



### *Australian Steel Convention 2006*

This year the Australian Steel Convention was held at the Hyatt Regency - Adelaide. Starting with a round of golf on Sunday 10 September the convention ran through to the afternoon of Tuesday the 12<sup>th</sup>. With over 300 delegates the event was certainly well attended. Participants from New Zealand and all states of Australia included steel producers, merchants, galvanisers, engineers, industry representatives, government departments, fabricators and detailers.

Presenters at the convention ranged from Australian Steel Industry leaders to International Key-note speakers sharing their experiences and forecasts. In addition to being an interesting and informative event the convention also provided participants with ideal networking opportunities.

The Convention was opened by the Premier of South Australia, the Hon. Mike Rann (MP). Topics covered by other speakers included Challenges facing the Australian Manufacturing Industry, the impact of China's economy on the global steel industry, risk management, safety, major projects and automation in the fabrication industry using NC data.

A social highlight was the "Meet and Greet" session on the Sunday evening held at the National Wine Centre. Convention delegates and their partners enjoyed the best of South Australian wines and hors d'oeuvres with musical accompaniment of a stringed quartet.

The Convention offered participants an occasion to relax and to have a look at what's happening in the Australian Steel industry as well as the global business environment. It also provided an opportunity to get to know other people who face the same risks and pressures in business and to be informed about the directions in which the various industry players are headed.

On a Detailing note, a national Steel Detailers forum was held as a lunch time session on the Monday. This brought together detailers from across the country and New Zealand to discuss some of the issues confronting our industry. I have prepared a separate report on this forum which is also included in this news letter. After the forum, the response of attendees was positive and constructive. You could almost feel the love!

Keep an eye on the QISD and ASI websites for more results and feedback.

Clayton Roxborough  
President  
QISD Inc.



### ***National Steel Detailers Forum***

A meeting for steel detailers was held during the Australian Steel Convention last month in Adelaide. The twelve detailers in attendance represented most Australian states and New Zealand. Also present were David Ryan (National Marketing Manager ASI) and Leo Wilson (Mincom).

The three main topics for discussion were:

1. National Skills Shortage- ASI's proposal to DEST in conjunction with the detailer associations and work with Careers Advice Australia.
2. ASI's Technology integration project.
3. Proposal on formation of a National Body for Detailers.

### ***Skills Shortage***

David Ryan described the work of the ASI in conjunction with the QISD and the NSWISD in putting a proposal to the Federal Government Department of Education, Science and Training for a matched funded dedicated resource on the skills shortage issue. This has been approved by DEST and awaiting a decision from the minister.

Work has also been done and support committed with Industry Skills Council, and Careers Advice Australia. This work would look at a dedicated steel detailer's course and work with Industry to get more entrants to this profession.

### ***Technology Integration***

This ASI project funded by AusIndustry and the ASI looks at bringing efficiencies into this fabrication industry by better integration of technology across the professions.

To date work has found

- There are differing levels of technology and skill levels
- There is a need to become more competitive
- Overseas have embraced 3d modelling.
- Training re-training and skill retention are big issues
- Common output rules from the models would help.
- There is a substantial value in having a national approach and a national body to work with.
- There is some reticence from low technology concerns and differing levels of commitment to introducing efficiencies.
- There is a lack of understanding of business processes across the board
- Detailers fear that if there is no national detailer view then their voice will not be heard.
- Need to make a decision on required standards of data files
- We need to give the industry a roadmap to follow.

Leo requested participation in case studies of success stories.

All – please respond to Leo.



*National Steel Detailers Forum.....cont'd*

**National Detailers body**

It was clear to all that there would be benefits in a National association.

The structure was contemplated as state bodies supporting a National Body.

It was suggested that there should be a detailers National Forum similar to the Fabricators forum. David Ryan offered the facilities of the ASI as the articulated body if the detailers wanted and it could be run independently by the State bodies.

The view of the group was that a National Body should be formed using an existing State's web and other amenities as required. It was decided to feed comments into Clayton as the prime point of contact.

Since the Convention meeting, a tele-conference between QISD, NSWISD, VISD and the ASI has progressed the National Detailer Body issue. I will provide an up-date on this issue at the AGM in 2 weeks time.

Clayton Roxborough  
President  
QISD Inc.



