Reference List

- Akintoye, A.S., MacLeod, M.J. (1997). The Construction research studies. Retrieved from: www.processprotocol.com/extranet/.../pdf/.../construction%20studies. pdf
- Abd El Karim,M.S.B.A,El Nawawy,O.A.M., Abdel Alim,A.M. (2015). Identification and assessment of risk factors affecting construction projects. Journal .Housing and Building National Research Canter. Retrieved from http://www.sciencedirect.com/science/article/pii/S168740481500036X
- Al- Bahar, J.F., Crandall,K.C. (1990). Systematic risk management approach for Construction Design Management, International Journal of Project Management. 19(3): 147-160
- Annual Report, Road Development Authority (2012). Retrieved from https://www.parliament.lk/uploads/.../annual-report-road-development-authority-2012.p
- Andi. (2006). The Importance and Allocation of Risks in Indonesian Construction Projects. Construction Management and Economics, Vol.24, pp.69-80.
- Aziz, R.F. (2013). Ranking of delay factors in Construction projects after Egyptian revolution. Alexandria Engineering Journal. (2013) 52.387 406. Retrieved from www.sciencedirect.com/science/article/pii/S1110016813000318
- Baker, S., Ponniah, D., Smith, S. (1999).Risk Response Techniques Employed Currently for Major Projects. Construction Management and Economics. Vol.17, pp. 205-213.
- Buertey, J.I.T., Emmanuel, A., Kumi, T.A. (2012). Estimating cost contingency for construction projects: the challenge of systemic and project specific risk. Journal of Construction Project Management and Innovation. Volume 2, issue 1: 166 189, 2012.

- Retrieved from http://journals.co.za/docserver/fulltext/jcpmi/2/1/jcpmi_v2_n1_a1. pdf?expires=1497766044&id=id&accname=guest&checksum=ABC1ECE01 83A58A8106AEC05794646D6
- Bing, L., Akintoye, A., Edwards, P.J., Hardcastle, C. (2004). The allocation of risk in PPP/PFI construction projects in the UK. Retrieved from www. down.cenet. org.cn/upfile/47/2005518123113112.pdf
- Banaitiene, N., Banaitis, A. (2012).Risk Management in Construction Project. Retrieved from http://www.wintechopen.com/download/pdf/38973
- Bhattacharyya, S.C., Dey, P.K. (2007). Managing risk in a large rural electrification programme in India, Impact Assessment and Project Appraisal, 25(1), March 2007, pages 15–26 Retrieved from www.tandfonline.com/page/terms-and-conditions
- Baloi, D., Prince, A.D.F.(2003).Modelling global risk factors affecting construction cost performance. International Journal of Project Management, 21(4):261 269.
- Brigtta, S. (2014). Risk Management Techniques and Strategies for Risk Managers.

 Retrieved from http://www.udemy.com/pmi_risk_management_
 professional_pmi_rmp
- Bunni, N.G. (2003).Risk and Insurance in Construction. (2ndEd.).London: span press Clear Path Employer Services, (2016). Risk Control Techniques. Retrieved from www.clearpathemployer.com/risk-control-techniques.html
- Churchill, H. & Sanders, T. (2007). Getting your PhD: a practical insider's guide. London, Sage Publications.
- Chapter 5: Risk Controls- The state Office of Risk Management. (2005).P.O. Box 13777 Austin, TX 78711-3777 512/475-1440.Retrieved from https://www.sorm.state.tx.us/rmtsa-guidelines-2/rmtsa.../rmtsa-volume.../rmtsa-vol-i-se..

