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vehicular access corridor through existing stone car park, area to kept clear at all times to enable AWS Ltd access to the FWPS for maintenance, inspection etc.

HEDGE & BUSHES

F147
cl:2.000
il:-0.282
bd:0.360
C1200b

MH (SOAKAWAY? NO VIS PIPE)
CL 1.95
WL 1.15
BED 0.15

1.035 150Ø 1:150 >>

GRASS

Manhole F148 sited adjacent to the pump station compound to enable over-pumping. Inlet to F148 to be fitted with a surface operated penstock valve to enable upstream system to be isolated if required.

F148
cl:3.000
il:-0.378
C1200a

Additional Storage Chamber
(12m x 3.0m x 2.1m PCC box culverts).
with dry flow channel.
150mmØ link pipe to wet well.
cover level: 3.000
max storage level: 1.732
invert level: -0.368.
Additional storage provided = 75.0m³
Additional storage required = 57.0m³

3.000 × 13.44m

gully
junction box
floodlight
telemetry mast
kiosk

F150 Valve Chamber
cl:3.000
il:1.700
sl:1.350
ol:1.700

3.000 × 11.63m

Foul Water Pumping Station sited in area where levels have been raised to higher than the lowest recommended lodge minimum 1:100 year climate change floor level (as per the approved FRA) to comply with clause D5.1.2 of the approved SSG v2 app C.

Pump station compound to be constructed in 1.80m high green coated Barbican galvanised steel paling fencing with galvanised steel bar gates.

Permeable Compound Surfacing
40mm of AC10 Open Surface Course
110mm of AC32 Open Binder Course
300mm Type3 (CGA) granular sub base
(40mm to 4mm giving 30% voids) layer
to BSEN 13242:2002.
Geotextile

Tanker Access & Hardstanding
40mm of AC10 Close Surface Course 100/150 bi
110mm of AC20 Dense Binder Course 40/60 bin
300mm Type1 sub base (clause 8.1)
Geotextile

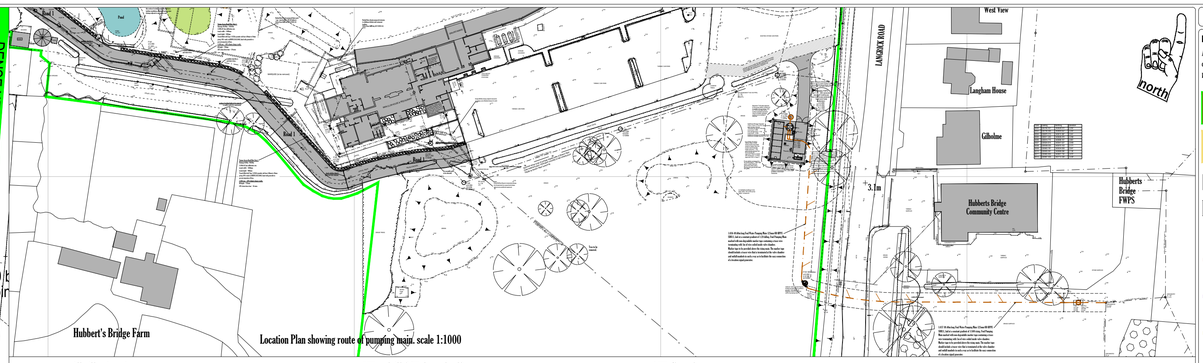
Adoptable FWPS
(ph 1-3) - 300 caravans
plus golf clubhouse
plus clubhouse extension,
hotel and hotel
extension.
cl:3.000
il:-0.393
sl:-1.593
ol:1.700