Some of the attendees enjoying a game of golf at the ASI Steel Convention in Adelaide:  
Left to right: Graham Choise (Industrial Galvanisers), Clayton Roxborough (Steelcad Drafting), John Bull (Stramit) Michael Minihan (Coil Steels)



Everyone enjoying themselves at the "Meet and Greet" session



### ***QISD presentation to Smorgon Steel Technology Integration of 3D detailing software packages***

Several weeks ago, the Queensland Institute of Steel Detailers was contacted by Smorgon Steel to discuss the Technology Integration document that had just been released by the QISD. As part of their own internal push towards higher levels of technology use, Smorgon management were very interested in what the Steel Detailing industry is able to provide in the way of high-end technology interface. In particular NC, DXF and material list reporting. After discussion by the management committee, two QISD members were assigned the task of preparing and delivering a suitable presentation to explain the possibilities to the fabrication and processing sectors. Committee members, Philip Shanks and Joe Biggs were the lucky devils appointed for this exercise and just recently carried out their presentation on Friday the 13<sup>th</sup> October. Following is a brief outline from the guys.

#### ***Present:***

- Smorgon Steel production and sales teams headed by Ernest Horder
- Fabricator clients of Smorgon Steel
- QISD Representatives Philip Shanks & Joe Biggs.

#### ***Aim:***

To address the industry's need to adopt faster and more efficient steel processing methods. Smorgon Steel and the fabrication representatives explained some of the problems that they currently face regarding shop detail drawings in terms of timing and technology content. It was pointed out that at time of drawing delivery to the fabricator it is often too late for steel processing and ordering. The purpose of the meeting was to bring together Steel Detailers, Steel Merchants and Steel Fabricators and see what problems each discipline faces and see what Detailers can offer the industry as a solution to speed up production methods. Due to the fragmentation of the industry it's been difficult for each discipline to work together and focus on a common goal.

#### ***Presentation:***

Philip and Joe delivered a presentation using a sample 3D model of a portal framed shed and explained the methods and formats in which data can be retrieved from a model. Sample reports were generated in real time and the model was broken down into smaller deliverables, part list reports, NC data and DXF data were extracted from the model to explain the possibilities of Batch processing. The QISD representatives were questioned on the type of reporting data that 3D programs can deliver, the type of information that both the fabricator and the merchant require is mostly member data, hole data and cutting data. All of this information is easily extracted from various standard reports or custom reports can be generated, collating various fields from the program database. The merchant representatives were particularly interested in reports that generate the quantity of holes per part and the cuts associated to cut parts. Software such as Fabtrol generates cut information from the NC files provided.



### *QISD presentation to Smorgon Steel.....cont'd*

#### **Concerns:**

The QISD representatives explained the problems that are associated with providing this extra information over and above the normal detail drawing deliverable.

There is extra responsibility on the detailing company to manage and control the flow of this data along with the detail drawings and this is more prevalent on larger projects.

Revision to a project puts more strain on the delivery of information, not only are detail drawings a controlled document but data is also.

#### **Summary:**

The merchants and fabricators were suitably impressed with the presentation by the QISD, the enthusiasm of those present was fantastic and it was great to be involved in something that could help bring about long awaited streamlining of the fabrication process.

It remains up to the merchants and the fabricators to work out what information they require and when they require it and communicate these needs to the detailing industry. It seems that 3d software packages can provide all of the information they require.

### *QISD through the eyes of one of its younger members...*

Shortly after starting as a cadet steel detailer I was encouraged to join the Queensland Institute of Steel Detailers (QISD). I have since completed my cadetship and have gained valuable knowledge from various events and forums held by the QISD. For the small fee that cadets have to pay it is a good experience to get out and meet other steel detailers and see some of their work.

With a lot steel detailing companies working independently of fabrication workshops; cadets and even steel detailers miss the opportunity to see how things are done throughout the construction process. Over the time of my cadetship, I have attended QISD events to structural steel workshops, rolling mills, job sites and a variety of the AIS organized site visits or forums. This has allowed me and others the experience to witness the fabrication and erection of structural steel, as well as gaining knowledge from other experienced steel detailers and construction staff within the industry. I think gaining these experiences is extremely vital in an industry where experience is everything.

I understand the QISD is currently working with government bodies to try and put in place a recognized training program through the TAFE system. I support this initiative as I believe a recognized training program is a step in the right direction to formally recognize the steel detailing profession and the next generation of detailers.

Timothy Rachow (QISD member)



## *QISD Working for Small Companies!!*

What can the QISD do for you???

With most small companies/sole traders working from home or small offices around Australia exposure to the outside world can sometimes be limited. Now that QISD website is up and running your company can be exposed to potential clients every minute of the day or night.

