



UNIVERSITY
of GUELPH

CHANGING LIVES
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MAY 4, 2015

MASTER PLAN

EXECUTIVE
SUMMARY

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Executive Summary:

The University of Guelph's Ontario Veterinary College (OVC) places fourth worldwide and tops in Canada in a new global ranking of veterinary schools. As a leading academic, clinical and research institution, OVC is committed to providing excellent facilities to maintain accreditation and a setting for leading edge learning, healthcare, and research. Previous Master Plans over the past 152 years have identified, based on the vision at the time, priorities and space requirements for the College. Since the 2009 Master Plan, the vision and priorities have evolved resulting in the need to update the plan to reflect current goals with a focus on taking maximum opportunity to use and repurpose existing built facilities. The Master Plan is a key planning tool that articulates the vision for OVC campus development for the future and provides guidance for decision making and design of campus facilities. The Master Plan identifies a strategy for short and long term development that can be implemented in phases in response to evolving OVC academic, clinical and research needs to maintain OVC as a leading veterinary college.

A key element of the Master Plan is inclusion of a building infrastructure Master Plan that integrates with the overall planning for the OVC facilities and the University of Guelph Campus Plan. A large component of the existing building services are at end of life. This updated Master Plan seizes the opportunity to create a long term strategy that provides a robust, flexible infrastructure capable of supporting the diverse space needs of the OVC now and in the future.

The new Master Plan will provide a realistic road map for future development as funding is secured. In the short-term, OVC is focusing on those parts of infrastructure renewal that are most critical for continued accreditation of the OVC by the Council on Education of the American and Canadian Veterinary Medical Associations. The proposed first step is updating the Companion Animal Hospital by creating surgical and anesthesia facilities within the existing footprint of the OVC Health Sciences Centre and creating new space for Enhanced Clinical Skills Learning.



