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Works In Progress

Defining A Sense Of Place
UNI's Communication Arts Complex fulfills the requirements of the campus master plan as well as meeting a complex program for present and future facilities.

Intern Development Program
In a recent interview Hovey Brom, AIA, IDP Coordinator for Iowa, tells about the development, current status, and future of the IDP.

The Legal Relationship Between The Architect and The Contractor
Part two of the article started in the May/June issue dealing with the changing legal liabilities of architects.

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Exterior Alterations to Younkers

A long lived and strongly established landmark of Des Moines' downtown will undergo extensive, but careful alteration beginning in the summer of 1981. The concept of the project, formulated by Charles Herbert and Associates, centers on retention of the character of the old facade while modernizing the existing glazing system. The original structure dates to 1895, growing with significant additions in 1911 and 1935 that have left a form disconnected in style and material coloration. The intricate terra cotta and masonry of the old facade is to be cleaned, repaired, and coated with a four-color protective and decorative coating that will highlight the details and unify the exterior composition. The existing glazing and frames will be replaced with black aluminum frames and silver reflective glass. The reflective glass will help to reduce heat gain and allow unfinished interior spaces to abut the windows. The project will encompass nearly 75,000 square feet of wall coating and glazing.

Joint Venture Yields Utility Co. Design

FEH Associates, Inc., Architects, have completed a joint venture with Rossetti Associates of Detroit of the construction in the central business district of an office building for Iowa Public Service Co. of Sioux City. The project, completed in January 1981, contains all functions related to the corporate headquarters of the utility company. In addition to general departments and spaces related to office buildings, the I.P.S. headquarters contains approximately 14,000 sq. ft. of computer spaces for the communications and control center operations of the company. Basically, the various departments are located in an open landscape work station arrangement with "private enclosed offices" reduced to a minimum number. The building to be initially occupied by 275 employees has a design capacity of 350 and includes a preparation kitchen, dining room, community meeting room, enclosed service and receiving garage.

The building has five floors overlooking an internal ground floor atrium with each floor connected to escalators transversing the long axis of the 280'x150' building. The interior spaces of the building at all floor levels are open to provide visual contact with the ground floor atriums are covered by a 5000 sq. ft. "L" shaped skylight that provides ambient light to all open plan office spaces.

Included as part of the $14.3 million project is a 330'x80' landscaped mall along the south side of the building that is a continuation of the city mall developed as part of a prior urban renewal effort.

United Central Bank Operation Center

An existing two-story warehouse on the western side of Des Moines' central business district is being extensively modified to house the electronic data and check processing departments of this major downtown bank. Employee parking will be on the quarter block to the northwest and the public entrance will be at the north-
east. A service and circulation spine runs along the north edge of the building between these access points. Data and check processing equipment are centered in the building and surrounded by open office areas.

The sound but unsightly masonry walls will be re-clad with a red brick indigenous to the neighborhood. Fenestration will be regular punched openings with bronze glass. The structure and roof are being rebuilt to support a partial third story now and a future third story addition. Raised access flooring, demountable partitions and lay-in ceilings will allow flexibility in the office and machine areas. The 38,000 square foot renovation was designed by Charles Herbert and Associates, Inc.

**Bank Form Emphasizes Linear Site**

Design development continues on Norwalk Cumming State Bank in Norwalk, Iowa. Designed by Brooks Borg and Skiles, Architects & Engineers, the linear plan was proposed in order to provide for a full main office banking facility (including 3 drive-up lanes) on a narrow site with limited access.

The main roof structure will be framed of laminated wood members and will be extended over the drive-up area giving further emphasis to the horizontal form as seen from the nearby highway.

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Defining A Sense Of Place

Communication Arts Complex
University of Northern Iowa

The design of the Communication-Arts Complex at the University of Northern Iowa started in the late spring of 1975. Brown Healy Bock Architects were presented with a fairly elaborate program statement and a copy of a comprehensive Master Plan report done by the firm of C.R.S., Inc. These two elements served as the guiding tools in the design process.

The campus plan set out the requirements for the type of structure that should be built on this site — an existing baseball field located at the west edge of the main campus. A pedestrian spine was indicated as necessary to carry students traveling from the main library and student union at the heart of the campus to the new physical education facilities which were to be built west of Highway #58 in the future. At the time design was started, the UNI Dome was under construction, and a major link in the development of physical education facilities on the campus was underway.

The Master Plan desired the creation of a structure that defined a “sense of place” in this location, or in other words, an outdoor gathering area. The site was a crossing point for students going from the Regent Dorms to the education building on the north as well as a termination structure for the western edge of the central campus. The site solution reinforced this pedestrian mall, which would eventually continue in a bridge across Highway #58, to provide access to the UNI Dome.

