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Subject: E90 Memo

Attn: Prof. Erik Cheever

For my E90 I will be working under the guidance of Prof. Arthur E. McGarity. The project will be an extension of past and current research regarding the development of a user-friendly urban stormwater pollution model in Arcview 9. The current outlook for the project would involve:

- development of a user-friendly urban stormwater pollution model written in VBA and based in Arc 9
- Analysis of AVGWLF, a current standard in agricultural stormwater pollution prediction, to further understand stormwater pollution modeling and identify possible deficiencies in AVGWLF when used in small urban watersheds, as seen in past field verified research
  - Analysis of possible deficiencies in AV data layers (e.g. inaccurate representation of land use in land use layers)
  - Analysis of possible deficiencies in GWLF for use in small urban watersheds (i.e. the program is intended for use with larger agricultural water sheds)
- Development of a method for field verification of such a model with taking into consideration seasonally and daily varying parameters of hydrologic flow

This particular project will take place mainly during the Spring of 2005 with extended work completed for 0.5 credits during the Fall of 2004.