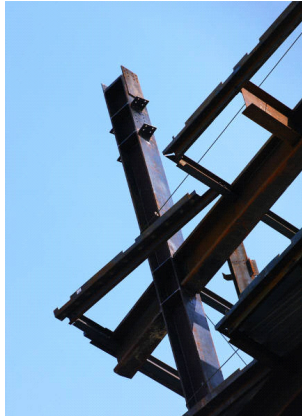


HFC: PEER REVIEWS

ADVANTAGES OF HFC PEER REVIEWS FOR DESIGNERS



TRACK RECORD: The team at HFC has over 20 years experience with peer reviews and have completed 100's of projects throughout New Zealand ranging in value from \$0.5 to \$150 million.

STAGED REVIEWS: HFC can carry out peer reviews in stages as the design is progressing. This enables an earlier start time on site while secondary review items are being processed. Reviews for larger projects are typically carried out in stages and these may include foundations, superstructure, lightweight upper floors, cladding, walkways and canopies.

SPEED: HFC will carry out peer reviews quickly and efficiently often in tandem with the consent process while other consent items are being progressed through council.

DESIGN & ETABS MODEL CHECKS: At an early stage your design and/or ETABS model can be checked by our reviewers to mitigate costly design errors flowing through the entire design process. This step confirms agreement of the, unit loads, model, periods and other design assumptions so the design can progress with confidence.



QUALIFICATIONS: All peer reviews are signed off by Chartered Professional Engineers (CPEng). HFC carries Professional Indemnity Insurance of \$2.5million.



ETHICAL: HFC prides itself on behaving ethically and does not divulge commercially sensitive information to third parties. HFC uses a direct line of communication with the design engineer. This process ensures that issues are resolved expediently without undermining the reputation of

the design engineer in the eyes of the client.

COMMERCIALY FOCUSED: HFC is a private engineering consultancy practice and has the same focus on client satisfaction as the designer. We will work with the design team to resolve issues in a timely and diplomatic manner.

METHODICAL: With over 10 years of experience carrying out peer reviews HFC has developed a methodical approach to their reviews. Review items are addressed with a specified order of priorities to ensure major items are addressed first. Each query is numbered sequentially to ensure all parties can clearly reference outstanding items.

SUMMARY OF THE PEER REVIEW PROCESS

HFC SPECIFIED ORDER OF PRIORITIES

UNIT LOADS

dead, live, wind, seismic, snow

SEISMIC MASSES

mass at each level

GEOTECHNICAL PARAMETERS

confirm correct parameters adopted in design

OVERALL STRUCTURAL SYSTEM

lateral resisting system, ductility, periods etc

VERTICAL LOADS

floor systems, gravity beams, columns

LATERAL LOADS

seismic design, wind design

RETAINING LOADS

retaining wall designs

FOUNDATIONS

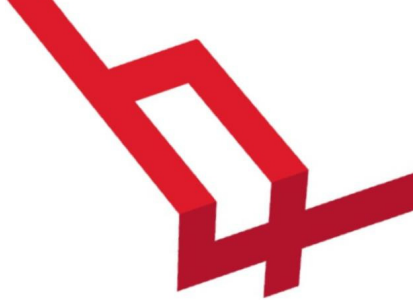
confirm loads and design

DRAWINGS

checks to ensure design is correctly documented with correct member sizes, connections, reinforcement etc

HFC: GROUP PS2 PEER REVIEW SERVICES

REFERENCES





15 January 2009

Holmes
Consulting
Group Limited

HFC: HARRIS FOSTER CONSULTING PEER REVIEW SERVICES

Auckland
Telephone
+64 9 965 4789

To whom it may concern

Facsimile
+64 9 965 4780

We have used HFC for structural peer reviews for a wide range of buildings since 1999. Over 80 reviews have been carried out by HFC for projects designed by Holmes Group.

holmesgroup.com

Projects reviewed by HFC range in value between 10 and 150 million and include high rise offices, high rise apartments, art galleries, museums, industrial buildings, hospitals, shopping centres and large residential buildings.

