

## Project Profile: Grant MacEwan Community College

Downtown Edmonton has taken on a new lease on life. The rusting, dusty railyards cutting through its heart are gone - replaced by a magnificent limestone, glass and concrete structure that stands up from the horizon and draws your attention from miles away - Grant MacEwan Community College.

Ask any of the contractors working on the project "What was special about this one?" and they will say, "Nothing unusual, except that it was big." The biggest commercial open shop site in Alberta, a huge educational facility grandly conceived, an enormous water storage cooling tank, acres of carpet and hectares of paint.

But one of the most remarkable things is that this has been such a low-key project. There were no major accidents, no delays, no labour unrest, no cost overruns. A very quiet, smoothly run project that resulted in an unusually attractive college campus that will be a boon to the citizens and businesses of Edmonton. What is the secret?

Apparently a combination of careful planning beforehand and laudable teamwork during construction. Barry Snowden, Vice President Administration and Andi Pallas, Director of Facilities, have been the Grant MacEwan representatives most closely involved with the project and they agree that cooperation and good communications characterized the project from start to finish. "This has gone, from everyone's perspective, very, very well," says Mr. Snowden. "They don't all happen this way." Mr. Pallas confirms: "It was so big, I was limited in the amount of attention I could pay to everything. I had to be confident that I could delegate to the contractors, particularly PCL-Maxam, and to the engineers and architects."

Mr. Snowden was instrumental in determining the design philosophy and design objectives as early as 1988, years before the architects had been engaged. "The idea of using the railyard dates back to the early '80s. CN still was actively using the railyards, but the president of the College included this proposal as part of the City's Taskforce on Downtown Revitalization."

### Design

Although "the Grant MacEwan project" has become the common verbal shorthand, this is actually the City Centre Campus and Grant MacEwan Community College continues to operate two other campuses in the city. There is no doubt that this is the most visible both because of its size - four full city blocks - and its appearance - a combination of soaring Gothic towers and accessible three storey glass buildings. The management team was not afraid to break new ground in more ways than one. The idea of having a downtown campus at all was innovative in a community used to farflung suburban settings, but the Seventh Street Plaza proved to be convenient for thousands of new students. And what could be more innovative than the appearance of City Centre? Rather than a single monolithic high-rise, it is several connected but visually distinct structures. From outside, the eye differentiates four separate buildings with multiple entrances, but inside, areas and operations overlap, joined above the ground floor by pedestrian walkways.

Mr. Snowden says they wanted the appearance of a neighbourhood of buildings

along a street which would be open and inviting to the community rather than intimidating as are many institutional structures. They have achieved that.

The campus occupies an unusual place: physically very close to Edmonton's downtown business centre to the south, it borders on the north in a district that combines residences and warehouses. The past few years, that area was in increasing danger of becoming ghettoized as newly arrived immigrants made their homes in a collection of walk-ups and older houses divided into suites. Literally on the wrong side of the tracks, residents had few resources to ease their entry into the general community. That has already changed with local groups and individuals using City Centre's recreational facilities, daycare and meeting rooms. Inevitably, with this campus acting as the bridge, this fringe group will be drawn into the larger Edmonton scene.

### **Open tendering**

After this daring design was finalized, how did things go? Barry Snowden: "We decided at the outset to publicly tender all major components of the project. I suppose we considered qualification rounds, but given the public nature of our funding and the institution itself, it was best to use open tendering." The project was originally broken up into four packages, each one complete in itself, the largest being \$44 million and the others \$15-20 million.

The budget set in 1991 was \$116.8 million including \$94.5 million for site development and building construction. At the end of the major tenders, costs were down to \$110.3 million and it has been completed at that lower level. All of the savings were made in the construction related activities, savings that will be used to support other costs - furnishings, the move itself and associated renovations at other campuses.

Although the construction owner has no position on open or closed shop construction, the successful generals were two of the province's major open shop contractors. Stuart Olson Construction picked up the sport and wellness centre and PCL-Maxam, a Joint Venture won the other major packages: the substructure and parkade and the three other buildings for human services and administration, arts and sciences, business and communication arts. At any one time, there were between 40 and 50 different sub-contractors working on site, the majority of them union-free, although the structural steel and masonry subs were unionized companies.

The mix of non-affiliated and unionized companies caused no problems for the owner, the contractors or the tradespeople working on site. Although some large construction sites in the province have been subjected to walkouts, strikes and general dissension, the labour situation at Grant MacEwan was very quiet. Early on when the first tender was awarded, there was a flurry of publicity and union picketing that dissolved quickly and did not reappear. Mr. Snowden commented, "There was no conflict that we became aware of." Nor were any of the contractors. On this high profile \$110 million site, the politics of labour was never an issue.

