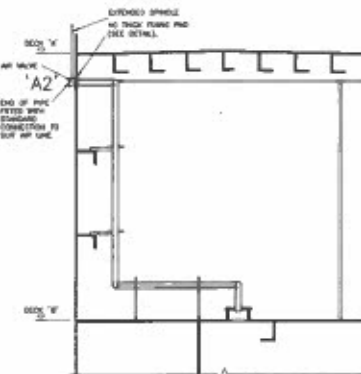
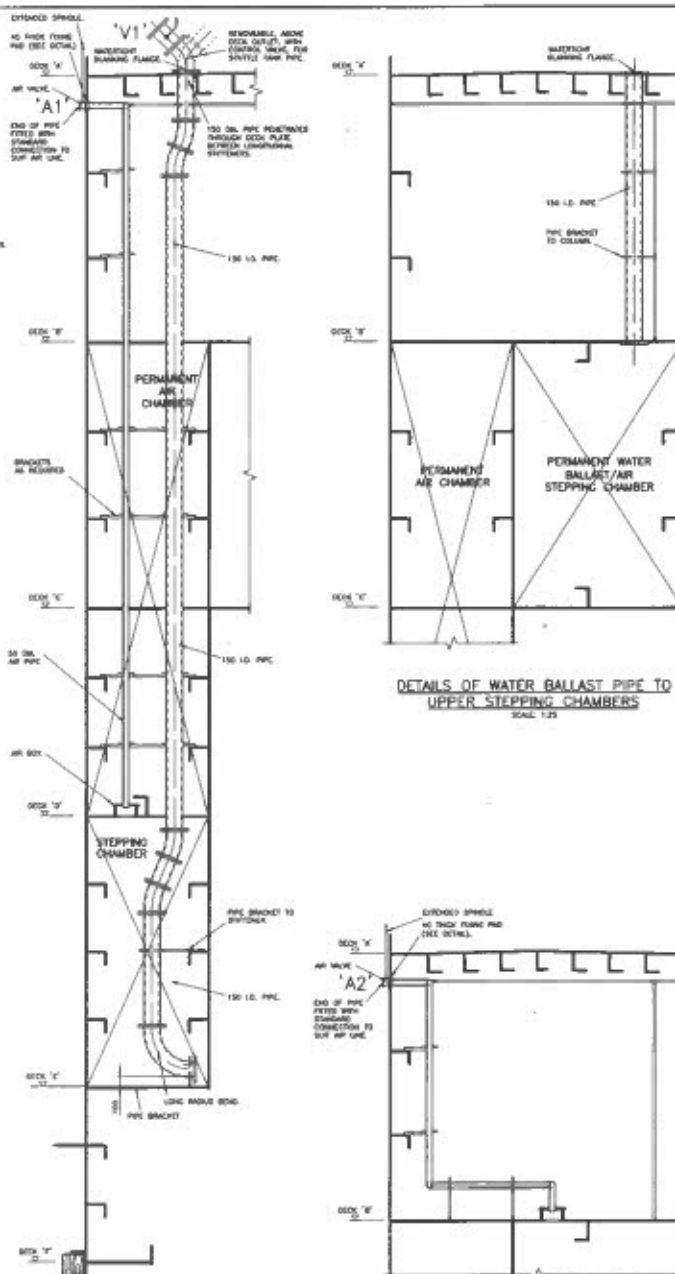
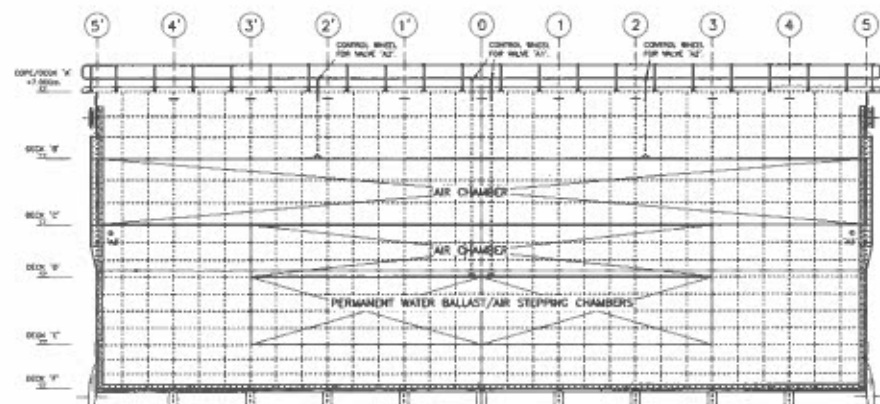
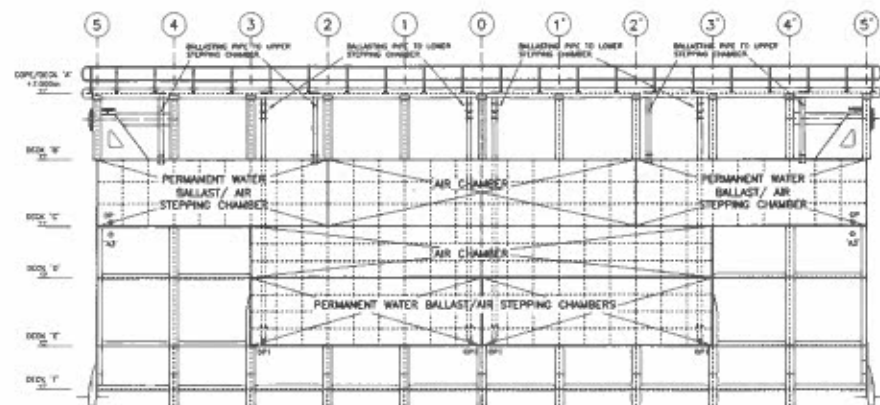
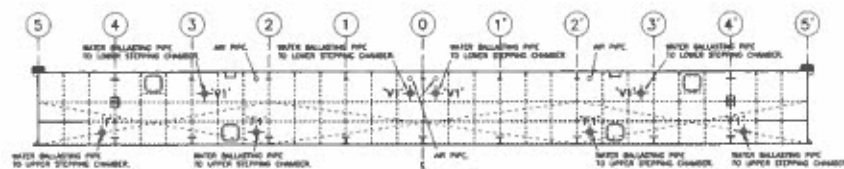
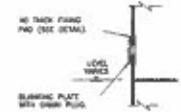
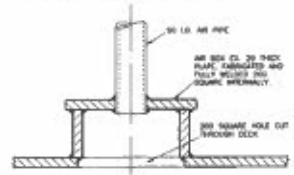
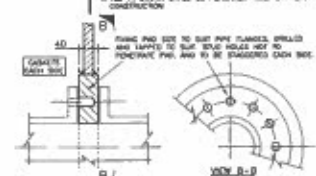


