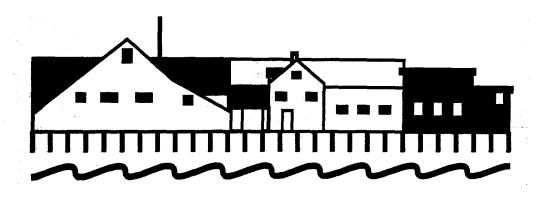


## A STRUCTURAL HISTORY OF THE GULF OF GEORGIA CANNERY NATIONAL HISTORIC SITE



Duncan Stacey, 1982

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## INTRODUCTION

Intil the present the eaphasis of historical research has been centered on the evolution of the processing and fishing technologies related to the site. Although this avenue of investigation is incomplete (especially in respect to herring technology 1939-82) a good basic overview is available and the author feels competent to produce a working paper on the historical development of the existing structures at the Gulf of Georgia. This temporary switch in research emphasis is necessitated by the knowledge that many of the site's structures are in danger of being removed, demolished, or irreparably altered due to local harbor construction by Small Craft Harbors. I don't pretend to be an archetectural historian, but my understanding of the processing and fishing functions carried on within the site's buildings and structures offers insights into the hows and whys of the Gulf's structural changes in addition to identifying those changes. "Industry is dynamic; its monuments need to be studied with their use constantly in mind. The physical remains can be properly understood only by asking 'how' and 'why' as often as 'what'."

The existing structures at the Gulf can be divided into two basic groups by their function in the industrial process. The first group are structures involved in the actual processing of fish or fish products such as oil and meal. These structures are the main cannery/reduction building, the fresh fish house, the vitamin oil shed, and the fish oil tank platform. All these structures fall within the Parks Canada ounership zone. The second group are sturctures not involved in the actual processing of fish or fish products but that provide storage and/or support functions to group one structures. Such structures are alleyways, front and rear docks, seine loft, gillnet

loft, soule meal sheds, drum shed, lead foundry, watchman's shed, fire equipment shed, and fish meal (cooling) warehouse. The drum shed, lead foundry, watchman's shed, fire equipment shed, and rear dock fall within the Parks Canada ownership zone, the alleyways and front dock into the letter of understanding zone, the seine loft into the agreement zone, and the soule meal sheds, gillnet loft, and fish meal (cooling) warehouse are under Small Craft Harbors' jurisdiction.

Due to the fact that major structural changes occurred to group one buildings while little if any change occurred to group two buildings and due to the fact that group one buldings all fall within Parks Canada ownership, the main section of this report will deal with group one structures. A brief description of the construction, function, and history of group two sturctures will, however, be found in the appendices, which are meant to be a working tool for department planners and fnterpreters who gay need basic information about specific: structures on' the site.

## PROCESSING STRUCTURES

Gulf of Georgia's existing (1982) processing structure 1 is made up of several parts. The main section, a frame building with a gabled roof, is 90 feet at its maximum width by 260 feet, with 9 foot walls. Twenty feet in from the wall it is 22 feet high, there is an 18 foot rise to the ridge, and it has a partial loft (originally a can loft). The south face of the building was built circa 1906 and is covered by a fish bin shelter. This 18' X 70' X 12' structure is congrised of three fish bins with eight foot walls and a roof section of composition roofing material.  $^{2}$  The north addition built 1896-7 is a 70' % 60' gabled roof building and the southeast addition, or dryer building, is a combination of a 1948 40' X 85' one storeg, gabled roof structure with 18 foot walls built on piles with a timber frame, asbestos siding and roofing and a 40' X 55' addition built in 1964 with 26' to 20' high flat roof with tar and gravel roofing. The whole structure is constructed on piles with 2 % 12 joists, 12 % 12 caps, 2" flooring, & % 10 posts, 2 % 3 rafters, 3 x 8" plates, and 1 X 6" roof strips.

Two other free standing buildings also exist: the vitamin oil refinery (or blending plant) built in 1940 and the ice/fresh fish (salmon) house built in 1943. The vitamin oil or blending plant is a 30° x 66° gabled roof frame building, set on piles with 100 feet of nine foot walk on two sides (part of this wal; has been removed but the one along the south side still exists;. This building is constructed of 12 x 12" caps, 2 x 12" joists, 2 x 6" frames, plank floors covered with shiplap and tongue and groove dropsiding over shiplap on the exterior walls, partitions and ceilings insulated

with sawdust shavings. The interior and exterior are painted and the roof is of-shingle construction. There are nine 10 % 14" double sash windows, lights, a 6 % 7 sliding batten door on square track and four 3' X 6' refrigerator doors. The function of this building was that of storage, refining, and blending of fish oils in the eight built-in tanks. The heavily insulated nature of this building is a result of its function. Fish oil must be kept cool to delay rancidity and to facilitate its refining. The ice house is a gabled roof frame building with 16 foot walls, 44 x 16' planking on its west side, 5 X 45' planking on the east side, and 5' to 12' X 27' planking at the front or south side, all set on piles. It has 12 X 12" caps, 3 X 12" joists, 3" decking, 2 X 6" frame, 1 X 6" drop siding, and shingle roof. There are also 10 X 40' set fish bins, an 18 X 28' double wailed cold room (which caved in May 1982 due to piledriving activity), and storage in the 12 X 18' crusher (ice) room and 12 X 40' engine room. The function of this building was to supply ice to the company's fleet and as a transshipment and temporary holding and icing down area for fresh fish, mainly the salmon caught by the Gulf's local Fraser River gillnet fleet.

The original 1894 Gulf structure consisted of the existing main section (minus 50 feet which was added to its south end circa 1906) and a 59' X 133' frame structure 8'6" from the floor to wall plate with 17' rise to the ridge, which extended west of the original Gulf aain section. The place where this gabled west wing, or gutting and fish receiving, structure connected to the main section is evident today in the broken roofline of the southwest side of the main

building. The maximum width of the main section was 71' as compared to its present maximum width of 90'. The original "L" shaped configuration is typical of early cannery structures of the West Coast. Such design was in direct response to the functional demands of the pre-1906 manual canning line where "machines" supplemented rather than replaced manual processes. Because the west wing functionned as a fish receiving shed and gutting shed it needed to be located far enough out into the river to enable vessels, fishboats and freighters, to load and discharge cargo at all stages of the tide and to allow fish offal from the gutting shed processes to be washed away by tidal action.

In 1396 or 1897 a 125 (approximately) addition was constructed on the northeast corner of the main structure in response to the need to expand the original 1894 single canning line into a triple canning line. 10 These extra lines fitted into the original structure, but trey necessitated the addition of another boiler, extra retorts, and nore storage area for the finished product on the main floor. Empty cans were stored in the can loft or mezzanine area, but only a small number of the heavier filled cans could be kept there.

extended 50 feet southward. <sup>12</sup> This expansion was again in response to the demands of canning technology. With the introduction of the Iron Chink to the Gulf in 1906 the gutting shed or west wing was no longer needed for fish processing; a canning line employing an Iron Chink ran more efficiently in a straight line. <sup>13</sup> Also, the earlier "deep water" requirements of canneries became less essential as time progressed and the windjammers with their deep draughts ceased to serve as carriers of cannery supplies and products. <sup>14</sup>

Between 1897 and 1911 approximately 50 feet was removed from the eastern end of the north addition, 15 giving it iss present (1982) dimensions. At present this shortening of the north addition can be accounted for only as a result of reconstruction of the diking system around the site 16 and possible construction of a railroad spur line 17 to the Gulf along the crest of this & diking system 18. After the shortening of the north addition most of its area was used as the China Eouse for the Gulf's Chinese contract cannery workers who were previously housed in a separate China House northwest of the main cannery complex.

30 major alterations occurred to the Gulf's structure after the early 1900's until 1927 and its acquisition by the Canadian Fishing Company.  $^{20}$  In **that** year the west wing was physically separated from the main section by construction of a driveuay down the west wall of the main section. 2 The isolation of the west wing from the main cannery and the fact that its original function as a gutting shed meant that it was in an exposed situation led to its destruction in an unusually vicious winter storm in 1932. 22 Any gutting and frksh fish holding area experiences rapid structural deterioration due to the extensive use of fresh water in the gutting process, melt water from ice used in fish holding areas, and bacteria from fish and fish offal which accelerates dry rot, especially in wooden struc tures. 23 After the destruction of the western wing, a western dock or platform and fish holding bins were constructed between 1933 and  $1937^{24}$ . The pilings for these structures appear to have been integrated into the construction of the seine loft and its wharf in 1939.25

Renovation of the Gulf's original surviving main cannery. structure and north addition in 1939/40 and construction of the

vitamin oil refinery in 1940, <sup>26</sup> the ice house in 1943, <sup>27</sup> the dryer room in 1948, <sup>28</sup> and its addition in 1964, <sup>29</sup> plus all post-1940 non-processing structures were erected in response to demands of processing technology (and fishing in the case of the seine netloft). Apart from the ice house, however, such demands arose not from salmon processing but from herring canning and reduction technologies.

The main cannery reduction structure was not only renovated in 1939.40 but its southeast corner expanded 20 feet in 1942<sup>30</sup> to its present maximum width of 90 feet. This expansion was necessitated to house the original reduction plant's machinery. Also around 1940/41<sup>31</sup> the roofline of the north side of the nainstructure was raised to its present level to accoadate an additional boiler. This expansion was minimal prior to 1948 because the "new" reduction technology was still a minor technique to process byproducts (oil and offal) of the dominant technology on the site, that of herring canning.

A fish oil tank storage platform was constructed in stages between 1940 and 1943<sup>32</sup> in response to the demands created by these byproducts, however, specifically oil fron both the herring cannery and reduction plant. This structure is presently (1982) a 50 % 55' planked area set on piles with 12 % 12" caps, 3 % 12" joists, acd 3" decking and lies on the eastern side of the nain cannery building between the vitamin oil plant and the dryer room. Its northern end was built in 1940 to support four anks, <sup>34</sup> its center in 1941 to facilitate four more tanks, and its southern end in 1943. This southern end originally held only one tank on its western end but at a later date two more tanks were added. With the exception of the two easterly (1940) tanks that belong to Parks Canada, the rest have been sold and most of then have been removed.

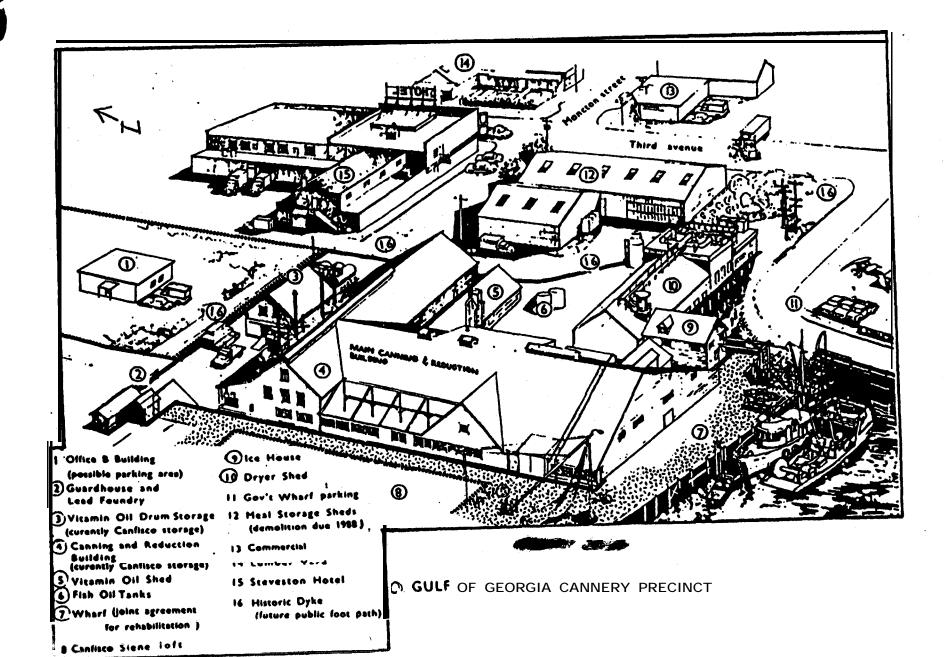
. . . .

The closure of the herring cannery in 1948 due to a lack of markets coupled with the switch to atrictly herring reduction technology and the resulting enlarged spacial requirement of this tea technology's machines (dut to the larger size of reduction equipment and its demand for greater quantities of raw fish as compared to canning machinery) led to the construction of the dryer room and the externai herring bins. The final structural additions to the main section occurred in 1956 when the east roofline was raised to its present level to acconodate the height of the  ${\tt evaporator}$  unit  $^{35}$  and in 1964 when the final extension was added to the dryer room. early 1970's a minor and final alteration was made to the Gulf's original cannery structure: . a large sliding door was built into the southwest side of the building. Its function was to allow offal from the herring roe fishery as well as general cannery offal from other Canadian Fishing Company processing plants to be dumped by truck directly onto the reduction holding or receiving area.

Pew internal structural changes to the remaining original salmon canning structure are evident. Here and there false walls have been erected to separate working areas and facilitate staff lunch and changing rooms. Parts of the original can loft have been removed to facilitate the reduction processes and its raw fish feed system. The boiler room, however, has been totally enclosed due to modern fire regulations; as this is a recent rather than historic area it is suggested that said structure should be removed. Such action till provide a traditional view of the boilers which in thenselves are fine examples of industrial technology dating to 1923 and 1941.

Although this is only a working paper it is hoped that the evidence presented illustrates a basic theme--that structural changes

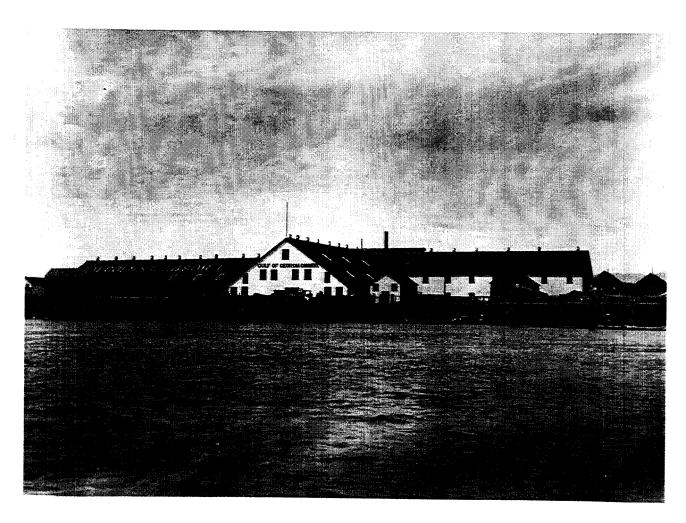
in industrial buildings are in many cased directly related to changes in processing technology. Investigating the "hows" and "whys! of processing technology as well as the "what" provides essential clues to structural changes of the buildings which house these machines and processes. If any conclusion can be drawn out of this approach it is that virtually 311 major structural change to the Gulf of Georgia ' has been in direct response to the demands of the state and type of processing technology at a given tine. One major exception to this conclusion is the shortening of the north addition to accomodate the reconstruction of the diking system. As long as canning was the major technology (189k-1339) the structure of the building reaained traditional because it was built to house such 3 process. Sturctural changes of this period were **merely** in response to duplication of canning lines and modernization of these lines. After 1939 major structural changes were to accomodate the "new" technology of the reduction process, whose machines are far longer and bigger than those of salmon and herring canning.





NORTH SIDE OF THE MAIN CANNERY BUILDING, JULY 1900.

