

CURRICULUM VITAE



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Short Biography

Dr. A. Naser Abdul Ghani obtained his BSCE from Ohio University (USA) 1986, his MSCE (Hydraulic and Hydrology) from Universiti Teknologi Malaysia, and his Ph.D. (Geotechnical Engineering) from Universiti Sains Malaysia. His main area of expertise is civil engineering infrastructures for housing and land development. He has professional and consulting experiences in Civil Infrastructure design and practice including road design and supervision, drainage studies and design, geotechnical studies and design as well as irrigation facilities studies and design. He has published over 30 technical papers in journals and conference proceedings. His current research works are related to civil infrastructure technology and; material and structure for infrastructure systems. His research work on earth retention systems won the CIDB (Construction Industry Development Board, Malaysia) R&D of the Year Award in 2004. He has taught courses and topics related to civil infrastructure design and construction, geotechnical design, site investigations, and civil infrastructure for land development. He is a registered Professional Engineer (P. Eng) and also a member of the Association of Consulting Engineers Malaysia (MACEM). He is also a member of the American Society of Civil Engineers (M.ASCE).

Academic Qualification:

- BSCE (Ohio University) USA 1986
- MSCE (Universiti Teknologi Malaysia) Malaysia 1990
- Ph.D. (Geotechnical) Universiti Sains Malaysia 2004

Professional Qualification:

- Member, Association of Consulting Engineers Malaysia (MACEM)
- Professional Engineer (Registered with Board of Engineers, Malaysia) (P.Eng.)
- Member, Institution of Engineers Malaysia. (MIEM)
- Member, American Society of Civil Engineers (M.ASCE)
- Life Member, ASEAN Engineers Register

Specialization:

Civil Engineering Infrastructure

Current Position:

Associate Professor (Civil Engineering Infrastructure),
School of Housing, Building and Planning, USM.

Quality Manager, HBP Testing Unit (HBPTU) – An Accredited Lab with SAMM, DSM, ILAC.

Previous Position:

- Engineer, Kedah Department of Health, 1986-1988
- Design Engineer, SSR Consultants, 1989-1992
- Consultant Engineer, SMHB Sdn Bhd, 1990-1992
- Head of Dept. – Technical, Kulim City Council, 1992-1995

Honors and Awards:

- 1) Selection Prize, 6th JICA International Thesis Competition
- 2) Gold Medal, ITEX 2004
- 3) R&D of The Year Award 2004, CIDB Malaysia.
- 4) Gold Medal, 33rd Int’nl. Exhibition of Inventions, New Techniques and Products, GENEVA 2005.
- 5) Saintis Cemerlang 2005, MOHE (Min. of Higher Education).
- 6) Sanggar Sanjung (Academic Prize) 2004, USM.
- 7) Sanggar Sanjung (Academic Prize) 2005, USM.
- 8) Excellent Service Award 2004, USM.
- 9) Hadiah Pendidik Sanjungan (Academic Prize) 2007, USM
- 10) Tokoh Maal Hijrah Daerah Padang Terap, Kedah, 1433/2011

External Appointments:

- 1) Honorary Research Fellow in Civil and Environmental Engineering. University of Auckland, New Zealand. (September 2009- January 2010)
- 2) Delegation Member (Malaysian) and Paper Presenter for 20th CAFEO in Cambodia. (2002). (International). ASEAN Federation of Engineering Organisation/ The Institution of Engineers Malaysia: ASEAN.

Key Consulting and Design Experiences:

- 3) Member - Technical Committee for the Privatization of National Sewerage Services (1992-1993), Ministry of Housing and Local Government Malaysia.
- 4) Consultant, ABADINI INTEGRAS ENGINEERS Sdn Bhd. (Present)
- 5) Technical Advisor, Kulim City Council (1995-1996)
- 1) Feasibility studies, planning and design of civil infrastructure systems
- 2) Design of drainage and flood control facilities.
- 3) Project Planning/Contract Administration.
- 4) Hydrological and Hydraulics Studies
- 5) Civil Engineering and Housing Infrastructure
- 6) Professional Practice - Civil Infrastructure/Land Development
- 7) Use of design software such as PROKON, Bentley Power Civil, AutoCAD, Esteem, PLAXIS, WaterCAD, FlowMaster, PRIMAVERA.

