VICTORIA HARBOUR

Seaplane landing area

Canadian Coast Guard Base Victoria

Boat ramp

Boat ramp

James Bay Anglers Club

Victoria Harbour Heliport

see Sheet 3 of 3

Dallas Road

Future Breasting Dolphin 1

Pier B North

PIER B

Pier B South

Main Terminal

Mooring Dolphin Under Construction

Future Breasting Dolphin 2

OGDEN POINT CRUISE SHIP TERMINAL

Office of Greater Victoria Harbour Authority

Pier A North

Warehouse

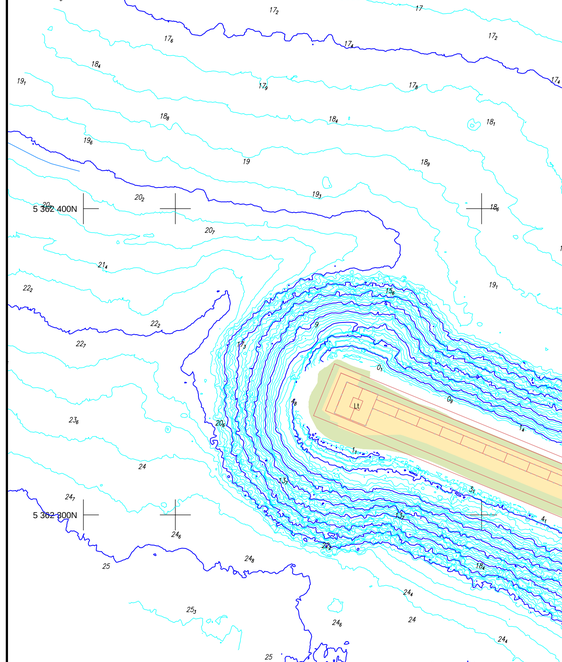
PIER A

Pier A South

Pacific Pilotage

470 770E
5 363 137N
470 800E
470 900E
471 000E
471 100E
471 200E
471 300E
471 400E
471 500E
471 521E
5 363 100N
5 363 000N
5 362 900N
5 362 800N
5 362 700N
5 362 600N
5 362 500N
5 362 400N
5 362 300N
5 362 200N
5 362 160N

KEY MAP



LEGEND

30 28 — BATHYMETRIC CONTOURS AND SPOT SOUNDINGS (IN METERS, CHART DATUM).

30 — INTERPRETED MAXIMUM VISIBLE THICKNESS (IN METERS) OF UNCONSOLIDATED SEDIMENTS (WHERE SHOWN). DASHED WHERE LESSER CONFIDENCE.

INTERPRETED GASSY/ORGANIC-RICH SEDIMENTS. (MAXIMUM SEDIMENT THICKNESS NOT VISIBLE)

APPROXIMATE PROPOSED GVHA LEASE BOUNDARY EXTENTION.

