

MANHOLE SCHEDULE * INDICATES IL TO BE CONFIRMED ON SITE										
MH NAME	EASTING NORTHING	COVER LEVEL & CLASS	PIPE NAMES	PIPE INVERT LEVEL	PIPE SOFFIT LEVEL	PIPE DIA. & MATERIAL	PIPE SLOPE	PIPE LENGTH	DS/MH NAME	TYPE
FW1	E 417865.476 N 427461.955	101.711m D400	1.000	100.445m	100.595m	Ø150 VC	1:24	64.604m	FW2	1,200 DIA TYPE B 600X600 ACCESS
FW2	E 417862.553 N 427526.492	100.622m D400	1.000 1.001	97.787m 97.937m	97.937m 97.937m	Ø150 VC	1:24 1:80	64.604m 67.162m	FW3	1,200 DIA TYPE B 600X600 ACCESS
FW3	E 417859.588 N 427593.589	99.528m D400	1.001 1.002	96.948m 96.948m	97.098m 97.098m	Ø150 VC	1:80 1:80	67.162m 39.416m	FW4	1,200 DIA TYPE B 600X600 ACCESS
FW4	E 417857.701 N 427632.960	99.939m D400	1.002 1.003	96.455m 96.455m	96.605m 96.605m	Ø150 VC	1:80 1:150	39.416m 32.766m	FW5	1,200 DIA TYPE B 600X600 ACCESS
FW5	E 417856.271 N 427665.695	99.786m D400	1.003 1.004	96.237m 96.237m	96.387m 96.387m	Ø150 VC	1:150 1:150	32.766m 19.076m		1,200 DIA TYPE B 600X600 ACCESS
FW6	E 417958.319 N 427245.561	95.521m D400	1.000 1.001	92.971m 92.971m	93.121m 93.121m	Ø150 PVC	1:150 1:150	17.931m 20.877m	FW8	1,200 DIA TYPE B 600X600 ACCESS
FW7	E 417965.618 N 427261.940	95.780m D400	1.000	93.090m	93.240m	Ø150 PVC	1:150	17.931m	FW6	1,200 DIA TYPE B 600X600 ACCESS
FW8	E 417972.008 N 427229.799	94.863m D400	1.001 1.002	92.832m 92.832m	92.982m 92.982m	Ø150 PVC	1:150 1:150	20.877m 19.693m	FW9	1,200 DIA TYPE B 600X600 ACCESS
FW9	E 417990.170 N 427222.186	93.901m D400	1.002 1.003	92.700m 92.700m	92.850m 92.850m	Ø150 PVC	1:150 1:150	19.693m 12.334m	FW10	1,200 DIA TYPE B 600X600 ACCESS
FW10	E 418002.401 N 427223.784	93.433m D400	1.003 1.004	92.618m 92.618m	92.768m 92.768m	Ø150 PVC	1:150 1:36	12.334m 60.339m	FW11	1,200 DIA TYPE B 600X600 ACCESS
FW11	E 418056.518 N 427250.467	92.272m D400	1.004 1.005	90.949m 90.949m	91.099m 91.099m	Ø150 PVC	1:36 1:154	60.339m 10.859m	FW12	1,200 DIA TYPE B 600X600 ACCESS
FW12	E 418067.377 N 427250.460	92.146m D400	1.005 1.006	90.879m 90.879m	91.029m 91.029m	Ø150 PVC	1:154 1:160	10.859m 13.002m	FW13	1,200 DIA TYPE B 600X600 ACCESS
FW13	E 418078.437 N 427243.624	92.000m D400	1.006 1.007	90.797m 90.797m	90.947m 90.947m	Ø150 PVC	1:160 1:150	13.002m 38.127m	FW14	1,200 DIA TYPE B 600X600 ACCESS
FW14	E 418094.213 N 427208.914	91.603m D400	1.007 1.008	90.543m 90.543m	90.693m 90.693m	Ø150 PVC	1:150 1:150	38.127m 25.451m	FW16	1,200 DIA TYPE B 600X600 ACCESS
FW15	E 418139.716 N 427149.969	91.334m D400	2.000	90.498m	90.648m	Ø150 PVC	1:150	34.603m	FW18	1,200 DIA TYPE B 600X600 ACCESS
FW16	E 418104.600 N 427185.680	91.353m D400	1.008 1.009	90.373m 90.373m	90.523m 90.523m	Ø150 PVC	1:150 1:149	25.451m 15.897m	FW18	1,200 DIA TYPE B 600X600 ACCESS
FW17	E 418131.072 N 427182.409	90.879m D400	1.010	90.124m	90.274m	Ø150 PVC	1:142	20.284m		1,200 DIA TYPE B 600X600 ACCESS
FW18	E 418113.405 N 427172.444	91.193m D400	1.009 2.000 1.010	90.267m 90.267m 90.267m	90.417m 90.417m 90.417m	Ø150 PVC	1:149 1:150 1:142	15.897m 34.603m 20.284m	FW17	1,200 DIA TYPE B 600X600 ACCESS
SW5	E 417854.094 N 427446.167	102.270m D400	1.000	100.923m	101.373m	Ø450 CONC	1:100	13.854m	SW6	1,200 DIA TYPE B 600X600 ACCESS
SW6	E 417867.944 N 427446.527	101.898m D400	1.000 1.001	100.784m 100.784m	101.234m 101.234m	Ø450 CONC	1:100 1:53	13.854m 33.758m	SW7	1,200 DIA TYPE B 600X600 ACCESS
SW7	E 417869.336 N 427412.797	101.410m D400	1.001 1.002	100.147m 100.147m	100.597m 100.597m	Ø450 CONC	1:53 1:54	33.758m 36.853m	SW8	1,200 DIA TYPE B 600X600 ACCESS

