Westmond North – Short Plat

Bear Creek Equity Investments LLC
Attn: Dave Cecie
January 22, 2026
Water Availability Review and Analysis

This review and analysis concerns private water systems proposed to serve an eight (8)-lot short plat known as Westmond North, located in Bonner County, Idaho.

The subject property currently consists of three (3) existing lots under single ownership, with two separate lenders. One lender manages Lots 1 and 2, while the second lender manages Lot 3. The owner proposes to subdivide Lots 1 and 2 into five (5) one-acre lots (Lots 1–5) and Lot 3 into three (3) one-acre lots (Lots 6–8). All proposed lots are intended for single-family residential use, which is permitted under the existing zoning.

The water supply is designed to meet the projected demand for eight (8) single-family dwellings, each potentially including an Accessory Dwelling Unit (ADU). The water supply consists of an individual shared well (Well Tag D0106482) constructed in accordance with IDAPA 37.03.09.

Proposed System Components

- One 5,000-gallon cistern or an equivalent equal (total storage: 5,000 gallons)
- Distribution system consisting of approximately 700 linear feet of 2-inch Schedule 40 PVC pipe (or equal)
- One pressure/booster pump capable of maintaining 40 psi within the system
- Two inch Blow Off for flushing and maintenance
- Each Lot will have its own fire cistern for fire protection.

The proposed system is intended to serve fewer than twenty-five (25) people in a 60-day period. As defined under IDAPA 58.01.08, the system qualifies as non-public, shared drinking water system. Based on this review, it is recommended that Bonner County, the Panhandle Health District, and Idaho Department of Environmental Quality (DEQ) approve the short plat as land capable of supporting the projected water use. The future water systems shall meet all applicable State of Idaho requirements for non-public water systems and be constructed in accordance with those standards.

Digitally signed by Daniel W. Larson, P.E.
DN: C=US, E=Dan@7BEngineering.com, O=D2G INC, OU=7B Engineering, CN="Daniel W. Larson, P.E."
Location: Sandpoint, ID
Reason: I am approving this document
Contact Info: Dan@7BEngineering.com
Date: 2026.01.23 14:36:54-08'00'

Daniel W. Larson, Principal
7B Engineering

Date

Digitally signed by Daniel W. Larson, PE
Location: Sandpoint, ID
Reason: I am approving this document
Contact Info: Dan@7BEngineering.com
Date: 2026.01.23 14:36:21-08'00'

Note: This document is signed and sealed electronically. If the Signature, Time, and Date are not shown imposed over the Seal, the document has been altered and should not be considered an Original.

ENGINEERING REVIEW & ANALYSIS

WATER AVAILABILITY

WESTMOND NORTH

RP017540000010A
RP017540000020A
RP017540000030A
Section 5, Township 55, Range 2 West, Bonner County, ID

Figure 1: Vicinity Map

Introduction

This report has been prepared to evaluate a proposed non-public water system utilizing a private shared well source, cistern storage, and a pressurized distribution system to serve eight (8) residential lots located off Westmond Road in Bonner County, Idaho. The purpose of this report is to analyze shared water system design criteria, including water source capacity, projected demand, storage requirements, and distribution system operating pressures.

Location

The project site is located east of U.S. Highway 95, near Westmond, in Bonner County, Idaho, and is accessed via Westmond Road, a county-maintained roadway. The shared well is located within a dedicated utility easement to allow future access and operation by the homeowners' association (HOA) or designated system operator responsible for maintaining the well and associated infrastructure.

The well site is located on the northern portion of parcel RP017540000030A (Westmond North Lot 3), owned by Bear Creek Equity Investments, LLC, within Section 5, Township 55 North, Range 2 West, Bonner County, Boise Meridian. The current owner proposes to subdivide the existing three (3) parcels into eight (8) one-acre lots.

Please refer to Figure 1: Vicinity Map and the attached Preliminary Short Plat for additional site information.

System Size and Demand

This proposal includes construction of a shared, community, non-public water system designed to adequately serve eight (8) residential lots. Water demand estimates were developed using guidance from the Washington State Office of Drinking Water Design Manual (Washington Department of Ecology) and the Idaho Rules for Public Drinking Water Systems (IDAPA 58.01.08).

The system is designed for the **maximum anticipated residential demand**, corresponding to **eight (8) single-family dwellings**. Using a standard planning assumption of **2.5 persons per dwelling**, the system is projected to serve a total population of **twenty (20) persons**.

Hydraulic Analysis

The following assumptions and methodologies were used to calculate the Average Day Demand (ADD), Maximum Day Demand (MDD), and Peak Hour Demand (PHD) for the combined system demand. No industrial or commercial water uses are proposed or included in this analysis.

Fire demand for the proposed eight-lot subdivision will be addressed through the construction of **private fire protection cisterns** installed at the time of building location or building permit. Each future residence will be required to install a minimum **2,000-**

gallon private fire water storage system meeting applicable **International Fire Code (IFC)** standards, as allowed by **Bonner County Revised Code Title 12** for subdivisions not served by a pressurized hydrant system.

Water Supply – Well Production
Well Discharge Rates
Well discharge rates may be determined from well design data, pump test results, pumping logs, water right information, or estimated using per-capita consumption values from the Idaho Source Water Assessment Plan (DEQ, 1999).

The shared well serving both water systems (Well Tag No. D0106482) was drilled and tested by H2O Well Service, Inc. A four-hour pump test was conducted.

- **Tested Well Production Rate:** 10 gallons per minute (gpm)
    - *(See Well Driller's Report and Pump Test Results – Well Tag D0106482)*

Peak Hour Demand Calculations:

Total System Demands

Residential water use Peak Hour Demand (PHD) for the facility has been calculated. This System will serve eight dwellings. The PHD is based on the March 2018 edition of the Washington State Department of Health, Office of Drinking Water, Group B Water System Design Guidelines, Section 3.1.2 Table 3.2:

Table 1: Guide for Minimum Residential Peak Hour Demand (DOH 331-467)

Minimum Residential Peak Hourly Demand	
Number of Dwelling Units	**Peak Hourly Demand (in Gallons per Minute)**
2	23
3	26
4	28
5	31
6	34
7	36
8	**39**
9	41

The **Total Peak Hour Demand** of the system based upon the guidelines above is estimated to be about **39 gpm.**

Proposed Water Demand

Maximum Day Demand Calculation:

Per IDAPA.58.01.08.552.01; the minimum capacity of a public drinking water system shall be at least eight hundred (800) gallons per day per residence exclusive of fire flows and

irrigation. This system is a non-public water system that serves less than 25 persons the minimum capacity of (800 GPD) was assumed adequate as long as the equalization storage of finished water is in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand.

Residential:
Assume at full occupancy an average maximum day demand (MDD) of 800gpd per RDU over the 8 dwellings. The estimated maximum day demand for the system would be:

800gpd/ RDU*8 RDU = **6,400 gpd (4.44 gpm) -** Residential

Total Maximum Day Demand: 6,400 Gallons (4.44 gpm).

Average Day Demand Calculation:

The Average Demand on the Aquifer was estimated from the 1999 domestic water consumptions guidelines by DEQ. The current (2015) per capita domestic consumption rate in Idaho per USGS is about 184 gpd (Dieter et al., 2018). Rates were estimated by the following calculation, which includes a factor of 1.5 to account for uncertainty and future growth. Using an average American household of 2.5 persons per equivalent residential unit gives us a total estimated capital of twenty (20) persons.

***Average Day Demand*:**

Dwelling Rate: 184 gpd/person x 2.5 people/RDU = 460 gpd/RDU
System Rate: 460 gpd/RDU x 8 RDU = 3,680 gpd
Total Average Day Demand: **3,680 gallons (2.55 gpm)**

Total Average Demand on Aquifer

The proposed well is estimated to serve a population of about 11 people. The aquifer consumption rate can be estimated by converting the average day demand in cubic foot/ day.

