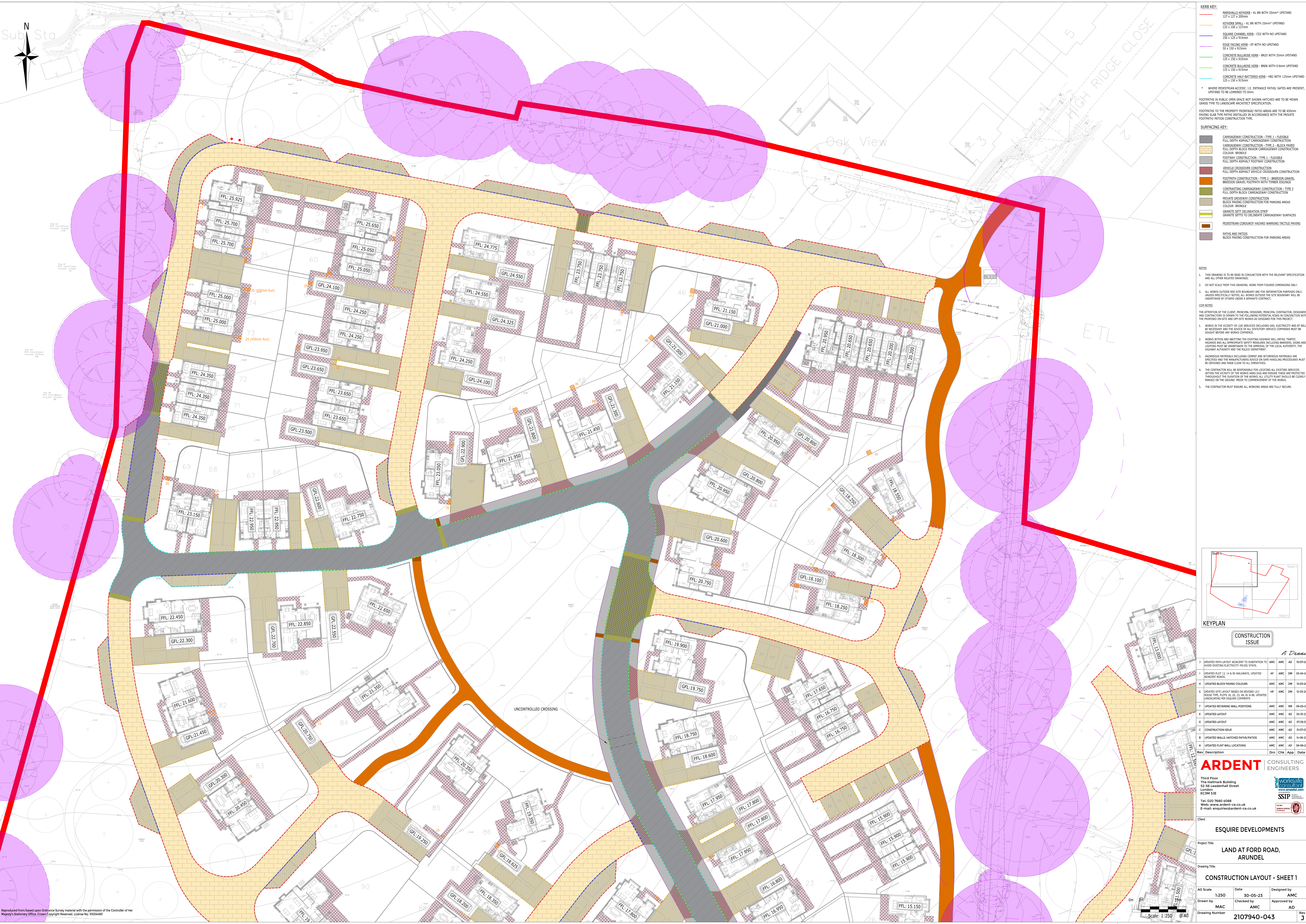


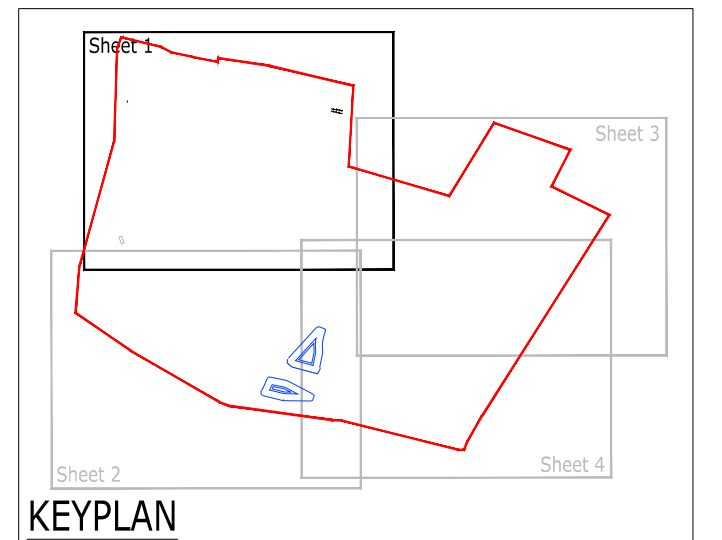


- KERB KEY:**
- MARSHALLS KEYB - KL BN WITH 25mm* UPSTAND
127 x 127 x 200mm
 - KEYKRB SMALL - KL BN WITH 25mm* UPSTAND
125 x 150 x 127mm
 - SQUARE CHANNEL KERB - CS2 WITH NO UPSTAND
150 x 125 x 914mm
 - EDGE FACING KERB - EF WITH NO UPSTAND
90 x 150 x 914mm
 - CONCRETE BALUNGE KERB - BK02 WITH 25mm UPSTAND
125 x 150 x 915mm
 - CONCRETE BALUNGE KERB - BK05 WITH 0-6mm UPSTAND
125 x 150 x 915mm
 - CONCRETE HALF-BATTERED KERB - HK2 WITH 125mm UPSTAND
125 x 150 x 915mm
- * WHERE PEDESTRIAN ACCESS, I.E. ENTRANCE PATHS/ GATES ARE PRESENT, UPSTAND TO BE LOWERED TO 0mm.

FOOTPATHS IN PUBLIC OPEN SPACE NOT SHOWN HATCHED ARE TO BE MOWN GRASS TYPE TO LANDSCAPE ARCHITECT SPECIFICATION
FOOTPATHS TO THE PROPERTY FRONTAGE/ PATIO AREAS ARE TO BE 450mm PAVING SLAB TYPE PATHS INSTALLED IN ACCORDANCE WITH THE PRIVATE FOOTPATH PATON CONSTRUCTION TYPE.

- SURFACING KEY:**
- CARRIAGEWAY CONSTRUCTION - TYPE 1, FLEXIBLE
FULL DEPTH ASPHALT CARRIAGEWAY CONSTRUCTION
 - CARRIAGEWAY CONSTRUCTION - TYPE 2, BLOCK PAVED
FULL DEPTH BLOCK PAVOR CARRIAGEWAY CONSTRUCTION
 - FOOTPATH CONSTRUCTION - TYPE 1, FLEXIBLE
FULL DEPTH ASPHALT FOOTPATH CONSTRUCTION
 - VEHICLE CROSSOVER CONSTRUCTION
FULL DEPTH ASPHALT VEHICLE CROSSOVER CONSTRUCTION
 - FOOTPATH CONSTRUCTION - TYPE 2, BRIDGON GRAVEL
BRIDGON GRAVEL FOOTPATH WITH TIMBER EDGING
 - CONTRASTING CARRIAGEWAY CONSTRUCTION - TYPE 3
FULL DEPTH BLOCK CARRIAGEWAY CONSTRUCTION
 - PRIVATE DRIVEWAY CONSTRUCTION
BLOCK PAVING CONSTRUCTION FOR PARKING AREAS
 - COLOUR: BRICKLE
 - GRANITE SETTS OBSERVATION STRIP
 - GRANITE SETTS TO DELINEATE CARRIAGEWAY SURFACES
 - PEDESTIAN CORRIDOR/ HAZARD WARNING TACTILE PAVING
 - PATIOS AND PATIOS
BLOCK PAVING CONSTRUCTION FOR PARKING AREAS

- NOTES**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELATED DRAWINGS.
 - DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
 - ALL WORKS OUTSIDE RED SITE BOUNDARY ARE FOR INFORMATION PURPOSES ONLY. UNLESS SPECIFICALLY NOTED, ALL WORKS OUTSIDE THE SITE BOUNDARY WILL BE UNDERTAKEN BY OTHERS UNDER A SEPARATE CONTRACT.
- CONTRACTOR NOTES**
- THE ATTENTION OF THE CLIENT, PRINCIPAL DESIGNER, PRINCIPAL CONTRACTOR, DESIGNERS AND CONTRACTORS IS DRAWN TO THE FOLLOWING POTENTIAL RISKS IN CONJUNCTION WITH THE PROPOSED ON-SITE AND OFF-SITE WORKS AS DESIGNED FOR THIS PROJECT:
- WORKS IN THE VICINITY OF LHM SERVICES INCLUDING GAS, ELECTRICITY AND HW WILL BE NECESSARY AND THE ADVICE OF ALL RELEVANT SERVICE COMPANIES MUST BE SOUGHT BEFORE ANY WORKS COMMENCE.
 - WORKS WITHIN AND ADJACENT TO THE EXISTING HIGHWAY WILL ENTAIL TRAFFIC HAZARDS AND ALL APPROPRIATE SAFETY MEASURES INCLUDING BARRIERS, SIGNS AND LIGHTING MUST BE UNDERTAKEN TO THE SATISFACTION OF THE LOCAL AUTHORITY, THE HIGHWAY AUTHORITY AND THE POLICE DEPARTMENT.
 - HAZARDOUS MATERIALS INCLUDING CEMENT AND BITUMINOUS MATERIALS ARE SPECIFIED AND THE MANUFACTURERS ADVICE ON SAFE HANDLING PROCEDURES MUST BE OBTAINED AND MADE CLEAR TO ALL OPERATORS.
 - THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES WITHIN THE VICINITY OF THE WORKS HAND DUG AND INSURE THESE ARE PROTECTED, THROUGHOUT THE DURATION OF THE WORKS. ALL UTILITY PIPES SHOULD BE CLEARLY MARKED ON THE GROUND PRIOR TO COMMENCEMENT OF THE WORKS.
 - THE CONTRACTOR MUST ENSURE ALL WORKING AREAS ARE FULLY SECURED.



CONSTRUCTION ISSUE		A Danner			
3	UPDATED PATH LAYOUT ADJACENT TO SUBSTATION TO AVOID EXISTING ELECTRICITY POLES STAYS.	AMC	AMC	AD	30-07-24
1	UPDATED PLOT 13, 14 & 90 HAWKWAYS, UPDATED ADJACENT ROADS.	AF	AMC	DM	05-04-24
H	UPDATED BLOCK PAVING COLOURS.	AMC	AMC	DM	16-03-24
C	UPDATED SITE LAYOUT BASED ON REQUESTED LLY HOUSE TYPE SUPPLY 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 102, 104, 106, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800, 802, 804, 806, 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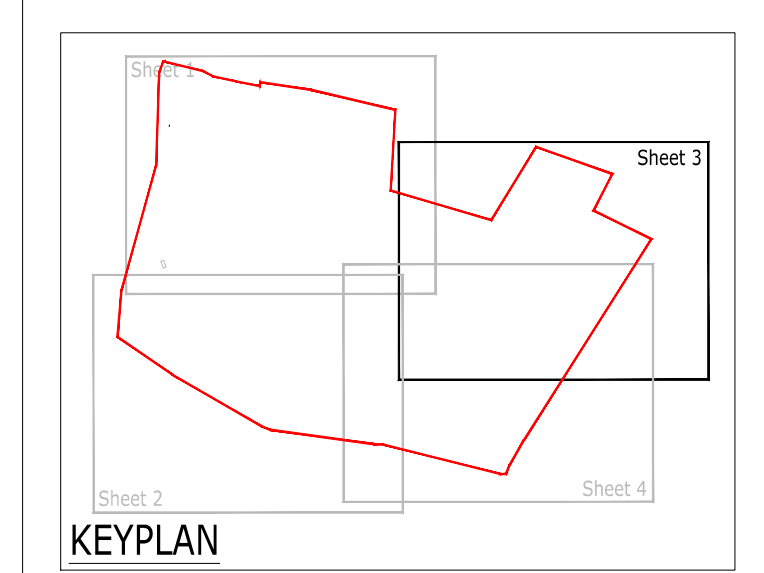


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WOODEN BRIDGE OVER SWALE TO BE DESIGNED BY SPECIALIST

- KERB KEY:**
- MARSHALLS KEYERB - KL BN WITH 25mm* UPSTAND 127 x 127 x 200mm
 - KEYKERB SMALL - KL BN WITH 25mm* UPSTAND 125 x 100 x 127mm
 - SQUARE CHANNEL KERB - CS2 WITH NO UPSTAND 150 x 125 x 91.4mm
 - EDGE FACING KERB - EF WITH NO UPSTAND 90 x 150 x 91.4mm
 - CONCRETE BALLOUSE KERB - BK02 WITH 25mm UPSTAND 125 x 150 x 91.5mm
 - CONCRETE BALLOUSE KERB - BK05 WITH 0.6mm UPSTAND 125 x 150 x 91.5mm
 - CONCRETE HALF-BATTERED KERB - HK2 WITH 125mm UPSTAND 125 x 150 x 91.5mm
- * WHERE PEDESTRIAN ACCESS, I.E. ENTRANCE PATHS/ GATES ARE PRESENT, UPSTAND TO BE LOWERED TO 0mm.
- FOOTPATHS IN PUBLIC OPEN SPACE NOT SHOWN HATCHED ARE TO BE MOWN GRASS TYPE TO LANDSCAPE ARCHITECT SPECIFICATION.
- FOOTPATHS TO THE PROPERTY FRONTAGE/ PATIO AREAS ARE TO BE 450mm PAVING SLAB TYPE PATHS INSTALLED IN ACCORDANCE WITH THE PRIVATE FOOTPATH PATON CONSTRUCTION TYPE.
- SURFACING KEY:**
- CARRIAGEWAY CONSTRUCTION - TYPE 1 - FLEXIBLE DUAL DEPTH ASPHALT CARRIAGEWAY CONSTRUCTION
 - CARRIAGEWAY CONSTRUCTION - TYPE 2 - BLOCK PAVED FULL DEPTH BLOCK PAVOR CARRIAGEWAY CONSTRUCTION COLOUR: BRICKLE
 - FOOTPATH CONSTRUCTION - TYPE 1 - CHEVRON FULL DEPTH ASPHALT FOOTPATH CONSTRUCTION
 - VEHICLE CROSSOVER CONSTRUCTION FULL DEPTH ASPHALT VEHICLE CROSSOVER CONSTRUCTION
 - FOOTPATH CONSTRUCTION - TYPE 2 - BRIDGON GRAVEL BRIDGON GRAVEL FOOTPATH WITH TIMBER EDGING
 - CONTRASTING CARRIAGEWAY CONSTRUCTION - TYPE 3 FULL DEPTH BLOCK CARRIAGEWAY CONSTRUCTION
 - PRIVATE DRIVEWAY CONSTRUCTION BLOCK PAVING CONSTRUCTION FOR PARKING AREAS COLOUR: BRICKLE
 - GRANITE SETTS DELINEATION - TYPE 1 GRANITE SETTS TO DELINEATE CARRIAGEWAY SURFACES
 - SHARED SURFACE DELINEATION STRIP CURBURY BLOCK PAVOR TO DELINEATE CARRIAGEWAY SURFACES
 - PEDESTRIAN CORDURRY HAZARD WARNING TACTILE PAVING
 - PATHS AND PATIOS BLOCK PAVING CONSTRUCTION FOR PARKING AREAS

- NOTES**
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 - ALL WORKS OUTSIDE RED SITE BOUNDARY ARE FOR INFORMATION PURPOSES ONLY. UNLESS SPECIFICALLY NOTED, ALL WORKS OUTSIDE THE SITE BOUNDARY WILL BE UNDERTAKEN BY OTHERS UNDER A SEPARATE CONTRACT.
- CONTRACT NOTES**
- THE ATTENTION OF THE CLIENT, PRINCIPAL DESIGNER, PRINCIPAL CONTRACTOR, DESIGNERS AND CONTRACTORS IS DRAWN TO THE FOLLOWING POTENTIAL RISKS IN CONJUNCTION WITH THE PROPOSED ON-SITE AND OFF-SITE WORKS AS DESIGNED FOR THIS PROJECT:
- WORKS IN THE VICINITY OF LHM SERVICES INCLUDING GAS, ELECTRICITY AND HWY WILL BE NECESSARY AND THE ADVICE OF ALL ESTABLISHED SERVICE COMPANIES MUST BE SOUGHT BEFORE ANY WORKS COMMENCE.
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 - HAZARDOUS MATERIALS INCLUDING CEMENT AND BITUMINOUS MATERIALS ARE SPECIFIED AND THE MANUFACTURERS ADVICE ON SAFE HANDLING PROCEDURES MUST BE OBTAINED AND MADE CLEAR TO ALL OPERATIVES.
 - THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES WITHIN THE VICINITY OF THE WORKS HAND DUE AND ENSURE THESE ARE PROTECTED. THROUGHOUT THE DURATION OF THE WORKS, ALL UTILITY MARKS SHOULD BE CLEARLY MARKED ON THE GROUND PRIOR TO COMMENCEMENT OF THE WORKS.
 - THE CONTRACTOR MUST ENSURE ALL WORKING AREAS ARE FULLY SECURE.



CONSTRUCTION ISSUE					
H	UPDATED BLOCK PAVING COLOURS	AMC	AMC	DM 18-03-24	
C	UPDATED SITE LAYOUT BASED ON REDESIGNED LHM VEHICLE TYPE, PLUTTS 18, 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	AMC	AMC	DM 12-03-24	
F	UPDATED RETAINING WALL POSITIONS	AMC	AMC	NR 06-02-24	
E	UPDATED LAYOUT	AMC	AMC	AD 01-10-23	
D	UPDATED LAYOUT	AMC	AMC	AD 07-08-23	
C	CONSTRUCTION ISSUE	AMC	AMC	AD 31-07-23	
B	UPDATED WALLS HATCHED PATHS/PATIOS	AMC	AMC	AD 31-06-23	
A	UPDATED FLINT WALL LOCATIONS	AMC	AMC	AD 06-06-23	
Rev	Description	Drn	Chk	App	Date

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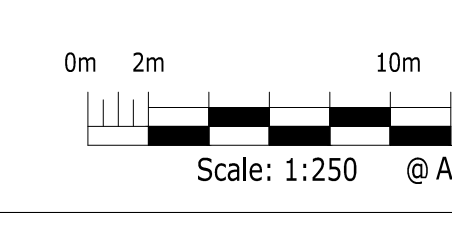
Project TSN:

LAND AT FORD ROAD, ARUNDEL

Drawing Title:

CONSTRUCTION LAYOUT - SHEET 3

AO Scale	Date	Designed by
1:250	30-05-23	AMC
Drawn by	Checked by	Approved by
MAC	AMC	AD
Drawing Number	2107940-045	
Rev	H	





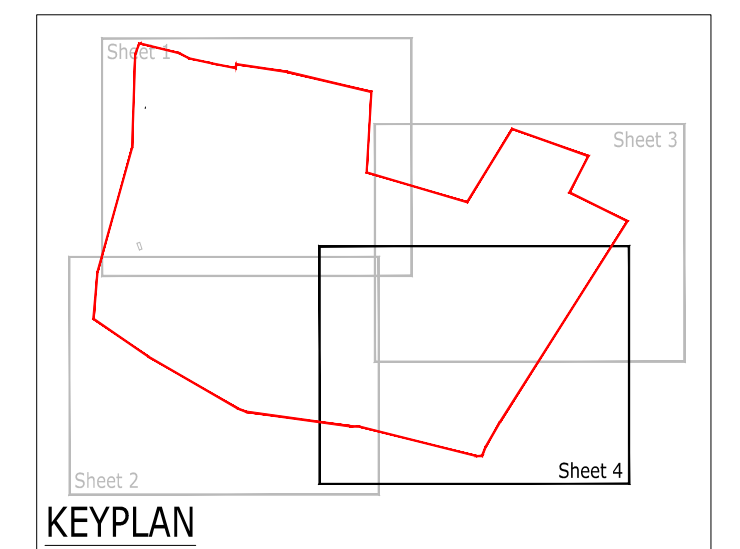
- KERB KEY:**
- MASCHALLS KERBS - KL BN WITH 25mm* UPSTAND
127 x 127 x 200mm
 - KEYKERB SMALL - KL BN WITH 25mm* UPSTAND
125 x 150 x 127mm
 - SQUARE CHANNEL KERB - CS2 WITH NO UPSTAND
150 x 125 x 914mm
 - EDGE FACING KERB - EF WITH NO UPSTAND
90 x 150 x 914mm
 - CONCRETE BALLOUSE KERB - BK02 WITH 25mm UPSTAND
125 x 150 x 914mm
 - CONCRETE BALLOUSE KERB - BK05 WITH 0-6mm UPSTAND
125 x 150 x 914mm
 - CONCRETE HAUTERED KERB - HK2 WITH 125mm UPSTAND
125 x 150 x 914mm
- * WHERE PEDESTRIAN ACCESS, I.E. ENTRANCE PATHS/ GATES ARE PRESENT, UPSTAND TO BE LOWERED TO 0mm.

FOOTPATHS IN PUBLIC OPEN SPACE NOT SHOWN HATCHED ARE TO BE MOWN GRASS TYPE TO LANDSCAPE ARCHITECT SPECIFICATION.

FOOTPATHS TO THE PROPERTY FRONTAGE/ PATIO AREAS ARE TO BE 450mm PAVING SLAB TYPE PATHS INSTALLED IN ACCORDANCE WITH THE PRIVATE FOOTPATH PATON CONSTRUCTION TYPE.

- SURFACING KEY:**
- CARRIAGEWAY CONSTRUCTION - TYPE 1 - FLEXIBLE DUAL DEPTH ASPHALT CARRIAGEWAY CONSTRUCTION
 - CARRIAGEWAY CONSTRUCTION - TYPE 2 - BLOCK PAVED FULL DEPTH BLOCK PAVOR CARRIAGEWAY CONSTRUCTION
 - FOOTPATH CONSTRUCTION - TYPE 1 - CHEVRON FULL DEPTH ASPHALT FOOTPATH CONSTRUCTION
 - VEHICLE CROSSOVER CONSTRUCTION
 - VEHICLE CROSSOVER VEHICLE CROSSOVER CONSTRUCTION
 - FOOTPATH CONSTRUCTION - TYPE 2 - BRICKON GRAVEL BRICKON GRAVEL FOOTPATH WITH TIMBER TROUSERS
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 - BLOCK PAVING CONSTRUCTION FOR PARKING AREAS
 - GRANITE SETTS DELINEATION - 150mm GRANITE SETTS TO DELINEATE CARRIAGEWAY SURFACES
 - SHARED SURFACE DELINEATION STRIP
 - CORRIDOR BLOCK PAVOR TO DELINEATE CARRIAGEWAY SURFACES
 - PEDESTRIAN CORRIDORY HAZARD WARNING TACTILE PAVING
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 - BLOCK PAVING CONSTRUCTION FOR PARKING AREAS

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CONSTRUCTION ISSUE					
H	UPDATED BLOCK PAVING COLOURS	AMC	AMC	DM	18-03-24
C	UPDATED SITE LAYOUT BASED ON REVISED LILY VIOLET TYPE PLANTS 10, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000	HP	AMC	DM	12-03-24
F	UPDATED RETAINING WALL POSITIONS	AMC	AMC	AD	06-02-24
E	UPDATED LAYOUT	AMC	AMC	AD	05-10-23
D	UPDATED LAYOUT	AMC	AMC	AD	07-09-23
C	CONSTRUCTION ISSUE	AMC	AMC	AD	31-07-23
B	UPDATED WALLS HATCHED PATHS/PATIOS	AMC	AMC	AD	31-06-23
A	UPDATED FLINT WALL LOCATIONS	AMC	AMC	AD	06-06-23
Rev	Description	Drn	Chk	App	Date

10-56

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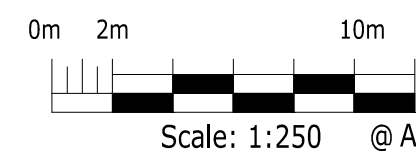
Third Floor
The Helix Building
52-56 Leadenhall Street
London
EC3M 5JE

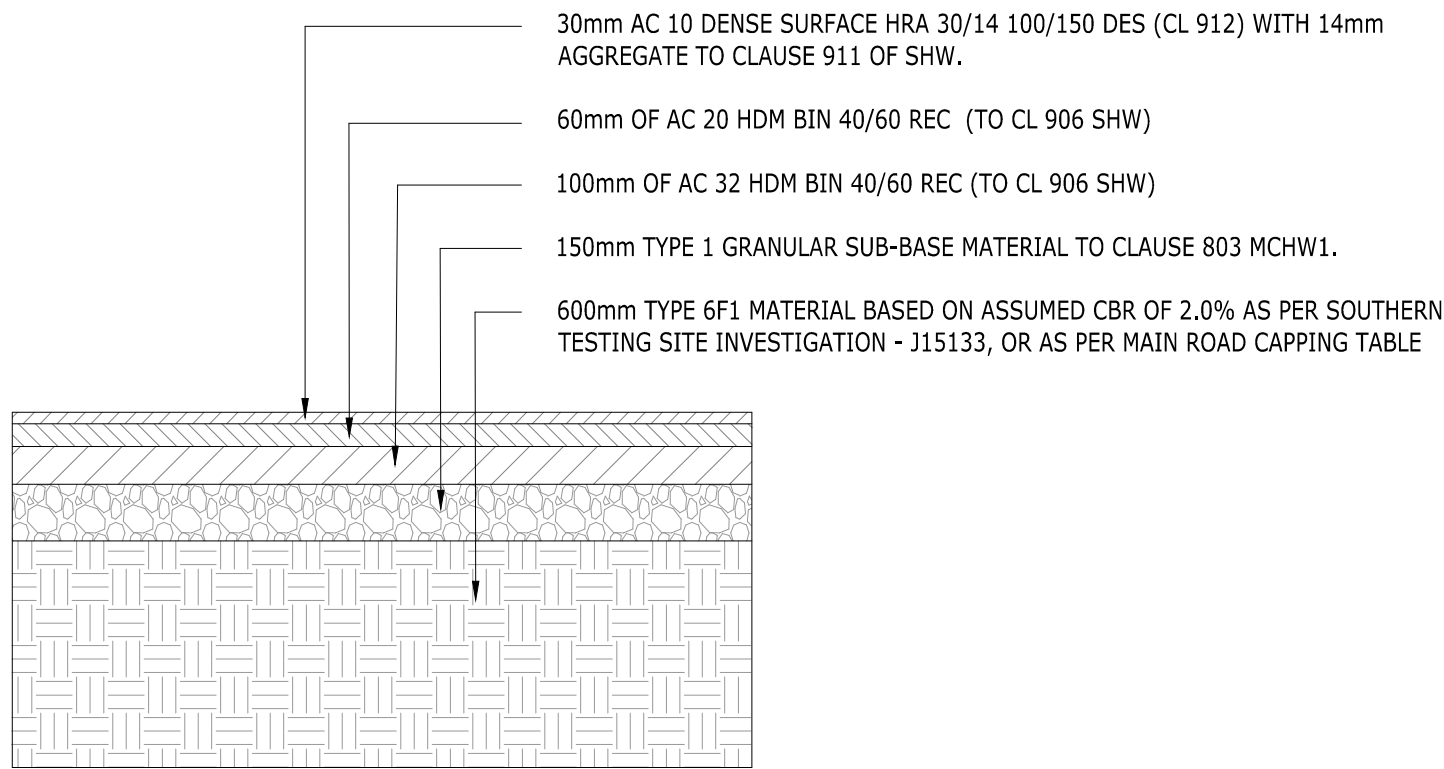
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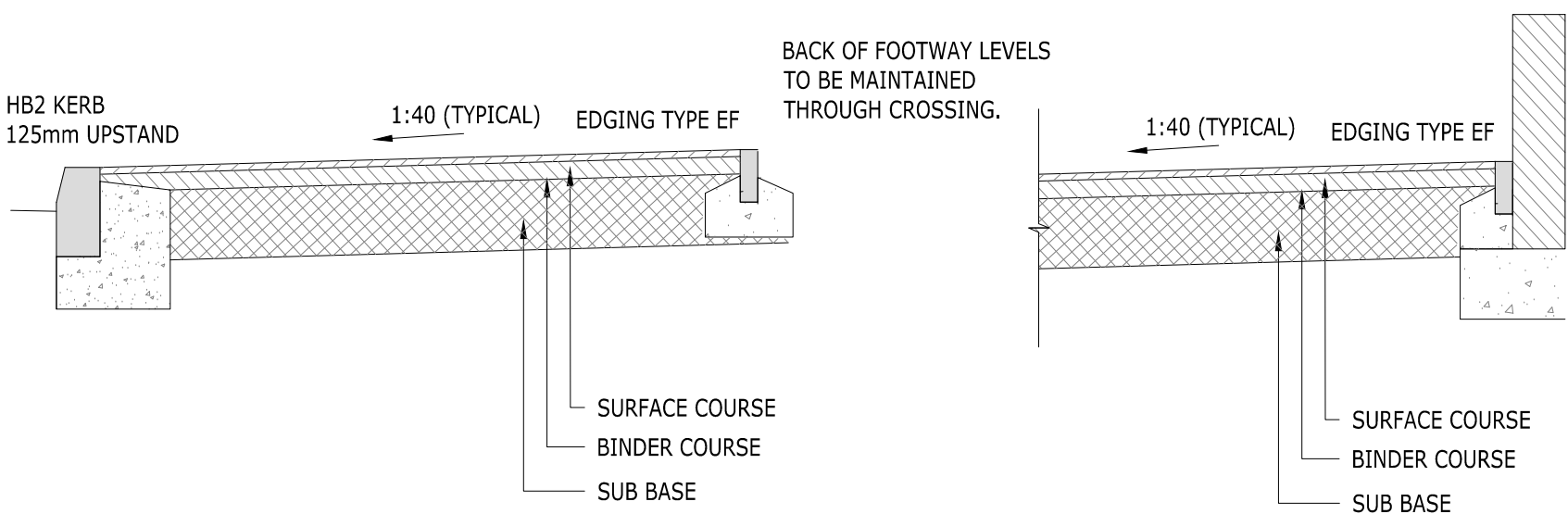
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SPECIALIST
INSTRUMENTED
PERSONNEL

Client			
ESQUIRE DEVELOPMENTS			
Project Title			
LAND AT FORD ROAD, ARUNDEL			
Drawing Title			
CONSTRUCTION LAYOUT - SHEET 4			
AO Scale		Date	Designed by
1:250		30-05-23	AMC
Drawn by		Checked by	Approved by
MAC		AMC	AD
Drawing Number		2107940-046	
			Rev H

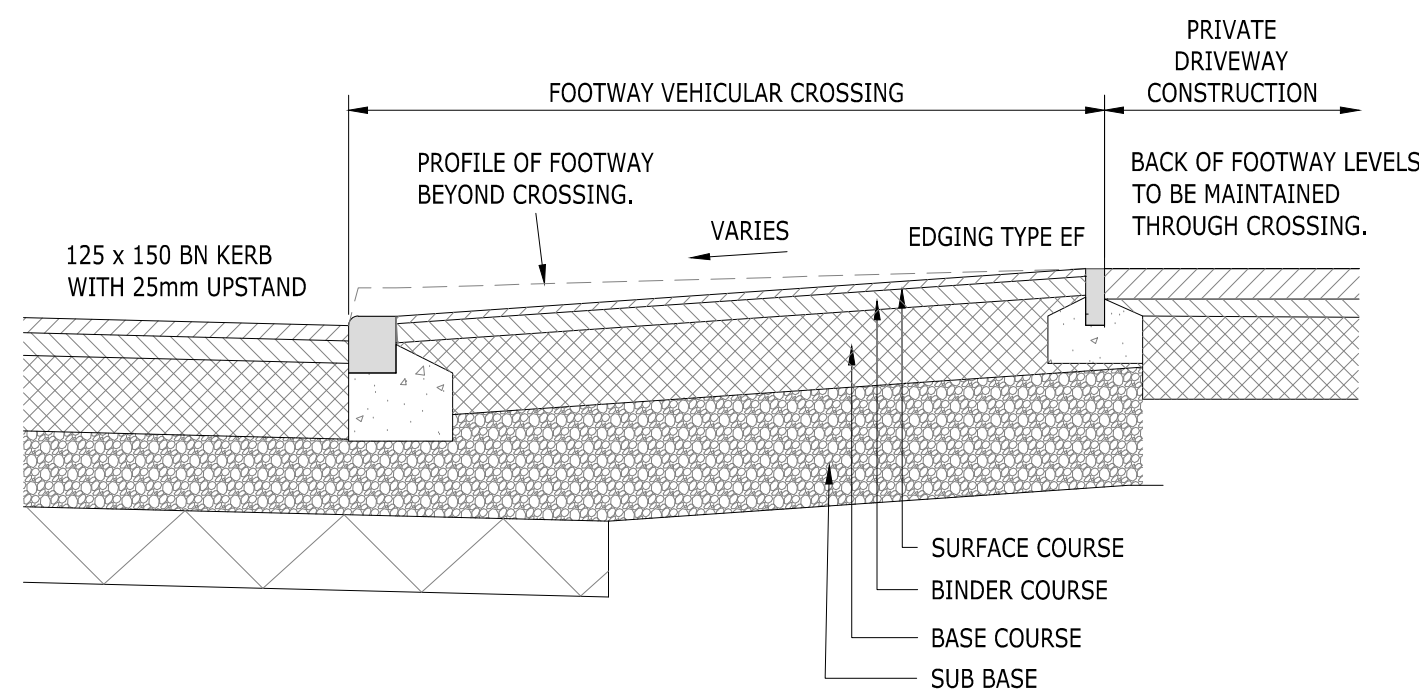




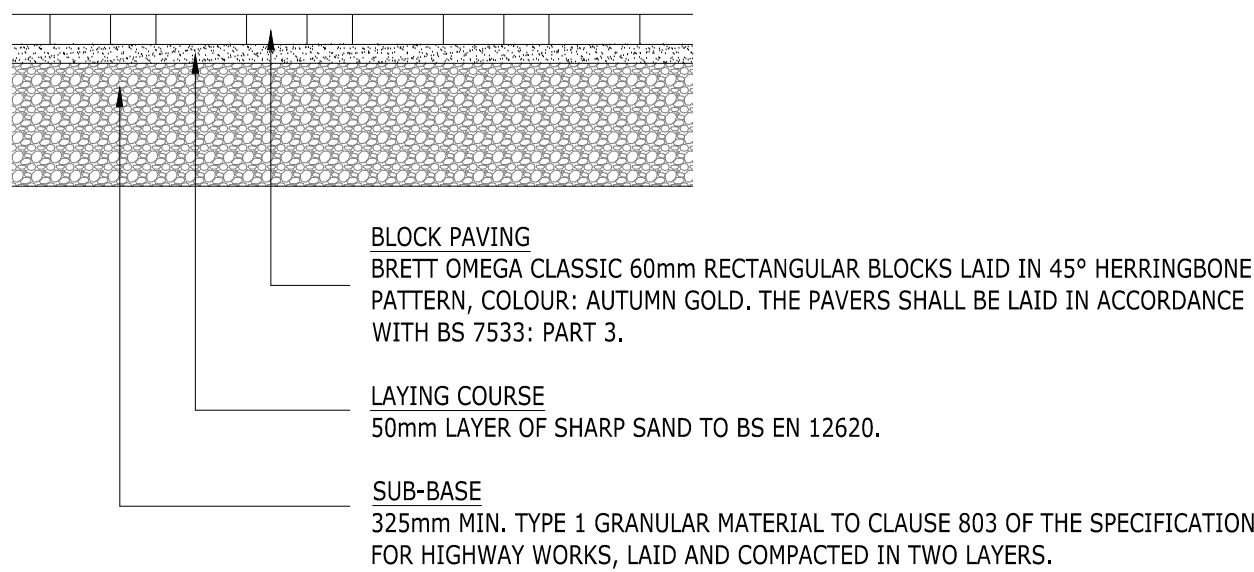
CARRIAGEWAY CONSTRUCTION - TYPE 1 - FLEXIBLE
FULL DEPTH ASPHALT CARRIAGEWAY CONSTRUCTION