PHOTO SOURCE: VANCOUVER CITY ARCHIVES:



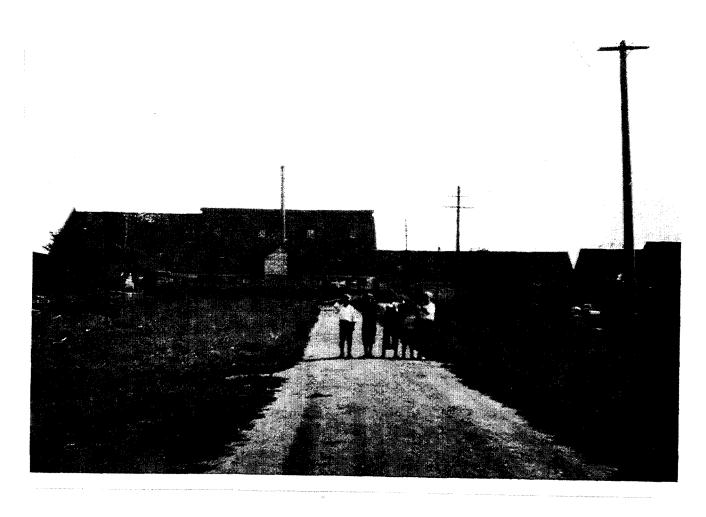
SOUTH SIDE OF THE MAIN CANNERY BUILDING, WEST WING ON LEFT AND NORTH ADDITION ON RIGHT, CIRCA 1900.

PHOTO SOURCE: VANCOUVER CITY ARCHIVES



EAST SIDE OF THE MAIN CANNERY BUILDING AFTER 1918STEVESTON FIRE.

PHOTO SOURCE: HAROLD STEVES COLLECTION



NORTH SIDE OF THE MAIN **CANNERY** BUILDING, WEST WING ON RIGHT AND NORTH ADDITION **ON** LEFT, **1926-1930**.

PHOTO SOURCE: CANADIAN FISHING COMPANY APPRAISEMENT OF THE **GULF**OF **GEORGIA** PLANT, **STEVESTON, B.C.,** 1926, 1928, 1930.



WEST SIDE OF THE MAIN CANNERY BUILDING, WEST WING ON RIGHT, 1926-30.

PHOTO SOURCE: CANADIAN FISHING COMPANY APPRAISEMENT OF THE GULF

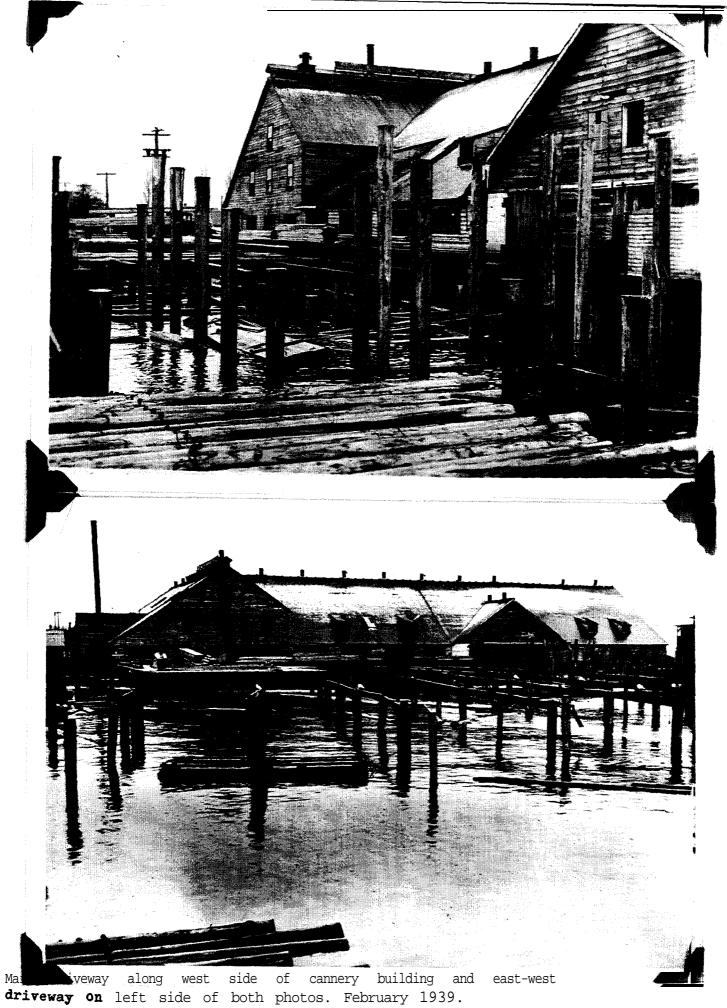
OF GEORGIA PLANT, STEVESTON, B.C., 1926,1928,1930.

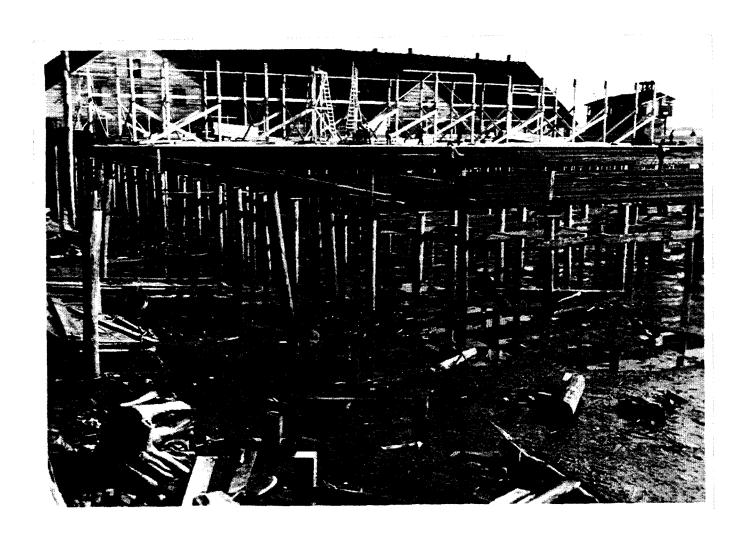


WEST SIDE OF MAIN CANNERY BUILDING; REMAINS OF WEST WING WHERE IT JOINED THE MAIN CANNERY ON THE RIGHT, 1939.



WEST SIDE OF THE MAIN CANNERY BUILDING. CIRCA 1906, ADDITION TO THE FRONT OF THE CANNERY IS EVIDENT RIGHT'OF THE BUTT OF THE WEST WING, 1939.





WEST SIDE OF THE &IN CANNERY BUILDING, FISH BINS ON RIGHT, 1939.



FRONT OF MAIN CANNERY BUILDING, 1939.

1939 TO ACCOMODATE THE CONSTRUCTION OF THE SEINE LOFT'S FRONT DOCK.



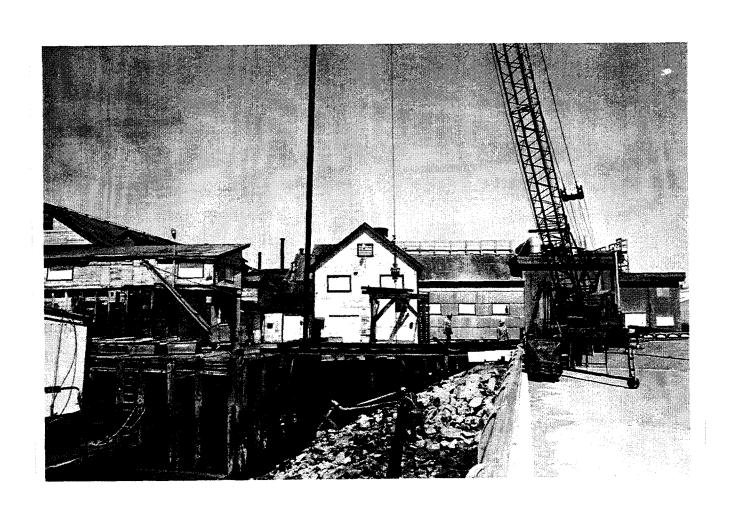
GULF OF GEORGIA AND SURROUNDING AREA, 1951-1964.

PHOTO SOURCE: CANADIAN FISHING COMPANY HOME PLANT

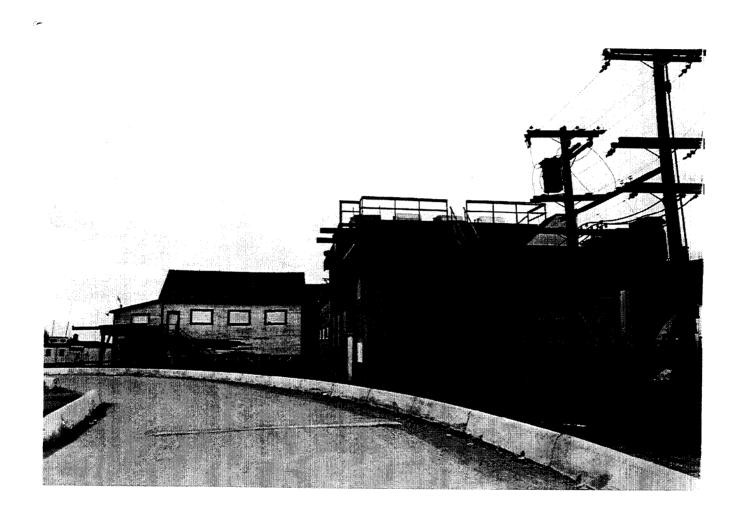


GULF OF GEORGIA'SITE; 1948-1951. DRIER ROOM ON RIGHT BUILT IN 1948.

PHOTO SOURCE: CANADIAN FISHING COMPANY HOME PLANT.



SOUTH SIDE OF DRIER ROOM IN BACK RIGHT WITH ICE HOUSE IN FRONT AND SMALL CRAFT HARBORS PIER ON RIGHT, 1982.



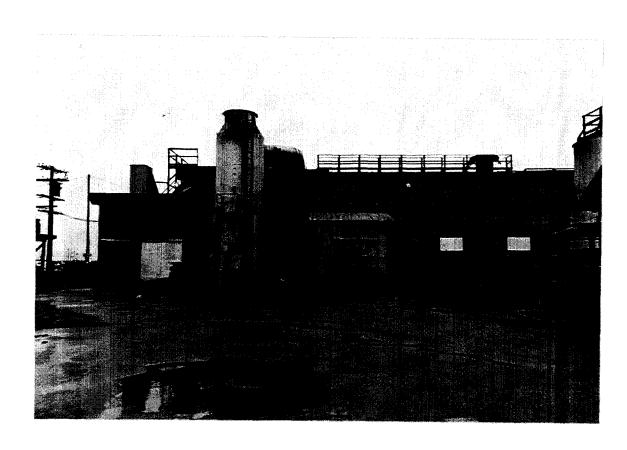
EAST SIDE OF DRIER ROOM ON RIGHT AND ICE HOUSE ON LEFT, 1982.



EASTERN SIDE OF GULF OF GEORGIA. LEFT TO RIGHT: DRIER ROOM, VITAMIN OIL TANKS, VITAMIN OIL PLANT, NORTH ADDITION. NOTE. RAILWAY SPUR ALONG TOP OF DIKE HAS BEEN REMOVED; IT AND THE DIKE WERE CONSTRUCTED CIRCA 1906. 1980 PHOTO.

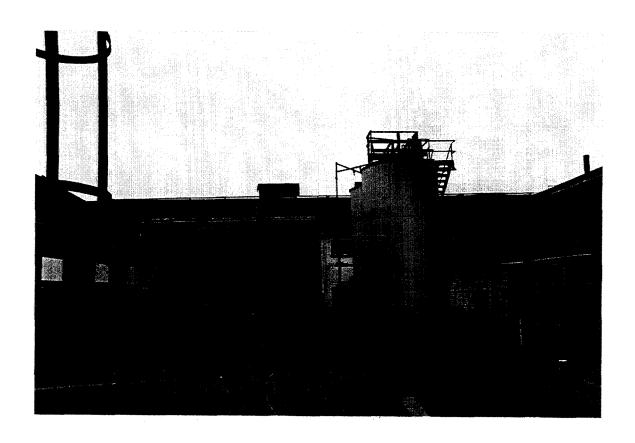


NORTH SIDE OF DRIER ROOM, 1982. ORIGINAL (1948) DRIER ROOM ON RIGHT AND 1964 EXTENSION ON LEFT.



Dryer room and Peabody Odor Control Unit, called "Buster's **Stinkeroo"** after its designer. January **1983.** 

Photo source: Duncan Stacey

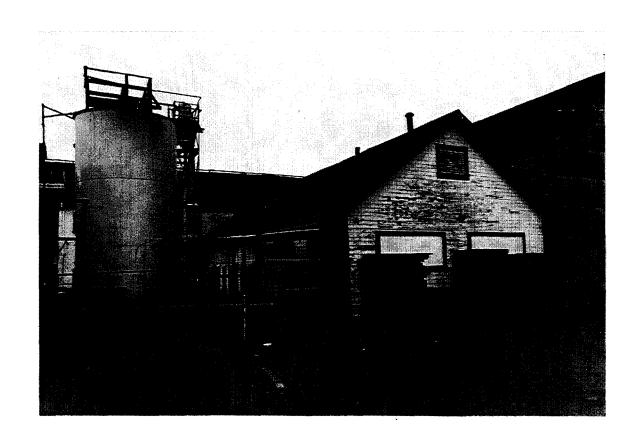


Fish oil tank storage platform, main cannery in background, (white) roofline raised in 1956 to accomodate evaporator unit; dryer room on left, vitamin oil plant on right. Remaining tanks are Parks Canada property. January 1983.

Photo source: Duncan Stacey



VITAMIN OIL PLANT EAST SIDE, NORTH ADDITION ON RIGHT AND MAIN SECTION OF ORIGINAL CANNERY IN BACKGROUND, 1982.



Vitamin oil plant with fish oil tanks (two acquired by Parks Canada). January 1983.

Photo source: Duncan Stacey



EASTERN SIDE OF NORTH ADDITION ON RIGHT; VITAMIN OIL PLANT ON LEFT.

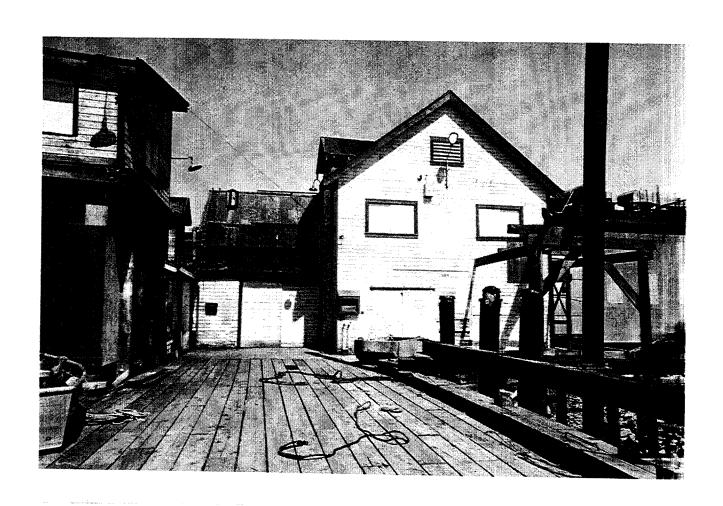


MAIN DRIVEWAY LOOKING NORTH FROM THE FRONT DOCK. WEST SIDE OF MAIN CANNERY BUILDING ON THE RIGHT AND SEINE LOFT ON LEFT. NOTE CEMENT SURFACE OF SEINE LOFT'S DOCK COMPARED TO PLANKED SURFACES' OF CANNERY FRONT DOCK. 1982 PHOTO.



Sliding door, in southwest corner of the main cannery structure, **built** in the early 1970's to facilitate trucks unloading cannery offal at the feed end of the reduction plant. If the 1927 canning line is installed, this door should be removed and the **roofline** returned to its original level, as the interior of the southwest corner housed the 1906-1930 fish house or gutting area for the salmon canning line.

