SDS/2 is the only BIM software that designs connections intelligently. This means it recognizes — and resolves — erectability issues and framing conditions while automatically designing connections.

SDS/2 takes the work out of connecting your steel. By intelligently analyzing the project using your chosen design code, and evaluating all the steel in the project — instead of a single member end — SDS/2 gives you connections that are a perfect fit in the field.

Don’t waste any more time or money on macro-based products and connections. Take advantage of SDS/2’s connection intelligence to increase your efficiency and streamline production.

Visit sds2.com or call 800.443.0782 to learn how you can start building intelligent connections in your projects today.
The State of the Economy Is the Overshadowing Factor In Everything That Goes On These Days.

It looms large in our businesses, it affects us at our homes, and our families may have to cut back on unnecessary spending and make adjustments to leaner times. Many of us may have friends that are hurting worse than we are. It’s that elephant in the room and it’s in every room you go in. You can’t escape it. It’s everywhere in the world because we’ve all become so close through this world economy that when a major trade partner takes a hit almost everyone down the line takes a hit with him.

In my over thirty years in business this downturn has a far greater magnitude than any of the others I’ve ever been through. It is at times like these that we can really appreciate having a resource like NISD to help us through it all. It’s comforting to have contact with others who face the same struggles as you do. There is the opportunity to network with fellow members, to get together and learn about how other detailers are coping. It’s just nice to know that you’re not alone out there.

Our Institute is healthy and strong. Our Board of Directors is guiding us through these stormy times and I have optimism that like all the other economic downturns we’ve been through – this too shall pass.

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Inside this Issue
The 3Rs ...

*It used to be the 3Rs for Reduce, Re-Use, Recycle, but it now stands for Recession, Re-group and Retaliate.*

It seems that this recession is now deep rooted and is triggering a new set of feelings and actions, quite natural when you’re under the gun, protectionism being one of them and retaliation against old partners being another. But is it the right thing to do? Don’t we need to re-group when it’s time to fight back? My opinion is that the more we talk to one another, the more we share information and the better it will help all to survive collectively. Sure there will be casualties. The ones that borrowed on their future and spent wildly will fall, but the strongest will survive. Sounds like Darwin’s theory on Evolution doesn’t it, “Survival of the fittest thru elimination of the weakest”.

Very few detailers actually know their costs. Most detailing firms and even more so, single detailers, gauge the price of a job on their monthly payments. They use gut feelings or their immediate needs regardless of the real costs of operating a business or the time it will take to do the job properly, and often bid on the tonnages only. Furthermore they are all caught in this downwards auction that goes on after the bid opening and it goes down, down, and down until the thing is so beat that there is not a drop of blood left in it.

A lot of detailers have invested large sums of money, sometimes borrowed against their only equity, their homes, to buy high end software packages, not always taking time to read the small print at the bottom of the contracts that limits their freedom to act and that carries horrendously expensive maintenance fees. The nice 3D color views twirling around every which direction on those flat screens make the packages look so appealing but reality sets in and they now have to make those payments.

It reminds me of 1983 when I saw my first steel show in New Orleans. All were watching the pen plotters zip-zapping on the sheets laying ink faster than the eye could read. It was the end of detailers then, they said, and they were all buying these $100,000 packages that merely drew beams and columns that any junior detailers could do with a good master and a sepia machine in no time.

Ah! The good ole days! The smell of burnt rubber and coffee stains all over the drawing boards.

Some detailing firms are using this slowdown to organize and prepare for the Quality Procedures Program or have employees study for the IDC test. Some others are actively marketing their companies by sending out sales letters or calling on old customers.

NISD’s Industry Standard is also a potentially helpful tool in learning how to operate a business in steel detailing. Just as well as a membership in the NISD will keep you abreast of what is going on in your trade.

Attending our Annual meeting in May in sunny Florida is a good way to learn about the trends (BIM) and meeting the key players in your industry. Check out the NISD web site at www.nisd.org for more information.

**CALENDAR**

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<tr>
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<tr>
<td>March 12-14</td>
<td><strong>SEAA National Convention &amp; Trade Show</strong> – Kingston Plantation, Myrtle Beach, SC</td>
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<tr>
<td>April 1-4</td>
<td><strong>NASCC</strong> – Phoenix, AZ</td>
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<td>April 4</td>
<td><strong>NISD Board Meeting</strong> – Phoenix, AZ</td>
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<td>May 14-16</td>
<td><strong>NISD Annual Conference</strong> – Deerfield Beach Embassy Suites, Florida</td>
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<tr>
<td>June 14-17</td>
<td><strong>International Bridge Conference</strong> – The David L. Lawrence Convention Center, Pittsburgh, PA</td>
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*These events are great ways to stay current on trends and network with others. Join us for any of these events in the first half of 2009.*
Vice President Mike Bowers –

The current Vice President of the NISD is a relative newcomer to the Institute. Let’s get to know him a little better.