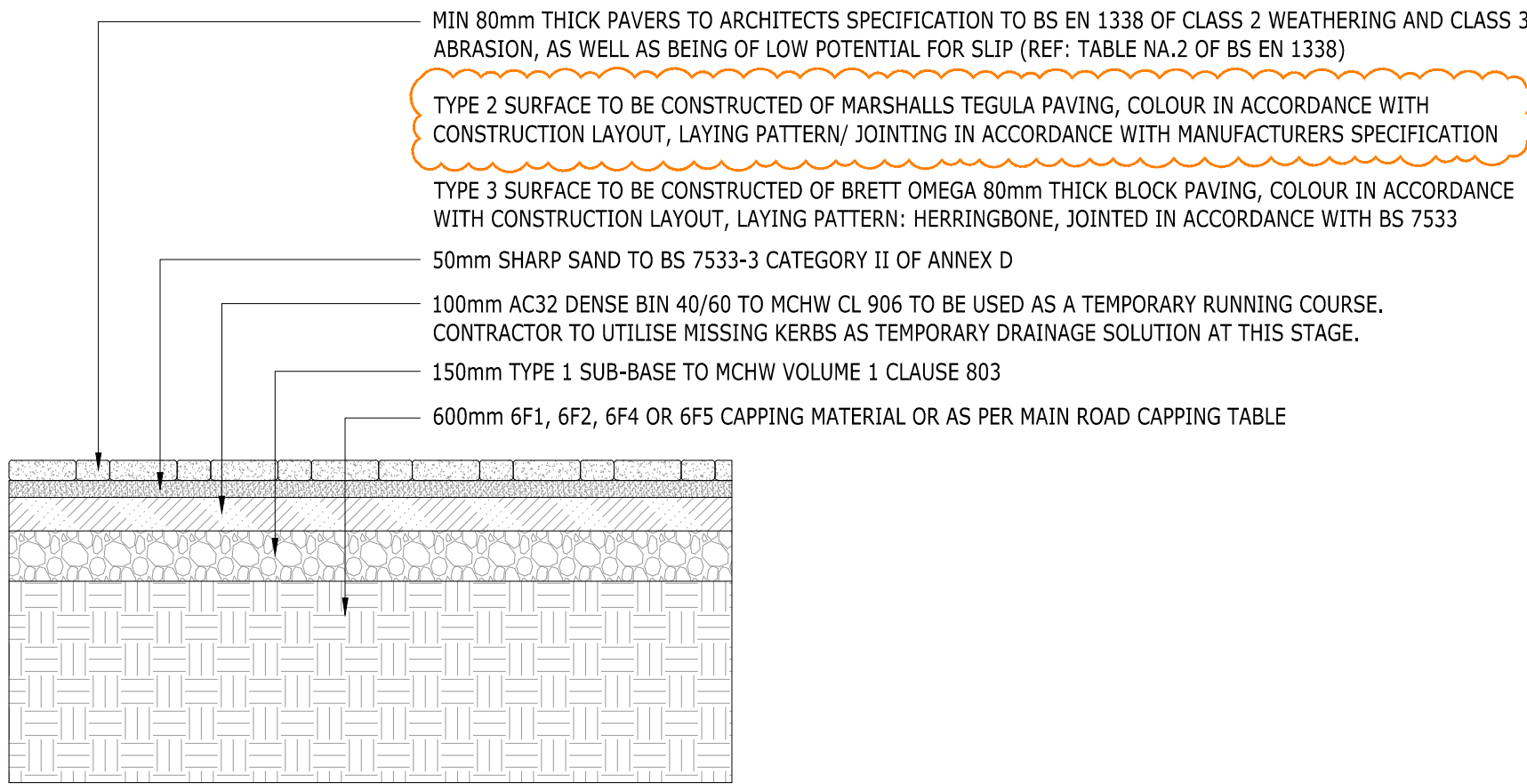
FOOTWAY CONSTRUCTION - TYPE 1 - FLEXIBLE
FULL DEPTH ASPHALT FOOTWAY CONSTRUCTION



VEHICLE CROSSOVER CONSTRUCTION
FULL DEPTH ASPHALT VEHICLE CROSSOVER CONSTRUCTION

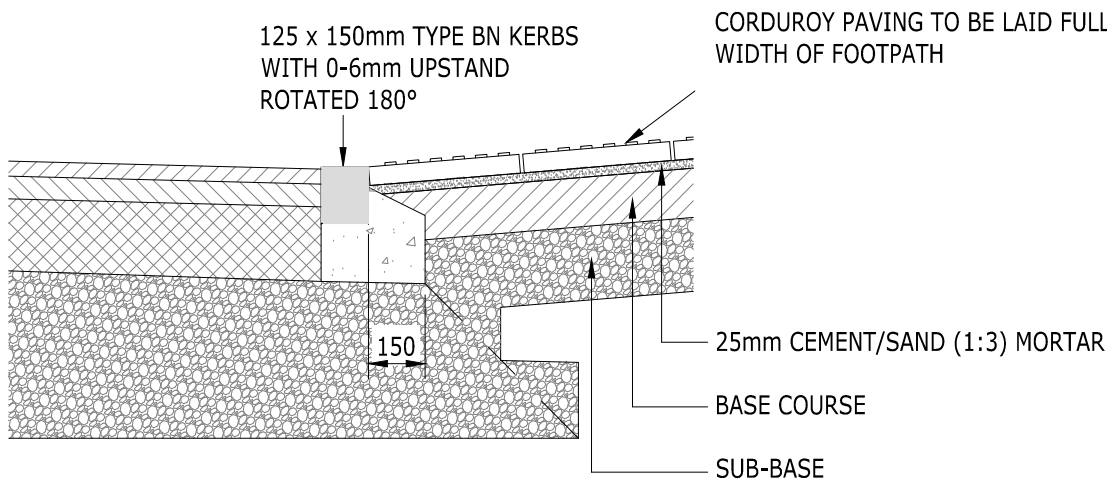
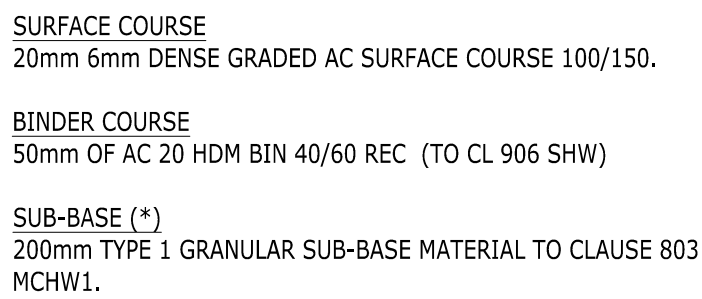


PRIVATE DRIVEWAY CONSTRUCTION
BLOCK PAVING CONSTRUCTION FOR PARKING AREAS

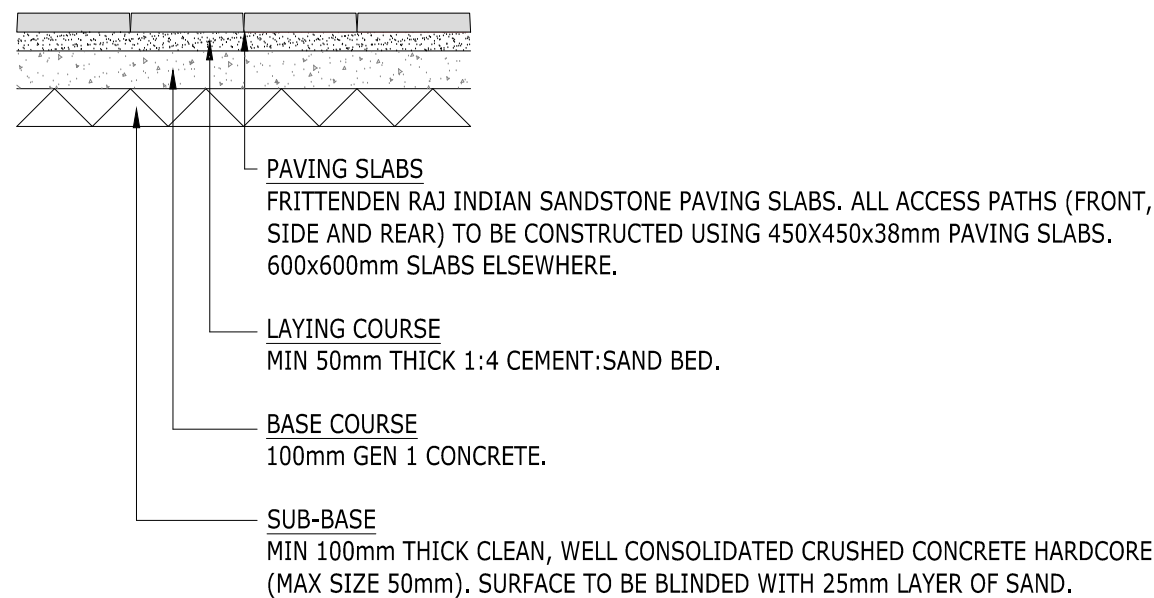


CARRIAGEWAY CONSTRUCTION - TYPE 2 - BLOCK PAVED
FULL DEPTH BLOCK PAVIOR CARRIAGEWAY CONSTRUCTION

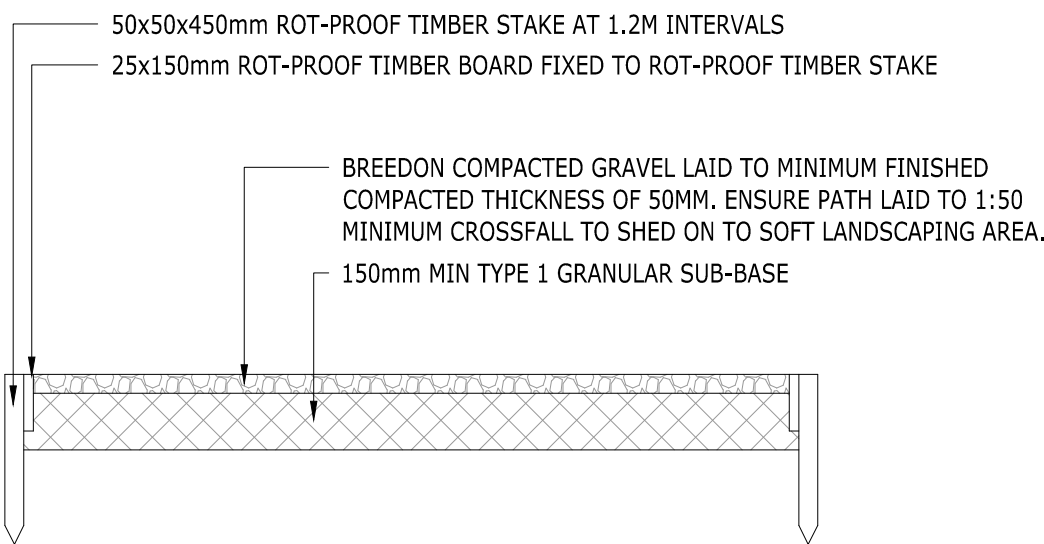
CONTRASTING CARRIAGEWAY CONSTRUCTION - TYPE 3
FULL DEPTH BLOCK CARRIAGEWAY CONSTRUCTION



PEDESTRIAN CORDUROY HAZARD WARNING TACTILE PAVING



PRIVATE FOOTPATH/ PATIO CONSTRUCTION DETAIL
FOR HOUSE FRONTAGES AND PATIO AREAS

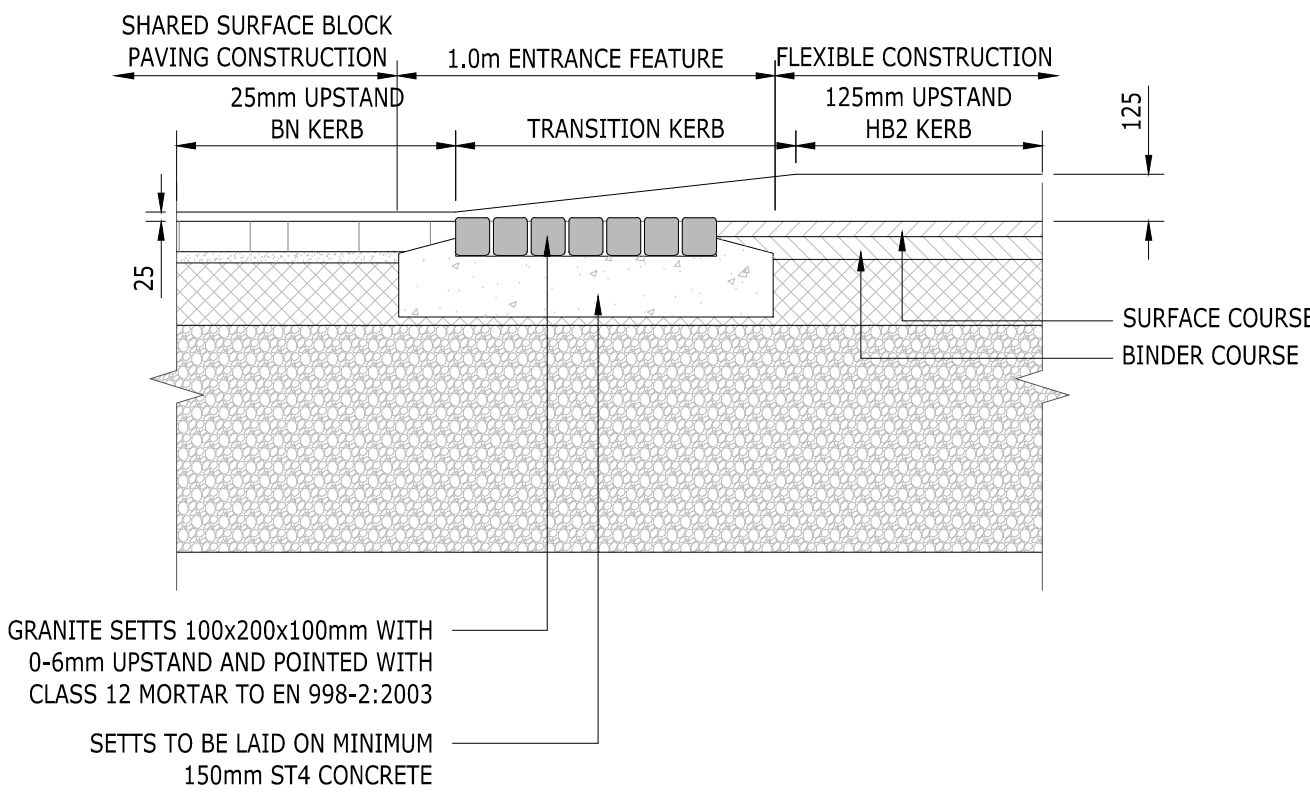
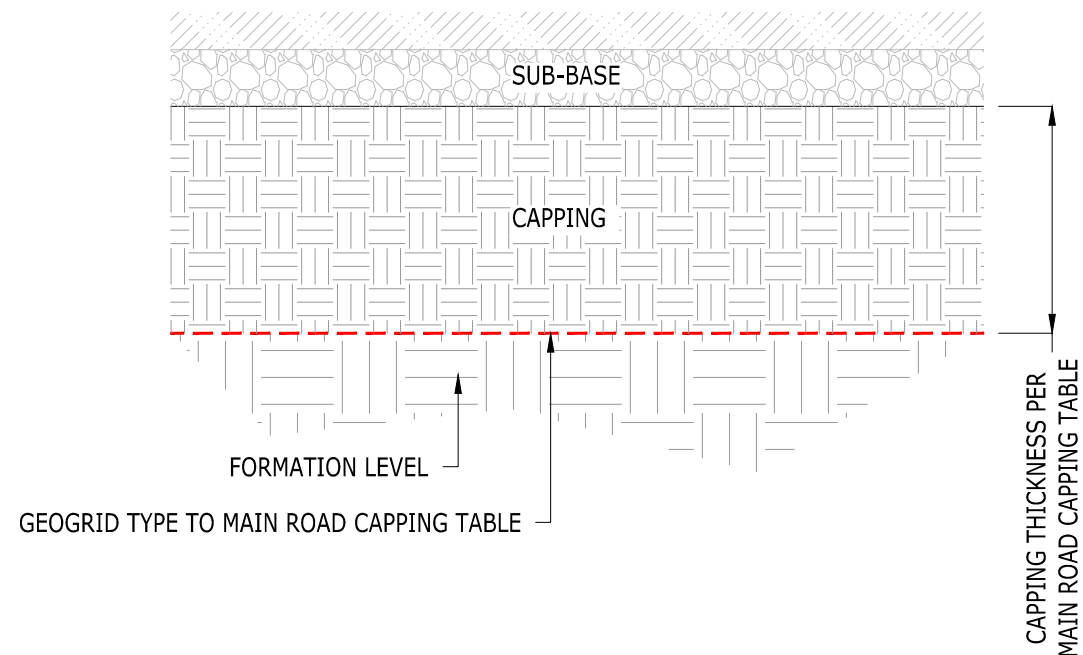


FOOTPATH CONSTRUCTION - TYPE 2 - BREEDON GRAVEL
BREEDON GRAVEL FOOTPATH WITH TIMBER EDGINGS

MAIN ROAD CAPPING TABLE

CBR	CAPPING ONLY	CAPPING WITH GEOGRID	
	CAPPING THICKNESS (mm)	CAPPING THICKNESS (mm)	GEOGRID TYPE
0.4 - 1.0	N/A	490	NAUE COMBIGRID 40/40 Q1 GRK 4 C
1.0 - 1.5	N/A	370	NAUE COMBIGRID 40/40 Q1 GRK 4 C
1.5 - 2.0	N/A	320	NAUE COMBIGRID 40/40 Q1 GRK 4 C
2.0 - 2.5	600	270	NAUE COMBIGRID 40/40 Q1 GRK 4 C
2.5 - 5.0	350	230	NAUE COMBIGRID 40/40 Q1 GRK 4 C
>5%	100*	N/A	N/A

*100mm TO BE INSTALLED AS TYPE 1 MATERIAL TO CL 803 RATHER THAN 6F MATERIAL



GRANITE SETT DELINEATION STRIP
GRANITE SETTS TO DELINEATE CARRIAGEWAY SURFACES

COMPACTION IN AREAS OF FILL

IN AREAS OF FILL WHERE SUBSOIL IS COMPACTED, SITE WON OR OTHER SUITABLE MATERIAL IS TO BE LAID IN COURSES OF MAX 150mm AND COMPACTED TO MINIMUM CBR OF 2.5%

BLOCK PAVING NOTES:

- ALL CONCRETE BLOCK PAVERS SHALL COMPLY WITH THE REQUIREMENTS OF BS EN 1338 AND BE A MINIMUM THICKNESS OF 80mm.
- THE SKID RESISTANCE OF CONCRETE BLOCKS SHALL BE DETERMINED BY THE POLISHED STONE VALUE (PSV) TEST, OF WHICH THE MINIMUM ALLOWABLE PSV VALUE FOR ANY PRODUCT USED IS 55 UNLESS AGREED OTHERWISE.
- BLOCK SURFACING SHALL BE LAID IN A 45 OR 90 DEGREE HERRINGBONE PATTERN UNLESS AGREED OTHERWISE WITH TWO STRETCHER COURSES ADJACENT TO KERBS AND A SINGLE STRETCHER COURSE AROUND IRONWORK AND SERVICE COVERS.
- THE LAYING COURSE SHALL BE WITHIN 1% OF ITS OPTIMUM MOISTURE CONTENT DETERMINED IN ACCORDANCE WITH TEST 12 OF BS 1377. THE LAYING COURSE SHALL BE SUCH THAT AFTER COMPACTION IT FORMS A UNIFORM LAYER 30mm THICK BELOW THE BLOCKS. THE LAYING COURSE SHALL BE SCREEDED TO PRODUCE A UNIFORM SURFACE TO CORRECT DESIGN PROFILES AND FALLS AT A UNIFORM DEGREE OF COMPACTION.
- THE BLOCKS SHALL BE LAID HAND TIGHT IN THE DESIGN PATTERN, WORKING FROM AN EXISTING LAYING FACE EDGE OR EDGE RESTRAINT WHEREVER POSSIBLE. MECHANICAL FORCE SHOULD NOT BE USED TO OBTAIN TIGHT JOINTS.
- BLOCK SURFACING TO HAVE SAND FILLED JOINTS OF 2-5mm WHEN PLACED HAND TIGHT. FULL BLOCKS SHALL BE LAID FIRST, WITH CUT BLOCKS LAID AFTERWARDS. THE ENTIRE AREA SHOULD BE COMPLETED USING FULL BLOCKS AS FAR AS IS PRACTICALLY POSSIBLE.
- THE MINIMUM SIZE FOR ANY CUT BLOCK SHALL BE ONE QUARTER OF A FULL BLOCK. ALL CUTS ARE TO BE MADE USING A DIAMOND EDGE CUTTER. INFILLING ALONG BOUNDARIES AND AROUND OBSTRUCTIONS SHOULD PROCEED AS THE LAYING OF THE ENTIRE SURFACE CONTINUES AND MUST BE COMPLETED BEFORE COMPACTION TAKES PLACE.
- WHERE CUT BLOCKS ARE NOT SUITABLE AND A MORE REGULAR SHAPE IS REQUIRED AROUND OBSTRUCTIONS, AND IF AGREED WITH THE HIGHWAY AUTHORITY PRIOR, EITHER DRY PACKED SAND/CEMENT MORTAR OR CONCRETE (10mm MAX AGGREGATE SIZE & 28 DAY COMPRESSIVE STRENGTH OF 40N/mm²) CAN BE USED AS INFILL. THE MORTAR OR CONCRETE SHOULD BE COLOURED TO MATCH THAT OF THE ADJACENT BLOCK PAVERS.
- ALL BLOCK PAVING TO BE COMPACTED BY USE OF APPROPRIATE EQUIPMENT IN ORDER TO ENSURE THE FILLING OF THE LOWER PORTION OF THE BLOCK TO BLOCK JOINT BY THE LAYING COURSE MATERIAL. TWO OR THREE PASSES OF THE COMPACTING EQUIPMENT SHOULD BE SUFFICIENT TO ACHIEVE THIS CONDITION.
- COMPACTION SHALL FOLLOW LAYING AS SOON AS POSSIBLE BUT SHALL NOT BE CARRIED OUT WITHIN ONE METRE OF THE LAYING FACE. APART FROM THIS EDGE STRIP, NO AREA OF PAVING SHALL BE LEFT UNCOMPACTED AT THE COMPLETION OF THE DAYS WORK.

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- CDM NOTES:
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 - HAZARDOUS MATERIALS INCLUDING CEMENT AND BITUMINOUS MATERIALS ARE SPECIFIED AND THE MANUFACTURER'S ADVICE ON SAFE HANDLING PROCEDURES MUST BE OBTAINED AND MADE CLEAR TO ALL OPERATIVES.
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 - THE CONTRACTOR MUST ENSURE ALL WORKING AREAS ARE FULLY SECURE.

CONSTRUCTION
ISSUE

E	UPDATED BLOCK PAVING DETAIL COLOUR	AMC	AMC	DM	15-03-24
D	UPDATED MAIN ROAD CAPPING TABLE	AMC	AMC	AD	05-10-23
C	UPDATED MAIN ROAD CAPPING TABLE	AMC	AMC	AD	21-08-23
B	CONSTRUCTION ISSUE	HP	AMC	AD	28-07-23
A	UPDATED BASED ON CLIENT COMMENTS	AMC	AMC	AD	06.06.23
Rev	Description	Drn	Chk	App	Date

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CERTIFICATION

Client

ESQUIRE DEVELOPMENTS

Project Title:
**LAND AT FORD ROAD,
ARUNDEL**

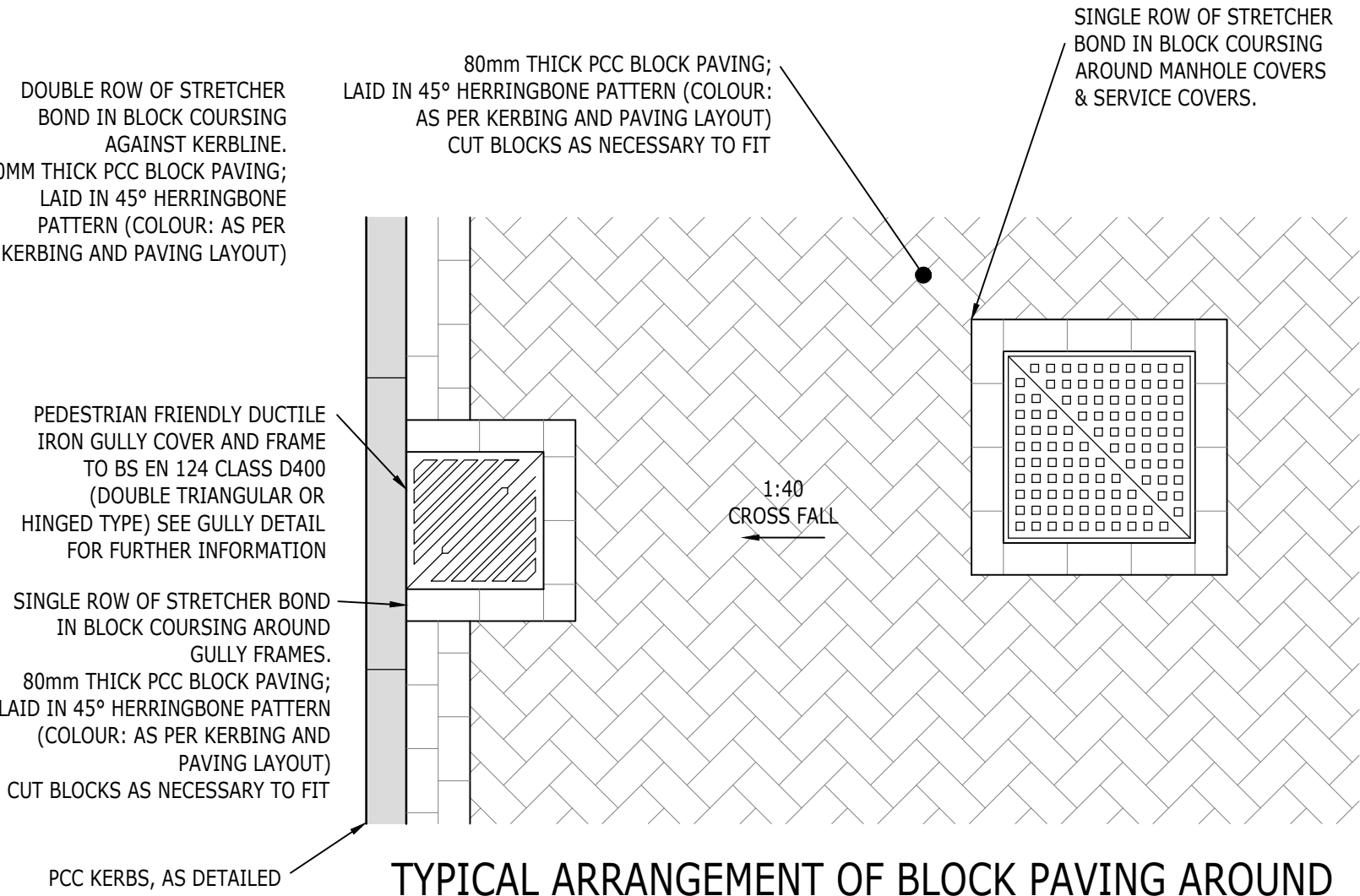
Drawing Title:

CONSTRUCTION DETAILS - SHEET 1

A1 Scale	1:20	Date	30-05-23	Designed by	AMC
Drawn by	MAC	Checked by	AMC	Approved by	AD

Drawing Number
2107940-047

Rev
E



TYPICAL ARRANGEMENT OF BLOCK PAVING AROUND GULLIES & MANHOLES (SERVICE COVERS)
(1:20)

ALL SERVICE COVERS SHOULD BE SQUARE OR RECTANGULAR, NOT CIRCULAR

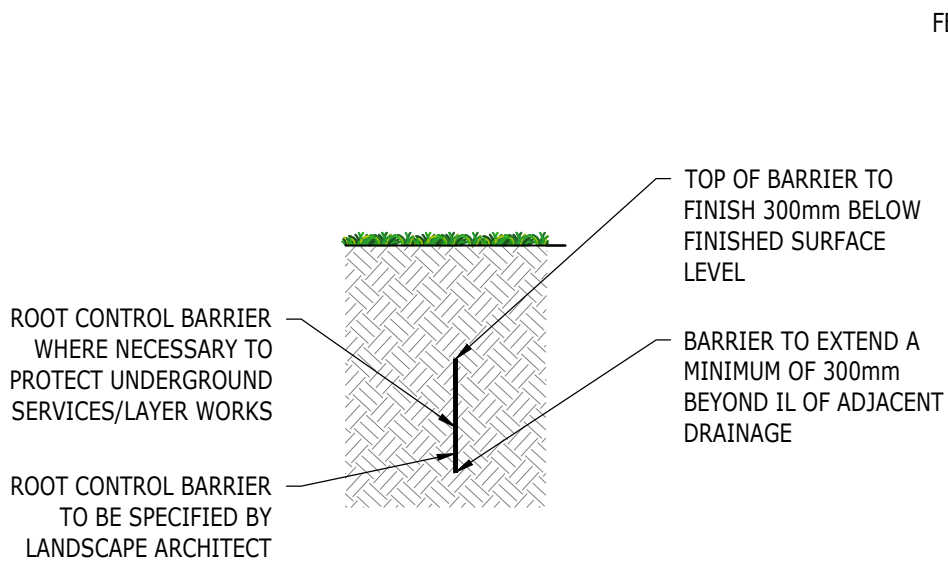
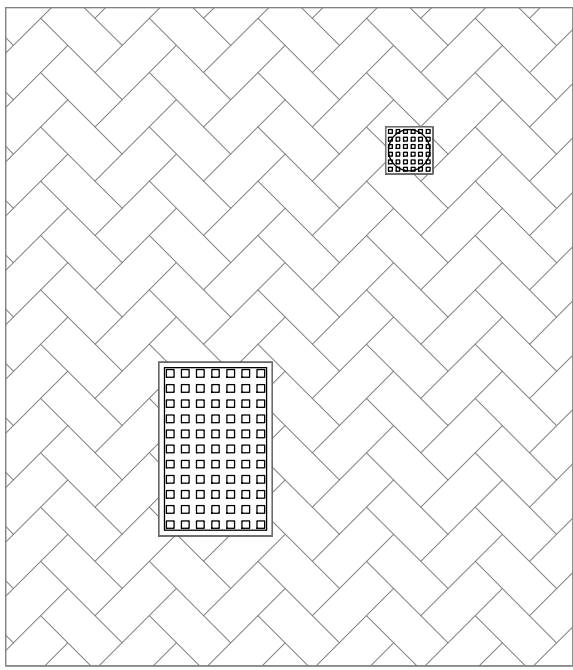
WITH REGARD TO THE ARRANGEMENT OF WATER SERVICE METERS/STOP COCKS, FEWER MANIFOLD TYPE SERVICE BOXES (SERVING MULTIPLE DWELLINGS) SHOULD BE USED IN PREFERENCE TO CLUSTERS OF INDIVIDUAL SERVICE BOXES

LARGE AREAS OF CONCRETE OR MORTAR INFILL AROUND SERVICE COVERS WILL NOT BE PERMITTED

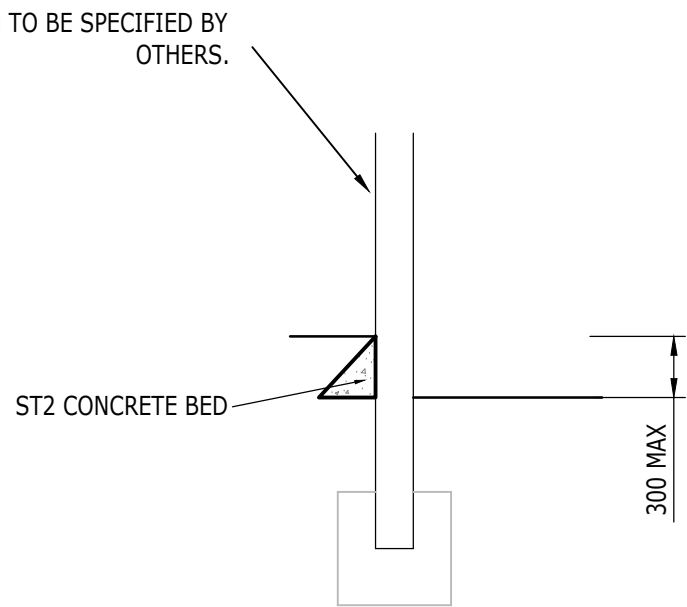
BLOCK PAVING AROUND SERVICE COVERS TO BE CAREFULLY ARRANGED TO AVOID SMALL PIECES OF CUT BLOCKS