Photo source: Duncan Stacey



ICE HOUSE AND HERRIMG BINS ON LEFT, DRIER ROOM EXTENSION ON RIGHT,

1982.



SOUTHEAST CORNER OF SITE; LEFT TO RIGHT: FRONT DOCK, HERRING BINS,

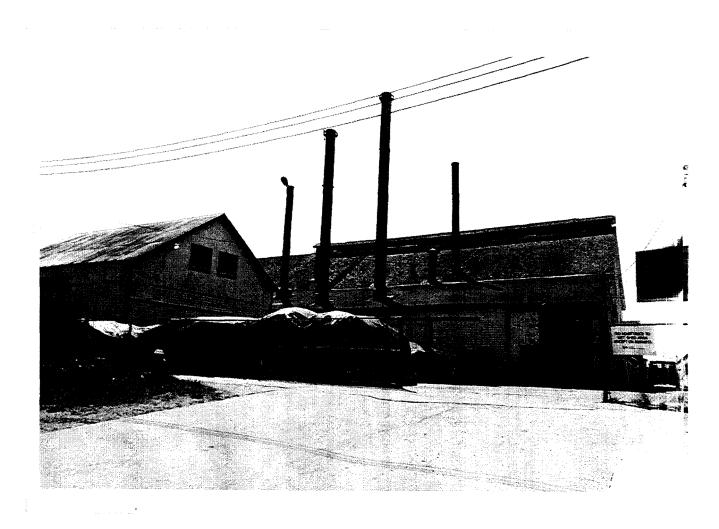
MAIN CANNERY BUILDING, ICE HOUSE.



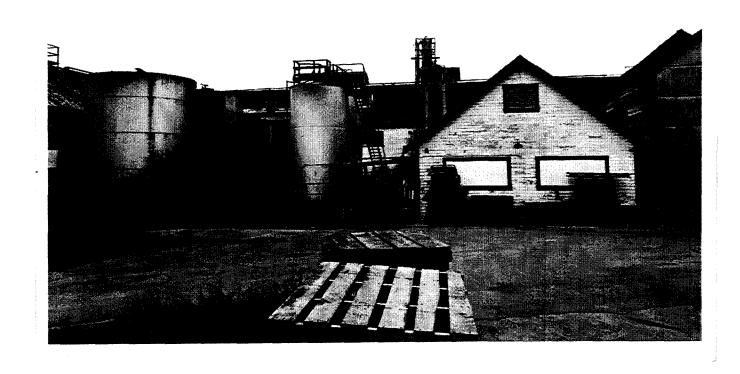
SOUTHWEST CORNER OF MAIN CANNERY, 1982. LEFT TO RIGHT: MAIN CANNERY
BUILDINGS, HERRING BINS, AND FRONT DOCK. ON THE FAR RIGHT IS CAMP 50,
A FLOATING FISH CAMP.



SOUTH SIDE OF MAIN **CANNERY** BUILDING, **1982.** HERRING BINS WITH ORIGINAL (CIRCA **1906)** SOUTH FACE IN BACK.



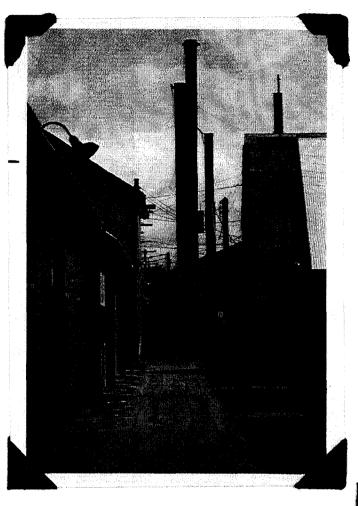
NORTHWEST CORNER OF MAIN CANNERY BUILDING, DRUM SHED ON LEFT, 1982.



VITAMIN OIL WHARF AND TANKS ON LEFT; VITAMIN OIL PLANT ON RIGHT.

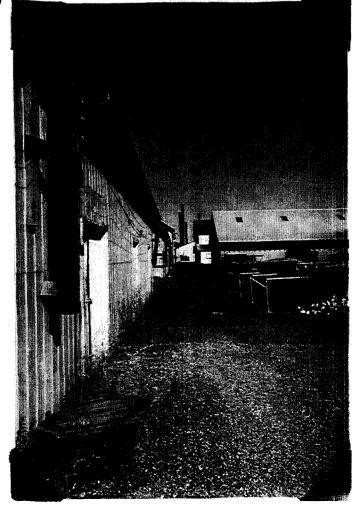
ORIGINAL MAIN CANNERY STRUCTURE IN BACKGROUND, DRIER ROOM ON FAR

LEFT AND NORTH ADDITION ON FAR RIGHT.



Traditional view of east-west driveway, circa  $1978_{\bullet}$ 

East-west driveway after land-fill, 1982.



## APPENDICES

The purpose of these appendices is to provide basic information about the existing "group **two"** structures at Gulf of Georgia, those not involved in the actual processing of fish or fish products. Appendix #1 deals with the front dock, Appendix #2 deals with the alleyways, and Appendix #3 is about support buildings such as netlofts, storage warehouses, the guard shed, and the lead foundry.

APPENDIX #1

GULF OF GEORGIA'S FRONT WHARF, 1894-1982

The Gulf of Georgia's front wharf is located along the soutle end of the National Historic Site. Between its original construct ( in 1894 and about 1906 it ran parallel to the entire south face i the building, with an unstaggered width estimated to be 20 to 30 :I  $\epsilon$ It functioned as a fresh fish receiving wharf, as a loading and unloading area for cannery supplies and filled cans, and as a boat storage and bluestone tank holding area. Circa 1906 and definatel by 1911 the front wharf was extended further out into the river (southward) and changed its frontage angle from parallel to the s:  $\epsilon$ south face to a slightly southwest angle further out into the rive at its western (downriver) end. This alteration was made necessary by the addition of fifty feet to the south face of the main section the site and a cluster of buildings attached to the south face of the west wing between 1894 and 1911. Unlike the 1894 configura' i this new front wharf was not an equal width in its whole length as t southwest corner had a deep indentation giving the new wharf a staggered configuration. 4

apparent change in the front wharf's configuration or location. The renovation and construction? did occur, however, with the 1927 purchase of the Gulf by the Canadian Fishing Company. Various en ! . . in the 1927 Daily Journal prove that the front wharf was recapped, piled, corbaled, fendered, fishing company. On the front wharf a new structure, the fish bins, was constructed costing \$1,092.52. As no plans have been located for the 1927-1935 perir the configuration of the front wharf during this time is unknown.

In 1932 much of the Gulf's front dock fell into the river wind J the west wing during a bad winter storm. 15 It also appears that t'

The Gulf has two existing driveways. The main one runs northsouth between the west side of the main cannery building and the east the seine loft. This main driveway provides direct access the foot of Fourth Avenue to the front dock. Today (1982) it enables vehicle traffic (trucks, cars, and forklifts) to load or unload nets and supplies on the front dock and it provides access between the seine loft's southern entrance and the cannery building's main vehicular entrance Since its original construction in 1927 it faces Fourth Avenue. has enabled supplies of ice from Home Plant in Vancouver to be delivered to the icehouse and fresh fish to be picked up from the front dock storage areas by truck delivery to other locations.

The other driveway joins the main driveway at the northwest corner of the main cannery building and runs west between the north side of the seine loft and the south side of the gillnet loft. The function of this second drive. way since its construction in 1939/40 has been to provide direct vehicular access to net racks, docks, marine grids, and storage sheds west or downriver of the seine loft. It also provides direct access to the north end of the seine loft and the gillnet loft.

North and south accesses are essential to the maintenance of the seine loft as a viable economic operation because they allow easy movement to and from seine gear stoaage areas in and outside the Gulf of Georgia property.

Due to the type of work being, conducted in the siine loft it is often feasible to utilize only one of the two main doors at a given time as nets being moved or worked on may block the use of one or the other exits. This is especially true when vessels are loading or unloading their seines. The continued activity of the senseloft is desirable for the site to provide continuation of the traditional fishing environment. The seine loft and its related activities are the last major fishing function remaining on the site (apart from a one-man blending operation in the vitamin oil area of the main cannery building).

fish bins were destroyed by the storm as new ones were constructed in 1935 at a cost of \$1,914.74. \(^{16}\)Such'expenditure during the great depression would have been economically justified only by the destruction of the 1927 fish bins. \(^{17}\)Sdme wharf constauction would necessarily have accompanied the 1935 fish bin construction southwest of the main cannery building. \(^{18}\) The configuration of this wharf and the fish bins are evident in the 1937 and 1938 Gulf plans and in the 1939 photo collection of Dick Jack. \(^{19}\)

The front wharf's final major construction and reconstruction period occurred between 1939 and 1944. In conjunction with the 1939 construction of the seine loft, the seine loft's part of the front wharf was built integrating the pilings which held the fish bins. 20 In 1942 the "old" section of the front dock along the south face of the cannery building was reconstructed and enlarged to the south to facilitate the marine leg unloading system and to the east to allow for vehicular 21 access to the "new" ice storage and fresh fish building constructed in 1943. 22 In 1944 the seine loft portion of the front wharf was extended south to line up with the south face of the cannery's front wharf face. No change is evident in the configuration or construction of the front wharf from 1944 to today (1982) although in front of the seine loft the traditional wooden decking was replaced with smooth cement in the late 1970's 23 to facilitate seine net loading and unloading.

·. .

During 1939/40 the introduction of herring canning and reduction processing technologies at the site led to the construction of the seine loft, net racks, gillnet loft, 'and the reconstruction of the main cannery building. At this time the east-west driveway between the seine loft and the gillnet loft was constructed and it is possible that the main driveway was reconstructed.

The Gulf of Georgia net loft facilities were constructed for the following reason: "to attract capable fishermen'to our operation we must be prepared to offer them better facilities for the care and storage of their gear and to provide safe mooring of their boats . . . In other sections of the river we provide no facilities whatever, and as a result competitors with idle plants offering the necessary service are able to gain or'hold the better fishermen."

The east-west driveway between the seine loft (built in 1939) and the gillnet loft (built in 1946) was constructed early in 1939 in conjunction with the seine loft. Pilings for this driveway, the seine loft, and the western netracks were driven prior to Narch 1939. Materials for the east-west driveway were as follows 10:

Jan 14. 1939

## Gulf of Georgia Cannery

<u>Material</u>	for	Driveway			along		new	bldg.		
26	рсь.	12	x 12	-	12	, _	SlS	#1	Con.	Caps
35	11	4	x 12	. –	22'	-	SIE		**	Joists
35	11	4	x 12	-	32'	~	SIE		' I	11
250	11	4	$\times 12$	2"'-	12'	_	SIS	ΙE	11	<b>Grax</b> Deck
500	lin.	ft.	8 2	s 8	-	20'	to	30	Rough	- GUARD

Templates **wfor** Trusses, rafters, etc. Also for "straight edges."

Construction Characteristics and Material of the Front Dock, 1940 to  $198z^{24}$ 

South of Main Building, a 50 to 58 wharf, constructed on piles. 240

Piling:. 40 Fender piles av. 35"

16 Mooring piles av. 40'

5 Bollards

Timber Construction: 8040'

lin. ft. caps av. 10x12"

7818 **lin.** ft. **2X12"** joists

16,836' **2"** plank decking

**1609'** rail

104 lin ft. 1X4" guard stop

34407' lumber, av. per M



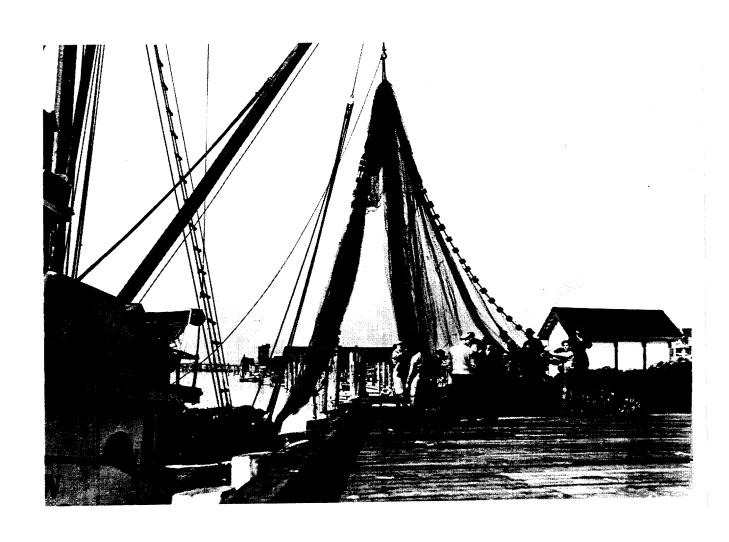
FRONT DOCK OF THE MAIN CANNERY, 1900.

PHOTO SOURCE: PUBLIC ARCHIVES OF CANADA



FRONT DOCK OF GULF **OF GEORGIA, 1939.** Note- storage of dead skiff's on this dock and fish bins in tee background.

PHOTO SOURCE: DICK JACK

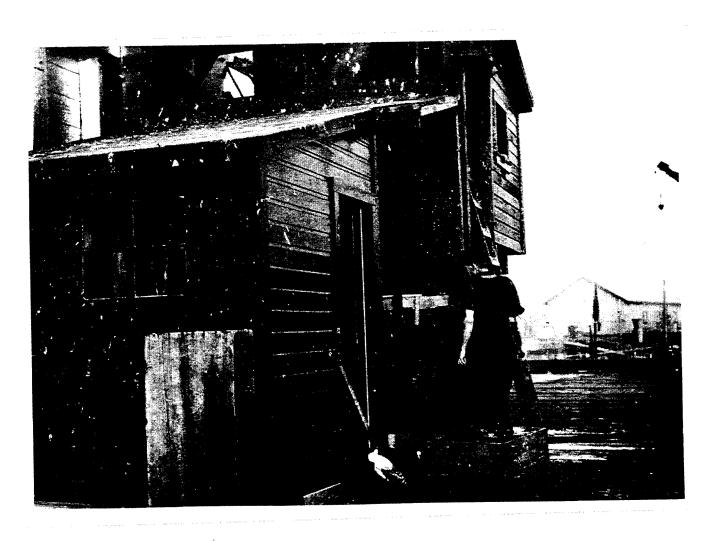


SOUTHWEST CORNER OF THE SEINE LOFT WHARF,1940's. SEINE LOFT CREW FLEETING NET ONTO THE DOCK.

PHOTO SOURCE: CANADIAN FISHING COMPANY HOME PLANT

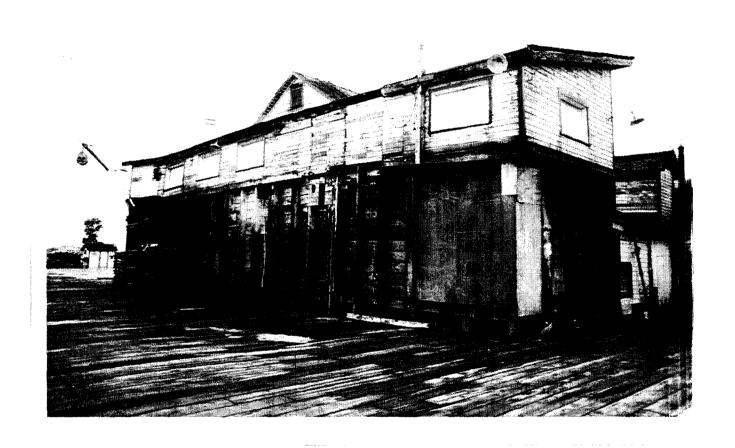


SEINE LOFT CREW WORXING ON THE FRONT DOCX, SOUTHWEST **CORNER** OF TEE MAIN CANNERY BUILDING. NOTE. THE HERRING BINS ON THE RIGHT, **1949.**PHOTO SOURCE: **CANADIAN** FISHING COMPANY HOME PLANT

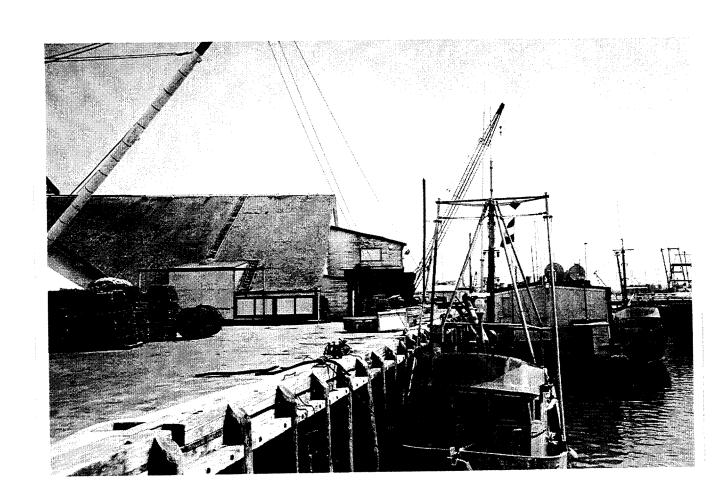


FRONT DOCK, CIRCA 1950. WEIGH SCALE HOUSE AND SALTING SHED REMOVED IN LATE 1970's. EXTERNAL HERRING BINS TOP LEFT.