- Democratic Socialist Republic of Sri Lanka.(2011,May).Procurement Guideline Part II Referance:237(Supplement-23). Department of Public Finance.
- Democratic Socialist Republic of Sri Lanka.(2006,October).Procurement Manual (Supplement-07). National Procurement Agency.
- Diego., Haruo., Marito., Naohisa,. (2005). Private Finance for Road Projects in Developing Countries: Improving Transparency through value for money (VFM) Risk Assessment: Journal of the Eastern Asia Society for Transportation Studies, Vol.6, and pp.3899 3914.
- Dey, P.K. (2002). Project risk management: A combined analytic hierarchy process and decision tree approach. Cost Engineering Vol.44/No.3. March. Retrieved from https://www.researchgate.net/.../40499015_Project_risk_management_A combined a.
- Dey, P.K. (2011). Issues and Challenges of managing projects in India: A Case study in: Budhwar P.S, Varna A, editors. Doing business in India: Building research based practice. New York: Routledge; 2011.
- Dey, P. K., & Ogunlana, S. O. (2004). Selection and Application of risk management tools and techniques for build-operate-transfer projects. *Industrial management and data systems*, Retrieved from https://research.aston.ac.uk/.../ selection-and-application-of-risk-management
- Dvir, D., Shenhar, A.J., Raz, T. (2002). Risk management, project success, and technological uncertainty. Retrieved from http://www.praxiom.com/iso-31000-terms.htm
- Edwards, P.P., Bowen,P.A.(1998).Risk and Risk Management in Construction, a review and future directions for research, Engineering Construction and Architectural Management. Vol.5, issue.4, pp. 339-349. Retrieved from http://www.doi.org/10.1108/ebo21087

- Ehan, N., Mirza, E., Alam, M., Ishaque, A. (2010). Risk Management in Construction Industry. Retrieved from www.meeting.edu.cn/meeting/UploadPapers/1282726331593.pdf
- Fan, C.K., Chen, T.C. (2012). The Risk Management Strategy of Applying Cloud Computing International Journal of Advanced Computer Science and Applications, Vol. 3, No. 9, Retrieved from http://www.chinacloud.cn/upload/2012-10/12100614526693.pdf
- Fidan, G., Dickmen, I., Tanyer, A.M. (2011).Ontology for relating risk and Vulnerability to Cost Overrun in International Projects. Retrieved from http://ascelibrary.org/doi/abs/10.1061/(ASCE)CP.1943-5487.0000090 #sthash.jjrhdFfP.dpuf
- Finance Commission of Sri Lanka. (2015). Public Private Partnership Approach: Theory and Practice. Retrieved from http://fincom.gov.lk/public-private-partnership-approach-theory-and-practice
- Flanagan, R., Norman, G. (1993). Risk Management and Construction. Retrieved from Retrieved from www.amazon.com/Risk-Management-Construction...Flanagan
- Flanagan, R., Norman, G., Chapman, R. (2006). Risk Management and Construction (2nd ed.) Oxford: Blackwell Publication.
- Ghosh, S., Jintanapakanont, J. (2004). Identifying and assessing the critical risk factors in an underground rail project in Thailand: a factor analysis approach. International Journal of Project Management 22 .633 643. Retrieved from https://www.academia.edu/8041766/Identifying_and_assessing_the_critical_risk_factors_in_an_underground_rail_project_in_Thailand_a_factor_analysis approach?
- Goh, C.S., Abdul Rahman, H.(2013). The Identification and Management of Major Risks in the Malaysian Construction Industry. Journal of Construction in Developing Countries. 18 (1), 19 -32 Retrieved from web.usm.my/jcdc/vol18_1_2013/art2_jcdc18-1.pdf

- Han, S. H., and Diekmann, J. E. (2001). "Approaches for making risk-based go/no-go decision for international projects." J. Constr. Eng. Manage., 127(4), 300–308.
- Helman, J.I.M., Keizer, .J.A. (1998). Risk Management in Product Innovation Project. Retrieved from www.researchgate.net/profile/johanneshalman/publication/232274044 risks in major innovation projects
- Henning, D. (2012).Project Cost Estimate and Contingency. Retrieved from http://w.w.w.wiki.iploca.com/appendix+3.4.5+project+cost+estimate
- Hillson, D. (2002). Extending the risk process to manage opportunities. International journal of Project Management. 20 (3):235 -240.
- Hsieh, H.F., Shannon, S.E. (2005). Three Approaches to Qualitative Content Analysis. Published by Sage http://qhr.sagepub.com/content/15/9/1277
- Institution of Civil Engineers and the Actuarial Profession (2005). Risk analysis and management for Projects (RAMP) (2nd ed.), London: Thomas Telford Ltd.
- Issa, D., Emsley, M., Kirkham, R. (2012).Reviewing Risk Allocation for infrastructure Private Finance Initiative (PFI): Between Theory and Practice. Retrieved from www.arcom.ac.uk/-docs/proceedings/ar2012-1219-1231 Issa Emsley Kirkham.pdf
- Jayasundha, K., Vidivelli, B. (2016). Analysis of Major Risks in Construction Projects. ARPN Journal of Engineering and Applied Sciences. Retrieved from www.arpnjournals.org/jeas/research_papers/rp_2016/jeas_0616_ 4375.pdf
- Jock, R. M., Samuel, J. M. (2012). Project Management: a Managerial approach, (7th ed.) John Wiley & Sons. Inc .111River Street, Hobokem, NJ 07030 -5774

