

2 MASTER PROGRAM

INTRODUCTION

This document describes the activities and spaces which are required to meet the proposed roles of the Fraser Valley Health Centre (FVHC) and Eastern Fraser Valley Cancer Centre (EFVCC), as described in the Program Parameters section. The Master Program can be viewed as a "translation" of the stated parameters into preliminary physical resource requirements. **This information will be developed in considerably more detail in a subsequent facility programming task and should, therefore, be viewed as preliminary information sufficient in accuracy and detail for project definition and master planning purposes.**

This document is presented in three main sub-sections as follows:

- Space Summary tables provide listings of programmed component gross areas and building gross areas for both the FVHC and EFVCC facilities. **Some of these estimated areas have been revised as a result of a program VA/review that took place in late September. Notes regarding the adjustments made can be found in the Executive Summary and in italics with each component affected.**
- General Planning Criteria provides an understanding of major planning concepts and objectives which pertain to the Centres as a whole or to particular groups of functional components.
- Component Planning Criteria provides a scope description of each functional component in both Centres and those components potentially accommodated off the site with an estimate of future space requirements and the preferred relationships each component has with other components.

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**FRASER VALLEY HEALTH
CENTRE BUILDING SPACE
SUMMARY**

The building space summary in the table below tabulates the component gross areas square metres (CGSM) for each functional component as well as the building gross square metres (BGSM) for the FVHC building(s) as a whole. The CGSM shown in the 1994 MSA Hospital Preliminary Design column is shown for general comparison to the current Master Program area.

Service Group	1994 Preliminary Design CGSM	2000 Master Program CGSM
A High/Medium Serviced Facilities (Post Disaster)		
A1 General Medical/Surgical Inpatient Units	7 480.4	5 735
A2 Maternal Child Program	3 542.1	4 687
A3 Mental Health/Psychiatry Program	2 235.3	3 337
A4 Palliative Care Unit	929.6	600
A5 Critical Care Units (ICU/CCU/SSDU)	846.1	1 600
A6 Emergency	1 284.1	1 475
A7 Surgical Suite (incl. PACU)	1 922.8	1 965
A8 Medical Imaging (incl. Nuclear Medicine)	1 801.5	2 200
A9 Laboratory Medicine	1 425.0	1 500
A10 Morgue/Autopsy	216.2	190
A11 Biomedical Engineering	101.0	194
Subtotal Component Area, A	21 784.1	23 483
B Low Serviced Facilities (Post Disaster)		
B1 Surgical Day Care	432.8	760
B2 General Day Care (incl. Endoscopy)	715.6	800
B3 Cardiopulmonary/Neurodiagnostic Services	357.4	493
B4 Pharmacy	508.4	650
B5 Health Information Management	897.1	838
B6 Volunteers/Auxiliary Services	190.2	102
B7 Spiritual Care Services	90.0	90
B8 Main Entry Facilities	-	400
Subtotal Component Area, B	3 191.5	4 133
C Low Serviced Facilities (Non-Post Disaster)		
C1 Wellness Centre (incl. Diabetes Education)	168.2	1 207
C2 Outpatient Clinics	833.3	435
C3 Pre-Admission Clinic	115.0	348
C4 Rehabilitation Services	572.3	400
C5 Site Administration	1 969.6	570
C6 Education Facilities	-	470
C7 Renal Dialysis Unit	-	680
Central Staff Facilities	358.7	-
Subtotal Component Area, C	4 017.1	4 110
D Industrial/Shop Facilities (Post Disaster)		
D1 Nutrition and Food Services	2 127.3	2 127
D2 Materiel Services (incl. CPD)	1 572.6	1 340
D3 Ambulance Station	-	(460)
Subtotal Component Area, D	3 699.9	3 467

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Service Group	1994 Preliminary Design CGSM	2000 Master Program CGSM
E Industrial/Shop Facilities (Non-Post Disaster)		
E1 Plant Services	388.6	440
E2 Linen/Housekeeping Services	440.5	455
Subtotal Component Area, E	829.1	895
F Regional/Other Facilities (Non-Post Disaster)		
F1 Regional Administration	-	(1 866) ¹
F2 Regional Materiel Services (Warehouse)	-	(3 500)
F3 Child Day Care Facility	-	(200)
Subtotal Component Area, F	-	(5 566)
Total Component Gross Area	33 521.7	36 088
Unassigned Gross Area (Incl. mech., ext. wall, major circulation, etc.) Public Links/Corridors	12 307.5 (1.367) -	12 912 (1.36) 991
TOTAL FVHC BUILDING GROSS AREA	45 829.2	49 991

Notes:

¹ Areas in brackets have not been included in the Total Component Gross Area or the Total Building Gross Area.

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**EASTERN FRASER VALLEY CANCER CENTRE
 BUILDING SPACE SUMMARY**

Service Group	2000 Master Program CGSM
G High/Medium Serviced Facilities (Non-Post Disaster)	
G1 Radiation Therapy Area	1 850
G2 Clinical Physics	660
G3 Dentistry	25
Subtotal Component Area, G	2 535
H Low Serviced Facilities (Non-Post Disaster)	
H1 Entry Facilities	160
H2 Patient Resources	180
H3 Patient Counselling	200
H4 General Clinic Area	700
H5 Systemic Therapy Area	220
H6 Pharmacy	130
H7 Clinical Trials Area	80
H8 Medical Staff Offices	540
H9 Patient Information Management	300
H10 Administration	180
H11 Staff Support	125
H12 Clinic Support	125
Subtotal Component Area, H	2 940
Total Component Gross Area	5 475
Unassigned Gross Area (Incl. mech., ext. wall, major circulation, etc.) (25%)	1 370
TOTAL EFVCC BUILDING GROSS AREA	6 845

GENERAL PLANNING CRITERIA

GENERAL PLANNING CRITERIA

INTRODUCTION

This section of the document is intended to provide an understanding of major planning criteria related to the needs of patients, staff, and visitors which impact on the site as a whole, or on specific groups of functional components.

The intention of this section is not to suggest physical planning solutions, but rather to identify the functional requirements for planning that will assist the Consulting Team and User Groups in development of the most appropriate environment for people and systems as design work proceeds.

It is recognized that some of the criteria described here may not be achievable (or may be only partially achievable) due to physical and economic constraints. It is, however, considered useful here to cover all important aspects of planning in order to re-acquaint the reader and planners of the highest standards desirable.

The narrative is organized under 3 sub-headings as follows:

- Site Planning Criteria
- Building Planning Criteria
- Major Functional Groupings

SITE PLANNING CRITERIA

Building Siting and Orientation

New construction should take maximum advantage of the site's positive features. New buildings should be massed so that vehicular and pedestrian arrival sequences clearly focus on patient and visitor entries. Energy conservation should also be a determining factor in orientating the building mass. Patient care areas should be located as far as possible from service courts and other potential noise sources. Considering prevailing winds and building height requirements, air-conditioning system air intakes should be located in relation to the boiler stack so that noxious products and other exhausts are not drawn into the buildings' air systems. Maximum opportunity for views to the exterior from all areas should be achieved.

Environmental Design Elements

Depending on the opportunities presented by the site, environmental design elements could be used effectively to create a dramatic and inviting outdoor space which would contribute significantly to the character of the surrounding environment. Features such as innovatively designed bus shelters, street furniture, lighting systems, kiosks, paving, landscape, fountains and artwork may be integrated in order to create a visually active, secure, and dynamic space for staff and public gatherings.

Landscape

Landscape should be an integral part of the site planning such as widened sidewalks and plazas. The development of public green space, horticultural spaces, and the retention of existing trees and provision of new trees and other vegetation would greatly enhance the image and attractiveness of all facilities.

Vehicular Circulation

General

It is assumed that staff and visitors will continue to primarily rely on the car to access the new site for the foreseeable future, that a high volume of materials and supplies delivery traffic will continue on site and that therefore, vehicular movement will continue to be a major planning issue for the site.

On-site vehicular circulation systems should be capable of handling projected volumes and should include alternative routes for unanticipated interruptions of normal patterns. The network should be logical so that visitors unfamiliar with the site can readily find their way to their destination. A clear sense of direction and orientation should be provided, primarily through visual recognition of destinations. This should be supplemented by a concise graphics and signage system. The various traffic types should be separated as early as possible on approach to the site. Priority should be given to emergency, bus and patient/visitor traffic. Vehicular intersections and pedestrian

crossings should be well-marked and illuminated for increased safety and security after dark.

Patient/Visitor

Routes should be clear and direct, including drives to covered drop-off points near the Hospital. Drivers should be able to deliver passengers to the appropriate entry and continue to a designated parking area. Pick-up routes from the parking area to the drop-off point should not require a return to adjacent streets. Access drives should be wide enough to allow movement past waiting or parked vehicles. Weather protected seating should be provided at all pick-up/drop-off points.

Service

Service vehicle routes should be clear, direct and well marked. Service drives and courts should be screened from view by other users of the site both visually and acoustically. Grades on service drives should be eliminated where possible to minimize motor and transmission noises. Again, all air intakes should be carefully located so as to not draw in vehicle exhausts. Solid waste and morgue holding service courts should be separated from other functions. Service traffic should be separated from people traffic to the maximum extent possible.

Emergency

Emergency vehicles, including both ambulances and fire equipment, should be provided with clear, direct routes which are well marked and illuminated. The routing system should require minimum travel time and distance and should terminate as close to the destination as possible. Vertical clearances of canopies should be adequate for the largest transport and fire vehicle to be used. No other circulation system should cross this emergency route. Back-up emergency routes should be provided to eliminate possible delays caused by congestion on primary access routes. Immediate patient/visitor access to both short-term and regular parking areas should be provided.

