REPORT OF THE CONSTRUCTION MANAGEMENT REVIEW COMMITTEE

The Committee report is based on the on-site interviews and discussions, conducted February 15-16, 2007, as well as a reading of all documents submitted to the Committee in advance of and during the review.

The record of interviews and discussions is contained in the Agenda provided by the Graduate School. All meetings listed on the Agenda were held, as planned. The Committee also conducted one follow-up meeting with Professor Schaufelberger on the second day of the site visit. And all participants in the meetings were present, as indicated on the agenda, with the following exceptions: Professor Vandra Huber was not present for the meeting with the Graduate Students and Tom Cole was not present at the meeting with the Construction Industry Advisory Council.

The principal documents that the Committee read and studied are: Program Self Study prepared by the Department (October 2006) and accompanying documents, Department of Construction Management Supplement to Program Self Study (based on questions raised in the Charge Letter of January 24, 2007) and accompanying documents, and the Review Committee Materials prepared and distributed by the Graduate School.

The Review Committee was asked to answer "yes" or "no" to two questions: (1) Should the Bachelor of Science degree program in Construction Management be continued? (2) Should the Master of Science degree program in Construction Management be continued? It was also asked to enumerate what it found to be the strengths and weaknesses of the Department and to make recommendations for the future. We address each of these charges in turn.

Continuation of degree programs

- 1. Should the Bachelor of Science in Construction Management be continued? The Committee answers this question with an emphatic "yes."
- 2. Should the Master of Science degree program in Construction Management be continued? The Committee answers this question with a qualified "yes." The affirmative answer is contingent upon the Department's taking certain action steps that we include below in our recommendations.

Strengths of the department

1. The Department has a highly successful undergraduate program. There is high student demand for the major. Its graduates have an outstanding record of placement in positions for which the degree is a crucial asset. The curriculum is well organized and well taught. The students evaluate their individual courses positively and give highly favorable reviews to the strength and appeal of the overall program. Morale and commitment

among the students is exceptionally high. Employers in the construction industry annually review course content and evaluate it favorably and provide generous financial support as well as their time in support of the program. Discussions with industry leaders suggested to us that the program is state of the art in terms of contemporary industry practice. The program has produced a significant number of highly successful and highly loyal graduates.

- 2. We consider it to be a significant strength of the Department that all of those with whom we spoke--faculty, students, staff, alumnae, and industry representatives--expressed a high degree of commitment to and favorable evaluation of the undergraduate degree program.
- 3. We observed a high degree of commitment, among the young tenure-track faculty—the Assistant Professors and the most newly tenured Associate Professor—to the undergraduate and graduate programs, to research that addresses directly issues and problems facing the profession of construction management, and to the well-being of the department.
- 4. The Construction Industry Advisory Council is fully engaged in and supportive of the efforts of the department. Members of the Council are generous in their contributions of time, money, advice, and talent. We note in particular their strong financial and visionary support of the new research center, their active engagement with students through internships and professional activities, their participation in the education of the department's students, and their continuing diligence in the annual review of course materials in each undergraduate course.
- 5. The Department Chair works very hard to administer the affairs of the department. While maintaining a heavy teaching and advising load himself, he is involved in every aspect of departmental administration, community outreach, fund-raising, and service to the university. As teacher, adviser, and department leader, he plays a crucial role in creating a very high level of morale among the undergraduate students, who commented enthusiastically about his availability and helpfulness to them.
- 6. Most of the faculty and all students report considerable opportunity to participate in the governance of the department. The Graduate School had raised the question of student participation in shared governance. We found that, although there are no student representatives to faculty committees or the general faculty meetings, the Chair has established a model department in terms of informal and active student participation in governance and in the larger life of the department.
- 7. The teaching load for tenure-track and tenured faculty is conducive to the support of research and publication for faculty. Each member of the faculty has ample time to pursue a significant program of research and publication, free from an excessive teaching and advising load.

8. The staff support is of a very high quality. Even when overloaded, which they are at times, the staff perform their duties well and with enthusiasm.

Weaknesses of the department

- 1. The Department has not articulated a clear and compelling vision for the scholarly direction the Department should take in terms of scholarship in construction management.
- 2. The master's program lacks rigor in terms of scholarship, content, the completion of degree programs, and loose admissions criteria. Information was lacking regarding the admissions criteria for the online distance learning program.
- 3. There is a lack of financial support for the attraction of full-time graduate students in the Master's program and in the College's Ph.D. program.
- 4. There is a lack of accountability for tenured faculty involvement in the graduate program and in published research. Some tenured faculty members are not contributing to the supervision of graduate students and yet teach only a typical course load.
- 5. There are too many Associate Professors who have not been promoted to Full Professor in a timely way.
- 6. There is a growing lack of high quality construction management-specific industry experience in the tenure-track faculty.
- 7. The distribution of service responsibilities among the full-time faculty is uneven.
- 8. The Chair of the Department is overburdened with too many teaching and administrative responsibilities. In spite of his demonstrated effectiveness in teaching and advising, he should consider some reduced load in his teaching and advising.
- 9. There is a perceived lack of recognition of the Department on the campus.