3,680gpd /7.48 gal/cf = **492 cf/d**

Storage

The minimum capacity of eight hundred gallons per day is only acceptable if the drinking water system has equalization storage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand. To estimate Equalization Storage (ES) (i.e. volume required in a system) we can calculate it based on Peak Hour Demand or Historic Flow Data (Equation 7-1 per WSDSHS 2020)).

Equation 1: Equalization Storage

$$ES = (PHD - Q_S) \times T$$

Where ES is the equalization storage/volume in gallons; PHD is peak hour demand in gpm; Q_s is the installed well pumping capacity; and T is minimal time (150 min per the WSDSHS manual for the number of hookups).

$$Es=(Q_{pkhr}-Q_s) \times (150\text{minutes})$$

Minimum proposed equalization storage for the Water System (8 connections):

$$Es= (39\ gpm- 10\ gpm)\ (150\ min) = 4{,}350\ gallons$$

The proposed storage of 5,000 gallons should be adequate for the demand of the private water system as it meets the requirements of IDAPA.

Distribution Operating Pressures

IDAPA 58.01.08.552.01.b.v requires that water systems maintain a minimum distribution pressure of forty (40) psi under normal operating conditions. In addition, the Idaho Plumbing Code requires that available pressure at the highest plumbing fixture be not less than 20 psi and not greater than 100 psi.

Distribution system pressures and hydraulic head losses were evaluated using KYPIPE hydraulic modeling software. The hydraulic model represents the proposed distribution system layout, estimated pipe lengths, service connections, and anticipated residential demand. A complete model output report and system map are attached to this report.

The proposed distribution system consists of approximately 700 linear feet of 2-inch Schedule 40 PVC main, with 1-inch service laterals serving each of the eight (8) lots. The system was evaluated under Peak Hour Demand (PHD) conditions, with a total system demand of 39 gpm, corresponding to an average peak demand of approximately 4.9 gpm per lot.

A booster pump is proposed to be located within the cistern or in a dedicated pump house. The hydraulic model assumes a booster pump capable of delivering 39 gpm at 50 psi, equivalent to a total dynamic head (TDH) of approximately 138 feet of water.

Model results indicate that under peak demand conditions:

- Minimum service pressure at the most hydraulically distant lot is approximately 42 psi,
- Maximum service pressure within the distribution system is approximately 47 psi, and
- All modeled service nodes meet or exceed the 40 psi minimum pressure requirement specified in IDAPA 58.01.08.

Based on the hydraulic modeling results, the proposed distribution system is capable of maintaining compliant operating pressures throughout the system under peak demand conditions.

Distribution Velocity

Maintaining adequate water velocity within the distribution system is necessary to promote effective flushing and prevent sediment accumulation. As a general design guideline, a minimum velocity of approximately 2 feet per second (fps) is desirable within water distribution piping during peak demand conditions.

Water velocity within a pipe was calculated using the following relationship:

Equation 2: Velocity in Pipes

$$V = 0.408 \frac{Q}{D^2}$$

Where:
V= Water Velocity inside pipe (fps)
Q = Flow Rate inside pipe (gpm)
D= Inside Pipe Diameter

Under Peak Hour Demand (PHD) conditions, the total system demand is 39 gpm. For the 2-inch distribution main, the resulting velocity is calculated as:

$$V= 0.408 \ \ (39 /4 \text{ in}^2) = 3.98 \text{ fps}$$

This result is consistent with the KYPIPE hydraulic model, which indicates maximum velocities of approximately 4.0 fps in the 2-inch main during peak demand conditions.

The peak hour demand distributed across the eight (8) residential services is approximately 4.9 gpm per service (39 gpm ÷ 8 services). For the 1-inch service lines, the resulting velocity is:

$$V= 0.408 \ \ (4.88 /1 \text{ in}^2) = 1.99 \text{ fps}$$

Model results confirm that service line velocities are approximately 2.0 fps, which is appropriate for residential service piping under peak demand conditions.

The proposed distribution system includes dead-end segments. To ensure adequate flushing capability and maintain water quality, pressure cleanouts (blow-off assemblies) will be installed at all dead ends. Each blow-off assembly shall consist of a 2-inch valved cleanout capable of providing high-velocity flushing under system pressure. Blow-off locations and details shall be shown on the construction plans and installed in accordance with standard water system practice.

Based on both hand calculations and hydraulic modeling results, the proposed distribution system provides adequate velocities for normal operation and flushing under peak demand conditions. The inclusion of pressure blow-off assemblies at dead ends ensures the system can be effectively maintained and operated as a non-public water system.

Construction Schedule

1. Obtain Water Right from the Idaho Department of Water Resources.
2. Well Improvements
    - Install a well pump capable of providing 10 GPM at 114 feet of head.
3. Construct Cistern(s) with a total working capacity of 5,000 gallons or larger.
    - Install a supply line, drain line and equalization if multiple tanks
    - *Expected Timeline:* Fall 2026
4. Construct a Pump House, including:
    - Install a pressure/booster pump capable of providing 50 psi at 39 GPM,.
    - Install pump tanks, a check valve, and sample taps for system monitoring and maintenance.
    - *Expected Timeline:* Fall 2026
5. Construct the Distribution System, including:
    - Including a blow-off assembly at the end of system for flushing and maintenance
    - Extend service lines up to each lot using 1-inch HDPE pipe or equivalent.
    - *Expected Timeline:* Fall 2026

Once the Water Right is approved, and the owner has completed well improvements, constructed the cistern, completed pump house improvements, and built the distribution system, the project will be completed without requiring connection charges or fees from future landowners, in accordance with IC-50-1334. Note at the time of BLPs for the home each lot must construct their own fire protection cistern, as outlined per BCRC 12-623.

Conclusion

The proposed non-public, shared drinking water system can meet design requirements for demand, operating pressures, and velocities. Overall, the proposed water system is believed to be adequate for the proposed use. This system will serve under twenty-five (25) people defined under IDAPA 58.01.08 as a non-public drinking water system. We recommend approval of this short plat because the land is capable of producing a water system that complies with the requirements for a non-public shared water system.

Attachments

1. Preliminary Short Plat – Westmond North
2. Hydraulic Water System Model Report (KYPIPE)
3. Recommended Water Storage Tank Specifications

References

Linaweaver, F. P. (1967). Summary Report on the Residential Water Use Research Project. Journal of the American Water Works Association, 59, 267.

WA DOH 331-123 (REV. 6/2020). Water System Design Manual. WA: Washington State Department of Health.

WA DOH 331-467. (2016, December). Group B Water System Design Guidelines (DOH 331-467 ed.).WA: Washington State Department of Health.

WSDSHS. (1973). Design Standards for Public Water Supplies. Olympia, WA: Washington State Department of Social and Health Services.

