

Valley County Planning and Zoning

PO Box 1350 • 700 South Main Street
Cascade, ID 83611-1350



Phone: 208-382-7115
Email: cherrick@valleycountyid.gov

STAFF REPORT: VAR 25-001 Vaughn Variance from Building Envelope
MEETING DATE: November 13, 2025
TO: Planning and Zoning Commission
STAFF: Cynda Herrick, AICP, CFM
Planning and Zoning Director
**APPLICANT /
PROPERTY OWNER:** Larry Vaughn
1317 W Clarnda St, Meridian ID 83642
LOCATION: 28 Compass Lane
360° Ranch Subdivision Phase 1, Lot 7, Block 2, in the W ½ Section 28,
T.18N, R.3E, Boise Meridian, Valley County, Idaho
SIZE: 3.06-Acre Lot
REQUEST: Variance to Build Outside of Platted Building Envelope
EXISTING LAND USE: Single-Family Residential Lot

360° Ranch Subdivision Phase 1 was platted at Book 13 Page 89 on September 12, 2022, Instrument # 452665. Each lot contains a designated building envelope and maximum building peak elevations.

Note 12 of the plat states the following:

All lots are subject to the Airport Overlay Agreement with the City of McCall, recorded with the Office of Recorder of Valley County, Idaho, as Instrument 452666.

All Buildings are limited to a Maximum Building Peak Elevation. Each lot has an FM Analyzed Site where this Peak Elevation has been calculated and this elevation has been noted within the Site on this Plat, Sheets 2 through 4. Benchmarks are provided, as noted on the Plat, for reference. In addition, all structures are subject to Valley County Building Height Limits.

To construct buildings or structures outside of these sites, the property owner must obtain approval from the 360 Ranch Property Owners Association and work with the FAA as necessary to verify that airport approach requirements can be met.

This subdivision plat is subject to an Airport Overlay Agreement with the City of McCall, Instrument # 455414.

Larry Vaughn is requesting a variance to build outside of the platted building envelope.

The home would be connected to an individual septic system and an individual well.

The 3.06-acre lot is addressed 28 Compass Lane. Access is from Compass Lane, a private road, onto Norwood Road, a public road.

FINDINGS:

1. The application was submitted on September 29, 2025.
2. Legal notice was posted in the *Star News* on October 23, 2025, and October 30, 2025. The applicant was notified by letter on October 14, 2025. Potentially affected agencies were notified on October 14, 2025, including the ITD Division of Aeronautics and City of McCall. Property owners within 300 feet of the property line were notified by fact sheet mailed on October 15, 2025. The notice was posted online at www.co.valley.id.us on October 14, 2025. The site was posted on October 15, 2025.

3. Agency comment received:

Emily Hart, McCall Airport Manager, does not support the request. It is unclear what hardship is created by the envelope. The platted building envelopes were identified in consideration of FAA and ITD Aeronautics efforts to strengthen land use compatibility. (October 15, 2025)

Brent Copes, Central District Health, agrees with the plat requirements stating "To construct buildings or structures outside of the site, the property owner must obtain approval from the 360 Ranch property association and work with the FAA as necessary to verify that airport approach requirements can be met." (October 27, 2025)

Kendra Conder, Idaho Transportation Department, had no comments. (October 15, 2025)

Idaho Department of Environmental Quality (DEQ) provided general comments on air quality, wastewater, drinking water, surface water, solid waste, hazardous waste, water quality, ground water contamination, and best management practices. (October 20, 2025)

4. Public comment received: *none*

5. Valley County Code:

9-5H-10: VARIANCES:

A. Conditions: Pursuant to Idaho Code section 67-6516, the commission shall be empowered to grant variances relaxing or modifying the requirements of this title with respect to lot size, setbacks, parking space, height of buildings, or other provisions of this title affecting the size or shape of a structure upon lots, and other land use requirements of this title. In the case of a PUD involving variations from the requirements of this title, it shall not be necessary for the applicant to file a separate application for such variances. Variances may also be heard simultaneously with conditional use permit applications.

B. Application:

1. A variance may be granted to an applicant only upon a showing of undue hardship as a result of characteristics of the site.
2. A written application for a variance shall be submitted to the administrator or staff containing:
 - a. Description of the nature of the variance requested.
 - b. A narrative statement and graphic material demonstrating:

- (1) That special conditions and circumstances exist which are not a result from any action of the applicant, which are peculiar to the land use or structure involved, and which are not applicable to other similar or adjacent lands, uses, or structures.
 - (2) That granting the variance requested will not result in any special privilege otherwise denied to other similar or adjacent lands, uses, and structures.
 - c. A site plan showing the location of the variance and the special characteristics of the site.
 - d. A list of adjoining property owners within three hundred feet (300') of the site.
 - e. The fee set by resolution of the board shall accompany the application for a variance.
- C. Procedure: An application for a variance shall be reviewed by the administrator or staff and the commission in accordance with section 9-5H-11 of this article. The administrator shall post notice of the public hearing to the applicant, adjoining property owners, on site, and the public in accordance with subsection 9-5H-6B of this article.
- D. Granting Of Variance:
1. A variance may be granted if the commission makes specific findings of fact based directly on the particular evidence in the application which supports the conclusion that the above conditions have been met by the applicant.
 2. Within ten (10) days after a decision has been rendered, the administrator or staff shall provide the applicant with written notice of the action by regular mail if so requested by the applicant.
 3. The commission's decision shall be a recommendation to the board.
 4. The clerk, upon receipt of a recommendation from the commission, shall set the item on the agenda of the board at the earliest possible regular meeting of the board.
 5. The board shall consider and act upon the commission's recommendations by following the procedures outlined in section 9-5H-11 of this article. However, if the commission's recommendation is unanimous and there is no opposition to approval of the variance, then the board need not hold a public hearing, but may make a decision as a regular agenda item. Only the applicant must be notified as to the time on the agenda of the public meeting.
 6. A permit for the variance may be issued by the administrator or staff only after approval by the board.
 7. The variance approval is valid for five (5) years, unless a more specific date is specified.

9-4 PERMITTED USES

9-4-3-2: SETBACKS:

- A. Buildings Exceeding Three Feet In Height: The setbacks for all buildings exceeding three feet (3') in height shall be in accordance with section 9-4-8, table 4-A of this chapter.
- B. Setback From Highway 55: All buildings shall be set back one hundred feet (100') from the right of way line of Highway 55 unless a more restrictive setback is required within other sections of this title.
- C. High Water Lines And Ditches: All residential buildings shall be set back at least thirty feet (30') from high water lines and ditches. All other buildings shall be set back at least one hundred feet (100') from high water lines and ditches.
- D. Front Yard: Front yard shall be determined by the structure establishing the principal use on the property and the access street or road.
- E. Encroachment By Other Structures: No other structures may encroach on the yards determined for the structure establishing the principal use.
- F. Measurement: Setbacks shall be measured horizontally, perpendicular to the property line, to the nearest corner or projections or overhang.

- G. Adjustment Of Front Or Rear Yard Setbacks: The minimum front or rear yard setbacks may be adjusted to allow a proposed principal use building to conform with the average setback of existing similar buildings on adjoining properties within the same block; however, no setback may be less than seven and one-half feet (7.5').
- H. Lots Having Common Boundary Line With BLM Property Surrounding Cascade Reservoir: Minimum rear yard setbacks for those lots having a common boundary line with bureau of reclamation property surrounding Cascade Reservoir are seven and one-half feet (7.5'), but may not be less than that provided for in subsection C of this section.
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STAFF COMMENTS / QUESTIONS:

1. A site plan showing the proposed location of the structures and the difference to the building envelope should be submitted. The site plan you submitted is not precise and does not have the dimensions of the lot.
2. This site is within the McCall Fire District, Water District 65, Lake Irrigation District, and within a herd district.
3. Building Envelopes for each lot are noted on the plat as well as mentioned in Plat Note 12. In addition, the applicant's engineer testified that building envelopes would be included during testimony presented for C.U.P. 21-15 360° Ranch Subdivision.
4. The Planning and Zoning Commission needs to determine if the future development of the neighborhood would be inhibited by the variance.
5. Approval of building permit(s) would require approval from the 360° Ranch Property Owners Association and FAA Form 7460.1
6. The Planning and Zoning Commission decision would be a recommendation to the Board of County Commissioners.

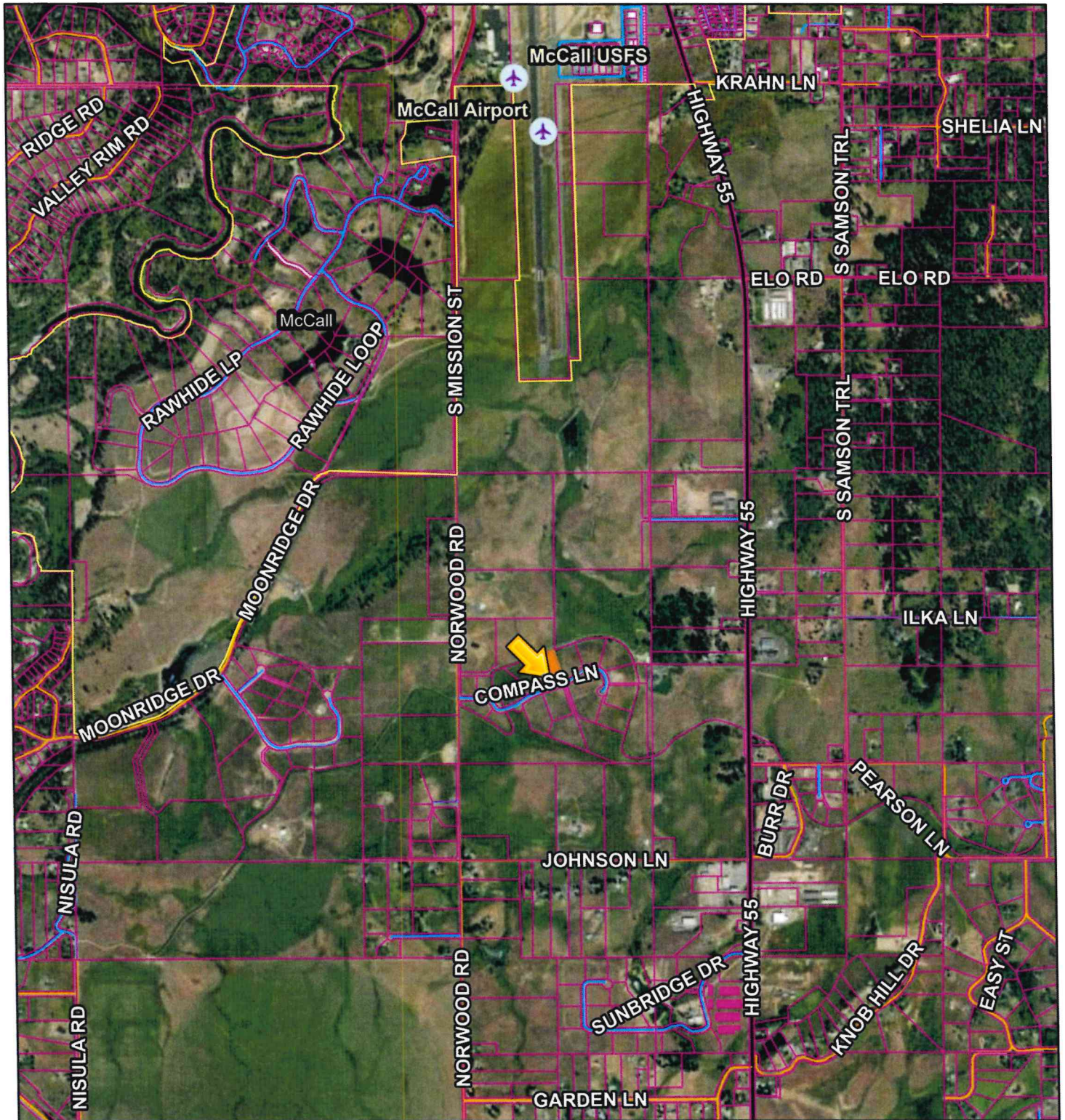
Condition of Approval: Obtain a FAA Form 7460-1.