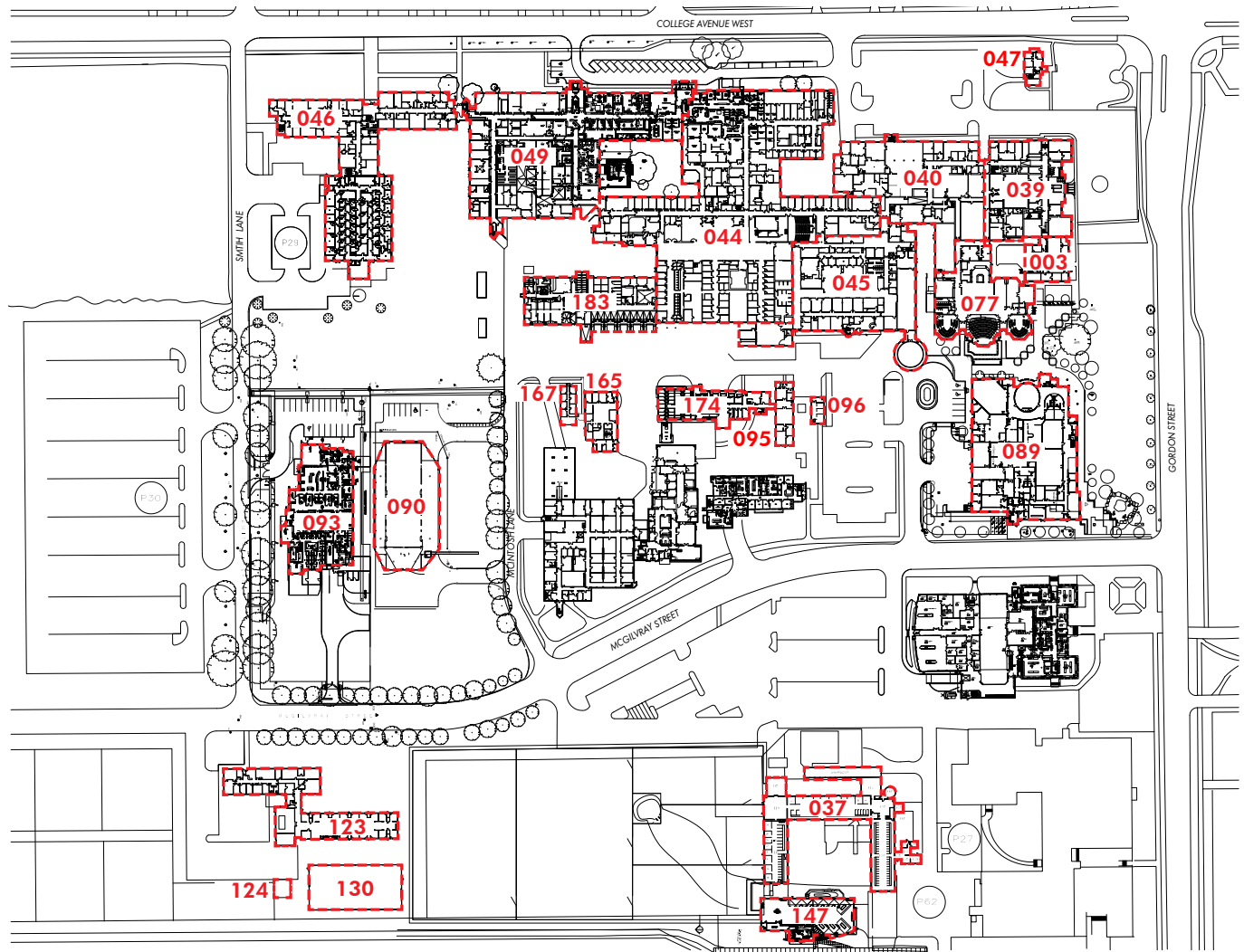


1. HISTORY

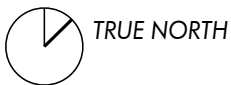
For over 150 years, the Ontario Veterinary College has been the guardian of animal, community and human health in Canada. Known until 1869 as the Upper Canada Veterinary School, the Ontario Veterinary School was the first in Canada to offer courses in veterinary medicine. It was established in 1862 by the Board of Agriculture, and although partially sponsored by this government body, it operated as a private enterprise by Prof. Andrew Smith, a graduate of Edinburgh Veterinary College. Incorporated in 1896, the college affiliated with the University of Toronto in 1897, although did not confer degrees in veterinary science until 1908. In that year Prof. Smith retired, and the Ontario Government acquired his interest in the college. Placed under the Department of Agriculture, it was moved to Guelph in 1922 and became a founding college of the University of Guelph in 1964.

The Ontario Veterinary College is the only veterinary college in the province of Ontario, and one of only five veterinary colleges across Canada. The OVC is prominently located on the University of Guelph campus on a major crossroad.

The OVC is housed in a large complex of connected facilities, which are numbered for wayfinding purposes. The map of the facilities can be found on the following page.



PROJECT NORTH



TRUE NORTH

- 003 Main Building Extension
- 037 Dairy Barn
- 039 Main Building
- 040 Department of Biomedical Science
- 044 James Archibald Building (Companion Animal Hospital)
- 045 Stewart Building (Large Animal Hospital and Population Medicine)
- 046 Former V.M.I.
- 047 McNabb House
- 049 Mona Campbell Centre for Animal Cancer
- 077 Lifetime Learning Centre
- 089 Pathobiology/Animal Health Laboratory (PAHL)
- 090 Large Animal Isolation Unit
- 093 Hills Pet Nutrition Primary Healthcare Centre
- 095 59 McGilvray Road
- 096 Flammable Liquid Storage
- 123 Equine Sports Medicine & Reproduction Centre, and Equine Guelph
- 124 Equine Manure Holding Facility
- 130 Horse Arena
- 147 Large Animal Clinical Skills
- 165 Embryo Biotechnology Group (slated for demo)
- 167 Animal Biotechnology Embryo Lab (slated for demo)
- 174 Population Medicine
- 183 Animal Holding

The Ontario Veterinary College precinct is comprised of several buildings both free standing and multiple interconnected buildings constructed since 1922 to the present day. Over the years, new buildings and renovations have occurred in response to changing needs. The current status of the existing facilities does not adequately address the OVC vision and needs for the future in several areas. The Master Plan identifies initiatives for improvements and establishes an overall concept that will provide guidance for growth and change.