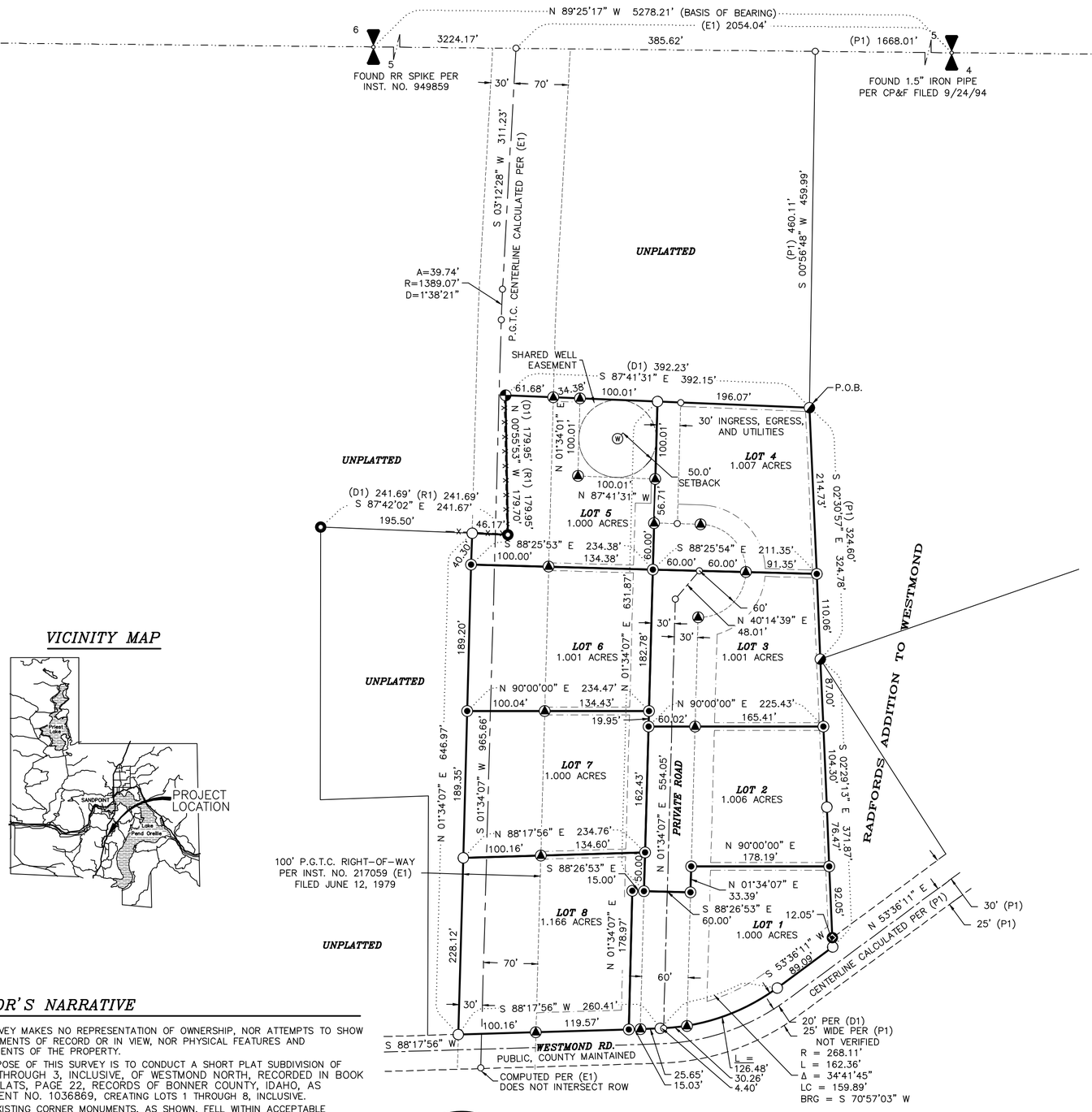
Dieter, C. A., Maupin, M. A., Caldwell, R. R., Harris, M. A., Ivahnenko, T., Lovelace, J. K., Barber, N. L., & Linsey, K. S. (2018). Estimated use of water in the United States in 2015. U.S. Geological Survey Circular. https://doi.org/10.3133/cir1441

DEQ (Idaho Department of Environmental Quality).1999. Idaho Source Water Assessment Plan. Boise, ID: DEQ.

Idaho Code: Title 50 Municipal Corporations, Chapter 13 Plats and Vacations

WESTMOND NORTH LOTS

LYING IN A PORTION OF THE SE¼ OF SECTION 5,
TOWNSHIP 55 NORTH, RANGE 2 WEST,
BOISE MERIDIAN, BONNER COUNTY, IDAHO



0 100 200 300

LEGEND

	SECTIONAL CORNER, AS NOTED.
◉	SET 5/8" X 24" REBAR AND CAP, PLS 14879
○	PREVIOUSLY 5/8" X 24" REBAR AND CAP, PLS 14879
▲	PREVIOUSLY SET 1/2" X 24" REBAR AND CAP, "GLAHE EASEMENT"
◕	FOUND 5/8" REBAR AND CAP, PLS 882
◉	FOUND IRON PIPE, 2" OUTSIDE DIAMETER
◈	FOUND 1/2" REBAR AND CAP, PLS 974
◪	FOUND 1/2" REBAR, NO CAP
○	CALCULATED POINT, NOTHING SET
(D1)	WARRANTY DEED, INST. NO. 1018953
(E1)	PACIFIC GAS TRANSMISSION COMPANY EASEMENT, INST. NO. 217059
(P1)	PLAT OF RADFORD'S ADDITION TO WESTMOND, INST. NO. 300187
(R1)	RECORD OF SURVEY, INST. NO. 234384
Ⓦ	SHARED WELL
——·——	CENTERLINE, AS NOTED
- - - - -	EASEMENT, AS NOTED
— — — —	SETBACKS, SEE NARRATIVE (6)

BASIS OF BEARING

THE BASIS OF BEARINGS FOR THIS SURVEY WAS ESTABLISHED BY GPS CONTROL COORDINATES DERIVED FROM NGS OPUS SOLUTIONS USING A REFERENCE FRAME OF NAD83 (2011)(EPOCH: 2010.000). ALL BEARINGS REFER TO THE IDAHO COORDINATE SYSTEM OF 1983, WEST ZONE, (1103) – US SURVEY FT. REFER TO THE DRAWING FOR SPECIFIC LINE AND MONUMENTS USED.

DISTANCES SHOWN HAVE BEEN CONVERTED FROM GRID TO GROUND USING A COMBINED ADJUSTMENT FACTOR (CAF) OF 1.0001486221. GEODETIC NORTH IS AN ANGULAR ROTATION OF −0°37'30.7" AT THE EAST QUARTER CORNER OF SECTION 5.

GENERAL NOTES

A) SOLID WASTE SHALL BE THE RESPONSIBILITY OF THE LOT OWNERS.

B) WETLANDS ARE NOT PRESENT ON THE SUBJECT PROPERTY PER THE U.S. FISH & WILDLIFE WETLAND INVENTORY MAPPING TOOL.

C) THE LOTS ARE CATEGORIZED AS ZONE 'X' PER FEMA PANEL 16017C0950E, EFFECTIVE 11/17/2009.

VICINITY MAP

SURVEYOR'S NARRATIVE

1) THIS SURVEY MAKES NO REPRESENTATION OF OWNERSHIP, NOR ATTEMPTS TO SHOW ALL EASEMENTS OF RECORD OR IN VIEW, NOR PHYSICAL FEATURES AND IMPROVEMENTS OF THE PROPERTY.
2) THE PURPOSE OF THIS SURVEY IS TO CONDUCT A SHORT PLAT SUBDIVISION OF LOTS 1 THROUGH 3, INCLUSIVE, OF WESTMOND NORTH, RECORDED IN BOOK 22 OF PLATS, PAGE 22, RECORDS OF BONNER COUNTY, IDAHO, AS INSTRUMENT NO. 1036869, CREATING LOTS 1 THROUGH 8, INCLUSIVE.
3) FOUND EXISTING CORNER MONUMENTS, AS SHOWN, FELL WITHIN ACCEPTABLE SURVEY TOLERANCES AS BEING THE INDICATED CORNERS.
4) A RECORD OF SURVEY, BY PLS 3451, INSTRUMENT NO. 234384, ESTABLISHES A CENTERLINE FOR WESTMOND ROAD AND NOTES THAT THE RIGHT-OF-WAY OF SAID ROAD IS UNKNOWN. PER WARRANTY DEED, INSTRUMENT NO. 1018953, THE SOUTHERLY BOUNDARY OF THE PARENT PARCEL LIES 20 FEET NORTH OF THE CENTERLINE OF WESTMOND ROAD. THUS IT WAS DETERMINED THAT THE NORTHERLY RIGHT-OF-WAY OF WESTMOND ROAD 20 FEET WIDE.
5) THIS SURVEY WAS PERFORMED USING TRIMBLE R10 & R12i GNSS RECEIVERS AND THE DATA WAS PROCESSED USING NGS OPUS AND TRIMBLE BUSINESS CENTER.
6) THE SUBJECT PROPERTY IS LOCATED WITHIN THE RURAL SERVICE CENTER (RSC) ZONING DISTRICT. IN ACCORDANCE WITH BONNER COUNTY REVISED CODE §12-412, TABLE 4-2, DEVELOPMENT WITHIN THE RSC ZONE IS SUBJECT TO A MINIMUM STREET SETBACK OF 25 FEET AND A MINIMUM PROPERTY LINE SETBACK OF 5 FEET.

