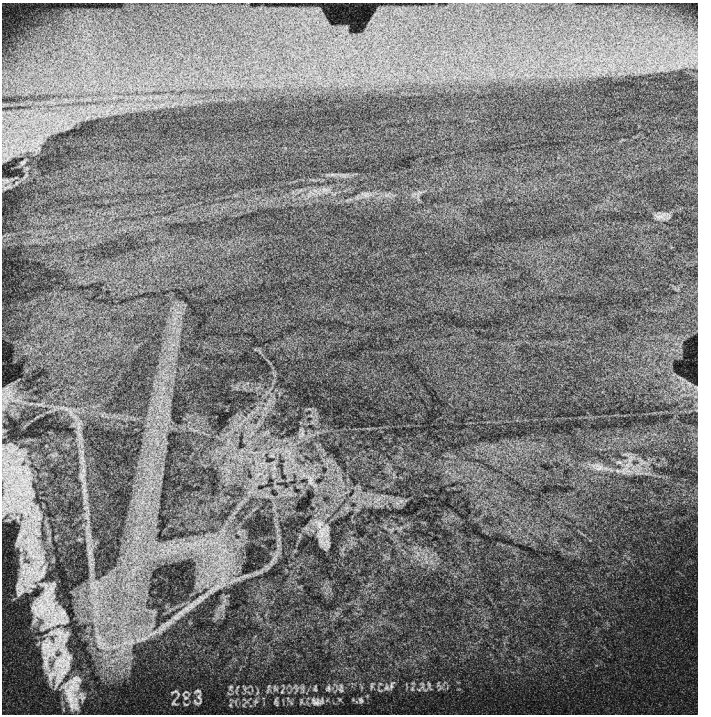
DEW Line, Komakuk Beach, Yukon Territory

DEW Line, Komakuk Beach, Yukon Territory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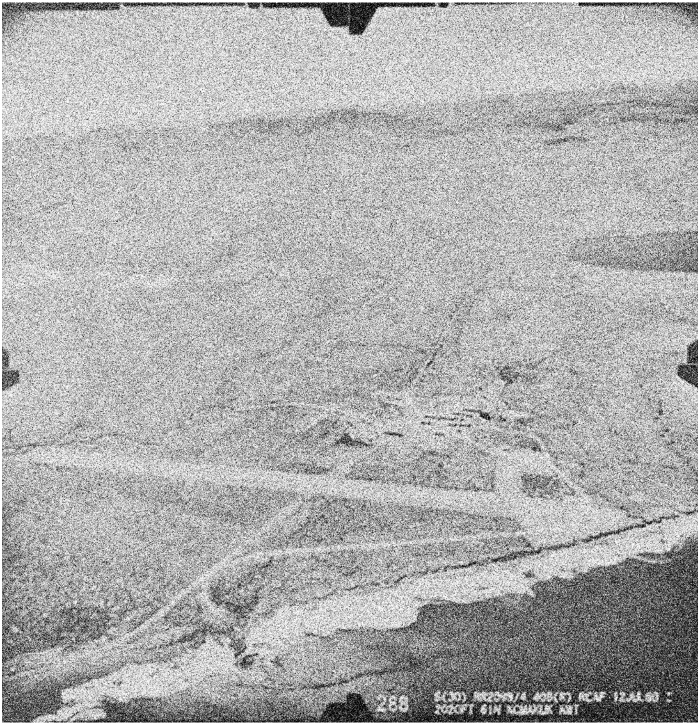
DEW Line, Komakuk Beach, Yukon Territory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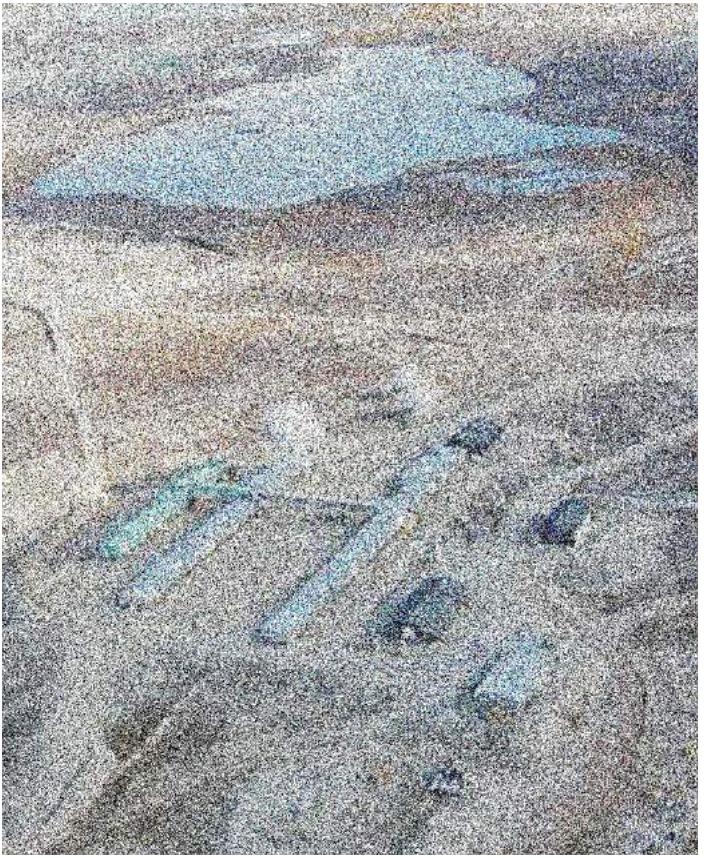
DEW Line, Cambridge Bay, Nunavut

