



Management Plan

For Antarctic Specially Protected Area No. 155 CAPE EVANS, ROSS ISLAND

(including Historic Site and Monument Nos. 16 and 17, the historic Terra Nova hut of Captain Robert Falcon Scott and its precincts and the Cross on Wind Vane Hill)

Introduction

The Area is located on the northwestern coast of Cape Evans, Ross Island, at 77° 38' 12"S, 166° 25' 15"E, and comprises an area of ~5.5 ha lying between Wind Vane Hill, Skua Lake and Home Beach. The Area was originally designated for the significant historic values of the hut built by the British Antarctic (*Terra Nova*) Expedition of 1910-13 led by Captain Robert Falcon Scott, listed as Historic Site and Monument (HSM) No. 16, and of the cross erected at

Wind Vane Hill listed as HSM No. 17, both of which were designated in Recommendation VII-9 (1972). The Area was designated as Specially Protected Area No. 25 through Measure 2 (1997) and renamed and renumbered as Antarctic Specially Protected Area (ASPA) No. 155 by Decision 1 (2002). Revisions to the Management Plan were adopted through Measure 2 (2005), Measure 12 (2008), Measure 8 (2010), and Measure 11 (2015).

1. Description of Values to be Protected

The significant historic value of this Area was formally recognised when it was listed as Historic Site and Monument Nos. 16 and 17 in Recommendation 9 (1972). An area containing both sites was designated as Specially Protected Area No. 25 in Measure 2 (1997) and redesignated as Antarctic Specially Protected Area 155 in Decision 1 (2002).

The *Terra Nova* hut (Historic Site and Monument No. 16) is the largest of the historic huts in the Ross Sea region. It was built in January 1911 by the British Antarctic *Terra Nova* Expedition of 1910-1913, led by Captain Robert Falcon Scott, RN. It was subsequently used as a base by the Ross Sea party of Sir Ernest Shackleton's Imperial Trans-Antarctic Expedition of 1914-1917.

Historic Site and Monument No. 17 consists of the Cross on Wind Vane Hill, erected in the memory of three members of Shackleton's Ross Sea party who died in 1916. In addition to this, two anchors from the ship *Aurora* of the Imperial Trans-Antarctic Expedition, two instrument shelters (one on Wind Vane Hill and the other near the *Terra Nova* hut), several supply dumps and numerous artefacts are distributed around the site.

Cape Evans is one of the principal sites of early human activity in Antarctica. It is an important symbol of the Heroic Age of Antarctic exploration and, as such, has considerable historical significance. Some of the earliest advances in the study of earth sciences, meteorology, flora and fauna in Antarctica are associated with the *Terra Nova* Expedition based at this site. The data collected can provide a benchmark against which to compare current measurements. The history of these activities and the contribution they have made to the understanding and awareness of Antarctica therefore contribute to both the historic and scientific value of the site.

A revised version of the Management Plan was adopted by means of Measure 2 (2005) and changes to the access and movement provisions were adopted by means of Measure 12 (2008).



2. Aims and Objectives

The aim of the Management Plan is to provide protection for the Area and its features so that its values can be preserved. The objectives of the Management Plan are to:

- avoid degradation of, or substantial risk to, the values of the Area;
- maintain the historic values of the Area through planned conservation work which may include:
 - a) an annual 'on-site' maintenance programme;
 - b) a programme of monitoring the condition of artefacts and structures, and the factors that affect them;
 - c) a programme of site, building and artefact conservation which may occur on or off site;
 - d) mapping and otherwise recording the disposition of historic items in the hut environs; and
 - e) recording other relevant historic data.
- minimise human disturbance to the Area, its features and artefacts whilst allowing for managed access to Scott's *Terra Nova* hut and other parts of the Area; and
- allow visits for management purposes in support of the aims of the Management Plan.

