

**DRAINAGE REQUIREMENTS**

IN ACCORDANCE WITH THE NATIONAL PLANNING POLICY FRAMEWORK (NPPF) AND THE NATIONAL PLANNING PRACTICE GUIDANCE (NPPG), THE SITE SHOULD BE DRAINED ON A SEPARATE SYSTEM WITH FOUL WATER DRAINING TO THE PUBLIC SEWER AND SURFACE WATER DRAINING IN THE MOST SUSTAINABLE WAY.

NPPF CLEARLY OUTLINES THAT THE DEVELOPER MUST CONSIDER THE FOLLOWING DRAINAGE OPTIONS IN ORDER OF PRIORITY:

1ST - INTO THE GROUND INFILTRATION;  
2ND - TO A SURFACE WATER BODY;  
3RD - TO A SURFACE WATER SEWER, HIGHWAY DRAIN OR ANOTHER DRAINAGE SYSTEM;  
4TH - TO A COMBINED SEWER.

THIS IS ESSENTIAL IN PROMOTING SUSTAINABLE DEVELOPMENT, SECURING PROPER DRAINAGE AND MANAGING THE RISK OF FLOODING AND POLLUTION.

**PROPOSED DRAINAGE SOLUTION**

A GROUND INVESTIGATION WAS CARRIED OUT WHICH ENCOUNTERED DEVENSIAN TILL AND MADE GROUND BENEATH THE REDGRA SURFACING. INFILTRATION TESTS WERE UNDERTAKEN TO DETERMINE THE SUITABILITY OF INFILTRATION TECHNIQUES.

THE DEVENSIAN TILL SOILS WERE PREDOMINANTLY ENCOUNTERED AS A COHESIVE MATERIAL ACROSS THE SITE, WHICH TYPICALLY EXHIBIT LOW PERMEABILITY. INDICATIVE INFILTRATION TESTS WERE UNDERTAKEN WITH NO FALL IN WATER OBSERVED, INDICATING THEIR IMPERMEABILITY.

THE PROPOSALS WILL COMPRISE A SUSTAINABLE URBAN DRAINAGE SYSTEM (SUDS), INCLUDING PERMEABLE MATERIALS WITH A PIPED DRAINAGE SYSTEM INSTALLED BENEATH THE FOOTPRINT WITH UPVC PERFORATED CARRIER & LATERAL PIPE DRAINS.

THE AGP BASE EFFECTIVELY CREATES A SUDS BY REPLICATING THE NATURAL DRAINAGE SYSTEM. THE BASE COMPRISES GRANULAR SUB-BASE CONSISTING OF TYPE 3 UNBOUND STONE TO ATTENUATE SURFACE WATER BEFORE IT DISCHARGES INTO THE WIDER DRAINAGE NETWORK AT A RESTRICTED RATE VIA HYDROBRAKE CHAMBER.

THIS SOLUTION ADHERES TO THE 3RD DRAINAGE OPTION.

**FLOOD COMPENSATION**

NO MEASURES SHOULD BE REQUIRED AS FINISHED LEVELS WILL NOT AFFECT CURRENT FLOOD PLAIN STORAGE ONSITE.

**OVERLAND FLOWS**

THERE IS A RISK OF THE CRITICAL STORM EVENT BEING EXCEEDED ALBEIT THIS RISK IS CONSIDERED VERY LOW. IN SUCH AN EVENT THE PROPOSED SYSTEM WILL BECOME OVERWHELMED AND OVERLAND FLOWS COULD OCCUR.

**FOUL WATER**

THERE WILL BE NO FOUL WATER DISCHARGE ASSOCIATED WITH THE PROPOSAL.

**MAINTENANCE**

THE DRAINAGE SYSTEM HAS BEEN DESIGNED TO MINIMIZE ONGOING MAINTENANCE.