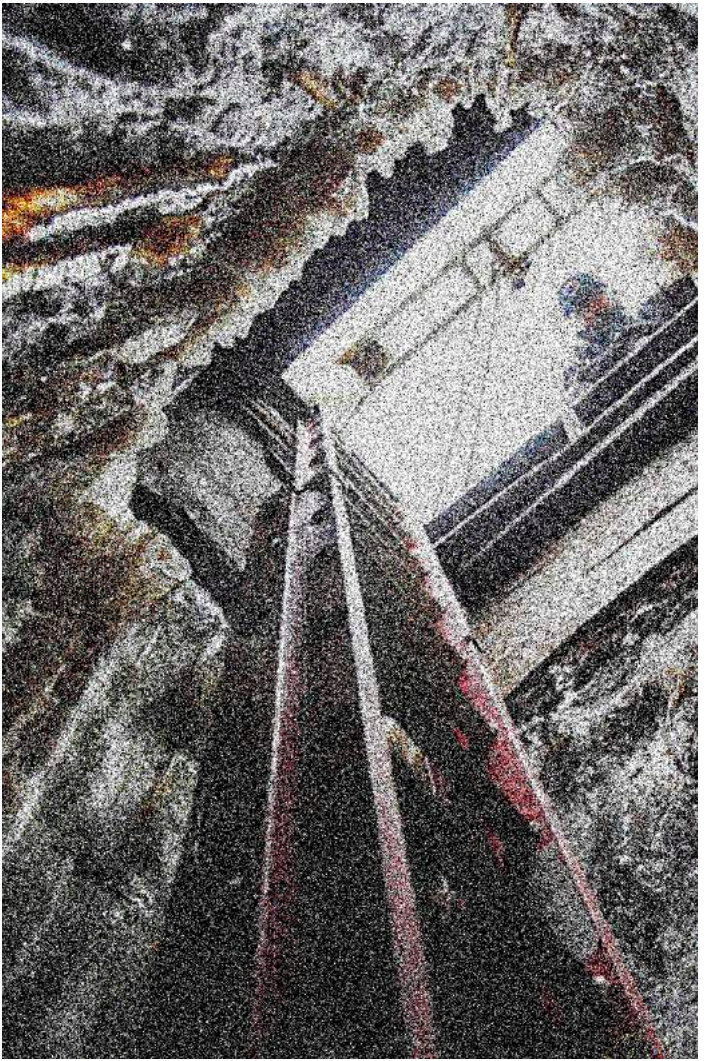
DEW Line, Cambridge Bay, Nunavut



Radar array at Weather Station in Point Barrow, Alaska

Permafrost slumping on Arctic coast

Looking up from a permafrost freezer, Point Barrow, Alaska



Summer camp at Bathurst Inlet, Nunavut

Miners camp at Goose Lake Mine

Hunter's camp near Kugluktuk, Nunavut

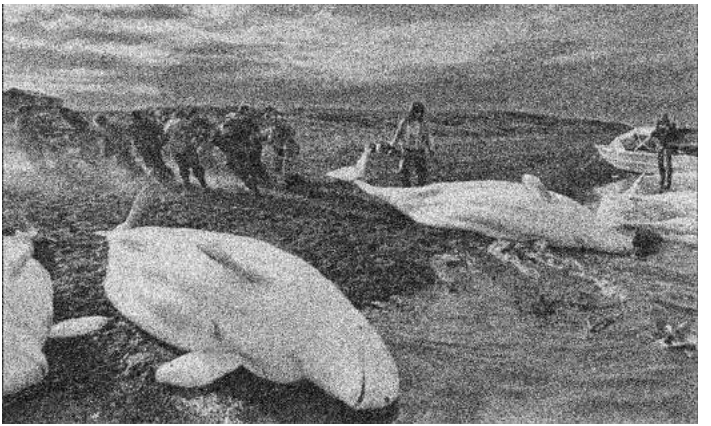
Detached housing unit in Point Barrow, Alaska


427

Ice Fishing Shack, Tobin Lake, Saskatchewan

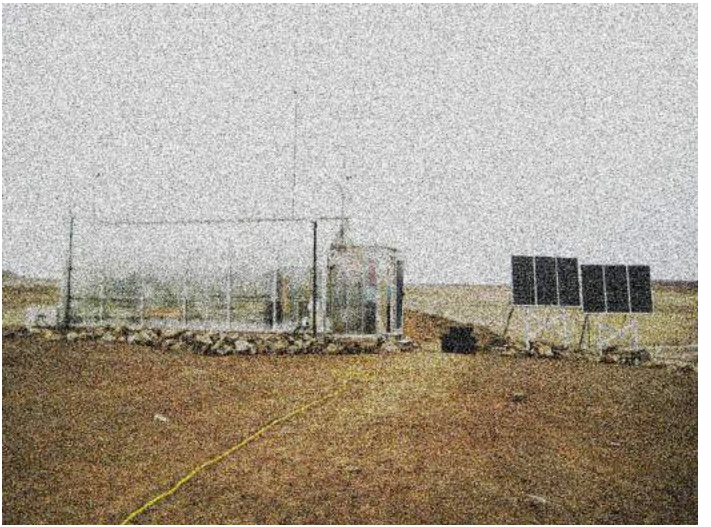
Grizzly Bear, Goose Lake Mine, Nunavut

Inupiat Bowhead Hunt



Research hut in the Arctic tundra

Greenhouse at the Mars Arctic Research station on Devon Island, Nunavut



Field scientists in the Arctic using planks to walk above the sensitive ground surface

Building a sled, still from Happy People: A Year in the Taiga

Still from Happy People: A Year in the Taiga


grits, food for the dogs—
and you store it all safely up high.