3. Management Activities

The following management activities shall be undertaken to protect the values of the Area:

- Notices showing the location of the Area (stating the special restrictions that apply) shall be displayed prominently, and a copy of this management plan shall be kept available, at all permanent scientific stations located on Ross Island;
- Copies of this management plan shall be made available to the principal permit holder of all groups visiting the Area and/or the leader of any groups operating in the adjacent vicinity at Cape Evans;
- National Antarctic Programmes shall take steps to ensure the boundaries of the Area and the restrictions that apply within are marked on relevant maps and nautical / aeronautical charts;
- Personnel (national programme staff, field expeditions, tourist expedition leaders and pilots) operating in the adjacent vicinity of, accessing or flying over the Area shall be specifically instructed by their national programme, tour operator or appropriate national authority to observe the provisions and contents of the Management Plan, including on the location, boundaries and restrictions applying to access and landings within the Area;
- Markers or signs erected within or near the boundary of the Area or in nearby facilities shall be secured and maintained in good condition, and removed when no longer required;
- A regular programme of conservation work shall be undertaken on Scott's *Terra Nova* hut and associated artefacts within the Area;

- Systematic monitoring shall be carried out to assess the impacts of visitors and the results, and any related management recommendations on limits to the number of visitors allowed at any one time or in any given period, shall be included in reviews of this Management Plan.
- Interested National Antarctic Programmes and relevant groups and organisations should consult together and coordinate to ensure:
 - a) skills and resources, particularly those related to conservation techniques, are developed and deployed to assist with protection of the historic values of the Area;
 - b) the defined limits on visitor numbers are not exceeded; and
 - c) the above management activities are implemented.

4. Period of Designation

Designated for an indefinite period.

5. Maps

Map 1: ASPA No. 155 Cape Evans, topographic map.

Projection: Lambert Conformal Conic; Standard parallels: 1st 77° 38' S, 2nd 77° 39' S; Central Meridian: 166° 25' 30"E; Latitude of origin: 78° 00' 00"S; Spheroid: WGS84. Contour interval 5 m.

Data sources: Coastline, topography, and infrastructure supplied by Antarctica New Zealand (2019). Historic features surveyed by Land Information New Zealand (LINZ).

Inset 1: Ross Sea region, showing location of Inset 2.

Inset 2: Ross Island region, showing location of Map 1, Cape Evans and McMurdo Station (US) and Scott Base (NZ).

Map 2: ASPA No. 155 Cape Evans, historic features. Map specifications as per Map 1.

6. Description of the Area

6(i) Geographical coordinates, boundary markers and natural features

Overview

Cape Evans is a small, triangular shaped, ice-free area of approximately 125 ha on the southwestern coast of Ross Island, ~10 km to the south of Cape Royds and 24 km to the north of Hut Point on Ross Island (Map 1).

The ice-free area is composed of till-covered basalt bedrock. The designated Area is located on the northwestern coast of Cape Evans adjacent to Home Beach and is focussed on Scott's *Terra Nova* hut (Map 2).

South polar skuas (*Stercorarius maccormicki*) nest at Cape Evans and Adélie penguins (*Pygoscelis adeliae*) occasionally transit the Area. Weddell seals (*Leptonychotes weddellii*) occasionally haul out on Home Beach.



Boundaries

The boundaries of the Area, described in a clockwise direction from the southwestern corner on Wind Vane Hill, are:

Southwest: a line extending ~182 m northwest from the southwestern corner of the Area at 77° 38' 15.47" S, 166° 25' 9.48" E, which lies ~20 m south of the cross on Wind Vane Hill, following the crest of the small ridge descending to the western corner near the shoreline at 77° 38' 11.50" S, 166° 24' 49.47" E;

Northwest: a line extending ~188 m northeast from the western corner of the Area following the shoreline of Home Beach to the northwestern corner at 77° 38' 7.5" S, 166° 25' 9.1" E;

Northeast: a line extending ~186 m southeast from the northwestern corner of the Area to the outlet stream from Skua Lake at the northeastern corner at 77° 38' 9.37" S, 166° 25' 35.74" E;

East: a line extending ~193 m due south from the northeastern corner of the Area to the southeastern corner at 77° 38' 15.6" S, 166° 25' 35.68" E; and

South: a line extending ~174 m due west from the southeastern corner of the Area to the southwestern corner on Wind Vane Hill.

Human activities

A regular and multi-year programme of conservation has been carried out on Scott's *Terra Nova* hut by New Zealand since the 1950s. The New Zealand based non-governmental organisation Antarctic Heritage Trust has undertaken conservation of Scott's *Terra Nova* hut and associated artefacts for over 30 years in coordination with National Antarctic Programmes operating in the region.

