Demande de la CNER faisant l'objet d'un examen préalable #126492

Crossbow Capital Project

Type de demande :	New
Type de projet:	Autre
Date de la demande :	Wednesday, September 23, 2026
Period of operation:	from 2029-09-01 to 2049-08-31
Promoteur du projet:	Adam Russell on behalf of RPON (Amber Vidal) Real Property Operations North Department of National Defence / Defence Construction Canada 180 Kent Street, 14Th Floor Ottawa Ontario K1P 0B6 Canada Téléphone :: 3435522023, Télécopieur ::

DÉTAILS

Description non technique de la proposition de projet

Anglais: The CROSSBOW project will establish a network of operational defence capabilities across approximately 47 strategic locations in the Canadian Northwest Arctic, from the US-Canadian border in the Yukon to Alert, Nunavut. This Defence capability will operate within self-powered, autonomous, ruggedized power-generating container systems designed for continuous operations in austere environments and extreme Arctic conditions.Other than the 3-5 day temporary deployment & installation camp and for annual maintenance, there will be 0 personnel on site. See attached Project document for full description.

Français: Le projet CROSSBOW va mettre en place un réseau de capacités de défense opérationnelles sur environ 47 sites stratégiques dans le Nord-Ouest arctique canadien, de la frontière américano-canadienne au Yukon jusqu'à Alert, au Nunavut. Cette capacité de défense fonctionnera au sein de systèmes de conteneurs autonomes, robustes et autoalimentés, conçus pour des opérations continues dans des environnements austères et des conditions arctiques extrêmes.À l'exception du camp temporaire de déploiement et d'installation de 3 à 5 jours et pour la maintenance annuelle, il n'y aura aucun personnel sur site. Voir le document du projet ci-joint pour la description complète.

Inuktitut: Ċᓐᓇ CROSSBOW ᐱᓕᕆᐊᖑᔪᖅ ᐋᖅᑭᒃᓱᐃᓐᓕᐊᕗᖅ ᐱᓕᕆᖃᑎᒌᒃᐸᒃᑐᓂᒃ ᓴᐳᔾᔨᓯᒪᓂᕐᒧᑦ ᐊᑐᖅᑕᐅᓐᒃᑐᓂᒃ 47−ᐸᓗᓐᓂ ᐃᓂᒋᔭᐅᓪᓗᐊᑕᖅᐸᒃᑐᓂ ᑲᓇᑕᐅᑉ ᐅᑭᐅᖅᑕᖅᑐᖓᓂ, ᐱᒋᐊᖅᓱᓂ ᐊᒥᐊᓕᑲᒥᐅᑦ-ᑲᓇᑕᐅᓪᓗ ᑭᒡᓕᖓᓂ ᔫᑲᓐᒥ ᑎᑭᓪᓗᒍ ᐊᓘᑦ, ᓄᓇᕗᑦ. Ċᒃᑯᐊ ᐊᑐᖅᑕᐅᓐᒃᑐᑦ ᐊᐅᓚᖃᑦᑕᕐᓂᐊᖅᐳᑦ ᓇᖕᒥᓂᖅ −ᐆᒻᒪᖅᑯᑎᖃᕐᓗᑎᒃ, ᓱᕋᒃᓴᕋᐃᙱᓪᓗᑎᒃ ᐆᖅᑲᖅᓯᒪᓗᑎᒃ ᓴᓇᔭᐅᓯᒪᓪᓗᑎᒃ ᑲᔪᓰᓐᓇᕈᓐᓇᕐᓗᑎᒃ ᐊᒃᓱᕈᕐᓇᕋᓗᐊᖅᑎᓪᓗᒍ, ᓂᒡᓚᓱᒃᑐᐊᓗᖕᒥ ᐅᑭᐅᖅᑕᖅᑐᒥ ᓂᒡᓚᓱᖕᓂᕆᔭᐅᔪᒥ. ᐊᓯᐊᒍᑦ ᕿᓚᒥᑯᓗᒃ ᐅᓪᓗᓄᑦ 3-5−ᓄᑦ ᐋᖅᑭᒃᓱᐃᓂᕐᒧᑦ ᐊᕐᑖᒍᑕᒫᓪᓗ ᐋᖅᑭᐅᒪᑎᑦᑎᓂᕐᒧᑦ, ᓴᓇᕝᕕᖕᒦᑦᑐᖃᔾᔭᙱᑦᑐᖅ. ᖃᐅᔨᒋᐊᕐᓗᒍ ᐃᓚᓕᐅᑎᓯᒪᔪᖅ ᐱᓕᕆᐊᒃᓴᒧᑦ ᑎᑎᕋᖅᓯᒪᔪᖅ ᐃᓗᓕᓕᒫᖕᒋᓐᓄᑦ.

