ALL DIMENSIONS TO BE CHECKED BY CONTRACTOR

150mm Ø Outfall
Max Discharge 7 L/s
100yr+CC Event.

S16–PC 1500Ø
CONTROL CHAMBER
CL=114.60
IL=112.95 (300Ø)
BDIL=113.50 (150Ø)
Sump = 112.45
Hydrobrake ref: Md6 111mm

ON–LINE 'ATTENUATION TANK'
AQUACELL UNDERGROUND STORAGE TANK
or similar approved.
60m x 5.0m x 0.8m deep
Approx Volume = 240 m3
Base Lvl = 113.00
Max Water Lvl = 113.70

U 12's Pitch

U 12's PITCH
LAND DRAINAGE SYSTEM
TO OUTFALL TO STORM SYSTEM
VIA CAITCHPIT–3.

5-a-Side Pitch

5 A–SIDE PITCH
LAND DRAINAGE SYSTEM
DESIGNED BY SPECIALIST.
OUTFALL TO CATCHPIT – 1

HATCHED AREA
POROUS BLOCK PAVING CONSTRUCTION
WITH 150Ø COLLECTOR PIPES LAID
WITHIN STONE 'STORAGE' SUB–BASE LAYER.
FLOW RESTRICTED WITHIN CATCHPIT–2 VIA
100mm dia OUTLET PIPE.

FFL = 115.500

EX.STW MH 2101
CL=116.00
IL=115.12
In Abeyance

EX.STW MH 3102
CL=115.47
IL=114.33

EX 2250 CWS

EX 5250 SWS

RAINTANK UNIT
CL=115.25
(BY SPECIALISTS)

S10
RAINTANK FILTRATION UNIT
CL=115.25
IL=113.85
Design Flow = 36 l/s
(BY SPECIALISTS)

BYPASS INTERCEPTOR
Inlet=114.02
Outlet=113.97

Drainage Design Parameters

Storm:-

1 in 2yr Return Period
Minimum 75mm/hr RFI

Storm Attenuation Requirements:-

1 in 100yr + CC Storm Event
Allowable discharge = 7 L/s

(see micro-drainage simulation calcs)

Foul:-

BS8301:1985

General Notes -

A. The Contractor shall check all tie-ins for line and level with existing before commencing any works. The Engineer shall be notified immediately, in writing, should any errors be found.

B. Any discrepencies, of whatever nature, must be reported to the Engineer prior to the commencement or continuance of any further works. It is the responsibility of the contractor to locate any service apparatus in the vicinity of the works. Engineer will accept no claims whatsoever in respect of any losses or damage caused in respect of such apparatus, however caused.

C. It is the responsibility of the Contractor to execute the works at all times in strict accordance with the requirements of the Health and Safety At Work Act 1974, and CDM regulations 2007. The contractor will be deemed to have allowed for full compliance, including full liaison with the planning supervisor, within his rates.

D. All private drainage works to be in accordance with the requirements of Building Regulations 2000, Part H, "Drainage and waste disposal".

E. Should any departure from the slab level be considered, agreement shall be sought from the Engineer immediately and prior to commencement or continuance of any works, and should take full account of all restrictions to the slab level.

1, This drawing is to be read in conjunction with all other relevant Engineering and Architects details

2, All work is to be carried out in accordance with the current British Standards, Building Regulations and "Sewers for Adoption' (latest edition). Highway construction materials and workmanship shall be in accordance with the Highway Authority's current general specification for roadworks. The Principal Contractor shall be responsible for checking the existing line and invert levels of any connection points for both the foul and surface water systems, prior to undertaking installation of any new drainage works. Any deviation to the levels and positions indicated on the drawing should be brought to the immediate attention of the Project Engineer.

3, For details of ground conditions refer to the Ground Investigation Report.

4, The following pipe strengths shall be adopted unless noted otherwise:-
- Pipes up to and including 150mm dia to be PVC-U to BS EN 3506 Polypipe or similar, or clayware to BS EN 295 Class 160.
- Pipes 150mm diameter up to and including 225mm to be clayware to BS EN 295 Class 120
- 300mm diameter to be clayware to BS EN 295 Class 120 or concrete to BS 5911 Class M.
- Pipes over 300mm diameter to be concrete to BS EN 1916 and 6911 Part I Class M

5, All pipe runs to be laid with flexible joints.

6, All pipes entering and exiting manholes are to be connected with pipe soffits level unless noted otherwise.

7, All connections to be turned in direction of flow using pipe bends.

8, All inverts specified are outgoing based on largest pipe size (except backdrop)

9, All connections to be made by purpose made junctions as far as practicable.

