



# LEGEND

- IT01 GEG Infiltration Test Location
- IT01 GEG Trial Pit (Unsuitable for Infiltration)

## TITLE:

FIGURE 4 : PROPOSED EXPLORATORY HOLE LOCATION PLAN

## SITE:

ADASTRAL PARK, IPSWICH

## PROJECT No.:

GEG-16-458

## CLIENT:

BROOKBANKS

## SCALE:

NTS

## DATE:

03/07/17

## DRAWN/CHECKED:

FT / MP

## REVISION:

A

## DRAWING NO.:

001

## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT01C Test 1 of 2

Depth of Pit (cm): 140  
Depth of Water at Start of Depth (cm): 38  
Date of Test: 28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT01C Test 1 of 2
Effective Depth of Trial Pit	$d_p$		m	1.02
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.83
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.41
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.11
Time to reach 75% Effective Depth	$T_{p75\%}$		min	144.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	1090.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	946
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	2.34E-06

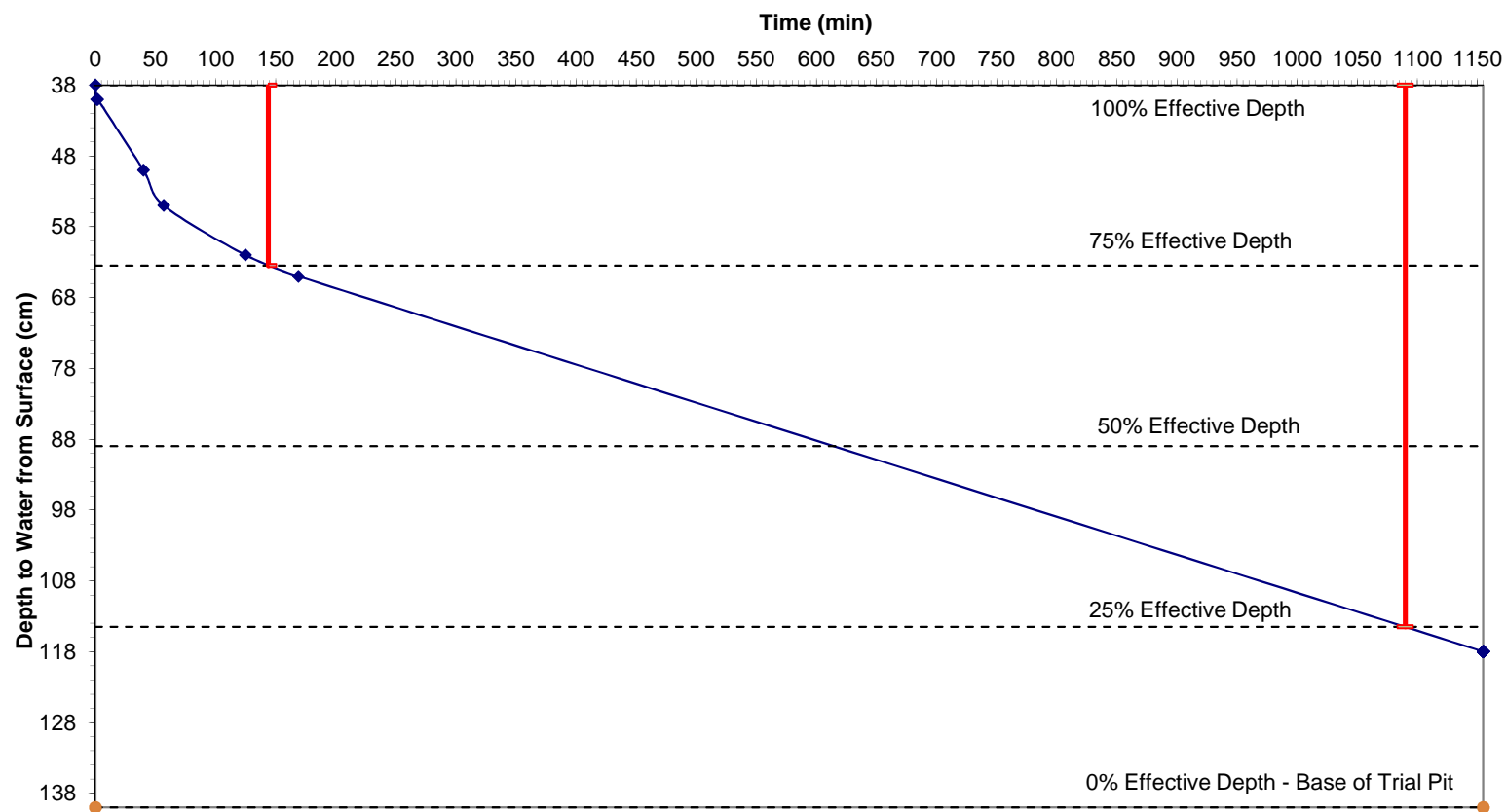
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT01C Test 1 of 2



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT01C Test 2 of 2

Depth of Pit (cm): 140  
Depth of Water at Start of Depth (cm): 40  
Date of Test: 29 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT01C Test 2 of 2
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.81
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.41
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.06
Time to reach 75% Effective Depth	$T_{p75\%}$		min	500.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	N/A
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	N/A
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	N/A

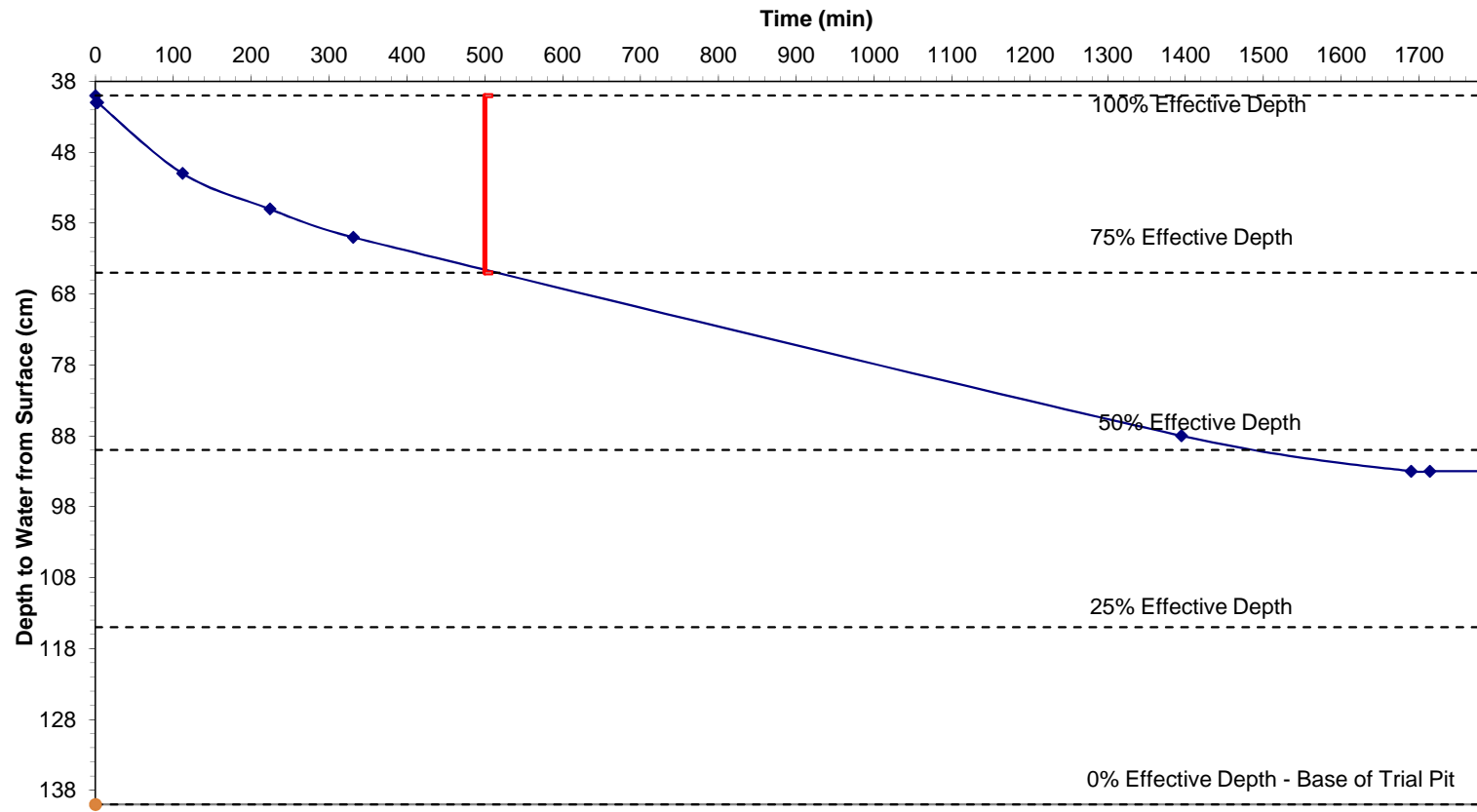
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT01C Test 2 of 2



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT02 Test 1 of 3

Depth of Pit (cm): 150  
Depth of Water at Start of Depth (cm): 50  
Date of Test: 28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT02 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.90
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.86
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.43
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.21
Time to reach 75% Effective Depth	$T_{p75\%}$		min	14.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	143.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	128.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.73E-05

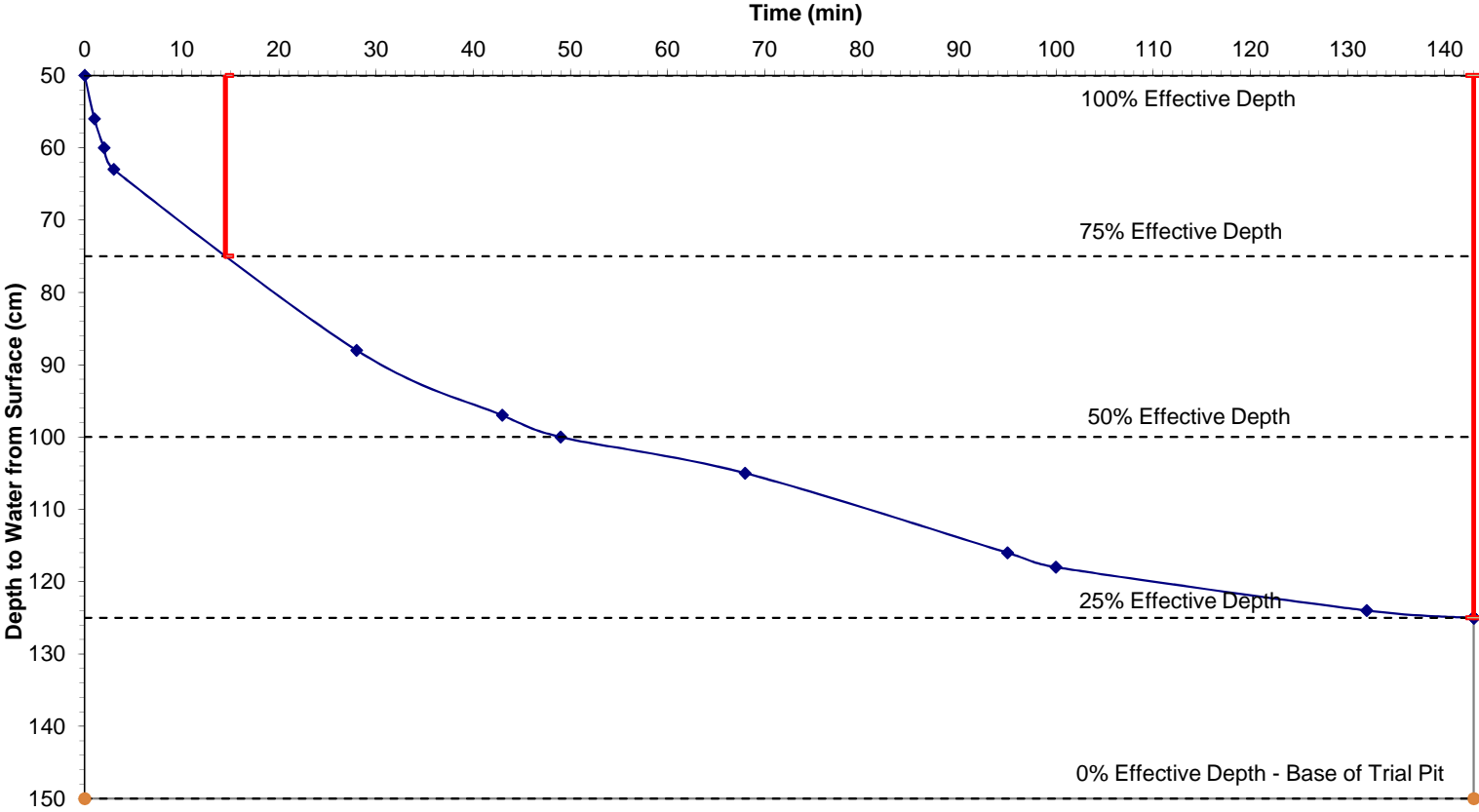
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT02 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT02 Test 2 of 3

Depth of Pit (cm): 150  
Depth of Water at Start of Depth (cm): 50  
Date of Test: 28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT02 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.90
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.86
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.43
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.21
Time to reach 75% Effective Depth	$T_{p75\%}$		min	27.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	116.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	89
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	2.50E-05

\*To 50% Effective Depth (including base)

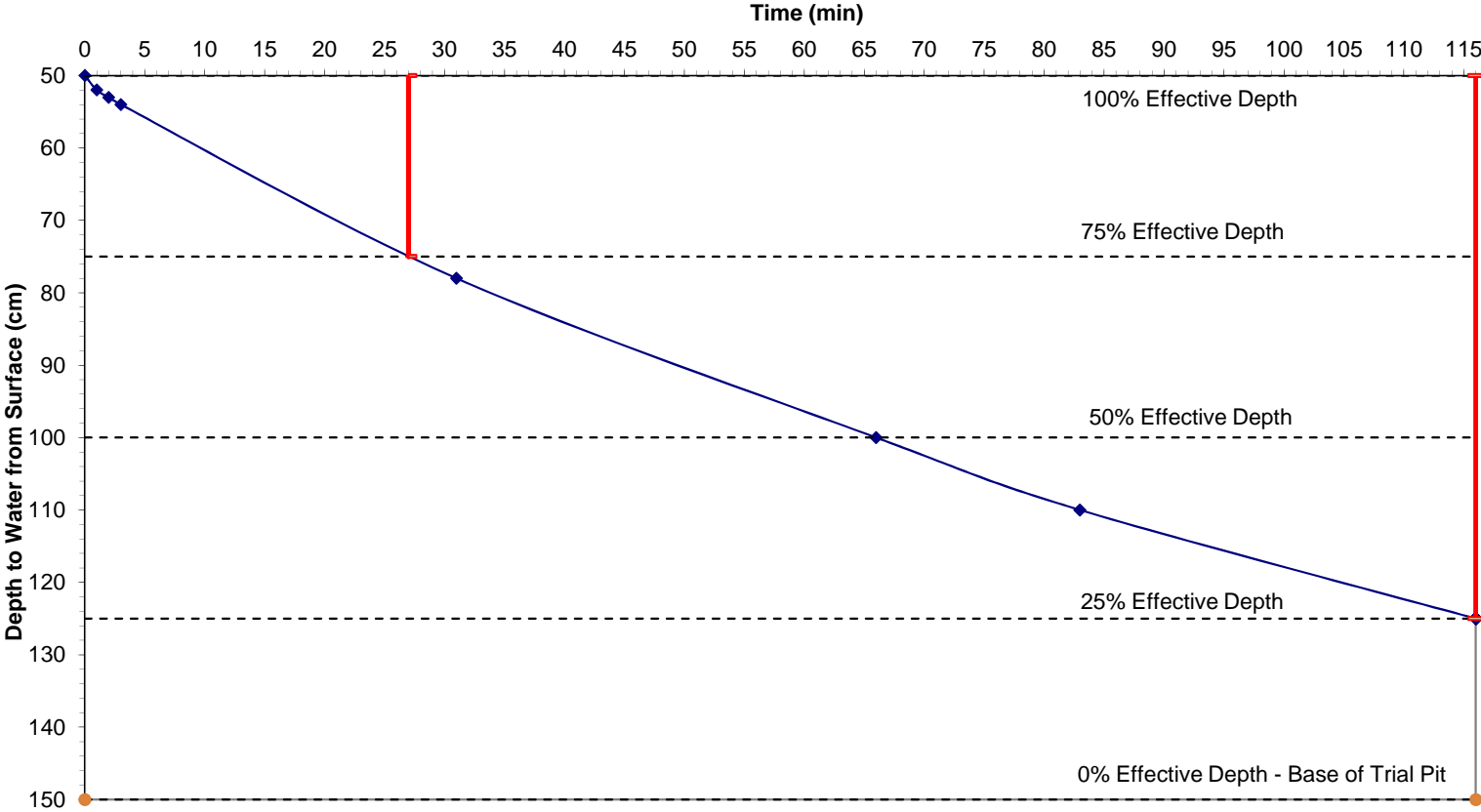
With Reference to: **Figure D-1**



Figure D-1

Adastral Park, Iç GEG-16-458

IT02 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT02 Test 3 of 3

Depth of Pit (cm): 150  
Depth of Water at Start of Depth (cm): 50  
Date of Test: 28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT02 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.90
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.86
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.43
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.21
Time to reach 75% Effective Depth	$T_{p75\%}$		min	29.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	121.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	92
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	2.42E-05

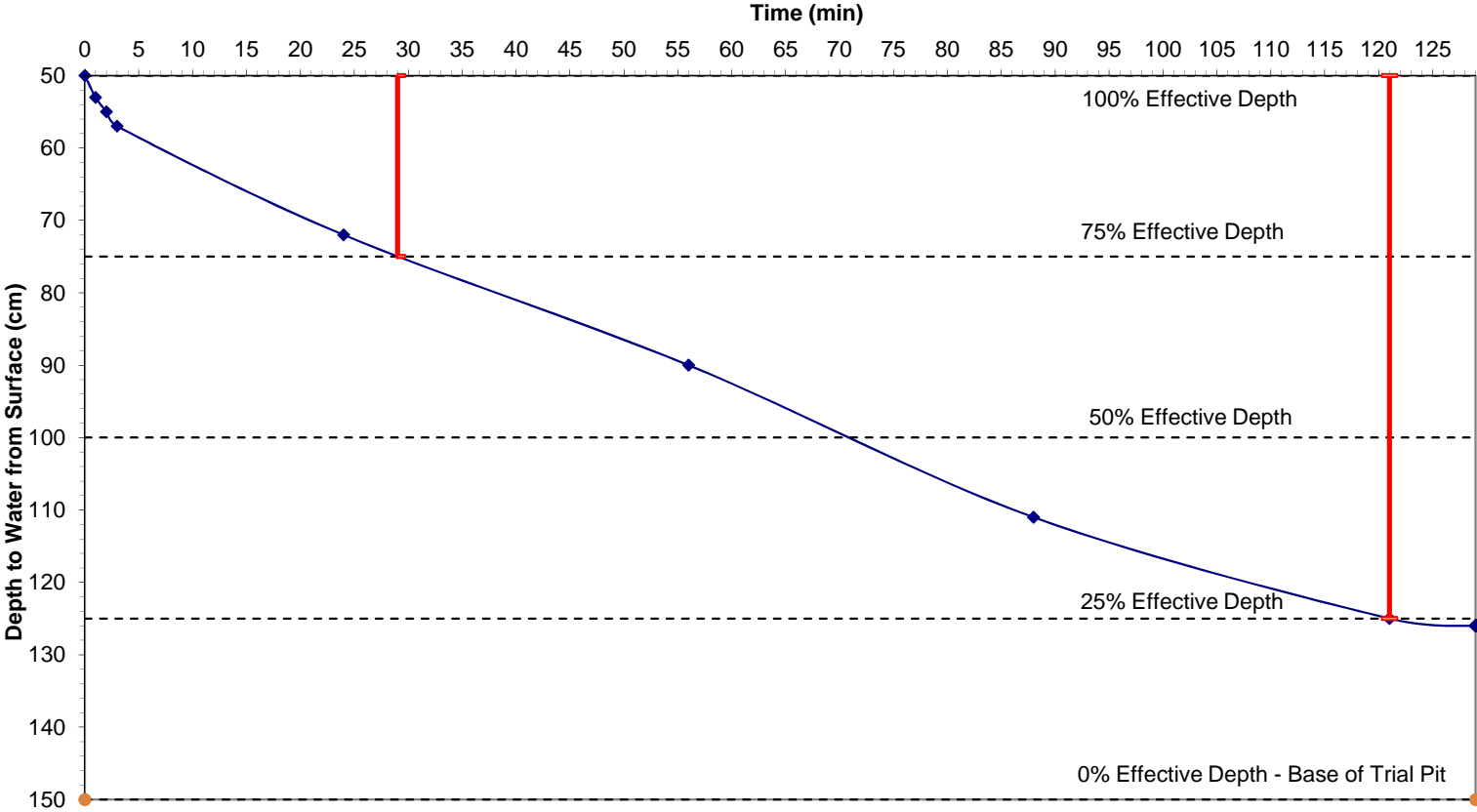
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT02 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT03 Test 1 of 3

Depth of Pit (cm):	140
Depth of Water at Start of Depth (cm):	40
Date of Test:	28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT03 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.65
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.74
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.37
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.84
Time to reach 75% Effective Depth	$T_{p75\%}$		min	9.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	66.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	57
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>3.82E-05</b>

