Action Requested: Consider approval of the following for the College of Veterinary Medicine – Phase 2 - Small Animal Hospital Renovation and Addition project, with the understanding that approval will constitute final Board approval and authorization to proceed with construction.

a. Acknowledge receipt of the University’s final submission of information to address the Board’s capital project evaluation criteria for the project (see Attachment A);

b. Accept the Board Office recommendation that the project meets the necessary criteria for Board consideration; and

c. Approve the schematic design and project description and budget ($45,100,000) for the project.

Executive Summary:

The College of Veterinary Medicine facilities were designed and constructed in the 1970s. The first major improvements to the College’s facilities were undertaken with construction of the Phase 1 – Teaching Hospital and Diagnostic Laboratory Renovation project which was recently completed. This phase included construction of an addition (52,000 net square feet) and renovation of existing space (4,700 net square feet) to provide improvements for the Dr. W. Eugene and Linda Lloyd Veterinary Medical Center and Veterinary Diagnostic Laboratory. This project responded to the need for modern academic facilities to ensure accreditation, the changing demands for the College’s services (equine and large animal care, new veterinary hospital technologies, and response to infectious disease risks), and the need for biosecure facilities. The Phase 1 project budget of $48,050,000 included $38,750,000 from the sale of Academic Building Revenue Bonds (authorized by the 2004 General Assembly) and $9,300,000 in private gifts.

The College of Veterinary Medicine – Phase 2 – Small Animal Hospital Renovation and Addition project of 92,254 net assignable square feet (144,796 gross square feet) includes both new and renovated areas and continues the improvements to the College of Veterinary Medicine facilities by providing state-of-the-art facilities for the Small Animal Hospital, correcting health and safety deficiencies and cross contamination concerns, and improving patient flow, functionality, and facility security. Undertaking project construction in multiple phases will allow the Medical Center to continue operations and to utilize vacated areas moved to the Phase I addition.
Details of Project:
College of Veterinary Medicine – Phase 2 Small Animal Hospital Renovation and Addition

Project Summary
Initial Review and Consideration of Capital Project Evaluation Criteria
Sept. 2008 Approved
Permission to Proceed
Architectural Selection – InVision Architecture, Des Moines/Waterloo, IA
Sept. 2008 Approved
CM Selection – J. E. Dunn Construction Co., West Des Moines, IA/Kansas City, MO
Story Construction Company, Ames, IA
Sept. 2008 Approved
Program Statement June 2009 Not Required*
Schematic Design Aug. 2009 Requested
Project Description and Budget $45,100,000 Aug. 2009 Requested

*Approved by Executive Director in accordance with Board procedures

The schematic design booklet is included with the Board’s materials.

This project is primarily a renovation, using both the current footprint of the Small Animal hospital, and the portion of the building recently vacated by the Large Animal hospital (often referred to as the “barn” or C-wing). This follows the original master plan, which also included a small addition along the southeast facade of the lower level which now houses Community Practice, Administration, and faculty offices. In addition, the companion animal imaging areas are being built in unfinished shell space, planned for and created in Phase I.

The massing and form of the addition is derived from the plan concept of program adjacencies and a desire to blend with both the Phase 1 addition and the existing building. The two story mass of offices will relate directly with the Phase 1 office block, and raised portions along the one-story connecting link will allow a subtle connection to the existing walls and parapet and help emphasize the entry location.

The layout of the internal spaces is based largely on required adjacencies of the program and patient flow. The Anesthesia induction/recovery area needs to be close to Imaging and the Surgery and ICU suites also need to be close to Anesthesia to minimize travel distances. The space vacated by the Large Animal Hospital will be used as specialty clinic procedures rooms and outpatient functions.

The addition will house the Community Practice facility which will function very similar to a free-standing clinic.
The following compares the functional square footages at program and schematic design:

### Detailed Building Program

<table>
<thead>
<tr>
<th>Function</th>
<th>Program Total</th>
<th>Schematic Total</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>10,975</td>
<td>11,804</td>
<td>829</td>
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<tr>
<td>Anesthesia</td>
<td>2,850</td>
<td>3,346</td>
<td>496</td>
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<tr>
<td>Animal Caretaker</td>
<td>400</td>
<td>573</td>
<td>173</td>
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<tr>
<td>Cardiology</td>
<td>1,550</td>
<td>1,900</td>
<td>350</td>
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<tr>
<td>Central Supply</td>
<td>4,765</td>
<td>4,769</td>
<td>4</td>
</tr>
<tr>
<td>Community Practice</td>
<td>5,120</td>
<td>5,259</td>
<td>139</td>
</tr>
<tr>
<td>Companion-Human Animal Bond</td>
<td>550</td>
<td>589</td>
<td>39</td>
</tr>
<tr>
<td>Conference Rooms</td>
<td>800</td>
<td>771</td>
<td>-29</td>
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<tr>
<td>Custodial/Laborer</td>
<td>1,000</td>
<td>1,095</td>
<td>95</td>
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<tr>
<td>Dermatology</td>
<td>1,470</td>
<td>1,970</td>
<td>500</td>
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<tr>
<td>Equine Field Service</td>
<td>2,350</td>
<td>3,180</td>
<td>830</td>
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<tr>
<td>Exam Rooms</td>
<td>2,500</td>
<td>2,343</td>
<td>-157</td>
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<td>Food Animal Field Lab</td>
<td>2,025</td>
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<td>228</td>
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<tr>
<td>Food Animal Field Services</td>
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<tr>
<td>Imaging</td>
<td>3,945</td>
<td>3,747</td>
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<tr>
<td>Instrument Sterilization &amp; Laundry</td>
<td>1,974</td>
<td>2,244</td>
<td>270</td>
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<tr>
<td>Intensive Care Unit Small Animal</td>
<td>4,270</td>
<td>4,522</td>
<td>252</td>
</tr>
<tr>
<td>Locker Rooms/Restrooms</td>
<td>1,100</td>
<td>2,112</td>
<td>1,012</td>
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<tr>
<td>Medical Records</td>
<td>1,325</td>
<td>1,594</td>
<td>269</td>
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<tr>
<td>Neurology</td>
<td>1,000</td>
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<td>162</td>
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<tr>
<td>Oncology*</td>
<td>1,760</td>
<td>1,844</td>
<td>84</td>
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<tr>
<td>Ophthalmology</td>
<td>890</td>
<td>980</td>
<td>90</td>
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<tr>
<td>Outdoor Site Development</td>
<td>3,414</td>
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<tr>
<td>Pathology</td>
<td>3,481</td>
<td>4,428</td>
<td>947</td>
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<tr>
<td>Pharmacy</td>
<td>2,430</td>
<td>2,542</td>
<td>112</td>
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<tr>
<td>Reception &amp; Waiting</td>
<td>3,050</td>
<td>2,152</td>
<td>-898</td>
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<tr>
<td>Rehabilitation</td>
<td>2,275</td>
<td>2,355</td>
<td>80</td>
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<tr>
<td>SA Wards</td>
<td>4,030</td>
<td>3,634</td>
<td>-396</td>
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<tr>
<td>Shelter Medicine</td>
<td>1,170</td>
<td>958</td>
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<tr>
<td>Small Animal Medicine</td>
<td>2,150</td>
<td>2,315</td>
<td>165</td>
</tr>
<tr>
<td>Small Animal Surgery</td>
<td>10,350</td>
<td>1,232</td>
<td>1,882</td>
</tr>
</tbody>
</table>

Grand Total                                  | 86,714        | 90,340          | 7,040|

* Does not include Bid Alternate NSF for Linear Accelerator (1,914 nsf; -67)

The net to gross square footage ration was 69% at the program and is 64% at schematic design. Efficiencies were lost in laying out the rooms and getting adjacencies to fit correctly within the existing structure and envelope. In addition, corridors were widened to safely accommodate passing animals.
The overall net and gross square feet also increased from 86,714 nsf and 122,897 gsf in the Program to 92,254 nsf and 144,796 gsf in Schematic Design due to: 1) Loss of efficiency by making the programmed spaces fit within the existing structure; 2) Accommodation of about 7,100 nsf for the Large Animal and Equine Field Service functions that are being displaced because of this project; 3) The inclusion of 6,000 gsf of existing mechanical room space that was not originally addressed in the Program document; and 4) The inclusion of the Linear Accelerator (1,914 nsf) as a bid alternate.

**Project Budget**

- **Construction**: $36,836,000
- **Professional Fees**: 6,739,000
- **Movable Equipment**: 579,000
- **Relocation**: 69,000
- **Contingencies**: 877,000

**TOTAL**: $ 45,100,000

**Source of Funds:**

- **State Appropriation – FY 2009 (Planning Funds)**: $1,800,000
- **State Bonds – FY 2009**: 10,000,000
- **Academic Building Revenue Bonds - FY 2010**: 15,000,000
- **State Appropriation – FY 2011**: 13,000,000
- **Private Giving**: 5,300,000

**TOTAL**: $45,100,000

Construction is envisioned to begin in February 2010, with final occupancy scheduled for June 2012.
College of Veterinary Medicine – Phase 2, Small Animal Renovation and Addition

Evaluation Criteria

Since the project meets the Board’s definition of a major capital project, the University has provided the following information in response to the Board’s evaluation criteria.