Mike started his career in steel detailing in September 1969 at Mosher Steel-Dallas. While working at Mosher Steel he saw the last rivet job go through the plant and worked on large industrial projects. Mike worked at Mosher for 3 years before moving to a contract detailing office in Garland, Texas. At this smaller office he was exposed to a variety of commercial and industrial projects. He worked at this “sweat-shop” until January 1984 at which time he opened his own shop under the name of M.D. Bowers, Inc. Since that time he has seen many changes and compromises to the steel detailing industry. At Mike’s office they mainly detail small to mid-size commercial projects with about 15% of the projects in the industrial sector.

Mike joined the Southwest Detailers Association Chapter in 1995 and has held each of the offices in that chapter. He was elected the National Director for the SDA in 2004, holding that position until 2008 when he was elected to his current position of Vice President of the NISD.

Mike has been married to his wife Liz since February 1972. They have two wonderful children, Melanie and Chad. They also are blessed with three very spoiled grandchildren. Mike and Liz live in the small town of Rowlett (a suburb on the northeast side of Dallas) where their home backs up to a golf course. At 250 yards from the box on the right side of the fairway, Mike has accumulated a 35-gallon drum full of golf balls in 4 years. Mike & Liz also own a small farm in east Texas to which they escape as often as they can.

Mike enjoys playing golf, snow skiing and scuba diving. Mike’s favorite leisure time passion though, is riding his HD RoadKing. Mike has been from the east coast to the west coast, passing through twenty of the lower forty-eight on trips. Colorado and the Rockies is his favorite destination. This summer he is planning on marking off an item on his “bucket list”, by riding the 9000 mile roundtrip from Dallas to Alaska. Mike and Liz also take shorter trips to bed & breakfast places all around the state of Texas.

Mike enjoys watching sports and until this year held season tickets to the Rangers baseball team. Something about getting tired of waiting on pitching.

Mike and Liz are highly involved in their church. As two of the original organizers of the church, they have seen God bless the attendance, going from 10 to an average of over 70 in less than two years. Mike and Liz manage the coffee kiosk in the lobby. The average age of the congregation is about 30 years old. They just keep Mike around to remind them that there is really life after age 40.

Mike’s aspirations for the Institute are that through good policies, decisions and quality programs, the NISD will become a driving force within the steel industry.

You can reach Mike at M.D. Bowers, Inc. – mike@mdbowers.com
In Memoriam

Timothy Johnson

We regret the passing of our friend and longtime Pacific Chapter member Tim Johnson. Tim owned and operated Drycreek Drafting in Modesto, California. He was a strong supporter of NISD and a valued member of the Pacific Chapter. Over the years Tim served in every chapter office including two terms as Chapter President.

Tim’s son Scott was active with him and we are all pleased to see that Scott has stepped in to take over for his father and is now running Drycreek Drafting.

Tim liked going to our Annual meetings and always enjoyed playing in our golf tournaments. We in the Pacific Chapter will always remember Tim and are grateful for his many contributions to our Institute.

by John Linn

NOTICE

Proposed Amendment to the Constitution and By-Laws:

To be voted upon at the Annual Meeting May 14-16, 2009

By-Laws Section B – Definitions of Memberships

6. Overseas Member At Large: An Overseas Member At Large is one whose office is outside the Americas and who otherwise complies with the definition of Member At Large in Section B, Article 1.

By-Laws Section C – Attendance and Voting

1. Attendance and Voting by Members: Any member in good standing with voting rights shall be permitted to attend and vote at any Special or Annual Meeting.

(a) Member In Good Standing: To be considered a member in good standing with voting rights, it is required that all Institute fees and dues are paid in full and the firm is certified under the Quality Procedures Program in accordance with the policies as established by the Board of Directors.

2. Regional Chapters: Any Regional Chapter in good standing shall be permitted to attend and vote at any Special or Annual Meeting or by proxy or letter ballots as follows: Each Regional Chapter shall notify the Institute prior to the meeting and within time limits specified by the Board of Directors the number of members of the Regional Chapter entitled to vote at the meeting. Quality Procedures Program certification and the payment of fees and dues constituting “good standing” shall be measured by the fiscal year in which the meeting is held, provided that a Regional Chapter shall be entitled to cast the vote of any former member if that former member’s dues and initiation fees have been paid for that fiscal year. At the time of notification to the Institute as set forth above, the Regional Chapter shall also state the name of its representative who will be attending and voting for the Regional Chapter at such meeting.
Engineers Need A Universal Directive on Responsibility

Reprinted From ENR.com 5/12/08 by Leonard N. Ross

On Feb. 5, 2007, a 60-foot section of the David L. Lawrence Convention Center in Pittsburgh tore loose and plummeted to the floor below. Fortunately, the grand opening of the center was still days away and there were no deaths or injuries reported.