Level 1
39 Market Place

Some of the projects reviewed by HFC include

- Auckland City Museum extension and upgrade
- Auckland City Art Gallery extension
- Botany Town Centre – shopping centre
- 82 Queen Street – BNZ Tower (4 basement levels with 20 Storey offices building over)
- Waikato Hospital Acute Hub and Emergency Centre
- Kawarau Falls Hotel – Queenstown
- Ellerslie Showgrounds extensions
- Middlemore Hospital (various buildings and extensions)
- Grafton Campus redevelopment
- Carlaw Park, office, hotel, apartments and carparks
- Several medium rise carparks
- Many apartment/office buildings ranging from 5 to 15 Storeys

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New Zealand

Auckland
Hamilton
Wellington

Christchurch
Queenstown
San Francisco



We have an excellent working relationship with HFC and have found them to be professional and timely with their reviews.

We have found that the clearly defined queries raised by HFC are able to be worked through item by item with our designers to ensure that all code requirements are satisfied. This methodical approach is of particular importance for the large and complex projects we often carry out.

The structural peer review process has been found to smooth the consent process which saves our clients time and costs.

Yours Faithfully

Bruce Black
MANAGING DIRECTOR

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San Francisco



19 January 2009

To Whom It May Concern:

**HFC: Harris Foster Consulting
Peer Review Services**

We have used HFC for structural peer reviews for a wide range of buildings since 2005.

Projects reviewed by HFC range in value between \$5 and \$20 million and include:

- Waitakere Civic Centre
- Waitakere Outdoor Grandstand
- Henderson Train Station
- Hastings Outdoor Grandstand
- Sudima Airport Hotel

As design engineers for these projects we have found HFC to be reliable and expedient with their reviews.

We have a good working relationship with HFC and any queries raised have been worked through efficiently between the designer and reviewer to ensure code requirements have been satisfied.

Yours faithfully

Dr Alan Reay

**Innovation
by design**

Alan Reay Consultants Ltd
395 Madras Street
PO Box 3911
Christchurch
New Zealand
Tel 03 366 0434
Fax 03 379 3981
Email eng@arcl.co.nz
Internet www.arcl.co.nz

15 Jan 2008

To whom it may concern:

RE: HFC: HARRIS FOSTER CONSULTING PEER REVIEW SERVICES

We have used HFC for structural peer reviews of our commercial buildings since 2006.

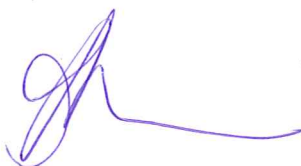
Projects reviewed by HFC range in value between \$30 and \$120 million and include:

- 95 Ascot Avenue – 5 Storey Office Building
- 162 Victoria Street – 7 Storey Office Building
- 167 Victoria Street – 2 storey basement carparking, with four 5 to 7 Storey Office Towers above
- 109 Fanshawe Street – 2 Storey Basement carparking, with five 5 to 7 Storey Office Towers above

We have found HFC to be professional and reliable with their reviews.

Their good relationship with Auckland City Council and the design engineers has assisted us greatly with our consent process.

Yours faithfully
Mansons TCLM Limited

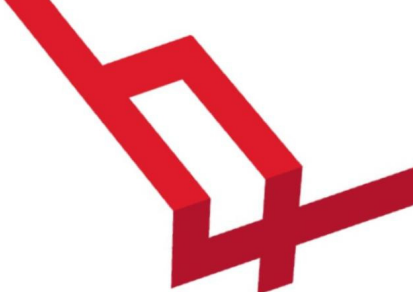


Jaye Moon
Consents Manager



HFC: GROUP
PS2 PEER REVIEW SERVICES
CAPABILITY STATEMENT

March 2009



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HFC | GROUP
CIVIL & STRUCTURAL ENGINEERS

1. The HFC Group

1.1 Company Profile

HFC was formed by Maurice Harris and Robert Foster

HFC is a small team of highly experienced professionals which provides a personalised, competitive, client focused service.

The team possesses a great depth of knowledge and experience in the engineering field. HFC has developed relationships within the industry that enables us to regularly partner with other companies to provide superior service.

HFC: is a group of limited liability companies privately owned by Maurice Harris and Robert Foster which normally carries \$2.5 million in indemnity insurance. This is increased for specific projects that require higher levels.

HFC has carried out hundreds of peer reviews over the last 10 years for a variety of consultants throughout New Zealand. HFC is on the 'approved engineers' list for all major councils in New Zealand.

Peer reviews carried out include high rise offices and apartments, Industrial buildings, structural upgrades, large retaining walls, large residential projects, and cladding systems.

1.2 PS2 Peer Review Services

HFC staff have been involved in the planning and design of many office and apartment developments. HFC carry out PS2 Peer reviews for many engineering consultancies, developers and local authorities on a regular basis.