The original program requirements for the Speech/Art Complex were to house the Departments of Speech and Art, the Speech Pathology Clinic, the two University Radio Stations and the Theatre Program. Due to severe budget limitations, only one-half of the project has been built, referred to as Phase I. The entire Art Department, except for the Art Gallery, which comprised the largest program element, has been delayed until additional funding is secured from the State Legislature. An integrated
structure was designed to incorporate all of the program disciplines in order to make efficient use of a compact site, promote energy efficiency, and help to develop interaction among disciplines previously scattered on the campus.

The pedestrian way skirts the south edge of the classroom building with entries into the Student Commons area and art gallery. At the west edge of the complex the walk would cut through the building on the first level and then across the highway on a bridge.

Initially, all of the disciplines wished to have their own building rather than be part of a total complex. At the present time the Speech Department, Fine Arts Administration, Speech Pathology Clinic and Radio Stations are
housed in a three story structure. The Speech Pathology and Broadcasting Departments were located at the northeast portion of the site so as to simplify public access, as well as allowing for a sense of privacy and acoustical isolation necessary for their proper operation.

The theatre was located in order to solve the following considerations: to allow for ease of access for on-campus students and to provide a relationship to the external community; to provide for the sharing of stage service facilities with its eastern neighbor, the Music Building; and also to be placed as far as possible from the highway at the west edge of the site.

The most complicated program element was the development of a multiform theatre to house the educational programs of the theatre department. The building contains three performing spaces - a “black box” experimental theatre seating 150 on telescoping seating risers which allow for various staging configurations, an acting classroom with portable lighting and sound equipment seating 50, and the main house, which provides for
seating of 500 in thrust configuration and 590 in proscenium format.

In the experimental theatre, the stage shape is varied by having all the seats on eight movable platform pallets. Theatrical effects, including stage lighting are suspended from a continuous system of overhead catwalks traversing the space.

Staging arrangements in the main theatre are changed from one form to the other by means of telescoping seating risers that store within the main
theatre cavities and the use of portable stage extensions plus a stage lift. The proscenium telescoping seat platforms store underneath the sixth row. The thrust seating platforms store underneath the side balconies when not in use and are covered by wood panels that act as acoustical deflectors when the proscenium seats are in place. The theatrical lighting is accommodated on a series of architecturally expressed catwalks above. All of the theatre functions are expressed in a simple and direct manner rather than hidden behind masking surfaces.

The lobby spaces are designed to contrast with the enclosed feeling of the main room. The public spaces are a series of interconnected levels tied together with broad stairways and lighted artificially and by daylight. The glass walls continue overhead as roof structure to enhance the lightness of these gathering spaces.

The eventual completion of this complex by the addition of the Art Department will create a total form encompassing an exterior three-dimensional space referred to as "a place" in the Campus Master Plan. At that point, the open space concept outlined in the Master Plan will have been achieved.

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The Communication/Art Complex at the University of Northern Iowa (shown on the cover) is a good example. Let the MII or one of its members help you with your masonry questions or problems.

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Intern Development Program

An Interview with Richard Hovey Brom, AIA

In 1976 the architectural profession launched a new and unprecedented program to provide young professionals increased opportunities for exposure and exploration in the various aspects of the architectural practice. The Intern Development Program (IDP) was developed to provide a structured and meaningful internship experience for young practitioners — in essence a continuation of the formal education process. IDP consists of a record keeping system, an advisory channel, and supplementary education program. IDP seeks to expand the young professional’s perceptions of the profession and its duties and prepares him/her to make a more effective contribution to the firm in which the internship is served. It seeks to fill the gaps left in educational preparation and to make learning a lifelong habit. Perhaps most tangibly, it prepares the intern for the registration exam and better prepares him/her to enter the profession, ready to make a more immediate contribution to society.

The Intern Development Program was initiated in Iowa in 1977. Its initial success was largely due to the enthusiasm and hard work of Ken Bussard, the original IDP Coordinator, and Dr. Eino Kainulai, who held introductory seminars for young professionals all over the state. Since that time the program has varied in its strength and activity. Presently there are forty intern-architects.

Claudia Cackler, Executive Director of the Iowa Chapter, AIA, conducted the following interview with Richard Hovey Brom, IDP Coordinator for Iowa, in order to provide an update on this very important program as it is presently being implemented.

Cackler: What advantage does IDP participation give the intern architect?
Brom: If you are interested in becoming a registered architect you need to have work experience under a registered architect prior to taking the registration exam. In the past this internship has been a helter-skelter experience. The schools just put you out into the job market and your experience was whatever you were able to get. You came to sit for the examination, not knowing whether you had a very good background or not, wondering what you should have been getting during those working years.

