NOTES:

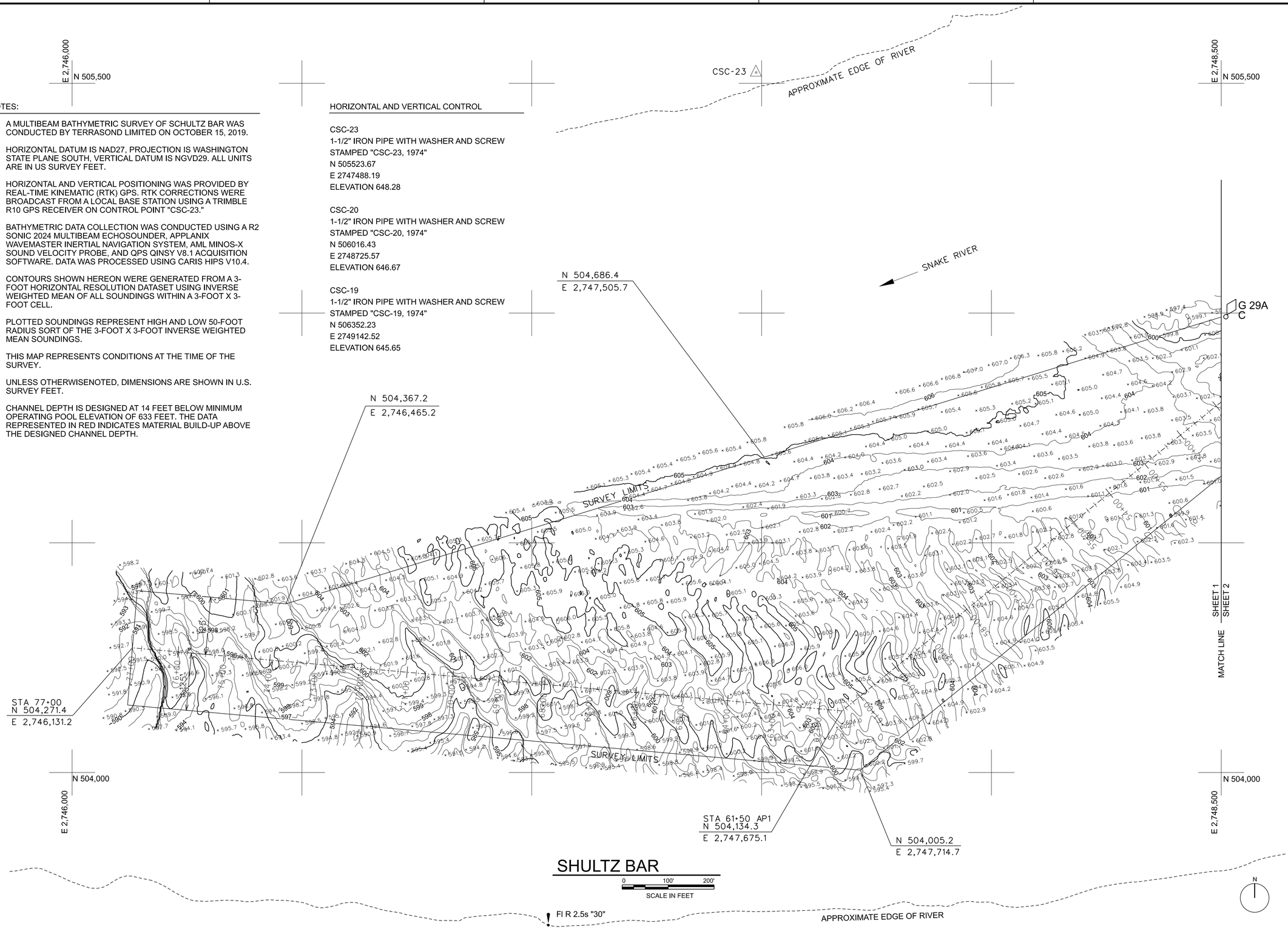
1. A MULTIBEAM BATHYMETRIC SURVEY OF SCHULTZ BAR WAS CONDUCTED BY TERRASOND LIMITED ON OCTOBER 15, 2019.
2. HORIZONTAL DATUM IS NAD27, PROJECTION IS WASHINGTON STATE PLANE SOUTH, VERTICAL DATUM IS NGVD29. ALL UNITS ARE IN US SURVEY FEET.
3. HORIZONTAL AND VERTICAL POSITIONING WAS PROVIDED BY REAL-TIME KINEMATIC (RTK) GPS. RTK CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION USING A TRIMBLE R10 GPS RECEIVER ON CONTROL POINT "CSC-23."
4. BATHYMETRIC DATA COLLECTION WAS CONDUCTED USING A R2 SONIC 2024 MULTIBEAM ECHOSOUNDER, APPLANIX WAVEMASTER INERTIAL NAVIGATION SYSTEM, AML MINOS-X SOUND VELOCITY PROBE, AND QPS QINSY V8.1 ACQUISITION SOFTWARE. DATA WAS PROCESSED USING CARIS HIPS V10.4.
5. CONTOURS SHOWN HEREON WERE GENERATED FROM A 3-FOOT HORIZONTAL RESOLUTION DATASET USING INVERSE WEIGHTED MEAN OF ALL SOUNDINGS WITHIN A 3-FOOT X 3-FOOT CELL.
6. PLOTTED SOUNDINGS REPRESENT HIGH AND LOW 50-FOOT RADIUS SORT OF THE 3-FOOT X 3-FOOT INVERSE WEIGHTED MEAN SOUNDINGS.
7. THIS MAP REPRESENTS CONDITIONS AT THE TIME OF THE SURVEY.
8. UNLESS OTHERWISENOTED, DIMENSIONS ARE SHOWN IN U.S. SURVEY FEET.
9. CHANNEL DEPTH IS DESIGNED AT 14 FEET BELOW MINIMUM OPERATING POOL ELEVATION OF 633 FEET. THE DATA REPRESENTED IN RED INDICATES MATERIAL BUILD-UP ABOVE THE DESIGNED CHANNEL DEPTH.