2. PLANNING PROCESS

Planning began in January 2015 in a consultative process involving visioning workshops, stakeholder meetings and a public feedback opportunity with broad representation to receive input on current and anticipated needs to inform the Master Plan and a vision for the campus.

The initial phase began with meetings with the Steering Committee who introduced the College's mission, structure and general anticipated space needs as informed by current and future requirements. Concurrently, an extensive assessment of the existing facilities was assembled by the consultant team to determine the status, suitability and quality of existing space.

The second phase involved meeting with numerous stakeholders representing various facets of the OVC. A spirited visioning session focused on teaching and learning was conducted in which emerging trends and traditional approaches to teaching and learning were discussed along with space types that were considered most appropriate to support teaching and learning at OVC.

The many stakeholders providing input included companion animal surgery, anesthesia, central sterile, communications, learning technologies, companion animal medicine, material handling, laundry, large animal medicine and surgery, research, cadaver and inanimate teaching models for learning, clinical skills, and anatomy. As the information was gathered, analysis and test fit studies were developed to inform the initial draft Master Plan which was presented to the OVC community during a public feedback opportunity session. The event provided an opportunity for anyone to review the planning to date and provide comments verbally and in written form on sticky notes. The input was subsequently documented for consideration in the Master Plan. A further opportunity was made available for people unable to attend the session in person to view the presentation boards and provide comments online.



3. VISION

The consultation process across the OVC community provided extensive input on people's views on what is important for the future of the OVC and can be summarized in the following "Vision Statement" for the Master Plan:

Maintain and enhance OVC's position as a leading veterinary college for teaching/learning, clinical and research activities through a Master Plan that:

- achieves continued conformance with accreditation requirements
- transforms the existing OVC complex into a highly functional, efficient and attractive teaching/learning, clinical and research facility
- provides pride and inspiration for the OVC community and visitors
- provides a stimulating comfortable environment with access to natural light where possible

4. PROGRAM SUMMARY

Through engagement with the OVC Steering Committee, staff, users, students, and others at the University of Guelph, a functional program was developed for multiple departments/services and areas within the OVC precinct. The focus of the programming process further developed to better utilize existing areas within the primary building complex to enhance functions and improve proximities and relationships. Test fit/design plans were developed, reviewed, and revised to feed back into the functional program, which was subsequently reorganized to identify a series of distinct "Projects" that described various phased renovations (and addition) that could be funded and advanced based on defined priorities.