Design and design review project values range from \$100,000 to \$80 million.

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2. Relevant Experience

2.2 PS2 Peer Review Examples

Buller George Engineers	- 32 Eden Crescent (14 Storeys)
Buller George Engineers	- Queen City & Queen Central Apartments (7 Storeys and 14 Storeys)
Warren Clarke Engineers	- Warehouse Building Reviews (2-8 million dollar developments)
Holmes Consulting Group	- Hyatt Residences Tower (18 Storeys)
Holmes Consulting Group	- Anzac Ave Apartments (12 Storeys)
Holmes Consulting Group	- Princeton Apartments (12 Storeys)
Holmes Consulting Group	- Renaissance Tower (16 Storeys)
Holmes Consulting Group	- Oakwood Hall Apartments (14 Storeys)
Buller George Engineers	- Silvia Park Shopping Centre
Holmes Consulting Group	- BNZ Tower, Queen Street
Structure Design	- MetLife retirement village
Holmes Consulting Group	- Waikato Hospital Carpark
Holmes Consulting Group	- Waikato Hospital Acute Hub
Knowles Consulting Ltd	- Whangarei District Court extensions
Alan Reay Consultants	- Waitakere Outdoor Grandstand
Alan Reay Consultants	- Hawkes Bay Grandstand
Alan Reay Consultants	- Waitakere Civic Centre
Arrow International	- Albany Senior High School
Arrow International	- Silverdale Primary School
Multiplex	- Silvia Park Shopping Centre
Buller George Engineers	- 32 Eden Crescent Apartments
Buller George Engineers	- 74 Wakefield Street, Sapphire Apartments
Buller George Engineers	- 62 Queen Street, Portland Tower
Buller George Engineers	- 96 Symonds Street, Apartments
Harrison Grierson	- Bucklands Beach Storage tanks
Harrison Grierson	- 12 Anderson Road, Retaining walls
Holdsworth Group	- Latitude 37 Apartments
Holdsworth Group	- Sudima Hotel, Auckland Airport
Holmes Consulting Group	- Viaduct Harbour, Log Farm Apartments

PS2 Peer Review Examples Continued:

Holmes Consulting Group	- Hyatt Princess Street
Holmes Consulting Group	- Rosebank Road Industrial Park
Holmes Consulting Group	- Southland Base Hospital
Holmes Consulting Group	- 21 Viaduct Harbour, Lighter Quay App
Holmes Consulting Group	- War Memorial Museum Upgrade
Holmes Consulting Group	- Auckland City Art Gallery
Homes Consulting Group	- Holiday Inn, Wellington
Holmes Consulting Group	- Kawarau Falls Station
Holmes Consulting Group	- Botany Town Centre
Mansons TCLM Ltd	- Ascott Office Park
Mansons TCLM Ltd	- Victoria Square Office Blocks
Mansons TCLM Ltd	- Victoria Exchange Office Block
Duffill Watts	- PRNZ House; Office Block Alterations
Holmes Consulting Group	- Hilltop House; Residential House
Holmes Consulting Group	- Auckland City Arena Stadium Pou Raho Arena Sculpture

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3. Resources

3.1 Staffing Levels

The HFC Group is made up of four companies, owned by Maurice Harris and Rob Foster, which work together to form the following team:

Directors	2
Professional Engineers	3
Engineers	7
Draftspersons	8
Administration	1

All staff are highly qualified and very experienced in a variety of building projects.

Through professional memberships, HFC is represented at the following organisations:

- Institution of Professional Engineers; New Zealand (IPENZ)
- Institution of Civil Engineers; UK (ICE)
- Structural Engineering Society; New Zealand
- Geotechnical Society; New Zealand
- Timber Design Society; New Zealand

3.2 Procedures and Internal Systems

HFC is committed to fully satisfying our clients requirements in respect of quality, time and cost. Great importance is placed on careful planning, forecasting, communication, time monitoring, reporting and control. In addition, project evaluation and peer reviews are carried out as a project warrants.

Management techniques to ensure successful completion of projects may include:

- Site appraisals
- Ongoing consultation with the client, user groups and affected parties
- Budget formulation, allocation and management
- Critical path programmes
- Critical reporting dates
- Distribution of information to the correct parties
- Accessing databases, such as in-house libraries
- Efficient control of resources and balanced allocation of work

A high emphasis is placed on quality being maintained in all aspects of the project. An internal review process is carried out on each project to ensure quality levels are maintained and that all professional 'best-practice' QA checks and completed.