Parking

Off-street parking facilities should be able to handle projected demands. Parking lot layouts should be orderly and logical to minimize confusion and excessive internal circulation. Parking facilities should be well lighted and located as close to patient and staff destinations as possible (e.g., to the Cancer Centre). Walkways and shelters should be planned in conjunction with the parking areas to minimize pedestrian/vehicular conflicts. Where assigned parking is used, preference should be given to short term users (i.e., outpatients).

Critical parking areas, such as those adjacent to Emergency, should be designed so that distraught drivers can park and leave their car without blocking circulation. Close-in staff parking should be available for evening and night shift workers to provide an increased sense of security for these employees. In addition, a reasonable number of close-in protected parking stalls should be dedicated to the handicapped.

Staff parking areas can be less direct than those for other types of traffic, since the staff will be familiar with the facility. However, these routes should be able to handle greater volumes of concentrated traffic than other routes, particularly during shift changes, and a drop-off point should be provided, which should be safe and secure.

Pedestrian Circulation

A general network of sidewalks should be provided to link all parts of the site. Gentle grades, not exceeding five per cent (5%), should be maintained on all sidewalks for wheelchair use. Pedestrian/vehicular conflicts should be minimized by carefully coordinating the two circulation networks. In the event conflicts cannot be avoided, crossings should be well marked and illuminated.

Upon leaving their vehicles, patients and visitors should be able to directly enter the facility of destination. Entrances should be clearly identifiable by both drivers and pedestrians. Walkways should incorporate seats, handrails, curb cuts and ramps to accommodate infirm or wheelchair bound patients. Adequate lighting and sightlines should be incorporated to provide a sense of security after dark.

Exterior Signage

Exterior signage should include:

- Formal identification of the Health Centre and Cancer Centre fixed in an architecturally appropriate location, floodlit at night, and readable from a distance of 150 metres.
- Informal directional and operational signage integrated with urban design concepts on the site.

Utilities Planning

Utilities include water, gas, electricity, storm, sewage and communications. They are in use every day, all day, in support of all activities on site. They cost money, in terms of energy consumption, facilities, and their effect on human resources.

Good utilities planning can result in significant savings and can, indirectly, raise the level of patient care and satisfaction. The creative core of good utilities planning focuses on four core services: cooling, heating, electricity and communications.

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Planning for other utilities services must be accommodated, but plans for these should be based on strategies developed for the core services, as follows:

- **Centralization:** centralization of heating, cooling and electrical systems complements planning for system capacity, redundancy and flexibility.
- **Future Growth:** in sizing new services where future growth is likely, allow for future growth in distribution mains and space for future equipment and consider a modular approach for building systems extensions.
- **Redundancy:** plan for redundancy with dual site services for electricity, domestic water, natural gas and communications systems. For on-site equipment serving critical functions, plan for redundancy with either standby equipment or active equipment that can be automatically commandeered when needed, particularly for the linear accelerators in the Radiation Therapy of the EVFCC.
- **Flexibility and Accessibility:** a lack of utilities flexibility and accessibility can prove to be more significant in limiting a building's usefulness and life expectancy than either its capacity or age. Future developments will provide for flexibility by providing looped distribution lines, ample branch-isolation valves, and adequate space for new services and maintenance access. Cable communications trays and provision of fibre optic hardware should be provided throughout the campus, in all buildings, and should form part of every minor and major capital project.
- **Energy Conservation:** evaluate heating, cooling and electrical loads and relationships for potential energy conservation applications, peak electrical demand shaving, cogeneration and thermal storage.

Green Space

The definition and development of green space is essential to providing a healing environment for patients, visitors and staff, and to enhancing the site's capacity as an asset of the neighbourhood. Adequate green space should be considered as part of good patient care and staff support, and part of being a good neighbour and citizen. Considerations include:

- views to green areas
- walks by and through green areas
- driving by or through green areas
- relaxation and meditation
- lunches, meetings and socializing of staff, visitors and patients

Key planning strategies must include the definition, enhancement and development of green space as integral to the project. More specifically, these strategies should focus on the following areas:

- providing green space immediately adjacent to the main cafeteria
- developing secure and directly accessible green spaces directly from the mental health program, pediatric and palliative areas if possible
- as part of being a good neighbour, develop substantial green “buffer” area between the site and the street

BUILDING PLANNING CRITERIA

Healthcare Campus

A trend in hospital planning and design has been to view the concept of hospital as a single building entity. Solutions that resulted in facilities of 1.5 to 2.0 million square feet were not uncommon. The result was floor plates with very large areas that were designed to provide significant opportunities to expand individual departments in response to changing demands (e.g., by locating "hard" spaces next to "soft" spaces). Conversely, departments located deep within the floor plates and not adjacent to exterior soft space (or walls) required the relocation of other departments in order to accommodate any expansion. This domino effect resulted in increased cost to an expansion project and in some cases to its cancellation. Alternatively, compromise solutions were developed that physically split the department resulting in dysfunctional arrangements and increased operating costs.

The concept of the healthcare campus, not unlike a university campus, allows for a progressive development over the lifetime of the campus without the need to achieve an "ultimate solution". Issues of expansion, adjacency and sustainability of the hospital as a whole, as well as the individual departments, might best be served by a campus approach. While we assume that our hospital buildings will serve our needs for 30+ years, the campus concept allows for continual renewal without limit through the strategic removal of individual buildings that have outlived their useful life. This ability to selectively renew, replace and expand individual elements without compromising the ongoing operation of the entire organization should be carefully considered. Additional benefits to the patients and staff concerning accessibility, wayfinding and access to day light, while not specific to issues of flexibility, are opportunities for environments that are scaled to the comfort of the individual and organized as links to the future.

Considerations of Building Type

Major hospitals are like urban centres in that they support large numbers of people in a wide variety of work environments. They also accommodate a broad range of space-types, as does a city or town, including: commercial space (offices/medical offices and practices), industrial space (materiel management, engineering and maintenance shops, food production), residential space (patient and resident bed-rooms, bathrooms, living space) and high tech space (diagnostic imaging, clinical and research laboratories, surgical suite, etc.).

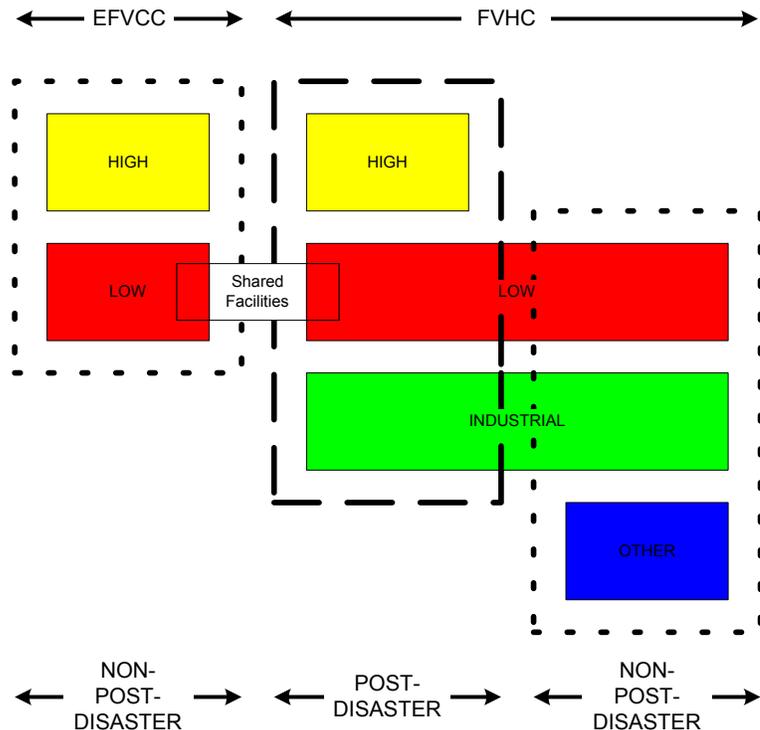
Some spaces in a hospital are recognized as part of a critical cluster that should be post disaster capable while a majority of other spaces do not need to be designed to this capacity.

Locating space in specific building-types, which may attract different design standards and different unit costs to construct, is worthy of consideration at the master planning stage.

Functional components in this program are organized by service groups which signify similarities of physical and support systems requirements and need for post or non-post disaster design. There are 6 main service groups as follows:

- High/Medium Serviced Facilities (Post Disaster)
- Low Serviced/Office/Retail Facilities (Post Disaster)
- Low Serviced/Office/Retail Facilities (Non-Post Disaster)
- Industrial/Shop Facilities (Post Disaster)
- Industrial/Shop Facilities (Non-Post Disaster)
- Regional/Other Facilities (Non-Post Disaster)

The physical plan should achieve a physically grouping of like kinds of space wherever possible.



Green Buildings

This project must conform to the 'green' performance standards established by the provincial government's Green Buildings BC New Building Program.

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Operational Efficiency/Quality of Service

The operational efficiency and effectiveness of caregivers in a hospital are greatly influenced by the physical design of facilities. A hospital is a very labour-intensive institution, which requires considerable movement of materials, staff, patients and visitors. The planning and design process must result in a physical plan and the organization of components that will minimize operating costs and maximize the quality of service.

Image and Environment

The external image of both the Health Centre and the Cancer Centre should make a symbolic statement about the values, which both the FVHR and BCCA embody.

All planning strategies should be considered within the context of advancing patient care and the enhancement of the FVHC and EFVCC as a humanistic and unthreatening refuge for healing and access to health and wellness. There are many possible strategies for achieving this goal, examples include:

- provision of the main entry outdoor and indoor space as a familiar, non-institutional area by making it a lively destination for visitors and patients, provision of varying kiosk retail and food functions, etc.;
- provision of an art program to invite community artists to display their work on a permanent and temporary basis within the buildings and on the site;
- maintenance of a clear distinction between those areas of the facilities which are fully accessible to the public and those that are secured private areas/restricted to staff access only.