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SW8	E 417871.876 N 427376.031	100.882m D400	1.002 1.003	99.464m 99.464m	99.914m 99.914m	Ø450 CONC	1:54 1:27	36.853m 27.524m	SW9	1,200 DIA TYPE B 600X600 ACCESS
SW9	E 417883.474 N 427351.071	100.375m D400	1.003 1.004	98.437m 98.437m	98.887m 98.887m	Ø450 CONC	1:27 1:50	27.524m 59.395m	SW10	1,200 DIA TYPE B 600X600 ACCESS
SW10	E 417918.142 N 427302.844	98.370m D400	1.004 1.005	97.256m 97.256m	97.706m 97.706m	Ø450 CONC	1:50 1:20	59.395m 42.653m	SW11	1,200 DIA TYPE B 600X600 ACCESS
SW11	E 417941.138 N 427266.921	96.614m D400	1.005 1.006	95.123m 95.123m	95.573m 95.573m	Ø450 CONC	1:20 1:12	42.653m 28.488m	SW13	1,200 DIA TYPE B 600X600 ACCESS
SW12	E 417968.438 N 427256.472	95.771m D400	2.000	92.500m	93.175m	Ø675 CONC	1:151	11.905m	SW13	1,800 DIA TYPE B 600X600 ACCESS
SW13	E 417961.385 N 427246.881	95.444m D400	2.000 1.006 1.007	92.421m 92.796m 92.421m	93.096m 93.246m 93.096m	Ø675 CONC	1:151 1:12 1:150	11.905m 28.488m 21.730m	SW14	1,500 DIA TYPE B 600X600 ACCESS
SW14	E 417975.899 N 427230.709	94.569m D400	1.007 1.008	92.276m 92.876m	92.951m 92.876m	Ø675 CONC	1:150 1:64	21.730m 17.722m	SW15	1,500 DIA TYPE B 600X600 ACCESS
SW15	E 417992.719 N 427225.129	93.800m D400	1.008 1.009	91.923m 91.923m	92.598m 92.598m	Ø675 CONC	1:64 1:44	17.722m 67.454m	SW16	1,500 DIA TYPE B 600X600 ACCESS
SW16	E 418053.796 N 427253.762	92.277m D400	1.009 PIPE134 1.010	90.401m 90.476m 90.401m	91.076m 91.076m 91.076m	Ø675 CONC	1:44 1:100 1:121	67.454m 12.883m 10.205m	SW17	1,500 DIA TYPE B 600X600 ACCESS
SW17	E 418063.963 N 427254.636	92.191m D400	1.010 1.011	90.317m 90.317m	90.992m 90.992m	Ø675 CONC	1:121 1:81	10.205m 16.180m	SW18	1,500 DIA TYPE B 600X600 ACCESS
SW18	E 418078.536 N 427247.607	92.052m D400	1.011 1.012	90.117m 90.117m	90.792m 90.792m	Ø675 CONC	1:81 1:112	16.180m 44.731m	SW19	1,500 DIA TYPE B 600X600 ACCESS
SW19	E 418098.779 N 427207.718	91.590m D400	1.012 1.013	89.716m 89.716m	90.391m 90.391m	Ø675 CONC	1:112 1:96	44.731m 19.814m	SW20	1,500 DIA TYPE B 600X600 ACCESS
SW20	E 418106.912 N 427189.651	91.385m D400	1.013 1.014	89.510m 89.510m	90.185m 90.185m	Ø675 CONC	1:96 1:92	19.814m 23.675m	SW21	1,500 DIA TYPE B 600X600 ACCESS
SW21	E 418120.760 N 427170.449	91.129m D400	1.014 1.015	89.254m 89.254m	89.929m 89.929m	Ø675 CONC	1:92 1:150	23.675m 10.683m	SW23	1,500 DIA TYPE B 600X600 ACCESS
SW22	E 418118.603 N 427201.639	91.934m N/A	3.000	90.100m	90.700m	Ø600 CONC	1:33	30.697m	SW23	CONCRETE HEADWALL REINFORCED CONCRETE
SW23	E 418130.983 N 427173.549	91.144m D400	1.015 3.000 1.016	89.183m 89.183m 89.183m	89.858m 89.783m 89.483m	Ø675 CONC	1:150 1:33 1:128	10.683m 30.697m 15.591m	SW24	2,100 DIA TYPE B 600X600 ACCESS HYDROBRAKE FLOW CONTROL 24L/S 1.8M DESIGN HEAD SHE-0204-2400-1800-2400
SW24	E 418145.245 N 427179.848	89.566m N/A	1.016	89.061m	89.361m	Ø300 CONC	1:128	15.591m		CONCRETE HEADWALL REINFORCED CONCRETE
SW25	E 418095.604 N 427321.922	94.073m D400	PIPE132	91.984m	92.659m	Ø675 CONC	1:12	22.401m	SW26	1,500 DIA TYPE B 600X600 ACCESS
SW26	E 418099.353 N 427299.837	91.000m N/A	PIPE132	90.100m	90.775m	Ø675 CONC	1:12	22.401m		CONCRETE HEADWALL REINFORCED CONCRETE
SW27	E 418049.332 N 427265.846	91.439m N/A	PIPE134	90.605m	91.205m	Ø600 CONC	1:100	12.883m	SW16	CONCRETE HEADWALL REINFORCED CONCRETE

