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Nationalmuseum &  
Arkiv

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# **HERITAGE IMPACT ASSESSMENT OF THE NATURE ROAD BETWEEN SISIMIUT AND KANGERLUSSUAQ: RECOMMENDATION FOR THE PROTECTION OF SCHEDULED MONUMENTS WITHIN THE PROPOSED PLAN**

## EXECUTIVE SUMMARY

A 10-day pedestrian survey was conducted between 4 and 14 July, 2017 to assess the impact of the construction of a gravel road (hereafter referred to as the ‘nature road’) that will connect the towns of Sisimiut and Kangerlussuaq, Qeqqata Municipality. The proposed road would extend over 150 km and will be used primarily for travel by all-terrain vehicle (ATVs) with possibilities for enhancement and expansion of the road in years following its construction. Archaeological reconnaissance of the 200 m wide corridor of the road’s path was performed with the purpose of identifying significant cultural resources that may be disturbed due to development of the road and accompanying infrastructure. This report documents the cultural assets identified within the corridor and provides recommendations/guidance on the mitigation of disturbances to archaeologically sensitive areas located within the immediate boundaries of the corridor. These recommendations follow Inatsisartut Act no. 11, 19 May 2010 on Cultural Heritage Protection and Conservation (Heritage Protection Act) with the sole intention of protecting historic assets as scientific source material and as an enduring basis for the perception, self-understanding, well-being and activities of present and future generations. In the area where the nature road overlaps with the UNESCO nominated property *Aasivissuit-Nipisat: Inuit Hunting Ground Between Ice and Sea*, identified ancient monuments are designated with a special significance due to their protected status within the larger management plan of the nominated property.

## KALAALLISUUATA NAALISARNERA

Qeqqata Kommuniani illoqarfinnik Sisimiut aamma Kangerlussuaq, atassusiisumik aqqusinniornerup sunniutigisinnaasai nalilersorniarlugit, ulluni 10-ni takusaaneq piffissami 4. - 14. juli 2017 ingerlanneqarpoq. Aqqusinniassatut siunnersutigineqartoq 150 km-inik isorartussuseqassaaq aammalu pingaartumik nunakkoortaait atorlugit (ATV-it) assartuussinermut atorneqassalluni – taamaattoq ukiuni aggersuni aqqusernup pitsanngorsarneqarnissaal allilerneqarnissaal periafissaqassalluni. Aqqusinniassamut qanganisarsiornikkut takusaaneq, qanganitsanik eriagisassanik imaaliallaannaq peerneqarsinnaanngitsunik aqqusinniornermi aammalu attaveqarnermi malittaasumi akornuserneqarsinnaasunik suussusersiinissaq siunertaralugu, aqqummi 200 meterisut atitutigisumi ingerlanneqarpoq. Nalunaarusiami matuman iqqutip iluani qanganitsat eriagisassat imaaliallaannaq peerneqarsinnaanngitsut nassaarineqartut uppernarsarneqarput aammalu NKA suliassap ingerlanneqarneranut inassuteqaateqarluni – inassuteqaatit aqqusinniornermi aqqutip maannakkut killeqarfia iluani sumiifflit qanganisarsiornermut tunngatillugu mianernartut akornusersorneqannginnissaannik qulakkeerisussat. Inassuteqaatini taakkunani, oqaluttuarisaanermi pigisat taamatullu ilisimatuussutsikkut najoqqtassat aammalu maannakkut siunissamilu kinguaariinni isummertarnermut, imminut paasinissamut, atugarissaarnissamut ingerlataqarnissamullu ataavartumik tunngaviusussat illersorneqarnissaat siunertaralugu, eqqisisimatisarisneq aamma allatigut kulturikkut eriagisassanik kulturikkut kingornussatut illersuineq pillugu Inatsisartut Inatsisaat nr. 11, 19. maj 2010-meersoq malinneqarpoq. Aqqutip ilaani pinngortitami aqqutip sumiiffimmut Aasivissuit-Nipisat UNESCO-mit toqqagaasumut: Inuit Hunting Ground Between Ice and Sea qalleraaffiani, qanganitsat eriagisassat, sumiiffimmi tamakkiisuuffiata iluani illersugaasutut inissisimanerat pissutigalugu, immikkut mianersuussisumik suliarineqarput.

### Inassuteqaat:

Inatsisartut inatsisaat nr. 11, 19. maj 2010-imeersoq malillugu qanganitsat eriagisassat imaaliallaannaq peerneqarsinnaanngitsut ukiup 1900-ip siornaneersut tamamik eqqisisimatisaapput, ilanggulligit illukut, nunaqarfikut, ilerrit iliveqarfikullu. Nunaannarmi ilerrit 1900-p kingornaneersut aammattaaq eqqisisimatisaapput. Aqqusinniornissamut tunngatillugu taamaattumik qanganitsanut eriagisassanut tamaginnut Appendix I-imí allattorsimasunut makkua inassutigineqarput:

- Qanganisaq eriagisassaq imaaliallaannaq peerneqarsinnaanngitsoq ajoquserneqassanngilaq, allanngortinnejassanngilaq imaluunniit nuunneqassanngilaq, tamakkiisumik imaluunniit ilaannaasumik aammalu ingerlatat suulluunniit qanganitsamit eriagisassamit 20 meterit iluanni ingerlateqquaanngillat.
- Inassuteqaat tamaginnit sumiiffimmut atuisinnaatitaasunit ataaqqineqassaaq, pisinnaatitaaneq taanna qanga pilersimanersoq apeqqutaanani.
- Maannamut qanganisaq eriagisassaq paasineqarsimanngitsoq sanaartornermik suliaqarnerup nalaani nassaarineqarpat, sanatisisup nassaarneq ingerlaannaq Nunatta Katersugaasivianut Allagaateqarfianullu nalunaarutigissavaa aammalu **suliaqarneq qanganitsamut eriagisassamut nassaarineqartumut toqqaannartumnik sunniisussaappat, tamanna unitsinnejassaaq**. Taamatut pisoqarnerani Nunatta Katersugaasivia Allagaateqarfialu qanganisarsiornikkut misissuinerit annertunerusut ingerlanneqartariaqartut, takuuk § 13, imm. 2, imaluunniit eqqisisimatisatassatut suliaqarneq immikkoortoq aallartinnejartariaqartoq takuuk § 5, imm. 2, aalajangiisinnaatitaassaaq.

## DANSK RESUMÉ

En 10-dages besigtigelse blev gennemført i tidsrummet 4. til 14. juli 2017 for at vurdere den mulige påvirkning ved anlæggelse af en vej, der forbinder byerne Sisimiut og Kangerlussuaq, Qeqqata Kommune. Den foreslæde vej vil strække sig over 150 km og primært blive brugt til transport med terrængående køretøjer (ATV'er) - dog med muligheder for forbedring og udvidelse af vejen i de kommende år. Den arkæologiske besigtigelse af vejforløbet blev foretaget på en 200 m bred korridor med det formål at identificere jordfaste fortidsminder, der kan blive forstyrret ved anlæggelse af vejen og den ledsagende infrastruktur. I denne rapport dokumenteres de fundne jordfaste fortidsminder indenfor korridoren og NKA kommer med sine anbefalinger til projektets udførsel – anbefalinger som skal sikre, at vejens anlæggelse ikke forstyrrer de arkæologisk følsomme områder inden for korridorens umiddelbare grænser. Disse anbefalinger følger Inatsisartut lov nr. 11 af 19. maj 2010 om fredning og anden kulturarvsbeskyttelse af kulturminder med den hensigt at beskytte historiske aktiver som videnskabeligt materiale og som et varigt grundlag for opfattelse, selvforståelse, trivsel og aktiviteter hos nutidens og fremtidens generationer. På strækningen hvor naturvejen overlapper med det UNESCO-nominerede område Aasivissuit-Nipisat: Inuit Hunting Ground Between Ice and Sea er fortidsminderne behandlet med særlig skånsomhed på grund af deres beskyttede status inden for områdets helhedsplan.

### Anbefaling:

Ifølge Inatsisartut lov nr. 11. maj 2010 er alle jordfaste fortidsminder fra før år 1900, herunder ruiner, bopladser, grave og nedlagte gravpladser fredede. Fritliggende grave fra år 1900 og fremefter er også fredede. Hvad angår anlæggelse af vejforløb anbefales derfor følgende for alle fortidsminder oplistet i Appendix I:

- Et jordfast fortidsminde må ikke beskadiges, ændres eller flyttes, hverken helt eller delvist og ingen aktiviteter må udføres inden for en afstand af tyve meter fra fortidsmindet.
- Anbefalingen skal respekteres af alle med brugsrettighed til området uanset hvornår denne ret blev etableret.
- Hvis et hidtil uidentificeret fortidsminde findes under anlægsarbejdet skal bygherren straks rapportere fundet til Grønlands Nationalmuseum og Arkiv og arbejdet skal stoppes, såfremt det vil have direkte påvirkning på det fundne fortidsminde. I sådan et tilfælde vil Grønlands Nationalmuseum og Arkiv have ret til at beslutte om yderligere arkæologiske undersøgelser bør udføres, jfr. § 13, stk. 2, eller om en selvstændig fredningssag bør opstartes jfr. § 5, stk. 2.