10, Bedding and surround to be Class 'S' unless noted otherwise.

11, First flexible joint in pipes adjacent to a manhole shall be a maximum of 600mm from inside face of manhole, connecting to a rocker pipe.

12, All drains to be tested prior to backfilling, after backfilling and upon completion of hard landscaping. In addition all drains to be inspected by CCTV methods prior to hard landscaping.

13, The concrete mixes are to be class C10 GEN1 / C 20 GEN3 (all in accordance with BS5328)

The above concrete mixes have been selected for BS 5328 Class 2 Sulphates. All precast concrete products (ie pipes, manholes rings etc.) shall be of suitable concrete mix to cater for Class 2 sulphates.

14, Manhole covers and frames to be as follows:-

Use	BS Reference
Service yards/Str/s	BS EN 124 Class D400
Access Roads,	
Kerbside drainage	BS EN 124 Class C250
Footways, pedestrian & car parking	BS EN 124 Class B125
Landscaping	BS EN 124 Class A15

15, Pre-formed channels are to be used in manholes where applicable.

16, Granolithic concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections.

17, Manholes with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains of other safety devices.

18, Internal inspection chambers & access fittings to be provided with lockable double sealed manhole cover & frames grade A15, B125 or D400 to BSEN 124 to suit loading conditions.

19, Road gully connections to be 150mm dia. laid at a minimum gradient of 1:150 unless noted otherwise.

20, All petrol interceptors are to be installed strictly in accordance with the manufacturers recommendations.

21, All drainage works within the zone of influence of trees are to be constructed in accordance with the NHBC Standards and tree preservation offices requirements.

22, All SVP's & RWP's to have a vertical rodding access positioned above ground level. Exact position of all SVP's & RWP's and setting out of these items to be confirmed by Architect.

All new branch connections to be :-
Storm- 150mm Ø (min 1:80) Foul - 100mm Ø (min 1:40)

Storm Design:- 2YR Return Period
(Hardstandings etc/ RFI=50mm/hr)
(Roof Drainage RFI=75mm/hr)

Foul Design:- BS 8301 : 1985

Key.

- Proposed Private Foul Drain (Invert level shown)
- Proposed Private Foul Rising Main. (Black MDPE to BS EN 13244-2)
- Precast Concrete Manhole Chamber using preformed manhole bases where practicable. (Type B up to 3.0m deep, Type A 3.0m to 6.0m deep)
- Nom 450mm dia. Universal Inspection Chamber - P.I.C. (Up to 1.0m deep)
- Nom 300mm dia. Shallow Inspection Chamber - S.I.C. (Up to 0.6m deep)
- VR Connection point which requires additional venting by air admittance valve or similar.
- S1 Proposed Private Surface Water Drain (Invert level shown)
- Proposed Drainage with Concrete Encasure.
- Precast Concrete Manhole Chamber using preformed manhole bases where practicable. (Type B up to 3.0m deep, Type A 3.0m to 6.0m deep)
- Nom 460mm dia. Universal Inspection Chamber - P.I.C. (Up to 1.0m deep)
- Sealed Rodding Eye with invert level approx 600mm below ground level.
- Trapped Road/Yard Gully (Use of extra channel drainage system at discretion of client).
- Drainage Channel Drain with gully/sump outlet .
- Rainwater Harvesting Tank. (specification by specialist) Supplier to confirm acceptance of design inflow and invert level shown on layout. Final position to be confirmed by Contractor
- Bypass Interceptor. (supplied by specialist) ref : Conder TNSB3S/21 or similar approved.
- Existing Public Sewers
- Catchpit Proposed Private Land Drain (Invert level shown) (150mm Ø perforated pipework)
- External Retaining Wall > 300mm. note: retaining < 300mm provided via gravel boards/slab on egde.
- Exposed Brickwork below D.P.C. Level. (underbuild)
- HDPC High Level DPC's in addition to threshold DPC. (tanking)
- 159.7 + Proposed level
- 1 in 15 Fall / Gradient
- Banking works (1 in 3 unless otherwise stated)

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RECEIVED 11 SEP 09 DEVELOPMENT SERVICES

REV	AMENDMENT	BY	DATE

DRAWING STATUS
PRELIMINARY

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CLIENT
HINCKLEY CLUB for YOUNG PEOPLE

PROJECT
PROPOSED CLUB for YOUNG PEOPLE, HINCKLEY.

DRAWING TITLE
PROPOSED SITE DRAINAGE LAYOUT

SCALES	DATE
1:250 @ A0	AUG 09

DRAWN	CHKD	DRG. No.	REV.
MS	–	C5380-500	–

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