

UNDER THE COMMISSIONS OF INQUIRY ACT 1908

IN THE MATTER OF ROYAL COMMISSION OF INQUIRY INTO BUILDING
FAILURE CAUSE BY CANTERBURY
EARTHQUAKES

KOMIHANA A TE KARAUNA HEI TIRO'TIRO I NGE
WHARE I HORO I NGA RUWHENUA O WAIT' AHA

AND IN THE MATTER OF THE CTV BUILDING COLLAPSE

STATEMENT OF EVIDENCE OF GERALD SHIRTCLIFF
IN RELATION TO THE CTV BUILDING

DATE OF HEARING: COMMENCING 25 JUNE 2012

BRIEF OF EVIDENCE OF GERALD SHIRTCLIFF IN RELATION TO THE CTV BUILDING

1. My name is Gerald Shirtcliff.
2. I worked for Williams Construction Canterbury (“Williams”) the building company that constructed 246 Madras Street. The building was later known as the CTV Building (“the Building”)
3. I was employed by Williams to the best of my recollection in late September or October 1986. I was 40 years old at the time.
4. My previous experience, prior to working for Williams, was as follows:
 - (a) I had previously worked in the building industry in various countries including Australia and New Zealand. The work that I undertook was of a general supervisory role relating to onsite construction and to ensure that construction works were in accordance with the plans and specifications provided to the builder by the professional design engineer or architect
 - (b) I was a graduate civil engineer. The type of work that I undertook while requiring a thorough knowledge of the building industry did not require me to undertake any design works of a structural nature and I did not do so. I was not and did not apply to the Institute of Engineers in New Zealand for registration as my work did not require me to do so.
5. I was employed with the title of Construction Manager, however the work that I was directed to undertake would have probably fitted better into the title of Project Manager. My duties included:
 - (a) Focusing on specific projects as directed by Mr Brooks to make sure work was completed in accordance with the design engineer’s plans and specifications and in other instances the plans and specifications of the architect
6. My position was akin to that of a project manager. When I started working at Williams, Williams was struggling to complete some of its existing projects, such as the Canterbury Manufacturers Building Mancan House and the Airforce Museum at Wigram and the Hotel on the corner of Kilmore and Durham Streets within the required timeframes that had been set by the various building contracts
7. Most of the staff employed at Williams started out as tradesmen. The staff employed by Williams tended to religiously follow plans. The Christchurch City Council were also keen to make sure that plans which had been approved and stamped as approved by Council were strictly complied with.
8. I reported to Mr Michael Brooks (“Mr Brooks”), the Managing Director of Williams. Mr Brooks provided me with instructions, when I first joined the company regarding which projects he wanted me to concentrate on, and which projects to be involved with. I followed the instructions that Mr Brooks gave me. Mr Brooks did not direct me as to what tasks I should undertake on a day to day basis, but he did expect me to report to him regularly as to the progress of the works that he has instructed me to be involved with on a day to day basis. Mr Brooks spent a considerable period of time in the field and he and I would meet on site from time to time on the sites that he had instructed me to be at. Because of the number of projects that Williams was undertaking, it was neither feasible, nor necessary, for me to have a detailed involvement in all of those projects that Williams were undertaking at the time.
9. I was instructed by Mr Brooks to become involved in specific buildings under construction for specific reasons which are as follows:-

Quality Inn Chain

- (a) Williams had just been taken over by the Smart Group and they had negotiated a lease of the partially constructed hotel on the corner of Durham and Kilmore Streets with the Quality Inn Chain. The Quality Inn Chain required that the project be changed completely in that sections of the internal works had to be demolished and replaced to the new design from an Architect Mr Graham Smith, who took instructions from the Quality Inn Chain. The person responsible for those instructions who I dealt with was to the best of my knowledge Mr N Corbett. I had to deal with both these people. When Mr Corbett and Mr Smith were in Christchurch I would attend meetings with Mr Brooks on site where alterations and new plans were given to Williams from Mr Smith. These plans were then given to the site foreman and the Williams office for action. I also dealt with the Smart group people from Wellington specifically as I recall Mr M. Cohen and Mr I Patterson who was the Director for the Smart Group in Wellington. Mr Cohen was the company buyer. The project became a turn key project and Williams supplied not only the building but everything that went into an operating hotel. External Quantity Surveyors from Wellington were also part of the new team that were engaged and I had a liaison role with this firm but I cannot remember their name. This was the principal job that I was employed for and it consumed a substantial part of my time.
- (b) The Quality Inn Chain was a complicated job. I was at that site almost every day. It was very labour intensive. That was because of the changes to the design. The outer shell of the building remained the same, except for the ground floor but the internal layout was changed significantly. That was why such a substantial part of my time was devoted to this project.

