

CURRICULUM VITAE

28 February 2008 day_generalcv_feb2008.doc

PETER DAY

Civil Engineer **Profession Date of Birth** 2 May 1953

Chairman, Director Position in firm

Years with the firm 29 years

South African **Nationality**

Education / Qualifications BSc Eng (1975); MSc Eng (1980); Pr Eng (1982), FSAICE, MASCE,

MISSMGE

Languages English, Afrikaans

Employers:

1975 - 1976Department of Water Affairs - Natal

1976 - 1978University of Natal – Junior Lecturer

1979 - Present Jones and Wagener

Areas of Expertise

Geotechnical engineering; lateral support and slope stability; construction on problem soils; design of foundations; insurance and contract dispute investigations.

Professional Affiliations

ECSA: (Engineering Council of S.A.) Member on Investigating Committee (2006-).

ISSMGE: Core member of Technical Committee TC40 on Forensic Geotechnical

Engineering (2005-). (International Society for Soil

Mechanics and Geotechnical Vice-President for Africa (2001-2005).

Engineering) Chairman of Technical Committee TC23 on Limit State Design (1997-2001).

Committee member of ISSMGE's Technical Committee TC20 on Professional

Practice (1997-2001).

Core Member of Technical Committee TC23 - Limit State Design (1994-1997).

SAICE: Treasurer - Geotechnical Division (1995-1996).

(S.A. Institution for Civil Engineering) Chairman - Geotechnical Division (1993-1994).

Secretary - Geotechnical Division (1988-1992)

JONES & WAGENER (PTY) LTD REG NO. 93/02655/07 VAT No. 4410136685

DIRECTORS: PW Day (Chairman) PrEng MSc(Eng) FSAICE D Brink (CEO) PrEng Hons BEng FSAICE PG Gage PrEng CEng BSc(Eng) GDE MSAICE JP van der Berg PrEng PhD MEng MSAICE

GR Wardle (Alternate) Pring MSc(Eng) MSAICE

TECHNICAL DIRECTORS: JA Kempe Pring MSc(Eng) GDE MSAICE Alstructe CG Waygood Pring BSc(Eng) MSAICE RA Cooper Pring BSc(Eng) GDE MSAICE JR Shamrock

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CONSULTANTS: W Ellis PrEng CEng MIStructE

Page 2 of 6 Peter Day

SAICE: Chairman of Organising Committee - Conference on Pile Design and

Construction Practice (1988).

Chairman of Organising Committee, X11 African Regional Conference on Soil

Mechanics and Geotechnical Engineering (1997-1999).

Chairman of Organising Committee - Seminar on Limit State Design in

Geotechnical Engineering (1995).

Chairman of Organising Committee, S.A. National Conference on Loading

(1998).

Relevant Experience

Heavy Industry / Power

Geotechnical investigations for gas fired power station: Kudu CCGT Power Station – Nampower; Coega – Eskom, PB Power; Mossel Bay – Eskom, PB Power; Atlantis – Eskom, PB Power; Hammarsdale – PB Power; Avon – Alstom, PB Power.

Geotechnical investigation for PBMR project – (Koeberg) – Eskom / PBMR.

Detailed investigation for Aluminium Smelter – Coega, Eastern Cape – Alcan/Pechiney/Bateman Enterprises Africa.

Site investigations and design of foundations for 200 – 300m high chimneys: Lethabo Power Station; Kendal Power Station; Tutuka Power Station; Matla Power Station, Komati Power Station.

Site investigation and lateral support design for stainless steel hot mill – (Middelburg) – Columbus Joint Venture.

Interpretation of test results and pile design for smelter – (Richards Bay) – Alusaf.

Investigation and foundation design assistance for steel mill – (Saldanha) – Saldanha Steel.

Geotechnical investigation for Water Treatment Works - Botswana - North South Carrier Project.

Construction

Design of TBM launch and receiving shafts for tunnel below mouth - Durban Harbour – Durban Harbour Tunnel Contractors.