That collapse rekindled memories of the July 17, 1981, Kansas City Hyatt Regency collapse, a horrific tragedy that really started the debate over which entity has the ultimate responsibility for the design of connections in a steel-framed structure. Although some 27 years have passed, that same issue apparently still remains unresolved.

The March 5, 2007, Engineering News-Record article, “Engineers Slam Failed Joint Detail” on the Lawrence collapse included the following statement: “Often, the structural engineer shows conceptual connection details with certain conditions on the drawings. After the fabricator’s detailer designs the connections and stamps the drawings, the engineer of record reviews and approves them. As far as responsibility goes, 'the fabricator will say the engineer approved the detail; the engineer will say the fabricator sealed the shop drawings', says one source.”

Actually, it’s a little more complicated than that. To quote Yogi Berra, “It’s deja vu all over again.”

After the March 17, 1993 American Institute of Steel Construction (AISC) annual meeting, the AISC magazine, Modern Steel Construction, published an article in its May, 1993 issue reporting on a panel discussion. The subject was who had the ultimate responsibility for the design of connections for structural steel members.

Here are some modified excerpts from the MSC article:

Richard Tomasetti of Thornton Tomasetti Engineers, Inc. took the position that advocated shared responsibility if the fabricator’s services extended to design of connections. He stated, “I want to change the question (from who is responsible for design) to who is responsible for the services a given party provides.”

The MSC article goes on to say: Among the reasons for the desire to shift responsibility were: pressure from lawyers and insurance companies, increased project complexity, a reduction in the quality of shop drawings by the fabricator, and tighter budgets and time frames for project completion. To make this paragraph

Continued on next page.

IDC Testing in Ecuador

by Mike Bowers, IDC Chairperson

In September 2008 I had the privilege to travel to the country of Ecuador and proctor an IDC exam. Luis Arana of A&P Detailing had his office of nine detailers tested. The moment that I entered Luis’ office it was quite evident that all were very enthused and dedicated detailers eager to learn as much as they could about the profession that they had chosen.

It was quite refreshing to see the age of this group, as they were mostly less than 30 years of age. The two elders of the group were in their early thirties. One of these elders, or #2 as she was affectionately called, saw to it that this group of detailers stayed focused on their projects and duties. While Luis was out of town the group had their NISD membership certificate gold-leafed and mounted in a dominant place in the office. Luis and his lovely family showed Liz and I around Guayaquil over the next few days. Thank you to Luis and his office for the great experience we had in their country.

Almost forgot, all nine detailers passed and I am looking forward to great things from them in the future.
Board Meeting Highlights
Kansas City, MO – January 24, 2009

Constitution & By-Laws
John Linn

There is an amendment ready to be voted on at the next Annual Meeting being held May 14-16 at Deerfield Beach, Florida. The amendment would allow for the formation of Overseas Chapters. Directors should poll each chapter member for their vote.

After the Annual Meeting an updated copy of the Constitution will be sent to all regular members.

Treasurer’s Report
Paul Crockett

Paul Crockett presented the treasurer’s report as of December 31, 2008, which showed the Institute to be operating responsibly and within budget.

Paul reviewed with the board a proposed budget for 2009 and asked committee chairs to review and comment on their budget allocations for the 2009 fiscal year.

Controller’s Report
John Linn

At the previous meeting John had given the board a quotation for directors’ liability insurance, which would cover all directors throughout the U.S. and Canada. The board had reviewed the proposal and wanted quotes from other companies outside of California.

The board requested that John get legal advice as to whether directors’ liability insurance is something that is really necessary for the NISD to have.

Engineers Need A Universal Directive on Responsibility
continued from previous page

more current I would add: “A reduction in the quality of the structural design product;” a situation boldly addressed by Document 962-D written by the Council of American Structural Engineers (CASE) and published by the American Council of Engineering Companies.

One of the founding fathers of the National Society of Professional Engineers was David B. Steinman, a pre-eminent New York engineer. It was Dr. Steinman’s firm belief that there must be a clear-cut demarcation between engineers and non-engineers.

That philosophy formed the foundation of my position at the panel discussion, which was: “Let’s be wise enough to prevent some of the future mishaps by rejecting attempts to improperly and unlawfully shift responsibility from the design professional to another party. A P.E. is licensed to perform and protect the public from harm. The engineer of record is the captain of the ship and cannot and must not abrogate any responsibility for the safety of his ship.”

My position in this matter has remained unchanged. The engineer-of-record is still the captain of the good ship structural.

As captain, he or she may delegate tasks to members of his crew (which de facto includes a P.E. engaged by the fabricator to design the connections); but he never abrogates his responsibility for the actions of his crew.

In the 15 intervening years since that meeting, why has there been no substantive resolution of this critical problem? What has the engineering profession done to avoid another nightmare like the Kansas City Hyatt Regency collapse, which killed 114 and injured 200 others, and just last year, when the I-35 bridge in Minneapolis collapsed resulting in dozens of dead and injured?