Personnel

Personnel on site: 10

Days on site: 5

Total Person days: 50

Operations Phase: from 2029-07-01 to 2032-08-01

Operations Phase: from 2029-09-01 to 2049-08-31

Post-Closure Phase: from to

Activités

Emplacement	Type d'activité	Statut des terres	Historique du site	Site à valeur archéologique ou paléontologique	Proximité des collectivités les plus proches et de toute zone protégée
Location 1	Other	Crown	n/a	n/a	n/a
Location 2	Other	Crown	n/a	n/a	n/a

Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Resolute Bay	n/a	HTO	2025-01-01
Grise Fiord	HTO	HTO	2025-01-01

Autorisations

Indiquez les zones dans lesquelles le projet est situé:

North Baffin

Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Nunavut Planning Commission	NIRB Exemption	Active	2026-08-10	
Parcs Canada	Awaiting NIRB decision	Applied, Decision Pending		
Crown Indigenous Relations and Northern Affairs Canada	Exempt	Active	2026-09-16	

Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Air	Chinook	

Project accomodation types

Temporary Camp

Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

Type d'équipement	Quantité	Taille – Dimensions	Utilisation proposée
Iso Container	2	20' long x 8' wide x 8' high	Defence (1 container at each location)

Décrivez l'utilisation du carburant et des marchandises dangereuses

Décrivez l'utilisation de carburant :	Type de carburant	Nombre de conteneurs	Capacité du conteneur	Quantité totale	Unités	Utilisation proposée
Methanol	fuel	1	2760	2760	Liters	Power for Direct Methanol Fuel Cells

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
0	n/a	n/a

Déchets

Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Other	Other, Garbage	0	The power generating containers are self contained and have 0 waste	deployment and Maintenance activities on site will ensure all waste is removed from each site upon departure.

Répercussions environnementales :

Environmental Impact Assessment Mitigation Plan is still in draft form and will be completed as the project progresses leading up to (and including) engagement with regional partners, who can inform select aspects of the mitigation plan. We anticipate support from Defence Construction Canada (DCC) to provide specialized environmental support throughout 2027 which will feed into CROSSBOW environmental mitigation requirements or strategies as part of site assessments, deployment, and ongoing maintenance and life cycling. Defence Research and Development have already informed items such as: - Surface installations impact on ground shifting or subsidence, with visual inspections indicating 1" ground settling over a 3-year period. - Heat loss and long-term presence altering ground conditions, including IR images showing the heat gradient, and indicating no significant heat conduction to the ground. - Behavior of contaminants in permafrost environments; although no testing has been done as it would require a controlled methanol spill on the ground, however the design of the container assumes leakage is not expected into the environment given the seal of the container's walls and floor (assuming steel container). A design choice was also made not to place a drain hole in the floor to remove any spilled methanol. Methanol safety measures have been implemented, including methanol spillage alarms and MSDS instructions. - Use of solar PV/wind turbines/DMFCs/batteries was proven to provide a polar night power and energy solution in the Arctic. - Methanol is contained in discrete 60L cartridges, so meets the transportation requirements for RCAF heavy lift aircraft, and was chosen over diesel for its function at sub-zero temperatures without a direct heating solution, providing longer operation with less (L) fuel on site, as well as methanol's compatibility with fuel cells to bridge the charging gap when solar/wind resources are not available during polar nights.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

Description de l'environnement existant : Environnement physique

National Park, remote

Description de l'environnement existant : Environnement biologique

National Park, remote

Description de l'environnement existant : Environnement socio-économique

n/a, remote area

Miscellaneous Project Information

Identification des répercussions et mesures d'atténuation proposées

Minimal impacts, non-disruptive to the land, no permanent foundation is required.

