

References

- Pile Dynamic Inc, "PDA PAL Manual, CAPWAP –2000 Manual, PIT Manual, GRLWEAP Manual and PIT-W Manual"
- Tien, N. T. "Dynamic and Static behavior of Driven Piles" Theses presented to the Swedish Geotechnical Institute in 1987, in partial fulfillment of the requirements of the degree of Doctor of Philosophy
- Bowles, J. E. " Foundation Analyses and Design" 1996, Fifth Edition, The McGraw-Hill Companies, Inc
- Tomlinson, M.J. " Pile Design and Construction Practice" 1997, Forth Edition, E & FN Spon
- Poulos, H.G. and Davis, E. H. " Pile Foundation Analyses and Design" 1980, John Wiley & Sons
- Goble, G.G. and Likins, G. " On the Application of PDA Dynamic Pile Testing" Reference Papers- www.pile.com , Visited 7th July 2001
- Likins, G. Rausche, F. Thendean, G. and Svinkin, M "CAPWAP Correlation Studies" Reference Papers- www.pile.com , Visited 27th July 2001
- Fellenius, B. H. " What Capacity Value to Choose the Results of a Static loading Test" Reference Papers- www.pile.com , Visited 7th July 2001
- Goble, G.G. and Hussein, M. " Deep Foundation Capacity –What Is It" Reference Papers- www.pile.com , Visited 8th July 2001
- Hussein, M. and Rausche, F. "Pile Design and Construction Control by Dynamic Methods" Reference Papers- www.pile.com , Visited 7th July 2001
- Rausche, F. Goble, G.G. and Likins, G. "Dynamic Determination of Pile Capacity" Reference Papers- www.pile.com , Visited 7th July 2001
- Likins, G. Rausche, F and Hussein, M. "Introduction to Dynamics Pile testing" Reference Papers- www.pile.com , Visited 7th July 2001
- Rausche, F. Moses. F. and Goble, G.G. " Soil Resistance Predictions from pile Dynamics" Reference Papers- www.pile.com , Visited 24th May 2001
- Rausche, F. Goble, G.G. and Likins, G. " Investigation of Dynamic Soil Resistance on Piles Using GRLWEAP" Reference Papers- www.pile.com , Visited 17th July 2001
- Gibson, G.G. and Coyle, H.M. 1968. "Soil Damping Constants Related to Common Soil Properties in Sand and Clays." Texas Transportation Institute, Texas A&M University.

- Goble, G.G and Rausche, F. 1976. Wave Equation
- Bjerrum, L., Johannesson, I.J., & Eide, O. 1969. "Reduction of Skin Friction on Steel Piles to Rock." Proc. 7th Int. Conf. S.M. & F.E., vol. 2: 27-34
- Bowles, J. E. 1977. Foundation Analysis and Design. 2nd Ed. New York: McGraw-Hill.
- Broms, B. B. & Silberman, J. O. 1964. "Skin Friction Resistance for Piles in Cohesionless Soils." Sols Soils, no.10: 33
- Broms, B. B. 1966. "Method of Calculating the Ultimate Bearing Capacity of Piles-A Summary." Sols-soils no. 18-19: 21-32.
- Brown, P. T., Poulos, H. G., & Wiesner T. J. 1975. "Piled Raft Foundation Design." Proc. of Symp. on Raft Foundations, CSIRO, Aust.
- Coyle, H. M. & Reese, L. C. 1966. "Load Transfer for Axially Loaded Piles in Clay," J.S.M.F.D., ASCE, vol. 92, SM2: 1-26.
- Coyle, H. M., Bartoskewitz, R.E., & Lowery, L. L. 1970. "Prediction of Static Bearing Capacity from Wave Equation Analysis." 2nd Offshore Tech. Conf., Texas, paper OTC 1202.
- Coyle, H.M. & Gibson, G. C. 1970. "Empirical Damping Constants for Sands & Clays." J.S.M.F.D., ASCE, vol. 96, SM3:949-965. www.lib.mrt.ac.lk
- Davisson, M. T. & Prakash, S. 1963. "A Review of Soil-Pile Behavior." High Res. Rec., No.39: 25-48.
- Fellenius, B. H. & Broms, B. B. 1969. "Negative Skin Friction for Long Piles Driven in Clay." Proc. 7th Int. Conf. S.M. & F.E., vol. 2: 93-98.
- Flaate, K. S. 1964. "An Investigation of the Validity of Three Pile Driving Formulae in Cohesionless Material." Pub. No.56, N.G.I., Oslo, Norway.
- Forehand, P. W. & Reese, J. L. 1964. "Prediction of Pile Capacity by the Wave Equation." J.S.M.F.D., ASCE, vol. 90, SM2: 1-25.
- Goble, G. G., Scanlan, R. H., & Tomko, J. J. 1967. "Dynamic Studies on the Bearing Capacity of Piles." High Res. Rec., no. 67.
- Lowery, L. L., Hirsch, T.J., Edwards, T. C., Coyle, H.M., & Samson, C.H., 1969. "Use of the Wave Equation to Predict Soil Resistance on a Pile During Driving." Spec. Session NO. 8, 7th Int. Conf. S. M. & F.E., Mexico.
- Meyerhof, G. G. 1976. "Bearing Capacity and Settlement of Pile Foundation." Jnl. Geot. Eng. Div., ASCE, vol. 102, no. GT3: 195-228.