One glimmer of hope is that certain professional groups of engineers in this country have published position papers similar to CASE Document 962-D. I believe, however, that until all of these efforts coalesce into one universal directive, we will continue to experience deja vu all over again.

Leonard N. Ross is president, L. N. Ross Engineering Co., Atlanta, Ga. He can be reached at 404-237-3517 or leonardross05@comcast.net.
Administrator’s Report
Stephanie Andrew

The office has been very busy with IDC re-certification tests and new testing. Keep in mind that our two marketing brochures are available at your request. They are: “Improve Your Business, Your Career & the Steel Detailing Profession” and “Certification Programs for Detailing Companies & Individual Detailers”.

Please let the office know of any address, email or telephone number changes.

Marketing Committee
John Linn

In April 2008, we placed a full-page ad in “Design-Build Dateline” magazine, which promoted the IDC and QPP programs. The board directed the committee to prepare an advertisement for Modern Steel Construction mainly featuring the IDC program.

Connection Committee
John Linn

The Winter 2009 issue is scheduled to be out in March. The Fall 2008 issue has had all of the 995 printed copies sent out and we need another fifty copies for the upcoming SEAA conference.

The board requested a printing of 2000 copies of the upcoming Winter 2009 issue.

Industry Standard Committee
Joel Hicks

Joel has finished his review of the latest proposed version of the AISC Code of Standard Practice. Joel asks for any input from NISD members. In his review, Joel does not see anything new that is in conflict with the Industry Standard. Our Standard already recommends a post award pre-detailing conference. Connection specifications agree with our Standard that the approval process by the owner’s designated representative for connection design is still required for all connections.

Where some of the necessary talents and abilities of a detailer are listed in the code, Joel would like to add “Connection Selection from AISC tables”.

Membership Committee
Fred Tinker & Terry Devine

The formation of the New England Chapter is nearly complete. They are finalizing their Constitution & By-Laws and are now ready for signing.

The Committee is working on software that will show all NISD members on an electronic world map.

Total membership now stands at 475 members.

IDC Committee
Mike Bowers

The program currently has a total of 443 certified detailers. 14 are Bridge - Class I, 4 are Bridge – Class II, 31 are Bridge/Structural/Misc. – Class I, 288 are Structural/Misc. – Class I, and 106 are Structural/Misc. – Class II.

The Bridge Re-certification is being re-worked and will be completed in the next few weeks.

Nominations for NISD Officers
Fred Tinker

The slate of officers nominated for the upcoming election at the Annual Meeting on May 16, 2009 is as follows:

President–Robert Beauchamp
Vice President–Michael Bowers
Secretary/Treasurer–Paul Crockett

Any other nominations may be sent to Fred Tinker at ftinker@pacificdrafting.com or faxed to (310) 522-1535.

Erector Liaison Committee
Jack Metcalfe

The main focus of this committee at this time is, and continues to be, the drafting of the new NISD/SEAA Manual for Erection Safety. This is a joint collaboration between us and SEAA whereby we are jointly developing material to be included. Robert Beauchamp is drafting new pages or revising old ones as required, I am responsible for organizing, table of contents, index, and written portions not a part of the illustrations (Kick-Off meeting, etc.), and SEAA is responsible for funding.

In other matters, last week I attended the SEAA winter board meeting. In addition to normal concerns regarding decking, safety, and the manual, etc., there are two areas of major concern.

One, which should be a concern to all of us, regardless of our political affiliation or whether or not you are working or retired from any occupation, is the “Employee Free Choice Act”. This act, which is union driven and highly supported in Congress, replaces an employee’s right to vote in secret and can be done in any place where workers gather outside the company grounds. If 50% plus one of a workplace signs the cards the company is, to all intents and purposes, organized. I would urge you to contact your elected officials and protest passage of this legislation.

The second area of concern is the standards being set forth by numerous states for crane operator training and certification. As you no doubt are aware there have been several fatalities due to crane accidents this year and every state wants to outdo the other in developing a plan, and to not care what the federal government is attempting to do. This is a potential nightmare.

Continued on next page.
Quality Procedures Program Committee

Jack Metcalfe & John Linn

The QP Program continues to struggle with a lack of participation and support from our membership. There is currently a total of 34 QPP firms but 14 of those are overdue for audits.

The Canadian Institute of Steel Construction has mandated that their detailing firm members must become certified in the NISD Quality Procedures Program by June 10, 2010. In response to their mandate the NISD board passed a motion that all NISD members become QPP certified by June 10, 2010.

After the board meeting John Linn was asked if our Constitution would presently allow for this membership requirement. The answer was that the Constitution would need to be amended before such a requirement as this could be imposed. John was also asked to seek legal advice as to whether or not this membership requirement is legally considered to be unfair restraint of trade.

