COURT OF INQUIRY

IN THE MATTER OF THE ENGINEERS ACT, 1979 AND IN THE MATTER OF P.L. BAKER, PENG

IUDGMENT

The Council of the Association of Professional Engineers of British Columbia under the authority of the Engineers Act, R.S.B.C., 1979, Chapter 109 held an Inquiry on Wednesday and Thursday, March 5 and 6, 1986 with respect to charges of unprofessional conduct, negligence or misconduct on the part of Mr. P.L. Baker, P. Eng. The charges against Mr. Baker

- "1. That contrary to Section 2(a) of the Code of Ethics you did not guard against conditions that were dangerous or threatening to life, limb or property with respect to alterations made to drawing No. D244 "The Corporation of the District of Matsqui Extension of Storm Trunk Sewer For Motorcade Plan", a drawing signed and sealed by you.
- 2. That contrary to Section 6(a) of the Code of Ethics, you signed and sealed plans for that project known as the Matsqui Extension of the Storm Trunk Sewer for Motorcade when these plans were not completely prepared by you or were prepared with inadequate supervision.
- 3. That contrary to Sections 8 and 8(a) of the Code of Ethics, you were in a conflict of interest with your employer in that you undertook in the name of Paul L. Baker and Associates, construction of a portion of that project known as the District of Matsqui Extension of Storm Trunk Sewer for Motorcade, either alone or in concert with others, while you were at the same time an employee of Peter Hogan and Associates Ltd., the engineering consultants for the Project, and further failed to disclose your circumstances as such to Peter Hogan and Associates Ltd.
- 4. That contrary to Sections 8 and 8(a) of the Code of Ethics, you were in a conflict of interest with a client, in that by acting as both contractor and consulting engineer on that Project known as the District of Matsqui Extension of Storm Trunk Sewer for Motorcade, you deprived your employer's client of the advice of an independent consultant with respect to the structural design and construction of the Project."
- Mr. P.L. Baker, P. Eng. was not present at the Inquiry although he had been personally served with Notice of Inquiry and had been informed as to the new Inquiry dates through his legal counsel. Mr. Baker was not represented by legal counsel. After consideration of the notice given to Mr. Baker, in accordance with Section 30(3) of the Engineers Act 1979, Council proceeded with the case in Mr. Baker's absence.

After due consideration of evidence produced by six witnesses, Council judged Mr. Baker to be guilty of all four charges and ordered that he be expelled from the Association of Professional Engineers of British Columbia, effective March 7, 1986. Council further ordered that Mr. Baker's costs should be borne by himself and the Association's costs borne by the Association. Mr. Glenn Urquhart and Miss Linda Nowlan of Vancouver were legal counsel for the Association.

FACTS IN THE CASE

There was no agreed statement of facts. During presentation of the case, Council heard from six witnesses. The following paragraphs contain a summary of the facts which were obtained directly from sworn witnesses or from documents identified by those witnesses. These facts were accepted by Council

