|Plan No. 3|

HATCHERY DEVELOPMENT PLAN

OPERATION IS MARINE |_| FRESHWATER |✓|

OPERATION IS WATER BASED |_| LAND BASED |✓|
(Check appropriate boxes)

Logged 97

Name of Applicant: Target Marine Hatcheries Ltd.

Address: P.O. Box 157 Madeira Park V0N 2H0 (mailing)
7333 Sechelt Inlet Road
Sechelt BC V (street)

Postal Code: V0N 3A0

Telephone: (604) 885-4688 (office) (604) 885-7949 (FAX)

_____ (home)

BRITISH COLUMBIA
Ministry of Fisheries
JUL - 2 1999
COURTENAY B.C.

OPERATION IS ON PROVINCIAL CROWN LAND YES |_| NO |✓|

If NO indicate one of the following:

FEDERAL HARBOUR OR PORT (HP)	|_|
PRIVATE UPLAND OR FORESHORE (PR)	|✓|
NATIVE RESERVE (NR)	|_|
PROVINCIAL PARK (PP)	|_|
FEDERAL PARK (FP)	|_|

PAID
JUL - 2 1999
$ 50.00 282491

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MAF Ref. No. | 585 |

MCL File No. | PR |

Ministry of Agriculture and Fisheries

Ministry of Crown Lands

JULY, 1990

ALL APPLICANTS MUST COMPLETE SECTIONS A, B, and C

APPLICANTS MUST COMPLETE THE FOLLOWING SECTIONS AS THEY APPLY.

For a Freshwater Operation complete Section D.

For a Marine Operation complete Section E.

All sections of this plan must be completed as they apply to your proposed operation. Consult Aquaculture Development Guide No. 3, Hatchery Operations.

SECTION A: DESCRIPTION OF SITE

1. NTS Map No. _____ or CHS Chart No. _____
   BCGS Map No. _____
   Geographical Coordinates: N. Latitude: ___° ___' ___"
   W. Longitude: ___° ___' ___"

2. Legal Description of Site (Land District & Lot Number)
   S½ D.L. 1410, Plan 47189 Lots 5-8

3. Geographical Description (see Guide):
   _____

4. Total Area of Site 14.62 hectares

5. INFORMATION RELATED TO OTHER RESOURCE USES

a) The site is zoned for aquaculture: Yes ✓ No _____. If no, describe current plan and zoning designations, if any:
_____
_____
(Information sources: Regional Districts; Regional Lands Office, Ministry of Forests)

b) The site fronts or lies beside private property: Yes ✓ No ___
   If yes, state location and usage of property Lot 4 unoccupied

c) The site is used or proposed for log handling or other use:
   Yes _____ No ✓ Unknown _____
   (Information sources: Regional Districts; Regional Lands Offices)

d) What types of predators may be encountered? birds
   _____
   How will they be controlled? sturgeon tanks will be contained inside a building

e) Water flowing from the site enters a salmonid-bearing water course:
   Yes _____ No ✓ Unknown _____
   (Information sources: Regional Conservation or Fisheries Officers)

SCHEDULE A

SCHEDULE OF IMPROVEMENTS

List the overall dimensions of all planned structures and their completion times.

Description	Number	Dimensions (in metres)	Area	Completion Date
tanks	2	~4md x 1.5m	25 m²	~Sept 1999
building	1	~12 x 8 m	96 m²	~Sept. 1999

EXAMPLE

Incubation Building	1	5 m x 7 m	35 m2	Jan. 1990
Tanks	10	3 m diam x 1.5 m	71 m2	Mar. 1990

<u>If the hatchery is on aquatic crown land, (ie the hatchery is water based), please complete the following:</u>

What is the minimum area _____(m2), minimum percentage of tenure area _____(%) and minimum number _____ of growout facilities at full production ?

What is the maximum area _____(m2), maximum percentage of tenure area (%) and maximum number _____ of growout facilities at full production ?

SECTION B: SCALE OF OPERATION

List the number and total capacity of the following culture or rearing structures as they apply to your proposed operation:

1. Incubation Units — No. 73 Total Capacity 5.1 million eggs
2. Fish Tanks — No. 126 Total Capacity 2,280,000 litres
3. Larvae Tanks — No. _____ Total Capacity _____ litres
4. Phytoplankton Tanks — No. _____ Total Capacity _____ litres
5. Setting Tanks — No. _____ Total Capacity _____ litres
6. Raceways — No. 32 Total Capacity 90,000 litres
7. Conchocelis Tanks — No. _____ Total Capacity _____ litres

At full production for each species describe: a) The number of eggs stocked or larvae produced; b) the expected growth period; c) expected losses; and, d) quantity of smolts or seed expected.