LARGER COVERS (GREATER THAN 600mm) TO HAVE SINGLE ROW OF STRETCHER BOND BLOCKS AROUND PERIMETER, AS PER MANHOLES

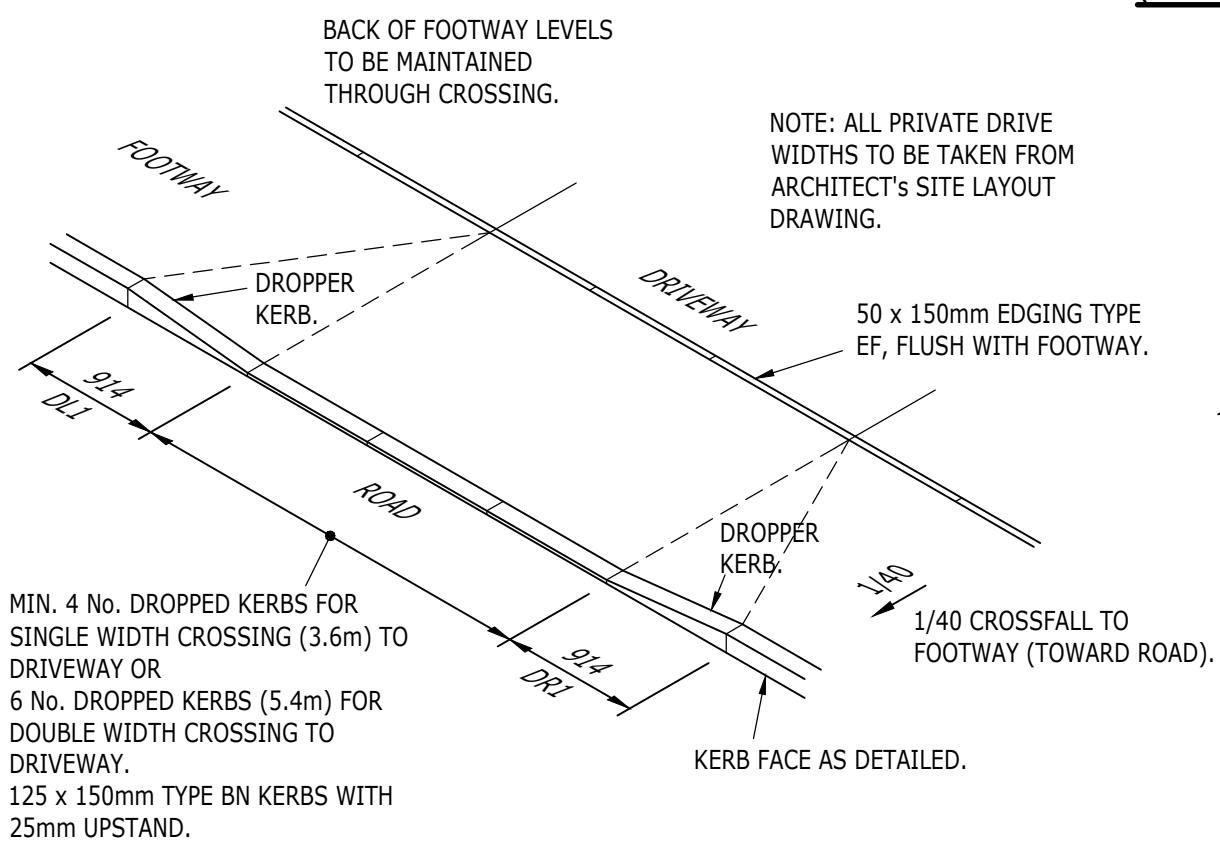
SERVICE COVERS WITHIN BLOCK PAVED AREAS
(1:20)



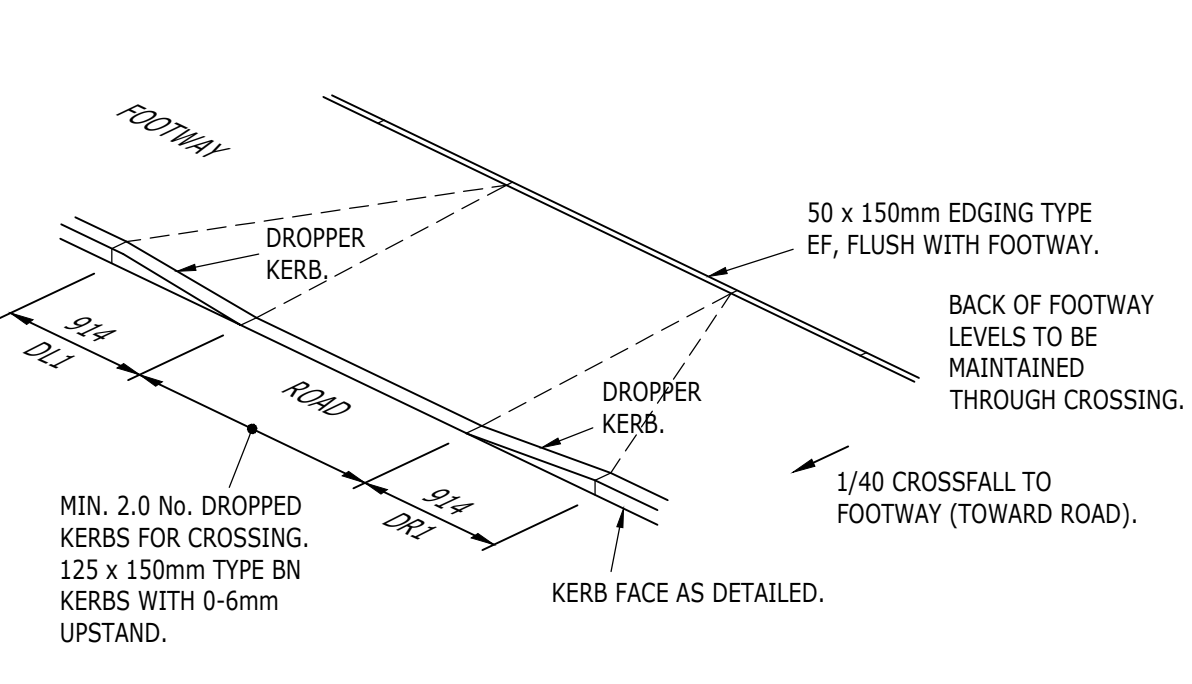
TYPICAL ROOT CONTROL BARRIER SECTION
(1:20)



TIMBER GRAVEL BOAR WALL - WHERE HEIGHT > 150mm

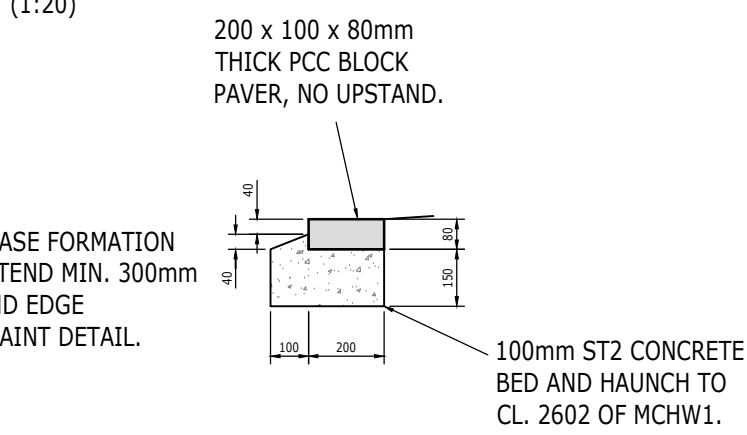


FOOTWAY - TYPICAL VEHICULAR CROSSING DETAIL
(NTS)



FOOTWAY - TYPICAL UNCONTROLLED PEDESTRIAN CROSSING DETAIL
(NTS)

BLOCK PAVED EDGE RESTRAINT

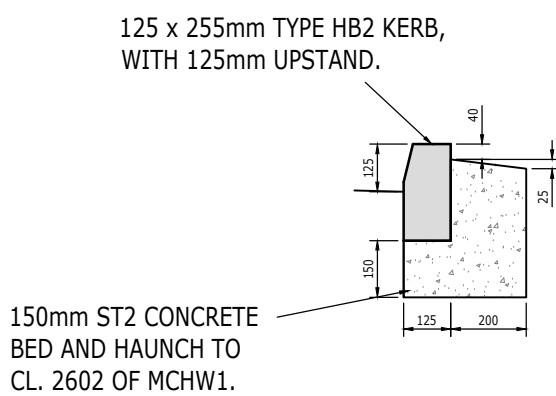
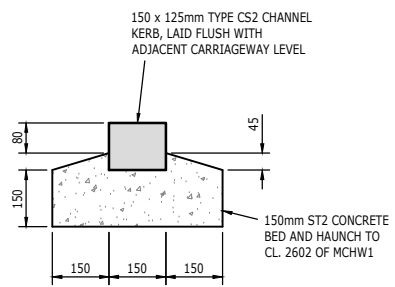


EDGING TYPE EF

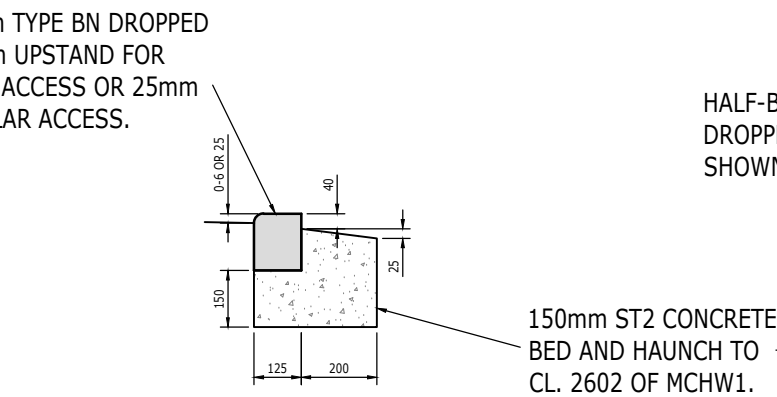
EDGE FACING KERB - EF WITH NO UPSTAND
50 x 150 x 915mm

CHANNEL KERB DETAIL TYPE CS2

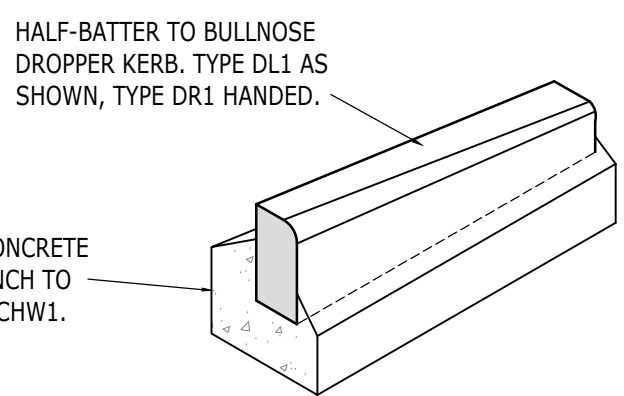
SQUARE CHANNEL KERB - CS2 WITH NO UPSTAND
150 x 125 x 914mm



KERB DETAIL-TYPE HB2



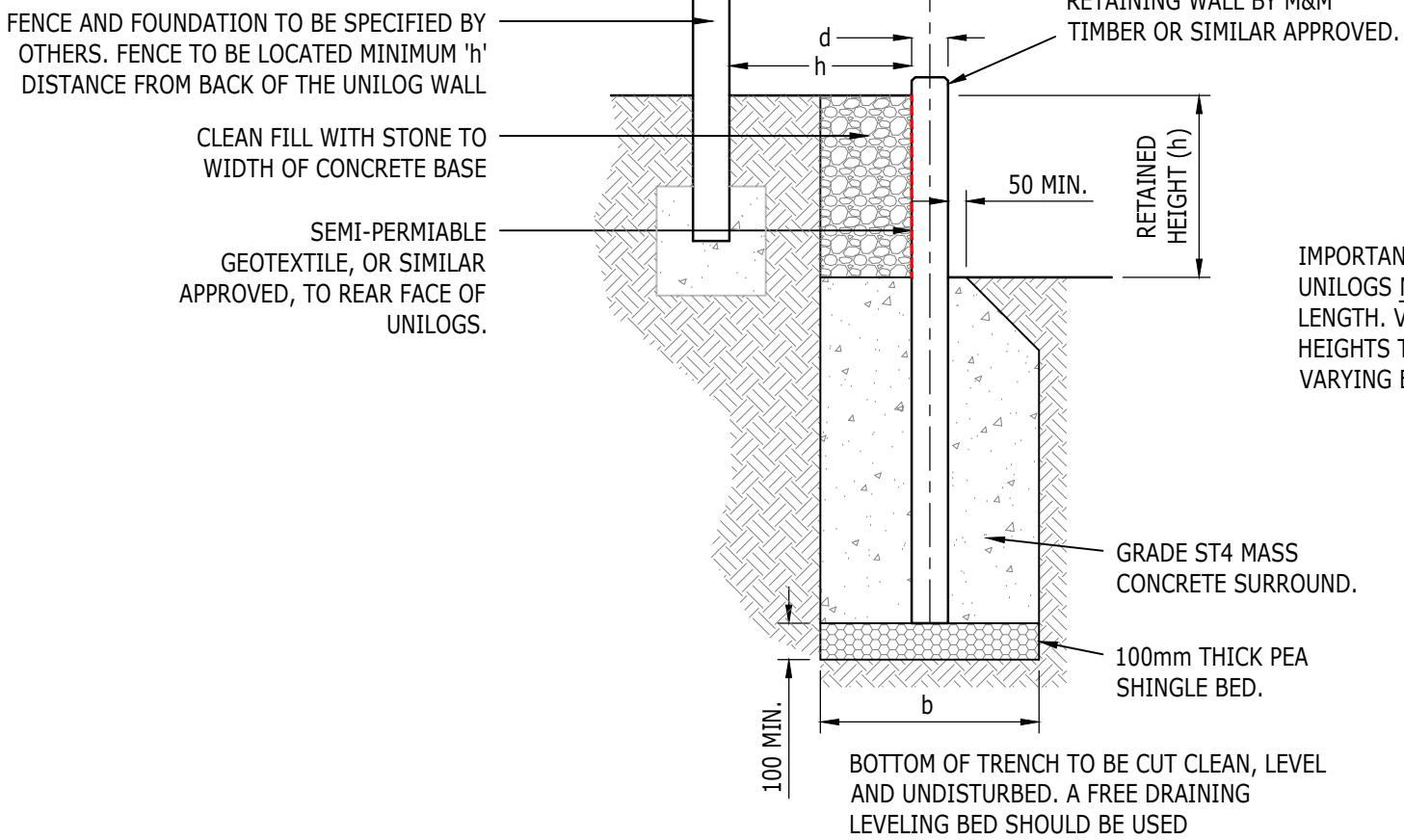
KERB DETAIL-TYPE BN (DROPPED)
REFER TO CONSTRUCTION LAYOUT FOR KEYKRB/ CONCRETE KERB TYPE



DROPPER KERB - TYPE DL1 (& DR1 handed)
TO BE INSTALLED WHERE REQUIRED

CONCRETE HALF-BATTERED KERB - HB2
WITH 125mm UPSTAND 125 x 150 x 915mm

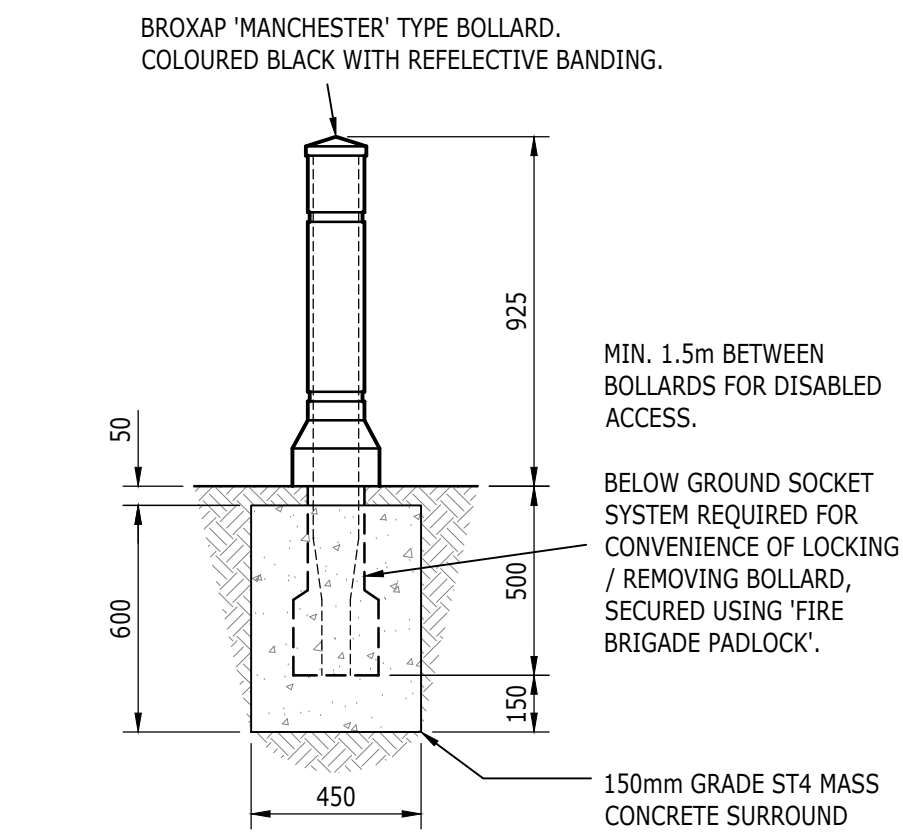
MARSHALLS KEYKERB - KL BN WITH 25mm* UPSTAND
127 x 127 x 200mm
MARSHALLS KEYKERB SMALL - KL BN WITH 25mm* UPSTAND
125 x 100 x 127mm
CONCRETE BULLNOSE KERB - BN25 WITH 25mm UPSTAND
125 x 150 x 915mm
CONCRETE BULLNOSE KERB - BN06 WITH 0-6mm UPSTAND
125 x 150 x 915mm



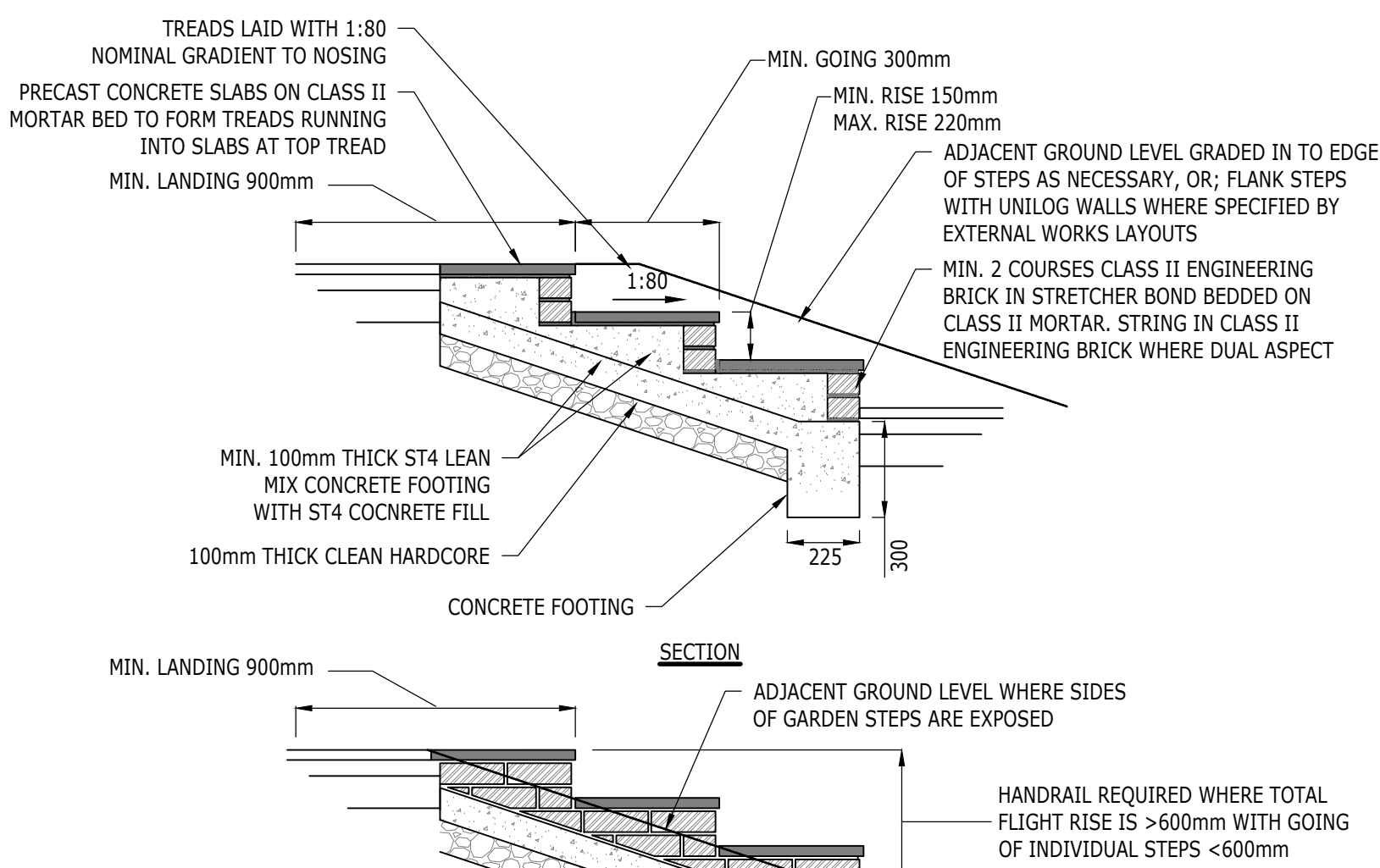
UNILOG RETAINING WALL DETAIL WITH FENCE
(NTS)

IMPORTANT NOTE:
UNILOGS MUST NOT BE CUT TO LENGTH. VARYING RETAINED HEIGHTS TO BE ACHIEVED BY VARYING EMBEDMENT ONLY.

UNILOG WALLS MUST BE INSTALLED IN ACCORDANCE WITH M&M UNILOG PRO INSTALLATION GUIDE AND TRADA REPORT.
REFER TO DRAWING 2107940-250 TO 253 FOR ARDENT SPECIFIED LOG LENGTHS, DIAMETERS AND FOUNDATION DETAILS.



REMOVABLE BOLLARD DETAIL (EMERGENCY ACCESS)
(1:20)



TYPICAL GARDEN STEPS DETAILS
(SCALE 1:20)

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CONSTRUCTION ISSUE

D	ADDED TIMBER GRAVEL BOARD WALL DETAIL	BT	AMC	MR	05.02.24
C	ADDED UNILOG ALL DETAIL	BT	AMC	MR	19-01-24
B	CONSTRUCTION ISSUE	HP	AMC	AD	28-07-23
A	EDITED BLOCK PAVING AROUND GULLIES DETAIL	AMC	AMC	AD	06-06-23
Rev	Description	Drn	Chk	App	Date

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Client	ESQUIRE DEVELOPMENTS				
Project Title:	LAND AT FORD ROAD, ARUNDEL				
Drawing Title:	CONSTRUCTION DETAILS - SHEET 2				
A1 Scale	1:20	Date	30-05-23	Designed by	AMC
Drawn by	MAC	Checked by	AMC	Approved by	AD
Drawing Number	2107940-048				Rev D

TIMBER EDGED STEP & HAND RAIL
DETAILS ONLY TO BE USED IN
PUBLIC OPEN SPACES

TIMBER HAND RAILS TO EDGE OF STEPS WHERE TOTAL
HEIGHT OF FLIGHT IS GREATER THAN 600mm

1200X300X50MM TREATED TIMBER EDGING TO
BS 8417 USE CLASS 4, DURABILITY CLASS 2

1200X300X50mm TREATED TIMBER RISER BOARD
TO BS 8417 USE CLASS 4, DURABILITY CLASS 2

15MM FINE GRAVEL SURFACING 0/5MM TO
CL.1174AR
75MM SELF BINDING GRAVEL TO CL.1174AR

600X50mm TIMBER PEGS

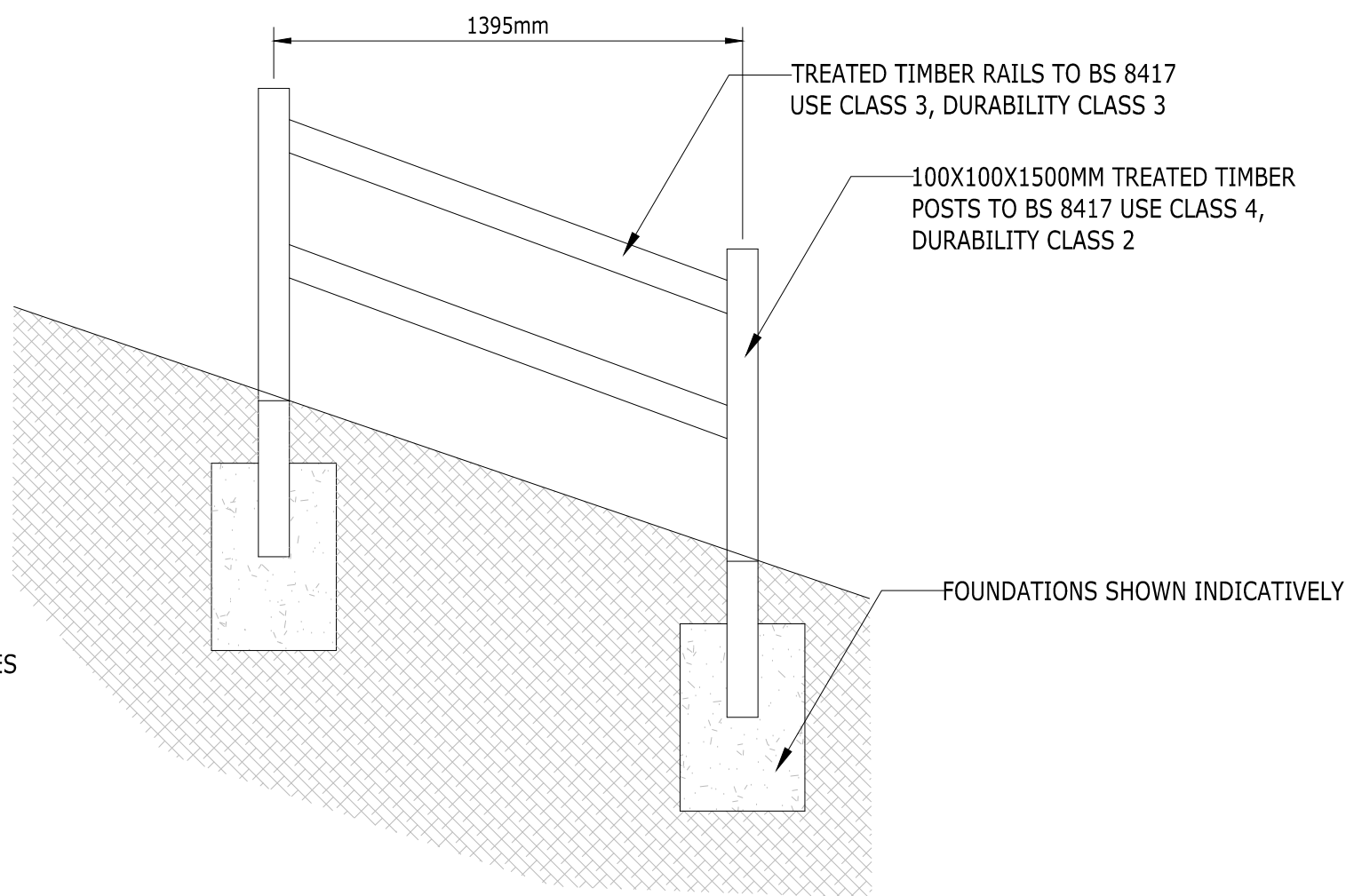
2 NO. CORROSION RESISTANT SCREWS

EXISTING EARTH CUT BACK TO 1:2.8 SLOPE ON ADJACENT SIDES

EXISTING EARTH TO BE CUT TO
SHAPE AND WELL COMPACTED

TIMBER EDGED STEP DETAIL
(PLAN VIEW)
SCALE 1:20

TIMBER EDGED STEP DETAIL
(SECTION VIEW)
SCALE 1:20



TIMBER HAND RAIL
SCALE 1:20

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CONSTRUCTION
ISSUE

A	CONSTRUCTION ISSUE	HP	AMC	AD	28-07-23
Rev	Description	Drn	Chk	App	Date

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ESQUIRE DEVELOPMENTS

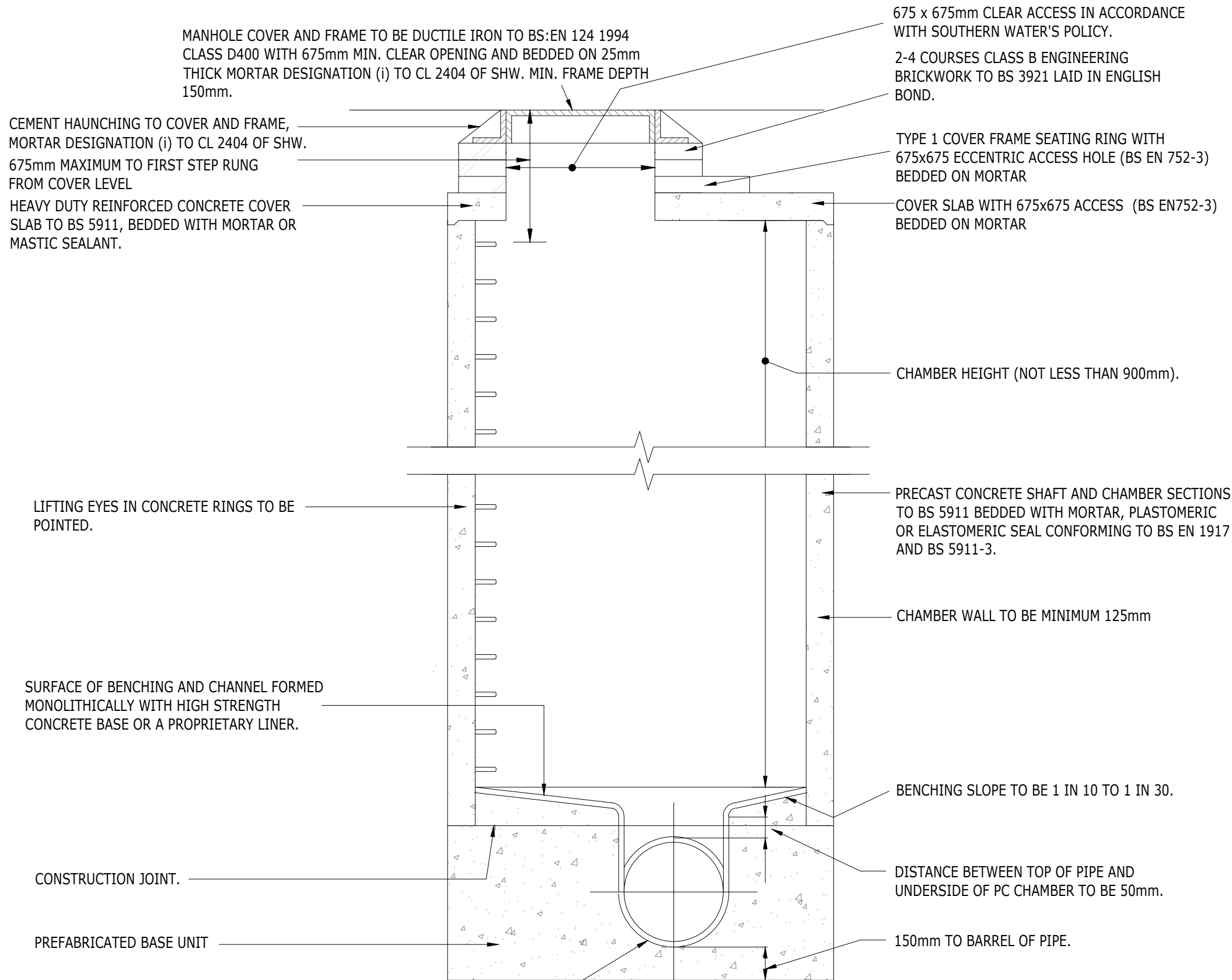
Project Title:

LAND AT FORD ROAD,
ARUNDEL

Drawing Title:

CONSTRUCTION DETAILS - SHEET 3

A1 Scale	Date	Designed by
1:20	07-06-23	AMC
Drawn by	Checked by	Approved by
MAC	AMC	AD
Drawing Number	2107940-049	Rev A



MANHOLE TYPE B
PREFABRICATED BASE UNIT AND WIDEWALL CHAMBER
(MAX DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 1.5m - 3.0m)

PIPE DIA	TRENCH WIDTH MEASURED 300mm ABOVE PIPE SOFFIT
100	550
150	600
225	700

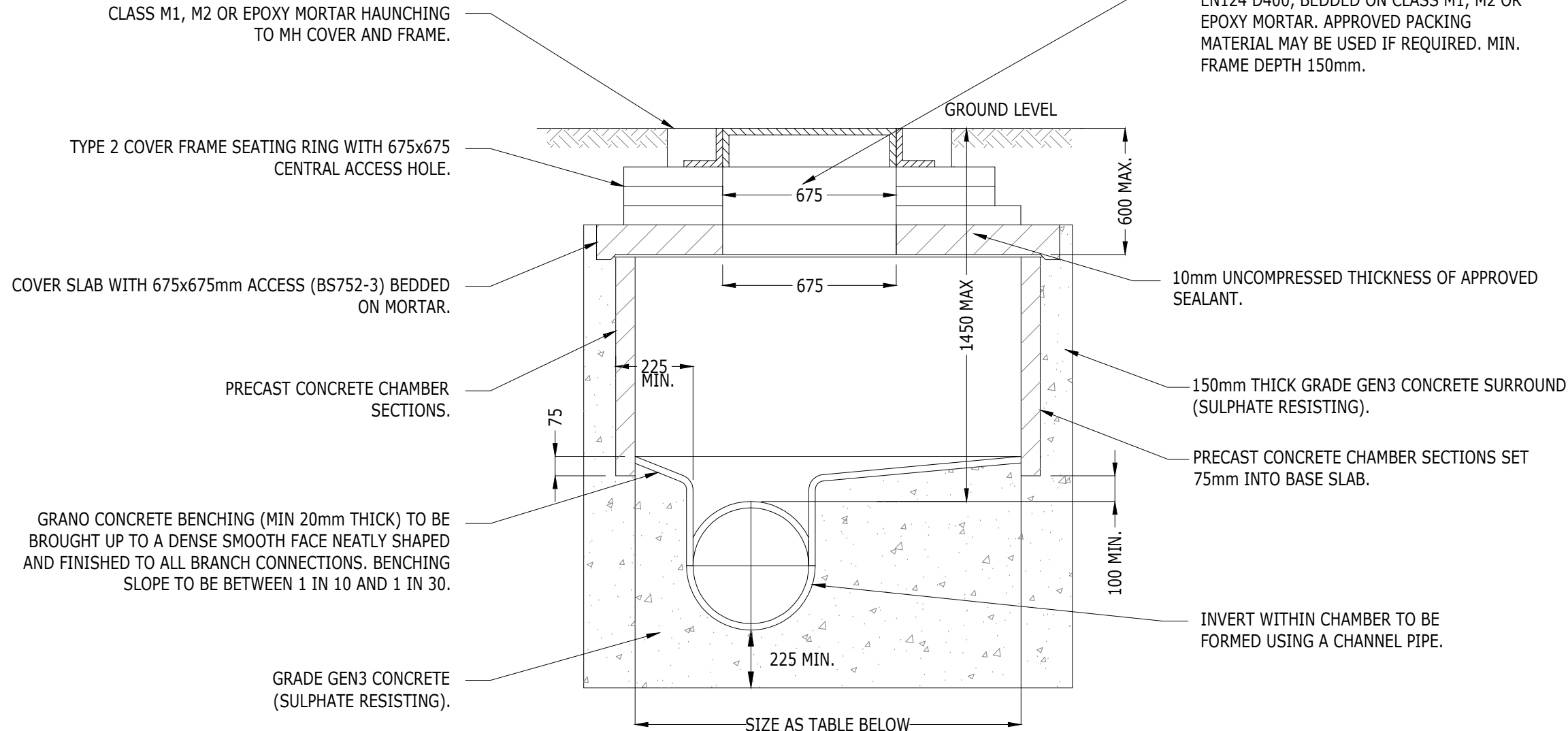
- NOTES:
- 1) BEDDING AT SIDES OF PIPES TO BE WELL COMPACTED
 - 2) BEDDING/BACKFILL DIRECTLY ABOVE PIPE TO BE LIGHTLY COMPACTED BY HAND
 - 3) DIMENSION X IS THE EXTERNAL DIAMETER OF THE PIPE
 - 4) DIMENSION Y=D/6 OR 150mm WHICHEVER IS THE GREATER (400 MAX)
 - 5) WHERE APPROPRIATE GEOTEXTILES MAY BE USED TO CONTAIN BEDDING MATERIAL E.G. IN RUNNING SAND
 - 6) PIPES WITH COVER OF LESS THAN 1.2m ARE TO BE PROTECTED WITH CLASS Z CONCRETE BED AND SURROUND.
 - 7) IF TRADITIONAL PC RINGS USED IN LIEU OF WIDEWALL CHAMBER 150mm THICK GEN 3 CONCRETE SURROUND REQUIRED.

