

UNDERGROUND STORAGE SCHEDULE

STORAGE REF	DIMENSIONS	VOLUME
U/G STORAGE A	31.5m x 31.5 x 1.6m DEEP	1,587m ³
U/G STORAGE B	22m x 22m x 0.8m DEEP	387m ³
U/G STORAGE C	40.5m x 19.5m x 1.6m DEEP	1,263m ³
U/G STORAGE D	51m x 16.5m x 1.6m DEEP	1,346m ³
U/G STORAGE E	34m x 34m x 1.6m DEEP	1,849m ³
U/G STORAGE F	51m x 22m x 1.6m DEEP	1,795m ³
U/G STORAGE G	112.5m x 25m x 1.6m DEEP	4,500m ³
U/G STORAGE H	52m x 52m x 2.0m DEEP	5,408m ³

TOTAL VOLUME PROVIDED 18,135m³

POND SCHEDULE

POND REF	POND FOOTPRINT	DEPTH	VOLUME
POND A	2,369m ²	1.0m	2,120m ³
POND B	3,249m ²	0.8m	2,410m ³
POND C	5,514m ²	1.1m	5,600m ³

TOTAL VOLUME PROVIDED 11,063m³

TOTAL ATTENUATION PROVIDED = 29,198m³

FOUL FLOW SCHEDULE

UNIT REF	**DAILY DRY WEATHER FLOW (DWF)	PEAK FLOW
UNIT 1	144,000 LITRES	11.0 LITRES PER SECOND
UNITS 2 TO 5	111,600 LITRES	8.53 LITRES PER SECOND

RIISING MAIN PUMP RATE 9.77 LITRES PER SECOND MINIMUM, IN ACCORDANCE WITH SEWERS FOR ADOPTION GUIDANCE.

** DAILY DRY WEATHER FLOW BASED ON 90 LITRES PER HEAD PER DAY

EXISTING AND PROPOSED SURFACE WATER FLOW RATES FROM THE DEVELOPMENT.

ALLOWABLE SURFACE WATER DISCHARGE RATES AGREED WITH HAMPSHIRE COUNTY COUNCIL ARE BASED ON EXISTING GREENFIELD RUNOFF RATES:
Q₁ = 15.7 l/sec
Q₃₀ = 41.9 l/sec
Q₁₀₀ = 58.9 l/sec

PROPOSED PEAK DISCHARGE RATES AT OUTFALL 1, FOR THE 1, 30 AND 100 YEAR (+40% climate change) RETURN PERIODS:
1 YEAR = 10.0 l/sec
30 YEAR = 25.0 l/sec
100 YEAR = 29.2 l/sec

PROPOSED PEAK DISCHARGE RATES AT OUTFALL 2, FOR THE 1, 30 AND 100 YEAR (+40% climate change) RETURN PERIODS:
1 YEAR = 5.2 l/sec
30 YEAR = 16.9 l/sec
100 YEAR = 19.5 l/sec

PROPOSED TOTAL FLOWS:
1 YEAR = 15.2 l/sec
30 YEAR = 41.9 l/sec
100 YEAR = 48.7 l/sec

FLOW ATTENUATION DEVICE UPSTREAM OF OUTFALL 1. COMPLEX FLOW CONTROL MANHOLE. LOWER LEVEL DEVICE LIMITING FLOWS TO 10.0 l/sec. 2ND DEVICE MOUNTED ABOVE INVERT LEVEL TO LIMIT FLOWS UP TO THE Q₁, Q₃₀ AND Q₁₀₀+40% ALLOWABLE DISCHARGE RATES ONCE ATTENUATED.

OUTFALL 1.
CL:136.42m
IL:135.70 (TBC)

FLOW ATTENUATION DEVICE UPSTREAM OF OUTFALL 2. COMPLEX FLOW CONTROL MANHOLE. LOWER LEVEL DEVICE DESIGN FLOW SET TO 5.2 l/sec. 2ND DEVICE MOUNTED ABOVE INVERT LEVEL TO LIMIT FLOWS UP TO THE Q₁, Q₃₀ AND Q₁₀₀+40% ALLOWABLE DISCHARGE RATES ONCE ATTENUATED.