PROFESSIONAL LAND SURVEYOR LICENSED 14879 STATE OF IDAHO TYSON L. A. GLAHE PRELIMINARY

PLACE RECORDING LABEL HERE

1/4	SECTION	TOWNSHIP	RANGE
	5	55 N	2 W

MONTANA IDAHO OREGON WASHINGTON

PROJECT #: 23-042B CECIE
DRAWING NAME: 23-042B_CECIE_SHORTPLAT_KAJ_V2.DWG

WESTMOND NORTH LOTS

GLAHE & ASSOCIATES
PROFESSIONAL LAND SURVEYORS
303 Church Street
Sandpoint, Idaho 83864
208-265-4474

Scale:	1"=100'
Checked By: TLAG	Drawn By: KAJ
Plot Date: 1/22/2026	Sheet: 1 of 1

WESTMOND NORTH LOTS

LYING IN A PORTION OF THE SE¼ OF SECTION 5,
TOWNSHIP 55 NORTH, RANGE 2 WEST,
BOISE MERIDIAN, BONNER COUNTY, IDAHO

OWNER'S CERTIFICATE

KNOWN ALL MEN BY THESE PRESENTS THAT DAVID CECIE, OWNER OF BEAR CREEK EQUITY INVESTMENTS, LLC, AN IDAHO LIMITED LIABILITY COMPANY, HEREBY CERTIFY HE IS THE OWNER OF THE REAL PROPERTY DESCRIBED IN THIS CERTIFICATE AND HAS CAUSED THE SAME TO BE PLATTED INTO LOTS 1 THROUGH 8, INCLUSIVE, THE SAME TO BE KNOWN AS 'WESTMOND NORTH LOTS' BEING A PORTION OF SECTION 5, TOWNSHIP 55 NORTH, RANGE 2 WEST, BOISE MERIDIAN, BONNER COUNTY, IDAHO, MORE SPECIFICALLY DESCRIBED AS FOLLOWS:

LOTS 1 THROUGH 3, INCLUSIVE, OF WESTMOND NORTH, RECORDED IN BOOK 22 OF PLATS, PAGE 22, RECORDS OF BONNER COUNTY, IDAHO, AS INSTRUMENT NO. 1036869.

TOGETHER WITH, AND SUBJECT TO, A SHARED WELL EASEMENT, BURDENING LOT 5, FOR THE BENEFIT OF WESTMOND NORTH LOTS, AS SHOWN HEREON.

TOGETHER WITH AND SUBJECT TO A 30–FOOT WIDE INGRESS, EGRESS, AND UTILITIES, BURDENING LOT 4, FOR THE BENEFIT OF WESTMOND NORTH LOTS.

TOGETHER WITH AND SUBJECT TO, A PRIVATE ROAD EASEMENT, BURDENING LOTS 1, 2, 3, AND 4, FOR INGRESS, EGRESS, AND UTILITIES, FOR THE BENEFIT OF WESTMOND NORTH LOTS, AS SHOWN HEREON.

TOGETHER WITH AND SUBJECT TO ALL EASEMENTS OF RECORD.

_____ _____
DAVID CECIE, OWNER OF BEAR CREEK EQUITY INVESTMENTS, LLC — DATE

ACKNOWLEDGMENT

STATE OF _____

COUNTY OF _____

ON THIS _____ DAY OF _____, 2025, BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, PERSONALLY APPEARED DAVID CECIE, OWNER OF BEAR CREEK EQUITY INVESTMENTS, LLC, KNOWN OR IDENTIFIED TO ME TO BE THE INDIVIDUAL WHO EXECUTED THE FOREGOING INSTRUMENT.

_____
NOTARY PUBLIC

NOTARY PUBLIC FOR THE STATE OF _____

RESIDING AT: _____

MY COMMISSION EXPIRES: _____

DOCUMENTS AND EASEMENTS OF RECORD

THE FOLLOWING DOCUMENTS OF RECORD PER NORTH IDAHO TITLE PRELIMINARY TITLE COMMITMENT, FILE NO. N–63595, DATED MARCH 3, 2023.

1. AN EASEMENT UPON THE TERMS, CONDITIONS AND PROVISIONS CONTAINED THEREIN FOR THE PURPOSE SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS GRANTED TO PACIFIC GAS TRANSMISSION COMPANY IN A DOCUMENT RECORDED JANUARY 18, 1960, AS (INSTRUMENT) 74085 (BOOK) 26 OF MISC. (PAGE) 534, OFFICIAL RECORDS:
   - NOTICE OF LOCATION, RECORDED FEBRUARY 9, 1962, AS (INSTRUMENT) 83968 (BOOK) 29 OF MISC. (PAGE) 415 OFFICIAL RECORDS.
   - NOTICE OF LOCATION AMENDING DESCRIPTION OF EXISTING RIGHT OF WAY, RECORDED OCTOBER 25, 1978, AS (INSTRUMENT) 206985 AND 207024 OFFICIAL RECORDS.
   - NOTICE OF LOCATION AMENDING DESCRIPTION OF EXISTING RIGHT OF WAY, RECORDED JULY 25, 1979, AS (INSTRUMENT) 217059 OFFICIAL RECORDS.
2. AN EASEMENT OVER SAID LAND FOR AN ELECTRIC DISTRIBUTION LINE WITH APPURTENANCES INCLUDING RIGHT OF INSPECTION AND INCIDENTAL PURPOSES, AS GRANTED TO NORTHERN LIGHTS, INC., IN DEED RECORDED JUNE 7, 1971, AS (INSTRUMENT) 133623, OFFICIAL RECORDS.
3. RECORD OF SURVEY RECORDED SEPTEMBER 21, 1980, AS (INSTRUMENT) 234384, OFFICIAL RECORDS.
4. ENCROACHMENTS, OVERLAPS, BOUNDARY LINE DISPUTES, OR OTHER MATTERS, WHICH WOULD BE DISCLOSED BY AN ACCURATE SURVEY AND INSPECTION OF THE PREMISES.
5. SUBJECT TO THE RIGHT, TITLE AND INTEREST OF GENE E. FITZGERALD AND NANCY E. FITZGERALD, HUSBAND AND WIFE, AS TO THE NORTH 213.0 FEET OF SAID PROPERTY THAT WAS EXCEPTED OUT OF WARRANTY DEED RECORDED FEBRUARY 25, 2005, AS INSTRUMENT NO. 670838, RECORDS OF BONNER COUNTY, IDAHO.

COUNTY COMMISSIONERS' CERTIFICATE

THIS PLAT HAS BEEN APPROVED AND ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS, BONNER COUNTY, IDAHO.

DATED THIS _____ DAY OF _____, 2026.

_____
CHAIRMAN, BOARD OF BONNER COUNTY COMMISSIONERS

PLANNING DIRECTOR

THIS PLAT HAS BEEN EXAMINED AND APPROVED THIS _____ DAY OF _____, 2026.

_____
PLANNING DIRECTOR

SURVEYOR'S CERTIFICATE

I, TYSON L.A. GLAHE, PLS 14879, STATE OF IDAHO. DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED ON AN ACTUAL SURVEY LOCATED IN SECTION 5, TOWNSHIP 55 NORTH, RANGE 2 WEST, BOISE MERIDIAN, BONNER COUNTY, IDAHO, THAT THE DISTANCES, COURSES AND ANGLES ARE SHOWN CORRECTLY THEREON AND THAT THE MONUMENTS HAVE BEEN PLACED AND ALL LOT CORNERS PROPERLY SET AND THE SURVEY IS IN COMPLIANCE WITH ALL PROVISIONS OF APPLICABLE STATE LAW AND LOCAL ORDINANCES.