Our good friend, David Ratterman was consulted and returned a very quick response that this was not a restraint of trade and similar requirements are now in effect in some other organizations today.

Mr. Ratterman gave counsel that if NISD member dues were used to develop or maintain QPP then it is acceptable to charge non-members a higher fee than NISD members, if the fee differential can be justified as a reasonable amortization of the NISD member investment in the program.

Since the initial motion to make QPP a membership requirement was not allowed by the NISD Constitution & By-Laws, the motion cannot be acted upon.

Jack Metcalfe made a motion to increase the QPP fee for non-NISD members to $500.00 over the member fee. The motion passed.

Web Site Committee

John Linn

2008 saw a huge increase in activity on our web site. We had 69,286 views and 51,959 visitors compared to 2007 when we had 32,377 visitors, for a 60% increase.

A new button has been added to the home page for Project of the Year.

Annual Meeting

Mike Bowers

All preparations are in place for the Annual Meeting, May 14-16 in Deerfield Beach, Florida.

There will be another great line-up of speakers. There will be seven in all who will mostly be addressing our theme of BIM/Interoperability.

Proposed NISD/AISC Membership

Mario Webber-Rookes

At the October 4th, 2008 board meeting in Fort Lauderdale, Florida, I was asked to head a committee to determine the viability of a proposed joint membership between the NISD and the AISC.

Fred Tinker, Chris Harms and Richard Stern all volunteered to be on the committee.

After exchanging ideas with my fellow committee members, I arranged a meeting with Scott Melnick and Roger Ferch of AISC in Chicago on December 15th.

Following is a summary of our understanding of AISC’s vision of this proposal, along with some of the probable repercussions:

1. AISC is interested in a “joint” membership, and by no means considers this a merger proposal.

2. They envision assuming general administrative responsibilities such as, processing applications, billing and monitoring dues, mailings, printing, publications etc.
3. Programs, which require technical skills, such as IDC and QPP, would remain directly under the supervision of the NISD.

4. They do not have a problem with the NISD maintaining its identity.

5. They do have some preferences/wishes (such as the NISD Annual tying in with the NASCC) but make no demands.

6. Their objective appears to be optimizing and unifying the steel industry - presenting a united front.

7. Membership cost and structure is negotiable, but would realistically result in an amount somewhat less than the sum of current NISD-AISC membership dues. And it is envisioned that there would probably be three cost categories rather than two.

8. Division of revenues was initially proposed (by AISC) as 50/50, but would be more realistically decided after a division of programs/responsibilities has been established.

9. A NISD membership would be the equivalent of an Associate membership in NISD.

10. AISC proposes to make “NISD” a category, much like Professional or Associate. Detailers wishing to join the AISC would join the NISD category, and thereby automatically become a member of AISC and NISD.

11. During the discussion, Scott Melnick expressed the opinion that engineers were concerned with the lack of qualified domestic detailers. It was felt that a joint membership might improve detailing image, and provide more visibility for detailers to the engineering community.

12. It was expressed that the NISD would have greater participation within the AISC regarding detailing-related activities, particularly via the Detailing Committee.

13. AISC has an upcoming board meeting in early March, and Scott would like to have something tangible to propose at that time.

Likely consequences

a) AISC assuming administrative duties could lead to a reduced workload for the NISD head office.

b) NISD administrative costs could be reduced substantially, thereby releasing funds for “volunteer” work.

c) Industry-wide image and visibility of detailers would likely be enhanced.

d) A review of current membership categories would have to be performed.

e) Constitution and By-Laws would have to be reviewed.

f) It is felt by the committee that keeping control of IDC and QPP is essential to maintaining the identity of the NISD.

A motion was passed by the board to agree in principle to pursue joint NISD/AISC membership.

NISD Survey

We will do a new survey of NISD detailing firms. The survey will be for the period ending December 2008. Richard Stern, Director of the British Columbia Chapter volunteered to conduct the survey.

Thank you Chris Harms for hosting dinner in Kansas City.

Board Meeting

The next NISD Board meeting will be held right after the completion of the North American Steel Construction Conference in Phoenix, Arizona. The meeting date is set for April 4, 2009.

What are you doing for SteelDay this year?
by Chris Moor, AISC Marketing LLC

The American Institute of Steel Construction announces a special nationwide event to promote the steel industry. The premier event is called SteelDay 2009, and the goal is to involve and educate people on the major features and benefits of structural steel through interaction with the steel industry.

SteelDay will be an interactive day with the structural steel industry. Steel fabricators, mills, service centers and others in our industry will open their facilities, jobsites and offices, offering tours and inviting the AEC community and general public in to see what we do and how we do it.

SteelDay provides a unique opportunity for those involved in the structural steel industry to raise the profile of our industry, while building lasting relationships with their local design community.

SteelDay 2009 will take place on September 18 at facilities across the nation. Our goal is to have at least one event in every state and we are already well on our way to meeting that objective. In addition, we aim to provide new online offerings to interact with those who are unable to leave their offices that day.