PIPE DIA	ROCKER PIPE LENGTH
150 - 600	0 - 0.6m
601- 750	0.6 - 1.0m
>750	1.25m

TABLE B

DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 700	1500
750 - 900	1800
>900	2100

TABLE C

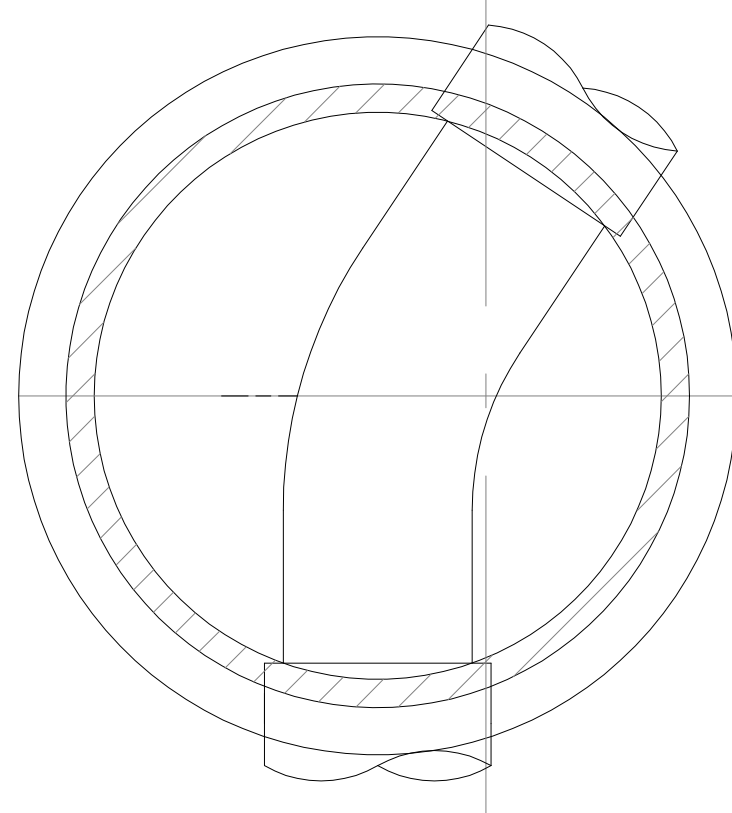


SHAFT DIAMETERS	
DIA OF LARGEST PIPE IN MH (mm)	INTERNAL DIA. OF MH (mm)
LESS THAN 375	1200

NOTE:
IF PIPE DIAMETER IS 375mm OR ABOVE USE 1500mm DIAMETER TYPE B.

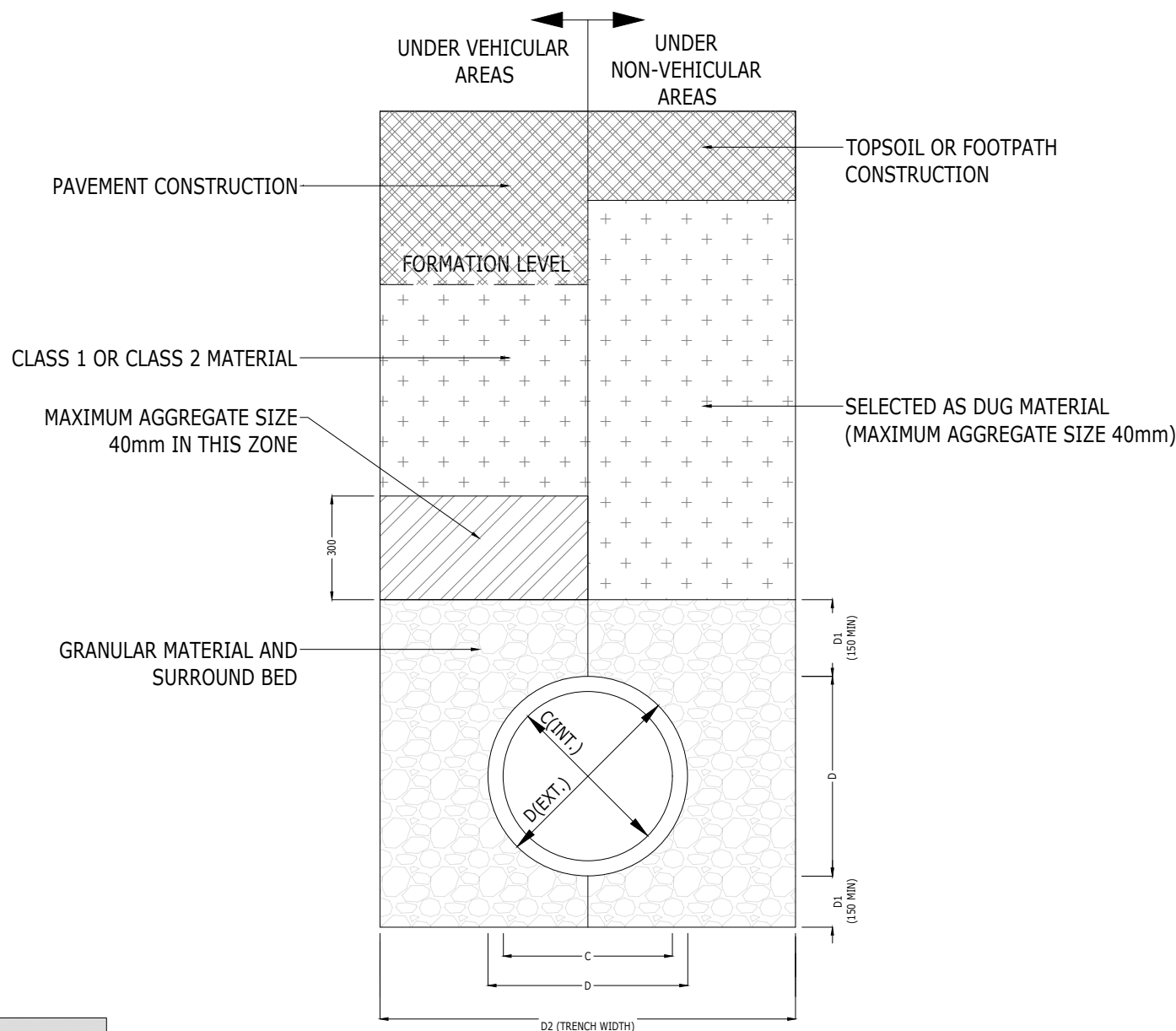
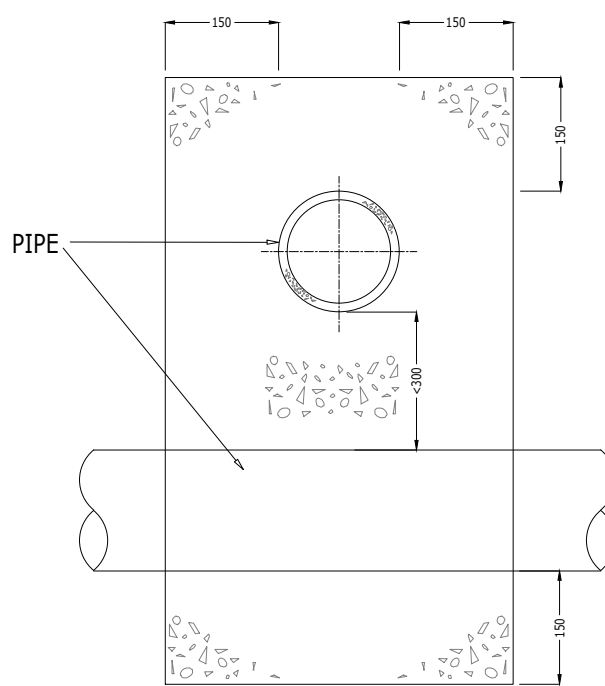
TABLE 3
TYPE A MATERIAL

GRANULAR BEDDING AND SIDEFILL MATERIALS FOR FLEXIBLE PIPES	
PIPE DIA. (mm)	GRADING
150	10 OR 14 SINGLE SIZE OR 14 TO 5mm GRADED
225 300	10, 14 OR 20mm SINGLE SIZE OF 14 TO 5mm GRAGED OR 20 TO 5mm GRADED
375 450 525	14 OR 20mm SINGLE SIZE OF 14 TO 5mm GRAGED OR 20 TO 5mm GRADED
GREATER THAN 600	14, 20 OR 40mm SINGLE SIZE OF 14 TO 5mm GRAGED OR 20 TO 5mm GRADED OR 40 TO 5mm GRADED



ALL PIPES ENTERING OR LEAVING MANHOLES SHALL HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE INSIDE FACE OF THE MANHOLE. THE NEXT PIPE SHALL BE A SHORT "ROCKER PIPE" 600mm LONG.

NB: REFER TO TYPE 2 DETAIL FOR MORE INFORMATION ON JOINTS



CLASS S PIPE BEDDING & SURROUND
(N.T.S.)

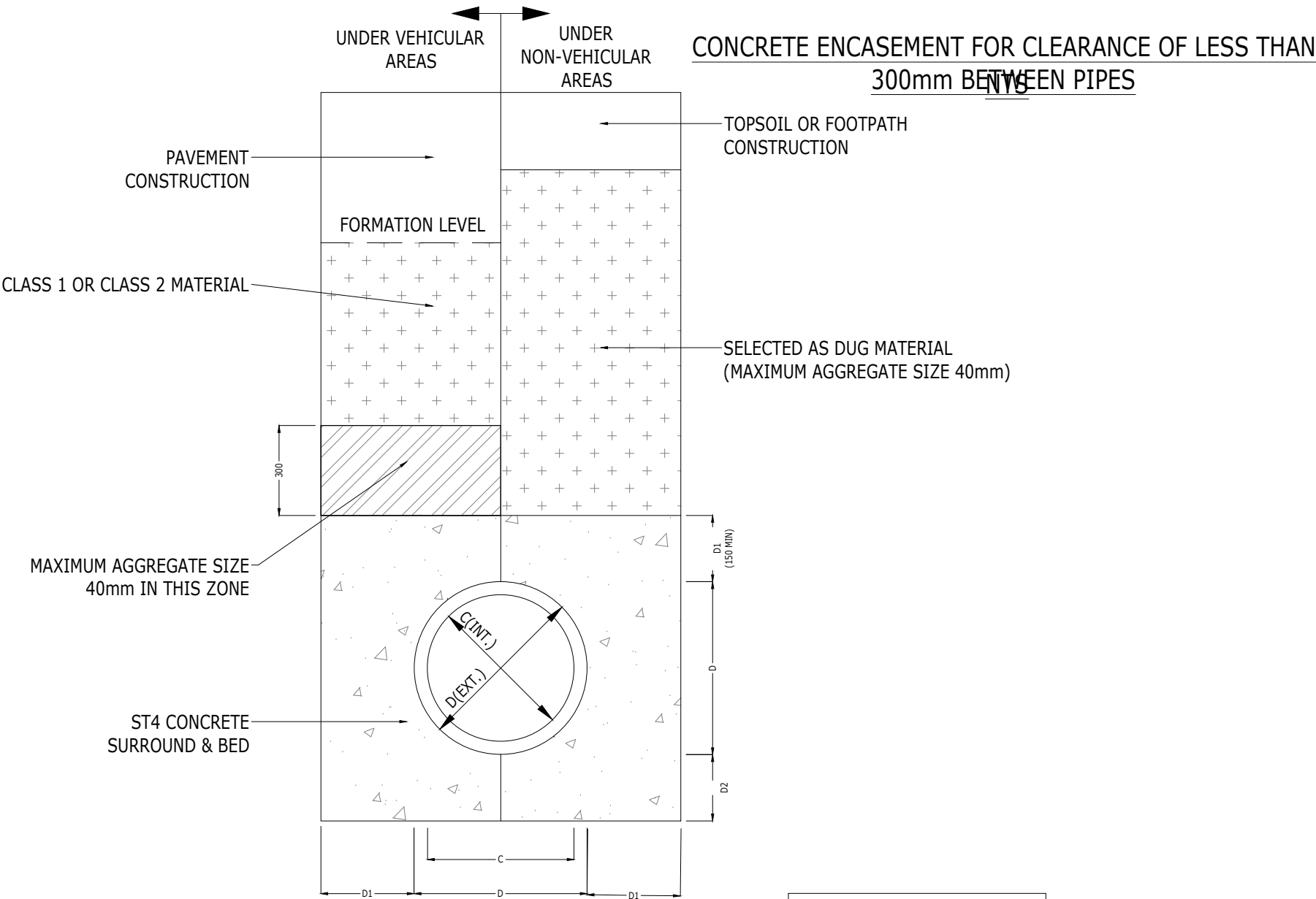
TO BE USED UNDER:

1. EXTERNAL VEHICULAR AREAS WHERE COVER TO PIPE SOFFIT IS GREATER THAN 1200mm
2. ALL EXTERNAL NON-VEHICULAR AREAS WHERE COVER TO PIPE SOFFIT IS GREATER THAN 900mm

NOTE:
ALL PIPEWORK SHALL HAVE FLEXIBLE COUPLINGS (UNLESS STATED OTHERWISE)

TABLE 2

MIN. GRANULAR BED		
PIPE Ø (C) (mm)	D1 (mm)	D2 (mm)
100	150	600
150	150	600
225	150	700
300	150	850
375	150	1050
450	150	1150
525	150	1200
600	150	1350
750	150	1500



CLASS Z PIPE BEDDING & SURROUND
(N.T.S.)

TO BE USED UNDER:

1. EXTERNAL VEHICULAR AREAS (**EXCEPT ADOPTABLE HIGHWAYS**) WHERE COVER TO PIPE SOFFIT IS LESS THAN 1200mm
2. ALL EXTERNAL NON-VEHICULAR AREAS WHERE COVER TO PIPE SOFFIT IS EQUAL TO OR LESS THAN 600mm

NOTE:
ALL PIPEWORK WITH CLASS Z SURROUND SHALL HAVE FLEXIBLE COUPLINGS WITH FLEXI-BOARDS ON ALL JOINTS

MIN. CONCRETE ENCASEMENT		
PIPE Ø (C) (mm)	D1 (mm)	D2 (mm)
100-600	150	150

TABLE 3

MANHOLE DETAILS SHOWN ARE INTERCHANGEABLE WITH ANY DETAIL SHOWN IN SEWER SECTOR GUIDANCE APPENDIX C WITH THE SAME TYPE DESIGNATED ON THE MANHOLE SCHEDULE

DRAINAGE NOTES

1. LATERAL PIPES TO BE 1000 UNLESS OTHERWISE SPECIFIED.
2. LATERAL PIPES TO BE INSTALLED AT MINIMUM 1:80 GRADIENT. INCLUDING THOSE FROM SVP AND RWFS.
3. PPIC CHAMBER ASSUMED TO BE EQUAL BASE TYPE WITH NO INTERNAL FALL
4. All MANHOLES AND INSPECTION CHAMBERS TO BE INSTALLED IN ACCORDANCE WITH THE SEWER SECTOR GUIDANCE APPENDIX C TYPE AS SHOWN. MANHOLE INSTALLATION CAN VARY FROM DETAIL SHOWN, I.E. A TYPE A MANHOLE CAN BE INSTALLED IN ACCORDANCE WITH SSG APPENDIX C FIGURE B4, B5, B6, B7, OR B8 AS LONG AS THE NOTES AT THE TOP OF THE FIGURE APPLY TO THE POSITION OF THE MANHOLE I.E. FIGURE B19 WOULD NOT BE CONSTRUCTED IN A ROAD BUT COULD BE CONSTRUCTED IN A DRIVEWAY, AND B20 COULD BE CONSTRUCTED IN A HIGHWAY. ALL UNDERGROUND BENDS SHOULD BE CONSTRUCTED OUT OF LOW RADII BENDS WITH MINIMUM 400mm INTERNAL RADII TO ALLOW FOR RODDING.
6. ALL THERMOPLASTIC PIPES TO COMPLY WITH WITH THE RELEVANT PROVISIONS OF BS EN 1401-1 (PVC-U), BS EN 1852-1 (PP), OR BS EN 12666-1 (PE) AS APPROPRIATE.
7. UNREINFORCED AND REINFORCED CONCRETE PIPES AND FITTINGS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 1916 AND BS 5911-1 AND SHALL BE MANUFACTURED FROM CONCRETE WITH A DESIGN CHEMICAL CLASS DC-4.
8. PIPES UP TO 3000 SHOULD BE CONSTRUCTED OF U-PVC TYPE MATERIAL. PIPES >3000 SHOULD BE CONSTRUCTED OF CONCRETE OR OTHER IN ACCORDANCE WITH SEWER SECTOR GUIDANCE.
9. WHERE INSTALLING PIPES SOFFIT TO SOFFIT BETWEEN DIFFERING PIPE SIZES WOULD CAUSE THE GRADIENT TO FALL BELOW THE MINIMUM DESIRABLE GRADIENT, I.E. 1:80 FOR A 100mm, THE PIPES SHOULD BE INSTALLED INVERT TO INVERT.
10. SVPs FOR WET ROOMS TO BE CAPPED AT FLOOR LEVEL TO PREVENT SMELL INGRESS UNLESS CONVERTED INTO WETROOM. ONLY APPLICABLE TO ACCESSIBLE PLOTS IN FLATS.

TENDER ISSUE

A	CONSTRUCTION ISSUE	AMC	AMC	AD	28-07-23
-	FIRST ISSUE	AMC	AMC	AD	30-05-23
Rev	Description	Drn	Chk	App	Date

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SSIP

ISO 9001
BUREAU VERITAS
CERTIFICATION

Client

ESQUIRE DEVELOPMENTS

Project Title:

**LAND AT FORD ROAD,
ARUNDEL**

Drawing Title:

DRAINAGE DETAILS - SHEET 1

A1 Scale

Date

Designed by

1:250

30-05-23

AMC

Drawn by

Checked by

Approved by

AMC

AMC

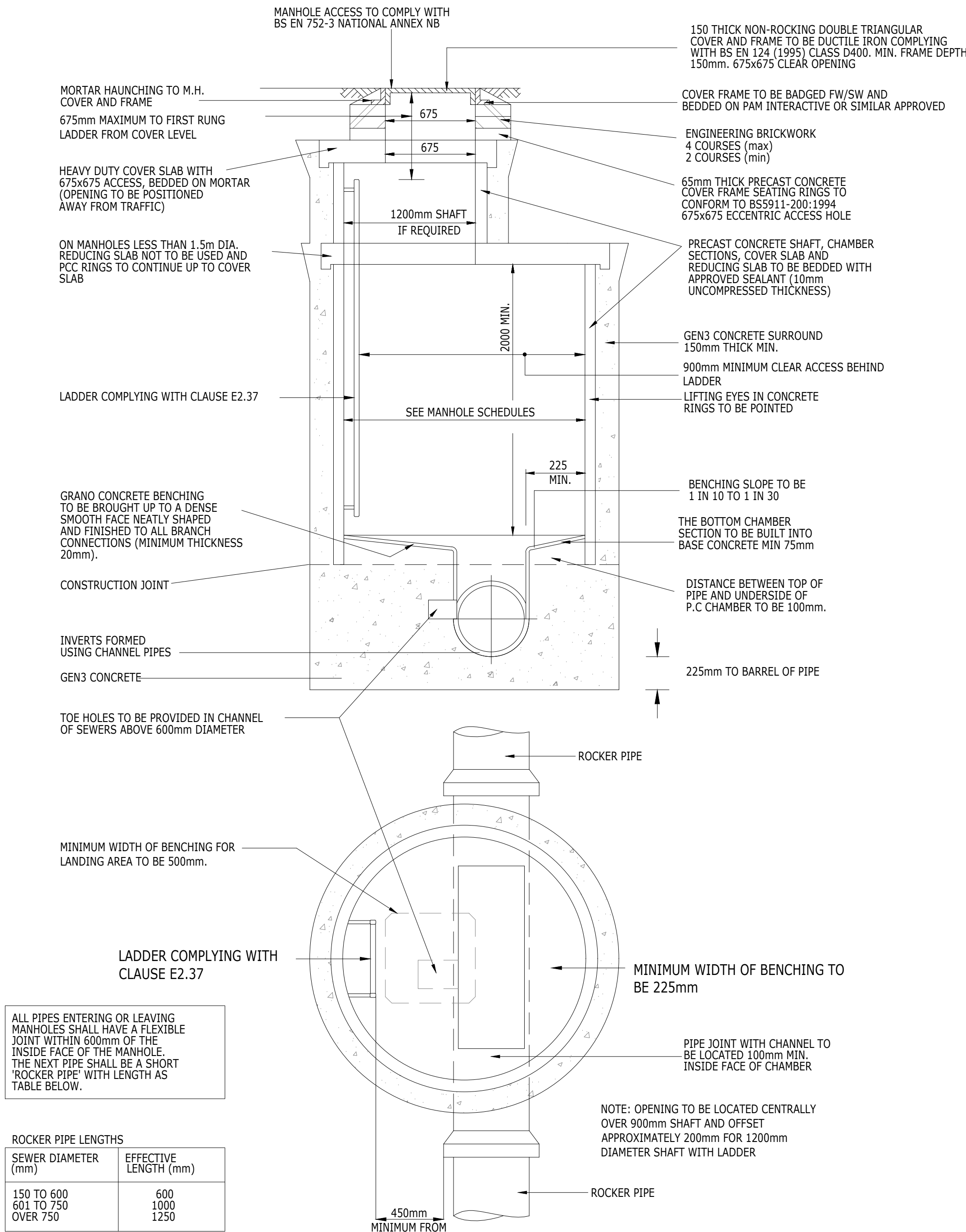
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Drawing Number

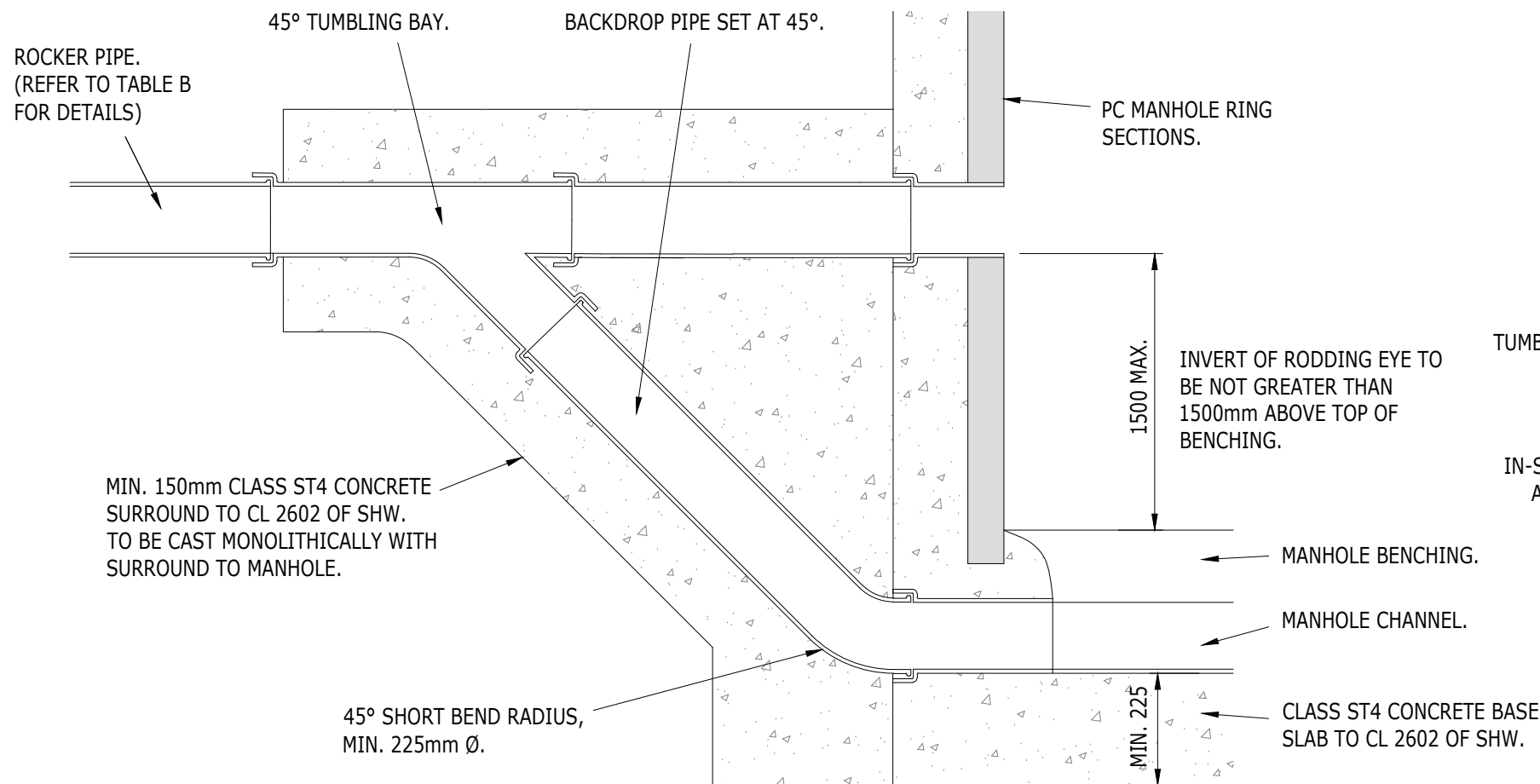
2107940-053

Rev

A



MANHOLE TYPE A
(MAX DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3.0 - 6.0m)

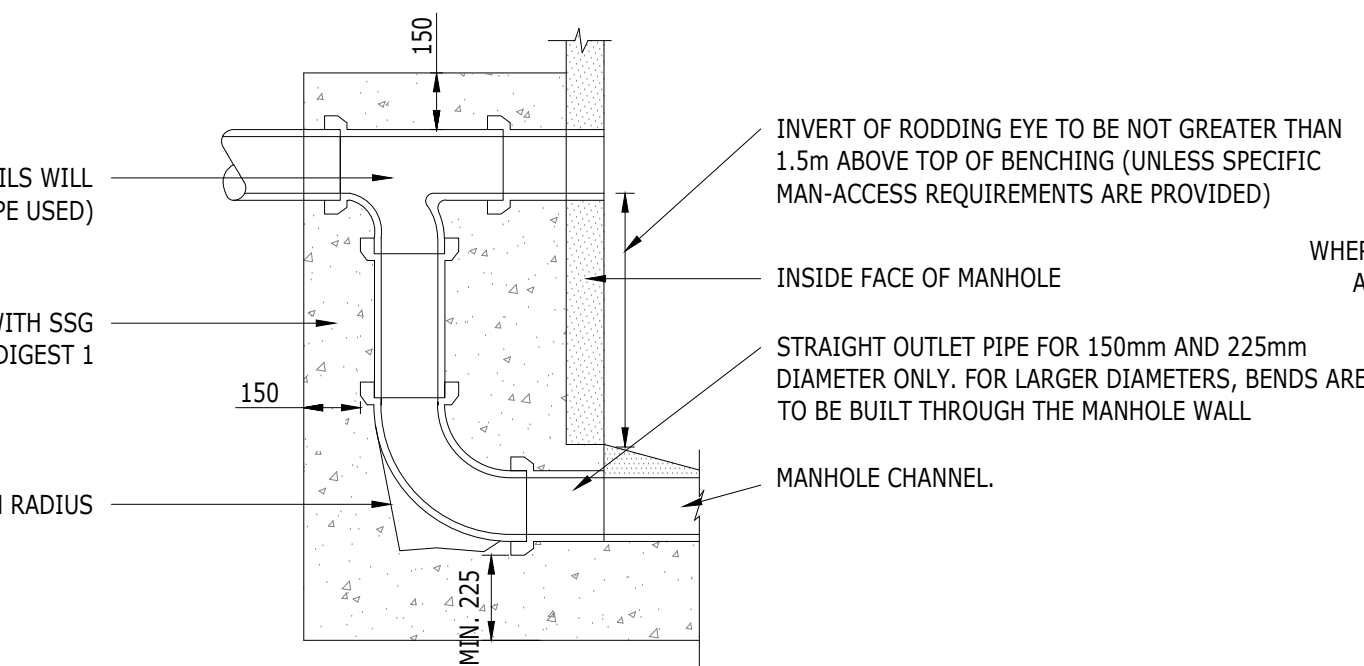


BACKDROP DETAIL
(PRIVATE CONNECTION MIN. 150mm PIPE DIA.)