Design of excavation and dewatering – Port of Ngqura - Ngqura Harbour Contractors.

Investigation into reasons for abandonment of Southern Heading – Malvern Tunnel.

Investigation into causes of failure and checking of remedial work to ensure stability of hillside - Zungwini Tunnel.

Site investigations and design of lateral support for commercial building under design-and-construct contracts: Joubert Park GPO (Johannesburg CBD); Bank City Blocks A - E(Johannesburg CBD); Village Walk, Sandton; Gencor H.O. and others.

Mining

Geotechnical investigation and excavation design for crushers and beneficiation plant – Sishen Expansion Project.

Geotechnical investigation for crushers and iron ore beneficiation plant - Project Phoenix, Thabazimbi.

Geotechnical investigation for diamond mine treatment plant – Jwaneng Diamond Mine, Botswana.

Geotechnical Investigation for feasibility studies on zinc projects: Zinkstad at Coega, Driftsands and Westbank and Skorpian Zink at Rosh Pinah.

Geotechnical investigations for new shafts, shaft structures, roads, earthworks and borrow searches (Various Gold, Platinum and Coal Mines).

Waste Management



Page 3 of 6 Peter Day

Investigation into causes of slip failure of landfill – Bulbul Drive Landfill.

Investigating and monitoring of landfill instability, testing of interface frictions and design of emergency remedial measures – Shongweni Landfill, KZN – Enviroserv (Pty) Ltd.

Transportation

Investigation of 20km rail link from Duvha to Middelburg Colliery including undermined areas – CRU Rail.

Geotechnical investigation for railway deviation including design and supervision of dynamic compaction for backfilled open pit crossings – Bothashoek Railway Deviation.

Design of piled foundations on "design and construct" contracts (Various Road and Rail Bridges).

Investigation of Komatipoort-Swaziland rail link.

Awards

2005	South African Geotechnical Medal.
1991	J.E. Jennings Award (SAICE Geotechnical Division) for contribution to the 1989 Code of Practice on Lateral Support in Surface Excavations.
1981	SAICE prize for Best Short Paper or Technical Note published in the Transactions during 1980.
1981	SAICE prize for Best Graduate Contribution published in the Transactions during 1980

Summary of other Experience / Publications

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DAY P.W.	2007	Forensic Geotechnical Investigations: Data Collection. ISSMGE TC40 Workshop of Forensic Geotechnical Engineering, 13 ARCSMGE, Kolkata, Dec 2007.
DAY P.W.	2007	Krebs Ovesen's legacy to South Africa: a harmonized basis of design code. ISSMGE TC23 Spirit of Krebs Ovesen Memorial Session, 14 ECSMGE, Madrid, Sept 2007.
DAY P.W.	2007	The Effect of Free Fall Placement of Concrete in Large Diameter Bored Piles. SAICE Geotechnical Division. Pile Design & Concrete Practice 6-7 March 2007, Midrand.
DAY P.W.	2006	Geotechnical Engineers and the Construction Regulations. Journal of SAICE, Volume 48, No. 4, December 2006.
VERMEULEN N.J. DAY P.W.	2005	Dewatering at the Port of Ngqura: A case study. Proc 16th ICSMGE, Osaka, Japan.
DAY P.W.	2005	Issue 1: Long term settlement of granular fills. Academic-Practioner Forum, Proc 16th ICSMGE, Osaka, Japan.
DAY P.W.	2005	Issue 2: Development of Advanced Constitutive Models – should these proceed. Academic-Practioner Forum, Proc 16th ICSMGE, Osaka, Japan.
WARDLE G.R. DAY P.W.	Dec 2003	Settlement predictions and monitoring of heavy industrial structures at Saldanha Bay, Cape West Coast, South Africa. 13th African Regional Conf. on Soil Mech. and Geotech. Eng. Morroco.
ORR, T.L.L. MATSUI, K. DAY,P.W.	Apr 2002	International practice with regard to geotechnical; investigation methods and the determination of parameter values. IWS Kamakura, Japan.
DAY,P.W.	Oct	Pre-loading to reduce settlement below heavy industrial structures.