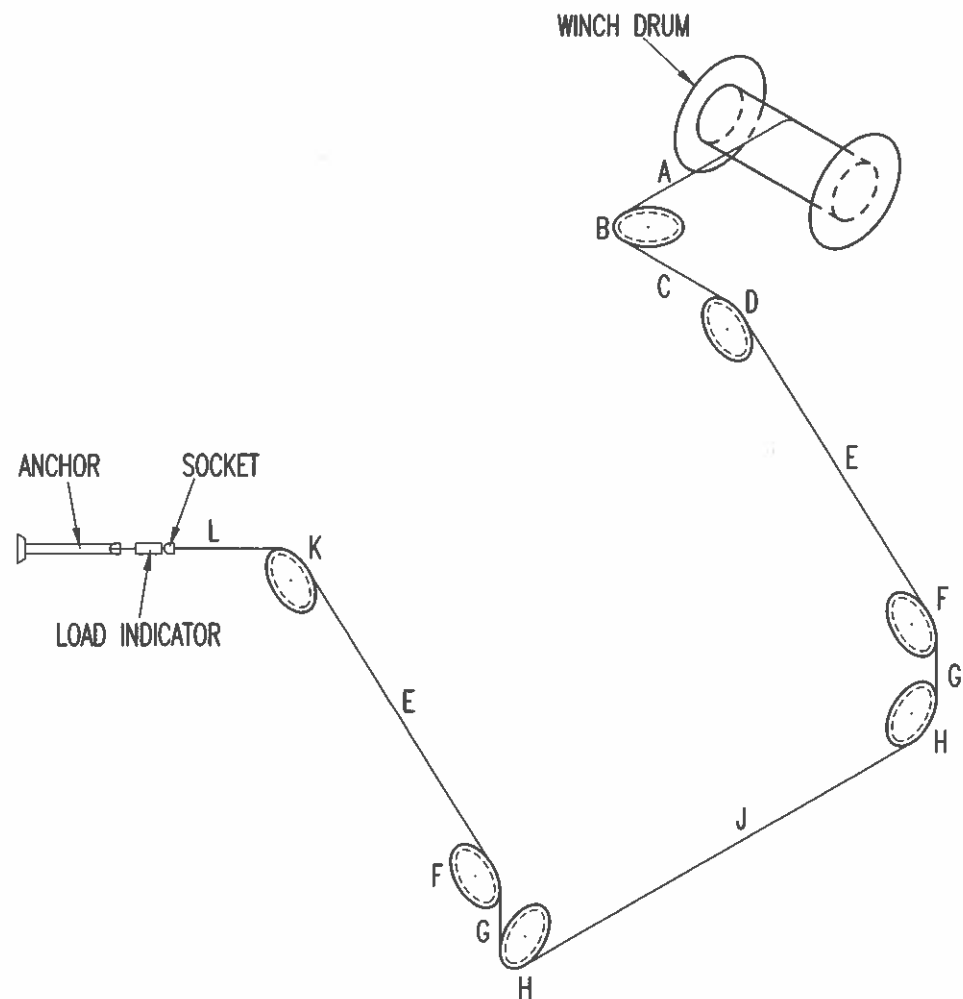


- NOTES
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS.
 2. FOR SCHOOL NOTES AND LISTS REFER TO (Drawing No. H0041/77/1000).
 3. DRAWING TO BE READ IN CONJUNCTION WITH H0041/77/700.
 4. ALL INFORMATION SHALL BE PERMANENT AND OF HEAVY



