage	66.8

Gallatin River Drainage

Baker Creek	10
Big Bear Creek	5
Bridger Creek	10
Gallatin River: Shedd's Bridge - Mouth	32.7
Hyalite (Middle) Creek	20
South Cottonwood Creek	6
Subtotal for Drainage	83.7

Jefferson River Drainage

Antelope Creek	7
Boulder River: Boulder - Cold Springs	36
Fish Creek	10
Jefferson River: Headwaters - mouth	84
Little Boulder River	10
North Willow Creek	9
Pipestone Creek	8
South Boulder River	10
South Willow Creek	8
Whitetail Creek	24
Subtotal for Drainage	206

Judith River Drainage

Cottonwood Creek: McMillan ditch to Big Spring Creek	17
Judith River: Ackley Lake diversion – Big Spring Creek	37
Ross Fork Creek	10
Subtotal for Drainage	64

PERIODIC DEWATERING

STREAM AND REACH	MILES DEWATERED
Beaverhead - Red Rock River Drainage	
Beaverhead River: Clark Canyon Dam - West Side Canal	21
Big Beaver Creek	0.7
Blacktail Deer Creek: West Fork - Axes Canyon Rd.	19.8
Bloody Dick Creek (Tributary to Horse Prairie Cr.)	10
Grasshopper Creek:	
Polaris - Bannock	14
Frency Place Placer - mouth	6
Jones Creek: BLM boundary - mouth	1.5
Little Sheep Creek: Road crossing - mouth	7.5
Medicine Lodge Creek (Tributary to Horse Prairie Cr.): Ayers Cyn - mouth	16.8
Peet Creek: Jones Diversion - mouth	1.7
Sage Creek: Rock Island Ranch - mouth	11
Trail Creek (Tributary to Horse Prairie Cr.): Source - mouth	7
Subtotal for Drainage	117.0
Big Hole River Drainage	
Big Hole River:	
Hamby Creek - Big Lake Creek	23.4
Swamp Creek - Glen Bridges	84.5
Big Lake Creek	7.5
Canyon Creek	6
Deep Creek	5.1
Divide Creek	9.5
Doolittle Creek	1.5
Fishtrap Creek	2.4
Francis Creek	7.7
Jerry Creek	3.1
Johnson Creek	3.7
Moose Creek	3.0
Mussigbrod Creek	9.4
North Fork Big Hole River	25
Pintlar Creek	10.8
Rock Creek	3
Rock Creek (Tributary to Big Lake Cr)	7
Ruby Creek	4.3
Sandhollow Creek	4.8
Steel Creek	8.6
Swamp Creek	17.4
Trapper Creek	6
Warm Springs Creek	9
Willow Creek	5.5
Subtotal for Drainage	268.2

Bitterroot River Drainage

Lolo Creek	1
Subtotal for Drainage	1

Blackfoot River Drainage

Arkansas Creek	2
Ashby Creek	2
Blackfoot River: Stream mile 84.9-54.1	30.8
Clearwater River	3.5
Elk Creek	3
Hoyt Creek	1
Nevada Creek: Stream mile 34.0-40.0	6
Shanley Creek	1.6
Subtotal for Drainage	49.9

Dearborn River Drainage

South Fork Dearborn River	10
Subtotal for Drainage	10

Flathead River Drainage

Ashley Creek: US Hwy. 2 Bridge – mouth	20
Blaine Creek: Above Lake Blaine - Lake Blaine	3
Bowser Spring Creek: Hwy 424 - Kalispell	8
Dayton Creek: Co. Line - mouth	10
Echo Creek: Sec. 27 - mouth	3
Evergreen Spring Creek	5
Garnier Creek: USFS - mouth	3
Lynch Creek: Sec. 12 - mouth	5
Meadow Creek (Big Fork): USFS - mouth	3
Ronan Creek: Lake Mary Ronan - mouth	5
Spring Creek: North of Kalispell	5
Trumbull Creek: USFS - Rose Crossing	20
Subtotal for Drainage	90

Gallatin River Drainage

Bozeman (Sourdough) Creek	8
Gallatin River: Gallatin Gateway - Shedd's Bridge	5.3
Subtotal for Drainage	13.3

Jefferson River Drainage

Hells Canyon Creek*	0.3
Willow Creek	10
Subtotal for Drainage	10.3

Judith River Drainage

Judith River: Utica to Ackley Lake diversion	5
Subtotal for Drainage	5

Assessment Record Summary

Reporting Cycle: 2020 **Assessment Record:** MT76O003_010 **Status:** Unassigned

WATER INFORMATION — Status: Unassigned

Reporting Cycle:	2020
Assessment Unit:	MT76O003_010
Name:	Flathead Lake
Location Description:	FLATHEAD LAKE

Water Type:	Size (Miles/Acres)	Use Class:
FRESHWATER LAKE	57305 ACRES	A-1

Trophic Status:	OLIGOTROPHIC
Trophic Trend:	Unknown
1 - Hydrologic Unit Code:	17010208
2 - HUC Name:	Flathead Lake
3 - Watershed:	Pend Oreille
4 - Basin:	Columbia
5 - TMDL Planning Area:	Flathead Lake
6 - Ecoregion:	Northern Rockies
6 - Ecoregion:	Canadian Rockies
7 - County:	Flathead County
7 - County:	Lake County
Water Quality Category:	5 - Waters where one or more applicable beneficial uses have been assessed as being impaired or threatened, and a TMDL is required to address the factors causing the impairment or threat.

Assessment Record Summary

Reporting Cycle: 2020 **Assessment Record:** MT76O003_010 **Status:** Unassigned

Beneficial Use Support Information

Use Name	Fully Supporting	Not Fully Supporting	Threatened	Insufficient Information	Not Assessed
Aquatic Life		X			
Agricultural	X				
Drinking Water	X				
Primary Contact Recreation	X				

Assessment Information

Use Name	Assessment Type	Assessment Confidence
NA		

Use Name	Assessment Methods
NA	

Impairment Information

Use Name	Probable Causes	Probable Sources	TMDL Completed
Aquatic Life	Mercury	Atmospheric Deposition - Nitrogen	N
		Impacts from Hydrostructure Flow Regulation/modification	
		Municipal Point Source Discharges	
		Silviculture Harvesting	
		Source Unknown	
		Dam or Impoundment	
		Unspecified Urban Stormwater	
	Polychlorinated Biphenyls (PCBs)	Atmospheric Deposition - Nitrogen	N
		Impacts from Hydrostructure Flow Regulation/modification	
		Municipal Point Source Discharges	
		Silviculture Harvesting	
		Source Unknown	
		Dam or Impoundment	
		Unspecified Urban Stormwater	
	Nitrogen, Total	Atmospheric Deposition - Nitrogen	Y
		Municipal Point Source Discharges	
		Unspecified Urban Stormwater	
	Phosphorus, Total	Atmospheric Deposition - Nitrogen	Y
		Municipal Point Source Discharges	
		Unspecified Urban Stormwater	

Assessment Record Summary

Reporting Cycle: 2020 **Assessment Record:** MT76O003_010 **Status:** Unassigned

Use Name	Observed Effects
NA	

Delisting / Category Changes

Cause	Reason for Change	Change Date	Comments
Nitrogen, Total	TMDL Approved or established by EPA (4A)	03/31/2002	"Nutrient Management Plan and Total Maximum Daily Load for Flathead Lake, Montana", approved by EPA on March 31, 2002 addressed TMDLs for nitrogen and phosphorus and indirectly addresses 303(d) listings for dissolved oxygen and excess algal growth, which result from excess nutrients.
Phosphorus, Total	TMDL Approved or established by EPA (4A)	03/31/2002	"Nutrient Management Plan and Total Maximum Daily Load for Flathead Lake, Montana", approved by EPA on March 31, 2002 addressed TMDLs for nitrogen and phosphorus and indirectly addresses 303(d) listings for dissolved oxygen and excess algal growth, which result from excess nutrients.
Sedimentation/Siltation	Applicable WQS attained, according to new assessment method	11/21/2014	

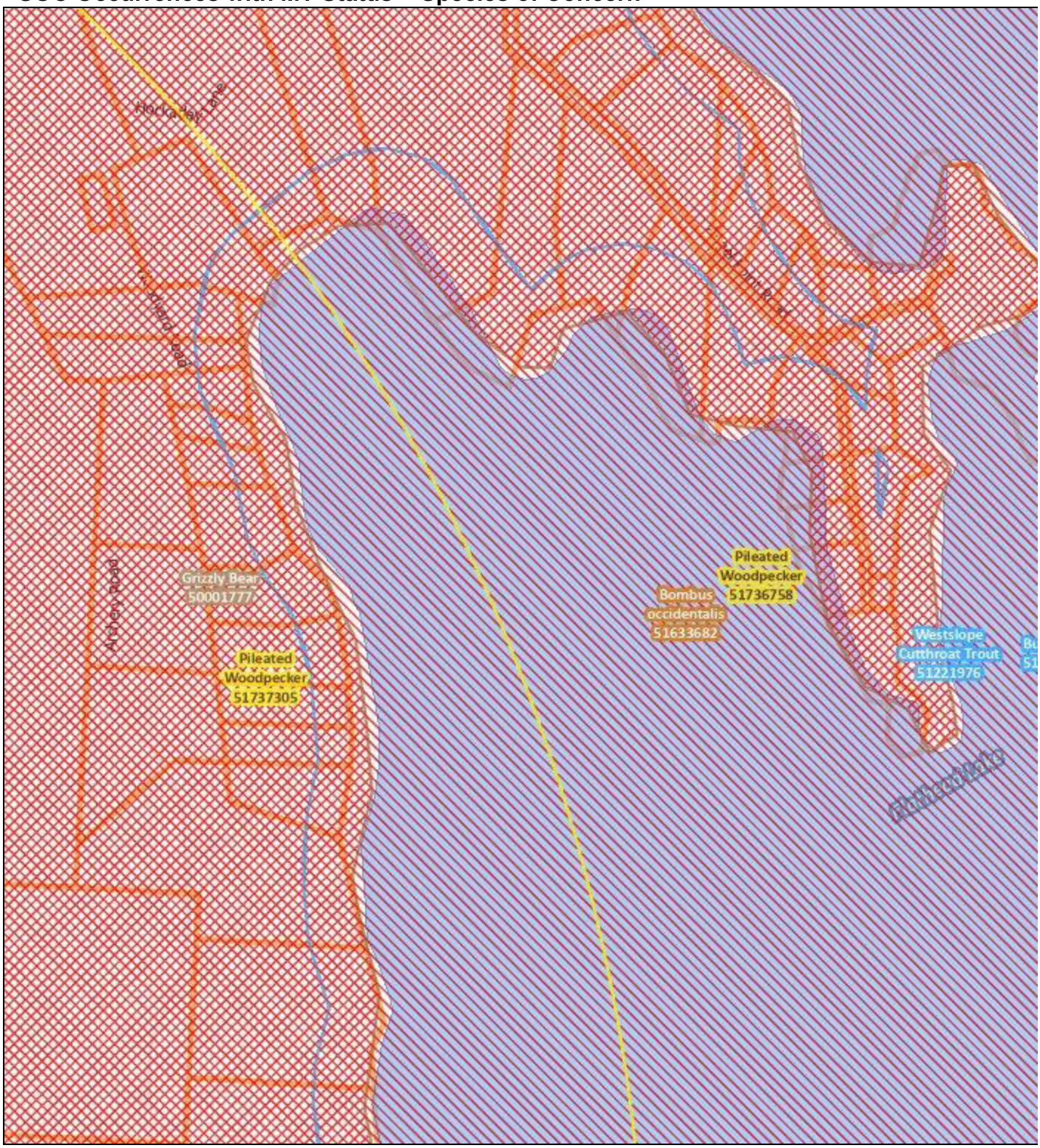
MONTANA STATE LIBRARY
NATURAL HERITAGE PROGRAM
A program of the **Montana State Library's Natural Resource Information System**.

Latitude	Longitude
47.97847	-114.15886
47.98768	-114.18226

Montana SOC Occurrences Report

SOC Occurrences with MT Status = Species of Concern

Report generated 4/15/2026 7:17:38 AM



⊞ **Mammals - Grizzly Bear** *(Ursus arctos)*

SO Count: 1 **Obs Count**: 1521 **Earliest Obs**: 1895 **Recent Obs**: 2025

⊞ **Birds - Pileated Woodpecker** *(Dryocopus pileatus)*

SO Count: 2 **Obs Count**: 2 **Earliest Obs**: 2021 **Recent Obs**: 2024

⊞ **Fish - Bull Trout** *(Salvelinus confluentus)*

SO Count: 1 **Obs Count**: 341 **Earliest Obs**: 1938 **Recent Obs**: 2022

⊞ **Fish - Westslope Cutthroat Trout** *(Oncorhynchus lewisi)*

SO Count: 1 **Obs Count**: 342 **Earliest Obs**: 1980 **Recent Obs**: 2022

⊞ **Invertebrates -** ***Bombus occidentalis*** (Western Bumble Bee)

SO Count: 1 **Obs Count**: 1 **Earliest Obs**: 1948 **Recent Obs**: 1948

Citation for this report:
Montana SOC Occurrences Report
SOC Occurrences with MT Status = Species of Concern
Within Lat/Long: (47.97847,-114.15886) to (47.98768,-114.18226)
Natural Heritage Map Viewer. Montana Natural Heritage Program.
Retrieved on April 15, 2026, from https://mtnhp.org/MapViewer/SOReport.aspx

114° 10' 22" W

114° 10' 11" W

47° 59' 10" N

47° 59' 0" N

Map Scale: 1:1,430 if printed on A portrait (8.5" x 11") sheet.

N

0 20 40 80 120 Meters

0 50 100 200 300 Feet

Map projection: Web Mercator Corner coordinates: WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Flathead County Area and Part of Lincoln County, Montana
Survey Area Data: Version 21, Aug 30, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 30, 2021—Oct 11, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
931G	Repp-Kingspoint-Rock outcrop complex, 40 to 80 percent slopes	5.8	75.2%
W	Water	1.9	24.8%
Totals for Area of Interest		**7.7**	**100.0%**

Flathead County Area and Part of Lincoln County, Montana

931G—Repp-Kingspoint-Rock outcrop complex, 40 to 80 percent slopes

Map Unit Setting

National map unit symbol: 1krfv
Landscape: Mountains
Elevation: 2,900 to 4,700 feet
Mean annual precipitation: 18 to 25 inches
Mean annual air temperature: 39 to 43 degrees F
Frost-free period: 70 to 90 days
Farmland classification: Not prime farmland

Map Unit Composition

Repp and similar soils: 50 percent
Kingspoint and similar soils: 25 percent
Rock outcrop: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Repp

Setting

Landscape: Mountains
Landform: Glaciated mountain slopes
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Colluvium derived from calcareous siltstone

Typical profile

Oi - 0 to 1 inches: mucky peat
E - 1 to 7 inches: gravelly loam
E/Bw - 7 to 19 inches: gravelly loam
Bw - 19 to 32 inches: very gravelly loam
Bk - 32 to 60 inches: extremely gravelly loam

Properties and qualities

Slope: 40 to 80 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: F043AP909MT - Upland Cool Woodland Group
Other vegetative classification: Douglas-fir/ninebark (PK260), Douglas-fir/snowberry (PK310)
Hydric soil rating: No

Description of Kingspoint

Setting

Landscape: Mountains
Landform: Glaciated mountain slopes
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Till derived from calcareous siltstone

Typical profile

Oi - 0 to 1 inches: mucky peat
E - 1 to 4 inches: gravelly silt loam
Bw - 4 to 16 inches: very gravelly silt loam
Bk - 16 to 60 inches: very gravelly silt loam

Properties and qualities

Slope: 40 to 60 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: F043AP909MT - Upland Cool Woodland Group
Other vegetative classification: Douglas-fir/ninebark (PK260), Douglas-fir/snowberry (PK310)
Hydric soil rating: No

Description of Rock Outcrop

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: Unranked

Data Source Information

Soil Survey Area: Flathead County Area and Part of Lincoln County, Montana
Survey Area Data: Version 21, Aug 30, 2025

U.S. Fish and Wildlife Service

National Wetlands Inventory

76LJ 30171669

April 15, 2026

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Draft Preliminary Determinations

- Draft PD
- Draft PD cover letter
- Updated Draft PD
- Updated Draft PD cover letter
- Any correspondence with the applicant regarding the draft PDs

Draft Preliminary Determinations

Water Resources Division – Kalispell Regional Office
655 Timberwolf Pkwy, Ste. 4
Kalispell, MT 59901-1215
(406) 752-2288
DNRCKalispellWater@mt.gov

April 16, 2026

JM REAL ESTATE HOLDING LLC
PO BOX 1109
LAKESIDE MT 59922-1109

Subject: Technical Analysis Report and Draft Preliminary Determination to Grant Beneficial Water Use Permit Application No. 76LJ 30171669

Dear Applicant,

The Department of Natural Resources and Conservation (Department or DNRC) has completed a preliminary review of your application. This review consists of an evaluation of the criteria for issuance of a Permit authorization found in §85-2-311, MCA. The Department has preliminarily determined that the criteria are met, and this application should be granted. A copy of the Department-completed Technical Analyses Report and Draft Preliminary Determination to Grant your application is attached

You have the opportunity to request an extension of time to submit additional information for the Department to consider in the decision, within 15 business days of the date of this letter. If no written request for an extension is received by May 7, 2026, the Department will prepare a notice of opportunity to provide public comment per §85-2-307(4), MCA.

Please contact me at (406) 752-2735 or Abigail.Williams@mt.gov if you have any questions.

Sincerely,

Abigail Williams
Water Resource Specialist
Kalispell Regional Office

Encl.: Department-completed Technical Analyses Report and Draft Preliminary Determination to Grant Water Right Permit Application No. 76LJ 30171669

Cc via email: Mikel Siemens, P.E, Core Water Consulting

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

* * * * * * *

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 76LJ 30171669 BY JM REAL ESTATE HOLDING LLC	)))	**DRAFT PRELIMINARY DETERMINATION TO GRANT**

* * * * * * *

JM Real Estate Holding LLC (Applicant) submitted Application for Beneficial Water Use Permit No. 76LJ 30171669 to the Kalispell Regional Office of the Department of Natural Resources and Conservation on August 27, 2025. The Applicant proposes to divert water from Flathead River (Flathead Lake) at a rate of 22.0 gallons per minute up to 3.08 acre-feet to irrigate 1.23 acres of lawn and garden from May 15th to September 30th annually. The Department published receipt of the application on its website on September 2, 2025. The Department sent the Applicant a deficiency letter under 85-2-302, Montana Code Annotated (MCA), dated October 8, 2025. The Applicant responded with information on December 3, 2025. The Application was deemed correct and complete as of December 19, 2025. The Department completed the Technical Analysis on April 16, 2026. An Environmental Assessment for this application was completed on April 15, 2026.

INFORMATION

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

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Attachments:
    - Supplemental Information for Beneficial Use Permit
    - Appendix A – Figures
    - Appendix B – Supplemental Water Right
        - Supplemental Water Right Abstract

        - Well Log for GWIC 137645
    - Appendix C - Means of Diversion Evidence
    - Appendix D - Possessory Interest
    - Appendix E – DNRC Correspondence
    - 600-TAA
- Maps:
    - Vicinity Map, dated August 11, 2025
    - Means of Diversion, dated August 11, 2025
    - POD Dock Intake Detail, dated August 11, 2025
    - Irrigation System controls, dated August 11, 2025
- Department completed technical analyses based on information provided in the 600 Application Form, Dated April 16 , 2026

<u>Information within the Department's Possession/Knowledge</u>

- Mean monthly stream flow data from United States Geological Survey (USGS) Gaging Station No. 12372000, Flathead River near Polson, MT. Period of record: October 1938 to April 2025.
- List of existing water rights on the Flathead River from the Inlet of Flathead Lake downstream to the USGS Gaging Station No. 12372000. This list has further been divided into two reaches:
    - From the inlet of Flathead Lake to the Sėliš Ksanka Qĺispe Dam (SKQ Dam); and,
    - From the SKQ Dam on Flathead Lake to USGS Gaging Station No. 12372000, Flathead River near Polson, MT.
- The following information is not included in the administrative file for this application but is available upon request. Please contact the Kalispell Regional Office at 406-752-2288 to request copies of the following documents.
    - DNRC Technical Memorandum: Physical Availability of Surface Water With Gage Data, Dated November 1, 2019

- Department Standard Practice for Determining Physical Availability of Surface Water
- Department Standard Practice for Determining Area of Potential Impact

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 and Conservation	
NRCS means the Natural Resource Conservation Service	
AF means acre-feet	**AOPI** means Area of Potential Impact
ARM means Administrative Rules of Montana	**MCA** means Montana Code Annotated
FOF means finding(s) of fact	**CFS** means cubic feet per second
GPM means gallons per minute	**USDA** United States Department of Agriculture
PSI means pounds per square inch	**POD** means point of diversion
TDH means total dynamic head	**BGS** below ground surface
VFD means variable frequency drive	

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicant proposes to divert water from Flathead Lake by means of a pump from May 15th to September 30th anually at a rate of 22.0 GPM up to 3.08 AF to irrigate 1.23 acres. The proposed point of diversion is located in the NENESE Section 28, Township 26N, Range 20W, Flathead County, Montana.The proposed place of use is located in Government Lot 3, SESENE of Section 28 Township 26N, Range 20W, Flathead County, Montana.

2. The POD is located in Water Right Basin 76LJ (Flathead River) in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

3. Groundwater Certificate 76LJ 87589-00 is currently being used for domestic use for the main home and guest house and to irrigate the 1.23 acres of lawn and garden area. Upon issuance of the provisional permit the well will no longer be the primary source for the lawn and garden irrigation and will be utilized for redundancy in case there is a call on the surface water source or the diversionary system is otherwise unable to function. The well's service to the Applicant's homes for domestic use will not change.