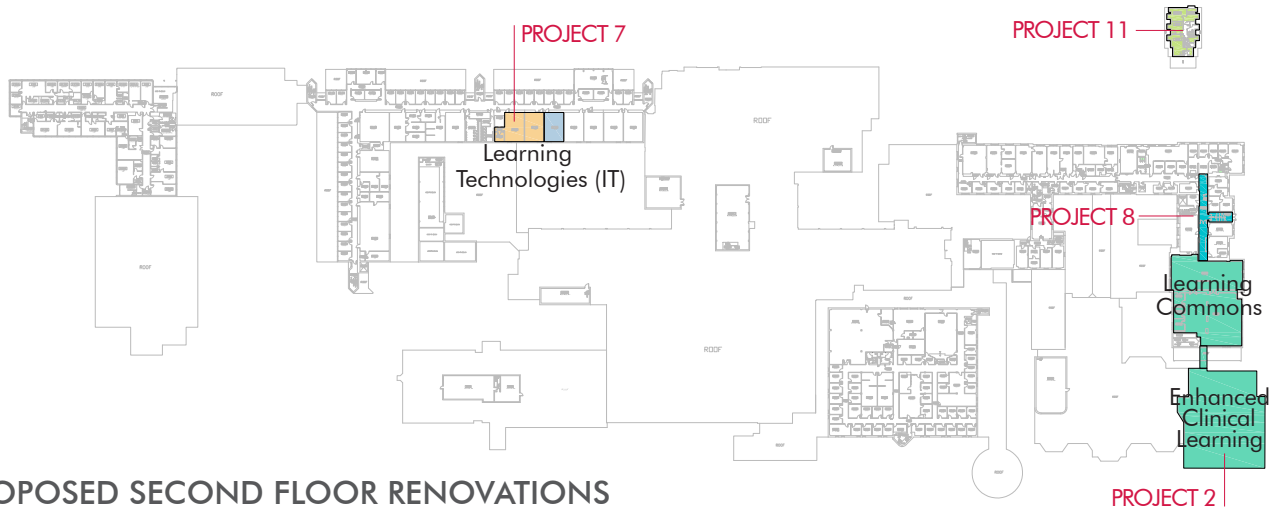


Functional Program Summary	Addition Net SF	Renovated Net SF	Total Gross Area SF
Project 1 New Surgery & Anesthesia			
Phase 1- HSC-OVC Office / Medical Records		5977	7172
Phase 2- Temporary Classroom		3356	4027
Phase 3- Ultrasound Relocation		467	560
Phase 4- Theriogenology Lab Relocation		473	710
Phase 5- Large Animal Imaging Relocation		1112	1668
Phase 6- New East-West Corridor Reno.		2690	2690
Phase 7- New Surgery & Anesthesia		10538	13735
Phase 8- New Central Sterile		2087	3130
Phase 9 & 10 Endoscopy & Surgery Recovery		1694	1867
Total	0	28394	35559
Project 2 New Space for Enhanced Clinical Learning			
Phase 1- New Enhanced Clinical Learning	11536		13843
Phase 2- Learning Commons		6100	7320
Phase 3- Small Lecture Hall Reno.		1168	1402
Phase 4- Large Lecture Hall Reno.		1960	2352
Phase 5- Link to PAHL	822		822
Phase 6 & 7- Third Floor	6173		7408
Total	18531	9228	33146
Project 3 New Treatment Rooms, Office and Rounds Rooms			
Phase 1- Treatment, Rounds/Offices		3046	3492
Phase 2- LAH Treatment Suite Relocation		878	1317
Phase 3- New Pharmacy		1872	2247
Total	0	5796	7056
Project 4 Outpatient Specialties & Rounds Rooms			
Phase 1- Outpatient & Rounds Rooms		6025	7230
Total	0	6025	7230

