



ARCHITECTURE

EHLINGER & ASSOCIATES

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SANTA MARIA NOVELLA
Florence, Italy

This edition's limited edition signed print by Ladd P. Ehlinger is of Santa Maria Novella in Florence, Italy. This is actually a Gothic church with a Renaissance facade completed in 1470 -- and a very famous one at that. It became famous because the architect, Leon Battista Alberti, solved the problem of the awkwardness of a facade when expressing the spatial configuration produced by the lower side aisles' roofs juxtaposed to the higher nave roof in the middle. In the usual Gothic style expression, towers on each side of the facade concealed this awkwardness of roof height change. Alberti used the device of the scrolls on either side to provide a visual transition from the low roofs to the high roof, and bounded decorative circles within the scrolls that echoed the rose window, the decorative circle in the pediment and the tops of the arches.

Another interesting aspect of Santa Maria Novella is the use of severely contrasting stone within the same plane of an element. The dark stone is actually a very dark green color and the white is a rather

stark white -- which almost renders a black and white effect. This gives an ambiguous definition or rendering of surfaces: in some areas an almost "zebra stripe" effect is created, such as on the pilasters. When this technique is used next to definitive elements such as the squares under the cornices, it defies the shadows that are produced, and tends to give a vibratory appearance or shimmering effect to the surfaces. Other Florentine Renaissance churches made use of this same device, such as the Duomo, and S. Miniato al Monte, and the Cathedrals at Siena and at Prato as well.

Alberti was a great 15th century architect, with more of an intellectual than practical bent. He was an avid writer, and a traveller who visited ancient Roman ruins and studied the theories of classical architecture and mathematical proportions described in those theories. He was also a sculptor. His books on architecture spread Renaissance ideas and concepts throughout Italy and Western Europe with great influence.

WELCOME ABOARD!

Amee Brown Donald joined E&A's New Orleans office in February. Amee graduated with a Bachelor of Science in Mass Communication from the University of Montevallo in Montevallo, Alabama this past May. Amee is from Birmingham, but moved to New Orleans to be with her husband who is employed with Cooper Energy Services in St. Rose. Amee is currently serving as our Administrative Assistant and hopes to attain a career as an Event Coordinator and Public Relations Specialist. Amee brings experience in community relations and various clerical responsibilities with her to New Orleans by way of internships with the Bessemer and Montevallo Chamber of Commerce, both in Alabama.

Boyet Junior High School

E&A was recently selected by St. Tammany Parish School Board to design a 12 Classroom addition, renovate the existing Rest Rooms and add additional Parking. We are now in the Design Development Phase which we will show you later.

ADA

The ADA which is euphemistically known in the architectural profession as the "**A**ttorney **D**eployment **A**ct" is actually an anagram for the "**A**mericans with **D**isabilities **A**ct", which was passed by the U.S. Congress and signed into law by President George Bush in 1990 with full implementation in January 1992. This satirical nickname derives from the belligerently litigious tone of the Act and some of the U. S. Justice Department attorneys that enforce it, along with some groups of disabled individuals attempting to enrich themselves through litigation under the Act. The ADA is in fact an amendment to the Civil Rights Act of 1964, which is rather unfortunate as the majority of the Act deals with design criteria for the handicapped - something sorely needed, although the design professions already had this in the form of *ANSI A117.1 - Design Standards for the Physically Handicapped* and in *NFPA 101, The Life Safety Code*.

What the ADA did was to make it a legal right for the Disabled to have access to and within any building open to the public, with the right to have damages assessed against the Owner or Tenant of an inaccessible entity and awarded to the Disabled plaintiff, and also a penalty assessed, and an imperative by the Court to the Owner or Tenant to remediate the facility to a condition of accessibility and compliance with the Act, and to be assisted by the U. S. Justice Department in any litigation against any allegedly of-

fending Owner or Tenant. This is powerful stuff!

The ADA requires Owners and Tenants to retrofit or alter existing facilities and to design new facilities to total accessibility. The ANSI Standard had only required that one accessible route and means of egress (ingress also) be provided into a building and within the building, whereas ADA requires that all entrances be accessible. ANSI required one Rest Room to be accessible -- ADA requires that all Rest Rooms be accessible with a prescribed number of accessible fixtures. ADA requires that all spaces open to the public or other employees be accessible.

