

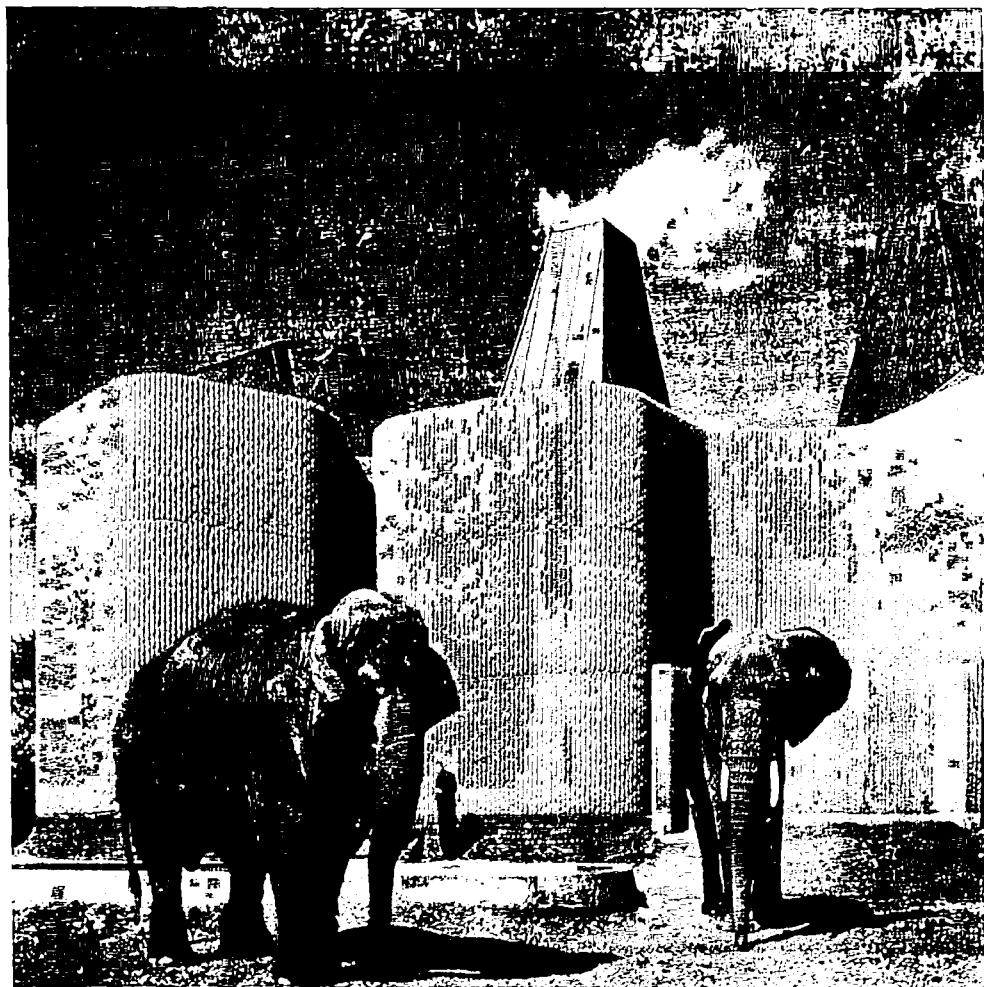
ELEPHANT & CASTLE

ELEPHANT AND RHINOCEROS HOUSE, ZOOLOGICAL GARDENS, REGENT'S PARK, LONDON

architects **CASSON, CONDER AND PARTNERS**

photographs by *H de Burgh Calcey and Henk Snock*

The Architectural Review
vol. 138 (821) 1965

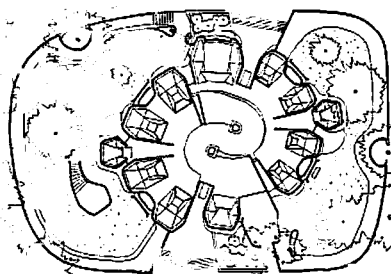


1, the south-east corner of the building, seen from the paddock

ELEPHANT AND RHINOCEROS HOUSE, ZOOLOGICAL GARDENS, LONDON

The elephant and rhinoceros house at The Zoological Society's gardens, Regent's Park, occupies an island site near the southern boundary of the gardens, and is the first major building in the main area of the gardens to be completed in accordance with the redevelopment plan prepared in 1956 by Sir Hugh Casson and the Society's architect, Mr. F. A. Stengelhofen.