TUMBLING BAY JUNCTION (ACTUAL DETAILS WILL BE DEPENDENT ON THE TYPE OF PIPE USED)

IN-SITU GEN3 CONCRETE COMPLYING WITH SSG APPENDIX C E4.1 AND BRE SPECIAL DIGEST 1

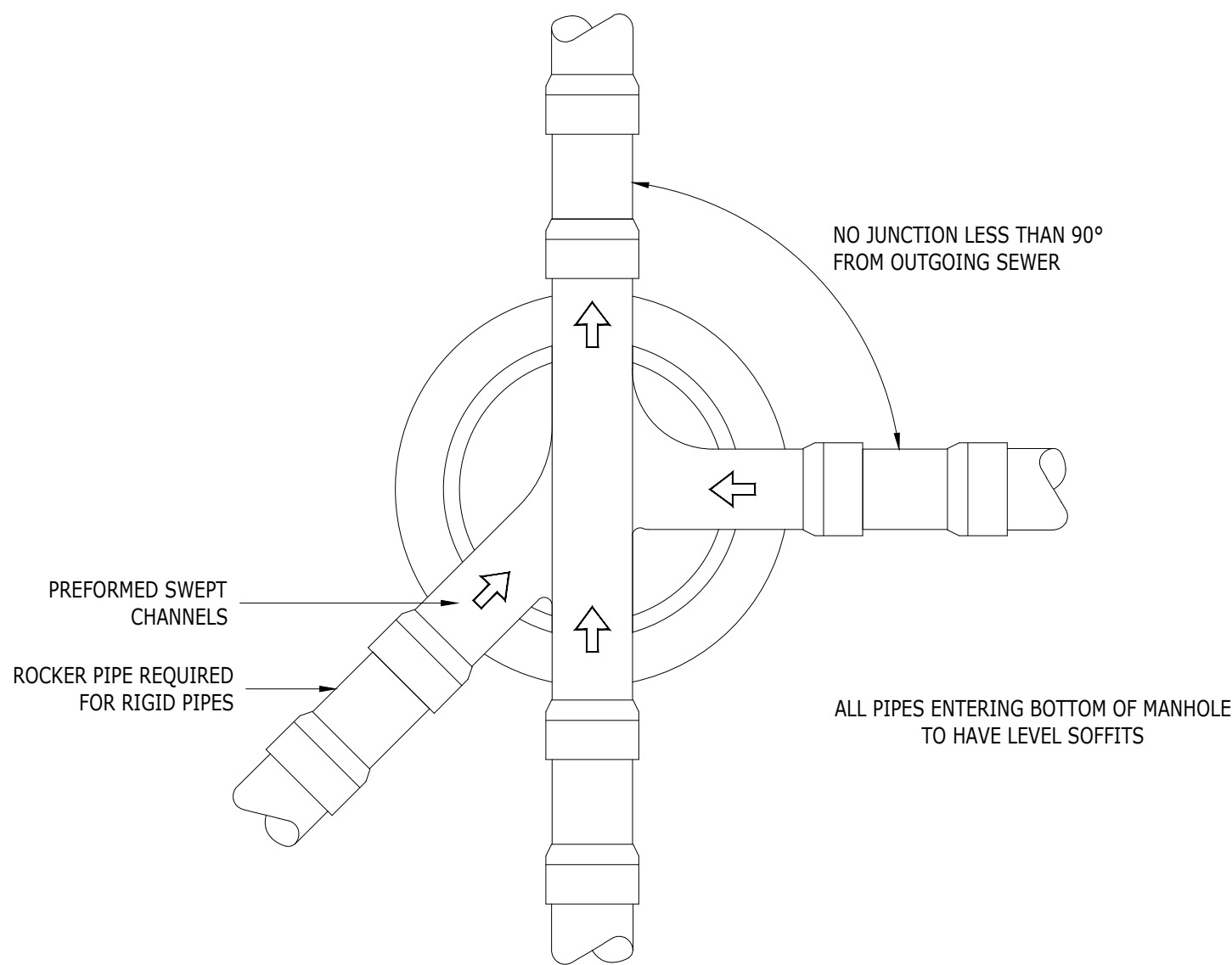
REST BEND 210mm MINIMUM RADIUS



TYPICAL VERTICAL BACKDROP DETAIL (RIGID MATERIALS)
FOR USE IN MANHOLE TYPES A TO D

TABLE 4 BS EN 124 CLASSIFICATION - DRAINAGE CHAMBERS

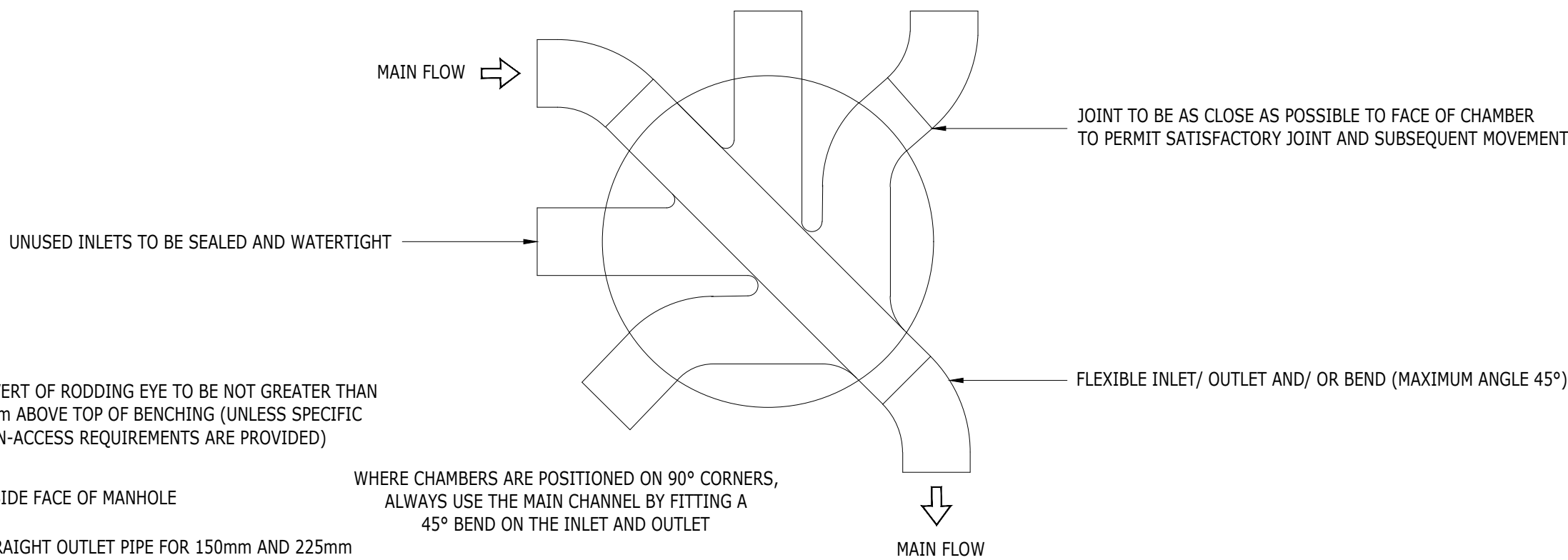
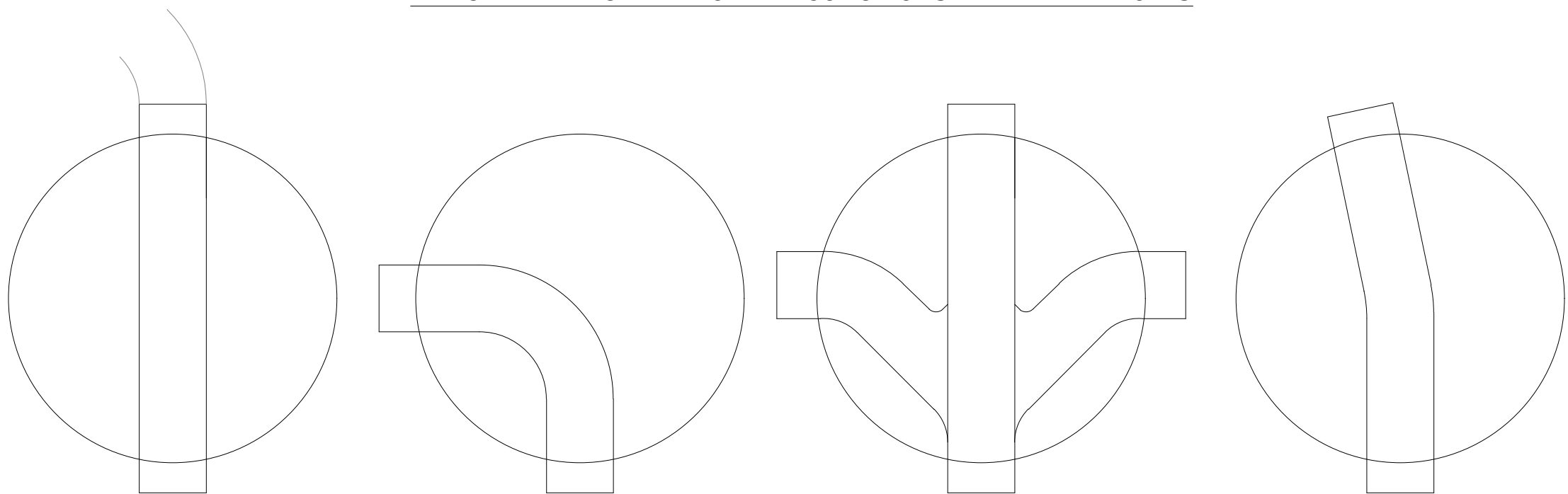
GROUP	CLASS	PLACE OF INSTALLATION
1	MIN. A 15	GARDEN AREAS OF PRIVATE HOUSES ONLY
2	MIN. B 125	FOOTWAYS, PARKING BAYS, AMENITY AREAS AND AREAS OF LANDSCAPING
3	MIN. C 250	N/A
4	MIN. D 400	ALL ESTATE ROADS AND PARKING ACCESS ROADS



RIGID PIPES BUILT INTO MANHOLE SHOULD HAVE A FLEXIBLE JOINT AS CLOSE AS FEASIBLE TO THE EXTERNAL FACE OF THE STRUCTURE AND THE LENGTH OF THE NEXT ROCKER PIPE SHOULD BE AS SHOWN

NOMINAL DIAMETER (mm)	MAX. EFFECTIVE LENGTH (m)
150 - 600	0.60
601 - 750	1.00
OVER 750	1.25

TYPICAL ARRANGEMENT OF PIPE JUNCTIONS WITHIN MANHOLES



WHERE CHAMBERS ARE POSITIONED ON 90° CORNERS, ALWAYS USE THE MAIN CHANNEL BY FITTING A 45° BEND ON THE INLET AND OUTLET

NOTE : WHERE A BEND IS USED IMMEDIATELY OUTSIDE THE MANHOLE, THIS MAY BE USED AS THE ROCKER PIPE

ALTERNATIVE BASE LAYOUTS FOR TYPE D CHAMBERS

MANHOLE DETAILS SHOWN ARE INTERCHANGEABLE WITH ANY DETAIL SHOWN IN SEWER SECTOR GUIDANCE APPENDIX C WITH THE SAME TYPE DESIGNATED ON THE MANHOLE SCHEDULE

DRAINAGE NOTES

- LATERAL PIPES TO BE 1000 UNLESS OTHERWISE SPECIFIED.
- LATERAL PIPES TO BE INSTALLED AT MINIMUM 1:80 GRADIENT. INCLUDING THOSE FROM SVP AND RWFS.
- PPIC CHAMBER ASSUMED TO BE EQUAL BASE TYPE WITH NO INTERNAL FALL
- ALL MANHOLES AND INSPECTION CHAMBERS TO BE INSTALLED IN ACCORDANCE WITH THE SEWER SECTOR GUIDANCE APPENDIX C TYPE AS SHOWN. MANHOLE INSTALLATION CAN VARY FROM DETAIL SHOWN, I.E. A TYPE A MANHOLE CAN BE INSTALLED IN ACCORDANCE WITH SSG APPENDIX C FIGURE B4, B5, B6, B7, OR B8 AS LONG AS THE NOTES AT THE TOP OF THE FIGURE APPLY TO THE POSITION OF THE MANHOLE I.E. FIGURE B19 WOULD NOT BE CONSTRUCTED IN A ROAD BUT COULD BE CONSTRUCTED IN A DRIVEWAY, AND B20 COULD BE CONSTRUCTED IN A HIGHWAY.
- ALL UNDERGROUND BENDS SHOULD BE CONSTRUCTED OUT OF LOW RADII BENDS WITH MINIMUM 400mm INTERNAL RADII TO ALLOW FOR RODDING.
- ALL THERMOPLASTIC PIPES TO COMPLY WITH WITH THE RELEVANT PROVISIONS OF BS EN 1401-1 (PVC-U), BS EN 1852-1 (PP), OR BS EN 12666-1 (PE) AS APPROPRIATE.
- UNREINFORCED AND REINFORCED CONCRETE PIPES AND FITTINGS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 1916 AND BS 5911-1 AND SHALL BE MANUFACTURED FROM CONCRETE WITH A DESIGN CHEMICAL CLASS DC-4.
- PIPES UP TO 3000 SHOULD BE CONSTRUCTED OF U-PVC TYPE MATERIAL. PIPES >3000 SHOULD BE CONSTRUCTED OF CONCRETE OR OTHER IN ACCORDANCE WITH SEWER SECTOR GUIDANCE.
- WHERE INSTALLING PIPES SOFFIT TO SOFFIT BETWEEN DIFFERING PIPE SIZES WOULD CAUSE THE GRADIENT TO FALL BELOW THE MINIMUM DESIRABLE GRADIENT, I.E. 1:80 FOR A 100mm, THE PIPES SHOULD BE INSTALLED INVERT TO INVERT.
- SVPs FOR WET ROOMS TO BE CAPPED AT FLOOR LEVEL TO PREVENT SMELL INGRESS UNLESS CONVERTED INTO WETROOM. ONLY APPLICABLE TO ACCESSIBLE PLOTS IN FLATS.

CONSTRUCTION ISSUE

A	CONSTRUCTION ISSUE	AMC	AMC	AD	28-07-23
-	FIRST ISSUE	AMC	AMC	AD	30-05-23
Rev	Description	Drn	Chk	App	Date

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Client

ESQUIRE DEVELOPMENTS

Project Title:

LAND AT FORD ROAD,
ARUNDEL

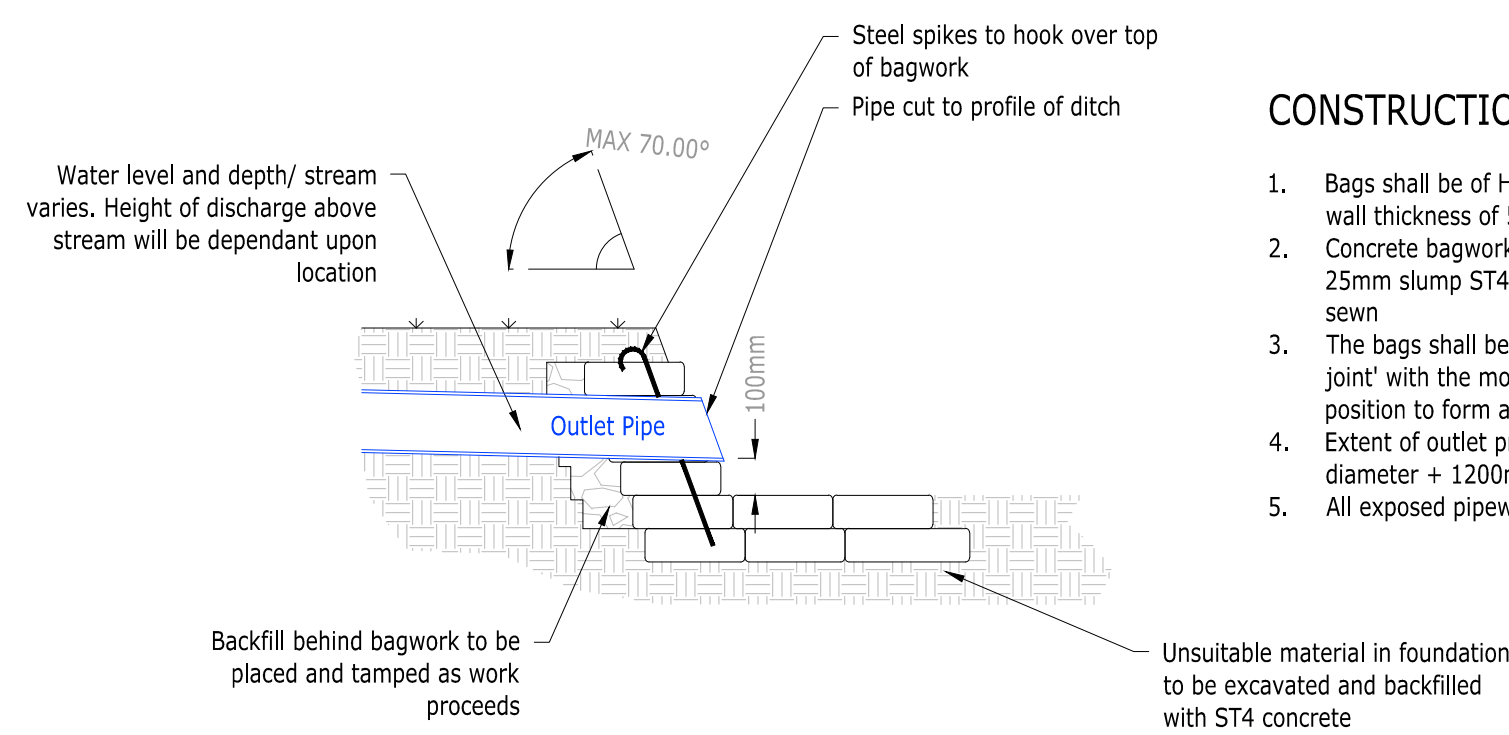
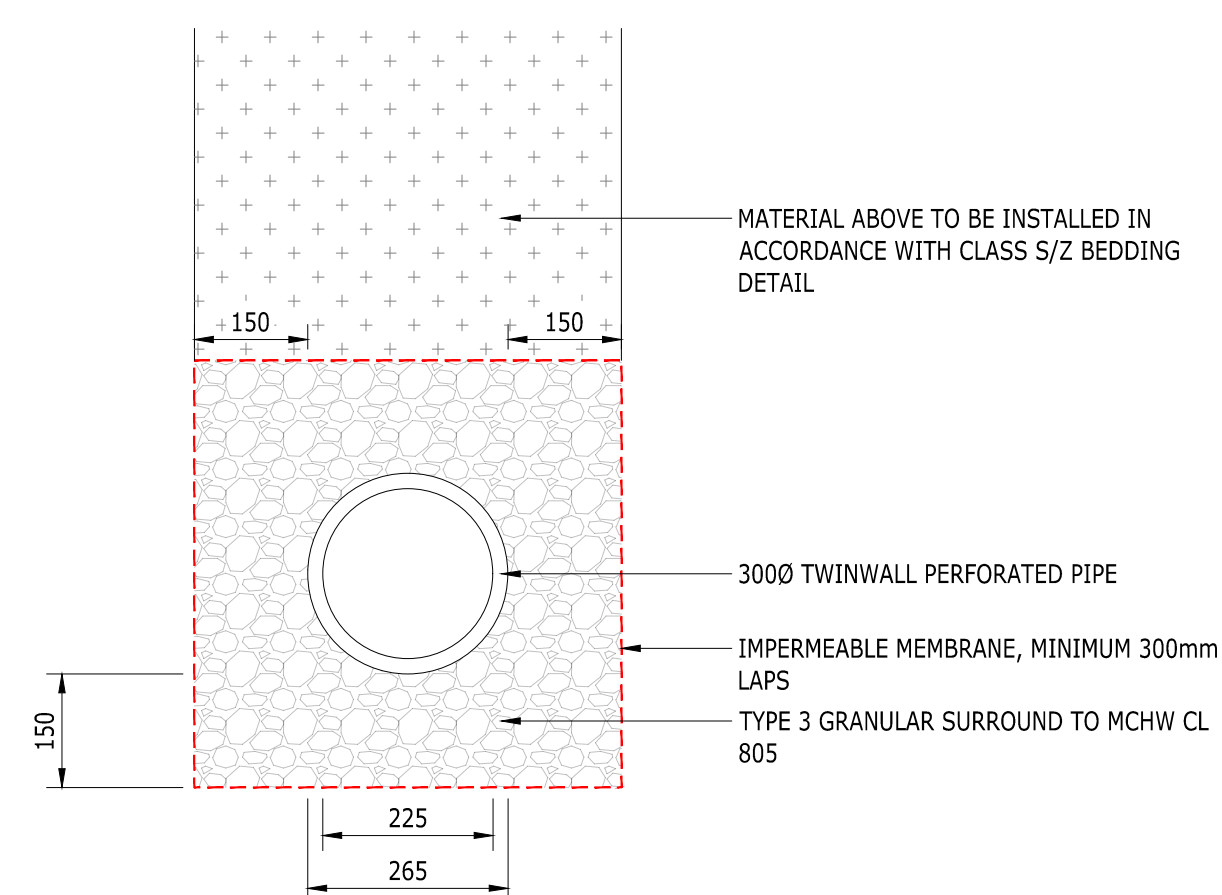
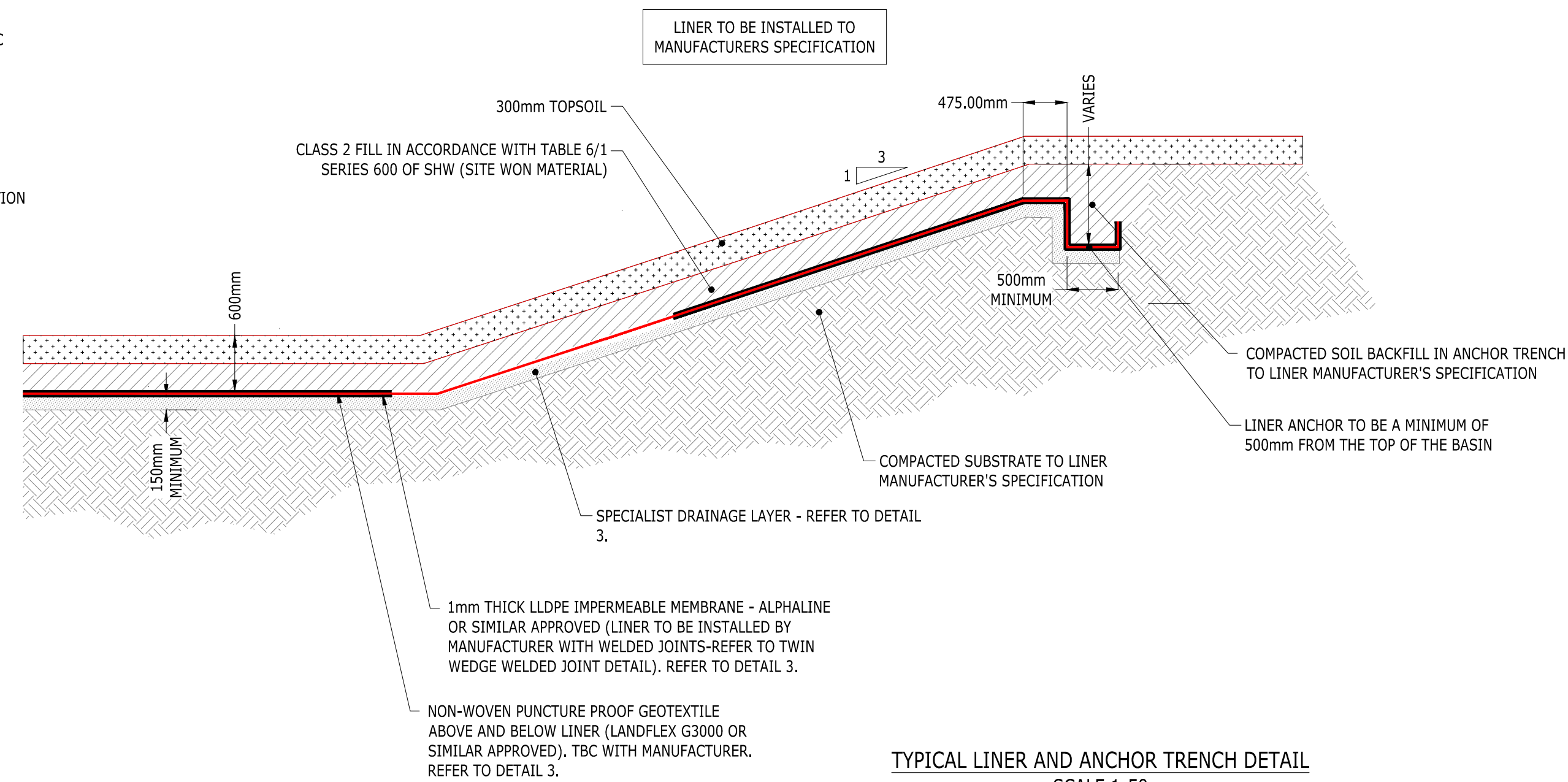
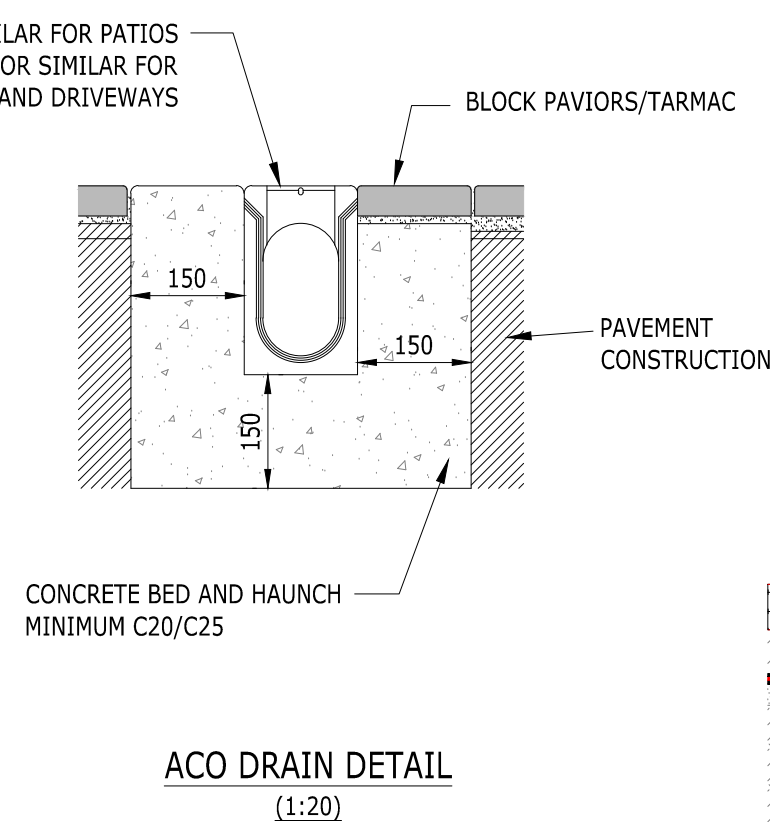
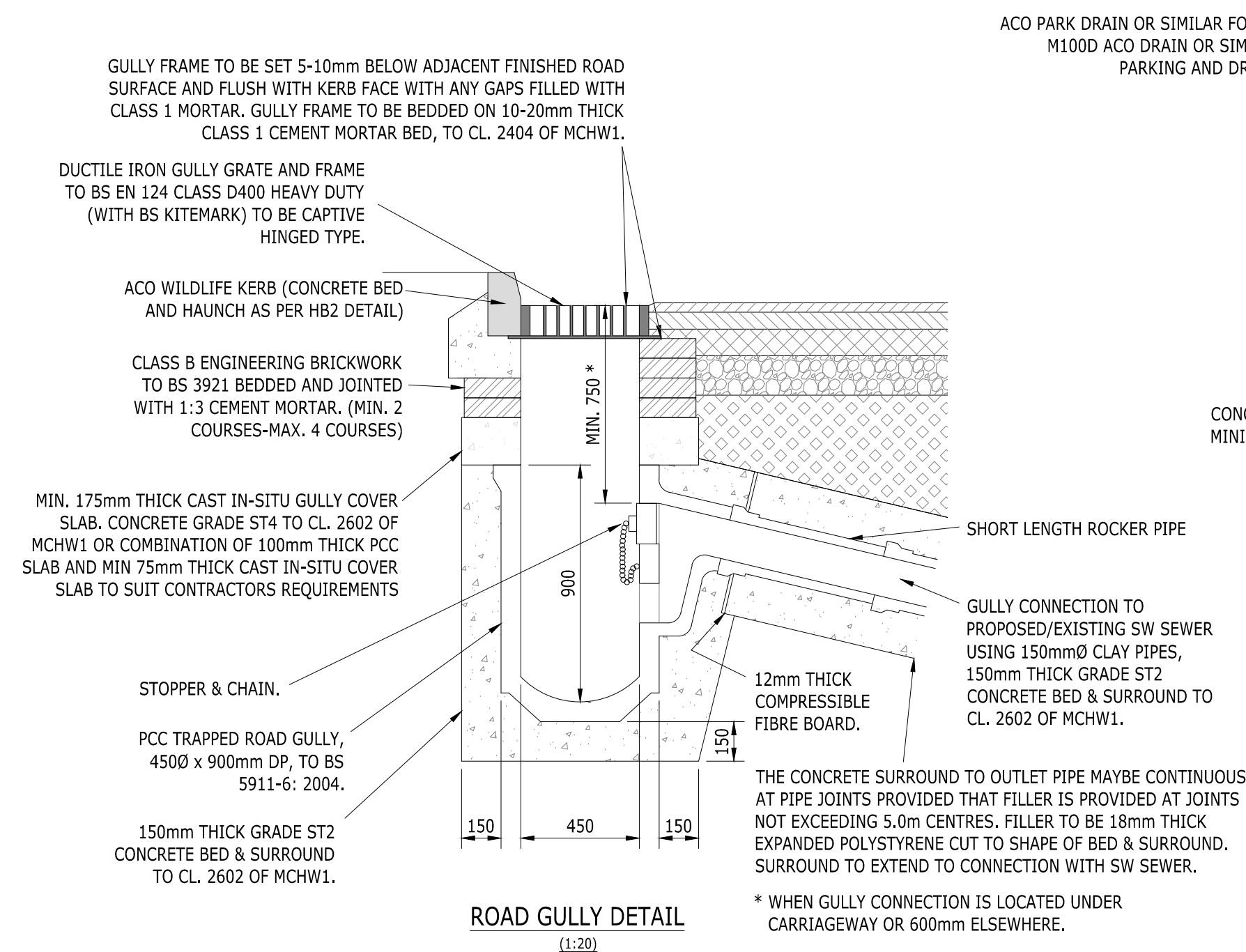
Drawing Title:

DRAINAGE DETAILS - SHEET 2

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1:250	30-05-23	AMC
Drawn by	Checked by	Approved by
AMC	AMC	AD

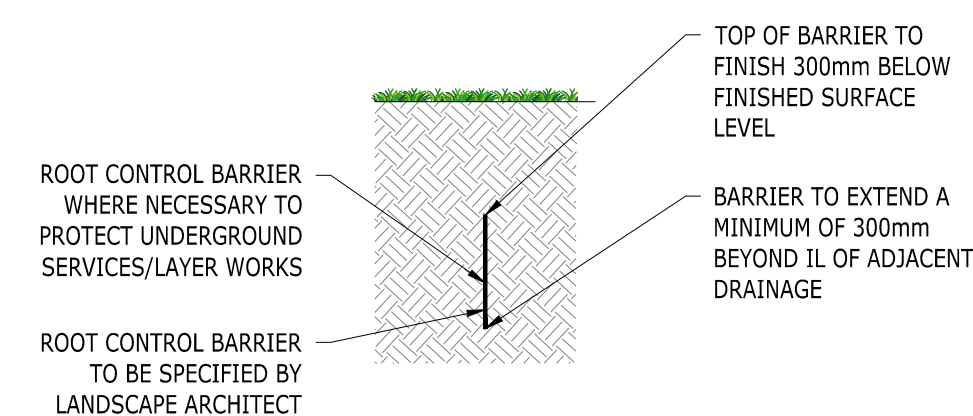
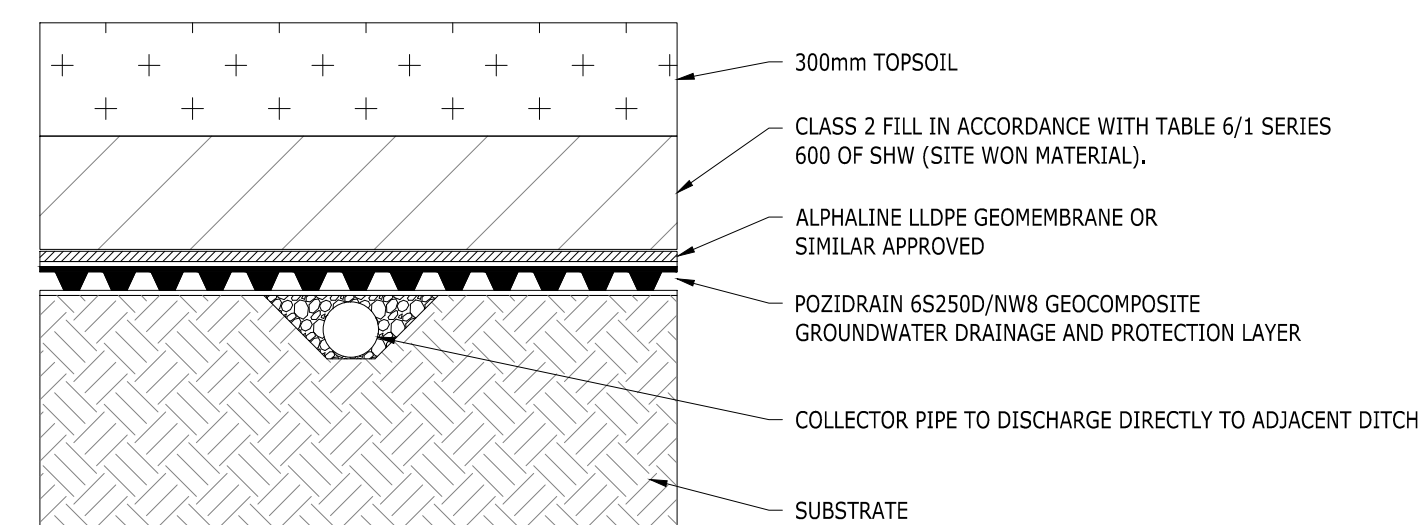
Drawing Number
2107940-054