Répercussions cumulatives

Minimal cumulative effects

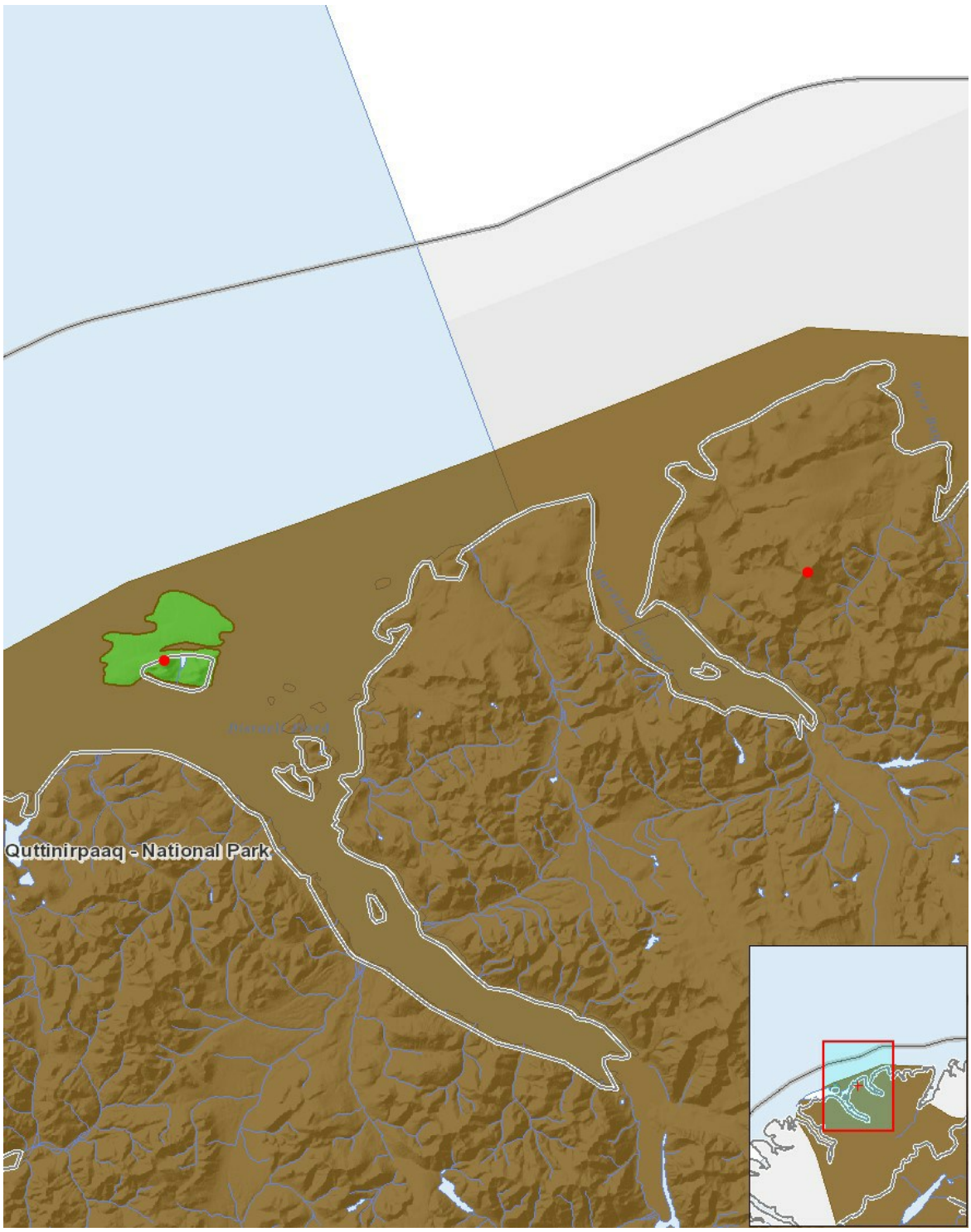
Impacts

Identification des répercussions environnementales

	PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction																									
Other		N	N	-	-	-	-	-	M	-	-	N	N		-	-	-	-	-		-	-	-	-	-
Exploitation																									
Other		N	M	-	-	-	-	-	M	-	-	N	N		-	-	-	-	-		-	-	-	-	-
Désaffectation																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

Site du projet



Liste des géométries de projet

1	point	Location 1
2	point	Location 2