DRAINAGE STRATEGY

THE FOLLOWING TEXT DESCRIBES THE SURFACE WATER DRAINAGE DISPOSAL STRATEGY FOR THIS DEVELOPMENT.

THE SITE IS CLASSIFIED AS GREENFIELD (BEING PREVIOUSLY USED FOR PASTURE PURPOSES,) KEY POINTS FOR THE STRATEGY ARE AS FOLLOWS:

- THE FIRST CHOICE FOR SURFACE WATER IS INFILTRATION AND DISPOSAL IS VIA A SINGLE CRATE SOAKAWAY SYSTEM.
- THE PROPOSED DEVELOPMENT HAS A DRAINED IMPERMEABLE AREA OF APPROXIMATELY 543m² (0.054ha)
- THE SURFACE WATER INFILTRATION RATE HAS A MAXIMUM DISCHARGE RATE OF $7.58x10^{-7}$m/s INTO THE SUB SOILS.
- MAX. SOAKAWAY HALF DRAIN DOWN TIME: EXCEEDS 24 HOURS. THEREFORE THE TANK HAS BEEN DESIGN TO STORE A 1440 MINUTE 1 IN 100 YEAR PLUS 40% CLIMATE CHANGE (48.2m³) WITH A FOLLOWING 1 IN 10 YEAR STORM EVENT (21.8m³).
- DUE TO THE SITE TOPOGRAPHY AND PROPOSED LAYOUT THERE IS NO SPACE FOR ANY OTHER SUDS FEATURES SUCH AS SWALES AND PONDS ETC.
- FOUL WATER FLOW TO BE DISCHARGED INTO THE PUBLIC SEWER VIA THE EXISTING PUMPING STATION .

NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEER'S AND ARCHITECT'S DRAWINGS, DETAILS & SPECIFICATIONS.
2. TOPOGRAPHICAL SURVEY DRAWING RS-1380-05-GEO-R0 & UTILITY SURVEY DRAWING RS-1380-06-UGS-R0 DATED 17/05/2021 BY RIGOUR SURVEY HAS ALSO BEEN USED IN THE DESIGN.
3. REFER TO THE ARCHITECT FOR SETTING OUT OF ALL BUILDINGS & INTERNAL DOWN PIPES & RWP'S
3. REFER TO SERVICE ENGINEERS DRAWINGS FOR FINAL SETTING OUT OF RWP AND SVP'S (BASED ON GUTTER SYSTEM).
4. REFER TO SERVICE ENGINEERS DRAWINGS FOR ABOVE GROUND PLUMBING ROUTES FROM APPLIANCES TO STUB STACKS ETC.
5. ALL EXISTING DRAINAGE THAT IS TO BE ABANDONED TO BE 'PLUGGED' IN WITH MASS CONCRETE (150mm MIN) OR REMOVED ENTIRELY.
6. ANY EXISTING SERVICES TO BE LOCATED AND CLEARLY MARKED PRIOR TO EXCAVATIONS BY CONTRACTOR.
7. ALL LEVELS ARE TO BE CONFIRMED BY THE CONTRACTOR ON SITE PRIOR TO CONSTRUCTION.
8. IT IS ASSUMED THAT ALL SINK AND TOILET DRAINAGE POINTS WILL HAVE RODDING ACCESS AT THE APPLIANCE BASE.
9. CONTRACTOR TO AVOID UNDERMINING ANY EXISTING FOOTPATHS/ BUILDINGS DURING WORKS BY ALLOWING ADEQUATE PROTECTION ADJACENT TO THESE AREAS.
10. ALL RAINWATER DOWN PIPES TO HAVE RODDABLE ACCESS AT THE BASE OF THE VERTICAL SECTION.
11. ALL BELOW GROUND DRAINAGE PIPES WITH LESS THAN 900mm COVER TO SOFFIT LEVEL IN TRAFFICKED AREAS I.E. CAR PARK AND SERVICE YARD AREA TO HAVE CLASS Z BEDDING SURROUND. REFER TO THE MANHOLE SCHEDULE AND DETAIL SHEETS FOR FURTHER DETAILS.
12. ALL BELOW GROUND DRAINAGE WITHIN THE SITE BOUNDARY HAS BEEN DESIGNED TO BSEN 752:2008 AND BUILDING REGULATIONS - PART H:2015.