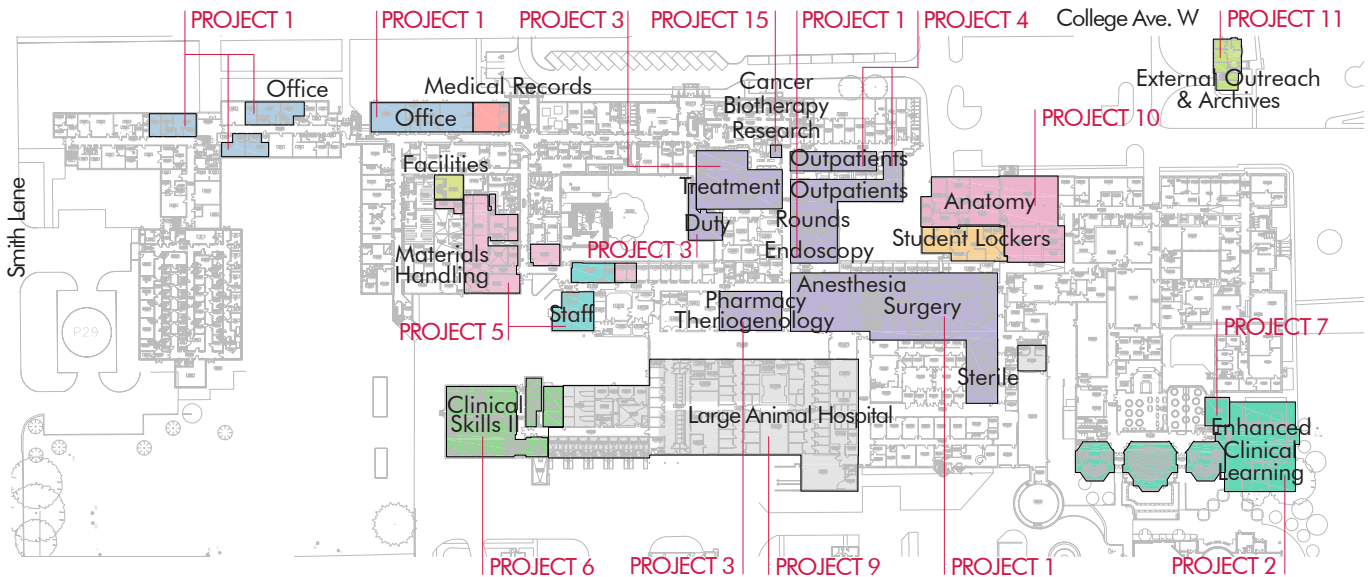
Project 5 Material Handling/ Laundry + Rounds Room			
Phase 1- Material Handling		6580	7896
Phase 2- Staff Area		2427	2912
Phase 3- Duty Space		1199	1439
Total	0	10206	12247
Project 6 Clinical Skills II Renovations			
Phase 1- Clinical Skills II		5868	8801
Total		5868	8801
Project 7 Learning Technologies & Student Lockers			
Phase 1- Learning Technologies (IT)		1303	1564
Phase 2- Conference Room		575	690
Phase 3- DVM Student Lockers		2554	3065
Phase 4- Cafeteria Storage Room		587	587
Total		5019	5905
Project 8 Main OVC Entrance Renovations			
Phase 1-5- Corridor Renovations		1739	1739
Total		1739	1739
Project 9 Large Animal Hospital			
LAH Renovations		26341	26341
Total		26341	26341
Project 10 Gross Anatomy Renovations			
Gross Anatomy & Cadaver		8077	9692
Total		8077	9692
Project 11 McNabb House Renovations			
McNabb House Renovations		2414	2897
Total		2414	2897
Project 15 Cancer Biotherapy Research			
Cancer Biotherapy Research		120	144
Total	0	120	144
Total New Build			
Total New Build	18531		
Total Renovations			
Total Renovations		109227	
Total Gross Area SF			150758
Total Gross Area Sq. M.			14005

5. KEY PRIORITIES AND PHASING

The master plan provides a road-map for achieving OVC’s short-term to medium infrastructure goals through an incremental phased strategy. Implementation will occur over a period of time as funds become available while maintaining a fully functional facility. The upgrading strategy establishes several projects that can be undertaken based on OVC priorities. Each of the projects may be implemented separately based on priorities established by the College and potential funding opportunities. By taking this approach the master plan becomes a flexible approach to options for improvements that are structured in manageable funding packages within an overall master plan, individual projects can be undertaken and while maintaining the overall vision for a practical, functional, well planned facility that optimizes efficiency and expenditure of limited resources. Areas that are not included in this short to medium-term plan are mentioned in Chapter 9 (e.g. Farm Animal Research Isolation, Biosecurity, and Centre for Public Health & Zoonoses.)