OUTFALL 2.
CL:139.0m
IL:137.71m (TBC)

FOR DETAILS OF FULL RISING MAIN ROUTE AND PROPOSED CONNECTION POINT INTO THE PUBLIC SEWER REFER TO DRAWING VD20233-004

POND C.

FLOW ATTENUATION DEVICE. DESIGN FLOW 45 l/sec.

UNDERGROUND STORAGE H.

FLOW ATTENUATION DEVICE. FLOW ATTENUATED TO 15 l/sec.

UNDERGROUND STORAGE G.

FLOW ATTENUATION DEVICE. FLOW ATTENUATED TO 6 l/sec.

UNDERGROUND STORAGE F.

FLOW ATTENUATION DEVICE. FLOW ATTENUATED TO 5 l/sec.

UNDERGROUND STORAGE E.

FLOW ATTENUATION DEVICE. FLOW ATTENUATED TO 5 l/sec.

UNDERGROUND STORAGE D.

FLOW ATTENUATION DEVICE. FLOW ATTENUATED TO 6 l/sec.

UNDERGROUND STORAGE C.

UNDERGROUND STORAGE B.

UNIT 3 PLATEAU LEVEL = 150.0m

FLOW ATTENUATION DEVICE. FLOW ATTENUATED TO 5 l/sec.

UNDERGROUND STORAGE A.

FLOW ATTENUATION DEVICE. FLOW ATTENUATED TO 5 l/sec.

UNIT 4 PLATEAU LEVEL = 150.0m

KEY

- SITE BOUNDARY
- PROPOSED PONDS
- PROPOSED UNDERGROUND STORAGE
- PROPOSED (DIVERTED) OIL MAIN AND EASEMENT
- EXISTING OIL MAIN AND EASEMENT
- PROPOSED INDICATIVE OUTFALL INTO EXISTING DRAINAGE DITCH
- PROPOSED INDICATIVE SURFACE WATER PIPE/MANHOLE NETWORK
- PROPOSED INDICATIVE FOUL WATER PIPE/MANHOLE NETWORK
- PROPOSED FOUL RISING MAIN
- EXISTING DRAINAGE DITCH



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

PLEASE REFER TO THE HEALTH AND SAFETY FILE FOR A FULL LIST OF THE HAZARDS ASSOCIATED WITH THIS WORK - THE FOLLOWING ARE THE MOST SIGNIFICANT ITEMS TO BE AWARE OF.

CONSTRUCTION

- OPERATIVES TO TAKE PRECAUTIONS WHEN WORKING ADJACENT TO OR WITHIN DEEP EXCAVATIONS. METHOD STATEMENT TO BE PRODUCED BY CONTRACTOR PRIOR TO WORKS COMMENCING.
- ATTENTION IS DRAWN TO THE EXISTENCE OF BOTH EXISTING UNDERGROUND AND OVERHEAD UTILITIES.

ENVIRONMENTAL

- EXISTING WATERCOURSES IN CLOSE PROXIMITY TO WORKS. A POLLUTION PREVENTION STRATEGY AND WORKING METHOD STATEMENTS TO BE PRODUCED BY THE CONTRACTOR FOR ALL WORKS.
- CONSIDERATION GIVEN TO NOISE LEVELS GIVEN PROXIMITY TO EXISTING PROPERTIES.
- CONSIDERATION GIVEN TO GROUND CONDITIONS. CONTRACTOR TO REVIEW GEOTECHNICAL REPORT PRIOR TO UNDERTAKEN EXCAVATION WORKS.

WORK CAN ONLY BE CARRIED OUT BY SUITABLY TRAINED AND BRIEFED PERSONNEL.

D	PONDS AND UNDERGROUND STORAGE UPDATED	PB	SR	30.06.20
C	PIPELINE DIVERSION UPDATED	PB	SR	19.05.20
B	DRAINAGE UPDATED	PB	SR	13.05.20
A	EARTHWORKS AMENDED	JD	SR	26.03.20

REV	DETAILS	DRAWN	CHECKED	DATE
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INFORMATION

CLIENT:

NEWLANDS DEVELOPMENTS

PROJECT:

LAND OFF A30, BASINGSTOKE

DRAWING TITLE:

DRAINAGE SCHEMATIC

SCALE:

1:2000 @ A1

DRAWN:

PB

CHECKED:

SR

DATE:

25.03.2020



DRAWING NUMBER:

VD20233-003

REVISION:

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