- 1. Mr. P.L. Baker, P. Eng., is registered as a member in good standing with the Association of Professional Engineers of British Columbia and has been a member continuously since 1978.
- 2. The Engineers Act, R.S.B.C. 1979, Chapter 109, as amended, and the Code of Ethics of the Association apply to the Inquiry by Council.
- 3. At all material times, Mr. Baker was employed and/or retained by Peter Hogan and Associates Ltd. as a professional engineer and performed all relevant engineering services as a professional engineer.
- 4. Peter Hogan and Associates Ltd. were the professional engineers for that Project which later became known as "The Corporation of the District of Matsqui Extension of Storm Trunk Sewer for Motorcade Plan" (the "Project") which involved installation of a culvert and filling a ravine in which the culvert was located.
- 5. A consulting firm was asked by Peter Hogan and Associates Ltd. to review the plans for the Project and provide advice on the soils aspects. The Manager of the Geotechnical Division of the consulting firm responded to this request and wrote a report dated October 18, 1977 which formed the basis for the design of the trunk sewer extension.
- **6.** P.F. Hogan, P. Eng., sealed the original drawings (the "Drawings") for the Project, which were issued in November, 1977, but the project did not proceed.
- 7. Shortly after, the property changed hands and the new owner contacted the Surrey office of Peter Hogan and Associates Ltd. Subsequently, a meeting was held between the owner and Mr. Baker, representing Peter Hogan and Associates Ltd. A letter of March 16, 1979 signed by Paul L. Baker was sent to the owner outlining the itemized services to be provided by Peter Hogan and Associates Ltd. and the fee to be charged for the services.
- 8. The owner, in a letter dated March 20, 1979 to Peter Hogan and Associates Ltd., Attention: Paul L. Baker, accepted the quote of March 16, 1979.
- 9. On May 1, 1979, Mr. Baker, on behalf of Paul L. Baker and Associates, wrote to the owner and confirmed that he would undertake construction of the culvert in conjunction with Casano Construction Ltd. This was the same Paul L. Baker who represented Peter Hogan and Associates Ltd., the consulting engineers for the Project.
- 10. On May 16, 1979, the owner prepared a letter to Paul L. Baker and Associates which would serve as a contract to construct part of the Project at an agreed price.
- 11. During the month of May 1979, an alteration was made to the Drawings which reduced the width of compacted sidefill from twelve feet to four feet, and the altered Drawings were signed and sealed by Paul L. Baker, P. Eng.
- 12. Construction of part of the Project was undertaken by Paul L. Baker and Associates.
 - 13. The culvert collapsed on or about July 25, 1979.
- 14. An engineer from the soils consultant investigated the

collapse and drafted a report dated February 25, 1980, outlining his conclusions.

15. The collapse of the culvert was investigated independently by an engineer from another firm, on request of lawyers for the owner, and his conclusions from the investigation are set out in a letter he prepared in July, 1981. An extract from his report is:

"In summary, the reduced compacted side fill dimension and construction practices in contract #1 resulted in an installation without adequate side restraint and which could deform above average from an unbalanced side load and could not adequately resist the vertical design load which was subsequently applied."

REASONS FOR JUDGMENT

Although earlier written assurance had been received from Mr. Baker's legal counsel that the Inquiry dates were acceptable to him and had been acknowledged by Mr. Baker, neither party appeared at the hearing. Council delayed commencement of the hearing until staff members had tried to communicate with Mr. Baker by telephone. Mr. Baker could not be located. Council was told that Mr. Baker did not advise his own legal counsel whether he would attend or not and did not formally request an adjournment. Mr. Baker made no attempt to defend himself nor provide further facts or evidence for Council's consideration.

Evidence presented during the hearing disclosed that the culvert construction drawing had been altered and the side fill had been reduced below the amount specified on the original drawing, and that Mr. Baker's stamp was on the altered drawing. Council believed that one of the causes of failure was the alteration in width of side fill. He was the consulting engineer on the project and, in the opinion of Council, he did not guard against conditions that were dangerous or threatening to life, limb or property on work for which he was responsible because of the alteration he accepted.

Evidence presented from investigation of the failure showed that the drawing stamped by P.L. Baker, P. Eng. was not adequately designed for the successful completion of the project. In stamping the drawings, Mr. Baker accepted responsibility for ensuring that the drawings would result in sound engineering and safe installation of the culvert.

It was clear to Council that Mr. Baker put very little effort into assessing the impact of the altered width of fill and that he also failed to make notes or specifications which might have led to a more successful result. In absence of other evidence, Council concluded that his failure to check the drawings thoroughly and question the changes led to a dereliction of his responsibility.

The evidence clearly showed there was a conflict of interest with his employer. Mr. Baker, acting for Paul L. Baker and Associates, accepted a contract to construct a portion of the work while still representing Peter Hogan and Associates Ltd. as consulting engineer on the Project. Mr. Baker did not advise Peter Hogan and Associates Ltd. of this relationship.