Still from Happy People: A Year in the Taiga

Still from Happy People: A Year in the Taiga

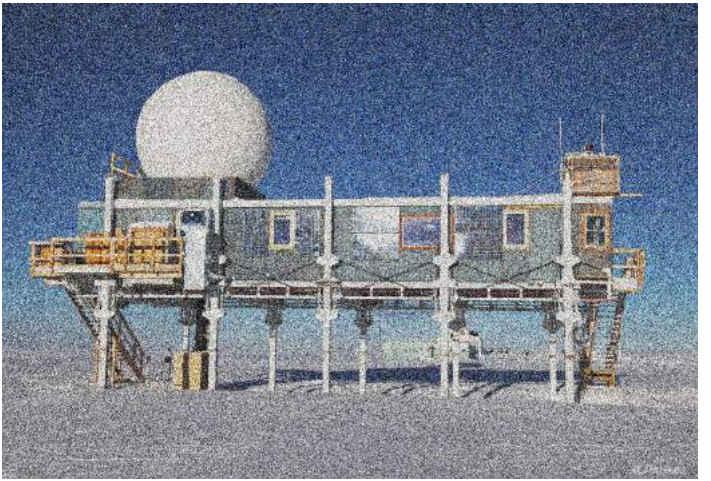
Still from Happy People: A Year in the Taiga

Hunter's shack, still from Happy People: A Year in the Taiga

Still from Happy People: A Year in the Taiga

Still from Happy People: A Year in the Taiga

Big House at Summit Research Station, Greenland



Installing solar panels on the Big House at Summit Research Station, Greenland

Restocking the Big House at Summit Research Station, Greenland

Northern lights at the Big House at Summit Research Station, Greenland

Summit Research Station, Greenland

Installing the outhouse, Summit Research Station, Greenland

Installing a walking platform, Summit Research Station, Greenland

Weather station, Summit Research Station, Greenland

Summit Research Station, Greenland

Clearing the runway at Summit Research Station, Greenland

Constructing a tool shed at Summit Research Station, Greenland

Miner's Camp, Back River Mine, Nunavut

Port at Hope Bay Mine, Nunavut

Miner's Camp, Boston Lake, Nunavut

Mars Arctic Research Station, Devon Island, Nunavut

Hope Bay Mine, Nunavut

Hope Bay Mine, Nunavut

Hope Bay Mine, Nunavut

Hope Bay Mine, Nunavut

Hope Bay Mine, Nunavut

Hope Bay Mine, Nunavut

Hope Bay Mine, Nunavut

Hope Bay Mine, Nunavut

Port for Hope Bay Mine, Nunavut

Miner's Camp, Lake George Mine, Nunavut

Miner's Camp, Lake George Mine, Nunavut

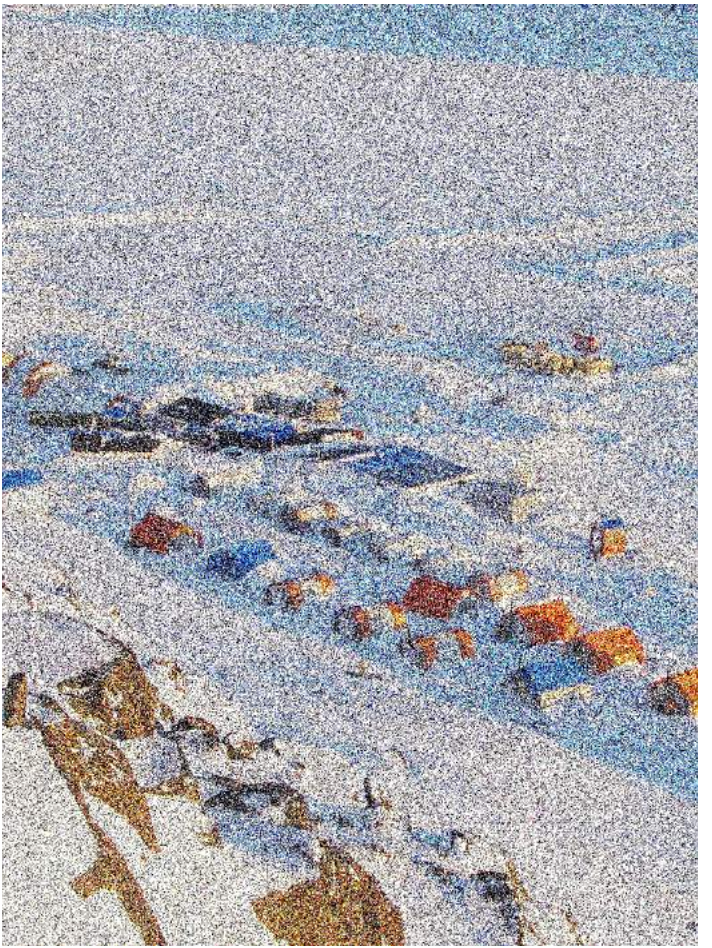
Lupin Gold Mine, Nunavut

Lupin Gold Mine, Nunavut

Cabin at Nauyak Lake, Nunavut

Camp at Nauyak Lake, Nunavut

Camp at Windy Lake Mine, Nunavut



Camp at Windy Lake Mine, Nunavut

Windy Lake Mine, Nunavut

Camp at Back River Mine, Nunavut

Canadian military training in the Arctic, Exercise Trillium Response, Winter 2014

