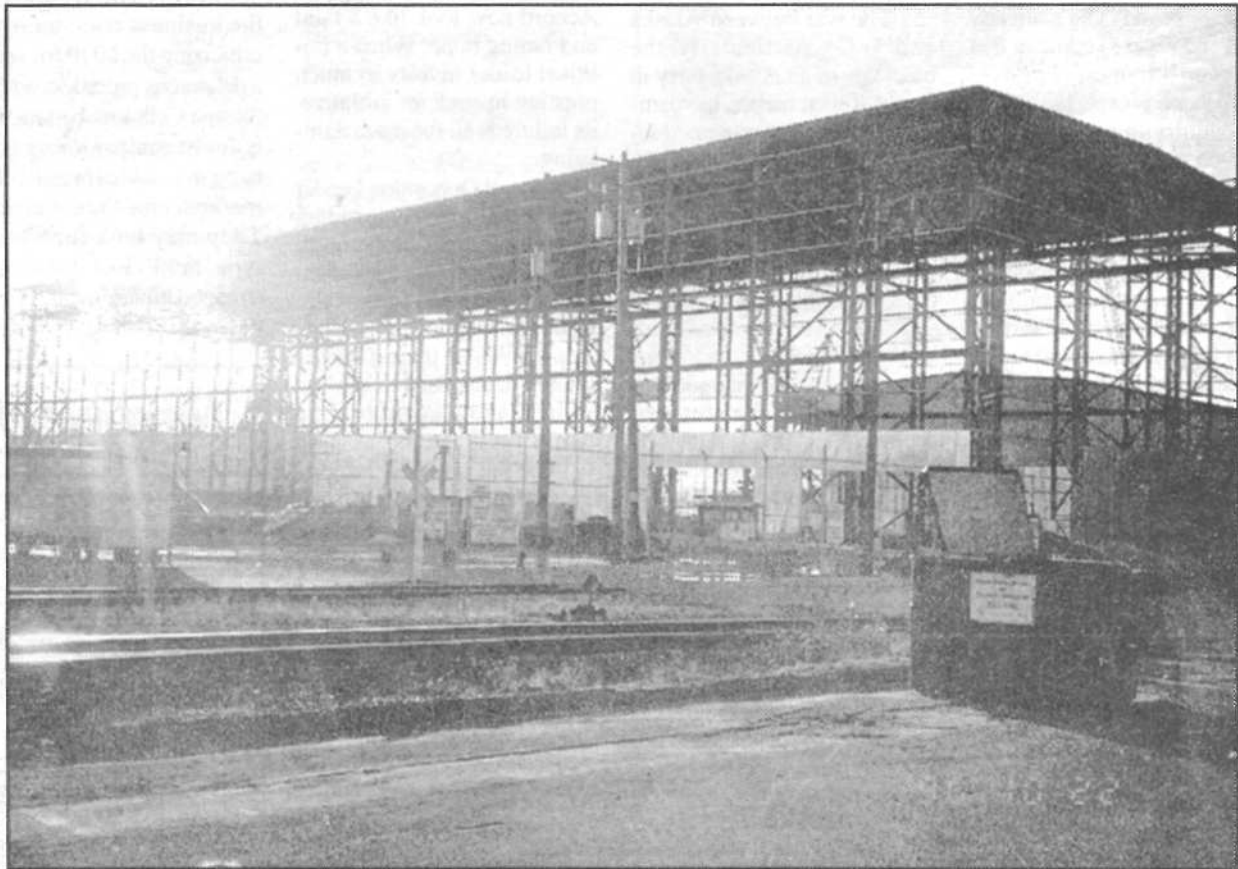


Monday, December 8, 1997 Published Twice Weekly 86th Year - No. 97 \$4.50

Journal of Commerce

B.C. & Alberta's construction newspaper



An evolving awards program

The Amalgamated Construction Association of B.C. gathered recently to honor contracting achievement with its annual Awards of Excellence. An evolving program, the awards commenced in 1989 with a single category for General Contractors. The Trade Contractor category was added in 1990 and the General's award divided into over and under \$5 million in 1994. This year saw a new category added, Mechanical Contractors. Walter & SCI Construction (Canada) Ltd. carried off the over \$5 million category for the Westview Interchange Design/Build Project seen in the top picture, during the Edgemont Boulevard Underpass construction, while Alpha Mechanical Contracting Ltd. became the charter winner of the Mechanical award for the Catamaran Ferries Fast Ferry Assembly Building seen silhouetted in the picture immediately above. For a complete review of all the winners of this year's awards see the pull-out section inside.

Mechanical contractor; Alpha Mechanical Contracting Ltd.; CFI Fast Ferries Assembly Building; owner, B.C. Ferry Corporation; sponsor, Westburne West Plumbing B.C. Ltd.

Foul weather, materials and ensuring safety factors in job that was ongoing "adventure"

The CFI Fast Ferries Assembly Building in North Vancouver was constructed to build state of the art high speed ferries for British Columbia, Canada and other countries. The mechanical installation was completed successfully within a three month fast track schedule to accommodate the requirements of the owner, B.C. Ferries.