Patients and visitors entering the Centres may be disoriented or anxious and many will be older patients who may have diminished cognitive and physical abilities. Every effort should be made to minimize the potentially intimidating nature of the typical institutional setting. Highly technical areas should be visually and acoustically isolated. Patients, visitors and staff should perceive the environment as open and accessible rather than regimented and intimidating.

The Main Entry/Lobby Facilities and Admitting of both Centres as common destinations and often the location where first impressions are made should be easily accessible and welcoming to visitors.

Views of the exterior and natural light should be provided from/to all patient care areas and staff work areas wherever possible. The psychological impact of the facility concerns not only the patient, but family, visitors and staff as well.

A general image of public accessibility should be provided which will be enhanced through the provision of "retail type" space located in the public area of the FVHC; by encouraging public use of the proposed new café; and by the provision of a single "front door" focal point for each Centre (see also Site Planning Criteria section in this document).

General Space Characteristics

Building space should be provided to generally allow for a maximum number of horizontal relationships between components, efficient intra-component clustering of spaces, and multiple circulation systems for separation of traffic types. These conditions may be achieved most readily with large, "deep plan" blocks of space. However, in the interests of staff and patient comfort and well-being, such potentially windowless "deep plan" space should be minimized wherever not critical for the functions being planned within it, in favour of space that will maximize the accessibility of all users to external views and natural light.

It should be noted that accessibility to views and natural light can be achieved by means of internal courtyards and clerestorey roof lights as well as by locations close to an external wall.

All new buildings should be designed for potential future growth, vertically and/or horizontally, but especially in areas where the need for expansion has been specifically highlighted (e.g., ambulatory care areas).

Flexibility

Versatility in the utilization of inpatient care facilities is to be achieved by maintaining typical inpatient unit sizes and configurations wherever possible. With the exception of the special purpose-built units, all inpatient care programs will be accommodated in general purpose units planned to accept a variety of programs in the future.

Versatility in the utilization of outpatient care facilities is to be achieved by:

- centralization of most outpatient components
- consolidation of modular general space
- segregation of special purpose or highly services (mechanical systems) space

In the highly technical (diagnostic and treatment) areas, large, open blocks of space with wide structural bays and minimum column area on each floor should be provided to allow for:

- a maximum of horizontal relationships between components
- efficient intra-component clustering of spaces

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- multiple circulation systems to facilitate separation of traffic types
- maximum flexibility for technical or functional renovation, and/or future conversion to other uses

Building Accessibility

Public orientation to and from all parts of both Centre should be achieved by emphasis on "first time" entrances where personal guidance and building graphics/signage can introduce the interior circulation system to the user.

The ambulance entrance to Emergency should be distinct from other entrances.

Provision of a secondary covered ambulance drop-off point to serve the inter-facility transport service mostly for cancer patients (but also include MLC clients e.g., coming for diagnostic testing).

The service vehicle loading/unloading area(s) should be distinct from other entrances.

All areas of both Centres must be accessible by handicapped persons.

All parts of the structure must be accessible from the exterior by fire fighting equipment.

Two Main Entrances

A distinct main entrance should be provided for both Centres, which creates a "front door/focal point" for entry to each building and enhances the general image of public accessibility. If possible, these should be adjacent and connected.

General Circulation

Interior Horizontal

Interior horizontal circulation systems should provide clear and direct access to all areas of all buildings. Opportunities for orientation to the rest of the facility should be provided at as many points as possible.

Separate horizontal circulation routes should be provided for clean/sterile and soiled goods where possible.

Interior Vertical

Interior vertical traffic also requires similar segregation. Public/outpatient traffic should be provided with separate elevator systems from staff/inpatient traffic.

Separate vertical circulation routes should be provided for clean/sterile, soiled goods and garbage.

Internal Circulation System

A direct and easily understood internal circulation system of corridors is essential to the effective movement of staff and materials through a hospital campus, and for orienting and guiding visitors and patients.

A simple ground floor interior circulation framework will be developed as an integral part of the new development. It will act as the primary functional organizing and orientation element of the ground floor and will improve the flow of materials and people by being as direct as practical, and by differentiating public and service circulation to the extent practical.

Primary elements of this framework include:

- **Public/Visitor Circulation**

Direct, primarily public route from the main entrance to all areas of the building, in particular to vertical circulation nodes (elevators, convenience stairs). Orientation devices should be provided at as many points as possible.

Stairways should be used to augment personnel movement between floors with "convenience" stairways located adjacent to elevators and elsewhere throughout the building. Stairwells should be pleasantly designed, bright and properly lighted.

There should be a clear and direct connection between elevators and building entrances and from elevators to all areas within the building. Passenger elevators should be clearly identifiable and service elevators should not be obvious to the public.

- **Materials Circulation**

Materials circulation routes should be segregated from public/visitor/patient circulation routes whenever possible. Separate, restricted or dedicated horizontal circulation system between materiel departments (supplies, food, etc.) and elevators should be provided. Dedicated elevators should be provided for materiel movement with separate elevators for clean/sterile and soiled items. Laundry and garbage chutes should be considered.

Orientation Signage and Wayfinding

Easy wayfinding to, and within, a large medical complex is of critical importance to patients and staff alike and ultimately saves staff time in giving directions and reduces stress experienced by visitors and patients. In general, wayfinding needs include:

Patients and Visitors:

- knowing how to find the facility from their home or office
- knowing where to park
- knowing and understanding the name of their destination
- knowing how to find the correct entrance
- knowing the building name, floor and room number of their destination

Staff:

- orientation to the facility when they first begin work
- understanding the layout of the facility
- ability to confidently direct patients, visitors and fellow staff
- knowing how to access wayfinding information if they don't have it themselves

Ideally, the building, its circulation systems and functions should be simply organized so that wayfinding is inherently easy and the importance of additional signage reduced. This can readily be achieved in a new complex.

The need for good wayfinding strategies is essential. General strategies include:

Interior Design and Signage:

- Develop transition wayfinding elements that clearly tell the visitor when they are leaving one building and entering another (e.g., colour schemes, interior design elements, signs including building names).
- Use different materials and different forms to make separate buildings on the same site distinguishable from one another.
- Provide orientation landmarks at ends of corridors and major intersections (e.g., artwork, large windows, etc.) – see following diagram.
- Design major public routes to look different from other, secondary public and service routes.
- Use plain language in signage that is clear and easy to understand by the non-medical professional (e.g., “eyes” vs. ophthalmology, “kidneys” vs. renal, “radiology” vs. diagnostic imaging, etc.).

- Provide wayfinding-related lighting to ensure that overhead signs, landmarks, “You-Are-Here” maps, public elevator lobbies, and entrances are distinctive and well lit.
- Design key areas to be visually distinctive from adjacent corridor areas, such as elevator lobbies, major departmental entrances, and other major destinations.
- Design staff and public areas to look significantly different from one another.
- Recognize that the formal main entry and functional main entry (possible direct access point from the proposed parking structure, where most people will enter the Hospital) both need to function as main entrances, and should both have appropriate wayfinding devices.
- Plan interior circulation patterns to consist of a simple and direct rectangular grid, avoiding complex intersections.
- Plan vertical circulation (especially elevators) to be easy to see and recognize along major circulation paths.

Outside Design & Signage:

- Ensure that views to important signs, site and building entrances, and entry drives are not obstructed by trees, shrubs, or berms.
- Locate the Emergency Department where it is easy to see and access.
- Provide street names at major exits.
- Ensure that drop-off areas are designed to accommodate the amount of traffic that will be present at peak use times.
- Plan for night time wayfinding ease by ensuring that intersections, entry drives, major building entrances, Emergency Department entrances, exterior directional and identification signs, and parking areas are all well-lit.

Inside:

- Ensure that major building entrances are distinctive and easy to recognize.

MAJOR FUNCTIONAL GROUPINGS

In general, the successful functional organization of each Centre involves locating functions to both minimize unnecessary movement of people and materials, and to concentrate more capital intensive, expensive space and equipment together. In other words, strategies of “one stop shopping” and locating “like functions with like functions”, can have substantial operating and capital economies and should be considered as general strategies for the development of the campus.

Also, certain components within each Centre require close groupings with others for one or more reasons (e.g., sharing of support facilities and staff, accessibility, future flexibility for shifting boundaries, expansion etc.). The following diagrams illustrate the key groupings that should be achieved wherever possible. In some cases a “higher priority” for adjacency applies to selected components within each group.

FVHC Ambulatory Care Services Group

Ambulatory care services, including outpatient clinics and day care programs, should be centralized, as much as possible, to consolidate ambulatory patient traffic and should be oriented to a major public entry, preferably located at grade level.

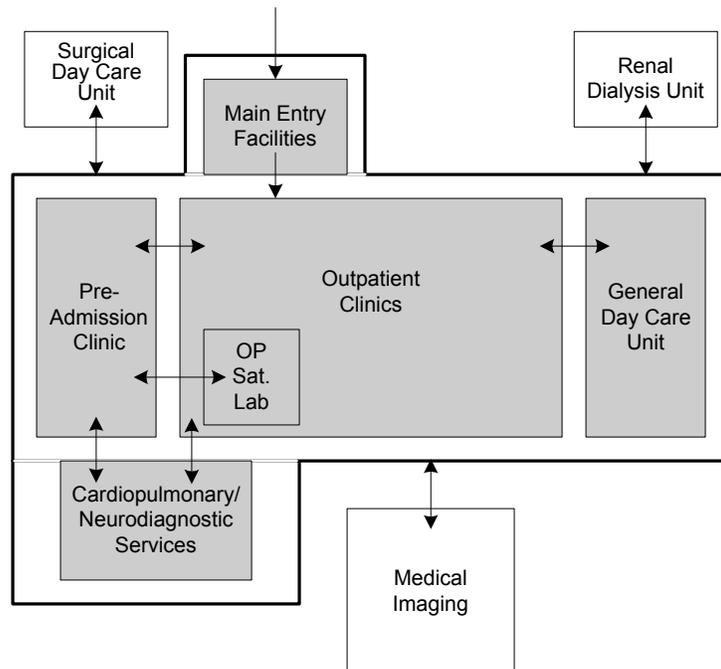
An Ambulatory Care Services Group should be developed and comprised of the following components:

High Priority Adjacency

- Outpatient Clinics
- Pre-Admission Clinic
- General Day Care Unit
- Main Entry Facilities
- Cardiopulmonary/Neurodiagnostic Services

Lower Priority Adjacency

- Surgical Day Care Unit
- Main Entry Facilities
- Medical Imaging
- Renal Dialysis Unit
- Mental Health/Psychiatry Program
- Wellness Centre



FVHC Emergency Services Group

Emergency services together with supporting diagnostic and treatment areas should be centralized as much as possible to shorten travel distances for staff and patients and to minimize the time it takes to deliver care to critically ill patients.