The building houses four elephants and four rhinoceroses in paired pens, each with access to sick-bay pens and to moated external paddocks. The pens are arranged round a central hall for the public who circulate through the building at a slightly



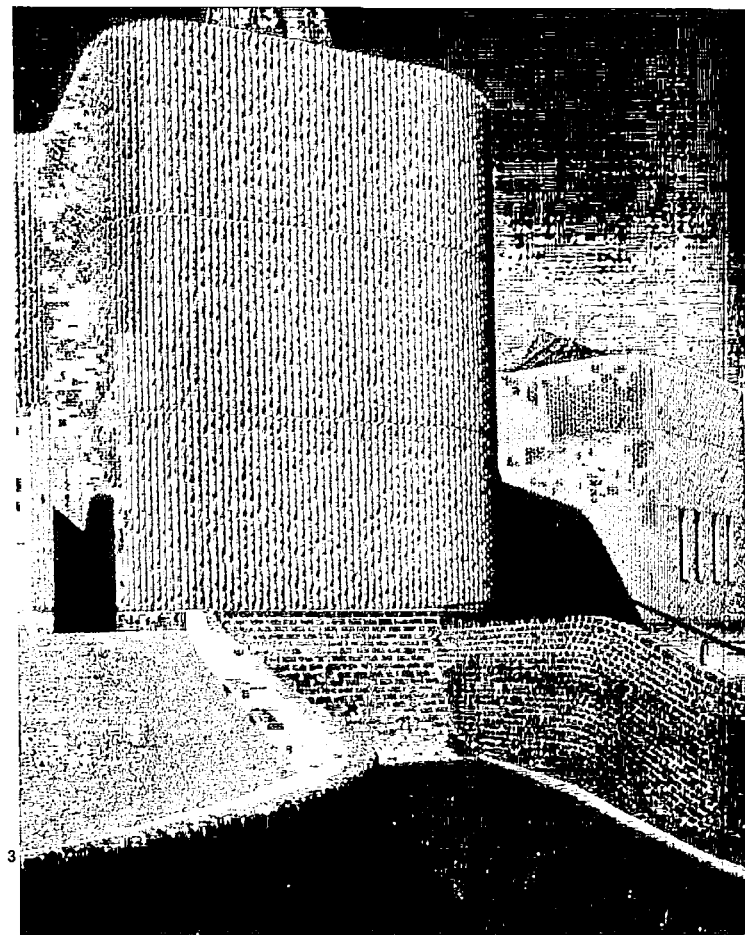
Site plan

lower level on an S-shaped route. This can become a one-way system on busy days. The public can also stand aside from the main route into viewing areas stepped down opposite each pen. On the main level there is a washing-pool for the animals in view of the public. On the same level is a staff mess-room and in the basement are a plant-room and accommodation for the storage, preparation and distribution of the animals' food.

The building stands among existing trees on a small mound formed from the excavated soil, and the animals, when in their paddocks, are seen against the curved concrete walls, which have a vertically ribbed texture. When in their pens they are seen against cyclorama walls, lighted from above through tall lantern lights in the form of copper sheathed funnels that give the exterior its unusual silhouette.

Construction is reinforced concrete with a brick inner skin protecting 1 in. polystyrene insulation. The inner walls of the pens are faced with light grey-blue ceramic mosaic. The roof structure over the public area is of laminated wood beams set in metal shoes and spanning from the concrete perimeter columns to a cluster of laminated timber columns set round a central flue and air-intake. Blue brick is used for paving throughout and for the plinth, yard walls