NOTES

1. ON 24 NOVEMBER 2017, TERRA REMOTE SENSING INC (TRSI) CONDUCTED BATHYMETRIC AND SUB-BOTTOM PROFILING SURVEY AT THE GVHA PIER B, IN VICTORIA BRITISH COLUMBIA.
2. POSITION, HEADING AND ATTITUDE DATA FOR THE MULTIBEAM SURVEY WERE RECORDED BY HYPACK 2016A AND APPLANIX POSVIEW SOFTWARE. GPS DATA FOR THE SUB-BOTTOM SURVEY WERE RECORDED AT ONE SECOND INTERVALS TO TRSI'S PROPRIETARY NAVIGATION AND DATA LOGGING SOFTWARE *RTC*.
3. SOUNDINGS WERE COLLECTED USING A RESON 7125 MULTIBEAM ECHO SOUNDER. ALL BATHYMETRIC DATA WERE REDUCED TO CHART DATUM USING PROCESSED GPS DATA.
4. SEISMIC DATA WERE COLLECTED USING AN APPLIED ACOUSTICS CSP-D ENERGY SOURCE AND A CATAMARAN-MOUNTED ACOUSTIC 301 BOOMER PLATE OPERATED ON A 250J ACOUSTIC OUTPUT LEVEL AT A 266MS REPETITION RATE. LOGGED DATA WERE BAND-PASS FILTERED FROM 600HZ -10KHZ. THE 3 METRE, 8-ELEMENT SINGLE CHANNEL HYDROPHONE TOWED BEHIND THE CATAMARAN DETECTED THE REFLECTED SIGNALS FOR ON-BOARD SIGNAL PROCESSING AND FOR THE LOGGING SYSTEM. DATA WERE LOGGED AND PROCESSED USING CHESAPEAKE SONAR WIZ SOFTWARE. DATA WERE COLLECTED AT 2 TO 3 KNOTS.
5. SHORELINE, LAND FEATURES, AND PIER PLACEMENT SHOWN ON THE DRAWINGS WERE SUPPLIED BY THE CLIENT. THE EXTENT OF THE YELLOW BACKGROUND AREA (ABOVE HIGH WATER) WAS SURVEYED BY TRSI. AREAS OF DISAGREEMENT BETWEEN THE TWO SHOULD BE RESOLVED WITH A SITE VISIT.
6. PROPOSED DOLPHIN PLACEMENT SHOWN WAS SUPPLIED BY BERGERABAM.
7. NO GEOTECHNICAL INFORMATION WAS AVAILABLE FOR VERIFICATION OF THIS SUB-BOTTOM INTERPRETATION. THICKNESS IS COMPUTED USING AN ASSUMED SEDIMENT VELOCITY OF 1600m/sec. ANTICIPATED ACCURACY IS APPROXIMATELY ±1m.

BergerABAM

20 0 20 40 60 80 100
Scale 1:1000 Scale in metres

REVISIONS

NO	REMARKS	DATE	DESIGNED	INDEP CHKD	DFTG	DFTG CHKD	INSPD	REV	ACPT
1	PLANNED MOORING AND BREASTING DOLPHINS ADDED	09 APR 2019	EXISTING CONDITIONS	DJ	MR	KK	.....	.....	.....
0	ISSUED AS FINAL	03 JAN 2018	EXISTING CONDITIONS	DJ	MR	KK	.....	.....	.....
B	ISSUED AS DRAFT	18 DEC 2017	EXISTING CONDITIONS	-	TCB	KK	.....	.....	.....

SURV	TCB/KK/BM	24NOV2017
PROCD	.....	.....
DFTG	KK/BM	28NOV2017
CHKD	KK	28NOV2017
INSPD	.....	.....
REV	.....	.....
ACPT	.....	.....

GENERAL NOTES

Equipment
Survey vessel: *Doppler*
Surface Positioning: POS MV, DGPS
Navigation/Acquisition Software: Hypack 2016
Bathymetry: Reson 7125 Multibeam
Morphology and Stratigraphy: AAE UniBoom

Drawing Parameters
Projection: UTM Datum: NAD83
Zone: 10 Central Meridian (CM): 123°W
Scale Factor at CM: 0.9996
False Easting: 500000 False Northing: 0
Vertical Datum: LLWLT (Chart Datum)

CLIENT
GREATER VICTORIA HARBOUR AUTHORITY

GREATER VICTORIA HARBOUR AUTHORITY

GREATER VICTORIA HARBOUR AUTHORITY
CORPORATE OFFICE
189 DALLAS ROAD
VICTORIA BC CANADA V8V 1A1
Tel: 250-383-8300 FAX: 250-383-8322
E-mail: GVHA@VICTORIAHARBOUR.ORG

Terra Remote Sensing Inc.
1962 Mills Road, Sidney, BC, Canada, V8L 5Y3
Local: 250.656.0931
Toll free: 1.800.814.4212
Fax: 250.656.4604
www.terraremote.com
International Surveying and Mapping Services

PROJECT
Ogden Point Pier B
Mooring Dolphin Project

TITLE
CONTOURED BATHYMETRY

m | DWG NO CAD 0 | R 1 | SHT NO. 2 of 4

TRSI PROJECT NO.: 000-3189

T:\PROJ\Marine\000-3189 GVHA - Victoria BC\Drawings\rev2\P3 Pier B Extension Survey - Rev 1.dwg, Sht2of4 - Contoured Bathymetry, 2019-04-09 15:42:26, Mike.Rebitt