**CONCLUSIONS**

THE DISPOSAL OF SURFACE WATER COLLECTED THROUGH THE AGP AND DISCHARGED TO THE WIDER DRAINAGE NETWORK WITHIN THE SITE PROVIDES A SUSTAINABLE DRAINAGE SOLUTION WHICH DOES NOT INCREASE FLOOD RISK ELSEWHERE.

SURFACE WATER WILL BE MANAGED AND DISPOSED OF WITHIN THE SITE BOUNDARY, COMPLYING WITH THE NPPG FOR 'FLOOD RISK AND COASTAL CHANGE' AND THE NPPF.

BASED ON THE ABOVE, THE DEVELOPED SITE WILL NOT CONTRIBUTE FURTHER TO FLOOD RISK, THUS SATISFYING THE PRINCIPLES OF THE NPPF.

**NOTES / KEY:**

DRAINED DEVELOPMENT AREA - [Symbol]  
[18,100M<sup>2</sup> DUE TO POROUS/PERMEABLE MATERIALS THROUGHOUT THE PITCHES AND HARD STANDING AREAS]

LATERAL DRAIN - [Symbol]  
[Ø80MM UPVC PERFORATED PIPE LAID INTO LINED GRAVEL-FILLED TRENCHES SET AT 10M INTERVALS]

CARRIER DRAIN - [Symbol]  
[Ø160MM UPVC PERFORATED PIPE LAID INTO LINED GRAVEL-FILLED TRENCHES]

RODDING EYE - [Symbol]  
[INSTALLED TO ALLOW FOR IMPROVED MAINTENANCE]

INSPECTION CHAMBER - [Symbol]  
[MIN. 600X600X1000 PRE CAST CONCRETE (PCG) WITH HEAVY DUTY CAST IRON COVER & FRAME. INCLUDES SILT-TRAP]

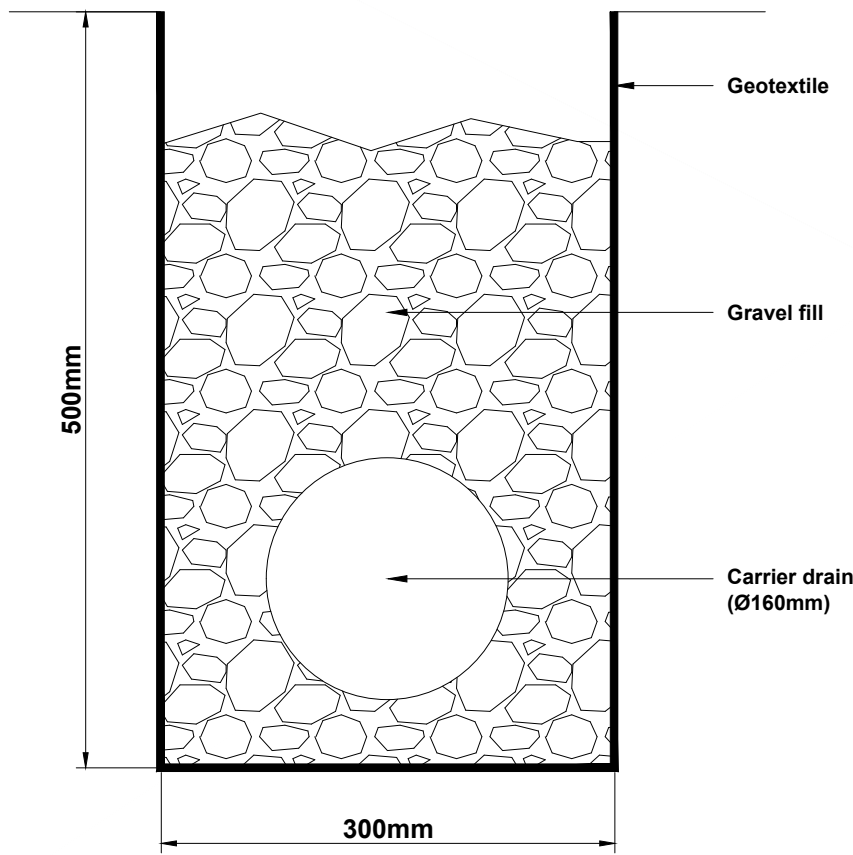
EXISTING LEVELS - 000.00 [Symbol]

