

Mr. P.M. Brady
Acting Director

J.C. Foweraker, Chief
Groundwater Division

Water Investigations Branch

September 27, 74

Groundwater Supply - Proposed Subdivision of
Section 2 & 3, Range 6, Cedar District (Yellow Point)

0239013

General

Following our recent discussions on the above mentioned subdivisions, I made an inspection of the area on September 19. I also had discussions in the Department of Highway's offices in Nanaimo with Mr. Gordon Dunsmore and Mr. Dean Anderson. Mr. Anderson then accompanied me to the subdivision and we located two wells (marked A & B on Figure 1) on Section 2 ~~Page~~ 6. Mr. Anderson noted that in cases where water supplies are required from individual wells within a new subdivision, the Department of Highways are insisting on two or possibly three test wells being drilled and subsequently tested within the subdivision. This procedure was followed for the subdivision on Section 2 and 3. The Section 2 subdivision was registered three weeks ago, according to Mr. Anderson, the Section 3 subdivision has not yet been approved and the minimum lot size has been increased from two acres to five acres.

Mr. Anderson also showed me the locations of Mr. Wilkinson's property and Mr. J.P. Huart's property, two of the principal objections to the subdivision plan (see Figure 2 for location of these two properties).

I visited the Ladysmith Health Unit and discussed the problem with Mr. Cecil Bridgen, Public Health Inspector. He assured me a thorough inspection was done on the Section 2 subdivision and he sees no objections to this development. Mr. Bridgen will also insist on close consultation with his office during the individual developments on Lots within the subdivision.

In the evening I called in to see Mr. W.J. Williams, owner, operator of Island Well Drilling and driller of the two wells Mr. Anderson and I had located earlier in the day. He provided me with the well locations of two additional wells drilled this year on the Section 3 subdivision considerably to the north (see figure 1) and drill logs for all four wells (attached).

Figure 1 shows the drainage to be predominant to the southeast which drains to Priest Creek. On the basis of the aerial photographs and existing maps and a field reconnaissance I would tentatively suggest that natural drainage may, in fact, be to the northwest towards Quesnel Lake and only the southeast corner of Section 2 may be affected by drainage towards Priest Creek. Only a detailed contour map which I do not have will resolve this question. However, there is enough doubt to defer placement of any proposed observation wells outside the

file 97

Subdivision until this map is made available.

Conclusions & Recommendations

1. We are in agreement with the findings of Mr. Livingston's report concerning expected well yields from individual domestic wells and with the limited interference expected with existing adjacent wells.
2. However, in view of the pressure exerted on Highways, Health and Water Resources Departments by concerned residents in the area, it might be prudent to install monitor wells within Sections 2 and 3 Subdivisions, in order to provide a documented record of water table fluctuations with increased demand in the area. I believe that wells should be located within the Subdivision as this would give more meaningful data on actual conditions in the problem area itself.
3. It may be advisable for Water Resources Service to look into present lake flows, withdrawals and licences on both Quesnell and Priest lakes, if any future monitor well is to be considered outside the Subdivision area in the Huart or Wilkinson property areas.

Specifically I would recommend that:

1. We write to Mr. N.G. Elston, Senior Approving Officer, Department of Highways, Parliament Buildings, Victoria, (and a carbon copy to be sent to the Nanaimo office) suggesting that in view of increasing concern by local residents to the approved Subdivision on Section 2 Range 6 we recommend that the developer be approached with a view to making both his test wells (marked A and B on Figure 1) available to the Department of Highways and/or the Regional District for use as observation wells for a minimum five-year period and further that a covenant be placed on both well site lots involved allowing access for an observer to instrument both wells and to make monthly observations for this period. Also a restriction should be placed on both lots and on adjacent lots to prevent tile field or well construction within (if practical) a 50-foot radius of these two wells.
2. We should also request that the developer of the Subdivision on Section 3 be approached with the same request for wells c and d on Figure 1. However, as the lot size is to be five acres, we would recommend a restrictive radius around the well of 100 feet ~~inland~~^{instead} of 50 feet. As this subdivision ^{instead} on Section 3 has not yet been registered I believe we should have a better chance of obtaining the developers approval for this.

I would suggest that the wells, if possible, be monitored and serviced by the Department of Highways and for the Regional District. Our Groundwater Division staff can provide technical assistance and advice to the observers and can

undertake the recording of all data sent to this office by the observers. I believe it may also be possible to provide one or perhaps two Stevens Recorders on loan for two or three years until short term groundwater level fluctuations are established and long term trends can be continued by manual readings.