- John, T.H. & Georgina, D. (2007). Unsolicited Infrastructure Proposals. Public-Private Infrastructure Advisory Facility(PPIAF) Publications/o the world Bank,1818 H street, Washington, DC 20433.
- Krippendorff, K. (2004). Content analysis. An Introduction to its Methodology. Sage Publication. 2004.
- Kartam, N.A., Kartam, S.A. (2001). Risk and its management in the Kuwaiti construction industry: a contractors' perspective... International Journal of Project Management. Volume 19, Issue 6 August 2001, Pages 325-335
- Laila, M.K. & Mohamed, A.H. (2014). Identifying the latest risk probabilities affecting construction projects in Egypt according to political and economic variables. From January 2011 to January 2013 Retrieved from www.sciencedirect.com/science/article/pii/S1687404814000285
- Lam, P.T.I. (1999). A sectoral review of risks associated with major infrastructure projects. International Journal of Project Management, Vol.17, No.2, 77-87
- Lenzi, J.C. (2012).Use of Risk based project estimates for budgeting and project management. Retrieved from www.wsdot.wa.gov/publications/fulltext/projectmanagement/policy
- Li,B.,Ren,Z.(2009).Bayesian technique framework for allocating demand risk between the public and private sector in PPP projects.IEEE,837 -841.
- Martin, S. (2006).Risk Management in Construction Project Management. Journal of Business Economics and Management Volume 7, 2006 –issue2 Retrieved from www.trandfonline.com
- Mark, S., Pickmen, D. (2000). Using Risk Analysis to Determine Construction Project Contingencies. Journal of Construction Engineering and Management. Vol. 126, No.2. pp. 130 -136.

- Mayring, P. (2000). Qualitative Content Analysis. Forum Qualitative Social Research. Volume. 1, No.2. Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1089/2385
- Mayring, P. (2014). Qualitative Content Analysis. Theoretical Foundation, Basic Procedures and Software Solution. Retrieved from http://www.ssoar.info/ssoar/bitstream/handle/document/39517/ssoar-2014-mayring-Qualitative_content_analysis_theoretical_foundation.pdf?sequence=1
- Memon,A.H., Rahman,I.A.,Azis,A.A. (2011). Preliminary study on Causative Factors Leading to Construction Cost Overrun. International Journal of Sustainable Construction Engineering & Technology. Volume 2, Issue1, June 2011.Retrieved from https://core.ac.uk/download/pdf/ 12007158.pdf
- Miller, R., Lessard, D. (2001). Understanding and managing risks in large engineering projects, Management. Volume, November 2001, Pages 437-443
- Michael, S. (2010).Risk Management. The what, why and how, global report. Retrieved from www.bia.ca/articles/rm-risk management.htm
- Nick, G. (2015). Project Management for Dummies. Wiley Publication. Retrieved from https://books.google.lk
- Nerija, B. & Audrius, B. (2012).Risk Management in Construction Projects. Retrieved from http://www.intechopen.com/download/pdf/38973
- Perera, B.A.K.A, Dhanasinghe, I. (2011). Risk Allocation of Road Projects in Sri Lanka .Retrieved from https://www.irbnet.de/daten/iconda/CIB11457.pdf
- Perera, B.A.K.S., Dhanasinghe, I., Rameezdeen, R.(2009). Risk management in road construction: The case of Sri Lanka. Journal, 13, 2009. Retrieved from International Journal of Strategic Property Management Volume Issue 2