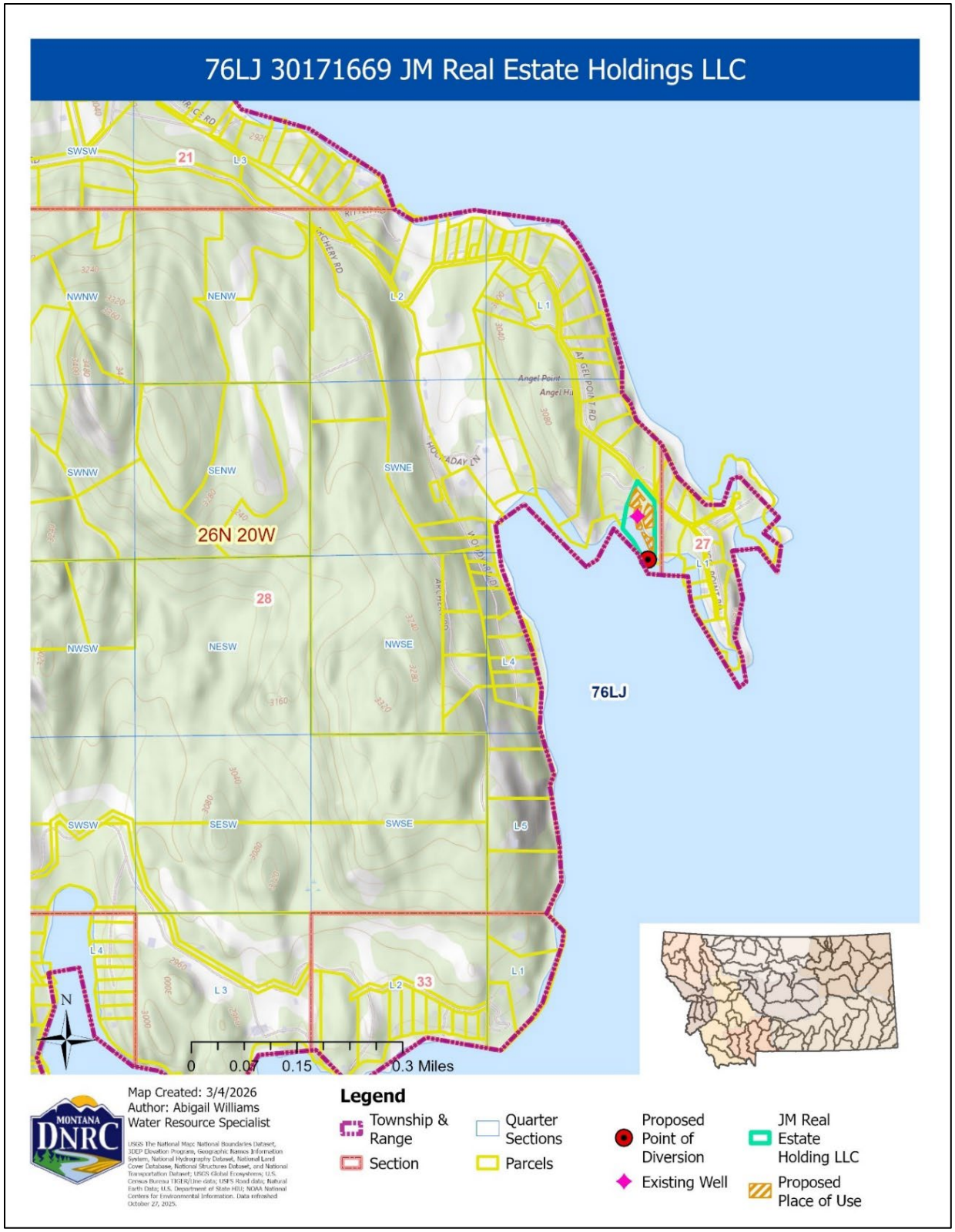


Figure 1: Map of the Applicant's proposed point of diversion and place of use

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

GENERAL CONCLUSIONS OF LAW

4. 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 . . .

5. 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.

6. 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.

7. 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).

8. 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.

9. 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

10. The Appicant proposes to divert water from Flathead Lake at a rate of 22.0 GPM up to 3.08 AF per year to irrigate 1.23 acres of lawn and garden from May 15th to September 30th.

11. Physical availability of Flathead Lake was calculated using data from USGS Gaging Station No. 12372000 on the Flathead River near Polson, MT. This gage was selcted as it is the nearest gage to the proposed POD and is located approximately 28 miles downstream of the proposed POD. The entire period of record for USGS Gaging Station No. 12372000, that ranges from October 1938 to April 2025, was used. The Department claculated the physical availability using the following method:

a. The Department calculated median of the mean monthly flow rates in cubic feet per second (CFS) for Flathead Lake, using USGS Gaging Station No. 12372000 records for each month of the proposed period of diversion (Table 1, column B). Those flows were converted to monthly volumes in AF (Table 1, column C) using the following conversion found in the DNRC Water Calculation Guide: median of the mean monthly flow (CFS) × 1.98 (AF/day/1 CFS) × days per month = AF/month.

The Department calculated the monthly flows appropriated by existing users upstream of USGS Gaging Station No. 12372000 (Table 1, column D) by:

i. Generating a list of existing water rights from the Flathead Lake inlet down to USGS Gaging Station No. 12372000 (this list is contained in the administrative file and is available upon request);

ii. Designating uses as occurring during their claimed or permitted periods of diversion;

iii. Assigning a single combined flow rate of 0.08 CFS to all livestock direct from source rights without a designated flow rate (per DNRC adjudication standards); and,

iv. Assuming that the flow rate of each existing right is continuously diverted throughout each month of the period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of existing uses from the source. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users.

b. Since the gage used is downstream of the POD, the Department added in the flow rates of the existing diversionary water rights between USGS Gaging Station No. 12372000 and the Flathead Lake inlet (Table 1, column D) to the median of the mean monthly gage values (Table 1, column B) to determine physical availability at the POD from Flathead Lake (Table 1, column E). Physically available monthly flows were then converted to monthly volumes (Table 1, column F).

Table 1: Physical Availability at the Point of Diversion on Flathead Lake					
A	**B**	**C**	**D**	**E**	**F**
Month	**Median of the Mean Monthly Flows at USGS Gaging Station No. 12372000 (CFS)**	**Median of the Mean Monthly Volume at USGS Gaging Station No. 12372000 (AF)**	**Existing Legal Demands from the Flathead Lake Inlet to the Gage (CFS)**	**Physically Available Water at POD (CFS)**	**Physically Available Water at POD (AF)**
May	18,560.0	1,139,212.8	5,429.5	23,989.5	1,472,474.9
June	25,400.0	1,508,760.0	5,437.6	30,837.6	1,831,751.7
July	12,730.0	781,367.4	5,438.1	18,168.1	1,115,159.2
August	6,126.0	376,013.9	5,438.1	11,564.1	709,805.7
September	5,956.5	353,816.1	5,413.5	11,370.0	675,375.6

12. Based on the physical availability analysis of Flathead Lake at the Applicant's proposed POD, the Department finds that the requested flow rate of 22.0 GPM (0.049 CFS) up to 3.08 AF of volume annually is physically available in Flathead Lake during the proposed period of diversion from May 15th to September 30th.

LEGAL AVAILABILITY

FINDINGS OF FACT

13. The Applicant proposes to divert up to 3.08 AF of surface water from Flathead Lake at a flow rate of 22.0 GPM to irrigate 1.23 acres of lawn and garden from May 15th to September 30th annually. The Department determined the AOPI for this application to be Flathead Lake from the inlet of the lake downstream to the SKQ Dam. This AOPI is appropriate as diversion of water at the proposed POD would reduce flow and volume in the lake and the outflow of which is controlled by the SKQ Dam. The Department found 1,795 water rights within the AOPI to evaluate for legal availability. This list is in the administrative file and is available upon request.

14. The Department calculated physically available flows and volumes at the proposed point of diversion (Table 2, Columns B-C). The DNRC used the method below to quantify legal demand in the depleted reach during the period of diversion:

a. The Department calculated median of the mean monthly flow rates in cubic feet per second (CFS) for the Flathead Lake using USGS Gaging Station No. 12372000 records for each month of the proposed period of diversion (Table 2, column B). Those flows were converted to monthly volumes in AF (Table 2, column C) using the following conversion found in the DNRC Water Calculation Guide: median of the mean monthly flow (CFS) × 1.98 (AF/day/1 CFS) × days per month = AF/month.

b. The Department calculated the monthly flows appropriated by existing users (Table 2, Column D) between the proposed point of diversion and the SKQ Dam by:

   I. Generating a list of existing water rights from the Flathead Lake inlet to the SKQ Dam (this list is included in the application file and is available upon request);

   II. Designating the uses as occurring during their periods of diversion;

   III. Assigning a single combined flow rate of 0.08 CFS to all livestock direct from source rights without a designated flow rate (per DNRC adjudication standards); and,

   IV. Assuming the flow rate of each existing water right is continuously diverted throughout each month of the period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of legal demands on the physical volume of water. The Department finds this Is an appropriate measure of assessing existing water rights as it protects existing water users.

15. The Department subtracted the flow rates of the existing legal demands (Table 2, Column D) within the AOPI from the physically available water (Table 2, Column B) to get the legally available flow rates at the POD (Table 2, Column E). Legally available monthly flow rates were then converted into monthly volumes (Table 2, Column F).

Table 2: Legal Availability from the proposed POD to the SKQ Dam					
A	**B**	**C**	**D**	**E**	**F**
Month	**Physically Available Water at POD (CFS)**	**Physically Available Water at POD (AF)**	**Existing Legal Demands within the AOPI (CFS)**	**Legally Available Flow (CFS)**	**Legally Available Volume (AF)**
May	23,989.5	1,472,474.9	5,285.0	18,561.0	1,139,259.0
June	30,837.6	1,831,751.7	5,285.0	25,401.0	1,508,804.6
July	18,168.1	1,115,159.2	5,285.0	12,731.0	781,413.4
August	11,564.1	709,805.7	5,285.0	6,127.0	376,060.0
September	11,370.0	675,375.6	5,265.0	5,957.3	353,860.7

16. Based on the evaluation of legally available water, the Department finds that the requested flow rate of 22.0 GPM (0.049 CFS) up to 3.08 AF of volume is legally available in Flathead Lake at the proposed POD during the period of diversion from May 15th to September 30th.

ADVERSE EFFECT

FINDINGS OF FACT

17. The Applicant proposes to divert water from Flathead Lake at a rate of 22.0 GPM up to 3.08 AF to irrigate 1.23 acres of lawn and garden from May 15th to September 30th. The Applicant provided a plan showing they can regulate water during times of shortage to ensure senior appropriators' water rights are met. The Applicant's plan is to implement water saving methods in times of shortage and will turn off the pump and revert back to the groundwater system if a valid call is made on the source.

18. The Applicant has shown that they can regulate their water usage and that a plan is in place to protect existing water users. The Department finds that water is both physically and legally available during the proposed period of diversion (FOF 12 and 16). The Department finds that the proposed water use will not adversely affect senior water users.

ADEQUATE MEANS OF DIVERSION

FINDINGS OF FACT

19. The Applicant proposes to divert water from Flathead Lake at a rate of 22.0 GPM up to 3.08 AF to irrigate 1.23 acres of lawn and garden from May 15th to September 30th by means of a Grundfos 22SQE submersible motor. The pump is hung in a 4-inch well casing that is permanently affixed to the existing private dock. The well casing is 14 feet long with 4 feet of perforated intervals at the end to allow intake of lake water. The pump outlet is connected to a 280 feet long 1 ¼- inch PVC pipe that runs from the dock above ground to the crawl space of the main home. Once in the crawl space the pressure in the system is maintained by two pressure tanks and the flow rate is controlled by a VFD set to a target pressure of 65 PSI.

20. The irrigation system will be controlled via a Rainbird sprinkler control system designed to have one zone operating at a time. The system consists of 10 irrigation zones in total. The irrigation zones are designed to have a flow rate demand of 20.0 GPM, and the additional 2 GPM will provide additional spray distance for the rotors as the spray distance is dependent upon the flow rate and pressure in the system.

21. The Applicant calculated a TDH of 234 feet for the system and will utilize a VFD with an output pressure of 65 PSI and flow rate of 22.0 GPM. The Applicant provided the pump curve for the Grundfos 22SQE submersible motor demonstrating that the pump is capable of producing 22.0 GPM at the TDH calculated.

22. Based on the system design and specifications, the Department finds that the diversion and conveyance system is adequate to supply the requested flow rate of 22.0 GPM (0.49 CFS) up to an annual volume of 3.08 AF.

BENEFICIAL USE

FINDINGS OF FACT

23. The Applicant requests to divert water from Flathead Lake at a rate of 22.0 GPM up to 3.08 AF to irrigate 1.23 acres of lawn and garden from May 15th to September 30th.

24. The Applicant has an existing well on the property (GWIC 137645), Ground Water Certificate 76LJ 87589-00. This well serves the main home and guest house for domestic water and is currently serving as the irrigation supply for the 1.23 acres of lawn and garden. Upon

issuance of the permit the well will cease being the primary provider of water for lawn and garden irrigation and act as a redundant source in case of a valid call on the source or if the lake system is otherwise unable to provide water due to maintenance. The well will only be utilized if a call is made on the source or if the Applicant is otherwise unable to irrigate via the Lake irrigation conveyance system. The water rights will be overlapping for the place of use.

25. The requested volume of 3.08 AF/ year was calculated using the ARM 36.12.115(2)(b) standard of 2.5 AF per acre for lawn and garden irrigation (1.23 acres X 2.5 AF/acre/year = 3.08 AF/year).

26. The Applicant requested a period of diversion and use of May 15th to September 30th based on the full pool of Flathead Lake and the requested period of diversion matching the current irrigation schedule on the property. The Applicant's property lies within USDA NRCS Climatic Area III and the standards for this area in ARM 36.12.112(1)(c)(iii) are April 15th to October 15th. The requested period of diversion and use falls within the standards.

27. The Department finds that the proposed water use is beneficial, and that the requested flow rate of 22.0 GPM (0.049 CFS) is justified per ARM 36.12.1801(3)(a). Additionally the Department finds that the 3.08 AF is reasonable to satisfy the beneficial use requested during the period of diversion and use of May 15th to September 30th.

POSSESSORY INTEREST

FINDINGS OF FACT

28. The Applicant signed the application form affirming that the Applicant has possessory interest or the written consent of the person with possessory interest, in the property where the water is to be put to beneficial use.

CONCLUSIONS OF LAW

PHYSICAL AVAILABILITY

29. 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."

30. 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).

31. 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).

32. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. Section 85-2-311(1)(a)(i), MCA. (FOF 10-12)

LEGAL AVAILABILITY

33. 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).

34. 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.

35. 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 13-16.)

ADVERSE EFFECT

36. 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.

37. 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).

38. 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).

39. 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).

40. 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.

41. 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).

42. 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 17-18)

ADEQUATE DIVERSION

43. 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.

44. 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.

45. The 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 19-22).

BENEFICIAL USE

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

47. 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).

48. 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).

49. It is the Applicant's burden to produce the required evidence. *Bostwick Properties, Inc. v. DNRC*, 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*.

50. The Applicant proposes to use water for lawn and garden which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence lawn and garden is a beneficial use and that 3.08 AF of diverted volume and 22.0 GPM is the amount needed to sustain the beneficial use. Section 85-2-311(1)(d), MCA. (FOF 23-27)

POSSESSORY INTEREST

51. 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.

52. 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.

53. 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 28)

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. 76LJ 30171669 should be GRANTED.

The Department determines the Applicant may divert and use water from May 15th to September 30th from Flathead Lake, by means of a pump at 22.0 GPM up to 3.08 AF, in the NENESE of Section 28, Township 26N, Range 20W, Flathead County, Montana, to irrigate 1.23 acres of lawn and garden. The place of use is located in Government Lot 3, SESENE of Section 28, Township 26N, Range 20W, Flathead County, Montana.

NOTICE

The Department will provide a notice of opportunity for public comment on this application and the Department's Draft Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for public comments to this application pursuant to §§ 85-2-307, and -308, MCA. If this application receives public comment pursuant to § 85-2-307(4), the Department shall consider the public comments, respond to the public comments, and issue a preliminary determination to grant the application, grant the application in modified form, or deny the application. If no public comments are received pursuant to § 85-2-307(4), MCA, the Department's preliminary determination will be adopted as the final determination.

DATED this 16th day of April, 2026.

James Ferch, Manager
Kalispell Regional Office
Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 16th day of April, 2026, by first class United States mail.

JM REAL ESTATE HOLDING LLC

PO BOX 1109

LAKESIDE MT 59922-1109

****

Via email:

Mikel Simmens, P.E

Core Water Consulting

Abigail Williams

Kalispell Regional Office, (406) 752-2288

Technical Analyses Report/ Scientific Credibility Review

- Departmental Technical Analyses Report/ Scientific Credibility Review
- Any correspondence relating to the Technical Analyses Report

Technical Analyses Report / Scientific Credibility Review

Surface Water Permit Technical Analyses Report

Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division
Abigail Williams, Water Resource Specialist, Kalispell Regional Office

Application No.	76LJ 30171669	**Proposed Point of Diversion**	NENESE of Section 28, Township 26 N, Range 20 W, Flathead County, Montana
Applicant	JM Real Estate Holding LLC		

Overview

This report analyzes data submitted by the Applicant in support of the above-mentioned water right application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-311, Montana Code Annotated (MCA).

This Surface Water Permit Technical Analyses Report contains the following sections:

1.0 Application Details

The Applicant proposes to divert water from May 15 to September 30 from Flathead Lake at a rate of 22 gallons per minute (GPM). A volume of 3.08 acre-feet (AF) of water would be used between May 15 to September 30 to irrigation 1.23 acres lawn & garden in Government Lot 3, NENESE of Section 28, Township 26 N, Range 20 W, Flathead County, Montana.

Table 1: Summary of the Proposed Use

Source	Flow Rate (GPM)	Diverted Volume (AF)	Purpose	Period of Diversion	Period of Use	Point of Diversion	Place of Use
Flathead River (Flathead Lake)	22	3.08	Lawn and Garden	05/15 to 9/30	05/15 to 9/30	NENESE of Section 28, Township 26 N, Range 20 W, Flathead County, Montana	Government Lot 3, SESENE of Section 28, Township 26 N, Range 20 W, Flathead County, Montana

2.0 Surface Water Analysis

2.1 Source Description

Proposed Source of Water: Flathead River (Flathead Lake)

Proposed Source Type: Perennial River/Lake System

Proposed Point of Diversion: NENESE of Section 28, Township 26 N, Range 20 W, Flathead County, Montana

2.2 Method of Estimation

Gage Name: Flathead River near Polson, MT

Gage Number: USGS # 12372000

Period of Record: October 1938 – April 2025

Why this gage is considered an appropriate data source:
USGS Gage No. 12372000 is the nearest gage to the proposed point of diversion (POD) and is located approximately 28 miles downstream of the POD. The date range used includes the entire period of record for this gage.

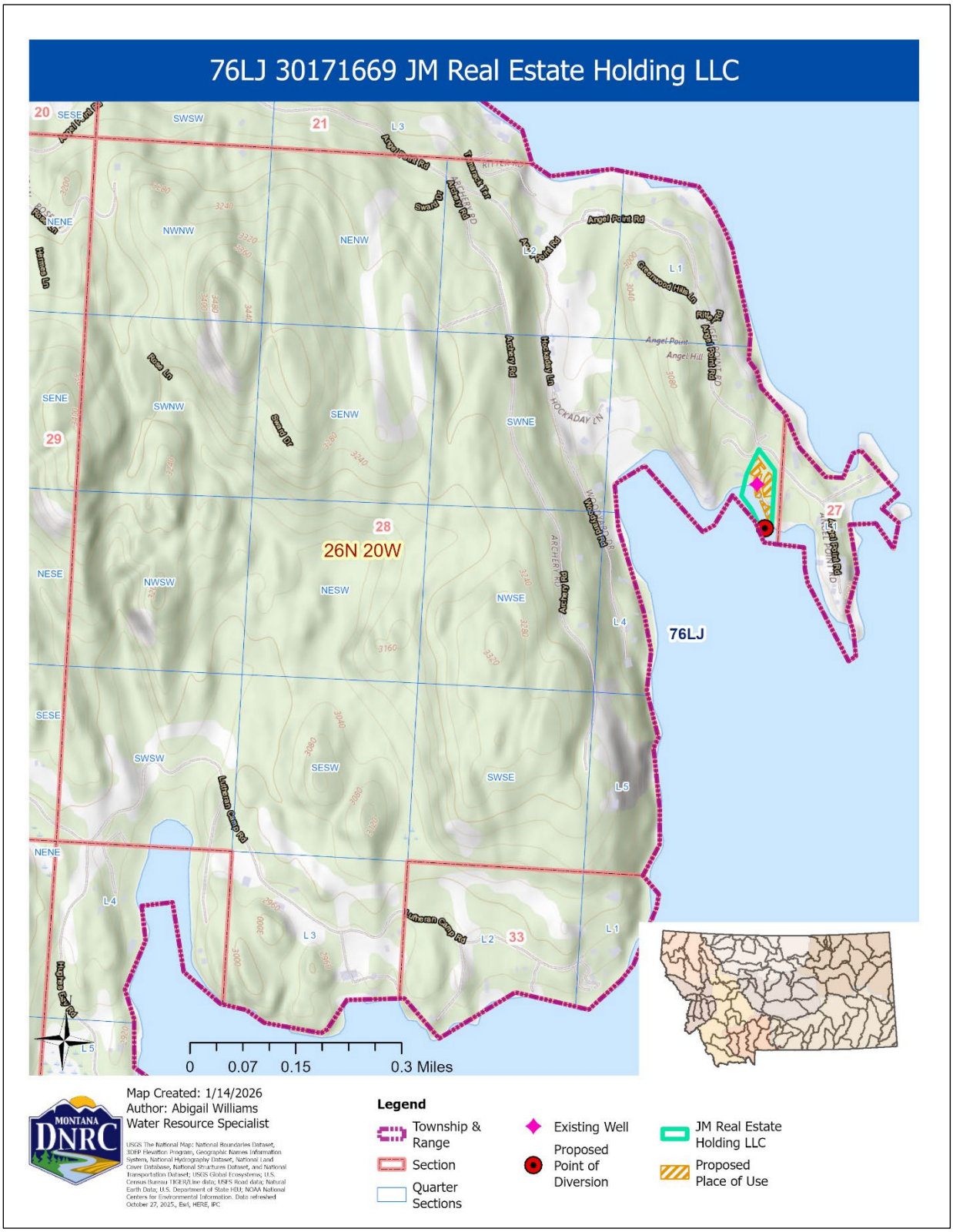


Figure 1: Map of the Applicant's proposed POD on the source and proposed place of use.

2.3 Monthly Flow Rate and Volume

Methodology:

Physical availability of Flathead Lake water at the POD will be quantified monthly. Department practice for physical availability analyses where the gaging station used is downstream of the POD is to add the monthly flow rates of existing diversionary water rights between the gaging station and the POD to the median of the mean monthly flows at the gaging station. The DNRC used the method below to quantify physically available monthly flows and volumes at the POD during the proposed period of diversion:

The Department calculated median of the mean monthly flow rates in cubic feet per second (CFS) for the Flathead River (Flathead Lake) using USGS Gaging Station No. 12372000 records for each month of the proposed period of diversion (**Table 2**, column B). Those flows were converted to monthly volumes in AF (**Table 2**, column C) using the following conversion found in the DNRC Water Calculation Guide: median of the mean monthly flow (CFS) × 1.98 (AF/day/1 CFS) × days per month = AF/month.

