

ENGINEERING FOR DAMS

CHAPTER 1 Investigation of Dam Site

General, Advisable Extent of Investigation, Reconnaissance, Preliminary Investigation, Final Investigation, Choice of Location, Topography, Aeroplane Mapping, Aero-Projection Method, Multiplex Equipment, Ground Control of Multiplex Mapping, Multiplex Plotting, Comparative Cost of Multiplex Mapping, Utilization of Aeroplane, Topographic Maps, Site Maps, Geologic Investigations, Subsurface Exploration, Methods of Subsurface Exploration, Electrical Resistivity and Seismic Methods of Prospecting, Test Pits, Wash Borings, Churn Drilling, Rotary Drilling Through Overburden, Undisturbed, Sampling of Overburden, Drive Sampling of Clays and Silts, Samplers for Silt and Clay, Prevention of Failure of Soil During Sampling, Clean-Out Auger and Calyx, Small-Diameter Sampler (2 In.), Thin-Walled Steel Tubing for Large-Diameter Samples, Large-Size Piston-Type Sampler, Importance of Fast Continuous Pushing of Sampler, Application of Samplers Described, Sampling of Cohesionless Materials, Fahlquist Method for Sampling Cohesionless Materials, Procedure in Use of Fahlquist Sampler, Diamond Drilling, The diamond Drill, Improved Efficiency of Diamond Bits, Size of Core and Holes, Importance of Accurate Boring Data, Large Drill Holes, Care of Cores and Samples

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CHAPTER 2 The Choice of Types of Dam

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CHAPTER 5 Flood Flows

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