



THE BAY DIMENSION

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gambling hall will be entertainment, bars, restaurants, even shops of various kinds, so the gambler doesn't have to wander far from the gambling floor to meet his or her needs, and wherever they want to go will normally necessitate moving through banks of slot machines, roulette wheels or poker tables. The gaming floor itself may occupy only a relatively small percentage of the floor area, but it is central to casino design, and ideally every path will lead through it. This area of the building will also be central to the design of security and monitoring systems.

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Las Vegas Casinos

Would you like to bet that the next casino to be built in Las Vegas will be smaller than others already there? Probably not. Bigger, more flamboyant, seems to be the order of the day where casinos are concerned.

Of course, they are not just casinos, but entertainment centers, or you could say that that they are enclosed communities, which is what they are designed to make them feel like to the visitor. The El Rancho casino back in 1941 introduced the concept of a lavish setting, and in 1946 the Flamingo was the first to bring entertainment to center stage by adding a showroom. Nowadays, surrounding the



The atmosphere of the gambling hall is geared to generate a desire to stay. It has been pointed out that clocks are never seen in a casino, but since almost everybody has a watch, or at least a cellphone or PDA that serves also as a timepiece, nobody can really claim to be unable to determine what the time is if they really want to know. Natural daylighting is one of the goals in the modern move to green buildings, but casinos are unlikely to win any LEED points with that. While more natural daylighting has been getting closer to the gambling hall, it hasn't reached the hall itself yet, and isn't really likely to, because daylight is a ready indicator of passing time. The setting in the casino will give no indication of changes in time; even if the décor depicts an outdoor setting the depicted time of day will remain static. On the other hand, the feel of the place will be anything but static. An aura of excitement is designed into the place, with "loose" slot machines (ones that pay off frequently and noisily) strategically placed to entice people into the excitement of it all, and free drinks and snacks brought to you so you feel less need to leave.

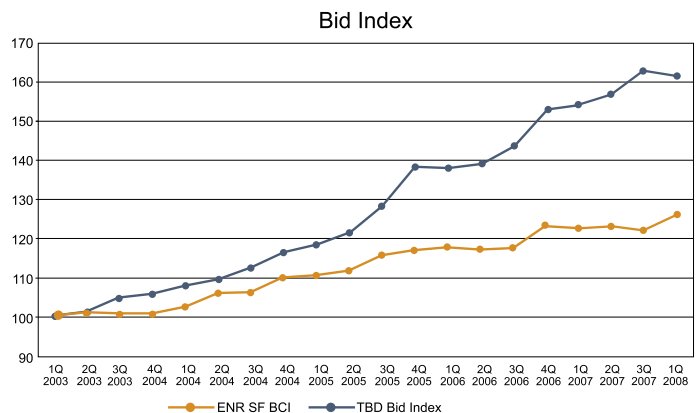
In 1966, the opening of Caesars Palace set the trend for a consistent theme, which has continued to this day. A walk down the Strip is a combined world tour with time travel and side-trips into fantasyland thrown in for good measure. The hotels/casinos have become forms of entertainment themselves, with theming being as important a part of the architecture as they are in a Disneyland exhibit.



Casinos are designed for round-the-clock operation, never shutting down. The construction site for a new casino is going to be similarly designed. Casinos generate large revenues, allowing for high construction budgets, but also leading to a desire for getting into operation as early as possible, so fast-tracking the design and construction is the norm on these projects.

Two-Tier Markets

After about four years of a remarkably rapid rise in bid prices, we are finally seeing a leveling off of prices, and even reductions in some cases – but it depends on where you are in the construction market. The collapse of the single-family housing market has meant that the contractors and subcontractors who have been making good money in that market for years are now looking elsewhere for work, leading to much more competition on the smaller projects that these contractors can obtain bonding for. In some instances we have seen bids for small projects coming in about 30% lower than would have been expected a year ago, in other words bringing the bids back down to the kind of level that the ENR building cost index would suggest.



More competition inevitably pushes prices down, resulting in a kind of two-tier market, where we are seeing competitive prices for smaller projects but little competition and consequently very high prices for larger projects. With our TBD Bid Index being based on a new school project we are somewhere between these two ends.

These same kinds of conditions are not unique to the Bay Area. We recently carried out a market survey in Ireland

that shows similar conditions, and for similar reasons. They are also suffering the collapse of the sub-prime lending market, and For Sale signs for houses show up regularly in town and country. Builders' suppliers readily remark on the recent downturn in demand and are much more likely to offer special deals. But commercial projects, such as business centers and supermarket/retail developments, are still continuing apace, at least for the present.



