UU REF 4200029492 - PHASE 2A UU REF 42000xxxxx - PHASE 2B **EXISTING** ROAD20 STORMWATER STORMWATER HAND HAND GROUND CHANNEL CHANNEL DETAILS INVERT LENGTHS LEVEL 80.000 Dia 225 IL 82.550 83.571 0.000 \$3.692 S94 2.800 83.674 82.550 83.622 83.485 83.553 83.473 10.000 34.444 e S granular surround UU 4200029492

Pipe 6.001

Dia 225

POLYSEWER

1 in 33

WIS.4.35.01 83.455 83.318 83.387 83.349 21.059 83.288 83.151 83.220 83.232 30.000 G= -1.669% 1: -59.9 8<u>3.150</u> S95 35.771 81.438 Туре 83.122 82.984 83.053 82.942 40.000 S 22.530 granular 41.479 4200029492
Pipe 6.002
Dia 300
POLYSEWER
1 in 50
WIS.4.35.01 Dia 150
1L 80.650 82.955 82.886 82.518 82.817 50.000 82.956 F54 ROAD21 56.544 55.846 80.650 82.788 82.650 82.719 82.130 60.000 80.912 36.611
Type S granular surround 82.610 66.544 82.618 82.480 81.654 70.000 PHASE 2A
U 4200029492
Pipe 2.004
Dia 150
POLYSEWER
1 in 23
WIS.4.35.01 S S62 Constructed on existing sewer. Position, invert & pipe size to be confirmed by excavation prior to any work on site granular = 20.000 -17.65494 55.115 surround Pipe 6.003
Dia 375
Circular CONC
1 in 58
Concrete Class 12 82.403 82.265 82.334 81.121 80.000 Dia 225 IL 78.877 82.163 86.544 82.135 81.997 82.066 82.181 S62 ROAD22 82.500 F55 90.744 79.052 120 92.444 77.195 150 77.195 98.889 81.886 81.748 81.786 80.051 S 25.160 granular surround 81.717 81.855 U 4200029492
Pipe 1.007
Dia 150
POLYSEWER
1 in 31
WIS.4.35.01 104.281 81.437 79.740 81.574 81.506 110.000 <u>∮1.387</u> S55 113.125 79.887 81.348 115.622 Pipe 6.004
Dia 450
Sircular CONC
1 in 47
Concrete Clas PHASE 2A 4200029492 81.271 F86 14.238
Type A
nc surround Type 78.003 119.097 81.313 81.244 79.770 81.176 78.003 120.000 16.569 granular surrou Pipe 1.006 Dia 150 POLYSEWER 1 in 140 WIS.4.35.01 5.11161 20.000 125.622 79.587 31.090 ROAD23 129.942 126.528 LP 79.587 120 81.216 81.079 81.148 79.732 2A 81.148 130.000 78.12 1.206 F1 135.936 78.121 136.183 81.228 140.000 81.297 81.159 79.638 81.270 79.696 150.000 81.408 81.339 Pipe 6.005
Dia 450
Circular CONC
1 in 250
Concrete Class 1 81.519 81.381 81.450 79.656 160.000 Type S granular Type 161.239 S U 4200029492
Pipe 1.005
Dia 150
POLYSEWER
1 in 140
WIS.4.35.01 64.423 granular 주= = 81.587 81.450 81.518 79.591 170.000 20.000 -9.00050 171.239 81.519 81.477 81.545 81.408 79.605 180.000 81.464 Dia 600 # 79.170 81.366 81.435 81.298 79.811 190.292 S 1<u>.306</u> S10 <u>은</u> 192.743 Pipe 8.008
Dia 450
rcular CONC
1 in 249
rete Class 12 79.345 79.346 81.255 81.324 80.205 81.187 78.582 81.232 202.091 78.582 KF= 9.47418 L= 20.000 81.177 81.246 81.109 80.543 210.737 212.617 LP 81.174 Type Pipe 8.007
Dia 450
Circular CONC
1 in 250
Concrete Class 120 81.271 81.134 80.745 220.000 81.202 Pipe 1.004 Dio 150 POLYSEWER 1 in 140 WIS.4.35.01 51.210 e S granular surround 53.724 S granular 81.221 222.091 81.369 81.231 81.300 80.872 230.000 240.000 81.469 81.331 81.400 81.058 245.584 ROAD20A 81.569 81.431 81.500 81.216 250.000 81.530 81.494 F72 S35 79.561 78.947 252.842 81.515 81.583 81.282 81.652 Туре S Pipe 8.006
Dia 450
Circular CONC
1 in 250
oncrete Class 1: Pipe 1.003 Dia 150 POLYSEWER 1 in 140 WIS.4.35.01 57.667 granular surround PHASE 2B 55.019 granular 2B surround δ92.18 523.18 003.21 ₹89.18 896.08 G= 1.250% 1: 80.0 000.01 Σ13.18 564.18 533.18 **4**Σ8.08 593.18 Σ74.18 004.8 005.1 79.781 79.359 81,458 769.08 000.0 000.0 Dia 375 IL 79.856 Dia 150 IL 79.359