At this point in time when the construction industry is booming there are clients looking for steel detailers everyday and this is one of the major information sources where people will look first. With your name under a well recognised institute like QISD your company will be given recognition.

Being a member of the QISD not only allows you internet exposure on the QISD site but also other companies/members are more likely to refer clients to your company if they have no capacity to take on a project.

The interaction of members at the AGM and other meetings throughout the year allows conversation between companies, sole traders and employees, which helps the industry as a whole. Introducing yourself to other fellow colleagues puts you & your company name into a circle of people, which may help you with future work.

The QISD offers a great deal of information via the website, information that forms uniform industry standard requirements. Putting information onto the website also creates a great method for standard information to be distributed easily between detailers.

Working as a group under a well recognised institute like QISD can only benefit you and your company. The progress made by the QISD thus far is inspiring and will only go forward.

The QISD is working for you!!

Peter Hemsall (Hemsall Steel Detailing)

### *What If.....*

With the recent traffic problems being experienced in Brisbane due to the South East Freeway closure it really starts to make one think. Would this have happened if the Freeway ramp was made of **STEEL**?

In the US steel is used extensively for overpasses, freeway ramps and bridges so maybe the Queensland Government should seriously think about **STEEL** as a viable option when looking into future expansions of Brisbane's inner city road system.

Wouldn't mind betting that the first material we see being used as part of the rectification process will be **STEEL**!



### ***Membership Renewals – 2006-2007***

Current members will have recently received their subscription renewal invitations for the 2006 – 2007 financial year. (Subscriptions fall due 30<sup>th</sup> September each year.)

#### ***Our Profile:***

*The QISD's profile growth* was enhanced not only by the annual “Documentation Awards”, but also with the country wide acceptance of the Consultants (document completion) Checklists. In addition, the list of Drafting Deliverables issued to the ASI is being distributed nationally – this document summarises the different levels of information able to be produced by the various Detailing organisations in Australia.

#### ***The Year ahead:***

***Exciting developments*** for 2006-07 will include the formation of an “Australia wide” body. The proposal at this stage is to form a “collective” which will include **National** representation for all state bodies. This collective will ratify procedures and viewpoints giving a truly National status to the outcomes.

The Q.I.S.D. is driving this national approach. However, the model we are aiming for will not detract from the focus on local issues.

We may simply “rename” our institute to the “**Australian Institute of Steel Detailers (Qld.) Inc.**” Thus, you will retain full control of the finances and management of the Institute, right here in Queensland - while adding a national “flavour” to the Institute’s profile.

#### ***Size Does Matter!***

The size of our membership is paramount to giving weight to those matters that concern us all, directly or indirectly.

After remaining static for the last Five Years (unlike fuel prices!), membership renewal fees have increased by approximately 10% for the coming year. Most members will recoup this outlay, simply by attending the AGM in November where a complimentary meal is provided.

Your subscriptions are completely tax deductible. The **QISD Inc.** is not required to register for GST, so no GST is payable on membership subscriptions. The QISD is a non-profit organisation with all the work carried out 100% voluntarily by the members of the Institute. The management committee wishes to thank you in advance for supporting the Institute that supports you, as we strive for even greater successes and National recognition for 2007.

Please return your remittance promptly, to once again show your support and dedication to **your Industry Body.**

Management Committee,  
October 2006.



### *ASI Awards Night*

The QISD Inc. can again congratulate itself for the success of the “Excellence in Design Documentation Quality” award presented by the QISD at the Australian Steel Institute Awards night. The evening was held at the Brisbane Convention and Exhibition Centre on Friday the 25<sup>th</sup> August 2006.

The evening represents the showpiece of Steel Awards in our industry by the ASI and again the QISD has been fortunate enough to provide our very important award at this highly regarded event. This award is presented in the company of all the major players in our industry from Designers to Builders and Steel Suppliers. It certainly does not go unnoticed as it is one of the earlier awards distributed and the interest in our award from the people I spoke to remains very high.

In the tradition of previous years, the QISD recognises two consultants for excellence of documentation and the winners this year are:

- Group H Architects in association with Project Services for the Architectural documentation on the Marsden State School (Resource Centre Up-grade)
- TFA Project Group for the Structural documentation on the Kogan Creek (Staff Amenities Building)

Group H Architects and Project Services were represented by Philip Haralampou and Bang Luong. TFA Project Group was represented by Wayne Kerkow. The QISD attendees who won their tickets for the winning nominations were Clayton Roxborough and Tony Dwyer. All of the winning participants were accompanied on the evening by their spouses. The winners were chosen by an independent judging panel from the QISD and we thank them for their time and effort which they donated.