The evidence clearly showed there was a conflict of interest with the owner of the property. Mr. Baker, as Paul L. Baker and Associates, accepted a contract to construct a portion of the work while representing Peter Hogan and Associates Ltd. as consulting engineer. Mr. Baker acted as both the contractor and consulting engineer on the Project; he thereby deprived his employer's client of the advice of an independent consultant with respect to the design and construction of the Project. The owner's evidence stated that Mr. Baker said no conflict would arise when the subject was discussed between the two, but it was clear from the evidence that a serious conflict did exist.

It was clear to Council that Mr. Baker could have accepted, on the owner's behalf, the lowest tender for construction of the Project. The amount of money suggested to the owner by Paul L. Baker and Associates was only about 10% lower than the figure asked for by another contractor. Mr. Baker then proceeded to approve changes to the drawing so as to reduce the width of side fill by such a quantity that the cost of

construction in the revised plan should have been significantly lower. Council heard evidence from the owner that he had not been told of the change nor of its significance in reducing costs, which reduction represented an undisclosed saving for Mr. Baker. Council therefore concluded that Mr. Baker had not only been in a conflict position but had taken full advantage of the conflict.

Council considered all the verbal and documentary evident available to it in judging Mr. Baker guilty of all four charges. His apparent disregard of good engineering practice, combined with engagement in deliberate conflict of interest, led Council to view his actions very seriously. Council concluded it must impose the most severe penalty available to it and ordered that Mr. Baker be expelled.

THE COUNCIL OF THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF BRITISH COLUMBIA

Ernest A. Portfors, Ph.D., P. Eng. President

Vancouver, BC April 18, 1986

COMMENTS BY COUNCIL

A Professional Engineer shall only seal or stamp a document which he has personally prepared or which has been prepared under his direct supervision and for which he assumes full responsibility. A Professional Engineer's stamp shall be applied by the Professional Engineer responsible for the document and only by that Professional Engineer.

By stamping a document, the Professional Engineer advises the public that he takes full responsibility for the competence of the engineering shown on the document. The stamp or seal demonstrates that his professional competence has been confirmed by the Association of Professional Engineers of British Columbia. Neither the Association nor the individual Professional Engineer can take improper use of the stamp or seal lightly.

Council considers that Professional Engineers must at all times act in an ethical fashion. Conflict of interest by a professional is serious in all cases, but is much more critical where a Professional Engineer is employed or retained in a position of trust.

The Code of Ethics is clear in prohibiting a Professional Engineer from using his professional position to secure benefits of inside information. The Code is also clear that the Engineer must advise the employer or client if he is involved or associated with any business interests which may influence his judgment.

When a Professional Engineer suspects his actions may infringe upon the Code of Ethics, he must modify his actions to act in accordance with the Code. Ignorance of the Code is not a reason or an excuse for ignoring the Professional Engineer's obligations.

RECEPTION FOR MLAs

The Association hosted a reception in Victoria on April 21 to which all Government MLAs were invited. The following guests attended: Hon J A Nielsen; Hon R Fraser PEng; Hon T M Waterland PEng; Hon J J Hewitt; Hon J R Chabot; Mrs Rita Johnston; D C M Mowat; J Parks; A L Passarell; W E Reid; J Reynolds; H Schroeder; W B Strachan; and C C Michael. Representing the Association were: E A Portfors PEng; R T Martin PEng; W E Royds PEng; D K McJunkin PEng; G S Prince PEng; K F Williams PEng; H N Gray PEng and M F Painter PEng.

President Ernest Portfors greeted the guests, thanked them for their support in getting amendments to the Engineers Act before the legislature, and invited informal discussion. The reception gave an opportunity for the MLAs and Association representatives to exchange ideas and concerns in a relaxed atmosphere and to get acquainted with each other. The general discussion ranged over a number of topics from the Engineers Act to Expo and the subsequent construction on the Expo site. There was also plenty of opportunity for individual discussion. Association representatives felt the exchange had been most informative.