The IDP is just an easy way to organize the work that you do and record the experience that you have had in the training period, so when the time comes that you are ready to take the exam, you can look at your IDP record and say to yourself, I have done very well in contract administration but I haven’t had any experience in some other areas that may be covered in the exam.

Cackler: When will a person begin the IDP program? Hasn’t that just been changed?
Brom: Yes, you may now enroll in IDP after you have completed three years of your education toward a professional architectural degree.

Cackler: Does this have to be an accredited degree?
Brom: Yes, but there is a problem, at least for Iowa State graduates. Anyone who is in their four year program (not accredited) may be going on to get their master’s degree. But then again they may not. It seems to me that the students would have to determine for themselves whether or not they are eligible.

Cackler: Many of our members, advisors, and interns alike, sound somewhat disillusioned with the intern development program. I have read a number of editorials concerning IDP, and a few were none too favorable. What do you see as the major reasons for that dissatisfaction?
Brom: At least two things are at fault, NCARB being one. The finger can also be pointed at me. Until about two months ago we had a terrible communication problem. What happened is kind of interesting. Ken Bussard started the program in Des Moines with people he knew. He got interns he knew. He got good advisors by twisting our arms and got the program started in a super fashion. Iowa is still looked on as one of the bright spots in starting the IDP. My problem was, until recently, there was no accurate communication between the co ordinators and NCARB. So as interns moved or became registered, I knew, or NCARB knew, but never both.

Unless interns would contact me personally, I had no way of knowing they were in the program. Finally, last June I got the...
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Brom: first list from NCARB of who they thought the participants were, and their list wasn't anything like mine. We now have a fairly accurate idea of who the active IDPs are and who has dropped out or become registered.

Cackler: On my firm visits around the state, many interns have complained of too much paper work with IDP. Don't you think they might have a point, Hovey?

Brom: In the first place, you have to understand what the IDP is. It is, by nature, a record keeping process. In other words, it is a way of recording your experience in this internship period and so obviously, yes, somebody has to keep the records and that burden is put on the person who is the intern. They have records and quarterly reports to send into NCARB and must check with their advisor and sponsor and get their signatures. How else are you going to keep a record? If you want to take the exam without IDP you still have to present a record of your experience. The intern has to somehow or other gather that information together. Without IDP you do not have the advantage of knowing half way through the internship where you are deficient. It is a good way to monitor yourself. This is probably the first time the intern has had to keep all their own records. Every IDP has to go one step beyond the normal time sheet that is kept for their firm, but that is the only way they are going to know whether they are getting experience in the necessary areas. The burden should be looked at as an opportunity because when they are finished they have a great work profile.

Cackler: Many interns I have talked to complain that isolation is a problem. Transportation to their advisor makes contact rare and difficult they say. Has this very practical problem been addressed by the institute and NCARB?

Brom: In two or three ways. One, when we assign an advisor we try to get someone in the area. Now here in Des Moines that is no problem, or in Cedar Rapids or Waterloo. But when you are in a single office in a small town it is impossible to have an advisor in your own town because the advisor should not be a member of the firm for whom you are working. So there are some people who will have advisors far away. We try to get them close, though. What I have been doing is asking the interns who they would like for an advisor because often times they have someone with whom they've had contact, maybe a previous employer or a friend. If this is a problem, they should let me know. It is awfully easy to change an advisor.

Cackler: Do you find many of the potential advisors scared off by the perceived drain on their time and resources?

Brom: Not really. Advisors are scared off because they really don't know what they are supposed to be doing. That's understandable because the role of an advisor is somewhat limited. When an intern starts the program, the advisor should have a reasonable amount of work to do. He or she should get to know who the person is and what he is working on. The advisor has those introductory things to do. As the intern is going through the program, the advisor, unless there is a problem, has almost nothing to do. All he is doing is verifying the intern's quarterly records. Aside from that, the advisor is there only if a special problem arises.

Cackler: How about the sponsor?

Brom: The sponsor has a great deal more responsibility. He is the one in the office whom the intern needs to contact first if he feels he is not getting enough experience in certain areas of work. The sponsor is the every day contact.

If the intern sits in the office and draws window details and is not getting experience with anything else, then he should tell his advisor, who should already know it by the records. The advisor can call the sponsor and request that the firm give the intern a little more experience in some other areas.

Cackler: Some of the questions asked lead me to believe there is some confusion between state registration and NCARB certification. Could you clarify the two?