SAICE Ground Improvement Seminar, Midrand.

2001

WARDLE, G.R.

Page 4 of 6 Peter Day

MODISHANE, T.L.		
DAY P.W.	June 2001	Case Histories and Lessons from Failures. Zimbabwe Institute of Engineers Congress, Harare.
KREBS OVESEN, N. DAY, P.W. (editors)	Nov 2000	LSD 2000 Proceedings of International Workshop on Limit State Design in Geotechnical Engineering. Melbourne, Australia.
DAY, P.W.	1999	Braced excavation – deformation and displacement of walls. Proceedings of International Symposium on geotechnical aspects of underground construction in soft ground IS Tokyo 99, General Report, Session 4, p43 – 52. Balkema, Rotterdam.
BRINK, D. DAY, P.W. DU PREEZ, L.	Oct 1999	Failure and remediation of BulBul Drive Landfill: KwaZulu-Natal, South Africa. 7th International Symposium on Waste Management and Landfill, Sardinia.
DAY, P.W. KEMP, A.	1998	South African Loading Code: Past, Present and Future. Civil Engineering, Volume 7, No 4. SAICE.
DAY, P.W.	1998	Interface Testing of Geomembranes and its application to Landfill Design. SAICE Geotechnical Division / SAIEG 1999 Lecture Course.
DAY, P.W.	Sept 1997	Limit State Design – A South African Perspective. Discussion Session 2.3, XIV International Conference on Soil Mechanics and Foundation Engineering, Hamburg.
DAY, P.W. WARDLE, G.	Oct 1996	Effect of Water on Settlement of Opencast Pit Backfill: Case Histories of Investigation and Performance. SAICE Seminar on Hydrology of Made Ground, Johannesburg.
DAY, P.W.	Oct 1996	Geotechnical Engineers and the Occupational Health and Safety Act. SAICE Journal, Volume 3, Third Quarter.
DAY, P.W. HARBUZ, H.	Jun 1996	Foundation Investigation, Selection and Design. Symposium of Industrial Civil Engineering, Rand Afrikaans University, Johannesburg.
DAY, P.W.	Sept 1996	Implementation of Eurocode 7 in South Africa. Eurocode – Towards Implementation, Institution of Structural Engineers, London.
DAY, P.W.	Dec 1995	Design, Construction and Performance of Deep Basement Excavations in South Africa and Zimbabwe. Eleventh African Regional Conference on Soil Mechanics and Foundation Engineering, Cairo.
DAY, P.W.	Mar 1994	Safety of Men Working in Testpits and Auger Holes. Requirements of Occupational Health and Safety Act (85, 1993). Safety and Health in Industry, Construction and Mining. The New Legislation. LGI, University of Pretoria. Bifsa Conference Centre, Midrand.
DAY, P.W.	Jan 1994	Factors Influencing the Movement of Retaining Structures. Plenary Session C, 13th International Conference on Soil Mechanics and Foundation Engineering, New Delhi.
HOWIE, C.T; SCHEELE, F; DAY, P.W.	Jan 1994	Soldier Pile Analysis using Non-linear Beam-Foundation Theory. Proceedings 13th International Conference on Soil Mechanics and Foundation Engineering, New Delhi, Volume 4, 1937 – 1402.
DAY, P.W.; SCHWARTZ K	Jan 1994	National Report on Codes of Practice and Authoritative Reports on Braced Excavations in Soft Ground, South Africa, Africa Region. International Symposium on Underground Construction in Soft Ground, New Delhi.
DAY, P.W.	May 1992	Determination of Settlement Parameters for Opencast Pit Backfill by means of Large Scale Tests. Proc. Conf. on Construction Over Mined Areas. SAICE, SANGROM, SAIEG, AEG.