Species	Amount stocked	Growth Period (Months)	Losses (%)	Amount expected
50 coho eggs	1 mill.	8	50	500,000 smolts
51 coho eggs	1 mill.	19	50	500,000 smolts
Atlantic eggs	2 mill.	10-17	25	1,500,000 smolts
Chinook eggs	250,000	11	20	200,000 smolts
white sturgeon brood	12	10 yrs.	0	12
white sturgeon eggs	60,000	36	50	30,000

STUR

EXAMPLES				
Chinook Eggs	200,000	6	20	160,000 smolts

HF FL PR STUR

SECTION C: OPERATIONAL FACILITIES AND LAYOUT

The following scale diagrams are required for the proposed Hatchery. They must be drawn or drafted in ink and be consistent with the written information you have provided in this plan. Consult the Guide for more detailed information.

LOCATION MAP AND RESOURCE USE MAP: Map or Marine Chart showing the area under application, and any resources or other uses in the area such as other hatcheries, nearby fish farms, salmon-bearing streams, important habitats, log sorts, log booming grounds, pollution sources, etc.

OPERATIONAL LAYOUT DIAGRAM: A plan (aerial) view of the proposed site and all hatchery facilities and structures. This scale diagram must clearly illustrate the site boundaries, water source, intake and outlet locations and all proposed buildings and outdoor facilities.

For water based hatcheries, all floating facilities, anchors, anchor lines, breakwaters, etc., must be depicted as they would appear in operation. Marine based operations must also include wind fetch and current vectors, showing direction and speed, as well as the bottom depth contours.

DETAILS OF OPERATION CONSTRUCTION: Details of water flow from the source through the tanks, raceways, etc., must be shown to the point of discharge.

For water based hatcheries, a side (elevation) view of the facilities must clearly show the floating facilities and all underwater structures including the anchors and anchor rodes, and the bottom profile. All intake and discharge pipes must be shown in their entirety.

SECTION D: FRESHWATER OPERATION

(Complete this section only if your proposed operation uses a freshwater source).

1. WATER SOURCE

a) Standing water in an excavated pond: Yes_____ No ✓

b) Municipal water supply: Yes_____ No ✓

c) Pumped ✓ or gravity flow_____ from a lake_____, stream_____ well ✓, flowing spring_____.

d) Name of waterbody_____

e) Inflow Volume 10 million litres/day

2. WATER DISCHARGE

a) Water will be discharged to lake_____, stream_____, municipal sewer_____ or 100% ground seepage_____.

b) Name of waterbody if different from above Sechelt Inlet

c) Discharge Volume: 10 mill. litres/day

d) Treatment by rock filter_____, settling pond_____, or other method (describe) to ocean as per waste management permit

e) Intake _____ or Outlet ✓ screens installed.
(Specify grid size. Note: The Department of Fisheries and Oceans requires that intake and outlet screens must be used if water source is a salmon-bearing stream.)

f) Distance from discharge to nearest aquaculture facility 10 km

g) Have you applied for a Water Licence? already exists

h) Have you applied for an Effluent Discharge Permit? already exists

SECTION E: MARINE OPERATION

(Complete this section only if your operation uses a seawater source.)

1. MARINE WATER SOURCE

a) Name of Waterbody _____

b) Intake Volume _____ litres/day

c) Depth of Intake: max _____ metres min _____ metres

d) WATER QUALITY:

Annual max. _____ min. _____ and mean _____
water temperature (°C) at intake depth.

Annual max. _____ min. _____ and mean _____
salinity (o/oo) at intake depth.

Annual max. _____ min. _____ and mean _____
dissolved oxygen (mg/L) at intake depth.