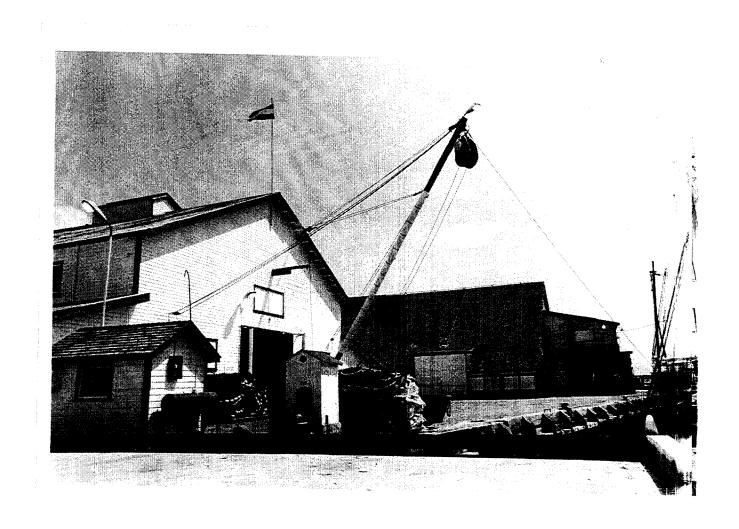
PHOTO SOURCE: DICK ISAACSON, PACIFIC BIOLOGICAL STATION, NANAIMO, B.C.



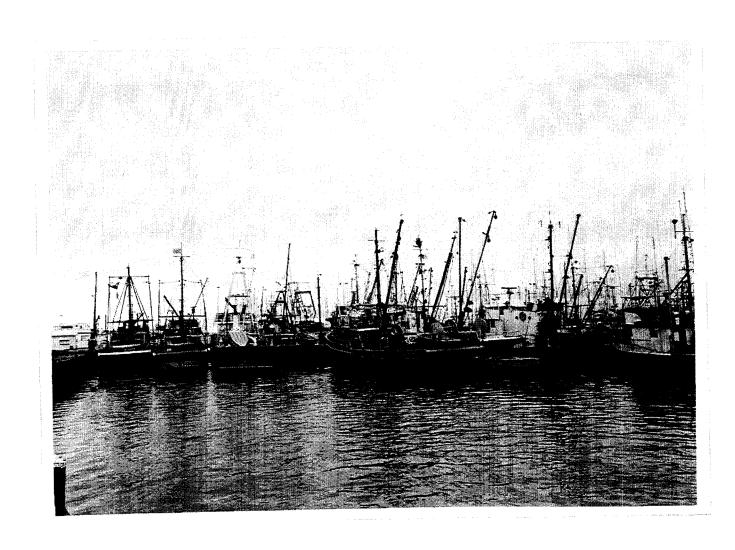
SOUTHEAST AREA OF FRONT DOCK, 1982. NOTE SEINE LOFT BOOM ON LEFT.



FRONT DOCK, GULF OF GEORGIA-, 1982.



FRONT DOCK OF SEINE LOFT WITH **CANNERY** BUILDING IN THE BACKGROUND', 1982

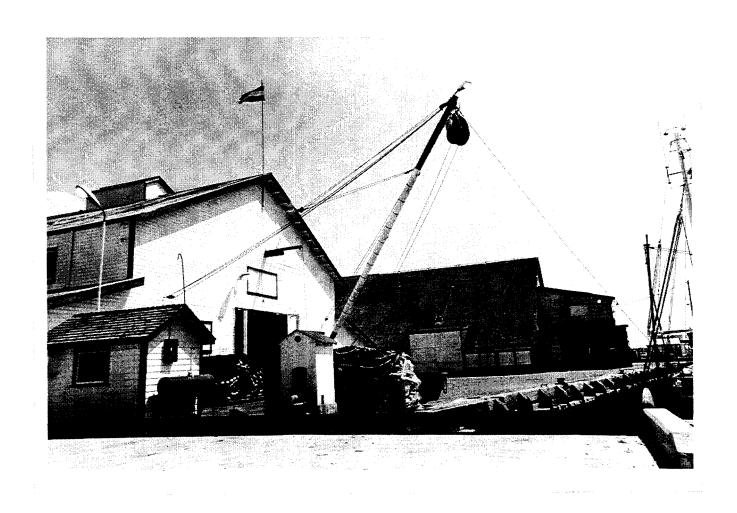


Winter tie-up at Gulf of Georgia. The historic site's front dock, southeast corner, is on the  $\frac{\text{right}}{\text{LEFT}}$ . January 1983.

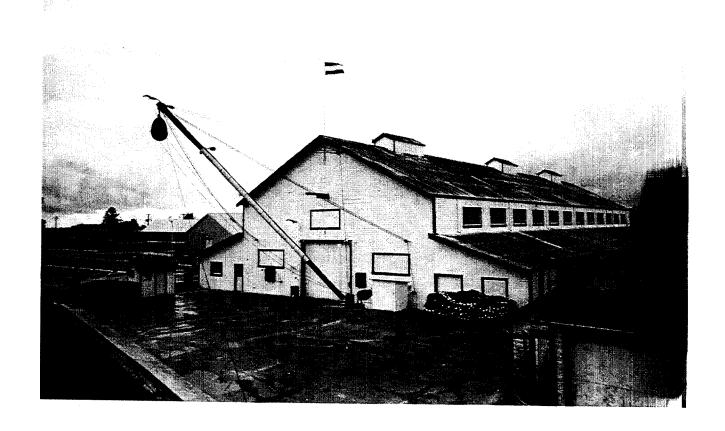
Photo source: Duncan Stacey .



FRONT DOCK OF MAIN CANNERY BUILDING WITH HERRING **BINS** ON THE LEFT, **1982. NOTE USE** OF FRONT DOCK AS STORAGE AREA FOR **DEAD** SKIFFS.



SEINE LOFT'S FRONT WHARF WITH **SMALL** CRAFT HARBORS' **NEW** DOCK IN FOREGROUND, 1982.



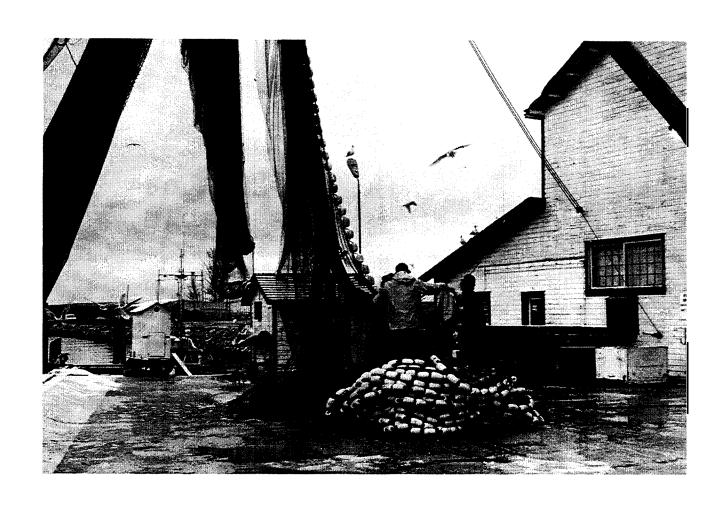
FRONT WHARF OF THE SEINE LOFT, 1982.



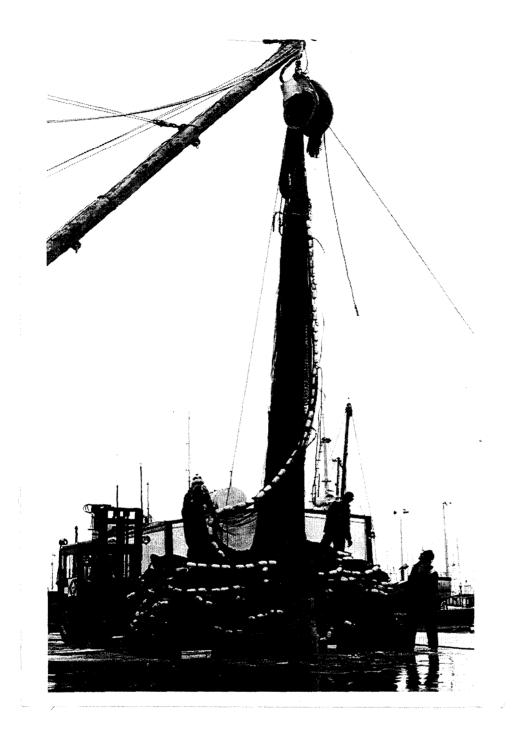
SEINER LOADING NET AT GULF OF GEORGIA SEINE WHARF, 1982.



SEINER PICKING UP NET FROM GULF OF GEORGIA FRONT WHARF, 1982. NOTE SEINER TIES ARSE END IN TO FACILITATE MOVING NET.



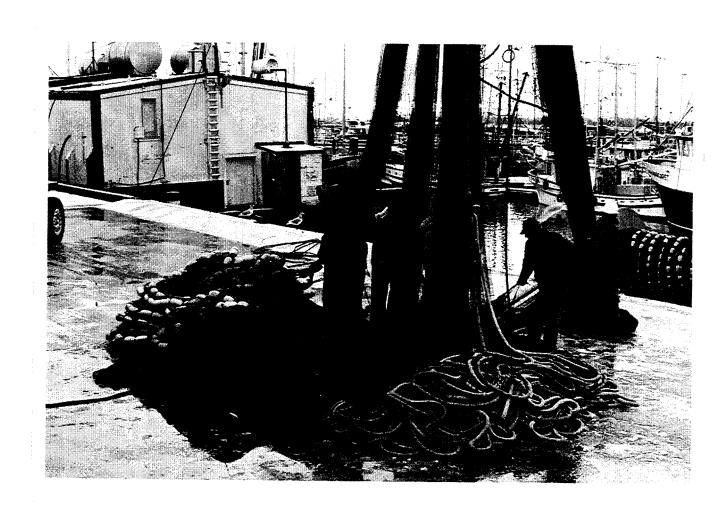
SOUTHWEST CORNER OF SEINE LOFT WHARF, 1982. UNLOADING A HERRING SEINE ONTO THE DOCK.



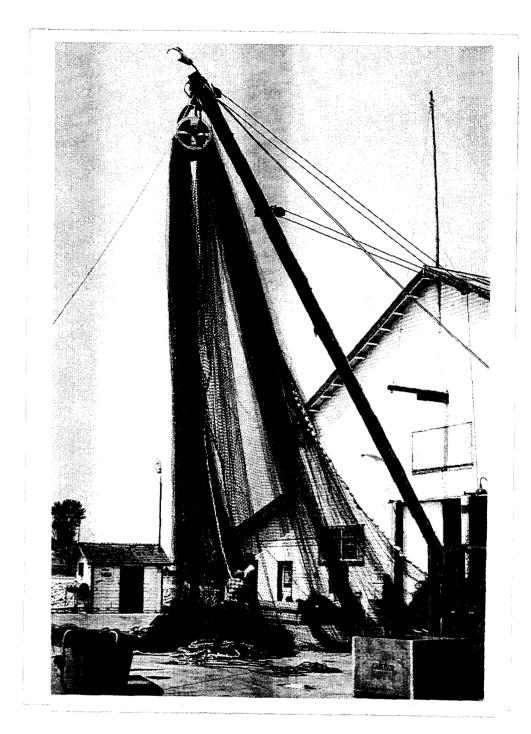
UNLOADING SEINE ONTO PALLET ON SEINE LOFT'S FRONT DOCK. FORKLIFT

ON RIGHT WILL TRANSFER SEINE TO STORAGE AREA. 1982

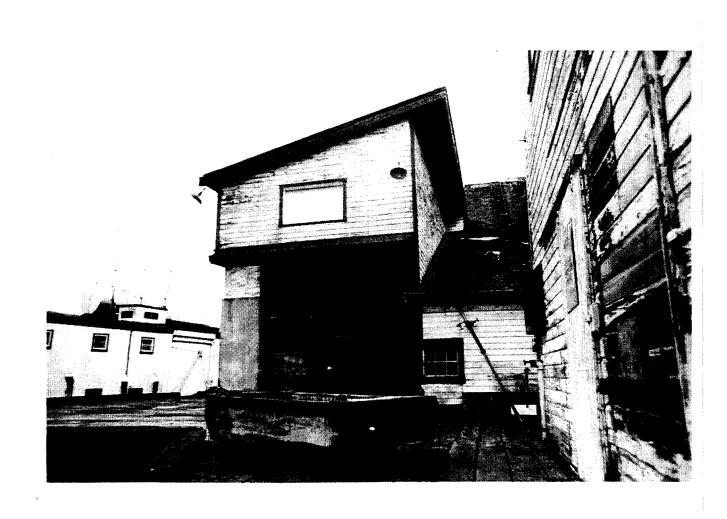
P'HOTO SOURCE: DUNCAN STACEY



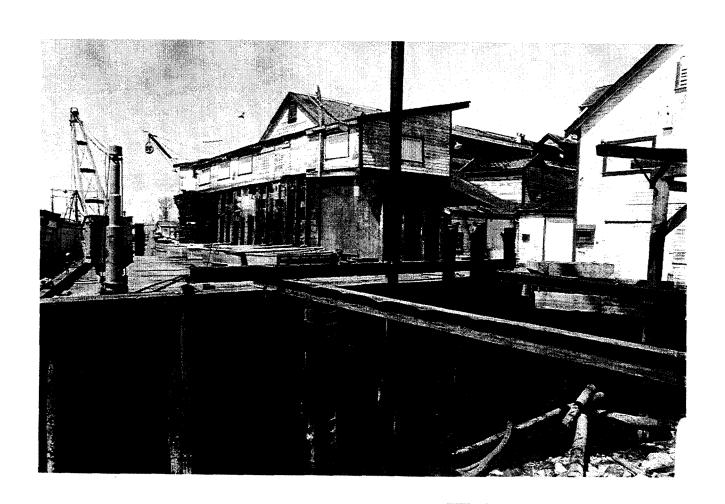
PILING SEINE ON FRONT DOCK OF SEINE LOFT, 1982.



TURNING SEINE OVER USING SEINE LOFT'S BOOM AND **PURETIC** BLOCK BEFORE LOADING ABOARD SEINE VESSEL, 1982.