University Responsibility:

1. Program Chairman (Building Tech): Jan 1997-Dec 1998
2. Program Chairman (Building Tech): Jan 1999-Dec 1999
3. Chairman, Industry and Community Network. Jan 2008 – Dec 2009.
4. Quality Manager – HBP Laboratory, School of Housing, Building and Planning, USM: 2011- present. A SAMM/ILAC/ ISO17025 Accredited Lab.

Graduate Supervision:

Graduated MSc Dissertation: 16
Graduated Masters Full Research Mode: 2
PhD (current): 2

Postgraduate Thesis Examination

1. Durability Properties of Stabilized Earth Blocks for Wall Construction (PhD), Yaser Khaled Abdulrahman Al-Sakkaf, Univ Sains Malaysia.

2. Study of "8" Mat Shape Materials for Soil Stabilization, Aboulfazi Safari (PhD), Univ Sains Malaysia.
3. Study on Pull Out Capacity of Meal Strips with Anchorage Elements Used in Mechanically Reinforced Earth (PhD), Javad Esfandiari, USM
4. Mechanical performance Evaluation of Improved Soils Using Compound Stabilizer and Fibers (PhD), Younes Bagheri, USM
5. Influence of Liquid Stabilizer on Different Soil Types (PhD), Yahya Kadhim Hussein, Universiti Sains Malaysia.
6. The Development of Assessment Framework for Sustainable Water Services in Bangladesh (PhD), AKM Kamruzzaman, USM.
7. Investigation Into Abandoned Houses in Sarawak: The Comfort in Sarawak Houses (MSc), Kabiru Musa Ayagi, Universiti Malaysia Sarawak
8. Study on the Mechanical and Thermal Properties of Lightweight Aggregate Geopolymer Concrete using Fly Ash based Geopolymer Binder. (PhD). Omar AKA Abdulkareem, UniMAP.
9. Enhancing the performance of recycled aggregate for sustainable construction. (PhD). Sallehan Ismail. USM
10. A study on the acceptance of QLASSIC by Malaysian contractors and its relationship with building resident's satisfaction. (PhD). Kam Kenn Jhun. USM
11. The Performance of Concrete with waste concrete ash as cement replacement materials. (Masters). Ahmad Hadri Hussain. USM.

Teaching and course development:

Teaching, since 1995, in the area of civil engineering infrastructure and construction technology.

Courses/Topics Taught:

- 1) Landscape Hydrology
- 2) Construction Geotechnics
- 3) Site Investigations
- 4) Road and Highway Design and Construction
- 5) Civil Infrastructure Design and Construction

Editorial and academic referees/advisory:

- 6) Construction Methods
- 7) Construction Material and Technology
- 8) Housing Infrastructure

1. Editorial Board Member, Journal of Construction in Developing Countries. A CIB Encouraged Journal. Indexed by SCOPUS.
2. Professional Assessment Examiner/Interviewer (2003-present). Board of Engineers Malaysia/The Institution of Engineers Malaysia.
3. Article Assessor, Journal of the Institution of Engineers Malaysia. IEM.
4. Assessor, USM Short Term Grant. Universiti Sains Malaysia.
5. Member Panel of Assessors, Research University Grant (RU), USM.
6. Assessor, MOHE scholarship and fellowship awards.
7. Assessor, FRGS 2014/1 Grant. IPT Level. MyGrants, Ministry of Education.

Publications:

More than 30 refereed international and local publications.
(Appendix A)

Research:
(RM 592 791 –Leader)
(RM 542 440 – Co-Res)

Sand removal systems for rural water supply dam. (Leader)	2014-2016 In Progress
The Vibration Effect Induced By Piling Installation on Adjacent Structures (Co-Researcher)	2014-2016 In Progress
The Effect of Lightning on the Integrity of Reinforced Concrete Structure Embedded with Lightning Protection Cable (Co-researcher)	2014-2016 In Progress
Study of Rock buttress in landslide remediation methods in tropical area. (Co-researcher)	2014-2016 In Progress