- Olsen, R. E. & Flaate, K. S. 1967 "Pile -Driving Formulas for Friction Piles in Sands." J.S.M.F.D., ASCE, vol. 93,SM6: 279-296.
- Peck, R. B. 1958. "A Study of the Comparative Behavior of Friction Piles." High. Res. Bd. Spec. Rep. 36.
- Pells, P. J. N. 1977. "Theoretical and Model Studies Related to the Bearing Capacity of Rock." Paper presented to Sydney Group of Aust. Geomechs. Soc., Inst. Engrs. Aust.
- Poulos, H. G. & Davis, E. H. 1972. "The Development of Negative Friction with Time in End-Bearing Piles." Aust. Geomechs. Jnl. Vol. G2, no. 1: 11-20.
- Reese, L. C., Hudson, B. S. & Vijayvergiya, B. S. 1969. "An Investigation of the Interaction Between Bored Piles and Soil." Proc. 7th Int. Conf. S.M. & F.E., vol. 2: 211-215.
- Rehman, S. e. & Broms, B. B. 1970. "Bearing Capacity of End-Bearing Piles Driven to Rock." Proc. 2nd Cong. Of Int. Soc. of Rock Mechs. Beograd, vol 2: 15-22.
- Rowe, R. K., Booker, J. R. & Balaam, N. P. 1978. "Application of the Initial Stress Method to Soil-Structure Interaction." Int. Jnl. for Num. Meth. In Eng., vol. 12: 873-880.
- Samson, C. H., Hirsch, T.J., & Lowery, L.L. 1963. "Computer Study of Dynamic Behaviour of Piling." J. Struct. Divn, ASCE, vol. 89, ST4: 413-449.
- Saul, W. E. 1968. "Static and Dynamic Analysis of Pile Foundations." J. Struct. Div., ASCE, vol. 94, ST5: 1077-1100.
- Scanlan, R.H. & Tomko, J. J. 1969. "Dynamic Prediction of Pile Static Bearing Capacity." J.S.M.F.D., ASCE, vol. 95, SM2: 583-604.
- Smith, E. A. L. 1960. "Pile Driving Analysis by the Wave Equation." J.S.M.F.D., ASCE, vol. 86, SM4: 35-61.
- Sorensen, T. & Hansen, B. 1957. "Pile Driving Formulae, An Investigation Based on Dimensional Considerations and a Statistical Analysis." Proc. 4th Int. Conf. S.M. & F.E., vol. 2: 61-65.
- Tavenas, F. A. 1971. "Load Test Results on Friction Piles in Sand." Can. Geot. Jnl., vol.8: 7-22
- Taylor, d. W. 1948. fundamentals of Soil Mechanics. New York: Wiley.
- Terzaghi, K. & Peck, R. B. 1967. Soil Mechanics in Engineering Practice. New York: Wiley.

Throne, C. P. & Burman, B. 1968. "The Use of Static (Dutch) Cone Penetrometer for the In-Situ Testing of Soils." Proc. Symp. on Field Measurements, paper no.498S,Aust. Road Res. Board, Melbourne.

Tomlinson, M. J. 1977. *Oil Design and Construction Practice*. London: Viewpoint Publications.

Van der Veen, C. & Boersma, L. 1957. "The Bearing Capacity of a Pile Predetermined by a Cone Penetration Test." Proc. 4th Int. conf. S.M. & F.E., vol.2: 72-75.

Vesic, A. S. 1964. "Investigations of Bearing Capacity of Piles in Sand." Proc. No. Amer. Conf. on Deep Fndns., Mexico City, vol. 1: 197-224.

Vesic, A. S. 1967. "A Study of Bearing Capacity of Deep Foundations." Final Rep., Proj. B-189, School of Civil Eng., Georgia Inst. Tech., Atlanta, Ga.