Within the ADA are the Accessibility Guidelines, called the ADAAG. These are an adaptation from the ANSI Standard, which were also written by lawyers not Architects, and thus have interpretation errors due to the rigidity of the mind set of the lawyers that wrote it. For instance, the ADAAG calls for the diameter of handrails to be 1-1/2". The ANSI lawyer who read the handrail manufacturer detail left out the complete text of the note which read: "1-1/2" STANDARD PIPE HANDRAIL" that pointed to the handrail in the graphic detail. The lawyer left it out not realizing that 1-1/2" standard pipe means an actual 1.9" diameter -- a much more comfortable diameter (actually 2" is the ideal diameter) of a handrail to grasp for both handicapped and able bodied users. This went into the ANSI detail, and then was adopted by ADA. Now this error is rigidly embedded in the law, although the ADA Review Board has ruled that 1-1/2" standard pipe is OK.

In the Life Safety Code, there were two issues that were debated for years, with no permanent resolution in the minds of the design professionals, yet the ADA adopted these also. One has to do with nosings on stairs and the other with slip resistance.

The stair nosings for a year or two were deleted, because the handicapped were said to hook their toe on the nosing and trip when ascending the stair. Yet it was then found that the able bodied were tripping on no-nosing stairs both on ascent and descent because that space under the nosing was needed to accommodate the shuffle motion of an able bodied foot. Then a compromise

nosing with a sloped underside was approved along with no nosings -- no more able bodied tripping.

There is no reliable slip measuring device -- that is a device that measures the coefficient of friction. Yet the writers of the ADA fearlessly incorporated coefficients of friction in the ADA for floor surfaces. The device used by manufacturers is the James machine, which can only be used in a laboratory setting. Field use machines give entirely different results that are not correlative. The ANSI A117.1 had included a coefficient standard in a proposed standard that was never adopted, and dropped the idea for the above reason.

Key language in the ADA talks about "readily achievable" alterations or remediation of the facility (defined in the Act as what one can afford based upon one's finances), and "technically infeasible" alterations (defined as what can or can't be done from a technology point of view). What you may think is readily achievable or technically infeasible will not necessarily be the same as the Judge's thinking. Of course these determinations were made at first by the Court only, leaving the Owner, Tenant and Architect in a huge grey area of interpretation with no authority to talk to, or to rule as to proper interpretation. Then the Justice Department attorneys decided that they should have an ADA Review Board to make interpretations, which cleared up the indecision to some extent. But what has actually occurred is the politicization of design standards, sometimes to the point of absurdity:

Signs are required under ADA to be repeated in Braille immediately adjacent, but do we really need Braille signs at drive up bank teller windows as are now required? Since firemen are required to be able bodied, do we really need accessibility to the sleeping accommodations in a firehouse? The ADA Review Board presently says we do.

Stadium type tiered seating prevalent in football and basketball stadiums, and recently adapted and the rage in movie theater design, is the most difficult to make totally accessible. Historically, stadium and theater owners and designers have allocated all handicapped seats to one area because of the infeasibility of making every row of seats accessible. Chair lifts as presently marketed do not

have the capability of turning the wheelchair 90° to the slope of the run when a particular row has been reached in the ascent or descent of a particular tier, nor is the standard row width adequate for the passage of a wheelchair. This practice has been vociferously objected to by militant disabled groups, and by the Justice Department attorneys, who claim that the handicapped are entitled to sit on any row in any tiered seating. If the chairlift were redesigned to turn 90° at each row and the row width was widened to allow wheelchair passage, then the sight lines would be all wrong as the slope of the tier would either be shallower or steeper, the total distance to see at the far end would be too far or too high for the same number of seats, and too much area would have to be built for a given number of seats, thereby making the facility too expensive.

The Justice Department filed suit against the architect of a sports arena in Washington, D.C. recently because all seating rows were not accessible. The architect claimed no cause of action because the designers of facilities are not named as being responsible for compliance in the ADA, only the Owner and Tenant. The trial court dismissed the architect, the appeals court affirmed, but on rehearing remanded it back to the trial court because of the politicization of this issue. The trial court then held the architect liable. The architect settled with the Justice Department, and agreed to redesign not only the D.C. facility but all the other sports facilities they were presently designing as well to be more accessible. Similar suits have been filed against tiered seat theaters by handicapped groups recently in the New Orleans area, but have not been adjudicated or settled yet.

As architects for both public and private facilities, we have to design for compliance with the ADA, although we have had some of both types of clients attempt to direct us not to comply with the Act. This we can't do, as the architect's licensing law requires us to comply with all applicable laws. Even though the pendulum may have swung too far with the ADA (there are proposed revisions that will rectify some of this), the older one gets with the possibility of becoming disabled a reality, even for a short period of time, the more reasonable some of the Act's provisions seem.