The Department calculated the monthly flows appropriated by existing users upstream of USGS Gaging Station No. 12372000 (**Table 2**, column D) by:

i. Generating a list of existing water rights from the Flathead Lake inlet down to USGS Gaging Station No. 12372000 (this list is contained in the administrative file and is available upon request);

ii. Designating uses as occurring during their claimed or permitted periods of diversion;

iii. Assigning a single combined flow rate of 0.08 CFS to all livestock direct from source rights without a designated flow rate (per DNRC adjudication standards); and,

iv. Assuming that the flow rate of each existing right is continuously diverted throughout each month of the period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of existing uses from the source. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users.

Since the gage used is downstream of the POD, the Department added in the flow rates of the existing diversionary water rights between USGS Gaging Station No. 12372000 and the Flathead Lake inlet (**Table 2**, column D) to the median of the mean monthly gage values (**Table 2**, column B) to determine physical availability at the POD from Flathead Lake (**Table 2**, column E). Physically available monthly flows were then converted to monthly volumes (**Table 2**, column F).

Table 2: Physical Availability at the Point of Diversion on Flathead Lake

A	B	C	D	E	F
Month	**Median of the Mean Monthly Flows at Gage 12372000 (CFS)**	**Median of the Mean Monthly Volume at Gage 12372000 (AF)**	**Existing Water Rights from the Flathead Lake Inlet to SKQ Dam (CFS)**	**Physically Available Water at POD (CFS)**	**Physically Available Water at POD (AF)**
January	10,380.0	637,124.4	78.73	10,458.7	641,956.8
February	9,133.0	506,333.5	81.31	9,214.3	510,841.3
March	7,748.0	475,572.2	86.5	7,834.5	480,881.6
April	9,223.0	547,846.2	5378.81	14,601.8	867,347.5
May	18,560.0	1,139,212.8	5429.49	23,989.5	1,472,474.9
June	25,400.0	1,508,760.0	5437.57	30,837.6	1,831,751.7
July	12,730.0	781,367.4	5438.12	18,168.1	1,115,159.2
August	6,126.0	376,013.9	5438.12	11,564.1	709,805.7
September	5,956.5	353,816.1	5413.46	11,370.0	675,375.6
October	7,184.0	440,953.9	5385.65	12,569.7	771,525.1
November	8,556.0	508,226.4	90.64	8,646.6	513,610.4
December	9,837.0	603,795.1	81.74	9,918.7	608,812.3

3.0 Area of Potential Impact Analysis

The Area of Potential Impact for this application is: The AOPI is the portion of the Flathead River system (including the entirety of Flathead Lake) from the Flathead Lake inlet in Section 34, Township 27N, Range 20W, Flathead County, downstream to the Seli'š Ksanka Qlispe' (SKQ) Dam in Section 12, Township 22N, Range 21W, Lake County. A total of 1,795 surface water rights exists within this reach. A list of these rights can be found in the administrative file and is available upon request.

Explanation of why this is an appropriate Area of Potential Impact: Physical Availability of Flathead Lake was quantified in **Section 2.0** above by quantifying the volume of physically available water between the Lake inlet and the Seli'š Ksanka Qlispe' Dam near Polson, MT. The dam is the control structure for Flathead Lake, and depletions to Flathead Lake will reduce the total volume of water passing over or through the dam and leaving the Lake. USGS Gage # 12372000 is approximately 0.6 miles downstream of the dam. The date range used includes the entire period of record for this gage.

Methodology: The Department considered the source characteristics of the Flathead River system (including Flathead Lake) and of the Seli'š Ksanka Qlispe' Dam, which controls the flow of water discharging from Flathead Lake when determining an appropriate AOPI.

Review

This document has been reviewed by the Department on 4/16/2026.

References

Department Standard Practice for Determining Physical Availability of Surface Water
Department Standard Practice for Determining Area of Potential Impact

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Appendix A: Water Rights within the Area of Potential Impact

Due to the large size of the list of water rights within the AOPI, the list is contained in the administrative file for this preapplication and is available as an excel spreadsheet upon request.

Excel File Placeholder

The Appendix A 76LJ 30171669 spreadsheet is available outside of the application file.

Please contact the regional office for more information.

Processing Materials

- Work copies of applicant-submitted information
- Deficiency letter
- Deficiency response
- Correct & complete determination
- Any correspondence with the applicant after application receipt and prior to sending the Draft PD

Processing Materials

Water Resources Division – Kalispell Regional Office
655 Timberwolf Pkwy, Ste. 4
Kalispell, MT 59901-1215
(406) 752-2288
DNRCKalispellWater@mt.gov

12/19/2025

JM Real Estate Holding LLC
PO BOX 1109
Lakeside MT 59922-1109

Subject: Correct and Complete Application for Beneficial Water Use Permit/ Change No. 76 LJ 30171669

Dear Applicant,

The Department of Natural Resources and Conservation (Department) has determined that your application is correct and complete pursuant to ARM 36.12.1601. Please remember that correct and complete **does not mean that your application will be granted.** The purpose of this letter is to indicate that the Department has enough information to analyze your water right application.

The Department will issue a Draft Preliminary Determination document and Technical Analyses within 120 days of the date of this letter per §85-2-307(2)(b), MCA.

Following issuance of the Draft Preliminary Determination, you (Applicant) will have 15 business days to request an extension of time to submit additional information, if desired pursuant to §85-2-307(3)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to grant your application or grant your application in modified form, the Department will prepare a notice of opportunity to provide public comment, per §85-2-307(4)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to deny your application, the Department will adopt the Draft Preliminary Determination as the final determination per §85-2-307(3)(d)(ii), MCA.

If you have any questions or concerns about the application process, please contact me.

Best,

Abigail Williams
Water Resource Specialist
Kalispell Regional Office
655 Timberwolf Parkway, Suite 4
Abigail.Williams@mt.gov

CC:

Core Water Consulting
490 E Montana St STE 2
Kalispell MT 59901-3567
Mikel@CoreWaterConsulting.com

Core Water Consulting

December 3, 2025

Abigail Williams, Water Resource Specialist
Montana Dept of Natural Resources and Conservation
655 Timberwolf Pkwy, Ste 4
Kalispell, MT 59901

RE: Surface Water Provisional Permit Application 76LJ 30171669
JM Real Estate Holding LLC, 982 Angel Point Road
in Section 28, Township 26 North, Range 20 West, Flathead County, Montana

Dear Ms. Williams:

A deficiency letter was received from DNRC relative to the application for beneficial water use permit, 76LJ 30171669, on October 8, 2025. The letter indicated the error affiliated to Form 600 Question 2. There was confusion as there was a pre-application meeting held, but the final application was not submitted timely, so that application closed. By submitting this new one, a new application was opened so there was **no preapplication meeting** held and question 2 should have been marked as no. As per question 2(a), form 600-TAA is enclosed. Question 2(b) would now be marked as "NA".

Since DNRC wrote a technical analysis (TA) for the other application, some of the information assembled was gathered from the expired TA.

For Form 600 TAA supplemental information is required about the method for determining the volume of the source. The Fish Wildlife & Parks bathometric map and database file has volume of the lake at 18,776, 897 Acre-ft. The FWP source map for Flathead Lake and databased record is attached.

Please let us know if you have any questions regarding this deficiency response.

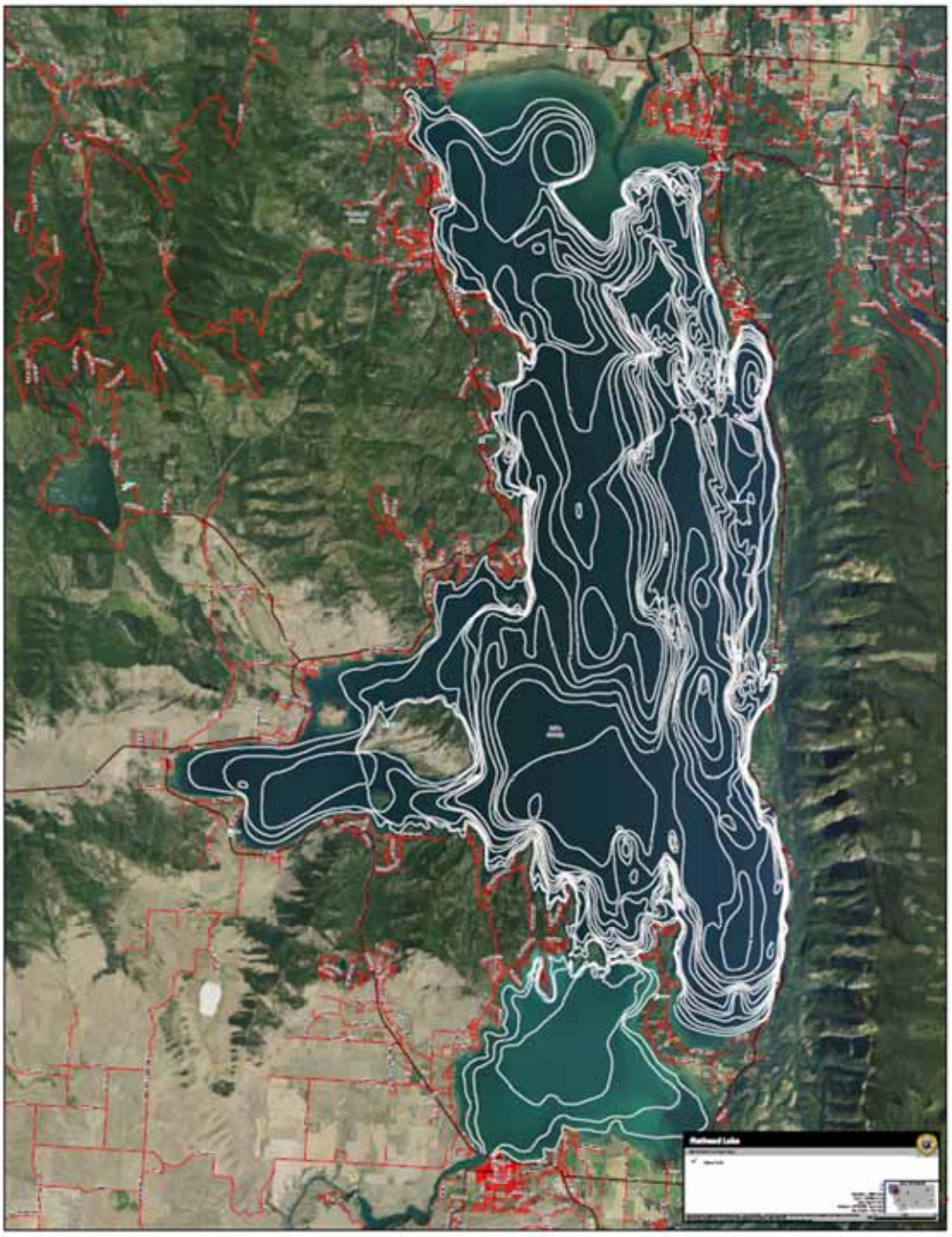
Regards,

Mikel Siemens, P.E.
Environmental Engineer

Attached: Flathead Lake Bathometric Map (2018)

Enclosed:
Form 600-TAA

(406) 890-2073 * 490 E. Montana Street, Suite 2, Kalispell, MT 59901 * Mikel@corewaterconsulting.com




Flathead Lake
Bathymetry Survey Map
State Park
Area of Interest
Elevation: 2889 Feet
Area: 122885 Acres
Max Depth: N/A
Volume: 18776897 Acre-feet
Ave Depth: 152 Feet

Form No. 600-TAA *(Revised 02/2025)* **Applicant Name** JM Real Estate Holding, LLC

APPLICATION FOR BENEFICIAL WATER USE PERMIT

TECHNICAL ANALYSES ADDENDUM

ARM 36.12.1303

Answer every question and applicable follow-up questions. Use the checkboxes to denote yes ("Y") or no ("N"). Questions that require items to be submitted to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Technical Analyses Addendum. Label all submitted items with the question number for which they were submitted. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, mark the see attachment ("A") checkbox on this form and label the attachment with the question number. If no attachment is needed, leave the see attachment ("A) checkbox blank. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Responses in the form of a table may be entered into the table provided on this form or in an attachment. If an attachment is used, the table must have the exact headings found on this form, and the see attachment ("A") checkbox on this form must be marked. Label all units in narrative responses and tables. Light gray checkbox cells denote a narrative or table response is required. Dark gray checkbox cells denote no response is needed because the question directs you to answer subsequent questions or provides you with information.

APPLICATION DETAILS

Questions, Narrative Responses, and Tables	Check-boxes
1. Did you have a preapplication meeting AND complete a Permit Preapplication Meeting Form (Form 600P)?	☐ Y ☑ N
a. If no, complete the remainder of Form 600-TAA. Skip to question 2.	
b. If yes,	
i. Do the technical analyses submitted with Form 600 remain unchanged from those completed during the preapplication meeting process?	☐ Y ☐ N
1. If yes, has any element of the project described in Form 600 changed from the mandatory elements of the project described in Forms 600P-A and/or 600P-B?	☐ Y ☐ N
a. If yes, complete the remainder of Form 600-TAA. Skip to question 2.	
b. If no, Form 600-TAA is complete.	
2. If no,	
a. Are you submitting new technical analyses with Form 600 to replace the technical analyses completed during the preapplication meeting process?	☐ Y ☐ N
i. If yes, complete the remainder of Form 600-TAA. Skip to question 2.	
ii. If no, are you correcting the technical analyses in response to a Departmental scientific credibility review completed during the preapplication meeting process?	☐ Y ☐ N

1. If yes, does every element of the project described in Form 600 remain unchanged from the mandatory elements of the project described in Forms 600P-A and/or 600P-B AND do the corrected technical analyses analyze the project exactly as proposed on Form 600 and Form 600P-A/600P-B?	☐ Y ☐ N
a. If yes, Form 600-TAA is complete.	
b. If no, complete the remainder of Form 600-TAA. Skip to question 2.	

SURFACE WATER

Questions, Narrative Responses, and Tables	**Check-boxes**
2. Is the proposed source surface water?	☑ Y ☐ N
a. If yes, move on to question 3.	
b. If no, skip to question 16.	

Surface Water Analysis

3. What is the flow rate (GPM or CFS), volume (AF), period of diversion start date and end date (MM/DD-MM/DD) at each point of diversion? Use the same POD # as the project map (Form 600) to label each point of diversion. ☐ A

POD #	**Period of Diversion Start**	**Period of Diversion End**	**Flow Rate**			**Volume**
	(MM/DD-MM/DD)	*(MM/DD-MM/DD)*	*Flow Rate*	*GPM*	*CFS*	*(AF)*
1	05/15	09/30	22	☑	☐	3.08
				☐	☐	
				☐	☐	
				☐	☐	
				☐	☐	
		Total	22	☐	☐	3.08

4. Is the source type of the diversion perennial or intermittent, ephemeral, lake, or other? ☐ A

Lake

Perennial or Intermittent	Answer questions 5 to 8	**Ephemeral**	Answer question 9	**Lake**	Answer question 10	**Other**	Answer questions 11 to 14

Surface Water Analysis: Perennial or Intermittent

☐ Applicable ☑ Not Applicable

5. Are stream gage data available?	☐ Y ☐ N
a. If yes, answer question 6.	
b. If no, answer question 7.	
6. Stream gage data are available.	
a. Is one stream gage located above the most upstream POD and one stream gage located below the most upstream POD?	☐ Y ☐ N
i. If no, is only one stream gage located near the most upstream POD?	☐ Y ☐ N
1. If yes, is the stream gage located upstream or downstream of the POD? _____	
b. List the gage name(s). Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____	
c. What is the distance between the gage(s) and the most upstream POD? Write “N/A” for Gage 2 if only one gage is available. Gage 1: _____ Gage 2: _____	
d. Is there a limiting or controlling factor on the source between the stream gage(s) and the most upstream POD? This includes dams that control the flow and streams with large gaining and/or losing reaches.	☐ Y ☐ N
i. If yes, explain. _____ _____ _____ _____	☐ A
e. How long is the period of record? Write “N/A” for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____	
f. Who operates and maintains the gage(s)? Write “N/A” for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____	

g. Is each available stream gage operated and maintained by USGS or DNRC?	☐ Y ☐ N
i. If yes, skip to question 6.h.	
ii. If no, answer the following questions for each gage not operated and maintained by USGS or DNRC.	
1. How frequently are stage data recorded? Write "N/A" for Gage 2 if only one gage is not operated or maintained by USGS. Gage 1: _____ Gage 2: _____	
2. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
3. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
4. Were requirements established and followed for maintaining a permanent gage datum and meeting specified accuracy limits?	
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
h. Do the data for one or more available stream gages meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion? See the "Department Standard Practice for Determining Physical Surface Water Availability" in the Permit Manual.	☐ Y ☐ N
i. If yes, record how many meet the standard, then skip to question 39 because this section is complete. _____	
ii. If no, answer question 7.	
7. If no gage data are available or if available gage data do not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?	☐ Y ☐ N
a. If no, the Department requires gage data and/or measurements that meet the requirements of ARM 36.12.1702 or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria. Skip to question 8.	

b. If yes,	
i. Submit available measurements to the Department.	☐ S
ii. Who collected the measurements? _____	☐ A
iii. With what method were the data collected? _____ _____ _____	☐ A
iv. What is the period of record? _____	
v. What is the frequency of measurement? _____	
vi. Are there gaps in the data?	☐ Y ☐ N
1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____	☐ A
vii. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N
1. If yes, explain. _____ _____ _____	☐ A
viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion? See the "Department Standard Practice for Determining Physical Surface Water Availability" in the Permit Manual.	☐ Y ☐ N
1. If yes, this section is complete. Skip to question 39.	
2. If no, answer question 8.	

8. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a Department-accepted estimation technique? If the Department finds that your measurements are not sufficient to validate an estimation technique or that no estimation technique is appropriate for the source characteristics, further measurements may be required. Refer to the "Department Standard Practice for Determining Physical Surface Water Availability" in the Permit Manual for more information.	☐ Y ☐ N
a. If yes,	
i. Describe how the measurements are representative of high, moderate, and low flows. _____ _____ _____ _____	☐ A
ii. Describe the estimation technique. _____ _____ _____ _____ _____ _____ _____	☐ A
b. If no, but a Department-accepted estimation technique will be appropriate for the source:	
i. Submit Form 653 if you want to request a variance from the requirements of ARM 36.12.1702(1)(b). The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet the requirements of ARM 36.12.1702(1) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ S
c. If no, because no Department-accepted estimation technique will be appropriate for the source:	
i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics. _____ _____ _____	☐ A
ii. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard for monthly measurements throughout the proposed period of diversion pursuant to ARM 36.12.1702(4)? Refer to the "Department Standard Practice for Determining Physical Surface Water Availability" in the Permit Manual for more information.	☐ Y ☐ N
1. If no, submit Form 653 if you want to request a variance from the requirements of ARM 36.12.1702(4). The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet the requirements of ARM 36.12.1702(4) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N

Surface Water Analysis: Ephemeral

☐ Applicable ☑ Not Applicable

9. Did you elect for the Department to conduct the Technical Analyses?	☐ Y ☐ N
a. If yes, do you have climate or drainage area data you would like the Department to consider during Technical Analyses?	☐ Y ☐ N
i. If yes, submit this information to the Department.	☐ S
b. If no,	
i. What estimation technique did you use to estimate physical availability at the point of diversion?	☐ A
ii. What is the net annual precipitation? Include the source of this information.	☐ A
iii. What is the drainage area upstream of the point of diversion and how was this figure calculated?	☐ A

Surface Water Analysis: Lake

☑ Applicable ☐ Not Applicable

10. What is the lake volume? Submit documentation explaining how the volume was quantified. Volume must be quantified by a qualified entity based on bathymetric data. 18,776,897 Acre-Feet - Montana FWP Bathymetric Map (2018)	☑ S

Surface Water Analysis: Other

☐ Applicable ☑ Not Applicable

11. Explain why the source type is “other”.	☐ A
12. Submit measurements of the source to the Department.	☐ Y ☐ N
13. With what method was the measurement data collected?	☐ A

14. What is the measurement interval? _____	
a. Does the interval meet the Department's standard for monthly measurements throughout the proposed period of diversion pursuant to ARM 36.12.1702(4)?	☐ Y ☐ N
i. If no, submit Form 653 if you want to request a variance from the requirements of ARM 36.12.1702(4). The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet the requirements of ARM 36.12.1702(4) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ S

Area of Potential Impact Analysis

All information for area of potential impact analysis was collected in previous questions.

GROUNDWATER

Questions, Narrative Responses, and Tables	**Check-boxes**
15. Is the proposed source groundwater?	☐ Y ☑ N
a. If yes, move on to question 16.	
b. If no, skip to question 39.	

