



SURFACE LEVEL DATA			
NUMBER	MINIMUM LEVEL	MAXIMUM LEVEL	COLOUR
1	−0.000	−0.250	
2	−0.250	−0.500	
3	−0.500	−0.750	
4	−0.750	−1.000	
5	−1.000	−1.250	
6	−1.250	−1.500	

ALL CUT / FILL LEVELS BASED ON EXISTING  
GROUND LEVELS

DRAINAGE

- THE LOCATION AND LEVEL OF EXISTING DRAINAGE CONNECTIONS AND EXISTING SERVICES IS TO BE CHECKED PRIOR TO COMMENCEMENT OF DRAINAGE WORKS. ANY VARIANCE TO THE DETAILS ON THE DRAINAGE DRAWING AND THE SCHEDULE IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THIS DESIGN IS BASED ON INFORMATION SUPPLIED BY PARTIES (Eg. ARCHITECT AND M&E ENGINEER), AND MAYBE SUBJECT TO CHANGE RESULTING FROM UPDATES AVAILABLE FROM THIRD PARTIES.
- THE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE NBS SPECIFICATIONS, ASSOCIATED MANHOLE SCHEDULE AND STANDARD DRAINAGE DETAIL DRAWINGS WHERE APPLICABLE.
- THE POSITIONS OF FOUL AND SURFACE WATER DRAINAGE POINTS ARE INDICATIVE ONLY, REFER TO THE ARCHITECTS DRAWINGS FOR LOCATION AND SETTING OUT DETAILS.
- MANHOLES, SEWERS, LATERAL CONNECTIONS ETC AND ANY OTHER PART OF THE WORKS INTENDED FOR ADOPTION UNDER A SECTION 104 AGREEMENT OR GULLIES ETC INTENDED FOR ADOPTION AS HIGHWAY DRAINAGE ARE TO BE CONSTRUCTED IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION (OR LATEST) AND TO THE APPROVAL OF THE WATER AND HIGHWAY AUTHORITIES.
- UNADOPTED FW & SW DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT BUILDING REGULATIONS, BS EN752 AND BS EN12056.
- DRAINS ARE TO BE CONSTRUCTED USING FLEXIBLY JOINTED VITRIFIED CLAY PIPES TO BS EN 295-1 SUPER STRENGTH SPECIFICATION (EG HEPUWORTH SUPERSLEEVE OR SIMILAR APPROVED) OR UPVC BUILDING DRAINAGE SYSTEM PIPEWORK TO BS 4660 AND BS EN1401-1, BEDDED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND THE SPECIFICATIONS UNLESS OTHERWISE SPECIFIED.
- ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE GENERALLY 100mm DIA LAID AT A MINIMUM GRADIENT OF 1:60 UNLESS NOTED OTHERWISE AND BE RODDABLE FROM ABOVE GROUND LEVEL.
- ALL RWP CONNECTIONS TO BE GENERALLY 100mm DIAMETER AND BE LAID AT A MINIMUM GRADIENT OF 1:150 UNLESS NOTED OTHERWISE AND BE RODDABLE FROM ABOVE GROUND LEVEL.
- RAINWATER DOWN PIPES TO CONNECT TO A DRAIN VIA A REST BEND OR BE CONNECTED DIRECT TO A TRAPPED GULLY OR A 'P' TRAP ON A COMBINED SYSTEM, WHERE INTERNAL RWP'S OCCUR THESE MUST BE CONNECTED TO A 'P' TRAP WITH RODDABLE ACCESS ABOVE FLOOR LEVEL.
- CHANNEL DRAINS TO BE GENERALLY ACO M100D 0.0 WITH SUMP UNIT OR SIMILAR APPROVED UNLESS STATED OTHERWISE. GRATING TO BE IN ACCORDANCE WITH ARCHITECT OR LANDSCAPE ARCHITECT SPECIFICATION.