ATTACHMENTS:

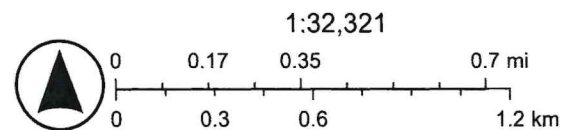
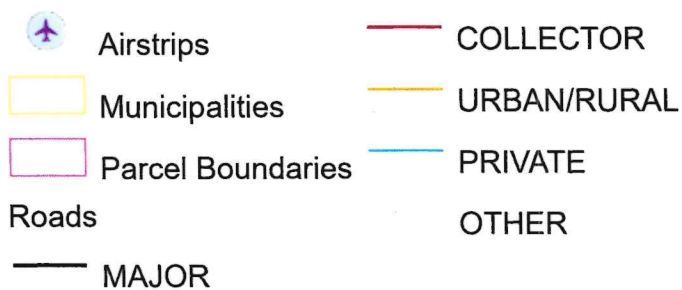
- Location Map
- Aerial Map
- Google Maps – Aerial View – 2025
- Google Maps – Street View - 2024
- Assessor Plat – T.18N R.3E Section 28
- 360° Ranch Subdivision Phase 1– Recorded as Instrument # 452665
- Photos Taken October 15, 2025
- Site Plan
- Responses
- Lake Irrigation District Flyer
- Septic Handout

END OF STAFF REPORT

VAR 25-001 Location



10/7/2025, 2:57:58 PM



Maxar

VAR 25-001 Aerial



10/7/2025, 2:55:33 PM

Permits

◆ CUP

◆ EXC

■ Address Points

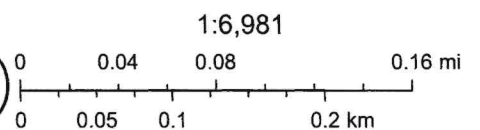


Parcel Boundaries

Roads

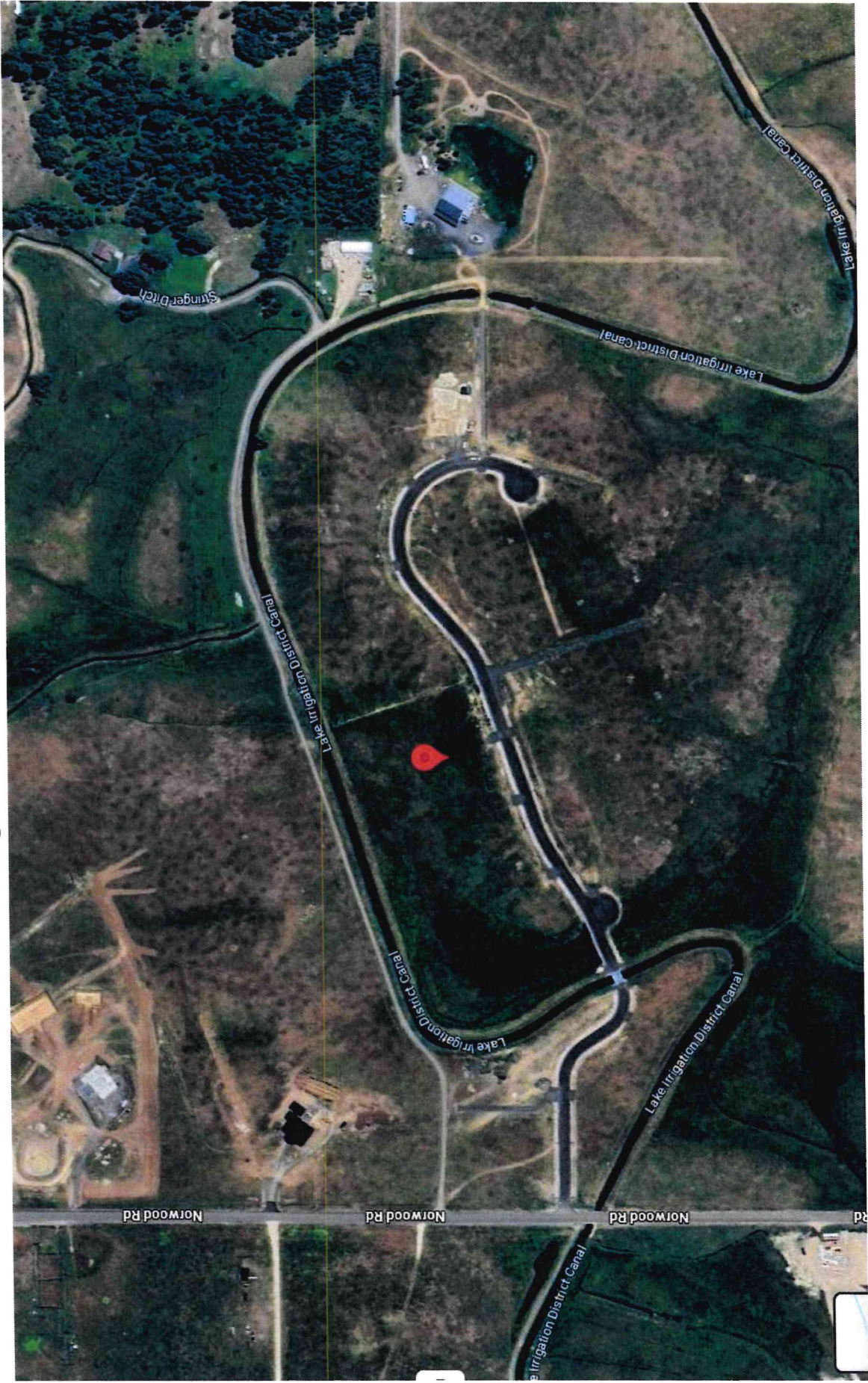
— URBAN/RURAL

— PRIVATE

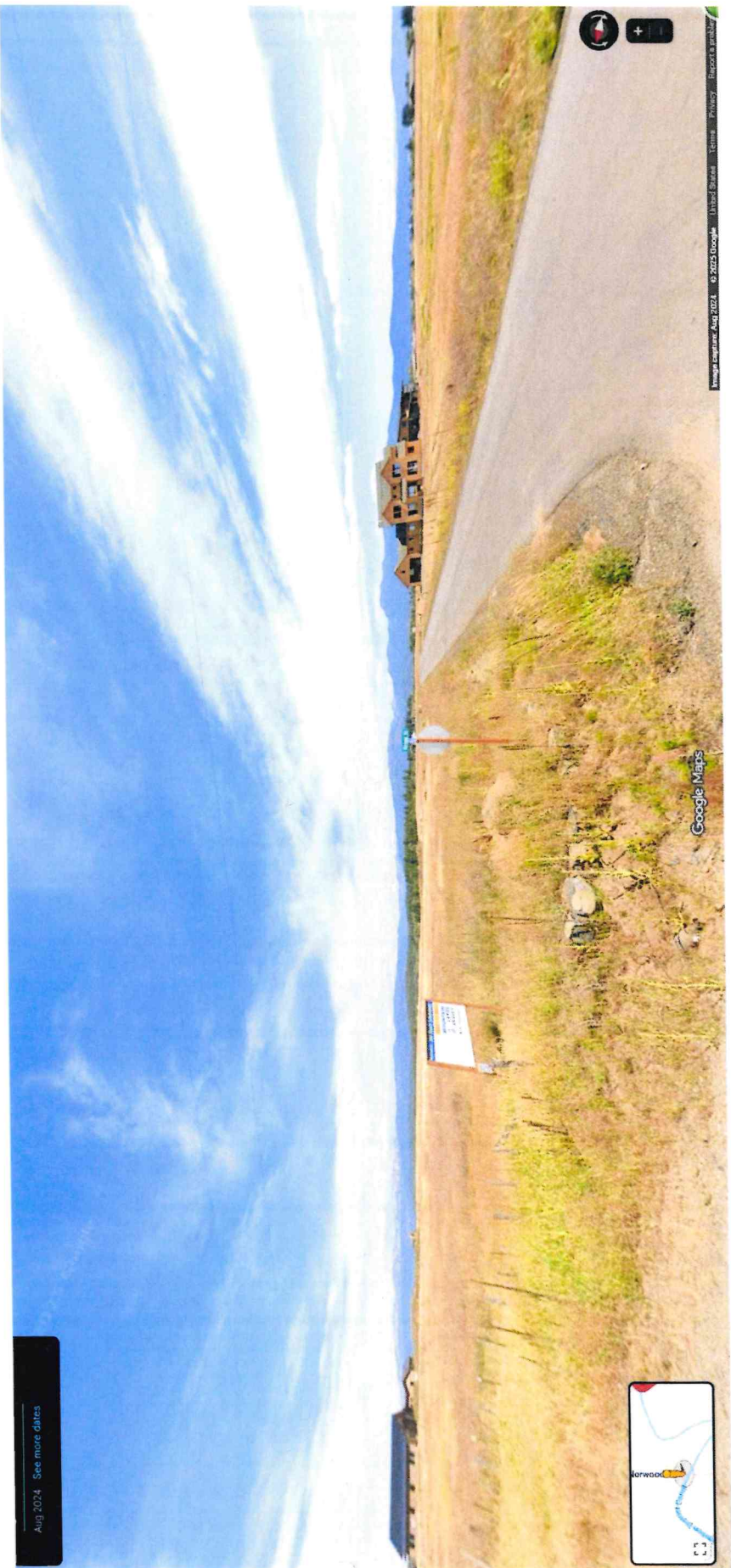


Maxar

Google Maps – Aerial View - 2025



Norwood Road x Compass Lane, Looking Easterly (Source Google Maps – Street View, August 2024)

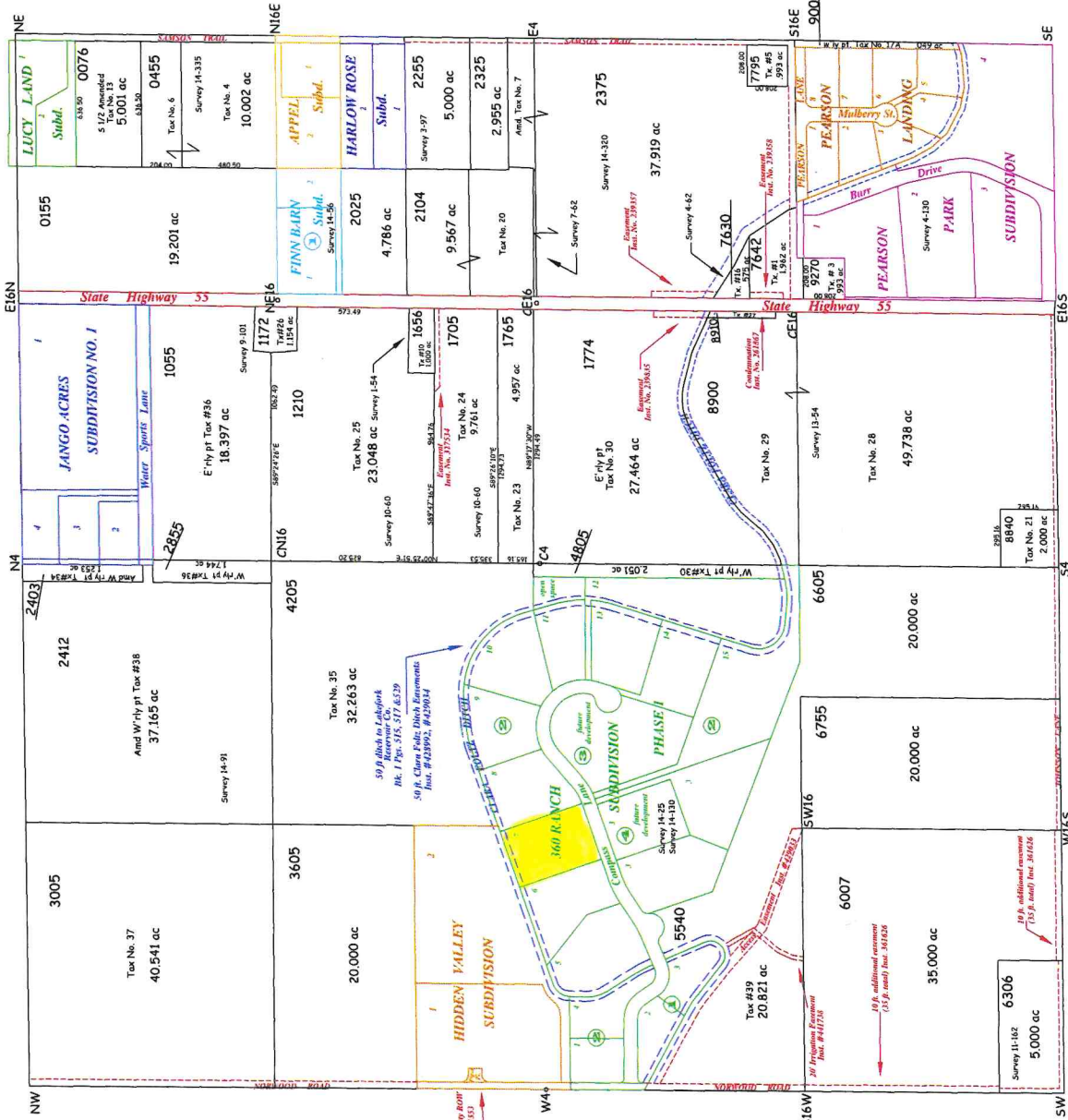


PLAT TITLE

T W P . 1 8 N R O 3 E S E C . 2 8

VALLEY COUNTY
Cartography Dept.
Assessor's Office
Cascade, ID 83611

Filename:
Valley County Base Map
Scale: 1" = 400 ft.
Date: 10/31/2024
Drawn by: L. Frederick



This drawing is to be used for Reference Purposes ONLY. This County is NOT Responsible for Any Inaccuracies Considered Herein.