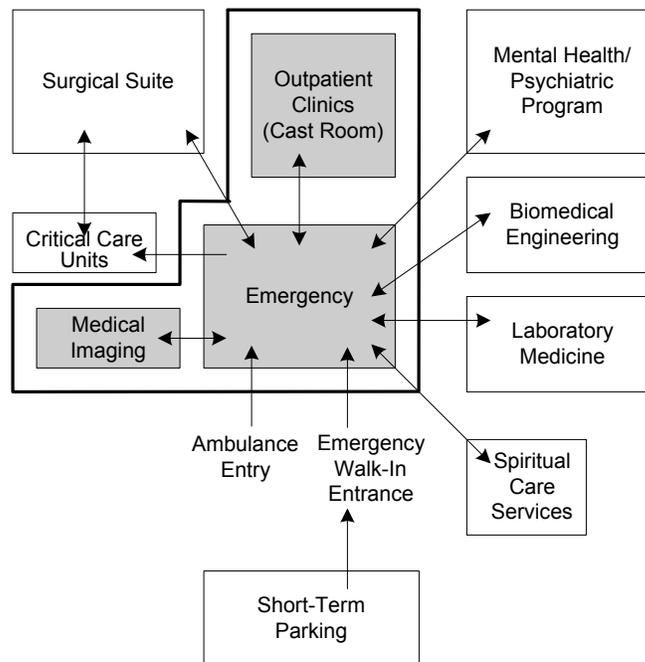
An Emergency Services Group should be developed and comprised of the following components:

High Priority Adjacency

- Emergency
- Medical Imaging
- Outpatient Clinics (Cast Room)

Lower Priority Adjacency

- Critical Care Units
- Surgical Suite
- Mental Health/Psychiatry Program
- Biomedical Engineering
- Laboratory Medicine
- Spiritual Care Services



FVHC Surgical Suite/Critical Care Group

Surgical and critical care services, together with key supporting services, should be centralized as much as possible to minimize travel distances for critically ill patients undergoing surgery and for continuity of care, on-the-spot technical back-up and efficient use of staff.

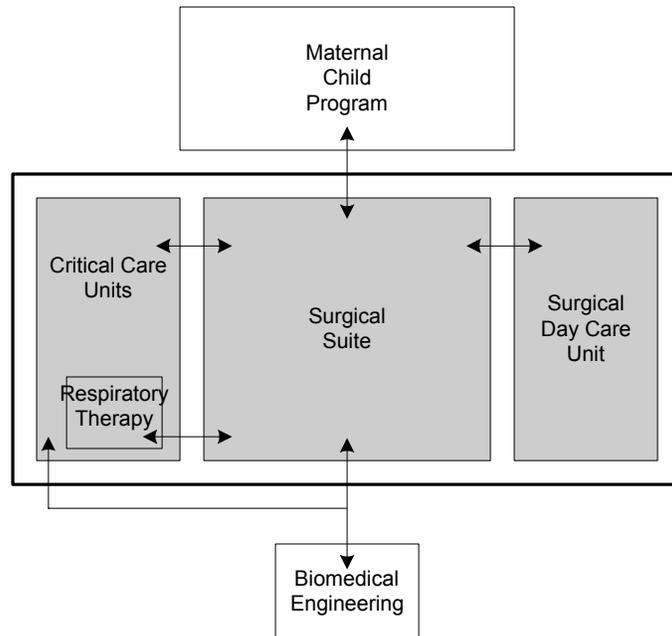
A Surgical/Critical Care Group should be developed and comprised of the following components:

High Priority Adjacency

- Surgical Suite
- Critical Care Unit (incl. Respiratory Therapy)
- Surgical Day Care
- Spiritual Care Services

Lower Priority Adjacency

- Maternal Child Program
- Biomedical Engineering



FVHC Perinatal Services Group

Perinatal services should be centralized as much as possible to provide appropriate progressive patient care, ensure implementation of a family-centred care approach, promote efficient use of resources and provide flexibility for future growth.

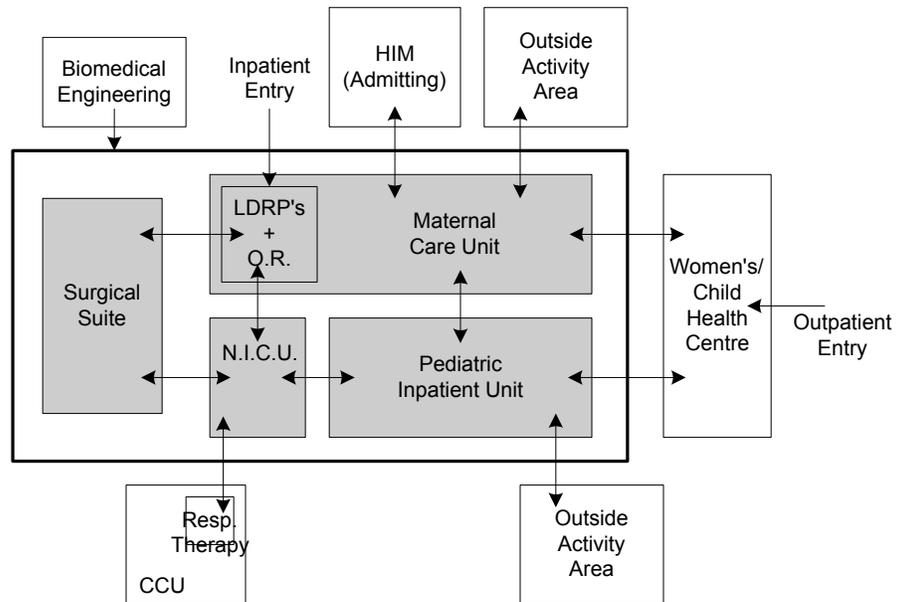
A Perinatal Services Group should be developed and comprised of the following components:

High Priority Adjacency

- Maternal Child Program
- Surgical Suite

Lower Priority Adjacency

- Women's/Child Health Centre
- Critical Care Units (Respiratory Therapy)
- Health Information Management (Admitting)
- Biomedical Engineering



FVHC Public Facilities Group

Public facilities should be centralized as much as possible to ensure orientation of patients, especially first-time visitors, and to promote a clear focus of public activity and an image of public accessibility.

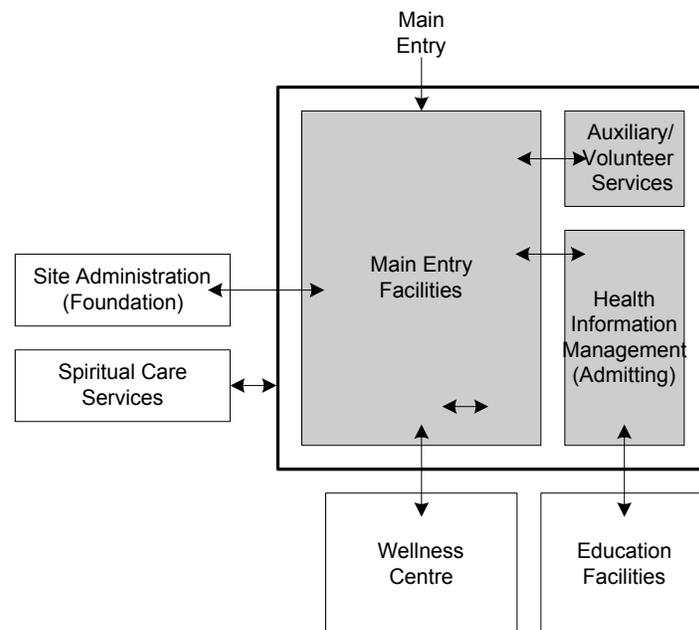
A Public Facilities Group should be developed and comprised of the following components:

High Priority Adjacency

- Main Entry Facilities
- Health Information Management (Admitting)
- Auxiliary/Volunteer Services

Lower Priority Adjacency

- Spiritual Care Services
- Wellness Centre
- Site Administration (Foundation)
- Education Facilities



FVHC Mental Health/Psychiatric Care Group

The Mental Health/Psychiatric Program group should be located on-grade in order to allow for opportunities of shared support space, shared exterior activity space, and shared direct entry.