- Pinto, J.K., Slevin, D.P. (2016). Critical Success Factors in R&D Projects. Journal Research-Technology Management. Volume 32, 1989 Issue 1. Retrieved from http://www.tandfonline.com/doi/pdf/10.1080/08956308.1989.1167057 2? needAccess=true
- Lam, P.T.I. (1999). A Sectional review of risks associated with major infrastructure projects. International Journal of Project Management, Vol.17, No.2, 77-87.
- Lee, E. (2009). Large engineering project risk management using a Bayesian belief network. Retrieved from www.isiarticles.com/bundles/Article/pre/pdf/722. pdf
- Oyegoke, Pheng & Chun, (2006).Risk management in Project: Peculiarities of Lithuanian Construction Companies. Retrieved from http://www.thefreelibrary.com
- Pejman, R. (2012). Classifying Key Risk Factors in Construction Projects. Retrieved from www.bipcons.ce.tuiasi.ro/Archive/292.pdf
- Project Management Institute. (2004). A Guide to the Project Management Body of Knowledge (PMBOK^R Guide) (3th ed.), New Town Square, USA.
- Project Management Institute. (2008). A Guide to the Project Management Body of Knowledge (PMBOK^R Guide) (5th ed.), New Town Square, PA19073-3299 USA.
- Rabechini, R., deCarralho, M.M. (2013).Understanding the impact of Project risk management on project performance: Empirical study, Journal of Technology Management & Innovation, volume 8, special issue ACTEC
- Raftery, J. (1994). Risk Analysis in Project Management. London: E & FN Spon. Poms & Associates. (2014). Risk Management. Retrieved from http://www.pomsassoc.com/6-fundamental-techniques-risk-control

- Rezakhani, P. (2012). Classifying Key Risk Factors in Construction Projects.

 Retrieved from https://www.researchgate.net/.../266460882_Classifying
 _key_risk_factors_in_construction.
- Remenyi, D., Williams, B., Money, A. & Swartz, E. (2003). Doing research in business and management: An introduction to process and method, London, SAGE Publications
- Risk Management Dictionary. (2010).ISO 31000 2009.Published by Praxion Research Group Limited.
- Saunders, M., Lewis, P., Thornhill, A. (2003).Research Methods for Business Students.3rd Edition, Dorling Kindersley (India) Pvt. Ltd. Licensee of Pearson Education Limited in south Asia. Retrieved from https://books.google.lk/
- Sarwono, H. (2014). Analysis on the Possession of Site as Physical Cause of Claim and the Related Clauses in the "FIDIC Conditions of Contract for Construction MDB Harmonised Edition" Journal of Basic and Applied Scientific Research. 4(12)109-121. Retrieved from https://www.textroad.com/.../J.%20Basic.%20Appl.%20Sci.%20Res.,%204 (12)109-12...
- Smith, S.F. (2003). Is scheduling a solved problem? Retrieved from www.cs.cmu.edu/afs/cs/user/sfs/www/mista03/sfs-mista-book.pdf
- Stephen, W., Chapman, C. (2003).Project risks Management. John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England.
- Susan, E.W. (2011). What is the Difference between Qualitative Research and Quantitative Research? Retrieved from https://www.snapsurveys.com
- The Project Management Body of Knowledge (2000). Risk Monitoring and Control. Retrieved from www.cin.utpe.br/v2/wbs_11.6html