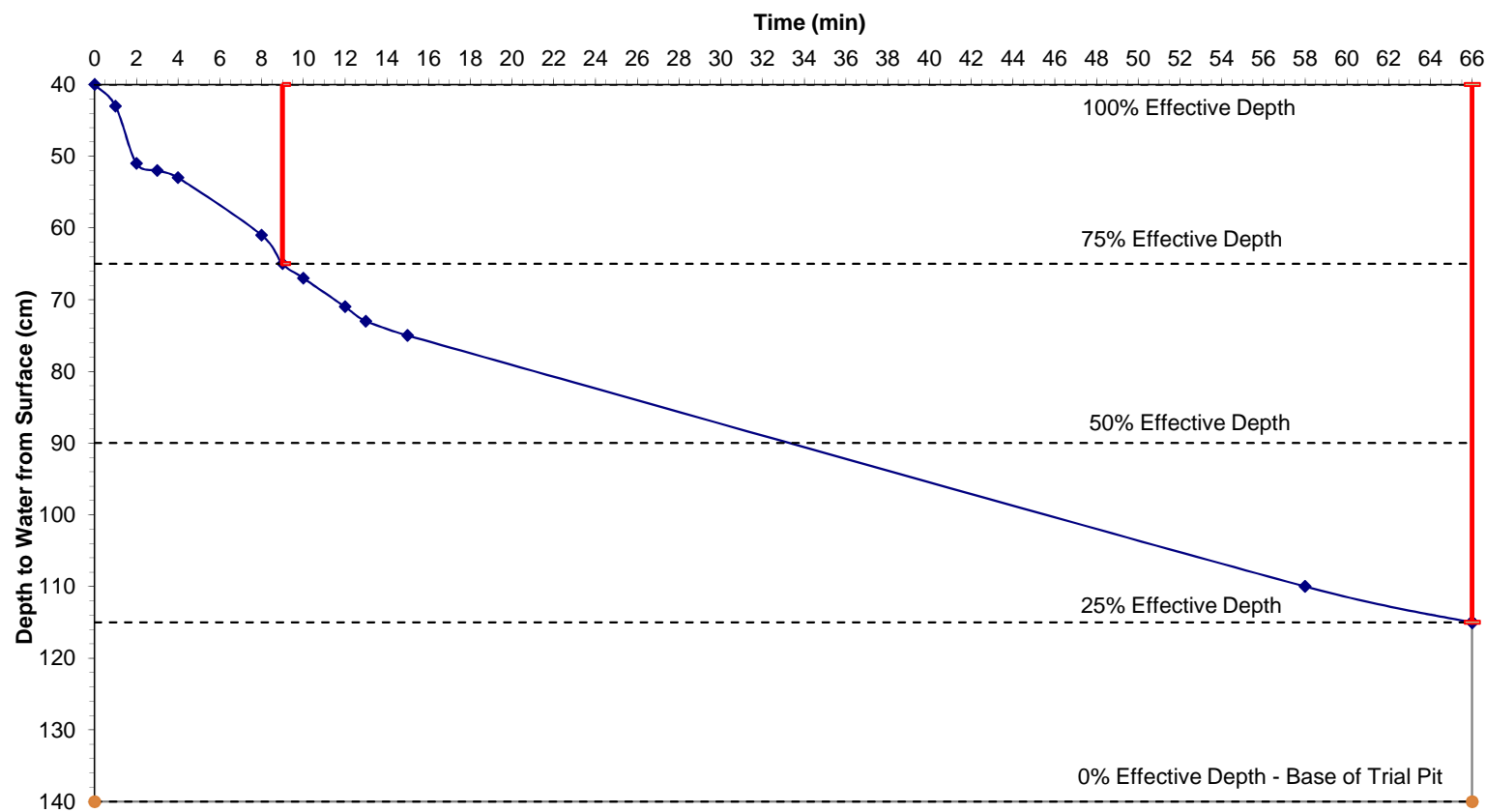
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT03 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT03 Test 1 of 3

Depth of Pit (cm):	125
Depth of Water at Start of Depth (cm):	25
Date of Test:	28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT03 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.65
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.74
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.37
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.84
Time to reach 75% Effective Depth	$T_{p75\%}$		min	18.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	97.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	79
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>2.76E-05</b>

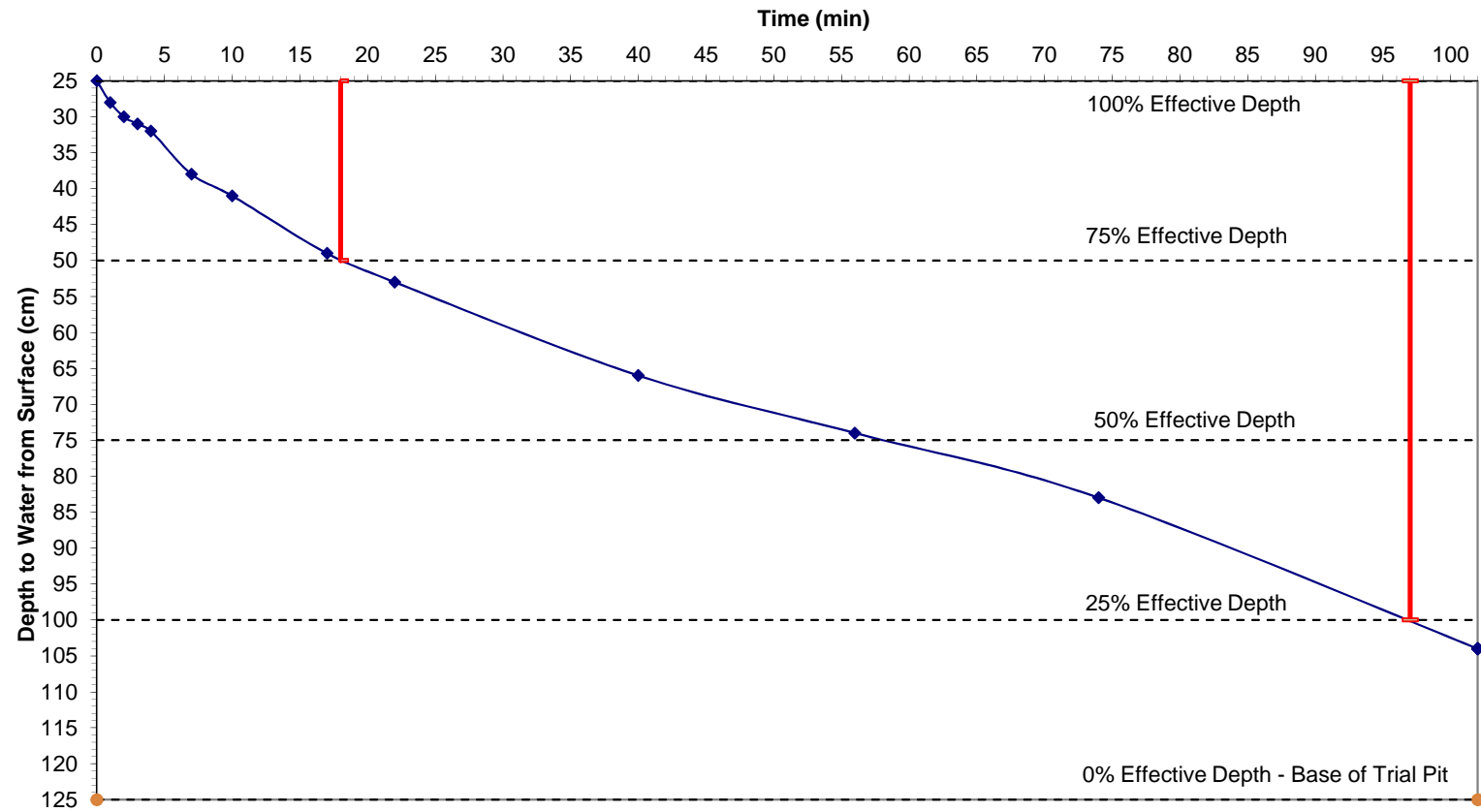
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT03 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT03 Test 2 of 3

Depth of Pit (cm):	110
Depth of Water at Start of Depth (cm):	10
Date of Test:	28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT03 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.65
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.74
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.37
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.84
Time to reach 75% Effective Depth	$T_{p75\%}$		min	15.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	132.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	117
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>1.86E-05</b>

\*To 50% Effective Depth (including base)

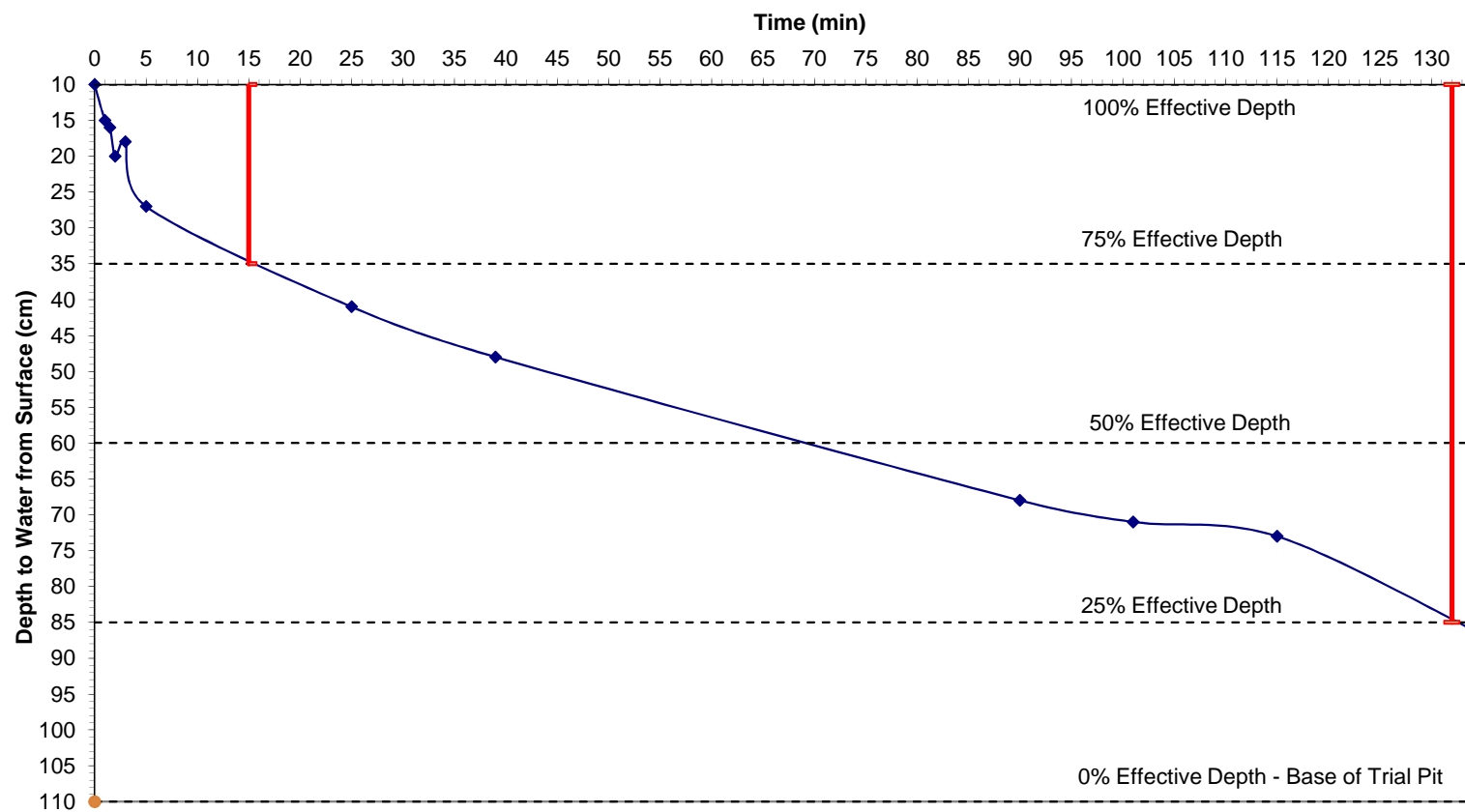
With Reference to: **Figure D-1**



Figure D-1

Adastral Park, Iç GEG-16-458

IT03 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT04 Test 1 of 3

Depth of Pit (cm): 160  
Depth of Water at Start of Depth (cm): 60  
Date of Test: 26 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT04 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	160.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	72.00
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	36.00
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	232.45
Time to reach 75% Effective Depth	$T_{p75\%}$		min	50.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	981.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	931
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>2.77E-06</b>

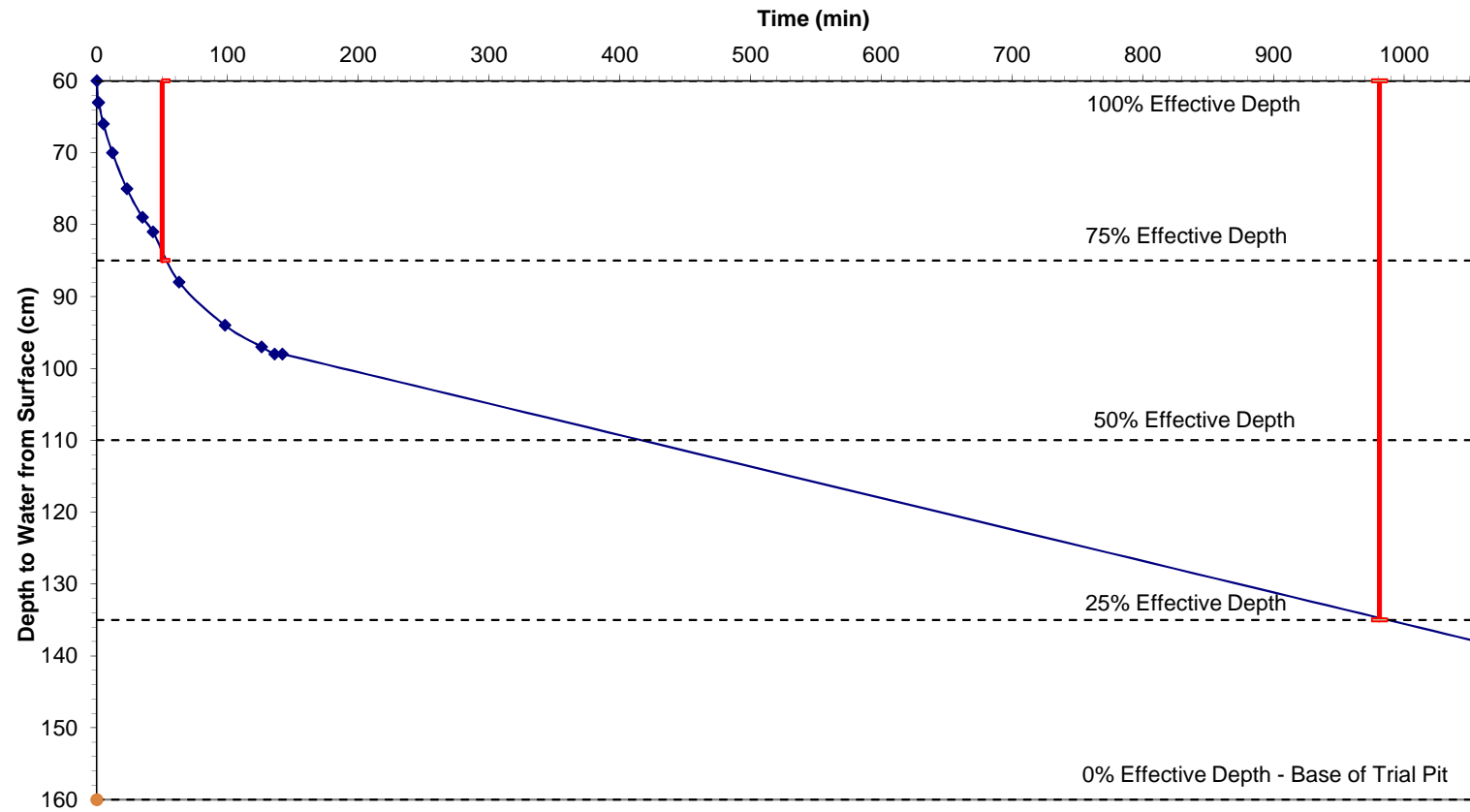
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT04 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT04 Test 2 of 3

Depth of Pit (cm): 140  
Depth of Water at Start of Depth (cm): 40  
Date of Test: 27 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT04 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	160.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	72.00
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	36.00
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	232.45
Time to reach 75% Effective Depth	$T_{p75\%}$		min	40.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	354.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	314
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	8.22E-06

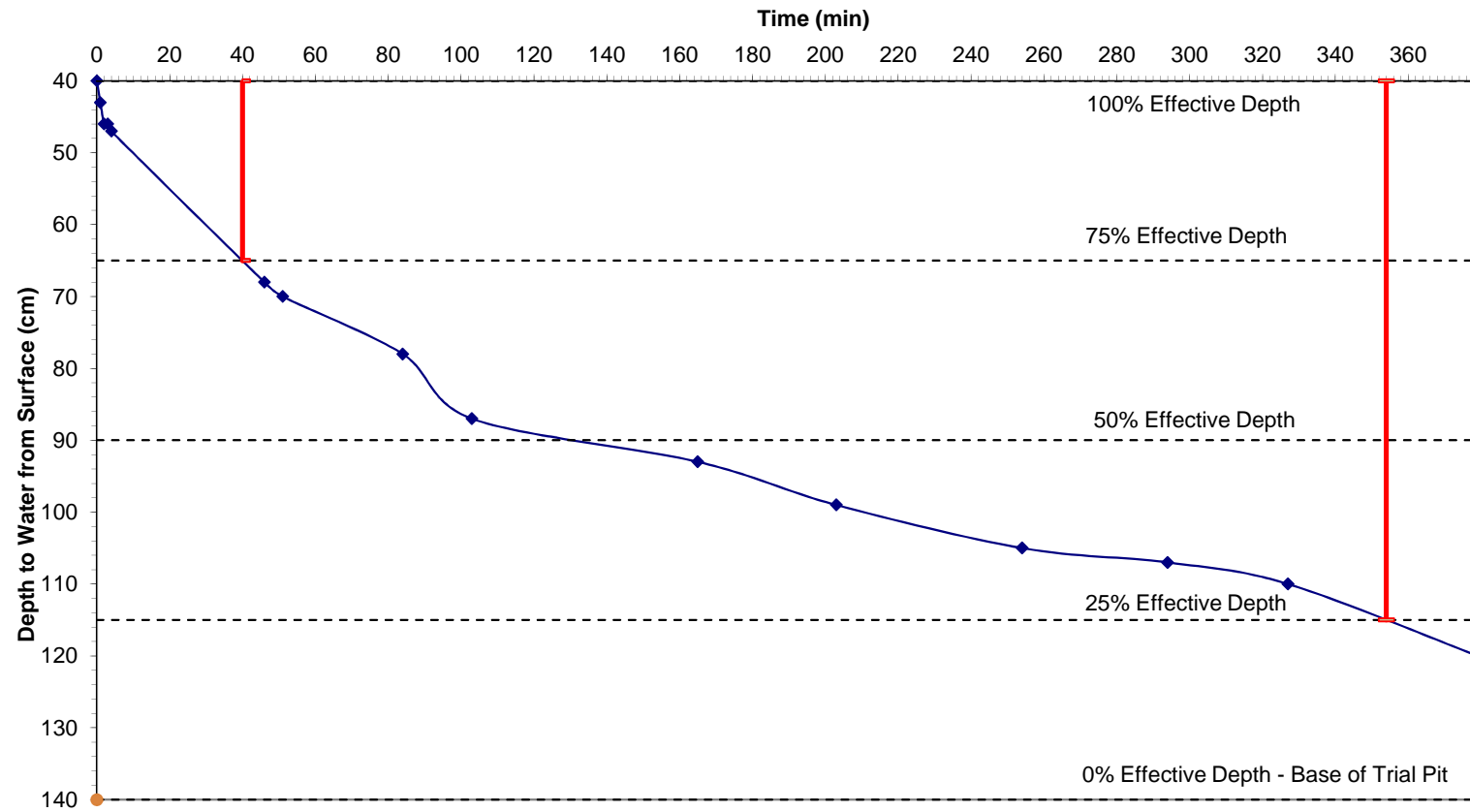
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT04 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT04 Test 3 of 3

Depth of Pit (cm): 130  
Depth of Water at Start of Depth (cm): 30  
Date of Test: 28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT04 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	160.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	72.00
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	36.00
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	232.45
Time to reach 75% Effective Depth	$T_{p75\%}$		min	66.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	436.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	370
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	6.98E-06

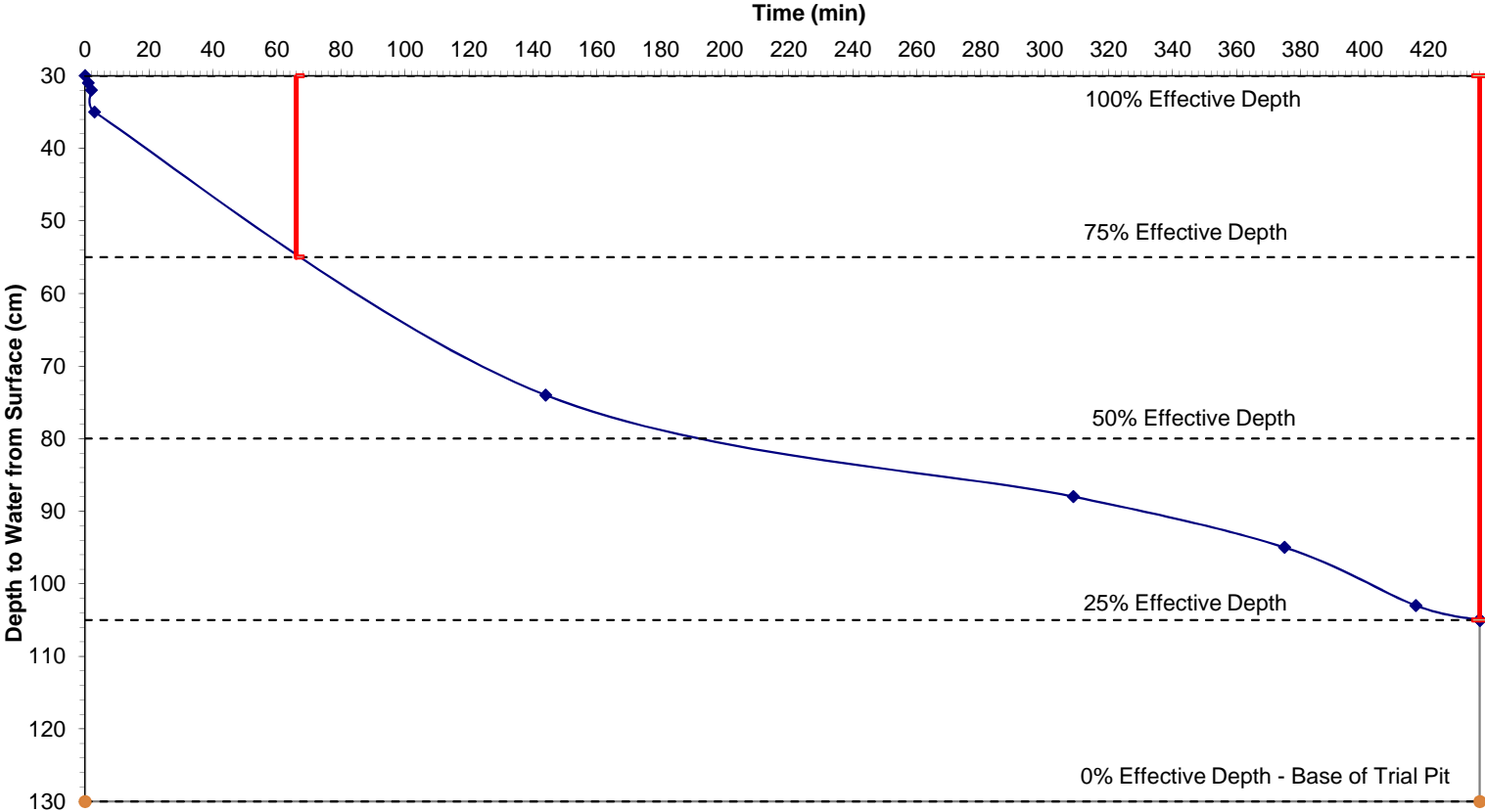
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT04 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT06 Test 1 of 3