F149 Wet Well
cl:3.000
il:-0.393
sl:-1.593
ol:1.700

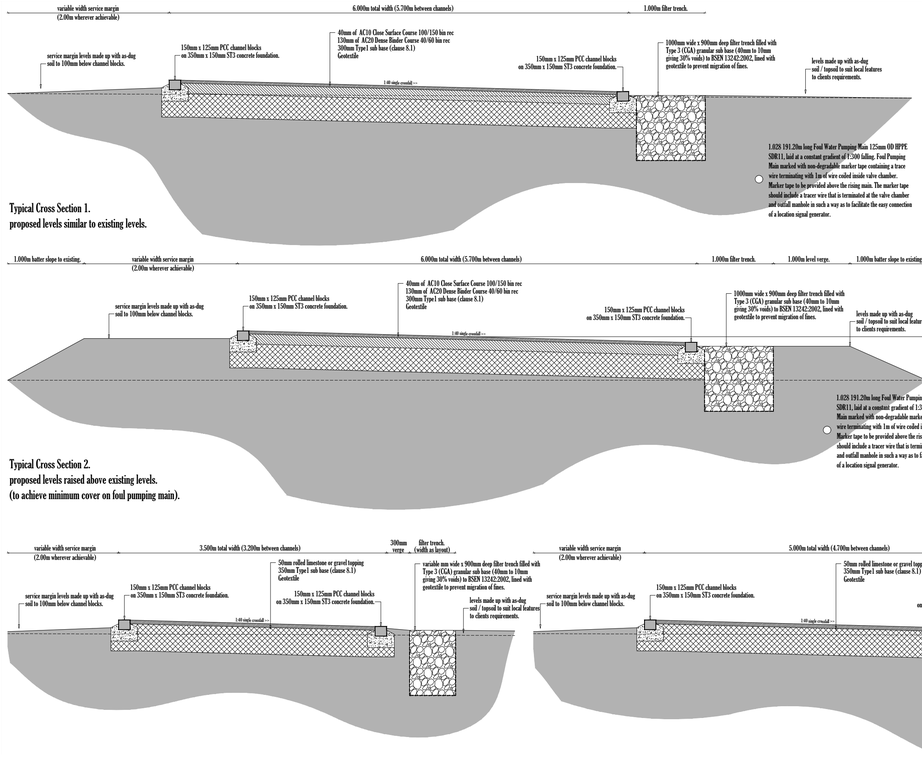
1,036 49.60m long Foul Water Pumping Main 125mm OD HPPE SDR11, laid at a constant gradient of 1:28 falling. Foul Pumping Main marked with non-degradable marker tape containing a trace wire terminating with 1m of wire coiled inside valve chamber. Marker tape to be provided above the rising main. The marker tape should include a tracer wire that is terminated at the valve chamber and outfall manhole in such a way as to facilitate the easy connection of a location signal generator.

DENSE HEDGE OVER DYKE TOP

Layout. scale 1:100



Location Plan showing route of pumping main. scale 1:1000



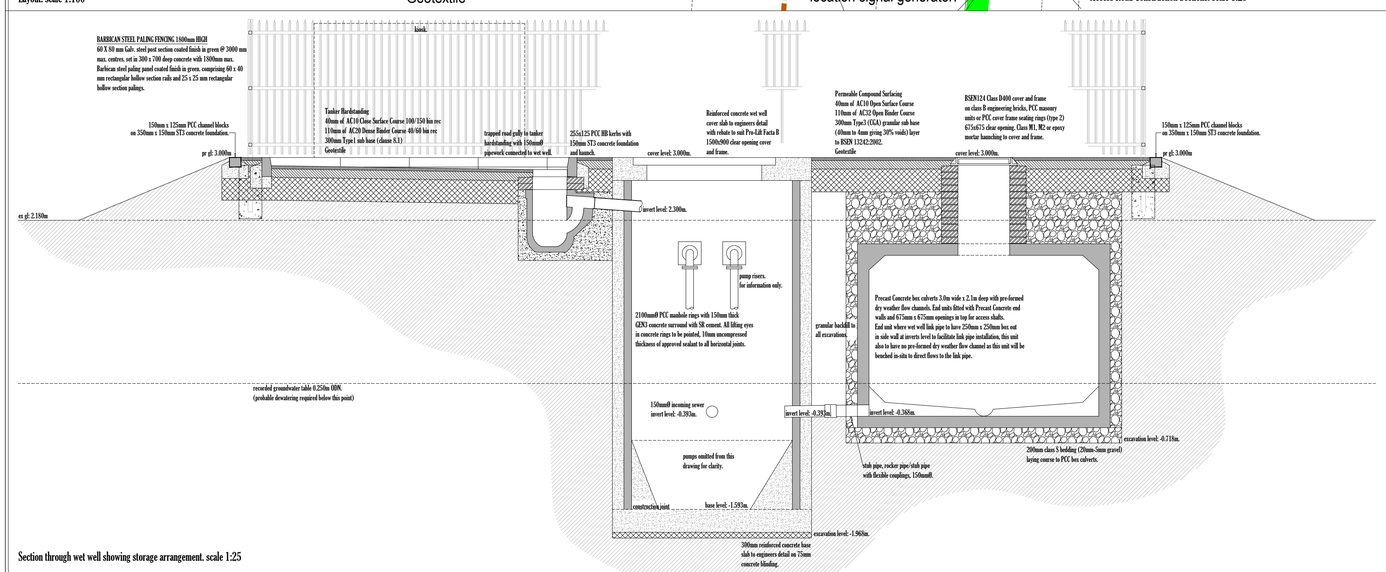
Typical Cross Section 1.
proposed levels similar to existing levels.