We’re planning an online contest, live webcams at jobsites and even a virtual fabrication shop, tracking steel live as it travels through the shop.

At AISC we encourage all members of the steel industry (fabricators, detailers, service centers, mills, galvanizers, bender-rollers, HSS producers, etc.) to become involved in this national day of awareness geared towards the architecture/engineering/construction (AEC) community and the general public.

Detailers play a crucial role in the structural steel industry, often utilizing leading edge BIM technology that architects, engineers and contractors want and need to understand more about. So, what are you doing for SteelDay this year?

To find out more visit www.SteelDay.org.

Winter 2009 • Connection

National Institute of Steel Detailing

11
It sure looks odd to see two apparently similar stadiums standing side by side in East Rutherford, New Jersey, right outside of New York City. But when New Meadowlands Stadium, the home of the New York Giants and Jets NFL teams hosts its first game in August 2010, there will be no mistaking it with its older neighbor - Giants Stadium, which is soon scheduled to be torn down. This project is being built in the new era of structural steel design with strength, stability, and beauty in mind. When completed it will become one of the largest stadiums in the National Football League.

New Meadowlands will seat no less than 82,500 fans per game and host 20 NFL games per season. It will host more games per year than any other NFL stadium in the United States. It will also host numerous other events including college football, international soccer, music concerts and more. Its innovative features include an outer skin of aluminum louvers and interior lighting that will switch colors depending on which team is playing at home. The massive “Great Wall”(400 feet long and 40 feet high) will display images that will alternate between photographic murals of the Jets and Giants on game days and different pictures for concerts and other events. Inside the arena, four 40-by130 foot scoreboards will hang from each corner of the upper deck.

Steel Detailing: The tackling of a giant... at jet speed

Lead by Technyx, a business unit of Canam Group, four steel detailing companies were involved in the demanding process of detailing the steel framing of the New Meadowlands Stadium. Cadmax, Datadraft, BDS, and BDSD acted as leading lights of the detailing group worked closely with Structural – Heavy Steel Construction, along with the architect, engineer, and general contractor. They had to be on top of their game to coordinate the detailing and erection of the structural steel for this colossal venture.

Challenges and Achievements

Of the estimated 24,000 tons of steel that frame the stadium, Cadmax was responsible for the detailing of 5,534 tons. Some of it was of a complexity that tested the skill and experience of its team.

One of the challenges met by the detailers was to deal with the really heavy steel pieces and complex connections that support this giant structure. Some of the columns at the base of the stadium are as big as W14x730 and weigh over 15 tons each. They also had to take into account the very fast schedule and minimize communication problems between the drafting offices. As soon as the project started in April 2007 and with only preliminary drawings available, 25% of the 24,000 tons of structural steel had to be detailed, fabricated, and erected by the end of the year 2007, and 70% of the steel had to be erected by July 2008. Efficiency and speed were essential, especially when dealing with a steel fabricator that had to produce two other major stadium projects simultaneously!

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The Meaning of Teamwork

All along, Cadmax and the other drafting offices had to keep a live advance bill of material up to date with connection design developments and revision changes. They had to manage a coating system that used several different types of paint throughout the project. They had to coordinate their work with the precast concrete seating system. The structural steel was further complicated by a great many ramps, expansion joints, raker beams, and various precast supports.

Cadmax had to interface between numerous models in their office and numerous models in the other detailers’ offices. Cadmax therefore had to develop an efficient and effective method of detailing through the interfaces. This was accomplished by the use of Technyx shared E-Folder Service that allowed for all offices to work as a team.

No Pain, No Gain

Cadmax was challenged by several major design changes throughout the project with a schedule that had to be strictly maintained. There was a complete revision of all detailed connections in the Lower Bowl area to allow for sequential erection of precast rakers. All connections in that area were redesigned and redetailed for torsional reaction within the established timeframe.

The detailers kept tight, well-referenced document control in the 3D model. They simplified the information sent to the field and that was much appreciated by the fabricator and general contractor. They generated complete erection diagrams for each erection sequence including 3D views with shipping marks and bolt sizes shown on the members. This system really worked well for the field and made the erection process go smoother and easier.

The structural steel was further complicated by a great many ramps, expansion joints, raker beams, and various precast supports.

The New Meadowlands Stadium under construction.

A W14x730 column splice.

Notice the many different paint systems here.
NISD established the Individual Detailer Certification (IDC) Program to evaluate an individual’s detailing knowledge. This recurring feature will provide insight from detailers who have received their Individual Detailer Certification through NISD. The following interview is with Dan Petersen of Cascade Design in Longview, Washington.

**In which discipline and category are you certified? (Bridge, Structural/Miscellaneous: Senior Detailer/Detailler)**

I am certified as a Structural/Miscellaneous Senior Detailer.