RNZAF AIR Force Museum

- (c) Williams was constructing the RNZAF Air Force Museum at Wigram. This was a Ministry of Works Contract and with a demanding Clerk of Works on site and Air Force Personnel the Foreman in Charge required expertise from me to assist in the completion of the structure and fit out of this building. The Architect was Mr Donnithorne (see references) and I spent considerable periods of time on this project particularly towards the end of the job as there was a very high level of scrutiny of the work that was being undertaken.

Canterbury Manufacturers Building Mancan House

- (d) The third building that I was heavily involved with was the Canterbury Manufacturers Building Mancan House. Williams was constructing this building. This building although a low rise structure was an important building that was seriously behind time and the Canterbury Manufacturers Association had a fixed completion date when the then Deputy Prime Minister was to officially open the building and Williams had to pick up their game to ensure the building was completed for the official handover. It fell to me to replace subcontractors who had fallen behind in their tasks and to replace them with suitably qualified and suitably resourced contractors and to ensure there was sufficient manpower from Williams available to complete the building tasks to finish the building for the opening.
- (e) This work was demanding and also took a substantial amount of my time and involved working late with tradesman who in some cases were working 15 hour days as we approached the opening ceremony. The building was opened on time and substantially complete. There were some minor tasks left to complete after the opening but these did not impinge on the opening ceremony.
- (f) I worked directly with the Director of the Canterbury Manufacturers Association Director Mr I Howell and he subsequently provided me with a reference which is attached.

AMP Society Office Block

- (g) The fourth building that I was involved with simultaneously was the office block for the AMP Society on Riccarton Road. Williams was constructing this building. The reason I was involved was a promotion of a sub foreman to Foreman and Mr Brooks wanted an extra pair of eyes, as I remember it, to look over the job to make sure all was going to plan.
10. Mr Brooks said to me words to the effect that the four projects referred to in the preceding paragraphs were to be my highest priority.

THE CTV Building

11. When I started at Williams, I recall that Mr Brooks ran through all the buildings that were under construction by Williams. I recall that Mr. Brooks told me the following about this high rise concrete structure in Madras Street:
- (a) the Design Structural Engineers were Alan Reay and Associates;
 - (b) Alun Wilkie was the Architect;
 - (c) The Christchurch City Council had approved the plans and they would be providing building inspectors to check the works as they proceeded.
 - (d) David Harding a registered structural engineer from Alan Reay and Associates was tasked as part of the contractual agreement between Williams and Alan Reay to inspect and approve all concrete pours, all reinforcing steel in position prior to pouring; to inspect the concrete in the columns after the formwork had been stripped, and to verify and approve the concrete docketts from the previous pour for strength as per his design requirements.
12. Mr Brooks did not instruct me to, and I did not, visit the CTV site regularly. I was at the site about once a month at most. When I was at the site, the purpose of my visits was generally to discuss any concerns that the foreman Mr Jones had and if there was anything he needed.
13. The reason why I only rarely visited the CTV Building was that it was a simple job. Every floor was the same, with repetitive concrete floors walls and columns and no internal fit-out. When I started at Williams, the foundations and ground floor had already been poured. The total time for the construction programme was about 8 or 9 months. I was only there for the last 6 or 7 months. The Williams staff at the site were in the rhythm of doing the same thing on each floor. Mr Brooks kept a watching brief over all projects. He visited the CTV Building about three times per week to the best of my recollection. Mr Brooks did not instruct me to, and there was no need for me to visit the site regularly, because it was essentially a simple job, and because Mr Brooks was visiting the CTV Building about three times per week, there would have been nothing for me to do there. Due to the long standing personal relationship that Mr Brooks had with Mr Jones, Mr Brooks knew before anybody else what was going on with the job and what actions needed to be taken.
14. The foreman, Mr Jones, would meet with me at the offices of Williams occasionally to update me on the status of the CTV Building. Williams' office was in Herford Street, Christchurch, which was around the corner from Madras Street. It was about two blocks away. He would tell me that the project was progressing to plan. I never recall him raising any significant problems or issues with the project with the exception when he came to the office to report an accident which as I recall it involved his son who was working on the job as a carpenter.
15. I would describe my role in relation to the CTV Building as receiving updates on progress of the construction on site from Mr Jones which I subsequently on forwarded to Mr Patterson of the Wellington office of the Smart Group. I have no recollection of any issues with the construction nor any reports from the Christchurch City Council who were undertaking inspections as to the construction of this building, nor any reports directed to me from the design engineers or Mr Harding