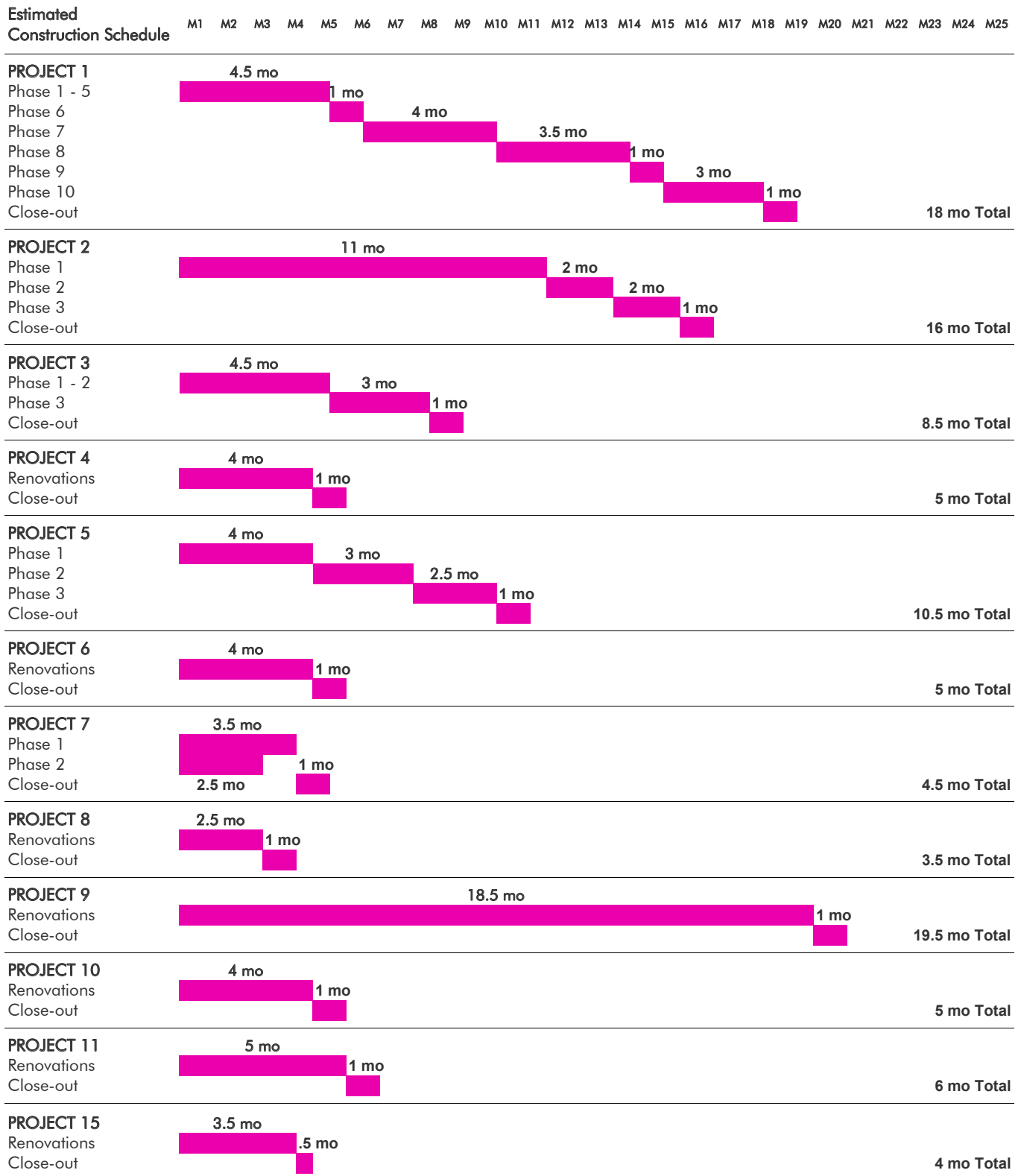


PROPOSED SECOND FLOOR RENOVATIONS



PROPOSED FIRST FLOOR RENOVATIONS

PROJECTED CONSTRUCTION SCHEDULES



6. IMMEDIATE NEED

The 2015 Master Plan acknowledges that the foremost requirement for action follows the need to maintain accreditation. Of the potential projects which can be completed to benefit OVC, the first two projects must be completed to deliver a level of veterinary education compliant with the Council on Education of the American Veterinary Medical Association (AVMA) and the Canadian Veterinary Medical Association (CVMA).

Project 1 delivers new surgery and anesthesia facilities within the existing complex, in addition to relocating user groups to accommodate the repurposed spaces. Project 2 delivers an Enhanced Clinical Skills Learning addition adjacent to the Lifetime Learning Centre; new construction is required because no appropriate space of size, location, or utility was available within the existing OVC.

