

NOTES

ALL SEWERS TO COMPLY WITH THE REQUIREMENTS OF THE WATER AUTHORITIES PUBLICATION "SEWERS FOR ADOPTION/SCOTLAND" - TOGETHER WITH ANY ADDITIONAL SPECIFIC REQUIREMENTS OF THE ADOPTING DRAINAGE AUTHORITY.

ALL BEDDING SHALL BE CLASS 5 UNLESS NOTED OTHERWISE.

ALL MANHOLE COVERS TO COMPLY WITH BS EN 124 AND BE KITEMARKED. GENERALLY ALL MANHOLE COVERS SHALL BE CLASS D400 WHERE SITUATED IN THE CARRIAGEWAY, HARD SHOULDER OR PARKING AREAS. CLASS B SHALL BE USED IN FOOTWAYS, PEDESTRIANS AND LANDSCAPE AREAS.

CONCRETE BED AND SURROUND IS REQUIRED TO PIPES LAID IN NEW ROADS WHERE THE OF COVER IS LESS THAN 1200MM.

THE USE OF PRECAST CONCRETE PRODUCTS AND SULPHATE RESISTING CEMENT IS MANDATORY.

ALL SEWER PIPES UP TO AND INCLUDING 225MM DIAMETER ARE TO BE VITRIFIED CLAY COMPLYING WITH BS 65 (STORM SEWERS) & BS EN 295 (FOUL SEWERS).

ALL SEWER PIPES 300MM DIAMETER AND ABOVE TO BE CLASS M CONCRETE PIPES UNLESS NOTED OTHERWISE.

UNPLASTICISED PVC PIPES, JOINTS AND FITTINGS FOR GRAVITY SEWERS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS 4660 OR BS 5481.

SOLID WALL CONCENTRIC EXTERNAL RIB-REINFORCED PVC-U SEWER PIPES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF THE W.I'S 4-31-05.

ALL SEWERS ARE TO BE THE SUBJECT OF A SECTION 104 AGREEMENT OF THE WATER INDUSTRIES ACT.

ALL STREETWORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT LOCAL AUTHORITY DESIGN GUIDE AND SPECIFICATION AND TO BE THE SUBJECT OF A SECTION 38 AGREEMENT OF THE HIGHWAYS ACT.

THE POSITIONS OF ALL EXISTING SEWERS ARE TO BE ESTABLISHED BEFORE CONSTRUCTION COMMENCES AND DETAILS TO BE REPORTED TO THE ENGINEER.

ALL TRENCHES UNDER EXISTING AND PROPOSED PUBLIC HIGHWAY ARE TO BE BACKFILLED WITH THOROUGHLY COMPACTED D.O.T. TYPE 1 SUB-BASE MATERIAL.

ALL MANHOLES SHALL HAVE A MINIMUM CLEAR OPENING OF 675MM IN ALL DIRECTIONS. MANHOLES DEEPER THAN 6.0M SHALL BE CONSTRUCTED IN ACCORDANCE WITH NWL STANDARD DETAIL SDD1/02 TYPE A1.

TYPE A MANHOLES SHALL BE PROVIDED WITH LADDERS (TO COMPLY WITH CL 4.2.35 OF SEWERS FOR SCOTLAND). SAFETY HOOPS ARE REQUIRED WHERE THE CHAMBER IS DEEPER THAN 2.5M.

STEP IRONS MAY BE USED AS AN ALTERNATIVE TO 'STEPS' IN MANHOLES TYPE B,C AND D.

SAFETY CHAINS IN ACCORDANCE WITH NWL STANDARD DETAIL SDD4/15 SHALL BE PROVIDED ON ALL OUTGOING SEWERS WHERE THE DIAMETER IS GREATER THAN 600MM.

CONCRETE BLOCKS WILL ONLY BE USED IF THEIR SPECIFICATION IS IDENTICAL TO CLASS B ENGINEERING BRICKS.

CONCRETE CAN BE EITHER C20 SRPC WITH HIGH STRENGTH CONCRETE TOPPING TO THE BENCHING OR C35 (OPC).