_____ _____
TYSON L.A. GLAHE, PLS 14879 — DATE

PROFESSIONAL LAND SURVEYOR LICENSED 14879 STATE OF IDAHO TYSON L. A. GLAHE PRELIMINARY

COUNTY SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I HAVE EXAMINED THE HEREIN PLAT "WESTMOND NORTH" AND CHECKED THE REPLAT AND COMPUTATIONS THEREON AND HAVE DETERMINED THAT THE REQUIREMENTS OF THE IDAHO STATE CODE PERTAINING TO PLATS AND SURVEYS HAVE BEEN MET.

DATED THIS _____ DAY OF _____, 2026.

_____
BONNER COUNTY SURVEYOR

PANHANDLE HEALTH DISTRICT

SANITARY RESTRICTIONS AS REQUIRED BY IDAHO CODE, TITLE 50, CHAPTER 13 HAVE BEEN SATISFIED. SANITARY RESTRICTIONS MAY BE REIMPOSED, IN ACCORDANCE WITH SECTION 50–1326, IDAHO CODE, BY THE ISSUANCE OF A CERTIFICATE OF DISAPPROVAL.

_____ _____
DATE — PANHANDLE HEALTH DISTRICT SIGNATURE

WATER AND SEWER NOTE

WATER SERVICE: WATER IS PROVIDED BY A SHARED WELL.
SEWER SERVICE: SEWAGE DISPOSAL BY INDIVIDUAL DRAINFIELDS.

COUNTY TREASURER'S CERTIFICATE

I HEREBY CERTIFY THAT THE REQUIRED TAXES ON THE HEREIN DESCRIBED PROPERTY HAVE BEEN FULLY PAID UP TO AND INCLUDING THE YEAR _____.

DATED THIS _____ DAY OF _____, 2026.

_____
BONNER COUNTY TREASURER

RECORDER'S CERTIFICATE

FILED THIS ____ DAY OF _____, 2026, AT ____ O'CLOCK __.M., IN BOOK ____ OF PLATS AT PAGE _____ AT THE REQUEST OF GLAHE AND ASSOCIATES, INC., AS INSTRUMENT NO. _____.

_____ _____
COUNTY RECORDER — BY DEPUTY

$_____
FEE

PLACE RECORDING LABEL HERE

1/4	Section	Township	Range
	5	55 N	2 W

MONTANA IDAHO OREGON WASHINGTON

PROJECT #: 23–042
DRAWING NAME: 23–042B_CECIE_SHORTPLAT_KAJ_V2.DWG
Plot Date: 1/22/2026

WESTMOND NORTH LOTS

GLAHE & ASSOCIATES
PROFESSIONAL LAND SURVEYORS
303 Church Street
Sandpoint, Idaho 83864
208–265–4474

Scale: N/A
Checked By: TLAG
Drawn By: KAJ
Sheet: 2 of 2

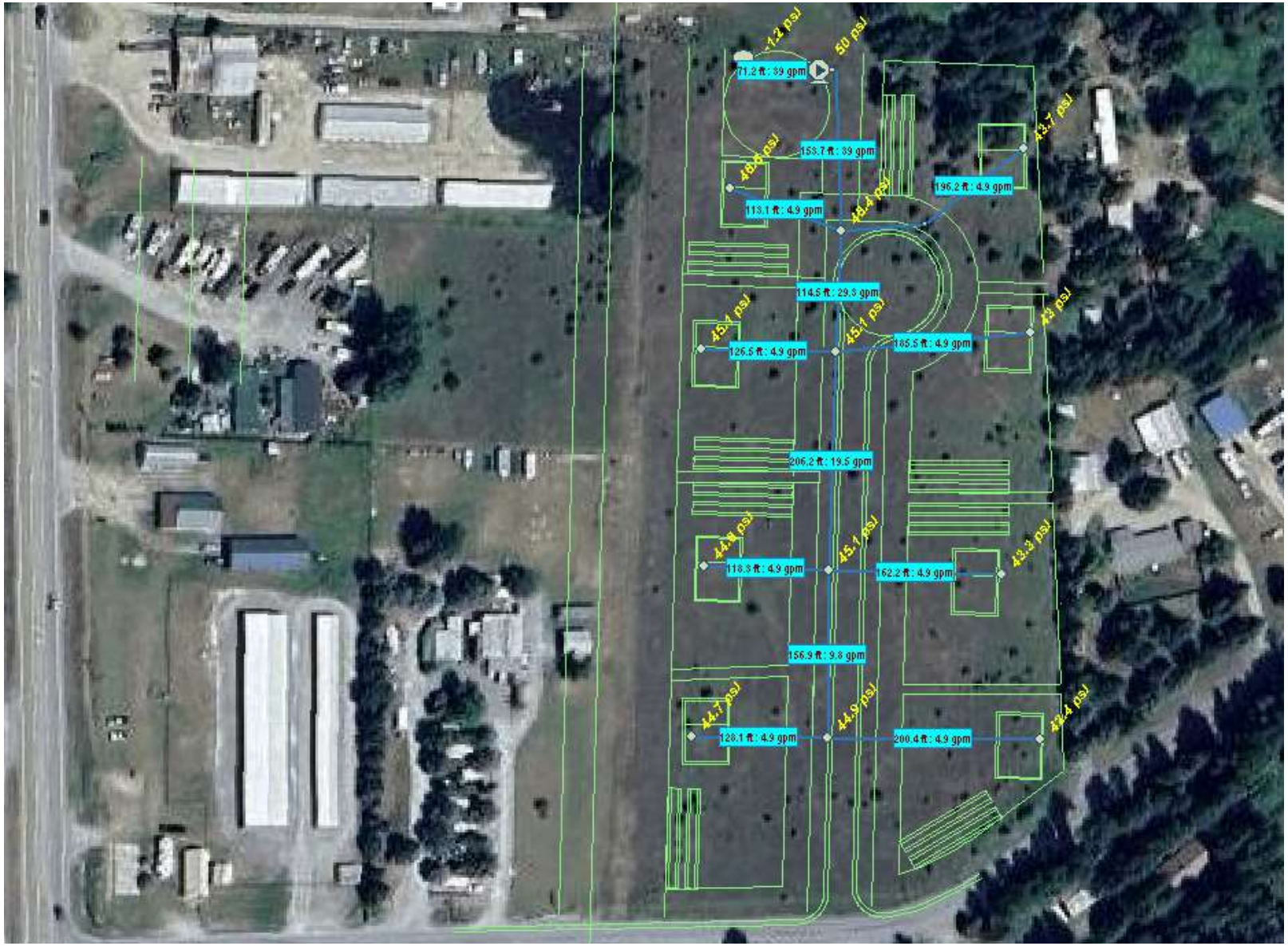


Figure 1: Peak Hour Water Model Exhibit

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* * * * * * * * * * * * K Y P I P E * * * * * * * * * * * *
*                                                           *
*  Pipe Network Modeling Software                           *
*                                                           *
*  CopyRighted by KYPIPE LLC (www.kypipe.com)               *
*  Version: 12.009b  03-25-2024                             *
*  Company:  7BENGI        Serial #:  580846                *
*  Interface:  KYnetic                                      *
*   Licensed for Pipe2024                                   *
*                                                           *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
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Date & Time: Wed Jan 07 14:42:45 2026

Master File : Z:\projects\2024\24006 westmond north\water system\x_letter intent private water system\model\westmond north.KYP\westmond north.P2K

S U M M A R Y O F O R I G I N A L D A T A

U N I T S S P E C I F I E D

FLOWRATE ..... = gallons/minute
HEAD (HGL) ..... = feet
PRESSURE ..... = psig

R E G U L A T I N G V A L V E D A T A

VALVE LABEL	VALVE TYPE	VALVE SETTING (ft or gpm)
Pump-1	Const_HEAD_Pump	2341.88

P I P E L I N E D A T A

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

P I P E N A M E	NODE NAMES #1	NODE NAMES #2	LENGTH (ft)	DIAMETER (in)	ROUGHNESS COEFF.	MINOR LOSS COEFF.