HFC has a current Health and Safety Plan, which covers the typical range of services offered. All staff are briefed on issues relevant to their workplace and receive specific training related to external site or engineering requirements.

For a new project where risks are not covered by the Health and Safety Plan, an assessment would be made and relevant steps taken to mitigate the risks involved. As part of an ever evolving plan these assessments would then be added to our H&S database.

3.3 Equipment and Facilities

HFC invests in its staff with regular in-house and external training to ensure continued professional competence and the use of the latest products/design methods.

Our engineering team is currently situated in two offices, Auckland and Christchurch, with both the North and South islands can be readily served.

Both offices are set up with modern computers and current draughting and design (analysis) software to enable the efficient completion of each project.

All staff are contactable by phone, fax and email; with senior staff being contactable directly by mobile phone.

Inspection of our offices and past project history is invited.

3.4 Statement on Conflicts of Interest

Where a conflict of interest arises, as professional engineers being governed by a Code of Ethics under our memberships to IPENZ, we are bound to report this to the relevant party for discussion before proceeding any further.

As a professional courtesy HFC will always seek to contact affected parties to inform them of any peer review work being completed on their work.

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3.5 Key Peer Review Staff

Maurice Harris - BE(Hons), MIPENZ

Maurice, a director of Harris Consulting Ltd, has 28 years experience in civil and structural engineering in the commercial, industrial and public sectors, with many projects relevant to this project. Maurice specialises in conceiving economic, 'build able' solutions to engineering problems. His long service in the industry includes significant projects involving timber structure, steel and concrete structures.

Maurice has worked successfully with the designers of many of the public building projects visited. Maurice has continued to research successful projects and has continued to keep up to date with recent developments.

Robert Foster - BE MIPENZ CPEng IntPE(NZ)

Robert is a director of Harris Consulting Ltd and has 18 years experience in structural engineering in New Zealand and overseas. His experience includes a wide variety of steel, timber and reinforced concrete structures including water retaining, industrial and commercial building.

Matt Harris - BE(Hons) MIPENZ CPEng IntPE(NZ) MICE CEng

Matt leads the engineering team at HFC: South, and as a chartered professional engineer has over 12 years experience in structural and civil engineering in New Zealand and overseas. His experience includes the design of a wide variety of residential and commercial steel, timber and reinforced concrete structures.

Matt is an IPENZ staff assessor for the assessment of MIPENZ/CPEng applications to IPENZ (the Institution of Professional Engineers New Zealand).

In addition, Matt has previously been involved in the production of insurance reports for seismic event claims, acting as an independent engineer; and has previously assessed and advised on the condition and options for repair of 'leaky buildings' for clients requiring independent professional advice.

4. Attachments

4.1 Detailed Work Histories of Key Peer Review Staff

MAURICE JOHN HARRIS

BE(Hons) MIPENZ

QUALIFICATIONS

BE (Hons) University of Canterbury 1975
Member of Institution of Professional Engineers

DATE OF BIRTH

9 July 1953

SPECIAL COMPETENCE

Structural design of public, commercial and industrial buildings
Structural design of concrete, steel and timber structures
Earthquake strengthening, and upgrading structural concept designs and peer reviews

PRESENT POSITION

Director – HFC: GROUP Ltd

PAST POSITIONS

Director and Principal of Royds Consulting Ltd
Montgomery Watson (NZ) Ltd Structural Discipline Leader

OVERSEAS EXPERIENCE

Planning and design of buildings and structures for Pacific Islands, North America, England, Middle East and North Africa

PROFESSIONAL EXPERIENCE

1990 – to present

Concept design and design of foundations and buildings associated with concrete plants throughout New Zealand

Structural design for new buildings at Coca Cola Amital (NZ) Ltd

Foundation design for a variety of building structures

Concept and structural design for new water treatment plants and associated structures

Structural design for new Cinema and car parking buildings

Structural design for new swimming pool complexes and amenity buildings

Planning and structural design for high rise and low rise residential projects

Planning and structural design for commercial and industrial buildings

1984 – 1990

Structural planning and design and of flood control systems including water retaining structures and water controls

Planning and design of Queenstown District Council sewerage extensions

Planning and design of Queenstown District Council water supply upgrade
Including reservoirs, underground services and structures

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1976 – 1983

Planning and civil design of subdivisions including roading and underground services