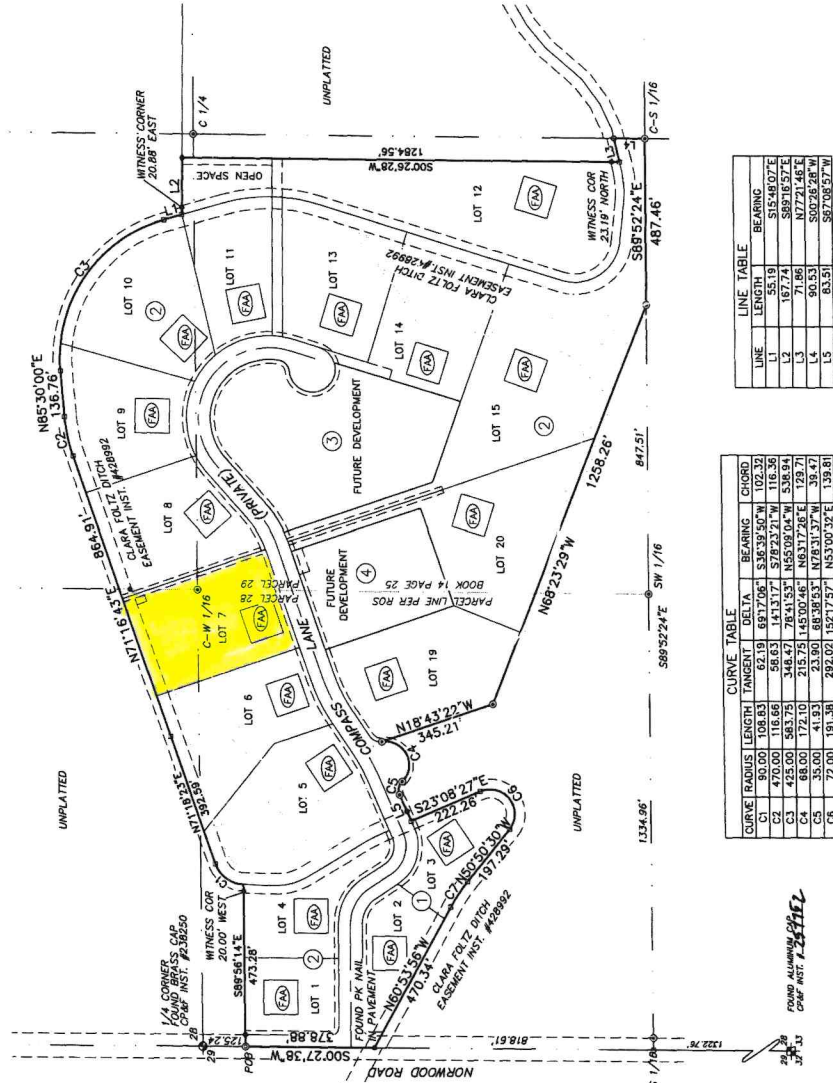
360 RANCH SUBDIVISION PHASE 1

Located in
W 1/2 Section 28, T.18N., R.3E., B.M.
Valley County, Idaho

Instrument # 452665
FILED FOR RECORD
9-11-2022
11:16:18 PM
RECORDED
BY: JILL B. B.
EX-Officer Recorder Deputy
FEE: \$15.00
DATE OF FILE

NOTES:

- All Lots shall be subject to the Declaration of Covenants, Conditions, Restrictions and Easements for the 360 Ranch Subdivision, as recorded with the Office of Recorder of Valley County, Idaho, Instrument Number **452667**.
- Compass Lane and its right of way as depicted on this Plat is private, and, after completion, it will be owned and maintained in a good and workmanlike manner by the 360 Ranch Property Owners Association, Inc. as Maintenance Property # **452668**.
- All lots shall be accessed from Compass Lane.
- GFL Holdings LLC will ensure that power and fiber optic services will be timely installed to a location within each Lot's utility easement running immediately adjacent to Compass Lane.
- No additional domestic water supply shall be installed beyond the water system approved in the Sanitary Records.
- There shall be no further subdivision of any Lot shown on this Plat without the approval of the Health Authority.
- All Utility and Irrigation easements shown on this plat are dedicated to Public Utilities. **452669**
- Flood zones shown on this plat are per FEMA FIRN panel #16085C 1001 Effective February 1, 2019.
- Flood Zone: Zone X N/A
- Base Flood Elevation: 5237.27' N/A
- Subdivision is subject to change by FEMA and all land within a floodway or floodplain is regulated by Title 9 and Title 11 of the Valley County Code.
- The Valley County Board of Commissioners have the sole discretion to set the level of service for any public road; the level of service can be changed.
- Many lot corners depicted on this plat fall within Clara Folz Ditch. Witness Corners are set on the lot lines at the intersection of the ditch easement.
- 360 Ranch Subdivision is subject to a Declaration of Water Delivery Easement, on file at the Office of Recorder of Valley County, Instrument Number 429034.
- All lots are subject to the Airport Overlay Agreement with the City of McCall, recorded with the Office of Recorder of Valley County, Idaho, Instrument Number **452666**.
- All Buildings are limited to a Maximum Building Peak Elevation. Each lot has an FAA Analyzed Site where this Peak Elevation has been calculated and this elevation has been noted within the Plat on this Plat, Sheets 2 through 4. Benchmarks are provided on the Plat for use in determining the true level of the building. The maximum building height is limited to 20 feet above the peak elevation. The maximum building height is limited to 20 feet above the peak elevation. The maximum building height is limited to 20 feet above the peak elevation.
- To erect buildings or structures outside of these limits, the property owner must obtain approval from the 360 Ranch Property Owners Association and work with the FAA as necessary to verify that airport approach requirements can be met.



CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C1	50.00	108.68	99.78°
C2	50.00	108.68	99.78°
C3	425.00	583.75	348.47°
C4	68.00	172.10	215.75°
C5	35.00	41.93	23.50°
C6	72.00	191.36	292.02°
C7	520.00	91.28	45.76°

LINE TABLE			
LINE	LENGTH	BEARING	POINT
L1	55.19	S15°48'07\"	E
L2	167.74	S89°18'52\"	E
L3	71.86	N72°14'46\"	E
L4	90.53	S02°28'28\"	W
L5	83.51	S87°08'57\"	W

SURVEY NARRATIVE

- This plat is filed to create 17 lots from a portion of Parcel 28 and 29. The boundary of the parent parcel was derived from record documents along with found monuments as shown on this plat.
- Record Documents:
 - Record of Survey Book 14, Page 139, Instrument Number 441746
 - Record of Survey Book 14, Page 25, Instrument Number 429031
 - Record of Survey Book 13, Page 54, Instrument Number 402217
 - Record of Survey Book 11, Page 162, Instrument Number 365581
 - Deeds, Instrument Number 433901, 433902
- The Vertical Control provided in this plat is to establish building height limits. The property corners and part of the Plat as shown on Sheets 2 through 4. The elevation of the monument is 5237.27 feet above mean sea level. The elevation of the monument is 5237.27 feet above mean sea level. The elevation of the monument is 5237.27 feet above mean sea level.

HEALTH CERTIFICATE

SANITARY RESTRICTIONS AS REQUIRED BY DAND CODE TITLE 50, CHAPTER 13, SECTION 50-1206, RESTRICTIONS MAY BE REMOVED, IN ACCORDANCE WITH DAND CODE TITLE 50, CHAPTER 13, SECTION 50-1206, BY THE ISSUANCE OF A CERTIFICATE OF DISAPPROVAL.

9/30/22
#452664
DISTRICT HEALTH DEPARTMENT, DSH

MONUMENT CERTIFICATE

THIS IS TO CERTIFY THAT THIS PLAT IS BEING RECORDED UNDER THE MONUMENT CERTIFICATE ACT, CHAPTER 13, SECTION 13-1206, THAT ALL INTERIOR MONUMENTS WILL BE SET WITHIN ONE YEAR FROM THE RECORDING DATE OF THIS PLAT.



LEGEND

- SUBDIVISION BOUNDARY
- FOUND 5/8\"
- FOUND 1/2\"
- SET 5/8\"
- SET 1/2\"
- FOUND BRASS CAP MONUMENT
- FOUND ALUMINUM CAP MONUMENT
- ANGLE POINT - NOTHING SET
- EASEMENT LINE
- WETLANDS - NO BUILD AREA
- BLOCK NUMBER
- FAA ANALYZED SITE

SCALE: 1\"

SECCESH ENGINEERING, INC.
McCall, Idaho

360 RANCH SUBDIVISION PHASE 1

Located in
W 1/2 Section 28, T.18N., R.3E., B.M.
Valley County, Idaho

Instrument # 452665
VALLEY COUNTY, CASCADE, IDAHO
Recorded for: 12:18 PM No. of Pages: 8
Surveyor: J. WILKINSON
Recorder: Deputy
Date: 11/11/11

CURVE	RADIUS	LENGTH	TANGENT	DELTA	BEARING	CHORD
C1	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C2	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C3	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C4	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C5	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C6	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C7	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C8	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C9	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C10	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C11	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C12	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C13	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C14	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C15	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C16	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C17	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C18	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C19	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C20	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C21	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C22	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39
C23	90.00	108.83	62.19	69.17	00° 36' 35.50" W	102.39

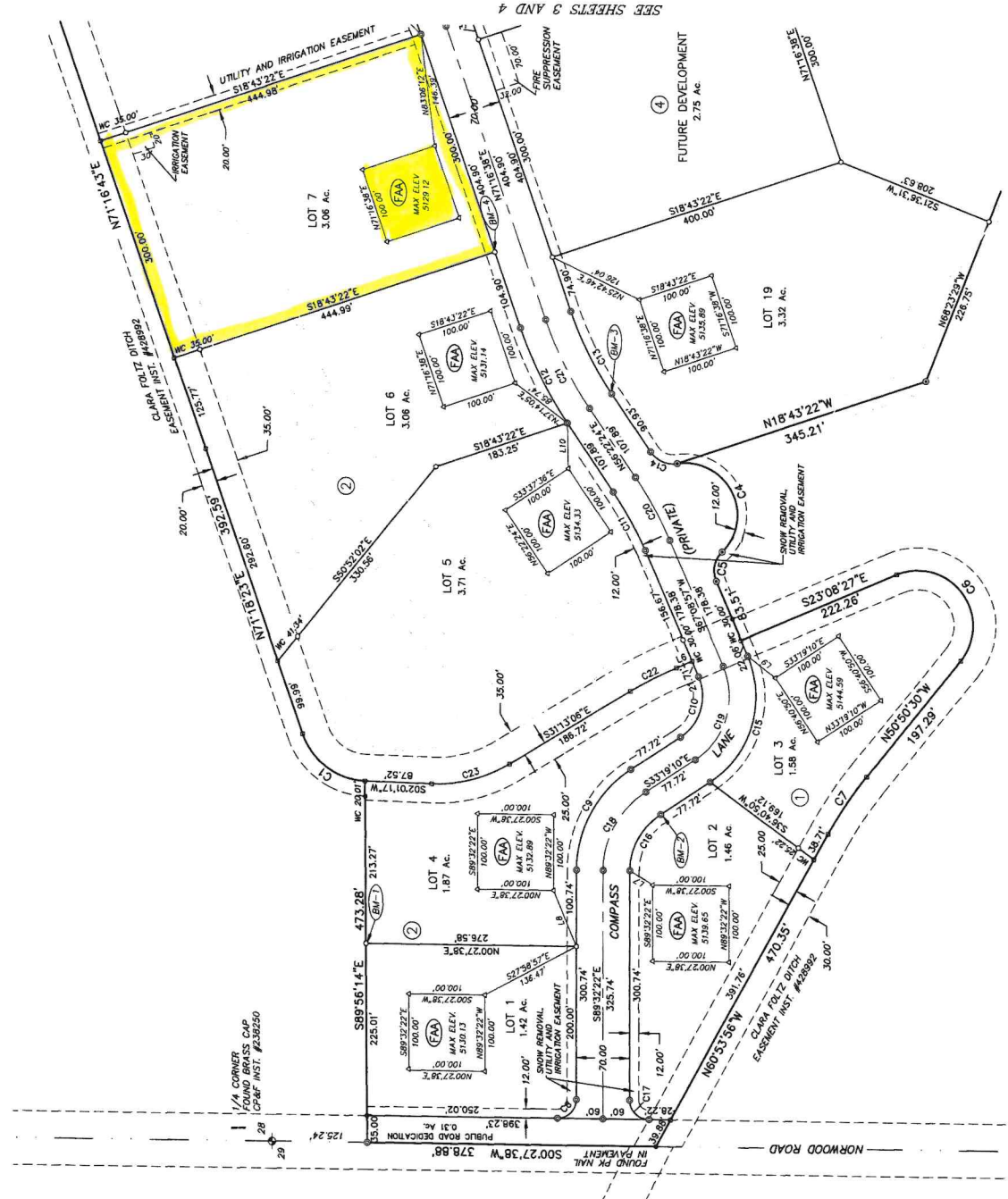
LINE	LENGTH	BEARING
L1	22.02	S21°08'27"E
L2	45.39	N49°05'34"E
L3	78.11	N68°10'30"E
L4	45.86	N37°41'18"E
L5	59.07	S88°53'12"W