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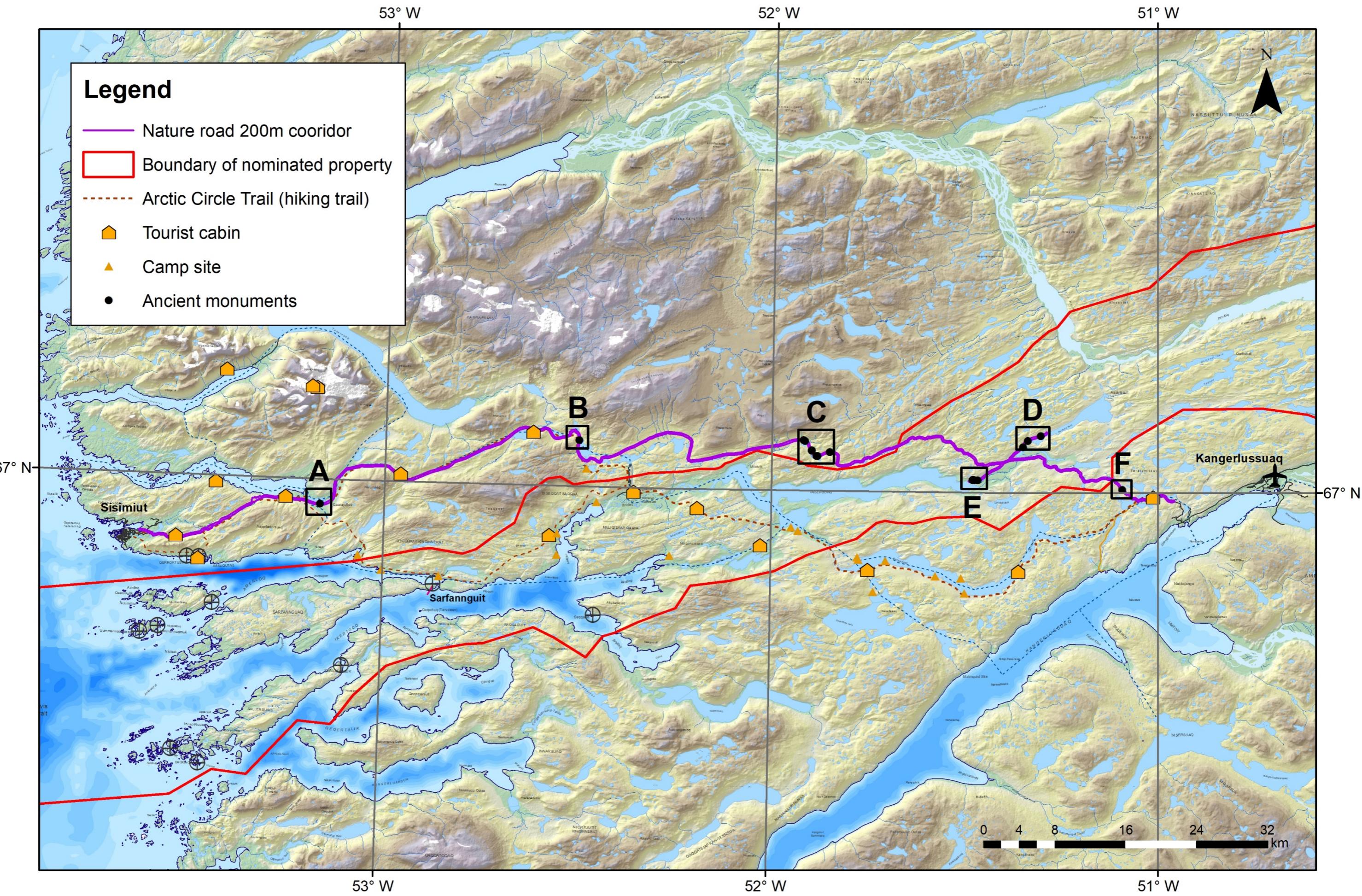
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## INTRODUCTION

Archaeological reconnaissance of the 200 meter (m) wide corridor of the proposed nature road's path was performed by a team of archaeologists from the Nunatta Katersugaasivia Allagaateqarfialu (NKA) and the Danish Nationalmuseet between 4 July and 14 July 2017. The proposed nature road plan (Tillæg nr. 22 til Kommuneplan 2012-24 for Qeqqata Kommunia Naturvej mellem Sisimiut og Kangerlussuaq) will connect the towns of Sisimiut and Kangerlussuaq (Map 1). In its initial form it will function primarily as an all-terrain vehicle (ATV) and snowmobile track and will extend over a distance of 150 kilometers (km) with a width of approx. 3 m with passing areas placed approximately every 1 km. Over time, the nature road is expected to be developed into a 3 m gravel road with ½ m buffer on each side. Approximately 30 km to the west of Kangerlussuaq, the main nature road is intersected by a secondary road that will connect the eastern end of Tasersuaq Lake with the southwestern end of Aasivissuit Tassiat (Aasivissuit Lake). This specific area falls within the Aasivissuit-Nipisat UNESCO nominated property. This particular area is recognized for its significance as a historic overland passage taken by Inuit hunters and their families during long seasonal hunting trips into Aasivissuit on their journey from the coast (Grønnow, et al. 1983). The Qeqqata municipality has taken a great interest in this cultural landscape and has suggested that the nature road will constitute an important element in the future infrastructure associated with the current UNESCO nominated property *Aasivissuit-Nipisat: Inuit Hunting Ground Between Ice and Sea*.

The purpose of the survey performed by the NKA in July of 2017 was to identify any visible cultural resources that could potentially be disturbed due to development of the road and its accompanying infrastructure. This report identifies all cultural assets identified within the proposed plan's corridor and provides recommendations/guidance on the mitigation of disturbances to archaeologically sensitive areas and ancient monuments that could

potentially be impacted by the construction of the road. Cultural assets, monuments and archaeologically sensitive areas older than AD 1900 in Greenland are protected by [Inatsisartut Act no. 11, 19 May 2010](#) on Cultural Heritage Protection and Conservation (Heritage Protection Act) and this act provides the legal designation of cultural assets that possess scientific, historic value and social value.

The Inatsisartut Act no. 11, 19 May 2010 allows for the Government of Greenland (Naalakkersuisut) under the direction of the NKA, to set aside designated assets and change or annul an existing designation or other cultural heritage conservation measures which may pose a threat to the enduring legacies connected to the cultural resources of the country. The act contains a definition of, and dedicated regulations for, ancient monuments, historic buildings and cultural-historical areas.

### Cultural-historical areas

Cultural-historical areas are defined as areas of cultural historical value. The area delimited by the boundaries of the nominated UNESCO World Heritage property possesses a cultural historical value and therefore falls directly under the Heritage Protection Act. The NKA is responsible for making the decision on what constitutes the recognition of a cultural-heritage area, and all interferences or alterations to this area are subject to prior notification and consultation with the NKA. In some cases, consultation may involve the public, the owner, users with areal allocation or other rights of use of the

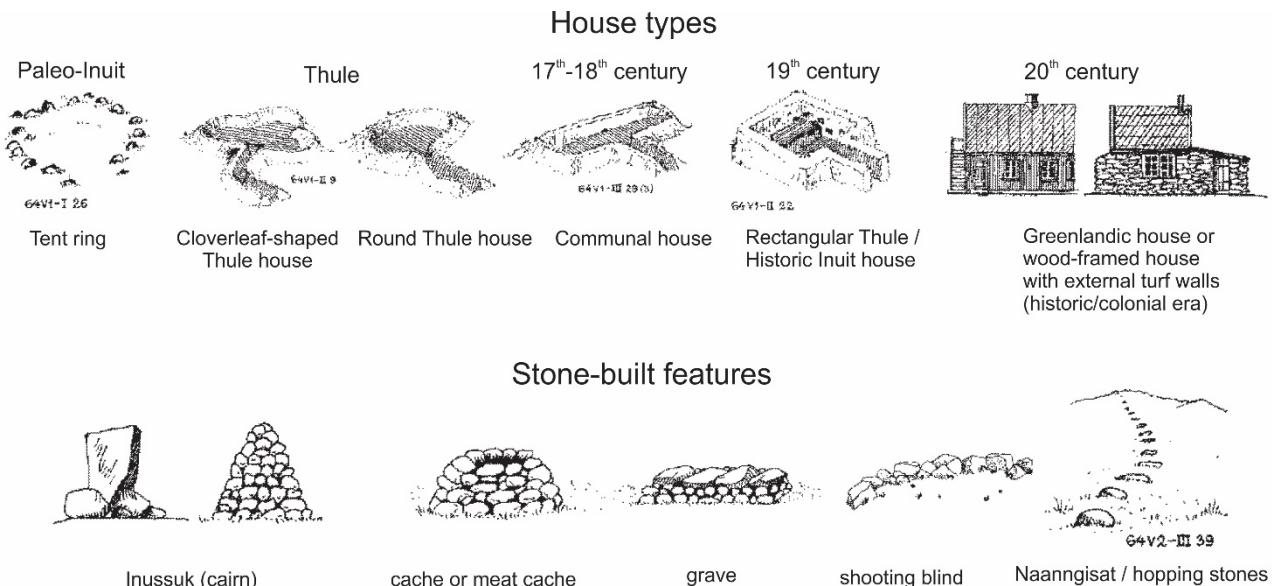


Fig. 1. Common stone and turf built house types and archaeological features in West Greenland (after Gulløv 1983; Vadstrup and Schultz-Lorentzen 1994).

area and the municipality in which the cultural-historical area is located, the Government of Greenland and other relevant parties. Furthermore, the Cultural Heritage Board, established under the act, must be consulted separately. Designation means that no activities whatsoever may take place within the area apart from public access. The NKA can grant exemption to this under very special circumstances. In other cases, conservation management of a cultural-historical area may require that no activities are to be permitted within the area and that no parts of the area may be altered, disfigured or damaged. The NKA may grant exemption to this under very special circumstances.

### Ancient monuments

The Heritage Protection Act also contains separate language specific to the designation of ancient monuments (i.e. ancient or historic man-made features) and historic buildings (Fig. 1). Unlike cultural-historical areas, ancient monuments are only subject to scheduling. Ancient monuments are understood as the physical traces of past human activity and their associated context. Some ancient monuments are automatically protected under the act, for example any archaeological feature pre-dating AD 1900 (i.e. ruins, settlements, individual graves

and/or burial grounds). Isolated graves from AD 1900 or after are also automatically protected. In addition to these automatically protected (scheduled) ancient monuments, the NKA can, following consultation, decide on the scheduling of structures from AD 1900 or after, such as disused churchyards, cairns, fields and associated stone walls. In some cases, these structures are of significant importance due to their historical value. Scheduling means that the monument is given an internal registration number in the NKA's national database of protected ancient and historic monuments ([Nunniffiit](#)). This monument may not in any way be damaged, altered or moved, either totally or in part and *no disturbances of any kind may take place within 20 m of the monument*. Scheduling must be respected by all parties who use the area where the ancient monument is located—regardless of when this designation was established.