Developing Empirical Relationship of Hydrodynamic Forces of Floodwater During Road Crossing. (FRGS), MOHE. (Project Leader)	2012-2014 (COMPLETED)
The Impact of MSMA (Manual Saliran Mesra Alam) on Construction Cost – Small Scale Development (NAPREC Research Fund) (Project Leader)	2008-2011 (COMPLETED)
Investigation of Strength and Durability of Paper Based Concrete for Development of Design Formula and Procedures. (FRGS) (Project Leader)	2007- 2010 (COMPLETED)
Standardization of Compressed Soil Blocks for use in the Building and Construction Industry , USM JANGKA PENDEK(Project Leader)	2005-2007 (COMPLETED)
Effects of Hydrostatic Pressure on Geocomposite Stabilised Soil Retaining Structures. (FRGS)(Co-Researcher)	2007 – 2008. (COMPLETED)
Developing an Educational Zero-Injury Environment Play Area for Preschool. (SCIENCEFUND). (Co-Researcher)	2007-2009. (COMPLETED)
Investigation of Durability Performance of Polymer Modified Cement System in Infrastructure Developments , USM JANGKA PENDEK (Co-Researcher)	2007-2009 (COMPLETED)
Soil Improvement Technique Using waste materials for Soft Soil Foundation.,IRDC (UiTM). (Co-Researcher)	2004 – 2006 (COMPLETED)

Current Research :

1) Developing empirical relationship of hydrodynamic forces of floodwater during road crossing in urban environment

Road infrastructure is the main access for escape and emergency supplies during floods. In flood events, some part of low lying roads will be inundated creating blockage for vehicle movement. Statistics clearly point out the high risk of driving in and around flooded roads and low lying areas (NHC, 2010). Flowing floodwater exerts pressure on objects such as a car or

person. The pressure will be higher when the water depth increases. Friction between the tire and the slippery pavement will also be reduced. At the same time water, sand, or mud tends to replace the frictional forces that stabilize the vehicle. This study will investigate how the flowing floodwater, site geometry and materials actually destabilize vehicles and people. The outcome of this research will provide the systematic approach to identify mechanics of floodwater during road crossing. This will enable better understanding of the parameters to be considered for its rational analysis and design of suitable road crossing strategy.

2) **Reinforcing road foundation in flood prone stretches**

Road life cycle is known to be shortened significantly in stretches affected by floods. The annual monsoon season has caused the need to spend hundred million of ringgit for road repair every year. The use of suitable reinforcing material and techniques specific to this issue must be found. Experimental research method using laboratory test and laboratory physical model is used to collect data for the assessment of various techniques and materials to strengthened road foundation.

Consultancy:

Consultant to development industry and the government.
(Appendix B)

APPENDIX A

Books/Research Publications

1. Md Azree Othuman Mydin and **Abdul Naser Abdul Ghani** (Eds.). (2014). Proceedings of the Building Material and Technology Conference 2014 (BUMATEC2014) e-ISBN 978-967-394-194-0, School of Housing Building and Planning, USM, 137p
2. Md Azree Othuman Mydin and **Abdul Naser Abdul Ghani** (Eds.). (2013). Proceedings of the Building Surveying and Technology Undergraduate Conference 2013 (BUSTUC2013) e-ISBN 978-967-394-153-7, School of Housing Building and Planning, USM, 204p
3. **A. Naser Abdul Ghani**. (2012). Recycling Scrap Tyres into Engineering and Construction Materials. Chapter in *Towards a Sustainable Built Environment in Malaysia*. (Eds Mahyuddin Ramli and Hugh Byrd). Penang, USM Press. Pp 45-52. ISBN 978-983-861-544-0.
4. **Abdul Naser Abdul Ghani**, Md Azree Othuman Mydin And Noor Faisal Abas (eds.), 2011, Proceedings of International Building and Infrastructure Technology Conference 2011 (ISBN 978-967-394-029-5), School of HBP, USM, 462
5. Sharifah Norhaidah Syed Idros, **A. Naser Abd Ghani**, Rusli Jamaluddin, Hairul Nizam Ismail, Aswati Hamzah, Zakiah Mohamad Ashari. (2010). *Developing a Safe and Sustainable Preschooler Play Area Integrating Blended Play and Learning Elements*. BERU Publications No. 17/2010. School Of Educational Studies; USM. ISBN 978-967-5467-57-8
6. Sharifah Norhaidah Syed Idros, **A. Naser Abd Ghani**, Hairul Nizam Ismail, Aswati Hamzah, Zakiah Mohamad Ashari. (2009). *Ke arah membina persekitaran pengajaran dan pembelajaran yang selamat di taman permainan prasekolah*. BERU Publications. School Of Educational Studies; USM. ISBN 978-983-2700-87-6
7. **A. Naser Abdul Ghani**. (2008). Planning, Design and Construction of Road and Highways. Teaching Module. 4TH Ed.
8. **A. Naser Abdul Ghani**, M. Farid Ahmad and Noor Faisal Abas (Editors).(2007). Proceedings of Malaysian Infrastructure Technology Conference 2007. Infrastructure Technology Research Unit. USM. ISBN 978-983-3986-19-4. 168 pages.
9. Hanafi Ismail, Baharin Azahari, **Abdul Naser Abdul Ghani**, Fauziah Ahmad and Meor Othman Hamzah. (2004). Recycling of Rubber Waste. Chapter in Environmental Management and Engineering (Eds. K.J. Ratnam, A.F.M. Sadullah and T.W. Sam). Penang, USM Press. Pp 134-143. ISBN 983-2514-88-6.

