

EXECUTIVE SUMMARY

INTRODUCTION

In June 2000, the Fraser Valley Health Region (FVHR) and the BC Cancer Agency (BCCA) submitted a proposal to construct a new 300-bed hospital, to replace the existing MSA General Hospital, and a new regional cancer centre on lands owned by the Regional Hospital District on Marshall Road in Abbotsford, British Columbia.

In late June 2000, the FVHR and BCCA received approval and planning funds from the Ministry of Health to proceed with planning for these facilities with the first objective being to submit a Business Case, for consideration by the Ministry, early in October 2000.

This document serves as an appendix to the Business Case for this project and includes four major sections which are summarized below:

1 PROGRAM PARAMETERS

The purpose of this section is to document health program planning factors having a substantial influence on the development of the Master Program.

Service Area

The FVHC will continue to serve two overlapping catchment areas. A community catchment area, which is comprised principally of LHA 34 Abbotsford, which will continue to serve patients seeking primary and secondary care. Selected secondary and tertiary programs and services at FVHC will draw from a much wider area encompassing the FVHR as a whole and perhaps surrounding regions.

Demography

Source: PEOPLE 25

The following table illustrates historical and projected populations for the Abbotsford LHA, the FVHR and the Province of British Columbia. These numbers were used for master programming purposes for the FVHR portion of the project.

	Abbotsford LHA 34	FVHR (incl. LHA 34)	BC (incl. FVHR)
1996	110,338	231,345	3,882,043
2000	116,176	243,175	4,067,179
2005	127,618	267,935	4,372,208
2010	139,601	296,511	4,898,030
2015	152,019	327,187	5,052,562

Over the 15 years, from 2000 to 2015, the FVHR population is expected to increase 36.2% compared to 25.6% for BC. LHA 34 Abbotsford comprises almost 50% of the population of the FVHR.

The population base served by the existing cancer centres in Vancouver and Surrey, plus the new EFVCC in Abbotsford will include the Lower Mainland and all of the North.

Planning Horizon

Facility planning will be based upon conditions estimated to exist in 2015.

Major Roles

Three major roles have been identified for further development at the new site.

1. The FVHC will continue to function as a **community health centre**, which includes a coordinated network of on-site and off-site services. The latter may include outreach services of the FVHR or community-based services operated by other agencies, but in cooperation with the Region. Preventative and care services will respond to the health care needs of population groups served by the Centre (e.g., specific ethnic/cultural groups, the geriatric community, the chronically mentally ill, children and adolescents, etc.), as well as meet the regional targets of 90% or higher of non-surgical and 85% of surgical service demand by 2010. Education and research activity will focus on the health needs of the Region's residents and staff.
2. The FVHC will add a number of **new programs** to augment and enhance existing programs and to better rationalize service delivery on a regional basis and to reflect a 'closer to home' care philosophy (e.g., renal dialysis, vascular surgery, enhanced medical imaging services, including MRI, nuclear medicine and echocardiography, child and adolescent mental health services, etc.), while also maintaining strong inter-regional relationships with Simon Fraser, South Fraser and Vancouver regions to ensure timely and appropriate access to services not planned for within the region (e.g., neurosurgery, cardiac and thoracic surgery, specialized pediatric surgery, etc.).
3. The site will also accommodate a new **regional cancer centre**, which together with the Surrey and Vancouver Centres, will serve the population of the Lower Mainland and the North of BC.

Ambulatory Care

The FVHR/BCCA will greatly expand its role in ambulatory care by offering a comprehensive array of outpatient/day programs, community and social services responding to existing and future new care programs, including:

- Surgical Day Care/Same Day Admit
- Pre-Admission Clinic
- General (Medical) Day Care (incl. Endoscopies)
- Women's Health Services
- Child Health Services
- Generic Multi-Use Clinics (incl. Wellness Programs)
- Renal Clinic

Inpatient Care

The table below illustrates existing beds as of August 2000 and the planned future beds envisioned to the year 2005 and 2015.