Page 5 of 6 Peter Day

DAY, P.W.	Aug 1990	Site Investigations for River Bridges. 10th Annual Transportation Convention, Pretoria.
DAY, P.W.	Jun 1990	Design and Construction of a Deep Basement in Soft Residual Soil. Proc ASCE Speciality Conference on Design and Performance of Earth Retaining Structures, Cornell University, Ithaca NY.
DAY, P.W.	Aug 1990	Observed Movement and Remedial Measures to Northern Face of an Excavation in Jeppe Street, Johannesburg. SAICE Lateral Support Code Launching Conference, Johannesburg.
SAICE Geotechnical Division	1989	Code of Practice, Lateral Support in Surface Excavations. SAICE, Geotechnical Division, 1989. (Code compiled by Geotechnical Division Sub-Committee including P.W. Day).
		Awarded J.E. Jennings award for best SA geotechnical publication in 1991.
DAY, P.W.	Nov 1989	Design of Raft Foundations (using Lytton's Method). Proc. Course on Design of Stiffened Raft Foundations, CSIR, Pretoria.
DAY, P.W.	Apr 1988	Reinforcement of Cast in situ Piles. Proc. of Course on Pile Design and Construction Practice, Geo Div, SAICE, Johannesburg.
WILLIAMS, A.A.B.; PIDGEON, J.T. DAY, P.W.	1985	Expansive Soils: State of the Art. The Civil Engineer in South Africa, Vol. 27, No.7, pp 367
DAY, P.W. WAGENER, F. VON M.	1984	Investigation Techniques on Dolomites in South Africa. Proc. 1st Multidisciplinary Conference on Sinkholes, Orlando, Florida. pp 153-159.
WAGENER, F. VON M. DAY, P.W.	1984	Construction on Dolomite in South Africa. Proc. 1st Multidisciplinary Conference on Sinkholes, Orlando, Florida. pp 403-413.
NICHOLAYSEN, L.O. DAY, P.W. HOCH, A.	1984	On the Stress Changes within a Porous Elastic Sphere during Consolidation and their importance for the Supply of Power to the Gravitational Dynamo. Terra Cognition Vol. 4, No. 2, pp 239.
NICHOLAYSEN, L.O. DAY, P.W. HOCH, A.	1982	Loss of Deep Mantle Carbonic Reduced Volatiles during N Polarity, Storage of these Volatiles during R Polarity. Lunar and Planetary Inst. Topical Conference, Alexandria, Minnesota. October 9 – 12th. LPI tech report 83-01. pp 119-121.
DAY, P.W. WATES, J.A. KNIGHT, K.	1981	Skin Friction on Underslurry Piles. 10th International Conference on Soil Mechanics and Foundation Engineering, Stockholm. pp 689-692.
DAY, P.W.	1981	Properties of Wad. Seminar on Engineering Geology of Dolomite Areas. Pretoria 1981. pp 135-147.
DAY, P.W.	1981	Dumprock and Chert Gravel Mattresses. Seminar on Engineering Geology of Dolomite Areas. Pretoria 1981. pp. 256-260.
DAY, P.W.	1981	A Comparison and Discussion of Investigation Techniques on Dolomites. Ground Profile No. 27, July 1981.
DAY, P.W.	1980	Geometrical Properties of Unsymmetrical Sections by Line Integration. Civil Engineering in South Africa, No. 6 Vol. 22, June 1980, pp 159-162.
		(Awarded SAICE awards for Best Graduate Contribution and Best Short Paper or Technical Note published in the Transactions in 1980).
DAY, P.W.	1980	The Application of Three Dimensional Consolidation Theory to the Movement of Ground Around an Underslurry Pile. MSc Thesis.



Page 6 of 6 Peter Day

University of Natal.

DAY, P.W. 1977 An Outline of Consolidation Theory and a Simple Numerical Solution to

the Biot Equation. Pulse, Vol. 224, pp 26-34, University of Natal.

Declaration

I confirm that the above CV is an accurate description of my experience and qualifications and that, at the time of signature, I am available and willing to serve in the position indicated for me in the Proposal, for the duration and at the locations indicated therein.

28 February 2008

Date

Signature of Staff Member