Exercise Trillium Response, Winter 2014

Exercise Trillium Response, Winter 2014

Exercise Trillium Response, Winter 2014

Exercise Trillium Response, Winter 2014

Exercise Trillium Response, Winter 2014

Exercise Trillium Response, Winter 2014

Yellow sled car

Hummer equipped with snowmobile treads to travel the frozen Northwest Passage in the winter of 2010, Haughton-Mars Project, Northwest Passage Drive Expedition

Northwest Passage Drive Expedition

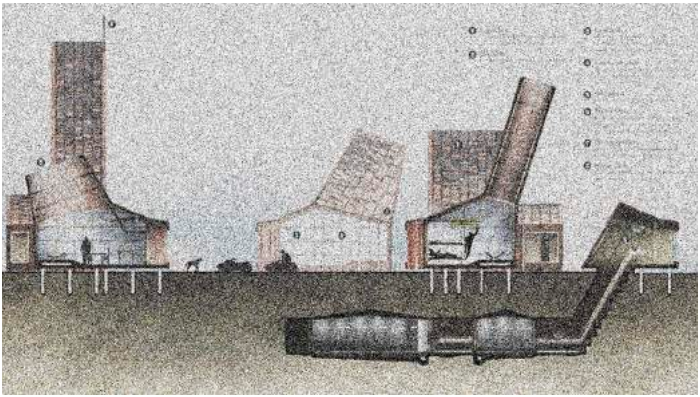

AM General
AM General
HUMVEE
HUMVEE

Northwest Passage Drive Expedition

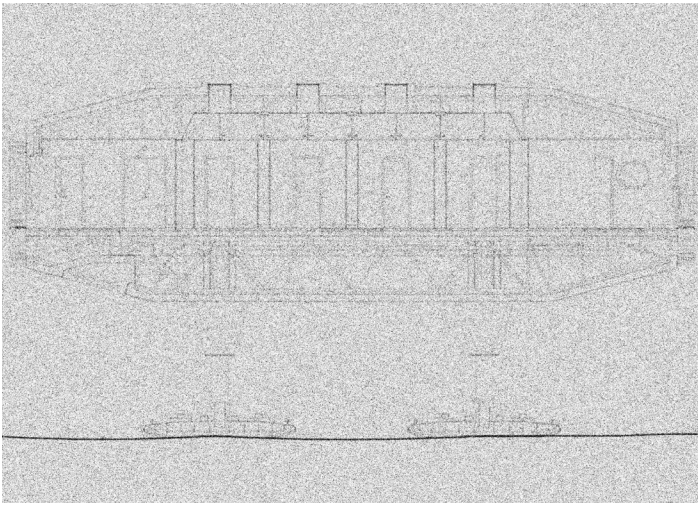
Northwest Passage Drive Expedition

Northwest Passage Drive Expedition

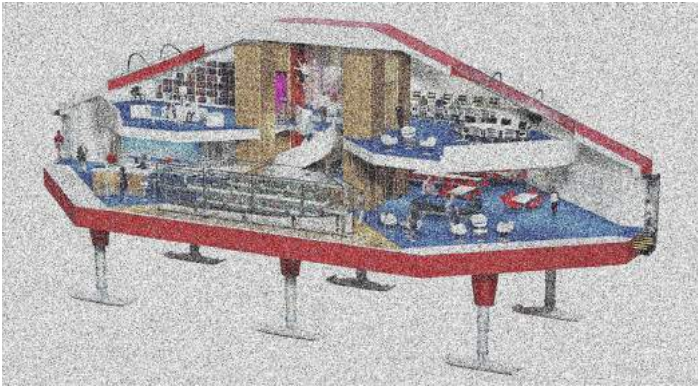
Lateral Office, Arctic Food Network Project



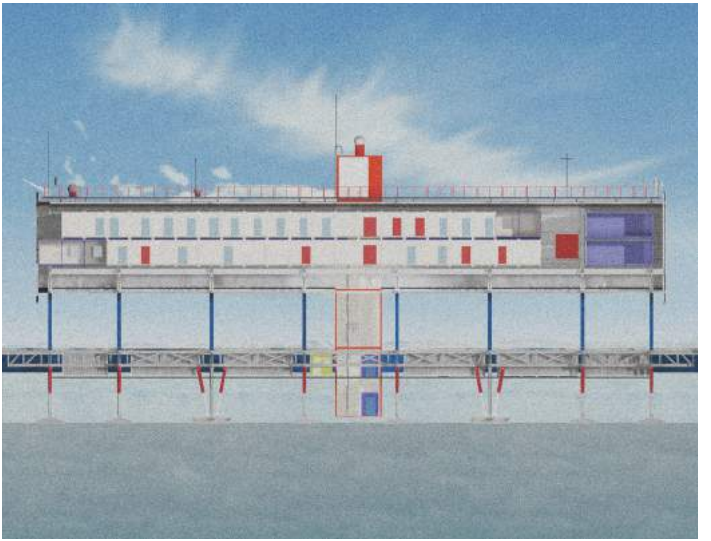
Hugh Broughton Architects, Halley VI Research Station, Antarctica