SOUTHEAST CORNER OF THE **FRONT** DOCK, ICE HOUSE OR THE RIGHT AND FISH BINS AND MAIN CANNERY IN **THE CENTER, 1982.** 



SOUTHEAST CORNER OF FRONT DOCK WITH ADJOINING PILINGS CONSTRUCTED BY SMALL CRAFT HARBORS, 1982.

APPENDIX #2

GULF OF GEORGIA'S DRIVEWAYS, 1927-1982

The Gulf has two existing driveways. The main one runs northsouth between the west side of the main cannery building and the east the seine loft. This main driveway provides direct access the foot of Fourth Avenue to the front dock. Today (1982) it enables vehicle traffic (trucks, cars, and forklifts) to load or unload nets and supplies on the front dock and it provides access between the seine loft's southern entrance and the cannery building's main vehicular entrance Since its original construction in 1927 it faces Fourth Avenue. has enabled supplies of ice from Home Plant in Vancouver to be delivered to the icehouse and fresh fish to be picked up from the front dock storage areas by truck delivery to other locations.

The other driveway joins the main driveway at the northwest corner of the main cannery building and runs west between the north side of the seine loft and the south side of the gillnet loft. The function of this second drive. way since its construction in 1939/40 has been to provide direct vehicular access to net racks, docks, marine grids, and storage sheds west or downriver of the seine loft. It also provides direct access to the north end of the seine loft and the gillnet loft.

North and south accesses are essential to the maintenance of the seine loft as a viable economic operation because they allow easy movement to and from seine gear stoaage areas in and outside the Gulf of Georgia property.

Due to the type of work being, conducted in the siine loft it is often feasible to utilize only one of the two main doors at a given time as nets being moved or worked on may block the use of one or the other exits. This is especially true when vessels are loading or unloading their seines. The continued activity of the senseloft is desirable for the site to provide continuation of the traditional fishing environment. The seine loft and its related activities are the last major fishing function remaining on the site (apart from a one-man blending operation in the vitamin oil area of the main cannery building).

## Historical Background of the Driveways

The main north-south driveway which runs along the entire west side of the main 1894 cannery structure was originally constructed in Kay of 1927. Total construction costs for this driveway were \$1.780.40.<sup>2</sup> It ran (as it does today) from the' foot of Fourth Avenue the front dock which was also reconstructed in 1927. This driveway could not have existed (at least not in its entirety) prior to 1927 as in preparation for its construction it was necessary to cut through the west wing or original (1894-1910) gutting shed to gain access to the front dock ("Cannery crew continues to tear out and cut through second floor old wing for driveway" (). Prior to 1927 there was little use for the driveway because the Gulf was the major processing plant for the companies that owned it. In  $1926^{5}$ , however, when the plant became the property of the Canadian Fishing Company, the Gulf became a secondary processing plant for the C.F.C. Home or main plant in Vancouver and the driveway was constructed to allow vehicular transport of supplies and product to and from the Home plant and the of Georgia. This situation is illustrated in the October 12 note in the 1927 Daily Report of Gulf of Georgia: "As there are very few chums running we have closed the cannery and will send our production for the rest of this season to Vancouver." The driveway's use increased drastically after the closure of the Gulf of Georgia as an operating salmon cannery in 1930 as all salmon delivered to the Gulf were trucked into the Home plant to be processed.

Between 1930 and 1937 only minor repairs were done on the main driveway, wharfs, and netracks. In 1938, 5500 was spent on repairs to the ramp and main driveway alone.

·. .

During 1939/40 the introduction of herring canning and reduction processing technologies at the site led to the construction of the seine loft, net racks, gillnet loft, 'and the reconstruction of the main cannery building. At this time the east-west driveway between the seine loft and the gillnet loft was constructed and it is possible that the main driveway was reconstructed.

The Gulf of Georgia net loft facilities were constructed for the following reason: "to attract capable fishermen'to our operation we must be prepared to offer them better facilities for the care and storage of their gear and to provide safe mooring of their boats . . . In other sections of the river we provide no facilities whatever, and as a result competitors with idle plants offering the necessary service are able to gain or'hold the better fishermen."

The east-west driveway between the seine loft (built in 1939) and the gillnet loft (built in 1946) was constructed early in 1939 in conjunction with the seine loft. Pilings for this driveway, the seine loft, and the western netracks were driven prior to Narch 1939. Materials for the east-west driveway were as follows 10:

Jan 14. 1939

## Gulf of Georgia Cannery

<u>Material</u>	for	Driveway			along		new	bldg.		
26	рсь.	12	x 12	-	12	, _	SlS	#1	Con.	Caps
35	11	4	x 12	. –	22'	-	SIE		**	Joists
35	11	4	x 12	-	32'	~	SIE		' I	11
250	11	4	$\times 12$	2"'-	12'	_	SIS	ΙE	11	<b>Grax</b> Deck
500	lin.	ft.	8 2	s 8	-	20'	to	30	Rough	- GUARD

Templates **wfor** Trusses, rafters, etc. Also for "straight edges."

The total 1939 costs (excluding pilings) for construction and reconstruction of both the **Gulf's** driveways and reconstruction of the bridge over the slough joining the main driveway to the foot of Fourth Avenue was \$1,412.78, \$774.39 for materials and \$638.39 for labor. <sup>11</sup> The bridge mentionned above no longer exists as some time after 1940 a new drainage system was in:roduced to the Steveston area enabling fill to replace said bridge.

There has been no change in the construction of the Gulf's driveways. They are constructed totally of wood: wooden decking, joists, caps, corbels, and pilings. The main driveway has a thin layer of asphalt which covers its decking, but the east-west driveway has recently been redecked merely with planks. It is my opinion that future decking for these driveway6 should be of wood construction to maintain the historical integrity of the site. This is also in keeping with proposals for the renovation of Steveston by the municipal council (the modern boardwalk around the Steveston Museum on Moncton Street) and also by Norad Development which is using a boardwalk system in their major redevelopment west of Number Two Road. 12

Examples of Traditional (1894-1982) Wharf and Roadway APPENDIX I: Construction Material&

## Front Wharf 13

South of Main Building, a 50° to 58 X 240' wharf constructed on piles

Fender piles average 35' Mooring piles average 40'

Timber Construction: 804 lin. ft. caps average 10 X 12" 3909 lin. ft. 2 x 12" joists

2" plank decking

Rail: 313 lin. ft. 1 X 4" quard stop

# Main Driveway Area 14

Roadway from Fourth Avenue to front of building 14x 116' and 12 X 270' blacktop covered

Piling: cedar piles average 24'

cedar piles average 45'

2 calpa X 16" - 16' Timber Construction:

3 sills 4 X 12" - 16' 5 caps 12 X 12" - 16' 26 12psx 12" - 12'

2818lin. ft. 4 X 12" joist

4" plank on deck

690 lin. ft. 8 X 8" guard rail 70 lin. ft. 2 X 8"blocks

### Net Rack 15

West of Seine Loft

First Section: 50 X 206' with a 20 X 32' approach

cedar piles average 40'

cedar fender piles average 45'

Timber Construction: 1380 lin. ft. 12 X 12" creosoted caps and corbels

5400 lin. ft. 3 X 12" creosoted joists 2" decking

Appendix #2: Maps

- #1 Gulf of Georgia Plant, Canadian Appraisal Company Ltd., December 1969
- #2 Gulf of Georgia Cannery, December 1937
- **#4** Gulf of Georgia Net Rack Wharves and Net and Gear Warehouse, December 28, **1938**

Appendix #3: Photos

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Main driveway photographed from foot of Fourth Avenue.

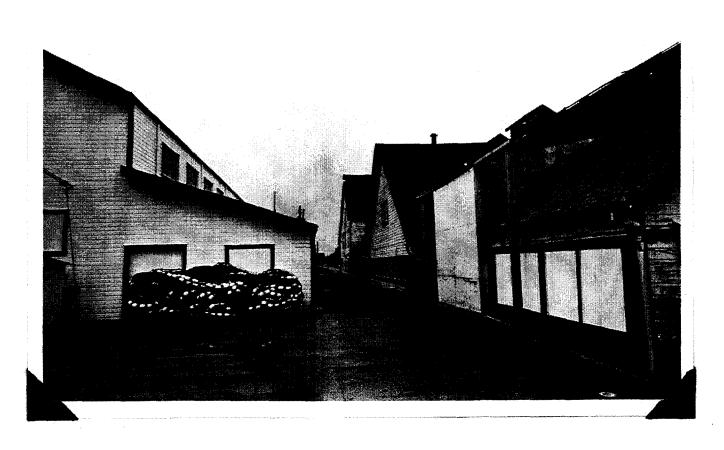
Blacktop ramp replaced wooden decked bridge after 1940's.

September 1982.

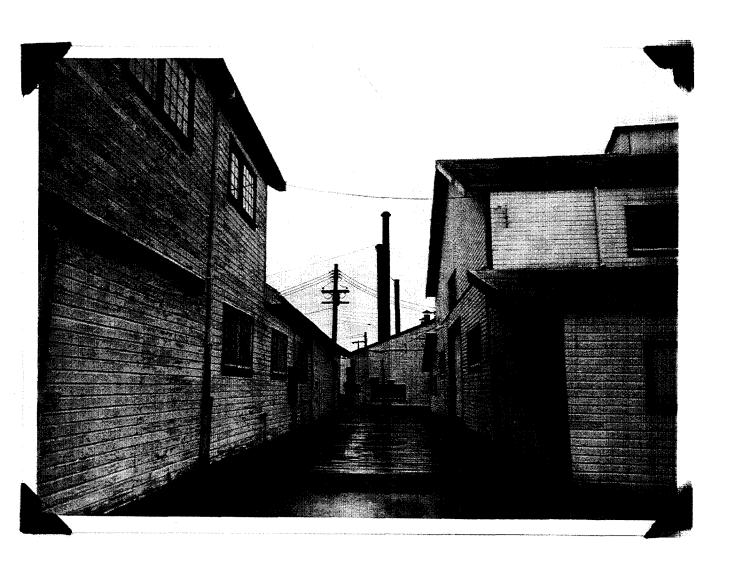


Main driveway, looking south to front dock; cannery building on left and seine loft on right. East-west driveway is between fish totes and seine loft.

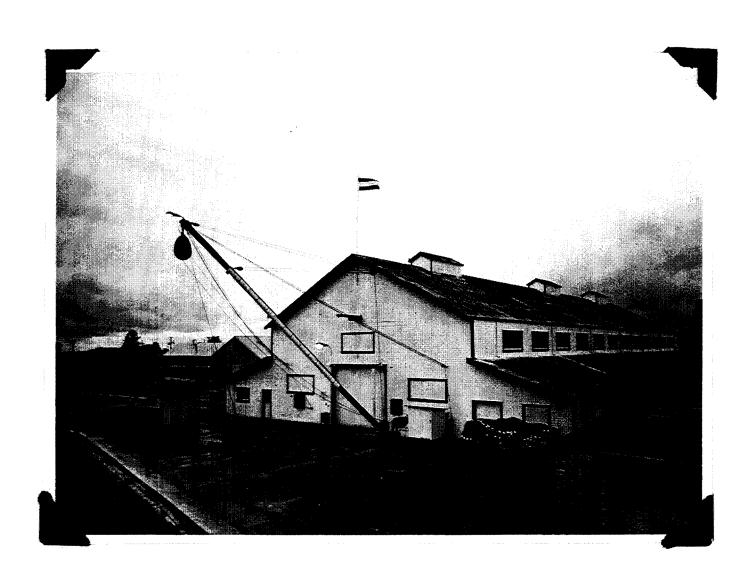
July 1982.



Main driveway looking north from front dock. Sliding plywood door constructed in early 1970's to allow roe herring carcasses from Home Plant to be dumped by truck at feed end of reduction plant. 1982



East-west driveway looking east. **Gillnet** loft on left, seine loft on right, and the main driveway and the cannery's northwest **cerner** in the background. Note blacktop of modern dock in foreground and traditional planking on the roadway. September 1982.

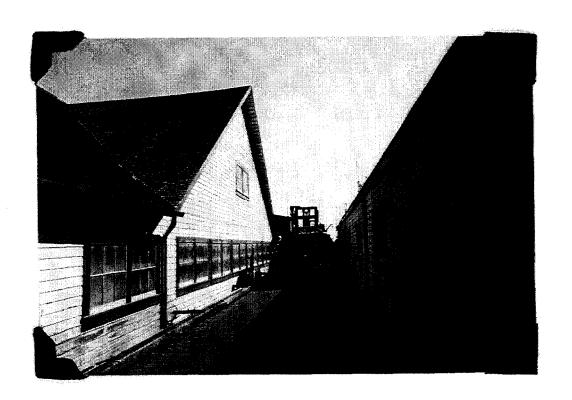


Front dock of seine loft. New Small Craft Harbors docks on left (west), 1982.

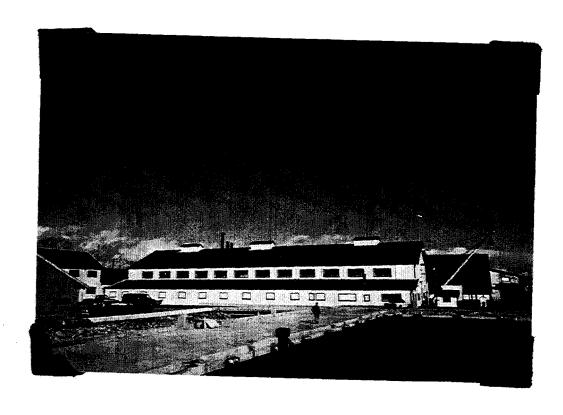


Front dock of Gulf of Georgia seine loft on left and cannery on right with southern end of main driveway between the buildings,  $1978_{ullet}$ 

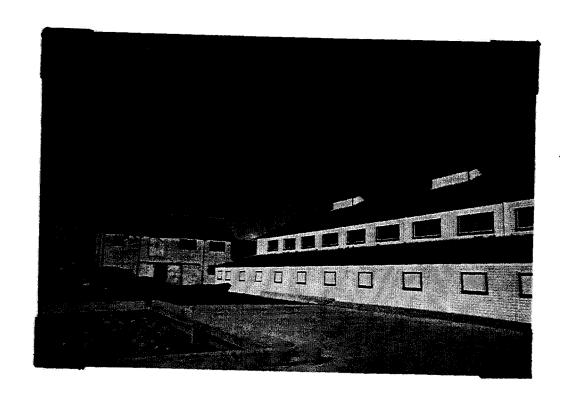
Traditional wooden docks west of, seine loft, **1978.** 

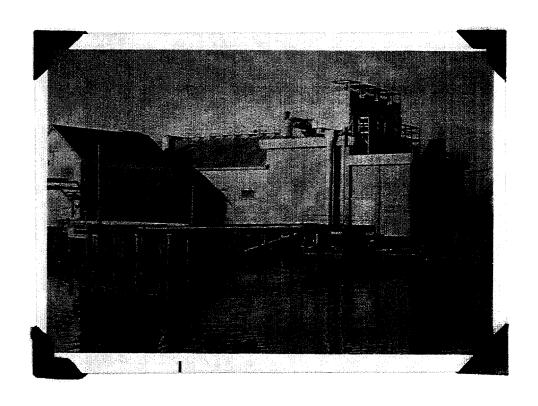


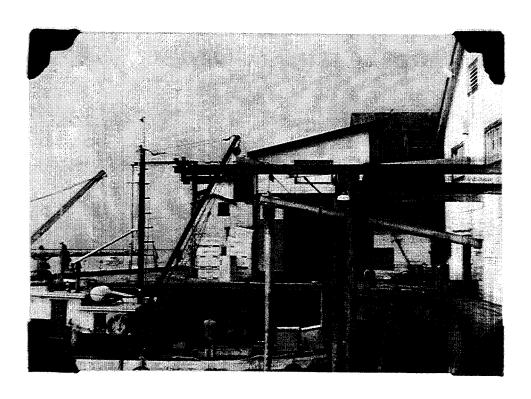
Seine loft's forklift **transferring** seine from the front dock via main driveway to storage area in old metal meal sheds east of main cannery building. 1982



Modern Small Craft Earbours dock west of seine loft, 1982.