There and here it is inevitable that, while the housing market remains in recession, the competition will continue to move up through the remaining sectors of the construction market. As contractors find more competition moving into the domain they have been content to work in for years, they will start looking at other fields to work in, which normally means the level of competition increasing to steadily larger projects.

The fear for the new year is that the recession will spread from the housing and banking fields into the rest of the economy, and then we could quickly be back to a truly competitive market for the wrong reasons. However, with the Bay Area's population growing faster than other areas in California, the resultant demand coming from that growth could cushion any recessionary trends, and leave intact the Bay Area's tradition of being one of the last regions to be affected by a recession.

The FIDIC Rainbow

The FIDIC (Federation Internationale Des Ingenieurs – Conseils) form of contract is the recognized standard contract form for international civil engineering projects and, with amendments, is also commonly used for international architectural projects.

Since it is aimed at international projects, versions of the document can exist in different languages, but a “ruling language” for legal purposes can be specified. Some of the terms in the English version of the contract may sound foreign to US designers and contractors:

- Bids are obtained using a Bill of Quantities (BoQ), which specifies the work items and their respective quantities, although all quantities are subject to remeasurement on completion, and the contract price will be adjusted based on these remeasurements and the unit rates that had been applied to the original quantities.
- “Bids” are actually referred to as “Tenders” in the FIDIC forms.
- “Change orders” are called “Variations”
- The construction schedule is called the “Programme”
- Lump sum allowances in the BoQ are called “Provisional Sums”

The two parties to the contract are the Employer (building owner) and the Contractor; the Engineer (or architect) is not a party to the contract, but his/her duties are defined in the



contract. One of those duties is to issue a decision, based on the contract terms, in the event of a dispute between the Employer and the Contractor, but if either of the parties is dissatisfied with the Engineer's ruling, the matter can be referred to mediation or conciliation, or ultimately to arbitration. Ideally, of course, disputes will be avoided, and to that aim the contract conditions are written with the goal of fairly distributing project risk.

The FIDIC form referred to above is known as the Red Book, but there are other colors available as well:

- The White Book is the FIDIC standard form of agreement between a building owner and a design consultant.
- The Yellow Book is their contract form for electrical and mechanical work.
- The Orange Book is for Design-Build and Turnkey projects.
- The Silver Book is for EPC (Engineer, Procure, Contract) turnkey contracts.
- The Green Book, or Short Form, is for engineering and architectural work of small capital value.
- Tendering Procedures is a document describing procedures for obtaining and assessing bids in a quick and fair manner.

Geoff's IT Gems Surface Computing

The greatest new thing in computing since the mouse, or even since the invention of the PC itself! That is what surface computing is supposed to be, and it should soon be coming to a hotel or casino near you soon, if not already.

Basically, surface computing lets you interact directly with the computer screen, but it is more than just a touch-screen computer. Actually, you would be pushed to recognize it as a computer, since it is missing a keyboard, mouse and array of USB ports to plug peripherals into. Probably the nearest thing available commercially at present is the iPhone, because a Surface computer and the iPhone are both design for multiple inputs at one time on the screen

(currently handling up to 52 simultaneous touches). This is a move away from personal computing and towards more collaborative computing, allowing a group of people to interact directly with the object(s) on the screen at the same time.

In the form currently proposed, the screen of the surface computer will form a tabletop, which people can gather around and interact with. The computer is designed to use an assortment of technologies, such as infrared sensors, RFID, Bluetooth, WiFi, shape-recognition, etc., so that it can interact with other equipment, such as the example often given where you might place a digital camera on the Surface computer and the images spill out automatically from the camera onto the table-top screen. There is no specific reason that a Surface computer has to be designed with a horizontal, table-like, screen. The screen could just as well be mounted vertically, which might be better for presentation purposes, but is more limiting as far as how many people can interact with it at one time, because fewer people would be able to gather around it (without hanging from the ceiling).

For the initial deployment of Surface computer, Microsoft has been working with T-Mobile, Starwood Hotels and Harrah's Entertainment to deploy the technology as interactive sales units.

It will be a few years before Surface computers are available for general purchase, probably priced between \$5,000 and \$10,000 each, but it sounds like a very useful design tool, enabling the design team to interact with a building model that can be moved and adjusted by the team in a very dynamic and interactive manner.