Brom: You are registered by individual states. When you say you are a registered architect, you mean you are registered in a state regardless of NCARB. Every state used to have their own individual registration process. It was decided that if you are going to have architects moving about from state to state, there should be some means of standardization. The architectural registration boards of the individual states got together in a voluntary organization and called themselves the National Council of Architectural Registration Boards. They developed standard tests and record keeping procedures and means of making it easier to go from state to state with your license. The Iowa Board was a part of this. As a matter of fact, the NCARB is an Iowa corporation. Iowa was really the leader and for years the headquarters for NCARB was Chariton, Iowa. The Iowa Board has elected to adopt NCARB's standard test as its own for registration in Iowa. Consequently they use
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the NCARB to write the test and do the record keeping. To take the Iowa test you first register with NCARB. You should write to them about the process to get your recommendations. They check your eligibility. So, in fact, they do the bookkeeping for the Iowa Board. They tell the Iowa Board that this particular person meets the Iowa standards, which are the NCARB standards also. At this point you take your test and if you pass you are registered in the state. That is Iowa registration only, even though you have come through the NCARB. To get your records, the Council will send you a letter and ask if you would like to get an NCARB certificate. If you then get your certificate and you want to get registered say, for instance, in Illinois, you write to the state of Illinois and when they ask for your credentials, NCARB will provide verification that you are a registered architect with them and Illinois will accept that. All 50 states and the territories will accept that with some exceptions. In Colorado you will have to take a test on earthquake design. If you go to Oklahoma, you will have to take a test in soils because they have a particular soil problem. Other states have additional special requirements.

Cackler: So besides providing them with the information that you have passed the exam, what other information do you have to provide?

Brom: Eligibility for registration in another state will require a yearly update of your record. If you have an NCARB certificate, once a year they will send you a form that asks what you have done professionally in the past year. On a spot check basis they confirm that what you are telling them is the truth. They keep in their office a year to year record of your total professional career, and that goes to any state in which you want to be registered.

It is not mandatory that you belong to NCARB. If you are going to practice in one state only, there is probably no need to. But, if you don't have your NCARB certificate, and you want to become registered in another state, you will usually find the process much more difficult.

Cackler: What does the NCARB have to do with the IDP?

Brom: The IDP is a joint project between the AIA and the NCARB. There is a great argument as to who started it. Since I was on the Iowa Board when the idea was first examined, I think most of the credit goes to NCARB, of course. We had all these people asking to sit for the tests and no idea what kind of training they had gotten in their intern period. Sup
pose they worked for three years. Three years was a quantitative sort of thing, but we had no quantitative yardstick to use. On the Iowa Board, time after time, we had someone all bright-eyed-and-bushy-tailed ready to take the test after their three years experience. When asked what they had done, we might find out they sat at a desk doing working drawings for all that time. Then we were faced with telling them that is not very good training because the architectural exam reflects the philosophy that the architect, first and foremost, is a generalist and secondly maybe a specialist. We don’t graduate just interior design architects or just foundation architects or hospital architects, although many people may specialize in these areas. In Iowa we have small offices as a rule, and people usually get a good generalized background. But, there are still those cases where you get a very thin background in some things and very heavy on others. I think the Board felt very strongly that some how or other we needed to take this quantitative time thing and make it qualitative. That way, NCARB began to get the Intern Developement Program organized.

**Cackler:** What does the NCARB council record have to do with the IDP?

**Brom:** The IDP starts the council record. You can start a council record without being in IDP but if you would like to go into the IDP you will start your council record there. It will stay with you as long as your professional life continues and as long as you keep it current. In this way it is an advantage because all the things I am talking about cost money. Every time you update it you have to pay, but it is not money lost because if you don’t do it as an IDP, you will have to do it when you sit for your exam. NCARB has just enabled you to start your record when you register for IDP, rather than waiting for your intern experience to be completed as it has been in the past.

**Cackler:** What do you see as the future of the IDP in Iowa, Hovey? Where is it going and how will it operate?

**Brom:** For better or worse, the IDP has to get more involved and stronger because the Iowa State Board of Architectural Examiners is now requiring proof of either IDP or some equal measure of not only quantitative but qualitative experience before you sit for your exams. And the easiest way to get it is under the guided program of the IDP. You are going to have to present this vital information to the Board, so you might as well take advantage of all the help you can get.
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Richard Hovey Brom, AIA is principal in the firm of Thorson, Brom, Broshar, Snyder Architects in Waterloo. He served as a member of the Iowa Board of Architectural Examiners from 1973 to 1978. For three of those years he was a member of the NCARB Professional Exam Writing Committee. Hovey also served a three year term as a Director on the Iowa Chapter AIA Executive Committee. He is presently a member of the national AIA Continuing Education Committee.

Cackler: Can the chapter office take a more active role in furthering the program? And if so, what should that role be?

Brom: Up until recently the IDP has been sort of a one-man operation, from an administrative standpoint. Ken did all the work. Since then, I have done it up in Waterloo, isolated from the chapter office.

The problem in part has been one of communication. The chapter office is the one established point of contact. It can and should be the logical place to call if someone has some questions. Now that good records are established I think the chapter office should and can play an important role in the IDP program.
The Legal Relationship Between The Architect and The Contractor

by John A. Ricchini, R.A., C.S.I.