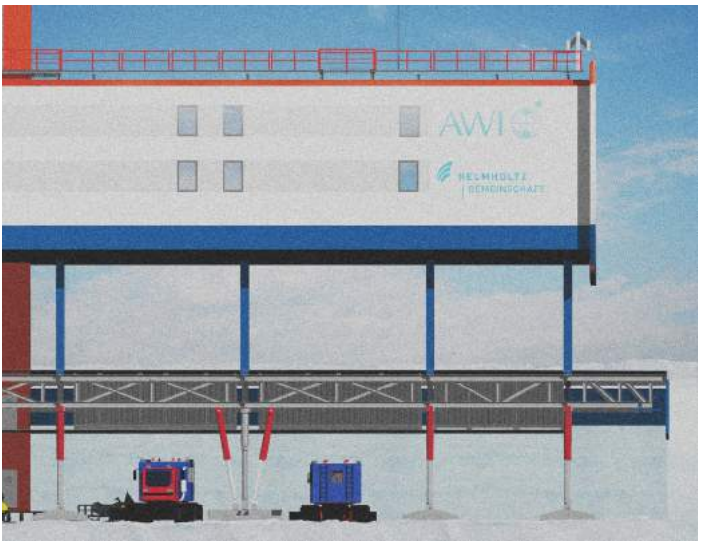
Hugh Broughton Architects, Halley VI Research Station, Antarctica



Neumayer III, Antarctic research station



Neumayer III, Antarctic research station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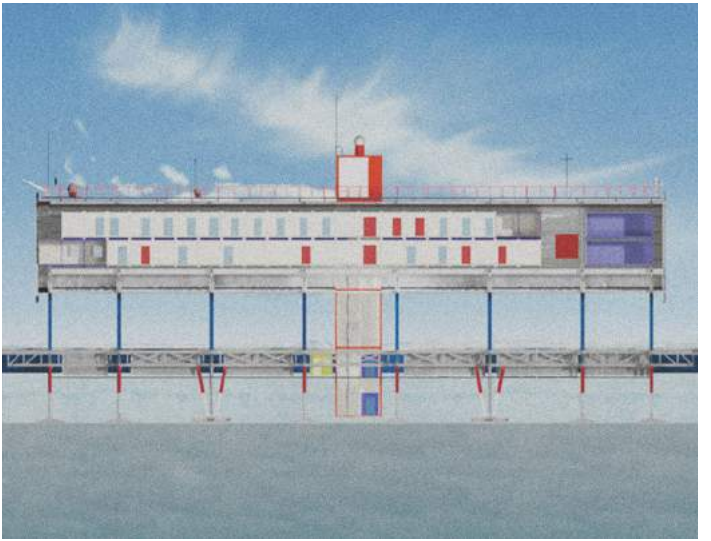
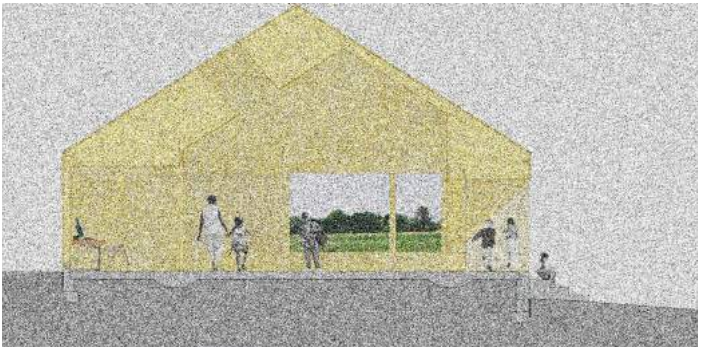
HELMHOLTZ
GEMEINSCHAFT

Neumayer III, Antarctic research station



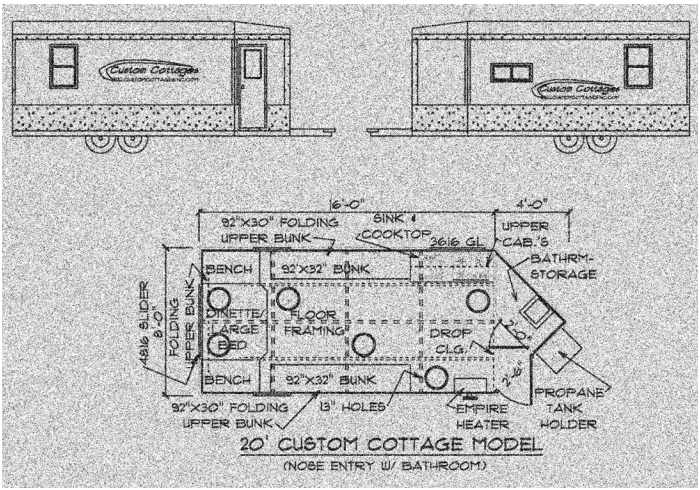
Neumayer III, Antarctic research station