16. I understand that originally the footing design for the CTV building was going to involve piles. However, I understand that the design was changed, to a shallow padded concrete footing system. I had no involvement in the design of the footings, or in the change to the design of the footing system. It was not my role to design, or have input into the structural design of the CTV building. I was not asked to, and did not have any input into the design of the CTV building. To the best of my recollection, the work in the foundations was complete when I first started at Williams and this particular project had already been in construction for two three months to the best of my knowledge.
17. It is my understanding that the building was constructed in accordance with the approved plans and was certified as such, by the design engineers, Alan Reay and Associates and the Christchurch City Council.
18. I have no knowledge of any departure from the approved plans, nor any knowledge of any defects in the construction of the building while the building was under construction.

My employment with Williams

19. In about March 1987 to the best of my recollection the Smart Group, took over Williams, and subsequently Mr Patterson dismissed Mr Brooks, the Managing Director of Williams. Mr Brooks started a new company, Union Construction in about July or August 1987 (or earlier). By that time, to the best of my recollection the structural frame of the CTV building was all but complete. The only works of a structural nature that had not yet been completed were the awning fronting Madras Street and the removal of the hoarding. The lift installation, completion of the fitment of the windows and external doors as well as services within the building that were not of a structural nature had not been completed to the best of my recollections. My workload did not change as far as the Madras Street building was concerned as I was still fully occupied with the Quality Inn and the Wigram Air Force Museum.
20. I continued to work for Williams, until about September. I then worked for Union Construction. Mr Brooks negotiated a deal with Mr Steven Smart and the remaining work that was outstanding from Williams was transferred to Union. There was still outstanding work at Wigram and I continued my liaison with Mr Donnithorne into early 1988 when the project paperwork was finalised.
21. I have had no contact with any of the Williams personnel since the closure of the company, with the exception of Tony Scott and some carpenters who joined Shirtcliff Scott which was formed after the demise of Union Construction. Shirtcliff Scott was subsequently closed due to non payment of variations on a major warehouse structure in Sockburn and the failure to sell the high rise apartment property that was constructed at 108 Park Terrace.

COMMENTS REGARDING WITNESS STATEMENTS OF BROOKS, HARDING, and SCOTT

MR. BROOKS STATEMENT

22. At para 12 - I deny that I was responsible for ensuring the satisfactory progress of all Williams contracts. I deny that I was responsible for, or had any involvement or close contact with sub-contractors, consultants or the supply of materials or labour for the CTV Building.

MR. HARDING STATEMENT

23. At para 31 - Mr Harding says he met with Bill Jones, the Site Foreman, the Quantity Surveyor, Tony Scott and the Construction Manager, Gerald Shirtcliff, at the start of the construction. I think that statement is incorrect, in so far as it says I took part in a meeting regarding the CTV Building at the start of construction. I had not been

employed by Williams when construction of the CTV Building started, but it is possible I met with Mr Harding, Mr Scott and Mr Jones at some stage on the project.

