

WOLVESLEY PALACE, Winchester.

1977-

Building and ornamental stones, identified by P.W. Anderson, 1978.

Building History. The building of the Palace appears to have started not long after the Norman Cathedral was completed almost at the end of the 11th. Century. Here, as at the Cathedral, the principal building stone was at first Quarr Feather Bed from the Isle of Wight. Later, in the second half of the 12th. Century local flint became the prime material, ^{at Wolvesley} with Quarr used only as a dressing e.g. for quoins, door and window frames. Internally, Caen limestone from Normandy served this purpose. Some Tournai Marble from Belgium was used for columns in the Palace perhaps imported at the same time as the Tournai font which was installed in the Cathedral c 1180.

After 1150, Tournai Marble began to be superseded by Purbeck Marble from Dorset, the use of which reached a peak in the 13th. Century. Some Purbeck Marble was used in the re-styling of the East end of the Cathedral in 1202 and the clustered Purbeck Marble shafts forming the arcade in the East Hall of the Palace were installed not long afterwards (c 1225).

Only a little building appears to have been carried out at Wolvesley in the 13th. Century, - On the West side of the East Hall and some internal work mainly in Greensand but with some Quarr, Caen, and Purbeck Marble.

Outbreaks of the plague in the 14th. and 15th, Centuries effectively slowed down the re-styling of the Cathedral and, presumably, any further work at Wolvesley. Furthermore, after about 1350, Quarr was no longer directly available and although some was used together with Caen and Portland Stone for the East end of the Bishop's Chapel, with Bath Oolite for the wall joining Wymondestour and the Keep, and with Portland and Chalk in the North Range most may have been stone re-used from earlier buildings or made available when the Cathedral was being re-modelled. The use of Caen probably followed the importation of this stone for the new West front of the Cathedral c 1360. Another link with the Cathedral is the use of Chalk (Beer Stone) in the Palace for mullions as this stone ^a _A ^{was} being used for the Perpendicular windows of the Cathedral nave.

In the 16th. and 17th. Centuries very little building appears to have been done at the Palace. Quarr, Caen, Bath and Portland were all used at this period, probably for repairs and with the possible exception of Portland probably all re-used material.

Flint was by far the commonest building material for walls usually with the centres packed with Chalk. It is a local material found on weathered Chalk surfaces and in the Plateau and River Gravels. For the rest Quarr

accounted for 33% of the stone recovered, Caen 27%, Purbeck Marble 15%, Portland Oolite 9%, Greensand, 7%, Chalk, Bath, Tournai, Travertine, and Sussex Marble together for 9%.

QUARR FEATHER BED. A pale, greenish-grey limestone composed of small shell fragments mostly leached out. It occurs as a shell bed in the Bembridge Limestone (Oligocene) near Ryde in the Isle of Wight.