Rural Studio, Greensboro Boys and Girls Club



Interior of Inuit house

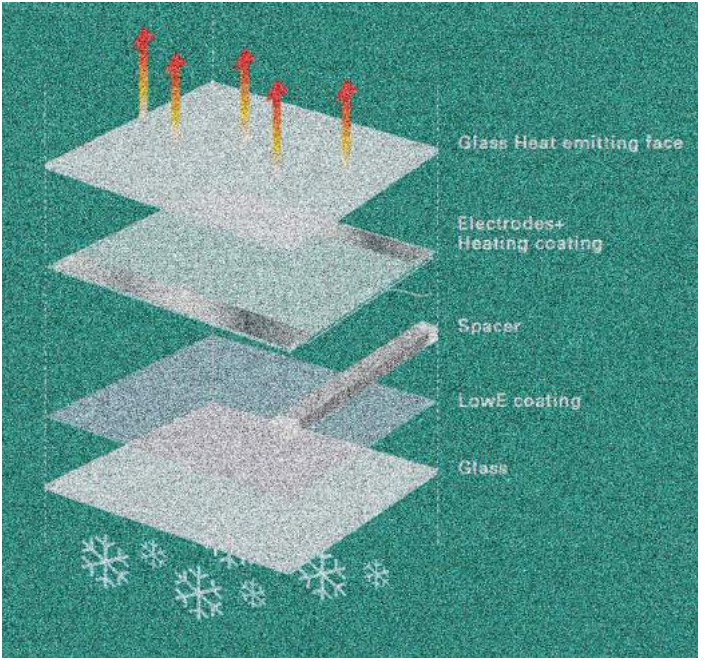
Ice fishing cottage



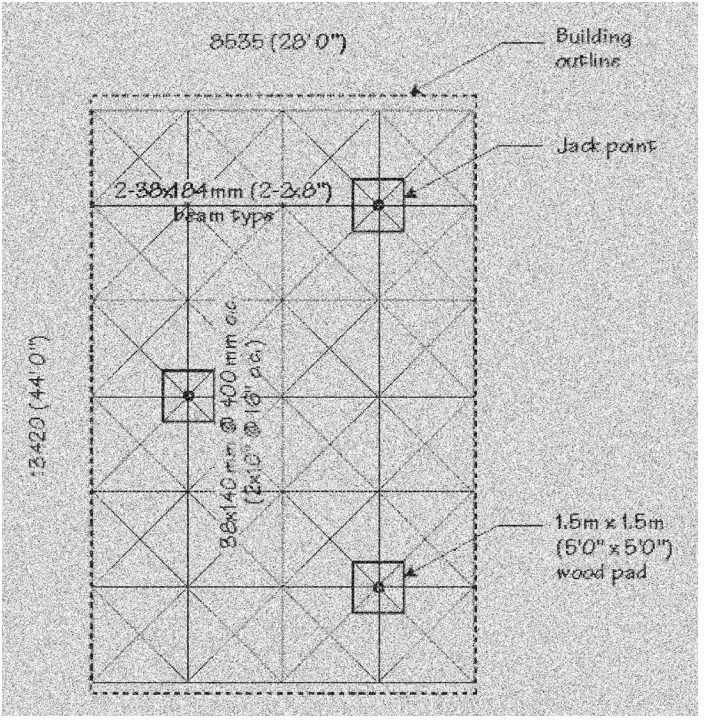
20' CUSTOM COTTAGE MODEL

(NOSE ENTRY W/ BATHROOM)

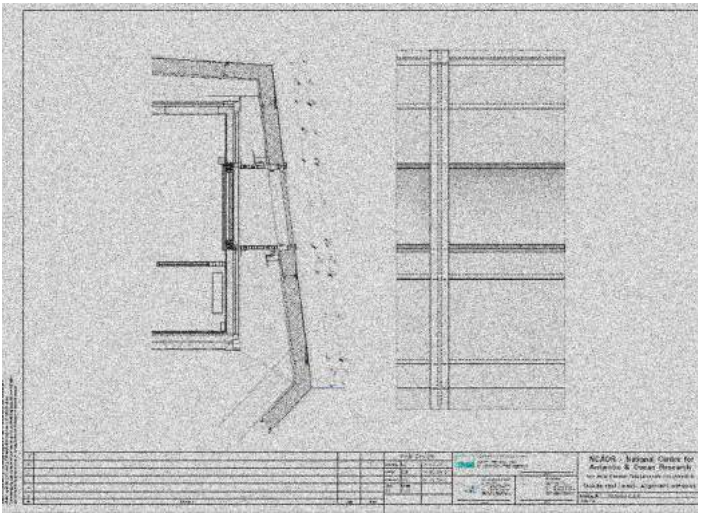
Insulated glazing unit


Glass Heat emitting face
Electrodes+
Heating coating
Spacer
LowE coating
Glass

Space frame platform with jacking columns


8535 (28' 0")
Building outline
Jack point
2-38x184mm (2-2x8")
beam type
38x140 mm @ 400 mm o.c.
(2x6" @ 16" o.c.)
13420 (44' 0")
1.5m x 1.5m
(5'0" x 5'0")
wood pad