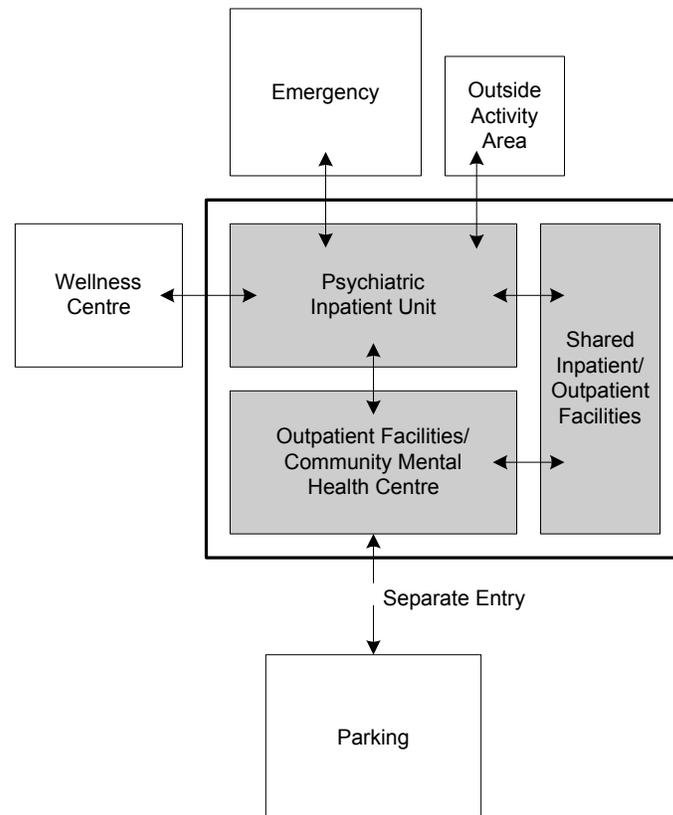
A Mental Health/Psychiatric Program group should be developed and should be comprised of the following:

High Priority Adjacency

- Mental Health/Psychiatric Program
- Exterior Parking and Grade Access

Lower Priority Adjacency

- Emergency
- Wellness Centre



Cancer Services/FVHC Group

Cancer services should be centralized as much as possible to provide appropriate progressive patient care, ensure implementation of a family-centred care approach, promote efficient use of resources and provide flexibility for future growth.

Adjacency to selected areas in the FVHC is also essential.

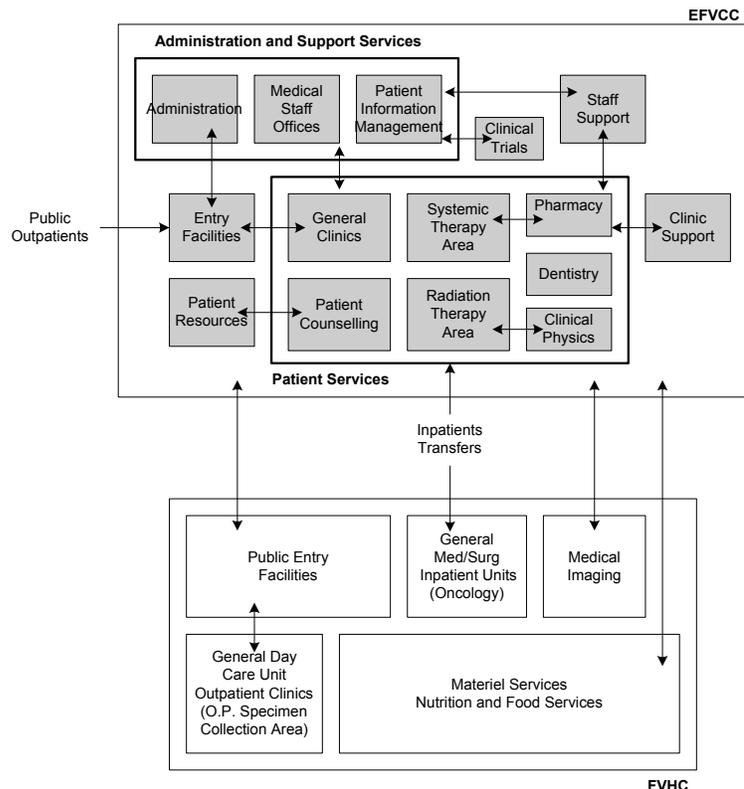
A Cancer Services/FVHC Group should be developed and comprised of the following components:

High Priority Adjacency

- Medical Imaging
- General Medical/Surgical Inpatient Units (Oncology area)
- General Day Care Unit
- Outpatient Clinics (O.P. Specimen Collection)
- Palliative Care Unit
- Public Entry Facilities

Lower Priority Adjacency

- Materiel Services
- Nutrition and Food Services
- Spiritual Care Services
- Emergency



COMPONENT PLANNING CRITERIA

COMPONENT PLANNING CRITERIA

INTRODUCTION

The basic "building blocks" which will be used to physically assemble each hospital project into a cohesive whole are called **FUNCTIONAL COMPONENTS**. A functional component can be defined as a grouping of activities, and assigned spaces, which are related by their common mission to satisfy a specific function or operation within a hospital. A functional component may or may not be synonymous with a department since the term "department" refers to an administrative organizational structure, not to a functional planning structure. Therefore, a department may consist of one or more functional components.

The functional components are organized to reflect a number of groupings reflecting the type of facility, which will likely be required to house them, as follows:

Fraser Valley Health Centre

- A High/Medium Serviced Facilities (Post Disaster)
- B Low Serviced/Office/Retail Facilities (Post Disaster)
- C Low Serviced/Office/Retail Facilities (Non-Post Disaster)
- D Industrial/Shop Facilities (Post Disaster)
- E Industrial/Shop Facilities (Non-Post Disaster)
- F Regional/Other Facilities (Non-Post Disaster)

Eastern Fraser Valley Cancer Centre

- G High/Medium Serviced Facilities (Non-Post Disaster)
- H Low Serviced Facilities (Non-Post Disaster)

High/Medium Serviced Facilities generally refers to components requiring a high to medium level of engineering servicing (such as medical gases, enhanced ventilation and pressurization, heavy electrical servicing, etc.), housing high-tech in-contract medical equipment and requiring a high to medium level of architectural detailing and finishes.

Low Serviced Facilities generally refers to components requiring a low level of engineering services normally found in commercial office buildings or community-based medical office facilities housing little in-contract medical equipment and requiring normal (commercial) levels of architectural detailing and finishes. They typically require flexible, open space planning with relatively easily moveable partitions, good elevator and, in many cases, good public access as there is usually considerable people traffic around them.

Industrial/Shop Facilities generally refers to components that can be housed in warehouse-type facilities requiring large open areas, higher floor-to-ceiling heights, low levels of engineering services, housing some in-contract, non-medical equipment and requiring a minimal level of architectural detailing and finishes. These facilities typically require good access to loading docks, exterior delivery/service vehicle routes and, sometimes, to outside 'service yard' areas.

Regional/Other Facilities refers to components that are either services supporting the entire region, or that are site-specific that could be developed on-site, but possibly through alternative financial arrangements (e.g., P3).

Functional components for each Centre are presented on the following pages and each includes information under the following headings:

Scope Description provides brief information on what functions a component includes (or excludes) and the major factors determining its size. It is not intended that this description includes a listing of all individual room requirements, but rather that it identifies only those specific factors that are required to estimate preliminary space requirements.

Estimate Space Need documents the gross square meters programmed to accommodate the anticipated functions and activities of the component. These grossly calculated areas are subject to refinement through subsequent detailed facility programming review. The area in (parentheses) below the estimated area is that that was reflected in the 1994 Preliminary Design submission.

Location Priorities documents the priorities for physical relationship between the subject component and other components. These priorities are generally limited to five in number as this is considered the maximum number of relationships that an architect can consider at one time when viewing physical alternatives in three dimensions.

A High/Medium Serviced Facilities (Post Disaster)

- A1 General Medical/Surgical Inpatient Units
- A2 Maternal Child Program
- A3 Mental Health/Psychiatry Program
- A4 Palliative Care Unit
- A5 ICU/CCU/SSDU
- A6 Emergency
- A7 Surgical Suite
- A8 Medical Imaging
- A9 Laboratory Medicine
- A10 Morgue/Autopsy
- A11 Biomedical Engineering

B Low Serviced Facilities (Post Disaster)

- B1 Surgical Day Care
- B2 General Day Care
- B3 Cardiopulmonary/Neurodiagnostics Area
- B4 Pharmacy
- B5 Health Information Management
- B6 Volunteers/Auxiliary Services
- B7 Spiritual Care Services
- B8 Main Entry Facilities

C Low Serviced Facilities (Non-Post Disaster)

- C1 Wellness Centre (incl. Diabetes Education)
- C2 Ambulatory Care Centre
- C3 Pre-Admission Clinic
- C4 Rehabilitation Services
- C5 Site Administration
- C6 Education Facilities
- C7 Renal Dialysis Unit

D Industrial/Shop Facilities (Post Disaster)

- D1 Nutrition and Food Services
- D2 Materiel Services
- D3 Ambulance Station

E Industrial/Shop Facilities (Non-Post Disaster)

- E1 Plant Services
- E2 Linen/Housekeeping Services

F Regional/Other Facilities (Non-Post Disaster)

- F1 Regional Administration
- F2 Regional Materiel Services (Warehouse)
- F3 Child Day Care Facility

FVHC

2 Master Program

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**FRASER VALLEY HEALTH
 CENTRE COMPONENT
 PROGRAMS**

The following tables present the Master Program for the functional components to be incorporated into the new Fraser Valley Health Centre.