### Historic buildings

Historic buildings are understood as entire buildings, building exteriors, individual building elements and their immediate surroundings to the extent that these external elements constitute a part of the entity worthy of conservation and protection. Buildings can only be listed by the NKA following an official

hearing (consultation). To be listed as historic, it must be demonstrated that the entity possesses some historical or architectural value.

## ARCHAEOLOGICAL RECONAISANCE

The following section provides detail on the ancient monuments identified during the course of the pedestrian survey. A 200 m wide corridor GPS track was provided to the NKA by the Qeqqata Municipality Area for Technology & Environment plan Division (Qeqqata Kommunia Området for Teknik & Miljø Planafdelingen). The three-man survey team covered the general course of the corridor, attempting when possible to retain a consistent distance between team members to ensure maximum coverage. Maps 2-16 indicate the georeferenced locations of protected monuments found within the Nature Road corridor. Overall, six localities (see Map 1, insets A-F) were identified to possess cultural assets protected under the Cultural Heritage Protection Act. In some cases, localities represented only a single monument (see insets A, B, & F). In other cases localities represented a clustering of archaeological features on the landscape (see Map 1, insets C, D & E) and are technically designated as ‘archaeological sites’ of unconfirmed age (i.e. cultural-heritage areas). A total of 19 individual ancient monuments were identified during the survey (Table 1). These archaeological features represent a wide variety of cultural asset types that in some cases may span multiple temporal phases and represent multi-component types (i.e. tent rings and/or tent house features). In the case of single features, ancient monuments may be relic man-made works such as *inussuk* (cairns), meat caches, fox traps or hunting blinds. Graves represent a special type of ancient monument especially in the instances where extent human remains are observed.

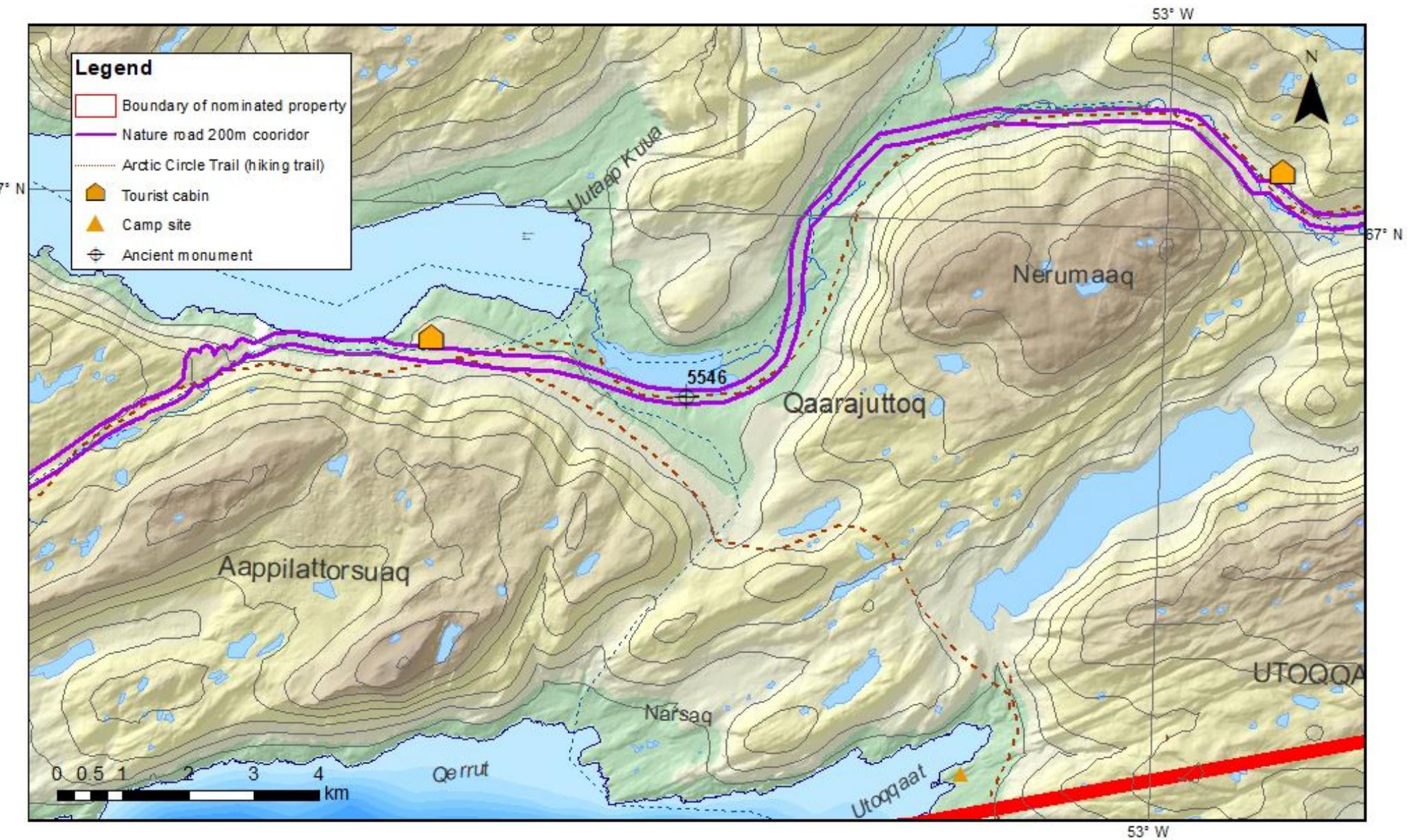
Typically, as soon as a team member identified an archaeological feature, other team members were notified and a systematic walk-over of the area would begin. Surveyors

would then approximate the observable boundaries of the site by walking outward in different directions from the estimated core or maximal extent of observable surface features. Areas of archaeological interest were given GPS waypoints, photographed and general descriptions recorded in field notebook. In only one instance a sample collection was deemed appropriate. In this case, a charcoal sample was collected from a hearth feature.

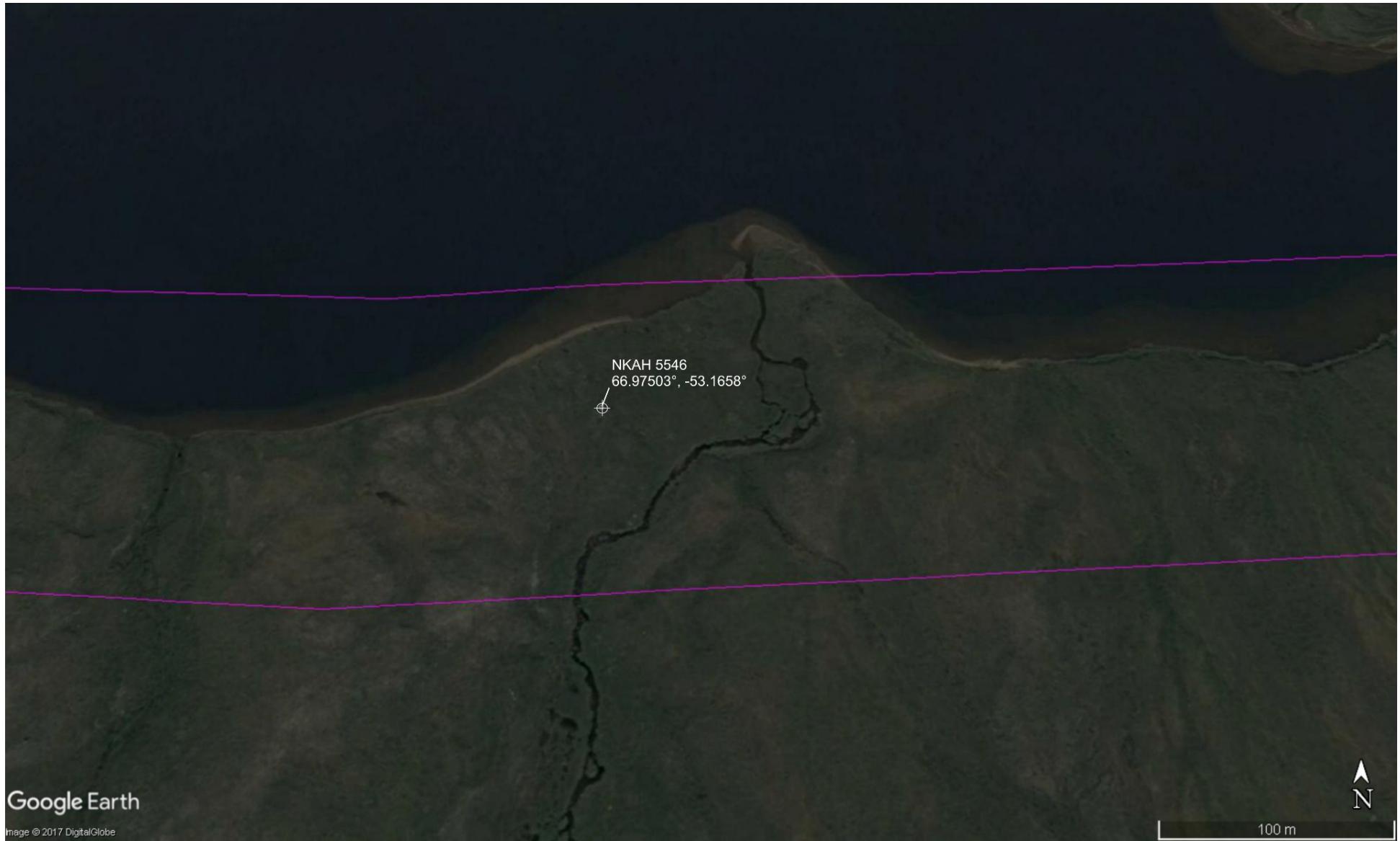
Overall, the survey has resulted in widening our knowledge of the area’s cultural resources. This information is critical in the future management of the UNESCO nominated property as well as the areas likely to be impacted by the future construction of the Nature Road.

Table 1. List of protected monuments identified within the 200 m Nature Road corridor.