Rev
A

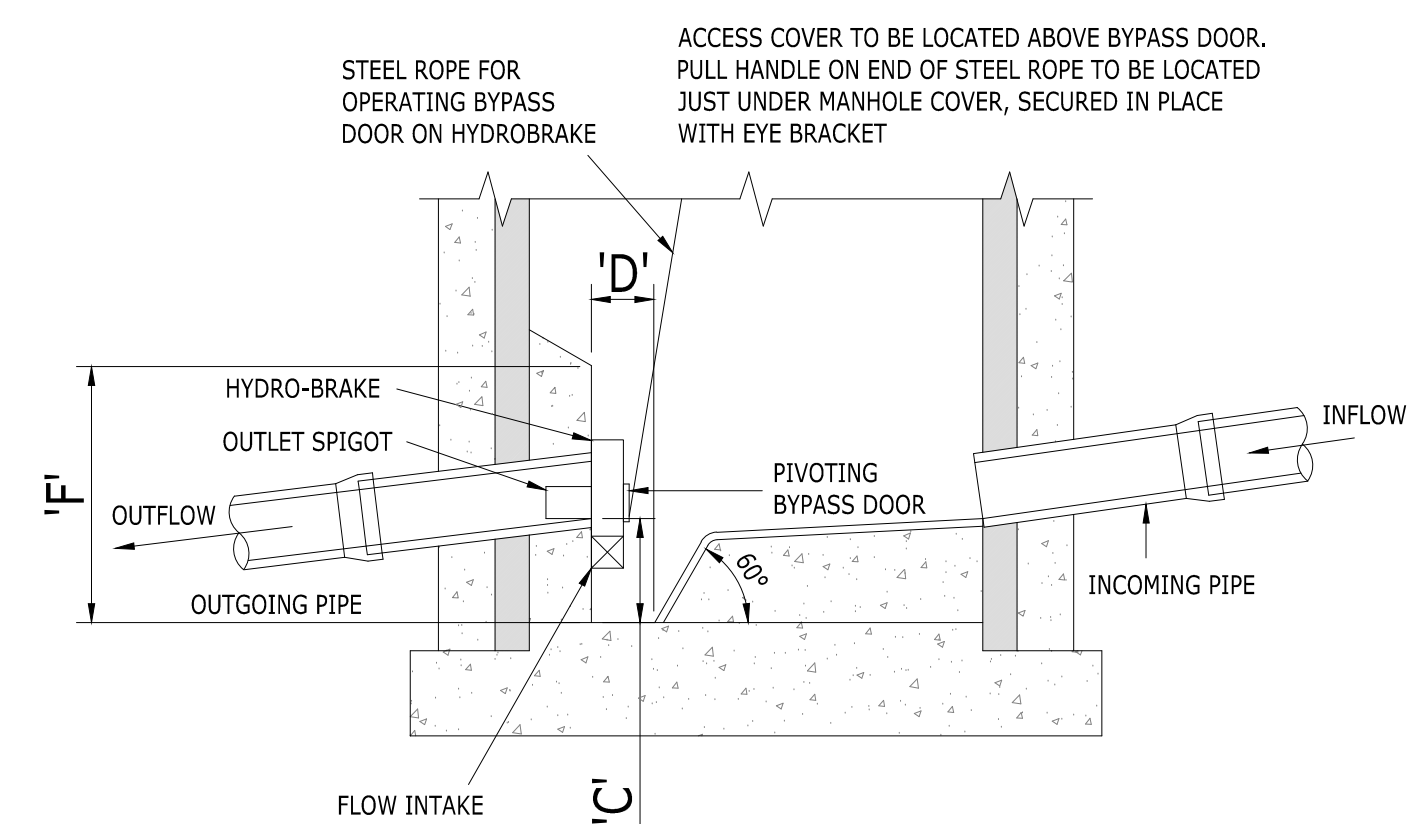
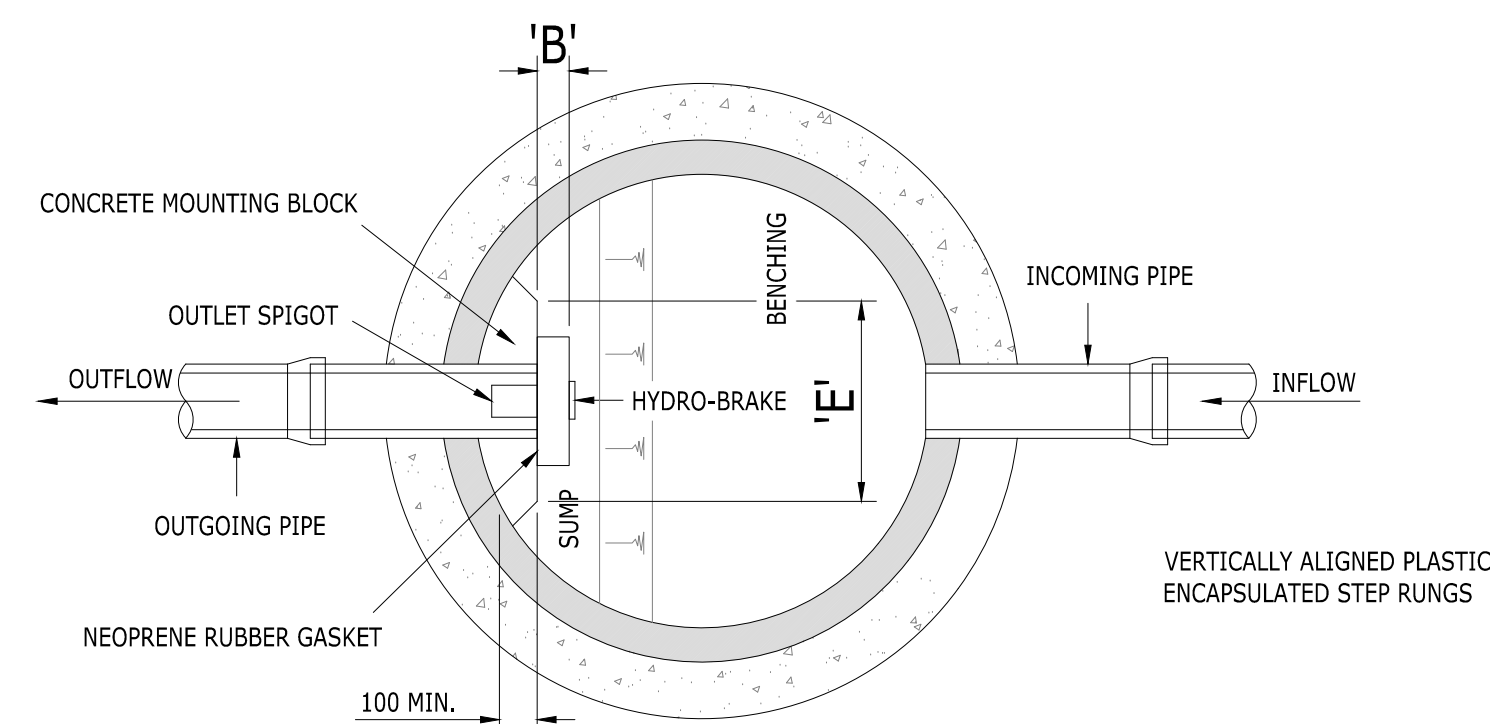
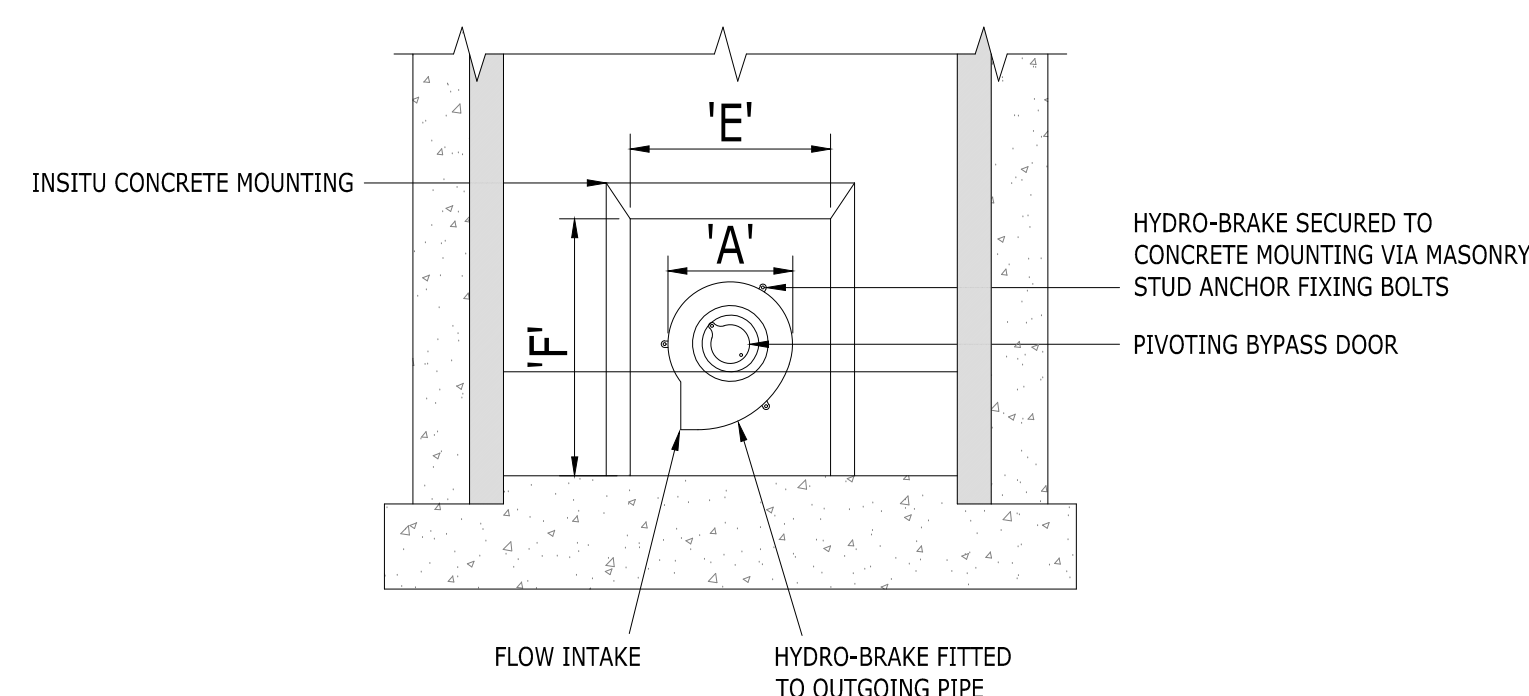


- ## CONSTRUCTION NOTES

1. Bags shall be of Hessian or Canvas and shall be of a size to provide a wall thickness of 500mm
2. Concrete bagwork shall be to Clause 519 and be three quarter filled with 25mm slump S14 concrete immediately prior to placing with the ends sewn
3. The bags shall be placed in a modified Flemish bond so as to 'break joint' with the mouths away from the surface and be tamped into position to form a rectangular block
4. Exit of outlet protection to be the greater of 1500mm or pipe diameter + 1200mm spanning the outlet pipe
5. All exposed pipework to be certified UV Stable.



PRIVATE HYDRO-BRAKE DIMENSION TABLE - (ALL DIMENSIONS IN mm)							
MANHOLE REFERENCE	HYDRO INTERNATIONAL HYDRO-BRAKE REFERENCE	'A' (HYDRO-BRAKE WIDTH)	'B' (HYDRO-BRAKE DEPTH)	'C' (SUMP DEPTH)	'D' (SUMP WIDTH)	'E' (MOUNTING BLOCK WIDTH)	'F' (MOUNTING BLOCK HEIGHT)
HYDROBRAKE 1	SHE-0053-1000-0566-1000	280	60	260	120	485	630
HYDROBRAKE 2	SHE-0043-1000-1403-1000	265	50	255	100	470	615
HYDROBRAKE 3	SHE-0068-3100-2501-3100	415	75	310	150	620	760



DRAINAGE NOTES

1. LATERAL PIPES TO BE 1000 UNLESS OTHERWISE SPECIFIED.
2. LATERAL PIPES TO BE INSTALLED AT MINIMUM 1:80 GRADIENT. INCLUDING THOSE FROM SVP AND RIMPS.
3. PPIC CHAMBER ASSUMED TO BE EQUAL BASE TYPE WITH NO INTERNAL FALL.
4. ALL MANHOLES AND INSPECTION CHAMBERS TO BE INSTALLED IN ACCORDANCE WITH THE SEWER SECTOR GUIDANCE APPENDIX C TYPE AS SHOWN. MANHOLE INSTALLATION CAN VARY FROM DETAIL SHOWN, I.E. A MANHOLE CAN BE INSTALLED IN ACCORDANCE WITH SSC APPENDIX C FIGURE B4, B5, B6, B7, OR B8 AS LONG AS THE NOTES AT THE TOP OF THE FIGURE APPLY TO THE POSITION OF THE MANHOLE I.E. FIGURE B19 WOULD NOT BE CONSTRUCTED IN A ROAD BUT COULD BE CONSTRUCTED IN A DRIVEWAY, AND B20 COULD BE CONSTRUCTED IN A HIGHWAY.
5. ALL UNDERGROUND BENDS SHOULD BE CONSTRUCTED OUT OF LOW RADI BENDS WITH MINIMUM 400mm INTERNAL RADI TO ALLOW FOR RODDING.
6. ALL THERMOPLASTIC PIPES TO COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 1401-1 (PVC-U), BS EN 1852-1 (PP), OR BS 12666-1 (PE) AS APPROPRIATE.
7. UNREINFORCED AND REINFORCED CONCRETE PIPES AND FITTINGS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 1916 AND BS 5911-1 AND SHALL BE MANUFACTURED FROM CONCRETE WITH A DESIGN CHEMICAL CLASS DC-4.
8. PIPES UP TO 3000 SHOULD BE CONSTRUCTED OF P-PVC TYPE MATERIAL. PIPES > 3000 SHOULD BE CONSTRUCTED OF CONCRETE OR OTHER IN ACCORDANCE WITH SEWER SECTOR GUIDANCE.
9. WHEN INSTALLING PIPES SOFT TO SOFT BY DIFFERING PIPE SIZES WOULD CAUSE THE GRADIENT TO FALL BELOW THE MINIMUM DESIRED GRADIENT, I.E. 1:80 FOR A 100mm, THE PIPES SHOULD BE INSTALLED INVERT TO INVERT.
10. SIPS FOR WET ROOMS TO BE CAPPED AT FLOOR LEVEL TO PREVENT SMIEL INGRESS UNLESS CONVERTED INTO WETROOM, ONLY APPLICABLE TO ACCESSIBLE PLOTS IN FLATS.

CONSTRUCTION
ISSUE

D	ADDED ROOT PROTECTION DETAIL	AMC	AMC	AD	07-05-24
C	UPDATED HYDROBRAKE 3 PER LLFA COMMENTS	AMC	AMC	AD	18-04-24
B	CONSTRUCTION ISSUE	AMC	AMC	AD	28-07-23
A	MOVED ACO DETAIL TO SHEET 4	AMC	AMC	AD	06-06-23
-	FIRST ISSUE	AMC	AMC	AD	30-05-23
Rev	Description	Drn	Chk	App	Date

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Project Title:

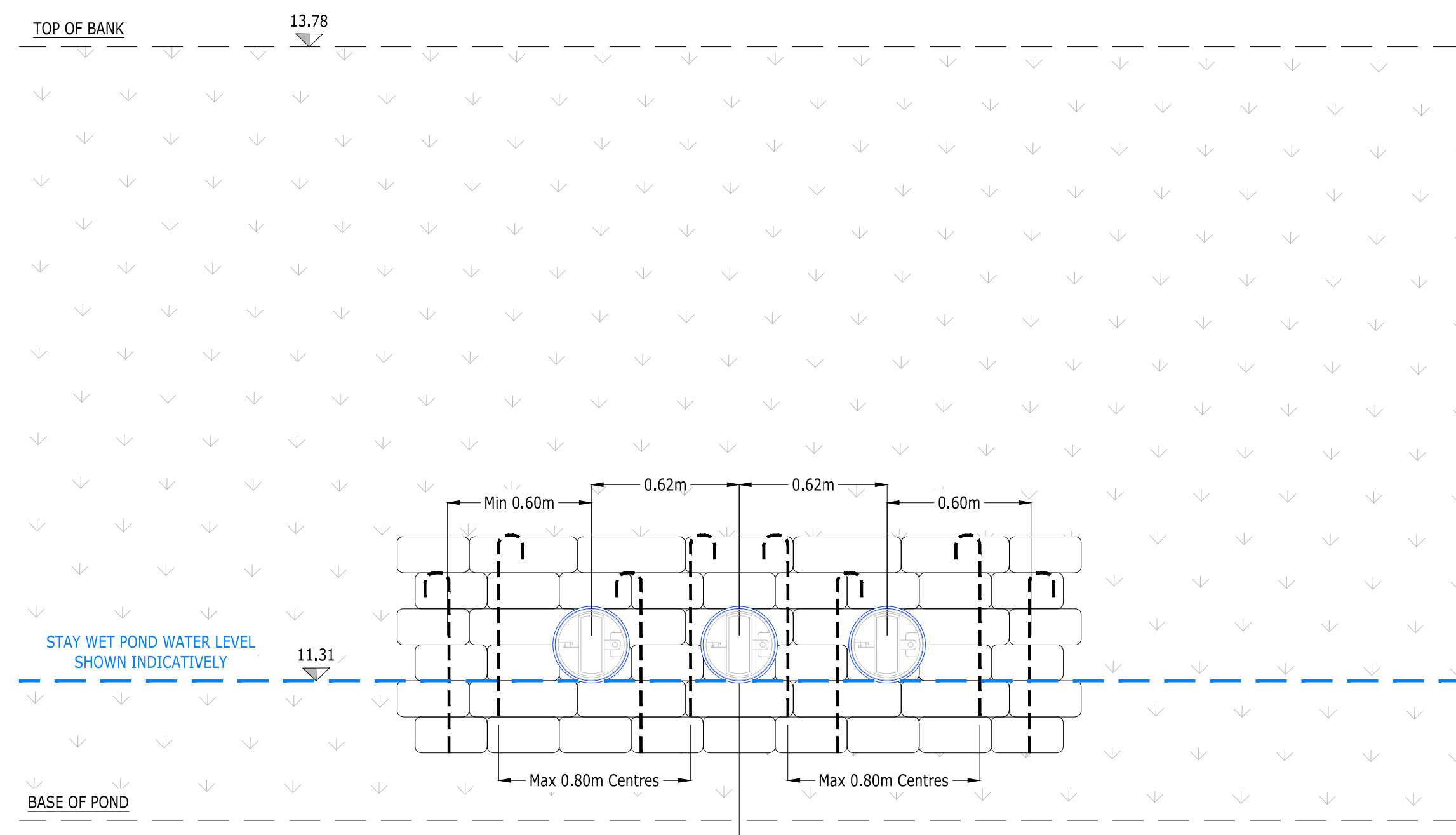
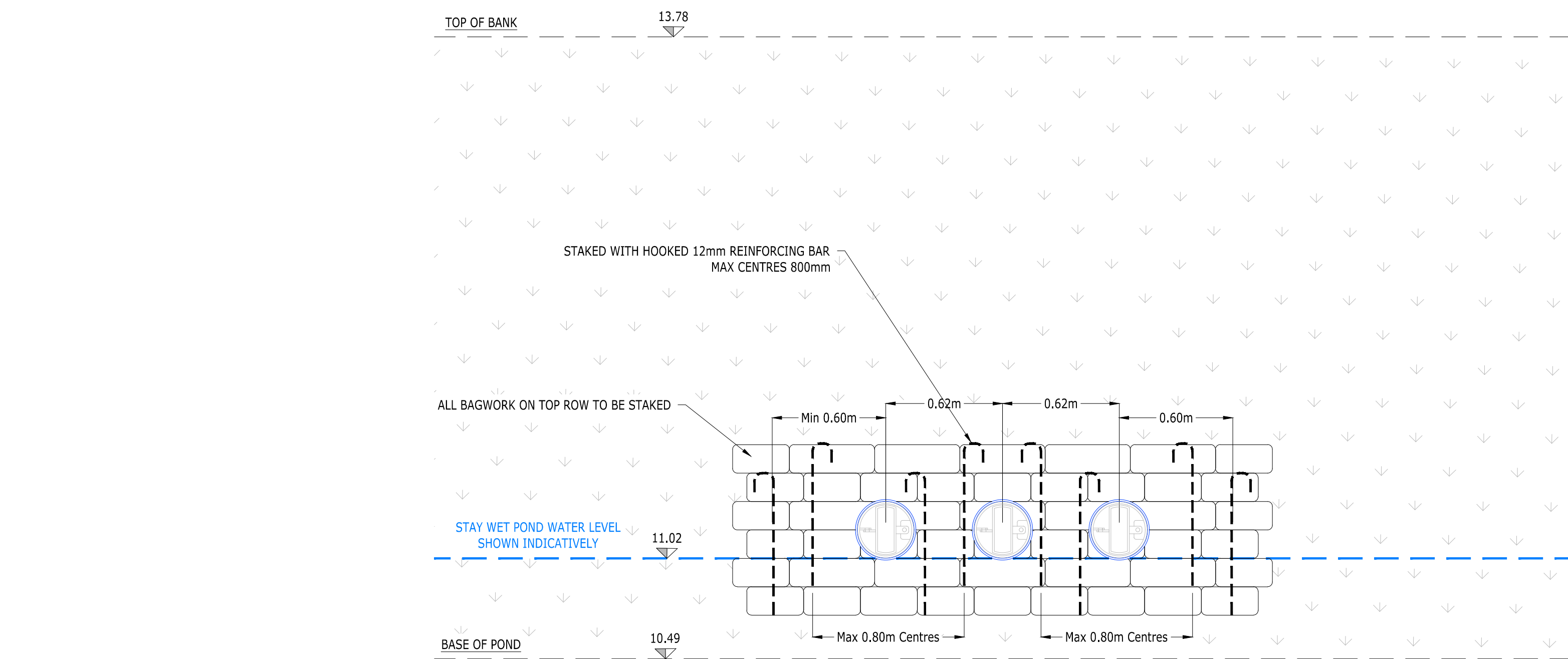
LAND AT FORD ROAD,
ARUNDEL

Drawing Title:

DRAINAGE DETAILS - SHEET 4

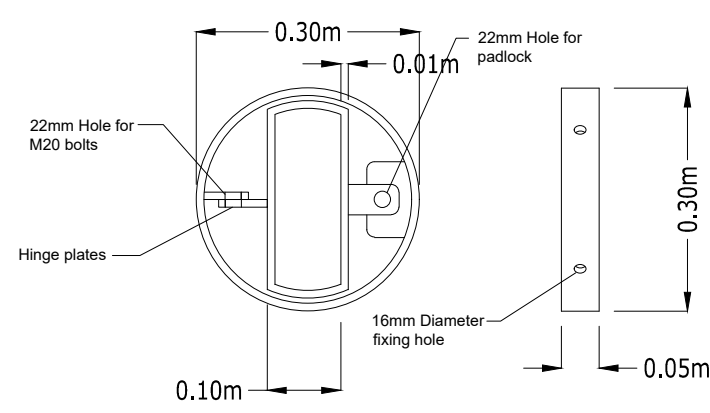
A1 Scale 1:250	Date 30-05-23	Designed by AMC
Drawn by AMC	Checked by AMC	Approved by AD
Drawing Number 2107940-056		Rev D

NOTE
PLEASE REFER TO DRAWING
2107940-032 FOR PLAN VIEW OF ALL
SECTIONS.
FOR OWC HEADWALL DETAILS REFER
TO DRAWING 2107940-033.



NOTES

- BAGS SHALL BE OF HESSIAN AND SHALL BE OF A SIZE TO PROVIDE A WALL THICKNESS OF 500MM
- CONCRETE BAGWORK SHALL BE TO CLAUSE 5.19 AND BE THREE QUARTER FILLED WITH 25MM SLUMP ST4 CONCRETE IMMEDIATELY PRIOR TO PLACING WITH ENDS SEWN.
- THE BAGS SHALL BE PLACED IN A MODIFIED FLEMISH BOND SO AS TO 'BREAK JOINT' WITH THE MOUTHS AWAY FROM THE SURFACE AND BE TAMPED INTO POSITION TO FORM A RECTANGULAR BLOCK. EXTENT OF OUTLET PROTECTION TO BE THE GREATER OF 1500mm OR PIPE DIAMETER + 1200mm SPANNING THE OUTLET PIPE.
- DITCH TO BE REGRADED AS REQUESTED.
- ALL EXPOSED PIPEWORK TO BE CERTIFIED UV STABLE.
- ALL BAGS ON TOP ROWS TO BE STEEL SPIKED.
- NO PART OF HEADWALL STRUCTURE TO ENCRoACH INTO THE PROFILE OF THE WATERCOURSE.

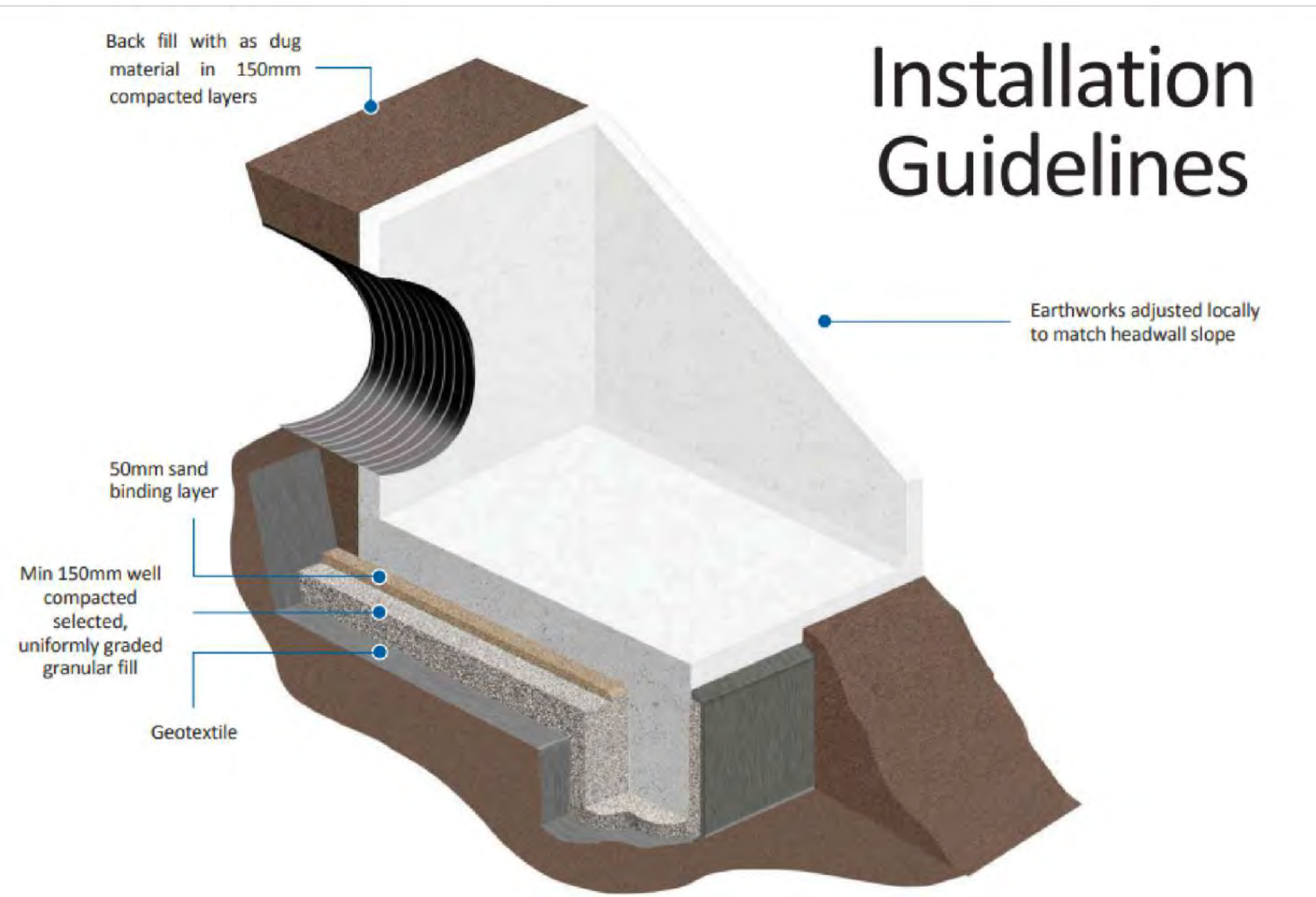


APPROVAL			
A	ADDED ADDITIONAL ELEVATIONS/ PLAN VIEWS AS REQUESTED BY LISA. ADDED ADDITIONAL SHEETS TO ACCOMMODATE.	AMC	AD
B	SECTION D-D - ADDED PIPE MOUNTED GRATING	AMC	AD
C	SECTION E-E - CHANGED HEADWALL TO ALTHON	AMC	AD
D	SEALS A HEADWALL - SPAL 600 OUTFALL SAFETY	AMC	AD
E	GULLIE	AMC	AD
F	SECTION F-F - CHANGED HEADWALL TO HSC A +	AMC	AD
G	PROPOSED 1000mm COULDED GRATING	AMC	AD
H	SECTION G-G - CHANGED HEADWALL TO HSC A +	AMC	AD
I	PROPOSED 1000mm COULDED GRATING	AMC	AD
J	SECTION H-H - ADDED PIPE MOUNTED GRATING	AMC	AD
K	SECTION I-I - ADDED PIPE MOUNTED GRATING	AMC	AD
Rev	Description	Dwn	Chk
App	Date		

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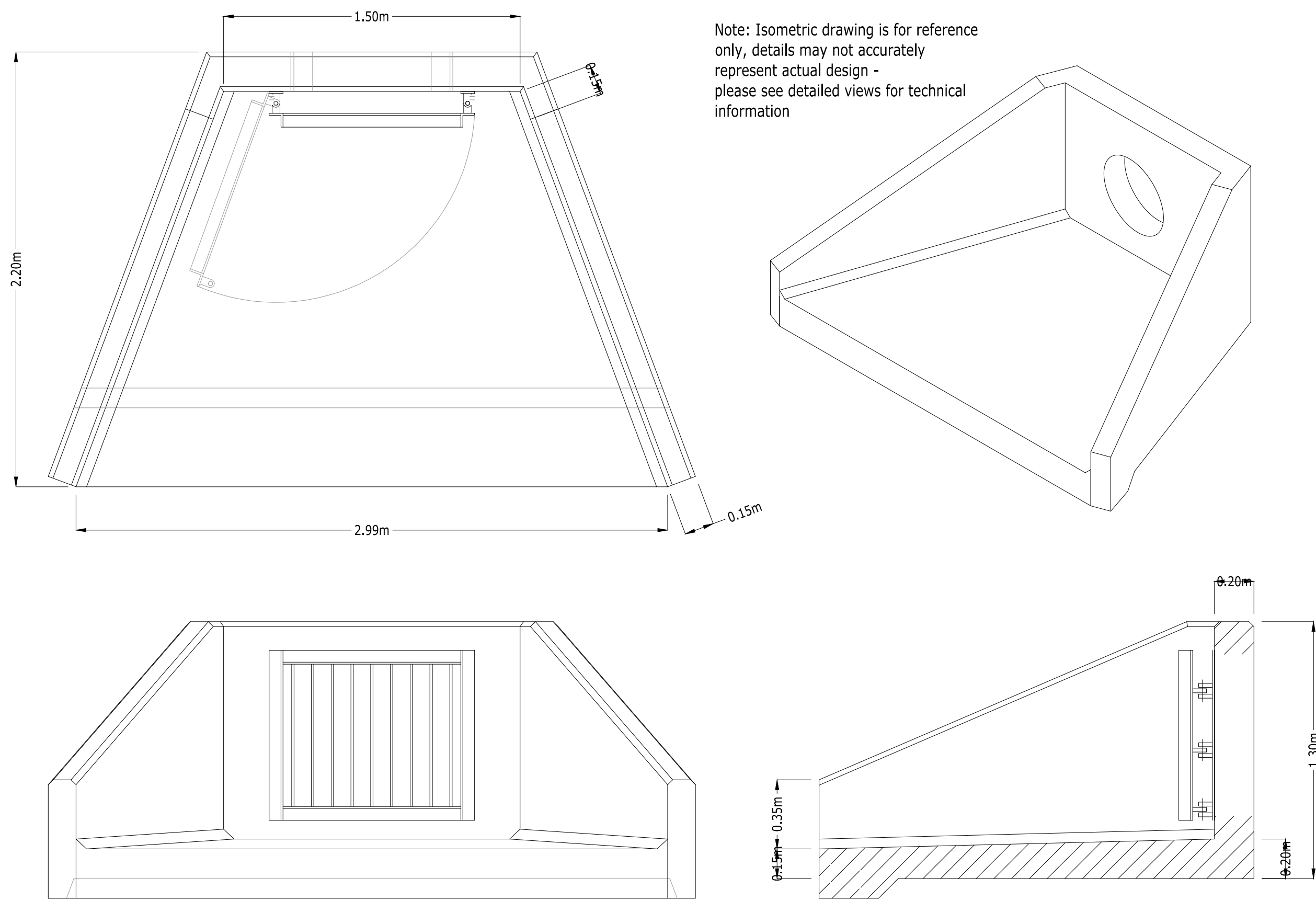
Client	
ESQUIRE DEVELOPMENTS	
Project Title:	
ARUNDEL GATE, FORD ROAD, ARUNDEL	
Drawing Title:	
HEADWALL SECTIONS - SHEET 1	
Scale	Date
AS SHOWN	02/05/24
Drawn by	Designed by
AMC	ADS
Checked by	Approved by
AMC	AD
Drawing Number	Rev
2107940-150	A

NOTE
PLEASE REFER TO DRAWING
2107940-032 FOR PLAN VIEW OF ALL
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FOR OWC HEADWALL DETAILS REFER
TO DRAWING 2107940-033.