MR. SCOTT STATEMENT

24. At para 8 – I deny that I was the person responsible for the on-site work at the CTV Building.
25. At para 30 – I deny that, after the dismissal of Mr Brooks, and the establishment of Union Construction, that I agreed to stay on to complete the CTV Building. Mr. Jones continued on in his role as the site foreman. Mr Harding the Design Engineer continued on in his role certifying all structural works on the site as well as the supervision from the Christchurch City Council building Inspectors and my role was confined to reporting the progress of the works directly to the Wellington office of the Smart group. Mr Brook's position, and the responsibility to supervise the completion of the CTV Building and indeed the Williams branch in Christchurch known as Williams Construction Canterbury was taken over by the Director Mr Charles Wright who had previously been a senior member of the Williams Team in Wellington and he had an overarching view of the Christchurch operations.
26. At para 31 – My job title at Williams was Construction Manager, but I only had limited involvement with the CTV Building, and other buildings such as the Canterbury Building Centre
27. At para 46(h) – I do not have any personal knowledge of whether or not the concrete strength was audited.

MR. SCOTT SUPPLEMENTARY STATEMENT

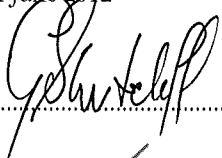
28. At para 12 – I deny that I was responsible for supervising the construction of the CTV Building, Mr Jones or the subcontractors.
29. At para 14 – I was not required to, and I did not visit the CTV Building on a daily basis. I was not required to, and I did not assist Mr Jones with formwork and propping design, the construction program, quality control or any general problems. I was not on the tools. Mr Harding would have approved the formwork and propping design prior to the first floor being constructed, before I was employed by Williams. I was not required to, and I did not, liaise with City Council inspectors or Alan Reay Consultants. Mr Jones, the foreman, was responsible with dealing with the Council inspectors and the engineers from Alan Reay and associates. The description of work however is correct in so far as my workload and daily activities at Shirtcliff Scott. I suggest Mr Scott may have muddled these memories after 25 years.

HYLAND SMITH REPORT


30. I have read sections of this report since receiving the link to the document from the Royal Commission. There appears to be significant evidence relating to the building columns, variable concrete strengths in the columns, design issues relating to the shear walls, the intensity of the horizontal ground shaking, and vertical ground accelerations
31. I note that the concrete supply for the building was organised by Mr. Scott. Mr Jones said he set out the columns and organised the steel fixers to place the reinforcing steel prior to the inspection (which was organised by Mr Jones) by the Christchurch City Council Building Inspectors and Mr Harding's inspections. The basis of my knowledge of the facts contained in this paragraph are the various statements of Mr Jones and Mr Harding.
32. On page 50 the report states that the minimum shear force reinforcing steel for the columns was not provided in accordance with the code and that goes to the structural design of the columns.

- 33. The conclusions on page 52 refer to the earthquakes in September 2010 and December 2010 and the significant weakening of the structure with respect to the collapse in 2011.

DATED this 28th day of June 2012

Signed : 

Gerald Shirtcliff

Witness: 



28 October 1992

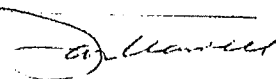
TO WHOM IT MAY CONCERN

Mr Gerald Shirtcliff, on behalf of Williams Construction Limited, was responsible for the project management of the construction of this Association's headquarters, Mancan House.

Over the period of 1986/87, we worked closely with Mr Shirtcliff in the building of Mancan House for the Association's company, Mancan Foundation Limited.

We valued Mr Shirtcliff's professional approach, not only in the construction and engineering for the building, but in his sound management of the project which was a major development for our organisation.

If we were involved in any future similar project, we would be delighted to have a person of Mr Shirtcliff's calibre to be responsible for this type of work.


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TO WHOM IT MAY CONCERN

I was the Architect for the R N Z A F Museum at the Wigram Air Base, erected 1987 - 88.

I worked very closely with Gerald Shirtcliffe towards the end of this Contract, in his position of Construction Manager for Williams Construction. The subsequent finalising of the contract took time and considerable diplomacy in view of the complex involvement of many parties.

I had a good working relationship with Gerald, and found him fair, courteous and thorough during this period. He had a sound knowledge of the construction industry and was able to bring to this Contract the qualities required for its completion.

I am proud of this project and grateful for his involvement.

Don Donnithorne

REGISTERED ARCHITECT