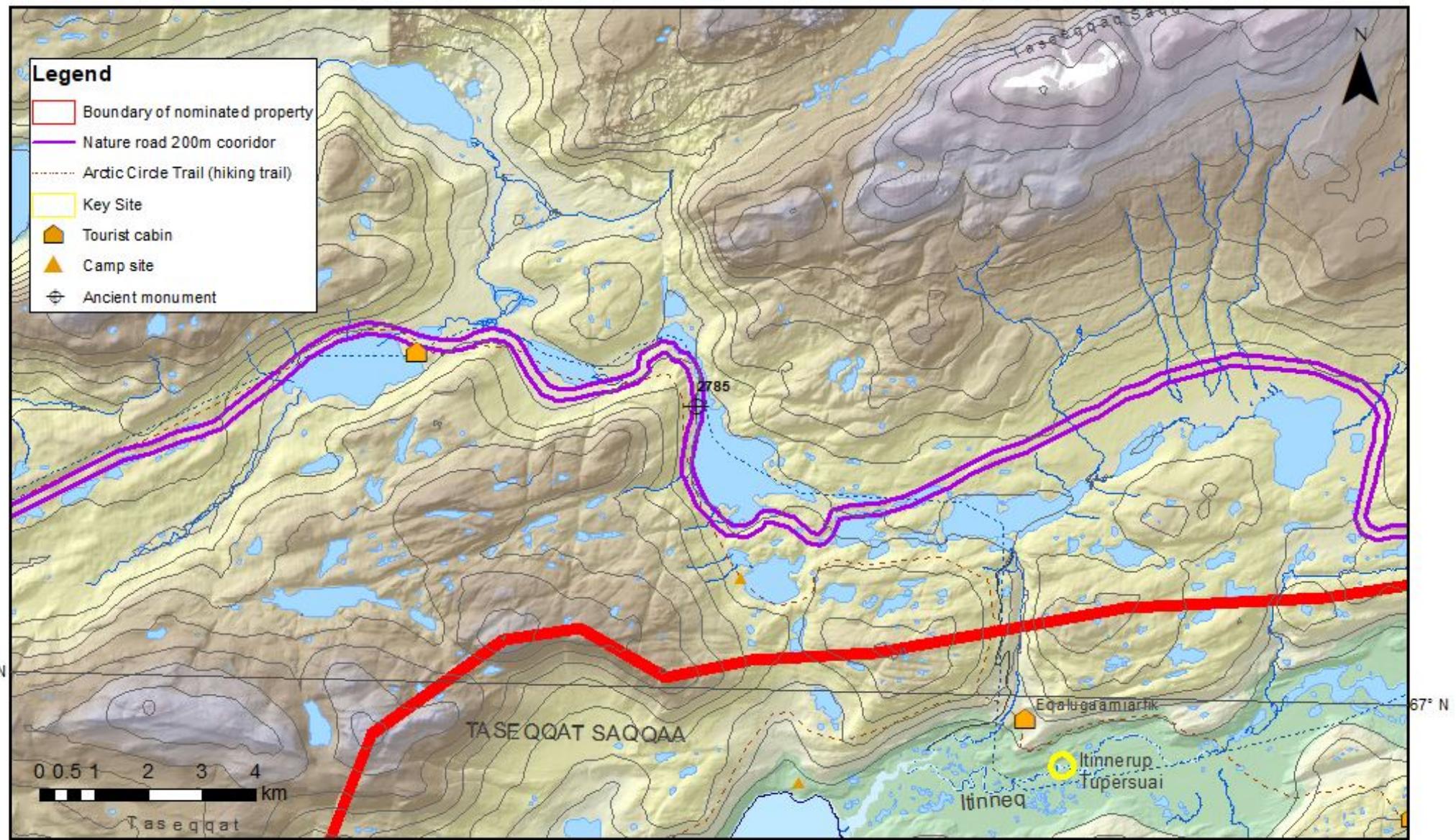
No.	Map inset	NKAH	Map No.	Location name	Latitude	Longitude	Protected monument(s)
1	A	5546		Qaarajuttoq	66.97503°	-53.1658°	tent rings (x2)
2	B	2785	67V1-0II-008	Taseqqat	67.047°	-52.4996°	turf house ruins, square dwelling
3	C	5548		Umiivik Valley	67.05137°	-51.9182°	cache
4	C	5548		Umiivik Valley	67.05062°	-51.9143°	tent ring
5	C	5549		Umiivik Valley	67.041°	-51.897°	hearth feature
6	C	5549		Umiivik Valley	67.04116°	-51.8969°	tent ring w/ hearth feature
7	C	5550		Umiivik Valley	67.03545°	-51.8848°	cache
8	C	5551		Umiivik Valley	67.03536°	-51.8822°	inussuk (cairn)
9	C	5552		Umiivik Valley	67.03962°	-51.8505°	cache
10	D	2852	67V2-III-012	Qorlortoq	67.04658°	-51.3495°	hunting blind
11	D	2855	67V2-III-015	Qorlortoq	67.0577°	-51.3039°	tent ring
12	D	2854	67V2-III-014	Qorlortoq	67.05295°	-51.3369°	tent ring
13	E	4847	67V2-III-020	Tasersuaq Lake	67.0124°	-51.4659°	meat cache
14	E	2841	67V2-III-002	Tasersuaq Lake	67.01249°	-51.4775°	fox trap
15	E	2841	67V2-III-002	Tasersuaq Lake	67.01275°	-51.4775°	grave
16	E	2841	67V2-III-002	Tasersuaq Lake	67.01274°	-51.4773°	grave
17	E	4848	67V2-III-021	Tasersuaq Lake	67.01309°	-51.4799°	fox trap
18	E	4848	67V2-III-021	Tasersuaq Lake	67.01277°	-51.4806°	fox trap
19	F	5553		Talut	67.00349°	-51.0921°	inussuk (cairn)



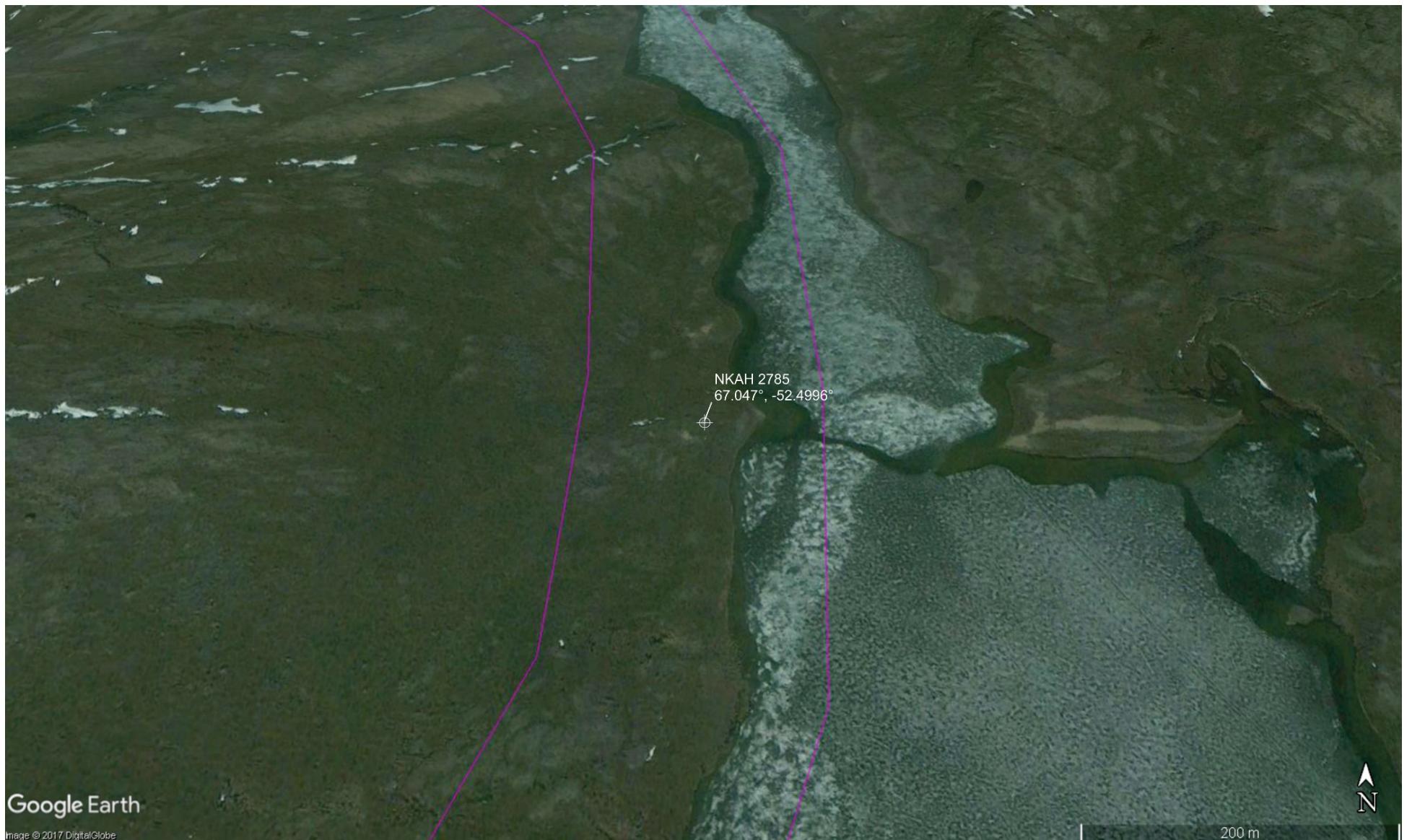
Map 2. Inset A. Location of NKAH 5546. Aasivissuit-Nipisat Annex Map, WGS 84/UTM zone 22N. Courtesy of GEUS and Frants von Paten (December 2016).



Map 3. Google Earth satellite map showing location of NKAH 5546 (66.97503°, -53.1658°), two historic tent rings with evidence of recent use near the shore of the lake.