TENDER DRAWING

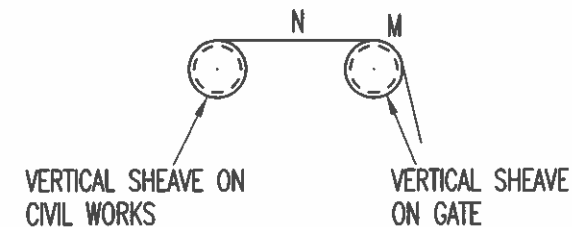
9	GL/TH	TEADOR	A	52	MM
40	SW	DISCOPHANT	B	50	MM
DRAWING					
			MAZDOCK ENGINE LTD DISCOPHANT ROAD MANCHESTER - M14 5SD		
PROJECT					
MAZDOCK MODERNISATION PROJECT					
DRAWING TITLE					
WET BASIN DOCK GATE LAYOUT AND DETAILS OF PIPES, VALVES, PLUGS AND FITTINGS					
			MAZDOCK ENGINEERING AND ARCHITECTURE		
ROYAL HASKONING Engineering and Architecture			MAZDOCK ENGINEERING AND ARCHITECTURE 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, 808, 810, 812, 814, 816, 818, 820, 822, 824, 826, 828, 830, 832, 834, 836, 838, 840, 842, 844, 846, 848, 850, 852, 854, 856, 858, 860, 862, 864, 866, 868, 870, 872, 874, 876, 878, 880, 882, 884, 886, 888, 890, 892, 894, 896, 898, 900, 902, 904, 906, 908, 910, 912, 914, 916, 918, 920, 922, 924, 926, 928, 930, 932, 934, 936, 938, 940, 942, 944, 946, 948, 950, 952, 954, 956, 958, 960, 962, 964, 966, 968, 970, 972, 974, 976, 978, 980, 982, 984, 986, 988, 990, 992, 994, 996, 998, 1000		
ISSUED BY	AP	DATE	DEC 73		
JOB NO.	H8543		MODIFY REF	T15.DWG	
SCALE AT A1	1:100, 1:20, 1:5				
DRAWING NO.	H8543/TD/T15				REVISION
					0



SCHEMATIC LAYOUT OF WINCH ROPE.

N.B. SUBJECT TO CONFIRMATION WHEN
LAYOUT SIZES ETC. ARE FINALISED.

DIMENSIONS WITH GATE CLOSED.



$$M = 0.960 \times \pi \times 0.25 = 0.750\text{m}$$

$$N = 2.300 \text{ APPROX.}$$

$$\text{LIVE TRAVEL : } 2E + 2D + 2F - 2M - 2N \\ = 31.220\text{m SAY } 32.0\text{m}$$

DIMENSIONS WITH GATE OPEN.

ANCHORAGE ON DRUM (SAY)	= 0.600
6 DEAD TURNS ON DRUM $6 \times \pi \times 0.700$ (SAY)	= 13.200
A = 10.000 APPROX.	= 10.000
B = $0.960 \times \pi \times 0.375$	= 0.750
C = 0.800 APPROX.	= 0.800
D = $0.960 \times \pi \times 0.125$	= 0.380
E = 17.900 APPROX.	= 17.900 x 2
F = $0.960 \times \pi \times 0.125$	= 0.380 x 2
G = 1.500 APPROX.	= 1.500 x 2
H = $0.960 \times \pi \times 0.25$	= 0.750 x 2
J = 31.500	= 31.500
K = $0.960 \times \pi \times 0.25$	= 0.750
L = 1.250 APPROX.	= 1.250