P-1	T-1	I-Pump-1	71.20	2.00	140.0000	0.00
P-2	O-Pump-1	J-1	153.70	2.00	140.0000	0.00
P-3	J-1	J-2	114.50	2.00	140.0000	0.00
P-4	J-2	J-3	206.20	2.00	140.0000	0.00
P-5	J-3	J-4	155.60	2.00	140.0000	0.00
S-1	J-4	L-1	128.10	1.00	140.0000	0.00
S-2	J-4	L-2	200.40	1.00	140.0000	0.00
S-3	J-3	L-3	162.20	1.00	140.0000	0.00
S-4	J-2	L-4	185.50	1.00	140.0000	0.00
S-5	J-1	L-5	198.30	1.00	140.0000	0.00
S-6	J-3	L-6	118.30	1.00	140.0000	0.00
S-7	J-2	L-7	126.50	1.00	140.0000	0.00
S-8	J-1	L-8	113.10	1.00	140.0000	0.00

N O D E D A T A

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	JUNCTION ELEVATION (ft)	EXTERNAL GRADE (ft)
J-1		0.00	2229.60	
J-2		0.00	2230.40	
J-3		0.00	2228.60	
J-4		0.00	2228.50	
L-1		4.88	2226.30	
L-2		4.88	2230.20	
L-3		4.88	2229.20	
L-4		4.88	2231.30	
L-5		4.88	2231.70	
L-6		4.88	2227.30	
L-7		4.88	2227.80	
L-8		4.88	2226.80	
O-Pump-1		----	2226.50	2341.88
T-1		----	2226.80	2224.00
I-Pump-1		0.00	2226.50	

O U T P U T O P T I O N D A T A

OUTPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT
MAXIMUM AND MINIMUM PRESSURES = 5
MAXIMUM AND MINIMUM VELOCITIES = 5
MAXIMUM AND MINIMUM HEAD LOSS/1000 = 5

S U P P L Y Z O N E D A T A

THIS SYSTEM HAS MULTIPLE SUPPLY ZONES

ZONE NO. 1 IS SUPPLIED THROUGH THE FOLLOWING PIPES:
~@Pump-1

ZONE NO. 2 IS SUPPLIED THROUGH THE FOLLOWING PIPES:
~@T-1

S Y S T E M C O N F I G U R A T I O N

NUMBER OF PIPES .....(P) = 13
NUMBER OF END NODES .....(J) = 13
NUMBER OF PRIMARY LOOPS .....(L) = 0
NUMBER OF SUPPLY NODES .....(F) = 2
NUMBER OF SUPPLY ZONES .....(Z) = 2

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Case: 0

RESULTS OBTAINED AFTER 3 TRIALS: ACCURACY = 0.00000E+00

S I M U L A T I O N D E S C R I P T I O N (L A B E L)

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

P I P E N A M E	NODE NUMBERS #1	#2	FLOWRATE	HEAD LOSS	MINOR LOSS	LINE VELO.	HL+ML/ 1000	HL/ 1000

				gpm	ft	ft	ft/s	ft/f	ft/f
P-1	T-1	I-Pump-1		39.00	2.38	0.00	3.98	33.48	33.48
P-2	O-Pump-1	J-1		39.00	5.15	0.00	3.98	33.48	33.48
P-3	J-1	J-2		29.25	2.25	0.00	2.99	19.65	19.65
P-4	J-2	J-3		19.50	1.91	0.00	1.99	9.27	9.27
P-5	J-3	J-4		9.75	0.40	0.00	1.00	2.57	2.57
S-1	J-4	L-1		4.88	2.67	0.00	1.99	20.81	20.81
S-2	J-4	L-2		4.88	4.17	0.00	1.99	20.81	20.81
S-3	J-3	L-3		4.88	3.38	0.00	1.99	20.81	20.81
S-4	J-2	L-4		4.88	3.86	0.00	1.99	20.81	20.81
S-5	J-1	L-5		4.88	4.13	0.00	1.99	20.81	20.81
S-6	J-3	L-6		4.88	2.46	0.00	1.99	20.81	20.81
S-7	J-2	L-7		4.88	2.63	0.00	1.99	20.81	20.81
S-8	J-1	L-8		4.88	2.35	0.00	1.99	20.81	20.81

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND	HYDRAULIC GRADE	NODE ELEVATION	PRESSURE HEAD	NODE PRESSURE
		gpm	ft	ft	ft	psi
J-1		0.00	2336.74	2229.60	107.14	46.43
J-2		0.00	2334.49	2230.40	104.09	45.11
J-3		0.00	2332.58	2228.60	103.98	45.06
J-4		0.00	2332.18	2228.50	103.68	44.93
L-1		4.88	2329.51	2226.30	103.21	44.72

L-2	4.88	2328.01	2230.20	97.81	42.38
L-3	4.88	2329.20	2229.20	100.00	43.33
L-4	4.88	2330.63	2231.30	99.33	43.04
L-5	4.88	2332.61	2231.70	100.91	43.73
L-6	4.88	2330.11	2227.30	102.81	44.55
L-7	4.88	2331.86	2227.80	104.06	45.09
L-8	4.88	2334.39	2226.80	107.59	46.62
O-Pump-1	----	2341.88	2226.50	115.38	50.00
T-1	----	2224.00	2226.80	-2.80	-1.21
I-Pump-1	0.00	2221.62	2226.50	-4.88	-2.12

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES psi	JUNCTION NUMBER	MINIMUM PRESSURES psi
O-Pump-1	50.00	I-Pump-1	-2.12
L-8	46.62	T-1	-1.21
J-1	46.43	L-2	42.38
J-2	45.11	L-4	43.04
L-7	45.09	L-3	43.33

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
P-1	3.98	P-5	1.00
P-2	3.98	P-4	1.99
P-3	2.99	S-1	1.99
S-2	1.99	S-2	1.99
S-3	1.99	S-3	1.99

H L + M L / 1 0 0 0

PIPE NUMBER	MAXIMUM HL+ML/1000	PIPE NUMBER	MINIMUM HL+ML/1000

	(ft/ft)		(ft/ft)
P-1	33.48	P-5	2.57
P-2	33.48	P-4	9.27
S-1	20.81	P-3	19.65
S-2	20.81	S-3	20.81
S-4	20.81	S-5	20.81

H L / 1 0 0 0

PIPE NUMBER	MAXIMUM HL/1000 (ft/ft)	PIPE NUMBER	MINIMUM HL/1000 (ft/ft)
P-1	33.48	P-5	2.57
P-2	33.48	P-4	9.27
S-1	20.81	P-3	19.65
S-2	20.81	S-3	20.81
S-4	20.81	S-5	20.81

R E G U L A T I N G V A L V E R E P O R T

VALVE LABEL	VALVE TYPE	VALVE SETTING psi or gpm	VALVE STATUS	UPSTREAM PRESSURE psi	DOWNSTREAM PRESSURE psi	THROUGH FLOW gpm
Pump-1	PRV-2	50.00	BOOSTED	-2.12	50.00	39.00