Alpha Mechanical Contracting Ltd. (AMC) was the "prime" mechanical contractor with direct contact to the

owner and overcame various obstacles to achieve milestone dates. Adverse weather conditions, a short schedule, additional work required, incomplete engineering designs, the condition of the structure all required innovative ideas and techniques.

Although AMC estimated that a project of this type would typically require six months to complete the preliminary schedule called for three months. To meet this abbreviated schedule AMC de-

viated from its traditional methods of purchasing, installing and planning.

Local suppliers could not provide specified equipment or confirm delivery dates so AMC reduced shipping time by co-ordinating directly with manufacturers.

Design build equipment and piping systems were bought direct from fabrication shops who were supplied with performance specifications and criteria.

AMC purchased prefab-

ricated material which was shipped directly to the site. One example was 2,000 feet of four inch medical gas pipe, factory degreased and capped direct from Wolverine in Ontario. Purchase orders were issued on the day AMC received its letter of intent from the owners.

To increase production during installation of above ground piping, AMC utilized a flatbed truck to distribute bundles of pipe throughout the job site. Work commenced in six different areas with six different crews. Special scissor lifts and platforms were employed to reduce installation times.

A computerized program maintained a flexible work schedule for the duration of the project and one man was dedicated to perform clerical work on site to assist the foreman.

When an opportunity presented itself to complete a large portion of work AMC responded by increasing crews,

Cont'd on page fs8



Crews hoisted 45 feet into the air were among the measures taken to deal with an ongoing list of challenging circumstances that Alpha took in stride and kept on schedule during the fast ferry project in North Vancouver.

SSG Steeplejack Services Group
An ISO 9002 Company

CONGRATULATIONS
ALPHA MECHANICAL ON
RECEIVING THE 1997 AWARD OF EXCELLENCE

785 Derwent Way, 1320 Annacis Business Park, Delta, B.C. V3M 5P9
Telephone: (604) 521-2627 Fax: (604) 521-2660

Congratulations
Alpha Mechanical Ltd.
We are proud to be a part of
this Award-winning project.

SKYREACH
EQUIPMENT

tel: (604) 522-3188 Fax: (604) 522-8903
Vancouver • Edmonton • Calgary • Red Deer • Grande Prairie
• Fort McMurray • Kelowna • Kamloops • Toronto • London



Western Supplies Ltd.

Congratulations

ALPHA MECHANICAL CONTRACTING LTD
on your Award of Excellence

Telephone:
294-8171
Fax: 713-2212

3140 Gilmore
Diversion
Burnaby, BC
V5G 3V4

We are proud to be part of
this Award-winning project

CONGRATULATIONS
ALPHA MECHANICAL CONTRACTING
on winning the
1997 ACA Award of Excellence



ENVIROTECH
POLLUTION CONTROLS LTD.

#9 - 8207 Swenson Way, Delta, BC V4G 1J5
Phone: (604) 951-2330 Fax: (604) 951-2335
1-800-932-5096

Working together for a better environment



MECHANICAL CONTRACTORS
ASSOCIATION OF B.C.

www.mcabc.org
phone: (604) 205-5058 fax: (604) 205-5075

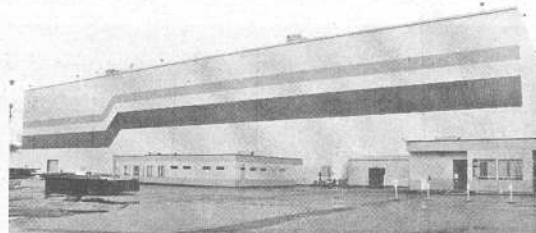
Congratulations to Alpha Mechanical on
receiving the ACA "Award of Excellence" for
Catamaran Fast Ferries Assembly Building.



BC's Mechanical Contractors Association
membership guarantees
its workmanship. In writing.

AMC Alpha Mechanical Contracting Ltd.

Proud to have been
selected as recipient of the
"1997 Award of Excellence
- Mechanical Contractor"
for our work on the
"Catamaran Ferries
International - Fast Ferry
Assembly Building".



Our thanks to Catamaran Ferries Inc., Sandwell Engineering, Keen Engineering,
Subtrades & Suppliers. A special thanks to our superintendent and all of AMC work
crews involved.

8180 Winston Street
Burnaby, BC V5A 2H5
Phone: (604) 420-5341
Fax: (604) 420-4741



FEATURE SECTION

Job an adventure for Alpha Mechanical

Cont'd from page fs7

then reducing them as necessary. The company took advantage of all opportunities to complete the bulk work as soon as possible because some of the technical systems could not be installed as quickly. To achieve success within the time frame AMC started work prior to the structure being ready; earlier than usual for this type of project.

The facility was fully exposed and open to the elements when AMC arrived on site with no roofing or cladding to protect work or workers from October and December weather. There were no structural supports provided to hang or attach piping (50 feet between columns).