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Current Court Attitudes

In the late 1960's and the early 1970's, different courts across the United States applied several principles of law in construction cases. These principles are all related to "strict liability" and although not new, were given new impetus in the courts. Included are such terms as "implied warranty," "statute of limitations," "guarantor," "express warranty," and "indemnification." The following cases point out some of the principles which concern the role of the architect in his capacity as supervisor during the construction period.

In 1967, an Illinois court heard the case of Miller v. DeWitt. Three construction workers had been injured when the shoring holding up a roof on which they were working collapsed. In a landmark opinion, the court concluded that when an architect undertakes supervisory responsibilities, has free access to the construction site, and has the authority to halt operations, he owes a duty to those working on the job site to see to their safety. Referring to the architect's duty to supervise, the court said:

The defendant's architects urge that under a contract to "supervise the work" of construction, an architect undertakes only a duty to see that a building is constructed, which, when completed, meets the plans and specifications and is the building for which the owner contracted, and that he has no rights or duties with regard to the manner or means or techniques of construction, adopted by the contractor to produce that end result...but that was by no means their only duty. Under these contracts and associated documents, they had many other powers, authorities, responsibilities, and duties. Some of these rights and corelevant duties did relate to some of what the defendant's architects possibly refer to as manners or means or techniques of construction of the contractor. But it would be a useless exercise in semantics and speculation to endeavor to examine or define or classify (which the architects here do not do) what is meant by manners or means or techniques of construction of the contractor and as to which ones the architect had duties, and as to which ones they had no duties. Under these contracts and documents and under these facts and circumstances, they had substantial, relevant, and applicable duties to persons in the position of this plaintiff as we've set forth, whether those be considered to relate, in part, to what are possible denominated to be manners or means or techniques of construction or to something else.

The decisions of this case created controversy among professional associations representing design professionals. Subsequent to this case, the American Institute of Architects completely revised its General Conditions in an effort to free the architect from the potential danger implied by the word "supervision." Inserted in place of "supervision" was the concept of onsite inspection and general administration. The crux of the controversy was defined in the dissenting opinion rendered by Justice House in the Supreme Court Hearing.

I cannot read into the contract a duty which is not imposed by it. The architect's contract used here is a more or less standard form generally used by architects and engineers...supervision is limited. The architect contracts to attempt prevention of defects but specifically disclaims a guarantee of the performance by the contractor...Again, the opinion concedes that the architects have no duties to specify the method used to accomplish the finished building, but the belief was stated that the architect had the right to insist upon a safe and adequate use of that method. True, but to parlay that "right" into a duty is neither consistent with generally accepted usage nor contemplated by the contractor. Obviously, the architect did not contract to be present or represented at all phases of construction and he should not be held responsible for methods used by the contractor which may result in injury. I find no support for such a radical departure in either this or any other jurisdiction. The cases cited for comparison are usually between the contractor and architect or owner and architect, but not for liability on an architect to an employee of the contractor...There would be utter chaos if the contractor or his superintendent were to give an order to his most efficient equipment and personnel, and the architect attempted to countermand an order that the work be done by another method requiring different equipment and skills.

In the 1967 case of Skinner v. Anderson, an architect was brought to court ten years after he designed a residence for failing to provide proper ventilation in an air-conditioning room which leaked carbon monoxide gas. Two people were killed and another seriously injured. The defense for the architect argued the statute of limitations required that any suit against the architect
arising out of defective or unsafe conditions could not be upheld unless it was brought within four years of completion of such service and construction. The court concluded that the architect's argument was logically unsound and declared the statute of limitations unconstitutional on the grounds that it was a special law granting privileges to architects and contractors without affording the same protection to the owner.47

The 1972 case of Xerox v. Welton Becket Assoc.48 used strong language in precluding a cause of action for breach of "implied warranty" against the architect.

In the absence of an express agreement to the contrary, the duty of an architect, in performing his duties to his employer, is to exercise reasonable care and diligence, to use ordinary and reasonable skill usually exercised by one in that profession. Case after case has held that in the absence of an 'express warranty' the architect is not a 'guarantor' of the plans and specifications he prepares.

In 1973, the case of Howard, Needles, Tamen, and Bergendorf, et al v. Steers, Perini, and Pomeroy49 precluded indemnification of the engineer by the contractor for amounts the engineer paid to workmen injured or killed while employed by the contractor. Because the contractor had compensated the original plaintiffs under the Workmen's Compensation Law, the contractor could not be held liable to the engineer as a joint tort-feasor. Any claim for indemnity had to be based on an expressed or implied contract.50 The courts simply stated that the "hold harmless" (indemnification) clause did not specifically include the architect or engineer. To illustrate the court's demand for precise writing, the indemnification clause reads:

The contractor agrees...to indemnify and save harmless the Authority (owner), its officers, agents, and servants and each and every one of them, against and from all suits and costs of every name and description and from all damages...resulting from the performance of said work, or through the negligence of said contractor...