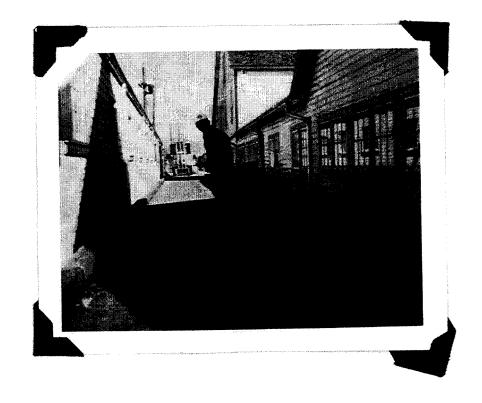


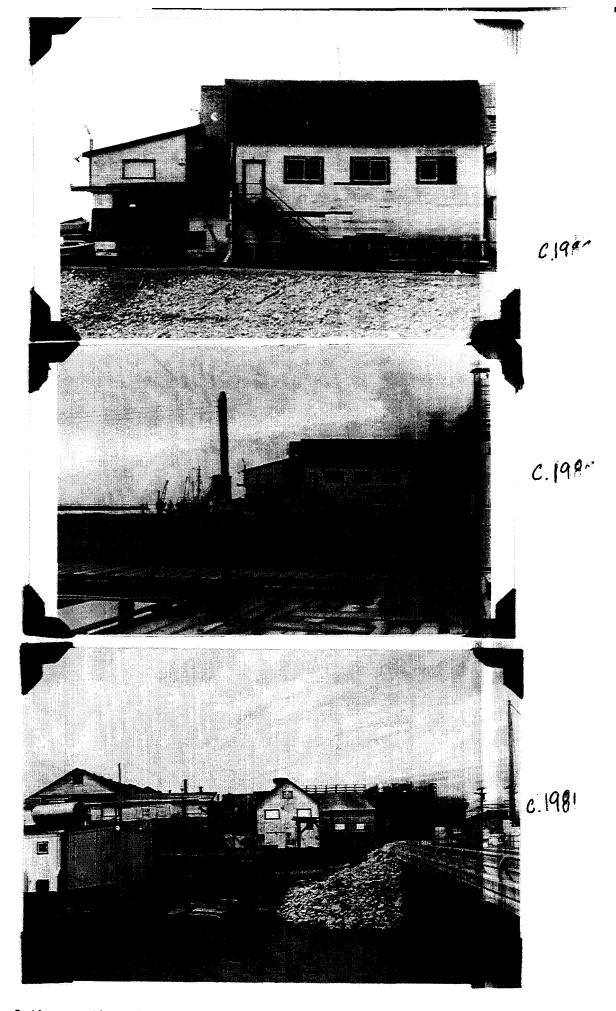


Views of the **southeast** corner of main cannery building before Small Craft Harbors construction, 1978.



Seine loft crew replacing cap on main driveway, September 1982.





Views of the southeast corner of main cannery building during and after Small Craft Harbors construction.

### APPENDIX #3

#### EXISTING GULF OF GEORGIA SUPPORT BUILDINGS'

<u>Section</u>	<u>Title</u>
А	Gillnet Loft
В	Watchman's Shed
C	Lead Foundry
D	Seine Loft
E	Barrel Shed
F	Soule (Metal) Meal Storage Warehouse8
G	Fishmeal (Wooden) Warehouse
Н	Fire Pumphouse

**GILLNET** LOFT1 (Warehouse)

Construction date: 1941<sup>2</sup>

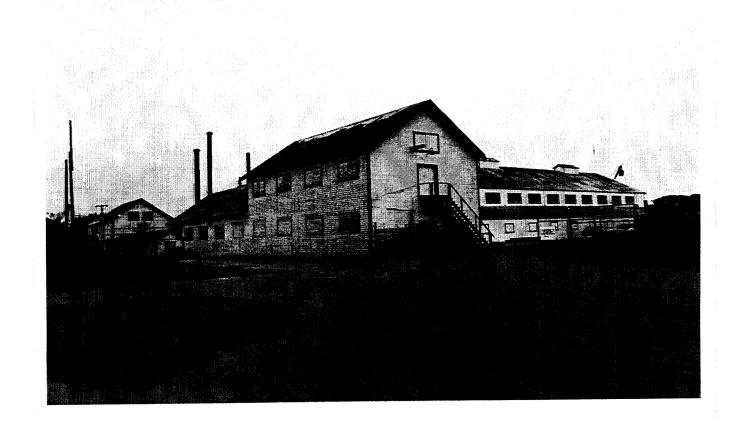
<u>Description:</u> A gable roof, frame, **trussed** building in two sections, set on piles, with **1x6"** dropsiding and corrugated galvanized iron roofing. Section one is a **33X74"** one story building with 12' walls. Section two is a **33X57"** two story building, with **12"** walls to the first floor and **10"** walls on the second floor. This building contained Gulf of Georgia's **gillnet** manager's office, **12'X14'X8"**.

Major structural changes: none

<u>Functions:</u> Historic-- 1941 to **1956** meal storage

-1956 to late 1970's a gillnet loft and gillnet office area where records of Gulf of Georgia's gillnet fleet were kept

Present;; storage for seine loft and gear lockers



NORTHWEST VIEW OF **GILLNET** LOFT/MEAL STORAGE SHED, **1982.**NOTE SEINE LOFT ON THE RIGHT.



SOUTHWEST VIEW OF **GILLNET** LOFT/MEAL **STORAGE SHED, 1982.**NORTHWEST CORNER OF THE SEINE LOFT ON THE RIGHT.



NORTH SIDE OF **GILLNET** LOFT/MEAL STORAGE SHED, 1982

# WATCHMAN'S SHED3

Construction date: unknown

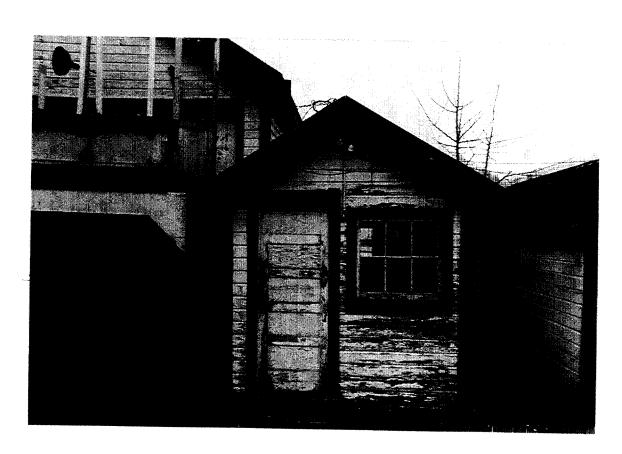
Description: 8'6"X8'6"X7', high gable roof frame building set on 3X12" joists, double flooring, 2X4" frame, drop siding, hardboard interior sheathing, shingle roof, 2 hinged sash, panel door, conduit wired and painted.

Function: watchman's post



LEAD FOUNDRY SMALL BUILDING IN CENTER LEFT; WATCHMAN'S SHED CENTER

RIGHT; GILLNET LOFT LARGE BUILDING ON RIGHT, 1982.



Watchman's shed. January 1983.

Photo source: Duncan Stacey



WATCHMAN'S SHED ON LEFT, LEAD FOUNDRY ON RIGHT, AND **GILLNET** LOFT IN BACKGROUND, 1979.

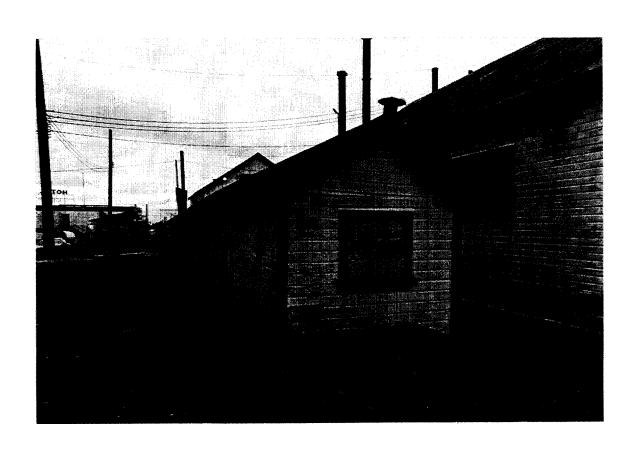
**LEAD FOUNDRY** (Storage Shed)

Construction date: 1941

<u>Description:</u> An **8x60'** gable roof shed, **2x4"** frame drop siding wal's shingled, roof **7'** to eaves. **17x17"x12'** chimney, two **3'x6'** batten doors, one **2'x8" x'** 6'4" panel door, two **34x34"** six light windows.

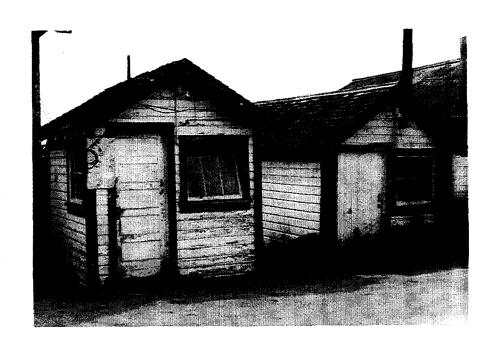
<u>Major structural changes:</u> none

Function: Western end used as a foundry for seine and gillnet les in the 1940's and 1950's, but abandonned in the 1960's when leadli construction changed to the lead core system rather than the traditional molded lead line. Eastern end a storage area.



Lead foundry, crest of dike on left, **gillnet** loft on right. January 1983.

Photo source: Duncan Stacey



WATCHMAN'S SHED ON LEFT, LEAD FOUNDRY ON RIGHT, 1979.

#### SEINE LOFT<sup>5</sup>

Construction date: 1939<sup>6</sup>

Description: One story faame building, 100' wide, 200' long, set on cedar piles, 12X12" caps, 3X12" joists, 2' centers, 3" plank floor; center section 22'8" under trusses, 60' wide with 20' lean-to 8'6" to 14'6" each side, 1X6" gropsiding walls, corrugated galvanized iron roof, with three 10' roof ventilators; 30X100' dock on s uth end and 20X100' dock on north end. Two 17"X17"X16' brick chimneys on bracket with 10' galvanized iron extensions.— Mezzanine floor 24'X125' shiplap sheathing and flooring. This floor is on the east side of the building, but not in the lean-to section.

Doors: -two 14X16" sliding doors, plywood on double braces, 2" frame weatherproof track

- -four **6x7'** sliding doors
- -two 2'8"X6'8"glazed doors, brass mortice locks, framed and cased
- -seven 2'8"X6'8" four panel doors as above
- -one pair 3X7' double batten hinged doors

Windows: -five single sash hinged windows, fifteen **lOX10"** lights, framed and cased sash stops and chains

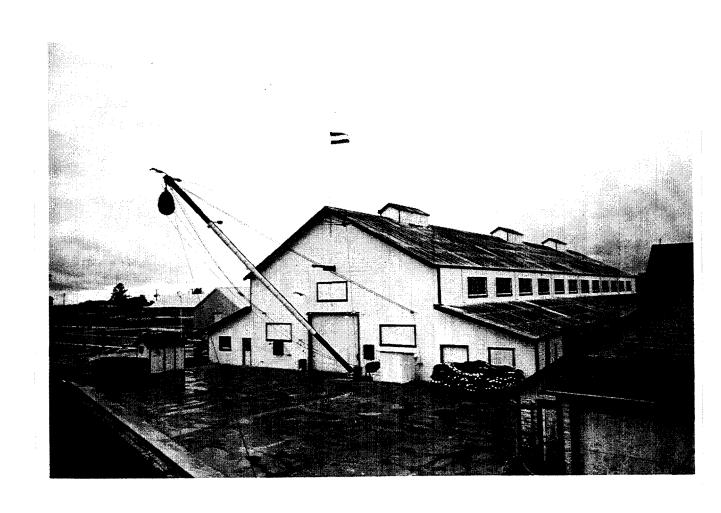
- -two double sash sliding windows, fifteen **lOXIO"** lights, framed and cased
- -one  $sin_{\text{S}}le$  hinged sash, four  $l2Xl4^n$  lights, framed and cased
- -thirty double sash sliding windows, twenty **lox10"** lights each sash, framed and cased with pulleys and rope
- -twenty-two single sash windows, fifteen **lox10"** lights, framed and cased one side

Major structural changes: none

Function: Historic and present--seine net repair and construction.

#### \*D continued\*

Holds seine loft manager's office. Prior to 1956 the wings of the building were used as fishing gear storage and as a gillnet loft

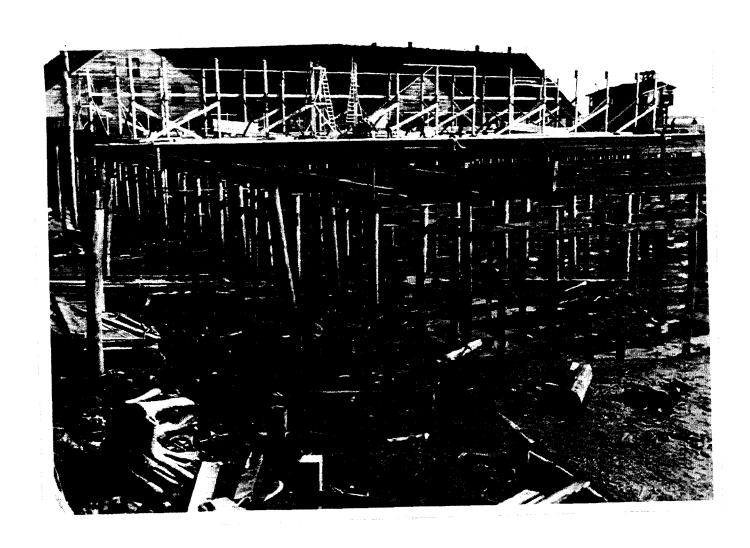


FRONT VIEW OF SEINE LOFT AND WHARF,1982.



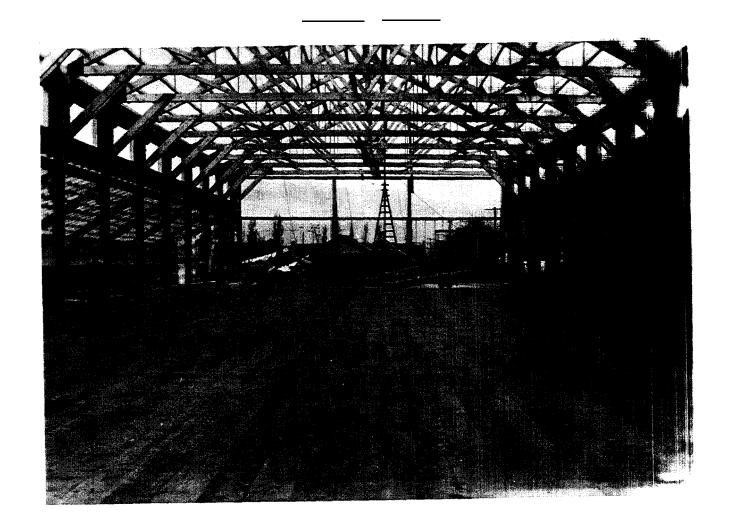
PILINGS FOR CONSTRUCTION OF SEINE LOFT, 1939.