Groundwater Analysis for Permits

16. What is the type of groundwater diversion? _____	

Well/Pit	Answer questions 17 to 20	**Developed Spring**	Answer questions 21 to 24	**Pond**	Answer questions 25 to 27

Groundwater Analysis for Permits: Well/Pumping Pit

☐ Applicable ☐ Not Applicable

17. Submit Aquifer Test Data Form (Form 633).	☐ S
18. Submit the Aquifer Testing Addendum (Form 600/606-ATA) and associated materials (e.g., well logs).	☐ S
19. Are you requesting a variance from ARM 36.12.121?	☐ Y ☐ N
a. If yes, submit Form 653.	☐ S
20. Have all proposed wells/pumping pits been constructed?	☐ Y ☐ N
a. If no, answer the following questions:	
i. Submit a list of all wells/pumping pits labeled with the same POD # as the project map (Form 600) and mark whether they have or have not been constructed.	☐ S

ii. When will all proposed wells/pumping pits be constructed? _____	☐ A
iii. Is the requested volume for each proposed well/pumping pit known?	☐ Y ☐ N
1. If yes, list the flow rate and volume requested for each proposed well/pumping pit. Label with the same POD # as the project map (Form 600). _____ _____	☐ A
2. If no, what is the total requested volume (AF) and the number of proposed wells/pumping pits? _____	

Groundwater Analysis for Permits: Developed Spring

☐ Applicable ☐ Not Applicable

21. Submit your measurements of the flow rate and volume of the source.	☐ S
22. With what method were measurements collected? _____ _____ _____ _____ _____ _____	☐ A
23. What is the interval of measurements? _____	
24. Is the interval of measurements sufficient to comply with ARM 36.12.1703(1)? Please note technical analyses or scientific credibility review cannot commence until the Department has measurement data that meets the requirements of ARM 36.12.1703(1). Variances from ARM 36.12.1703(1) are not allowed.	☐ Y ☐ N

Groundwater Analysis for Permits: Pond

☐ Applicable ☐ Not Applicable

25. Submit Form 653 to apply for a variance from ARM 36.12.121 for the Aquifer Test.	☐ S
26. Submit pond bathymetry data, survey, or engineering plans to the Department.	☐ S
27. Is the pond fed or drained by surface water?	☐ Y ☐ N
a. If yes,	
i. Explain. _____ _____ _____ _____	☐ A

ii. Submit measurements of the connected surface water source. These may include inflow and outflow measurements.	☐ S

Surface Water Depletion Analysis

28. Is the type of groundwater diversion for your proposed project a developed spring? If yes, skip to question 33 because this section is complete. If no, move onto question 29.	☐ Y ☐ N
29. Is the type of groundwater diversion for your proposed project a pond? If yes, answer question 29.a, then skip to question 33 because this section is complete. If no, move onto question 30.	☐ Y ☐ N
a. Will any of the ponds have diversions for out-of-pond use that differ from, if year-round use, an allocation of diverted volume by the number of days in the month, or, if irrigation/lawn and garden use, the 80% dry year net irrigation requirement (IWR, NRCS 2003)?	☐ Y ☐ N
i. If yes, provide a schedule of the diversions for out-of-pond use in the table below. Use the same POD # as the project map (Form 600). Attach any additional schedules with POD # labeled.	☐ A

POD #			
Month	**Diversions for Out-of-Pond Use Volume (AF)**	**Month**	**Diversions for Out-of-Pond Use Volume (AF)**
January		July	
February		August	
March		September	
April		October	
May		November	
June		December	

30. What are the flow rate (GPM or CFS), volume (AF), and period of diversion required (MM/DD-MM/DD) at each well/pumping pit? What is the well/pumping pit depth (FT), if available, or estimated well/pumping pit depth (FT). Please use the same POD # as the project map (Form 600) to match this information with the location information.	☐ A

POD #	**Flow Rate**	**GPM**	**CFS**	**Volume (AF)**	**Period of Diversion (MM/DD-MM/DD)**	**Well Depth (FT)**	**Measured or Estimated**
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				

31. Will any of the *new* wells/pumping pits have a monthly pumping schedule that differs from, if year-round use, an allocation of diverted volume by the number of days in the month, or, if irrigation/lawn and garden use, the 80% dry year net irrigation requirement (IWR, NRCS 2003)?	☐ Y ☐ N
a. If yes, provide the alternative pumping schedule(s) in the table below. Use the same POD # as the project map (Form 600). Attach any additional pumping schedules with POD # labeled.	☐ A

POD #				**POD #**			
Month	**Volume (AF)**	**Month**	**Volume (AF)**	**Month**	**Volume (AF)**	**Month**	**Volume (AF)**
January		July		January		July	
February		August		February		August	
March		September		March		September	
April		October		April		October	
May		November		May		November	
June		December		June		December	

32. Will one or more *existing* wells/pumping pits be used for the proposed project?	☐ Y ☐ N
a. If yes, will any of the *existing* wells/pumping pits have a monthly pumping schedule, before or after the proposed project, that differs from an allocation of diverted volume by the number of days in the month (if year-round use) or the 80% dry year net irrigation requirement (if irrigation/lawn and garden use) (IWR, NRCS 2003)?	☐ Y ☐ N
i. If yes, provide the pumping schedules before and after the proposed project in the table below. Use the same POD # as the project map (Form 600). Attach any additional pumping schedules with POD # and before/after proposed project labeled.	☐ A

Before proposed project: POD #				**After proposed project: POD #**			
Month	**Volume (AF)**	**Month**	**Volume (AF)**	**Month**	**Volume (AF)**	**Month**	**Volume (AF)**
January		July		January		July	
February		August		February		August	
March		September		March		September	
April		October		April		October	
May		November		May		November	
June		December		June		December	

Surface Water Analysis of Depleted Surface Water

33. If you submitted Technical Analyses with this application, list the hydraulically connected surface water sources and answer questions 34 to 38 one time per source. Use the "Additional Hydraulically Connected Source (600-TAA)" sheet for each additional source. If you have elected for the Department to conduct the Technical Analyses after application submittal, write "N/A" and skip to question 39 because the information required to answer questions 34 to 38 is not yet available. If measurements are required to determine physical or legal availability of depleted surface water sources, the Department will not have the information necessary to complete all necessary technical analyses or to evaluate the applicable criteria. If the type of groundwater diversion for your proposed project is a developed spring, write "NA" and skip to question 39 because this section is complete.

34. Name the hydraulically connected surface water source for which you are answering questions 35 to 38. _____	
35. Are stream gage data available?	☐ Y ☐ N
a. If yes, answer question 36.	
b. If no, answer question 37.	
36. Stream gage data are available.	
a. Is one stream gage located above and one stream gage located below the start of the depleted reach?	☐ Y ☐ N
i. If no, is only one stream gage located near the start of the depleted reach?	☐ Y ☐ N
1. If yes, is the stream gage located upstream or downstream? _____	
b. List the gage name(s). Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____	
c. What is the distance between the gage(s) and the start of the depleted reach? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____	
d. Is there a limiting or controlling factor on the source between the stream gage(s) and the start of the depleted reach? This includes dams that control the flow and streams with large gaining and/or losing reaches.	☐ Y ☐ N
i. If yes, explain. _____ _____ _____ _____	☐ A
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____	
f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____	
g. Is each available stream gage operated and maintained by USGS or DNRC?	☐ Y ☐ N
i. If yes, skip to question 36.h.	
ii. If no, answer the following questions for each gage not operated and maintained by USGS or DNRC.	
1. How frequently are stage data recorded? Write "N/A" for Gage 2 if only one gage is not operated or maintained by USGS. Gage 1: _____ Gage 2: _____	

2. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write “N/A” on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
3. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write “N/A” on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
4. Were requirements established and followed for maintaining a permanent gage datum and meeting specified accuracy limits?	
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write “N/A” on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
h. Do the data for one or more available stream gages meet the Department’s standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions? See the "Department Standard Practice for Determining Physical Surface Water Availability" in the Permit Manual.	☐ Y ☐ N
i. If yes, record how many meet the standard, then skip to question 39 because this section is complete. _____	
ii. If no, answer question 37.	
37. If no gage data are available or if available gage data do not meet the Department’s standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions, is the source otherwise measured?	☐ Y ☐ N
a. If no, the Department requires gage data and/or measurements that meet the requirements of ARM 36.12.1702 or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria. Skip to question 38.	
b. If yes,	
i. Submit available measurements to the Department.	☐ S
ii. Who collected the measurements? _____	☐ A
iii. With what method were the data collected? _____ _____ _____	☐ A
iv. What is the period of record? _____	

v. What is the frequency of measurement? _____	
vi. Are there gaps in the data?	☐ Y ☐ N
1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____	☐ A
vii. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N
1. If yes, explain. _____ _____ _____	☐ A
viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions? See the "Department Standard Practice for Determining Physical Surface Water Availability" in the Permit Manual.	☐ Y ☐ N
1. If yes, this section is complete. Skip to question 39.	
2. If no, answer question 38.	
38. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a Department-accepted estimation technique? If the Department finds that your measurements are not sufficient to validate an estimation technique or that no estimation technique is appropriate for the source characteristics, further measurements may be required. Refer to the "Department Standard Practice for Determining Physical Surface Water Availability" in the Permit Manual for more information.	☐ Y ☐ N
a. If yes,	
i. Describe how the measurements are representative of high, moderate, and low flows. _____ _____ _____ _____	☐ A
ii. Describe the estimation technique. _____ _____ _____ _____ _____ _____ _____ _____	☐ A

b. If no, but a Department-accepted estimation technique will be appropriate for the hydraulically connected surface water source:	
i. Submit a request to deviate from the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique. The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a request to deviate, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ S
c. If no, because no Department-accepted estimation technique will be appropriate for the source:	
i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics. _____ _____ _____	☐ A
ii. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard for monthly measurements throughout the months with net depletions? Refer to the "Department Standard Practice for Determining Physical Surface Water Availability" in the Permit Manual for more information.	☐ Y ☐ N
1. If no, submit a request to deviate from the Department's standard for monthly measurements throughout the months with net depletions. The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a request to deviate, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ S

Area of Potential Impact Analysis of Depleted Surface Water

All information for area of potential impact of depleted surface water was collected in previous questions.

PROJECT-SPECIFIC QUESTIONS

Controlled Groundwater Areas and Basin Closures

Questions, Narrative Responses, and Tables	Check-boxes
39. Does the project include one or more groundwater points of diversion located in the East Valley Controlled Groundwater Area (EVCGWA)?	☐ Y ☑ N
a. If yes, is the use over 35 GPM or 10 AF per year?	☐ Y ☐ N
i. If no, this is the incorrect form. Use instead Form 600-EVCGWA: East Valley Controlled Groundwater Area Permit Application.	
ii. If yes, how does this project meet the specific requirements of the East Valley Controlled Groundwater Area? Include any relevant documentation. _____ _____ _____ _____	☐ A
b. If no, skip to question 40.	
40. Does the project include one or more groundwater points of diversion located in the Yellowstone Controlled Groundwater Area (YCGA)?	☐ Y ☑ N
a. If yes, is the proposed flow rate and volume over 35 GPM or 10 AF per year?	☐ Y ☐ N
i. If no, this is the incorrect form. Use instead Form 600-YCGA: Yellowstone Controlled Groundwater Area Permit Application.	
ii. If yes, submit *Form 600 YCGA: Yellowstone Controlled Groundwater Area Addendum Over 35 gallons per minute*.	☐ S
41. Is the project for surface water or groundwater and subject to one or more of the following areas listed on the Department's website (https://dnrc.mt.gov/Water-Resources/Water-Rights/Basin-Closures-Stream-Depletion-Controlled-Ground-Water-Areas)? • Controlled Groundwater Areas, not mentioned in questions 39 to 40 • Basin Closures or Stream Depletion Zones	☐ Y ☑ N
a. If yes, identify each area and describe how the proposed project meets its requirements. An application must meet the specific requirements of the Controlled Groundwater Area or closure to be accepted by the Department. _____ _____ _____ _____ _____ _____ _____ _____ _____ _____	☐ A

Water Resources Division – Kalispell Regional Office
655 Timberwolf Pkwy, Ste. 4
Kalispell, MT 59901-1215
(406) 752-2288
DNRCKalispellWater@mt.gov

10/8/2025

JM Real Estate Holding LLC
PO BOX 1109
Lakeside MT 59922-1109

Subject: Deficiency letter for Beneficial Water Use Permit Application No. 76LJ 30171669

Dear Applicant,

The Department of Natural Resources and Conservation (DNRC or Department) has begun reviewing your application. This letter is to notify you of the deficiencies in your application as required in ARM 36.12.1501(1) and §85-2-302(5)(b), MCA. An Applicant is required to submit substantial and credible information addressing the rules and statutes that are relative to the application. You must provide the information specified below for your application to be considered correct and complete. "Correct and complete" means all of the information provided is substantial and credible and provides all of the information as required by applicable rules and statutes. The application as submitted contains deficiencies in the following section(s):

Preapplication and Technical Analyses Information

Form 600 - Question 2

Q2: *Did you have a preapplication meeting AND complete a Permit Preapplication Form Part A and Part B (Form 600P-A and 600P-B)*

2.*a Submit the Technical Analyses Addendum*

2.*b Submit the technical analyses, if you elected in question 1 for the Applicant technical analyses to be used for criteria assessment. Select "NA" if you elected for the Department technical analyses.*

Yes was marked for question 2 but no preapplication meeting occurred for this application. It is a standalone application. Question 2 should be marked "No" and questions 2.a and 2.b should have been answered. Per question 2.a, Please submit the 600-TAA for permit 76LJ 30171669.

As stated above, the information submitted to address the rules and statutes listed in this deficiency letter must be substantial credible information to be acceptable at the correct and complete determination. §§85-2-102 (9) and (26), MCA.

Please submit the information specified above to the Kalispell Regional Office by February 5, 2026. This is the only deficiency letter that will be sent. An application not corrected or completed within 120 days from the date of this letter is terminated per ARM 36.12.1501(2) and §85-2-302(6)(a), MCA.

Please let me know if you have any questions.

Best,

Abigail Williams
Water Resource Specialist
Kalispell Regional Office
655 Timberwolf Parkway, Suite 4
Abigail.Williams@mt.gov

CC:
Core Water Consulting
490 E Montana St STE 2
Kalispell MT 59901-3567
Mikel@CoreWaterConsulting.com

IMPORTANT NOTICE: This will be the final opportunity for you to provide the required information to the Department. If all of the requested information in this letter is not postmarked or submitted within 120 days of this letter, the application will be terminated within 30 days and the application fee will not be refunded.

Application Materials

- Application
- Any information submitted with Application including maps

Application Materials

APPLICATION FOR BENEFICIAL WATER USE PERMIT

§ 85-2-302, MCA

Form No. 600 *(02/2025)*

For Department Use Only

RECEIVED
DNRC Water Resources
AUG 27 2025
Kalispell Unit

Application # 30171669 Basin 76LJ
Priority Date 8/27/25 Time 15:10 AM/PM
Rec'd By TW
Fee Rec'd $ 2500.00 Check # 5040
Deposit Receipt # KLV2603425
Payor Core Water Consulting Inc.
Refund $ _____ Date _____

FILING FEE

$2900/$1600 – Inside a Basin Closure Area, Controlled Groundwater Area or Compact Closure; without/with filing fee reduction.

$2500/$1200 – Outside a Basin Closure Area; Controlled Groundwater Area or Compact Closure; without/with filing fee reduction.

INFORMATION

An application will be eligible for a filing fee reduction and expedited timelines if the applicant completes a preapplication meeting with the Department (ARM 36.12.1302(1)), which includes submitting any follow-up information identified by the Department (ARM 36.12.1302(3)(c)) and receiving either Department-completed technical analyses or Department review of applicant-submitted technical analyses (ARM 36.12.1302(4) and (5)). An application for the proposed project also must be submitted within 180 days of delivery of Department technical analyses or scientific credibility review and no element on the submitted application can be changed from the completed preapplication meeting form (ARM 36.12.1302(6)). If application is eligible for a filing fee reduction, $500 paid for Form 600P-B will be credited toward filing fees shown above.

Applicant Information: ***Add more as necessary.***

Applicant Name JM Real Estate Holding, LLC
Mailing Address P.O. Box 1109 City Lakeside State MT Zip 59922
Phone Numbers: Home _____ Work _____ Cell 970-692-1639
Email Address jmann15090@aol.com

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Contact/Representative Information: ***Add more as necessary.***

Contact/Representative is: ☐ Applicant ☑ Consultant ☐ Attorney ☐ Other
Contact/Representative Name Mikel Siemens, PE; Core Water Consulting
Mailing Address 490 E. Montana Street, Suite 2 City Kalispell State MT Zip 59901
Phone Numbers: Home _____ Work 406-890-2073 Cell 406-261-0216
Email Address mikel@corewaterconsulting.com

NOTE: *If a contact person is identified as an attorney, all communication will be sent only to the attorney unless the attorney provides written instruction to the contrary (ARM 36.12.122(2)). If a contact person is identified as a consultant, employee, or lessee, the individual filing the water right form or objection form will receive all correspondences, and a copy may be sent to the contact person (ARM 36.12.122(3)).*

Answer every question and applicable follow-up questions. Use the checkboxes to denote yes ("Y"), no ("N"), or not applicable ("NA"). Questions that require items to be submitted to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Application. Label all submitted items with the question number for which they were submitted. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, specify "see attachment" on this form, and label the attachment with the question number. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Responses in the form of a table may be entered into the table provided on this form or in an attachment. If an attachment is used, the table must have the exact headings found on this form, and "see attachment" must be entered as a response to the relevant question. Clearly label all units in tables and narrative responses.

PREAPPLICATION AND TECHNICAL ANALYSES INFORMATION

1. ☑ **Y** ☐ **N** Do you elect for Department technical analyses to be used for criteria assessment?

2. ☑ **Y** ☐ **N** Did you have a preapplication meeting AND complete a Permit Preapplication Meeting Form Part A and Part B (Form 600P-A and 600P-B)?

IF QUESTION 2 IS NO, answer 2.a and 2.b:

2.a. ☐ **S** Submit the Technical Analyses Addendum (Form 600-TAA).

2.b. ☐ **S** ☐ **NA** Submit the technical analyses, if you elected in question 1 for Applicant technical analyses to be used for criteria assessment. Select "NA" if you elected for Departmental technical analyses.

IF QUESTION 2 IS YES, answer 2.c, 2.d, and 2.e:

2.c. ☐ **Y** ☑ **N** Has any element of the project described in this application changed from the mandatory elements of the project described in the completed form 600P? **If yes:**
2.c.i. Please explain.

2.c.ii. ☐ **S** Submit the Technical Analyses Addendum (Form 600-TAA).

2.d. ☑ **Y** ☐ **N** Are the technical analyses to be used for criteria assessment exactly the same as those completed during the preapplication process? **If no:**
2.d.i. Please explain.

2.d.ii. ☐ **S** Submit the Technical Analyses Addendum (Form 600-TAA).

2.e. ☑ **Y** ☐ **N** Did you elect in Question 1 for Department technical analyses to be used for criteria assessment? **If no:**
2.e.i. ☐ **S** Submit the technical analyses.

APPLICATION ADDENDA AND REVIEW

3. ☐ **S** ☑ **NA** If your application is for groundwater, not surface water, and one or more of your points of diversion are in a Basin Closure Area, then submit the Basin Closure Area Addendum (Form 600-BCA).

4. ☐ **S** ☑ **NA** If your application is for groundwater and one or more points of diversion are in a Basin Closure Area, then your project must have a Hydrogeologic Report that conforms with MCA 85-2-361 to comply with the requirements of § 85-2-360, MCA. A Hydrogeologic Report Addendum (Form 600-HRA) or Department Technical Analyses may be used to meet these requirements. Please mark the box below that best applies, then select "S" if submitting a Hydrogeologic Report or "NA" if one is not required. This question does not apply to surface water points of diversion in a Basin Closure Area.

- ☐ If you elected to conduct Technical Analyses, you must submit the Hydrogeologic Report Addendum (Form 600-HRA).
- ☐ If you elected for DNRC to conduct Technical Analyses but did not have a preapplication meeting AND complete a Form 600P Permit Preapplication Meeting Form (or changes have occurred since the completed Form 600P), you must submit the Hydrogeologic Report Addendum (Form 600-HRA).
- ☐ If you elected for DNRC to conduct Technical Analyses, had a preapplication meeting, completed a Form 600P, and the Technical Analyses remain unchanged since the preapplication meeting, you do not need to submit Form 600-HRA because the Department's Technical Analyses meet the report requirements of § 85-2-360 and § 85-2-361, MCA.

5. ☐ **S** ☑ **NA** If the project is for one or more groundwater points of diversion located in a Controlled Groundwater Area, then submit the Controlled Groundwater Area Addendum (Form 600-CGWA).

6. ☐ **S** ☑ **NA** If the project involves an appropriation that is greater than 5.5 CFS and 4,000 acre-feet, then submit a Criteria Addendum Application for Beneficial Water Use Permit for Appropriations Greater than 5.5 CFS and 4,000 AC-FT (Form 600-B).

7. ☐ **S** ☑ **NA** If the project involves out-of-state water use, then submit the Out-of-State Use Addendum (Form 600/606-OSA).

8. ☐ **S** ☑ **NA** If you require mitigation water to meet the criteria of issuance, then submit a Mitigation Purpose Addendum (Form 600/606-MIT).

9. ☐ **S** ☑ **NA** If the proposed purposes include marketing or selling water, (not marketing for mitigation/ aquifer recharge), then submit the Marketing Purpose Addendum (Form 600/606-WMA).

10. ☐ **S** ☑ **NA** If the project involves one or more places of storage, then submit a Permit Storage Addendum (Form 600-SA). This does not include reservoirs, pits, pit-dams, or ponds with a capacity less than 0.1 AF; water tanks; or cisterns (ARM 36.12.113(6)).

11. ☐ **S** ☑ **NA** If the project is in designated sage grouse habitat, then submit a review letter from the Montana Sage Grouse Habitat Conservation Program.

12. ☐ **S** ☑ **NA** If the project includes a point of diversion and/or place of use on State of Montana Trust Land, submit documentation of consent from the DNRC Trust Lands Management Division.

13. ☐ **S** ☑ **NA** You must provide a written notice of the application to each owner of an appropriation right sharing a point of diversion or means of conveyance (e.g., canal, ditch, flume, pipeline, or constructed waterway) pursuant to §85-2-302(4)(c), MCA. Submit a copy of this notice and the recipient list.

PURPOSE AND DIVERSION INFORMATION

14. ☐ **Y** ☑ **N** Is the proposed use temporary?

14.a. If yes, when will the appropriation cease? _____

15. Is the proposed source surface water or groundwater? Surface Water

16. What is the source name? Flathead Lake (above Kerr Dam aka Selis-Qlispe)

17. ☑ **S** Attach a map utilizing an aerial photograph or topographic map that shows the following: section corners; township and range; north arrow; scale bar; all proposed points of diversion labeled with a unique Point of Diversion (POD) ID number and, if applicable, GWIC number; all proposed places of use; all proposed conveyance facilities and or routes; all proposed places of storage labeled with a unique Storage ID number; and places of use (POU) for all overlapping water rights. More than one map may be submitted, if necessary to clearly convey all required information.

18. Fill out the table below. Means of diversion for surface water includes headgate, pump, dam, and others. Means of diversion for groundwater includes well, developed spring, pit pond, and others.

Purpose	**Means of Diversion**	**Acres Irrigated** (if appl.)	**Period of Diversion** *(Month/Day - Month/Day)*	**Period of Use** *(Month/Day - Month/Day)*	**Flow Rate** ☑ *GPM* ☐ *CFS*	**Volume** *(Acre-Feet)*
Lawn & Garden	Pump	1.23	5/15 - 9/30	5/15 - 9/30	22	3.08
			Total Flow Rate and Volume Required		22	3.08

19. ☑ **Y** ☐ **N** Does the proposed use include on or more of the following purposes: domestic, multiple domestic, stock, or irrigation? If yes, fill out the following table, where applicable.