Depth of Pit (cm): 160  
Depth of Water at Start of Depth (cm): 60  
Date of Test: 26 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT06 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.75
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.79
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.39
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.99
Time to reach 75% Effective Depth	$T_{p75\%}$		min	3.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	154.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	151
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.45E-05

\*To 50% Effective Depth (including base)

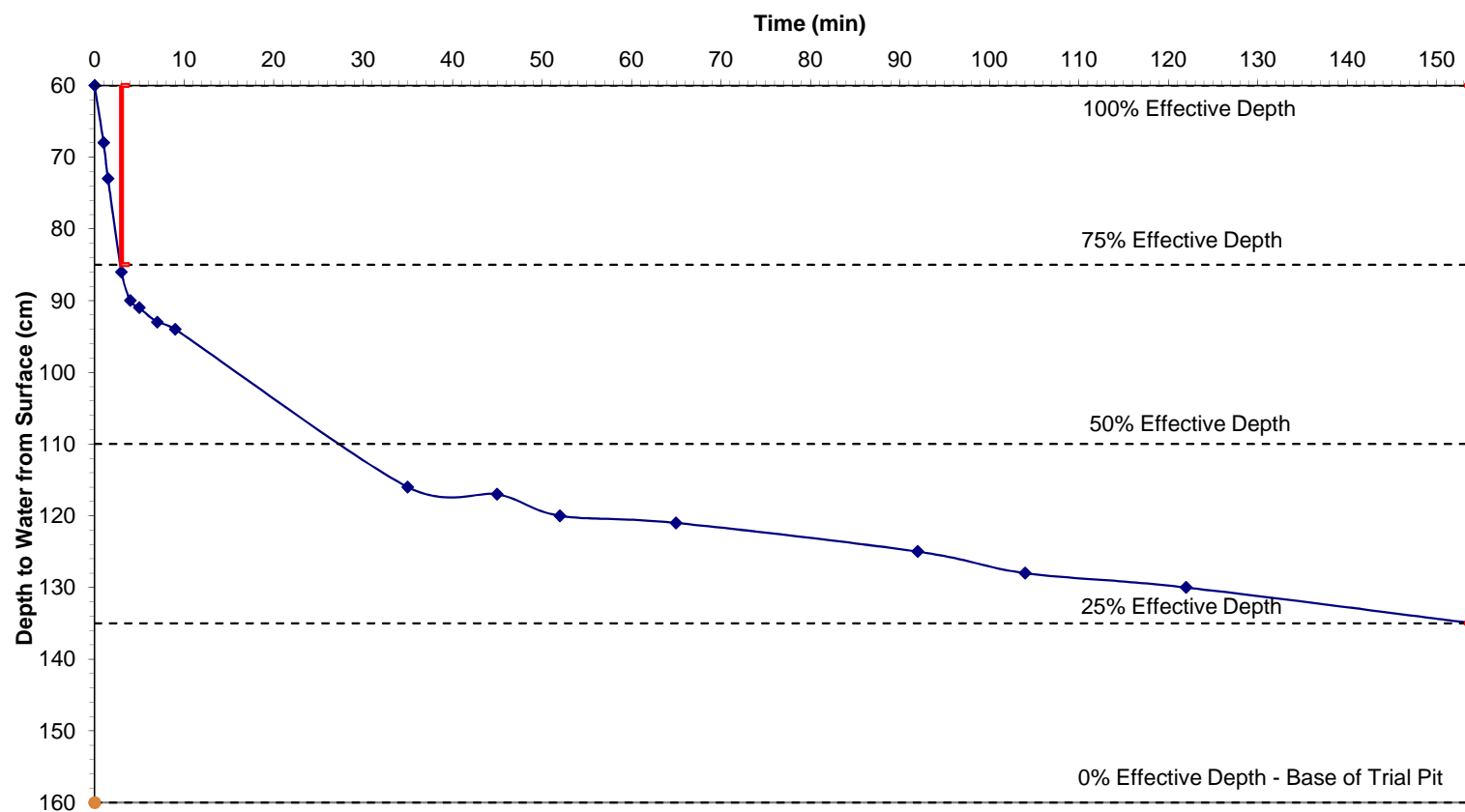
With Reference to: **Figure D-1**



Figure D-1

Adastral Park, Iç GEG-16-458

IT06 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT06 Test 2 of 3

Depth of Pit (cm): 160  
Depth of Water at Start of Depth (cm): 60  
Date of Test: 27 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT06 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.75
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.79
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.39
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.99
Time to reach 75% Effective Depth	$T_{p75\%}$		min	26.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	159.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	133
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.65E-05

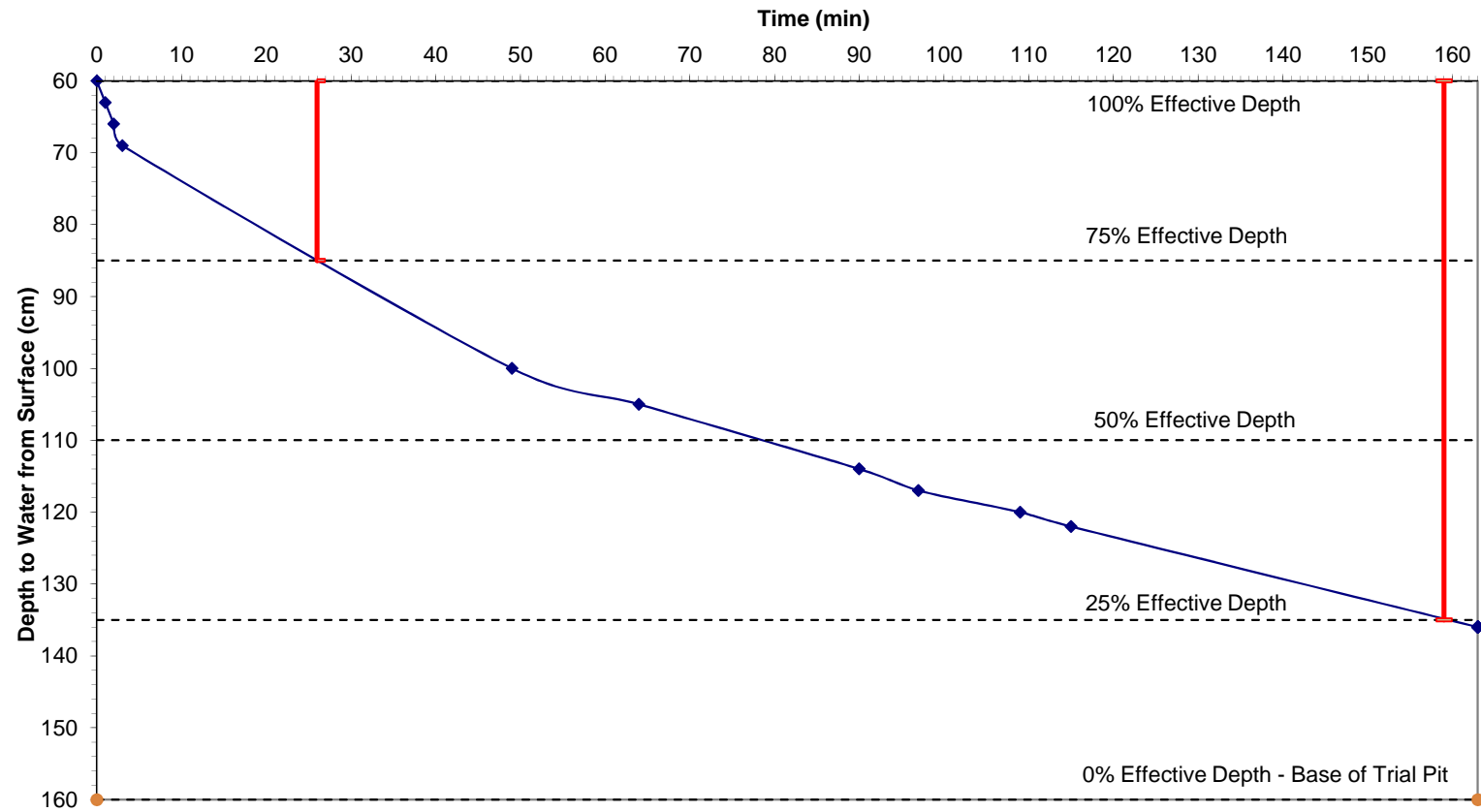
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT06 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT06 Test 3 of 3

Depth of Pit (cm): 160  
Depth of Water at Start of Depth (cm): 60  
Date of Test: 27 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT06 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.75
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.79
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.39
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.99
Time to reach 75% Effective Depth	$T_{p75\%}$		min	23.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	128.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	104.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>2.10E-05</b>

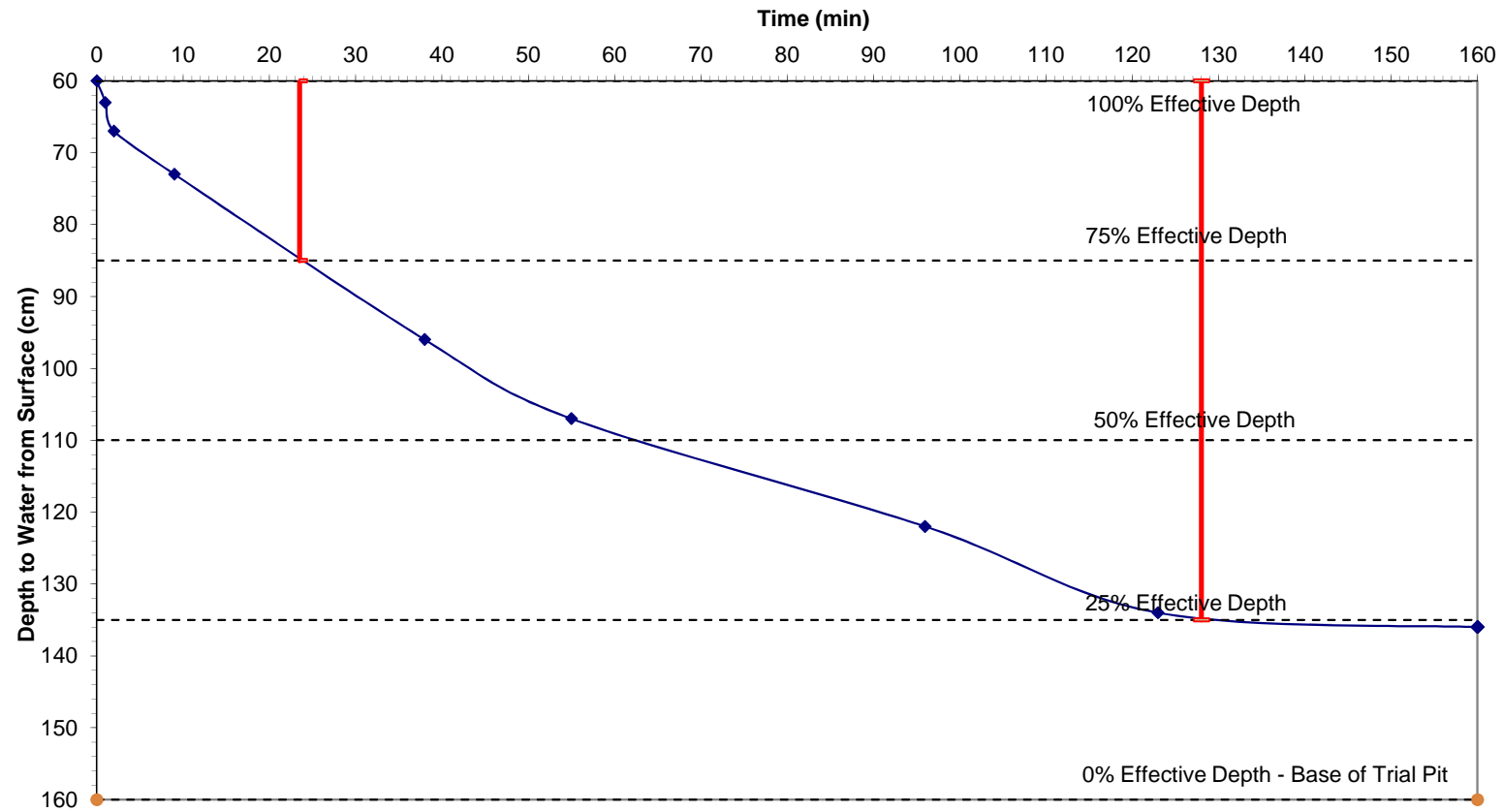
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT06 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT07 Test 1 of 3

Depth of Pit (cm):	140
Depth of Water at Start of Depth (cm):	40
Date of Test:	26 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT07 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	170.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	76.50
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	38.25
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	246.95
Time to reach 75% Effective Depth	$T_{p75\%}$		min	25.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	188.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	163
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.58E-05

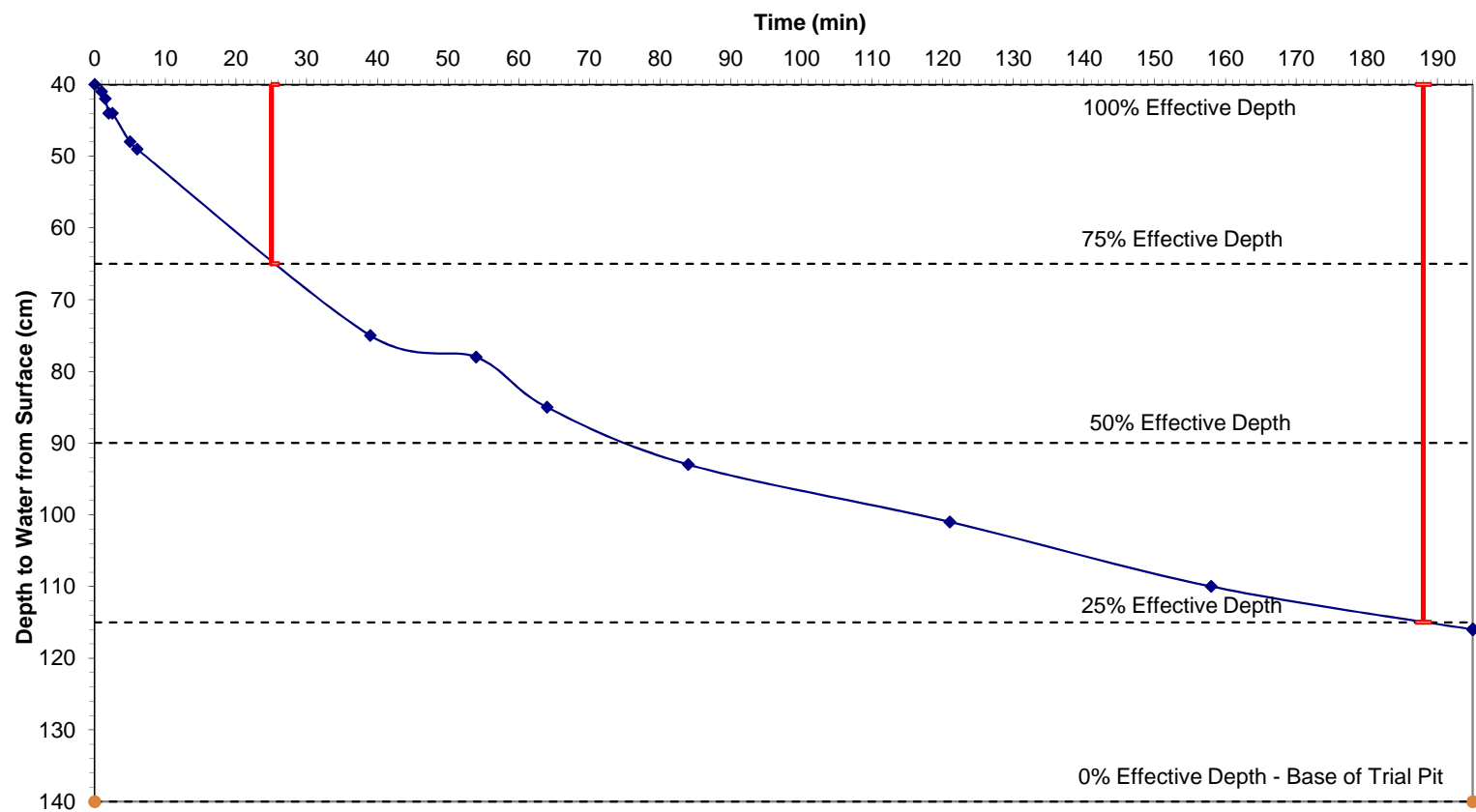
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT07 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT07 Test 2 of 3

Depth of Pit (cm):	140
Depth of Water at Start of Depth (cm):	40
Date of Test:	26 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT07 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	170.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	76.50
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	38.25
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	246.95
Time to reach 75% Effective Depth	$T_{p75\%}$		min	33.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	190.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	156.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>1.65E-05</b>

\*To 50% Effective Depth (including base)

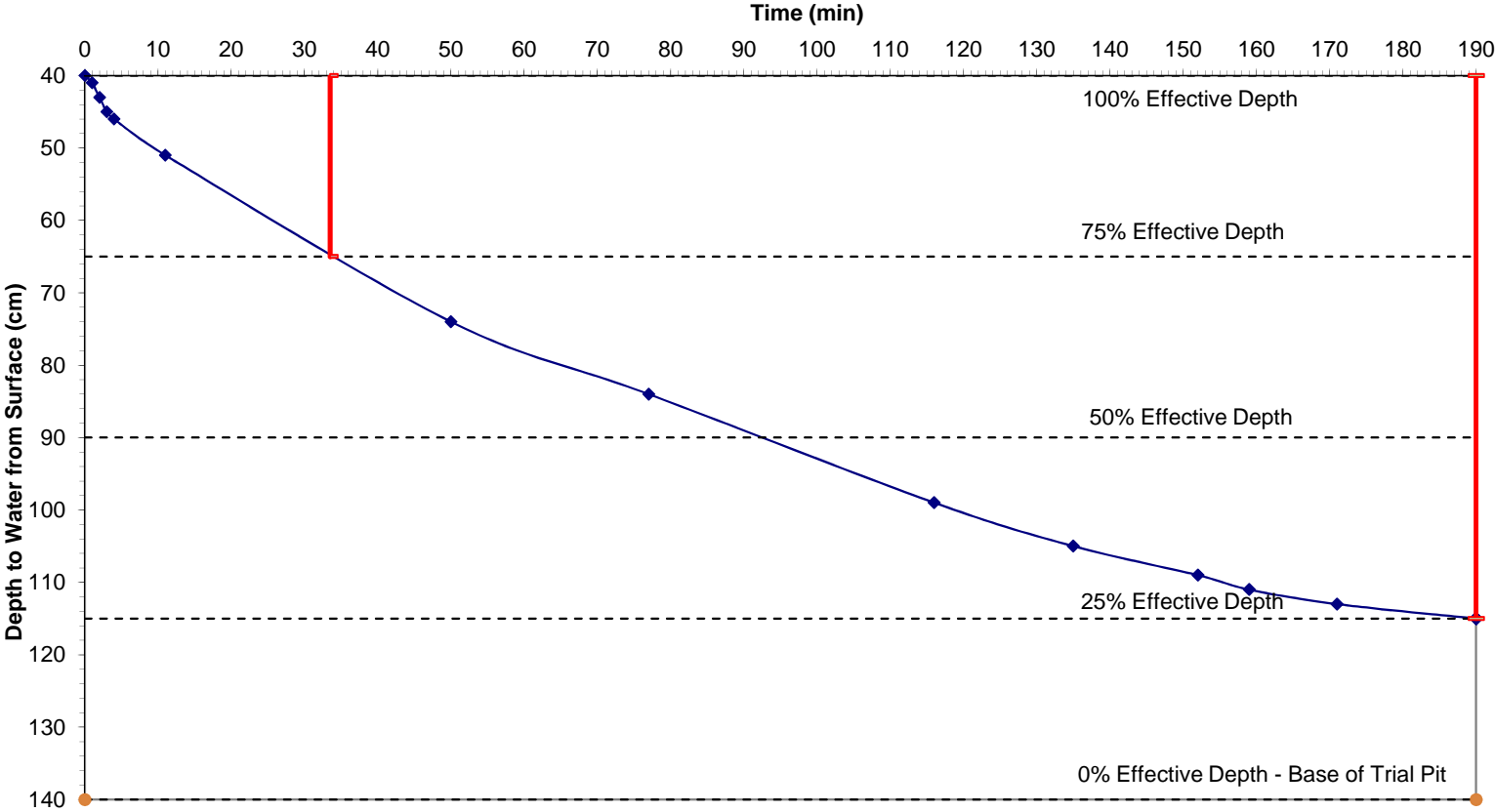
With Reference to: **Figure D-1**



Figure D-1

Adastral Park, İç GEG-16-458

IT07 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT07 Test 3 of 3

Depth of Pit (cm): 120  
Depth of Water at Start of Depth (cm): 20  
Date of Test: 26 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT07 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	170.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	76.50
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	38.25
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	246.95
Time to reach 75% Effective Depth	$T_{p75\%}$		min	16.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	131.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	114.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	2.25E-05

