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Notes

- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE MILLIMETRES U.N.O.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- ALL DRAINAGE WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH 'SEWERAGE SECTOR GUIDANCE APPENDIX C (FORMERLY KNOWN AS 'SEWERS FOR ADOPTION'), BUILDING REGULATIONS PART H AND CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY WHERE APPROPRIATE.
- DRAWINGS HAVE BEEN PRODUCED BASED ON:
 - SITE MASTERPLAN - GILLESPIES DRAWING P12061-00-001-GIL- 0105
 - OS BASE MAP
 - TOPOGRAPHICAL SURVEY - MALTBY SURVEYS LTD DRAWING 19/013/100-00

KEY:

- SITE BOUNDARY
- PHASE 1 BOUNDARY
- PHASE 1 SUB-CATCHMENT BOUNDARY
- EXISTING FOUL WATER DIVERSION
- EXISTING FOUL WATER MANHOLE
- FOUL WATER DRAIN
- FOUL WATER MANHOLE
- FOUL WATER RISING MAIN
- FOUL WATER PUMP STATION
- EXISTING MAIN RIVER/ ORDINARY WATERCOURSE
- FLOOD ZONE 2 EXTENT
- PHASE 1 BOUNDARY EXTENT - TO ARCADIS DESIGN INFORMATION
- SUB-CATCHMENTS WITHIN PHASE 1 DESIGN BY ARCADIS

KEY PLAN

P03	UPDATED RED LINE BOUNDARY	10.06 2025	GG PMG	SP
P02	DRAFT ISSUE	16.04 2025	GG PMG	SP
P01	DRAFT ISSUE	25.05 2023	PMG MS	DS
Rev	Description	Date	By Chk	App

STAGE 2

WEST OF IFIELD

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SITE WIDE FOUL WATER DRAINAGE GENERAL ARRANGEMENT

Project No:	Scale (0A1):	Drawn:	Date:
1620007949-001	1:2500	PMG	MAY.2023
Drawing No:	SCALE 1:250	Rev:	
RAM-XX-DR-C-0110		P03	

APPENDIX 6

SURFACE WATER CALCULATIONS

Catchment 1:

The 'Quick Storage Estimate' dialog box is shown with the 'Variables' tab selected. The left sidebar contains buttons for 'Variables', 'Results', 'Design', 'Overview 2D', 'Overview 3D', and 'Vt'. The main area contains the following variables and their values:

Variable	Value
FSR Rainfall	100
Return Period (years)	100
Region	England and Wales
Map	M5-60 (mm)
Ratio R	0.350
Cv (Summer)	0.750
Cv (Winter)	0.840
Impermeable Area (ha)	11.940
Maximum Allowable Discharge (l/s)	62.1
Infiltration Coefficient (m/hr)	0.00000
Safety Factor	2.0
Climate Change (%)	40

Buttons at the bottom: Analyse, OK, Cancel, Help.

Footer text: Enter Maximum Allowable Discharge between 0.0 and 999999.0

The 'Quick Storage Estimate' dialog box is shown with the 'Results' tab selected. The left sidebar contains buttons for 'Variables', 'Results', 'Design', 'Overview 2D', 'Overview 3D', and 'Vt'. The main area displays the following results:

Global Variables require approximate storage of between 8245 m³ and 11591 m³.