- Thompsom, P.A., Perry, J.G.(1992). Engineering Construction risks, Thomas Telford Publishing London. T. Telford, 1992.
- Tohidi, H. (2011). The role of Risk management in IT systems of organizations. Retrieved from www.sciencedirect.com/science/article/pii/S18770509 10005193
- Trochim, W., William, M. (2006). The Research Methods Knowledge Base, 2nd Edition. Retrieved from the Internet at http://www.socialresearchmethods.net/kb
- Tom, K. (2003). Identifying and Managing Project Risk, American Management Association, 1601, Broadway, New York, NY 10019.
- Treasury Sri Lanka. (1997). Private Sector Infrastructure Projects. Retrieved from http://www.treasury.gov.lk
- Uher, (2003), Managing Project. Retrieved from https://books.google.lk/books?isbn=1259097277
- Usama, H.I. (2013).Implementation of lean construction techniques for minimizing the risks effect on project construction time. Retrieved from http://w.w.w.sciencedirect.com/science/article
- Wang, M.T. Chou, H.Y. (2003)."Risk Allocation and Risk Handling of Highway Projects in Taiwan", Journal of Management in Engineering, vol.19,no.2. pp 60-68. Retrieved from https://doi.org/10.1061/(ASCE)0742-597X(2003) 19:2(60) #sthash.Y34MFshD.dpuf
- Wong, K.W.J., Skitmore, M., Creedy, G.D. (2010). An Evaluation of the Risk Factors Leading to Cost Overrun in the Delivery of Highway Construction Projects. Journal of Construction Engineering and Management, 136(5), pp. 528-536 Retrieved from https://www.scribd.com/document/89981626/Jurnal-Highway-Cost-Overrun

- Woodside, A., Villiers, R., Marshall, R. (2010). Incompetency and Competency Training. Springer International Publishing, Switzerland. Retrieved from https://books.google.lk
- Wiguna, I.P.A., Scott, S. (2006).Relating risk to project performance in Indonesian Building Contracts. Construction Management and Economics, Vol.11, pp.1125-1135
- Yin, R.K. (1994). Case study research design and methods. (2nded.). Sage Publication, Inc. London.
- Zhi, H. (1995). "Risk management for overseas construction projects." International Journal Project Manager, 13(4), 231–237.
- Zou, P.X.W., Zhang, G., Wang, J., and (2007) .Understanding the key risks in construction projects in China. Int. Journal Project Manage2007; 25(6):601-614.

<u>APPENDIX – 1: Interview Guide Line – Employer</u>

Date:

General Information

- 1. Name (Optional):
- 2. Organization (Optional):
- 3. Role in this Organization:
- 4. Experience in Road Projects:
 - 4.1. Experience in Unsolicited Projects:
- 5. How did you prepare the Request for Qualification (RFQ) in this project proposal?
- 6. If there were more adequate responses to the Request of Qualification (RFQ), how did you prepare the Request for Proposals (RFP)?
- 7. What were the key reasons for submitting an unsolicited proposal for this particular project?
- 8. How long did it take from the submission of project proposal to the awarding of contract?

Risk related Information

- 1. What were the main risks faced by you in developing the preliminary project proposal for this project?
 - 1.1. Who were responsible parties for handling the risk for preliminary project proposal of this project?
 - 1.2. What was the risk handling techniques used at this project?
- 2. How did you carry out the review of project proposal?
- 3. How were the factors you consider to accept or reject the project proposal in review stage?

- 4. Once the project was accepted, what was the time allocation for the review of project proposal?
- 5. How did you consider the collaboration of other institution to review of project proposal?
- 6. What were the main risks associated in the project review stage of this project?
 - 6.1 Who were the responsible parties for handling the risk for review work of this project proposal?
 - 6.2 What was the risk handling techniques used in this stage of the project?
- 7. What were the main risks associated with funding for this project?
 - 7.1 Who were the responsible parties for handling the risk for funding of this project?
 - 7.2 What was the risk handling techniques used at this stage of the project?
- 8. Were there any other risks related to the pre contract stage of this project?
 - 8.1. Who were the responsible parties for handling the risk for any other matters of this project?
 - 8.2. What were the risk handling techniques used in this project?
- 9. How did you identify the quality measures in stages of project proposal?
 - 9.1 Who were the responsible parties for handling the risk for quality measures work of this project?
 - 9.2 What were the risk handling techniques used in this project?