A HIGH/MEDIUM SERVICED FACILITIES (POST DISASTER)

Component	Scope Description	Estimated Space Need CGSM	Location Priorities
A1 General Medical/ Surgical Inpatient Units	<ul style="list-style-type: none"> 168 beds serving medical, surgical, oncology and telemetry patients with 42 private rooms and 63 semi-private rooms planned in 4-32 bed units and 1-40 bed unit with care sub-units of 8 beds with some to support specific programs such as oncology, rehabilitation, geriatric assessment, etc. and shared support areas for groupings of 80-90 beds Including 3 offices for social workers, 2 offices for dietitians 		<ol style="list-style-type: none"> Surgical Suite Critical Care Units Diagnostic and Treatment Services Support Services
	Total:	5 735 (7 480.4)	<p><i>Note: The total area to be increased by 400 CGSM to accommodate the 6-bed Surgical Step-Down Unit transferred from A5.</i></p>
A2 Maternal Child Program	<p><u>Pediatric Inpatient Unit</u></p> <ul style="list-style-type: none"> 20 beds organized as 8 singles and 6 doubles all rooms with parent sleep-in accommodation 4 singles to provide isolation 1 double to be monitored 	885 (875.4)	<ol style="list-style-type: none"> Outside Activity Area Maternal Care Unit Neonatal ICU
	<p><u>Maternal Care Unit</u></p> <ul style="list-style-type: none"> 2,200 future annual deliveries (2015) 14 inpatient beds for ante/postpartum and 18 LDRP's configured as private rooms, each room including ensuite toilet and shower/Jacuzzi tub, family accommodation and equipment storage 1 operating/delivery room for high risk and C-section deliveries, plus a recovery area Includes a triage/pre-admission area 	2 738 (2 245.6)	<ol style="list-style-type: none"> Surgical Suite Neonatal ICU 24-Hour Entry Outside Activity Area

2 Master Program

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
A4 Palliative Care Unit	<ul style="list-style-type: none"> 10-bed acute inpatient unit with 8 private, 1 semi-private beds <p style="text-align: right;">Total:</p>	600 (929.6)	<ol style="list-style-type: none"> Outside Garden Area Main Entry Facilities Spiritual Services View of Mt. Baker
A5 Critical Care Units	<ul style="list-style-type: none"> 8 intensive care beds, 10 coronary care beds and 6 surgical step-down beds, all in single closed cubicles, each sub-unit with care station and immediate support areas Shared support area including: <ul style="list-style-type: none"> Respiratory Therapy area supporting 33,600 IP treatments and blood gas tests Biomedical Engineering workroom Treatment/procedure room Equipment storage Visitor support area <p style="text-align: right;">Total:</p>	1 600 (846.1)	<ol style="list-style-type: none"> Med/Surg Inpatient Unit (Telemetry) Surgical Suite Emergency Medical Imaging <p><i>Note: This area to be reduced by 400 CGSM for the 6-bed SSDU which is being transferred to A1.</i></p>
A6 Emergency	<ul style="list-style-type: none"> 60,000 annual visits assuming 10% emergent, 40% urgent, 50% non-urgent/fast track Total of 36 patient positions incl. 2 peds, 2 psych, 2 trauma, 14 acute, 12 fast-track, 6 clinical decision Area for ambulance and paramedic support teams Security/police workstations Includes 1 office for social worker Includes special exam rooms for gyne, eye, ear <p style="text-align: right;">Total:</p>	1 475 (1 284.1)	<ol style="list-style-type: none"> Ambulance Entrance Medical Imaging Outpatient Clinics (Cast Room) Women's/Child Health Centre (Sexual Assault Room) Critical Care Units
A7 Surgical Suite	<ul style="list-style-type: none"> Future workload capacity of 14,000 cases, 9,100 OP and 4,900 IP, incl. up to 400 pacemaker implants 6 general, 1 cystoscopy and 2 special operating rooms 		<ol style="list-style-type: none"> Surgical Day Care ICU/CCU/SSDU Inpatient Units (Surgical) Emergency

2 Master Program

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
	<ul style="list-style-type: none"> • PACU with 18 positions, 1 for isolation • 3 OR booking staff <p style="text-align: right;">Total:</p>	<p style="text-align: center;">1 965 (1 922.8)</p>	
<p>A8 Medical Imaging (incl. Nuclear Medicine)</p>	<p>Diagnostic Imaging</p> <ul style="list-style-type: none"> • A total of 80,000-90,000 exams per year including: <ul style="list-style-type: none"> – 47,000 Radiography exams - 4 rms – 7,000 Fluoroscopy exams- 2 rms – 9,000 CT exams - 2 room – 11,600 Ultrasound exams – 4 rms – 3,400 Echocardiography exams – 2 rooms – 500 Specials (angiography) -1 rm – 3,000 MRI tests – 1 MRI suite (fixed unit) – 9,000 Nuclear Med. Exams - 4 rms • Assumes digital imaging and PACs • Excludes space for portable equipment used in, but not limited to, 1 ICU/CCU, 1 General Day Care, 1 Emergency and 1 Surgical Suite • 7 years active film storage (to be phased out in longer term future) • Post-procedure recovery area w/6 stretcher positions & nurse station <p style="text-align: right;">Total:</p>	<p style="text-align: center;">2 200 (1 801.5)</p>	<ol style="list-style-type: none"> 1. Emergency 2. Main Outpatient Entry 3. Ambulatory Care (General Day Care Unit) 4. ICU/CCU 5. Inpatient Units <p><i>Note: The post-procedure recovery area to be transferred to B2 with no overall space reduction anticipated.</i></p>
<p>A9 Laboratory Medicine</p>	<p>Clinical Laboratory</p> <ul style="list-style-type: none"> • Future annual units of 5.5 million (including approximately 337,000 units for Cancer Centre patients) • Core laboratory for accessioning/testing/ specimen preparation area, data processing and laboratory routine procedures laboratories <p>Includes:</p> <ul style="list-style-type: none"> • Clinical Pathology <ul style="list-style-type: none"> – Chemistry – Hematology 		<ol style="list-style-type: none"> 1. Emergency 2. Critical Care Units 3. Outpatient Clinics (Specimen Collection Centre) 4. Surgical Suite (Frozen Section Lab) 5. Inpatient Units

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
	<ul style="list-style-type: none"> - Blood Bank - Immunology • Anatomical Pathology <ul style="list-style-type: none"> - Surgical Pathology - Cytology - Histology • Excludes Morgue & Autopsy area (see below), Microbiology (see CGH) and Specimen Collection Centre in Outpatient Clinics <p style="text-align: right;">Total:</p>	<p>1 500 (1 425)</p>	<p><i>Note: This area reduced by 250 m² to reflect a change in role with all Microbiology to be consolidated at CGH.</i></p>
A10 Morgue/Autopsy	<p>Morgue & Autopsy</p> <ul style="list-style-type: none"> • 525 annual deaths with 3-5% autopsy rate for 240 annual autopsies • Autopsy room with 2 positions and cold storage/holding room, 16 bodies • Specimen preparation area • Support area including family viewing room, staff change and shower area <p style="text-align: right;">Total:</p>	<p>190 (216.2)</p>	<ol style="list-style-type: none"> 1. Hearse Access Area 2. Laboratory
A11 Biomedical Engineering	<ul style="list-style-type: none"> • Supplies storage • Shops including precision mechanical/instrument, general biomedical, mechanical • Workbench and rack space to accommodate 7 technicians and engineers • Offices for administrative staff and chief technologists / engineers • Excludes satellite repair and maintenance facilities in Renal Dialysis Unit • General/shared facilities incl. education/demonstration room (8 to 10 seats) <p style="text-align: right;">Total:</p>	<p>194 (101.0)</p>	<ol style="list-style-type: none"> 1. Critical Care Units 2. Maternal Child Program (NICU) 3. Surgical Suite 4. Renal Dialysis Unit

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B LOW SERVICED FACILITIES (POST DISASTER)

Component	Scope Description	Estimated Space Need CGSM	Location Priorities
B1 Surgical Day Care/Same Day Admit	<ul style="list-style-type: none"> • 9,100 SDC cases per year • Day surgery prep/recovery area w/ 24-26 stretcher beds/recliner chairs • 16-20 chairs/recliners for Same Day Admit/final stage SDC recovery <p style="text-align: right;">Total:</p>	760 (432.8)	<ol style="list-style-type: none"> 1. Surgical Suite 2. OP Entry 3. Medical Imaging
B2 General Day Care Unit	<ul style="list-style-type: none"> • Estimated total workload and procedure rooms as follows: <ul style="list-style-type: none"> – 2,400 minor surgical/medical procedures – 1,035 colonoscopies – 200 bronchoscopies, – 1,500 G.I. endoscopies – 100 flexible sigmoidoscopies – 3,000 cystoscopies – 300 blood transfusion visits – 400 anaesthetic clinic visits for pain and symptom management – 3,000 IV therapy procedures requiring: <ul style="list-style-type: none"> – 2 minor procedure rooms – 3 endoscopy rooms – 1 bronchoscopy room – 1 cystoscopy room – 1 eye procedure room – 10 stretchers, plus 6 recliners • Excludes recovery of 1,300 imaging patients (see Medical Imaging) <p style="text-align: right;">Total:</p>	800 (715.6)	<ol style="list-style-type: none"> 1. Main O.P. Entry 2. Medical Imaging 3. Laboratory <p><i>Note: Will include post-procedure recovery from Medical Imaging with no anticipated overall space reduction.</i></p>

2 Master Program

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
<p>B3 Cardiopulmonary/ Neurodiagnostic Services</p>	<ul style="list-style-type: none"> • Estimated workload and procedure rooms as follows: <p><u>Cardiology Diagnostics:</u></p> <ul style="list-style-type: none"> - 22,800 ECG exams - 600 holter monitor exams - 300 pacemaker clinic visits - 3,400 stress tests <p><u>Pulmonary Diagnostics:</u></p> <ul style="list-style-type: none"> - 6,000 PF assessments - 200 stress tests <p><u>Neurology Diagnostics:</u></p> <ul style="list-style-type: none"> - 1,000 EEG exams - 300 Evoked Response tests - 200 EMG tests <p><u>Vascular Diagnostics:</u></p> <ul style="list-style-type: none"> - 2,200 stress tests <p>requiring:</p> <ul style="list-style-type: none"> - 2 ECG rooms - 1 holter monitoring room - 1, 2-position stress testing room, plus 1, 1-position room - 1 pulmonary testing room - 1 evoked potential room - 1 EEG room - 1 EMG room <p style="text-align: right;">Total:</p>	<p style="text-align: center;">493 (357.4)</p>	<ol style="list-style-type: none"> 1. Main Entry 2. Pre-Admission Clinic 3. Outpatient Clinics 4. Emergency
<p>B4 Pharmacy</p>	<ul style="list-style-type: none"> • 2.8 million unit doses/year • Unit dose distribution for all acute and long term care medications • Assumes regional sterile manufacturing located at FVHC site, incl. a total of 120,000 IV preps • Administration / clinical pharmacy / teaching area including offices, conference/drug information library, counselling and research offices • Includes 5 regional admin. offices • Main pharmacy storage located in this component • Excludes service to BCCA ambulatory patients 		<ol style="list-style-type: none"> 1. Materiel Services (Receiving/Shipping) 2. Inpatient Units 3. Outpatient Areas