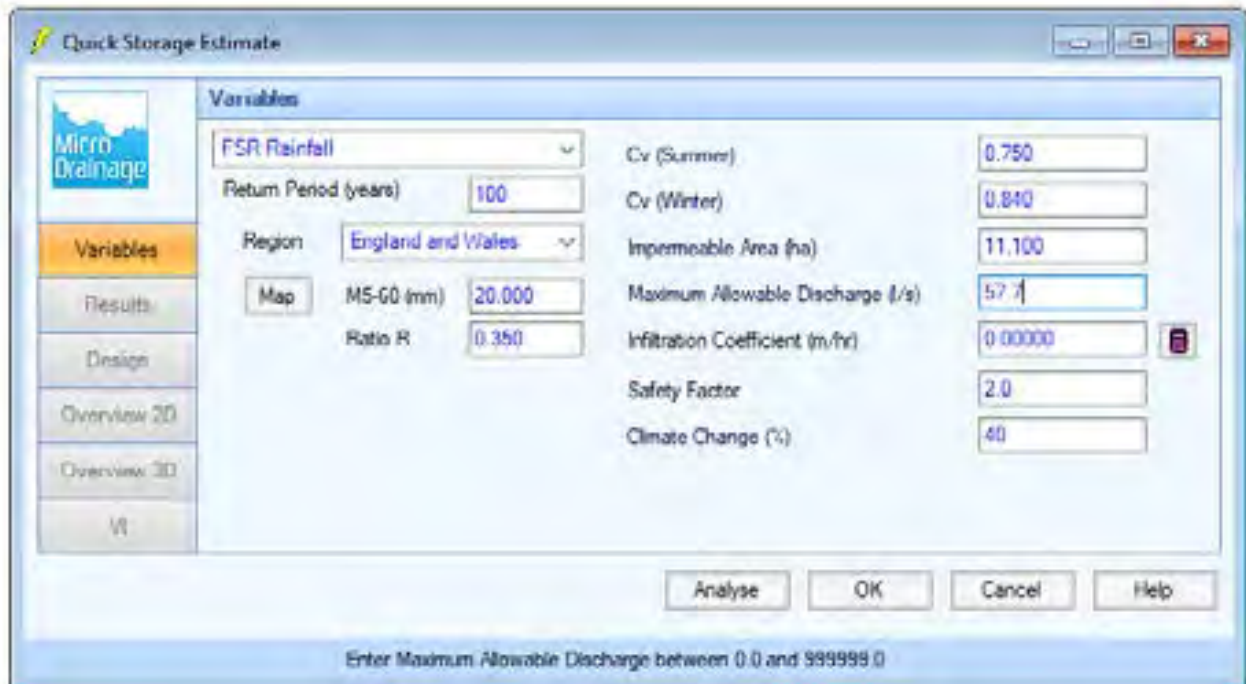
These values are estimates only and should not be used for design purposes.

Buttons at the bottom: Analyse, OK, Cancel, Help.

Footer text: Enter Maximum Allowable Discharge between 0.0 and 999999.0

Quick Storage Estimate: 10,755m³ of Storage

Catchment 2:



Quick Storage Estimate

Variables

FSR Rainfall

Return Period (years): 100

Region: England and Wales

Map: MS-G0 (mm): 20.000

Ratio R: 0.350

Cv (Summer): 0.750

Cv (Winter): 0.840

Impermeable Area (ha): 11.100

Maximum Allowable Discharge (l/s): 57.7

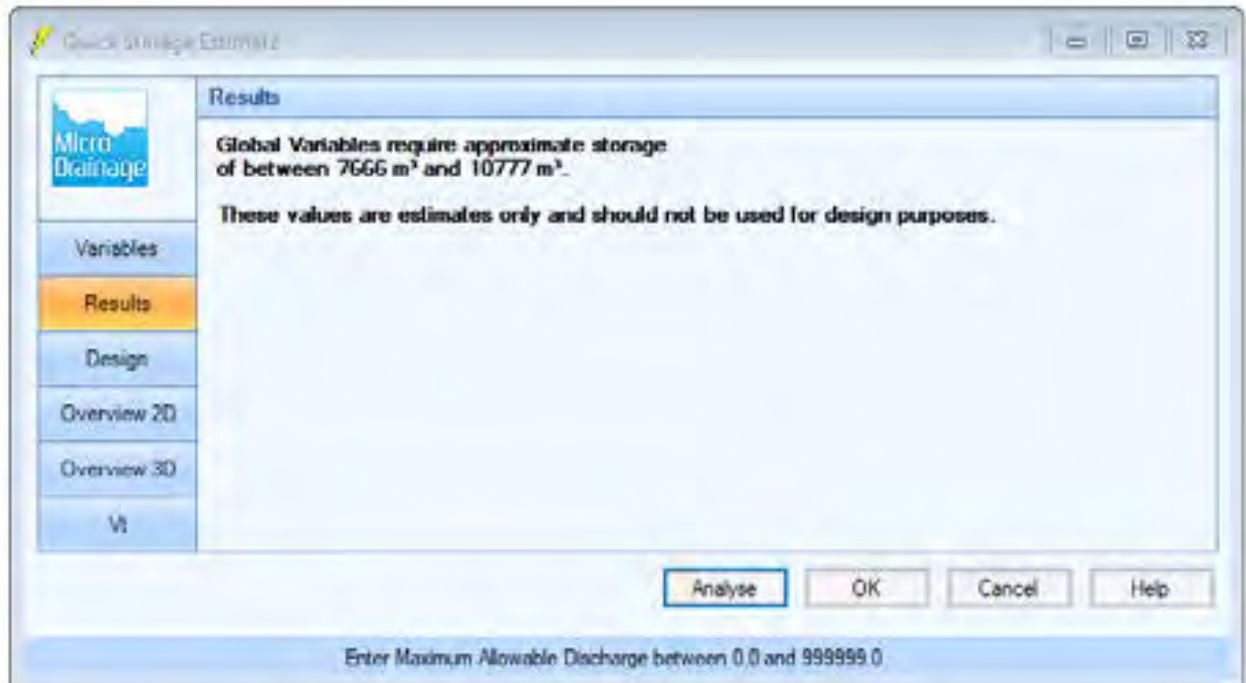
Infiltration Coefficient (m/hr): 0.00000

Safety Factor: 2.0

Climate Change (%): 40

Analyse OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0



Quick Storage Estimate

Results

Global Variables require approximate storage of between 7666 m³ and 10777 m³.

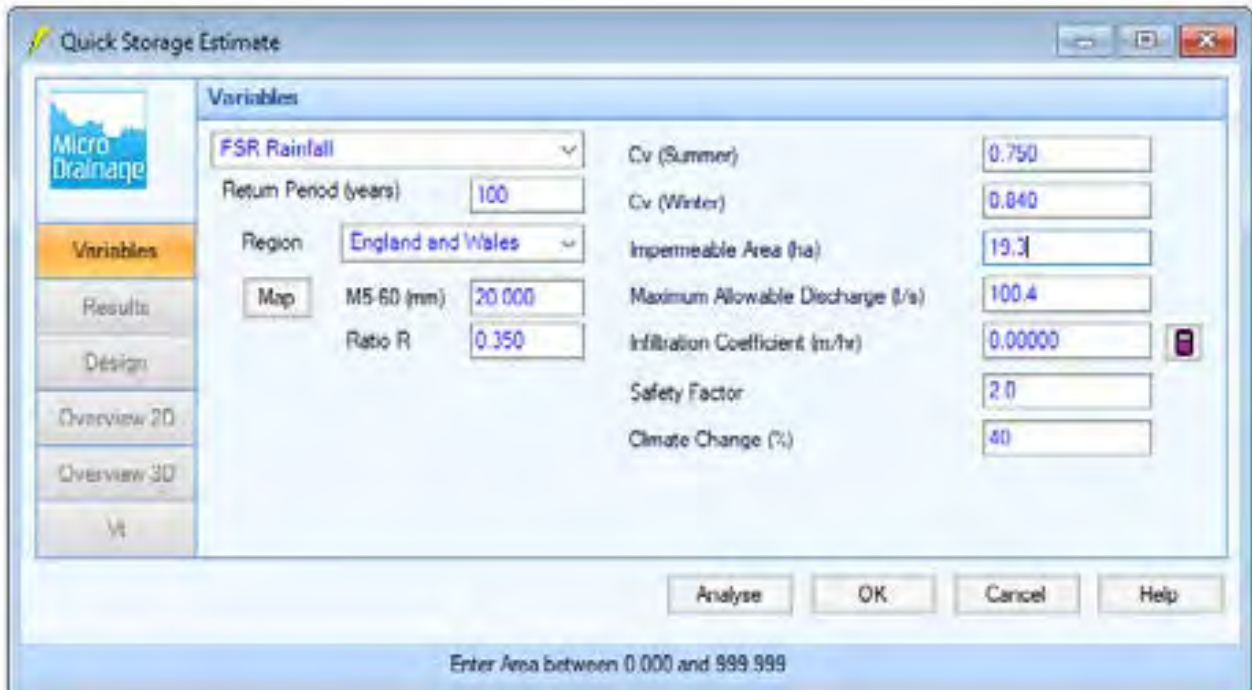
These values are estimates only and should not be used for design purposes.