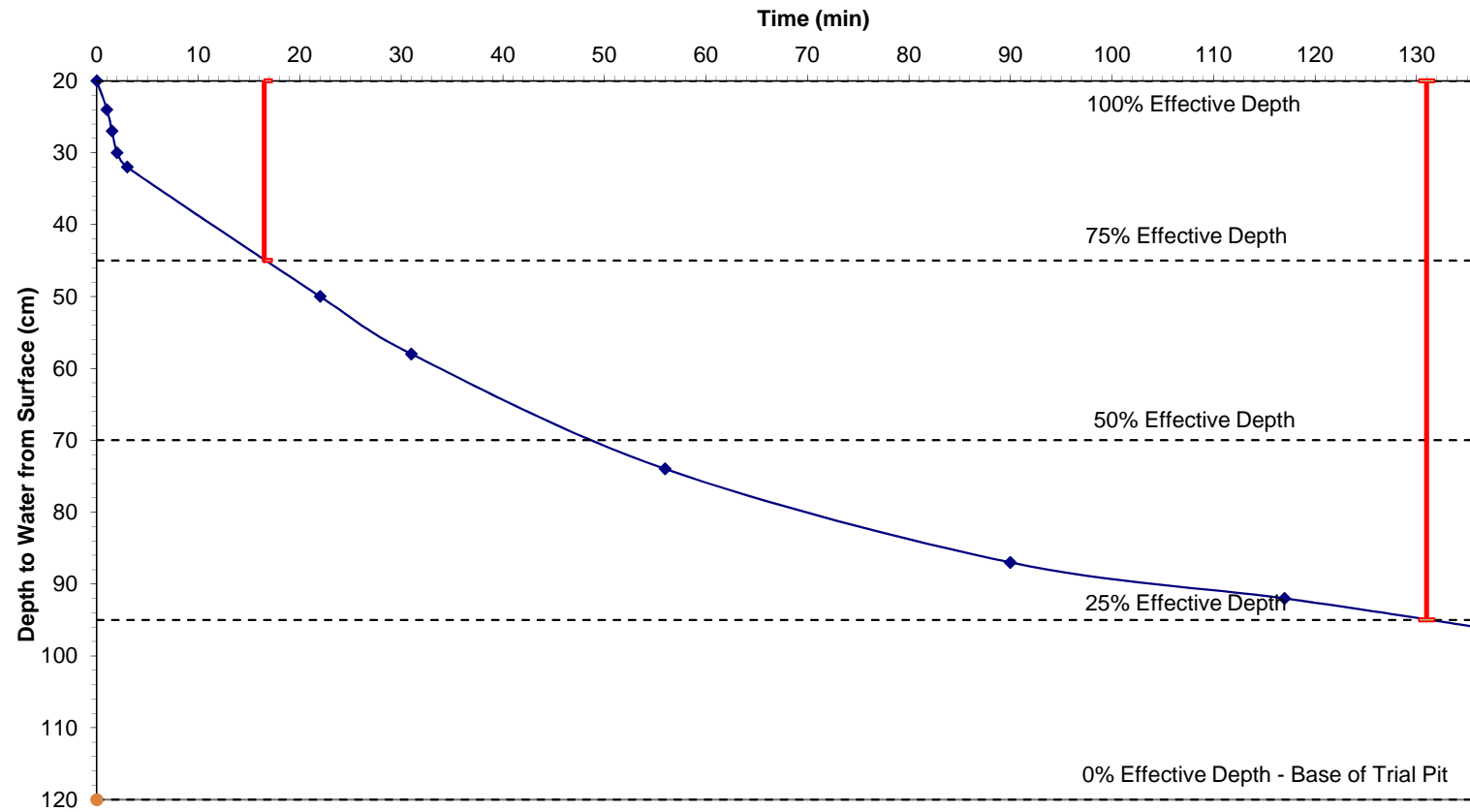
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT07 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT08 Test 1 of 3

Depth of Pit (cm):	140.00
Depth of Water at Start of Depth (cm):	40.00
Date of Test:	27 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT08 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	2.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.90
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.45
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.35
Time to reach 75% Effective Depth	$T_{p75\%}$		min	6.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	114.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	107.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>2.08E-05</b>

\*To 50% Effective Depth (including base)

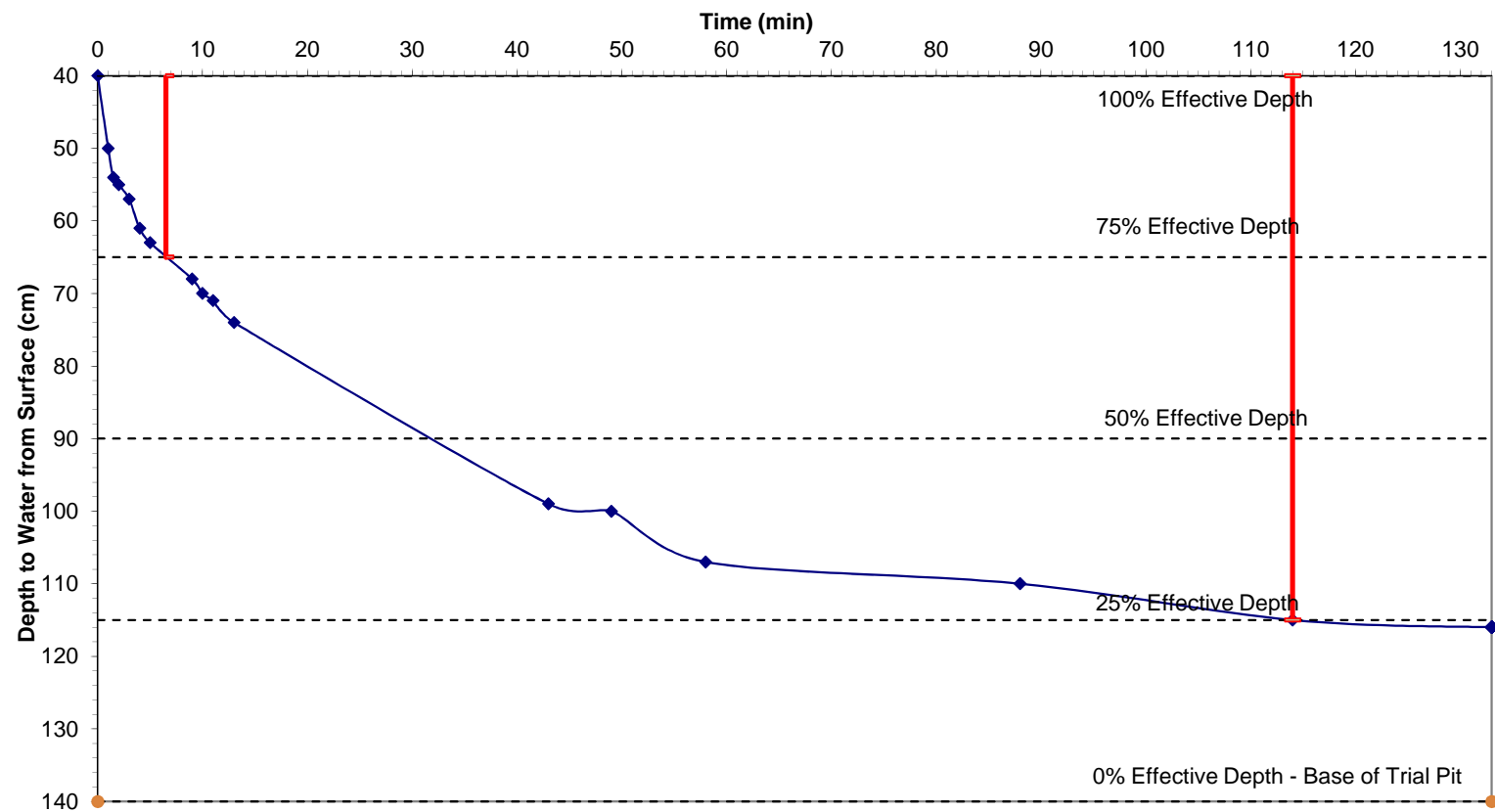
With Reference to: **Figure D-1**

Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT08 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT08 Test 2 of 3

Depth of Pit (cm):	130.00
Depth of Water at Start of Depth (cm):	30.00
Date of Test:	27 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT08 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	2.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.90
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.45
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.35
Time to reach 75% Effective Depth	$T_{p75\%}$		min	20.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	100.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	80
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	2.80E-05

\*To 50% Effective Depth (including base)

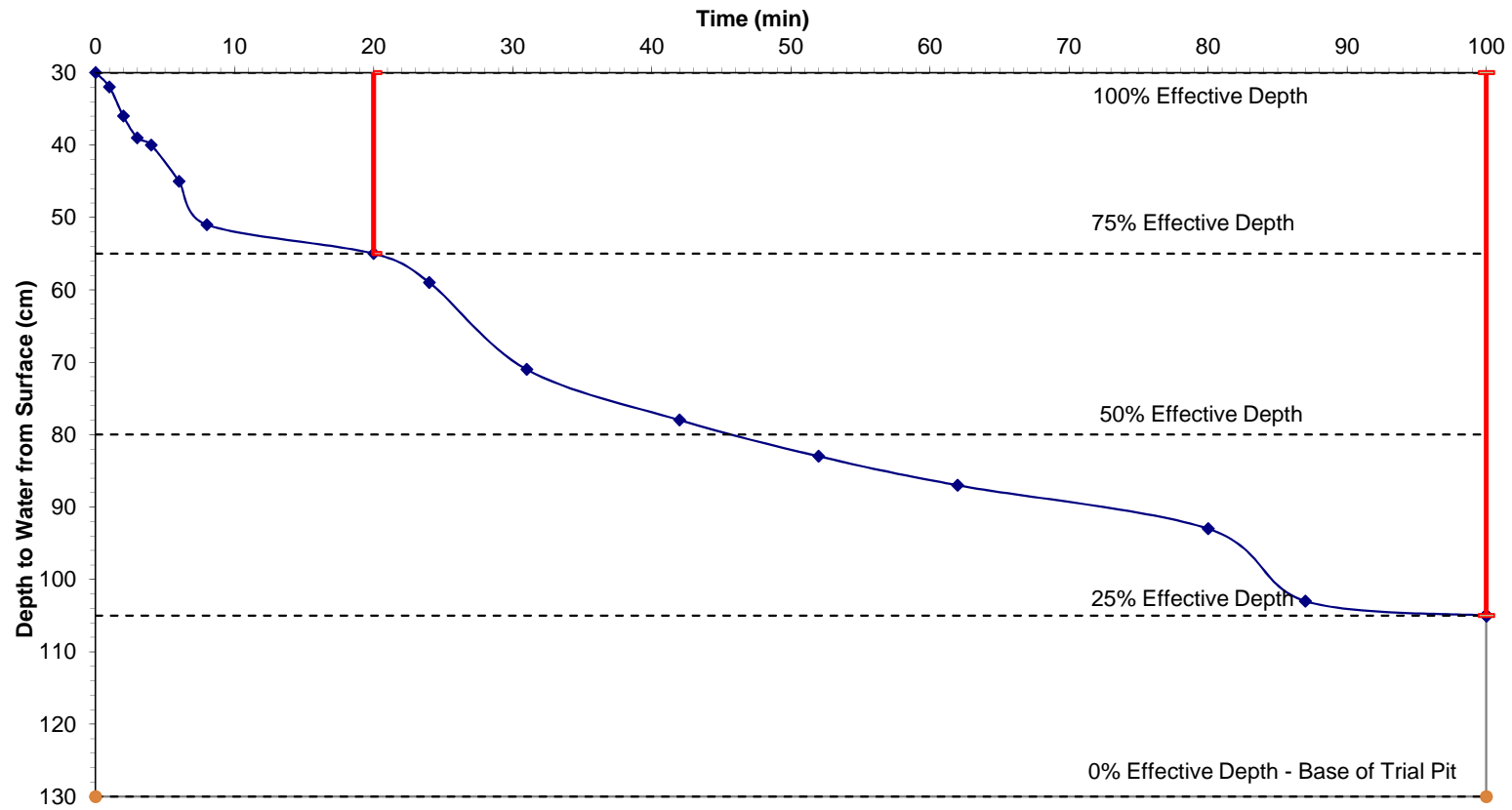
With Reference to: **Figure D-1**

Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT08 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT08 Test 3 of 3

Depth of Pit (cm):	130.00
Depth of Water at Start of Depth (cm):	30.00
Date of Test:	27 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT08 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	2.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.90
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.45
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.35
Time to reach 75% Effective Depth	$T_{p75\%}$		min	18.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	145.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	126.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>1.77E-05</b>

\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

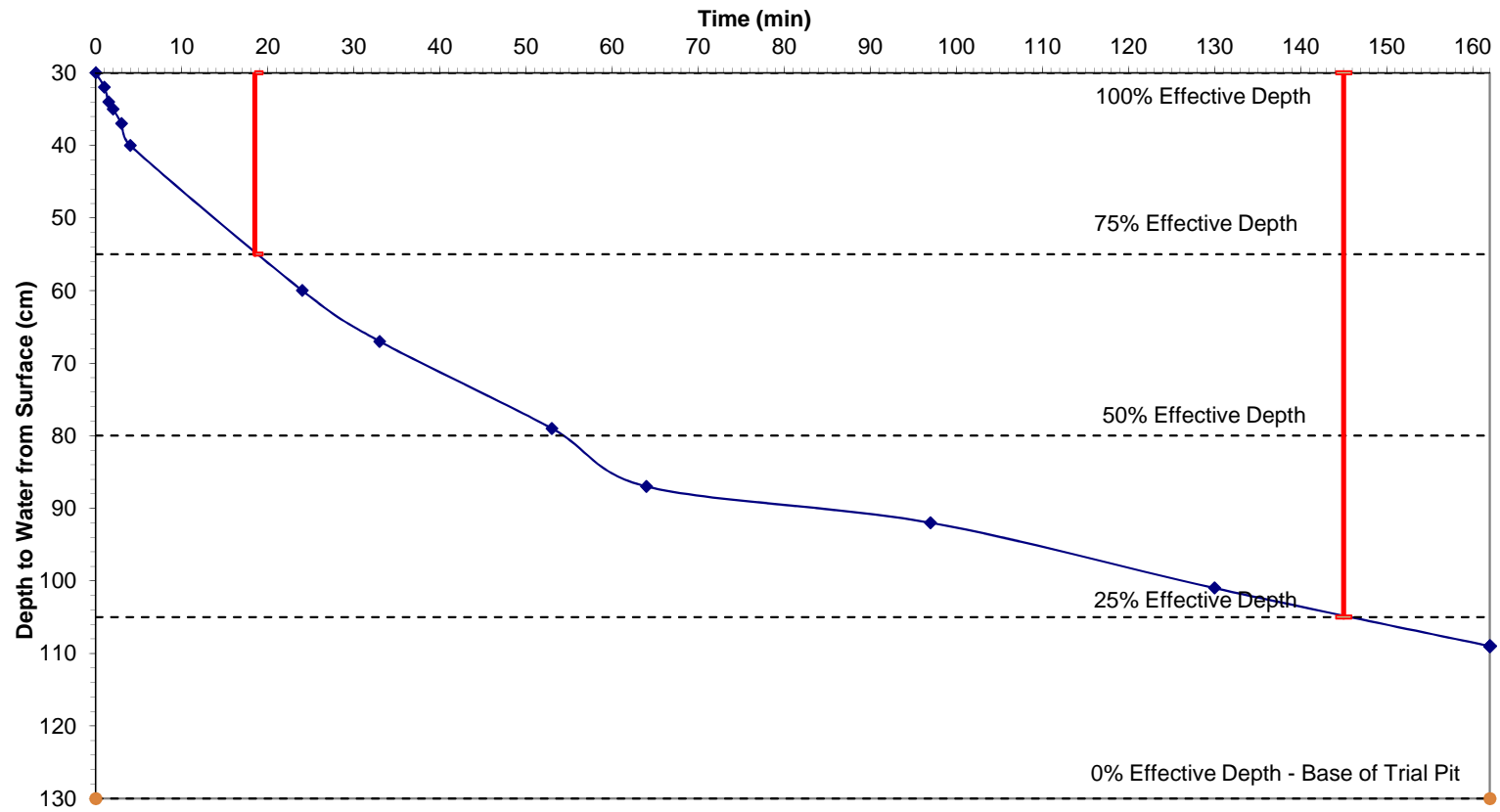


Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT08 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT09 Test 1 of 3

Depth of Pit (cm): 160  
Depth of Water at Start of Depth (cm): 60  
Date of Test: 28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT09 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.64
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.74
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.37
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.83
Time to reach 75% Effective Depth	$T_{p75\%}$		min	17.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	200.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	183
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>1.19E-05</b>

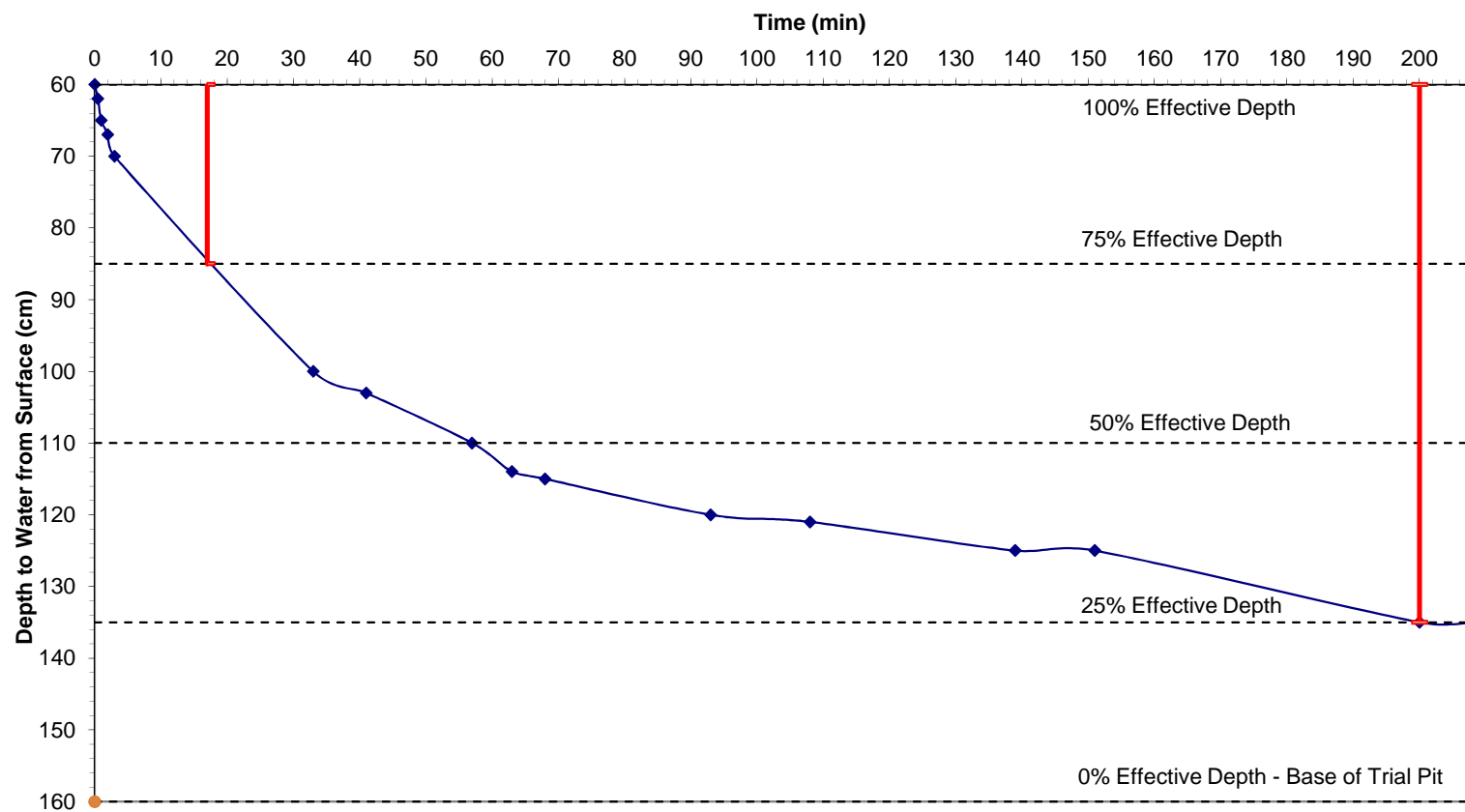
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT09 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT09 Test 2 of 3

Depth of Pit (cm): 150  
Depth of Water at Start of Depth (cm): 50  
Date of Test: 28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT09 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.64
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.74
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.37
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.83
Time to reach 75% Effective Depth	$T_{p75\%}$		min	23.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	166.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	142.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.53E-05