2. MARINE WATER DISCHARGE

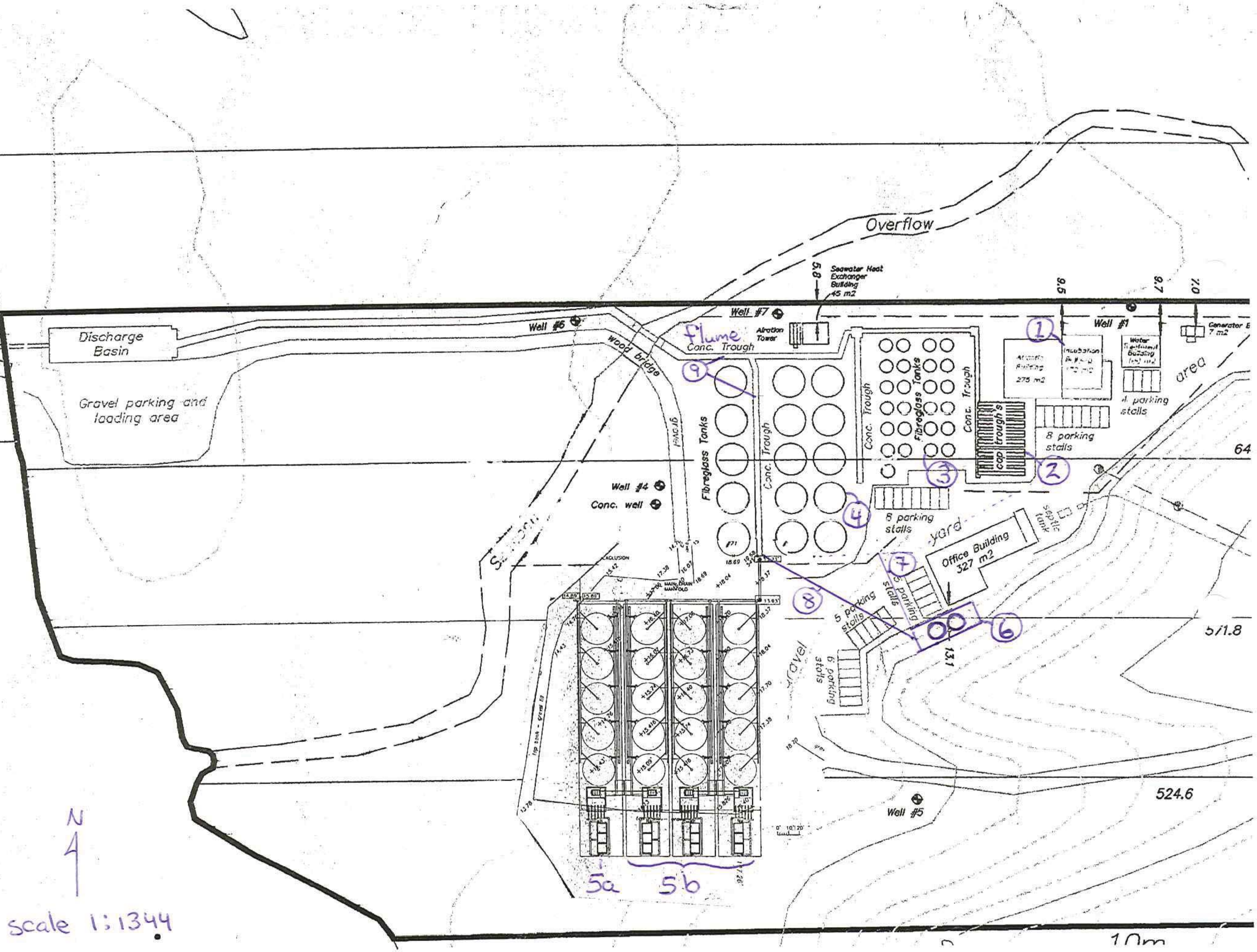
a) Depth of Discharge _____ m and Distance from Intake _____ m