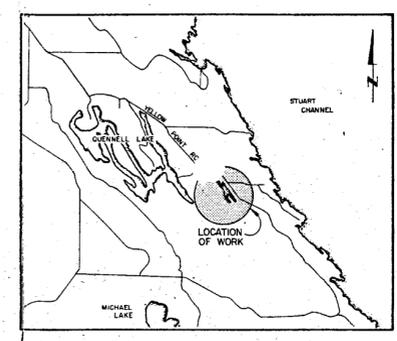
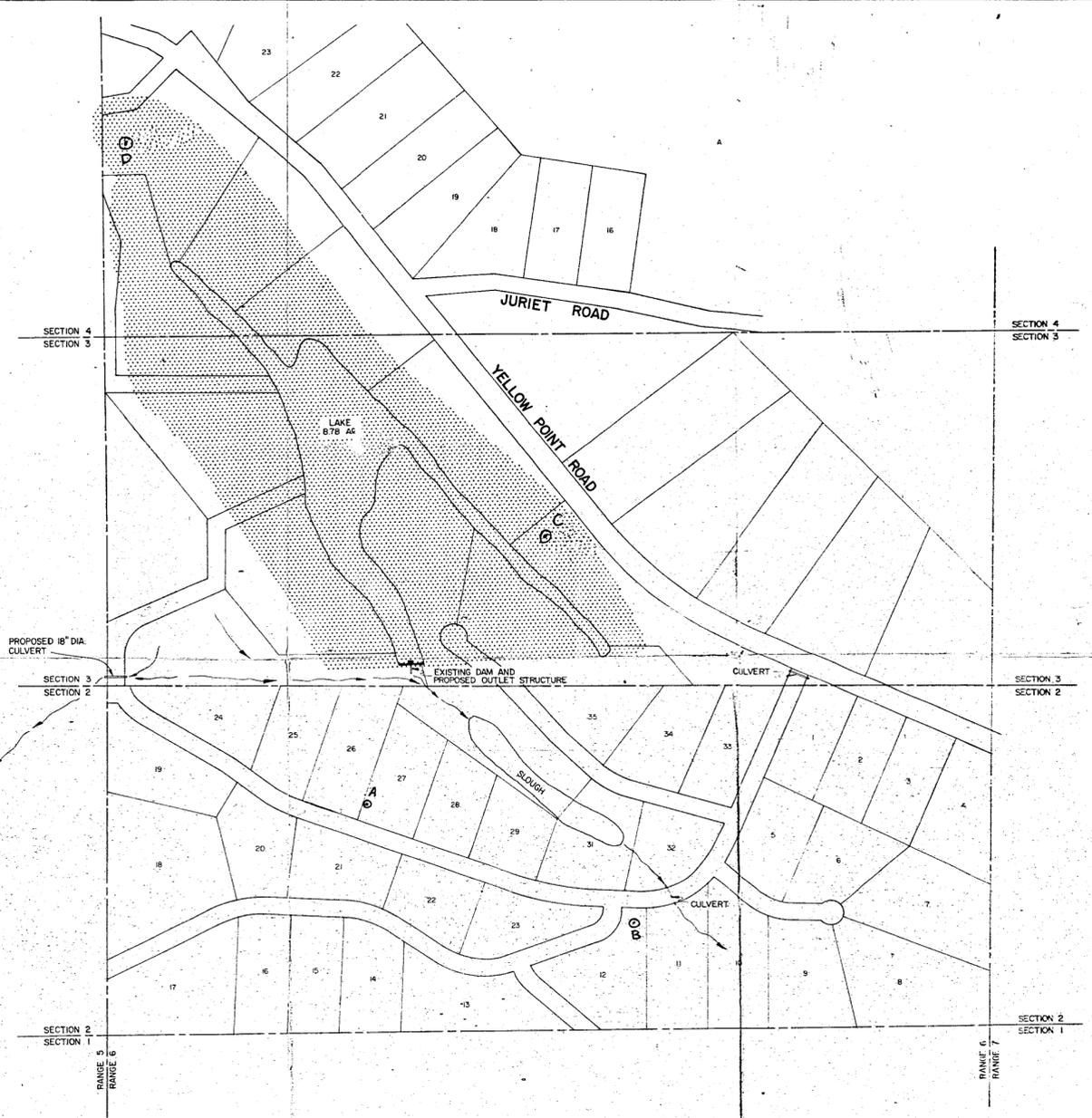


J.C. Foweraker

JCF/kt



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LOCATION PLAN

LEGEND

- LAKE DRAINAGE AREA (APPROXIMATELY 47 ACRES)
- CULVERT DRAINAGE AREA
- NATURAL DRAINAGE COURSE

FIGURE 1

○ location of subdivision wells (approximate)

AESL
Consulting Engineers

ASSOCIATED ENGINEERING SERVICES LTD.
VANCOUVER, B.C.