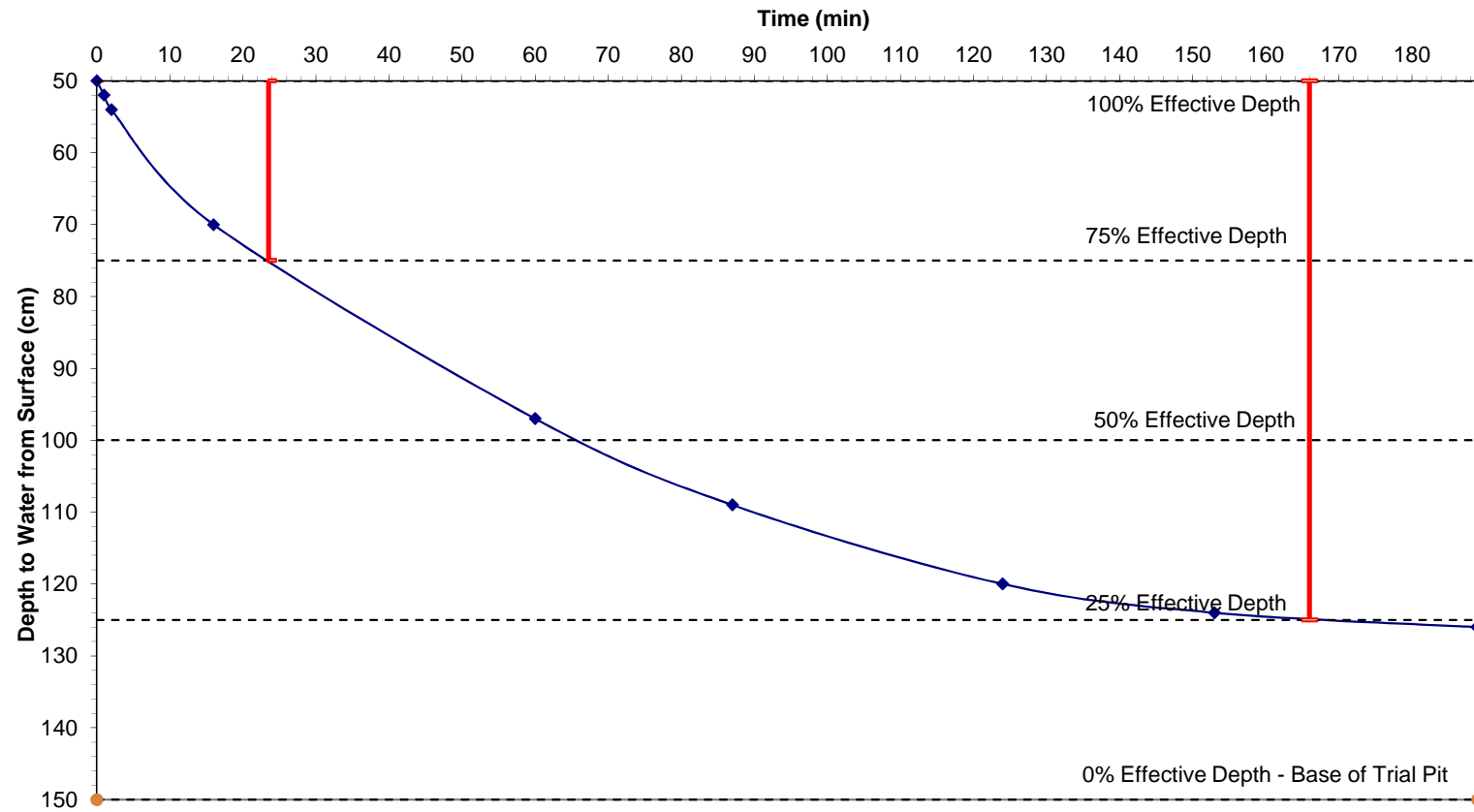
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, İç GEG-16-458

IT09 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** GEG-16-458  
**Project Ref.:** Adastral Park, Ipswich  
**Trial Pit:** IT09 Test 3 of 3

Depth of Pit (cm): 150  
Depth of Water at Start of Depth (cm): 50  
Date of Test: 29 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT09 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.64
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.74
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.37
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.83
Time to reach 75% Effective Depth	$T_{p75\%}$		min	66.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	138.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	71.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	3.04E-05

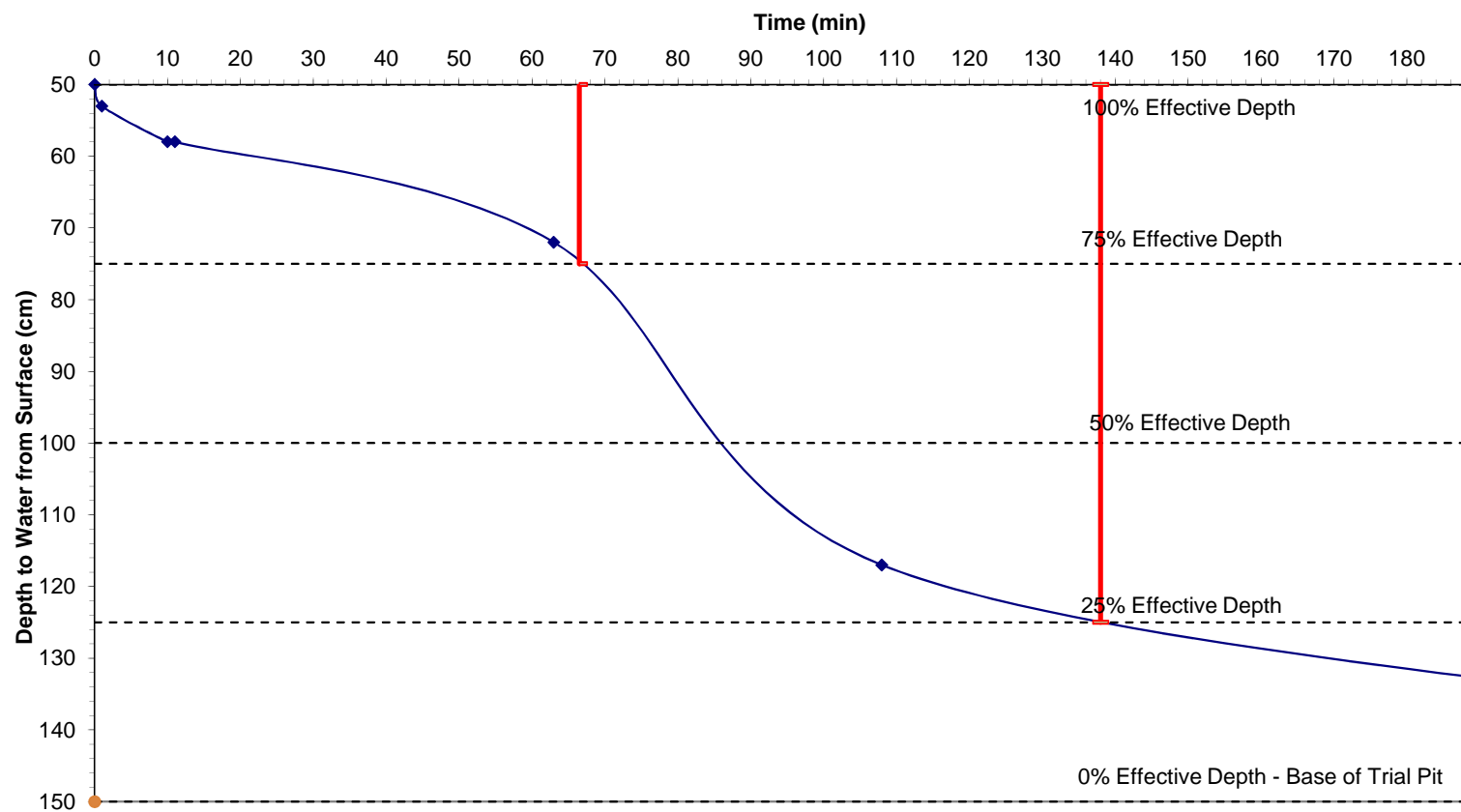
\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

Figure D-1

Adastral Park, Iç GEG-16-458

IT09 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT10 Test 1 of 2

Depth of Pit (cm):	180.00
Depth of Water at Start of Depth (cm):	80.00
Date of Test:	29 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT10 Test 1 of 2
Effective Depth of Trial Pit	$d_b$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	2.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.90
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.45
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.35
Time to reach 75% Effective Depth	$T_{p75\%}$		min	41.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	368.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	326.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	6.86E-06

\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

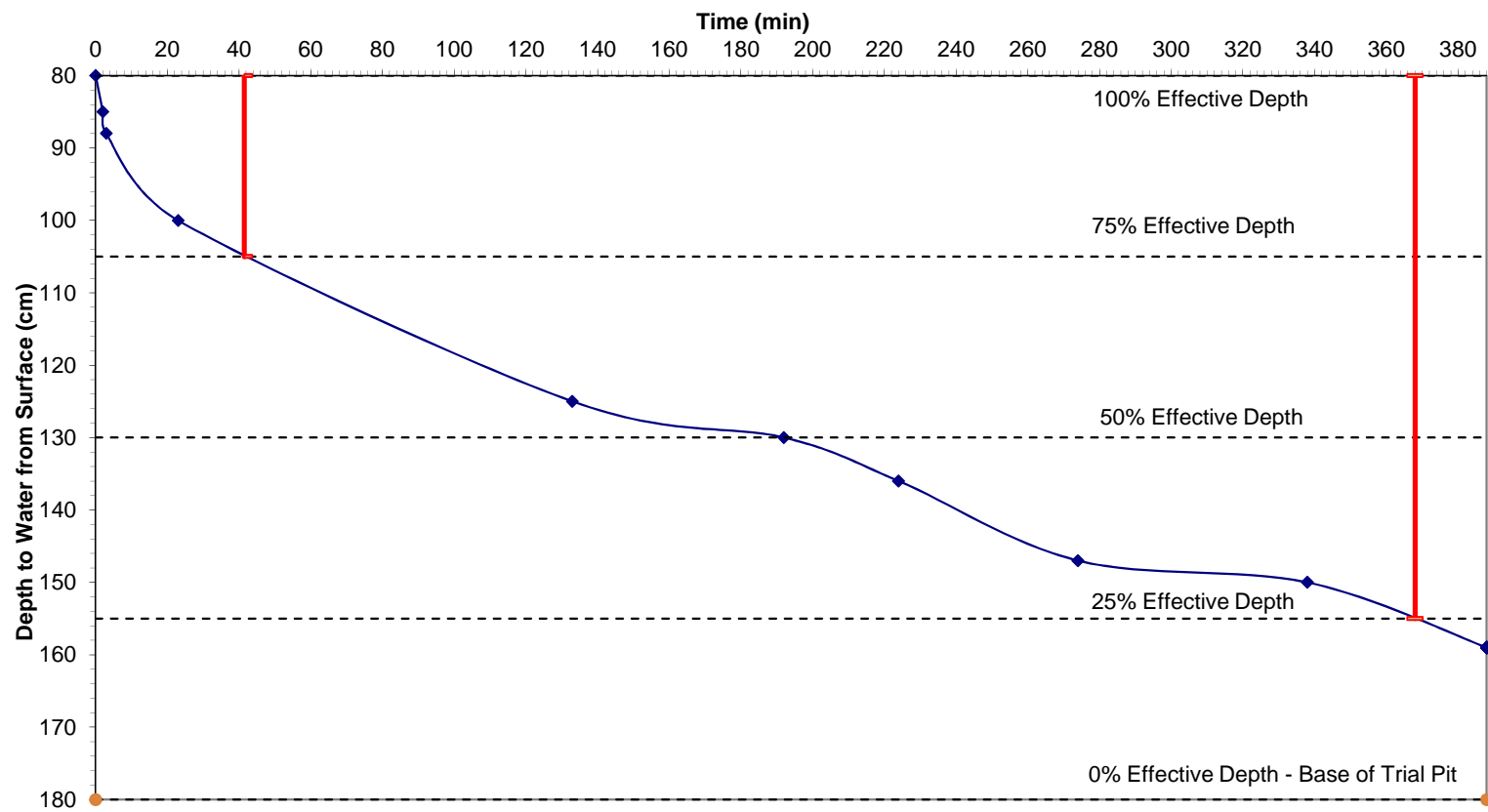


Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT10 Test 1 of 2



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT10 Test 2 of 2

Depth of Pit (cm):	180.00
Depth of Water at Start of Depth (cm):	80.00
Date of Test:	29 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT10 Test 2 of 2
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	2.00
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.90
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.45
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.35
Time to reach 75% Effective Depth	$T_{p75\%}$		min	160.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	N/A
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	N/A
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	N/A

\*To 50% Effective Depth (including base)

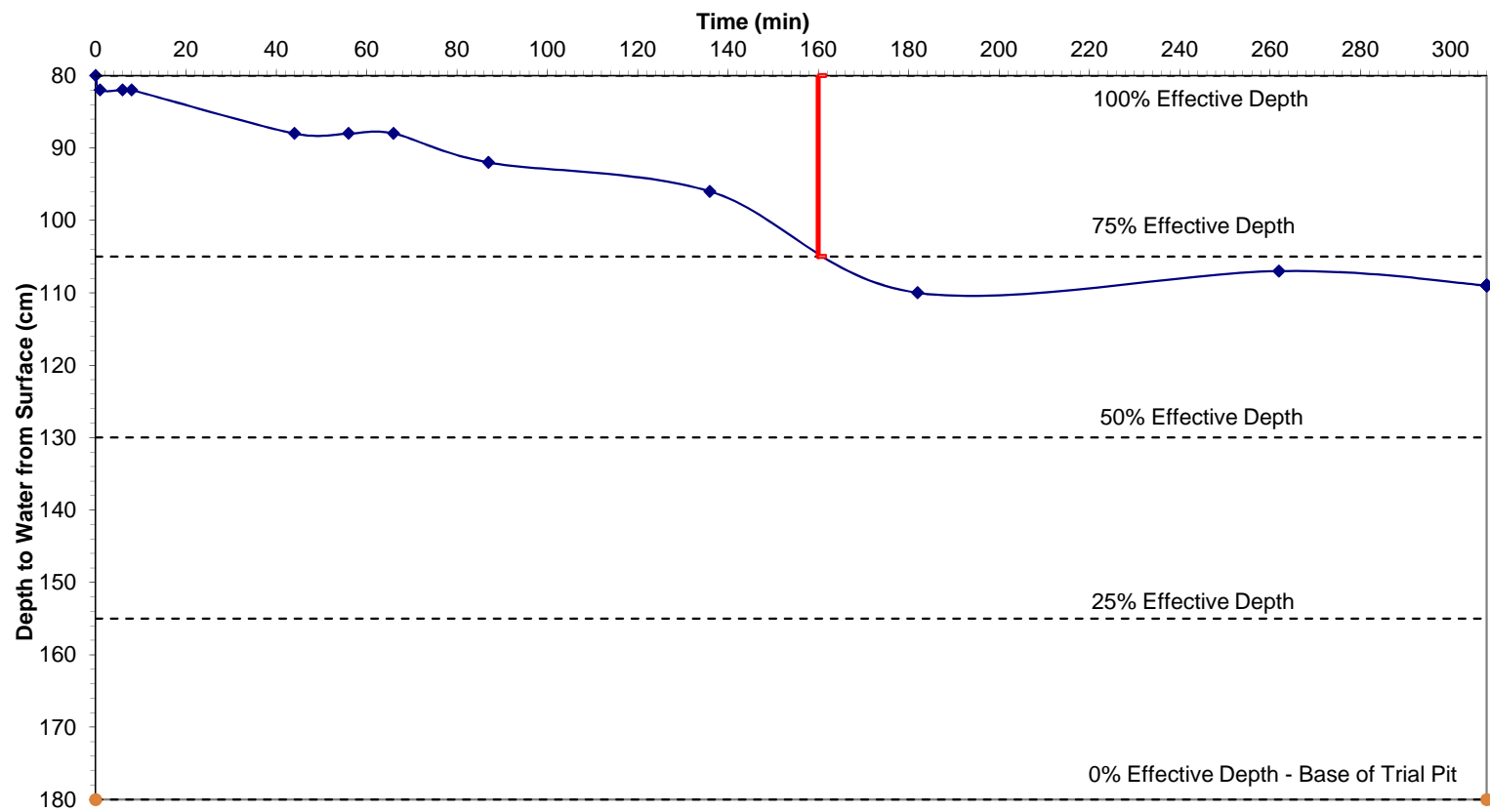
With Reference to: **Figure D-1**

Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT10 Test 2 of 2



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT11B Test 1 of 2

Depth of Pit (cm):	130.00
Depth of Water at Start of Depth (cm):	30.00
Date of Test:	29 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT11B Test 1 of 2
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.81
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.405
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.06
Time to reach 75% Effective Depth	$T_{p75\%}$		min	30.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	205.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	175
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.26E-05

\*To 50% Effective Depth (including base)

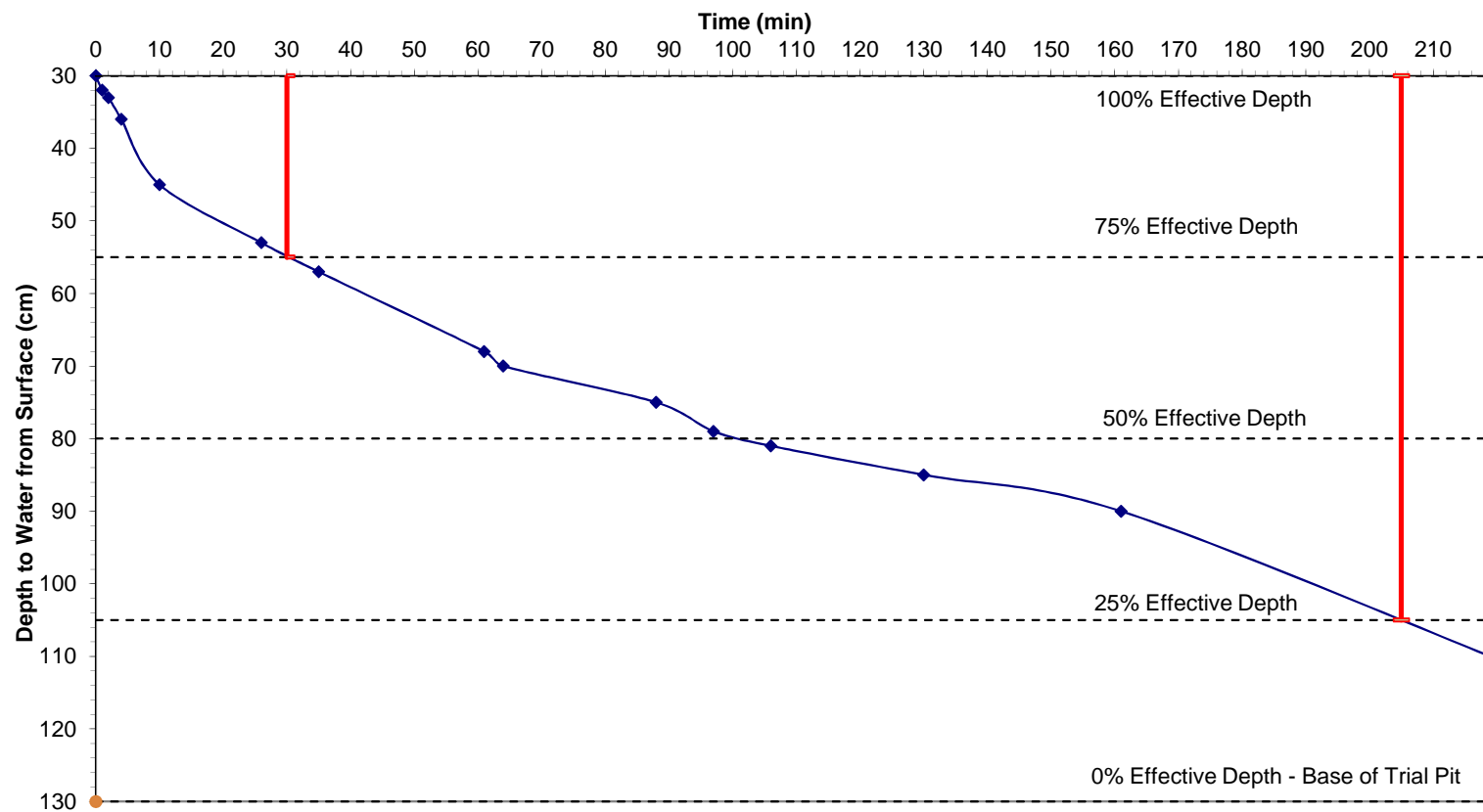
With Reference to: **Figure D-1**

Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT11B Test 1 of 2



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT11B Test 2 of 2

Depth of Pit (cm):	120.00
Depth of Water at Start of Depth (cm):	20.00
Date of Test:	30 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT11B Test 2 of 2
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.81
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.405
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.06
Time to reach 75% Effective Depth	$T_{p75\%}$		min	64.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	318.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	254
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	8.68E-06

\*To 50% Effective Depth (including base)