TOMILSON, M.J. Some effects of pile driving on skin friction, Proceedings of the Conference on the Behaviour of piles, Institution of Civil Engineers, London, 1971, pp. 107-14.

MEYERHOF, G. G. and MURDOCK, L. J. An Investigation of the bearing capacity of some bored and driven piles in London Clay. *Geotechnique*, Vol.3, No.7, 1953,pp.267-82.



COYLE, H. M. and REESE, L. C. Load transfer for axially loaded piles in clay, Proceedings of the American Society of Civil Engineers, Vol. 92, SM2, 1966.

PELLS, P. J. N. and TURNER, R. M. End bearing on rock with particular reference to sandstone, Proceeding of the International Conference on Structural Foundations on Rock. Sydney, 1980, Vol. 1, pp. 181-90.

KULHAWY, F. H. and GOODMAN, R. E. Design of foundations on discontinuous rock, Proceeding of the International Conference on Structural Foundations on Rock, Sydney, 1980, Vol. 1, pp. 209-20.

HOBBS, N. B. and HEALY, P. R. Piling in chalk, Construction Industry Reserch and Information Association (CIRIA), Report PG6, 1979.

WYLLIE, D. C. *Foundations on Rock*, E & FN Spon, 1st edn, 1991

OSTERBERG, J. O. and GILL, S. A. Load transfer mechanism's for piers socketted in hard soils or rock, Proceedings of the 9th Canadian Symposium on Rock Mechanics, Montreal, 1973,pp. 235-62.

HORVARTH, R. G. Field load test data on concrete-to-rock bond strength for drilled pier foundations, University of Toronto, publication 78-07, 1978.

ROSENBERG, P. and JOURNEAUX, N. L. Friction and end bearing tests on bed rock for high capacity socket design, Canadian Geotechnical Journal, Vol. 13, 1976, pp. 324-33

WILLIAMS, A. F. AND PELLIS, P. J. N. side resistance rock sockets in sand stone, mud stone and shale, Canadian Geotechnical Journal, vol. 18, 1981, pp. 502-13.

HOBBS, N. B. Review paper –rocks, Proceedings of the Conference on Settlement of Structures, Geotechnical Society, Pentech Press, 1975, pp. 579-610.

PELLIS, P. J. N. and TURNER, R. M. Elastic solutions for design and analysis of rock socketted piles, Canadian Geotechnical Journal, 1979, vol. 16, pp. 481-7.

ENR (1965), "Michigan Pile Test Program Test Results Are Released," Eng. News-Record, May 20, pp. 26-28, 33-34.

Flaate, K. (1972), "Effects of Pile Driving in Clays," CGJ, vol. 9, no. 1, Feb, pp. 81-88.
_____, and P. Selnes (1977), "Side Friction of Piles in Clay," 9th ICSMFE, vol. 1, pp. 517-522.

Janbu, N. (1976), "Static Bearing Capacity of Friction Piles," Proc. 6th European Conference on SMFE, vol. 1.2, pp. 479-488.

_____(1957), "Earth Pressures and Bearing Capacity 4th ICSMFE, vol. 2, pp. 207-212.



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www.lib.mrt.ac.lk

Parry, R.H.G. (1977), "Estimating Bearing Capacity of Sand from SPT Values," JGED, ASCE, vol. 103, GT 9, Sept, pp. 1014-1019.

Randolph, M. F., and C. P. Wroth (1979), "A Simple Approach to Pile Design and the Evaluation of Pile Tests." ASTM STP No. 670, pp. 484-499.

Reese, L. C. (1978), "Design and Construction of Drilled Shafts," JGD, ASCE. vol. 104, GT 1, Jan, pp. 95-116 (Terzaghi Lecture).

_____(1977), "Laterally Loaded Piles-Program Documentation," JGED; ASCE. vol. 103, GT 4, April, pp. 287-305.

_____, and M. W. O'Neill (1969), "Field Tests of Bored Piles in Beaumont Clay," ASCE Annual Meeting, Chicago, Preprint No. 1008, 39 pp.

Smith, E. A. (1962), "Pile Driving Analysis by the Wave Equation," Trans. ASCE, vol. 127, part 1, pp. 1145-1193.

Timoshenko, S., and J. N. Goodier (1951), Theory of Elasticity, 2nd ed., McGraw-Hill, New York, 580pp.

Webb, D. L., and A. L. Melvill (1971), "Discussion: Static Cone to Compute Static Settlement over Sand," JSMFD, ASCE, vol. 97, SM 3, March, pp. 587-589.

Whitaker, T., and R. W. Cooke(1966), "An Investigation of the Shaft and Base Resistances of Large Bored Piles in London Clay." Proc. Conference: Large Bored Piles, ICE,London, pp. 7-49.