To overcome the havoc snow, wind and rain were causing to materials and tools, as well as causing delays, AMC proposed permanent structural supports for pipe and ductwork. When the owners concurred, AMC provided and installed tarps over immediate work. Forty foot containers were utilized where AMC constructed its own pipe racks, protecting materials and fabrication. During limited opportunities between rainy days the company completed groundwork installations and other areas of work delayed by weather.

In spite of the owner's tight schedule, AMC was faced with daily requests from changes, which were accommodated.

AMC also faced additional work due to the domestic water piping when the owners added a staff lunchroom and crew facilities building complete with additional plumbing fixtures. Thirteen catch basins and 2,000 feet of site

services for storm were added to the contract. At project completion, the labor hours had increased 100 per cent to 4,054, but AMC still maintained the schedule.

Many of the systems on the project were not typical and required a higher quality of skilled workmanship and their correct installation was a source of justifiable pride for the AMC crews. Labor saved at the outset of the project contributed greatly to the completion of:

- breathing air system and air purifier equipment (BAS)
- argon gas welding system and equipment (AGS)
- compressed air system for tools
- design and fabrication of the BAS and AGS remote pigs

Extreme co-ordination was required from iron workers, crane operators and pipe fitter mechanics to lift four 1,000 pound, 7.5 horsepower exhaust fans and four three ton rooftop air handling units.

Roof openings, the roof curbs and the units had to be completed as a single operation for each one to satisfy Workers' Compensation Board requirement due to the size of the openings required for the units. Roof top units were six feet high by nine feet wide by 20 feet long and the fans were 60 inches square by 60 inches high. These eight units were lifted - in two working days - onto a 115 foot high roof from both sides of the building.

Major obstacles encountered by AMC were:

Painting: This trade was specified in AMC's work and would normally have taken place after piping installation. However, the company's foreman realized that it would be

impossible for painters to paint the pipe without using the special lifts and platforms due to the exposed site conditions and the height of installation. AMC negotiated with the owner to use their warehouse on an adjacent site where pipe was painted prior to installation then touched up as required within the scheduled time frame.

WCB: WCB advised that where there was fall risk a site specific fall protection plan was required before any work could begin. AMC contacted the Construction Labor Relations Association for data on this issue, compared it to the Industrial Health and Safety Guidelines and within a week had a site specific fall protection plan. Within days it was approved by the owner's CSO and all other regulatory authorities.

Scheduling: Scheduling was the key to the success of the project. AMC engaged a professional scheduler who used a computer program compatible to the owners. Wherever there was a change or delay the AMC scheduler and the owner's scheduler worked together and provided weekly update schedules so that all trades, workers and owner's representatives were on the

same page.

AMC has a philosophy that a successful project must include not only customer satisfaction, but employee gratification and corporate success; it must meet financial and construction requirements. The project budget must be adhered to, margins maintained and employees appropriately compensated for efforts above and beyond the call of duty. The project, says AMC, met all their corporate goals.

The CFI Fast Ferries Assembly Building was not AMC's largest or most difficult project but with all the elements combined into the exceedingly fast paced effort it was the most challenging in the company's 22 year history.

Many new and difficult situations were overcome and problems tackled through teamwork with the construction crews, subtrades and office staff. Client satisfaction, quality workmanship and financial success were maintained throughout the complex project.

As AMC said in its written history of the job: "Our first day on site until the last was an adventure." □



Congratulations

ALPHA MECHANICAL CONTRACTING LTD.
We are proud to have supplied

to the Award Winning Project.

Telephone: (604) 299-3371 Fax: (604) 299-3375
5043 Still Creek Avenue, Burnaby, B.C. V5C 5V1

AC SYSTEMS INC

BUILDING AUTOMATION CONTROLS

Congratulations Alpha Mechanical

*Western Canadian Representatives for Alerton Technologies
Supply, Installation, Programming & Commissioning of
Building Automation Systems.*

1415 Crown St.
North Vancouver, B.C.
V7J 1G4
Tel: (604) 984-9301
Fax: (604) 980-6371



KD ENGINEERING

Congratulations Alpha Mechanical.
We are proud to be part of your successful team.

COMMERCIAL & INSTITUTIONAL

- ▶ Indoor Air Quality
- ▶ Testing & Balancing of HVAC Systems
- ▶ Commissioning of HVAC & Electrical Systems

239 East 8th Avenue, Vancouver, B.C. V5T 1J7
Tel: (604) 872-8651 Fax: (604) 872-0281
www.teamkd.com • email: amo@teamkd.com



INTERNATIONAL PLASTICS LTD.

Congratulations

ALPHA MECHANICAL CONTRACTING

on your Award of Excellence.

We are proud to have been part of the project.

Tel: (604) 273-4987 • Fax: (604) 273-0619



AARC-WEST MECHANICAL INSULATION INC.

Congratulations Alpha Mechanical on winning the
1997 Award for Excellence

Unit 109 - 42 Fawcett Rd., Coquitlam, B.C. V3K 6X9
Phone: (604) 524-4855 Fax: (604) 524-4857