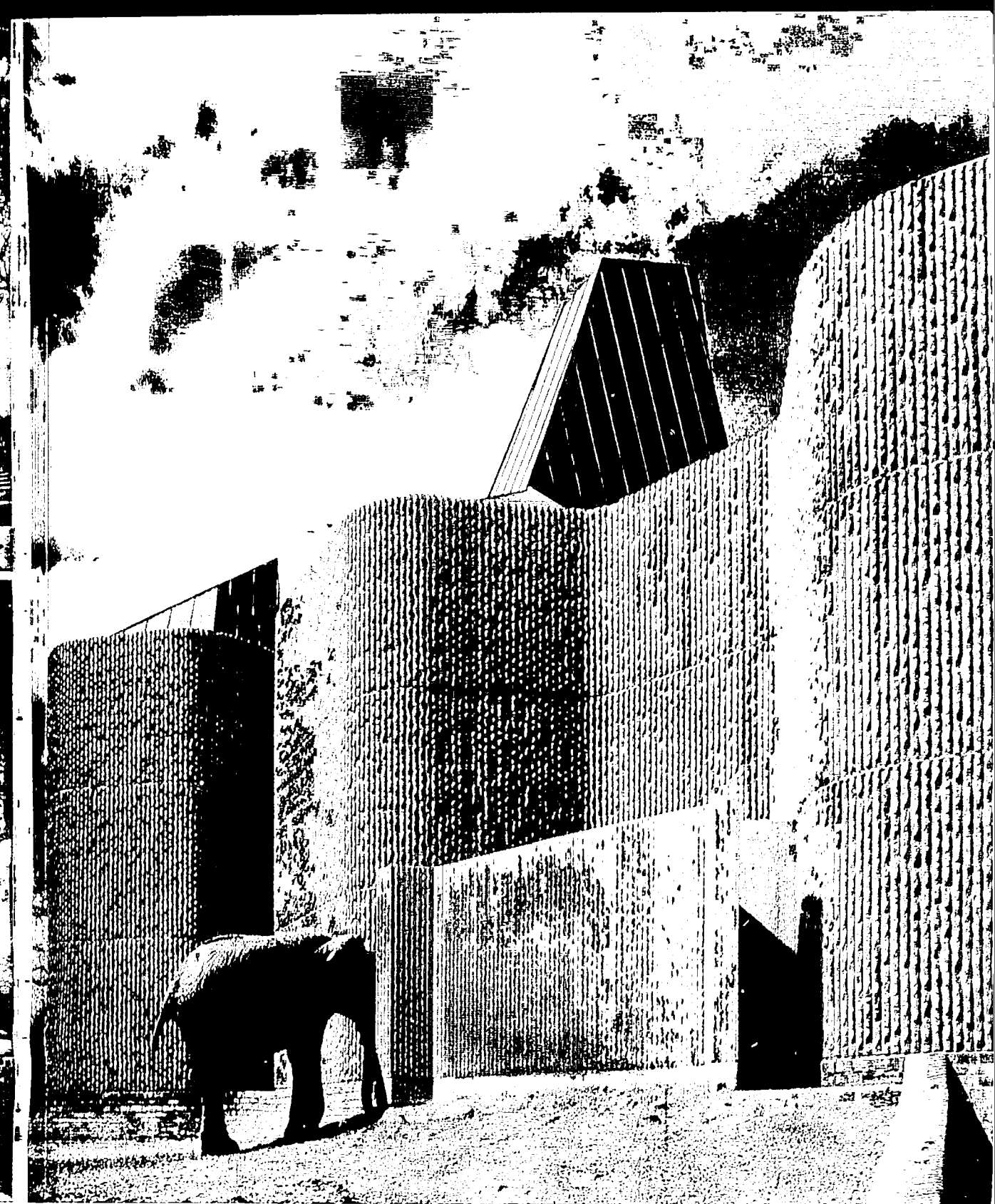
2



3

2. general view from the south-east: the elephant pens are on the left and the steps on the right lead up to the public entrance 3. one of the elephant pens with part of

the surrounding moat in the foreground 4 (facing page). close up of the elephant pens: the green walls shield the drinking troughs placed between the pens.





5

The building is a school for the deaf. The design was developed by the architect, who has a long experience in the field of architecture. The building is located in the city of Boston, Massachusetts. The design is a result of a competition held by the Boston Public Schools. The winning design was selected for its innovative and functional approach to the problem of providing a school for the deaf.

and most requires skill. Air extraction fans are incorporated in the placed funnels over the pans which are supported on concrete ring beams. The funnels also contain concealed spot lights. Heating is obtained by warm air rising from the basement.