Further, the two project costing tables to the right focus on the minimum construction required to achieve the primary objectives of Project One and Project Two.

The top table for Project One — new Surgery & Anesthesia deletes/revises the following:

- **Phase One:** the relocated/displaced Offices are provided via open areas in building 046 and 049; no separate/individual offices are provided.
- **Phase Two:** no temporary large instruction space is provided, instead the existing instruction periods are rescheduled to use current spaces throughout each day.
- **Phase Eight:** no new Central Sterile suite is constructed, and the combination existing/new public corridor will remain around the current Decontamination/Sterilization suite. As part of this, the proposed new Endoscopy & Recovery areas are also deleted.

These above noted revisions to the Project One scope-of-work result in a reduced cost of \$8,417,871. The project cost without the above deletions (providing all phases + separate Offices) is \$10,645,945 as per the summary of Project Costs on page 9.

The bottom table for Project Two — new space for Enhanced Clinical Learning, deletes the following:

- **Phase Two:** renovations to provide a Learning Commons in Buildings 003 and 039; existing furniture can be rearranged as required.
- **Phases Three & Four:** renovations to the three existing lecture theatres in the Lifetime Learning Centre (retain the current tiered floors).
- **Phase Five:** enclosed second storey link to the Pathobiology / Animal Health Laboratory (PAHL) building 089 (retain the current exterior access).
- **Phases Six & Seven:** a completed third storey (construct only a two-storey addition).

The above noted exclusions to Project Two result in a reduced cost of \$9,708,561 for this addition. The project cost with a completed third storey + link to the PAHL building is \$20,722,714 as per the summary of Project Costs on Page 9.

OVC Project 1 : Minimum Costs		Construction Cost	Equipment Costs	Soft Costs (25%)	Total
Project 1	New Surgery & Anesthesia				
	Phase 1- HSC-OVC Offices (Open Plan)	\$ 1,639,524	\$ 49,411	\$ 409,881	\$ 2,098,816
	Phase 3- Ultrasound Relocation	\$ 136,511	\$ 13,651	\$ 34,128	\$ 184,290
	Phase 4- Theriogenology Lab Relocation	\$ 120,454	\$ 12,045	\$ 30,114	\$ 162,613
	Phase 5- Large Animal Imaging Relocation	\$ 305,250	\$ 30,525	\$ 76,313	\$ 412,088
	Phase 6- New East-West Corridor	\$ 1,207,620	\$ -	\$ 301,905	\$ 1,509,525
	Phase 7- New Surgery & Anesthesia	\$ 2,987,532	\$ 316,125	\$ 746,883	\$ 4,050,540
Total Construction Cost		\$ 6,396,891			
Total Equipment Costs			\$ 421,758		
Total Soft Costs				\$ 1,599,223	
Total Gross Cost					\$ 8,417,871

Note: Escalation allowance not included in the above figures. Current escalation rate 3%. All costs are based on second quarter of 2015.

Phase 1 Cost Report Option B with open plan offices

Phase 2 Temporary Learning space could be dealt with via scheduling of lectures

Phase 8 New Central Sterile could be delayed; corridor remains as per phase 6 (jogged) with no new Recovery or Endoscopy rooms

OVC Project 2 : Minimum Costs		Construction Cost	Equipment Costs	Soft Costs (25%)	Total
Project 2	New Space for Enhanced Clinical Learning				
	Phase 1- Two Storey Enhanced Clinical Learning	\$ 7,191,527	\$ 719,153	\$ 1,797,882	\$ 9,708,561
Total Construction Cost		\$ 7,191,527			
Total Equipment Costs			\$ 719,153		
Total Soft Costs				\$ 1,797,882	
Total Gross Cost					\$ 9,708,561

Note: Escalation allowance not included in the above figures. Current escalation rate 3%. All costs are based on second quarter of 2015.