PROPOSED LEVELS - 000.00

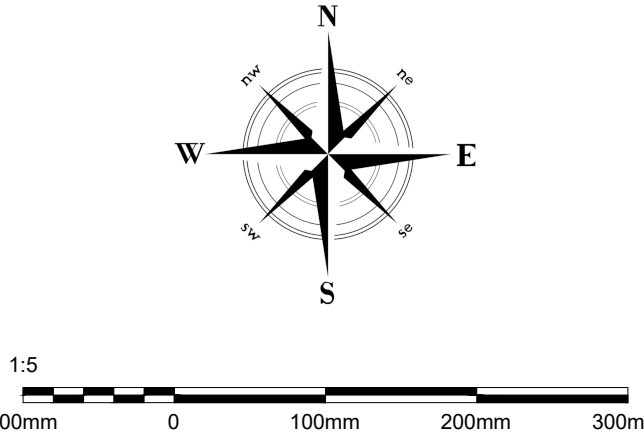
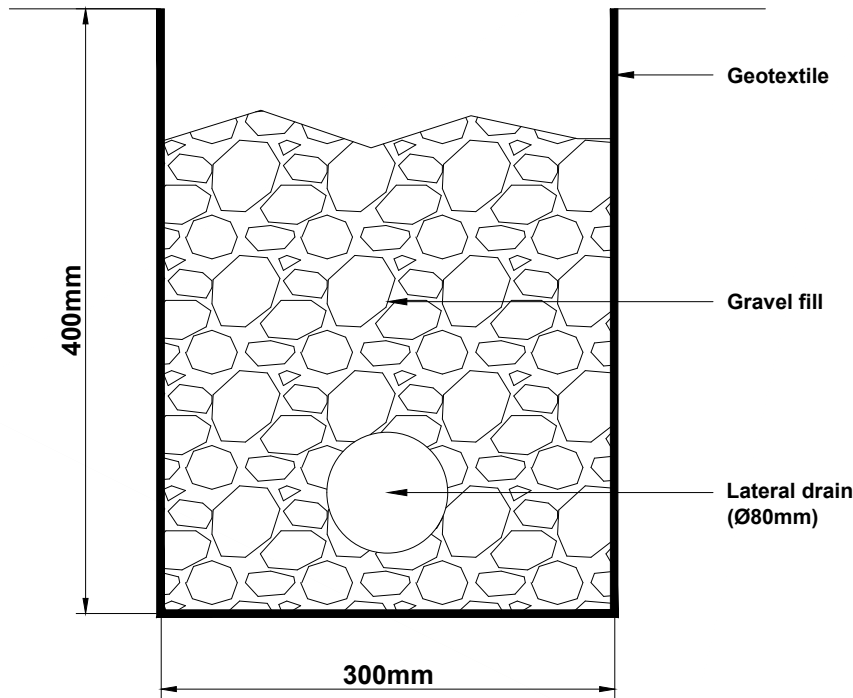
OUTFALL/CONNECTION TO EXISTING SURFACE WATER DRAIN TO BE CONFIRMED IN SUPPORTING DRAINAGE STRATEGY FOLLOWING DRAINAGE CONSULTATIONS

INDICATIVE WIDER SITE LAYOUT DEVELOPMENTS SHOWN, REFER TO PLANS AND DOCUMENTS ASSOCIATED WITH APPLICATION 419/23/7/0/1 FOR FURTHER DETAILS

CARRIER DRAIN SECTION  
SCALE 1:5



LATERAL DRAIN SECTION  
SCALE 1:5



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**nottssport** Synthetic Surfacing / Multi-Sports

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