SECTION 15301C – SPRINKLER HYDRAULICS FOR A/E FIRMS

PART 1 - GENERAL

1.1 FACTORY MUTUAL DESIGN CRITERIA

A. Obtain the name and phone number of the appropriate FM Loss Prevention Consultant from the Brown Project Manager.

B. Obtain copies of appropriate FM Data Sheets from the FM Loss Prevention Consultant.

C. Confirm Use Group, hazard classification and design densities, areas of application and hose stream requirements with Factory Mutual Loss Prevention Consultant

1.2 DESIGN PROCEDURES

A. Performance type sprinkler specifications are unacceptable except for minor system modifications where a limited number of sprinklers are relocated to suit ceiling changes.

B. The Design Engineer shall perform hydraulic calculations for all new sprinkler and standpipe systems.

C. The contractor shall also be required to perform hydraulic calculations based on the FM approved design criteria to confirm that the final Working (Fabrication) Drawing Layout provides sufficient pressures and flows.

1.3 HYDRAULIC CALCULATIONS

A. The Design Engineer shall perform hydraulic calculations to confirm that the available water supply is adequate to provide sufficient pressure and flow for the protected hazard.

B. Preliminary Design Calculations: The Design Engineer may perform simple hand calculations to confirm sufficiency of the water supply including any required fire pumps.

C. Final Contract Drawings: The Design Engineer shall perform complete hydraulic calculations to prove the water supply, fire pump, distribution mains, and branch piping are adequate.

END OF SECTION