7. ESTIMATED TOTAL COSTS

OVC Estimated Project Costs		Construction Cost	Equipment Costs	Soft Costs (25%)	Total
Project 1	New Surgery & Anesthesia	\$ 7,885,885	\$ 788,589	\$ 1,971,471	\$ 10,645,945
Project 2	New Space for Enhanced Clinical Learning	\$ 15,961,896	\$ 1,142,026	\$ 3,618,791	\$ 20,722,714
Project 3	New Treatment, Office/Rounds Rooms	\$ 1,438,586	\$ 143,859	\$ 359,647	\$ 1,942,091
Project 4	Outpatient Specialties & Rounds Rooms	\$ 1,641,534	\$ 164,153	\$ 410,384	\$ 2,216,071
Project 5	Material Handling/Laundry & Rounds Room	\$ 2,466,849	\$ 246,685	\$ 616,712	\$ 3,330,246
Project 6	Clinical Skills II Renovations	\$ 1,941,809	\$ 194,181	\$ 485,452	\$ 2,621,442
Project 7	Learning Technologies & Student Lockers	\$ 1,076,162	\$ 105,116	\$ 269,041	\$ 1,450,319
Project 8	Main OVC Entrance Renovations	\$ 275,316	\$ -	\$ 68,829	\$ 344,145
Project 9	Large Animal Hospital	\$ 6,383,499	\$ 638,350	\$ 1,595,875	\$ 8,617,724
Project 10	Gross Anatomy Renovations	\$ 2,303,128	\$ 230,313	\$ 575,782	\$ 3,109,223
Project 11	McNabb House Renovations	\$ 822,399	\$ 82,240	\$ 205,600	\$ 1,110,239
Project 15	Cancer Biotherapy Research	\$ 26,803	\$ 2,680	\$ 6,701	\$ 36,184
Total Construction Cost		\$ 42,223,866			
Total Equipment Costs			\$ 3,738,192		
Total Soft Costs				\$ 10,184,284	
Total Gross Cost					\$ 56,146,342

Note: Escalation allowance not included in the above figures. Current escalation rate 3%. All costs are based on second quarter of 2015.



8. RECOMMENDATIONS

The 2015 Master Plan provides a comprehensive assessment of the OVC existing facilities, analysis and programmatic requirements to address accreditation issues, operational efficiency as well as academic, clinical and research needs to maintain OVC's leading position as a College of Veterinary Medicine. The outcome of extensive consultation, test fit studies and design concepts provides the basis for making decisions on phasing and scope packages to implement. Based on the 2015 Master Plan findings, the following approach is recommended:

1. When space changes are contemplated, explore the potential for alterations and renovations of existing built space before adding new construction. Significant existing space within the facility was identified as being vacant or underutilized because it is outdated and/or not functional for current needs. This provides the opportunity for economical, sustainable improvements to the OVC. The 2015 Master Plan is centered on repurpose and renovation with new construction only where proximity, circulation requirements or specific types of space dictate otherwise.
2. Confirm a phasing strategy for projects based on OVC priorities and funding availability. Based on input from the OVC Steering Committee, priorities to address accreditation include:
 - Project One New Surgery and Anesthesia via renovations
 - Project Two Enhanced Clinical Learning Area addition
3. Implement a phased building infrastructure upgrade plan to replace existing mechanical systems with "plug and play" options to reflect a new infrastructure concept with the ability for sequential connections as renovation projects are implemented. Ensure that when systems fail, they are replaced with components consistent with the new infrastructure concept.
4. At the time projects are initiated, functional program requirements must be verified through follow-up meetings with the steering committee and users to confirm spaces, space sizes, space requirements, and servicing requirements.
5. Continue the consultation process within the OVC to explore short and long term needs for teaching, clinical, and research. Refine the Master Plan as needed to reflect physical space requirements.
6. Research labs should continue to be designed as open lab environments where possible to facilitate flexibility, equipment sharing and to foster collaboration.
7. Design for teaching and learning should focus on technology-enabled flexible space that can be used for varied teaching models including student-centered group and traditional settings and hands-on skills training.