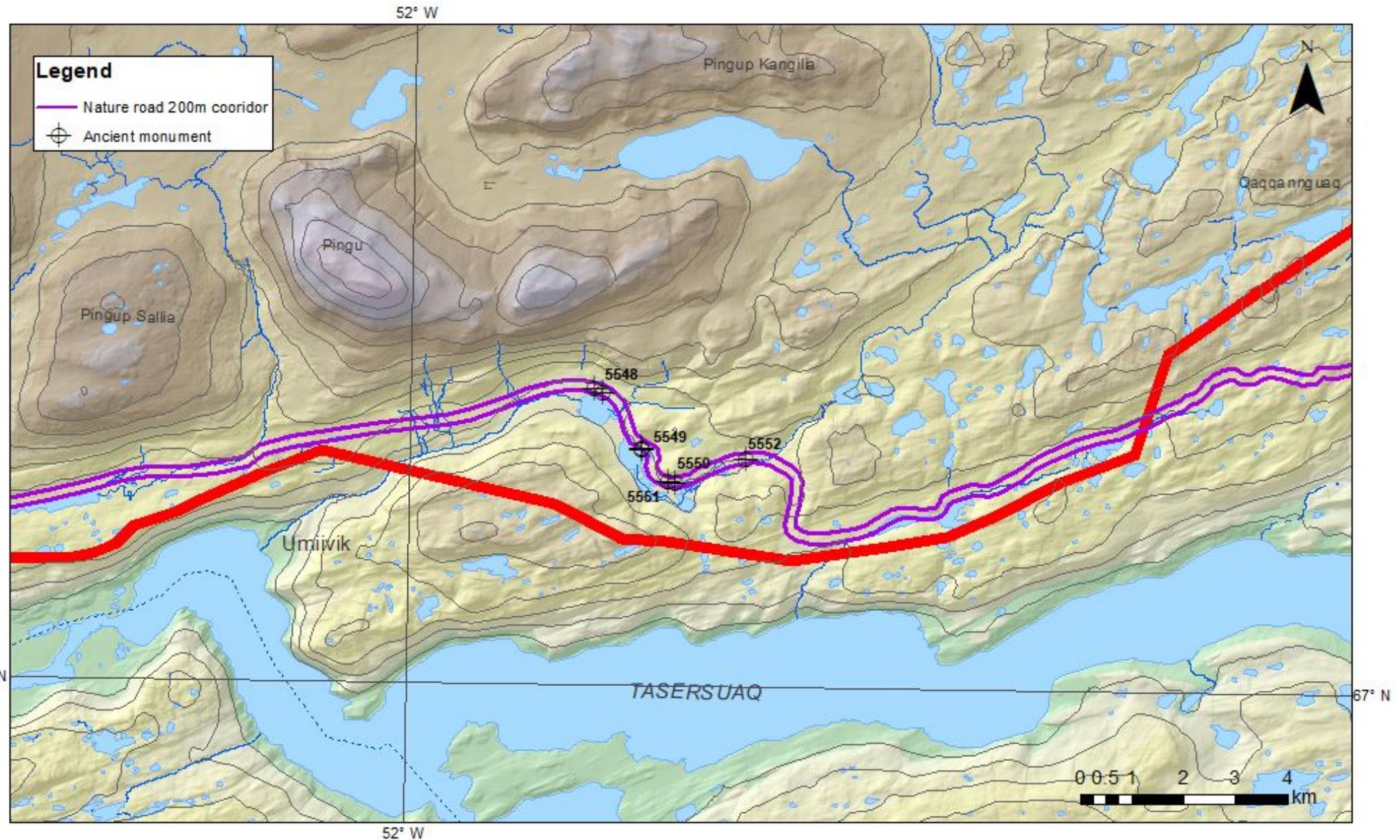
Map 4. Inset B. Location of NKAH 2785. Aasivissuit-Nipisat Annex Map, WGS 84/UTM zone 22N. Courtesy of GEUS and Frants von Paten (December 2016).



Google Earth

Image ©2017 DigitalGlobe

Map 5. Google Earth satellite map showing location of NKAH 2785 ( $67.047^{\circ}$ ,  $-52.4996^{\circ}$ ), remains of rectangular stone and turf house on the Arctic Circle Trail (ACT).



Map 6. Inset C. Locations of NKAH 5548, 5549, 5550, 5551 and 5552. Aasivissuit-Nipisat Annex Map, WGS 84/UTM zone 22N. Courtesy of GEUS and Frants von Paten (December 2016).



Google Earth

Image © 2017 DigitalGlobe

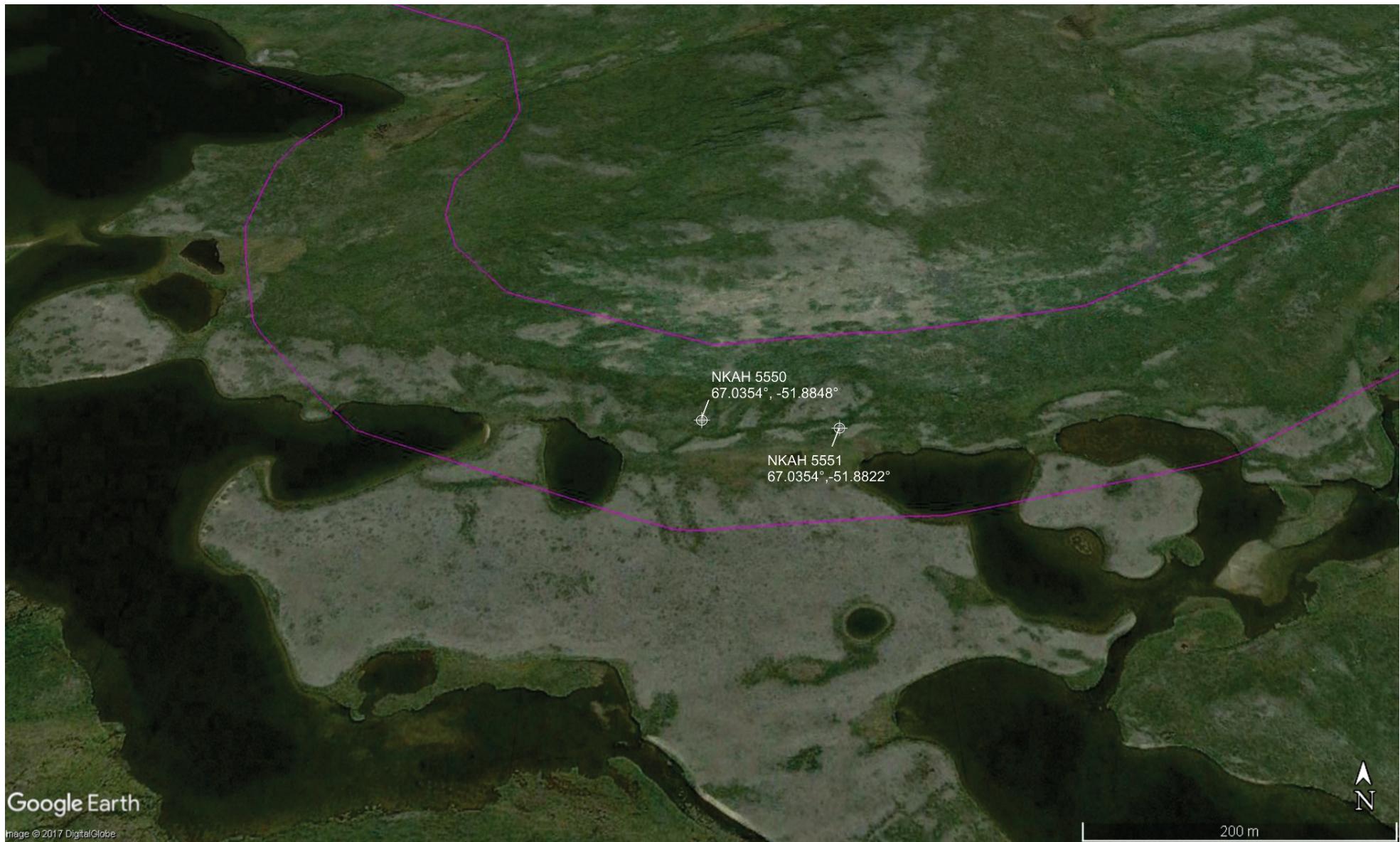
Map 7. Google Earth satellite map showing location of ancient monuments listed under NKAH 5548. A stone meat cache ( $67.05137^{\circ}$ ,  $-51.9182^{\circ}$ ) and a tent ring ( $67.05062^{\circ}$ ,  $-51.9143^{\circ}$ ) suggest this area was used as a summer hunting camp.