National programme personnel from nearby McMurdo Station (US) and Scott Base (NZ), and tourist groups, regularly visit Scott's *Terra Nova* hut and the nearby vicinity. The numbers of visitors may fluctuate depending on a range of factors, including sea ice and weather conditions, available logistics, and the number of tour operators in any given year.

6(ii) Access to the Area

The Area may be accessed by first travelling to locations adjacent to but outside of the boundaries by either helicopter, vehicle, small boat, or on foot. Access into and within the Area is generally made on foot, although vehicles may be used for purposes authorised by permit. Particular routes for access to the Area have not been designated. The specific conditions for access by pedestrians, small boats, vehicles, overflight and aircraft landings are set out in Section 7(ii).

6(iii) Location of structures within and adjacent to the Area

All structures located within the Area are of historic origin, apart from a brass plaque installed ~15m west of the hut to commemorate HSM No. 16, a plaque on Wind Vane Hill detailing the intended inscription for the memorial cross and a temporary, modern protective enclosure that has been placed around the magnetic hut as a safety precaution because the hut contains friable asbestos. A major feature of the Area is Scott's *Terra Nova* hut (HSM No. 16) located on the northwestern coast of Cape Evans on Home Beach (Map 2). The hut is surrounded by many historic relics including the two anchors from the *Aurora*, dog and seal skeletons, an instrument shelter, two dog lines, a pony line, meteorological screen, fuel dump, magnetic hut, coal stores, and a flag pole. The experimental rock hut / rubbish dump is an historic rock structure associated with the 'Worst Journey in the World' to Cape Crozier in the winter of 1911 (Cherry-Garrard 1922), which contains a small collection of artefacts. A memorial cross to three members of Shackleton's Ross Sea party of 1914-17 stands on Wind Vane Hill (HSM No. 17). All these features are included within the boundaries of the Area.

A New Zealand refuge hut, camp site and helicopter landing site are situated approximately 250 m to the southwest of the Area.

The former Greenpeace year-round 'World Park Base' was sited to the northeast of Scott's *Terra Nova* hut from 1987 to 1992. No visible evidence of the base remains.

The nearest permanent scientific stations to the Area are McMurdo (US) and Scott Base (NZ), which are located ~24 km south of the Area (Map 1, Inset 2).

6(iv) Location of other Protected Areas in the vicinity

Nearby protected areas, all located on Ross Island (Map 1, Inset 2), are:

- ASPA No. 121 Cape Royds and ASPA No. 157 Backdoor Bay, Cape Royds, ~11 km north of Cape Evans; and
- ASPA No. 158 Hut Point and ASPA No. 122 Arrival Heights, on Hut Point Peninsula, ~24 km south of Cape Evans.

6(v) Special Zones within the Area

There are no special zones within the Area.



7. Terms and conditions for entry permits

7(i) General permit conditions

Entry into the Area is prohibited except in accordance with a permit issued by an appropriate national authority. A permit may be issued by a national authority to cover a number of visits in a season. Conditions for issuing a permit for entry to the Area are that:

- The activities are related to conservation, research and/or monitoring purposes, or are for reasons essential to the management of the Area, or are activities related to education, outreach or recreation, including tourism, provided they do not conflict with the objectives of this Management Plan;
- The activities permitted are in accordance with this Management Plan;
- The activities permitted will give due consideration via the environmental impact assessment process to the continued protection of the historic values of the Area;
- The permit shall be issued for a finite period; and
- The permit, or a copy, shall be carried by the principal permit holder, or their designated representative, when visiting the Area.

7(ii) Access to, and movement within or over, the Area

Access into the Area shall be on foot or by vehicle. Aircraft landings are prohibited within the Area.

Foot access and movement within the Area

- 1) Access into the Area should generally be on foot.
- 2) Specific paths or routes of access have not been defined (Maps 1 and 2).
- 3) Movement within the Area shall be in accordance with the Code of Conduct in Section 7(iii).
- 4) Care should be exercised when walking around Scott's *Terra Nova* hut or nearby, as delicate artefacts may be present on the ground, perhaps obscured by a thin snow covering, and may be difficult to see.

Small boat access

- 1) Access by small boat (when there is open water) should be made to the Cape Evans coastline, and thence access should be made on foot (Maps 1 and 2).