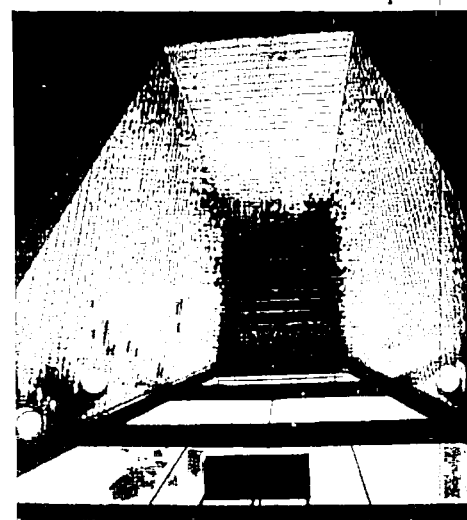
Partners in charge, Sir Hugh Cassin and Norman C. and Associates in charge, Montague T. and Structural engineers, Jencks and Foster Services consultants, G. H. Buckle and Partner Quantity surveyors, A. S. Valen and Partners

6



16

7



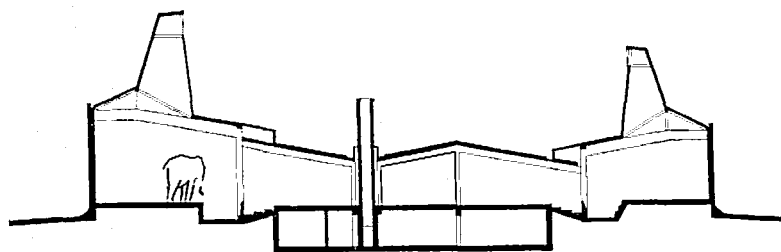
criticism

Elephants are such architectural animals that there is a temptation to look at a building housing them as a kind of analogy of themselves. This building, for example, could be described in terms of its massive curves, its wrinkled hide and its curious silhouette. But it would be an injustice to the building to do so, and even more an injustice to the architects to suggest that they had made the possibilities of such an analogy their starting point, because it is a serious building based on a thorough analysis of function.

Nevertheless the pictorial resemblance to the elephant: image—to the bunch of rounded bodies with their heads in the air—exists, and even more strongly than this there exists an element of deliberate fantasy not usually associated with a building designed round so strict a set of practical needs. It is in fact something of an achievement that these—the fantastic and the functional—have been so combined without being mutually destructive. In a building whose purpose is partly display and entertainment, a vivid individuality of form is however itself functional, and on the particular site the elephant house occupies, which will be one of the focal points in the replanned zoo, a striking architectural form is not inappropriate; and the somewhat fantastic silhouette has landscape value as part of the distant view that has now been opened up from Regent's Park.

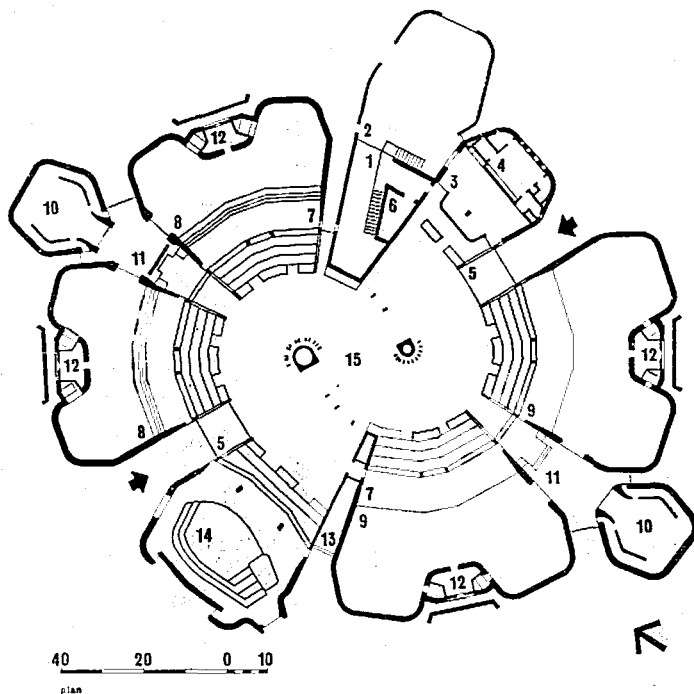
The display function of zoo buildings raises more difficult problems when we come to the inside of the elephant house, such as how far it is justifiable to dramatize these extraordinary animals if to do so means some risk to their dignity and means also providing them with a stylized, highly artificial, setting when the accepted policy in modern zoos is to aim at naturalism and informality. This is basically a question of zoological policy—of the client's brief—but since architecture is the means of implementing the policy it cannot be evaded in any appraisal of the building. The policy decision, in this instance, was clearly to go all out to highlight the animal's peculiar qualities—and highlighting is literally what the architects have done: they have posed each animal on a kind of stage, lighted from above. The architects have managed, in the writer's view, just—but only just—to stop short of displaying the elephants so consciously that they resemble acts in a circus rather than specimens in a zoological garden. The technique with which it has been done, depending first on lighting, secondly on scale and thirdly on colour, is masterly. Its only defect is in relation to the scale. One of the most impressive characteristics of the elephant is simply its bigness, but the great height of each elephant's pen, and the way the indirect lighting falls on them from above, in fact makes them look surprisingly small.