Wall Section of Hugh Broughton Architects, Halley VI



Footings for permafrost regions

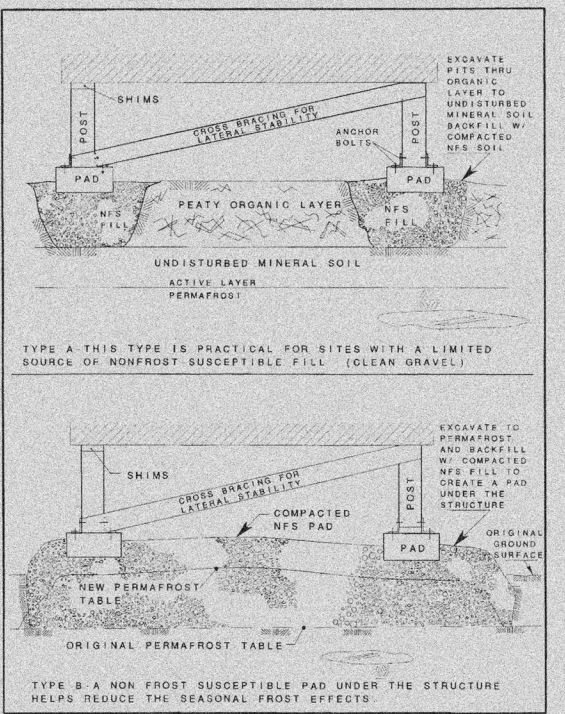


Figure 5.4 Post and pad foundation details. In type B the permafrost will rise into the gravel pad as thermal equilibrium is reestablished and will help reduce seasonal frost movement.

Timber crib footing for building in permafrost regions

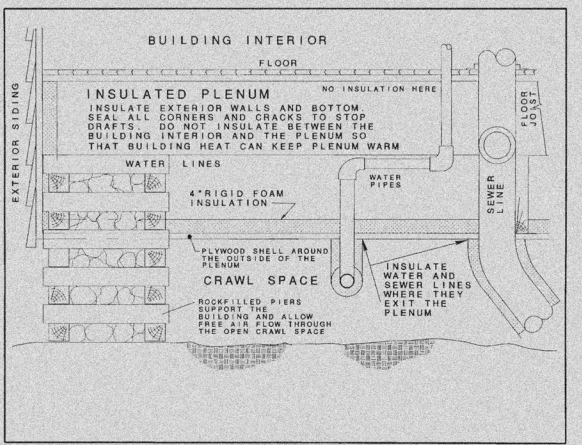


FIGURE 5.6 Building on Piers with an Insulated Plenum

Thermo-pylons for building in permafrost regions

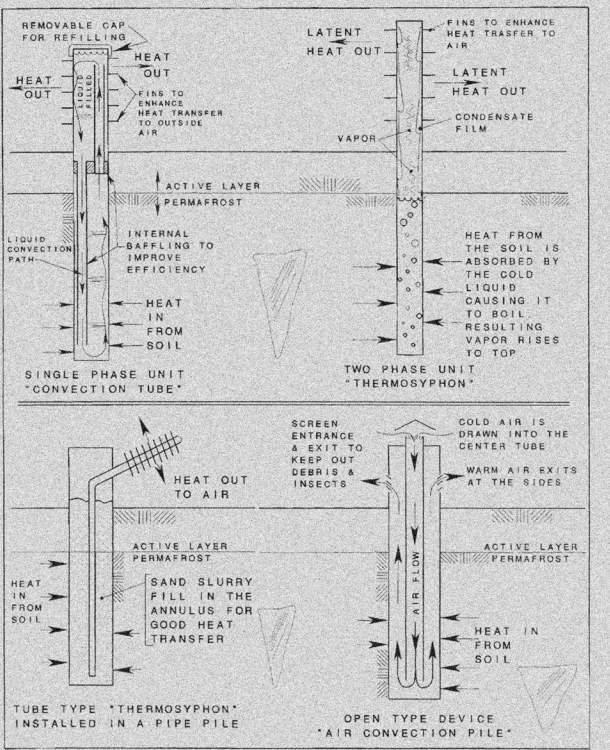


Figure 3.4 Four typical natural convection devices

Thermo-pylons for building in permafrost regions. Thermo-pylons are drilling into the permafrost and through natural convection keep the ground frozen despite the heat emitted from the structure above

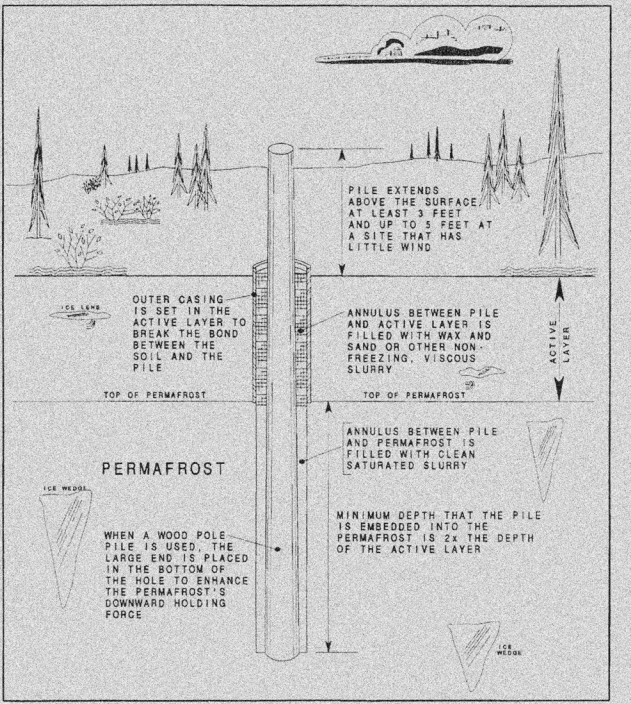


FIGURE 4.1 Typical slurried pile installation at a permafrost site. Note that the ice lenses in the active layer are only present when the active layer is frozen.

