

23 ጥላረ 2020

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Gjoa Haven, NU
X0A 0H0 Canada

$\triangleright^a \text{L} : \Pi \triangleright^b \text{C}_D^c, \Delta \vdash^a \Gamma^a \sigma^b \triangleright^c \text{b} \triangleright^d \lambda \Gamma \triangleleft \Pi$

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1 ΛΓΔΠΘ

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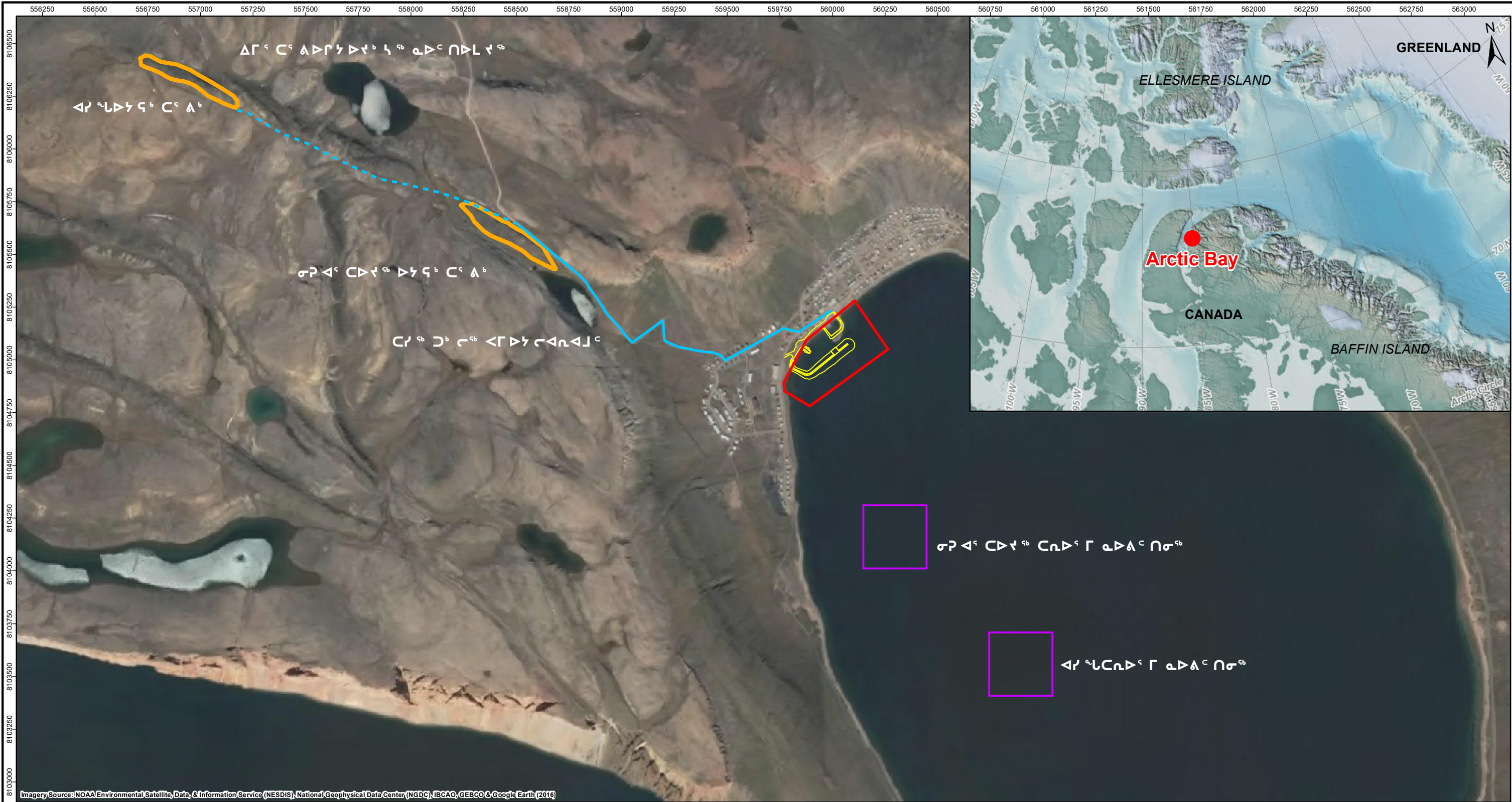
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Imagery Source: NOAA Environmental Satellite Data & Information Service (NESDIS), National Geophysical Data Center (NGDC), IBCAO, GERCO & Google Earth (2016)

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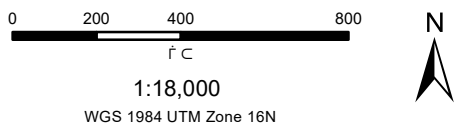
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Aerial Image: GoogleEarth, July 2016
Locations approximate.

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 Public Services and Procurement Canada	Date:	21-DEC-20	Drawn by:	KR
	Edited by:	KR	App'd by:	VB
	Project No.			317071-00037
	FIG No		1-1	REV 0
This drawing is prepared solely for the use of our customers as specified in the accompanying report. Worley Canada Services Ltd. assumes no liability to any other party for any representations contained in this drawing.				