**How many years of detailing experience do you have?**

I have over 23 years experience detailing projects in the pulp and paper, aerospace, chemical, petroleum, timber, commercial, residential, and transportation markets.

**What influenced you to become a detailer?**

As a project manager for a fabrication shop I was constantly stuck in the bottleneck of waiting for our staff detailers to get the detailing completed on my customer’s projects so I could fulfill my customer’s delivery expectations.

**Where did you learn steel detailing?**

On the job, after hours, and on my own time. The company I worked for was using AutoCAD release 9 at the time. I had access to the workstations after hours, to experiment with trying to create drawings. The daytime detailers would give me pointers on how to use simple commands like array, and how to use blocks in drawings. It’s amazing how open your mind can be to learning new techniques that reduce several tedious hours to a few simple keystrokes.

**Did your exam results offer an accurate assessment of your detailing knowledge?**

I believe the test was both an accurate measurement of my detailing knowledge of situations I have had daily exposure to, and the ability to reason out the solutions to situations I have never encountered.

**What were your expectations of the exam? Would you make any changes to the exam?**

I thought the test would be much easier, and much shorter. I did not study for the test because it was open book, multiple choice, and I had all day to complete it. Much to my surprise, the test was very well written. It forced me to stretch beyond my comfort zone into areas of detailing I don’t operate in, and took me eight hours to complete.

The only thing I would change would be the addition of some feedback. I received a call telling me of my mid-90s score, but I feel I missed an opportunity to learn even more if I would have been told what topics I answered incorrectly.

**Why would you recommend the IDC program to others?**

I believe it’s a very good yardstick for detailers to measure their own qualifications in their field as well as the ability to substantiate those qualifications to their clientele.

**How has your certification helped you in your job?**

The testing process has shown me that I can use the many reference materials and tools available to the detailer to work through design situations not encountered previously, to achieve a positive outcome.

The certification itself hasn’t had any impact that I can see to date. Until now I have had more work than I could complete. Now that we are in the “New Economy”, and my established customers are scrambling for work, I’ll be using my NISD certification in my marketing approach to new potential clients.

**What advantage over other detailers do you have by being certified?**

I believe my certification will show my potential customers that I have demonstrated proficiency to the recognized peer group in my field.

Make Your Move!

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www.nisd.org
AISC and the fabricated structural steel industry introduce SteelDay 2009—a new opportunity for networking among members of the design, construction, and structural steel industry nationwide.

Find out more about SteelDay and sign up for an event near you at www.SteelDay.org.
California Chapter News
by Fred Tinker, Director

California Chapter Members are reporting there are a few jobs to bid and a lot of detailing companies bidding them. And only a few of these jobs are going ahead. It appears the industry is getting budget prices these days.

I have asked the California Chapter Secretary, Greg Daneshvar to send a reminder to all of our members about upcoming events relating to the steel industry. First is the Steel Erectors Association of America’s National Convention & Trade Show in Myrtle Beach, SC on March 12, 13 and 14. Second is the North American Steel Construction Conference in Phoenix, AZ on April 1 thru 4. And third is our National Institute of Steel Detailing’s Annual Conference in Deerfield Beach, FL on May 14, 15 and 16. This brings me to one more event and that is the long awaited joint meeting with the California and Pacific Chapters in Morro Bay, CA this June. John Linn and I have a special surprise guest who is attending the weekend meeting. The date, time, lodging and other information will be sent to all members of the California and Pacific Chapters. Anyone else wanting to attend the Joint Meeting in Morro Bay, CA please let John or me know.

The question of having a NISD/AISC Joint Membership was asked of all members of the California Chapter. The result of the poll was: 13 – Yes; 1 – No; 2 – Did not respond; 2 – Stay the way it is now and put more NISD people on the AISC Detailing Committee; 1 – Abstained.

Have a great summer!

Pacific Chapter News
by John Linn, Director

At our last meeting centered on potential joint membership with AISC and NISD. Our members are in agreement that there is a lot of upside potential for this union and that we should pursue it but do so with caution.

Our chapter will hold future meetings every other month on the third Thursday of the month.

We welcomed a new member into the chapter. The new firm, Cal Trek, Inc. had been a Member at Large for a short time and wanted to join the chapter. Cal Trek’s owner, John Pedersen has volunteered to speak at the upcoming NASCC in Phoenix, Arizona. We are pleased to have Cal Trek join us and feel that their participation will be good for our chapter.

Fred Tinker of the California Chapter and John Linn of the Pacific Chapter have made plans to hold a joint meeting half way between Northern and Southern California at a small town on the coast called Morro Bay. There will be a surprise guest visitor joining our meeting and we want to invite our chapter members and anyone else who wants to be there. When we know the exact date that the surprise guest will be in Morro Bay we will set the meeting date, but it should be sometime in the month of June.