LEGEND:

SW	NEW SURFACE WATER SEWER PIPE AND MANHOLE PIPE 150Ø UNO
FW	NEW FOUL WATER SEWER PIPE 100Ø AND MANHOLE 300Ø B125 COVER UNO
DFW	DIVERTED FOUL WATER SEWER PIPE AND MANHOLE
RWP	NEW RAINWATER PIPE DOWNPIPE
SS/SVP ETC	NEW ABOVE GROUND FOUL DRAINAGE POINT
RE	RODDING EYE
	EXISTING PIPE TO BE GRUBBED UP OR REMOVED
	PROPOSED PERMEABLE BLOCK PAVING FOOTBATH WITH SUB-BASE STORAGE (PAVING TO ARCHITECTS SPEC)

HEALTH SAFETY AND ENVIRONMENTAL RISKS BOX

CONSTRUCTION RISKS	MAINTENANCE RISKS	DEMOLITION/ ADAPTATION RISKS
1. DUE TO THE STEEP GRADIENT OF THE SITE CONSIDERATION TO SAFETY MUST BE GIVEN TO EACH CONSTRUCTION TASK . **2.** REFER TO EXISTING SERVICES DRAWING AND TO ARCHITECTS SERVICES DRAWINGS FOR DETAILS & LOCATION OF EXTG AND PROPOSED DRAINAGE & SERVICES. **3.** DRAINAGE CONNECTION REQUIRES DEEP EXCAVATION TEMP WORKS REQUIRED. **4.** EXISTING DRAINS TO EITHER BE REMOVED OR GRUBBED UP. **5.** CONSTRUCTING NEW CONNECTIONS DRAINAGE, POTENTIAL FOR HAZARDOUS GASES. RELEVANT P.P.E SHOULD BE WORN AT ALL TIMES. IF ANY ASBESTOS CEMENT PIPES ARE FOUND, THEN SAFE SYSTEM OF WORK NEED TO BE PUT IN PLACE WITH ATTENTION DRAWN TO THE CONTROL ASBESTOS AT WORK (AMENDMENT) REGULATIONS 1992. **6.** HIGHWAY WORKS REQUIRED	**1.** ATTENUATION TANKS, GULLIES, CHANNELS AND CHAMBERS REQUIRE THE STANDARD PERIODIC INSPECTION REGIME AND CLEANING ROUTINE TO ENSURE CONTINUED PERFORMANCE. **2.** CONFINED SPACE ENTRY.	**1.** APPARATUS LOCATED IN LANDSCAPED AREAS HAS NOT BEEN DESIGNED TO SUPPORT HEAVY VEHICLE LOADING. 2. THE SURFACE WATER DRAINAGE APPARATUS HAS BEEN DESIGNED TO ACCOMMODATE THE DESIGNED CATCHMENT AREA. NO ADDITIONAL AREAS OF HARDSTANDING CAN BE CONNECTION INTO THE SYSTEM WITHOUT RISK OF LOCALIZED FLOODING ON SITE. 3. THE SURFACE WATER DRAINAGE HAS BEEN DESIGNED FOR THE INFILTRATION RATE OF $7.9x10^{-6}$m/s FOR THE PROPOSED CATCHMENT AREA, ANY ADDITIONS TO THIS MUST BE CHECKED WITH A CLANCY CONSULTING ENGINEER BEFORE ANY CONNECTION IS MADE. 4. HAZARDOUS WASTE MATERIALS
IN ADDITION TO THE HAZARDS & RISKS NORMALLY ASSOCIATED WITH THE TYPE OF WORK DETAILED ON THIS DRAWING, TAKE NOTE OF THE ABOVE. IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR, WORKING WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.		

Rev	Date	Description	By	Check	App.
P1	25/08/21	PRELIMINARY ISSUE	JC	LP	LP

Client	NCFC
Project	NCFC ACADEMY SWIMMING POOL & ADMIN BUILDINGS
Office	NORWICH - 01603 305 190
Discipline	CIVIL
Title	PROPOSED DRAINAGE PLAN ADMIN BUILDING
Scale @ A1	1:100
Status	PRELIMINARY

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Birmingham 0121 289 7800, Glasgow 0141 222 1720, Liverpool 0151 227 3300, London 020 3077 6970, Manchester 0161 615 6000, Newcastle 0191 221 0762, Norwich 01603 305190, Prestwick 01292 478375, Reading 0118 941 7868

Originator	Job Number	Discipline	Building/Zone
CCL	8/2349	C	AB
Type	**Level**	**Drawing No.**	**Revision**
GA	DRN	4400	P1