Analyse OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Quick Storage Estimate: 10,000m³ of Storage

Catchment 3:



Quick Storage Estimate

Variables

FSR Rainfall

Return Period (years): 100

Region: England and Wales

Map: M5-60 (mm): 20 000

Ratio R: 0.350

Cv (Summer): 0.750

Cv (Winter): 0.840

Impermeable Area (ha): 19.3

Maximum Allowable Discharge (l/s): 100.4

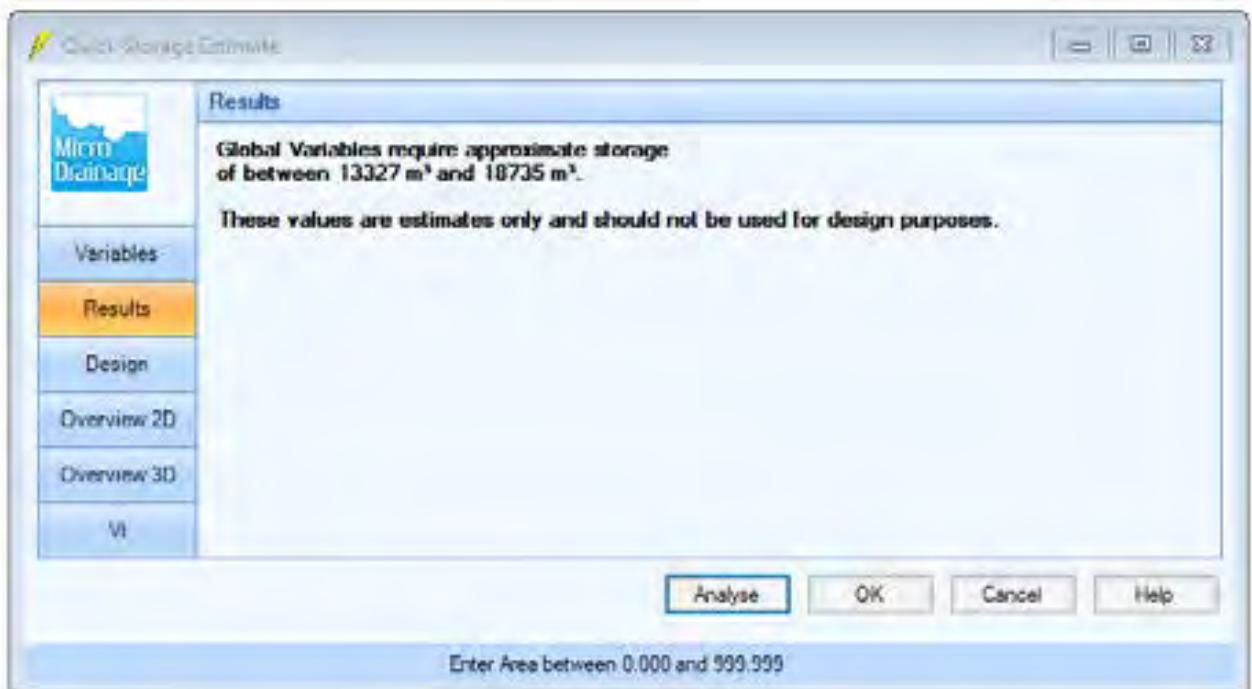
Infiltration Coefficient (m/hr): 0.00000