BENCHMARK	ELEVATION
BM-1	5078.05
BM-2	5078.05
BM-3	5072.14
BM-4	5077.40

SCALE: 1"=100'
BEARINGS BASED ON GPS DERIVED
STATE PLANE GRID, IDAHO WEST ZONE
VERTICAL DATUM NAD83

LEGEND

- SUBDIVISION BOUNDARY
- FOUND 5/8" IRON PIN
- FOUND 1/2" IRON PIN
- SET 5/8" X 30" REBAR MKD LS 8577
- SET 1/2" X 24" REBAR MKD LS 8577
- SET 3/8" X 24" REBAR MKD LS 8577
- FOUND BRASS CAP MONUMENT
- FOUND ALUMINUM CAP MONUMENT
- ANGLE POINT - NOTHING SET
- EASEMENT LINE
- WETLANDS - NO BUILD AREA
- BENCHMARK
- BLOCK NUMBER
- FMA ANALYZED SITE

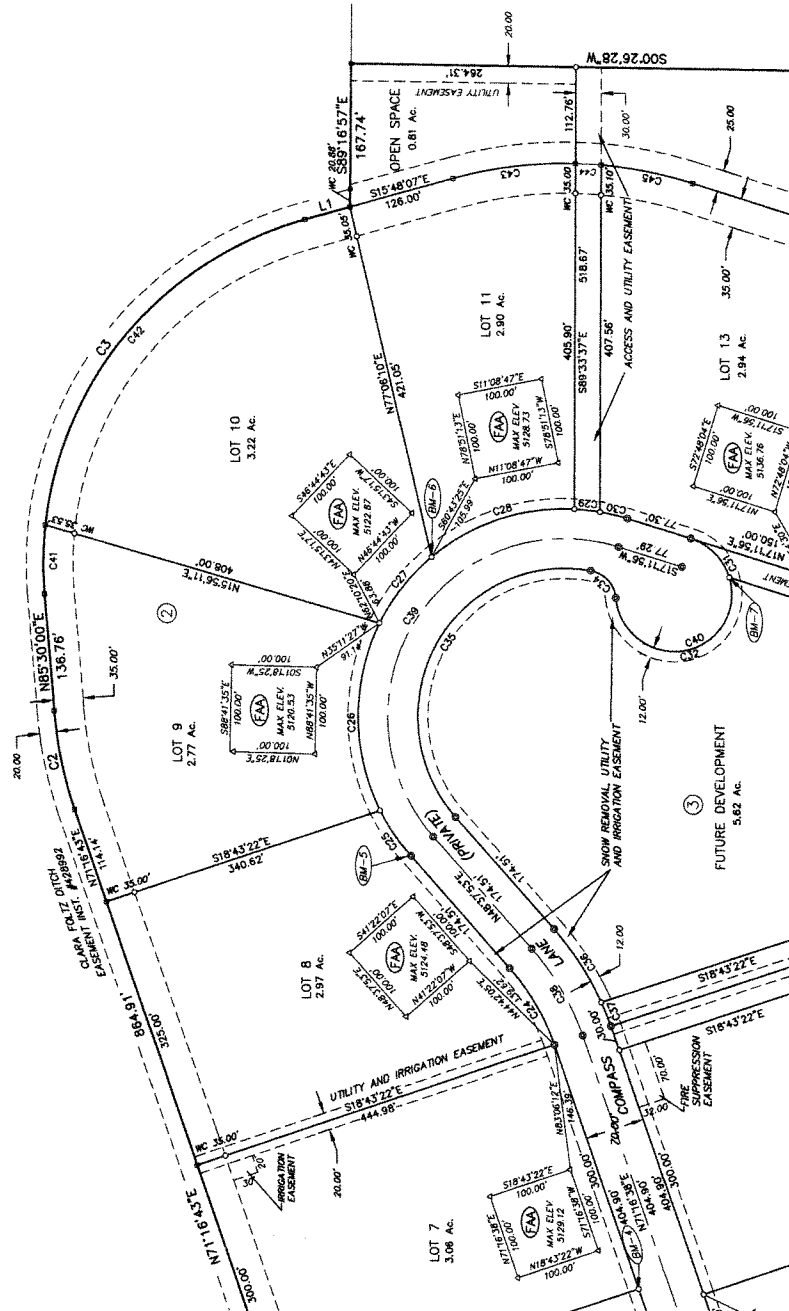


SECESH ENGINEERING, INC.
McCall, Idaho

360 RANCH SUBDIVISION PHASE 1

Located in
W 1/2 Section 28, T.18N., R.3E., B.M.
Valley County, Idaho

Instrument # 452665
VALLEY COUNTY, IDAHO
9-19-2022
12:18:18 PM No. of Pages: 6
Surveyed by:
DANIEL A. MILLER
Ex-Officio Recorder Deputy
Made in Full



SCALE: 1"=100'
BEARINGS BASED ON GPS DERIVED
STATE PLANE GRID, IDAHO WEST ZONE
VERTICAL DATUM NAD83

LEGEND

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- FAA ANALYZED SITE



SECTESH ENGINEERING, INC.
McCall, Idaho

LINE TABLE		
LINE	LENGTH	BEARING
L1	55.19	S15°48'07"E

BENCHMARKS	
BM	ELEVATION
BM-4	5077.40
BM-5	5066.75
BM-6	5068.35
BM-7	5067.25

CURVE TABLE (Continued)				
CURVE	RADIUS	LENGTH	TANGENT	CHORD
C34	375.00	46.28	27.23	75.95
C35	150.00	43.76	494.64	141.07
C36	335.00	102.37	51.35	173.93
C37	330.00	115.57	60.07	223.85
C38	210.00	244.53	746.29	148.34
C39	68.00	284.60	100.39	248.13
C40	425.00	80.97	40.61	103.45
C41	425.00	80.97	285.49	674.54
C42	495.00	146.03	71.55	153.58
C43	495.00	146.03	13.01	326.34
C44	495.00	146.03	13.01	326.34

CURVE TABLE				
CURVE	RADIUS	LENGTH	TANGENT	CHORD
C2	470.00	116.86	58.63	143.17
C3	425.00	93.75	784.17	535.09
C24	265.00	104.74	51.06	222.85
C25	245.00	64.32	32.34	150.22
C26	245.00	100.01	40.71	233.13
C27	245.00	182.14	95.51	432.55
C28	245.00	30.16	15.10	73.12
C29	245.00	32.86	16.45	74.01
C30	68.00	66.49	36.17	95.01
C31	68.00	228.11	45.31	192.11
C32	68.00	228.11	45.31	192.11
C33	68.00	87.59	21.03	73.96

SEE SHEET 4

360 RANCH SUBDIVISION PHASE 1

Located in
W 1/2 Section 28, T.18N., R.3E., B.M.
Valley County, Idaho

Instrument # 452665
VALLEY COUNTY, IDAHO
9-12-2023 12:16:18 PM No. of Pages: 5
DOUGLAS A. MILLER
E-Official Recorder Deputy
Date of Filing

CURVE	RADIUS	LENGTH	TANGENT	DELTA	BEARING	CHORD
C28	245.00	30.16	15.10	7.0312°	N05°58'20"E	30.14
C29	245.00	32.86	16.45	7°41'01"	N13°21'28"E	32.83
C30	68.00	66.49	36.17	56°01'24"	N45°12'49"E	65.87
C31	68.00	278.11	69.31	182°11'56"	S10°40'32"E	125.48
C32	68.00	278.11	69.31	182°11'56"	S10°40'32"E	125.48
C33	335.00	30.04	15.03	7°03'01"	N84°42'30"E	30.03
C34	68.00	284.60	100.39	248°13'31"	S48°41'18"E	112.60
C43	495.00	109.07	55.02	32°28'34"	N02°30'19"E	30.03
C45	495.00	109.07	54.76	12°37'28"	N10°31'17"E	108.85
C46	135.00	238.09	163.91	101°02'56"	S33°12'28"E	208.41
C47	300.00	98.37	49.63	18°47'18"	N89°45'25"E	97.93

BENCHMARKS	
BM	ELEVATION
BM-1	5077.40
BM-2	5077.40
BM-3	5073.27
BM-4	5081.30

SCALE: 1"=100'
BEARINGS BASED ON GPS DERIVED
STATE PLANE GRID, IDAHO WEST ZONE
VERTICAL DATUM NAVD83

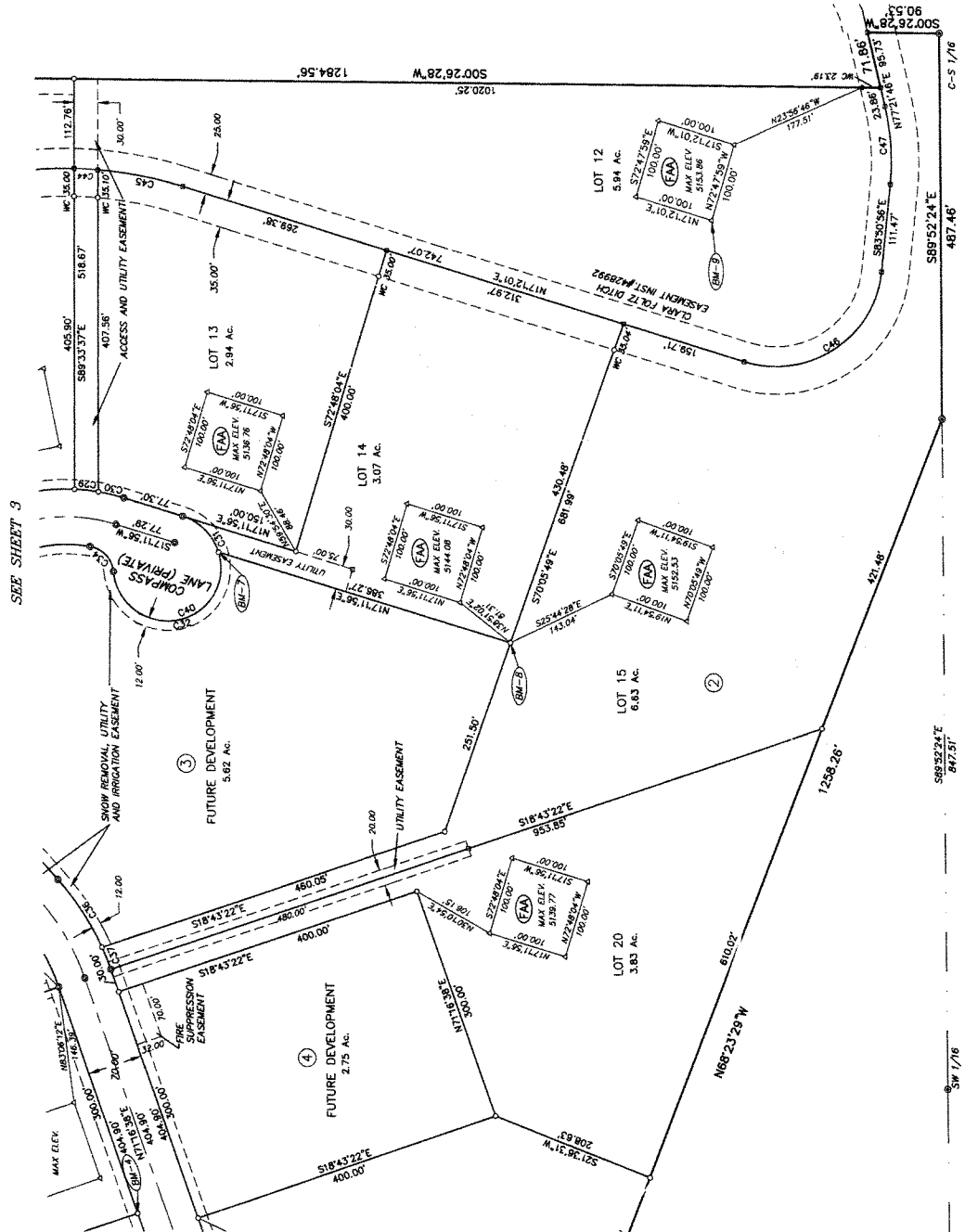
LEGEND

SUBDIVISION BOUNDARY

- FOUND 5/8" IRON PIN
- FOUND 1/2" IRON PIN
- SET 5/8" X 30" REBAR MKD LS 8577
- SET 1/2" X 24" REBAR MKD LS 8577
- SET 3/8" X 24" REBAR MKD LS 8577
- FOUND BRASS CAP MONUMENT
- FOUND ALUMINUM CAP MONUMENT
- ANGLE POINT - NOTHING SET
- EASEMENT LINE
- METLANDS - NO BUILD AREA
- BENCHMARK
- ② BLOCK NUMBER
- FAA ANALYZED SITE



SECESH ENGINEERING, INC.
McCall, Idaho



360 RANCH SUBDIVISION PHASE 1

Located in
W 1/2 Section 28, T.18N., R.3E., B.M.
Valley County, Idaho

CERTIFICATE OF OWNER

A parcel of land, located in Section 28 T.18N., R.3E., B.M., more particularly described as follows:

COMMENCING at the west 1/4 corner of said Section 28 as shown on a Record of Survey filed in Book 14 of Page 23 of Surveys, Records of Valley County, Idaho; thence, along the west line of said Section 28, a distance of 125.24 feet to the POINT OF BEGINNING; thence, departing said section line,