The California court of Appeals heard the case of Swett v. Gribaldo, Jones and Associates in 1974.51 The plaintiff, a home owner in a subdivision for which the defendant, a soils engineer, had rendered professional services four years earlier, filed suit against the lender and the soils engineer. However, the developer, grading contractor, general contractor, and consulting general engineer were not sued. The lower courts found the soils engineer liable for damages based on the court's apparent belief that he created a product when giving advice in connection with regarding and excavation necessary for foundation work. The principle of "strict liability" was applied to this decision.

In the appeal case, the court noted:

...an engineering firm was employed solely in an advisory capacity and paid by the hour. It had no interest in the property and did not participate in any way in its sale.

In the absence of negligence or intentional miscon-
Workmen's Compensation Law. The establishment of the workmen's compensation laws grew out of the Industrial Revolution in the United States during the nineteenth century. During this time employees frequently were not compensated for injuries which occurred on the job. As a result, early in the twentieth century, states began enacting workmen's compensation laws that substantially changed the rules which allowed an employee to establish negligence by an employer. In most states, employees who suffer injury, except from willful misconduct and drunkenness, can recover from his employer through workmen's compensation laws. Employees in other states cannot only recover under workmen's compensation, but can also sue any other third party whose negligence caused the injury, including the manufacturer, a fellow employee, or the architect. When suing a third party, however, the employee will have to revert to similar requirements existing prior to the workmen's compensation laws establishing negligence on the part of third party. The legal relationship between the architect and the contractor in a workmen's compensation suit is rather bizarre because the employer, or the contractor, has given up his rights and legal protection in employment accidents. Whatever liability the employer might have had for employment injuries to his employees has now been replaced by most state workmen's compensation statutes; therefore, an employee cannot sue his employer. If an individual wished to seek additional compensation, his next choice is a third party, possibly the architect.45

Patent or Copyright Laws. Patent and copyright laws give protection to persons who own rights to inventions or processes, or to written materials such as plans and literature. A party whose rights have been infringed can take civil action against the infringer. In one case involving a contractor, subcontractor and architect,46 the owner of a patent for a specific technique of constructing stained glass panels instituted an infringement action against the contractor and a subcontractor who had used his patent. The contractor and subcontractor instituted a crossaction against the architect who was the author of the plans and specifications illustrating the design. The court held that all three had infringed on the inventor's patents.47

Mechanics' Liens. A lien is a legal device whereby an architect, contractor, subcontractor, supplier or laborer, who has not been paid, may collect for work or materials in a project through the judicial process. The claimant can initiate sale of an owner's property subject to the lien, which usually results in the owner paying the parties.48 The direct relationship between the architect and contractor as a result of a mechanics' lien is somewhat confused. For instance, a contractor or subcontractor may place a lien on an owner's property due to the owner's failure to reimburse the party for his work. If, however, the owner had been advised to hold payment to that party by an architect who refused to certify progress payments because of negligence or fraud, the owner may bring action against the architect to recover his loss due to the lien.

Contract Provisions
The legal system in the United States leaves parties who formulate a contract to themselves to establish the authority and responsibility of each party to the other. Whatever is agreed upon, provided it is not in violation of a law, will be recognized by the courts as binding. As a result of many judicial decisions emanating from cases affecting the construction industry, the professional associations, who are responsible for the composition of the general conditions of the contract, modify the conditions periodically in order to cope with the adverse effect of some current court findings. Recognizing the extensive legal entanglements in which the architect and contractor can find himself, these associations hired teams of legal experts to compose or modify the conditions of the contract.

Conclusions and Recommendations
As discussed in the preceding chapters, four principle areas cause the greatest concern and produce the bulk of litigation: the establishment of the standard of performance, the duties of the architect during construction, the imposition of statutes on the construction process, and the specific wording of the contract provisions, especially in the area of indemnification.

Standards of Performance
For more than one hundred years, the standard of performance has been dictated by professionals working in the same geographical area. In recent years, however, courts have not allowed professionals in the construction industry to establish their own standards, but have depended instead on the legislatures to impose standards which will ensure that the public interest is served. In the case of Henry v. Britt,49 a young boy drowned when his arm was caught in an open main drain of a motel swimming pool. The court, in assessing damages, said that the engineers who designed the pool were obligated to follow not only the standards of the engineering community, but also the standards set forth in the state safety code. The engineers were held negligent as a matter of law.

This case illustrates the point that if architects and engineers through their associations, fail to adopt and follow a high standard of performance, the law will step in and impose a minimum standard to protect the public.50 Obviously, professional associations should establish a standard of performance which meets or exceeds the requirements of statutes affecting the construction industry.