<u>APPENDIX - 2</u>: Interview Guide Line - Contractor

General Information

- 1. Name (Optional):
- 2. Organization (Optional):
- 3. Role in this Organization:
- 4. Experience in Road Projects:
 - 4.1 Experience in Unsolicited Projects:
- 5. How did you prepare the Request for Qualification (RFQ) in this project proposal?
- 6. If there were more adequate responses to the Request of Qualification (RFQ), how did you prepare the Request for Proposals (RFP)?
- 7. What were the key reasons for submitting an unsolicited proposal for this particular project?
- 8. How long did it take from the submission of project proposal to the awarding of contract?

Risk related Information

- 1. Once a project is selected what are the main factors you consider in preparing the preliminary unsolicited road project proposal?
- 2. What did you determine the scope of work for this particular project proposal?
- 3. Once a scope of work is determined, how did you consider the project period of unsolicited road project proposal?
- 4. Can you briefly explain the stages you went through from project inception to the awarding of contract?
 - 4.1. How did you develop the preliminary description of the project proposal for this particular project?
 - 4.2. What was the level of details provided in this preliminary project proposal?

- 5. Can you identify any key risks involved to prepare the project proposal in this project?
 - 5.1. Who were the responsible parties for handling the risk in that stage?
 - 5.2. What were the risk handling techniques used in this project?
- 6. What were the main risks associated with funding for this project?
 - 6.1 Who were the responsible parties for handling the risk for funding of this project?
 - 6.2 What were the risk handling techniques used at this stage of the project?
- 7. How did you identify the quality measures in stages of project proposal?
 - 7.1 Who were responsible parties for handling the risk for quality measures work of this project?
 - 7.2 What was the risk handling techniques used in this project?

APPENDIX -3: Interview Transcript Sample of Case Study – Employer

Date:

General Information

- 1. Name (Optional):
- 2. Organization (Optional): RDA
- 3. Role in this Organization: Deputy Director/Quality Control Manager
- 4. Experience in Road Projects: 25 Years
 - 4.1. Experience in Unsolicited Projects: 05 years
- 5. How did you prepare the Request for Qualification (RFQ) in this project proposal?

Commonly attended to prepare RFQ in unsolicited road project. Considered the previous experience of the contractor, technical and financial capacity, Grade of ICTAD, funding facilities granted by the local bank.

6. If there were more adequate responses to the Request of Qualification (RFQ), how did you prepare the Request for Proposals (RFP)?

Not attended but the following facts were considered to prepare the RFP.*Submission of form of RFP,* Technical and Financial proposal,*Project Period,*Design proposals with relevant typical drawings,*Preliminary site inspection and investigation report,*feasibility study report,*Economical and physical advantages for the nation,*Public interest and Environmental impact due infrastructure development work,

7. What were the key reasons for submitting an unsolicited proposal for this particular project?

Upgrading the existing road to link the National road network, Facilitate the infrastructure development in rural area, Developing the tourism industry in this area, Developing the Agriculture and irrigation facilities

8. How long did it take from the submission of project proposal to the awarding of contract?

Approximately 03 months

Risk related Information

1. What were the main risks faced by you in developing the preliminary project proposal for this project?

Scope changes due to site conditions, Quantity variation due to scope changes, Insufficient BOQ items in Original BOQ, Schedule of work of Master Work programme, Delay caused by authorities, exceeding the original contract sum, dealing with utility agencies

1.1 Who were responsible parties for handling the risk for preliminary project proposal of this project?

Scope changes – Employer/ Contractor, Quantity variation – Contractor, Insufficient BOQ items in Original BOQ – Contractor, Schedule of Work – Contractor, Delay caused by authorities – Employer

Project Period – Employer/Contractor, Dealing with utility agencies – Employer/contractor

1.2 What were the risk handling techniques used at this project?

Scope changes- Allocating additional funds from the Line Ministry – Employer (Risk Retention), Limiting the scope of work to allocate within the Contract Sum – Employer (Risk Mitigation)

Quantity variation/ Insufficient BOQ items in Original BOQ - Requesting Variations - Contractor (Risk Transfer)

Schedule of Work- Coordinating relevant authority and apply prior approvals- Employer (Risk Mitigation), Preparing the required preliminary site investigation report – Contractor (Risk Mitigation)