PHOTO SOURCE: DICK JACK



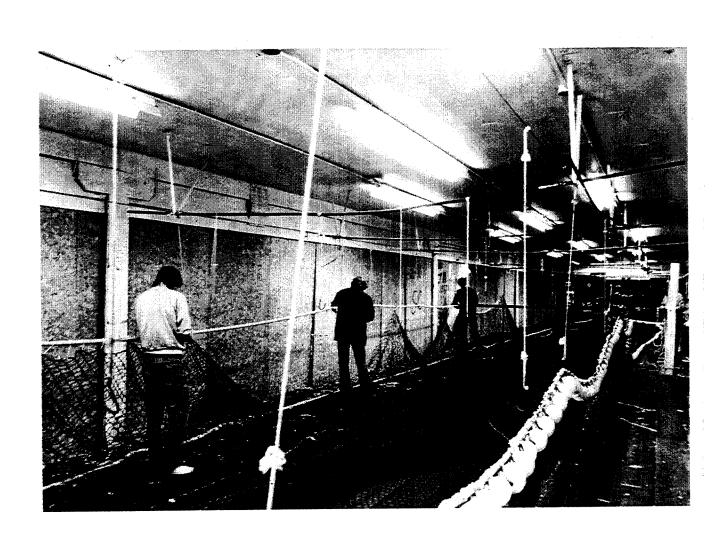
CONSTRUCTION OF SEINE LOFT, 1939. NOTE SALMON BINS ON FAR RIGHT AND WEST SIDE OF ORIGINAL CANNERY BUILDING IN THE BACKGROUND.

PHOTO SOURCE: DICK JACK



CONSTRUCTION OF THE SEINE LOFT, 1939.

PHOTO SOURCE: DICK JACK

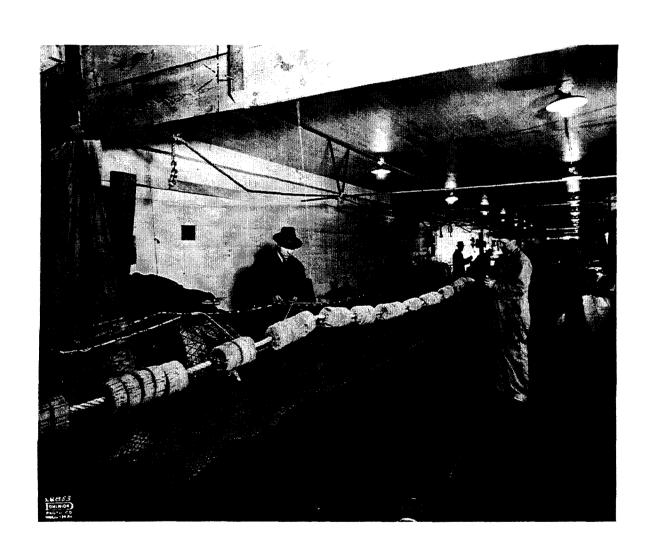


INTERIOR OF THE SEINE LOFT, 1982. STRIPPING A SEINE.



SEINE LOFT CREW, 1940's. WOMEN EMPLOYEES WERE HIRED BASICALLY FOR LACING THE SEINE NETS.

PHOTO SOURCE: CANADIAN FISHING COMPANY HOME PLANT



 ${\tt INTERIOR}$  of seine loft,  $1945 \centerdot$  hanging a herring seine.

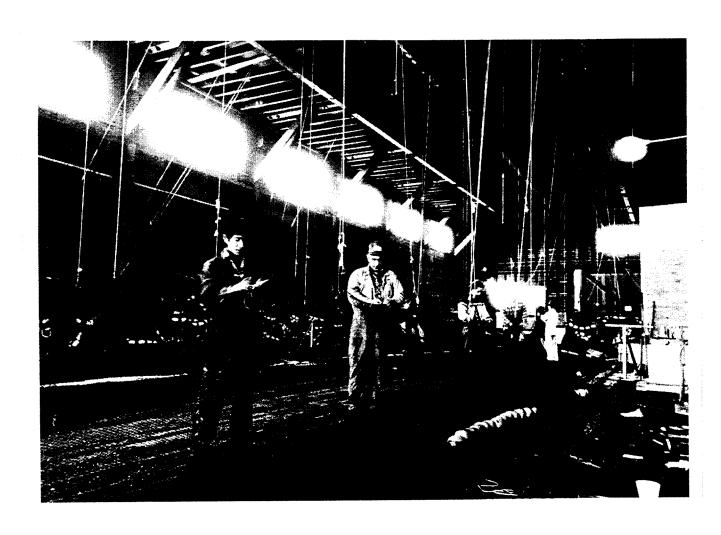
PHOTO SOURCE: CANADIAN FISHING COMPANY HOME PLANT



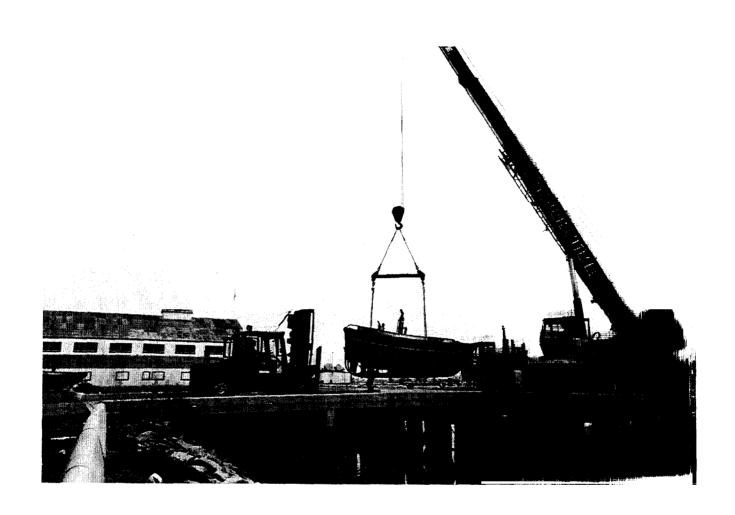
INTERIOR OF SEINE LOFT, **1945.** BEFORE THE **INTRODUCTION** OF SYNTHETIC FIBERS SEINE **NETS** HAD TO BE STRIPPED EVERY YEAR AND **HUNG FROM THE** RAFTERS.

PHOTO SOURCE: CANADIAN FISHING COMPANY HOME PLANT

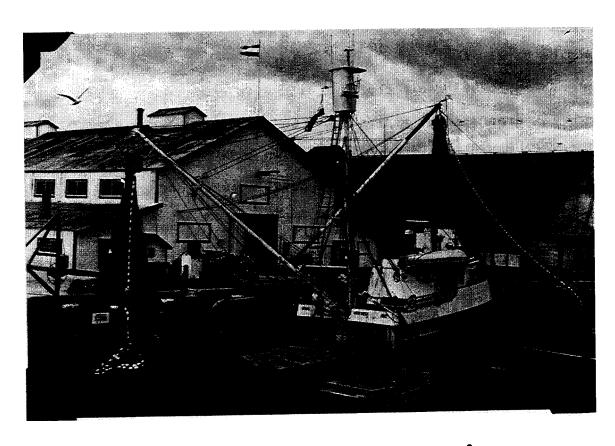




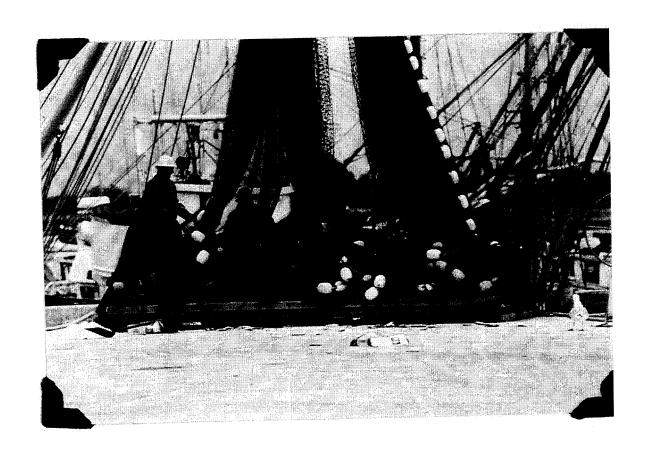
INTERIOR OF SEINE LOFT, 1982. HANGING A SEINE.



TAKING THE **POWER** SKIFFS OUT OF THE WATER FOR WINTER STORAGE, **1982.**SMALL CRAFT HARBORS' NEW **DOCK WEST** OF GULF OF GEORGIA. NOTE SEINE LOFT IN BACKGROUND.



Unloading and salting down herring seines, 1982.



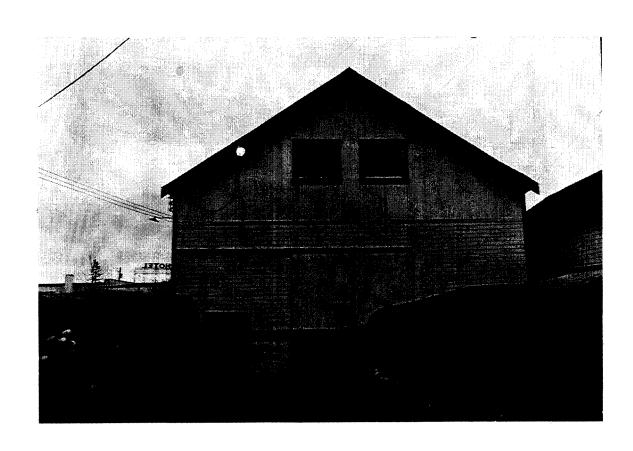
BARREL SHED 7

Construction date: 1941<sup>8</sup>

<u>Description:</u> A **35X46'** gable roof building with **2X6"** frame, trussed roof and **1X6"** drop siding; set on posts and concrete blocks **2X2X2'.**Roofed with corrugated galvanized iron. Two **36"X48"** fixed 12 light sash windows, two **6'X7'** sliding batten metal covered doors, and one **3'X7'** batten hinged door.

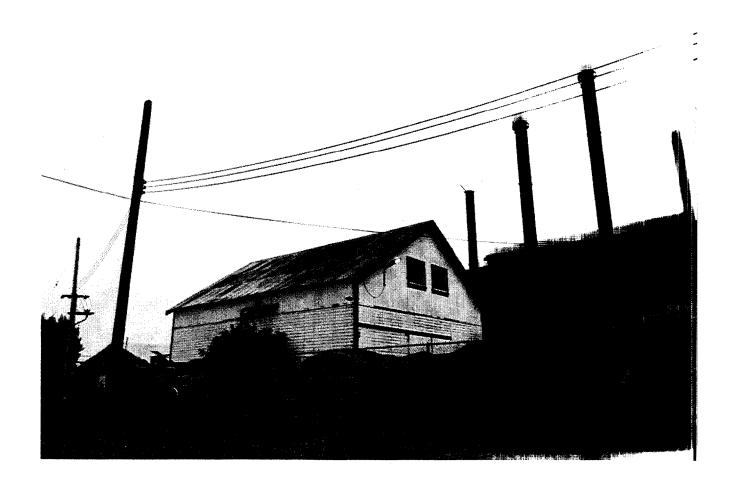
Major structural changes: none

Function: historic--storage area for fish oil drum present--net and gear storage

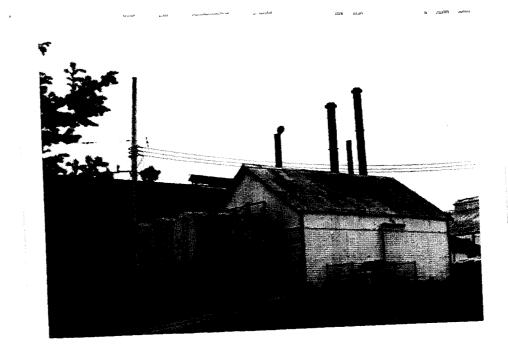


West side of barrel shed, January 1983.

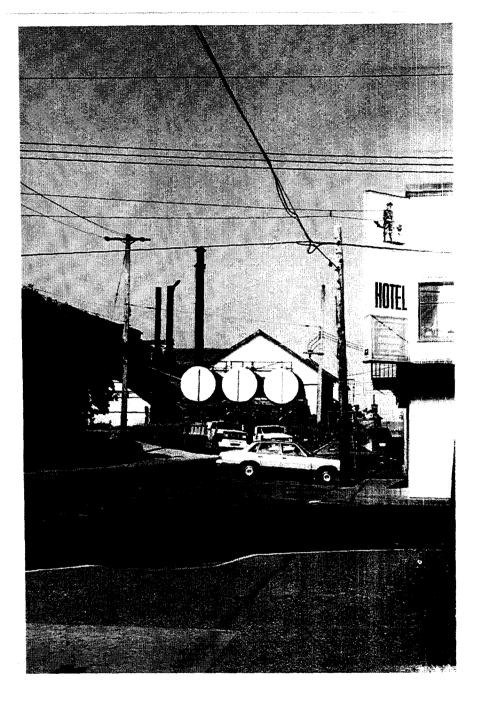
Photo source: Duncan Stacey



NORTHWEST VIEW OF BARREL SHED, 1982. NORTH FACE OF MAIN CANNERY BUILDING ON THE RIGHT..



NORTH SIDE OF DRUM SHED, 1980. NOTE THAT TANKS HAVE BEEN REMOVED.



EASTERN END OF BARREL SHED, 1982. NOTE THREE FISH OIL TANKS WHICH WERE LATER REMOVED ALTHOUGH WOODEN CRADLE STILL REMAINS.

# SOULE MEAL STORAGE WAREHOUSES (two)

Construction date: 1956 10

<u>Description:</u> Number 1 (most easterly warehouse) 60X120'X13'6", high gable roof. Soule building with six Babricated steel arch supports, ten steel two section purlins, galvanized corrugated iron sides and roof with ten fiberglass panels in roof. Interior walls 2X6"X10' high, wood, slats at 12" centers, two 10X11' high overhead five panel wood doors, one 3X7' half glazed steel door.

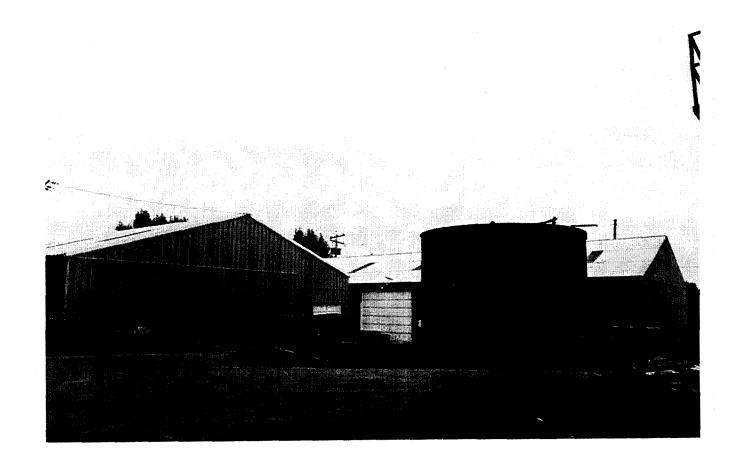
Number 2 (west of Number 1 warehouse), constructed 1964<sup>11</sup>, 60x60x16' gable roof, Butler (Challenger) prefabricated building, steel frame and steel siding set on concrete footwall and footings; one 20X10' seven section up and over door; one 9X9' up and over five section door, one metal hinged door, conduit wired outlets.

<u>Function:</u> historic--storage area for sacks of fish meal present-- seine net storage



Soule (metal) meal storage warehouses, crest of dike on Fight. January 1983.

Photo source: Duncan Stacey



SOULE NEAL STORAGE WAREHOUSES (TWO), 1982. TANK IN FRONT IS FOR FUEL OIL, NOT FISH OIL..

# FISH MEAL WAREHOUSE 12

Construction date: 194713

Description: 50X79' gabled roof building, 2X6" frame, 2' centers,

18 posts, 6X6' - 12', two beams 6X6" - 80', 2X8" rafters, shiplap ends,
roof end 5' high sides, 5' wide wire sides, 1" board floor, tarpaper
roofing, one 6X8' batten door and one 10X10 batten door on square
track and hangers, six knob and tube outlets, 12" reflectors.