C20 CONCRETE IS PREFERRED AS HAUNCHING TO MANHOLE COVER FRAMES.

THE CHAMBER HEIGHT OF MANHOLE TYPE B SHALL BE NOT LESS THAN 800MM.

TYPES E AND F MANHOLES ARE NOT ACCEPTABLE.

200MM REINFORCED CONCRETE SLAB ON 1200 GAUGE DPM

225MM GRANULAR TYPE 1 SUB-BASE TO CL 803.

CONCRETE TO BE GRADE PAV 2 TO BS 5328:PART 2 REINFORCED WITH A252 MESH, WITH 50 TOP & BOTTOM COVER.

CONCRETE TO HAVE A BRUSH FINISH SURFACE TREATMENT WITH TROWELLED MARGINS AT KERBS, JOINTS ETC.

ALL JOINTS ARE LONGITUDINAL (LJ) UNLESS NOTED OTHERWISE

ALL ACCESS ROAD AND HARDSTANDING CONSTRUCTIONS ARE BASED ON A SUB-GRADE CBR OF 5% FROM RECOMMENDATIONS WITHIN THE SITE INVESTIGATION REPORT AND ARE TO BE CONFIRMED ON SITE.

ACCESS ROAD & HARDSTANDING CONSTRUCTION ASSUMING SUB-GRADE CBR > 5% IE CAPPING LAYER NOT REQUIRED IF CBR > 5%

ADD 270MM CLASS 6F2 CAPPING LAYER IF CBR BETWEEN 2 & 5%
ADD 500MM CLASS 6F2 CAPPING LAYER IF CBR BETWEEN 1 & 2%
ADD 1000MM CLASS 1C CAPPING LAYER IF CBR <1%

ALTERNATIVELY CONSIDER USING TENSAR TRIAX GEOGRID & CAPPING LAYER IF CBR < 5%

HAURATON RECYFIX HICAP LINEAR DRAINAGE SYSTEM INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

ATTENUATION TANK

CELLULAR STORM WATER STORAGE SYSTEM BY APPROVED MANUFACTURER/SUPPLIER - AQUACELL CORE OR SIMILAR APPROVED. (NOTE SYSTEM TO SUIT PROPOSED LOADING & DISCHARGE RATE OF 5 l/s.

VOLUME 15x12x2.0m DEEP = 340m³ BASED ON AN IMPERMEABLE AREA OF 0.46Ha, 1 IN 100 YEAR RETURN PERIOD PLUS 40% ALLOWANCE FOR CLIMATE CHANGE WITH AN ALLOWABLE DISCHARGE RATE OF 5 l/s.

SWMH F - SURFACE WATER PACKAGED PUMPING STATION (BY SPECIALIST MANUFACTURER). PUMP TO LIMIT FLOWS TO 5 l/s

FLOW RESTRICTION TO BE CONFIRMED BY THE LEAD LOCAL FLOOD AUTHORITY & CAPACITY OF EXISTING SURFACE WATER DRAINAGE SYSTEM

EXISTING MANHOLE MH A INVERT DEPTH & PIPE DIAMETERS TBC

NOTE ATTENUATION VOLUME TO BE REVIEWED TO SUIT DRAINED AREA

ASSUMED SURFACE WATER DRAINAGE TO BE CONFIRMED ON SITE

EXISTING SURFACE WATER DRAINAGE TO CONCRETE HARDSTANDING TO BE CONFIRMED ON SITE

32.18 DENOTES EXISTING LEVEL
x 31.710 DENOTES PROPOSED LEVEL

POTENTIAL FUTURE HARDSTANDING & SURFACE WATER DRAINAGE EXPANSION

PRELIMINARY

James Jones (Pallets & Packaging)

Project client / project James Jones Oak Road Wretham

Site & Drainage Layout

PRELIMINARY
drawing title
drawing number
scale
1:200 @ A1
checked
drawn
date
12/14

NOTES
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND DETAILS.
ALL DIMENSIONS/LEVELS TO BE CHECKED AGAINST ARCHITECTURAL DRAWINGS AND ANY DISCREPANCIES TO BE ADVISED PRIOR TO CONSTRUCTION.

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