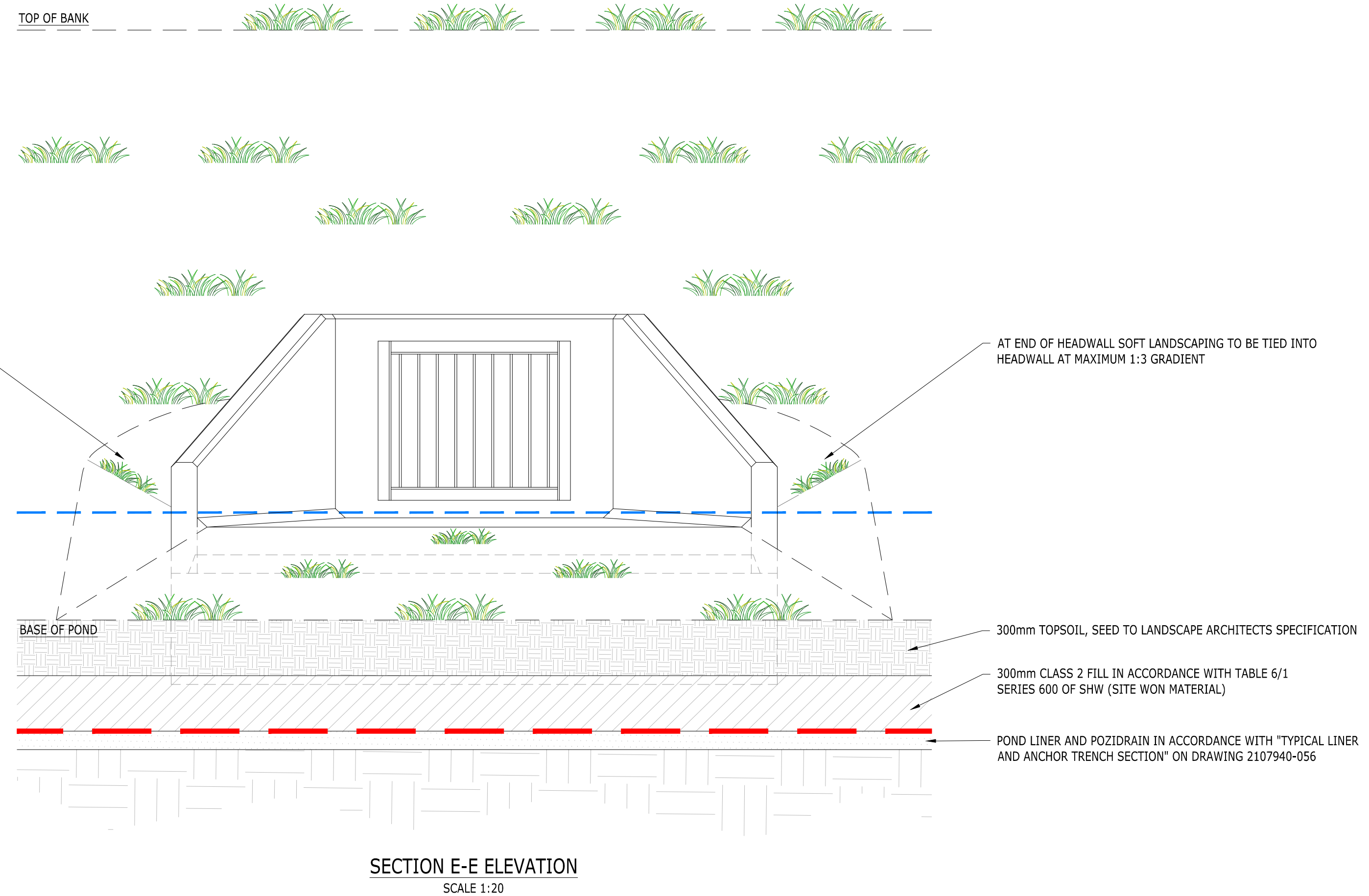
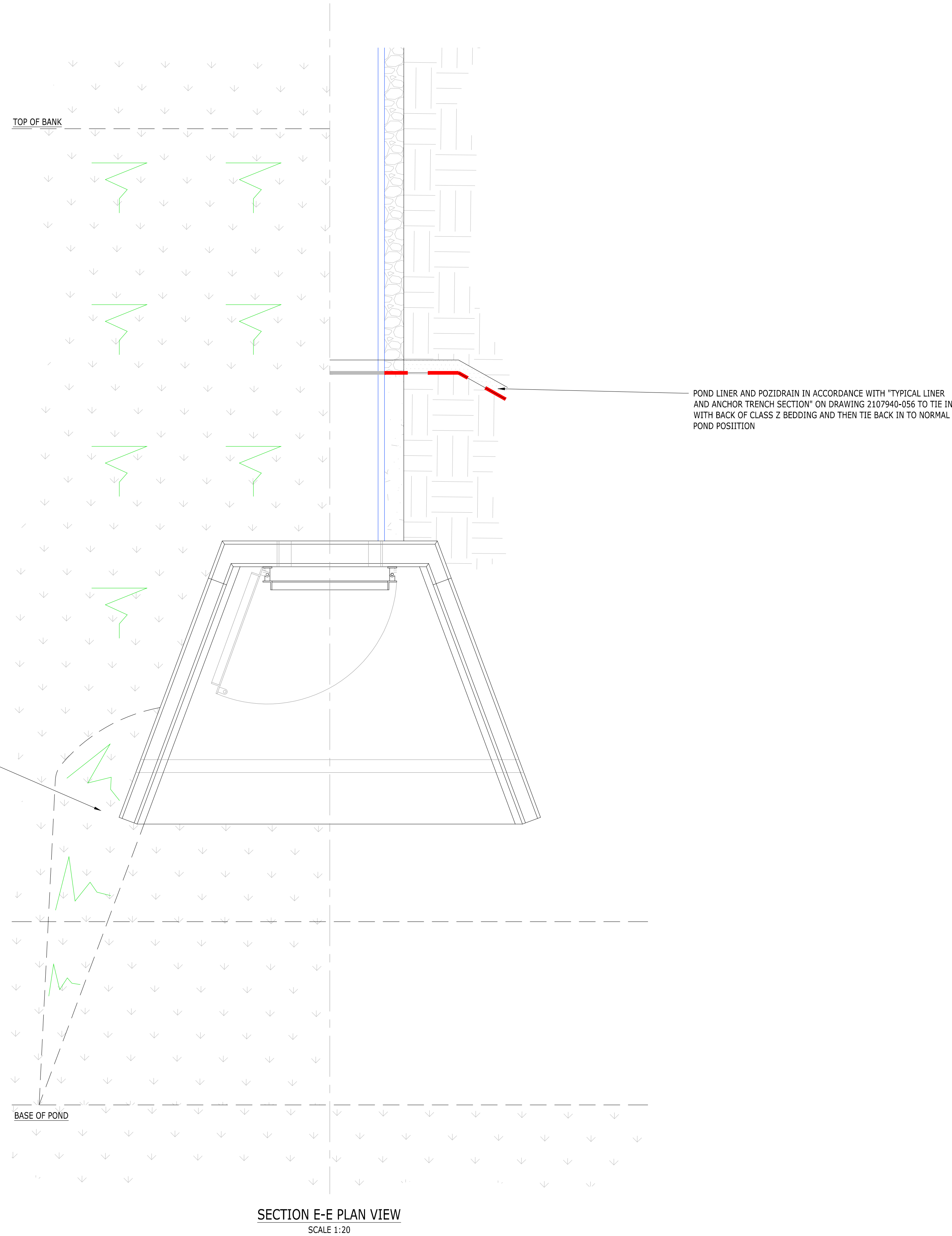
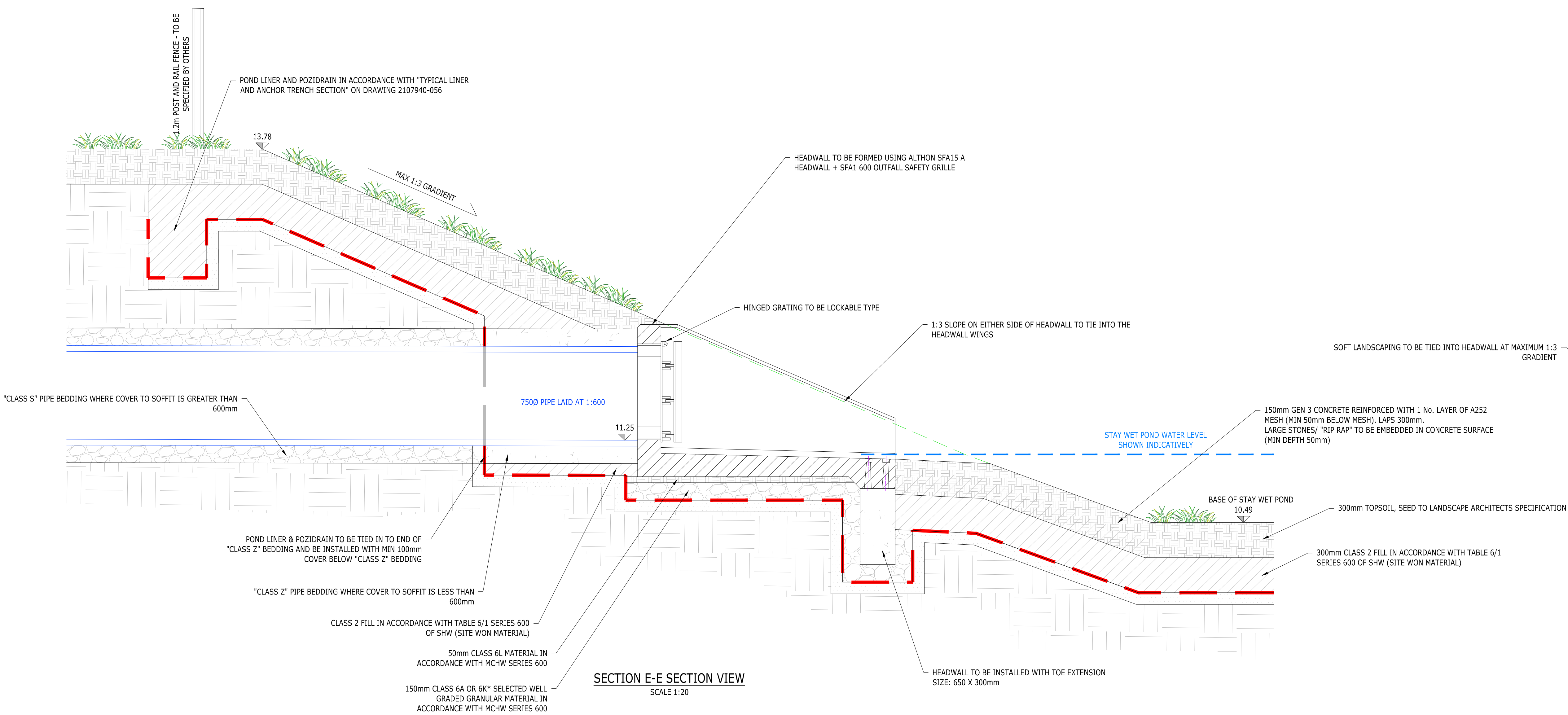


- 1 Ensure that first or last spigot/butt or socket/butt pipe that is to be fitted to the Headwall is in position and free from backfill.
- 2 Dig out the bank of the watercourse to take the size of the headwall making sure that the Headwall will not protrude into the path of the water flow. The angle of the excavation to the rear of the Headwall should be roughly the same as the existing bank profile.
- 3 Dig out sufficient size trench to take the toe along the front of the foundation.
- 4 Line toe foundation with Geotextile then place selected, uniformly graded granular fill in the base and compact well. Lift Toe into position and level then fill around the toe with selected, uniformly graded granular fill and compact well. Insert supplied threaded rod into the sockets cast into the top of the toe.
- 5 Line the base of the rest of excavation with Geotextile then place a minimum bed of 150mm Class 6A or 6K* Selected Well Graded Granular Material on the base & compact well, especially around the back of the toe, then a 50mm topping of fine material (Class 6L*) to ensure units are level and stable. Lift Headwall into position, over the end of the pipe & locate over threaded rod protruding from the toe and level. Place washer over threaded rod (SFA10 8 No) in recess in Headwall apron and tighten nut. Fill recess with high strength non-shrink grout.
- 6 The pipe should be flush with the front of the back wall if fitting grating or flap valve, or protruding by 50mm if not.
- 7 Shim the pipe until it is central within the opening then fill void with sand cement mortar or high strength non-shrink grout.
- 8 If flap valve or grating is supplied, this will need to be removed before the pipe is inserted and sealed into place. Then reinstall using stainless steel fixing bolts into cast in sockets. (When bolting flap valves against headwall, use a good quality sealant but do not over tighten bolts or distortion may occur resulting in the valve not seating correctly.)
- 9 Backfill pipe section first then backfill all around Headwall with as dug material. Make good at front of toe with as dug material ensuring river bank is returned to its original profile. It may be necessary to provide protection in front of the toe, please refer to engineers' recommendation.

*Manual of Contract Documents for Highway Works: Volume 1 (MCHW1), Specification for Highway Works, Series 600 (Nov 09)



ALTHON SFA15 A HEADWALL + SFA 600 OUTFALL SAFETY GRILL
SCALE 1:20



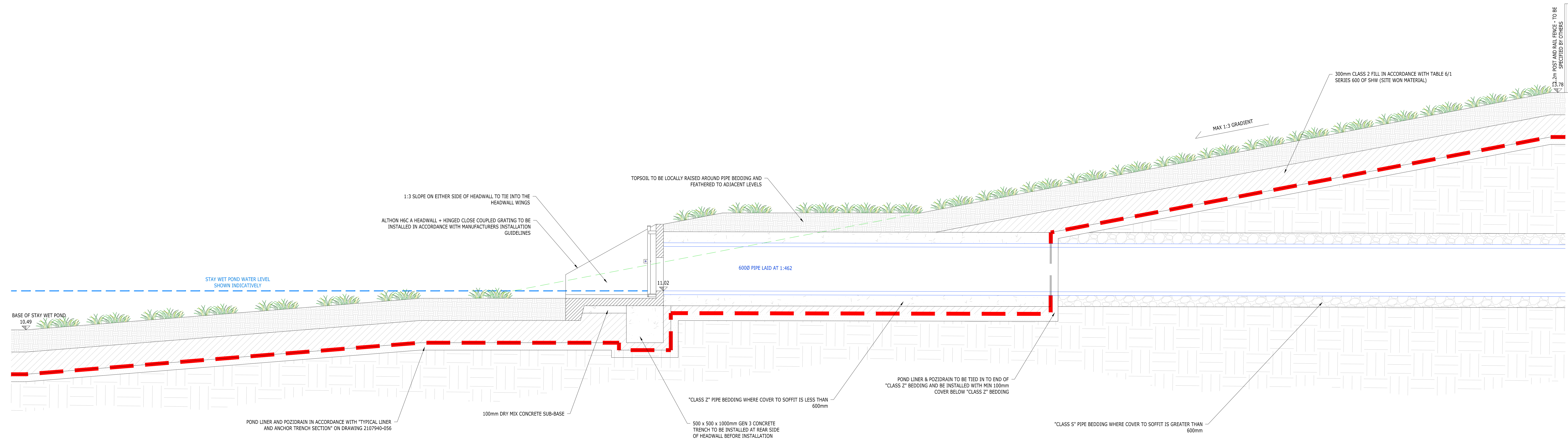
APPROVAL

A REFER TO DRAWING 155, REV A NOTES		AMC	AMC	AD	30.07.24
Rev	Description	Drn	Chk	App	Date
ARDENT CONSULTING ENGINEERS					
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Client					

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Project Title:		ARUNDEL GATE, FORD ROAD, ARUNDEL			
Drawing Title:					
HEADWALL SECTIONS - SHEET 2					
Scale	Date		Designed by		
AS SHOWN	02/05/24		ADS		
Drawn by	Checked by		Approved by		
AMC	AMC		AD		
Drawing Number	2107940-151			Rev	A

NOTE
PLEASE REFER TO DRAWING
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FOR OWC HEADWALL DETAILS REFER
TO DRAWING 2107940-033.

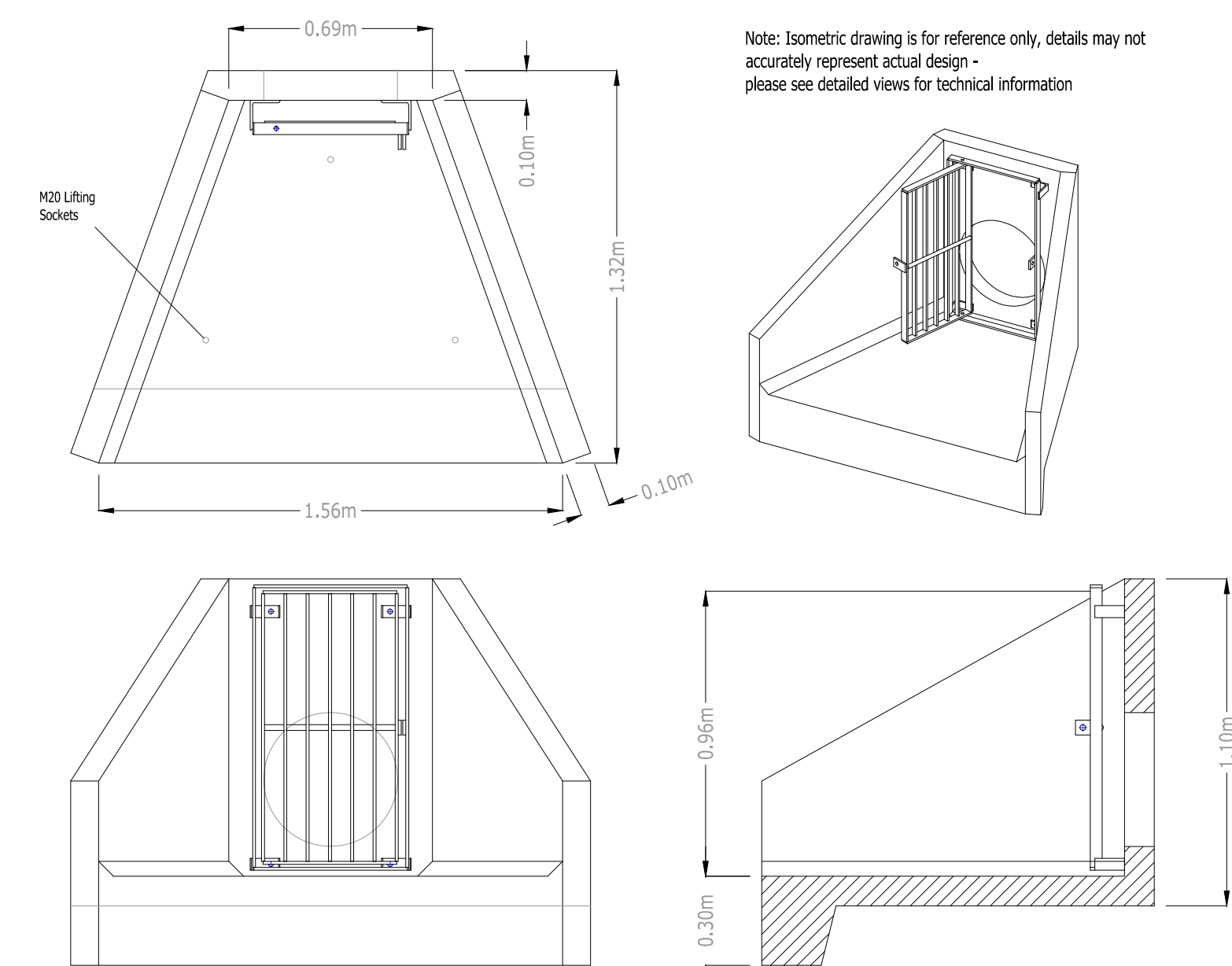


SECTION F-F SECTION VIEW
SCALE 1:20

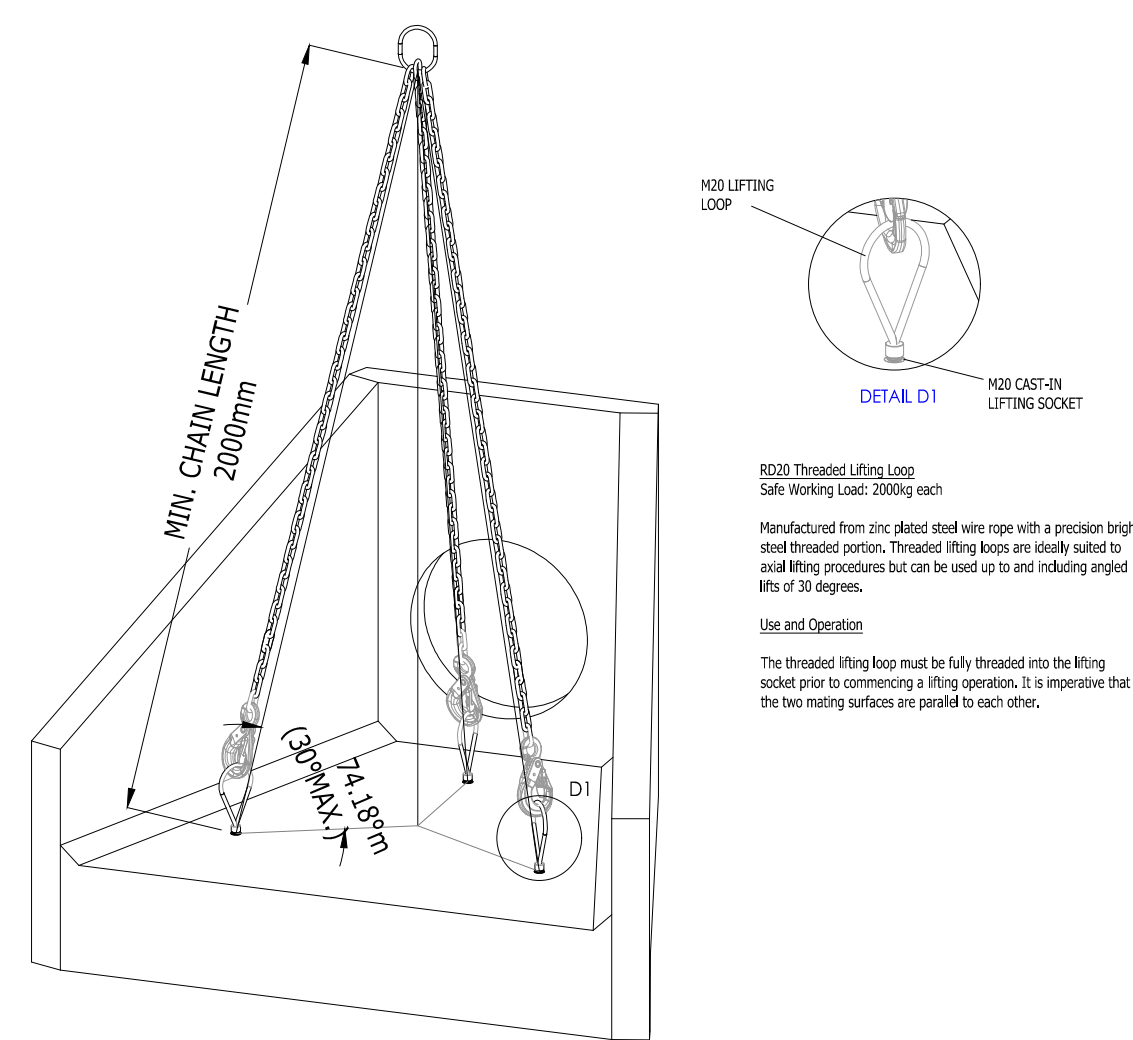
INSTALLATION GUIDE

1. Ensure that the pipe is fully fitted leaving either the first (or last) section of pipe free from backfill in order to attach to the headwall

2. Dig out the bank of watercourse to take the size of the headwall making sure that the headwall will not protrude into the path of the water flow
3. Dig out sufficient size trench to take the toe along the front of foundation allowing for sufficient room to manoeuvre the headwall over the end of the pipe
4. If an extended toe will be fitted increase the depth of excavation as required
 - If very large pipes are to be used, it is recommended that a 500mm wide x 500mm deep trench filled with mass concrete is constructed under the back edge of the headwall to cover the possibility of the heavy pipe resting upon the opening within the back wall of the headwall.
5. Lay a minimum (varies with ground conditions) of 100mm thick bed of dry mix concrete as a foundation to rest the headwall on. Allow concrete creating a slight fall of 1:50 from pipe to soil mouth
6. Prior to lifting and positioning the headwall all attachments such as gratings and water control gear should be removed
 - If there is a bolt on extension feed fully threaded M16 stainless steel studding into the fixing sockets of the toe and lift this on position first. Once the headwall is installed on top of the toe use washers and nuts to secure the headwall to toe together. (Once the nuts have been sufficiently tightened fill the holes with mortar)
 - Do not exceed a torque setting of 40Nm/m when tightening bolts.
7. Lift the headwall into position using two R2020 threaded lifting eyes, long adjustable chains and suitable machinery. Before carrying out the lifting operation all relevant personnel involved should read the installation and lifting guide in this document and a detailed lift plan should be completed and be completed by a competent person
8. The two R2020 threaded lifting sockets are all located in the base of the headwall
 - Placing a shim at the outside of the pipe will assist with centring it in position
 - If attachments as water control gear or gratings are to be fitted to the headwall - the pipe must be fitted flush with the inside of the back wall
9. When satisfied with positioning backfill in front and under the headwall toe with mass concrete
10. Backfill around the pipe with either mass concrete or well compacted impervious clay. If concrete has been used around the pipe then proceed with soil backfilling to the top level of the structure ensuring good compaction as you go
11. Depending on soil conditions and specific site requirements Allow sufficient backfilling around wing walls with well compacted impervious clay
12. Using an appropriate mortar or resin fill in the gap between the pipe and headwall around the opening in the back wall of the headwall
13. For fitting gratings and other fabricated metal components
 - Position the grating using appropriate lifting equipment
 - Use the correct size and length of stainless steel bolts with washers to fix
 - Gratings to the threaded fixing sockets cast into headwall
 - To prevent bolts binding in threaded fixing sockets copper slip must be applied to the thread of all bolts
 - Do not exceed a torque setting of 40Nm/m when tightening bolts.



ALTHON H6C A HEADWALL
SCALE 1:20



B232 Threaded Lifting Loop
Safe Working Load: 2000kg each

Manufactured from zinc plated steel wire rope with a precision bright steel threaded portion. Threaded lifting loops are ideally suited to axial lifting procedures but can be used up to and including angled lifts of 30 degrees.

Use and Operation

The threaded lifting loop must be fully threaded into the lifting socket prior to commencing a lifting operation. It is imperative that the two mating surfaces are parallel to each other.

SECTION F-F PLAN VIEW
SCALE 1:20

APPROVAL

Rev	Description	Drn	Chk	App	Date
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ESQUIRE DEVELOPMENTS

Project Title:

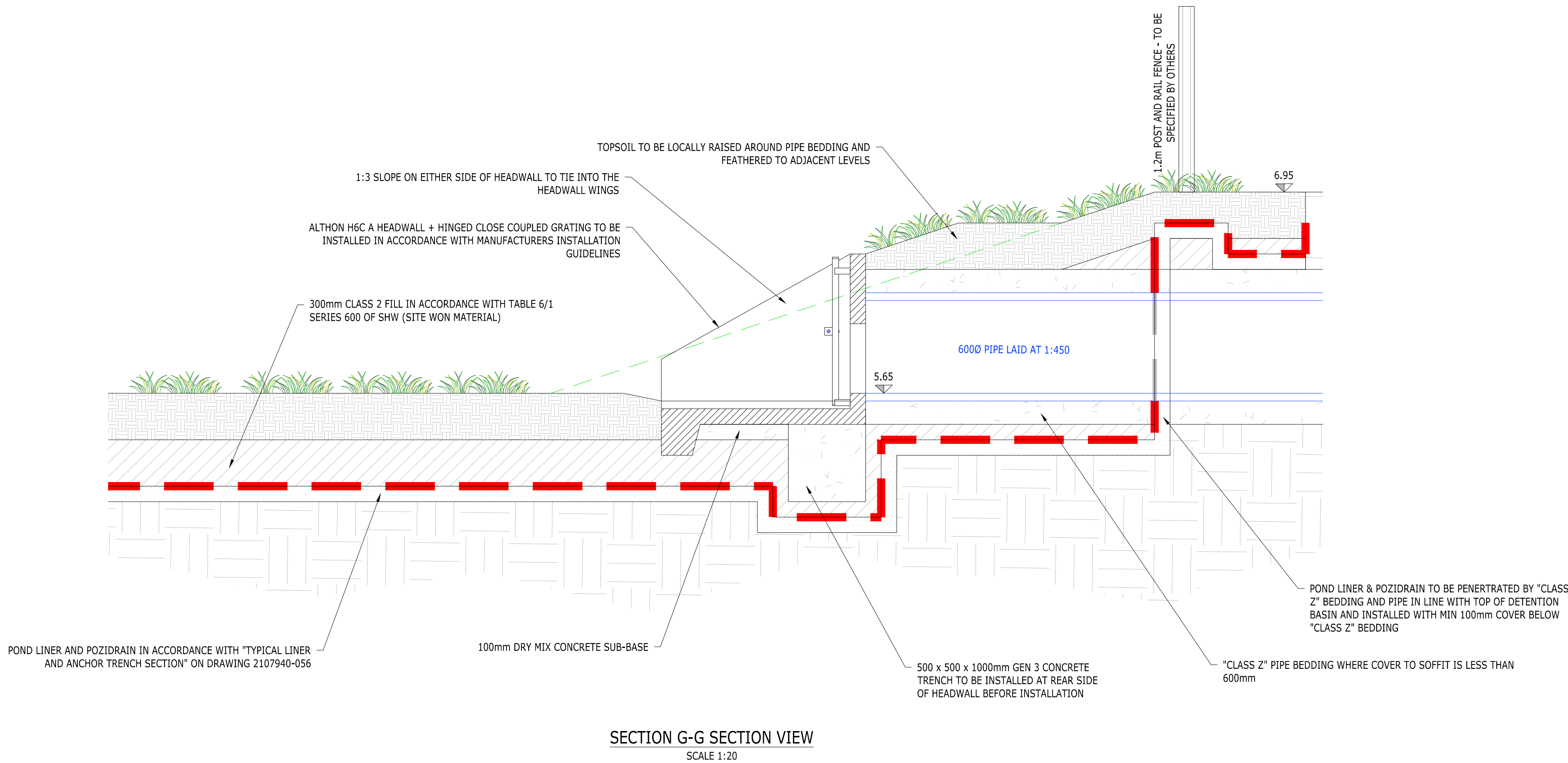
ARUNDEL GATE,
FORD ROAD, ARUNDEL

Drawing Title

HEADWALL SECTIONS - SHEET 3

Scale AS SHOWN	Date 08/07/24	Designed by AMC
Drawn by AMC	Checked by AMC	Approved by AD
Drawing Number 2107940-152		Rev - A Dennis

APPROVAL

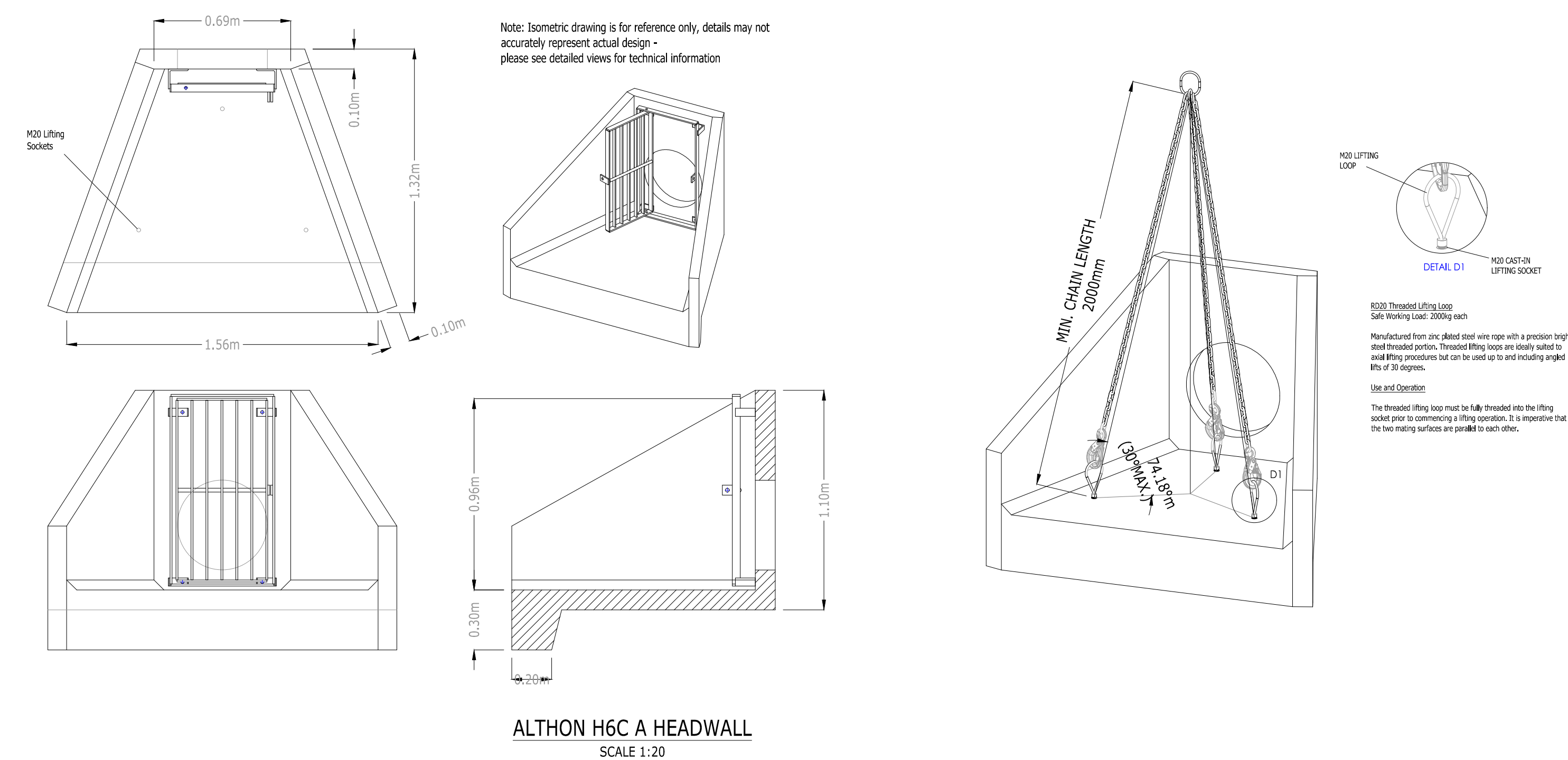


SECTION G-G SECTION VIEW
SCALE 1:20

INSTALLATION GUIDE

Once installed correctly the ground pressure of a headwall is low (approximately 7kn/m²) Althon suggest a minimum sub base of 100mm dry mix concrete to give a foundation to sit the headwall onto

1. Ensure that the pipe is fully lifted leaving either the first (or last) section of pipe free from bacfill in order to attach to the headwall
2. Dig out the back of the watercourse to take the size of the headwall making sure that the headwall will not protrude into the path of the water flow
3. Dig out sufficient size trench to take the toe along the front of foundation allowing for sufficient room to manoeuvre the headwall over the end of the pipe
4. If an extended toe is to be fitted then increase the depth of the excavation as required
 - If very large pipes are being used, it is recommended that a 500mm wide x 500mm deep trench filled with mass concrete is constructed under the back edge of the headwall to cover the possibility of the heavy pipe resting upon the opening within the back wall of the headwall.
5. Lay a minimum (varies with ground conditions) of 100mm thick bed of dry mix concrete as a foundation to rest the headwall on. Allowneath recommend a slight fall of 1:50 from pipe to spill mouth
6. Prior to lifting and positioning the headwall all attachments such as gratings and water control gear should be removed
7. If there is a bolt on extended toe fully threaded the M16 stainless steel studing into the fixing sockets of the toe and lift it into this position first. Once the headwall is installed on top of the toe use washers and nuts to fix the headwall and toe together. Once the nuts have been sufficiently tightened lift the holes with murtors. Do not exceed a torque value of 40Nm when tightening bolts.
8. Lift the headwall into position using 3no RD20 threaded lifting eyes, long adjustable chains and suitable machinery. Before carrying out the lifting operation all relevant personnel involved should read the installation and lifting guide in this document and a detailed lift plan and risk assessment should be completed by a competent person
9.
 - The 3no RD20 threaded lifting sockets are all located in the base of the headwall
 - Position a shim at the bottom of the pipe well assist with centring it in position
 - If attachments such as water control gear or gratings are to be fitted to the headwall – the pipe must be fitted flush with the inside of the back wall
10. When satisfied with positioning bacfill in front and under the headwall toe with mass concrete
11. bacfill around the pipe with either mass concrete or well-compacted impervious clay. If concrete has been used around the pipe then proceed with bacfilling to the top level of the structure ensuring good compaction as you go
12. Depending on soil conditions and specific site requirements Allowneath recommend bacfilling around wing walls with well compacted impervious clay
13. Using an appropriate mortar or resin fill in the gap between the pipe and headwall around the opening in the back wall of the headwall
14. For lifting gratings and other fabricated metal components
 - Position the grating using appropriate lifting equipment
 - Use the correct size and length of stainless steel bolts with washers to fix
 - Gratings to the threaded fixing sockets cast into headwall
 - To prevent bolts binding in the lifting sockets copper slip must be applied to the thread of all bolts
 - Do not exceed a torque setting of 40Nm when tightening bolts.