Purpose	**Requested Information**	**Response**
Domestic or multiple domestic	Number of dwellings	
Stock	Number of animal units	
Irrigation	Method of irrigation type (sprinkler or flood) and subtype (if flood: level border, graded border, furrow, contour ditch, or other; if sprinkler: center pivot, wheel line, or other)	Sprinkler
Irrigation (flood only)	Design slope	

POINT(S) OF DIVERSION

20. Describe the proposed location of the point(s) diversion to the nearest ¼ ¼ ¼ Section. Label each POD with the POD ID number used for the project map (question 17).

POD #	¼	¼	¼	Sec.	Twp.	Rge.	County	Lot	Block	Tract	Subdivision	Gov. Lot
1	SE	SE	NE	28	26N	20W	Flathead	26			Amended Plat of Lot 25- 29	
											of Angel Point Acreage	

PLACE OF USE

21. What are the geocodes of the place of use?

07-3705-28-1-04-13-0000	

22. Describe the legal land description for the proposed place of use and, if applying for an irrigation or lawn and garden purpose, list the number of irrigated acres.

Acres	Gov. Lot	Block	¼	¼	¼	Sec.	Twp.	Rge.	County
1.23				SE	NE	28	26N	20W	Flathead

SUPPLEMENTAL AND OVERLAPPING WATER RIGHTS

23. ☑ **Y** ☐ **N** Will other water rights supplement or overlap the place of use to contribute to the purpose(s)?

23.a. If yes, summarize how the supplemental and proposed water rights will be operated as a whole to serve the purpose(s).

Domestic water rights provide up to 5 acres irrigation (ARM 36.12.101 (20)(g)). The owners have diverted water from the existing well for this purpose with 76LJ 87589 00. Surface water irrigation will be dominant sprinkler method, with groundwater well diversion serving as alternative backup if a call for water is made.

24. For each supplemental or overlapping water right, please list the water right number, typical period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the shared place of use.

Water Right #	Average Period of Diversion	Average Period of Use	Flow Rate	Volume Contributed
76LJ 87589 00	1/1 - 12/31	1/1 - 12/31	35 GPM	If necessary

25. ☐ **Y** ☑ **N** Will this application supplement contract water from a Federal Project, ditch company, or other source?

25.a. If yes, explain.

ADVERSE EFFECT

26. Explain how you can control your diversion in response to a call being made.

1) If a valid call for surface water is requested, diversion period can be reduced to minimum for each irrigation zone. Sprinkler periods will increase through the summer, so reduction zone time is first step. 2) In the event the problems persists, the surface water diversion system would be able to revert back to groundwater well to assist in maintaining the established lawn. 3) If the call is from senior water right holder precedes the groundwater priority date and the call could be applied to groundwater also, irrigation would cease except for fire protection if necessary.

27. Describe any plans you have for ensuring existing water rights will be satisfied during times of water shortage.

Groundwater operation remains an option and backup alternative for the surface water diversion. Sprinkler irrigation can be halted if necessary.

28. ☐ **Y** ☑ **N** Are you aware of any calls that have been made on the source of supply or, if groundwater, on nearby surface water sources?

28.a. If yes, explain.

29. ☐ **Y** ☑ **N** Does a water commissioner distribute water or oversee water distribution on your proposed source?

29.a. If yes, list the source(s).

30. ☐ **Y** ☑ **N** Do other water rights share any of the proposed points of diversion?

30.a. If yes, describe how the proposed project will not adversely affect these water rights.

31. ☑ **Y** ☐ **N** Do other water rights share any conveyance infrastructure associated with the proposed project?

31.a. If yes, describe how the proposed project will not adversely affect these water rights.

Groundwater Well is connected to the sprinkler system currently, and the method to switch diversion points from groundwater to surface water will remain an option for the system.

ADEQUATE MEANS OF DIVERSION AND OPERATION

32. ☑ **S** Submit a diagram of how you will operate your system from all proposed points of diversion to all proposed places of use.

33. Describe specific information about the capacity of all proposed diversionary structures. This may include, where applicable: pump curves and total dynamic head calculations, headgate design specifications, and dike or dam height and length.

Pump curves and total dynamic head calculations provided in the supplemental report.

34. Describe the size, materials, capacity, and configuration of infrastructure to convey water from all proposed points of diversion to all proposed places of use. This may include but is not limited to, pipelines and ditches. Include a description of any losses related to the proposed conveyance. Ditch conveyance losses may be estimated numerous ways, which include a ditch loss rate or Department standard methods.

Conveyance losses and infrastructure configuration are provided in the supplemental report.

35. Describe how the proposed diversion and conveyance infrastructure can provide the required flow and volume, for the purposes plus any conveyance losses and storage, throughout the proposed period of diversion.

Diversion information is provided in the supplemental report.

36. Provide a plan of operations, which includes specific information about how water is delivered within the place of use. This may include, where applicable, the range of flow rates needed for a pivot.

Water will be diverted for irrigation purposes from May 15th to September 30th. Water will be diverted from the lake using a Grundfos SQE 1-1/2 horsepower pump, located under the existing dock. PEX waterlines will carry the water from the dock to the control room beneath the residence (crawl space), to small pressure tanks with variable frequency drive to maintain constant pressure. Water will then be diverted to the 10 irrigation zones. Additional information is in the supplemental report.

37. ☐ **Y** ☑ **N** Does the proposed conveyance require easements?

37.a. If yes, explain.

38. ☑ **Y** ☐ **N** Do you own the land where all proposed points of diversion are located?

38.a. ☐ **S** If no, submit documentation to show you have the right to use all points of diversion located on each property you do not own. This may include, but is not limited to, a well agreement, an easement, or permission of the party that owns the property where the proposed point(s) of diversion are located.

39. ☐ **Y** ☑ **N** Will your system be designed to discharge water from the project?

IF YES,

39.a. Explain the wastewater disposal method.

39.b. ☐ **Y** ☐ **N** ☐ **NA** Have the necessary permits been obtained to comply with §§ 75-5-410 and 85-2-364, MCA?

40. ☐ **Y** ☑ **N** Do you have any plans to measure your diversion and use?

40.a. If yes, describe the plan and the type of measurements you will take.

41. ☐ **Y** ☑ **N** Is the means of diversion for any proposed point of diversion a well?

IF YES,

41.a. ☐ **Y** ☐ **N** Have all wells been drilled?

41.b. For all wells that have been drilled, what is the name of the well driller and, if available, what is their license number?

_____

41.c. ☐ **Y** ☐ **N** For all wells yet to be drilled, will a licensed well driller construct the wells?

41.d. ☐ **S** ☐ **NA** Submit any well logs not yet submitted to the Department.

BENEFICIAL USE

42. ☑ **Y** ☐ **N** Does the Department have a volume, period of diversion, or period of use standard for the purposes for which water is proposed? Department standards can be found in the DNRC Water Calculation Guide, ARM 36.12.112, and ARM 36.12.115.

42.a. ☑ **Y** ☐ **N** If yes, do all proposed beneficial uses fall within Department standards?

42.b. If no Department standard exists, or if any proposed beneficial use falls outside of Department standards, explain how the requested flow rate and volume are reasonable for the purpose.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

43. ☐ **Y** ☑ **N** Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?

44. ☐ **Y** ☑ **N** Are you proposing to use surface water for in-house domestic use?

44.a. ☐ **Y** ☐ **N** If yes, does a COSA exist for the proposed place of use?

44.a.i. ☐ **S** ☐ **NA** If yes, please submit the COSA.

44.a.ii. ☐ **Y** ☐ **N** If no, have you researched or consulted with DEQ regarding their requirements?

POSSESSORY INTEREST

45. ☐ **Y** ☑ **N** Do you meet one of the exceptions to possessory interest requirements, pursuant to ARM 36.12.1802? Exceptions include cases 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.

45.a. If yes, explain.

_____

_____

_____

_____

46. ☑ **Y** ☐ **N** ☐ **NA** Do you own all proposed places of use? Mark "NA" if you meet one of the exceptions to the possessory interest requirement.

IF NO,

46.a. ☐ **S** Explain and submit documentation that shows you either have possessory interest or written permission of the parties with possessory interest of the place of use.

_____

_____

_____

_____

_____

_____

_____

46.b. ☑ **Y** ☐ **N** Would you like the water right to be appurtenant to the land? Please note that if your water right is not appurtenant to land it will not transfer by default with the conveyance of the property, pursuant to § 85-2-403, MCA.

46.b.i. If no, explain.

_____

_____

_____

PROPOSED COMPLETION PERIOD

47. How much time will be needed to complete this project and to submit to the DNRC a Project Completion Notice (Form 617)? 3 years

48. Please describe why this amount of time is needed to complete this project.
Contractor demand for installation is high in Flathead Valley. The time requested allows permit acquisition, locate contractor, get on schedule and complete the installation, and one season of monitoring and diversion.

AFFIDAVIT & CERTIFICATION

Read carefully before you sign and review with legal counsel if you have any questions. All owners (or trustees) must sign the form. ***If the owner is a business or trust, include the title of the representative(s) signing the form (i.e., president, trustee, managing partner, etc.) and provide documentation that establishes the authority of the representative to sign the application.*

I affirm the information provided for this application is to the best of my knowledge true and correct. If a preapplication meeting form was submitted, I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if upon submittal of the application to the Department, I changed any element of the proposed application from the preapplication meeting form and follow-up materials (ARM 36.12.1302(6)(a)).

I affirm I 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, unless this application meets an exception to the possessory interest requirements in ARM 36.12.1802(1)(b).

I understand that making a false statement under oath or affirmation in this application and official proceedings throughout the examination of my application may subject me to prosecution under § 45-7-202, MCA, a misdemeanor punishable by a jail term not to exceed 6 months or a fine not to exceed $500, or both. I have read this Affidavit and understand the terms and conditions.

I declare under penalty of perjury and under the laws of the state of Montana that the foregoing is true and correct.

Printed Name Jessica Manning

Applicant Signature  Date: 08/27/25

Printed Name _____

Applicant Signature _____ Date: _____

Printed Name _____

Applicant Signature _____ Date: _____

Core Water Consulting

SURFACE WATER APPLICATION FOR BENEFICIAL WATER USE PERMIT, SUPPLEMENTAL INFORMATION FOR LOT 26 OF ANGEL POINT ACREAGE AMENDED

IN THE SE1/4, NE1/4 OF SECTION 28, T26N, R20W, P.M.,M. FLATHEAD COUNTY, MONTANA

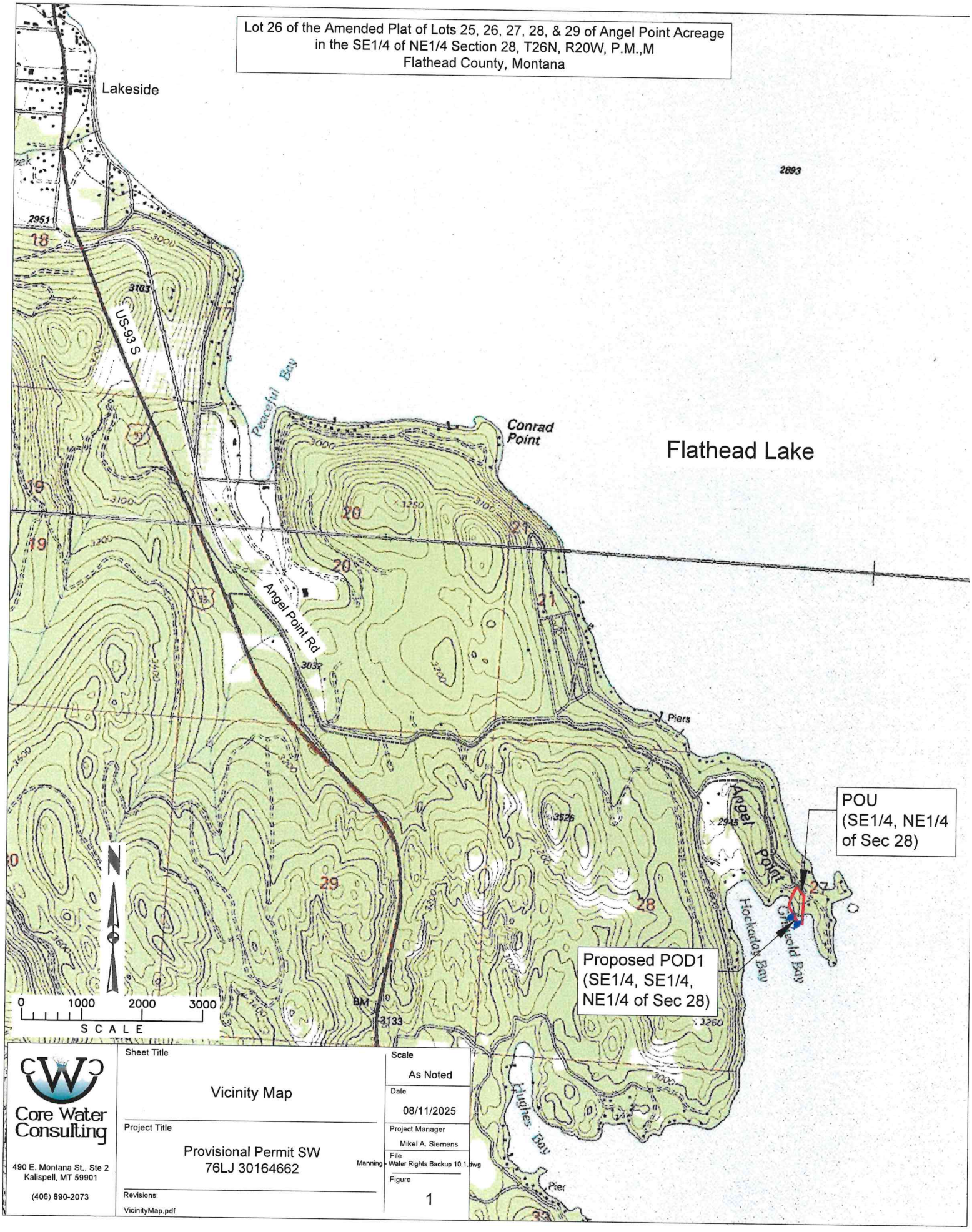
Prepared for:
JM Real Estate Holding LLC
P.O. Box 1109
Lakeside, MT 59922

August 26, 2025

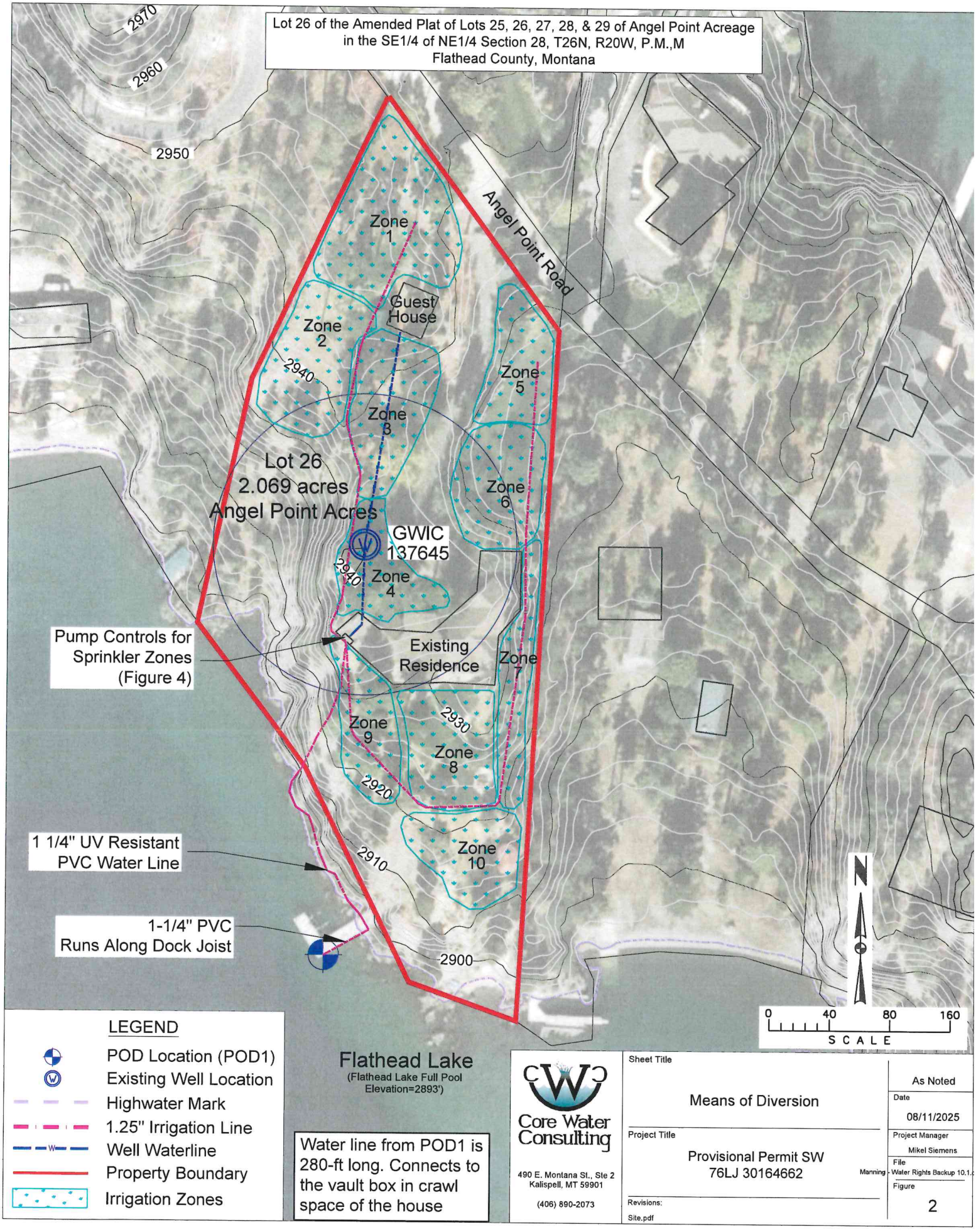
Prepared by:
Core Water Consulting

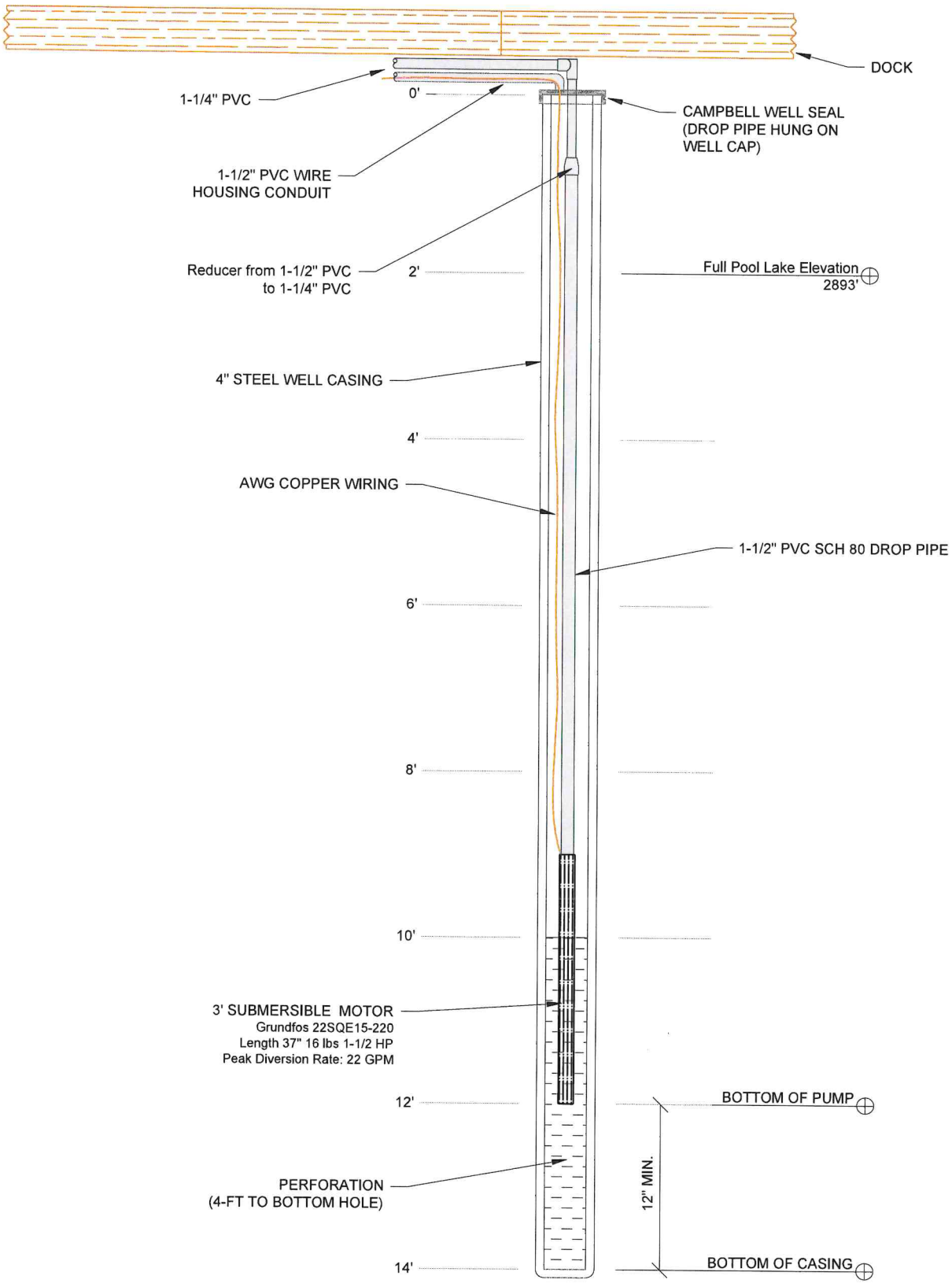
(406) 890-2073 * 490 E. Montana St, Suite 2, Kalispell, MT 59901 * Mikel@corewaterconsulting.com

Lot 26 of the Amended Plat of Lots 25, 26, 27, 28, & 29 of Angel Point Acreage
in the SE1/4 of NE1/4 Section 28, T26N, R20W, P.M.,M
Flathead County, Montana



Core Water Consulting 490 E. Montana St., Ste 2 Kalispell, MT 59901 (406) 890-2073	Sheet Title: Vicinity Map Project Title: Provisional Permit SW 76LJ 30164662 Revisions: VicinityMap.pdf
Scale: As Noted Date: 08/11/2025 Project Manager: Mikel A. Siemens File: Manning - Water Rights Backup 10.1.dwg Figure: 1	

