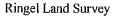
## RLS PROFESSIONAL SERVICES, P.A.





LAND SURVEYING: DEVELOPMENT - CONSTRUCTION

PO BOX 582 CASCADE, IDAHO 83611 PHONE: (208) 382-4230 Email: rasurvey@frontiernet.net June 6, 2019 LT19011

Ron Brown, President Leisure Time Park Owners Association 513 Sawyer, F-33 Cascade, Idaho 83611

Dear Ron,

The Base Flood Elevation (BFE) as shown on the FEMA FIRMette map for City of Cascade 160161, cross section AD, Zone AE, panel number 16085C1593C effective 2/1/2019 is 4740.9 feet.

At your request, we measured and shot elevations on the westerly rims of 6 manholes inside the Leisure Time RV Park boundary as shown on enclosed Google map.

The elevations are based upon NAVD88 Ortho Height as shown on the NGS data sheet for the brass cap monument P139, the elevation of which is 4769.04 feet. We also found NGS brass cap monument A136, the NAVD88 Ortho Height as shown on the NGS data sheet is 4764.74 feet. We measured it at 4764.53 feet.

The elevations shot on the 6 manholes (MH) are as follows:

MH1 - 4740.146	BFE = 4740.9	or	0.7 feet below BFE
MH2 - 4739.189			1.7 feet below BFE
MH3 - 4737.684			3.2 feet below BFE
MH4 – 4738.094			2.8 feet below BFE
MH5 - 4738.053			2.8 feet below BFE
MH6 - 4739.459			1.1 feet below BFE

Enclosed are copies of the NGS data sheets, a portion of the FEMA FIRMette and the Google topo showing the locations of the manholes for your information.

Sincerely,

Dave Ringel

## The NGS Data Sheet

See file dsdata.pdf for more information about the datasheet.

```
PROGRAM = datasheet95, VERSION = 8.12.5.3
1
        National Geodetic Survey,
                                    Retrieval Date = MAY 30, 2019
QB0084
        DESIGNATION -
                       P 139
OB0084
                       QB0084
QB0084
                       ID/VALLEY
        STATE/COUNTY-
QB0084
        COUNTRY
                       US
OB0084
        USGS QUAD
                       CASCADE (1985)
QB0084
QB0084
                               *CURRENT SURVEY CONTROL
OB0084
QB0084* NAD 83(1986) POSITION- 44 31 26.
                                             (N) 116 02 30.
                                                                (W)
                                                                     SCALED
QB0084*
        NAVD 88 ORTHO HEIGHT - 1453.605 (meters)
                                                     4769.04 (feet) ADJUSTED
QB0084
QB0084
       GEOID HEIGHT
                                 -15.136 (meters)
                                                                     GEOID12B
OB0084
        DYNAMIC HEIGHT
                                1452.948 (meters)
                                                     4766.88 (feet) COMP
OB0084
        MODELED GRAVITY -
                             980,115.1
                                         (mgal)
                                                                     NAVD 88
OB0084
OB0084
        VERT ORDER
                           SECOND
                                     CLASS 0
QB0084
QB0084. The horizontal coordinates were scaled from a topographic map and have
QB0084.an estimated accuracy of +/- 6 seconds.
QB0084. The orthometric height was determined by differential leveling and
QB0084.adjusted by the NATIONAL GEODETIC SURVEY
OB0084.in June 1991.
QB0084
QB0084.Significant digits in the geoid height do not necessarily reflect accuracy.
QB0084.GEOID12B height accuracy estimate available here.
QB0084. The dynamic height is computed by dividing the NAVD 88
QB0084.geopotential number by the normal gravity value computed on the
QB0084.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
QB0084.degrees latitude (g = 980.6199 \text{ gals.}).
QB0084. The modeled gravity was interpolated from observed gravity values.
QB0084
QB0084;
                           North
                                         East
                                                Units Estimated Accuracy
QB0084; SPC ID W
                        317,440.
                                      776,820.
                                                   MΤ
                                                       (+/- 180 meters Scaled)
QB0084
Q80084_U.S. NATIONAL GRID SPATIAL ADDRESS: 11TNK761305(NAD 83)
QB0084
                               SUPERSEDED SURVEY CONTROL
QB0084
QB0084
        NGVD 29 (??/??/92) 1452.54
QB0084
                                     (m)
                                                4765.5
                                                          (f) COMPUTED
                                                                          2 0
QB0084
QB0084. Superseded values are not recommended for survey control.
QB0084.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
```

QB0084.See file dsdata.pdf to determine how the superseded data were derived.

QB0084

QB0084 MARKER: DB = BENCH MARK DISK

QB0084 SETTING: 36 = SET IN A MASSIVE STRUCTURE

QB0084\_SP\_SET: BRIDGE

QB0084 STAMPING: P 139 1935

QB0084\_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

OB0084

QB0084 HISTORY - Date Condition Report By OB0084 HISTORY - 1935 MONUMENTED CGS

QB0084 HISTORY - 1953 GOOD USGS

QB0084

QB0084 STATION DESCRIPTION

QB0084

OB0084'DESCRIBED BY US GEOLOGICAL SURVEY 1953

QB0084'0.8 MI N FROM CASCADE.

QB0084'0.8 MILES NORTH ALONG THE OREGON SHORT LINE RAILROAD FROM THE SCHOOL QB0084'AT CASCADE AT BRIDGE IN ABANDONED SECTION OF RAILROAD (NOW CAR BRIDGE)

QB0084'OVER THE NORTH FORK PAYETTE RIVER. IN TOP OF THE SOUTH END OF THE QB0084'EAST WING WALL AND 9.5 FEET SOUTH EAST OF THE CENTERLINE OF THE ROAD.

\*\*\* retrieval complete. Elapsed Time = 00:00:04

## National Flood Hazard Layer FIRMette



Legend

l-eet 1:6,000 With the line and in

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR

Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas

Chance Flood Hazard Zone X Area with Reduced Flood Risk due to

m Future Conditions 1% Annual of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X

OTHER AREAS OF FLOOD HAZARD

Area with Flood Risk due to Levee Zone D

Levee. See Notes, Zane X

NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs

Area of Undetermined Flood Hazard Zone D

OTHER AREAS

STRUCTURES | 1111111 Levee, Dike, or Floodwall GENERAL | - - - - Channel, Culvert, or Storm Sewer

FEATURES OTHER 17.5 Water Surface Elevation 20.2 Cross Sections with 1% Annual Chance Limit of Study Jurisdiction Boundary Base Flood Elevation Line (BFE) Coastal Transect Digital Data Available Profile Baseline Coastal Transect Baseline No Digital Data Available Hydrographic Feature



MAP PANELS

Unmapped

an authoritative property location. The pin displayed on the map is an approximate point selected by the user and does not represent

digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap This map complies with FEMA's standards for the use of

FIRM panel number, and FIRM effective date. Map images for elements do not appear, basemap imagery, flood zone labels, This map image is void if the one or more of the following map time. The NFHL and effective information may change or was exported on 6/5/2018 at 11:41:24 AM and does not authoritative NFHL web services provided by FEMA. This map The flood hazard information is derived directly from the become superseded by new data over time. reflect changes or amendments subsequent to this date and egend, scale bar, map creation date, community identifiers,

unmapped and unmodernized areas cannot be used for

regulatory purposes.

1,500

2,000

1,000