ALTHON H6C A HEADWALL
SCALE 1:20

SECTION G-G PLAN VIEW
SCALE 1:20

Rev	Description	Drn	Chk	App	Date
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dent

ESQUIRE DEVELOPMENTS

Project Title:

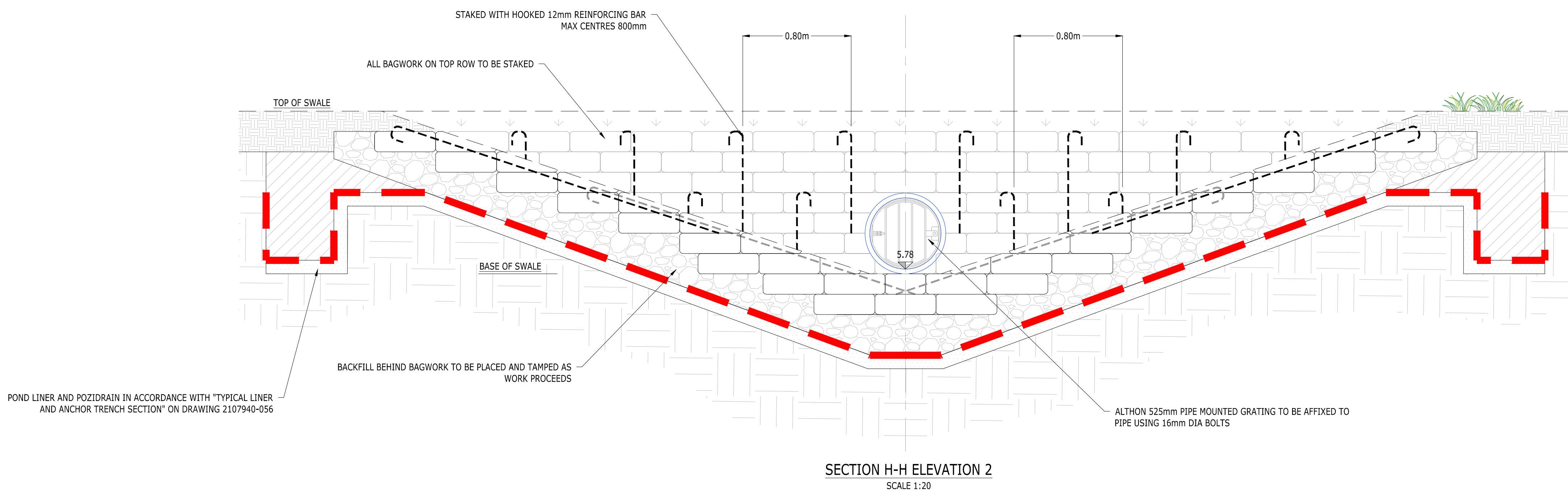
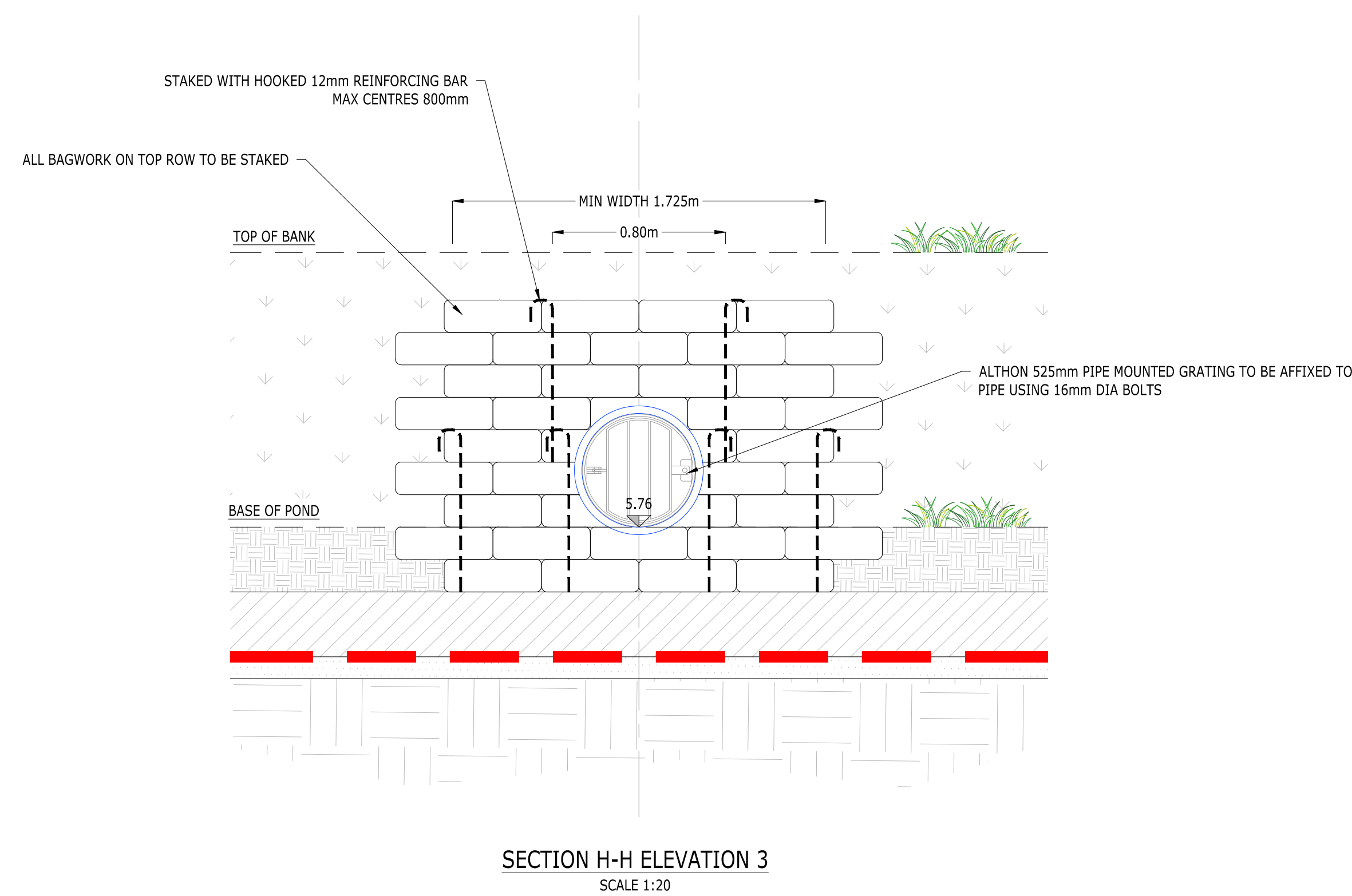
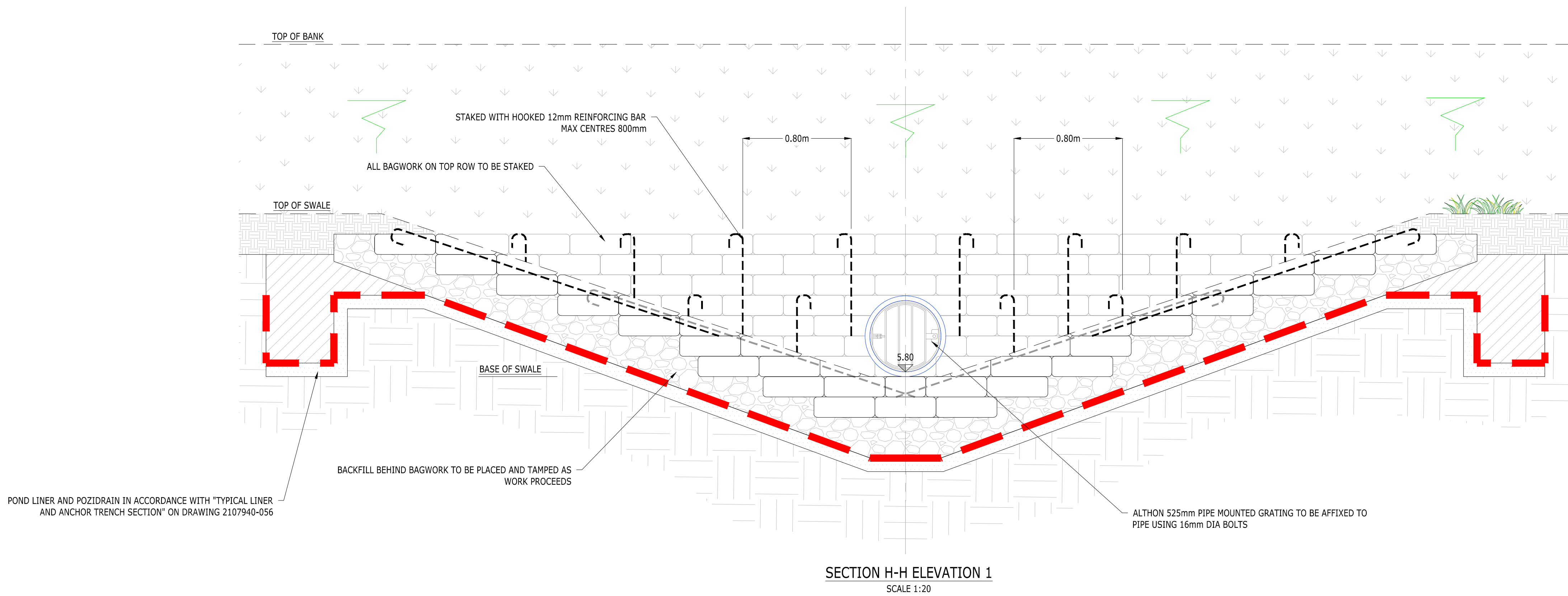
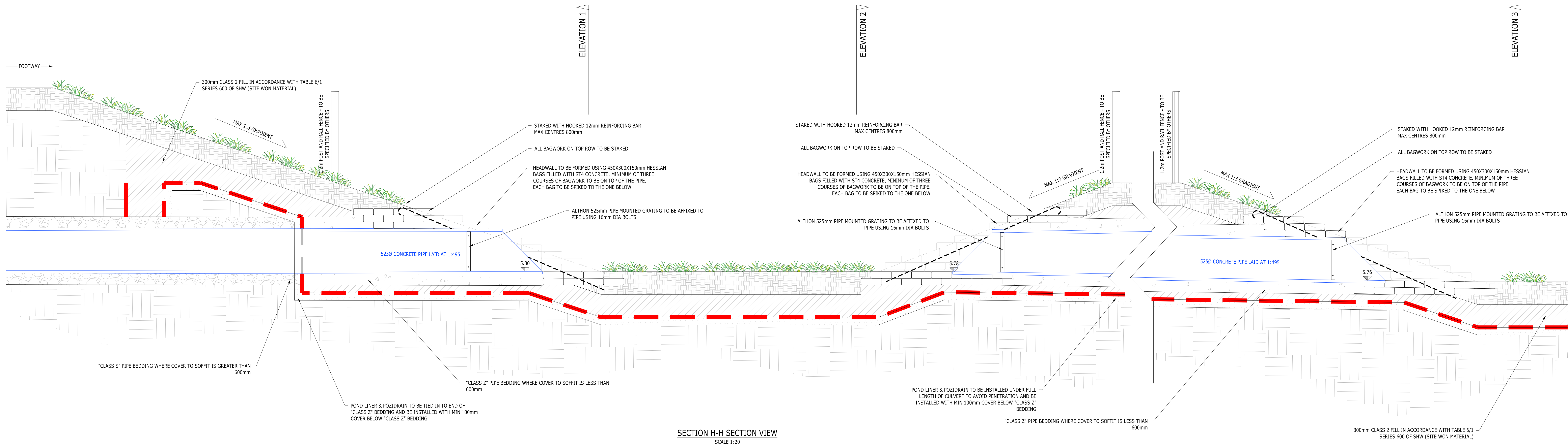
ARUNDEL GATE,
FORD ROAD, ARUNDEL

Drawing Title

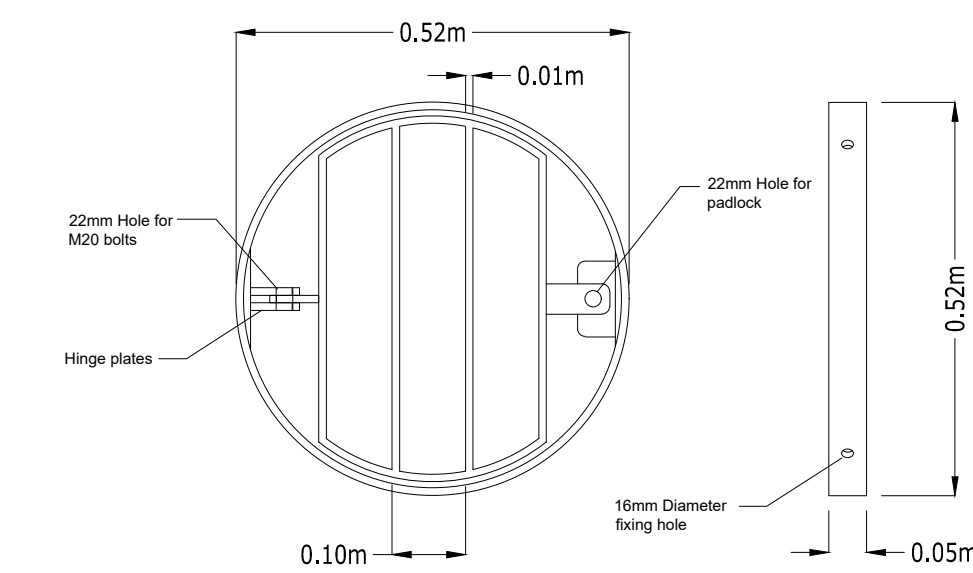
HEADWALL SECTIONS - SHEET 4

Scale AS SHOWN	Date 08/07/24	Designed by AMC
Drawn by AMC	Checked by AMC	Approved by A Dennis AD
Drawing Number 2107940-153		Rev -

NOTE
PLEASE REFER TO DRAWING
2107940-032 FOR PLAN VIEW OF ALL
SECTIONS.
FOR OWC HEADWALL DETAILS REFER
TO DRAWING 2107940-033.



- NOTES
1. BAGS SHALL BE OF HESSIAN AND SHALL BE OF A SIZE TO PROVIDE A WALL THICKNESS OF 500MM
 2. CONCRETE BAGWORK SHALL BE TO CLAUSE 519 AND BE THREE QUARTER FILLED WITH 25MM SLUMP ST4 CONCRETE IMMEDIATELY PRIOR TO PLACING WITH ENDS SEWN.
 3. THE BAGS SHALL BE PLACED IN A MODIFIED FLEMISH BOND SO AS TO 'BREAK JOINT' WITH THE MOUTHS AWAY FROM THE SURFACE AND BE TAMPED INTO POSITION TO FORM A RECTANGULAR BLOCK
 4. EXTENT OF OUTLET PROTECTION TO BE THE GREATER OF 1500mm OR PIPE DIAMETER + 1200mm SPANNING THE OUTLET PIPE.
 5. DITCH TO BE REGRADED AS REQUESTED.
 6. ALL EXPOSED PIPEWORK TO BE CERTIFIED UV STABLE.
 7. ALL BAGS ON TOP ROWS TO BE STEEL SPIKED.
 8. NO PART OF HEADWALL STRUCTURE TO ENCRoACH INTO THE PROFILE OF THE WATERCOURSE.



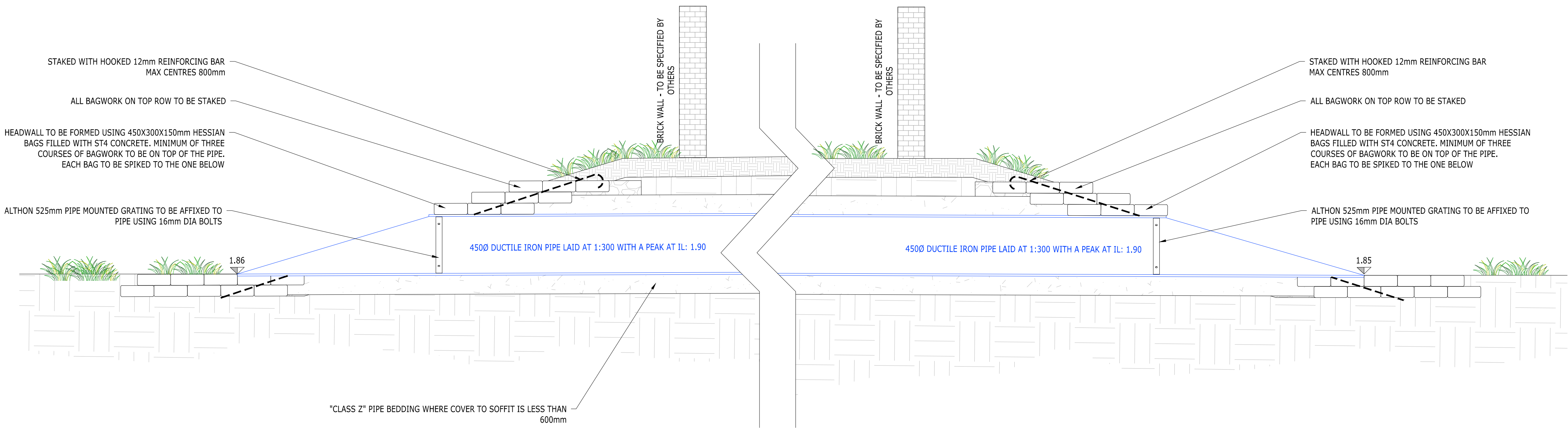
ALTHON 525mm PIPE MOUNTED GRATING
SCALE 1:10

APPROVAL

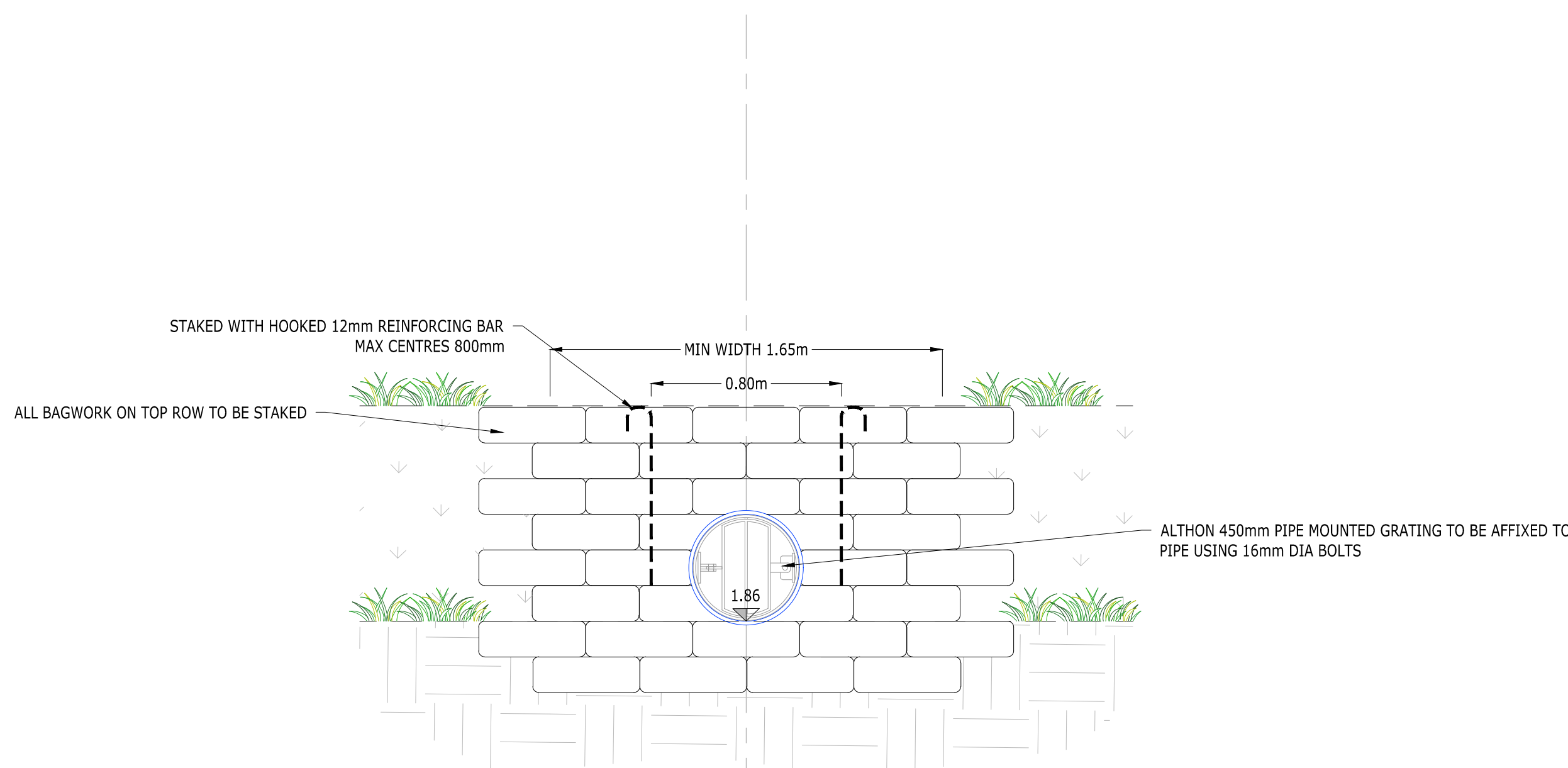
Rev Description Dwn Chk App Date
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Client
ESQUIRE DEVELOPMENTS
Project Title
**ARUNDEL GATE,
FORD ROAD, ARUNDEL**
Drawing Title
HEADWALL SECTIONS - SHEET 5
Scale AS SHOWN Date 08/07/24 Designed by AMC
Drawn by AMC checked by AMC AD
Drawing Number 2107940-154 Rev

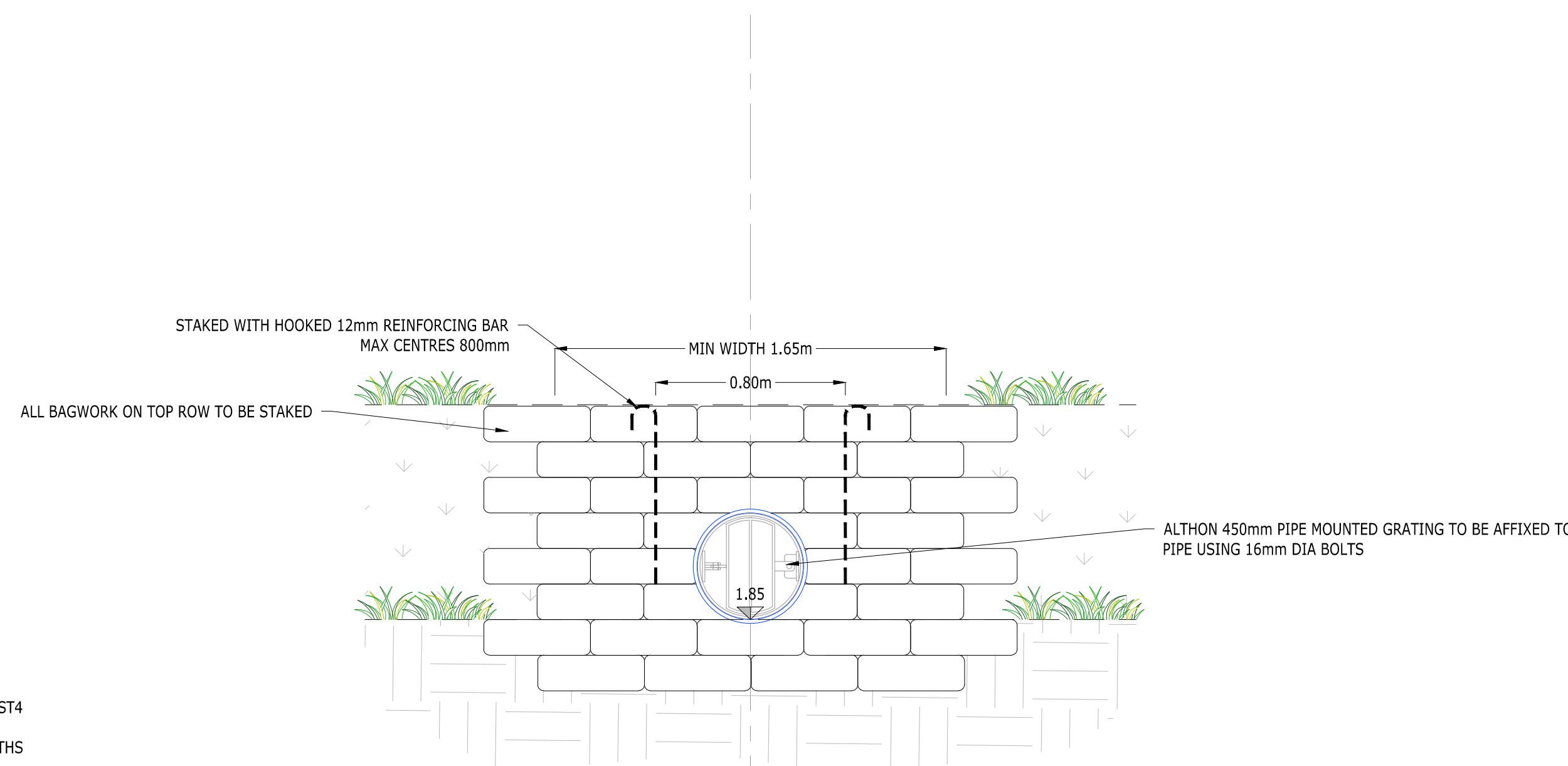
NOTE
PLEASE REFER TO DRAWING
2107940-032 FOR PLAN VIEW OF ALL
SECTIONS.
FOR OWC HEADWALL DETAILS REFER
TO DRAWING 2107940-033.



SECTION ACCESS ROAD CULVERT - SECTION VIEW
SCALE 1:20

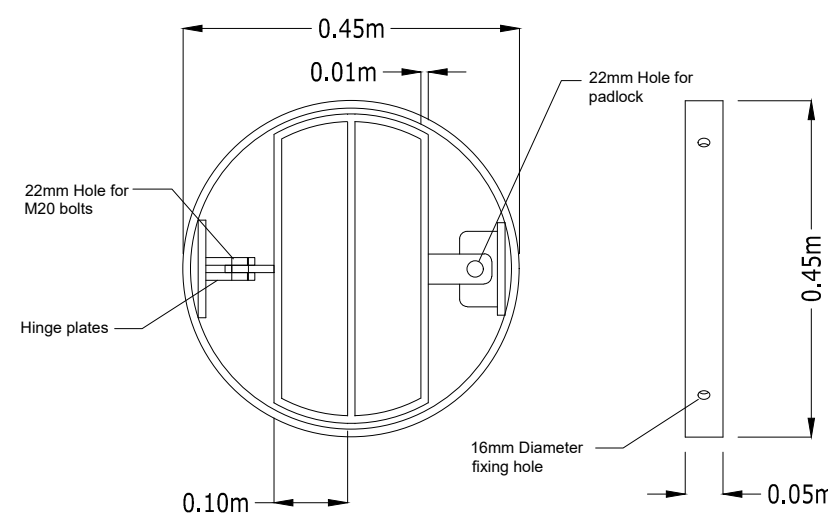


SECTION ACCESS ROAD CULVERT ELEVATION
SCALE 1:20



SECTION ACCESS ROAD CULVERT ELEVATION
SCALE 1:20

- NOTES
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 - CONCRETE BAGWORK SHALL BE TO CLAUSE 519 AND BE THREE QUARTER FILLED WITH 25MM SLUMP ST4 CONCRETE IMMEDIATELY PRIOR TO PLACING WITH BAGS SEWN.
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 - DITCH TO BE REGRADED AS REQUESTED.
 - ALL EXPOSED PIPEWORK TO BE CERTIFIED UV STABLE.
 - ALL BAGS ON TOP ROWS TO BE STEEL SPIKED.
 - NO PART OF HEADWALL STRUCTURE TO ENCRDACH INTO THE PROFILE OF THE WATERCOURSE.



ALTHON 450mm PIPE MOUNTED GRATING
SCALE 1:10

APPROVAL

Rev | Description | Dwn | Chk | App | Date

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ESQUIRE DEVELOPMENTS

Project Title:

ARUNDEL GATE,
FORD ROAD, ARUNDEL

Drawing Title:

HEADWALL SECTIONS - SHEET 6

Scale

AS SHOWN

Drawn by

AMC

Drawing Number

Date

06/07/24

Checked by

AMC

Approved by

Rev

2107940-155

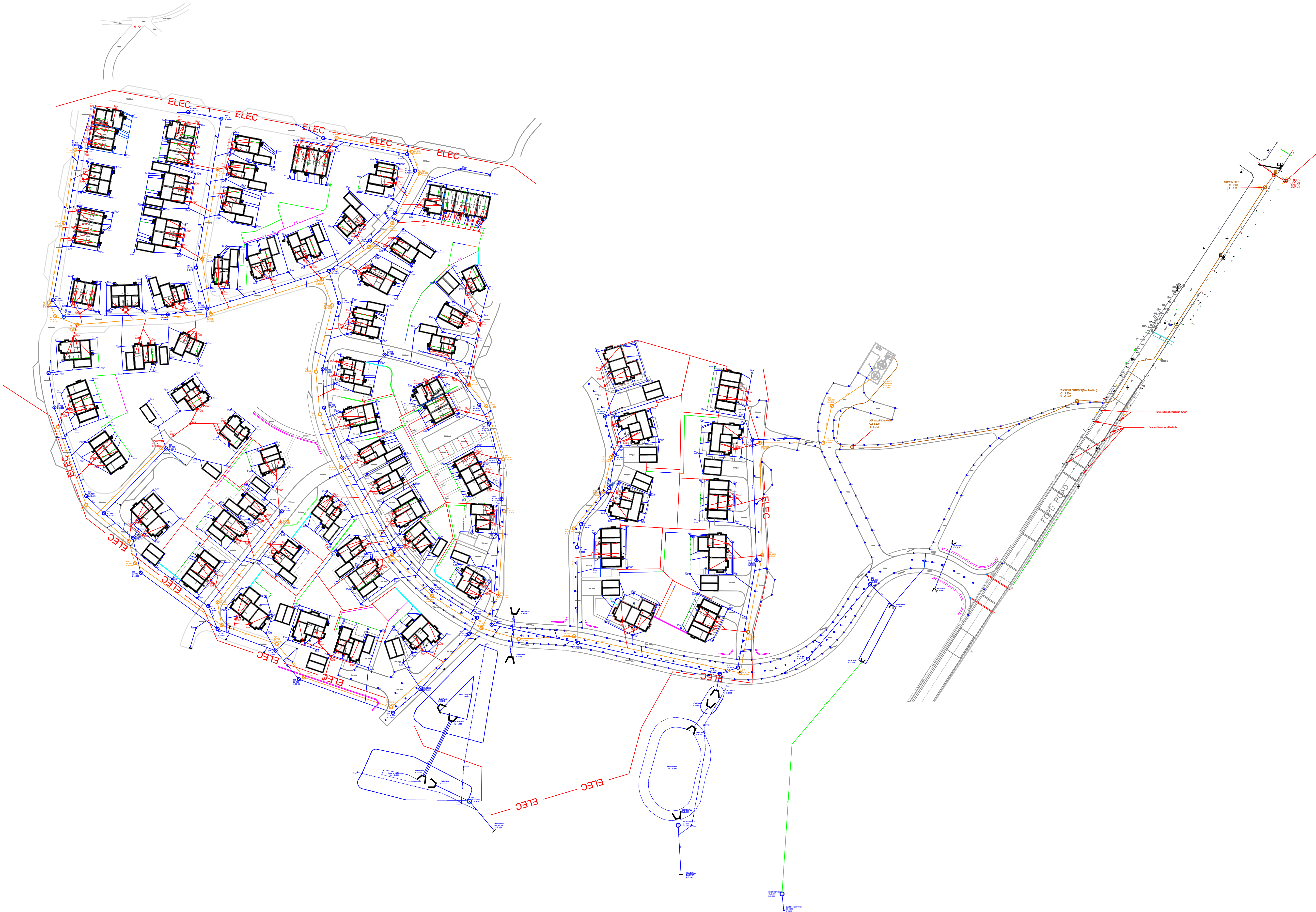
Rev

LAND AT FORD ROAD, ARUNDEL

SuDS VERIFICATION REPORT



Appendix D – As-Built Survey



GENERAL NOTES

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THIS DRAWING SHOULD NOT BE USED FOR SCALING. ANY SCALED DIMENSIONS ARE TO BE CONFIRMED BY THE CONTRACT ADMINISTRATOR.

UNLESS STATED OTHERWISE, ALL DIMENSIONS ARE IN MILLIMETRES.

MATERIALS AND WORKMANSHIP SHALL BE TO THE BEST OF THEIR RESPECTIVE KIND AND CONFORM WITH THE RELEVANT BRITISH & EUROPEAN STANDARDS, SPECIFICATIONS AND CODES OF PRACTICE.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND THE SERVICES SPECIFICATION DOCUMENT(S).

FAILURE TO RAISE QUERIES IN A TIMELY MANNER SHALL RESULT IN COSTS BOURNE DIRECTLY BY THE CONTRACTOR.

CON RESIDUAL MECHANICAL ELECTRICAL & PUBLIC HEALTH DESIGN RISKS AND RESIDUAL ENVIRONMENTAL RISKS

NO UNUSUAL RISKS ASSOCIATED WITH THIS ELEMENT OF WORK.

In accordance with the Construction Design Management Regulations 2015, BSE34 Consulting Engineers Ltd has undertaken a design risk assessment for the elements of work shown on this drawing. The above are some but not all the residual risks identified in the risk assessment.

ABBREVIATIONS:

2x1 1000 DUCT	CONFIGURATION & SIZE IN MILLIMETRES	IL INVERT LEVEL
0.50	DEPTH IN METRES	JB JUNCTION BOX
AV	AIR VALVE	LP LAMP POST
BH	BOREHOLE	MR MARKER POST
BL	BLOCKED	MH MANHOLE
BOL	BOLLARD	NL NOT LOCATED
BC	BOLLARD COVER	NSV NO SERVICE VISIBLE
BPav	BRICK PAVING	RDG RIDGE LEVEL
CCTV	CCTV CAMERA	RI RISER
CC	CONTROL CABINET	RS ROAD SIGN
CL	COVER LEVEL	SA SAWY ARMY
CO	COLUMN	SL SENSOR LOOP
CP	CATCH PIT	SV SLUCE VALVE
DP	DRAINPIPE	T&C TARMAC
EOT	END OF TRACE	TPav TACTILE PAVING
EP	ELECTRIC POLE	TR TREE
EV	EAVE LEVEL	VP VENT PIPE
FRL	FLAT ROOF LEVEL	WM WATER METER
GV	GAS VALVE	WO WASHOUT
GY	GULLY	WSV WATER STOP VALVE
IC	INSPECTION COVER	WV WATER VALVE
		UTL UNABLE TO LIFT
		UTT UNABLE TO TRACE

Notes:
1. Dimensions should not be scaled. All dimensions should be checked onsite before proceeding with any works.

1.0	ISSUE FOR INFORMATION
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BN18 9EX

Drawing Title:
As Built Drawing

Scale	1:750	Drawn By	AR	Date Drawn	02.07.2025	Checked By	KC
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Drawing No.	3125-01-02	Revision	
Sheet No.	1 of 1		As Built