The exterior form of the building clearly reflects the chosen style of display: a cluster of stages, or raised open-fronted pens, with curved cycloramas as background, and a cluster of tapered funnels above them through which they are lit; and its plan



section

- | | | | | |
|---------------------------|---------------------|-------------------|---------------------------|-----------------------|
| 1. ramp from service yard | 4. staff lavatories | 7. animal ditches | 10. sick bays | 13. main rising ducts |
| 2. service yard | 5. public entrance | 8. animal pens | 11. pen lobbies | 14. elephant pool |
| 3. staff mess room | 6. store | 9. elephant pens | 12. drinking trough areas | 15. public space |

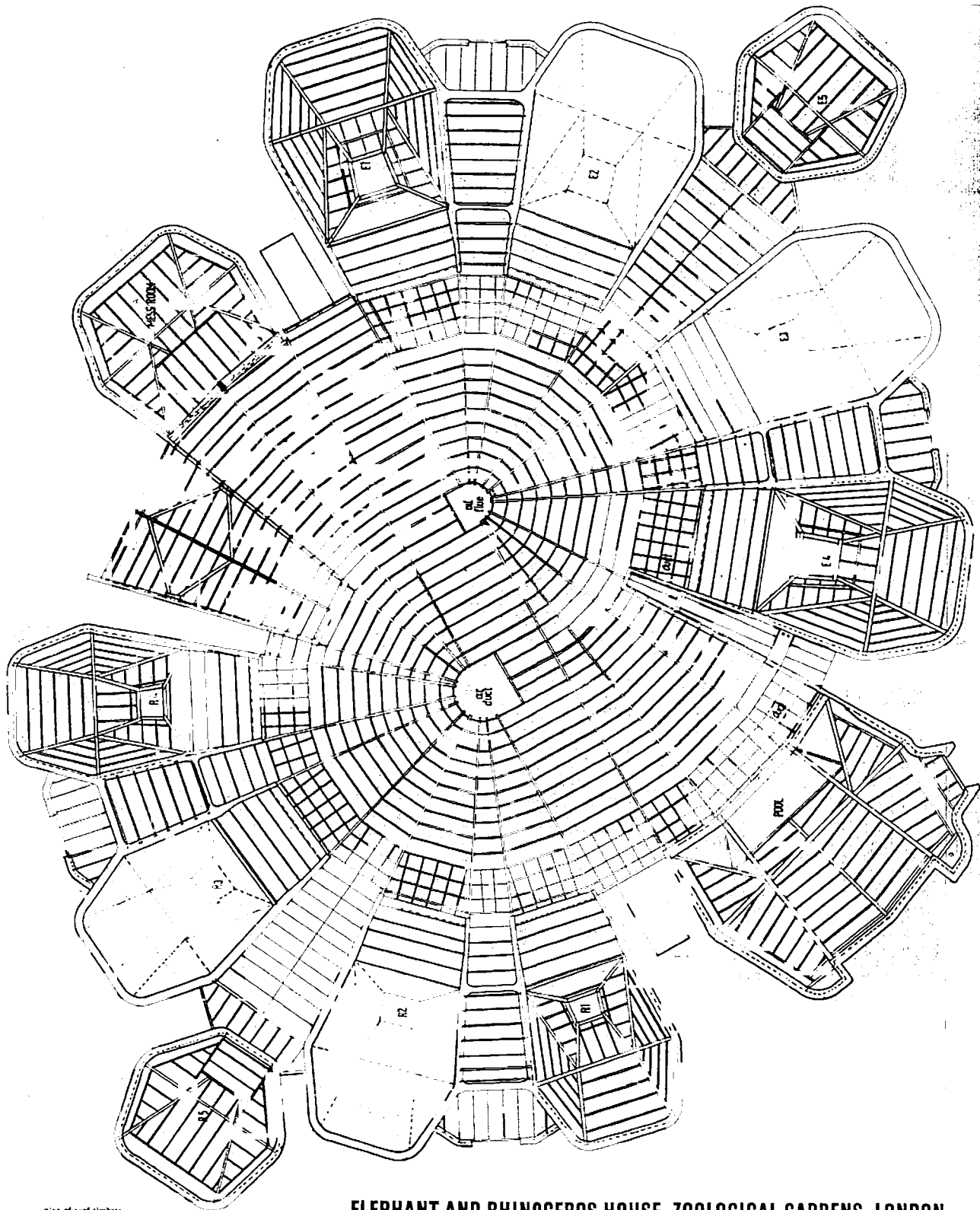


ELEPHANT AND RHINOCEROS HOUSE, ZOOLOGICAL GARDENS, LONDON

clearly reflects (and efficiently serves) the basic need to let the public circulate comfortably through the building but at the same time to let individual members of the public stop and stare at the animals without impeding the general circulation. This is successfully achieved by the lower level viewing areas in front of each pen, which also give the public a remarkable sense of closeness to the animals, the barriers that keep them apart forming surprisingly little visual impediment. In deciding the size of the public space a nice balance has been kept between the need to keep the central area in scale with the surrounding pens and the need to allow crowds room to move. The public space may be uncomfortably crowded on the zoo's busiest days, but however much it had been enlarged there would still have

been days when it was not large enough. To assist the dramatic effect of the top-lighting of the pens, the public area is kept relatively dark. But it is not gloomy, largely because of the pattern and colour given to the ceiling by its radiating timber beams of laminated construction and reddish colour. Colours and materials throughout the building are well chosen and well used. Their effect is decorative, but they are clearly related to their function and do not therefore appear contrived. Outside too, the combination of ribbed concrete, blue brick and copper for the roofs is sober and practical. This and the way the materials are handled ensure that the building, in spite of the total absence of right-angles, remains a structure, not just a fancifully moulded shape.