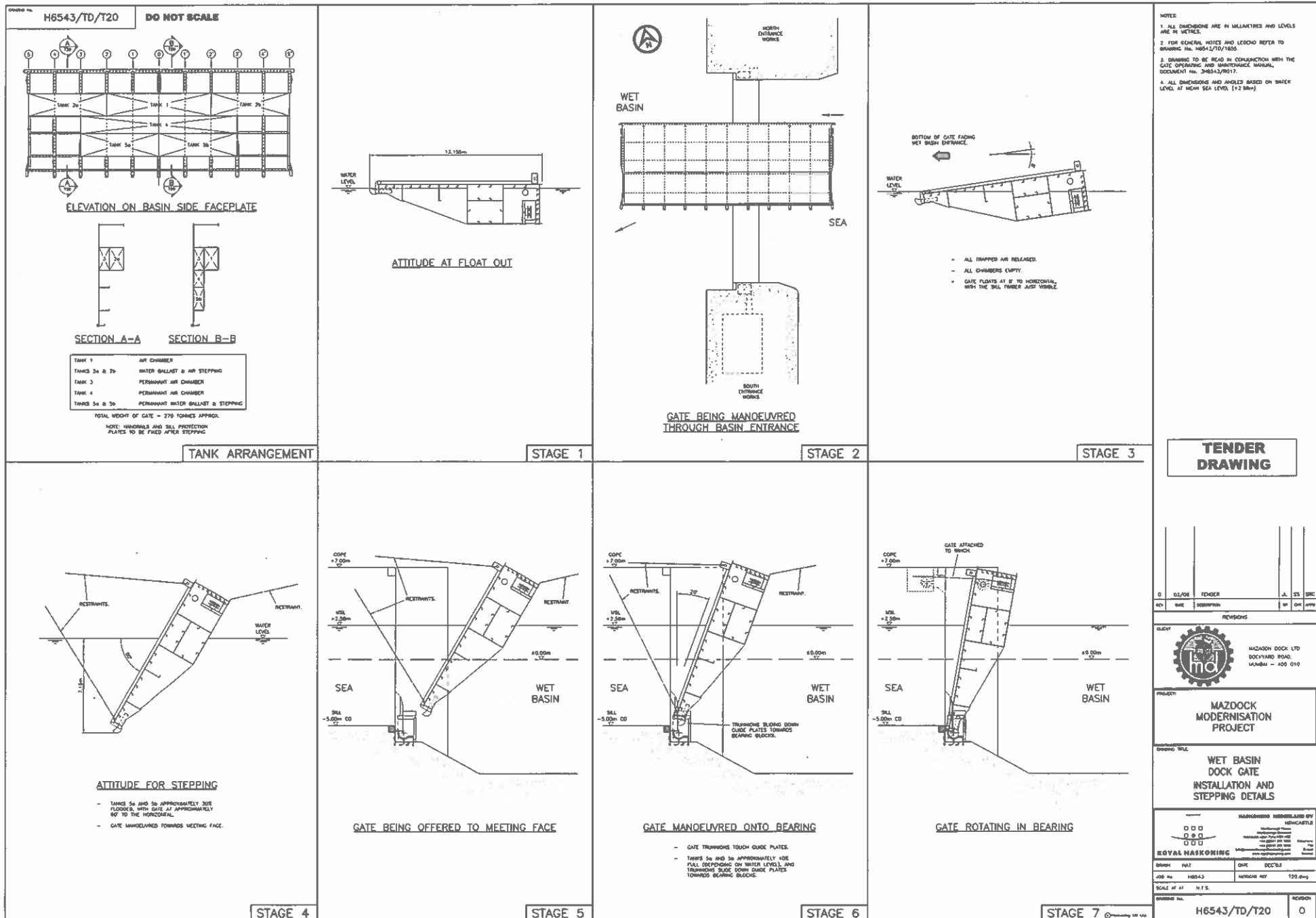
TOTAL = 100.29m say 105m

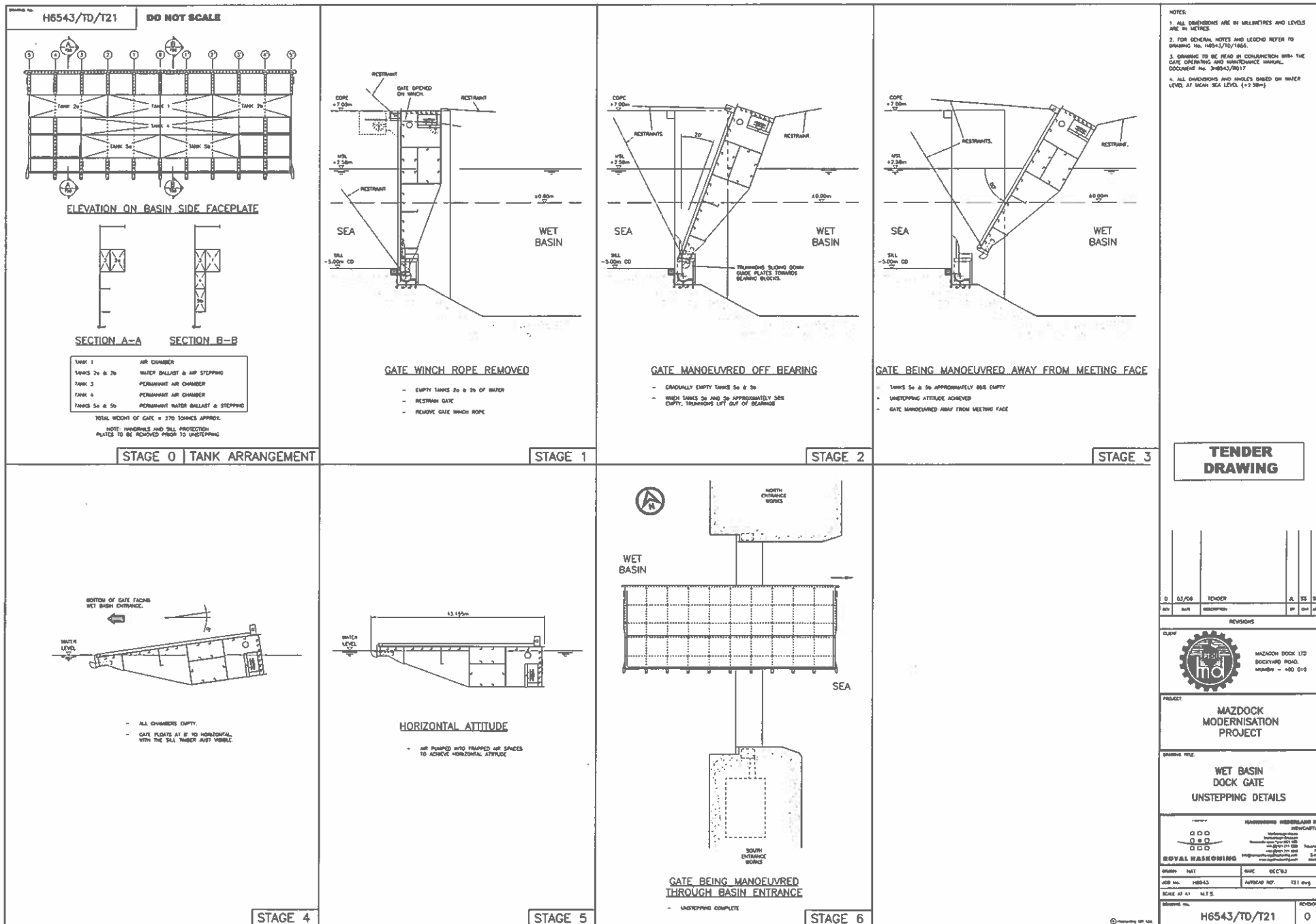
TITLE
WET BASIN
GATE WINCH ROPE
LENGTH CALCULATION