Major structural changes: none, but moved north from its original
location around 1981.

<u>Function:</u> historic --cooling area for sacked fish meal present--net and gear storage



Fish meal (wooden) warehouse, new location north of dike. January 1983.

Photo source: Duncan Stacey

# FIRE PUMPHOUSE 14

Construction date: circa 1948<sup>15</sup>

Description:
A 6x10 gable roof frame building set on platform A;

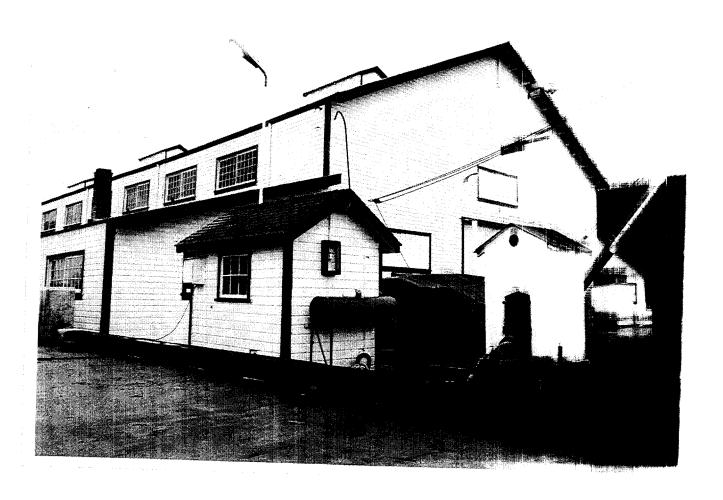
2X4" frame, 1X6" siding, shingle roofing.

Function: historic and present to house deep well fire pump



Fire pumphouse'with southwest corner of seine loft on the right. Note the cement decking to facilitate seine loft operations.

Photo source: Duncan Stacey



Fire pumphouse and deepwell pump, southwest corner of the front dock, seine loft in background. January 1983.

Photo source: Duncan Stacey

- 'Harley J. McKee, Recording Historic Buildings (Washington: U.S. Government Printing Office, 1970), p. 140. See also Dianne Newell MacDougall, "Changing Brewing Technology and Related Effects on Brew House Architecture in 19th Century North America," National Historic Sites Service unpublished manuscript, March 1973.
- The Gulf of Georgia Fish Processing Plant National Historic Park Proposal at Steveston, British Columbia; Agreement Between Small Craft Harbors Branch (Department of Fisheries and Oceans) and Parks Canada (Department of the Environment). July 1981. National Historic Park Proposed Tenure appendix, figure 2.

'Ibid. Although the meal sheds and cooling warehouse are desirable but not essential for the interpretation of the herring reduction period 1947-82, the same cannot be said of the gillnet loft. This building was constructed in 1941 as an integral part of the site's support buildings, originally as a herring can and meal storage warehouse (1941-56) and then as a gillnet loft. This building is not only historically important but due to its location it plays an essential role in maintaining the historical integrity of the site's northwestern perimeter. Is removal would destroy the east-west alleyway and expose the north end of the seine loft to the modern harbor's backland development north of the Rike.

## Processing Structures

- 1"Appraisement for Gulf of Georgia Plant," Canadian General Appraisal Company Ltd., December 12, 1969.
- <sup>2</sup> See "Research Notes on Gulf of Georgia's Fish Bin Shelter," Duncan **Stacey,** Parks **Canada** Western Region, July 1982.
- $^3$  "Appraisement for Gulf of Georgia **Plant,"** Canadian General Appraisal Company Ltd., December 12, **1969,** p. **280**.
  - <sup>4</sup>Ibid., **p. 231.**
- $^5\, \rm Fire$  Insurance Map, Fraser River Canneries, **#1,** Steveston, B.C., July 1845, Richmond Public Library.
- $^{
  m 6}$  Appraisement for Gulf of Georgia Cannery, General Appriasal Company, November 8, 1930, p. 10.
- 7"Appraisement of Gulf of Georgia Plant," General Appraisal Company Ltd., January 9, 1948, p. 37; November 8, 1926, p. 10.

Canada Western Region, 1981, p. 38 and following pages.

- $^9\,\text{Fire}$  Insurance Map, Fraser River Canneries, #3, Steveston British Columbia, July 1897.
- 10 Ibid. Also see "Specific Information About Gulf of Georgia's Cannery Technology," report of historical research relationg to Gulf of Georgia cannery, Steveston, B.C., Duncan Stacey, Parks Canada Western Region, 1981, p. 71 and following.
- $^{11}$ Fire Insurance Map, Fraser River Canneries, **#3,** Steveston, British Columbia, July 1897.
- 12 Fire Insurance Map, Fraser River Canneries, #3, Steveston, British Columbia, July 1911. \$150 see Appendix #1 of this report relating to Gulf of Georgia's front wharf, 1894-1982. There is confusion over this extension as the south face on the main structure has the same configuration prior to and after the addition. 1900 and 1939 photos of this face are similar for window and door locations. It can be surmised'that as a maximum of 12 to 15 years elapsed betwwn construction of these south faces that the original 1894 facing materials would have been reused, especially as the dimensions of the 1906 face are for all practical purposed identical to those of its predecessor.
- 13 Interviews with various cannery managers, especially Harold Britten, George Olsen, and Everett Pierce of C.F.C. Home Plant.
- $^{14}{\rm Although}$  the deep water requirements of canneries became less important, the traditional configuration of their loading and unloading wharves (that of being parallel to the current and/or tides of the water body on which they are situated) has remained the same. The key to docking any vessel is the use of spring lines, which enable a vessel to dock using the power of the tide, current, or assist tug.
- 15 Fire Insurance Map, Fraser River Canneries, #3, Steveston, British Columbia, July 1911.
  - 16 Ibid.
  - 17 This spur appears to have been constructed 1905-06.
- <sup>18</sup>Construction of this dike and its wide ditch prior to 1911 is a major reason why the Gulf remained untouched by the 1918 Steveston fire. The dike and ditch formed a fire break directly east of the historic site and west of the original source of the fire. The fire break plus the fact that the prevailing wind during the fire blew upriver meant that it was impossible for the historic site to have been even partially burned.

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- $^{20}\underline{\text{Pacific Fisherman,}}$  March 1927, p. 29. Also Certificate of Indefeasible Title, Title #176627E, Land Registry Office, New Westminster, British Columbia.
- <sup>21</sup>Canadian Fishing Company, "Daily Report" for Gulf of Georgia, May 19, 1927. See also appendix #2, this report, research notes on Gulf of Georgia's driveways.
- Interviews with Dick Jack, 1980 and 1981; Province, December 23, 1932,  $p_{\bullet}$  2.
- The same argument holds true for the present dilapidated condition of the external herring bins. This **dryrot** problem is alleviated in modern processing plants by the use of cement floors with built-in drainage systems, especially in the gutting and fresh fish holding areas. This accounts for the present (1982) cement floors in the historic site's ice house and the herring reduction holding and processing areas.
- 24 Gulf of Georgia Cannery, General Appraisal Company Ltd., December 1937. Whiteprint.
- $^{25}\text{c.F.C.}$  Net Rack Wharves and Net and Gear Warehouses at Gulf of Georgia Cannery, December  $28,\,1938.$
- 26<sub>C.F.C.</sub> blueprint of vitamin oil plant at Gulf of Georgia, November 14, 1940, revised November 20, 1940.
- 27<sub>C.F.C.</sub> plan showing property at Steveston, July 29, 1944, revised 1956.
  - <sup>28</sup>C.F.C. Dryer Building at Steveston, B.C., May 7, 1948.
  - 29<sub>C.F.C.</sub> Gulf of Georgia Dryer Room Addition, July 9, 1964.
- 30<sub>C.F.C.</sub> plan showing the Canadian Fishing Company Ltd. property at Steveston, B.C. July 29, 1944, revised 1956.
- 31<sub>B.C.</sub> Boiler Inspector's Report, boiler #44979B.C., first inspected at Gulf of Georgia on October 28, 1941.
- Cannery, November 14, 1940, revised November 20, 1940.

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34<sub>C.F.C.</sub> plan showing the Canadian Fishing Company Ltd. property at Steveston, B.C., July 29, 1944, revised 1956.

35 Interview with Sun Yip of C.F.C. in 1982. B.C. Pressure Vessel Inspector's Report, #13P1022B.C., 13P1023B.C. Issued November 14, 1956.

# Appendix #1: Gulf of Georgia's Front Wharf, 1894-1982

1906 is the likely date that the Iron Chink was introduced to the Gulf's canning line. This technological change made the west wing or gutting shed obsolete for canning line functions. As the most efficient assembly for a mechanized canning line is a straight line, this would and did demand expanding the length of the main sector of the original cannery to accomodate the Iron Chink and provide floor space for its effective operation. Such an expansion is evident on the 1911 fire insurance plan, but in all probability the expansion occurred in conjunction with the introduction of the butchering machine. This appears to be the only answer as to why capital was spent in increasing the floor space area of the cannery when the west wing floorspace more than satisfied the needs of mechanized butchering. In addition, as the 1900 canning line was line shaft powered, changing the position of the machine following the butchering sector (i.e. the whole line) would be a costly and troublesome job, so adding the Iron Chink to the front of the existing danning line seems logical and practical.

Properly designed tie-up docks should be parallel to the tide and/or current, as is the case of Gulf of Georgia's front dock. The easiest and best way to bring a vessel, and especially a non-powered vessel of the type which were predominant at Gulf of Georgia before 1910, up to a wharf is by the use of a spring line which draws a vessel into a dock by using the current's power.

3Fire Insurance Map, Fraser River Canneries, #3, Steveston,
B.C., July 1897.

<sup>4</sup>Fire Insurance Map, Fraser River Canneries, #3, Steveston, B.C., July 1911.

<sup>5</sup>Ibid. See also B.C. Fire Underwriters Association Plans of Salmon Canneries in B.C., August 1924, #106 Gulf of Georgia.

6"Two men also working on end of wharf putting down torn up decking on old part of wharf." C.F.C. Daily Report, May 26, 1927.

 $^{11}\text{Canadian}$  Fishing Company, file driveway/construction 1939-40, "Gulf Construction, R & R, and White Labor Accounts" in Gulf books as at April 26, 1939.

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  m Evidence}$  given at recent Richmond Advisory Planning Committee meetings (the author is a member).
- $^{13}$  "Appraisement for Gulf of Georgia Plant," Canadian General Appraisal Company Ltd., December 12, 1969, p. 283.
  - <sup>14</sup>**Op.** cit., **p.** 285.
  - <sup>15</sup>Op. cit., p. 287.

### Appendix #3: Existing Gulf of Georgia Support Buildings

- "'Appraisement for Gulf of Georgia Plant," Canadian General Appraisal Company L&d., December 12, **1969**, pp. 218, 224; October 24, 1941, **p** 255.
- $^2\text{C.F.C.}$  Warehouse and Storage Shed, Gulf of Georgia Cannery, July 22, 1941.
- "'Appraisement for Fulg of Georgia Plant," General Appraisal Company Ltd., **November** 2, **1959, p. 396A.**
- 4"Appraisement for Gulf of Georgia Plant," Canadian General Appraisal Company Ltd., December 12, 1969, p. 298.
- <sup>5</sup> "Appraisement for Gulf of Georgia **Plant,"** General Appraisal Company Ltd., November 2, **1959,** p. **213** and following.
- C.F.C. blueprint, net and gear warehouse at Gulf of Georgia Cannery, January 12, 1939. Also Dick Jack diary and photos, **1939**.
- 7"Appraisement for Gulf of Georgia Plant," General Appraisal Company Ltd., November 2, 1959, p. 219.
- <sup>8</sup>C.F.C. plan showing the Canadian Fishing Company Ltd. property, Steveston, B.C., July **29,** 1944, revised **1956.**

- 8 The Canadian Fishing Company bought the Gulf in August 1926. British Columbia Certificate of Indefeasible Title, #1766276, New Westminster, B.C. See also Pacific Fisherman, March 1927, p. 29.
- 9"...nearly finished putting in corbal poil 1 /sic/ caps on end of wharf." C.F.C. Daily Report, May 14, 1927.
- 10"They /pile driver crew/ are now driving fender piles on end of wharf." C.F.C. Daily Report, May 14, 1927.
- ll"Driver crew completed laying of joists and decking on end of wharf." C.F.C., Daily Report, May 23, 1927.
- 12"Two cappenters have finished constructing fish bin on end of wharf and installed winch. It took them 9 days for this work."

  C.F.C. Daily Report, June 10, 1927.
- $^{13}$ It is assumed that these bins were for storing fresh fish prior to shipment to C.F.C. home plant because an ice bin was constructed under the middle fish bin (C.F.C. Daily Report, June 25, 1927). After the Gulf closed as a salmon cannery in 1930 these bins were painted and repaired (C.F.C. file, Gulf of Georgia Buildings, Maps 1926-1935; List of Approximate Expenditure for Repairs and Renewals, 1931).
- $^{14}$ C.F.C. file Driveway and Wharf Construction **1926-1930,** Gulf of Georgia Cannery Season 1927, Additions to Plant and Equipment.
- $^{15}\,\text{Interviews}$  with Dick Jack, 1980 and 1981; Province, December 23, 1932,  $p_{\bullet}$  2. It was not entirely because of the storm that the west wing collapsed. Its structure had been seriously weakened by its traditional industrial function as a gutting shed and fresh fish storage area which entails the extensive use of fresh water and which, when combined with fish slime and offal, results in dryrot in the lower areas of the wooden structure.
- 16C.F.C. file on Driveway and Wharf Construction, 1931-1938,
  Gulf of Georgia Repairs and Renewals, December 31, 1935.
- $^{17}$ This assumption is supported by the total Repair and Renewal statistics for the **Gulf**: \$15 in 1932 (C.F.C. file inventory 1932) and nothing in 1933 (C.F.C. file budget 1933).
  - <sup>18</sup>C.F.C. file of Canadian Fish Company, June 27, 1935.
  - 19 photo of front of the Gulf, 1939, property of Dick Jack-

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- $^{21}$ Ice was delivered in 500 pound blocks to the ice house by truck from home plant. On the return trip the truck carried fresh fish from the ice house to home plant to be processed, usually as fresh fish.
- $^{22}\text{C.F.C.}$  Plan of Property at Steveston, B.C., July  $29\,\text{,}$  1944, revised circa  $1956\,\text{.}$
- $^{23}$ Interviews with Tad Hayashi, manager, Gulf of Georgia, 1981 and 1982.
- $^{2\,4}\text{Appraisment}$  of Gulf of Georgia Cannery, General Appraisal Company Ltd, January 9, 1948, p. 385.

## Appendix #2: Gulf of Georgia's Driveways, 1927-1982

<sup>1</sup>Canadian Fishing Company, Daily Report, May 30, **1927.** 

 $/^2$  C.F.C. file "Driveway, 1926-1930," Additions to Plant and Equipment, 1927.

3Ibid.

<sup>4</sup>Op. cit., **May 19, 1927.** 

**5**0p. cit., May 14, 1927.

The Canddian Fishing Company purchased the Gulf on August 25, 1926. As this was near the end of the salmon season, reconstruction was only necessary in preparation for the 1927 season.

7 Interviews with Dick Jack, 1980, 1981, 1982.

- 8 Canadian Fishing Company, Dick Jack diary for 1939, Report on Fraser River operations for 1939, p. 8. "At the present time, all our net racks and tanks are i6 use, and it is necessary to erect temporary racks in both buildings cannery and seine loft during the fishing season."
- 9 Canadian Fishing Company, Dick Jack diary for 1939, photographs of Gulf of Georgia **netracks** dated February **1939**.