Along with the formal duties of the awards, the evening as always contained some great entertainment. The MC hosting the awards kept the audiences attention with laughter and great comedic timing whilst later our entertainment hit top gear with an acrobatic juggling act from a very experienced entertainer. I understand this chainsaw throwing and fire eating individual has presented in many TV variety shows dating over 20 years. The food and wine was of course scrumptious and up to the standards one would expect on a gala evening.

The QISD thanks all members for their submitted entries and encourages them to get involved in next year’s awards. It is never too soon to start thinking about possible entries and participate in our industry’s major annual event. By giving our award the QISD believes this pro-active response to the declining documentation issues can have a positive outcome as it acknowledges the individual consultants who do strive to produce quality documents.



**ASI Awards Night .....cont'd**

The QISD would also like to thank the ASI and John Gardner for the opportunity to share in the awards and their continued support for the assistance they provide in the recognition of our Institute.



From left to right: Philip Haralampou (Group H Architects –Architectural Award), Tony Dwyer of the QISD, Wayne Kerkow (TFA Project group - Structural Award), Bang Luong (Project Services Architectural award)

**QISD 5<sup>th</sup> Anniversary Celebration**

You may remember that in our last newsletter the QISD announced a competition where members were invited to put forward ideas they thought were important to the industry with a prize on offer being two tickets to the ASI awards night held in August for one of our lucky members.

The lucky winner of this competition was Graeme Enever of Steelcad Drafting, so Graeme and his wife attended the night and we believe they both had a great time. Below are a few words from Graeme about the evening.

*“The ASI awards night was a very informative and entertaining night out. It provided a good opportunity to catch up with some people in the industry that I haven't seen in a few years, as well as meeting some new people. I was able to have a chat to the winners of the QISD design awards and discuss how the quality of drawings that we have to work from impacts on the speed and quality of the project as a whole. Thanks to the QISD for a great night out, and for doing it's bit in promoting higher quality documentation”.*





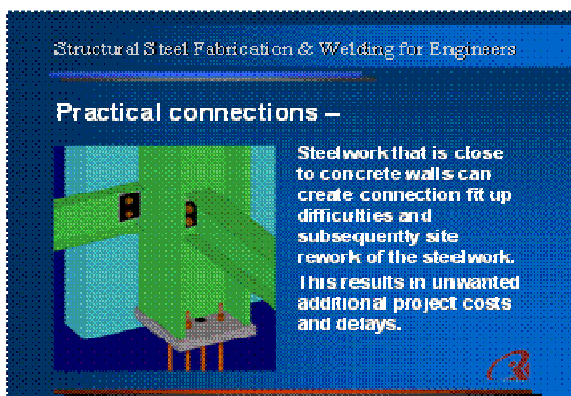
***QISD imparting some wisdom and experience.....***As part of a joint initiative of the Australian Steel Institute (ASI) and Engineers Australia Qld division the QISD recently provided a speaker, Kerry Lindemann of BDS Steel Detailers, as part of the Structural Steel Fabrication & Welding for Engineers short course.

The last night of the nine night course was devoted to a presentation by a Steel Detailer and secondly by a Fabricator. The topic of the presentation given by Kerry was on welding and practical connections from a Steel Detailers perspective and below is a brief summary provided by Kerry in regard to his presentation.

*From a welding standpoint the presentation highlighted the welding access requirements and the preference for fillet welding as a preference over unnecessary complete penetration butt welds, a view that the fabricator also reinforced due to the need to provide testing and the extra joint preparation required for butt welding.*

*The practical connection section highlighted just a few, in the short time available, connections that create detailing, fabrication and site fit up issues that inevitably add costs to projects. These included connections close to concrete walls and the access issues, the complexities at some connection nodes with multiple horizontal and vertical members requiring various combinations to achieve practical connection outcomes. The presentation was enhanced by the ability to show 3D model images of connection examples from real projects in Australia and around the world.*

*The students interacted well during the presentation and actually appeared to have a better understanding of the role a Steel Detailer plays in a projects work flow and appreciate the value engineering a Steel Detailer can bring to a project in the early phase of connection design of a project. The student feedback was positive and appreciative with some even requesting more Steel Detailer content to the course.*



The QISD firmly believes that these types of presentation opportunities can only benefit our industry. We therefore would like to thank Kerry for his efforts in preparing and delivering his presentation on our behalf and judging from the feedback we believe those who attended also appreciated having an experienced detailer pass on some of his experiences in regard to these matters.