Typical Cross Section 2.
proposed levels raised above existing levels.
(to achieve minimum cover on foul pumping main).

Typical Cross Section - one-way side roads

Typical Cross Section - two-way side roads

Access Road Construction Sections. scale 1:25



Section through wet well showing storage arrangement. scale 1:25

NOTES:

All information contained in this drawing is the property of Hall Infrastructure Design Ltd and shall not be disclosed / sold / transferred / copied or extracted for use in other drawings without the prior express permission of Hall Infrastructure Design Ltd.

- Development Boundary (land owned by Boston West Leisure Ltd) - 56.80 Hectares
- Development of 300 holiday caravans granted FULL planning permission ref B/18/0520 "The land to be served by the Section 104 Agreement / Section 30 Sewer Requisition."
- Existing tarmac vehicular access road providing continued vehicular access from the public highway (Langrick Road) to the existing golf course clubhouse.
- Proposed tarmac vehicular access road providing continued vehicular access from the existing golf course clubhouse road to the proposed foul water pumping station.
- Proposed adoptable Foul Water Pumping Station (section 104 agreement) provided with 75m³ additional storage as per AWS pre-planning report ref PPE-0077561.
- Proposed 125mm OD HPPE SDR11 foul rising main - installed in trench - in client owned land - (section 104 agreement). Length = 54.5m
- Proposed 125mm OD HPPE SDR11 foul rising main - installed by directional drilling. - in public highway land - (section 104 agreement). Length = 25.7m
- Proposed 125mm OD HPPE SDR11 foul rising main - installed by directional drilling. - in third party owned land - (section 20 sewer requisition). Length = 59.3m
- Proposed 150mmØ gravity foul sewer to connect to existing AWS foul sewer - in third party owned land - (section 30 sewer requisition). Length = 9.0m

Notes:

1. 6.0m sewer easement in favour of Anglian Water Services Ltd to be provided on the foul pumping main / gravity sewer from the new pumping station to the point of connection to existing foul sewer.
2. This drawing to be read in conjunction with detailed infrastructure layout drawings and long sections which detail the location of manholes, washout valve, drift pits, pumping main profile etc.
3. Structural calculations for wet well and valve chamber plus floatation to be provided by others.
4. M&E details for adoptable pumping station to be provided by Pump Contractor, when appointed.
5. Type and detailed specification of pump station compound fencing and security gates to be provided by Pump Contractor and Client.

ALL SEWERS PROPOSED FOR ADOPTION UNDER A SECTION 104 AGREEMENT OF THE WATER INDUSTRY ACT 1991 TO BE CONSTRUCTED IN ACCORDANCE WITH THE THE PROCEDURES AND SPECIFICATIONS OF SEWERAGE SECTION GUIDANCE (SSG) V4 (OCTOBER 2019) AND DESIGN AND CONSTRUCTION GUIDANCE (DCG) V2.0 (MARCH 2020).

FOUL DRAINAGE CONNECTIONS TO BE 100mm dia. LAID NO FLATTER THAN 1:66 WHERE SERVING 9 PLOTS OR LESS AND 150mm dia. LAID NO FLATTER THAN 1:150 WHERE SERVING 10 PLOTS OR MORE (UNLESS OTHERWISE STATED).

ALL SEWERS AND LATERAL DRAINS WITHIN DOMESTIC CURTILAGE OF DIAMETER 100mm AND 150mm TO BE PVC-U TO BS EN 1401-1:1998 & BS 6660:2000.

ALL PIPEWORK TO BE LAID SOFFIT TO SOFFIT UNLESS OTHERWISE STATED.
ALL PIPES 100mmØ & 150mmØ TO BE PROVIDED WITH CLASS S BEDDING (10mm - 5mm GRAVEL RED AND SERRIATED).
ALL PIPES 100mmØ & 150mmØ WITH COVER LESS THAN 1.2m TO BE PROVIDED WITH CONCRETE PROTECTION.

PRECAST CONCRETE PRODUCTS AND IN SITU CONCRETE TO CONTAIN A MINIMUM CLASS 3 S.R.C.
STRUCTURAL CONCRETE TO BE IN ACCORDANCE WITH BS 5328: 1990 WET TO BE LESS THAN GRADE F50(2) WHEN REINFORCED AND GEN3 IN ALL OTHER SITUATIONS.
CAST CONCRETE SHALL BE FINISHED TO PRODUCE A "FAIR" SURFACE WHERE EXPOSED AND SHALL HAVE A "BOOSH" FINISH IN ALL OTHER SITUATIONS.
STEEL WORK SHALL BE IN ACCORDANCE WITH BS4482.