Québec Chapter News
by Gérard Barbeau, Director

The Québec Chapter has two members, Technyx and BDSD, who are prepared for their Quality Procedures Program audit and should become QPP certified very soon.

The economy in our area is not good, just as in most other places. Fabricators here are worried about the stimulus package and any changes it might have on restriction of free trade with Canada and the United States.

We are encouraging our members to attend the NISD Annual Meeting and get better acquainted with other fellow detailers outside of Québec.

We have been working to increase our chapter membership by bringing in new detailing firms and also trying to bring in fabricators as associate members.

Québec WELCOMES OUR NEWEST CHAPTER “THE NEW ENGLAND CHAPTER”

INITIAL CHAPTER MEMBERS ARE:

Russell Shiebler
Alfredo Boracchini
Paul Crockett
Kevin Jacques
John Benvenuti
Kathy Kilbride

National Institute of Steel Detailing
Winter 2009 • Connection
Congratulations!

This regular feature recognizes detailers who have recently taken and passed the IDC test. The listing is by discipline and class.

**Structural/Miscellaneous**

**Senior Detailer – Class I**
- Nelson Castro
- Kevin Parker
- Marco Patrigiani
- Jasper Yang
  - M & D Drafting, Ltd.
  - British Columbia, Canada
- Ryan Alvero
- Raymond Dudang
- Joven Fajardo
- Flora Ruby Ozaeta
- Jose Elmer Sarzona
  - International Design Services, Inc.
  - Maryland Heights, MO

**Detailer – Class II**
- Juan Aguirre
- Margarita Aguirre
- Luis Arana
- Carlos Baquerizo
- Sonnia Freire
- Jenny Gongora
- Cesar Perez
- Alfredo Torres
  - A & P Detailing & Design, Inc.
  - Guayaquil, Ecuador
- David Curley
- Douglas Hugill
- Alex Ramirez
  - M & D Drafting, Ltd.
  - British Columbia, Canada
- Nellex Arevalo
- Joan Fulgencio
- Remigio Navarro
- Willie Solera
- Sammy Tolentino
  - International Design Services, Inc.
  - Maryland Heights, MO

**Current Renewals**

**Pittsburgh Chapter**
- Alpha Structures, Inc.
  - 26 E. Pike Street
  - Canonburg, PA 15317
  - malterio@alphastructures.com

**Québec Chapter**
- Steltec, Inc.
  - 22 Blvd. Desjardins East, Suite 200
  - St. Thérese, Québec
  - Canada J7E 1C1
  - maurice@steltec.ca
- TECHDESS, Inc.
  - 424 St. George Street
  - Saint Jerome, Québec
  - Canada J7Z 5Bl
  - info@techdess.com

**Members at Large**
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  - Tampa, Fl 33611-4044
  - bmcgill@mei-group.com
- PEC Detailing Co., Inc.
  - 33 Delcor Drive
  - Walpole, MA 02081
  - paul.crockett@comcast.net
- Steel Systems Engineering, Inc.
  - 4340 Fulton Ave
  - Sherman Oaks, CA 91423
  - simon@sseus.com

*Coming Soon - New Publications from NISD...*  
These reference guides are scheduled to be available by April 2009. You can order them online at www.nisd.org
The undersigned hereby applies for membership in the National Institute of Steel Detailing, Inc.

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This is the year for recognition. The National Institute of Steel Detailing has begun something new and exciting this year. The Project of the Year (POY) is the newest opportunity that the NISD is offering, in which to allow each member firm to participate. The panel of judges will be looking for projects that present a unique challenge to the detailer. Three categories are offered for members to choose where they will be most competitive.

Categories:

- Structural/Misc. projects less than 500 tons
- Structural/Misc. projects over 500 tons
- Bridge projects

For more information go to www.nisd.org and click on the Project of the Year icon.
The National Institute of Steel Detailing is holding its 41st Annual Conference in Deerfield Beach, FL and would like you to be a part of it. Each year we strive to bring in speakers who are knowledgeable in issues that matter to detailers and the steel industry as a whole. Come hear speakers talk about BIM and Interoperability. Building Information Modeling (BIM) is a significant new technology that is revolutionizing the steel industry. BIM is transforming the roles of professional service firms and how people work together, bringing remarkable new capabilities that can improve the speed and efficiency of projects.

Each speaker will present a unique perspective on how Interoperability is shaping the future of the steel industry. Vic O’Mara, Doug Evans, and Chris Keyack will each be speaking about what their company software packages will do as it applies in communicating with other software packages. Doug Fitzgerald will be speaking on BIM from the technological end. Will Ikerd II will be speaking about BIM from the theoretical point of view. John Moebes will speak on BIM from the owners’ points of view.

Join us at our Welcome Reception to get acquainted with the speakers and other members who will be attending. Saturday evening we invite you to our President’s Banquet where we will announce the Person of the Year as well as the winner of the Project of the Year.

For more information go to www.nisd.org and click on the Annual Conference icon.
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