PROJECT
MAZDOCK
MODERNISATION PROJECT

ROYAL HASKONING
HASKONING NEDERLAND BV
NEWCASTLE
Marinegroup House
Marinegroup Crescent
Newcastle upon Tyne NE1 4EE
+44 (0)191 211 1300
+44 (0)191 211 1302
info@haskoning.nl
www.haskoning.nl

Job No. 3H6543	DATE FEB'06	SCALE N.T.S.
ACAD Ref.	CHECKED SJW	PASSED
DRAWN NAT	DRG No. H6543/TD/T17	REV 0





NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES.
2. FOR GENERAL NOTES AND LEGEND REFER TO DRAWING NO. H6543/TD/T655.
3. DRAWING TO BE READ IN CONJUNCTION WITH THE GATE OPERATING AND MAINTENANCE MANUAL, DOCUMENT NO. 305043/0017.
4. ALL DIMENSIONS AND ANGLES BASED ON WATER LEVEL AT MEAN SEA LEVEL (+7.58m).

TENDER DRAWING

0	03/06	TOUCH	A	ES	SEC
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS



MAZDOCK MODERNISATION PROJECT

WET BASIN DOCK GATE UNSTEPPING DETAILS

MANUFACTURED BY
ROYAL HARRINGTON

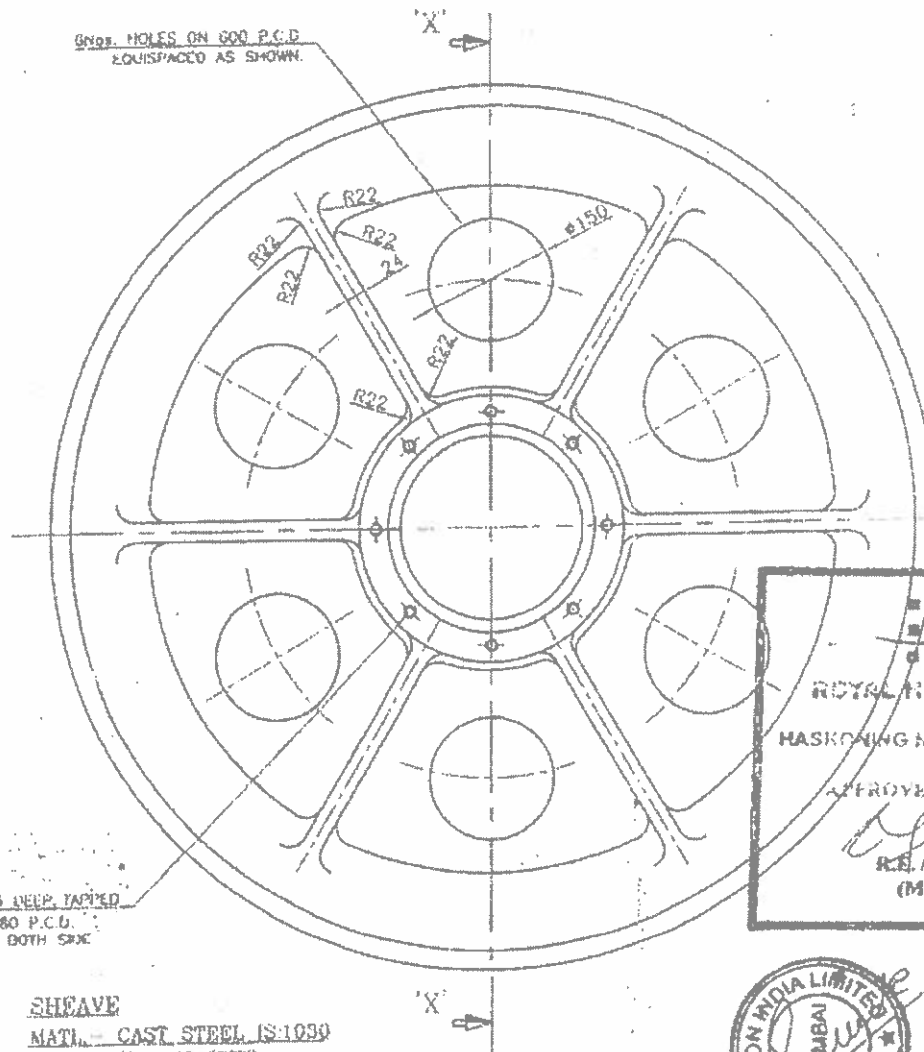
DESIGN: MAT DATE: DEC'03
JOB NO.: H6543 APPROV. NO.: T21 rev
SCALE: AS SHOWN