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የታሪክ	የሰውነት	የሰውነት
የፕላስቲክ ማህተም Methyl hydrate	20 ርገ	ማህተም
የፕላስቲክ ማህተም Transmission Fluid	20 ርገ	ማህተም
80/90 የማህተም ማህተም Gear oil	80 ርገ	ማህተም
የፕላስቲክ ማህተም Antifreeze	120 ርገ	ማህተም

5 $\triangleleft \nabla \cap c_n \sigma^b d^c L c^b \sigma^a l$

[illegible]

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- [illegible]

$$- \quad \zeta^L L^{\zeta} \zeta \Delta \sigma^{\zeta b}$$

- 6 $\mathcal{H}^{\mathfrak{a}}\sigma^{\mathfrak{b}}$

7 $\triangleright \sigma^b b \triangleright r \triangleright \sigma^a L$

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$\bar{L}^a \underline{Q}$ $\nabla^a r^\gamma C D / L^{r\gamma b}$ $\nabla D^\gamma C D^{r^a} Q^\sigma \tau^a \iota \sigma^b$ $\wedge \iota \iota \nabla C^b \rho^c$ $L C^b C D Q \rho^b \triangleright \Pi^b.$

[illegible]

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Victoria.coutts@advisian.com ስልክ 778-945-5501 (በጥናል) ወይም 778-839-2372 (በሪሶርስ)።

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[Signature]

Marine Structural EIT

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Butler

Environmental Consultant, Senior Marine Scientist
and Regulatory Specialist



Diane Pinto, M.Sc.
Senior Community Engagement &
Indigenous Knowledge Research

Advisian-Ikpiaryuk JV

cc: Harald Kullmann, Advisian
Eleanor McEwan, Fisheries and Oceans Canada, Small Craft Harbour
Kenton Thiessen, Public Services and Procurement Canada

Advisian. (2019). Lancaster Sound Four Harbours Feasibility Study: Application Information Requirements for Submissions to Nunavut Impact Review Board (NIRB). Prepared for the Government of Nunavut. (Document No. 307071-01306-00-EN-LET-0006, Revision 0), June 2019.

Advisian. (2020a). Non-Technical Annual Report: Nunavut Research Institute -License #02 058 19N-M, Arctic Bay Harbour Development. Prepared for Public Service and Procurement Canada. (Document No. 317071-00037-00-EN-RPT-0001, Revision 0) November 2020.

Advisian. (2020b). Regulatory Compliance for Arctic Bay Civil Engineering Services, Harbour Development Project (R.110729.001). Prepared for Public Services and Procurement Canada and DFO-SCH. (Document No. 317071-00037-00-EN-TEN-0001, Revision 0) September 23, 2020.

DFO. (2019). Measures to Protect Fish and Fish Habitat. Available at: <http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html>. Accessed: September 2020.

DFO. (2020). Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater. Fisheries and Oceans Canada. Available at: <https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.html>. Accessed: May 2020.

Erbe, C., & McPherson, C. (2017). Underwater Noise from Geotechnical Drilling and Standard Penetration Testing. J Acous. Soc. Amer. 142 (3) 281-285 Available at: <https://asa.scitation.org/doi/abs/10.1121/1.5003328?af=R&>.

Halvorsen, M. B., Casper, B. M., Matthews, F., Carlson, T. J., & Popper, A. N. (2012). Effects of exposure to pile-driving sounds on the lake sturgeon, Nile tilapia and hogchoker. *Proceedings of the Royal Society B: Biological Sciences*, 279(1748), 4705-4714. doi:10.1098/rspb.2012.1544

IIBA. (2019). allurutiup Imanga National Marine Conservation Area. Inuit Impact and Benefit Agreement. August 1 2019. Available at: https://www.qia.ca/wp-content/uploads/2019/09/2019-08-01_TINMCA-IIBA_FULLY-SIGNED-1.pdf Accessed: November 2019.

Nedwell, J., Turnpenny, A. W. H., Lovell, J. M., & Edwards, J. (2006). An Investigation into the Effects of Underwater Piling Noise on Salmonids. *The Journal of the Acoustical Society of America*, 120(5), 2550-2554.

Nedwell, J. R., Edwards, B., Turnpenny, A. W. H., & Gordon, J. (2004). Fish and Marine Mammal Audiograms: A Summary of Available Information (Report No. 534R014): Subacoustech. 281p.

NIRB. (2019). Screening Decision Report: Four Harbour Feasibility Study Program - Fisheries and Oceans Canada-Small Craft Harbour's (DFO). NIRB File No. 19YNO31. NPC File No: 149159. Dated 15 August 2019.

NPC. (2000). North Baffin Regional Land Use Plan. Available at: https://www.nunavut.ca/sites/default/files/north_baffin_regional_land_use_plan.pdf Accessed: October 2020.

Popper, A. N., Carlson, T. J., Hawkins, A. D., Southall, B. L., & Gentry, R. L. (2006). Interim Criteria for Injury of Fished Exposed to Pile Driving Operations: A White Paper. Prepared for Jones & Stokes and the California Department of Transportation. Sacramento, CA.