Goble, G.G. and Rausche, F. 1976 Wave equation analyses of pile driving-program manuals. Department of Transportation, Report No.FHWA IP-76-14.3.

Heerema, E.P. 1979.Relationships between wall friction, displacement velocity, and horizontal stress in clay and in sand, for pile driveability analysis. Ground Engineering, Vol.12, No.1.

Litkouhi, S and Poskitt, T.J. 1980. Damping constants for pile drive ability calculations. Geotechnique 30,No.1:77-86.

Proceedings of the Fourth International Conference on the Application of Stress-Wave Theory to piles, The Netherlands, September 1992.

Briaud, J.L. and Tucker, L.M., "Measure and Predicted Response of 98 Piles," "ASCE,journal of Geotechnical Engineering, Voi.114,No.9,1988.

Goble, G.G.,Rausche, F.,and Likins, G.E., "The Analysis of Pile Driving –A State-of the Art," Proceedings of the International Seminar on the Application of Stress-Wave Theory on Piles, Stockholm, Sweden,1980.

Likins. G.E.. "Pile Installation Difficulties in Soils with Large Quakes, "Dynamic Measurement of Piles and Piers, ASCE Spring Conventions, Philadelphia, PA.1983.

Likins, G.E., Hussein, M., and Rausche, F., "Design and Testing of Pile Foundation," Third International Conference on the Application of Stress-Wave Theory to Piles, Ottawa, Canada, 1988.

Skov, R., and Denver, H., "Time-Dependence of Bearing Capacity of Piles," Third International Conference on the Application of Stress- Wave Theory to Piles, Ottawa, Canada, 1988.

Svinkin, M.R., Morgano, C.M.,and Morvant, M., "Pile Capacity as a Function of time in Clayey and Sandy Soils," Proceedings International Conference and Exhibition on Piling and Deep Foundation, DFI, Westrade Fairs Ltd., Bruges, Belgium,1994.

Thendean, G., Rausche, F., Svinkin, M., and Likins, G.E., "Wave Equation Correlation studies," Fifth international Conference on the Application of Stress-Wave Theory to Piles, Orlando, Florida, 1996.

Fellenius, B.H., A.J.O'Brien, and G.T. Tracy, (1983), Dynamic Monitoring an Conventional Pile Testing Procedures. Proceedings, Symposium on Dynamic Measurement of Pile and Piers, ASCE Convention, Philadelphia, PA.

Kulhawy, F.H. and A. Hirany, 1997, What is Foundation Failure, Proceedings of the Internation Conference on Foundation Failures, The Institute of Civil Engineers, Singapore.

Goble, G.G., Rausche, F., and Moses, F., "Dynamic Studies on the Bearing Capacity of piles, Phase 3," Report No.48, Division of Solid Mechanics, Structures and Mechanical Design, Case Western Reserve University, Cleveland, Ohio, 1970.

Goble, G.G., Scanlan, R.H., and Tomko, J.J., "Dynamic Studies on the Bearing Capacity of Piles," Vols 1 and 2, Case Institute of Technology, Cleveland, Ohio, July,

Likins, G. E., "Field Measurements and the Pile Driving Analyzer," Proceedings of the 2nd international Conference on the Application of Stress Wave Theory On Piles, Stockholm, Sweden, May 1984.

Rausche, F., 'Soil Response From Dynamic Analysis and Measurements on Piles,' thesis presented to the Case Western Reserve University, at Cleveland, Ohio, in 1970. in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Rausche, F., "Stress Wave Measuring in Practice," Theme Lecture and Paper for 2nd international Conference on the Application of Stress Wave Theory On Piles. Stockholm, Sweden, May 1984.

Donnell, L.H., "Longitudinal Wave Transmission and Impact," Journal of Applied Mechanics, Transactions, ASME, APM-52-14, 1930.

Forehand, P.W., and Reese, J.L., "Predictions of Pile Capacity by the Wave Equation," Journal of the Soil Mechanics and Foundations Division, ASCE, Vol. 90, No. SM2, Proc. Paper 3820, March 1964, pp.125.

Appendices

- A. Table for evaluation of static bearing capacity of driven piles.
- B. Summary of pile driving equations.
- C. Deduction of one-dimensional wave equation.
- D. Typical values of viscous damping and damping lows
- E. A Study of Strength Gain of Driven piles
- F. A Study of Static Capacity Estimation Method for Bored piles in Residual Soils
- G. A Study of Ultimate carrying Capacity Estimation of Driven piles Using Pile Driving Equation Methods