ALL MANHOLE COVERS TO BE 600x600 CLEAR OPENING IN ACCORDANCE WITH B.S. EN124 CLASS D400 AND EMBOSSED FW.

Drainage Notes

Plot 1 — DENOTES CARAVAN PLOT NUMBER
Bl 3.600 — DENOTES SUGGESTED CARAVAN FINISHED FLOOR LEVEL, NORMALLY 450mm ABOVE EXISTING GROUND LEVEL, min 3.000m ODN
CL 0.51 — DENOTES EXISTING GROUND LEVEL

- 150mmØ @ min 1:150 (10 - PLOTS) FOUL WATER SEWER (S104).
- 125mm OD HPPE SDR11 FOUL WATER PUMPING MAIN (S104).
- 100mmØ @ min 1:80| 150mmØ @ min 1:150 FOUL WATER DRAIN (PRIVATE).
- 100mm Ø, 150mm Ø, 300mm Ø SURFACE WATER LINE DRAIN (PRIVATE).
- SVP ADAPTOR
- WASH BASIN / BATH / SHOWER ADAPTOR
- POLYPROPYLENE ACCESS CHAMBER TYPE 2 (PRIVATE) - FOUL
- POLYPROPYLENE RODDING ACCESS CHAMBER TYPE 4 (PRIVATE) - FOUL
- POLYPROPYLENE ACCESS CHAMBER TYPE 2 (PRIVATE) - SURFACE WATER
- 1200mm Ø PRECAST CONCRETE MANHOLE (PRIVATE) - FOUL
- 1200mm Ø PRECAST CONCRETE MANHOLE (PRIVATE) - SURFACE WATER
- JKR DRAINAGE UNITS - LARGE GENERAL PURPOSE PRE-FORMED HEADWALL UNIT (OR SIMILAR)

POLYPROPYLENE ACCESS CHAMBERS (TYPE 2) TO BE SIZED UP TO 2.0m DEEP.
POLYPROPYLENE ACCESS CHAMBERS (TYPE 4) TO BE SIZED UP TO 2.0m DEEP SERVING MAX 5 PLOTS.
ALL CHAMBERS WITHIN GARDEN AREAS, FOOTPATHS AND DRIVEWAYS TO BE FITTED WITH BS EN 124 GRADE B125 COVERS.
ALL CHAMBERS WITHIN VEHICULAR OVERRUN AREAS TO BE FITTED WITH BS EN 124 GRADE D 400 COVERS AND PROVIDED WITH 150mm DEEP C20 CONCRETE CRADLE.
WHERE CHAMBERS ARE WITHIN 2.2m OF ANY BUILDING AND THE INVERT LEVEL OF THE CHAMBER IS MORE THAN 1000mm DEEP ENSURE BUILDING FOUNDATION IS EACH LEY DEEPENED SO THAT BOTTOM OF FOUNDATION IS 150mm BELOW CHAMBER INVERT LEVEL.
DOMESTIC DRAINAGE TO BE PVC-U TO BS EN 1401-1:1998 & BS 6660:2000.
100mm Ø DOMESTIC DRAINAGE (see) TO BE LAID NO FLATTER THAN 1:80 (Gradl) 1:100 (wsFoul) GRADIENT UNLESS OTHERWISE STATED.
150mm Ø DOMESTIC DRAINAGE (see) TO BE LAID NO FLATTER THAN 1:150 GRADIENT UNLESS OTHERWISE STATED.

DO NOT SCALE. USE FIGURED DIMENSIONS ONLY. CHECK ON SITE AND ALL DISCREPANCIES TO BE REPORTED TO HALL infrastructure DESIGN Ltd.

AMENDMENTS:

REF.	DESCRIPTION.	DATE.	BY.
A	Provisional surface water drainage added. Road cross sections added.	14.12.20	CWH
B	Updated ready for submission to Boston Borough Council for planning condition discharge.	19.01.21	CWH
C	Adoptable FWPS moved to client requirements, emergency storage amended.	10.03.21	CWH

CLIENT:
Boston West Holiday Park Ltd

PROJECT:
Boston West Golf Centre

TITLE:
Proposed AWS Ltd foul water pumping station
General Arrangement
Section through showing storage arrangement

SCALE:	DATE:	SIZE:
as stated	December 2020	A1

DRAWING No:	DRAWN BY:	CHECKED BY:
2011/1S-C		

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