Vehicle access

- 1) Access by vehicles to the Area is prohibited unless specifically authorised by permit for conservation or management purposes;
- 2) Where a permit for vehicle access to the Area has been issued, which may include, but is not limited to, activities such as clearing snow and ice that is judged to be a threat to the historic hut or other artefacts, consideration should be given to:
 - a) using a vehicle that is the minimum size required for the job;
 - b) ensuring the vehicle operator is fully trained and aware of the provisions of this Management Plan and of the site sensitivities; and

c) careful planning and monitoring of all vehicle movements within the site so as to avoid damage to either the hut or artefacts buried beneath accumulated snow and ice.

- 3) Vehicles without permits for entry into the Area may approach the Cape Evans coastline at either South Bay or North Bay, where they may be parked on sea ice and should not be taken onto land (Map 1).

Aircraft access and overflight

Taking into account the historic values, aircraft within and near the Area shall operate according to strict observance of the following conditions:

- 1) Helicopter landings within the Area are prohibited. Helicopter landings result in rotor wash, which can cause damage to the historic features;
- 2) Overflight of the Area by piloted aircraft below 2000 ft (~610 m) is prohibited, except in accordance with a permit issued by an appropriate national authority.
- 3) Helicopters should land outside of the Area at the Primary landing site (77° 38.32' S, 166° 24.45' E) (Map 1), ~50 m south of the New Zealand refuge huts. A Secondary landing site is located at 77° 38.11' S, 166° 25.22' E, ~110 m northeast of Scott's *Terra Nova* hut, and ~30 m beyond the northeastern boundary of the Area (Maps 1 and 2). The Secondary helicopter landing site should be used to support conservation and management only.
- 4) Overflight below 2,000 ft (610 m) and landings within the Area by Remotely Piloted Aircraft Systems (RPAS) are prohibited except in accordance with a permit issued by an appropriate national authority. RPAS use within the Area should follow the Environmental Guidelines for Operation of Remotely Piloted Aircraft Systems (RPAS) in Antarctica (Resolution 4 (2018)).

Limits to the number of people allowed within the Area

Control of the number of people and movement within the Area, both at any given time and cumulatively over time, is necessary to minimise damage and deterioration precipitated by:

- a) physical foot traffic of visitors across the vulnerable features of the Area and inside Scott's *Terra Nova* hut in particular; and
- b) measurable changes in ambient conditions (i.e. temperature and humidity) inside Scott's *Terra Nova* hut.

- The maximum number in the Area at any time (including guides and those within the hut) shall be: **40 people**.
- The maximum number within the hut at any time (including guides) shall be: **8 people**.
- The annual maximum number of visitors to the Area shall be limited to: **2,000 people**.
- The observed effects of monitored visitor levels suggest that significant adverse impacts could be caused by exceeding the maximums specified above.



- These limits have been set based on the best advice available from conservation advisory agencies (which include conservators, archaeologists, historians, museologists and other heritage protection professionals). These limits shall be reconsidered at each management plan review, when the limit may be adjusted based on monitored impacts at the site.
- All educational, outreach and recreational (including tourism) visits shall be supervised by a trained guide nominated by the operator (refer Section 7(x)). Adequate supervision of visits to the Area is necessary to prevent damage caused by crowding and by actions inconsistent with the Code of Conduct in Section 7(iii).

7(iii) Activities that may be conducted within the Area

- Visits for conservation or management purposes;
- Educational, outreach and/or recreational visits, including tourism; and
- Scientific activity that does not detract from or damage the values of the Area.

Visitors should adhere to the following Code of Conduct for site visits, except where conservation, research, monitoring or management activities specified in the permit require otherwise:

Code of Conduct

- Smoking or the use of any naked flames in the Area, and particularly in or around Scott's *Terra Nova* hut, is strictly prohibited, as fire is a major risk;
- Hazardous materials, such as asbestos, chemicals, mould, etc., are present on site. Avoid handling anything within the protected area and huts.
- Thoroughly clean grit, dirt, guano, ice and snow from boots using the brushes provided before entering Scott's *Terra Nova* hut to reduce floor abrasion. Larger groups are recommended to lay the tarpaulin provided outside to keep footwear and personal items clean whilst waiting to enter the building;
- Remove any clothing made wet by sea water, and any sea ice crystals from boots, as salt particles accelerate corrosion of metal objects;
- Do not touch, move or sit on any items or furniture in the huts – handling artefacts causes damage;
- As many areas are cramped and artefacts can be accidentally bumped, do not take bags or wear packs inside, do not use 'selfie' sticks for photos, and avoid tripods or monopods when the maximum number of visitors (8) are in the hut at one time;
- Only use tripods or monopods with flat bottomed rubber bases as opposed to those with metal spikes which can damage the hut floor;
- When moving around the site, take great care not to tread on any artefacts, which may be difficult to see; and
- Visits should be recorded in the visitor book provided. This allows data on times and numbers of visitors to be correlated with temperature and humidity data automatically logged inside the hut.

7(iv) Installation, modification or removal of structures / equipment

- Existing structures shall not be altered, and new structures shall not be erected in the Area, or scientific equipment installed, except when authorised by permit for conservation, educational or scientific purposes that do not detract from or damage the values of the Area as specified in Section 1.
- Historic items shall not be removed from the Area, unless specified in a permit issued in accordance with the provisions of Section 7(viii).

7(v) Location of field camps

- Scott's *Terra Nova* hut, or other huts within the Area, shall not be used for living purposes.
- Camping is prohibited within the Area.
- Camping is permitted at the location of the two New Zealand field shelters ~250 m southwest of the Area, which is the preferred camp site (Map 1). An alternative field camp site is located ~30 m north of the Area near the Secondary helicopter landing site near Home Beach (Maps 1 and 2).

7(vi) Restrictions on materials and organisms that may be brought to the Area

In addition to the requirements of the Protocol on Environmental Protection to the Antarctic Treaty, the following are restrictions on materials and organisms that may be brought into the Area:

- Deliberate introduction of animals, plant material, micro-organisms or soils into the Area is prohibited;
- Visitors shall take precautions to prevent the accidental introduction of animals, plant material, micro-organisms and soils by ensuring that their equipment brought into the Area is clean. To the maximum extent practicable, footwear and other equipment used or brought into the area (including backpacks, carry-bags and other equipment) shall be thoroughly cleaned before entering the Area;
- Food shall not be consumed within the Area;
- Fuel, food, chemicals, and other materials shall not be introduced or stored within the Area, unless specifically authorised by permit for essential purposes connected with the conservation of the historic structures or the associated relics, and shall be stored and handled in a way that minimises the risk of their accidental introduction into the environment;
- All materials introduced shall be for a stated period only and shall be removed by the end of that stated period; and
- If release occurs which is likely to compromise the values of the Area, removal is encouraged only where the impact of removal is not likely to be greater than that of leaving the material in situ.



7(vii) Taking or harmful interference with native flora and fauna

Taking or harmful interference with native flora and fauna is prohibited, except in accordance with a permit issued under Article 3 of Annex II of the Protocol on Environmental Protection to the Antarctic Treaty. Where animal taking or harmful interference is involved, this should, as a minimum standard, be in accordance with the SCAR Code of Conduct for the Use of Animals for Scientific Purposes in Antarctica.

7(viii) Collection of anything not imported by the permit holder

- 1) Material may be collected and removed from the Area for conservation or scientific reasons consistent with the objectives of this Management Plan only in accordance with a permit issued by an appropriate national authority.
- 2) Materials that pose a threat to the historic values of the Area, environment or human health may be removed from the Area for disposal in accordance with a permit where they meet one or more of the following criteria:
 - i. the artefact presents a threat to the historic values, environment, wildlife or human health and safety;
 - ii. it is in such poor condition that it is not reasonably possible to conserve it;
 - iii. it does not contribute in any significant way to our understanding of the hut, its occupants, other artefacts, or the history of Antarctica;
 - iv. it does not contribute to, or it detracts from, the visual qualities of the site or the hut; and/or
 - v. it is not a unique or rare item;
 and where such action is:
 - vi. undertaken by parties with appropriate heritage conservation expertise; and
 - vii. part of an overall plan for conservation work at the site.
- 3) National authorities should ensure that any removal of artefacts and assessment against the above criteria is carried out by personnel with appropriate heritage conservation expertise.
- 4) Artefacts judged to be of high historic value, which cannot be conserved on site with currently available techniques, may be removed in accordance with a permit for storage in a controlled environment until such time as they can safely be returned to the Area, which should be the preferred outcome unless there is a high risk that return would be likely to damage or destroy the integrity of the artefact(s).
- 5) Samples of soil and other natural materials may be removed for scientific purposes only in accordance with a permit issued by an appropriate national authority.