1, 5, 9, 10, 11, 12, 14, 15, 19, 20, 22, 23, 24, 25, 30, 31, 32, 33, 34, 35, 36, 39, 42, 43, 54, 59, 67, 89, 92, 99, 106, 108, 111, 115, 123, 124, 130, 131, 135, 139, 140, 146, 155, 156, 158, 160, 161, 162, 164, 169, 177, 178, 179, 180, 186, 189, 190, 197, 201, 204, 205, 206, 207, 208, 213, 221, 224, 225, 229, 230, 234, 238, 240, 244, 246, 247, 255, 256, 256b, 259, 261, 263, 264, 266, 268, 270, 271, 272, 273, 274, 276, 278, 28-, 281, 283, 284, 285, 286, 297, 298, 301, 305, 306, 307, 308, 309, 310, 311, 320, 337, 341, 348, 354, 368, 369, 370, 374, 376, 391, 395, 399, 402, 405, 408, 411, 432, 435, 456, 462, 474, 476, 484, 488, 489, 490, 498, 500, 505, 506, 507, 509, 510, 513, 514, 515, 523, 525, 533, 551, 573, 576, 580, 581, 582, 585, 586, 587, 589, 592, 594, 595, 596, 597, 598, 599, 623, 631, 633, 655, 668, 671, 689, 734, 735, 743, 744, 750, 751, 754, 765, 766, 772, 774, 775, 776, 780, 782, 785, 787, 798, 800, 812, 833, 841, 842, 843, 844, 851, 852, 860, 864, 865, 866, 871, 872, 874, 875, 877, 878, 880, 880a, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 893, 898, 899, 905, 906, 907, 910, 911 a, b, c, 912, 913, 914, 915, 916, 922, 925, 926, 927, 929, 930, 931, 935, 936, 943, 949, 958b, 967, 968, 969, 972, 977, 978, 979, 980, 983, 985, 992, 993, 994, 995, 996, 997, 1000, 1002, 1011, 1012, 1014, 1017, 1023, 1026, 1027, 1029, 1031, 1032, 1038, 1043, 1044, 1048, 1051, 1087, 1091, 1100, 1101, 1103, 1108, 1111, 1112, 1113, 1114, 1115, 1117, 1118, 1119, 1125, 1126, 1128, 1134, 2016, 2017, 2018, 2022, 2023, 2025, 2026, 2028, 2029, 2032, 2033, ~~2035-2036~~ 2034, 2035, 2037, 2038, 2041, 2042, 2043, 2045, 2048, 2049, 2050, 2051, 2052, 2057, 2058, 2060, 2061, 2062, 2064, 2065, 2066, 2068, 2071, 2072, 2073, 2074, 2080, 2081, 2088, 2089, 2090, 2092, 2095, 2096, 2100, 2103, 2104, 2105, 2108, 2109, 2112, 2113, 2114, 2116, 2117, 2119, 2121, 2123, 2124, 2125, 2127, 2128, 2129, 2131, 2132, 2133, 2134, 2137, 2141, 2145, 2147, 2148, 2149, 2152, 2164, 2175, 2179, 2182, 2183, 2185, 2191, 2195, 2200, 2201, 2204, 2203. *add - Binstead Vane - 326, 342, 934, 1003.*

Of the above, 109 specimens have been listed as worked stones, - 11 capitals, 9 shafts, 10 bases, 44 voussoirs, 11 mouldings, 14 imposts, 3 ashlar and 7 others. Most appear to be Norman work except three mouldings (391, 772, 775) listed as 13th. Century, and 926 listed as Pre-conquest and 180 listed as Norman but looks more like Saxon work. Note voussoirs 139, 140 and 156 which appear to have alternated with Caen.

CAEN. A pale cream Jurassic limestone from the Calvados area in Normandy.

2, 6, 28, 29, 40, 49, 50, 51, 55, 65, 68, 102, 107, 109, 110, 112, 116, 117, 129, 139, 140, 141, 143, 144, 145, 147, 150, 153, 154, 156- fifteen specimens including some Quarr (139-twenty-one specimens and 140-fifteen specimens also include some Quarr), 157, 159, 163, 168, 171, 172, 173, 174, 175, 176, 179b, 181, 183, 184, 185, 193, 196, 199, 200, 202, 210, 211, 212, 219, 222, 226, 228, 241, 243 I & II, 252, 269, 292, 296, 317, 333, 335, 340, 343, 344, 346, 351, 353, 357, 360, 361, 364, 366, 368 (with some Quarr), 371, 375, 377, 378 (with some Portland), 384, 387, 388, 389, 396, 397, 400, 401, 404, 410, 412, 414, 415, 416, 426, 427, 428, 436, 438, 441, 442, 452, 453, 459, 461, 463, 464, 465, 467, 470, 475, 482, 491, 492, 508, 512, 526, 536, 538, 542, 543, 544, 545, 546, 555, 560, 574, 575, 577, 584, 588, 590, 593, 621, 638, 641, 652, 666, 667, 669, 670, 673, 674, 675, 676, 691, 695, 698, 700, 701, 702, 708, 709, 711, 713, 714, 715, 716, 717, 718, 719, 720, 722, 725, 726, 727, 728, 749, 752, 753, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 777, 779, 783, 784, 789, 795, 796, 797, 799, 803, 813, 815, 817, 826, 827, 845, ~~846~~, 847, 870, 892, 894, 895, 896, 908, 909, 932, 933, 937, 939, 940, 941, 946, 950, 958, 961b, 981, 987, 989, 991, 998, 1005, 1006, 1009, 1020, 1021, 1022, 1037, 1039, 1047, 1052, 1055, 1057, 1066, 1078, 1079, 1081, 1082, 1085, 1090, 1105, 1106, 1128, 2013, 2020, 2027, 2040, 2044, 2046, 2050, 2055, 2056, 2059, 2076, 2077, 2078, 2084, 2086, 2091, 2101, 2115, 2120, 2130, 2143, 2155, 2157, 2160, 2161, 2168, 2170, 2202, to these add,- 57, 359, 485, 494, 609, 699, 960, 961a, 1063, 1106, 1109, 1121, 1122, 1123, 1124, 1127, 2099, 2135, 2140, 2142, 2151, 2156, 2165, 2173, 2176, 2184, 2186, 2194, 2205, 2206.