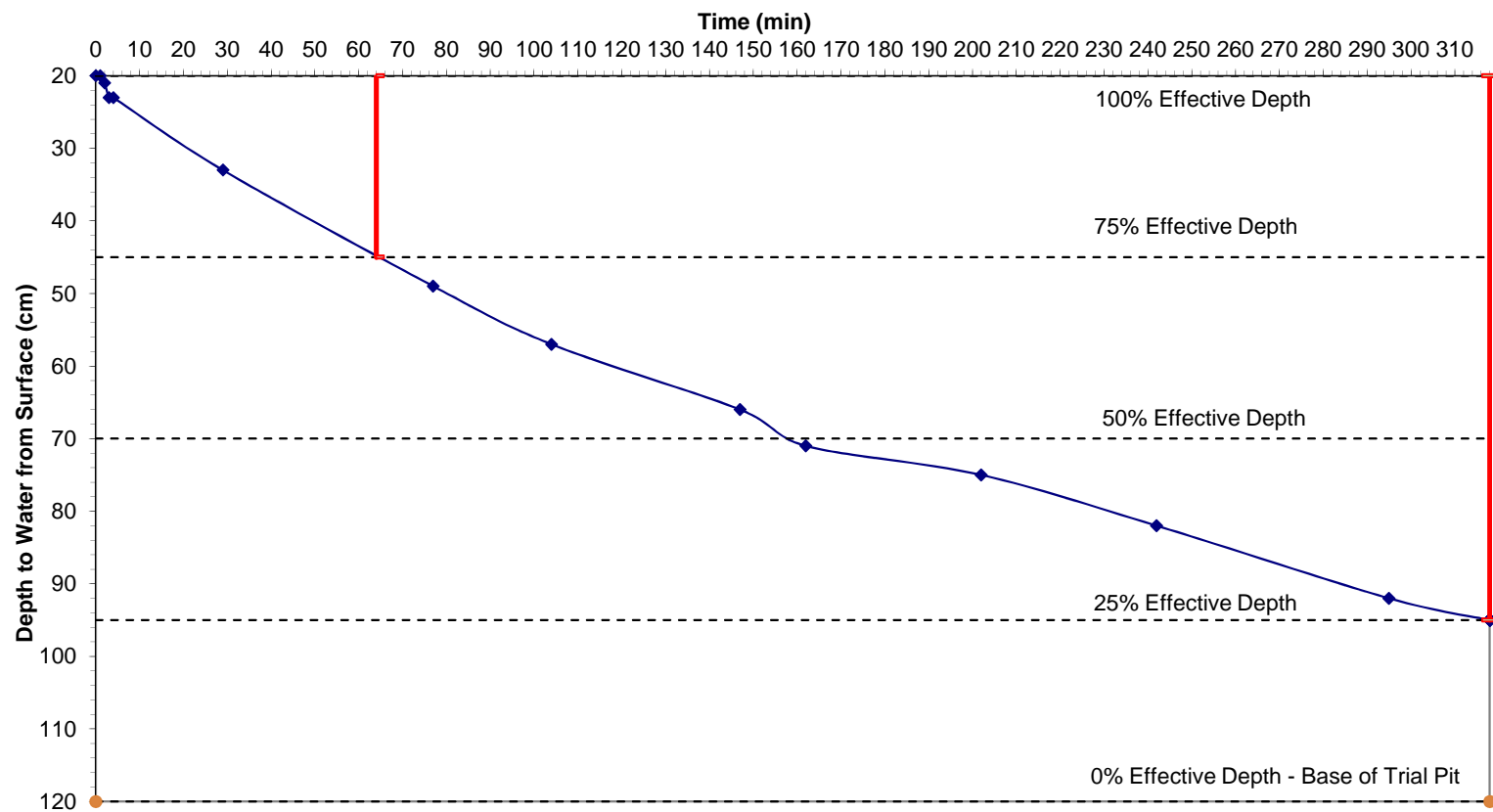
With Reference to: **Figure D-1**

Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT11B Test 2 of 2



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT12 Test 1 of 1

Depth of Pit (cm):	140.00
Depth of Water at Start of Depth (cm):	40.00
Date of Test:	29 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT12 Test 1 of 1
Effective Depth of Trial Pit	$d_b$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.50
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.68
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.3375
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.63
Time to reach 75% Effective Depth	$T_{p75\%}$		min	N/A
Time to reach 25% Effective Depth	$T_{p25\%}$		min	N/A
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	N/A
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	N/A

\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

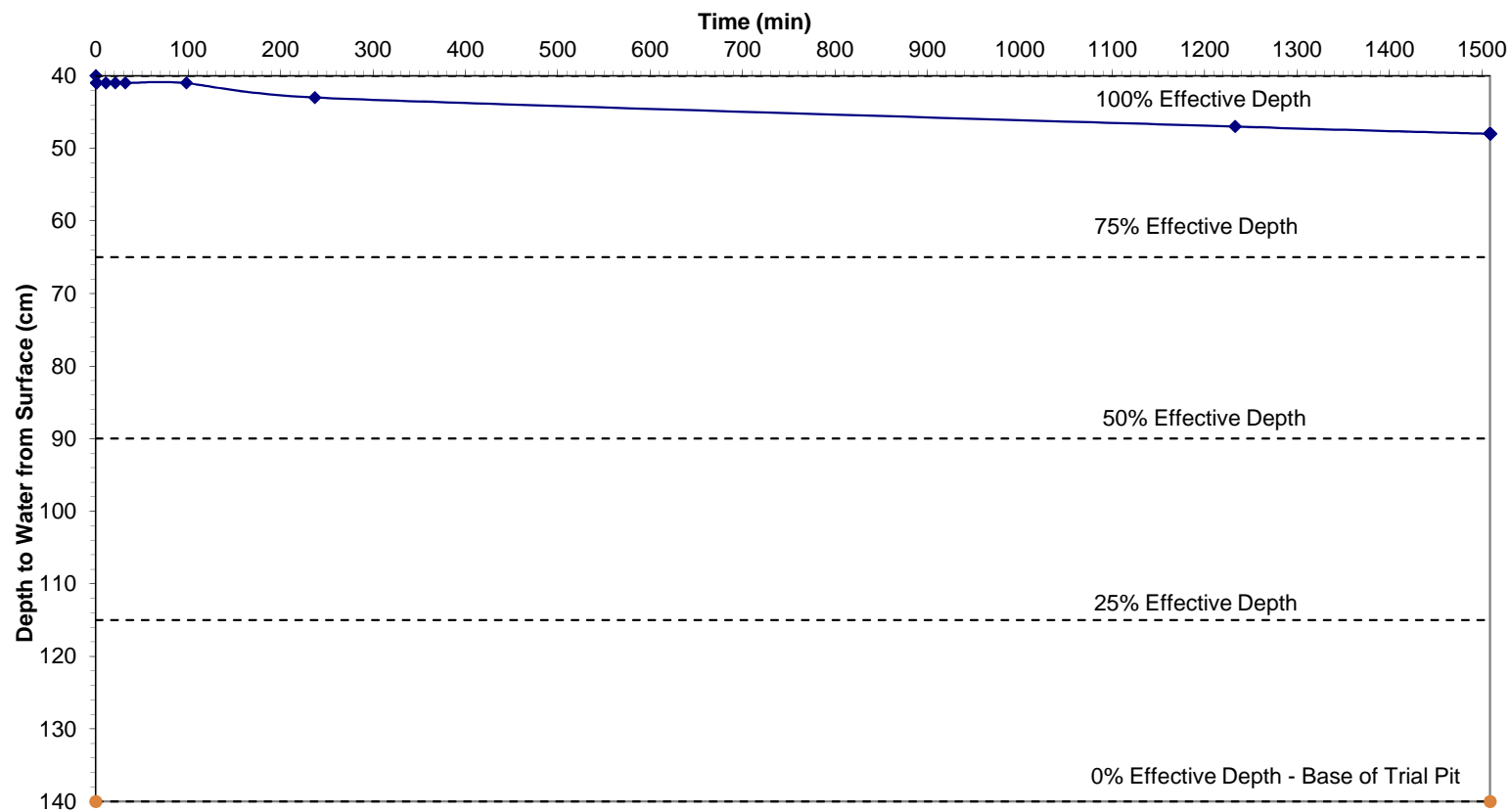


Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT12 Test 1 of 1



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT13B Test 1 of 3

Depth of Pit (cm):	190.00
Depth of Water at Start of Depth (cm):	90.00
Date of Test:	22 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT13B Test 1 of 3
Effective Depth of Trial Pit	$d_b$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.90
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.86
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.43
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.21
Time to reach 75% Effective Depth	$T_{p75\%}$		min	5.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	116.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	111
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	2.00E-05

\*To 50% Effective Depth (including base)

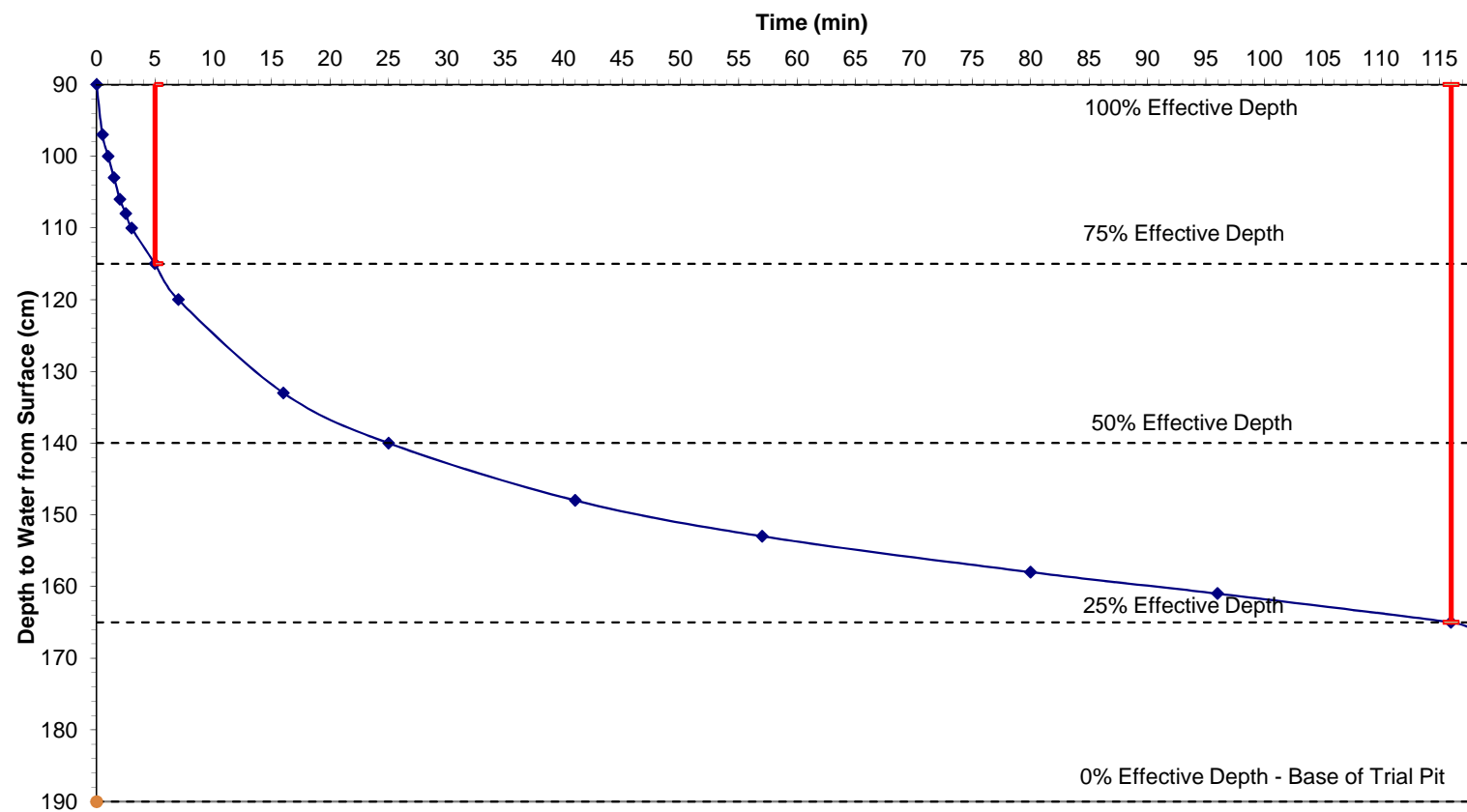
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT13B Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT13B Test 2 of 3

Depth of Pit (cm):	190.00
Depth of Water at Start of Depth (cm):	86.00
Date of Test:	22 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT13B Test 2 of 3
Effective Depth of Trial Pit	$d_b$		m	1.04
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.90
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.89
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.44
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.30
Time to reach 75% Effective Depth	$T_{p75\%}$		min	14.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	101.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	87
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>2.58E-05</b>

\*To 50% Effective Depth (including base)

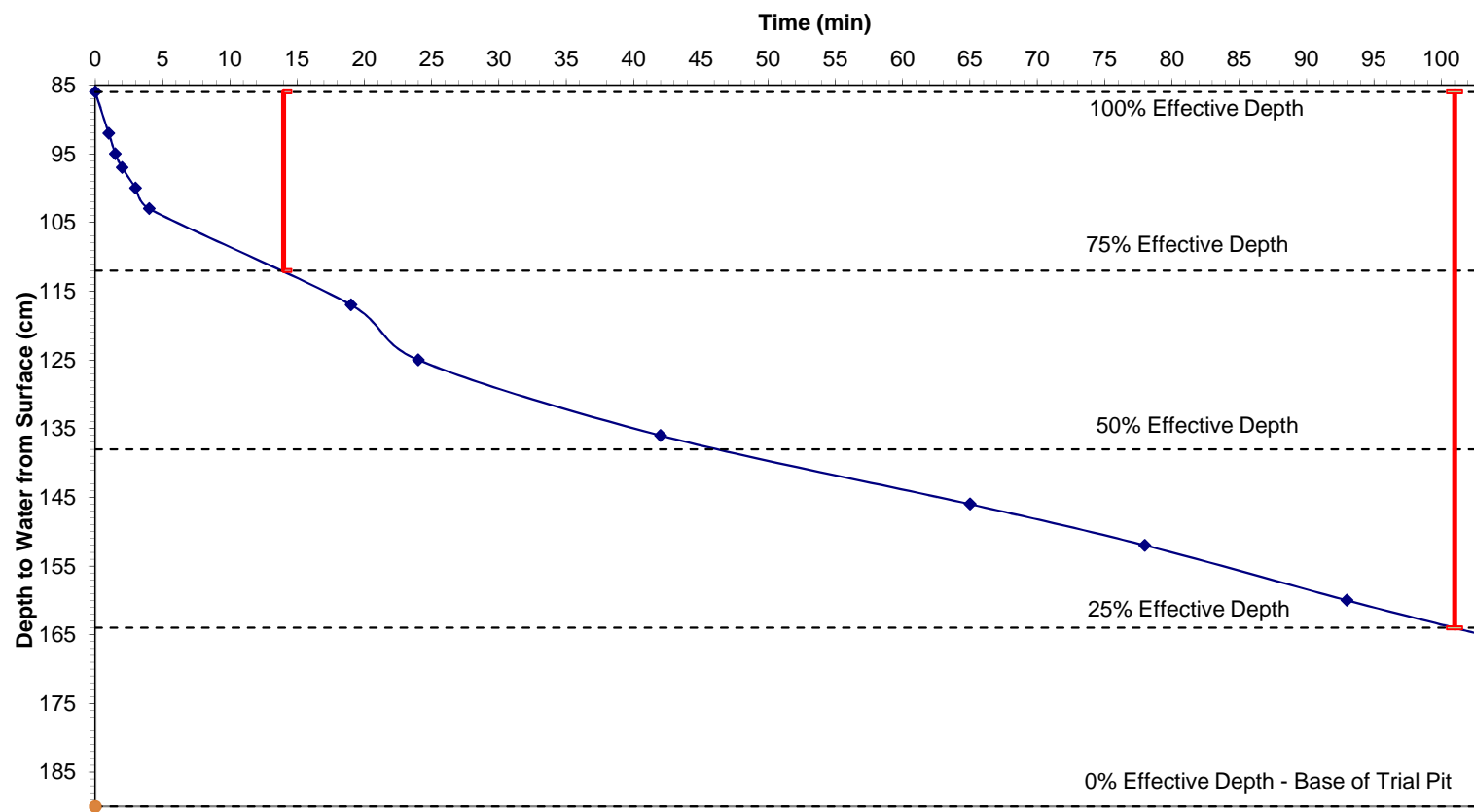
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT13B Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT13B Test 3 of 3

Depth of Pit (cm):	190.00
Depth of Water at Start of Depth (cm):	90.00
Date of Test:	23 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT13B Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.90
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.86
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.4275
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.21
Time to reach 75% Effective Depth	$T_{p75\%}$		min	10.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	110.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	100
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	2.22E-05

\*To 50% Effective Depth (including base)

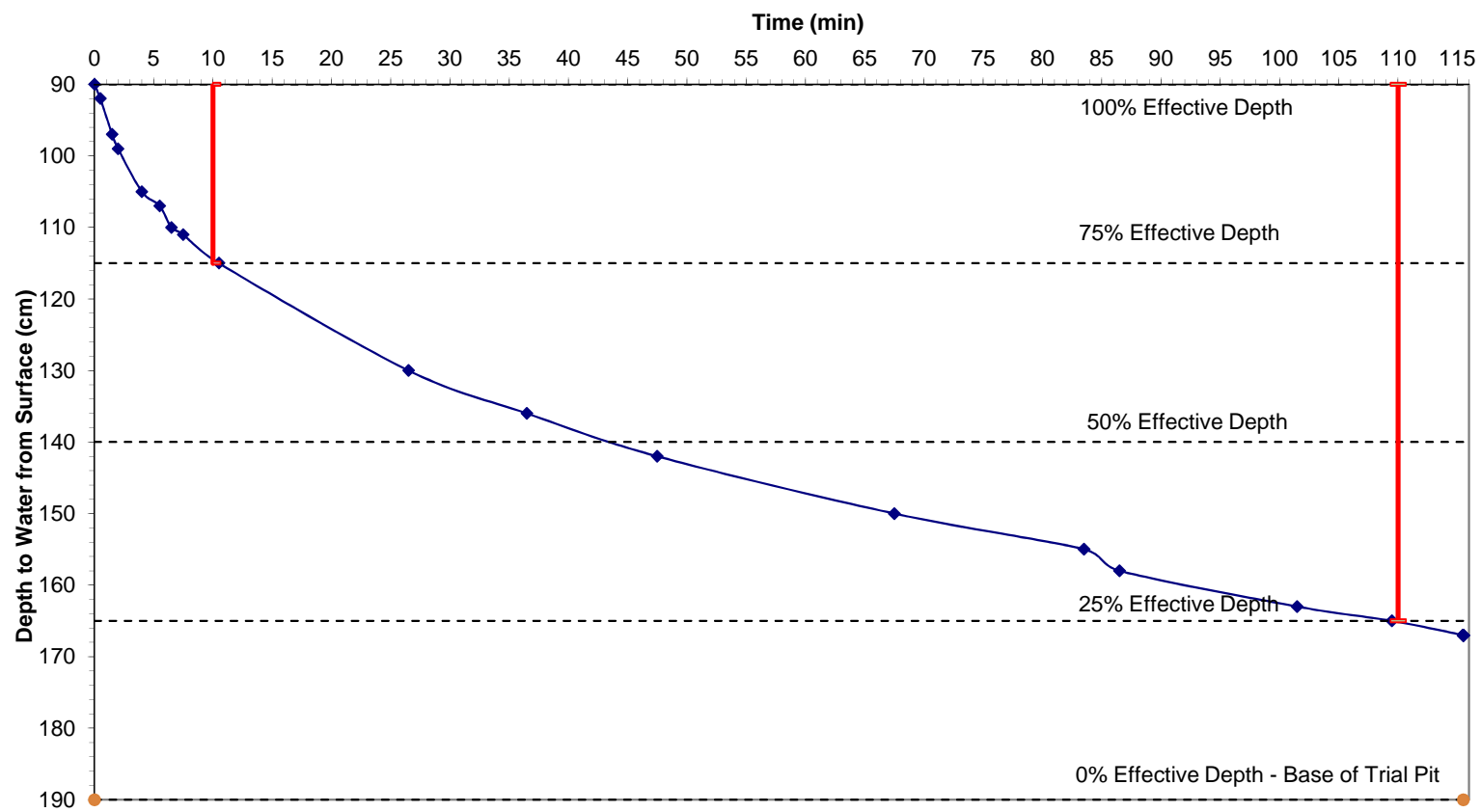
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT13B Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT14 Test 1 of 3

Depth of Pit (cm):	180.00
Depth of Water at Start of Depth (cm):	72.00
Date of Test:	22 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT14 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.08
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.70
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.83
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.4131
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.09
Time to reach 75% Effective Depth	$T_{p75\%}$		min	5.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	208.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	203
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>1.10E-05</b>

\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

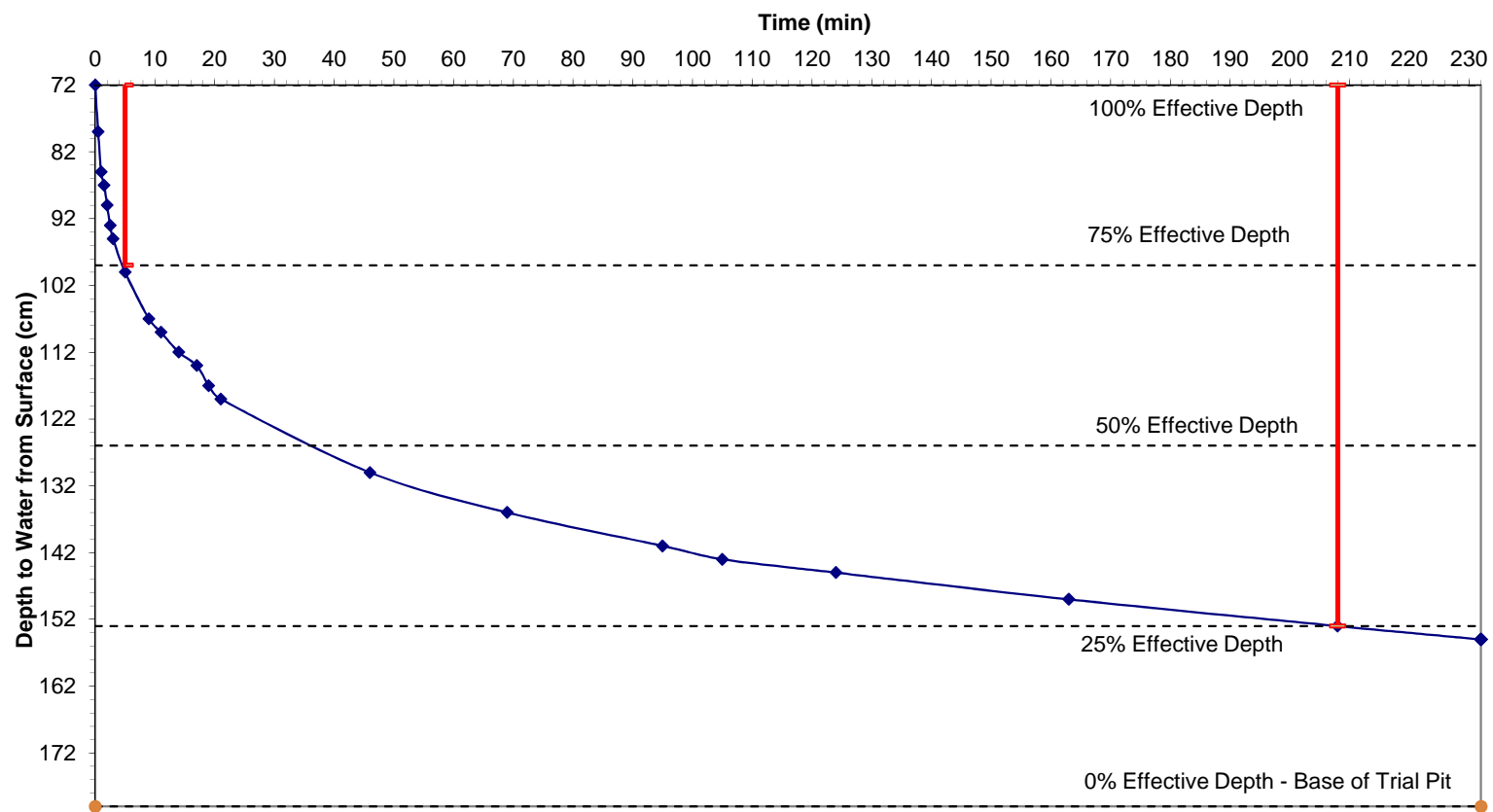


Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT14 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT14 Test 2 of 3