7(ix) Disposal of waste

All human waste, grey water and other waste generated by work parties or visitors shall be removed from the Area.

7(x) Measures that may be necessary to continue to meet the aims of the Management Plan

- Information on the requirements of this Management Plan shall be provided to all visitors.
- The Code of Conduct set out in Section 7(iii) shall be followed by all visitors, except where conservation, research, monitoring or management purposes require otherwise.
- Operators facilitating educational, outreach and recreational visits (including tourism) to the Area shall, prior to commencement of the summer season, nominate people with a working knowledge of both the site and this Management Plan to act as guides during visits and provide training appropriate to ensure they are capable of fulfilling their roles.
- All educational, outreach and recreational visits, including tourism, shall be supervised by a nominated guide, who is responsible for briefing visitors on the Code of Conduct and the requirements of this Management Plan and for ensuring their full compliance. The guide(s) shall actively monitor visitor activity within the Area, and in particular within *Terra Nova* hut, and take corrective actions against any potential or actual breaches of the Management Plan and Code of Conduct.

7(xi) Requirements for reports

- The principal permit holder for each visit to the Area shall submit a report to the appropriate national authority after the visit has been completed in accordance with national procedures and permit conditions.
- Such reports should include, as appropriate, the information identified in the visit report form contained in the Guide to the Preparation of Management Plans for Antarctic Specially Protected Areas (Resolution 2 (2011)). The national authority should also forward a copy of the visit report and confirmation of site visitor numbers to the Party that proposed the Management Plan, to assist in managing the Area and reviewing the Management Plan.
- Any removal of materials in accordance with Section 7(viii) shall be detailed, including the reason for removal and the current location of the items or the date of disposal. Any return of such items to the Area shall also be reported.
- Parties should, wherever possible, deposit originals or copies of such original visit reports in a publicly accessible archive to maintain a record of usage, for the purpose of any review of the Management Plan and in organising the scientific use of the Area.
- The appropriate authority should be notified of any activities / measures undertaken, and / or of any materials released and not removed, that were not included in the authorised permit.



8. Supporting documentation

Antarctic Heritage Trust 2018. *Antarctic historic huts of the Ross Sea region*. NZ Antarctic Heritage Trust, Christchurch.

Antarctic Treaty Parties. Guidelines for handling of pre-1958 historic remains whose existence or present location is not known. Resolution 5 (2001).

Antarctic Treaty Parties. Guidelines for the designation and protection of Historic Sites and Monuments. Resolution 3 (2009)

Antarctic Treaty Parties. Guidelines for the assessment and management of heritage in Antarctica. Resolution 2 (2018).

Cherry-Garrard, A. 1922. *The worst journey in the world: Antarctic 1910-13*. Penguin Books, London.

