

DESIGNERS HAZARD IDENTIFICATION
 IT IS ASSUMED THAT ALL WORKS WILL BE UNDERTAKEN BY A COMPETENT CONTRACTOR WORKING WHERE APPROPRIATE TO AN APPROVED METHOD STATEMENT. IN ADDITION TO THE HAZARDS TYPICALLY ASSOCIATED WITH THE TYPE OF CONSTRUCTION DETAILED ON THIS DRAWING, ANY KNOWN ABNORMAL HAZARDS SPECIFIC TO THIS DRAWING HAVE BEEN IDENTIFIED.



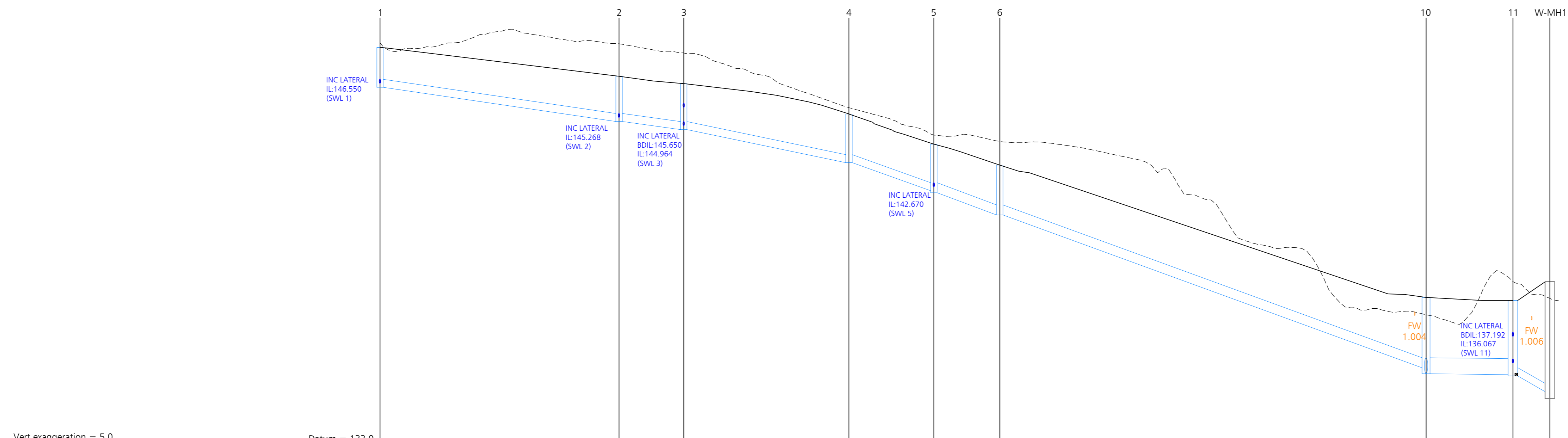
- DO NOT SCALE FROM THIS DRAWING AS IT MAY NOT BE REPRODUCED TO SCALE.
- THIS DRAWING IS TO BE REPRODUCED IN COLOUR.
- PLEASE REPORT ANY DISCREPANCIES TO DUDLEYS CONSULTING ENGINEERS PRIOR TO CONSTRUCTION.
- REFER TO YW STANDARD NOTES 7 FOR SEWER PIPE BEDDING & NOTE 11 FOR PIPE STRENGTH CLASSES.