REVISIONS
H6543/TD/T21 0

This drawing is Copyright ©



Notes: - M12x25 DEEP TAPPED
HOLES ON 280 P.C.U.
EQUISPACED BOTH SIDE



SHEAVE

MATL - CAST STEEL IS-1030
(Gr. 340-570W)

QTY - 7 Nos.

PART No. B094200

~~ROYAL MASKING~~

HASKONING NEDERLAND B.V.

~~APPROVED BY UNBY~~

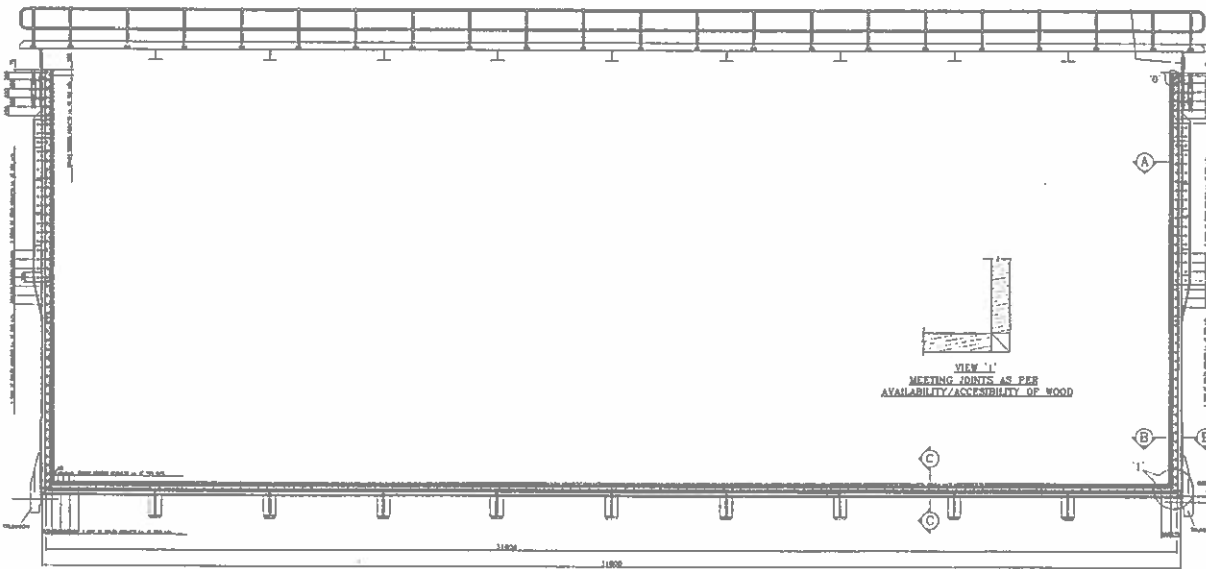
RE. /INBV
(MMP)



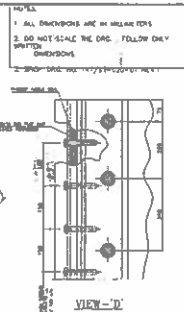
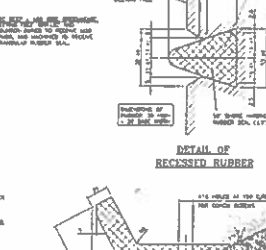
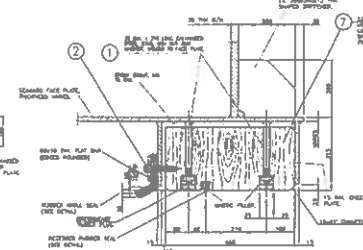
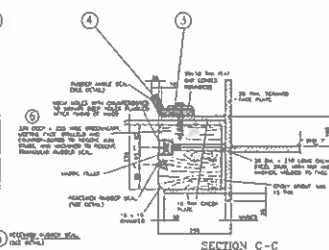
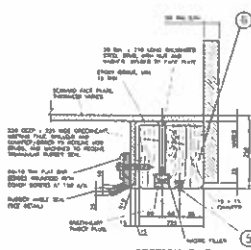
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H6543/47/ST-020