GENERAL NOTES:

YORKSHIRE WATER NOTES

- ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "CODE FOR ADOPTION", THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATERS' STANDARDS/REQUIREMENTS/ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED
- MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
- FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
- YORKSHIRE WATER IS NOT OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARDS TO THE DISPOSAL OF FILTER DRAIN/LAND DRAIN RUNOFF.
- COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY YORKSHIRE WATER INSPECTOR. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME, A LOAD BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600x600mm. FOR THE YORKSHIRE WATER SPECIFIED COVER SIZE. PLEASE REFER TO CONCRETE PIPE SYSTEMS ASSOCIATION (CPSA) 'TECHNICAL BULLETIN' ISSUED AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.
- SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
- THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
- SEWERS MUST HAVE 5 METRES CLEARANCE FROM TREES AND HEDGES (PLEASE ALSO REFER TO FIGURE 2.3 ON PAGE 33 IN "SEWERS FOR ADOPTION" 6TH EDITION FOR RESTRICTIONS ON TREE PLANTING ADJACENT TO SEWERS)
- SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED AND SURROUND). WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 900mm IN NON-VEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
- BEDDING AND BACKFILL TO CONFORM TO THE REQUIREMENT OF THE WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2)
- THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
- YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE "C" BRICK MANHOLES AND 1050mm DIA MANHOLE RINGS. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIA OR 1500mm DIA RINGS, WITH OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1 - 1.5m.

P02	REVISED TO SUIT HIGHWAYS UPDATES	23/10/20	OT	OT
P01	FIRST ISSUE	28/08/20	OT	NT
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Status:

SUITABLE FOR INFORMATION

S2

Project:

INTERCHANGE 26

Orig Title:

S104 DRAINAGE
MANHOLE SCHEDULES SHEET 1

Size:	Date:	Drawn By:	Designed By:	Checked By:			
A1	28/08/20	OT	OT	NT			
Scale: AS SHOWN							
Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:

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