## THE DERWENT VALLEY WATER BOARD MAP OF UNDERTAKING RAINFALL AVERAGE ANNUAL RAINFALL ON AFFORESTATION. TO NOTTINGHAM THE NATURAL CATCHMENT AREA PLANTATIONS ARE FORMALLY TO LADYBOWER DAM, OVER THE DEDICATED UNDER THE PERIOD 1935 to 1960 IS 54-83 INCHES. PROVISIONS OF THE AMBERGATE RESERVOIR FORESTRY ACTS. LADYBOWER RESERVOIR TOTAL LENGTH OF CAPACITY: 28 MILLION GALLONS AREA PLANTED AT END OF CAPACITY: 1980 MILLION GALLONS CAPACITY: 6310 MILLION GALLONS MAIN AQUEDUCTS : 54 MILES. 1962. 2000 ACRES. APPROX. AREA: 4-83 ACRES. DEPTH: 23rt. CONSISTS ON VARIOUS SECTIONS OVERFLOW LEVEL: 668 FT. O.D. OVERFLOW LEVEL: 870 FT O.D. UNDERGROUND SERVICE RESERVOIR MASONRY DAM: LENGTH, 1080 FT. DERWENT RESERVOIR EARTHWORK EMBANKMENT OF : 1, 2 or 3 LINES OF PIPES HEIGHT, 117 FT. WITH CLAY CORE: LENGTH. 1250 FT BETWEEN 18"& 60" DIAMETER. CAPACITY: 2120 MILLION GALLONS CUT & COVER OR TUNNEL 6'3" DIAMETER FORMALLY OPENED 1912 HEIGHT. 140 FT. OVERFLOW LEVEL: 776 FT O.D. ELECTRICALLY DRIVEN PUMPING-MASONRY DAM : LENGTH HIOFT PLANT. POWER SUPPLY FROM HEIGHT. 114 FT. TURBO-GENERATORS, AUXILIARY BROUGHT INTO USE 1916 LANGLEY MILL POWER FROM ELECTRICITY BOARD'S MAINS WHEN REQUIRED. THE RESERVOIR IS CROSSED BY DERWENT #DOE TWO ROAD VIADUCTS. FORMALLY OPENED 1945 BY HIS MAJESTY KING GEORGE VI. HATHERSAGE RIPLEY TO CHESTERFIELD EICESTER SUPPLY NOTTINGHAM SHIPPLY CHATSWORTH SYPHON HOWDEN & DERWENT GRINDLEFORD TO EICESTER CATCHMENT THE DERWENT VALLEY WATER BOARD WAS CONSTITUTE 13280 ACRES BY ACT OF PARLIAMENT IN 1899, FOR THE PURPOSE OF HATSWORTH PARK BREASTON SUPPLYING WATER IN BULK TO THE CORPORATIONS OF SHEFFIELD, LEICESTER, NOTTINGHAM & DERBY BLEAKIOW HILL OTHER LOCAL AUTHORITIES IN DERBYSHIRE. DRAYCOTT AMBERGATE ROWSLEY HOLBROOK ASHOP & ALPORT DIVERSION CATCHMENT 10,310 ACRES RADWELL ASTISTAN BAMFORD FILTERS. MILFORD | LITTLE EATON BRADWELL INTAKE CHADDESDEN RAPID GRAVITY WITH PRE-TREATMENT BY M BREADSALL EDALE > FLOCCULATION & SEDIMENTATION. G. SOO ACRES. NOE DIVERSION CAPACITY 24 MILLION GALLONS PER DAY BRADWELL MOOR YORKSHIRE BRIDGE FILTERS. MECHANICAL PRESSURE FILTERS CAPACITY 9 MILLION GALLONS PER DAY NOE DIVERSION BRADWELL INTAKE CASTLETON WATER FROM BOTH PLANTS IS MIXED LIMESTONE SCHEME ASHOP DIVERSION. CATCHMENT DOSED WITH HYDRATED LIME & CHLORINATED. INTAKE WEIRS ON RIVERS ASHOP & ALPORT INTAKE WEIRS AT BRADWELL & CASTLETON. WATER SUPPLIED TO SHEFFIELD IS KINDER PUMPING STATION AT EACH, OPERATING FILTERED BY SHEFFIELD CORPORATION TOTAL LENGTH OF WATERCOURSE 2.75 MILES NOMINAL INTERNAL DIAMETER - CAST IRON PIPE AUTOMATICALLY UNDER REMOTE CONTROL AT RIVELIN. DELIVERS INTO DERWENT RESERVOIR. STEEL PIPE. PRESTRESSED CONCRETE PIPELINES 2.50 MILES LONG PRESTRESSED CONC. P NOE DIVERSION TUNNEL 1:10 MILES LONG INTAKE WEIR ON RIVER NOE SCALE DELIVERS INTO LADYBOWER RESERVOIR. OPEN WATERCOURSE TOTAL LENGTH OF WATERCOURSE 1.75 MILES SHEFFIELD WATERWORKS DEPT. TUNNEL MILES DELIVERS INTO LADYBOWER RESERVOIR ..... CUT & COVER OF TUNNEL VALVE House