The chamber size of manholes with more then one connection in them may need to be increased one increment to accommodate the connection and bends. See individual manhole detail

wers to be laid in class S bedding (150mm granular bed and rround. Where depth of cover is less then 1.2m in highways and rges (or less then 900mm in non vehicle access areas) then a ncrete slab should be provided above the granular bed and

wers must have 5 metres clearance from trees and hedges (please o refer to Figure 2.3 on page 33 in "Sewers for Adoption" 6th Edition restrictions on tree planting adjacent to sewers)".

ALL MANHOLES AND DRAINAGE COMPONENTS TO COMPLY WITH UNITED UTILITIES CURRENT STANDARD DETAILS. ANY DEVIATION BETWEEN THESE AND THE CURENT DESIGN TO BE CLARIFIED PRIOR TO CONSTRUCTION.

OPTIONAL MANHOLE CONSTRUCTION.
IN LIEU OF THE STANDARD DETAILS UNITED UTILITIES WILL ACCEPT FP MACCANN EASI—BASE PRECAST MANHOLE BASES AND FP MACCANN WIDE WALLED MANHOLE RINGS.
DEVIATION FROM THESE DRAWING BY UTILIZING THE ABOVE PROJECTS MUST BE APPROVED FOR INDIVIDUAL MANHOLES BY UNITED UTILITIES PRIOR TO CONSTRUCTION

Top water level for the 30 year 15min storm

A02. This drawing to be read in c engineers and architects drawings part of this drawing may be reproduced, stored in a retrieval stem or transmitted in any form or by any means without prior rmission in writing from RAB Engineering LTD hole construction - refer to CPA technical bulletin Sept 2001 ming changes to relevant British Product Standards 911-200:1994. All precast concrete products are to be kite marked ey will be rejected as part of an adoptable system. Manhole cover s to BS5911 ble covers to have a clear opening of 600 x 600mm and shall be 2400 to BSEN124 with 150mm deep frames. ground must be filled and consolidated under the supervision of ore any sewer works are carried out. All adoptable sewers to be emarked, (certified to WIS-4-35-01)

able sewer pipes to be laid in max 3m len ic operational need to lay longer lengths.

All adoptable sewer works and materials to be in accordance with Sewers for Adoption 6th edition. The relevant British / European and United Utilities standards / requirements / addendum & Kitemarked. he adoptable sewers shall be a min 1.0m and m ne curb and service margins. wers must have 5m clearance t trictions on tree planting / types

K. Full redesign following layout changes and implement of surface water storage basin

J. UU reference numbers added

H. phases 2A & 2B annotation added

G. Revised following UU comment 29—11—19

F. Details/revisions for section 104 submission

E. Full redesign in line with Alpha Design layout

D. Full redesign to incorporate northern field and tank

C. Drainage redesigned following client and UU commer

Road20 lifted to give cover to storage pipe

B. S81—S53 added, Road 20 vertical alignment revised chainage 50—130m. Road 22 revised

A. Storage revised to D1800mm, highway vertical alignment revised ➤ m o bilioi÷ ≥ 14-8-21 2-8-20 16-7-20 2-12-19 28-11-19 17-10-19 1 tank storage 12-6-19 omments. 17-4-19

DRAWN BY rab H1:500 V1:100 1083-2-1 DATE Apr17

Mill Hill, Cleator Moor Plots 15-64 & 80-82 Longitudinal Sections

High Grange Developments Ltd

12 BERRY HOLME CLOSE SHEFFIELD S35 1AB

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