That is probably not all that unusual on open sites, but then who notices an absence of trouble? Merit member Lotus Painting Ltd. did all the painting and vinyl wall coverings in three of City Centre's buildings and president Thomas Cheong says,

"There was no friction. We were not even aware of the union-non-union thing. At the Royal Alex (an Edmonton hospital undergoing extensive construction and renovation) too, a union mechanical contractor is putting up scaffolding for us. There is no problem."

The entire project employed 700 to 800 over the three year duration. Stuart Olson's crew of carpenters and labourers, peaking at about 60, employees of PCL-Maxam and many other open shop contractors were paid at rates similar to unionized employees and were covered by Merit Contractors Association's benefit plan. With comparable compensation packages and secure employment prospects, most tradespeople were happy to keep their attention on the job rather than labour relations differences.

### **Early occupancy**

In June 1993, occupancy began in completed facility, the sports and wellness centre, and continued through the summer in a carefully planned succession of administrative and teaching departments. Before the end of August, the process was finished; the original date had been six months later in early 1994.

The process was accelerated to some extent by contractors' adjusting size of work crews and overtime hours, but the major factor happened in the first stages of the project. The original plan was to start two buildings in December 1991, incorporating substructures and the underground parkade in the separate bid packages. Early cashflow problems caused the management and design team to reassess this: they had come up with a good idea or the entire schedule would be delayed by as much as two months. Their solution was to tender the entire campus substructure and parkade as the first package, which, being less costly, could get underway several months early in June.

By the time finances were unblocked, this initial work was completed and the above grade work could begin. The entire schedule was moved forward several months and contractors were able to keep the momentum going and further compressed the schedules. Barry Robertson Stuart Olson's project manager, commented that, although bad weather delayed start of construction by a month or so, the centre was nevertheless finished a couple of months earlier than scheduled. "We had good performance from the subtrades as well as excellent cooperation between the consultants and all the contractors. There was not too much else being built in Edmonton at the time and we could pick good people for our crew."

Everyone performed as expected and there was no need for excessive overtime or inflated crew size to complete the centre early. And, of course, college management and staff were elated that they finished the rigours of desk and file moving before students returned in September.

### **Unusual features**

Many of the contractors say there was nothing special about constructing this facility except the size. Certainly, Lotus Painting Ltd. who did the paint and vinyl wall coverings, Rainbow Rebar Placing (1989) Ltd. who installed the reinforcing steel, Urban Scaffold Ltd. and Falcons Scaffold Installation Ltd. who supplied and installed

scaffolding respectively, and Bay Acrylics and True-Wall Interiors Ltd. who completed much of the drywall and stucco and the forty other subcontractors on site would have encountered few complications created by the design.

The towers, for example, although striking in design, are routinely functional, housing stairwells and elevator shafts, mechanical and electrical ducts, boiler flues and exhausts. Some are merely decorative.

On the other hand, some of the mechanical features were unusual and Newland Contracting (North) Ltd. who secured all the mechanical and electrical work for the entire campus had a more interesting time of it. They installed the two million gallon chilled water tank beneath the main structure, part of the air conditioning system which will cool the campus at a relatively inexpensive cost. The digital control system, subcontracted by Newland, allows room temperatures to be controlled from a central point. In spite of these challenges, Heather Zimmel, president of Newland, says the work presented only "the usual problems. For a project of this size, communication and companies getting along together were excellent." Her opinions were echoed by Thomas Cheong who praised general contractor PCL-Maxam in particular for the good job they did on safety.

## **Safety**

This is music to the ears of Jerry Young, Edmonton District Loss Control Supervisor for PCL-Maxam whose work began with developing a project safety policy. Enlisting input at the start from supervisors as well as management, from the subcontractors as well as PCL-Maxam itself means that they all felt involved and committed. From that policy statement, safe work procedures and programs were put in place. Mr. Young cites one of the successes as the crew and individual safety award program with up to 1500 individuals from all trades on the site. Points were awarded based on the result of a monthly safety audit and attendance at safety meetings; points were lost for medical aids or lost time accidents.

Few crews could have lost points: on the entire project, there were no lost time accidents and just two medical aids. (A medical aid is any injury that requires off-site treatment but no time lost.) Considering the numbers of people involved, the variety of trades and such potentially hazardous areas as the soaring towers, this is an exemplary safety record.

Mr. Young takes it in his stride: "This year to date, we have had only one LTA on any Edmonton area job site. And participation from the subtrades [at Grant MacEwan] in all our programs was excellent." The other open shop general, Stuart Olson, also has a commendable record, with no lost time accidents in the past two years. The Grant MacEwan City Centre campus is a beautiful facility, with a free-flowing combination of tiles and carpet, champagne-coloured wood, red brick, backlit glass brick, and indirect lighting. Students will enjoy the light and airy public areas, well-designed classrooms - both tiered and single level and fully equipped labs and workshop areas.

Management can be proud of the finished product, built at a cost that is astonishingly low when extended over the student population over the likely life of the buildings. And the contractors who did the work will long remember this as a big challenge successfully met because of the teamwork and energy of everyone

involved.