Structural design of Hospitals and Public buildings

Structural planning and design of marine structures

Structural design and planning redevelopment of Docklands (London) including buildings civil work and underground services

Structural design using reinforced concrete, structural steel and timber

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ROBERT FOSTER

BE MIPENZ CPEng IntPE(NZ)

QUALIFICATIONS	BE University of Auckland (1989) Member of Institution of Professional Engineers
DATE OF BIRTH	2 December 1967
SPECIAL COMPETENCE	Structural design of commercial and industrial buildings in concrete, steel and timber structures Water and earth retaining structures and foundations. Structural peer reviews (calculations and site supervision)
PRESENT POSITION	Director – HFC: GROUP Ltd
PAST POSITION	Senior Engineer - Royds Consulting Ltd & Montgomery Watson Ltd Engineer at Kenchington Ford PLC London
OVERSEAS EXPERIENCE	Design of buildings, bridges and other structures Pacific Islands, England, Indonesia and Australia
PROFESSIONAL EXPERIENCE	
1993 – to present	Structural design of 12 storey Hotel building Concept design and design for foundations for concrete plants throughout New Zealand Precast concrete panel design and QA checking Structural Concept and Design for 15m steel cantilever bungee platform Structural design for new building for Coca Cola Amital (NZ) Ltd Structural design of many 5-7 storey office/apartment buildings Structural design for new swimming pool complexes Structural design for high rise and low rise residential projects Structural reviews of multistorey industrial and commercial structures
1990 – 1993	Feasibility assessment and Structural design of Bridge structures (UK) Refurbishment of Waterloo Station (UK) Concept planning and structural design of commercial warehouses and shopping complexes

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MATTHEW JOHN HARRIS

BE(Hons) MIPENZ CPEng IntPE(NZ) MICE CEng

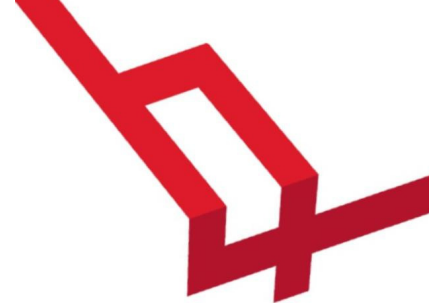
QUALIFICATIONS	BE (Hons) University of Plymouth (UK) 1996 Member Institution of Professional Engineers (NZ) Member Institution of Civil Engineers
DATE OF BIRTH	5 April 1973
SPECIAL COMPETENCE	Structural design of public, commercial and industrial buildings in concrete, steel and timber structures Engineering design & management of multi-discipline structural and civil engineering projects IPENZ Staff Assessor for CPEng application assessments IPENZ Neighbourhood Engineer
PRESENT POSITION	Engineering Manager – HFC: Civil & Structural (south) Ltd
PAST POSITIONS	Associate Director of Weber Christchurch Ltd Structural Principal of Davis Ogilvie & Partners Ltd
OVERSEAS EXPERIENCE	Planning and design of buildings/structures in Australia, UK, Channel Islands, Republic of Maldives and the United Arab Emirates
PROFESSIONAL EXPERIENCE	
1996 – to present	Structural design for stage 2 car showrooms - Al Tayer Motors, Dubai, UAE Civil works design - Hedland Health Campus/ Hospital Stage 2 Redevelopment, Pilbara, Western Australia Civil contract review - Fonterra Stirling Waste-water Treatment Plant (approx NZ\$20 million) Peer review - Dubai Cargo Terminal Building Project/contract management - Pilbara Iron, West Angelas Stage 5 Fly in/fly out workers camp upgrade, Western Australia Structural cladding assessment report - The Point Apartments, Queenstown Structural assessments for natural disaster damage to 46 various properties in the lower South Island Civil works design and contract management - Ashburton Aquatic Park Subdivision – Stages 2, 3, 4 & 5 Residential Canal Subdivision Condition assessment of existing bridges on Barnes and Humphries dam walking tracks, Picton Structural design of new residential development, Oriental Road, Woking - Barrett Southern Counties, UK

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Resident engineer - Addu Link Road, Addu Atoll, Republic of Maldives, Value US\$12million & Addu Bridge Contract, Addu Atoll, Republic of Maldives, Value US\$1.5million

Structural design – Restaurant & Bar Building remedial works, Soneva Gili Resort, Maldives

Structural design – New Process Area Building and Tank Building, Montana Wines Ltd, Brancott Estate

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