YORKSHIRE WATER GENERAL NOTES

- ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE (CODE FOR ADOPTION), THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATERS STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED.
- MANHOLE COVERS SHALL 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 DRAINLAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR IN-DIRECTLY). 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 REGARD TO THE DISPOSAL OF THE FILTER DRAINLAND DRAINAGE RUN-OFF.
- 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 OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT.
- 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 MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
- YORKSHIRE WATER POLICY IS THAT TYPE "C" BRICK MANHOLES AND 1050MM DIA. MANHOLE RINGS ARE NOT PREFERRED. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200MM DIA OR 1500MM DIA RINGS, WITH THE OPENING SITED OVER THE CHANNEL, WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1 - 1.5M.
- ADOPTABLE PLASTIC SEWER PIPES TO BE BS1 KITEMARKED (CERTIFIED TO WS 4-35-01 AND BS EN 13476). ADOPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD PREFER CLAYWARE CHANNEL IN MANHOLES.
- THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS - 100MM DIA. 40KN/M, 150MM DIA. 40KN/M, 225MM DIA. 45KN/M AND 300MM DIA. 72KN/M. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CLASS 120 TO EN 1916/BS5911-1:2002). PLASTIC PIPES SHOULD CONFORM TO WS 4-35-01 AND BS EN13476.
- WHERE A B125 COVER AND FRAME HAS BEEN APPROVED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.
- THERE MUST BE ENOUGH CLEARANCE AT CROSSOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES, APPROX. 200MM. IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY NEED TO BE INCREASED.