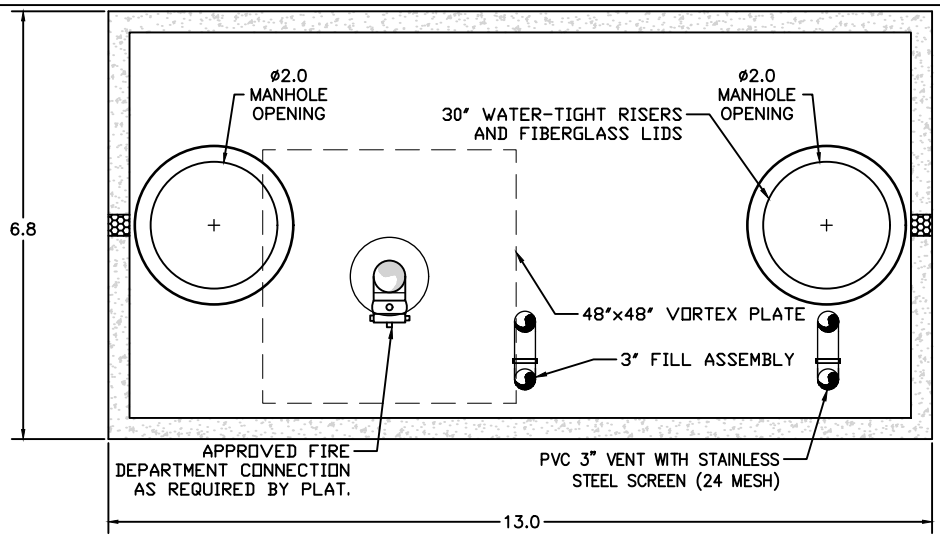
S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

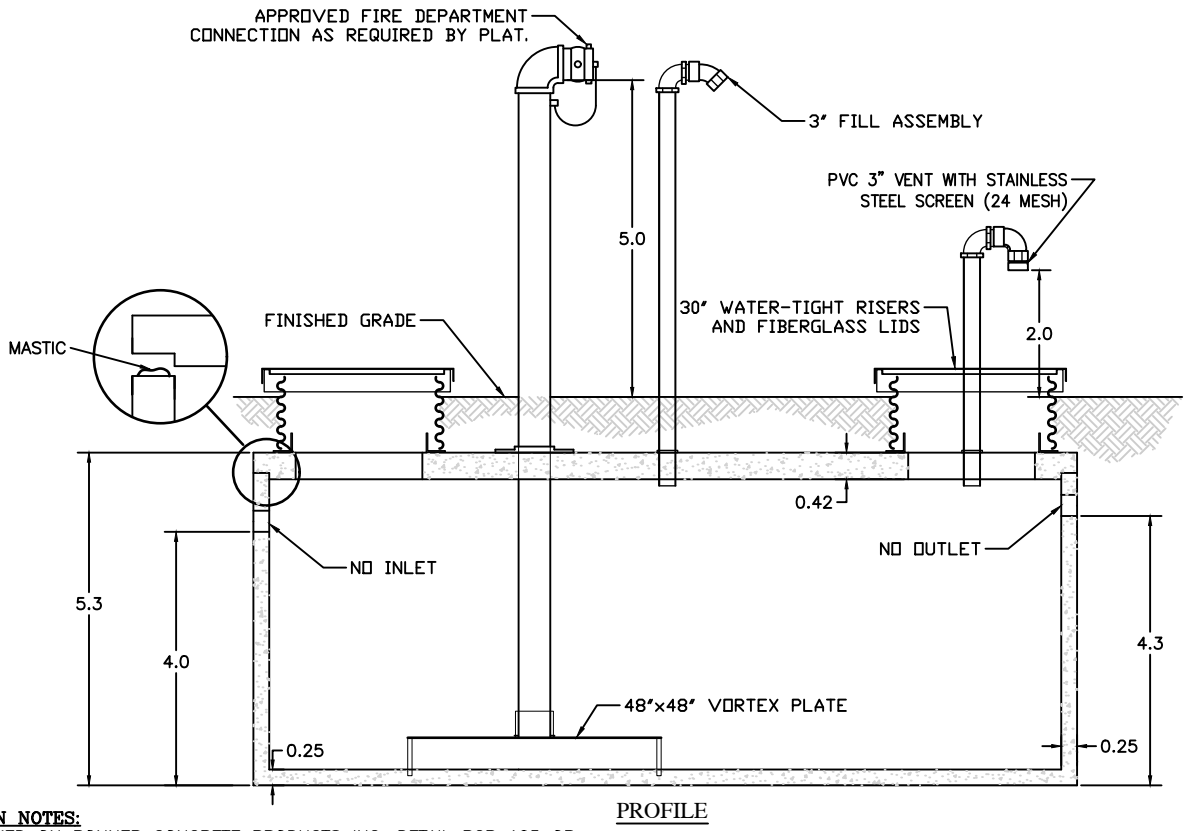
NODE NAME	FLOWRATE gpm	NODE TITLE
T-1	39.00	

NET SYSTEM INFLOW = 39.00
NET SYSTEM OUTFLOW = 0.00
NET SYSTEM DEMAND = 39.00

***** HYDRAULIC ANALYSIS COMPLETED *****



PLAN



PROFILE

CONSTRUCTION NOTES:

1. TANK BASKED ON BONNER CONCRETE PRODUCTS INC. DETAIL BCP 105 OR APPROVED EQUAL.
2. TANK VOLUME: 2,000 GALLONS – WEIGHT: 16,000 LBS.
3. 3" THICK 5,000 PSI @ 28 DAYS TYPE III CONCRETE FLOOR AND WALLS
4. 5" THICK 5,000 PSI @ 28 DAYS TYPE III CONCRETE TOP NOT TRAFFIC RATED
5. MASTIC AS NOTED TO BE BUTYL RUBBER JOINT SEALANT.
6. DAMP-PROOF EXTERIOR OF TANK WITH APPROPRIATE COATING.
7. SET TANK ON 12" OF CRUSHED AGGREGATE TYPE I (2020 ISPWC) COMPACTED TO 95% MAXIMUM DENSITY AS MEASURED BY AASHTO T 99, OR APPROVED EQUAL.
8. BACKFILL AROUND TANK WITH 3"-MINUS DRAIN ROCK, WELL-GRADED CRUSHED AGGREGATE, OR SAND IN 12" LOOSE LIFTS. COMPACT WITH HAND OPERATED VIBRATING PLATE COMPACTOR OR APPROVED EQUAL.
9. TANK EXCAVATION SHALL BE KEPT DEWATERED THROUGHOUT INSTALLATION AND BACKFILL OPERATIONS AND UNTIL TANK IS FILLED WITH FIRE SUPPRESSION WATER.

A/1 **2,000 GAL CISTERN SINGLE COMPARMENT TANK (BCP105)**
N.T.S.

Know what's below. Call before you dig.

7B ENGINEERING
414 CHURCH STREET, SUITE 203
SANDPOINT, IDAHO 83864
(208)263-0623
info@7BEngineering.com

FIRE CISTERN
7B ENGINEERING

DRAWING DATE	DESCRIPTION
1/23/2026	DRAWING DESCRIPTION

PROJECT #: xxxxx
DRAWN BY: DWL
CHECKED BY: DWL

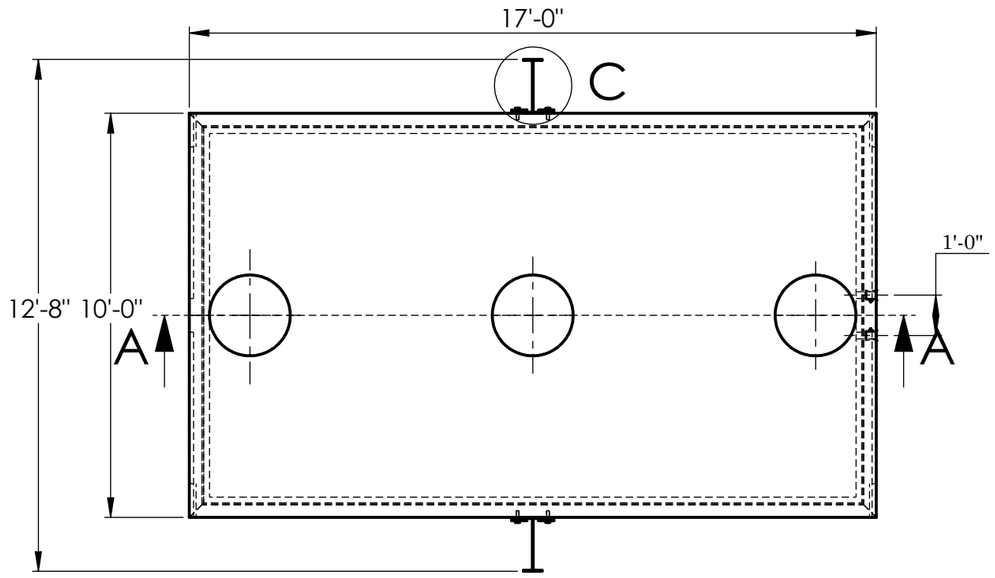
ORIGINAL STORED AT:
7B ENGINEERING
414 CHURCH ST STE 203
SANDPOINT, ID 83864