### ***More from the Australian Steel Convention 2006.....***

This year saw several of our members attend the ASI Steel Convention held in Adelaide in September. In addition to Clayton's very informative summary of the Convention, a couple of other QISD members who attended the convention have provided the following submissions on some topics that caught their eyes while they were taking a break from their wine tasting assignments!!!

#### ***The Challenges Ahead!!!***

The two most important issues I walked away with from the Australian Steel Convention was how an Australian Company should sit with respect to the Global Steel Market and how the future workforce, being the "Y Generation" will be one of the most important challenges for Employers to be successful in the Australian industry.

The Steel Market has not changed since the last Convention, that is, the leading nation in steel production is still China. Its influence is so great over the last 4 years it equals the increase in steel production over the previous 30 years when it was not a major player.

With China's part there has been a 5.8% increase in steel production over the last year and this would be only 0.6% if China was excluded from the Global market.

The major countries besides China noted for being a major impact on increased steel production were Brazil, Russia and India.

All the speakers that addressed the Convention spoke about the same issues, that is, for Australian companies to survive, they should engage themselves in overseas competition and be very aware of the quality of skills produced from the countries noted above.

We were also addressed by "Peter Sheahan" who is a recognised expert on Generation Y, global workforce trends and their impact on the way we work and live. He quoted, "*Each year 350,000 qualified engineers enter the world's workforce out of India and are working on less than \$100 a week. In fact 1.7 Billion (b b billion) educated and literate global citizens will enter the worlds workforce from Asian nations between 2000 and 2020.*"

*"Generation Y' come to work for companies but they leave managers."*

The reason many industries are struggling to attract the best talent is because they have poorly marketed and poorly positioned the image of their industry in the minds of tomorrow's workers. These are the people born between 1978 and 1994

Gone are the days where an Employer will say, you show me "Loyalty" and I will give you "Good Work". Now the Employee will say help me build a career portfolio and I will give you "Good Work".

It is essential that employers fully engage the new "Y Generation" as early as possible into a level of performance that adds value to their business while allowing them to grow or they will look elsewhere.

Cameron Elms (QISD member)

*More from the Australian Steel Convention 2006.....cont'd****Full size drawing?******1:1 drawings?***

Along with fetching a left handed scale rule or the invisible tape, one of the old training (?) lessons for the cadet detailer was to get him/her to order a map of the world scale 1:1 for the drawing office. Suppliers get to know the routine and the cadets will never forget what scale 1:1 is again.

With the advent of the harassment laws the "scale" lesson now just consists of drawing UB, PFC cross sections at 1:1 but you can throw in the occasional 2m long beam just to see how large he/she makes the drawing sheet.

Talking with Christian Columbo from FICEP Italy at the Adelaide Steel Convention, the 1:1 scale steel drawing is not a prank or lesson but a reality. The only difference is our shop detail drawings are on paper where FICEP's are on the actual piece of steel.

FICEP makes a range of NC beam lines, plate cutters and the relevant associated software to nest plates, beams, program, schedule etc. The most interesting point from a detailing perspective is that unlike most beam lines that simply drill and cope, FICEP's machinery can draw/scribe all connecting material and information on the beam. Picture a shear plate welded to a beam. FICEP's scribing system can draw the outline of the plate on the beam; place the piece mark and a weld symbol. Gone are the days of a welder looking for a pop mark or running a tape measure down a beam to locate a shear tab and the associated inaccuracies. There is absolutely no layout work for the welder as all the information is there. Just pick up the piece and place it over the scribed outline. Even skewed plates can be located with a work line and a bevel angle shown. Items like base plates can similarly be processed with the outline of the column located on the matching side of the plate. As you can imagine, the layout time for the shop is greatly reduced.

The bottom line for the future is that shop detail drawings as we currently know them could become obsolete in the workshop environment.

Peter Harper (QISD member)



### ***QUT - Structural Engineering***

The QISD delivered a lecture to 3<sup>rd</sup> year engineering students at the Queensland University of Technology earlier this month. This is a one hour presentation given each year at the QUT as part of their - University for the real world campaign.

The lecture provides an ideal opportunity to introduce the QISD and the detailing profession to the next generation of structural engineers. Some of the topics covered in the lecture include a history of steel detailing, the relationship between engineering and detailing, the role of the detailer today, our work processes and what detailers require from the engineering and architects documents. It also touches on the impact of RFI's and the QISD Design Document Check list.