J M R

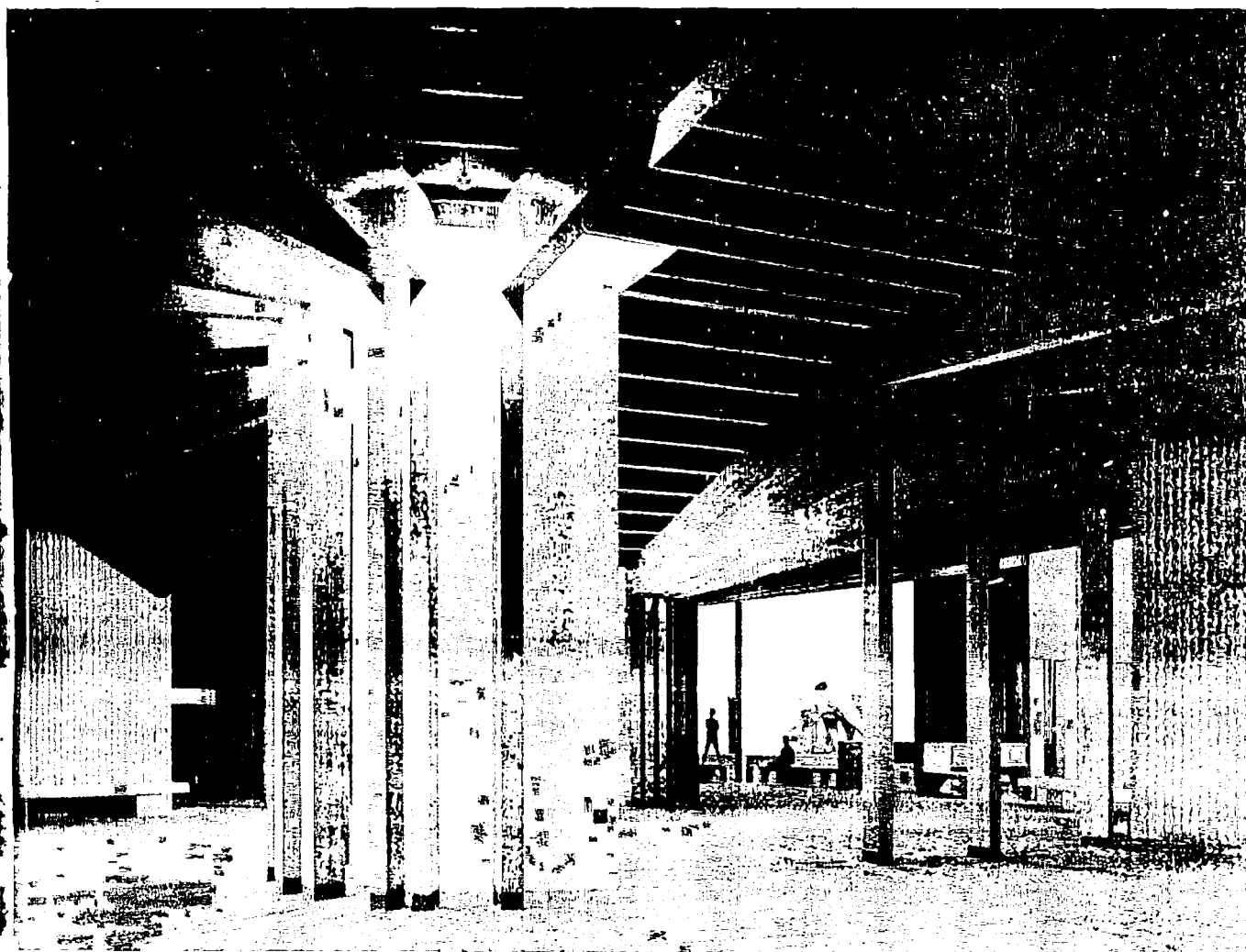


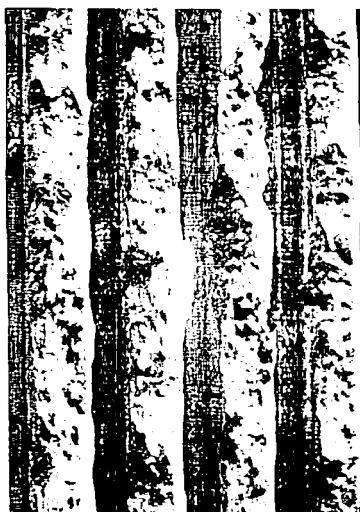
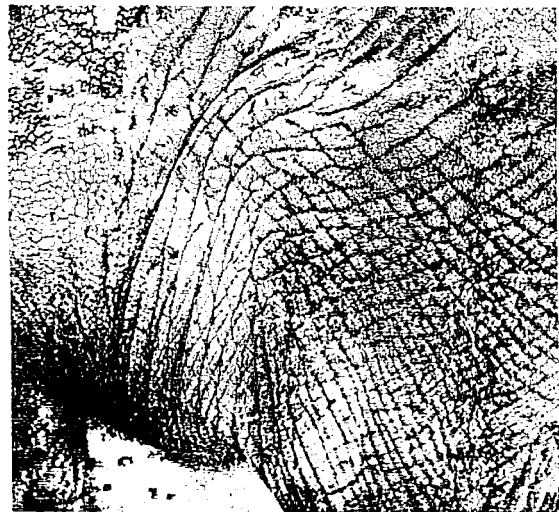
plan of roof timbers