At Wolvesey 27% of the stone recovered was Caen. It appears to have been used from the 12th. Century onwards, in the 14th.-15th. Centuries mainly for windows.

PURBECK MARBLE. Shelly limestones in the Upper Purbeck Beds (Upper Jurassic) of the Swanage area of Dorset. Hard enough to take a polish.

56, 61, 64, 73, 74, 75, 76, 77, 78, 82, 83, 84, 85, 86, 87, 90, 91, 93, 94, 95, 96, 97, 100, 102, 114, 122, 127, 134, 136, 137, 138, 195, 209, 220, 232, 237, 319, 321, 331, 336, 349, 356, 385, 386, 409, 430, 443, 449, 451, 499, 527, 528, 529, 530, 531, 532, 534, 535, 549, 566, 615, 616, 618, 620, 625, 626, 637, 640, 647, 654, 654b, 656, 657, 658, 659, 660, 661, 662, 663, 680, 684, 687 (1-14), 687 (15, 16, 19), 688(1-8), 688(20, 26-29, 30, 32, 37, 41, 45), 733, 737, 778, 801, 805, 807, 808, 809, 810, 811, 814, 818, 831, 834, 835, 836, 837, 838, 839, 840, 846, 848, 849, 850, 853, 854, 856, 857, 859, 868, 900, 917, 918 (1-4), 919, 920, 921, 924, 944, 945, 951,

952, 964, 976, 1028, 1068, 1073, 1107, 1120, 2010, 2011, 2021, 2031, 2047, 2079, 2080, 2083, 2122, 2126, 2146, 2150 (19 pieces), 2154, 2163, 2172, 2189,

Purbeck Marble appears to have been used more lavishly in the Palace than in the Cathedral mainly for columns and mainly for 12th. Century work.

15% of the samples recovered were Purbeck Marble.

PURBECK LIMESTONE (Not marble). 345, 767, 2030. & ? 239.

Purbeck Roofing Tiles. 2053 etc. *probably all Roman.*

4 5, 46, 312, 578, 1074, 1093, 1094, 1095, 1096, 2036, 2053

Purbeck Flagstone - 18, 27, 440, 466

PORTLAND OOLITE. A white, fine-grained oolitic limestone from the Upper Jurassic of Dorset.

52, 53, 69, 105, 125, 142, 166, 167, 170, 182, 188, 192, 214, 215, 235, 242, 260, 265, 267, 287, 289, 315, 332, 334, 339, 347, 350, 355, 363, 372, 378, 382, 390, 393, 403, 406, 407, 421, 442, 433, 439, 487, 501, 504, 516, 517, 518, 521, 541, 591, 690, 869, 873, 879, 902, 903, 939, 948, 953, 954, 955, 956, 957, 963, 965, 966, 973, 974, 982, 984, 986, 988, 990, 999, 1001, 1018, 1025, 1034, 1035, 1049, 1050, 1092, 1102, 1130, 1131, 2019, 2039, ~~2087, 2094, 2111, 2118, 2138, 2162, 2167, 2169~~, 2069, 2075, 2085, 2087, 2094, 2111, 2118, 2138, 2162, 2167, 2169, 2180, 2196, 2197.

9% of the stone samples recovered were Portland Oolite. Most appear to have been used for 12th. Century work though some were used in the 14th.-15th. Century re-building.

Upper Greensand (GREEN VENTNOR or ST. BONIFACE STONE).