Safety Factor: 2.0

Climate Change (%): 40

Analyse OK Cancel Help

Enter Area between 0.000 and 999.999



Quick Storage Estimate

Results

Global Variables require approximate storage of between 13327 m³ and 18735 m³.

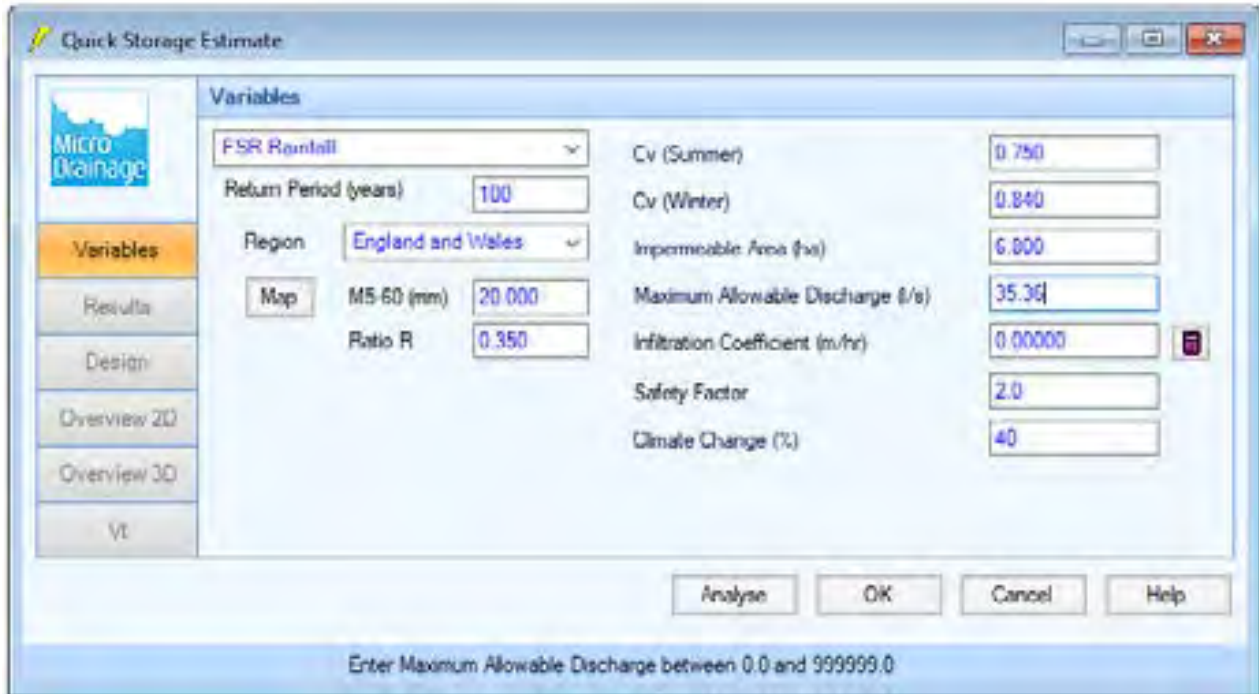
These values are estimates only and should not be used for design purposes.