- 1.) S.89°56'14"E., 473.28 feet to a point in Clara Foltz Ditch; thence, along said ditch,
- 2.) along a curve to the right having a radius of 90.00 feet, an arc length of 108.83 feet, through a central angle of 69°17'06", and a chord bearing and distance of N.36°39'50"E., 102.32 feet; thence,
- 3.) N.71°18'23"E., 392.59 feet; thence,
- 4.) N.71°18'43"E., 864.91 feet to the beginning of a tangent curve; thence, along said curve to the right having a radius of 470.00 feet, an arc length of 116.66 feet, through a central angle of 14°31'17", and a chord bearing and distance of N.78°23'21"E., 116.36 feet; thence, tangent from said curve,
- 5.) N.85°30'00"E., 136.76 feet to the beginning of a tangent curve; thence, along said curve to the right having a radius of 425.00 feet, an arc length of 583.75 feet, through a central angle of 78°41'53", and a chord bearing and distance of S.55°09'04"E., 538.94 feet; thence, tangent from said curve,
- 6.) S.15°48'07"E., 55.19 feet; thence, departing said ditch,
- 7.) S.89°16'57"E., 167.74 feet; thence,
- 8.) S.0°26'28"W., 1284.56 feet to a point in said Clara Foltz Ditch; thence, along said ditch,
- 9.) N.77°21'46"E., 71.86 feet to a point on the east line of the NE 1/4 of the SW 1/4 of said Section 28; thence, departing said ditch, along said 1/4 of said Section 28,
- 10.) S.0°26'28"W., 90.53 feet to the C-S 1/16 corner of said Section 28; thence, along the 1/16 line of the NE 1/4 of the SW 1/4 of Section 28,
- 11.) N.88°23'39"W., 189.26 feet; thence, departing said 1/16 line,
- 12.) N.88°23'39"W., 1258.26 feet; thence,
- 13.) N.43°42'22"W., 345.21 feet to the beginning of a non-tangent curve;
- 14.) along said curve to the right having a radius of 68.00 feet, an arc length of 172.10 feet, through a central angle of 145°00'46", and a chord bearing and distance of S.63°17'26"W., 129.71 feet to the beginning of a reverse curve; thence,
- 15.) along said curve to the left having a radius of 35.00 feet, an arc length of 41.93 feet, through a central angle of 68°38'53", and a chord bearing and distance of N.78°31'37"W., 39.47 feet; thence, tangent from said curve,
- 16.) S.67°08'57"W., 83.51 feet to a point in said Clara Foltz Ditch; thence, along said ditch,
- 17.) S.23°08'27"E., 222.26 feet to the beginning of a tangent curve; thence, along said curve to the right having a radius of 72.00 feet, an arc length of 191.38 feet, through a central angle of 152°17'57", and a chord bearing and distance of S.53°00'32"W., 139.81 feet; thence, tangent from said curve,
- 18.) N.50°50'30"W., 197.29 feet to the beginning of a tangent curve; thence, along said curve to the left having a radius of 520.00 feet, an arc length of 91.28 feet, through a central angle of 10°03'26", and a chord bearing and distance of N.55°52'13"W., 91.16 feet; thence, tangent from said curve,
- 19.) N.60°53'56"W., 470.34 feet to a point on the west line of said Section 28; thence, along said section line,
- 20.) N.07°27'58"E., 378.88 feet to the POINT OF BEGINNING.

CONTAINING 66.88 Acres, more or less.

That it is the intention of the undersigned to and they do hereby include said land in this Plat.
Irrigation water have been provided from Lake Irrigation District in compliance with Idaho Code 31-3805(b). Lots within the subdivision will be entitled to irrigation water rights as stated in the 360 Ranch as recorded. Conditions, Restrictions and Easements for the 360 Ranch as recorded with the Office of the County Clerk, Valley County, Idaho. Owners will be obligated for assessments from Lake Irrigation District.

GFL HOLDINGS, LLC

By: AARON CHAMBLET, MEMBER

APPROVAL OF

THE BOARD OF VALLEY COUNTY COMMISSIONERS

ACCEPTED AND APPROVED THIS 9 DAY OF SEPTEMBER, 2022, BY THE BOARD OF COUNTY COMMISSIONERS OF VALLEY COUNTY, IDAHO.

Cheryl A. Schubert
CHAIRMAN

CERTIFICATE OF COUNTY SURVEYOR

I, GEORGE BOWERS, REGISTERED PROFESSIONAL LAND SURVEYOR FOR VALLEY COUNTY, IDAHO, DO HEREBY CERTIFY THAT I HAVE CHECKED THIS PLAT AND THAT IT COMPLIES WITH THE STATE OF IDAHO CODE RELATING TO PLATS AND SURVEYS.



George Bowers
VALLEY COUNTY SURVEYOR

APPROVAL OF

THE VALLEY COUNTY PLANNING AND ZONING COMMISSION

ACCEPTED AND APPROVED THIS 11th DAY OF August, 2022, BY THE VALLEY COUNTY PLANNING AND ZONING COMMISSION.

John A. Nelson
CHAIRMAN

CERTIFICATE OF SURVEYOR

I, RALPH MILLER, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR IN THE STATE OF IDAHO, AND THAT THIS PLAT AS DESCRIBED IN THE "CERTIFICATE OF OWNERS" WAS DRAWN FROM THE FIELD NOTES OF A SURVEY MADE ON THE GROUND UNDER MY DIRECT SUPERVISION AND ACCURATELY REPRESENTS THE POINTS, PLATTED HEREON, AND IS IN CONFORMITY WITH THE STATE OF IDAHO CODE RELATING TO PLATS AND SURVEYS.



RALPH MILLER
IDAHO NO. 8577

ACKNOWLEDGMENT

STATE OF IDAHO,)
(ss.
County of Valley,)

On this 9th day of September 2022, before me, *John A. Nelson*, Notary Public in and for said State, personally appeared AARON CHAMBLET, known to me to be the Member of GFL HOLDINGS LLC, the person who executed the instrument on behalf of said limited liability company, and acknowledged to me that such limited liability company executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

John A. Nelson
NOTARY PUBLIC FOR IDAHO
My Commission Expires: 4-11-2023



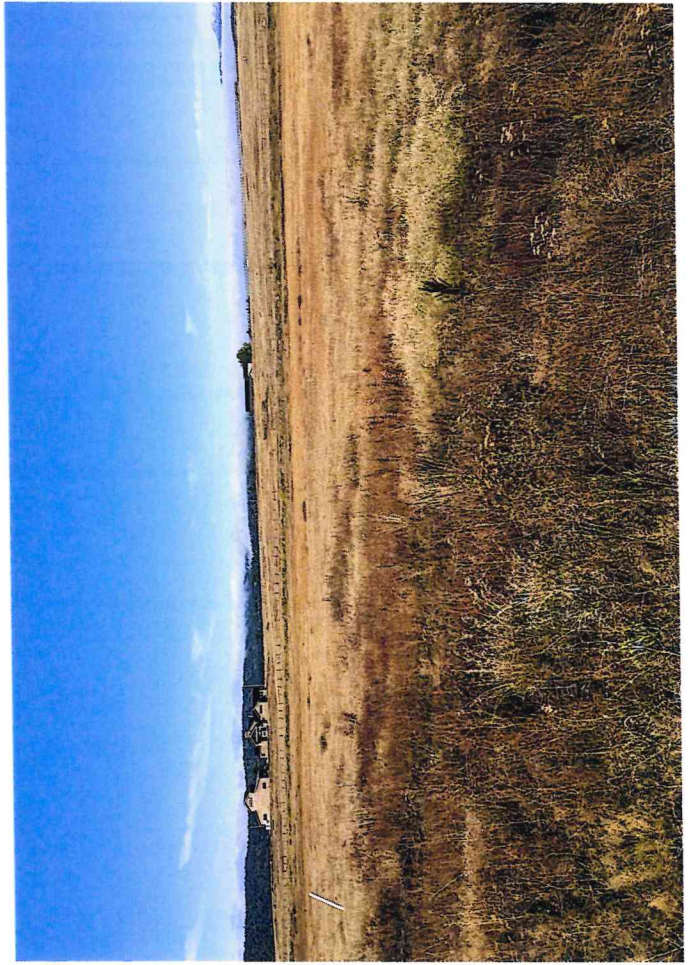
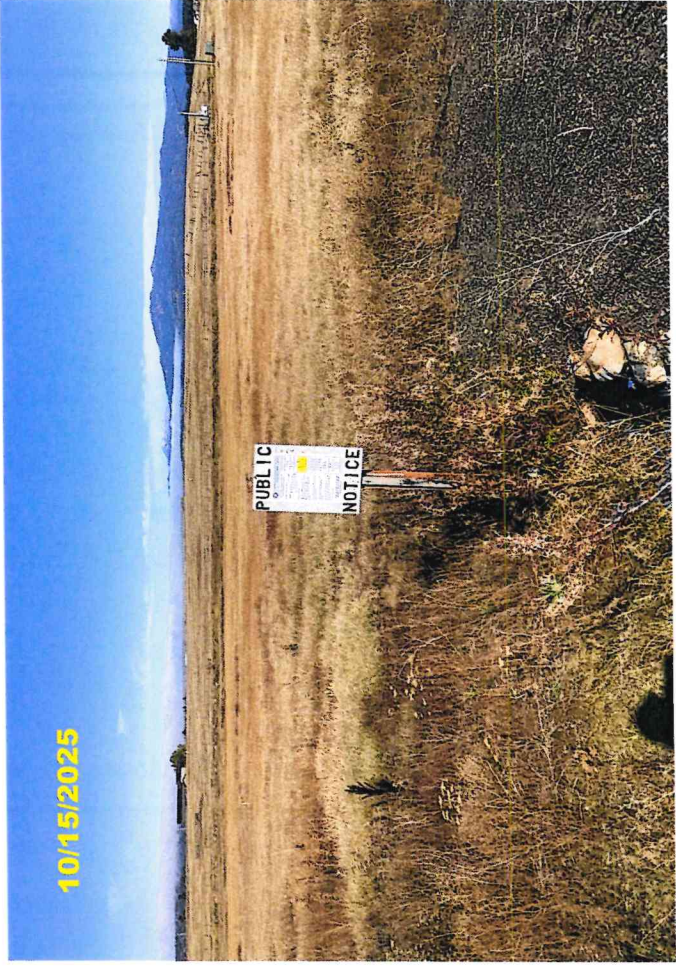
CERTIFICATE OF COUNTY TREASURER

I, THE UNDERSIGNED, COUNTY TREASURER IN AND FOR THE COUNTY OF VALLEY, STATE OF IDAHO, PER THE REQUIREMENTS OF I.C. 50-1308, DO HEREBY CERTIFY THAT ANY AND ALL CURRENT AND/OR DELINQUENT COUNTY PROPERTY TAXES FOR THE PROPERTY INCLUDED IN THIS SUBDIVISION HAVE BEEN PAID IN FULL. THIS CERTIFICATION IS VALID FOR THE NEXT THIRTY (30) DAYS ONLY.