INDEXED JOURNAL AND PROCEEDINGS

10. **Abdul Naser Abdul Ghani**, Ahmad Hilmy Abdul Hamid and Nursriafitah Kasnon. (2015). Study on the Use of Obstructing Objects to Diffuse Flood Water Velocity during Road Crossing. Int. J. of GEOMATE, March 2015, Vol.8, No. 2 (SI No 16), pp 1245-1249, ISSN: No. 16, Japan.

11. **A.N. Abdul Ghani** and M.F.Z. Alias (2014). Anchor Fitted with Special Fin for Soil Reinforcement. MATEC Web of Conferences 17 01013 (2014) (DOI: 10.1051/mateconf/20141701013. EDP Sciences, 2014. **(Indexed by SCOPUS)**)
12. **A.N. Abdul Ghani** and A.N.W. Abd Rased (2014). Load Absorption Characteristics of Tyre Waste Rubber for Playground Floor Systems. MATEC Web of Conferences 17 01015 (2014) (DOI: 10.1051/mateconf/20141701015. EDP Sciences, 2014. **(Indexed by SCOPUS)**)
13. **A.N. Abdul Ghani** and P.C. Cheong (2014). Porous Pavers: Effects of the Recycled Aggregate Size on Drainage Properties. MATEC Web of Conferences 17 01017 (2014) (DOI: 10.1051/mateconf/20141701017. EDP Sciences, 2014. **(Indexed by SCOPUS)**)
14. N. Kasnon, and **A.N. Abdul Ghani** (2014). Flood Water Crossing: Laboratory Model Investigations for Water Velocity Reductions. SHS web of Conferences, 11, 01009 (DOI: 10.1051/shsconf/20141101009) **(Indexed by ISI)**
15. **A.N. Abdul Ghani** (2014). Experimental Research Methods for Students in Built Environment and Engineering. MATEC Web of Conferences 10 01001 (DOI: 10.1051/mateconf/20141001001) **(Indexed by SCOPUS/ISI)**
16. **A.N. Abdul Ghani** and N. Kasnon (2014). Effect of Flood Water Diffuser on Flow Pattern of Water during Road Crossing. MATEC Web of Conferences 10 06006 (2014). DOI: 10.1051/mateconf/20141006006 **(Indexed by SCOPUS/ISI)**
17. Adhilla Ainun Musir and **Abdul Naser Abdul Ghani** (2014). A study of Pile Driving Effects on Nearby Building. Int. J. of GEOMATE, March, 2014, Vol. 6, No. 1 (SI. No. 11), pp. 806-810. ISSN:2186-2982(P), 2186-2990(O), Japan. **(Indexed: SCOPUS, Gale, a Cengage Learning Company, ULRICHSWEB, Global Serials Directory, EBSCO) (Impact Factor GIF: 2013 – 0.825)**
18. NR Buyung and **ANA Ghani** (2014). [The State of Skilled Components Installers for Industrialized Building System \(IBS\) Construction in Malaysia](http://dx.doi.org/10.1051/mateconf/20141004002), MATEC Web of Conferences 10, 04002. DOI: <http://dx.doi.org/10.1051/mateconf/20141004002> **(Indexed by SCOPUS/ISI)**
19. Nurul Rezuana Buyung, Md Azree Othuman Mydin, **Abdul Naser Abdul Ghani** (2013). Investigation on Prefabricated Building System Skilled Component Installers. ANALELE UNIVERSITĂȚII "EFTIMIE MURGU" RESHA ANUL XX, NR. 3, 2013, ISSN 1453 – 7397. Pp 105-120.**(Indexed by EBSCO, ProQuest, DOAJ)**
20. Wan Mohamad, W.N.S and **Abdul Ghani, A.N.** (2011). The Use of Geographic Information Systems (GIS) for Geotechnical Data Processing and Presentation. Procedia Engineering 20 (2011) PP 397-406. **(Indexed by ISI/SCOPUS). DOI: 10.1016/j.proeng.2011.11.182**
21. **Ghani, A.N.A.** (2005). Civil Engineering Infrastructure and Land Development: Issues in the Technically Difficult Ground Condition in Malaysia. In *Proceeding of International Conference on Construction and Real Estate Management. The Challenge for Innovation.* (Wang, et al. Eds). P.R. China: China Architecture & Building Press. P. 1199-1201. ISBN 7-112-07871-7. **(Indexed by ISI.)**

22. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2003). Strength, Compressibility and Drainage Behavior of Composite Geomaterial Developed for Application as Retaining Wall Backfill Inclusions. In *Deformation Characteristics of Geomaterials*. (Di Benedetto et al., ed), The Netherlands: A.A. Balkema, pp. 991-996. ISBN 90-5809-604-1. **(Indexed by ISI.)**
23. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2003). Shredded Tire Based Geocomposite as Drainage and Load Reduction Layers for Earth Retaining Structures. In *Proceeding of 5th EASTS Conference*, Fukuoka, Japan: Eastern Asia Society for Transportation Studies, 2003. pp. 354-363. **(Indexed by ISI.)**

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24. **Abdul Naser Abdul Ghani**, Ahmad Hilmy Abdul Hamid and Nursriafitah Kasnon (2014). THE VELOCITY REDUCTION EFFECT OF OBSTRUCTING STRUCTURES ON FLOOD WATER FLOWS DURING ROAD CROSSING. Proceedings of Fourth International Conference on Geotechnique, Construction Materials and Environment, Brisbane, Australia, Nov. 19-21, 2014, ISBN: 978-4-9905958-3-8 C3051. Pp 427-431.
25. Adhilla Ainun Musir and **Abdul Naser Abdul Ghani** (2013). Pile Driving Effects on Nearby Building. In Proceedings of Third International Conference on Geotechnique, Construction Materials and Environment, Nagoya, Japan, Nov. 13-15, 2013, ISBN: 978-4-9905958-2-1 C3051
26. Wan Nur Syazwani W.M, and **A. Naser Abdul Ghani** (2011), GIS BASED STUDIES OF GEOTECHNICAL PROPERTIES FOR LAND DEVELOPMENT PLANNING AND DESIGN , Proceedings of International Building and Infrastructure Technology Conference 2011 (ISBN 978-967-394-029-5) , Penang, Malaysia, 10
27. **Abdul Naser Abdul Ghani**, Mohd Wira Mohd Shafiei and Mohd Yahaya Mohd Daud (2010). The Consequence of MSMA on Drainage Construction Costs. Proceedings of 4th International Conference on Built Environment in Developing Countries. Penang, Malaysia. Pp. 1001-1012 (ISBN 978-983-3986-606).
28. Muhammad Zuhaer Abdulameer and **Abdul Naser Abdul Ghani**. (2010). The Development of a Newly Designed Concrete Armour Unit for Rubble Mound Breakwaters. Proceedings of 4th International Conference on Built Environment in Developing Countries. Penang, Malaysia. Pp. 899-909 (ISBN 978-983-3986-606).
29. Chow, S.H., Norshida Ismail and **Abdul Naser Abdul Ghani** (2009). *Shear Strength Characteristics of Sand-Waste Material Mixture*. Journal of the Institution of Engineers Malaysia. Vol 70. No.1 March 2009. pp 36-43.
30. Chow, S. H., Chow, S. T., Ghani, A. N. A and Ibrahim, Anas (2008). Development of a Laboratory Model Retaining Wall Test Facility. Proceedings of International Conference on Science & Technology: Application in Industry & Education, Penang, Malaysia, pp. 216-222. (ISBN: 978-983-42204-1-9)
31. **A. Naser Abdul Ghani** (2007). Use of Scrap Tire as Lightweight Material in Civil Engineering Infrastructure Works. In Proceedings of Malaysian Infrastructure