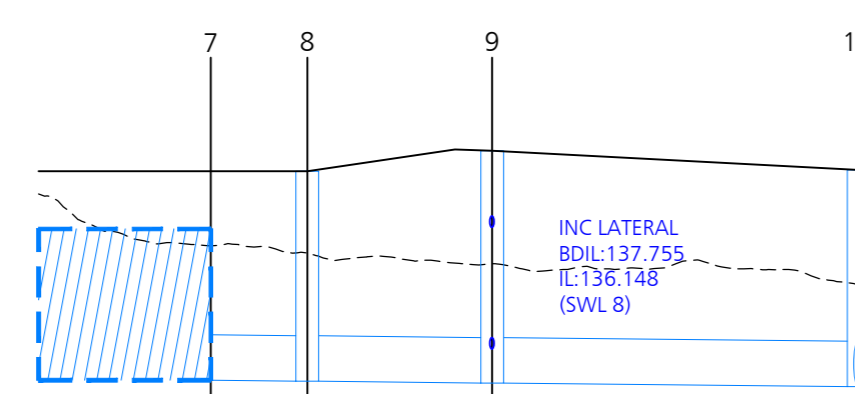
KEY

- SURFACE WATER SEWER
- FOUL WATER SEWER
- EXISTING GROUND PROFILE
- PROPOSED GROUND PROFILE

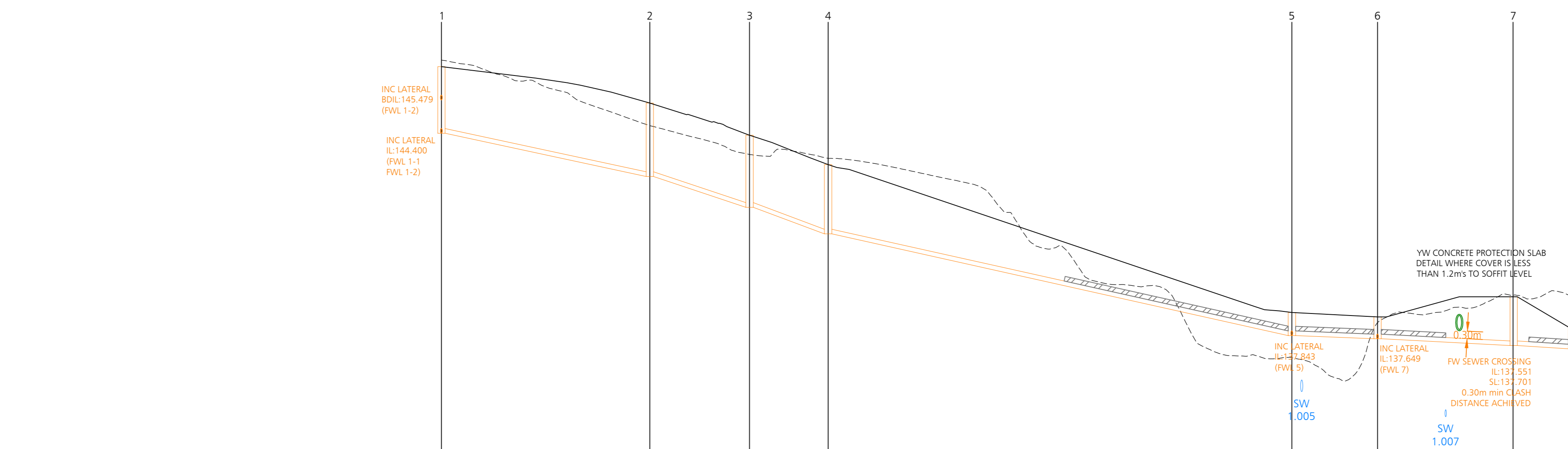


Link Name		1.000	1.001	1.002	1.003	1.004		1.006	1.007
Pipe Diameter/Material		300mm PCC	300mm PCC	300mm PCC	300mm PCC	375mm PCC		600mm PCC	300mm PCC
Slope (1:X)		1:35.0	1:40.0	1:25.0	1:15.1	1:14.8		1:500.0	1:10.0
Cover Level (m)		147.500	146.815	146.541	145.397	144.268		138.517	139.100
Invert Level (m)		146.400	145.118 145.118	144.814 144.814	143.574 143.574	142.520 142.445		135.825 135.650	135.617 134.831
Length (m)		44.857	12.145	30.991	15.938	12.367		16.294	6.938
Pipe Strength		CLASS 120 TO EN 1916/BS5911:1 2002							
Pipe Surround		TYPE 5 BED & SURROUND							

FP MCANN PCC ATTENUATION TANK
 TOTAL STORAGE VOLUME 231 SHP
 10.225m WIDE X 11.8m LONG X 2m TALL
 CL:138.500m / TANK I:135.758 - 135.735 /
 TANK SL:137.758 - 137.735
 TANK GRADIENT 1:500
 0.742m MIN COVER FROM SOFFIT OF TANK



Link Name		2.000	2.001	2.002
Pipe Diameter/Material		600mm PCC	600mm PCC	600mm PCC
Slope (1:X)		1:500.0	1:500.0	1:500.0
Cover Level (m)		138.500	138.500	138.517
Invert Level (m)		135.735 135.735	135.722 135.722	135.698 135.698
Length (m)		6.376	12.228	24.231
Pipe Strength		CLASS 120 TO EN 1916/BS5911:1 2002		
Pipe Surround		TYPE 5 BED & SURROUND		



Link Name		1.000	1.001	1.002		1.003	1.004	1.005	1.006
Pipe Diameter/Material		150mm VC	150mm VC	150mm VC		150mm VC	150mm VC	150mm VC	150mm VC
Slope (1:X)		1:24.1	1:16.2	1:14.8		1:22.8	1:71.5	1:134.7	1:134.5
Cover Level (m)		146.558	145.376	144.335		138.990	138.449	139.100	138.120
Invert Level (m)		144.400	143.050 143.000	142.000 142.000		137.843 137.843	137.649 137.649	137.486 137.486	137.415 137.415
Length (m)		33.753	16.156	12.728		75.130	13.878	21.951	9.551
Pipe Strength		40KN/M							
Pipe Surround		TYPE 5 BED & SURROUND							

25.04.23	UPDATED TO SUIT YW COMMENTS	MDI	PD	P3
31.03.23	UPDATED TO SUIT YW AND LIFA COMMENTS	MDI	PD	P2
27.01.23	PRELIMINARY ISSUE	MDI	PD	P1
Date	Revision	By	Chkd	Ref



Project
 LOVELL HOMES
 SKELMANTHORPE
 Title
 S104 DRAINAGE
 LONGSECTIONS

Scale	1:500	Paper	AO	Drawn	MDI	Check	PD
Date	JAN 23	Status	PRELIMINARY				
Job No.	21374	Dep. No.	122	Rev.	P3		