DATE 9/7/22
RP18NDJC284175
RP18NDJC284280

John A. Nelson
COUNTY TREASURER

SECESE ENGINEERING, INC.
McCall, Idaho





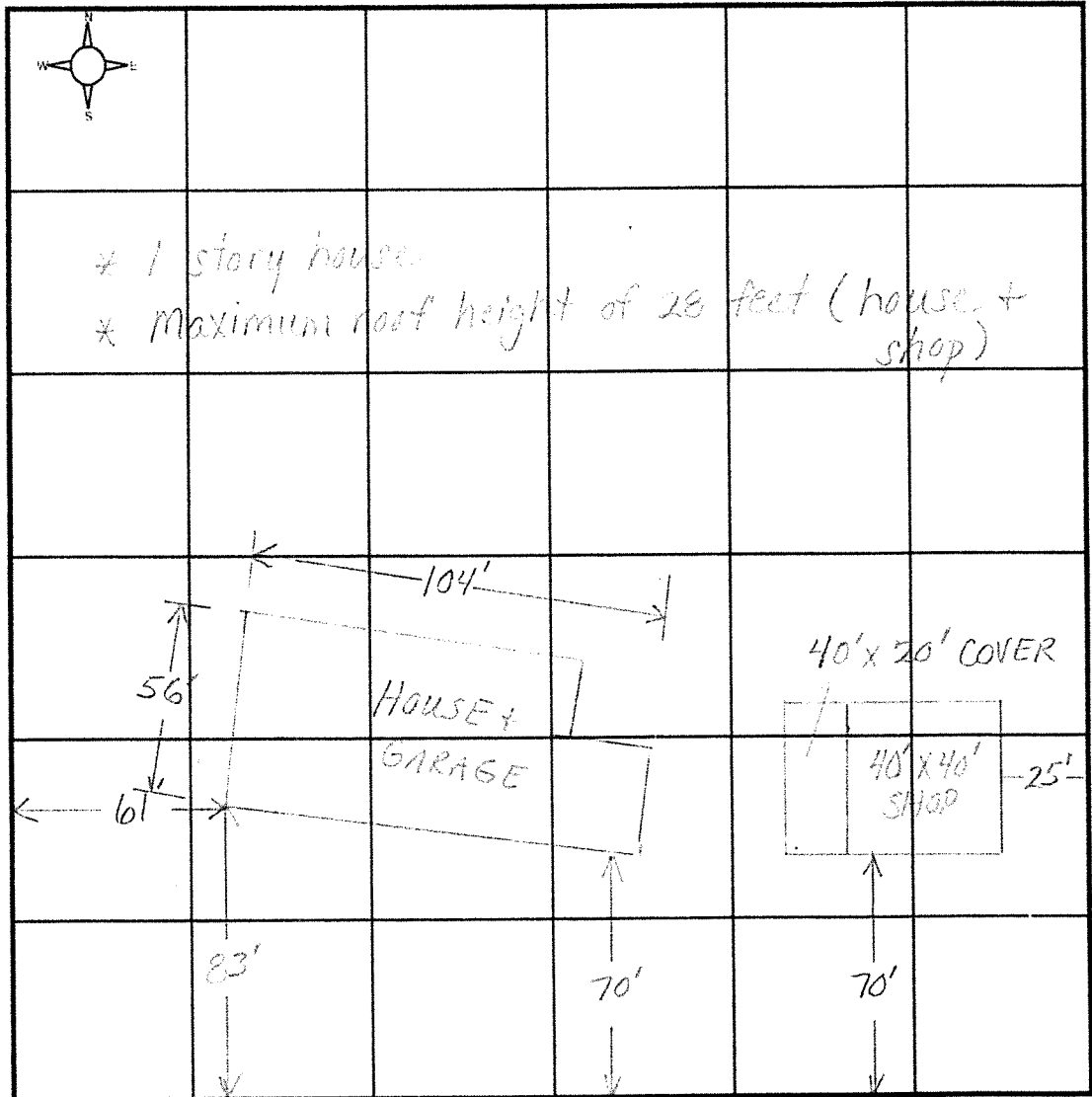
Public Health

Idaho Public Health Districts

Please draw an aerial view of the property showing the outline of buildings, property lines, well location water lines, location of septic tank and drainfields, location of drainfield replacement area, ditches and streams, easements and right-of ways, driveway and parking area, cut banks, and location of street or road. Indicate dimensions and separation distances of each from septic tank and drainfield.

Plot Plan

Scale: 1" = 50'



Signature: _____ Date: _____

By my signature above, I certify that all answers and statements on this application are true and complete to the best of my knowledge. I understand that should evaluation disclose untruthful or misleading answers, my application may be rejected or my permit canceled. I understand that any deviation from the plans, conditions, and specifications, is prohibited unless it is approved in advance by the Director or his designee. I hereby authorize the Health District to have access to this property for the purpose of conducting a site-evaluation.

(Official Use Only)

Plot Plan Approval Date: _____ EHS Name: _____ EHS #: _____

Revision Date: 10/2010 NRU

From: Emily Hart <ehart@mccall.id.us>

Sent: Wednesday, October 15, 2025 11:30 AM

To: Lori Hunter <lhunter@valleycountyid.gov>

Subject: Re: Public Notices - Valley County PZ - November 13, 2025

Hi Lori,

VAR 25-001 Vaughn Variance from Building Envelope:

McCall Airport does not support a variance to the building envelope. It is unclear what hardship is created by the envelope in pursuing the property owner's goals. The 360° Ranch building envelopes were identified in consideration of FAA and ITD Aeronautics efforts to strengthen land use compatibility policies and practices in the original subdivision process.

Emily Hart, C.M. | McCall Airport Manager
336 Deinhard Lane Hangar 100 | McCall, ID 83638
Direct: 208.634.8965 | Cell: 208.630.3441
www.mccall.id.us/airport



Valley County Transmittal
Division of Community and Environmental Health

Return to:

- ☐ Cascade
☐ Donnelly
☐ McCall
☐ McCall Impact
☒ Valley County

Rezone # _____

Conditional Use # _____

Preliminary / Final / Short Plat _____

VAR 25-001 Larry Vaughn

- ☐ 1. We have No Objections to this Proposal.
- ☐ 2. We recommend Denial of this Proposal.
- ☐ 3. Specific knowledge as to the exact type of use must be provided before we can comment on this Proposal.
- ☐ 4. We will require more data concerning soil conditions on this Proposal before we can comment.
- ☐ 5. Before we can comment concerning individual sewage disposal, we will require more data concerning the depth of:
☐ high seasonal ground water ☐ waste flow characteristics
☐ bedrock from original grade ☐ other _____
- ☐ 6. This office may require a study to assess the impact of nutrients and pathogens to receiving ground waters and surface waters.
- ☐ 7. This project shall be reviewed by the Idaho Department of Water Resources concerning well construction and water availability.
- ☐ 8. After written approvals from appropriate entities are submitted, we can approve this proposal for:
☐ central sewage ☐ community sewage system ☐ community water well
☐ interim sewage ☐ central water
☐ individual sewage ☐ individual water
- ☐ 9. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
☐ central sewage ☐ community sewage system ☐ community water
☐ sewage dry lines ☐ central water
- ☐ 10. Run-off is not to create a mosquito breeding problem
- ☐ 11. This Department would recommend deferral until high seasonal ground water can be determined if other considerations indicate approval.
- ☐ 12. If restroom facilities are to be installed, then a sewage system MUST be installed to meet Idaho State Sewage Regulations.
- ☐ 13. We will require plans be submitted for a plan review for any:
☐ food establishment ☐ swimming pools or spas ☐ child care center
☐ beverage establishment ☐ grocery store
- ☒ 14. Per the plat: "To construct buildings or structures outside of the site, the property owner must obtain approval from the 360 Ranch Property association and work with the FAA as necessary to verify that airport approach requirements can be met". CDH agrees with the plat requirements.
Reviewed By: Brian Cope
Date: 10/27/25

Public Notices - Valley County PZ - November 13, 2025

From Kendra Conder <Kendra.Conder@itd.idaho.gov>

Date Wed 10/15/2025 1:14 PM

To Cynda Herrick <cherrick@valleycountyid.gov>

Cc Lori Hunter <lhunter@valleycountyid.gov>

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Cynda,

ITD does not have any comments for the November 13 agency notice. However, our request for turn lane warrants for SUB 25-019 has not been met.

Let me know if you have any questions!

Kendra Conder

District 3 | Development Services Coordinator

Idaho Transportation Department

Office: 208-334-8377

Cell: 208-972-3190



October 20, 2025

Cynda Herrick, Planning & Zoning Director
Valley County Planning & Zoning
219 N. Main Street
P.O. Box 1350
Cascade, Idaho 83611
cherrick@co.valley.id.us

Subject: Public Notices - Valley County PZ - November 13, 2025

Dear Cynda Herrick:

Thank you for the opportunity to respond to your request for comment. While DEQ does not review every project on a project-specific basis, we attempt to provide the best review of the information provided. DEQ encourages agencies to review and utilize the Idaho Environmental Guide to assist in addressing project-specific conditions that may apply. This guide can be found at: <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/15083>.

The following information does not cover every aspect of this project; however, we have the following general comments to use as appropriate:

1. AIR QUALITY

- Please review IDAPA 58.01.01 for all rules on Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), and odor control plans (58.01.01.776).

For questions, contact David Luft, Air Quality Manager, at (208) 373-0550.

- IDAPA 58.01.01.201 requires an owner or operator of a facility to obtain an air quality permit to construct prior to the commencement of construction or modification of any facility that will be a source of air pollution in quantities above established levels. DEQ asks that cities and counties require a proposed facility to contact DEQ for an applicability determination on their proposal to ensure they remain in compliance with the rules.

For questions, contact the DEQ Air Quality Permitting Hotline at 1-877-573-7648.

2. WASTEWATER AND RECYCLED WATER

- DEQ recommends verifying that there is adequate sewer to serve this project prior to approval. Please contact the sewer provider for a capacity statement, declining balance report, and willingness to serve this project.
- IDAPA 58.01.16 and IDAPA 58.01.17 are the sections of Idaho rules regarding wastewater and recycled water. Please review these rules to determine whether this or future projects will require DEQ approval. IDAPA 58.01.03 is the section of Idaho rules regarding subsurface disposal of wastewater. Please review this rule to determine whether this or future projects will require permitting by the local public health district.
- All projects for construction or modification of wastewater systems require preconstruction approval. Recycled water projects and subsurface disposal projects require separate permits as well.
- DEQ recommends that projects be served by existing approved wastewater collection systems or a centralized community wastewater system whenever possible. Please contact DEQ to discuss potential for development of a community treatment system along with best management practices for communities to protect groundwater.
- DEQ recommends that cities and counties develop and use a comprehensive land use management plan, which includes the impacts of present and future wastewater management in this area. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.

For questions, contact Valerie Greear, Water Quality Engineering Manager at (208) 373-0550.

3. DRINKING WATER

- DEQ recommends verifying that there is adequate water to serve this project prior to approval. Please contact the water provider for a capacity statement, declining balance report, and willingness to serve this project.
- DEQ recommends verifying if the current and/or proposed drinking water system is a regulated public drinking water system. A drinking water system is a Public Water System (PWS) if it has at least 15 service connections or regularly serves an average of 25 or more people per day for at least 60 days per year (refer to the DEQ website at: <https://www.deq.idaho.gov/water-quality/drinking-water/>). For non-regulated systems, DEQ recommends annual testing for total coliform bacteria, nitrate, and nitrite.
- IDAPA 58.01.08 is the section of Idaho rules regarding public drinking water systems. Please review these rules to determine whether this or future projects will require DEQ approval.
- All projects for construction or modification of public drinking water systems require preconstruction approval.
- If any private wells will be included in this project, we recommend that they be tested for total coliform bacteria, nitrate, and nitrite prior to use and retested annually thereafter.
- DEQ recommends using an existing drinking water system whenever possible or construction of a new community drinking water system. Please contact DEQ to discuss this project and to explore options to both best serve the future residents of this development and provide for protection of groundwater resources.
- DEQ recommends cities and counties develop and use a comprehensive land use management plan which addresses the present and future needs of this area for adequate, safe, and sustainable drinking water. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.

For questions, contact Valerie Greear, Water Quality Engineering Manager at (208) 373-0550.

4. SURFACE WATER

- Please contact DEQ to determine whether this project will require an Idaho Pollutant Discharge Elimination System (IPDES) Permit. A Multi-Sector General Permit from DEQ may be required for facilities that have an allowable discharge of storm water or authorized non-storm water associated with the primary industrial activity and co-located industrial activity. For questions, contact Emily Montague, IPDES Compliance Supervisor, at (208) 373-0433.
- If this project is near a source of surface water, DEQ requests that projects incorporate construction best management practices (BMPs) to assist in the protection of Idaho's water resources. Additionally, please contact DEQ to identify BMP alternatives and to determine whether this project is in an area with Total Maximum Daily Load stormwater permit conditions.
- The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources (IDWR), Western Regional Office, at 2735 Airport Way, Boise, or call (208) 334-2190 for more information. Information is also available on the IDWR website at: <https://idwr.idaho.gov/streams/stream-channel-alteration-permits.html>
- The Federal Clean Water Act requires a permit for filling or dredging in waters of the United States. Please contact the US Army Corps of Engineers, Boise Field Office, at 10095 Emerald Street, Boise, or call 208-345-2155 for more information regarding permits.

For questions, contact Lance Holloway, Surface Water Manager, at (208) 373-0550.

5. SOLID WASTE, HAZARDOUS WASTE AND GROUNDWATER CONTAMINATION

- **Solid Waste.** No trash or other solid waste shall be buried, burned, or otherwise disposed of at the project site. These disposal methods are regulated by various state regulations including Idaho's Solid Waste Management Regulations and Standards (IDAPA 58.01.06), Rules and Regulations for Hazardous Waste (IDAPA 58.01.05), and Rules and Regulations for the Prevention of Air Pollution (IDAPA 58.01.01). Inert and other approved materials are also defined in the Solid Waste Management Regulations and Standards.
- **Hazardous Waste.** The types and number of requirements that must be complied with under the federal Resource Conservation and Recovery Act (RCRA) and the Idaho Rules and Standards for Hazardous Waste (IDAPA 58.01.05) are based on the quantity and type of waste generated. Every business in Idaho is required to track the volume of waste generated, determine whether each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.
- **Water Quality Standards.** Site activities must comply with the Idaho Water Quality Standards (IDAPA 58.01.02) regarding hazardous and deleterious-materials storage, disposal, or accumulation adjacent to or in the immediate vicinity of state waters (IDAPA 58.01.02.800); and the cleanup and reporting of oil-filled electrical equipment (IDAPA 58.01.02.849); hazardous materials (IDAPA 58.01.02.850); and used-oil and petroleum releases (IDAPA 58.01.24.060 and 58.01.24.061). Petroleum releases must be reported to DEQ in accordance with IDAPA 58.01.24.060.01 and 58.01.24.061.04. Hazardous material releases to state waters, or to land such that there is likelihood that it will enter state waters, must be reported to DEQ in accordance with IDAPA 58.01.02.850.