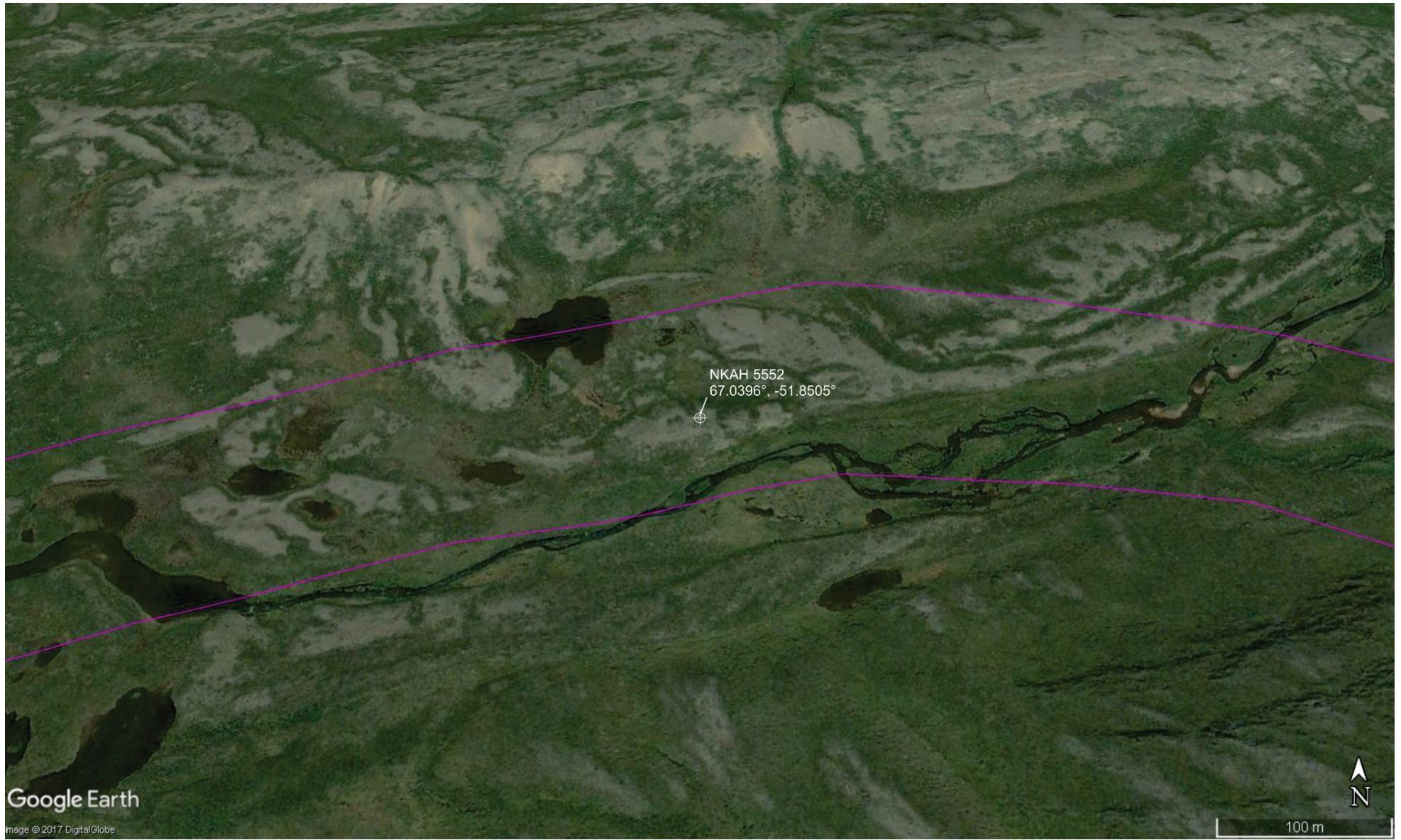
Google Earth

Image © 2017 DigitalGlobe

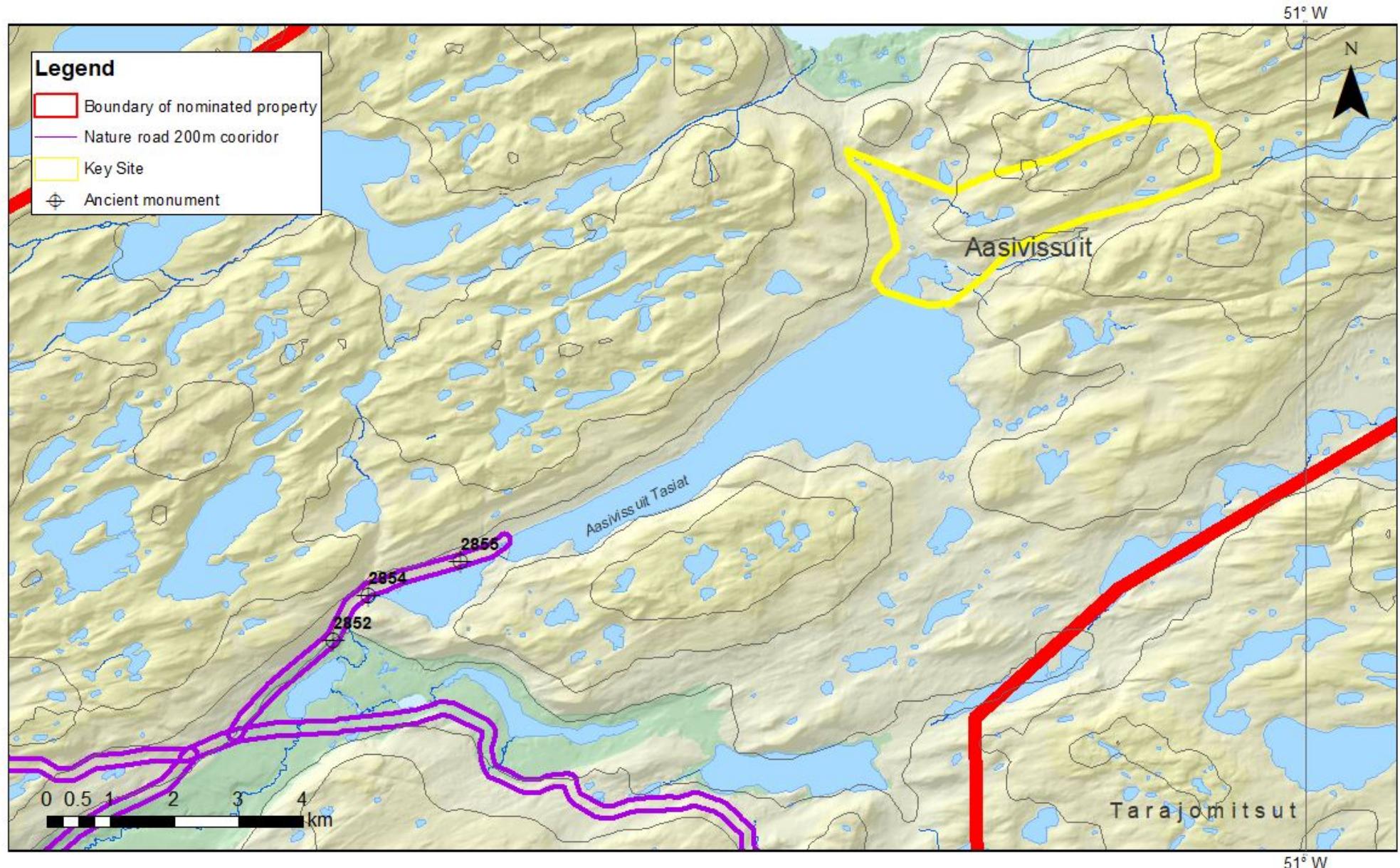
Map 8. Google Earth satellite map showing location of ancient monuments listed under NKAH 5549. An open air circular hearth ( $67.041^\circ$ ,  $-51.897^\circ$ ) lies in proximity to a tent ring with associated hearth feature ( $67.04116^\circ$ ,  $-51.8969^\circ$ ). Round features suggest a possible Paleo-Inuit phase that extends into the historic/modern period.



Map 9. Google Earth satellite map showing location of NKAH 5550 and 5551. The two listing represent an associated cluster of monuments that skirt the edge of the slope along the lower drainage basin. NKAH 5550 ( $67.0354^{\circ}$ ,  $-51.8848^{\circ}$ ) represents a large cracked boulder improvised into a meat cache with caribou bones. NKAH 5551 ( $67.03536^{\circ}$ ,  $-51.8822^{\circ}$ ) is a strategically placed innusuk (cairn). The features are believed to be part of a larger caribou drive system in the valley and associated with NKAH 5548, 5549 and 5552.



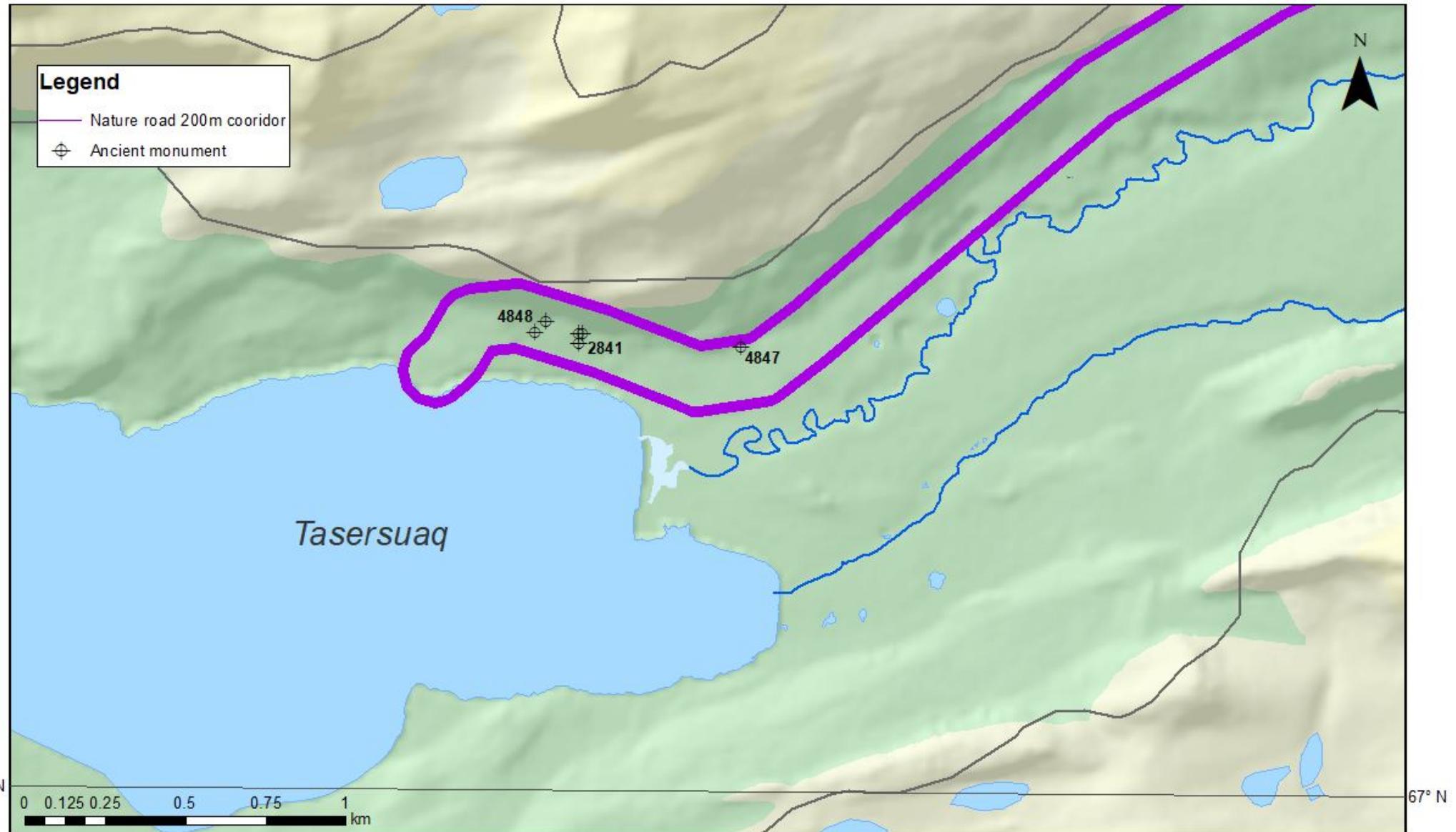
Map 10. Google Earth satellite map showing location of NKAH 5552 ( $67.0396^{\circ}$ ,  $-51.8505^{\circ}$ ). The site represents a well-preserved cache of undetermined age.