2 Master Program

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
	<ul style="list-style-type: none"> Excludes clinical offices in: <ul style="list-style-type: none"> ICU/CCU Inpatient Units EFVCC <p style="text-align: right;">Total:</p>	<p>650 (508.4)</p>	
B5 Health Information Management	<p><u>Admitting/Discharge</u></p> <ul style="list-style-type: none"> 2 offices and 3 admit cubicles <p><u>Health Information Systems</u></p> <ul style="list-style-type: none"> Central computer/server room (to be located with PBX, telephone equipment room) Administrative area with 6 offices/workstations for senior staff, meeting room Support areas for equipment staging, storage and testing/ repair Training laboratory with 20 stations Excludes 23 offices located in Regional Administration Excludes switchboard/regional call centre and help desk located in Regional Administration <p><u>Health Records</u></p> <ul style="list-style-type: none"> 6 years active health records storage (to be phased out in longer term future) 24 workstations for technical/clerical/transcription staff Assumes 10 transcription workstations off-site <p style="text-align: right;">Total:</p>	<p>90 (204.2)</p> <p>318 (259.0)</p> <p>430 (433.9)</p> <p>838 (897.1)</p>	<ol style="list-style-type: none"> Main Entrance Emergency Outpatient Clinic Inpatient Units
B6 Volunteers/ Auxiliary Services	<ul style="list-style-type: none"> 1 volunteer coordinator Includes workroom/coat room for 20-25 persons Excludes gift shop (see Main Entry) <p style="text-align: right;">Total:</p>	<p>102 (190.2)</p>	<ol style="list-style-type: none"> Main Entry Facilities

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
B7 Spiritual Care Services	<ul style="list-style-type: none"> • Office for the Coordinator • Visiting clergy and volunteer sign-in/workroom • Conference/multipurpose room used primarily for chaplaincy training • Spiritual multipurpose room with seating for 15 <p style="text-align: right;">Total:</p>	<p style="text-align: center;">90 (90)</p>	<ol style="list-style-type: none"> 1. ICU/CCU 2. Inpatient Units 3. Emergency 4. Main Entrance
B8 Main Entry Facilities	<ul style="list-style-type: none"> • Waiting/display area w/25 seats • Information kiosk (for volunteers) • Reception/cashier counter and vault (for HIM) • Offices for the Hospital Foundation (1) • Café with servery, cashier and seating for 50 • Other undesignated retail functions (e.g., coffee wagon service, book service, dry cleaning, ATM machine, vending machine, lottery booth, hair salon) • Red Cross loan area • Gift shop <p style="text-align: right;">Total:</p>	<p style="text-align: center;">400 (0)</p>	<ol style="list-style-type: none"> 1. Main Entrance 2. Elevators 3. HIM (Admitting) 4. Pre-Admission Clinic 5. Outpatient Clinics

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C LOW SERVICED FACILITIES (NON-POST DISASTER)

Component	Scope Description	Estimated Space Need CGSM	Location Priorities
<p>C1 Wellness Centre</p>	<ul style="list-style-type: none"> • A multidisciplinary, integrated, care centre promoting wellness, disease prevention, and risk reduction, including diabetes education, stroke prevention, cardiac rehab, employee wellness through fitness, etc., plus various EFVCC programs, including complementary therapies, hereditary program, community-based epidemiology, education program on prevention, etc., and a Cultural Centre <p style="text-align: right;">Total:</p>	<p style="text-align: center;">1 207 (168.2)</p>	<ol style="list-style-type: none"> 1. Parking 2. EFVCC <p><i>Note: This area reduced by 607 CGSM and is to be combined with C2 Ambulatory Care Centre as a consolidated ambulatory care centre.</i></p>
<p>C2 Ambulatory Care Centre</p>	<ul style="list-style-type: none"> • Overall estimated workload of approximately 20,000 annual visits • Ambulatory Care administration including main reception, entry area and registration, general patient waiting area, offices for Director, Manager and other allied health staff, multi-purpose room • Outpatient Specimen Collection Centre • Treatment/consultation, office/workroom space incl. 8 shared exam/interview rooms for clinics & services in a "storefront" venue supporting: <ul style="list-style-type: none"> – General Clinics (all subspecialities) – Cast Clinic – HIV/Aids Clinic – Enterostomal Therapy – Dietetic counselling <p style="text-align: right;">Total:</p>	<p style="text-align: center;">510 (833.3)</p>	<ol style="list-style-type: none"> 1. Main Outpatient Entry 2. Medical Imaging 3. Laboratory <p><i>Note: This area to be increased by 775 CGSM for Women's/Child Health Centre and 600 CGSM for Wellness Centre as a consolidated ambulatory care centre.</i></p>

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
C3 Pre-Admission Clinic	<ul style="list-style-type: none"> Up to 9,800 visits annually <p style="text-align: right;">Total:</p>	348 (115)	<ol style="list-style-type: none"> Medical Imaging Cardiopulmonary/ Neurodiagnostics Pharmacy Laboratory <p><i>Note: This area to be reduced by 48 CGSM to reflect a slight reduction in overall workload.</i></p>
C4 Rehabilitation Services	<ul style="list-style-type: none"> Assumes a workload of 32,000 PT/OT attendances, 22,000 IP attendances and 10,000 OP attendances, _?_ SLP attendances Assumes most IP work provided centrally Includes treatment cubicles (8) and gym Incl. hubbard and extremity tanks Incl. ADL kitchen, bathroom and splinting area <p style="text-align: right;">Total:</p>	400 (572.3)	<ol style="list-style-type: none"> General Medical/ Surgical Inpatient Units Main Outpatient Entry
C5 Site Administration	<ul style="list-style-type: none"> Senior staff (22 offices), support staff and reception Shared support areas including board room, meeting/conference room & storage Physician facilities Occupational health offices, exam rooms/ training room <p style="text-align: right;">Total:</p>	570 (1 969.6)	<ol style="list-style-type: none"> Main Pedestrian Corridor Main Lobby and Retail Education Resources
C6 Education Facilities	<ul style="list-style-type: none"> Instruction space including 1 @ 150 seat classroom, subdivisable into 3 rooms Sound/projection/media room Foyer for 75 people Health Sciences Library <p style="text-align: right;">Total:</p>	470 (0)	<ol style="list-style-type: none"> Wellness Centre Nutrition & Food Services (Cafeteria) Main Lobby and Retail Main Traffic Corridor

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
C7 Renal Dialysis Unit	<ul style="list-style-type: none"> 90 patients requiring 15 treatment stations 		<ol style="list-style-type: none"> Outpatient Entry Other Ambulatory Areas Materiel Services (Stores)
	Total:	680 (0)	

D INDUSTRIAL/SHOP FACILITIES (POST DISASTER)

Component	Scope Description	Estimated Space Need CGSM	Location Priorities
D1 Nutrition and Food Services	<ul style="list-style-type: none"> Total 182,000 meal days Cook-serve production kitchen sized to also accommodate food preparation and distribution for off-site ECUs (55,000 meal days) and the on-site EFVCC (7,900 meal days) Centralized dishwashing Cafeteria and private dining room Nutrition Services supervisory staff and dietician offices Assumed architects Preliminary Design Area 		<ol style="list-style-type: none"> Materiel Services Inpatient Units Central Education
	Total:	2 127 (2 127.3)	
D2 Materiel Services	<p><u>Receiving & Stores</u></p> <ul style="list-style-type: none"> Bulk receiving including loading dock and breakdown area, garbage handling and recycle area Stores area including data entry, cart staging area, safety/disaster stock, daily food supplies, active equipment storage, flammable storage Mail services, porter dispatch Excludes bulk storage and Administration/Purchasing function located at off-site warehouse 	550 (783.4)	<ol style="list-style-type: none"> Nutrition & Food Services Pharmacy Inpatient Units

2 Master Program

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
	<p>Central Processing Department</p> <ul style="list-style-type: none"> • Decontamination area including cart wash area and soiled linen holding • Packaging and assembly area • Sterilization area including sterile cart marshalling area • Sterile stores and case cart marshalling area • Staff offices and locker rooms • Carousels • Case cart staging (O.R. and maternity) • Excludes linen packaging (laundry) <p style="text-align: right;">Total:</p>	<p>790 (789.2)</p> <p>1 340 (1 572.6)</p>	<ol style="list-style-type: none"> 1. Surgical Suite (direct internal to sterile core) 2. Maternal Child Program (direct internal to birthing area)
D3 Ambulance Station	<ul style="list-style-type: none"> • Includes 5 ambulance bays and 3 bedrooms as per MOH guidelines <p style="text-align: right;">Total:</p>	<p>460 (0)</p>	<ol style="list-style-type: none"> 1. Main Street Access

E INDUSTRIAL/SHOP FACILITIES (NON-POST DISASTER)