- **Groundwater Contamination.** DEQ requests that this project comply with Idaho's Ground Water Quality Rules (IDAPA 58.01.11), which states that "No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or disposal of a contaminant into the environment in a manner that causes a ground water quality standard to be exceeded, injures a beneficial use of ground water, or is not in accordance with a permit, consent order or applicable best management practice, best available method or best practical method."

For questions, contact Matthew Pabich, Waste & Remediation Manager, at (208) 373-0550.

6. ADDITIONAL NOTES

- If an underground storage tank (UST) or an aboveground storage tank (AST) is identified at the site, additional regulations may apply. If an UST is present, the site should be evaluated to determine whether the UST is regulated by DEQ. If an AST is identified, EPA may have additional requirements. Both UST and AST sites should be assessed to determine whether there is potential soil and ground water contamination. Please call DEQ at (208) 373-0550, or visit the DEQ website <https://www.deq.idaho.gov/waste-management-and-remediation/storage-tanks/leaking-underground-storage-tanks-in-idaho/> for assistance. If applicable to this project, DEQ recommends that BMPs be implemented for any of the following land uses: wash water from cleaning vehicles, fertilizers and pesticides, animal facilities, composted waste, ponds and outdoor gun ranges. Please contact DEQ for more information on any of these conditions.

We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any of our technical staff at (208) 373-0550.

Sincerely,

A handwritten signature in black ink, appearing to read "Troy Smith", with a stylized flourish at the end.

Troy Smith
Regional Administrator

Contact your local irrigation entity before you begin any construction, landscaping or other activity within a ditch easement.

Any unauthorized encroachments will be removed at your expense, in accordance with Idaho law.

Can I relocate and/or pipe the irrigation facility on my property?

Yes. But you must first obtain written permission from the entity operating the irrigation facility.

To obtain permission, contact your local irrigation entity to determine what information they will need to review your request. They will also advise you of any standards and/or specifications relating to moving or piping an irrigation facility.



Generally, canals and lateral ditches may only be relocated or piped during the non-irrigation season, after water is out of the delivery system.

Will the irrigation entity work with me to address my questions?

Yes. Contact your local irrigation entity if you have questions about the ditch easement on your property.

The irrigation entity can give you information about the irrigation facility in question. This may include:

- The scope of the ditch easement, including the access necessary to operate, clean, maintain and repair the facility; and
- Any policies and/or procedures regarding encroachments and/or modifications.

We appreciate your cooperation in working to protect our irrigation facilities. Feel free to contact us if you have any questions.

PO Box 3126
McCall, Idaho 83638

Shirley Florence
SECRETARY
208-634-9235

John Leedom
MANAGER
208-634-9672

Board Members
Justin Florence
Will Maki
Art Troufner

LAKE IRRIGATION DISTRICT

**What do I need to
know About
Irrigation
Easements and
Rights-of-Way?**



In Partnership With



IDAHO
**WATER
USERS**
ASSOCIATION

Each year, Idaho's water users divert millions of gallons of water from Idaho's rivers, reservoirs and aquifers. This water is delivered to farms, neighborhoods, parks and schools throughout the state through thousands of miles of canals, laterals, ditches and other facilities.

Since many of these facilities cross private property, it is important for you to understand the rights and obligations associated with a ditch easement or right-of-way (referred to as a "ditch easement").

What is a ditch easement?

- A ditch easement includes the irrigation facility and enough land along both banks to allow access for operation, cleaning, maintenance and repair. The width of the easement will vary depending on the facility.
- Access allows operators to remove sediment and other debris, mow, spray/burn and refurbish facilities and to perform other maintenance activities.



- The ditch easement includes the right to deposit any removed debris or other material on the banks of that facility.
- It is not required for a ditch easement to be recorded or notated on your deed(s). Mere existence of the facility constitutes notice of the ditch easement.
- Ditch easements are not public property and are not open to public use. Unauthorized third-party use of this land is a trespass.

Is there a ditch easement on my property?

If your land is crossed by a water delivery facility, there is likely an easement on your land.

You may use the easement area. However, you cannot interfere with access for operation, cleaning, maintenance or repair activities.

What are the irrigation entity's duties?

Irrigation entities must operate and maintain the facilities to minimize the risk of over-topping the banks, failure of the facility and/or blockage. This includes regular monitoring of water flows, ditch banks and irrigation structures.

Ditch easements are necessary to perform these duties. Access must not be blocked.

What happens if I encroach on a ditch easement?

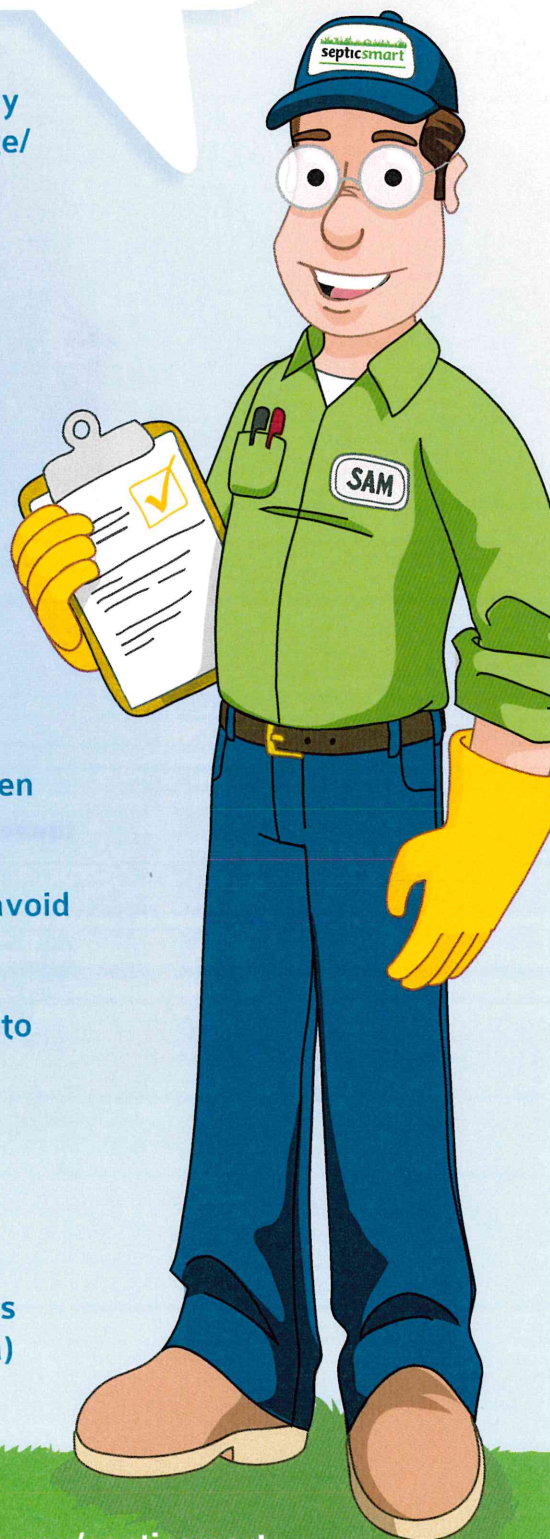
Encroachments onto ditch easements interferes with access for operation, cleaning, maintenance and repair activities.

Idaho statute (42-1209) prohibits the placement of any encroachment within a ditch easement – including buildings, parking areas, fences, landscaping and other structures or activities within the ditch easement.



Top 10 Ways to Be a Good Septic Owner

- ✓ Have your system inspected every three years by a qualified professional or according to your state/ local health department's recommendations
- ✓ Have your septic tank pumped, when necessary, generally every three to five years
- ✓ Avoid pouring harsh products (e.g., oils, grease, chemicals, paint, medications) down the drain
- ✓ Discard non-degradable products in the trash (e.g., floss, disposable wipes, cat litter) instead of flushing them
- ✓ Keep cars and heavy vehicles parked away from the drainfield and tank
- ✓ Follow the system manufacturer's directions when using septic tank cleaners and additives
- ✓ Repair leaks and use water efficient fixtures to avoid overloading the system
- ✓ Maintain plants and vegetation near the system to ensure roots do not block drains
- ✓ Use soaps and detergents that are low-suds, biodegradable, and low- or phosphate-free
- ✓ Prevent system freezing during cold weather by inspecting and insulating vulnerable system parts (e.g., the inspection pipe and soil treatment area)



A Homeowner's Guide to Septic Systems



**Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706**

January 2001

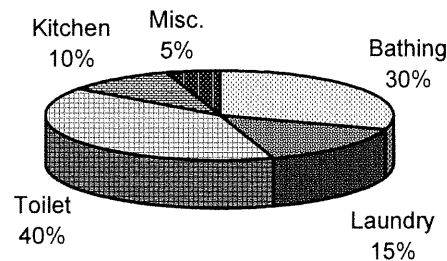


Do you have a home septic system? As an Idaho resident, there is a good chance you do—thirty-six percent of Idaho's homes, or about 210,000 residences, use septic systems to treat their sewage. These systems discharge more than 53 million gallons of wastewater into Idaho's soils annually, and this figure grows each year. In 1999, Idaho's seven health districts issued over 6,100 permits for new septic systems.

Septic systems dispose of household sewage, or wastewater, generated from toilet use, bathing, laundry, and kitchen and cleaning activities. Because septic systems are underground and seldom require daily care, many homeowners rarely think about routine operations and maintenance. However, if a septic system is not properly designed, located, constructed, and maintained, groundwater may become contaminated.

Household Wastewater

Households that are not served by public sewers depend on septic tank systems to treat and dispose of wastewater. Household wastewater carries with it all wastes that go down the drains in our homes, including human waste, dirt, food, toilet paper, soap, detergents, and cleaning products. It contains dissolved nutrients, household chemicals, grease, oil, microorganisms (including some that cause disease), and solid particles. If not properly treated by your septic system, chemicals and microorganisms in wastewater can travel through the soil to groundwater and pose a health hazard.



The average person uses between 50 and 75 gallons of water per day; mostly in the bathroom. Reducing your water use will help your septic system to work more efficiently.

Your Septic System

A conventional septic system has three working parts: a septic tank, a drainfield, and surrounding soil.

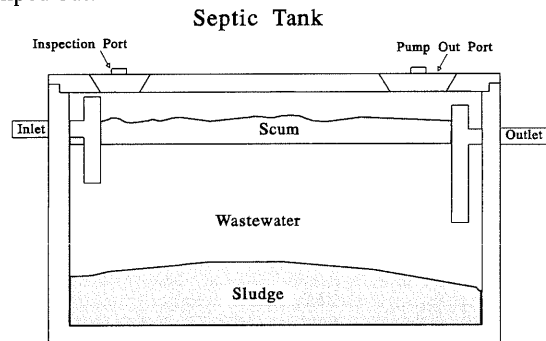
Septic Tank

Septic tanks can be made of concrete, fiberglass, or plastic and must be approved by the state. Minimum sizes of tanks have been established for residences based on the number of bedrooms in the dwelling. In Idaho, a 1,000-gallon septic tank is required for homes with three or four bedrooms. Larger tanks are required for larger homes. Local district health departments issue permits for septic systems and specify the minimum size tank. Some systems installed before the current rules and regulations may have smaller septic tanks.

A septic tank has three main functions:

- to remove as many solids as possible from household wastewater before sending the liquid, called “effluent,” to a drainfield;
- to decompose solids in the tank; and
- to store solids that do not decompose.

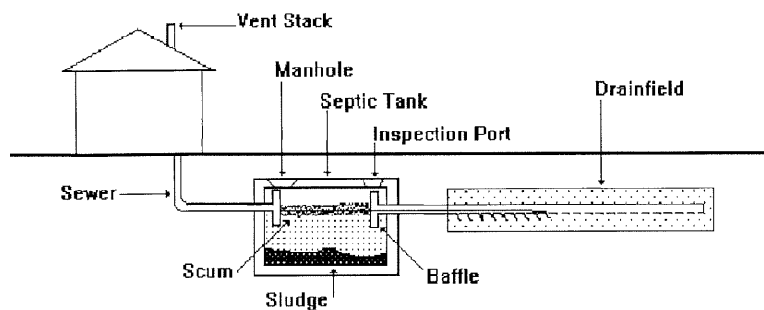
When raw wastewater enters the tank, heavy solids sink to the bottom of the tank as sludge. Light solids, such as grease and paper, float to the surface as scum. During the wastewater storage period, bacteria digest organic material in the wastewater. During this process, the solid material is reduced in volume and composition. Solids that do not decompose accumulate in the tank and eventually must be pumped out.



Tees, or baffles, are provided at the tank's inlet and outlet pipes. The inlet tee slows the incoming wastes and reduces disturbance of the settled sludge. The outlet tee keeps the solids and scum in the tank. As new wastewater enters the tank through the inlet tee, an equal amount of wastewater is pushed out of the tank through the outlet tee. The effluent that leaves the tank has been partially treated but still contains disease-causing bacteria and other pollutants.

Drainfield

Each time raw wastewater enters the tank it forces an equal amount of effluent into a drainfield. A standard drainfield is composed of a series of perforated pipes buried in gravel-filled trenches in the soil. The effluent seeps out of the perforated pipes and percolates through the gravel to the soil.



Soil

The soil below the drainfield provides the final treatment and disposal of the septic tank effluent. After the effluent has passed into the soil, most of it percolates downward and outward, eventually entering the groundwater. Soils are critical to the treatment of septic tank wastewater.