Duties of the Architects—“Who is in Charge”
In many cases, the courts assessed either the architect or the contractor for damages based on who the court considered to be in control at the time of the defect or damage.

In the case of Smith v. Wilcox,51 the court assessing the damages to the contractor stated:
To facilitate the acquisition of the lien, however, the statute has made the original contractor an agent of the
owner while in charge of the construction. Necessarily, he is given the primary control thereof...The parties may agree that an architect...shall be in charge, but unless there is some such provision to (shift) the supervision, he (the contractor) is necessarily entrusted with it.

As cited previously, the 1967 case with Miller v. DeWitt found the architect categorized as the one "in charge" and therefore responsible for the damages suffered by the subcontractor's workmen. The word which created the most concern in determining who is in charge was "supervision". Prior to this case, the AIA document A201 "General Conditions of the Contract for Construction" contained the word "supervision." After this decision, however, the AIA removed the word "supervision" and substituted words suggesting "onsite observations" rather than daily superintendence. The definition of "supervision" contained in the AIA documents caused the misunderstanding between the professionals and the courts. The architectural profession intended the word to mean that the architect would periodically visit the site and meet the immediate needs of either the owner or contractor, but the courts interpreted the word "supervision" to be more all-encompassing. As a result, the architect was charged with neglecting to act when an unsafe condition existed.

It would be redundant to recommend that design professionals clearly define the word "supervision" or substitute another word. This course of action has already been followed without positive effect. One author suggests:

It would appear, from the reasoning of recent cases, that the engineer struggles to restrict the perimeters of his supervision responsibilities by amending contract documents to eliminate the word "supervision" (which some engineers believe is the cause of all their troubles) and by making the contractor (at least on the record) more responsible for construction management is doomed to failure. Irrespective of contract terminology, the courts now seem to be looking at the total construction pattern in a particular case to see who is really in control. In the vast majority of cases, primarily because there is no one else as qualified to take over his leadership role, the engineer is the person in control. As such, he acquires the liability and duties which flow from that right.

The architect should recognize that he is in control and has a responsibility to supervise the construction process within the parameters established by statutes and his own contractual authority. If the magnitude of responsibility which accompanies such authority is too great, the architect should retain personnel who are competent in this role and include a sufficient sum in his fee to employ the staff necessary to monitor construction activities on a daily basis.

Specific Writing

There are three basic principles on how to avoid professional liability: "put it in writing," "put it in writing," and "put it in writing." Although many cases have been decided for individuals without the protection of a written document, there are many more where the wording saved the day for the individual who created the document. Not only is it important that a written document exist, the wording of such a document must be very specific and both its technical and legal importance understood. In addition to the case of Howard, Needles, Tamen, and Bergendorf, et al v. Steers, Perini, and Pomroy, cited earlier, two other decisions extoll the importance of specific writing and clear understanding of its legal interpretation. In Larson v. Johnnies, the court rejected an owner's claim against an architect for defects in the mechanical system. The owner had rescinded the architect's supervisory contract, depriving the architect of the opportunity to make periodic onsite observations which may have led to the correction of the defect. In an effort to save money, the owner advised the architect before the work began that he wished to dispense with the supervisory service. The architect consented, but only after the owner had formally released him "from any and all claims, demands, actions, or suits of any kind arising out of any liability, known or unknown, of said parties to each other..." As a result of this writing, the court ruled in favor of the architect, stating:

No more precise words in the English language could have been employed to mutually terminate and rescind the relationship...without such supervision and further architectural services, deficiencies in performance might arise, which would be uncorrected, ambiguous plans might not be made certain by interpretation, and expanded by working drawings. Such future damage was legally in their contemplation in signing the release.

In the case of Aetna Insurance Co. v. Hellmuth, Obata, and Kassabaum, the contractor's surety was allowed to recover progress payments made to the contractor for unacceptable and incomplete work because the architects had failed to properly supervise construction. When the contractor ran into financial difficulties, the surety intervened and financed the subcontractors to complete and correct the work. The surety in turn brought suit against the architect for his negligence in certifying payment to the contractor when, according to the requirements of the contract, he had a duty to supervise the work and certify the payments accordingly. The court, in its ruling in favor of the surety, stated:

Under Missouri Law, surety may recover for loss occasioned by the architect's negligence in failing to properly supervise construction project where architect is obligated by contract or agreement to supervise construction, regardless of lack of privity between surety and architect...Words in architect's contract requiring 'supervision of construction' or words of similar import are not words of art and should be accorded their ordinary and usual denotation in absence of evidence showing different or more restrictive connotations.