DO NOT SCALE



ELEVATION ON SEA SIDE PLATE AND TIMBER MEETING FACE



NO.	DESCRIPTION	QTY	UNIT
1	20 mm x 100 mm x 100 mm	1	PC
2	20 mm x 100 mm x 100 mm	1	PC
3	20 mm x 100 mm x 100 mm	1	PC
4	20 mm x 100 mm x 100 mm	1	PC
5	20 mm x 100 mm x 100 mm	1	PC
6	20 mm x 100 mm x 100 mm	1	PC
7	20 mm x 100 mm x 100 mm	1	PC
8	20 mm x 100 mm x 100 mm	1	PC
9	20 mm x 100 mm x 100 mm	1	PC
10	20 mm x 100 mm x 100 mm	1	PC

NO.	DESCRIPTION	QTY	UNIT
1	20 mm x 100 mm x 100 mm	1	PC
2	20 mm x 100 mm x 100 mm	1	PC
3	20 mm x 100 mm x 100 mm	1	PC
4	20 mm x 100 mm x 100 mm	1	PC
5	20 mm x 100 mm x 100 mm	1	PC
6	20 mm x 100 mm x 100 mm	1	PC
7	20 mm x 100 mm x 100 mm	1	PC
8	20 mm x 100 mm x 100 mm	1	PC
9	20 mm x 100 mm x 100 mm	1	PC
10	20 mm x 100 mm x 100 mm	1	PC