- Technology Conference 2007. Infrastructure Technology Research Unit. USM. ISBN 978-983-3986-19-4. p 129-136.
32. Chow Shio Huey, Anas Ibrahim and **A. Naser Abdul Ghani** (2007). Investigation on Compressive Strength of OPC-Waste Material Geocomposite. In Proceedings of Malaysian Infrastructure Technology Conference 2007. Infrastructure Technology Research Unit. USM. ISBN 978-983-3986-19-4. p 107-114.
 33. Noordin, N.M., Awang, H., and **Ghani A.N.A.** (2006). Practical application of portable foam generator and lightweight foam concrete in housing development. In Proceeding of International Conference on Sustainable Housing (Ismail, A.M. et al. eds), Penang: USM. ISBN 983-41749-1-8.
 34. **Ghani, A.N.A.** (2006). Civil Infrastructure in Land Development: the Sustainable and Environmental Challenges. In Proceeding of the International Conference on Environment. Penang, Malaysia. ISBN 983-3391-54-0.
 35. Noordin, N., Awang, H. and **Ghani, A.N.A.** (2005). Lightweight Foamed Concrete in Construction. In *Proceeding of International Conference on Construction and Real Estate Management: The Challenge for Innovation.* (Wang, et al. Eds). P.R. China: China Architecture & Building Press. P. 1488-1491. ISBN 7-112-07871-7.
 36. **Ghani, A.N.A.**, Ahmad, F. Hamir, R., Mohd, S. (2005). Development of Pre-Engineered Geomaterial for Use in Road Embankment and Retaining Structure Backfill. Journal of Transportation Science Society of Malaysia. Vol. 1 2005. ISSN 1823609X. Kuala Lumpur: TSSM. P 38-43.
 37. **Ghani, A.N.A.**, Ahmad, F. Hamir, R. and Mohd, S. (2004). Yielding Behavior of Scrap Tire Based Lightweight Geomaterial. In *Proceeding of the Malaysian Geotechnical Conference 2004* (Chan S.F., ed), Kuala Lumpur: IEM, pp. 375-380.
 38. **Ghani, A.N.A.**, Ramli, M. and Noordin, N.M. (2004). Shredded Scrap Tire Blocks as Load Reducing and Drainage Layers Behind Bridge Abutment. In *Proceeding of International Conference on Bridge Engineering and Hydraulic Structures* (Jaafar, M.S. et al., eds), Kuala Lumpur: UPM Press, pp. 189-192. ISBN 983-2871-62-X.
 39. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2003). Strength, Compressibility and Drainage Behavior of Composite Geomaterial Developed for Application as Retaining Wall Backfill Inclusions. In *Deformation Characteristics of Geomaterials.* (Di Benedetto et al., ed), The Netherlands: A.A. Balkema, pp. 991-996. ISBN 90-5809-604-1. **(Indexed by ISI.)**
 40. **Ghani, A.N.A.** (2003). Shredded Scrap Tire Blocks as Lightweight Material in Construction Works. *J. of Housing, Building and Planning.* Penang: Penerbit USM (USM Press). P. 27-41. ISSN 0218-6536.
 41. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2003). Yielding Behavior of Scrap Tire Based Lightweight Geomaterial Subjected to Repeated Load. In *Proceeding of 2nd International Conference on Advances in Soft Soil Engineering and Technology.* (B.B.K. Huat et al.,ed.), Selangor: UPM Press, pp. 681-689. ISBN 983-2373-92-1.
 42. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2003). Pre-Engineered Lightweight Geomaterial for Retaining Wall Backfill. In *Proceeding of International Conference on Industrialised Building Systems.* (Jaafar, M.S. et al., eds). Kuala Lumpur: CIDB. pp. 199-208. ISBN 983-2724-10-4.

43. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2003). Compressible Geomaterial as Inclusions or Layers in Retaining Wall Backfills. In *Proceeding of 3rd International Conference on Recent Advances in Materials, Minerals and Environment* (), Penang: USM, 2003. pp.
44. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2003). Reducing Wastes By Utilizing Scrap Tires as Geotechnical Material. In *Proceeding of Environment 2003*, Penang: USM, pp.259-263.
45. **Ghani, A.N.A.**, Ahmad, F., and Hamir, R. (2002). Varying Effect of Compressible Layers in Retaining Wall Backfill. In *Proceedings of 2nd World Engineering Congress*. (B.B.K. Huat et. al, ed.), Selangor: UPM Press, pp. 114-116. ISBN 967-960-142-0.
46. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2002). Strength, Elasticity and Deformation Characteristics of Composite Geomaterial Containing Tire Shreds. In *Proceeding of the 3rd Iranian International Conference on Geotechnical Engineering and Soil Mechanics*. Tehran: Center for Scientific Documentation and Publications, pp. 251-255. ISBN 964-425-388-4.
47. **Ghani, A.N.A.**, Ahmad, F., and Hamir, R. (2002). Recycling Wastes into Lightweight Geomaterial for Civil Engineering Works. In *Proceeding of 20th Conference of ASEAN Federation of Engineering Organization*. Phnom Penh: OCM/EIC/AFEO, pp. 190-196.
48. **Ghani, A.N.A.**, Ahmad, F., Hamir, R. and Mohd, S. (2002). Engineered Strength and Compressibility of Lightweight Geomaterial Composite for Use in Embankment and Retaining Structure Backfills. In *Transport Research Towards National Development* (Ibrahim, N.I. and Ghani, W.R.A.W.A., ed.), Kuala Lumpur: CTR/TSSM, pp. 63-68.
49. **Ghani, A.N.A.**. (2000) Feasibility of a Concealed Drainage Systems for Housing Projects in Malaysia. *Proceeding of Pacific Rim Real Estate Conference*. http://www.prrs.net/papers/Ghani_Feasibility_of_a_Concealed_Drainage_Systems_For_Housing_Projects_In_Malaysia.pdf. Sydney: UNISA.
50. **Ghani, A.N.A.** and Yusoff M.N. (2000). Design Issues and Capital Costs of Concealed Drainage Systems for Housing Projects in Malaysia. In *Proceeding of National Conference on Urban Issues and Challenges: Developing Solutions for Cities of the 21st Century*. Selangor: UPM Press.
51. Jamal Z.A.Z., Mohd Zain Z. and **Ghani A.N. A.** (1997). Engineers Write and Reflect: An Experience in the Use of Work Journals in Undergraduate Engineering Education. In *Proceeding of 5th Triennial Conference on Engineering Education: Challenges and Goals for Engineering Education in the 21st Century*. Manila: AESEAP. pp k31-k38.
52. **Ghani, A.N.A.** (1996). Towards Integrated Management of An Urbanizing Area: Developing Data Bank and Flood Forecasting Model; *BULETIN*, Pusat Pengajian Perumahan, Bangunan dan Perancangan; Jilid 8 1996. Penang: USM-HBP. Pp. 47-49.
53. **Ghani, N.A.** (1995). Development in Compound Channel Flow Studies; *JOURNAL INSTITUTION OF ENGINEERS MALAYSIA*, Vol. 56 No.2 September 1995. Kuala Lumpur: IEM. pp.45-50. ISSN 0126-513X.

CONFERENCE/SEMINAR/ PRESENTATION AND PROCEEDINGS

54. Cheong Pik Chi and **Abdul Naser Abdul Ghani** (2014). The Use of Recycle Aggregate as Pervious Pavers: Effect of Aggregate Sizes on Drainage Properties. In Proceedings of Building Material and Technology Conference 2014. e-ISBN 978-967-394-194-0. Pp. 8-13
55. Mohamad Fakhru Zahin Alias and **Abdul Naser Abdul Ghani** (2014). Studies of Anchor with Special Fin for Earth Retention. In Proceedings of Building Material and Technology Conference 2014. e-ISBN 978-967-394-194-0. Pp. 60-67
56. Nurhafizah Yusof and **Abdul Naser Abdul Ghani** (2014). A Study on the Use of Strain Gages to Monitor Water Pressure in Water Supply Pipe. In Proceedings of Building Material and Technology Conference 2014. e-ISBN 978-967-394-194-0. Pp. 130-134
57. An Nisha Nur Welliana Abd Rased and **Abdul Naser Abdul Ghani** (2014). A STUDY OF LOAD ABSORPTION CAPACITY OF TIRE PRODUCTION WASTE RUBBER FOR LOW IMPACT PLAYGROUND FLOOR SYSTEM. In Proceedings of Building Science and Technology Conference 2014. e-ISBN 978-967-394-195-7. Pp. 14-18
58. Nursriafitah Kasnon and **Abdul Naser Abdul Ghani** (2014). Flood Water Crossing : Developing Laboratory Model for Water Velocity Investigations. In Proceedings of Building Science and Technology Conference 2014. e-ISBN 978-967-394-195-7. Pp. 30-36
59. **Abdul Naser Abdul Ghani** (2013), Experimental Research Methods in Built Environment, In Proceedings of Building Surveying and Technology Undergraduate Conference 2013, e-ISBN 978-967-394-153-7 , pp1-5
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APPENDIX B