**Institutional Mission/Strategic Plan:** The College of Veterinary Medicine’s mission is to be strong academically, to provide outstanding services, and to conduct research in the multiple areas of veterinary clinical sciences. It will do this by providing ample and pleasing space equipped with current technology for: teaching and training of students; examination and treatment of small and companion animals; and, generating and disseminating new knowledge in the areas of veterinary clinical sciences.

This is also consistent with the University’s mission statement to, “Create, share and apply knowledge to make Iowa and the world a better place.” This renovation and addition will create the facilities necessary to raise Iowa State’s veterinary medicine program into the upper quartile of peer institutions and to maintain full accreditation with the American Veterinary Medical Association (AVMA).

The acceptance of University of Nebraska Veterinary Medical students and the increased enrollment to 145 (from 125) within the next year dictates expeditious improvements be made.

**Other Alternatives Explored:** A master plan was completed in 2006 which reviewed several options for the program and location of the Small Animal hospital. Options to demolish and rebuild the facilities to relocating hospital functions to the northwest part of the Vet Med complex were reviewed. It was strongly felt that the existing building envelope and structure should be maintained to the greatest extent possible, which lead to the solution to move the Large Animal Hospital (Phase 1) into a new building which would allow nearly 40,000 gsf for Small Animal hospital functions to expand into this current phase of work.

With the development and construction of the Large Animal hospital to the southeast of the current facility and the need for Large Animal and Small Animal to share several services, such as radiographic imaging and anesthesia, the direction to maintain Small Animal in its current location and expand their facilities into the area vacated by the relocation of the Large Animal hospital seemed most logical. It allowed for the necessary functional adjacencies, while reusing the structure, envelope and mechanical penthouses to the greatest extent possible.

As construction costs over the past 12 months have become very volatile, the planning team has also developed some alternatives to help protect the budget or take advantage of a very competitive bidding market. Currently, we are developing plan alternates for a new Linear accelerator space and a Shelter Medicine facility. As cost estimates become clearer in later design phases decisions will be made as to how to bid these.
Impact on Other Facilities and Square Footage: The College of Veterinary Medicine-Phase 2-Small Animal Hospital project consists of 92,254 NSF (144,796 GSF) of space. The space is housed in both new and renovated space.

The primary elements of the project are defined as follows:
- 81,779 GSF of Small Animal Hospital clinical space
- 5,480 GSF of Imaging/Radiology rooms
- 18,578 GSF of Administrative and Faculty offices
- 9,293 GSF of Community Practice space

To accommodate the necessary functions of the Small Animal Hospital functions, it will be necessary to relocate about 8,000 square feet of Large Animal functions still operating out of their old space (in the area to be remodeled). The groups affected will be the Large Animal and Equine Field Services and Labs. We are proposing a metal building just to the north of the main Veterinary Medicine building to garage the vehicles and provide the ancillary support spaces.

Financial Resources for Construction Project: This project has been asked to be “shovel ready” by this fall and consequently we are developing strategies to fast-track this project by phasing construction and being ready to bid portions of this project early this fall.

Our intent is to construct this facility within a 28 month time frame and to be substantially complete by June of 2012.

Project funding has been identified as follows:
- $15M Academic Building Revenue Bonds – FY10
- $13M State Appropriation-RIIF Funds – FY11
- $10M State Bonds – FY09
- $5.3M Private Giving – FY12
- $1.6M State Appropriation-Planning Funds – FY09
- $45.1M TOTAL PROJECT COST

Financial Resources for Operations and Maintenance: Operation and maintenance funding will be under the new budget model which will make the College of Veterinary Medicine responsible for monitoring and budgeting for these expenses. We are estimating that this project will increase these annual expenses to be about $677,000.

External Forces: The American Veterinary Medical Association (AVMA) is the professional organization which is charged with maintaining basic standards for accreditation of veterinary teaching hospitals.

In 2004, the AVMA evaluated the programs and the facilities at the College of Veterinary Medicine at Iowa State University and found serious deficiencies in the condition of the physical environment used to diagnose and treat animals and to teach future veterinarians. The college was placed on limited accreditation citing critical cross contamination and safety issues in the Large Animal Hospital and inefficient, cramped and inadequate spaces required to effectively operate and dispense current clinical and diagnostic services in the Small Animal Hospital.

In 2007, after a visit from AVMA’s Council on Education, the limited accreditation was lifted due to the immediate progress being made with the construction of the new Large Animal Hospital and the promise the College made to make similar timely improvements for the Small Animal Hospital.

In order to maintain accreditation, these improvements are necessary to provide facilities which allow safe and efficient operation of a small animal teaching hospital.