Map 11. Inset D. Locations of NKAH 2852, 2854 and 2855 at Qorlortup Tasia (Aasivissuit Tasiat). Aasivissuit-Nipisat Annex Map, WGS 84/UTM zone 22N. Courtesy of GEUS and Frants von Paten (December 2016). The sites in this area fall within the boundaries of the nominated UNESCO property. The UNESCO key site of Aasivissuit is seen in northeast corner of the map.

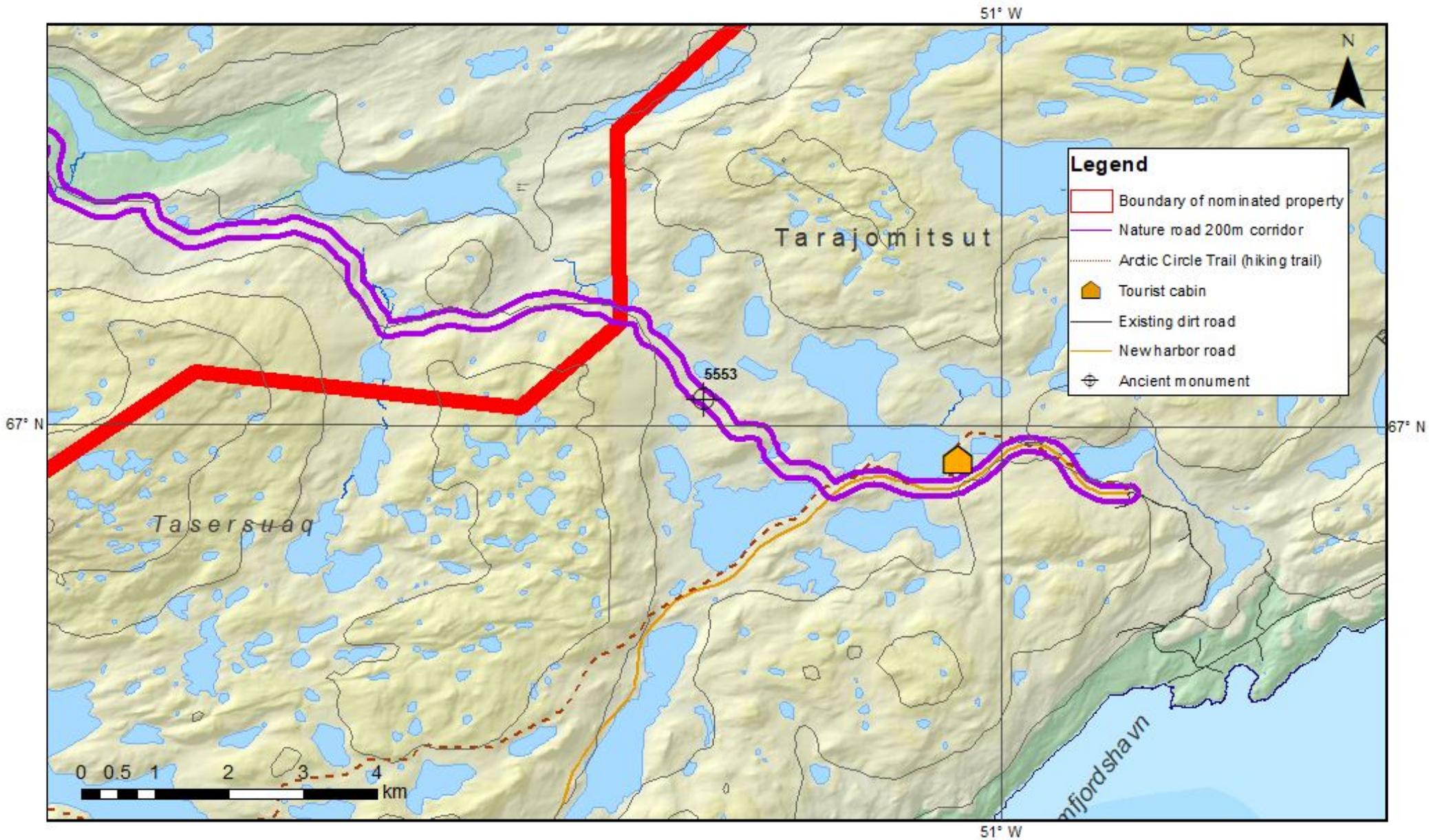


Map 12. Google Earth satellite map showing location of NKAH 2852, 2854 and 2855. The sites represent a cluster of monuments that fall along a traditional migration route that connects the eastern end of Tasersuaq Lake and Aasavissuit. NKAH 2852 ( $67.04658^\circ$ ,  $-51.3495^\circ$ ) comprises two hunting blinds; NKAH 2854 ( $67.05295^\circ$ ,  $-51.3369^\circ$ ) and 2855 ( $67.0577^\circ$ ,  $-51.3039^\circ$ ) both represent two clusters of tent rings on the northern shore of the lake.



Map 13. Inset E. Locations of NKAH 4848, 2841 and 4847 on the eastern tip of Tasersuaq. Aasivissuit-Nipisat Annex Map, WGS 84/UTM zone 22N. Courtesy of GEUS and Frants von Paten (December 2016). The sites in this area fall within the boundaries of the nominated UNESCO property.





Map 15. Inset F. Location of NKAH 5553. Aasivissuit-Nipisat Annex Map, WGS 84/UTM zone 22N. Courtesy of GEUS and Frants von Paten (December 2016).



Google Earth

Image © 2017 DigitalGlobe

Map 16. Google Earth satellite map showing location of NKAH 5553 ( $67.00349^{\circ}$ ,  $-51.0921^{\circ}$ ), a solitary inussuk (cairn).

## RECOMMENDATIONS

Following Inatsisartut Act no. 11, 19 May 2010 on Cultural Heritage Protection and Conservation (Heritage Protection Act), all ancient monuments from before year 1900, including ruins, settlements, graves and burial grounds, are protected cultural assets. Detached graves from year 1900 onwards are also protected. Therefore, as regards the construction of the Nature Road:

- A scheduled site, ancient monument or structure must not be damaged, altered or moved, either in whole or in part and no activities may be performed within a distance of twenty meters from the ancient monuments.
- Scheduling must be respected by all rights of use holders for the area in which the ancient monument is located, regardless of when this right was established
- If a previously unidentified ancient monument is found during the course of construction, the developer must immediately report the discovery to the Greenland National Museum and Archives and work must be suspended if it will directly impact the ancient monument. In these instances, the Greenland National Museum and Archives reserves the right to decide whether further archaeological survey and/or testing should be conducted, cf. section 13(2), or whether a proposal for protection should be submitted; cf. section 5(2).

## World Heritage Context

Special considerations should also be made regarding the context of cultural resources found within the nominated UNESCO World Heritage property. The nominated property contains some of the most complete and best preserved ancient monuments in Greenland dating from 2500 BC onwards. Following Mitchell, et al. (2009) the area fulfills the criteria necessary to define it as a cultural landscape based on an enduring tradition of sustainable resource exploitation and seasonal migrations between the coast and the interior over the last four millennia. All monuments found within the property's boundary's constitute one aspect of a range of attributes that contribute to the property's Outstanding Universal Value (OUV) (see ICOMOS 2011:4). To sustain OUV, the NKA would emphasize that within the nominated property's boundary, **the Qeqqata Municipality and all other parties involved in the construction of the Nature Road should seek to minimize any activity that may change or degrade these attributes—both individually and collectively.** In instances where questions about what constitutes damage to the OUV, managers and decisionmakers should consider whether the heritage conservation needs should be given greater weight than competing uses and developments. This is particularly applicable to the addition of infrastructure that may evolve in conjunction with future enhancement of the Nature Road. In all cases the NKA and the Steering Committee should be consulted prior to major amendments to the current plan and all future initiatives.

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## APPENDIX I: SCHEDULED MONUMENTS WITHIN THE NATURE ROAD CORRIDOR

### INSET A

1. NKAH 5546 (66.97503°,-53.1658°) Qaarajuttoq. Site represents two (2) adjacent tent rings of undetermined age both measuring approximately 2-3 m in diameter (Fig. 2). approximately 60 m to the south of the nearby lakeshore and Arctic Circle trail (ACT). Although portions of the site may have been used in recent times, some stones comprising the ring structures appear to have advanced lichen growth and some subsurface depth, indicating their potential deep time-depth.



Fig. 2. NKAH 5546 facing West. Two identified tent rings of undetermined age. Harmsen shown in background for scale. Photo: M. Myrup 2017.

### INSET B

2. NKAH 2785 (67.047°,-52.4996°), Bruun Map No. 67V1-0II-008, Taseqqat. Remains of an approximately 9x4 m rectangular structure with two rooms (Fig. 3). Relic stone and turf walls abut a semi-subterranean floor. Dense willow growth in western half of the structure. A large lintel stone was observed in place on what would have been the entrance facing the lake. The structure lies directly on the ACT and has been utilized as a rest stop for hikers (Fig. 4). A structure of this type is unusual to be found so far inland and most likely represents a seasonal hunting shelter that dates to the historic/colonial era.



Fig. 3. NKAH 2785, facing East. Remains of a rectangular stone and turf dwelling measuring approximately 9x4 m. Harmsen shown in photo for scale. Photo: M. Myrup, 2017.