A system that is not functioning properly will release nutrient-rich and bacterial-laden wastewater into the groundwater and/or surface water. These contaminated waters pose a significant public health threat to people that come into contact with them. Wastewater that moves with groundwater can transport bacteria considerable distances. This can result in a threat to public health and adversely affect the quality of ground and surface waters.

Caring for Your Septic System

Installing Your System

In order to have a septic system installed on your property, you must first obtain a permit. Permit applications are available from your local district health department. Next, you must have a site evaluation performed. Make arrangements for this with your district health department and with a licensed septic system installer. Note that not all property is suitable for septic systems, so some permits may be denied. It is recommended that you have a site evaluation performed before you purchase property. Finally, have your system installed by a licensed installer and inspected by your local health district. Provide regular, preventative, maintenance to keep your system running smoothly.

Inspecting Your System

When too much sludge and scum are allowed to accumulate in your tank, the incoming sewage will not have enough time in the septic tank for solids to settle. Solids may flow to the drainfield and clog the pipes, causing the sewage to overflow to the ground surface, where it exposes humans and animals to disease-causing organisms. To prevent this from happening, it is very important to inspect your tank regularly and have it serviced when needed. All tanks have accessible manholes for inspecting and pumping. Some excavation work may be needed to uncover the manhole.

Properly designed tanks should have enough capacity for three to eight years of use before needing service. This is dependent upon the amount of wastewater generated. It is recommended that an average family of four have its septic tank pumped out every three to five years. Don't wait for signs of system failure to have your tank pumped. Your tank should be checked annually to measure sludge and scum levels. A licensed septic tank pumper can provide a septic tank inspection and recommend when the tank should be pumped. A tank inspection should include measuring the depth of scum and sludge and inspecting the tees in the septic tank.

If you do the inspection yourself, it is important to understand that septic tanks always appear full because both the inlet and the outlet are at the top of the tank. What you will need to know is how much of the tank's volume is being taken up by scum and sludge. When sludge and scum take up more than 35 percent of the tank volume, these solids need to be removed by pumping. A pole wrapped in a coarse weave cloth can be used to check the sludge depth. An extension on the pole can be used to measure the scum depth. Record these measurements as part of your pumping records. To check the tees, uncover the inspection ports.

Never allow anyone to enter your septic tank. Dangerous gases and the lack of oxygen can kill in minutes.

While it is impractical to inspect the pipes in your drainfield, it is important to watch for drainfield failure or overuse. See "Warning Signs of System Failure" in this booklet for information.

Maintaining Your System

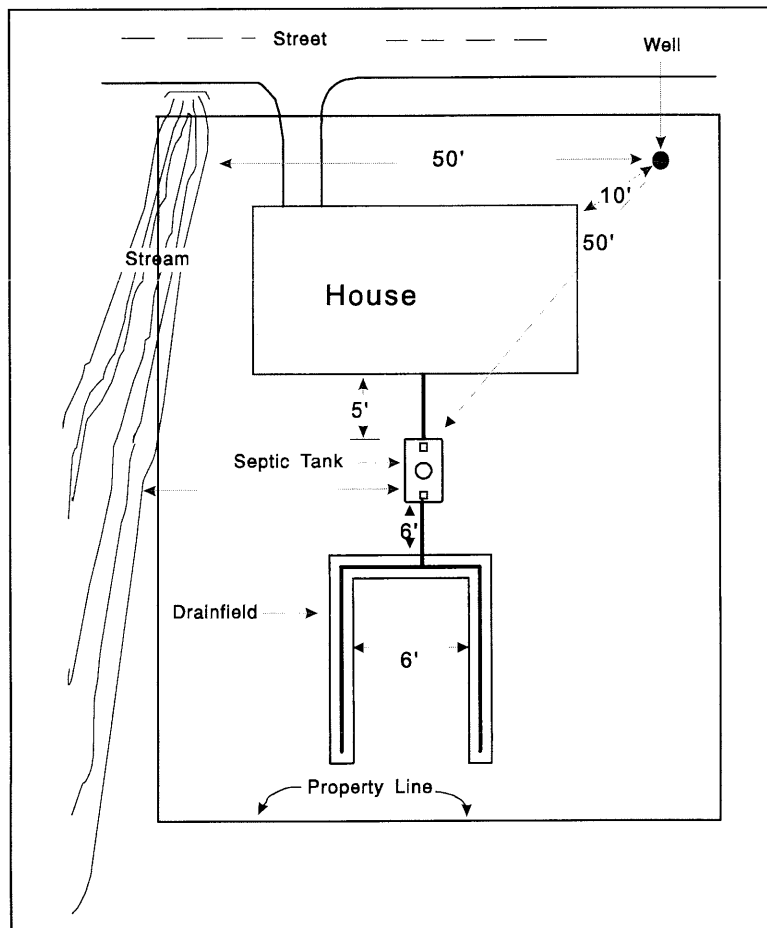
Pumping your septic tank every three years (or as determined by your inspections) will remove accumulations of solids, help keep the drainfield from becoming clogged, and help prevent you from experiencing sewage backups or septic system failure. An accumulation of sludge exceeding 35% of the total water depth in the septic tank could cause solids to enter the drainfield and clog the system. Hire a licensed septic tank pumper to pump your tank for you.

Mapping Your System

In order to take proper care of your septic system, you must know the location of the septic tank and drainfield. The location of your septic tank can be determined from plot plans, septic system inspection records, architectural or landscape drawings, or from observations of the house plumbing. If you do not have access to drawings, find where the sewer pipe leaves your house. Some installers mark the location where the waste pipe comes out of the house with an "S" on the foundation. You may want to do this as well. Probe in the ground 10 to 15 feet directly out from the location where the pipe leaves your house to find your tank.

Once the septic tank has been located, make several plot plan diagrams (with measurements) that include a rough sketch of your house, septic tank cover, drainfield area, well, and any other permanent reference points (such as trees or large rocks) and place them with your important papers. You'll find a sample system diagram on the next page, and a place to draw your own inside the front cover of this booklet. You may also want to hang a diagram in your garage and provide one to your local district health office.

Maintain a permanent record of any septic system maintenance, repair, sludge and scum levels, pumping, drainfield condition, household backups, and operations notes.



Create a septic system diagram, similar to this one, for your system.

Warning Signs of System Failure

While proper use, inspections, and maintenance should prevent most septic tank problems, it is still important to be aware of changes in your septic system and to act immediately if you suspect a system failure. There are many signs of septic system failure:

- surfacing sewage or wet spots in the drainfield area;
- plumbing or septic tank backups;
- slow draining fixtures;
- gurgling sounds in the plumbing system;
- sewage odors in the house or yard (note that the house plumbing vent on the roof will emit sewage odors and this is normal); and
- tests showing the presence of bacteria in well water.

If you notice any of these signs, or if you suspect your septic tank system may be having problems, contact a licensed septic system professional or your local district health agency for assistance.

Septic System Dos and Don'ts

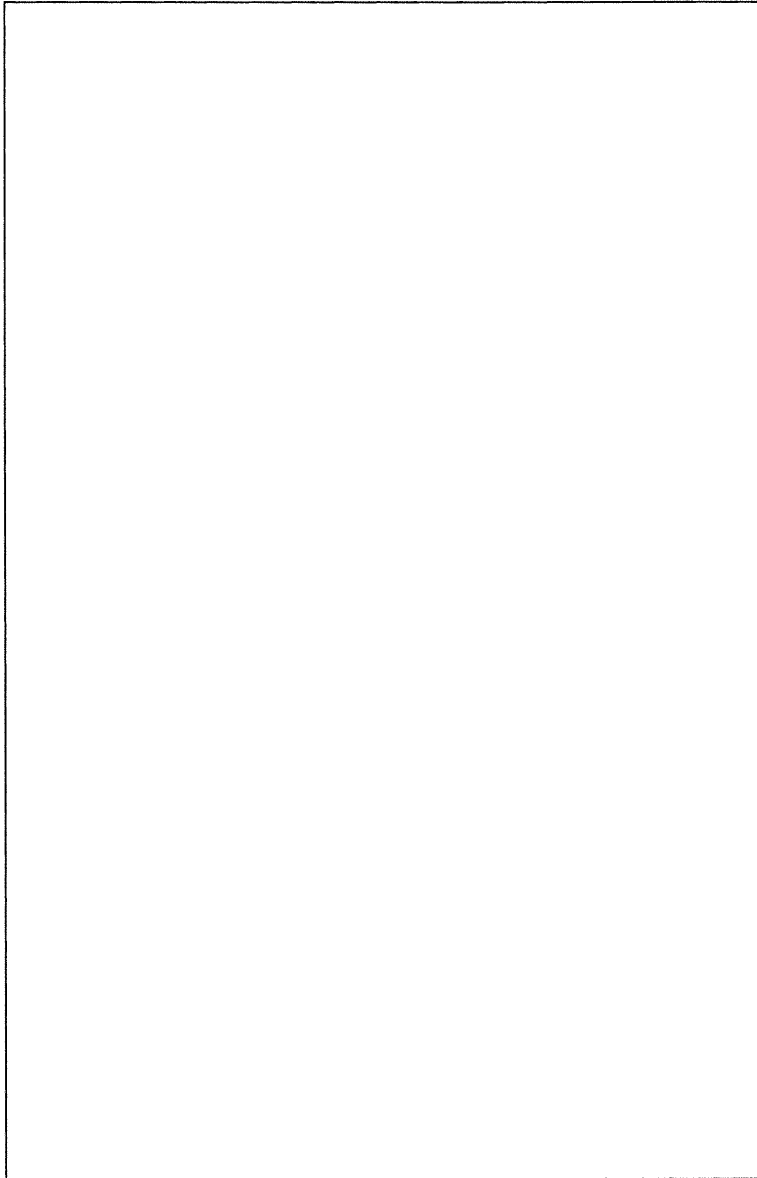
Proper operation of a septic system can prevent costly repairs or replacement. Observing the following guidelines will help to keep your system running efficiently.

Do

- ...practice water conservation. The more wastewater you produce, the more wastewater your system must treat and dispose. By reducing and balancing your use, you can extend the life of your system and avoid costly repairs.
 - Use water saving devices such as low flow showerheads.
 - Repair leaky faucets and plumbing fixtures immediately.
 - Reduce toilet reservoir volume or flow.
 - Take short showers.
 - Take baths with a partially filled tub.
 - Wash only full loads of dishes and laundry.
 - Shut off the water while shaving or brushing your teeth.
 - Balance your water use (e.g., avoid washing several loads of laundry in one day).
- ...keep accurate records. Know where your septic tank is, keep a diagram of its location using the space provided in this booklet, and keep a record of system maintenance.
- ...inspect your system annually. Check the sludge and scum levels inside the tank and periodically check the drainfield for odors, wet spots, or surfacing sewage.
- ...pump your system routinely. Pumping your septic tank is probably the single most important thing you can do to protect your system.
- ...keep all runoff away from your system. Water from roofs and driveways should be diverted away from the septic tank and drainfield area. Soil over your system should be mounded slightly to encourage runoff.
- ...protect your system from damage. Keep vehicles and livestock off your drainfield. The pressure can compact the soil or damage the pipes. Before you dig for any reason, check the location of your system and drainfield area.
- ...landscape your system properly. Plant grass over the drainfield area. Don't plant trees or shrubs or place impermeable materials, such as concrete or plastic, over the drainfield.
- ...use cleaning chemicals in moderation and only according to manufacturer's directions.

Don't

- ...flood irrigate over your system or drainfield area. The best way to irrigate these areas is with sprinklers.
- ...use caustic drain openers for clogged drains. Use boiling water or a drain snake to clean out clogs.
- ...enter a septic tank. Poisonous gases or a lack of oxygen can be fatal.
- ...use septic tank additives. They are not necessary for the proper functioning of your tank and they do not reduce the need for pumping. In fact, some additives can even harm your system.
- ...flush harmful materials into your tank. Grease, cooking oil, coffee grounds, sanitary napkins, and cigarettes do not easily decompose in septic tanks. Chemicals, such as solvents, oils, paints, and pesticides, are harmful to your systems operation and may pollute groundwater.
- ...use a garbage disposal. Using a garbage disposal will increase the amount of solids entering the septic tank and will result in the need for more frequent pumping.



Map your septic system here

For More Information

If you need to obtain a permit for a new or replacement septic system, or if you have questions about septic systems and their operation and maintenance, please contact your local health district.

Panhandle District Health Department
8500 N. Atlas Road
Hayden, ID 83835
208-415-5100

North Central District Health Department
215 10th Street
Lewiston, ID 83501
208-799-0353

Southwest District Health Department
920 Main Street
Caldwell, ID 83605
208-455-5400

Central District Health Department
707 N. Armstrong Place
Boise, ID 83704
208-327-7499

South Central District Health Department
1020 Washington Street North
Twin Falls, ID 83303
208-734-5900

Southeastern District Health Department
1901 Alvin Ricken Drive
Pocatello, ID 83201
208-239-5270

District 7 Health Department
254 "E" Street
Idaho Falls, ID 83402
208-523-5382