- IN CASES OF IN SITU OR RC FLOOR SLABS, DRAINS ARE TO BE CAST INTEGRAL WITH THE SLAB WHERE PIPE COVER TO THE CROWN IS LESS THAN 300mm - NOTE SPECIAL PROVISIONS APPLY TO BASEMENT FLOOR SLABS - SEE DETAILED DRAINAGE AND STRUCTURAL DRAWINGS. CONCRETE ENCASEMENT TO BE REINFORCED AS PER DRAINAGE DETAIL.
- IN CASES OF SUSPENDED FLOORS WHERE A VOID OF 300mm OR MORE EXISTS BELOW THE FLOOR, DRAINS MAY REQUIRE TO BE SUSPENDED USING A PROPRIETARY HANGER SYSTEM OR CAST INTEGRAL WITH THE FLOOR WHERE INSITU CONCRETE FLOORS ARE SPECIFIED.
- WHERE DRAINS PASS THROUGH FOUNDATIONS OR OTHER RIGID STRUCTURES A LINTEL OR SLEEVE IS TO BE USED AND PROVISION FOR FLEXIBILITY IS TO BE MADE USING ROCKER PIPES.
- BACKFILLING OF DRAIN TRENCHES ADJACENT TO BUILDINGS OR OTHER STRUCTURES IS TO BE IN ACCORDANCE WITH DIAGRAM 8 OF THE BUILDING REGULATIONS.
- DRAINS WITHIN AREAS OF MADE GROUND TO BE CONSTRUCTED BY FIRST MAKING UP THE AREA TO APPROX. FINISHED LEVEL AND THEN EXCAVATING THROUGH THE FILL MATERIAL INTO UNDISTURBED GROUND. THE DRAIN TRENCH IS THEN TO BE BACKFILLED TO FORMATION LEVEL USING SUITABLE GRANULAR FILL MATERIAL WELL COMPACTED IN LAYERS NOT EXCEEDING 150mm.
- ALL INTERNAL FLOOR DRAINS TO BE SPECIFIED BY THE ARCHITECT.
- ANY PIPE, GULLEY OR OTHER FITTING OR DUCT PENETRATING THE BASEMENT SLAB OR WALLS IS TO BE WATERPROOFED USING HYDROPHILIC STRIPS OR PUDDLE FLANGES TO ENSURE A WATER TIGHT JOINT. CONCRETE SURROUND TO DRAINAGE PIPES AND FITTINGS MAY BE REQUIRED IN CERTAIN CASES - REFER TO DETAILED DRAINAGE DRAWINGS AND RELEVANT STRUCTURAL DETAILS.
- THRESHOLD DRAINS TO BE ACODRAIN BRICKSLOT OR SIMILAR APPROVED BY ARCHITECT. DRAINS TO BE FITTED WITH SUMP UNIT & FOUL AIR TRAP.
- FOR DETAILS OF BUILDING DRAINAGE REFER TO M&E DRAWINGS.
- THE PROPOSED FINISHED FLOOR LEVELS OF THE PROPOSED DWELLINGS ARE TO BE 300mm ABOVE THE 0.1% AEP FLOOD LEVEL OF 7.91m at 8.21m AOD.
- THE ATTENUATION IS TO BE PROVIDED THROUGH UNDERGROUND PIPES WHICH ARE TO BE RESISTANT TO FLOTATION DURING FLOOD EVENTS WITH THE OUTFALLS INTO POW BECK FITTED WITH NON-RETURN VALVES.

ACCESS

- IN ACCORDANCE WITH PART M OF THE BUILDING REGULATIONS, LEVEL ACCESS IS TO BE PROVIDED THROUGH RAISED DECKING WITHIN THE REAR GARDENS . NO GROUND LEVELS ARE TO BE BUILT UP ON SITE.

REV	DATE	AUTHOR	NOTES	
DRAWING STATUS		PLANNING		
<div><div>AD</div><div>A L DAINES &amp; PARTNERS</div><div>CONSULTING CIVIL &amp; STRUCTURAL ENGINEERS</div><div>28 Castle Street, Carlisle, Cumbria CA3 8TP</div><div>TEL 01228 527428</div><div>EMAIL mail@aldaines.co.uk</div><div>WEB www.alldaines.co.uk</div></div>		CLIENT PRIMA HOMES GROUP		
		TITLE GROUND ROAD, WHITEHAVEN GROUND REMODELING PLAN		
		DRAWN PA	DATE AUG 23	SCALE 1:350 @A1
		DRAWING NO. 23-C-I6902-004		-