HORIZONTAL AND VERTICAL CONTROL

CSC-23
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-23, 1974"
N 505523.67
E 2747488.19
ELEVATION 648.28

CSC-20
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-20, 1974"
N 506016.43
E 2748725.57
ELEVATION 646.67

CSC-19
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-19, 1974"
N 506352.23
E 2749142.52
ELEVATION 645.65



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: MEYER
DRAWN BY: LINDBLAD
CHECKED BY: MILDON
SUBMITTED BY: TERRASOND LIMITED
SIZE:
ISSUE DATE: 1/6/2020
SOLICITATION NO.: 9817
CONTRACT NO.: W912EF-16-D-0004
FILE NO.:

U.S.ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON

TERRASOND
PRECISION GEOSPATIAL SOLUTIONS®
801 NW 42ND STREET, SUITE 275, SEATTLE, WA 98107
WWW.TERRASOND.COM, 206.782.5128

LITTLE GOOSE LOCK AND DAM
SNAKE AND CLEARWATER RIVERS, WASHINGTON AND IDAHO

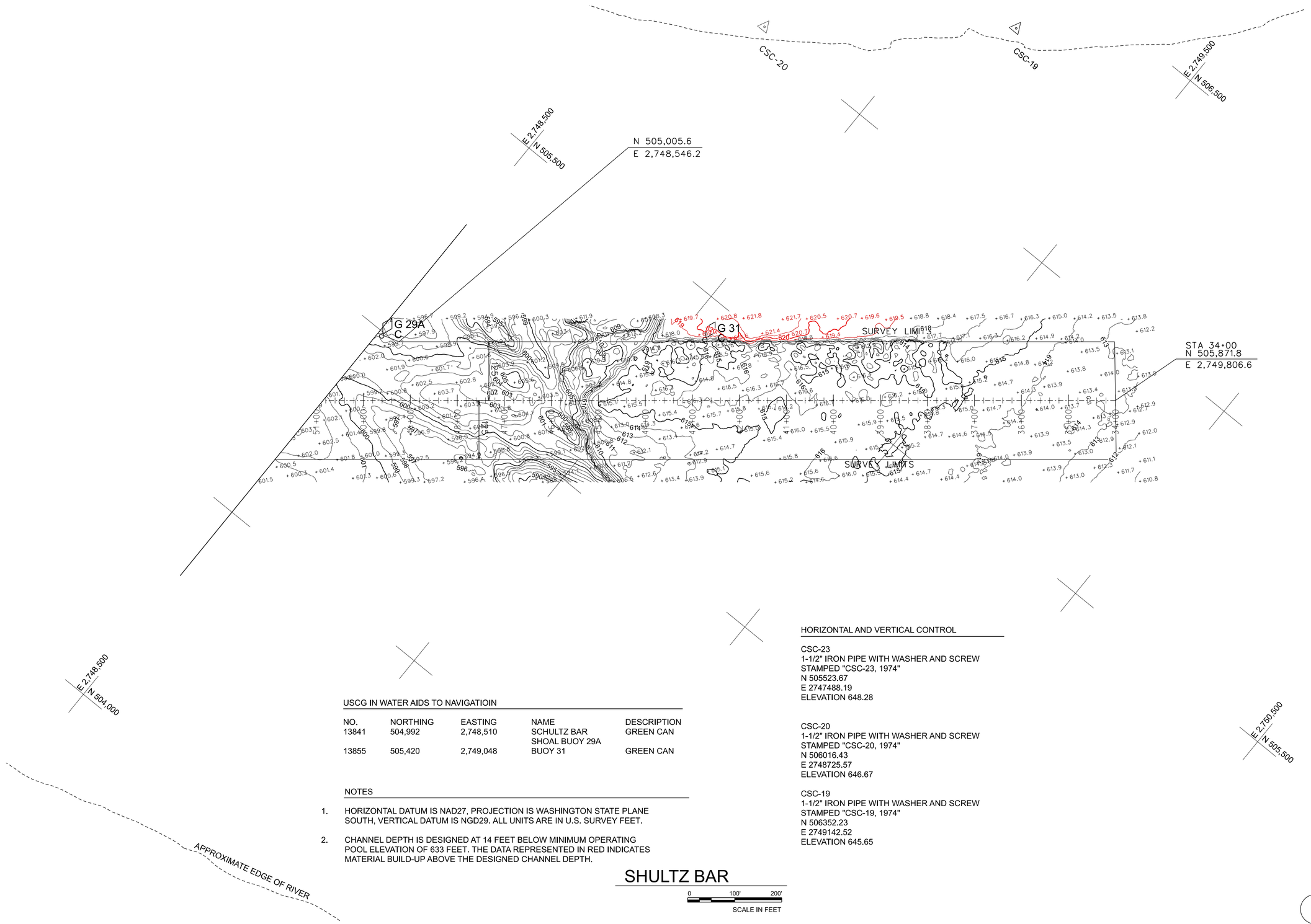
W912EF-16-D-0004-9817

SNAKE RIVER SHULTZ BAR
MULTI-BEAM BATHYMETRIC SURVEY

SHEET ID
V-101

DATE AND TIME PLOTTED: 1/6/2020

DESIGN FILE: L:\Z_surveys\00Hydro_Condition\2019_Hydro_Condition\25Nov2019_Revised Submittals\Nav Condition Surveys\Drawings and Bathymetry\Schultz Bar\Drawings Bentley Opensite\LGSchultzV-101---.dgn



USCG IN WATER AIDS TO NAVIGATIOIN

NO.	NORTHING	EASTING	NAME	DESCRIPTION
13841	504,992	2,748,510	SCHULTZ BAR SHOAL BUOY 29A	GREEN CAN
13855	505,420	2,749,048	BUOY 31	GREEN CAN

NOTES

1. HORIZONTAL DATUM IS NAD27, PROJECTION IS WASHINGTON STATE PLANE SOUTH, VERTICAL DATUM IS NGD29. ALL UNITS ARE IN U.S. SURVEY FEET.