It is very important that the specifier of the architect's documents and the interpreter of the contractor's documents understand the specific wording contained in the General Conditions of the Contract Documents. Not
only are these words and phrases specific within the meaning of the contract, but they are also affected by individual statutes which may reinforce or alter the specificity of the writing. Clauses contained in the contract, such as the "indemnification" clause and the "agency" clause, are governed by statute and will be affected accordingly. It is therefore very important that those writing and interpreting such clauses know the statutes and the effect they might have.

Other clauses, such as "time is of the essence" and "no damages for delay", are legal expressions having specific legal interpretations and importance. The requirements of state statute and specific legal interpretation are both brought out in the case of Peter Klewit Sons Co. v. Iowa Southern Utilities Co. The general contractor, one of several prime contractors on a particular project, brought action against the engineer and owner for breach of contract, negligence, and equitable adjustment of contract price. The contractor attempted to prove that his work was delayed because of the engineer's negligence in coordinating and expediting the work of all the prime contractors. The court decided against the contractor for the following reason:

Under Iowa Law, where language contained in 'no damage' clauses is clear and without ambiguity, such clauses will be regarded as valid, and enforced according to their terms...Under Iowa Law, in order for 'time to be of the essence' in contracts, there must be expressed provisions to that effect.

Because the court paid close attention to the specific wording within the contract, the contractor's claim against the engineer was defeated. To help clarify and reinforce the importance of these points, it is worth noting the relevant portions of the contract.

Article III of the contract agreement provided that:
Time of completion is of the essence of the contract agreement, and that the contractor shall proceed with the work in accordance with the specified schedule.

Article G C—35 of the Contract General Conditions provided that: The contractor expressly agrees that the construction period named in the contract agreement include allowance for all hindrances and delays incident to the work. No claim shall be made by the contractor for hindrances or delays from any cause during the progress of the work, except as provided under...

Clearly both the architect and the contractor are legally responsible to each other. Neither the architect nor the contractor can survive in the construction industry during the age of consumerism without legal counsel, so retention in daily activities is highly recommended. If a summons is issued before a lawyer is summoned, it may be too late.

Notes
3. ibid., Articles 4.3.1. and 4.4.1.
4. ibid., Article 4.10.1.
5. ibid., Article 4.18.1.
8. ibid., p. 7.
11. ibid., Article 4.18.
17. 120 Red 865 (6th Circuit Court—1903).
18. 217 N.Y. 382 (1882).
19. 89 N.Y. 470 (1882).
23. 143 NE 2d 895 (1957).
34. 226 NE 2d 630 (1967).
36. 231 NE 2d 588 (1967).
38. N.Y.S. Supreme Court, Monroe City, (Dec. 1, 1972).
41. Court of Appeals, State of California, 1st Appellate District, Div. 3, Civil No. 32264 (July 10, 1974).
44. ibid., p. 756.
45. ibid., p. 635.
48. ibid., p.487.
51. 74 Pac 708 (1903).
52. 226 NE 2d 630 (1967).
55. 392 F 2d 472 (1968).
Brickwork in Italy

The Masonry Institute of Iowa at its recent Annual Meeting held in Des Moines, presented to the Department of Design of Iowa State University a set of 500 slides known as "Brickwork in Italy."

This presentation was made by Paul Skiles of Brooks, Borg & Skiles on behalf of the MI. The slide program was photographed, prepared and edited by Ambrose M. Richardson, FAIA, as an audio-visual project by the MI for use in architectural schools throughout the country.

"Brickwork in Italy," is an encyclopedic slide and text treatment of both structural and decorative uses of brick in Roman, early Christian, and Italian Gothic Architecture. It illustrates the development over several centuries and through photographs, drawings, and text showing what was done and how it was done.

Accepting for the University was Mr. & Mrs. M.P. Brooks, Professor and Dean of the College of Design at Iowa State University.

ACI Compilation on Concrete Repair and Restoration

The repair and restoration of concrete structures — the mounting attention given to it, current methods, what some of the problems are, and other aspects — is the subject of a new publication by the American Concrete Institute.

The 118-page aid to designers and contractors is a compilation of articles which appeared in the September 1980 issue of ACI’s Concrete International: Design & Construction. The September issue was largely devoted to repair and restoration.

The compilation includes articles on the repair of fire damaged concrete, sawing and drilling, cleaning masonry surfaces, uses of epoxy injections, repair of bridge superstructures, shotcrete repair, underwater grouting, repair of abrasion-erosion damage, high performance patching systems, as well as other aspects of the subject.

In a forward to the issue, editors of Concrete International noted that concrete repair and restoration will be "a major public works priority of the 80's" because of inflation, funding cutbacks, and other factors which will curb new construction.

Cost of the compilation (Catalog No. C-5) is $7.95; $6.25 to ACI members. Shipping and handling fee is $2.00.

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