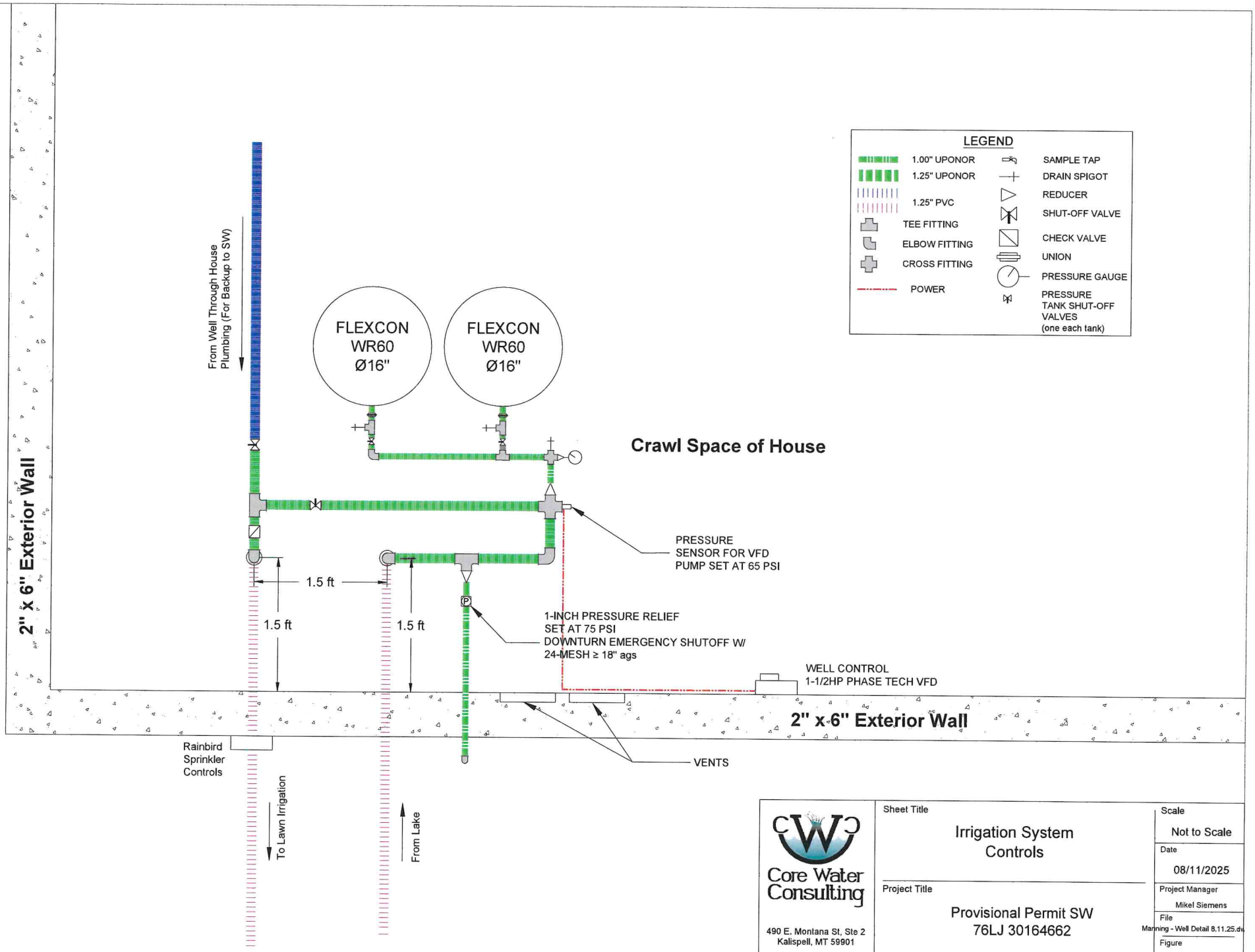

Lot 26 of the Amended Plat of Lots 25, 26, 27, 28, & 29 of Angel Point Acreage
in the SE1/4 of NE1/4 Section 28, T26N, R20W, P.M.,M
Flathead County, Montana
2970
2960
2950
2940
2930
2920
2910
2900
Angel Point Road
Zone 1
Zone 2
Zone 3
Zone 4
Zone 5
Zone 6
Zone 7
Zone 8
Zone 9
Zone 10
Guest House
Existing Residence
Lot 26
2.069 acres
Angel Point Acres
GWIC
137645
Pump Controls for
Sprinkler Zones
(Figure 4)
1 1/4" UV Resistant
PVC Water Line
1-1/4" PVC
Runs Along Dock Joist
Flathead Lake
(Flathead Lake Full Pool
Elevation=2893')
N
0
40
80
160
SCALE
LEGEND
POD Location (POD1)
Existing Well Location
Highwater Mark
1.25" Irrigation Line
Well Waterline
Property Boundary
Irrigation Zones
Water line from POD1 is
280-ft long. Connects to
the vault box in crawl
space of the house
Core Water
Consulting
490 E. Montana St., Ste 2
Kalispell, MT 59901
(406) 890-2073
Sheet Title
Means of Diversion
Project Title
Provisional Permit SW
76LJ 30164662
Revisions:
Site.pdf
As Noted
Date
08/11/2025
Project Manager
Mikel Siemens
File
Manning - Water Rights Backup 10.1.
Figure
2



PUMP INTAKE DIVERSION DESIGN
(NOT TO SCALE)

Core Water Consulting
490 E. Montana St, Ste 2
Kalispell, MT 59901
(406) 890-2073

Sheet Title	POD Dock Intake Detail
Project Title	Provisional Permit SW 76LJ 30164662
Revisions:	Welldetails.pdf
Scale	Not to Scale
Date	08/11/2025
Project Manager	Mikel Siemens
File	Manning - Well Detail 8.11.25.dwg
Figure	3



Core Water Consulting
490 E. Montana St, Ste 2
Kalispell, MT 59901
(406) 890-2073

Sheet Title
Irrigation System Controls

Project Title
Provisional Permit SW
76LJ 30164662

Revisions:
Dock.pdf

Scale
Not to Scale

Date
08/11/2025

Project Manager
Mikel Siemens

File
Manning - Well Detail 8.11.25.dw

Figure
4

Contents

INTRODUCTION

A Provisional Permit for the surface water diversion from Flathead Lake has been prepared for James Manning. Report components Provisional Permit application Form 600. Not all sections of the application require supplemental descriptions.

The property is owned by JM Real Estate Holding LLC and encompasses 2.069 acres in Lakeside along the Flathead River at latitude 47°59'5" and longitude -114°10'17".

There is one existing well on the property (GWIC 137645) which has been used for domestic and lawn/ garden sprinkling purposes. The new surface water diversion would divert at a rate of 22 gpm and total volume use would be 3.08 acre-feet per year (AF/year). The new surface water right will be used for irrigating 1.23 acres, with the existing groundwater right (76LJ 87589-00) providing a backup diversion and supplemental water.

PHYSICAL CONDITIONS

The property is south of lakeside in Griswold Bay of Flathead Lake, to the east of Hockaday Bay. Residential properties surround the subject property along Angel Point. Angel Point Road is east of Highway 93 south past Lakeside. Figure 1 in Appendix A shows the location of the subject property in relation to surrounding roads.

The Flathead Valley has significant mountain ranges that create the valley: to the north, Whitefish Mountains; to the west, Salish mountain range; to the south, Flathead Lake; and to the east, the Swan Mountain Range. The property resides about 9 miles east of Blacktail Mountain, as the crow flies and three miles east of Legacy Bike Park. The subject property is 2940 feet above mean sea level.

1. PURPOSE AND DIVERSION INFORMATION

The purpose of this report is to complement Form 600 Application for Beneficial Use Permit for JM Real Estate Holding LLC. Elements of the application require supplemental and expanded responses. Information provided is intended to permit lawn and garden irrigation for the property. DNRC previously approved the pre-application forms and provided the technical analysis (***Appendix E***).

The proposed right will divert water from Flathead Lake (above Séliš Ksanka Qlispé Dam) using a Grundfos SQE 1-½ horsepower submersible pump. The pump will serve 10 zones for sprinkler irrigation across the 1.23 acres. The pump will divert within well casing attached to the existing dock. Figure 2 in Appendix A shows the pump location relative to the dock and the water line attached to the dock stringers and diversion waterline. Pump controls will be located at the residences with power laid in conduit at the dock.

2. POINTS OF DIVERSION

Figure 2 in Appendix A shows the location of the surface water diversion in relationship to the existing well. The diversion location is SE1/4, SE1/4, NE1/4 of Section 28.

The surface water diversion will be underneath the existing dock on the property, with the water line running along the dock joist.

3. PLACE OF USE

The place of use is in the SE1/4, NE1/4 of Section 28. The 10 irrigation zones are outlined in Figure 2 in Appendix A for ease of reference.

4. SUPPLEMENTAL WATER RIGHTS

Domestic water rights provide up to 5 acres irrigation (ARM 36.12.101 (20)(g)). The owners have diverted water from the existing well for this purpose with 76LJ 87589-00 (***Appendix B***). The property has a well onsite which is in the SE1/4, SE1/4, NE1/4 of Section 28. The well was drilled on July 2, 1993, and is 190-ft deep with a 6-ft diameter casing. The owner intends to convert lawn irrigation to surface water (POD1) for the dominant portions of the season, with the well (POD2) being a backup water source during times of servicing or water shortage. The groundwater well will continue to provide water for the residence.

5. ADVERSE EFFECT

The owner will implement and properly regulate the volume diverted during times of water shortage. The owner understands the process of water right seniority.

1. If a valid call for surface water is requested, diversion period can be reduced to minimum for each irrigation zone. Sprinkler periods will increase through the summer, so reduction zone time is the first step.

2. In the event the problems persist, the surface water diversion system would be able to revert to the groundwater well to assist in maintaining the established lawn.

3. If the call is from senior water right holder preceding the groundwater priority date and the call could be applied to surface water also, irrigation would cease except for fire protection.

6. ADEQUATE MEANS OF DIVERSION AND OPERATION

The diversion works pump will be Grundfos SQE 1-1/2 horsepower (hp) submersible pump hung on the existing private dock (Figure 3 in Appendix A). The pump will be accessed from the dock platform and be encased in a 4-inch well casing permanently installed below the deck. The casing length will be 14-ft with perforated intervals at the bottom four feet. The selected pump is three feet long and weighs 16 lbs. The steel casing cap will be a well seal (***Appendix C***), so water will convey through the top (the pump hangs on the seal) and then along the dock stringers. Water will

be pumped to the shore and up the slope in 1-1/4-inch PVC that is ultraviolet resistant. The waterline is not expected to be buried given the existence of bedrock.

Flathead Lake elevation is documented as full pool at 2893-ft between June through September, which is the dominant sprinkler diversion period. The system controls and pressure tank are planned at 2938-ft for an elevation gain of 45-ft. The transmission line from the lake to the residence will be a 280-ft long 1-1/4-inch PVC pipe. The friction loss over the length of pipe at 22-gpm is 28.32-ft. variable frequency drive will be set to a target pressure of 65 psi as sprinkler heads have design pressure of 50 – 70 psi (Rain Bird sprinkler specifications and pump performance chart attached). Per the above friction loss of 28.32-ft, elevation gain of 45-ft, and service pressure of 65 psi (150-ft), the total dynamic head is approximately 234-ft. ***The Grundfos SQE 1-1/4 HP motor indicates the 22SQE15-220 can produce 22-gpm at 65 psi with total dynamic head of 234-ft.***

Water pressure is maintained by small pressure tanks with variable frequency drive system controls to maintain constant pressure for the sprinkler system. The irrigation system is installed with 10 zones (Figure 4 in Appendix A). Zones operate individually across the property. Water will divert from rotary sprinkler pop-up heads. Zones are designed for 20-gpm, so the additional 2-gpm will provide additional spray distance on the system. Sprinkler head distance is dependent upon pressure and flow rate.

Zones are designed to have six Rain Bird 8005 sprinklers with Blue #3.0 nozzles. Each head is capable of 3.7 gpm at 65 psi or 3.4 gpm at 55 psi. The elevation of the zone (zone 9) near the residence to be irrigated ranges from the same elevation as the control room to 15-ft lower. The anticipated friction loss from the control valve box to distribution is estimated at 8.5-ft of head. With the range of elevation, the estimated sprinkler output ranges from 3.5 to 3.7 gpm (61 to 66 psi) with an estimated average of 3.6 gpm. With six heads this equates to a 22-gpm irrigation demand. See Appendix C for sprinkler specifications and friction calculations to the control box and zone near the residence.

7. BENEFICIAL USE

Standard irrigation dates for climatic area III are April 15 through October 15, however, a more realistic period for this property is May 15 to September 30 based upon the water level of the lake and actual lawn irrigation timelines. Flathead Lake reaches full pool around June at which point the owner would prefer diversion from the lake instead of groundwater. This more accurately represents the period of irrigation for the area instead of the standard climatic irrigation periods. The shortened period of use lies within DNRC standards.

A volume of 0.72 AF was reported in the technical analysis from DNRC as well as discussed in the preapplication form. This volume falls below the DNRC standard for lawn and garden irrigation (2.5AF/acre). The DNRC standard is requested to ensure the owner has sufficient water for irrigation, which brings the annual volume to 3.08 AF for 1.23 acres. This small volume of

water a continual basis is not desired. The system will operate intermittently at a flow rate of 22 GPM for lawn sprinklers. A flow rate of 25 GPM was referenced in the technical analysis and preapplication follow up, however, after analyzing diversion equipment methods, a flow rate of 22 GPM is applicable.

8. POSSESSORY INTEREST

JM Real Estate Holding LLC holds possessory interest in this property. Appendix D has ownership details.

9. PROPOSED COMPLETION PERIOD

The proposed completion period for this project is 3 years, which allows for permit acquisition, locating a contractor (as the demand is high in the Valley), scheduling and installation, and one season of monitoring the diversion.

10. AFFIDAVIT & CERTIFICATION

James Manning of JM Real Estate Holding LLC has approved of the context of this report. The signature authority is enclosed.