2. CHANNEL DEPTH IS DESIGNED AT 14 FEET BELOW MINIMUM OPERATING POOL ELEVATION OF 633 FEET. THE DATA REPRESENTED IN RED INDICATES MATERIAL BUILD-UP ABOVE THE DESIGNED CHANNEL DEPTH.

HORIZONTAL AND VERTICAL CONTROL

CSC-23
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-23, 1974"
N 505523.67
E 2747488.19
ELEVATION 648.28

CSC-20
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-20, 1974"
N 506016.43
E 2748725.57
ELEVATION 646.67

CSC-19
1-1/2" IRON PIPE WITH WASHER AND SCREW
STAMPED "CSC-19, 1974"
N 506352.23
E 2749142.52
ELEVATION 645.65

SHULTZ BAR

0 100' 200'
SCALE IN FEET

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: MEYER
DRAWN BY: LINDBLAD
CHECKED BY: MILLIGAN
SUBMITTED BY: TERRASOND LIMITED
SIZE:
ISSUE DATE: 1/6/2020
SOLICITATION NO.: 9817
CONTRACT NO.: W912EF-16-D-0004
FILE NO.:

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WALLA WALLA, WASHINGTON

TERRASOND
PRECISION GEOSPATIAL SOLUTIONS®
861 NW 42ND STREET, SUITE 215, SEATTLE, WA 98107
WWW.TERRASOND.COM, 206.782.9100

LITTLE GOOSE LOCK AND DAM
SNAKE AND CLEARWATER RIVERS, WASHINGTON AND IDAHO

W912EF-16-D-0004-9817

SNAKE RIVER SHULTZ BAR
MULTI-BEAM BATHYMETRIC SURVEY

SHEET ID
V-102

DATE AND TIME PLOTTED: 1/6/2020

DESIGN FILE: L:\Z_surveys\00Hydro_Condition\2019_Hydro_Condition\25Nov2019_Revised Submittals\Nav Condition Surveys\Drawings and Bathymetry\Schultz Bar\Drawings Bentley Opensite\LGSchultzV-102---.dgn