ELEPHANT AND RHINOCEROS HOUSE, ZOOLOGICAL GARDENS, LONDON

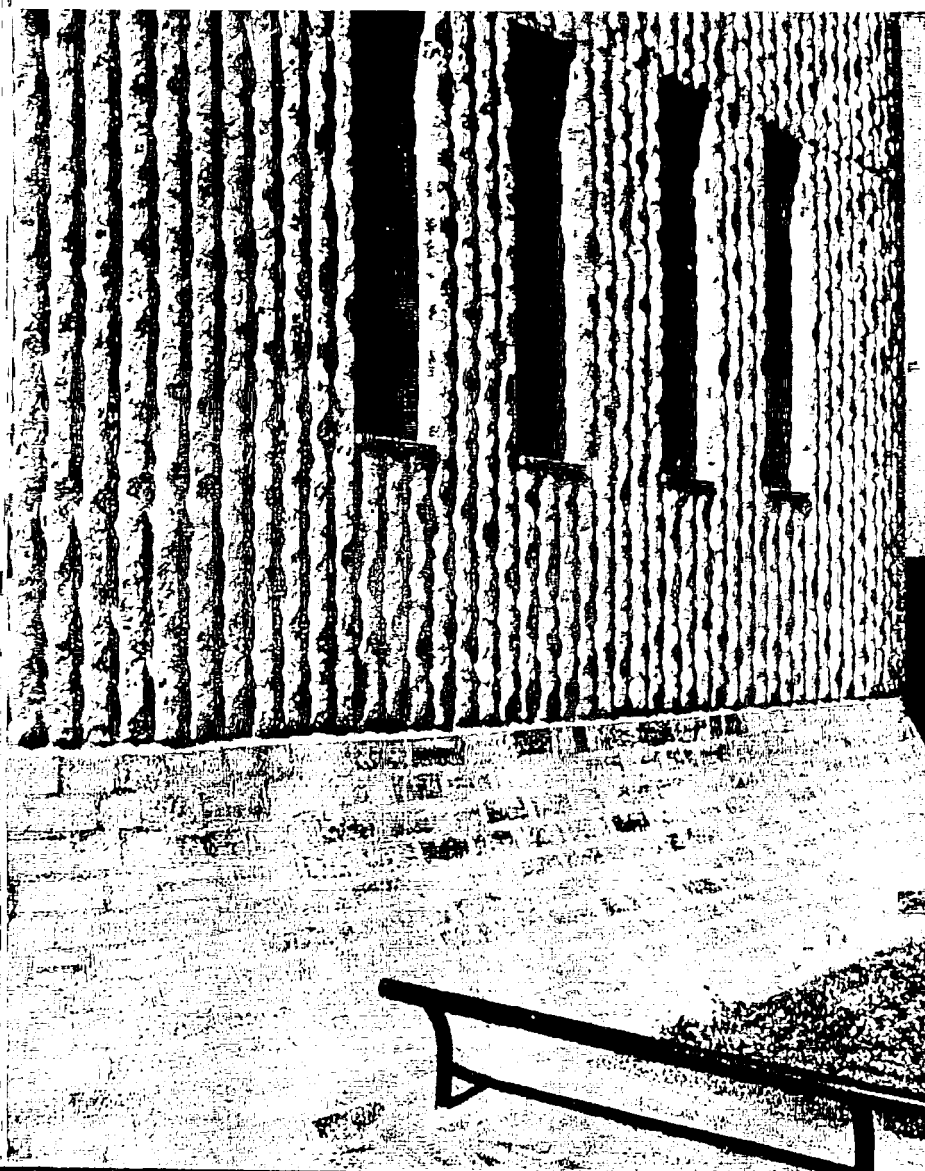


8, 9, 10 views of the public area, looking toward the main part. The roof of the main part would be a large, open space, like 10, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.





11
12



13

ELEPHANT AND RHINOCEROS HOUSE, ZOOLOGICAL GARDENS, LONDON

Elephant house
texture. 11
Elephant 12
Elephantically ribbed
reticulated
The house is
a 3 ft
a 10 ft
The house is
painted in
blue brick