APPENDIX A. FIGURES

Figure 1. Vicinity Map

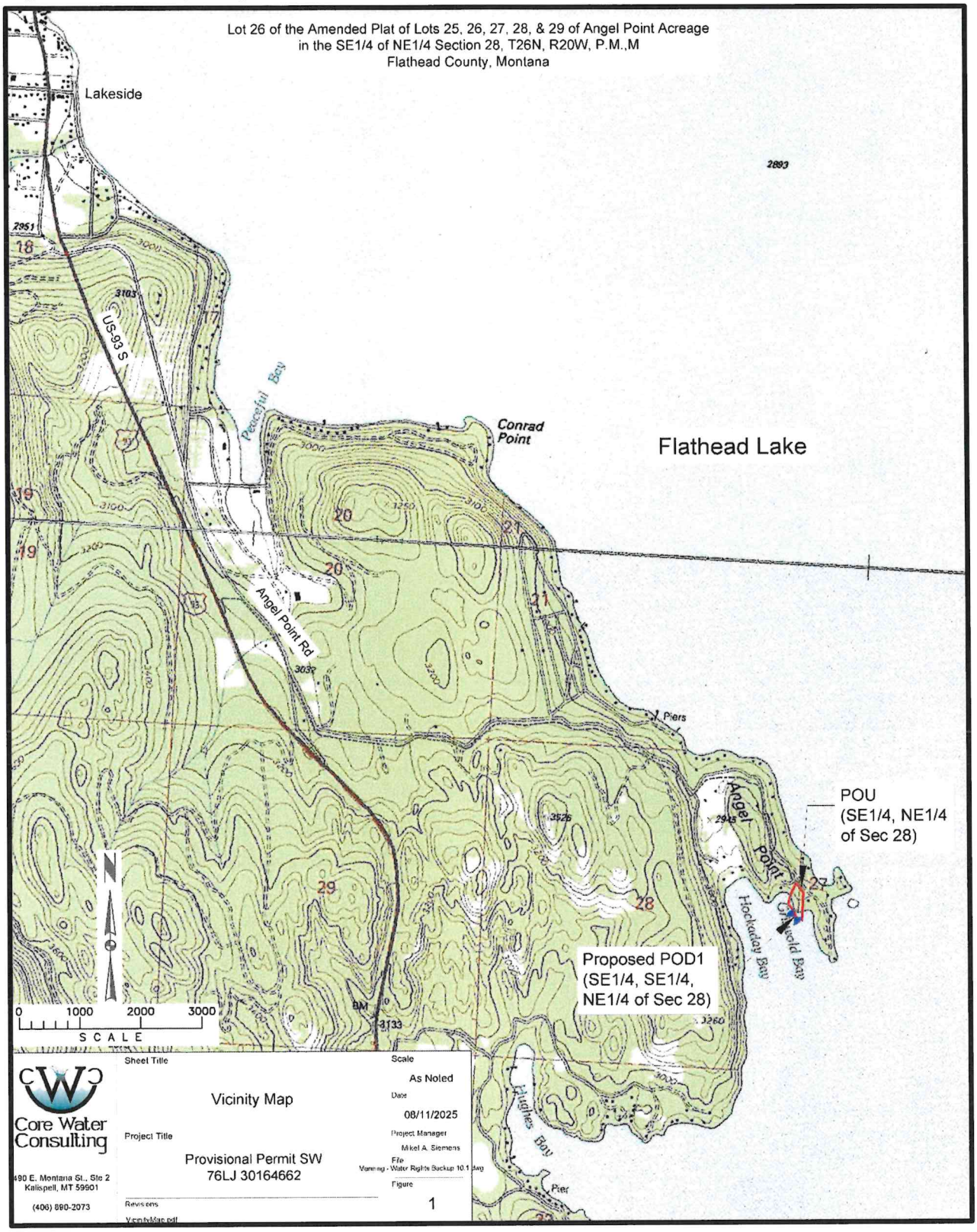


Figure 2. Means of Diversion

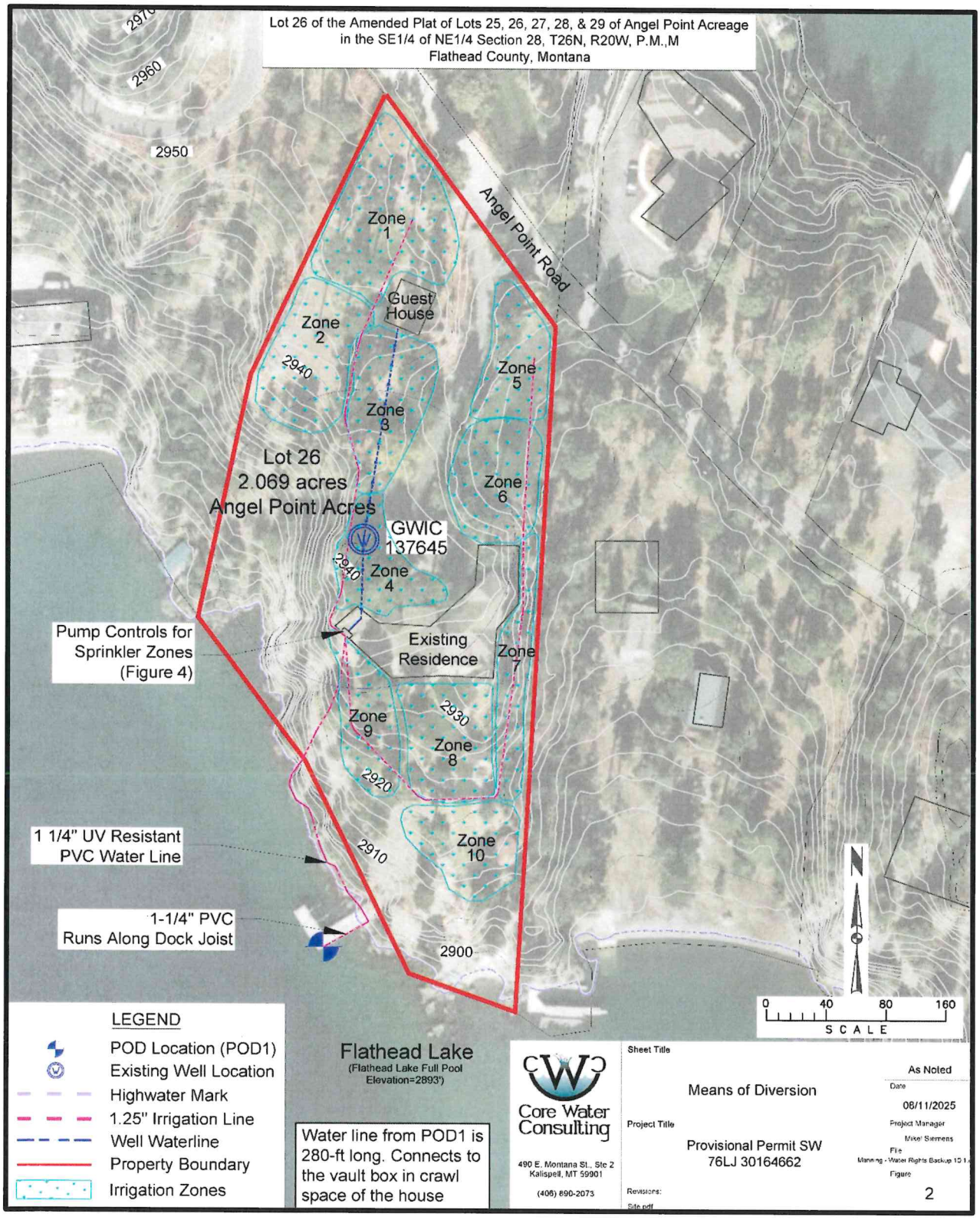


Figure 3. POD Dock Intake Detail

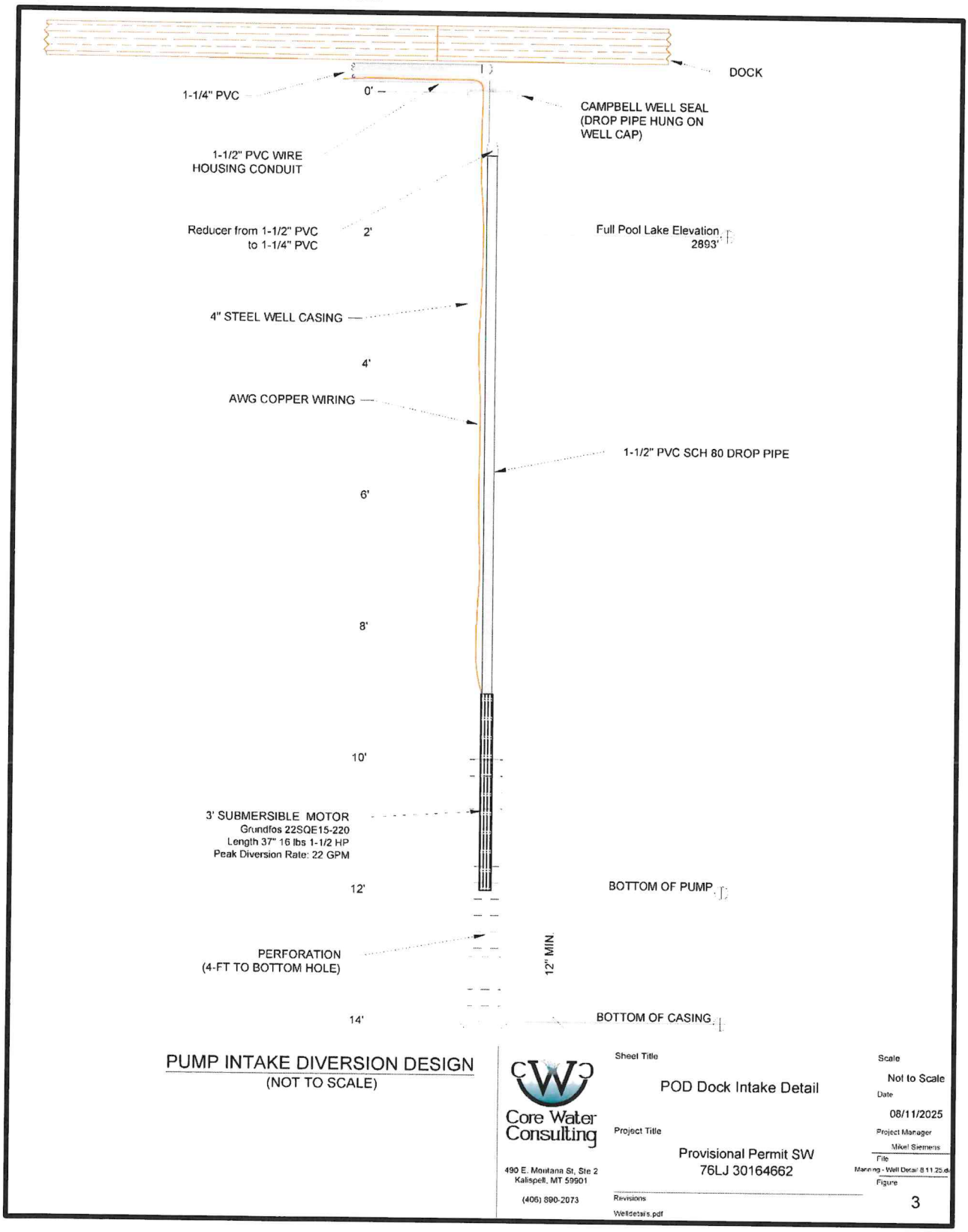
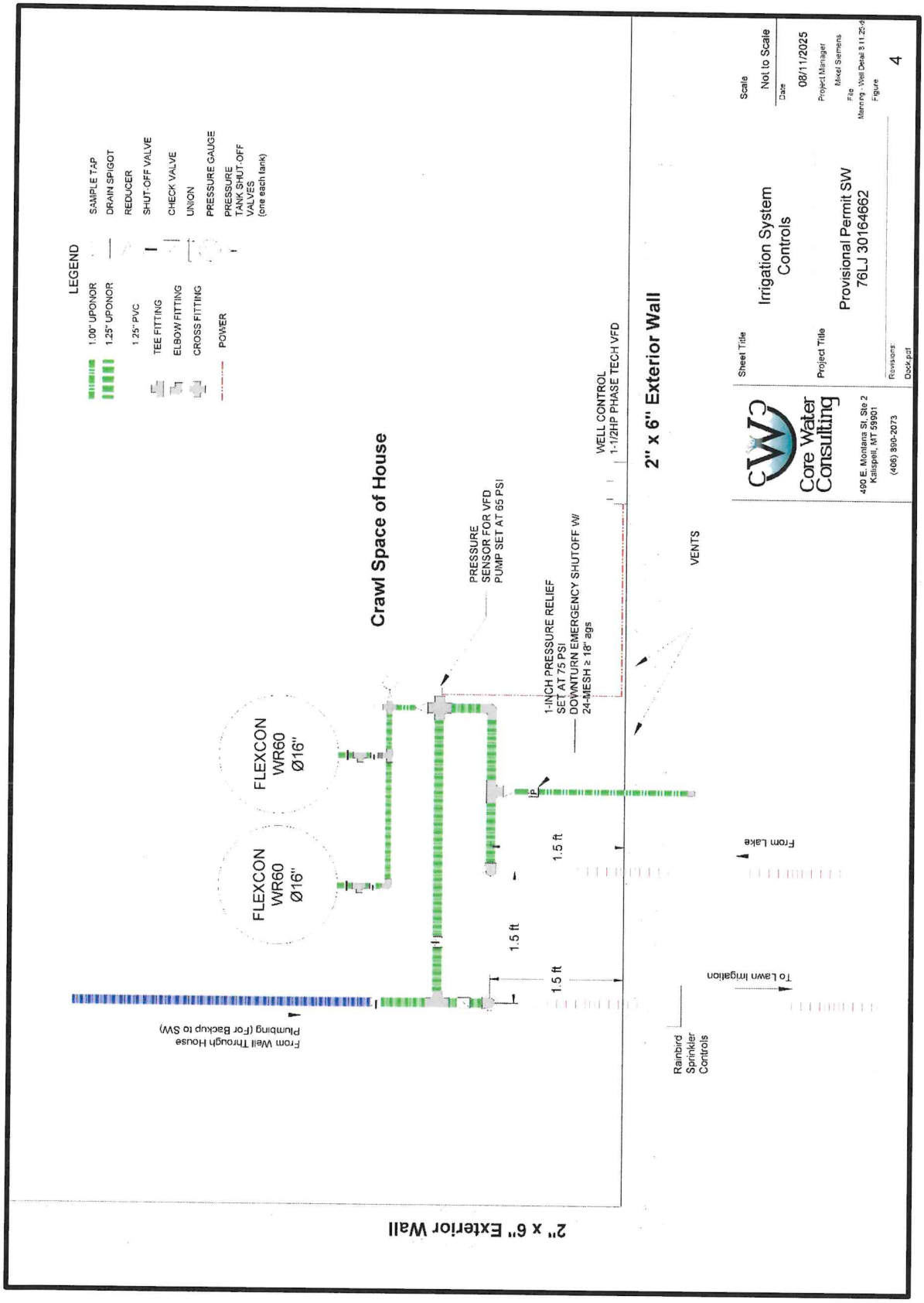


Figure 4. Irrigation System Controls



APPENDIX B. SUPPLEMENTAL WATER RIGHT

76LJ 87589-00 Abstract

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O. BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number: 76LJ 87589-00 GROUND WATER CERTIFICATE

Version: 1 -- ORIGINAL RIGHT

Version Status: ACTIVE

Owners: JM REAL ESTATE HOLDING LLC
1 BLACKFIELD DR STE 129
TIBURON, CA 94920-2053

Priority Date: DECEMBER 31, 1993 at 08:00 A.M.

Enforceable Priority Date: DECEMBER 31, 1993 at 08:00 A.M.

Purpose (Use): DOMESTIC

Maximum Flow Rate: 35.00 GPM

Maximum Volume: 1.00 AC-FT

Source Name: GROUNDWATER

Source Type: GROUNDWATER

Point of Diversion and Means of Diversion:

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1		SESENE	28	26N	20W	FLATHEAD

Period of Diversion: JANUARY 1 TO DECEMBER 31

Diversion Means: WELL

Subdivision: ANGEL PT AC LOT 25-29 AMEND TRACT/LOT: 26

Well Depth: 190.00 FEET

Static Water Level: 60.00 FEET

Casing Diameter: 4.50 INCHES

Pump Size: 2.00 HP

LOCATED AT 982 ANGEL POINT DRIVE

Purpose (Use): DOMESTIC

Households: 1

Volume: 1.00 AC-FT

Period of Use: JANUARY 1 to DECEMBER 31

Place of Use:

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			SESENE	28	26N	20W	FLATHEAD

Subdivision: ANGEL PT AC LOT 25-29 AMEND TRACT/LOT 26

Geocodes/Valid: 07-3705-28-1-04-13-0000 - Y

Remarks:

OWNERSHIP UPDATE RECEIVED

GWIC 137645

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Return to menu
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View scanned well log (7/15/2009 3:15:52 PM)

Site Name: TAVERRITE FRANK & SYLVIA
GWIC Id: 137645
DNRC Water Right: 87589

Section 1: Well Owner(s)

1) TAVERRITE, FRANK AND SYLVIA (MAIL)
11 EAGLE BEND DRIVE
BIGFORK MT 59911 [07/02/1993]

Section 2: Location

Township	Range	Section	Quarter Sections
26N	20W	28	SE¼ SE¼ NE¼

County: FLATHEAD
Geocode:

Latitude	Longitude	Geomethod	Datum
47.98471	-114.17153	MAP	NAD83

Ground Surface Altitude: **Ground Surface Method**: **Datum**: **Date**:

Addition: ANGEL POINT ACREAGE **Block**: **Lot**: 26

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method: ROTARY
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Friday, July 2, 1993

Section 6: Well Construction Details

There are no borehole dimensions assigned to this well.

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	30	6				STEEL
15	190	4				PVC

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
0	0	4			FACTORY SLOTTED

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	20	BENTONITE	

Section 7: Well Test Data

Total Depth: 190
Static Water Level: 60
Water Temperature:

Air Test *

35 gpm with drill stem set at _ feet for 2 hours.
Time of recovery _ hours.
Recovery water level _ feet.
Pumping water level 160 feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

400MCRB - MIDDLE BELT CARBONATE

From	To	Description
0	1	TOP SOIL
1	15	BROKEN GRAY ROCK
15	27	BROKEN GRAY & BROWN ROCK
27	150	GRAY ROCK
150	165	BROWN FRACTURED ROCK & WATER
165	190	BROWN- GREEN & GRAY ROCK

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

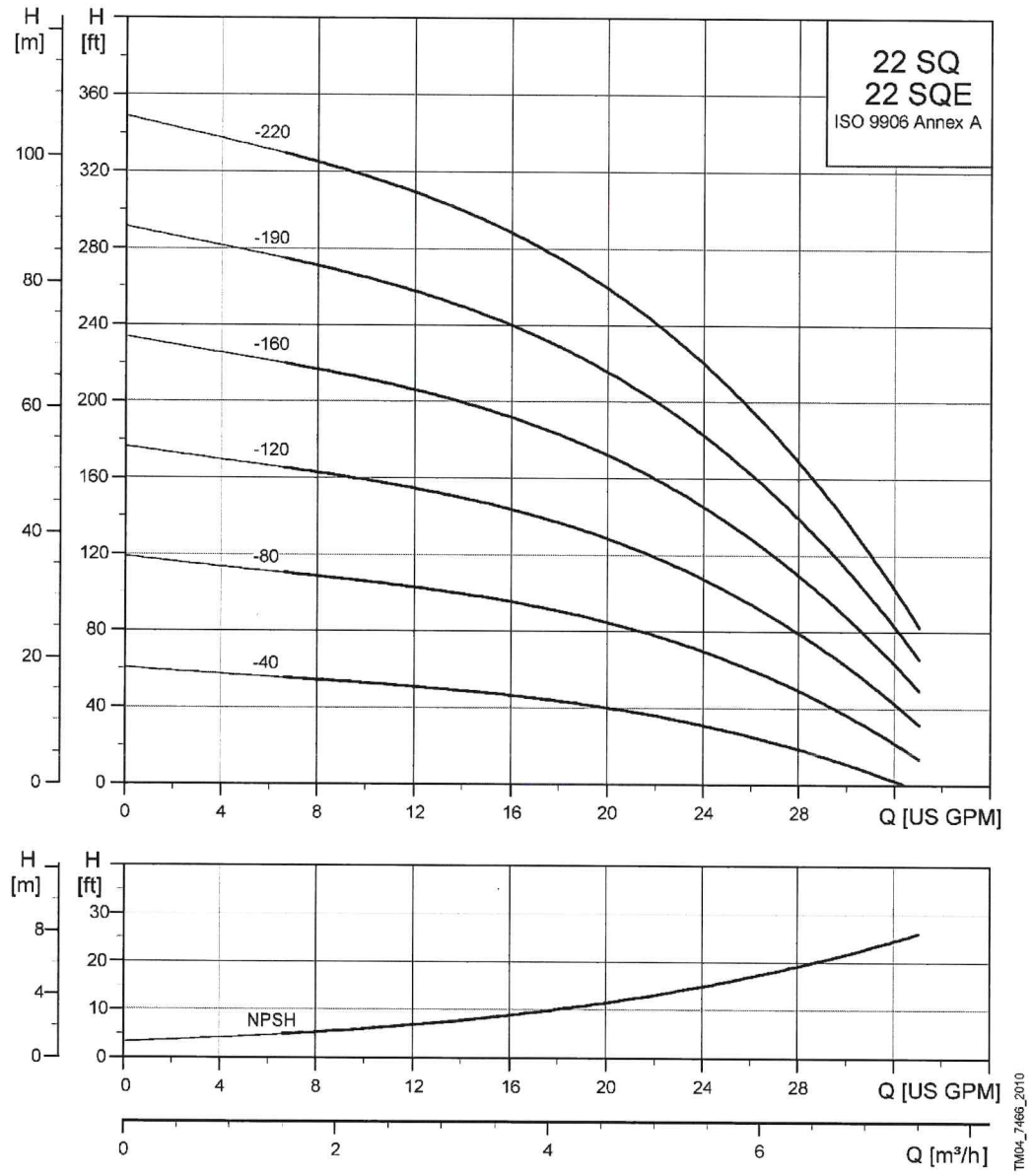
Name:
Company: BILLMAYER DRILLING
License No: WWC-47
Date Completed: 7/2/1993

APPENDIX C. MEANS OF DIVERSION

Grundfos Pump

SQ, SQE, CU 331, and SP

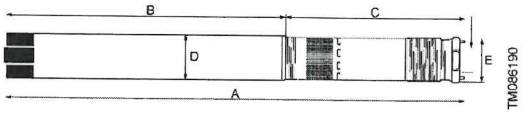
22 SQ, SQE



Motor data

Pump type	Hp	Voltage	Full load amps		Overload amps		Min. well diameter	Discharge
			230 V	115 V	230 V	115 V		
5SQE05-90	1/2	230 V / 115 V	2.1	4.2	5	11	3"	1" NPT
5SQE05-140	1/2	230 V / 115 V	2.9	6.0	5	11	3"	1" NPT
5SQE05-180	1/2	230 V / 115 V	3.7	7.7	5	11	3"	1" NPT
5SQE07-230	3/4	230 V	4.6	-	8	-	3"	1" NPT
5SQE07-270	3/4	230 V	5.3	-	8	-	3"	1" NPT
5SQE07-320	3/4	230 V	6.2	-	8	-	3"	1" NPT
5SQE10-360	1	230 V	7.2	-	11	-	3"	1" NPT
5SQE10-410	1	230 V	8.1	-	11	-	3"	1" NPT
5SQE15-450	1 1/2	230 V	9.2	-	12	-	3"	1" NPT
10SQE05-110	1/2	230 V / 115 V	2.9	6.1	5	11	3"	1 1/4" NPT
10SQE05-160	1/2	230 V / 115 V	4.1	8.6	8	11	3"	1 1/4" NPT
10SQE07-200	3/4	230 V	5.3	-	8	-	3"	1 1/4" NPT
10SQE7-240	3/4	230 V	6.0	-	8	-	3"	1 1/4" NPT
10SQE10-290	1	230 V	7.7	-	11	-	3"	1 1/4" NPT
10SQE15-330	1 1/2	230 V	8.9	-	12		3"	1 1/4" NPT
10SQE15-370	1 1/2	230 V	10.1	-	12	-	3"	1 1/4" NPT
15SQE05-70	1/2	230 V / 115 V	2.9	6.0	5	11	3"	1 1/4" NPT
15SQE05-110	1/2	230 V / 115 V	4.0	8.3	5	11	3"	1 1/4" NPT
15SQE07-150	3/4	230 V	5.1	-	8	-	3"	1 1/4" NPT
15SQE07-180	3/4	230 V	6.2	-	8	-	3"	1 1/4" NPT
15SQE10-220	1	230 V	7.4	-	11	-	3"	1 1/4" NPT
15SQE10-250	1	230 V	8.4	-	11	-	3"	1 1/4" NPT
15SQE15-290	1 1/2	230 V	9.7	-	12	-	3"	1 1/4" NPT
15SQE15-330	1 1/2	230 V	10.5	-	12	-	3"	1 1/4" NPT
22SQE05-40	1/2	230 V / 115 V	1.9	3.9	5	-	3"	1 1/2" NPT
22SQE05-80	1/2	230 V / 115 V	3.4	7.2	5	-	3"	1 1/2" NPT
22SQE07-120	3/4	230 V	4.9	-	8	-	3"	1 1/2" NPT
22SQE10-160	1	230 V	6.4	-	8	-	3"	1 1/2" NPT
22SQE10-190	1	230 V	7.9	-	11	-	3"	1 1/2" NPT
22SQE15-220	1 1/2	230 V	9.5	-	12	-	3"	1 1/2" NPT
30SQE05-40	1/2	230 V / 115 V	2.8	5.7	5	-	3"	1 1/2" NPT
30SQE07-90	3/4	230 V	5.2	-	8	-	3"	1 1/2" NPT
30SQE10-130	1	230 V	7.6	-	11	-	3"	1 1/2" NPT
30SQE15-170	1 1/2	230 V	9.	-	12	-	3"	1 1/2" NPT

Dimensions and weights



Model	Hp	Motor size	Discharge size	Dimensions in inches					Approx. ship. wt.
				A	B	C	D	E	
5SQ/SQE05-90	1/2	3"	1" NPT	29.1	19.0	10.1	2.6	2.9	11
5SQ/SQE05-140	1/2	3"	1" NPT	29.1	19.0	10.1	2.6	2.9	11
5SQ/SQE05-180	1/2	3"	1" NPT	30.2	19.0	11.2	2.6	2.9	12
5SQ/SQE07-230	3/4	3"	1" NPT	32.4	19.0	13.3	2.6	2.9	13
5SQ/SQE07-270	3/4	3"	1" NPT	32.4	19.0	13.3	2.6	2.9	13
5SQ/SQE07-320	3/4	3"	1" NPT	33.4	19.0	14.4	2.6	2.9	13
5SQ/SQE10-360	1	3"	1" NPT	37.0	20.4	16.5	2.6	2.9	15
5SQ/SQE10-410	1	3"	1" NPT	37.0	20.4	16.5	2.6	2.9	15
5SQ/SQE15-450	1 1/2	3"	1" NPT	38.0	20.4	17.6	2.6	2.9	16
10SQ/SQE05-110	1/2	3"	1 1/4" NPT	29.1	19.0	10.1	2.6	2.9	11
10SQ/SQE05-160	1/2	3"	1 1/4" NPT	29.1	19.0	10.1	2.6	2.9	11
10SQ/SQE07-200	3/4	3"	1 1/4" NPT	30.2	19.0	11.2	2.6	2.9	13
10SQ/SQE07-260	3/4	3"	1 1/4" NPT	32.4	19.0	13.3	2.6	2.9	13
10SQ/SQE10-290	1	3"	1 1/4" NPT	33.8	20.4	13.3	2.6	2.9	14
10SQ/SQE15-330	1 1/2	3"	1 1/4" NPT	34.8	20.4	14.4	2.6	2.9	15
10SQ/SQE15-370	1 1/2	3"	1 1/4" NPT	37.0	20.4	16.5	2.6	2.9	16
15SQ/SQE05-70	1/2	3"	1 1/4" NPT	29.1	19.0	10.1	2.6	2.9	11
15SQ/SQE05-110	1/2	3"	1 1/4" NPT	29.1	19.0	10.1	2.6	2.9	11
15SQ/SQE07-150	3/4	3"	1 1/4" NPT	30.2	19.0	11.2	2.6	2.9	13
15SQ/SQE07-180	3/4	3"	1 1/4" NPT	32.4	19.0	13.3	2.6	2.9	13
15SQ/SQE10-220	1	3"	1 1/4" NPT	33.8	20.4	13.3	2.6	2.9	14
15SQ/SQE10-250	1	3"	1 1/4" NPT	34.8	20.4	14.4	2.6	2.9	15
15SQ/SQE10-290	1 1/2	3"	1 1/4" NPT	37.0	20.4	16.5	2.6	2.9	16
15SQ/SQE15-330	1 1/2	3"	1 1/4" NPT	37.0	20.4	16.5	2.6	2.9	16
22SQ/SQE05-40	1/2	3"	1 1/2" NPT	29.1	19.0	10.1	2.6	2.9	11
22SQ/SQE05-80	1/2	3"	1 1/2" NPT	29.1	19.0	10.1	2.6	2.9	11
22SQ/SQE07-120	3/4	3"	1 1/2" NPT	32.3	19.0	13.3	2.6	2.9	13
22SQ/SQE10-160	1	3"	1 1/2" NPT	33.7	19.0	13.3	2.6	2.9	14
22SQ/SQE10-190	1	3"	1 1/2" NPT	36.9	20.4	16.5	2.6	2.9	15
22SQ/SQE15-220	1 1/2	3"	1 1/2" NPT	36.9	20.4	16.5	2.6	2.9	16
30SQ/SQE05-40	1/2	3"	1 1/2" NPT	29.1	19.0	10.1	2.6	2.9	11
30SQ/SQE07-90	3/4	3"	1 1/2" NPT	29.1	19.0	10.1	2.6	2.9	12
30SQ/SQE10-130	1	3"	1 1/2" NPT	33.7	20.4	13.3	2.6	2.9	14
30SQ/SQE15-170	1 1/2	3"	1 1/2" NPT	33.7	20.4	13.3	2.6	2.9	15

Rotors

8005 Nozzle Performance

Pressure psi	Nozzle	Radius ft.	Flow gpm	■ Precip in/h	▲ Precip in/h
50	● 04	39	3.8	0.48	0.56
	● 06	45	5.6	0.53	0.62
	● 08	49	6.6	0.53	0.61
	● 10	53	9.3	0.64	0.74
	● 12	57	11.1	0.66	0.76
	● 14	59	12.6	0.70	0.81
	● 16	61	14.3	0.74	0.85
	● 18	63	16.1	0.78	0.90
	● 20	65	18.6	0.85	0.98
	● 22	65	20.7	0.94	1.09
	● 24	63	22.3	1.08	1.25
	○ 26	65	24.3	1.11	1.28
60	● 04	39	3.8	0.48	0.56
	● 06	45	6.1	0.58	0.67
	● 08	49	8.4	0.67	0.78
	● 10	53	10.1	0.69	0.80
	● 12	59	12.0	0.66	0.77
	● 14	61	14.3	0.74	0.85
	● 16	65	15.9	0.72	0.84
	● 18	65	17.8	0.81	0.94
	● 20	67	20.1	0.86	1.00
	● 22	71	23.2	0.89	1.02
	● 24	69	24.7	1.00	1.15
	○ 26	73	26.7	0.96	1.11
70	● 04	39	4.7	0.60	0.69
	● 06	45	6.7	0.64	0.74
	● 08	49	9.0	0.72	0.83
	● 10	55	11.1	0.71	0.82
	● 12	59	13.2	0.73	0.84
	● 14	63	15.3	0.74	0.86
	● 16	67	17.2	0.74	0.85
	● 18	67	19.3	0.83	0.96
	● 20	71	22.0	0.84	0.97
	● 22	73	25.2	0.91	1.05
	● 24	75	27.0	0.92	1.07
	○ 26	75	29.4	1.01	1.16
80	● 04	39	5.0	0.63	0.73
	● 06	45	7.1	0.68	0.78
	● 08	49	9.8	0.79	0.91
	● 10	55	11.8	0.75	0.87
	● 12	61	14.2	0.73	0.85
	● 14	63	16.4	0.80	0.92
	● 16	67	18.6	0.80	0.92
	● 18	69	20.9	0.85	0.98
	● 20	71	23.9	0.91	1.05
	● 22	75	27.3	0.93	1.08
	● 24	77	29.2	0.95	1.10
	○ 26	79	31.5	0.97	1.12

Pressure psi	Nozzle	Radius ft.	Flow gpm	■ Precip in/h	▲ Precip in/h
90	● 12	61	14.7	0.76	0.88
	● 14	65	17.9	0.82	0.94
	● 16	69	20.0	0.81	0.93
	● 18	71	22.2	0.85	0.98
	● 20	73	25.3	0.91	1.06
	● 22	75	29.1	1.00	1.15
	● 24	79	31.0	0.96	1.10
	○ 26	79	33.7	1.04	1.20
100	● 20	75	26.8	0.85	0.97
	● 22	77	30.7	1.00	1.15
	● 24	79	32.8	1.01	1.17
	○ 26	81	36.3	1.07	1.23

Precipitation rates based on half-circle operation

■ *Square spacing based on 50% diameter of throw*

▲ *Triangular spacing based on 50% diameter of throw*

Performance data collected in zero wind conditions

Performance data derived from tests that conform with ASAE S standards; ASAE S398.1. See page 224 for complete ASAE Test Certification Statement.