Depth of Pit (cm):	180.00
Depth of Water at Start of Depth (cm):	80.00
Date of Test:	22 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT14 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.70
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.77
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.3825
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.92
Time to reach 75% Effective Depth	$T_{p75\%}$		min	10.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	82.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	71.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	3.06E-05

\*To 50% Effective Depth (including base)

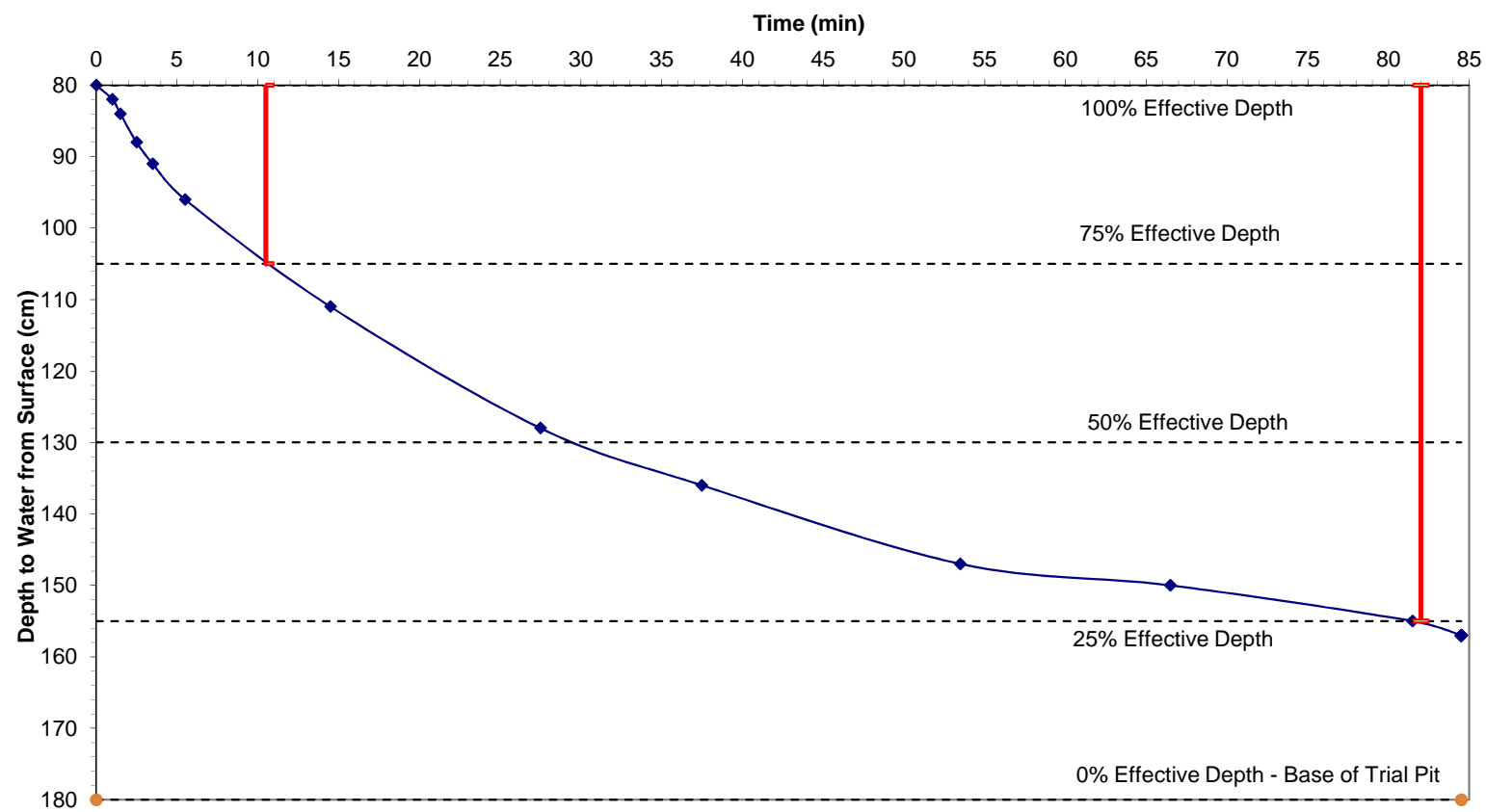
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT14 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT14 Test 3 of 3

Depth of Pit (cm):	180.00
Depth of Water at Start of Depth (cm):	75.00
Date of Test:	23 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT14 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.05
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.70
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.80
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.401625
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.02
Time to reach 75% Effective Depth	$T_{p75\%}$		min	4.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	61.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	56.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	3.92E-05

\*To 50% Effective Depth (including base)

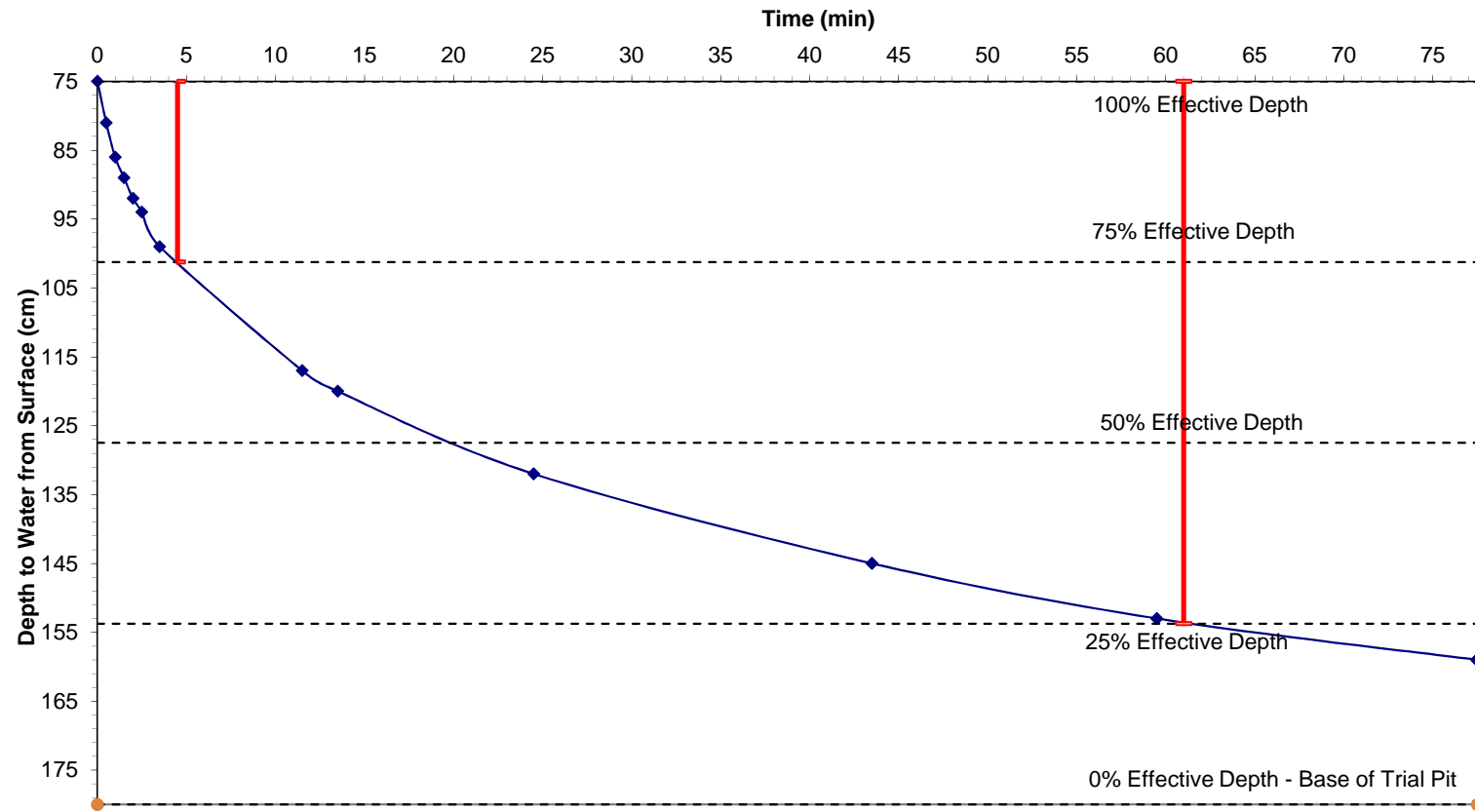
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT14 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT16 Test 1 of 3

Depth of Pit (cm):	170.00
Depth of Water at Start of Depth (cm):	70.00
Date of Test:	22 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT16 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.81
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.405
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.06
Time to reach 75% Effective Depth	$T_{p75\%}$		min	6.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	208.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	202
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.09E-05

\*To 50% Effective Depth (including base)

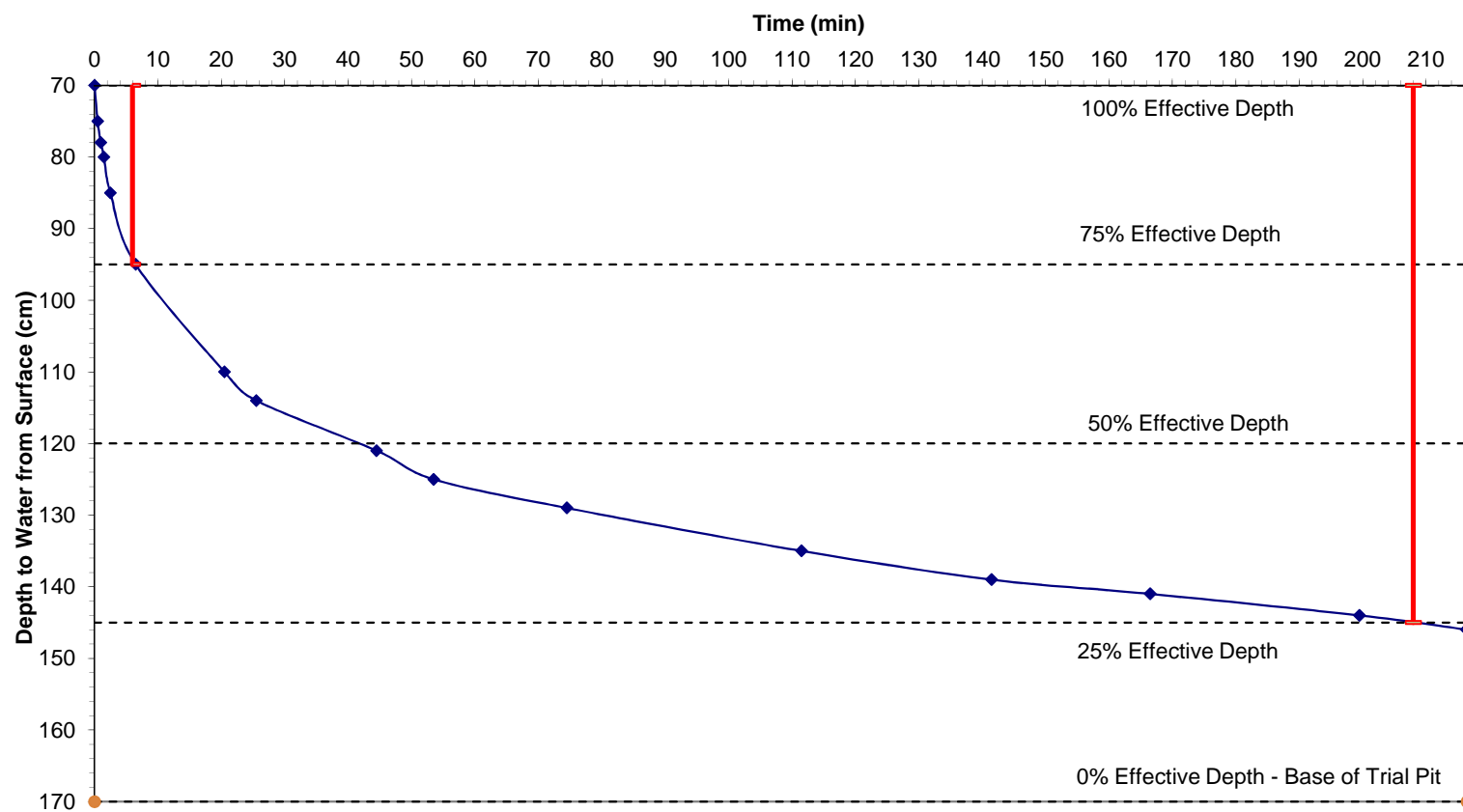
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT16 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT16 Test 2 of 3

Depth of Pit (cm):	170.00
Depth of Water at Start of Depth (cm):	70.00
Date of Test:	22 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT16 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.81
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.405
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.06
Time to reach 75% Effective Depth	$T_{p75\%}$		min	15.0
Time to reach 25% Effective Depth	$T_{p25\%}$		min	144.0
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	129
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.71E-05

\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

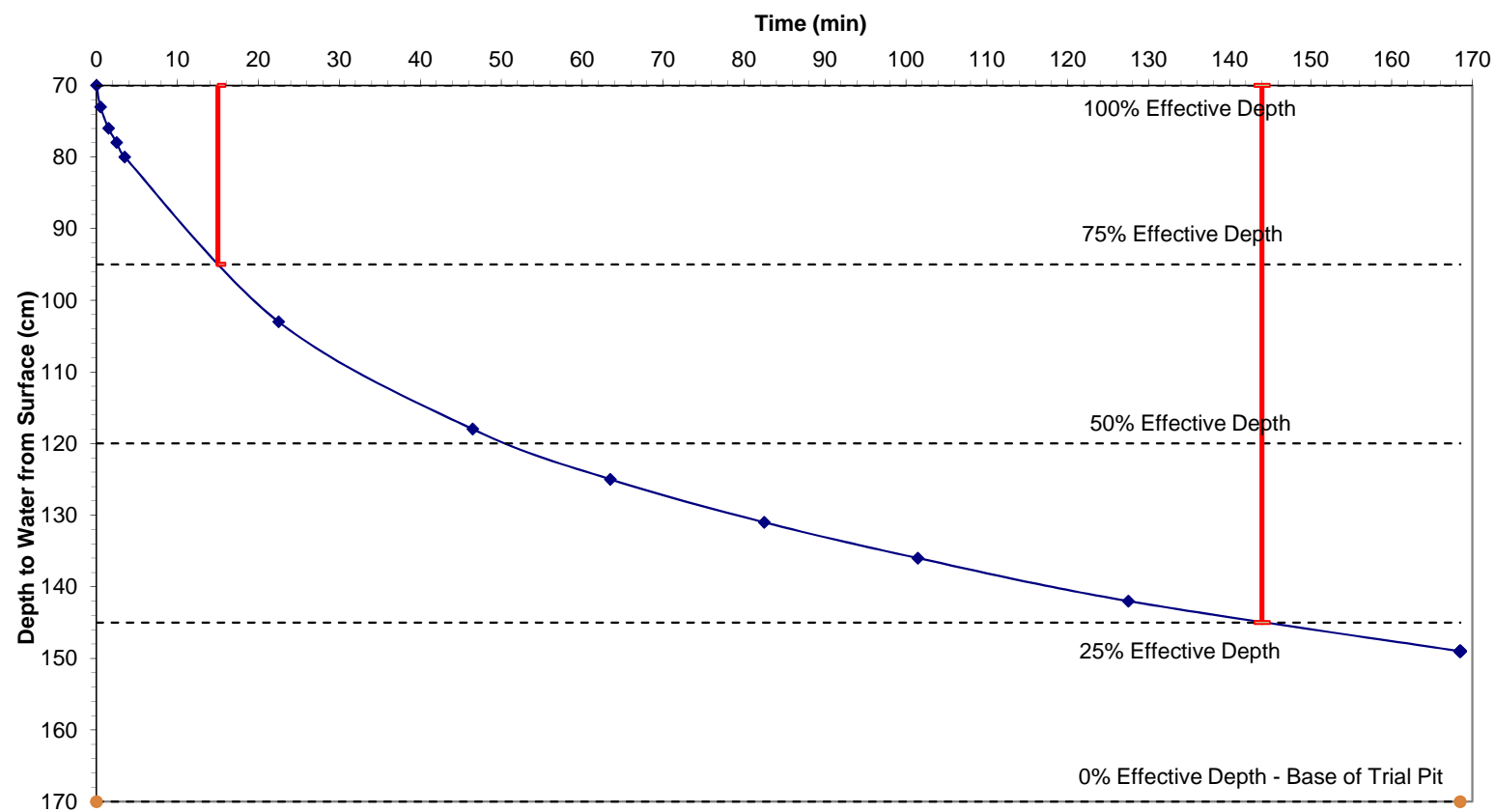


Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT16 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT16 Test 3 of 3

Depth of Pit (cm):	170.00
Depth of Water at Start of Depth (cm):	69.00
Date of Test:	23 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT16 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.01
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.82
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.40905
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.08
Time to reach 75% Effective Depth	$T_{p75\%}$		min	6.5
Time to reach 25% Effective Depth	$T_{p25\%}$		min	31.5
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	25
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>8.85E-05</b>

\*To 50% Effective Depth (including base)

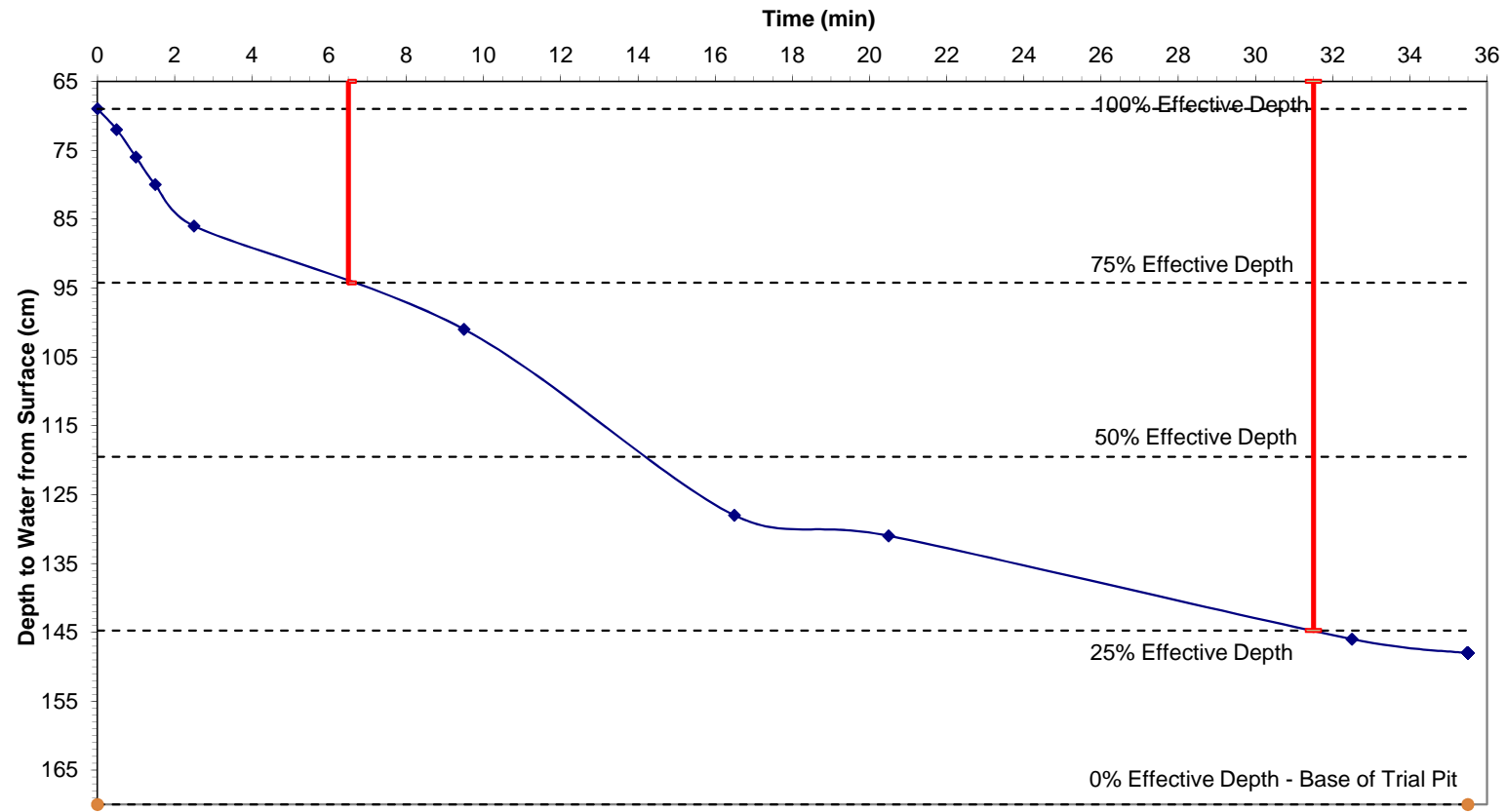
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT16 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT17 Test 1 of 2