List of boundary coordinates

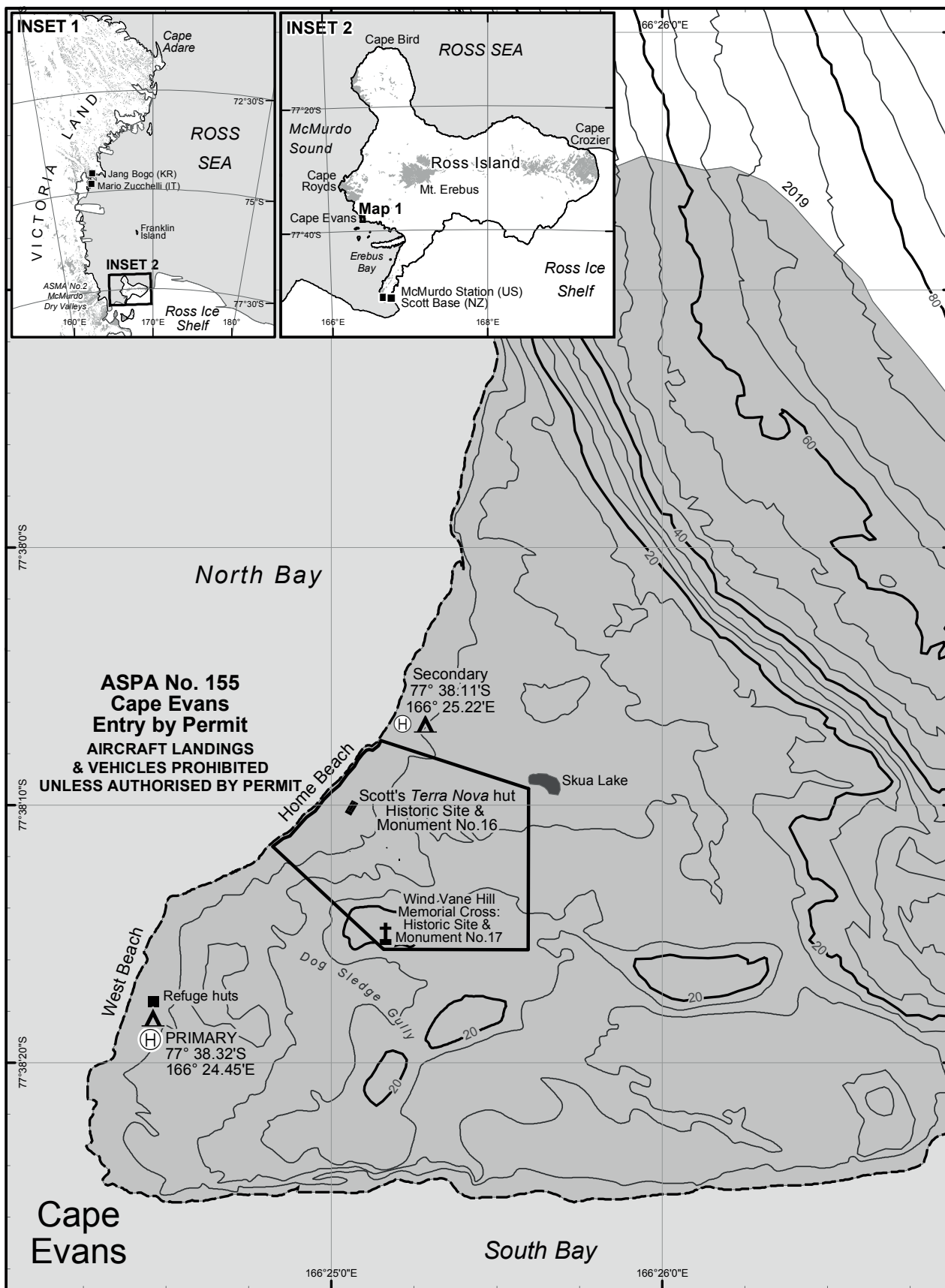
Southwestern corner: 77° 38' 15.47" S, 166° 25' 9.48" E;

Western corner: 77° 38' 11.50" S, 166° 24' 49.47" E;

Northwestern corner: 77° 38' 7.5" S, 166° 25' 9.1" E;

Northeastern corner: 77° 38' 9.37" S, 166° 25' 35.74" E;

Southeastern corner: 77° 38' 15.6" S, 166° 25' 35.68" E.