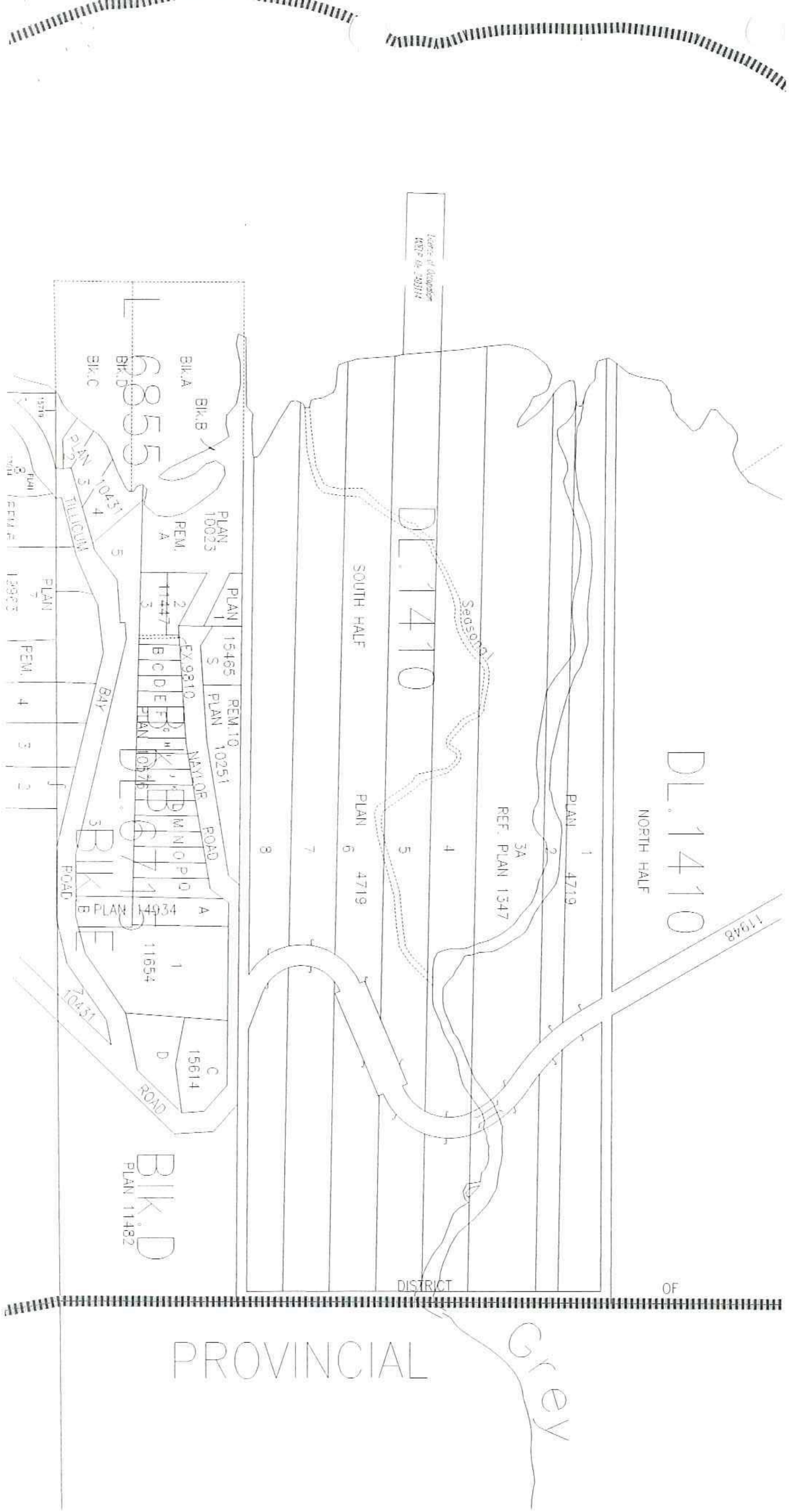
b) Discharge Rate _____ litres/day

c) Treatment by filters _____, settling pond _____, or other

method (describe) _____

Have you applied for an effluent discharge permit? _____
(Contact the Regional Waste Management Office)


Overflow
Seawater Heat Exchanger Building 45 m2
5.8
9.5
9.7
7.0
Well #7
Well #6
Well #1
Generator B 7 m2
Discharge Basin
wood bridge
flume
Conc. Trough
Aeration Tower
Gravel parking and loading area
gravel
Fibreglass Tanks
Conc. Trough
Fibreglass Tanks
Conc. Trough
Conc. Trough
cap troughs
275 m2
area
4 parking stalls
8 parking stalls
64
Well #4
Conc. well
8 parking stalls
yard
septic tank
Office Building 327 m2
5 parking stalls
5 parking stalls
6 parking stalls
gravel
13.1
571.8
524.6
Well #5
1
2
3
4
5a
5b
6
7
8
9
N
scale 1:1344
10m


PROVINCIAL
DISTRICT
OF
Grey
DL.1410
NORTH HALF
SOUTH HALF
PLAN 4719
REF. PLAN 1347
3A
Seasonal
DL.671
L.6855
Blk.A
Blk.B
Blk.C
Blk.D
Blk.E
BAY
ROAD
TILLICUM
NAYLOR
PLAN 11482
PLAN 10023
PLAN 14934
PLAN 10251
PLAN 10576
EX.9810
REM.10
REM. A
15465
15614
11654
11447
10431
11948