Recommendations

1. By the end of the site visit discussions, the Committee came to the conclusion that that the Department needs to do some basic thinking about its mission and its objectives for the future. Given (a) the current demand locally and nationally for graduates with construction management degrees, (b) the dearth nationally of graduate programs in construction management, and (c) the potential for carving out new topics for scholarly research that could inform the practice of construction management, we feel there is a tremendous opportunity for the long-term development of this department. We also felt that this potential is seriously under-realized. The place to start working on this is, we feel, expressed in the following two interrelated recommendations:

- The Department faculty should work together to articulate a vision and rationale for construction management as an established professional field.
- Further, the Faculty should develop a plan for establishing the Department as a national and international leader in research and teaching in the construction management field. The plan should establish timelines and specific objectives to be met by the next review of the department.
- 2. The Department should conduct a sustained discussion that leads to steps to increase the rigor of the on-campus Master's degree program. Although our inquiries into the quality and success of the program were wide-ranging, as was our discussion, one fact stood out: In 2004-2005, the last year for which there is complete information in the Graduate School Statistical Summary, there were 46 students in the two-year on-campus Master's program and only 7 students graduated. There was a similar pattern for the previous year. We took this as symptomatic of a serious problem in the program and responses to our inquiries led us to believe that it is not high standards that explain this dramatically poor record of completion. Furthermore, most of the faculty we interviewed expressed serious concerns about the quality and direction of the program. Although we make no specific recommendations that we feel must be accepted, we do believe the faculty should take serious steps to enhance the rigor of the program. We suggest as points of faculty discussion the following possibilities:
 - Establish a minimum GRE level as a guideline for admissions.
 - Create a system for tracking time to degree with warnings to students who fall behind and a system for establishing failure to make satisfactory progress toward completion of the degree.
 - Require a thesis or a re-cast the project as a scholarly exercise in applied research.
 - Convert to a full-time degree.

The Committee is not recommending that any particular style or method of scholarship be mandated or emphasized, nor does it recommend any particular change. Rather, we found what we believe to be a need for a serious re-thinking of the program. We do not explicitly recommend requiring a thesis or converting to a full-time only program, although either or both of those could be positive steps; we only use these as examples of how greater rigor might be reached. Our recommendation is that the Department develops a plan to increase the rigor of the program. We were particularly impressed with the possibility that the master's program could be focused on applied research problems that could be developed in response to needs for new knowledge that are expressed in conversations with the industry.

3. The tenure-track faculty and the Chair should engage the Dean in a discussion of the prospects of establishing permanent lines of support for students in the College's Interdisciplinary Ph.D. program and should consider approaching industry representatives for support for full-time study for students in the Department's Master's program.

There is a growing need for Ph.D. level faculty members actively conducting research in construction management. The University of Washington, as a top research institution, is

positioned to respond to this need. We recommend that more resources be devoted to the recently developed College-wide doctoral program so as to graduate more doctoral-level researchers in the built environment, with special attention to the construction management field.

- 4. The Chair should work with the Dean of the College to establish a program of mentoring for those Associate Professors who seek to advance to the rank of Full Professor. See the <u>University of Washington Handbook</u>, Vol. II, Section 24-54 (Procedure for Promotion).
- 5. The Chair should work with the Dean of the College to assess the work loads of tenured faculty who are not actively taking the lead in supervising graduate student theses and projects and/or who are not actively doing research that leads to new publications. In such cases, we recommend that the Chair, Dean, and Faculty Member develop an agreement for a teaching load that is greater than that which is assigned to members of the faculty who are carrying heavier loads in publication, graduate advising, and service. See the University of Washington Handbook, Vol. II, Section 24-57.C and D (Regular Conference with Faculty).
- 6. In the next hiring of a tenure track member of the faculty the construction management industry experience of the candidates should be heavily weighted in the hiring decision.
- 7. The distribution of service responsibilities among the tenure-track faculty should be carefully examined and, where feasible, adjustments should be made to ameliorate discrepancies.
- 8. The Chair of the Department should delegate more of his administrative and leadership functions to other tenured members of the Department. In part this is a matter of one person carrying too great a burden and in part it is a matter of assuring that as many other members of the faculty as possible gain experience in, and mentoring for, Department leadership.
- 9. The Department has hired an undergraduate academic advisor. The Chair should work with this new staff member to increase the visibility of the Department at the University of Washington, for example, through publicity about the undergraduate program, activities of the students, honors and awards of students, and should work with the faculty to publicize the research, teaching, service, and outreach work of the Department.
- 10. The undergraduate admissions process should be operationalized in a more systematic manner. Although we found no evidence of unfairness or inappropriateness, we nonetheless encourage the department to consider a process that provides for a more rationalized review of applicants. Many departments use a weighted scoring algorithm where grades, test scores, work experience, and essays are all assigned weights and assessed such that a numerical score is produced for each applicant. A system such as this could provide greater transparency to the admission process as well as enhance its

fairness. The new academic counselor could help the Department utilize resources available at the University for making such upgrades in the process.

11. During the course of the review process, the Committee learned that the Department has applied for a line for a new full-time faculty member to be supported by anticipated new money from the Provost for high-demand undergraduate programs. The Committee would like to register its support for the Department's request for such a position.

Sincerely yours,

Gerry Philipsen, Review Committee Chair Professor, Department of Communication University of Washington

Santosh Devasia Professor, Mechanical Engineering University of Washington

Vandra Huber Professor, Department of Management and Organization University of Washington

Abdol Chini Professor and Director, Rinker School of Building Construction University of Florida

John D. Murphy, Jr. Professor and Head, Department of Building Science Auburn University