HORIZONTAL CONTROL AND VERTICAL CONTROL

86-20-1
1" IRON PIPE WITH 1-3/4"
WASHER STAMPED 86-20-1
N 500,450.68
E 2,770,734.50
ELEV. 652.87'

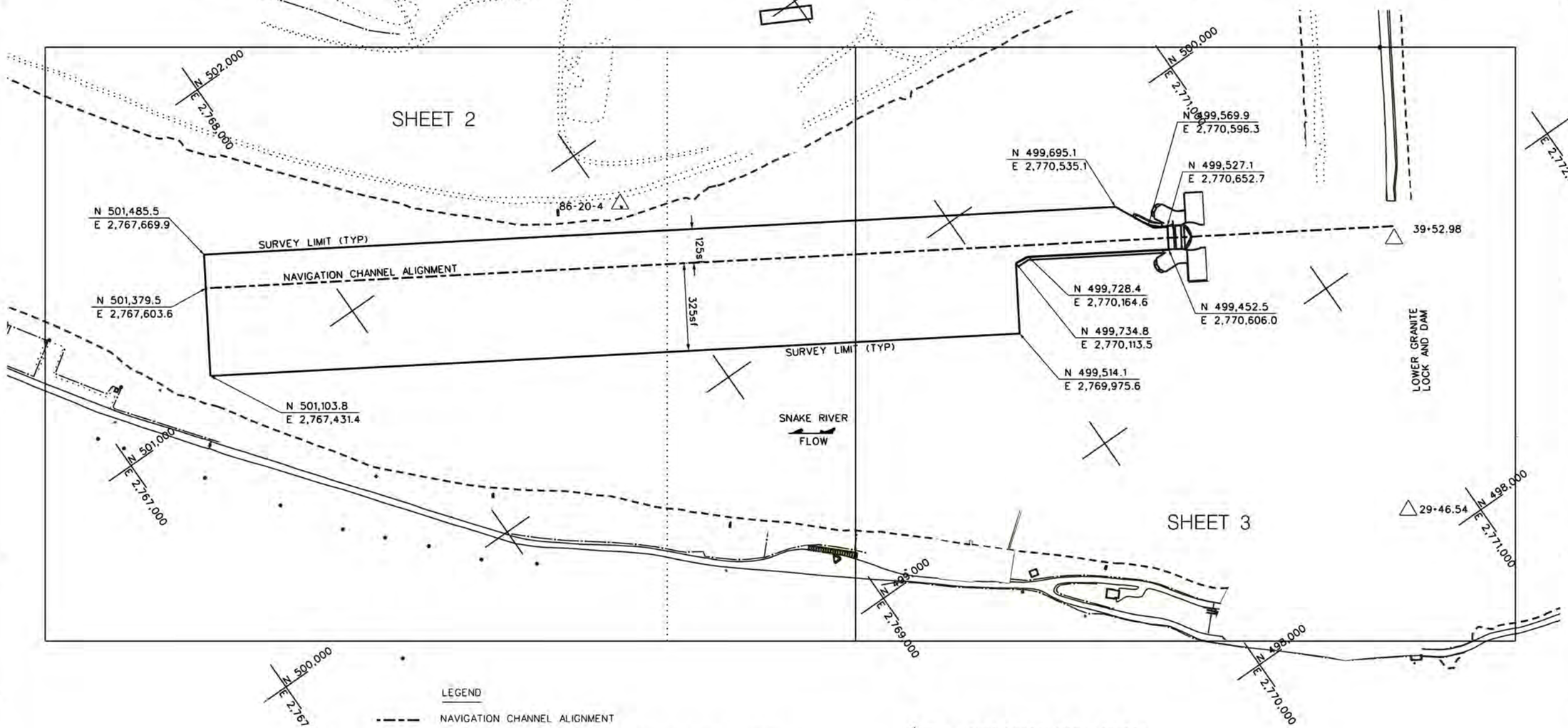
86-20-4
1" IRON PIPE WITH 1-3/4"
WASHER STAMPED 86-20-4
N 500,755.26
E 2,769,039.60
ELEV. 650.00'

CBL 39+52.98
3-½" BRASS DISC
STAMPED 39+52.98
N 499,006.23
E 2,771,32.88
ELEV. 750.87

CBL 29+46.54
3-½" BRASS DISC
STAMPED 29+46.54
N 498,152.82
E 2,770,779.61
ELEV. 750.840

NOTES

1. A MULTIBEAM BATHYMETRIC SURVEY OF THE LOWER GRANITE D/S NAVIGATION LOCK APPROACH WAS CONDUCTED BY TERRASOND LIMITED ON SEPTEMBER 12-13, 2015
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 A REAL-TIME KINEMATIC (RTK) GPS. CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION USING A TRIMBLE R8 GPS RECEIVER ON CONTROL POINT 86-20-1
4. BATHYMETRIC DATA COLLECTION WAS CONDUCTED USING AN R2 SONIC 2024 MULTIBEAM ECHOSOUNDER, CODA OCTOPUS F185+ INERTIAL NAVIGATION SYSTEM, AML MINOS-X SOUND VELOCITY PROFILER, AND QPS QINSY V8.1 ACQUISITION SOFTWARE. DATA WAS PROCESSED USING CARIS HIPS V9.0
5. CONTOURS SHOWN HEREON WERE GENERATED FROM A 5-FOOT HORIZONTAL RESOLUTION DATASET USING INVERSE WEIGHTED MEAN OF ALL SOUNDINGS WITHIN A 5-FOOT X 5-FOOT CELL
6. PLOTTED SOUNDINGS REPRESENT THE SHALLOWEST DETECTED DEPTH IN A 3-FOOT BY 3-FOOT CELL. A SHOAL-BIASED SORT OF THE SOUNDINGS WAS PERFORMED USING A 50-FOOT SORT RADIUS
7. THIS MAP REPRESENTS CONDITIONS AT THE TIME OF THE SURVEY



LEGEND

- NAVIGATION CHANNEL ALIGNMENT
- SURVEY LIMITE OF LOWER GRANITE D/S NAV LOCK APPROACH
- SURVEY CONTROL

GENERAL SITE PLAN

0' 200' 400'
SCALE IN FEET

US Army Corps of Engineers
Walla Walla District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

DESIGNED BY: MCYER
DWN BY: LNL
CHKD BY: KMJ
SUBMITTED BY: S C
DATE: 15 OCTOBER 2015
FILE: UPDER FILL 11
CONTRACT NO. W912EF-10-D-0002
FILE NO. F

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

TERRASOND
PROFESSIONAL HYDROGRAPHIC SURVEYORS
1900 SOUTHWEST FIFTH AVENUE, SUITE 1100
PORTLAND, OREGON 97201 USA
(503) 226-1285 FAX (503) 226-1286

LOWER GRANITE LOCK AND DAM
SNAKE AND CLEARWATER RIVERS, WASHINGTON AND IDAHO
WA912EF-10-D-0002, T.O. NO. 11
LOWER GRANITE DS
NAVIGATION LOCK APPROACH
MULTIBEAM BATHYMETRIC SURVEY

Plate number:
V-001

Sheet 1 of 3

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BORDER SIZE IS ANSI D

DATE AND TIME PLOTTED: 12/9/2015

DESIGN FILE: L:\Z_SURVEYS\00HYDRO_CONDITION\2015 HYDRO_CONDITION\LGA_LLA_DS_NAV_LOCK_APPR\OPERATIONS\OPERATIONSV-001---.DGN