Analyse OK Cancel Help

Enter Area between 0.000 and 999.999

Quick Storage Estimate: 17,383m³ of Storage

Catchment 4:



Quick Storage Estimate

Variables

FSR Rainfall

Return Period (years): 100

Region: England and Wales

Map: M5-60 (mm): 20 000

Ratio R: 0.350

Cv (Summer): 0.750

Cv (Winter): 0.840

Impervious Area (ha): 6.800

Maximum Allowable Discharge (l/s): 35.36

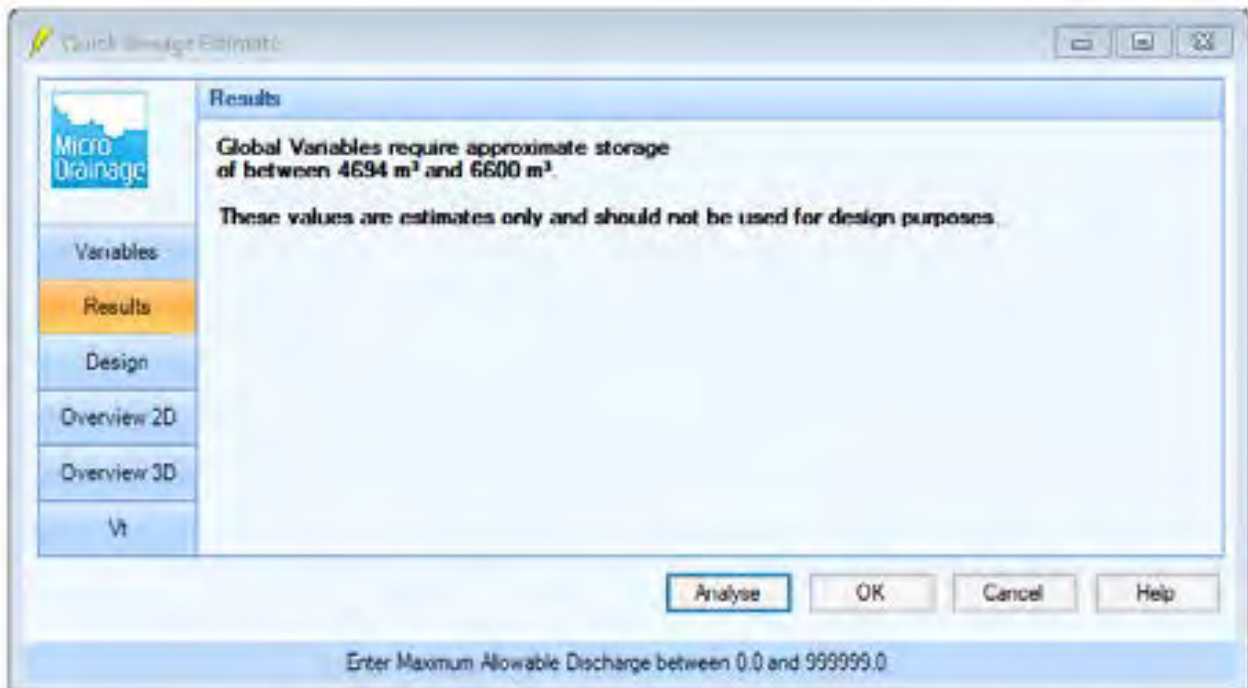
Infiltration Coefficient (m/hr): 0.00000

Safety Factor: 2.0

Climate Change (%): 40

Buttons: Analyse, OK, Cancel, Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0



Quick Storage Estimate

Results

Global Variables require approximate storage of between 4694 m³ and 6600 m³.