8005 Cutaway

Rehau PEX Waterline

2. System overview and components

2.1 Applications

The REHAU F1960 cold expansion fitting system (REHAU F1960 fitting system) consists of ASTM F1960 cold expansion fittings (REHAU F1960 fittings) in polymer and lead-free brass, and PEX reinforcing rings (PEX rings), for use with REHAU PEXa UV shield pipe for potable plumbing system applications and RAUPEX O_2 barrier pipe for hydronic radiant heating and cooling system applications (REHAU PEXa pipe).

The REHAU F1960 fitting system is intended for use in hot- and cold-water potable systems and hydronic heating and cooling systems as defined by the following national codes:

- ICC International Plumbing Code (IPC)
- ICC International Residential Code (IRC)
- IAPMO Uniform Plumbing Code (UPC)
- National Plumbing Code of Canada (NPCC)
- International Mechanical Code (IMC)
- International Building Code (IBC)
- Uniform Mechanical Code (UMC)
- National Building Code of Canada (NBCC)
- CSA B214 Installation Code for Hydronic Heating Systems

2.2 System components

For a detailed description of the system components, refer to the *REHAU Building Solutions Product Catalog (855.312).*

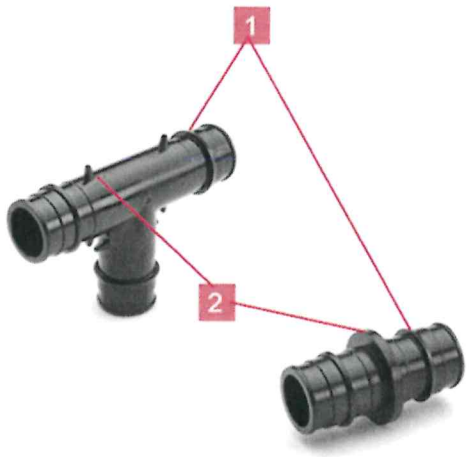
2.3 Product range

The REHAU F1960 fitting system is available in 3/8, 1/2, 5/8, 3/4, 1, 1 1/4, 1 1/2 and 2 in. sizes and is intended for use with REHAU PEXa SDR9 copper tube size (CTS) pipe manufactured in accordance with ASTM F876.

2.4 Fitting features

REHAU F1960 polymer and lead-free brass fittings have the following features:

1. Sealing rib
2. Fitting shoulder



2.5 REHAU F1960 polymer fittings

REHAU F1960 cold expansion polymer fittings are available in couplings, tees, elbows, multi-port tees and plugs. All polymer fittings are produced from a polyphenylsulfone (PPSU) material that meets the requirements of NSF61 for health effects of drinking water system components and complies with the lead-free requirements of the U.S. Safe Drinking Water Act.

2.6 REHAU F1960 lead-free (LF) brass fittings

REHAU F1960 cold expansion LF brass fittings are available as transition fittings to NPT thread and copper solder connections. All metal fittings are produced from ECO BRASS® (UNS C69300 or CW724R) that meets the requirements of NSF61 for health effects of drinking water system components and complies with the lead-free requirements of the U.S. Safe Drinking Water Act.

2.7 REHAU F1960 PEX reinforcing rings

REHAU F1960 PEX reinforcing rings are intended for use with REHAU F1960 fittings and REHAU PEXa pipe.

2.8 REHAU PEXa pipe

RAUPEX PEXa pipe is produced using the high-pressure peroxide method for crosslinked polyethylene (PEXa) in accordance with ASTM F876,F877, CSA B137.5 and PPI TR-3, and is certified to NSF 61 standards. RAUPEX UV shield pipe also meets the requirements NSF14 and of ASTM F2023 for chlorine resistance. REHAU PEXa pipe is manufactured using a quality management system which has been certified to the latest version of ISO 9001.

RAUPEX UV shield pipe

RAUPEX O, barrier pipe

2.9 F1960 assembly tools

Installation of the REHAU F1960 cold expansion fitting system may be performed with commercially available F1960 cold expansion tools.

Readily available tools currently in the market are:
- DeWALT® 20V MAX PEX Expander (DCE400B)
- Milwaukee Tool® M12™ ProPEX® Expansion Tool (2432)
- Milwaukee Tool® M18™ ProPEX® Expansion Tool (2632)
- Milwaukee Tool® M18™ FORCE LOGIC™ 2"-3" ProPEX® Expansion Tool (2633)

F1960 cold expansion tools are not sold or endorsed by REHAU. It is the responsibility of the contractor to verify the tools are being used in accordance with the tool manufacturer recommendations.

2.10 Certifications

The REHAU F1960 fitting system is certified to the following standards:
- ASTM F1960 *Standard Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing*
- NSF/ANSI 14 *Plastic Piping System Components and Related Materials*
- NSF/ANSI 61 *Drinking Water System Components – Health Effects*
- NSF/ANSI 372 *Drinking Water System Components – Lead Content*
- CSA B137.5 *Crosslinked polyethylene (PEX) Tubing Systems for Pressure Applications*

Campbell Well Seal

CentriPro Dayton

Well Water Tanks

- Pre-charged tanks
- Vertical orientation

Act as a reservoir to store water and keep the pressure consistent to reduce the start/stop cycling of the pump. Tanks keep the water pressure constant with an air bladder system that is precharged (a set amount of air is pumped into the bladder) when the tank is assembled at the factory or charged with an air compressor just before installation. All tanks when used with pumps require a relief valve sold on page 2770.

Butyl Rubber Body—Airtight. Water and gas resistant.

Fiberglass Body—Rust-, dent-, and scratch-resistant high-density polyethylene composite is half the weight of steel. Base rotates 360°. Chlorine-resistant butyl air cell allows easy maintenance and will not affect water purity.

Fiberglass
16X844

Tank Cap.	Drawdown @ 30-50 PSI	Precharge Pressure	Max. Water Temp.	Inlet	Dia.	Overall Height	Item No.
Butyl Rubber Body—Centripro							
25.9 gal	7.7 gpm	38 psi	120 °F	1 in	15⅜ in	39⅜ in	795F67
45.2 gal	13.9 gpm	38 psi	120 °F	1¼ in	22 in	36⅝ in	795F69
83.5 gal	25.9 gpm	38 psi	120 °F	1¼ in	26 in	46 in	795F71
115.9 gal	35.9 gpm	38 psi	120 °F	1¼ in	26 in	61½ in	795F73
Fiberglass Body—Dayton							
20 gal	6.1 gpm	40 psi	120 °F	1 in	16 in	34⅛ in	16X840
40 gal	12.5 gpm	40 psi	120 °F	1 in	16 in	59 in	16X847
80 gal	24.6 gpm	40 psi	120 °F	1¼ in	21 in	65½ in	16X849
119 gal	37 gpm	40 psi	120 °F	1¼ in	24 in	75⅝ in	16X844

Bell & Gossett
a xylem brand

6LFA2

Water Pressure Reducing Valves

- Max. pressure: 125 psi
- Max. temp.: 225°F

Use to control and protect plumbing systems by reducing the downstream pressure. They decrease the psi of water entering buildings from municipal water mains to avoid ruptured pipes and damaged fixtures in commercial, industrial, or institutional facilities.

Pipe Size	L	Material	Mfr. Model	Item No.
	3 ⁵⁄₁₆ in	Brass	110192LF	6LFA4
½ in	6 ⁵⁄₁₆ in	Lead Free Brass	110199LF	6LFA2
	6 ⁵⁄₁₆ in	Lead Free Brass	110197LF	6LFA5
¾ in	3 in	Brass	110196LF	6LFA3

Well Seal
5YM59

Well Cap
2NRE6

Pitcher Pump
5YM61

Hose Barb
5YM55

Pitless Adapter
38G635

Campbell Simmons Brady

Well Accessories

Use only with nonflammable liquids compatible with pump component materials and in nonflammable/nonexplosive atmospheres.

Item	Brand	Item No.
Well Seals, ABS Body, PVC Gasket		
1 in Drop Pipe Dia., 1 in Cable Hole Dia., 6 in Casing I.D.	Campbell	5YM64
1 in Drop Pipe Dia., 1¼ in Cable Hole Dia., 4 in Casing I.D.	Campbell	5YM62
1 ¼ in Drop Pipe Dia., 1 in Cable Hole Dia., 6 in Casing I.D.	Campbell	5YM65
1 ¼ in Drop Pipe Dia., 1¼ in Cable Hole Dia., 4 in Casing I.D.	Campbell	5YM63
1 in, 1 ¼ in Drop Pipe Dia., 4 in Casing I.D.	Campbell	5YM59
Well Caps		
ABS Body, Rubber Gasket, 6 in Casing I.D.	Campbell	2NRE6
Cast Iron Body, 6 ⅜ in Casing I.D.	Campbell	2NRF1
Well Points, Galvanized Steel, Stainless Steel Body		
24 in L, 1 ¼ in O.D., 60 Gauze	Campbell	5YM69
24 in L, 1 ¼ in O.D., 60 Gauze, 400 Max. Press.	Simmons	482A38
30 in L, 1 ¼ in O.D., 60 Gauze	Campbell	5YM71
36 in L, 1 ¼ in O.D., 60 Gauze	Campbell	5YM73
48 in L, 2 in O.D., 80 Gauze	Campbell	5YM70
Pitcher Pump		
Cast Iron, 15 in H, 1 ¼ in Inlet Dia.	Simmons	482A52
Cast Iron, 17 ½ in H, 1 ½ in Inlet Dia	Campbell	5YM61
Barbed Hose Fitting		
¾ in x ¾ in, Hose Barb x NPT	Campbell	5YM52
1 in x 1 in, Hose Barb x NPT	Campbell	5YM53
1¼ in x 1¼ in, Hose Barb x NPT	Campbell	5YM54
1½ in x 1½ in, Hose Barb x NPT	Campbell	5YM55
2 in x 2 in, Hose Barb x NPT	Campbell	5YM56
Pitless Adapter		
1 in Inlet/Outlet, 100 psi Max., Low Lead Brass	Campbell	38G635
Well Tank Accessories		
¾ in Comp. Tank Port, ¾ in Comp. Suction Port, 20 to 60 psi, Zinc Body	Brady	3A421
1¼ in MPT Tank Port, 1¼ in MPT Suction Port, 20 to 100 psi, Zinc Body	Campbell	29AH95
1000 ft. General Purpose Utility Rope, 700 lb Tensile Strength	Campbell	2NRE9
Drive Cap, Malleable Iron Body, 1 ¼ in O.D.	Campbell	5YM57
Drive Cap, Malleable Iron Body, 2 in O.D.	Campbell	5YM58
Drive Coupling, Galvanized Steel Body, 1 ¼ in O.D.	Campbell	5YM76
Drive Coupling, Galvanized Steel Body, 2 in O.D.	Campbell	5YM77
Torque Arrestor PVC, Stainless Steel Body, 1 in to 2 in Pipe, 4 in to 8 in Casing I.D.	Campbell	5YM80

Bell & Gossett
a xylem brand

Enhanced Air Separators

- Max. pressure: 150 psi
- Max. temp.: 250°F

Remove 99% of entrained air in hydronic heating systems.

4JB11

Max. Flow (gpm)	Max. Working Pressure (psi)	Inlet	Outlet	H (in.)	W (in.)	Mfr. Model	Item No.
Cast Iron, Max. Temp.: 300 °F							
35 gpm	175 psi	1½ in NPT	1½" NPT	8 ⅛	4 ½	1AS-1.5	6ETT6
50 gpm	175 psi	2 in NPT	2" NPT	8 ⅛	4 ½	1AS-2	6ETT7
75 gpm	175 psi	2½ in NPT	2½" NPT	10 ⅛	6 ⅝	1AS-2.5	6ETT8
Bronze, Max. Temp.: 250 °F							
6 gpm	150 psi	¾ in NPT	¾" NPT	6 ⅞	3 ⅝	EASB-3/4JR	4JB11
12 gpm	150 psi	1 in NPT	1" NPT	6 ⅞	3 ⅝	EASB-1JR	4JB12
20 gpm	150 psi	1¼ in NPT	1¼" NPT	7 ½	4 ⅝	EASB-1-1/4 JR	4JB13
30 gpm	150 psi	1½ in NPT	1½ NPT	7 ½	4 ⅝	EASB-1-1/2 JR	4JB17
Brass, Max. Temp.: 240 °F							
	35 psi	⅛ in MNPT	—	3 ⁵⁄₁₆	1 ½	67	6LFC1
	150 psi	½ in FNPT, ¾ in MNPT	—	4 ⅜	2 ⅛	87	6ETU7

Friction Loss Calculations

Distribution Flow Calculations

William and Hazen Eqn:

f = 0.2083 (100/C)^1.85 [(q^1.85)/(d^4.8655)]

in which

f = friction head in ft of liquid per 100 feet of pipe
d = inside diameter of pipe in inches
q = flow in gal/min
C = constant accounting for surface roughness

Side note: 1ft head/0.4331 psi or 2.31 psi/ft of head

Roughness Coefficients

C (Galvanized)	140
C (PVC/HDPE)	150

Design Flow Rate	22	gpm

Static Head				
Irrigation Controls	2938	ft	Flathead Lake Full Pool	2893
Lake Elevation	2893			
PWL (ft)	45	ft		
Pump house pressure	150.15	ft	65 psi	
Static Head =	195.15	ft		

Major Losses

	Hundred Feet of Pipe	C (Roughness)	q (Flow gal/min)	d (diameter inches):	Friction Head (ft):
Drop pipe	2.8	150	22	1.25	28.32
Well to Pump House	0.2	150	22	1.25	2.02
Misc pump house fittings	0.25	140	22	1	8.51
Subtotal					38.85
Service line fittings	0.5	150	10	1	3.48
Service line	3	150	10	1	20.89
					24.38
Well TDH	234.00	ft			
Max Friction Distribution to Services	24.38	ft	10.55	54.45	MIN 35

Desired operation rate 22 gpm @ 234.00 TDH

Grundfos Pump

Pump Head to Pump House	38.85
Pressure Setting Pump House	150.15
PWL	130
	319.00

APPENDIX D. POSSESSORY INTEREST

Proof of Possessory Interest

THIRD AMENDMENT TO OPERATING AGREEMENT OF JM REAL ESTATE HOLDING LLC

THIS THIRD AMENDMENT TO OPERATING AGREEMENT OF JM REAL ESTATE HOLDING LLC, a Nevada limited liability company ("**Amendment**"), is made effective April 8, 2020, by the undersigned Member, Manager and Special Manager of JM Real Estate Holding LLC, a Nevada limited liability company ("**Company**").

RECITALS

A. The Company is governed by that certain Operating Agreement dated May 15, 2019, as amended by that certain First Amendment to Operating Agreement dated September 18, 2019 and that certain Second Amendment to Operating Agreement dated December 19, 2019 (as amended, "**Agreement**"). Terms which are defined in the Agreement shall have their defined meanings when used herein, unless otherwise stated.

B. Pursuant to Section 4 of the Agreement, the Manager may be removed and appointed by the Member at any time for any reason. The Member desires to appoint James Manning as a "Special Manager" of the Company for the purpose set forth herein.

C. The undersigned desire to amend the Agreement as set forth in this Amendment.

AGREEMENT

NOW, THEREFORE, based on the above recitals, the undersigned agree as follows:

1. Incorporation of Recitals. The recitals set forth above are hereby incorporated into this Agreement.

2. Special Manager. James Manning is hereby appointed as a "Special Manager" of the Company. The Special Manager shall have the limited authority to manage the business, property and affairs of the Company with respect to that certain real property located at 982 Angel Point Road, Lakeside, Montana 59922 ("**Lakeside Property**") and to execute and deliver on behalf of the Company such documents and instruments as it deems reasonably required in connection with the Lakeside Property, including documents relating to permits and construction of the Lakeside Property; provided, however, the Special Manager has no authority to mortgage, purchase or sell property.

3. Section Headings. The various section headings in this Amendment are inserted for reference only and will not affect the meaning or interpretation of this Amendment or the Agreement.

[Signature page follows]

[Signature page to Third Amendment to Operating Agreement of
JM Real Estate Holding LLC]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first written above at San Diego, California.

MANAGER:

JESSICA MANNING

MEMBER:

JESSICA E. MANNING, Trustee of the
TBJ Trust dated April 25, 2018, as amended

SPECIAL MANAGER:

JAMES MANNING

APPENDIX E. DNRC CORRESPONDENCE

Pre-Application Approval

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION

WATER RESOURCES DIVISION – KALISPELL REGIONAL OFFICE
655 TIMBERWOLF PKWY, SUITE 4, KALISPELL, MONTANA 59901 PHONE: (406) 752-2288 FAX: (406) 752-2873

GREG GIANFORTE, GOVERNOR

STATE OF MONTANA

DIRECTOR'S OFFICE: (406) 444-2074
FAX: (406) 444-2684
http://dnrc.mt.gov

PO BOX 201601
HELENA, MONTANA 59620-1601

October 17, 2024

JM REAL ESTATE HOLDING LLC
PO BOX 1109
LAKESIDE MT 59922-1109

Subject: Complete Preapplication Form for Beneficial Water Use Permit Application No. 76LJ 30164662

Dear Applicant,

The Department of Natural Resources and Conservation (Department) Kalispell Regional Water Resource Office received your Preapplication Meeting Form on October 16, 2024. Your Preapplication Meeting Form is deemed successfully completed per Administrative Rules of Montana (ARM) 36.12.1302.

As designated on the Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department will produce the technical analyses based on the parameters included in the Preapplication Meeting Form (ARM 36.12.1302(4)) within 45 days of October 16, 2024 (45-day deadline: November 30, 2024).

If you have any questions, please contact me at (406) 752-2746 or Travis.Wilson@mt.gov.

Sincerely,

Travis Wilson
Water Resource Specialist
Kalispell Regional Water Resource Office

Cc: Mikel Siemens, Core Water Consulting, 490 E Montana St. Ste. 2, Kalispell, MT 59901

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Technical Analysis

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION

WATER RESOURCES DIVISION – KALISPELL REGIONAL OFFICE
655 TIMBERWOLF PKWY, SUITE 4, KALISPELL, MONTANA 59901 PHONE: (406) 752-2288 FAX: (406) 752-2873

GREG GIANFORTE, GOVERNOR

STATE OF MONTANA

DIRECTOR'S OFFICE (406) 444-2074
FAX (406) 444-2684
http://dnrc.mt.gov

PO BOX 201601
HELENA, MONTANA 59620-1601

November 27, 2024

JM Real Estate Holding LLC
PO Box 1109
Lakeside, MT 59922-1109

Subject: Completed Technical Analyses Report for Beneficial Water Use Permit Preapplication No. 76LJ 30164622

Dear Applicant,

As designated on the submitted Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department of Natural Resources and Conservation (DNRC or Department) has completed the technical analyses for Beneficial Water Use Permit Preapplication No. 76LJ 30164622 based on the information provided in your Preapplication Meeting Form submitted to the Department on October 16, 2024. The technical analyses can be found in the attached report.

This Technical Analyses Report **IS**: A collection of facts that the DNRC has gathered, including content provided in the Preapplication Meeting Form materials. The Department will use these data to analyze the criteria in §85-2- 311, MCA if you submit an application for the project described in the completed Preapplication Meeting Form.

This Technical Analyses Report **IS NOT**: An analysis or discussion of whether the Preapplication Meeting Form as filed meets the criteria (§85-2- 311, MCA).

You have 180 days to submit the Beneficial Water Use Permit Application Form 600 considering the information provided in the technical analyses and Preapplication Meeting Form. If the Application Form is not submitted to the Kalispell Regional Office by May 26, 2025, a new preapplication meeting will be required to process the Application with expedited timelines (ARM 36.12.1302(6)(b)). If any elements described in the submitted Application are changed from that of the submitted Preapplication Meeting Form, the discounted filing fee and expedited timelines will not apply (ARM 36.12.1302(6)(a)). Please note that the technical analyses will expire one year from the date of this letter (ARM 36.12.1302(8)).

Please let me know if you have any questions.

Best,

KKiel

Kristal Kiel
Water Resource Specialist
DNRC Water Resources- Kalispell Regional Office
655 Timberwolf Parkway Suite 400
Kalispell, MT 59901

CC:
Mikel Siemens
Core Water Consulting
490 E Montana St Ste. 2
Kalispell, MT 59901

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