NO.	DATE BY	REVISIONS	ENG. NO.	DATE BY	REVISIONS	ENG. APP.

DESIGN: []
DRAWN: []
CHECKED: []
DATE: AUGUST 1974

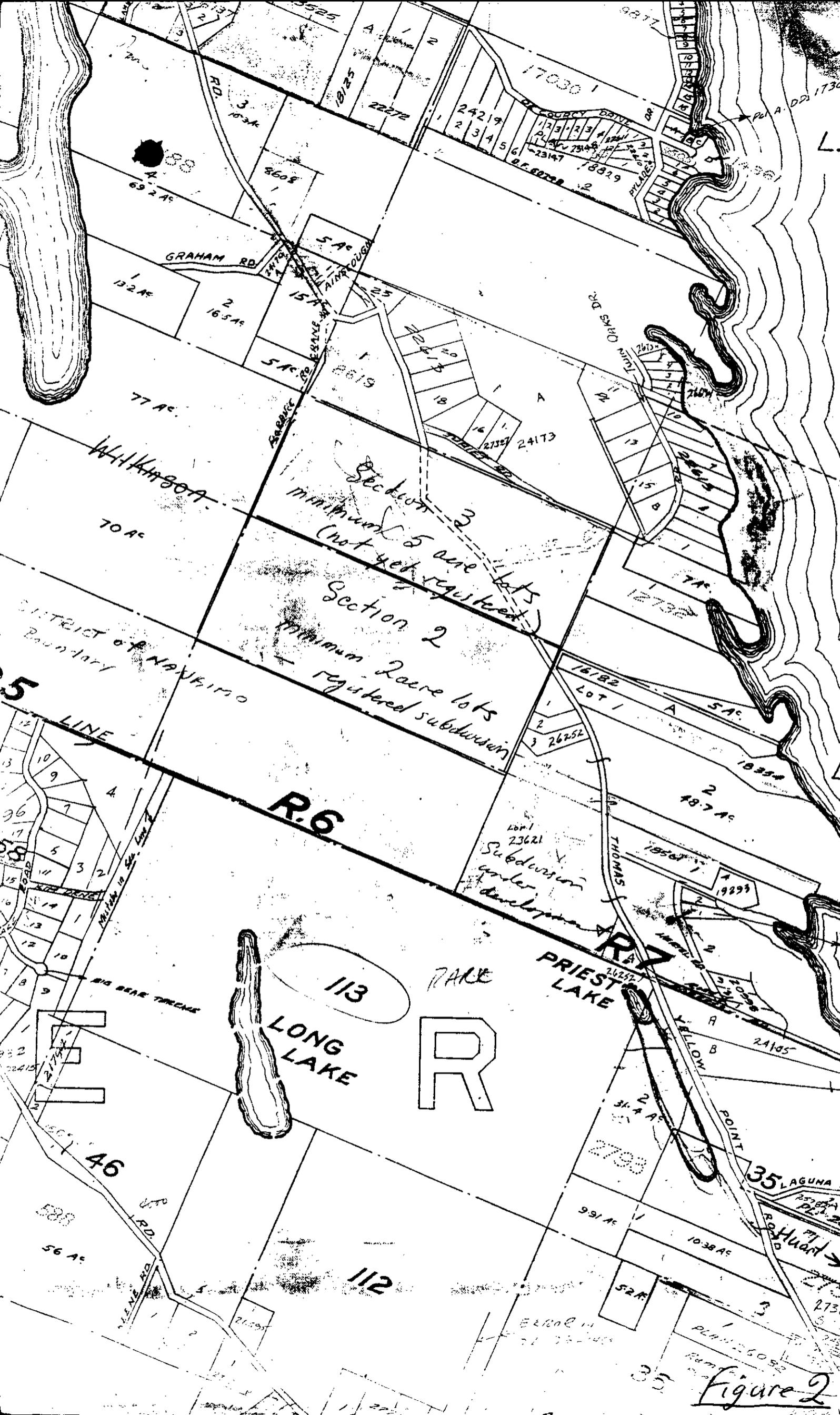
APPROVED: []
APPROVED: []
SCALE: 1" = 20'

CLIENT: **NASH DEVELOPMENTS LTD.**
PROJECT: **YELLOW POINT SUBDIVISION**

TITLE: **DRAINAGE AREAS**

SHEET NUMBER	OF	PER SET
DEPT. DRAWING NUMBER		REV.
C 4146-912-RE-101		

SUPERSEDES ALL PREVIOUS PRINTS WITH A NUMBER LOWER THAN



Section 3
 minimum 5 acre lots
 (not yet registered)

Section 2
 minimum 2 acre lots
 registered subdivisions

R.6

LONG LAKE

7 ACRE

R

PRIEST LAKE

Figure 2