A pale grey-green medium grained, calcareous, glauconitic and micaceous sandstone from Shanklin Down, Isle of Wight. Lower Cretaceous.

3, 4, 7, 13, 16, 21, 26, 38, 41, 44, 46, 103, 118, 133, 248, 279b, 304, 338, 444, 511, 550, 552, 553, 554, 556, 558, 559, 561, 562, 563, 564, 565, 567, 568, 569, 570, 571, 572, 583, 612, 617, 619, 622, 627, 629, 635, 639, 642, 645 (1 & 2), 650, 651, 678, 769, 770, 771, 794, 970, 1008, 1010, 1040, 1065, 1067, 1080, 1083, 1084, 1086, 1089, 1129, 2024, 2067, 2082, 2093, 2144, 2158, 2159, 2187, 2198.

Most of these are 13th. Century keeled mouldings. Only 6% of the stone from Wolvesey was Greensand.

CHALK (Beer Stone). A very fine-grained limestone from the Upper Cretaceous. That used at Wolvesey appears to be of the harder variety found at Beer in Devon.

8, 17, 62, 63, 68, 79, 104, 121, 250, 253, 258(I & II), 300, 324, 325, 367, 373, 383, 418, 420, 423, 424, 448, 455, 457, 460, 469, 473, 477, 478, 481, 486, 493, 495, 497, 547, 613, 630, 632, 634, 636, 648, 649, 649b, 710, 712, 745, 1072.

Only 4% of the stone recovered from Wolvesey was Chalk, mostly used for 14th.-15th.^e Century mullions. Compare the windows of the South aisle of the Cathedral. In the Norman buildings it was used for packing the centres of flint walls.

add - ? Red Chalk - 98. Grey Chalk 904.

TOURNAI MARBLE. A grey silty limestone from the Lower Carboniferous of Tournai in Belgium.

70, 71, 72, 113a & b, 115, 119, 128, 233, 245, 249, 251, 254, 327, 365, 398, 472, 739, 816, 876, 962, 1016, 1064, 1077, 2063.

These are all parts of slim octagonal shafts with square bases and capitals. These are almost certainly 12th. Century and probably pre-date the Purbeck Marble shafts.

Travertine. Compact banded calcite, deposited from lime-bearing water as stalactites, stalagmites and sheets in limestone caves. Much used in Italy and Spain since Roman times for interior paving and decorative wall slabs. Little used in Britain except by Romans though there was some Saxon and Norman use. At Wolvesey, Travertine was used for slender cylindrical shafts and was almost certainly imported from Italy, although in the first instance they may have been used in a Roman building.

37, 58, 165, 194, 223, 282, 322, 329, 362, 381, 394, 483, 519, 540, 557, 611, 628, 1046, 1071, 2012, 2014, ~~2015, 2190~~ 2015, 2190.

To these add, - 468, 806.

BATH OOLITE. A cream-coloured oolitic limestone in the Great Oolite Series of the Bath area. The best known variety is Box Ground Stone, known to the Saxons as St. Aldhelm's Stone, from Box Hill near Bath in Wiltshire, and used in Winchester Cathedral. All the samples of Bath stone found at Wolvesey appear to be of this variety.

66, 80, 213 (with some Quarr), 217, 231, 328, 419, 431, 471, 790, 901, 1062, 1104, 2106, 2171, 2177, 2178, 2193.

Very little Bath stone appears to have been used at Wolvesey Palace which is surprising in view of the large amount used in the Cathedral unless there was little building work done after the middle of the 14th. Century.

SUSSEX MARBLE. A shelly limestone, similar but coarser textured than Purbeck Marble. From the Wealden of Sussex. Five fragments of a shaft and a base.

358, 380, 490, 624, 644, 2153.

ITALIAN MARBLES. Fragments of white Carrera Marble and a marble breccia. Probably from a Roman building.

445, 539, 947.

RED PORPHYRY. One fragment only. Probably from a Roman building.

804.

Miscellaneous.

Old Red Sandstone pebble,- 923.

?Niedermendig Basalt (Quern fragment),- 1076.

Micaceous Grit (Quern fragments),- 352, 610.

Flint,- 479, 646.

Lead,- 579.