Most of the 75 students in attendance were full-timers with only 5% or so having any work experience or exposure to an engineering office.

The QISD is grateful to Associate Professor Mahen Mahendren – Director of the school of engineering at QUT for giving us the opportunity to talk to his students.

Mahen is a great believer in structural steel and is the driving force behind the development of the 4<sup>th</sup> year elective subject – *Design and construction of multi storey buildings*. This new subject is a spear head for the increased use of structural steel in multi storey buildings in Australia, and was put together under the guidance of a working group from the ASI Qld Construction/Technical committee and focuses on the design of a 12 storey steel framed building. (Wouldn't that be a sweet job to detail).

For more information about this course contact John Gardner, State manager ASI Qld on 07 3853 5320.

### ***The Warren Centre – for advanced engineering***

In November, the Warren Centre will be delivering seminars around the country to invigorate the development and construction industries about the use of structural steel. Australia lags the UK and USA in the use of steel framing in large buildings. This workshop investigates why and discusses how the Australian construction industry can deliver better results – cheaper, faster and safer. For more on this contact Fiona Hearne, Warren Centre on 02 9351 7205.



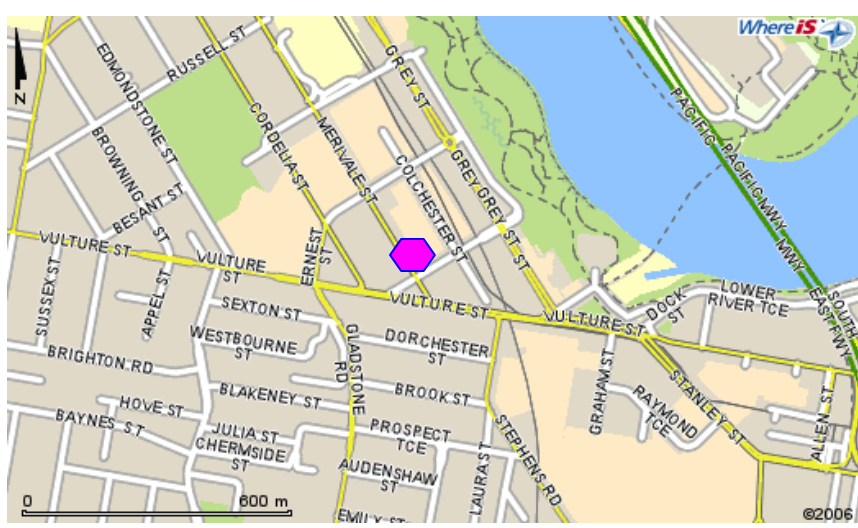
**QISD Annual General Meeting.....**

This year's AGM is to be held at Covers Restaurant, Southbank TAFE. Level 4, Cnr Merivale & Tribune street South Brisbane

**Date: Wednesday 1<sup>st</sup> November, 2006**

- 5.30pm Members arrive and are served with Refreshmnets
- 6.00pm AGM to commence
- 6.30pm General meeting to commence
- 7.30pm Buffet style dinner served
- 9.00pm Function concludes

See map for location of venue



As we all know the AGM is the opportunity for members who want to become actively involved in the QISD to do so. However, for those members who just want to stay in touch with what is happening then this event also provides for this while also allowing members the chance to catch up with other like minded members over a great buffet meal and a few drinks.

It is pleasing to see that as of 18/Oct/2006 (close of written nominations), the QISD had received formal nominations for all elected positions. For those members wanting to be involved in a formal capacity, but who have missed the written nomination closing date, there is still opportunity to nominate from the floor on the night. Having nominations for all elected positions however does mean the *pressure is off*, so come along and enjoy the evening.

As this is a catering event we really need to confirm numbers by **24<sup>th</sup> October 2006** so if you are attending please **RSVP to the QISD secretary** [secretary@qisd.org.au](mailto:secretary@qisd.org.au) by this date.



**Feedback....**

As requested in previous newsletters for the Institute to know what issues are really concerning its members we need to get constructive feedback. If you have any specific issues or ideas please find the time to write them down and send them through to the committee for due consideration.

**Feedback Form**

This is **your** QISD so please take the time to let us know what you think.

**Fax to QISD:** (07) 3844 9477  
**Email to QISD:** [feedback@qisd.org.au](mailto:feedback@qisd.org.au)  
**Post to QISD:** QISD  
PO Box 8250  
Woolloongabba  
Brisbane Qld, 4102

Comments:

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**Thank you for your input,  
Queensland Institute of Steel Detailers**