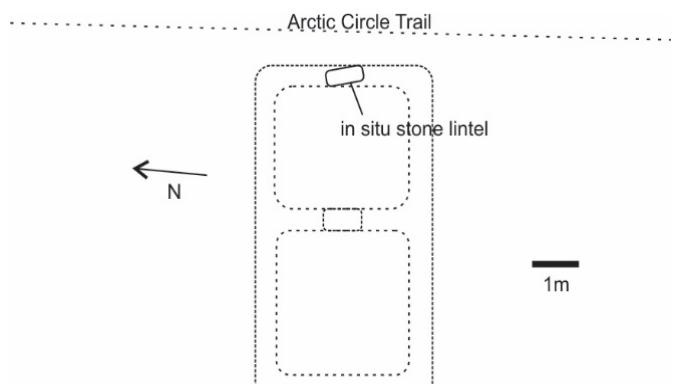


Fig. 4. Simplified site plan for NKAH 2785.

## INSET C

3. NKAH 5548 (67.05137°,-51.9182°), Umiivik Valley. Relic meat cache or open-air hearth of undetermined age (Fig. 5). Approximately 1-1.5 m in diameter. No bones present.
4. NKAH 5548 (67.0506°2,-51.9143°), Umiivik Valley. Solitary tent ring feature, approximately 2.5-3 m in diameter (Fig. 6). Undetermined age.
5. NKAH 5549 (67.041°,-51.897°), Umiivik Valley. Open-air hearth feature on eastern shore of lake (Fig. 7). Most likely historic/modern usage but proximity to adjacent tent ring structure may suggest an ancient Paleo-Inuit phase with historic re-use of site by Thule/Inuit and up through modern period.



Fig. 5. NKAH 5548. Relic meat cache or heart feature. Photo: M. Myrup 2017.



Fig. 6. NKAH 5548, facing West. Harmsen shown in photo for scale inside tent ring feature. Photo: M. Myrup 2017.



Fig. 7. NKAH 5549 facing Northwest. Open-air hearth feature. Harmsen seen in distance. Photo: M. Mikkel, 2017.

6. NKAH 5549 ( $67.04116^{\circ}$ ,  $-51.8969^{\circ}$ ), Umiivik Valley. Solitary tent ring w/ hearth feature. This secondary feature is observed in close proximity (approx. 20 m to the northeast) to the aforementioned open-air hearth (Fig. 8). The tent ring measures approximately 2.5-3 m in diameter and possesses a centrally located circular hearth feature (Figs. 9-10). A charcoal sample collected from the hearth and provided a radiocarbon age of cal 1620-1490 BC (87.8% accuracy)<sup>1</sup>. This time depth suggests a Greenlandic Dorset phase occupation of the site approximately 3500 years BP.

Fig. 9 Simple schematic of the hearth feature found inside the tent ring at NKAH 5549

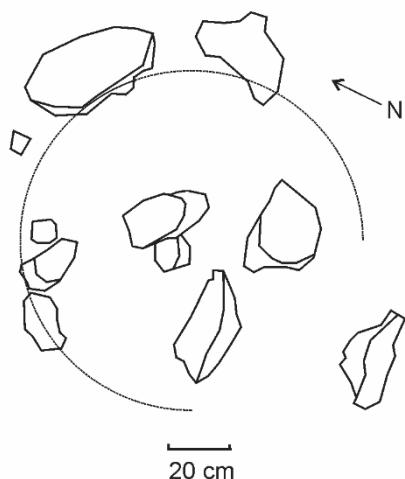


Fig. 8. NKAH 5549, facing West. Solitary tent ring w/ hearth feature with possible Paleo-Inuit origins.



Fig. 10. Areal view of the hearth feature found within the tent ring at NKAH 5549. Photo: M. Myrup, 2017.

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<sup>1</sup> ICA-17C/1151. Calibrated ages are obtained using INTCAL13 after Reimer et al (2013).

7. NKAH 5550 ( $67.03545^{\circ}$ , $-51.8848^{\circ}$ ), Umiivik Valley. Large improvised meat cache feature incorporated into open, cracked boulder (Fig. 11). Caribou bones observed in the cache. Undetermined age.
8. NKAH 5551 ( $67.03536^{\circ}$ , $-51.8822^{\circ}$ ), Umiivik Valley. Inussuk (cairn), undetermined age. No photo available.
9. NKAH 5522 ( $67.03962^{\circ}$ , $-51.8505^{\circ}$ ), Umiivik Valley. Open meat cache, undetermined age but cobbles appear to be in situ with advanced lichen growth (Fig. 12). No bones observed in cache.



Fig. 11. NKAH 5550, large meat cache incorporated into natural crack of boulder. Photo: J. Fog Jensen, 2017.



Fig. 12. NKAH 5522, open meat cache, undetermined age. Photo: M. Myrup, 2017.

## INSET D

10. NKAH 2852 ( $67.04658^{\circ}$ ,  $-51.3495^{\circ}$ ),  
Bruun Map No. 67V2-III-012,  
Qorlortoq. Remains of two hunting  
blinds on an elevated escarpment  
overlooking the lake (Fig. 13). Both  
measure approximately 1.5-2 m in  
length. Undetermined age but  
believed to be associated with a  
string of Thule/Historic Inuit  
monuments that fall along a  
traditional inland migration route that  
connects the eastern end of  
Tasersuaq Lake and Aasavissuit.
  
11. NKAH 2855 ( $67.0577^{\circ}$ ,  $-51.3039^{\circ}$ ),  
Bruun Map No. 67V2-III-015,  
Qorlortoq. Hunting camp with visible  
tent ring measuring approximately  
2.5-3 m in diameter (Fig. 14).  
Undetermined age, but likely of  
Thule/Historic Inuit origin.
  
12. NKAH 2854 ( $67.05295^{\circ}$ ,  $-51.3369^{\circ}$ )  
Bruun Map No. 67V2-III-014,  
Qorlortoq. Hunting camp with visible  
tent ring, over 2.5-3 m in diameter  
with visible hearth feature (Fig. 15).  
Undetermined age, but likely of  
Thule/Historic Inuit origin.



Fig. 13. NKAH 2852 facing North, remains of two hunting blinds. Undetermined age, but likely of Thule/Historic Inuit origin. Photo: H. Harmsen, 2017.



Fig. 14. NKAH 2855, facing West. Tent ring feature 2.5-3 m in diameter. Undetermined age, but most likely of Thule/Historic Inuit origin.



Fig. 15. NKAH 2855, facing northeast. Tent ring feature 2.5-3 m in diameter. Undetermined age, but most likely of Thule/Historic Inuit origin.

## INSET E

13. NKAH 4847 ( $67.0124^{\circ}$ ,  $-51.4659^{\circ}$ ), Bruun Map No. 67V2-III-020, Tasersuaq Lake. Remains of a solitary stone cobble meat cache/cairn approximately 1-1.5 m in diameter (Fig. 16). No bones observed in cache. Undetermined age but believed to be associated with a cluster of monuments associated with a diffuse Thule inland camp area on the eastern shore of Tasersuaq Lake.



Fig. 16. NKAH 4847, facing southeast. Remains of a solitary meat cache. Photo: M. Myrup, 2017.

14. NKAH 2841 ( $67.01249^{\circ}$ ,  $-51.4775^{\circ}$ ) Bruun Map No. 67V2-III-002, Tasersuaq Lake. In situ cobble stone fox trap found on the northern boundaries of the escarpment overlooking eastern shore of Tasersuaq Lake (Fig. 17). Undetermined age but believed to be of Thule/Historic Inuit origin.



Fig. 17. NKAH 2841, facing southeast. In situ fox trap of undetermined age but believed to be of Thule/Historic Inuit origin. Photo: M. Myrup, 2017.

15. NKAH 2841 ( $67.01275^{\circ}$ ,  $-51.4775^{\circ}$ ), Bruun Map No. 67V2-III-002, Tasersuaq Lake. Chambered grave, disturbed (Fig. 18). Human remains observed in the grave. Undetermined age but believed to be of Thule/Historic Inuit origin.



Fig. 18. NKAH 2841, facing South. Chambered grave believed to be of Thule/Historic Inuit origin. Photo: M. Myrup, 2017.

16. NKAH 2841 ( $67.01274^{\circ}$ ,  $-51.4773^{\circ}$ ) Bruun Map No. 67V2-III-002, Tasersuaq Lake. Chambered grave, undisturbed (Fig. 19). Human remains observed in the grave including one skull. Undetermined age but believed to be of Thule/Historic Inuit origin.



Fig. 19. NKAH 2841, facing West. Chambered grave believed to be of Thule/Historic Inuit origin. Harmsen shown in photo for scale. Photo: M. Myrup, 2017.

17. NKAH 4848 ( $67.01309^{\circ}$ ,  $-51.4799^{\circ}$ ) Bruun Map No. 67V2-III-021, Tasersuaq Lake. In situ cobble stone fox trap found on the northern boundaries of the escarpment overlooking eastern shore of Tasersuaq Lake (Fig. 20). Approximately 1 m in length. Undetermined age but believed to be of Thule/Historic Inuit origin.



Fig. 20. NKAH 4848, facing West. In situ fox trap of undetermined age but believed to be of Thule/Historic Inuit origin. Photo: M. Myrup, 2017.

18. NKAH 4848 ( $67.01277^{\circ}$ ,  $-51.4806^{\circ}$ ) Bruun Map No. 67V2-III-021, Tasersuaq Lake. In situ cobble stone fox trap found on the northern boundaries of the escarpment overlooking eastern shore of Tasersuaq Lake (Fig. 21). Approximately 1-1.5 m in length. Undetermined age but believed to be of Thule/Historic Inuit origin.



Fig. 21. NKAH 4848, facing West. In situ fox trap of undetermined age but believed to be of Thule/Historic Inuit origin. Harmsen shown in photo for scale. Photo: M. Myrup, 2017.

## INSET F

19. NKAH 5553 ( $67.00349^{\circ}$ ,  $-51.0921^{\circ}$ ), Talut. A solitary inussuk (cairn), undetermined age but possibly of Thule/Historic Inuit origin. No photo taken.