Fraser Valley Health Centre Bed Summary

Type	Existing Beds (2000)	Planned Future Beds	
		2005	2015
<u>General Purpose Units</u>			
Medical	76	} 132	} 142
Surgical	38		
Telemetry	12	14	16
Oncology	-	5	10
Subtotal, General Purpose Units	126	151	168
<u>Special Purpose Units</u>			
Obstetric, Ante/Postpartum/LDRP	21	28	32
Pediatric	18	20	20
Psychiatric	20	29	36
Intensive/Coronary Care	10	13	18
Surgical Step Down	4	6	6
Palliative	-	7	10
Subtotal, Special Purpose Units	73	103	122
Total Beds	199	254	290
<u>Neonatal Care</u>			
Special Care	5	7	10
Total, Neonatal Care	5	7	10
TOTAL	204	261	300

Cancer Care Services

The new regional cancer centre on the site of the replacement MSA General Hospital will be planned to support the following workload volumes.

	2000	2005	Projected 2015/16
<u>Cancer Frequency</u>			
Area 1 (Vancouver, Burnaby, Richmond, North Shore, Coast Garibaldi)	5,008	5,545	7,002
Area 2 (Fraser Valley, South Fraser, Simon Fraser Health Regions)	4,489	5,303	7,358
Northern Region (Peace-Laird, Northern Interior, Northwest Interior)	802	963	1,340
Total	10,299	11,811	15,700
<u>EFVCC Outpatients</u>			
New Patient Appointments	0	1,200	2,800
Follow-Up Visits	0	7,200	16,800
Medical Oncology			
Chemo Treatment New Courses	0	200	480
Chemo Visits	0	2,800	6,400
Radiation Oncology/Therapy			
Cancer Cases for Lower Mainland	0	11,811	15,700
Treatments/Visits EFVCC	0	2,000	1636
Fractions Required	0	18	22
Fractions EFVCC ⁴	0	36,000	36,000

Education

The FVHC/EFVCC will host both undergraduate and graduate students from medical and nursing programs. Technical and professional trainees in the allied health disciplines will also be accommodated on-site for the practicum phase(s) of their curricula.

Research

The FVHC/EFVCC will actively promote on-site clinical research. Clinical research protocols will encompass epidemiological-type studies as well as clinical trials; the latter may be coordinated through established clinical programs or may be conducted as independent protocols.

2 MASTER PROGRAM**Space Summary**

The table below illustrates gross areas in square metres (CGSM) for each service category of facilities as designed in 1994, as master programmed, and as revised following a Program Value Analysis/Review by KPMG consultants. The table concludes with previously designed and currently programmed future building gross areas for both the Fraser Valley Health Centre and the Eastern Fraser Valley Cancer Centre.

Fraser Valley Health Centre

Service Group	1994 Preliminary Design GSM	2000 Master Program GSM	2000 Post Program VA GSM
A High/Medium Serviced Facilities (Post Disaster)	21 784.1	23 483	
B Low Serviced Facilities (Post Disaster)	3 191.5	4 133	
C Low Serviced Facilities (Non-Post Disaster)	4 017.1	1 110	
D Industrial/Shop Facilities (Post Disaster)	3 699.9	3 467	
E Industrial/Shop Facilities (Non-Post Disaster)	829.1	895	
F Regional/Other Facilities (Non-Post Disaster)	-	(5 566)	
Total, Component Gross Square Metres (CGSM)	33 521.7	36 088	
TOTAL FVHC BUILDING GROSS SQUARE METRES (BGSM)	45 829.2	49 991	47 649

Note:

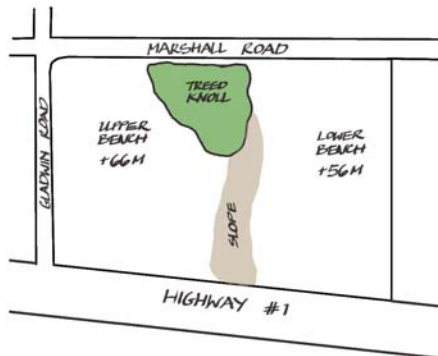
1 Changes recommended that have been included as a result of the KPMG Program VA include:

- The Surgical Step-Down Unit at 400 CGSM has been relocated from A5 Critical Care Units to A1 General Medical/Surgical Inpatient Units in order to ensure staffing economies.
- The Women's and Children's Ambulatory Clinics area of 775 CGSM has been relocated from A2 Maternal Child Program to C2 Ambulatory Care Centre to allow for space sharing opportunities.
- The Community Mental Health Centre area of 800 CGSM has been deleted from A3 Mental Health/Psychiatry and will be retained in the community.
- The Laboratory Medicine component has been reduced in area by 250 CGSM to reflect a change in role with all microbiology being consolidated at Chilliwack General Hospital.
- The C1 Wellness Centre component has been reduced in area by 607 CGSM and will be integrated with C2 Ambulatory Care Centre for improved space and operating efficiencies.
- The Pre-Admission Clinic component has been reduced by 48 CGSM to reflect a slightly reduced workload.

Eastern Fraser Valley Cancer Centre

Service Group	1994 Preliminary Design GSM	2000 Master Program GSM
G High/Medium Serviced Facilities (Non-Post Disaster)	-	2 535
H Low Serviced Facilities (Non-Post Disaster)	-	2 940
Total, Component Gross Square Metres (CGSM)	-	5 475
TOTAL EFVCC BUILDING GROSS SQUARE METRES (BGSM)	-	6 845

3 PHYSICAL PLAN REVIEW



The work presented in this report has concluded that the preliminary physical resource requirements outlined in the Master Program can be arranged on the subject site in a configuration, which generally meets the planning objectives of the FVHR and BCCA. The planning diagrams suggest one siting concept involving two to three storey development on the upper 'bench' on the western portion of the site consisting primarily of outpatient, ambulatory care, administration, and cancer clinic program components. The acute and support services functional components would generally be located on the lower bench or eastern portion of the site in a five storey configuration. The main entry is shown located off the upper bench with the emergency entry off the lower bench.

From a site utilization perspective and given this siting concept, the site will accommodate the ambulance station, energy centre, and the future expansion of each major functional component. It is estimated that the parking requirements for this development would consist of approximately 500 surface parking stalls and 500 stalls in structured parking.



September 14, 2000 Functional Modelling Session

The health care campus suggested by the planning diagrams support the notion of a healing environment through retention and acknowledgement of the treed knoll and by separating outpatient services from acute services. It also responds to the considerable demands for natural light into the majority of the program components and assists wayfinding through the campus. Other benefits include the separation of post disaster components from non-post disaster components for improved construction economy and the ability to fast-track smaller contract elements within the larger campus development. Alternatives to the suggested health care campus concept should be explored during the detailed functional programming stage to confirm the most appropriate planning solution for this facility on this site.

**4 PROGRAM LEVEL CAPITAL
COST ESTIMATE**

The current estimated cost of the project, based on the adjusted Master Program dated September 2000, is as follows:

Item No.	Estimated Cost \$
A. Land	0
B. Construction	125,932,000
C. Professional Fees	15,304,900
D. Furnishings & Equipment	53,198,000
E. Municipal & Connection Fees	1,576,100
F. Management & Overhead	4,909,500
G. Project Contingency (2%)	1,160,800
H. Payable Goods & Services Tax	2,404,800
I. Total Project Cost	\$204,486,100

Note:

The Total Project Cost estimate above is based on a total building gross area for the Fraser Valley Health Centre of 45 569 square metres. This is less than the number presented in the Master Program Space Summary earlier which implies that program area will have to be reduced in order to meet this estimate.