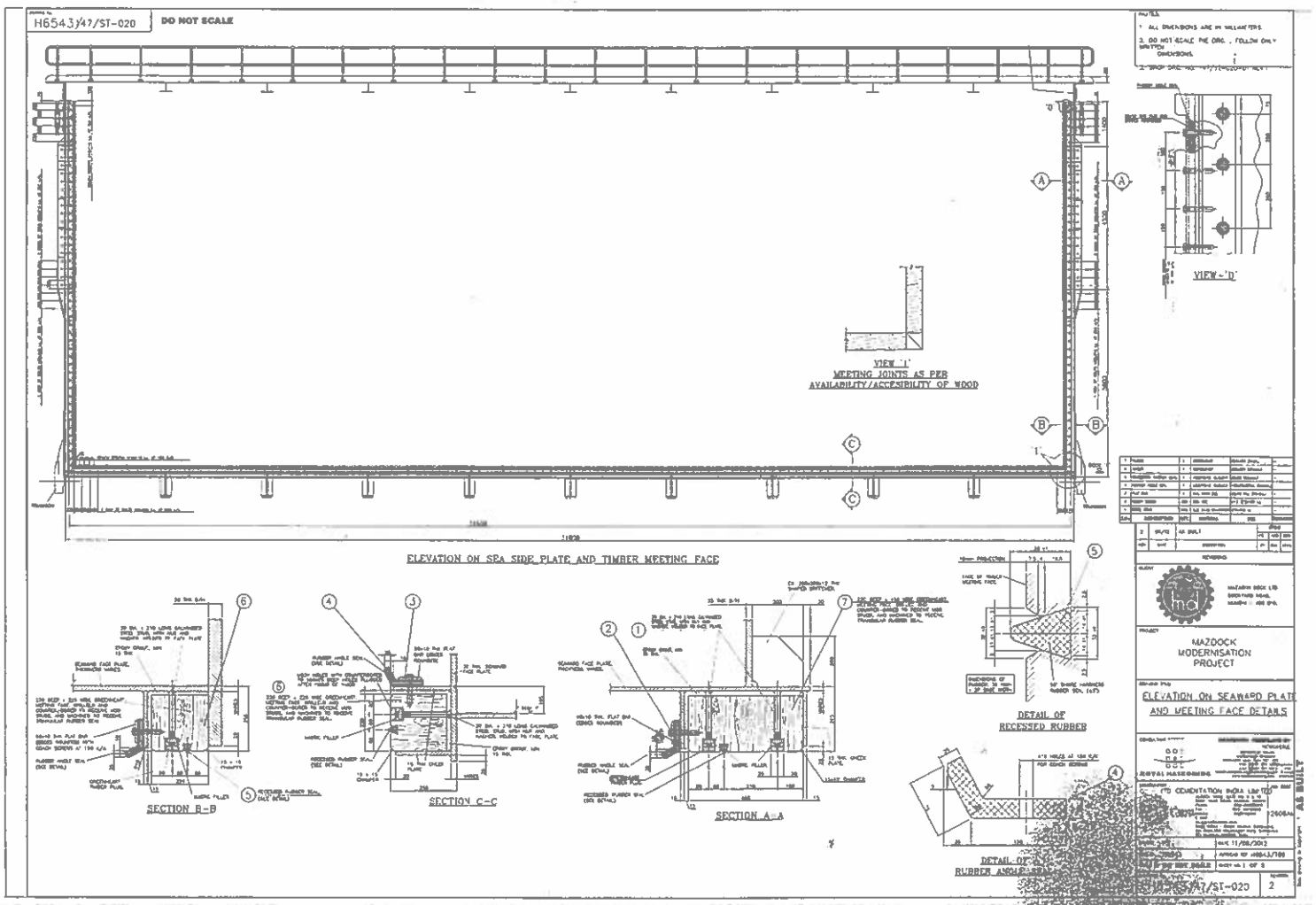


MAZDOCK
MODERNISATION
PROJECT

ELEVATION ON SEAWARD PLATE
AND MEETING FACE DETAILS

NO.	DESCRIPTION	QTY	UNIT
1	20 mm x 100 mm x 100 mm	1	PC
2	20 mm x 100 mm x 100 mm	1	PC
3	20 mm x 100 mm x 100 mm	1	PC
4	20 mm x 100 mm x 100 mm	1	PC
5	20 mm x 100 mm x 100 mm	1	PC
6	20 mm x 100 mm x 100 mm	1	PC
7	20 mm x 100 mm x 100 mm	1	PC
8	20 mm x 100 mm x 100 mm	1	PC
9	20 mm x 100 mm x 100 mm	1	PC
10	20 mm x 100 mm x 100 mm	1	PC

H6543/47/ST-020 2

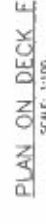


wood material : Padank wood to be considered.

[Signature]
08/1/25

GATE AND SILL DRAWING LIST	
316543/7001	General Arrangement
316543/7002	Deck Plans (1 of 2)
316543/7003	Deck Plans (2 of 2)
316543/7004	Bulkheads (1 of 2)
316543/7005	Bulkheads (2 of 2)
316543/7006	General Arrangement
316543/7007	End Elevation & Sheave Mounting
316543/7008	Both Face Plans Elevation
316543/7009	Seaward Profile Elevation & Mooring Plan
316543/7010	Plan Elevation & Transverse Section
316543/7011	Reverse Head Plan & Sheave Plan
316543/7012	Reverse Head Plan Details
316543/7013	SI Protection Profile
316543/7014	Manufacturing Details
316543/7015	SI Protection Profile
316543/7016	Gate Works & Interface
316543/7017	Gate Work Shop Layout
316543/7018	Gate Work Shop Layout
316543/7019	Unloading Details
316543/7020	Unloading Details
316543/7021	Gate Work Shop Layout
316543/7022	Gate Work Shop Layout
316543/7023	Gate Work Shop Layout

FOR CONSTRUCTION



- 1 ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS NOTED OTHERWISE.
- 2 ALL LEVELS ARE IN METRES ABOVE CHART DATUM, UNLESS NOTED OTHERWISE.
- 3 ALL STEEL TO BE MILD STEEL, AND SHALL COMPLY WITH LLOYD'S REGISTER STEELWORK CLASSIFICATION GRADE A, OR SIMILAR APPROVED.
- 4 ALL CONSTRUCTION JOINTS TO BE FULL STRENGTH BUTT WELDS.
- 5 ALL OTHER WELDS TO BE 8mm (FULL STRENGTH) FULL PROFILE FILLET WELDS, UNLESS NOTED OTHERWISE.
- 6 FOR CONSTRUCTION TOLERANCES, REFER TO THE SPECIFICATION.
- 7 WELDS ARE TO BE GROUND/GRIT BLASTED IN ACCORDANCE WITH THE SPECIFICATION PRIOR TO PAINTING.
- 8 ALL EXPOSED STEEL TO BE BLAST CLEANED AND PAINTED IN ACCORDANCE WITH THE SPECIFICATION PRIOR TO PAINTING.
- 9 ALL EDGES TO EXPOSED STEEL ARE TO BE GROUND SMOOTH/CHAMFERED PRIOR TO PAINTING.
- 10 ALL WELDING SPATTERS TO EXPOSED STEEL ARE TO BE REMOVED BY CHIPPING, PRIOR TO PAINTING.

SUGGESTED REVERSE HEAD POST INSTALLATION PROCEDURE

- 1 LOCATION BOLTS TO BE SET WITH 1ST STAGE CONCRETE.
- 2 COMPLETE ASSEMBLY TO BE PLACED IN POSITION, AND 2ND STAGE CONCRETE TO BE PLACED.
- 3 AFTER SILL MEETING BLOCKS HAVE BEEN DRESSED AND SET IN FINAL POSITION, ADJUST POSITION OF STUDS SO THAT FACE OF STUDS ARE 107mm FROM MEETING FACE, THEN TIGHTEN NUTS ON #80mm BOLTS.
- 4 PLACE 3RD STAGE CONCRETE.
- 5 NOTE: CONCRETE STAGES DETAILED ON THIS DRAWING MUST BE TO THE CONSTRUCTION OF THE REVERSE HEAD POSTS ONLY.