APPENDIX B: LIST OF RELATED CONSULTANCY WORKS

Engineering Design

1. Consulting Engineer. Studies and Design of Interceptor Sewer Systems for Cenang, Langkawi, Malaysia. (2012)
2. Consulting Engineer/Design Director. Kulim High Tech Urban Drainage Studies and Design. (2010)
3. Consulting Engineer. Infrastructure and Foundation Design. Kuala Perlis Immigration Complex. AIESB. (2008).
4. Consulting Engineer. Infrastructure and Security Fencing Design. Serdang AADK Detention Center. AIESB. (2007).
5. Consulting Engineer. Infrastructure Design. National Registration District Office for Kulim, Pendang and Yan.. AIESB. (2006)
6. Consulting Engineer. Infrastructure and Foundation Design. Mini Stadium Kulim. AIESB. (2005)
7. Consulting Engineer. Infrastructure Design. Kulim Golf and Country Resort. AIESB (2004)
8. Consulting Engineer. Conservation and Development of Kota Kayang Muzium, Perlis. AIESB (2003)
9. Consulting Engineer. Design of Sanitary Landfill. AIESB. (2002)
10. Consulting Engineer. Infrastructure Design. Ministry of Education Housing Quarters in Sungai Petani. AIESB. (2001)
11. Consulting Engineer. Infrastructure Design. Drainage Improvement Works for Selasih Park, Kulim. TNI (1998)
12. Consulting Engineer. Infrastructure Planning and Design. Mix Commercial and Residential Development of 360 Acres. TNI. (1996)
13. Consulting Engineer. Infrastructure Planning and Design. Residential Development of 400 acres. TNI (1999)
14. Consulting Engineer. Sewerage Network Planning and Design. 15000 PE Residential Development. TNI. (1998)
15. Consulting Engineer. Al Malik Khalid Mosque Expansion Project. USM. (1999)
16. Consulting Engineer. USM Islamic Kindergaten Project. USM. (2000)
17. Lenggong Archeology Lab. Foundation Design . USM.
18. Lenggong Archeology Lab: Water Supply Design.USM.
19. Lenggong Archeology Lab: Sewerage Systems Design. USM.
20. Drainage Detail Design of Upper Krian Basin-Land development/reclamation. SMHB S/B.
21. Desaru International Resort – infrastructure design. SMHB S/B.
22. Penang Water Resources Study – water distribution systems studies and design. SMHB S/B.
23. New Klang Valley Expressway (NKVE) – drainage design. SMHB S/B.
24. Melaka New Water Supply – contract administration. SMHB S/B.

	<p>Engineering Studies</p> <ol style="list-style-type: none"> 1. Rancangan Kawasan Khas (Special Area Plan) Matang Kuala Sepetang. Infrastructure Studies. Usains Holding SB. (2007). 2. Rancangan Kawasan Khas (Special area Plan) Kota Kuala Muda. Transportation and Infrastructure studies. AIESB. (2007) 3. Kajian Dasar Perumahan Negara (National Housing Policy Studies). Ministry of Housing and Local Govt. RM 5 Million. (2003-2005). Responsible for technical and engineering portion. 4. Consultant. Ministry of Education's School Maintenance Studies. Usains Holding Sdn Bhd. (2004-2006) 5. Kajian Penyelenggaraan Sekolah-Sekolah Seluruh Malaysia (Studies of Malaysian School Maintenance). Ministry of Education. RM 4.5 Million. (2004-2006). Responsible for technical and engineering portion. 6. Consultant. Kajian Saliran dan Pembangunan Daerah Barat Daya Pulau Pinang. PDC/JPS/State Govt. (1998) 7. Consultant. The Low Cost Housing Scenario in Malaysia. EWIEN Sdn Bhd. 6 months. (1996) 8. Consulting Engineer. Abadini Integras Engineers Sdn Bhd. – Usains Holding Sdn Bhd. (2003-present). 9. Consultant. National Housing Studies. Usains Holding Sdn Bhd. (2004-2005) 10. Sterling Drug Wastewater Treatment Systems – waste treatment studies 11. KTM Railway Rehabilitation-Drainage studies 12. Klang River Erosion and Sediment Control - studies 13. Remote Sensing Based Urban Runoff Studies - studies