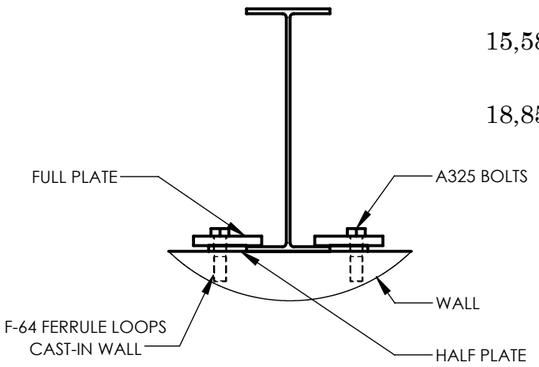
SCALE: NTS
(VALID FOR 8.5"x11" PRINTS ONLY)

Digitally signed by Daniel W. Larson, PE
Location: Sandpoint, ID
Reason: I am approving this document
Contact Info: Dan@7BEngineering.com
Date: 2026.01.23 14:36:30-08'00'

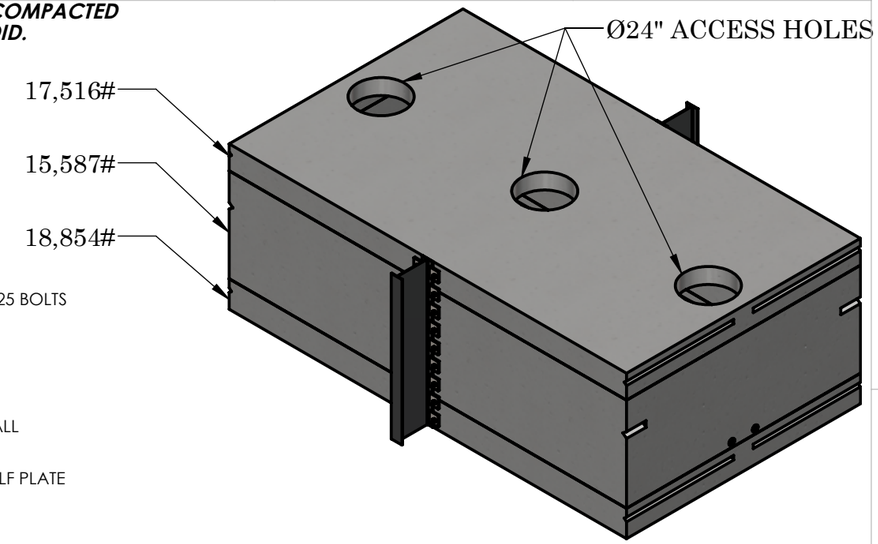
PROFESSIONAL ENGINEER REGISTERED STATE OF IDAHO 10086 DANIEL W. LARSON

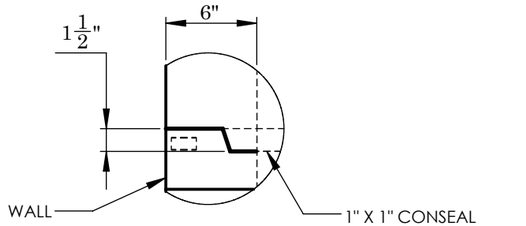
WARRANTY: ALL TANKS MUST BE BACKFILLED AND COMPACTED PRIOR TO FILLING OR WARRANTY IS VOID.





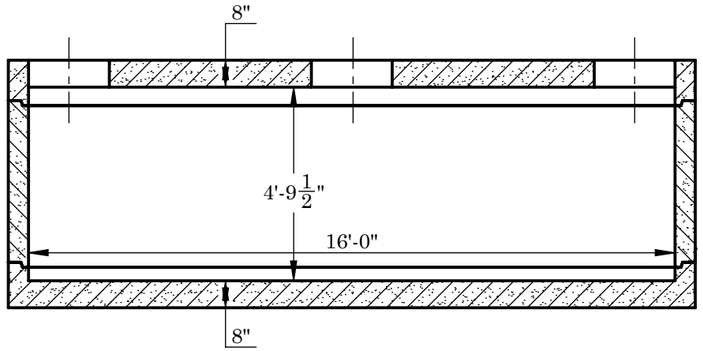
W16x26 STL BEAM
DETAIL C





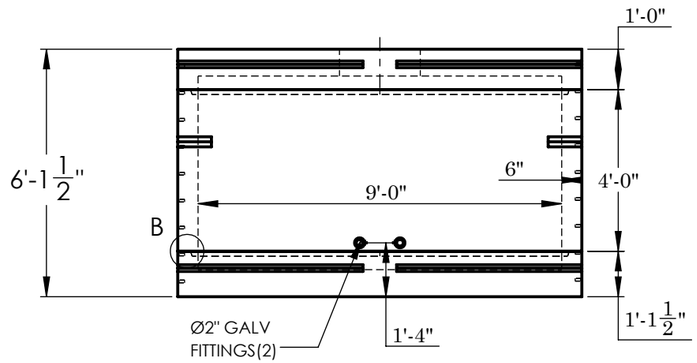
NOTES:
1. 1077 GALLONS/VERTICAL FOOT CAPACITY
2. ON-SITE CRANE SUPPLIED BY CONTRACTOR (20,000# PICK TO CENTER OF EXCAVATION)
3. WIDE FLANGE INSTALLED BY CONTRACTOR.
4. PLATE & BOLT SPACING @ EVERY 8'

CONCRETE:
TANK CONSTRUCTION UTILIZES 6000 PSI CONCRETE AND GRADE 60 REBAR



SECTION A-A

SHIPLAP JOINT DETAIL B



GALLON CALCULATIONS:
9'-0"W x 16'-0"L x 4'-9½"H x 7.48 = 5,116 GAL

NON-TRAFFIC RISERS:
PVC: 24"Ø & FIB. COVER (TO GRADE)
CONCRETE: 24"Ø x 8" OR 12" (6" BELOW GRADE)

TRAFFIC RISERS/COVERS:
24"Ø GRADE RINGS (2",3",4",5",6",13")
4" x 24"Ø CAST-IRON GASKETED BOLT-DOWN

UPLIFT RINGS:
BURY DEPTH WITH WATER AT GRADE ~ 4'
BURY DEPTH WITH WATER AT TOP OF TANK ~ 2'

BEDDING:
4" PEA GRAVEL OR COMPACTED CRUSHED GRAVEL (NO WATER PRESENT)

EXCAVATION:
12" LARGER EACH WAY THAN TANK DIMENSION

BURY:
MAXIMUM BURY DEPTH 5'-0"

NOTES:
REINFORCEMENT:
WALLS:
-#6 @ 6" O.C. HORIZONTAL
-#4 @ 10" O.C. VERTICAL
TOP & BOTTOM
-#6 @ 6" O.C. SHORT DIRECTION
#5 @ 12" O.C. LONG DIRECTION, (2) #5 BAR LONG SIDE OF ACCESS, (2) #6 BAR SHORT SIDE

2215 E. BROOKLYN AVE
SPOKANE, WA 99217
TOLL FREE 1-800-888-4573
(509) 325-4573 FAX (509) 325-5098
SPOKANE - LEWISTON - YAKIMA
www.wilbertprecast.com

DRAWN BY: TH

TITLE: 5000 GALLON SINGLE COMPARTMENT WATER TANK TRAFFIC BEARING

SIZE	DWG. NO.	SCALE:	DATE:
B	916-3W	NTS	7/10/2025