Shallow foundation unanchored in permafrost

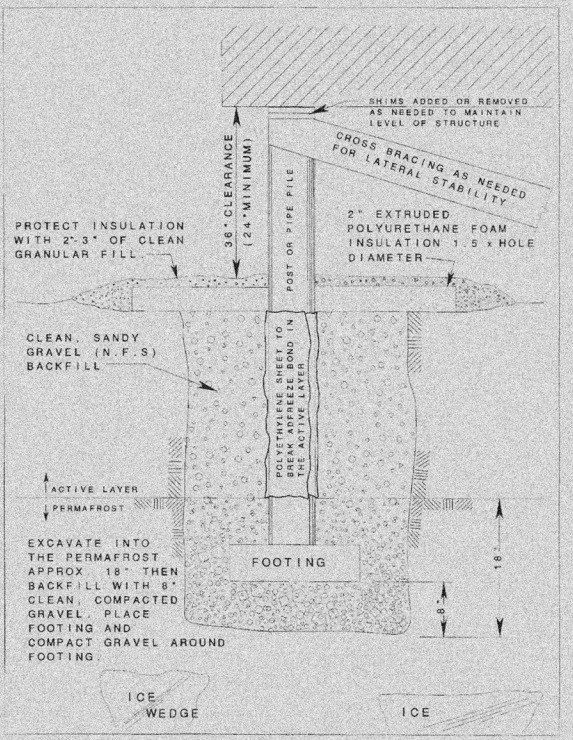
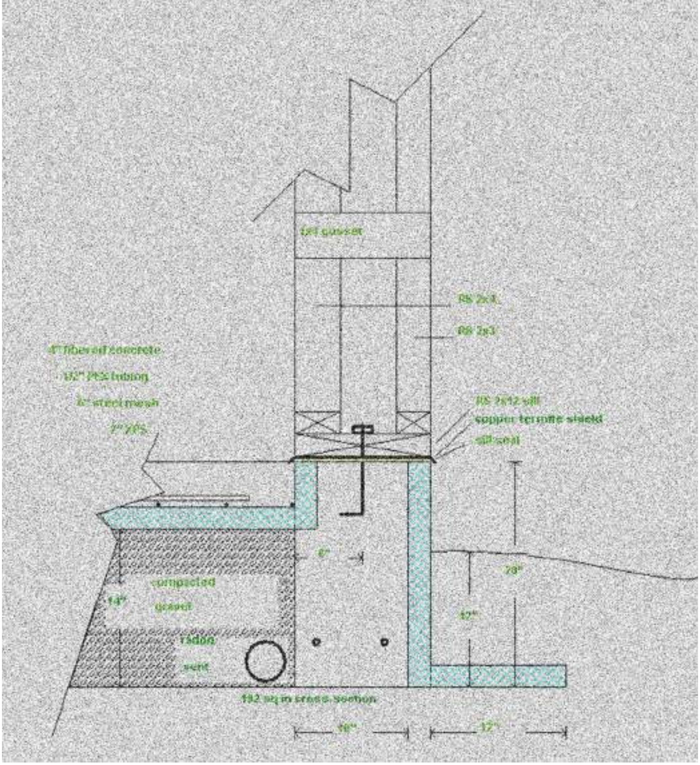


Figure 4.8 Shallow foundation not anchored in the permafrost.

Foundation detail for truss wall assembly

House Foundation Detail



Gantry crane

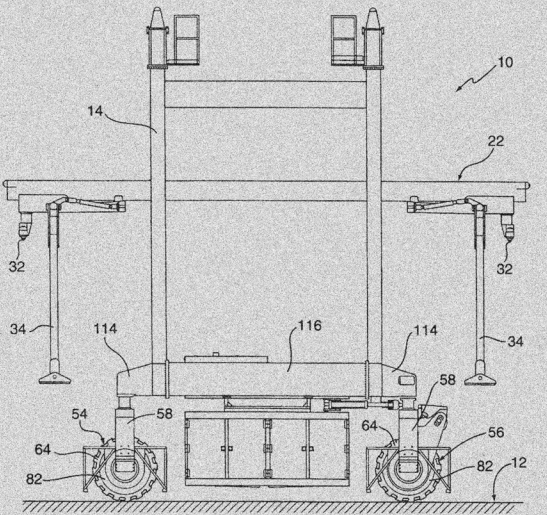


FIG. 1

Gantry crane

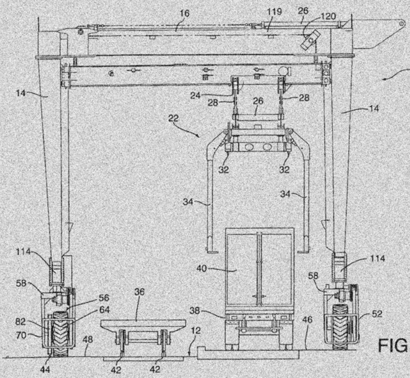

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FIG. 3

Spiral piling machine