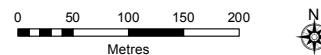


Map 1: ASPA No. 155 Cape Evans - topography

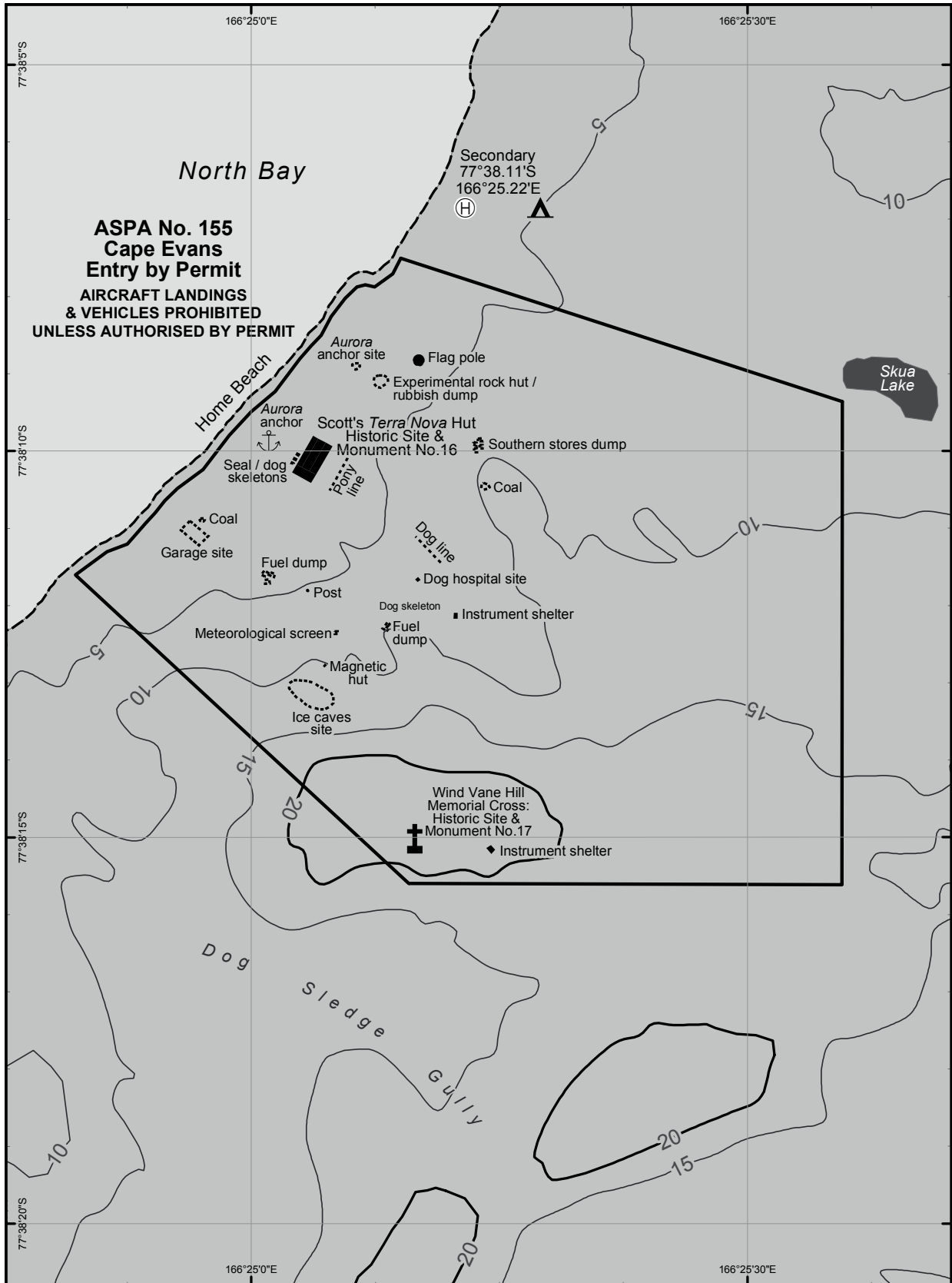
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- Ocean
- Permanent ice (approx)
- Ice free ground
- Coastline (approx)
- Contours (20 m)
- Contours (5 m)
- Protected Area boundary
- H Helicopter landing site
- Designated campsite
- Buildings
- Memorial Cross



Projection: Lambert Conformal Conic
 Spheroid and horizontal datum: WGS84.
 Data sources: ASPA boundary, topography & infrastructure data supplied by Antarctica NZ (2019).



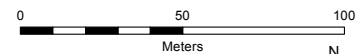
Map 2: ASPA No. 155 Cape Evans - Historic features

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|--------------------|-------------------------|---------------------|
| Ocean | Contours (20 m) | Buildings |
| Permanent ice | Contours (5 m) | Designated campsite |
| Ice free ground | Protected Area boundary | Memorial Cross |
| Coastline (approx) | Helicopter landing site | Historic features |



Projection: Lambert Conformal Conic
Spheroid and horizontal datum: WGS84.
Data sources: ASPA boundary, topography & infrastructure data supplied by Antarctica NZ (2019).