Delay Caused by authorities- Requesting interest payments -Contractor (Risk Transfer), - Paying interest payments or deducting liquated damages - Employer (Risk Retention)

Project period – Minimizing uncomplete activities within project period – Employer (Risk Retention), - Requesting Extension of time – Contractor (Risk Transfer)

Dealing with utility agencies, Employer – Communicate the work programme in advance (Risk Transfer)

Contractor – Coordinating the prepare estimate and payments on time (Risk Mitigation)

2. How did you carry out the review of project proposal?

Not attended. PC of line Ministry had been done the review work. Geometric and pavement designs were arranged with respective divisions of RDA

3. How were the factors you consider to accept or reject the project proposal in review stage?

Not attended.

4. Once the project was accepted, what was the time allocation for the review of project proposal?

Approximately 02 months.

5. How did you consider the collaboration of other institution to review of project proposal?

According to the previous information of the line ministry, the various originations were participated to review work namely, Dept. of Irrigation Central Environmental Authority, Dept. Of Agriculture, National Water Supply & Drainage Board, Dept. Of wild life, Dept. of Forest etc.

6. What were the main risks associated in the project review stage of this project?

Referring the previous details available from the Line Ministry records, the main risks associated in the project review stages namely, Inadequate information of Project Proposal

Submission of unsatisfactory typical drawings and design details

Insufficient time frame to detail investigation and evaluate the reports with project proposal

6.1 Who were the responsible parties for handling the risk for review work of this project proposal?

Employer/ Contractor

6.2 What was the risk handling techniques used in this project?

Reconsider the information of project proposal- Employer (Risk Mitigation)

Compare the BOQ items of Engineer estimate and Contractor estimate – Employer (Risk Avoidance)

Submitting accurate details and Information –Contractor (Risk Mitigation)

7. What were the main risks associated with funding for this project?

Exceeding the Contract sum due to extra works due to under estimate of the BOQ of project Proposal

7.1 Who were the responsible parties for handling the risk for funding of this project?

Employer and Contractor

7.2 What were the risk handling techniques used at this stage of the project?

Contractor -Resubmit the revised BOQ and Variation to extra funds (Risk Transfer)

Employer -submit detail report with revisited BOQ to SCAPC through the PC of line Ministry for allocating additional funds (Risk Retention)

8. Were there any other risks related to the pre contract stage of this project?

Not known but PC had to determine the Project period with available resources in rural area of this project

☐ Who were the responsible parties for handling the risk for any other matters of this project?

Contractor: Consider sufficient preliminary site investigation to prepare the project proposal

Employer – Consider the proposal BOQ amount to adequate the completion of work within the period of Contract

□ What were the risk handling techniques used in this project?

Contractor - Submit adequate details and data for redesign work (Risk Mitigation)

- Submit variations and request extension of time for any changes of original proposal(Risk Avoidance)

Employer – Requesting to revised the BOQ and scope changes to adequate the BOQ amount for any variation work (Risk Mitigation)

- Requesting the additional amount for variation work from the Line Ministry (Risk Transfer)

- Determine the limitation of project scope of work up to original contract sum (Risk Mitigation)
- 9 How did you identify the quality measures in stages of project proposal?

Determine the adequate provisions of Original BOQ

9.1 Who were the responsible parties for handling the risk for quality measures work of this project?

Employer

9.2 What were the risk handling techniques used in this project?

Employer – Deployed adequate technical staff to apply the quality control techniques throughout the project work (Risk control)

APPENDIX: 4 Interview Transcript Sample of Case Study – Contractor

Date:

General Information

- 1. Name (Optional):
- 2. Organization (Optional): Private Organization
- 3. Role in this Organization: Deputy General Manager (Quality)
- 4. Experience in Road Projects: 15 years
 - 4.1 Experiences in Unsolicited Projects: 4 Years
 - 4.2 Project (Optional:
- 5. How did you prepare the Request for Qualification (RFQ) in this project proposal?
 - Submitting the similar experience of road project
 - Submitting the line of credit facilities provided by the funding agency (Local Bank)
- 6. If there were more adequate responses to the Request of Qualification (RFQ), how did you prepare the Request for Proposals (RFP)?
 - The Request for Proposal prepared with,
 - The length of the proposed road, preliminary investigation report of feasibility study, Hydrological, typical cross sections & drawings, scope of work, Cash draw down of the project period and Bill of Quantities
- 7. What were the key reasons for submitting an unsolicited proposal for this particular project?
 - The project was Class A road of National road list.
 - The capability of construction work was gained the upgrade of the institution in construction industry.
 - The adequate resources and techniques were deployed to implement the construction work in specified project period.
- 8. How long did it take from the submission of project proposal to the awarding of contract?
 - Approximately 03 months

Risk related Information

1. Once a project is selected what are the main factors you consider in preparing the preliminary unsolicited road project proposal?

Considered the project period with considering schedule of work specified in master work programme

Prepared the all preliminary design details to submit the design report for tentative design drawings and pavement design

Prepared procurement of resources plan

2. How did you determine the scope of work for this particular project proposal?

Considered the field investigation report and typical cross sections

Identified the rehabilitation and improvement required the existing road with proposed design parameters

3. Once a scope of work is determined, how did you consider the project period of unsolicited road project proposal?

Considered the length of the road and the rehabilitation the existing & proposed structures of the road

4. Can you briefly explain the stages you went through from project inception to the awarding of contract?

Submitted the project proposal

Submitted the technical proposal with the letter of funding facilities from local banks and capabilities to construction work to secretary of the Line Ministry

Submitted the details and any classification to project committee of Dept. of Public Finance

Project committee submitted their recommendation to standard Cabinet Appointed Procurement Committee of office of the Cabinet Ministers

Obtained cabinet approval

Signed loan agreement with bank and RDA Issue a letter of accept ion by RDA

4.1. How did you develop the preliminary description of the project proposal for this particular project?

Identified the advantages to rehabilitation and improvement of the project

Importance to development of road network for infrastructure facilities of the area

Identified the locations of resources supply to project work

Identified the project staff and equipment to implement the project

Identified the construction of structures and prepare the detail investigation report for design work

Identified external organization to involvement of the construction stage to prepare the schedule of work

Considered the public request for development work and Environmental issues for improvement work.

4.2. What was the level of details provided in this preliminary project proposal?

Conceptual design report ant typical cross section were used to prepare the preliminary project proposal

The BOQ was prepared on the preliminary investigation report and scope of work

5. Can you identify any key risks involved to prepare the project proposal in this project?

Possession of site to initiate the section of road

Structural & Pavement Design changes due to site condition

Changes of Project period due to extension of time and quantity variations

Procurement of resources with the schedule of work plan

Time frame to discuss the public and environmental issues

Discussion with relevant organization and explained any objection to the draft project proposal

5.1. Who were the responsible parties for handling the risk in that stage?

Employer, Contractor and relevant organizations

5.2. What were the risk handling techniques used in this project?

Possession of site – Employer (Risk Mitigation)

Design Changes – Contractor (Risk Mitigation)

- Employer (Risk Mitigation)
- Engineer (Risk Mitigation)

Public Issues – Contractor (Risk Mitigation)

- Employer (Risk Mitigation)

Project period -Employer (Risk Retention/Risk Transfer)

Contractor (Risk Retention/Risk Transfer)

6. What were the main risks associated with funding for this project?

Capability to select the funding facilities from local banks

Obtained the treasury guarantee to funding facilities

6.1 Who were the responsible parties for handling the risk for funding of this project?

Employer/ Contractor

6.2 What were the risk handling techniques used at this stage of the project?

Employer – Request required amount of particular project from the treasury (Risk Mitigation)

Contractor – Provide adequate liabilities to obtain funding facilities from the bank (Risk Mitigation)

7. How did you identify the quality measures in stages of project proposal?

Provided the adequate provision of quantities and items in BOQ

7.1 Who were the responsible parties for handling the risk for quality measures work of this project?

Quality control techniques implemented and monitored by the Employer

7.2 What was the risk handling techniques used in this project?

Quality measures implemented with qualified staff with equipment in frequently to maintain the necessary standard of quality work with reference to specifications.