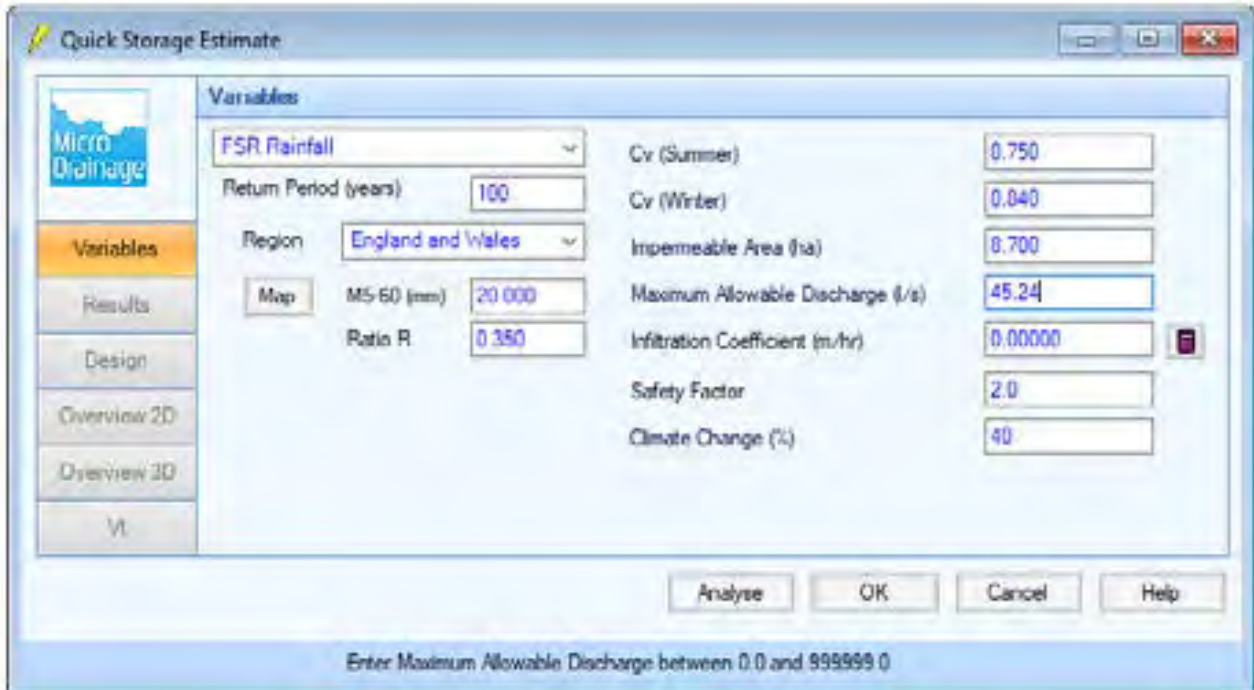
These values are estimates only and should not be used for design purposes.

Buttons: Analyse, OK, Cancel, Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Quick Storage Estimate: 6,125m³ of Storage

Catchment 5:



Quick Storage Estimate

Micro Drainage

Variables

FSR Rainfall

Return Period (years) 100

Region England and Wales

Map

M5-60 (mm) 20 000

Ratio R 0.350

Cv (Summer) 0.750

Cv (Winter) 0.040

Impermeable Area (ha) 0.700

Maximum Allowable Discharge (l/s) 45.24

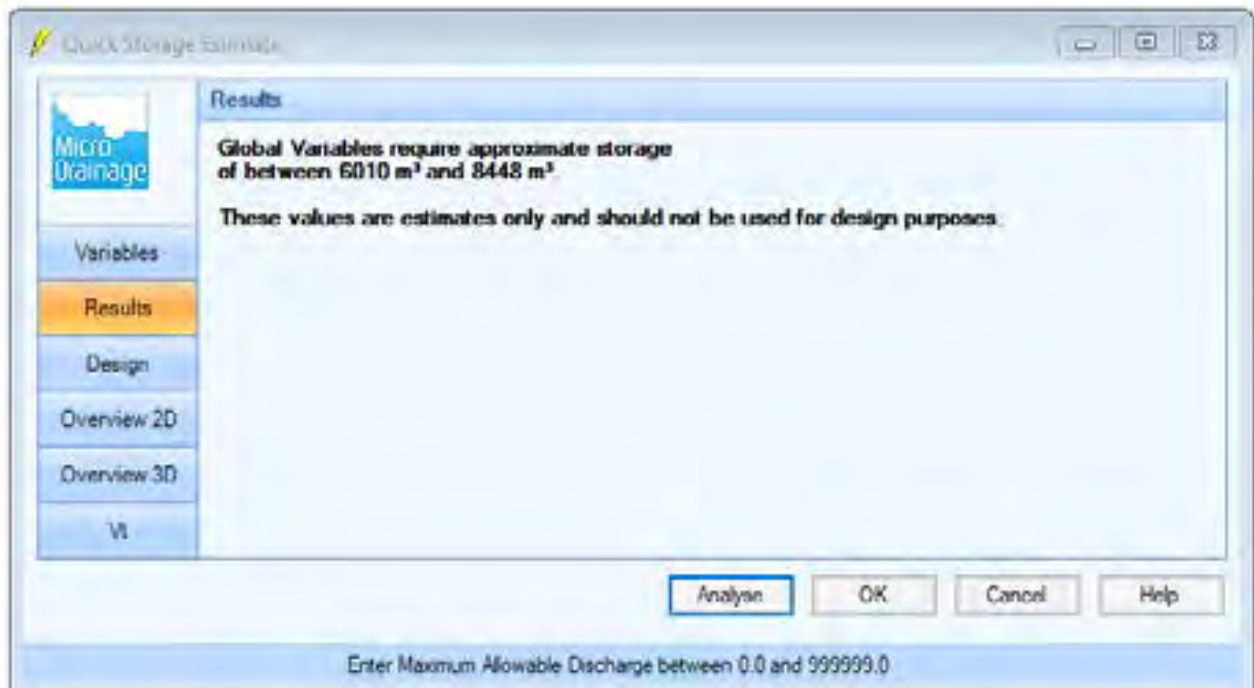
Infiltration Coefficient (m/hr) 0.00000

Safety Factor 2.0

Climate Change (%) 40

Analyse OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0



Quick Storage Estimate

Micro Drainage

Results

Global Variables require approximate storage of between 6010 m³ and 8448 m³.

These values are estimates only and should not be used for design purposes.

Analyse OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Quick Storage Estimate: 7,850m³ of Storage

APPENDIX 7

FOUL WATER CALCULATIONS

WEST OF IFIELD
Homes England

Connection
via pump
station

Connection
via 2701

Connection
via TWMH
5601

Connection
via TWMH
1305

BLOCK	FLATS			HOUSES				TOTAL HOMES	Peak Flow Rate from each Block	Average Flow Rate
	1B2P	2B4P	TOTAL	2B4P	3B5P	4B6P	TOTAL		(based on 4,000 l/ unit /day)	Avg = (Peak/6)
S	87	118	205	0	0	0	0	205	9.47	1.6
F	18	24	42	12	30	21	63	105	4.87	0.8
A	0	0	0	14	64	53	131	131	6.06	1.0
B	1	2	3	27	188	72	287	290	13.45	2.2
C	7	9	16	12	185	118	315	331	15.31	2.6
D	40	53	93	37	44	22	103	196	9.07	1.5
E	41	55	96	40	109	45	194	290	13.41	2.2
G	27	37	64	14	42	8	64	128	5.93	1.0
H	211	285	495	0	0	0	0	495	22.94	3.8
P									0.00	0.0
Q									0.00	0.0
I	0	0	0	6	2	6	14	14	0.65	0.1
J	4	5	9	20	57	36	113	122	5.63	0.9
K	5	7	13	36	98	16	150	163	7.53	1.3
L	10	13	22	14	52	24	90	112	5.21	0.9
M	0	0	0	12	88	79	179	179	8.29	1.4
N	0	0	0	7	32	78	117	117	5.42	0.9
O	0	0	0	28	80	14	122	122	5.65	0.9
	449	608	1058	279	1071	592	1942	3000	138.87	23.1
								Secondary School	18.75	3.1
								Care Centre	20	3.3
								Primary School	11.38	1.9
								Total Demands (l/s)	189.00	31.50

APPENDIX 8

FLOOD EXCEEDANCE ROUTES