Component	Scope Description	Estimated Space Need CGSM	Location Priorities
E1 Plant Services	<ul style="list-style-type: none"> • Future building gross area of 54,000 to 55,000 BGSM (incl. EFVCC) • Shop/work areas including carpentry, painting, electrical, plumbing, maintenance engineering, lathe/machinist area, HVAC area • Support area including CADD files, catalogue room • Grounds maintenance storage and shop <p style="text-align: right;">Total:</p>	<p>440 (388.6)</p>	<ol style="list-style-type: none"> 1. Material Management (Receiving) 2. Main Service Corridor and Goods Elevator 3. Medical Imaging (for Biomedical Engineering)

2 Master Program

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
E2 Linen/ Housekeeping Services	<p><u>Laundry</u></p> <ul style="list-style-type: none"> Off-site laundry to support acute beds generating approximately 1.3 million kgs of laundry annually On-site linen service to receive, hold and partially assemble exchange carts for distribution and hold soiled linen for return <p><u>Housekeeping</u></p> <ul style="list-style-type: none"> Future capacity of 300 on-site beds Future building area of 54,000 to 55,000 BGSM (incl. EVFCC) Bulk storage of equipment, carts and supplies Excludes satellite Housekeeping rooms located throughout facility <p style="text-align: right;">Total:</p>	455 (440.5)	<ol style="list-style-type: none"> Main Service Corridor Material Management Centre Staff Facilities

F REGIONAL/OTHER FACILITIES (NON-POST DISASTER)

Component	Scope Description	Estimated Space Need CGSM	Location Priorities
F1 Regional Administration	<p><u>Switchboard/Call Centre</u></p> <ul style="list-style-type: none"> Regional switchboard/call centre with 10 workstations Systems monitors including fire alarms, medical gases, doctors registry, nurse call <p><u>Administration Offices</u></p> <ul style="list-style-type: none"> Offices for service staff (total of 109); finance (12 offices, plus 24 clerks), executive admin (9 offices, plus 6 secretaries), human resources (20 offices, plus 15 clerk workstations), H.I.M. (23 offices/ workstations) Regional files storage <p style="text-align: right;">Total:</p>	1 866 (0) (0)	<ol style="list-style-type: none">

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
F2 Regional Materiel Services (Warehouse)	<ul style="list-style-type: none"> • Warehouse – 1 500 nsm, incl. equipment storage • Assume 6 metre high ceiling with carousel system • 3 docks w/levellers, compactor • Materiel Services reception and offices/workstations (7) • Purchasing offices/workstations (10) • File room/catalogue library • Meeting rooms (2) <p style="text-align: right;">Total:</p>	<p style="text-align: center;">3 500 (0)</p>	<ol style="list-style-type: none"> 1. Regional Administration (Finance) 2. 3.
F3 Child Day Care Facility	<ul style="list-style-type: none"> • Assume provision for a total of 49 children consisting of 25 pre-school, 12 toddlers and 12 infants • Need for a minimum of 318 m² of secured outdoor space <p style="text-align: right;">Total:</p>	<p style="text-align: center;">200 (0)</p>	<ol style="list-style-type: none"> 1. Parking & Separate Entry 2. Outdoor Play Area 3.

G High/Medium Serviced Facilities (Non-Post Disaster)

- G1 Radiation Therapy Area
- G2 Clinical Physics
- G3 Dentistry

H Low Serviced Facilities (Non-Post Disaster)

- H1 Entry Facilities
- H2 Patient Resources
- H3 Patient Counselling
- H4 General Clinic Area
- H5 Systemic Therapy Area
- H6 Pharmacy
- H7 Clinical Trials Area
- H8 Medical Staff Offices
- H9 Patient Information Management
- H10 Administration
- H11 Staff Support
- H12 Clinic Support

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**EASTERN FRASER VALLEY
 CANCER CENTRE COMPONENT
 PROGRAMS**

The following tables present the Master Program for the functional components to be incorporated into the new Eastern Fraser Valley Cancer Centre.

G HIGH/MEDIUM SERVICED FACILITIES (NON-POST DISASTER)

Component	Scope Description	Estimated Space Need CGSM	Location Priorities
G1 Radiation Therapy Area	<ul style="list-style-type: none"> • RT courses equal 60% of Cancer cases or 60% of 15,700 equals 9420 RT courses • 9420 RT courses and 197,820 fractions for Lower Mainland Cancer Centres in 2015 • 9,000 fractions per 10 hour day • 36,000 fractions at EFVCC for 4 vaults • 180 fractions per day per vault <p>RT Examination and Consultation: includes 3 exam rooms, 2 stretcher exam rooms, and rooms for mark-up, small procedures, and treatment liaison.</p> <p>RT Treatment Activity and Support Areas: includes 4 vaults, and all support, backup cooling system, and patient change and waiting.</p> <p>RT Administration includes offices and clerical support, student areas and teleconference room</p> <p>Simulator Area includes a simulator and a simulator with CT scanner plus support areas</p> <p style="text-align: right;">Total:</p>	1,850	<ol style="list-style-type: none"> 1. Clinical Physics 2. Entry Facilities 3. Dentistry
G2 Clinical Physics	<ul style="list-style-type: none"> • New mould room patients is 35% of 9420 courses equals 3611 • Treatment planning cases equals 50% of 9420 courses equals 4410 <p>Physics/Dosimetry includes offices, treatment planning, computer lab, dosimeter workroom, electronic lab, and patient measuring.</p> <p>Mould Room includes patient change/shower, mould room and vacuum forming and casting.</p> <p style="text-align: right;">Total:</p>	660	<ol style="list-style-type: none"> 1. Radiation Therapy 2. Clinic Support

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
G3 Dentistry	<ul style="list-style-type: none"> • _____ number of exams per year • • Dentistry includes patient waiting examining chair and workroom/storage <p style="text-align: right;">Total:</p>	25	1. Radiotherapy 2. Entry Facilities

H LOW SERVICED FACILITIES (NON-POST DISASTER)

Component	Scope Description	Estimated Space Need CGSM	Location Priorities
H1 Entry Facilities	<ul style="list-style-type: none"> • 36,000 (visits) RT fractions • 6,400 visits in chemotherapy • 17,000 follow-up visits Entry Facilities includes lobby public washrooms and telephone, reception and information desk, wheelchair alcove, information kiosk, general conference room, and waiting area. <p style="text-align: right;">Total:</p>	160	1. General Clinics 2. Systemic Therapy 3. Radiotherapy
H2 Patient Resources	<ul style="list-style-type: none"> • 2,800 new patients annually Patient Resources includes volunteer drivers, information desk, workroom, break area, storage, washroom/coats, quiet room, patient support group rooms, and a resource centre <p style="text-align: right;">Total:</p>	180	1. Entry Facilities 2. Patient Counselling 3. General Clinics
H3 Patient Counselling	<ul style="list-style-type: none"> • _____ annual visits to social workers • _____ annual visits to nutrition/diet Patient Counselling includes social workers (4), clerks waiting, meeting room, nutritionists (2),		1. Entry Facilities 2. Patient Resources 3. General Clinics

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
	other counsellors (5), storage and workroom. <p style="text-align: right;">Total:</p>	200	
H4 General Clinic Area	<ul style="list-style-type: none"> • 2,800 new patient annually • 8,000 systemic follow-up visits • 8,800 RT follow-up visits General Clinic includes 2 pods of clinics with total of 16 exam rooms, 4 stretcher exam rooms, ENT room, 2 liaison, 4 patient counselling rooms, and support spaces <p style="text-align: right;">Total:</p>	700	<ol style="list-style-type: none"> 1. Entry Facilities 2. Systemic Therapy 3. Patient Counselling
H5 Systemic Therapy Area	<ul style="list-style-type: none"> • 480 new courses annually • 6,400 chemotherapy visits annually Systemic therapy includes waiting, clerks, washrooms, IV chairs (10), stretcher bays (2), and support areas <p style="text-align: right;">Total:</p>	220	<ol style="list-style-type: none"> 1. Entry Facilities 2. General Clinics 3. Medical Staff
H6 Pharmacy	<ul style="list-style-type: none"> • 6,400 chemotherapy patient visits • 18,000 prescriptions completed Pharmacy includes offices, dispensing, compounding, preparation and packaging, and IV preparation, and support areas. <p style="text-align: right;">Total:</p>	130	<ol style="list-style-type: none"> 1. Systemic Therapy 2. General Clinics
H7 Clinical Trials Office	Clinical Trials includes waiting area, coordinators (6) and drug storage areas. <p style="text-align: right;">Total:</p>	80	<ol style="list-style-type: none"> 1. General Clinics 2. Entry 3. Patient Information Management
H8 Medical Staff Offices	<ul style="list-style-type: none"> • _____ patients per medical staff Medical Staff Offices includes 28 staff		<ol style="list-style-type: none"> 1. General Clinics 2. Radiation Therapy 3. Systemic Therapy

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Component	Scope Description	Estimated Space Need CGSM	Location Priorities
	offices, multi-purpose conference room, clerical staff, and support areas Total:	540	
H9 Patient Information Management	<ul style="list-style-type: none"> • 2,800 new patient annually • 8,000 systemic follow-up visits • 8,800 RT follow-up visits Patient Information Management include manager, technical services, clerical services and support space. Total:	300	1. General Clinics 2. Clinical Trials
H10 Administration	Administration includes site clinical director, clerks, finance clerk, HR office, information systems, infection control/occup. health, quality improvement/education, process leaders, clerks, and Foundation office. Total:	180	1 Medical Staff Offices 2 Patient Information Management
H11 Staff Support	Staff Support includes locker rooms, lounge/lunch room. Total:	125	1 Medical Staff Offices 2 Patient Information Management
H12 Clinic Support	Clinic Support includes supply and equipment storage, housekeeping and communication rooms. Total:	125	1. Medical Staff Offices 2. Patient Information Management