Depth of Pit (cm):	180.00
Depth of Water at Start of Depth (cm):	77.00
Date of Test:	21 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT17 Test 1 of 2
Effective Depth of Trial Pit	$d_p$		m	1.03
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.70
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.79
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.393975
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.98
Time to reach 75% Effective Depth	$T_{p75\%}$		min	46.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	650.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	604
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	3.65E-06

\*To 50% Effective Depth (including base)

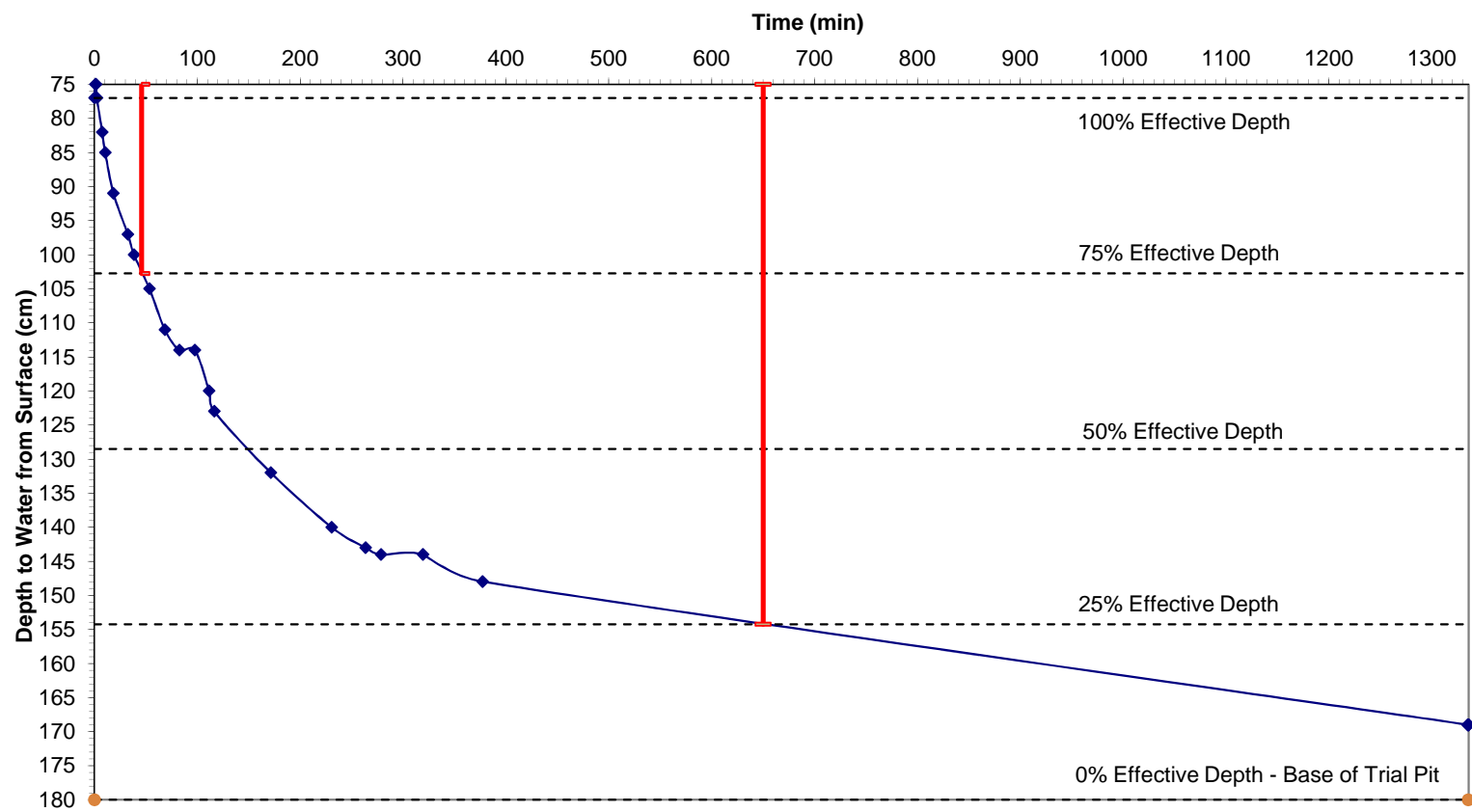
With Reference to: **Figure D-1**

Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT17 Test 1 of 2



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT17 Test 2 of 2

Depth of Pit (cm):	150.00
Depth of Water at Start of Depth (cm):	50.00
Date of Test:	26 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT17 Test 2 of 2
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.50
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.68
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.3375
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.63
Time to reach 75% Effective Depth	$T_{p75\%}$		min	15.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	176.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	161
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.33E-05

\*To 50% Effective Depth (including base)

With Reference to: **Figure D-1**

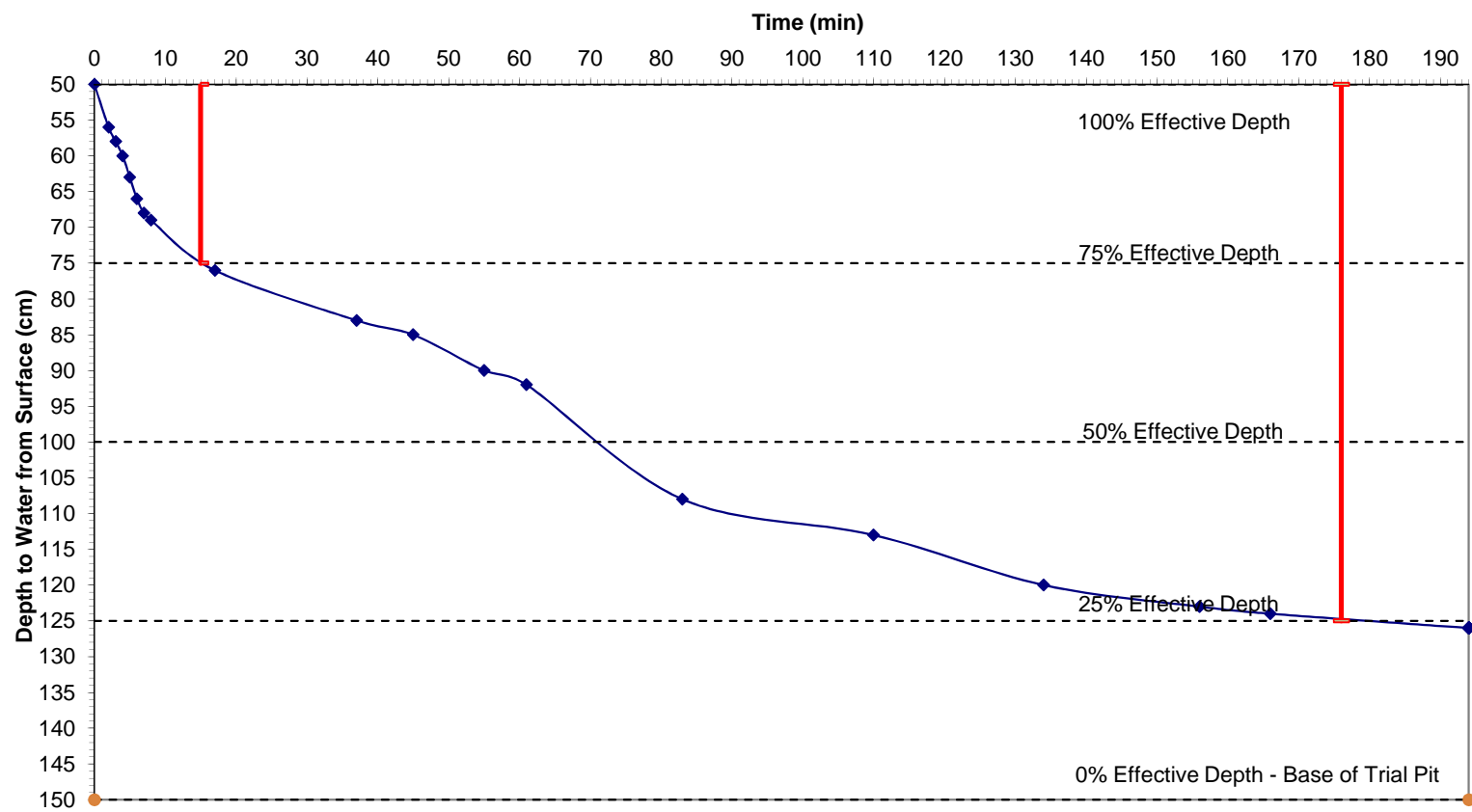


Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT17 Test 2 of 2





## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT18 Test 1 of 3

Depth of Pit (cm):	160.00
Depth of Water at Start of Depth (cm):	58.00
Date of Test:	23 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT18 Test 1 of 3
Effective Depth of Trial Pit	$d_p$		m	1.02
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.83
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.41
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.11
Time to reach 75% Effective Depth	$T_{p75\%}$		min	1.70
Time to reach 25% Effective Depth	$T_{p25\%}$		min	12.10
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	10.4
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	2.13E-04

\*To 50% Effective Depth (including base)

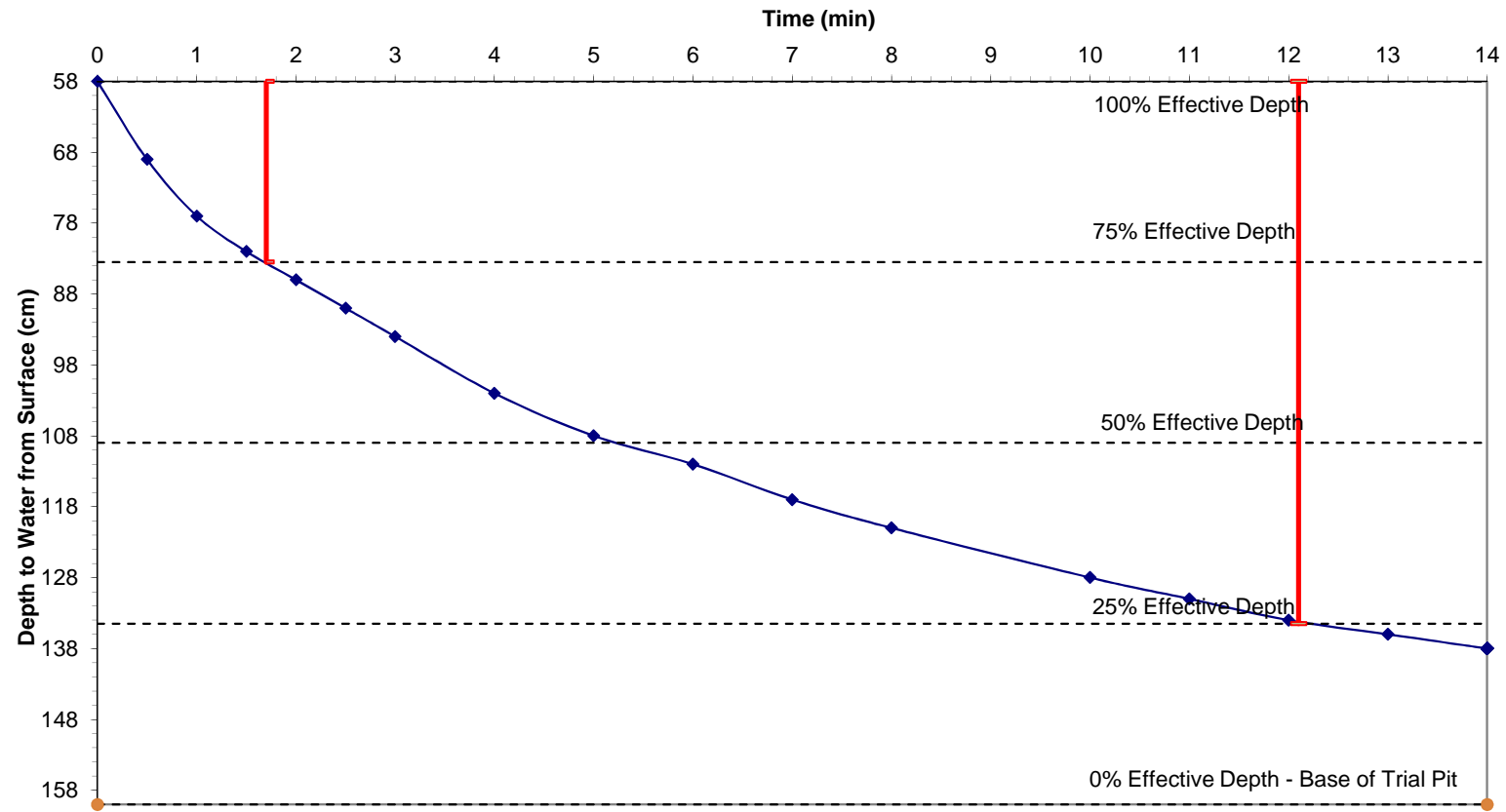
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT18 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT18 Test 2 of 3

Depth of Pit (cm):	160.00
Depth of Water at Start of Depth (cm):	58.00
Date of Test:	23 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT18 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.02
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.83
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.41
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.11
Time to reach 75% Effective Depth	$T_{p75\%}$		min	3.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	18.50
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	15
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>1.48E-04</b>

\*To 50% Effective Depth (including base)

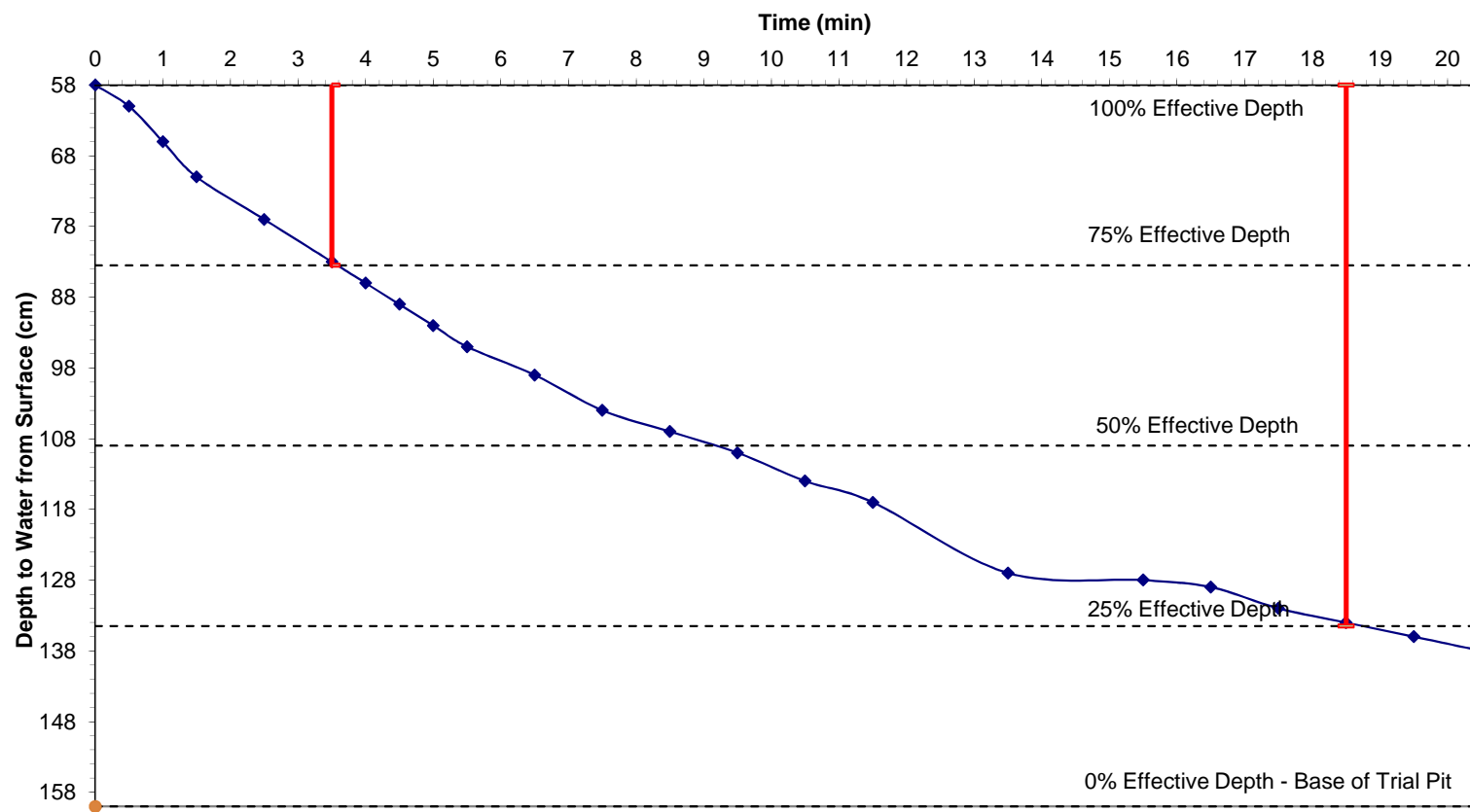
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT18 Test 2 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT18 Test 3 of 3

Depth of Pit (cm):	160.00
Depth of Water at Start of Depth (cm):	57.00
Date of Test:	23 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT18 Test 3 of 3
Effective Depth of Trial Pit	$d_b$		m	1.03
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.80
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.83
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.13
Time to reach 75% Effective Depth	$T_{p75\%}$		min	4.30
Time to reach 25% Effective Depth	$T_{p25\%}$		min	22.60
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	18.3
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	#VALUE!

\*To 50% Effective Depth (including base)

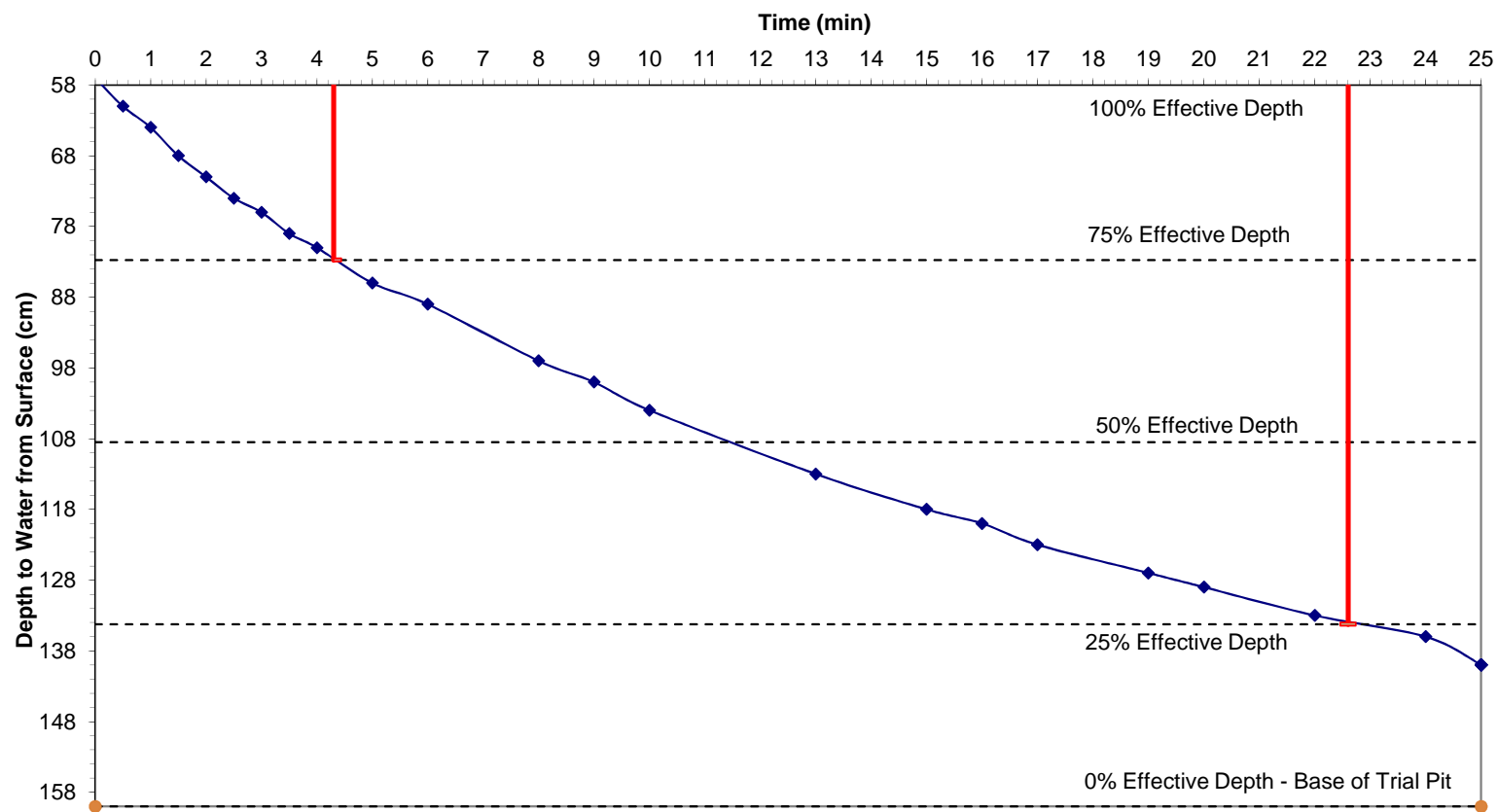
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT18 Test 3 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT19 Test 1 of 2

Depth of Pit (cm):	160.00
Depth of Water at Start of Depth (cm):	60.00
Date of Test:	26 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT19 Test 1 of 2
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.85
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.83
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.41625
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	3.13
Time to reach 75% Effective Depth	$T_{p75\%}$		min	125.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	2065.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	1940
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.14E-06

\*To 50% Effective Depth (including base)

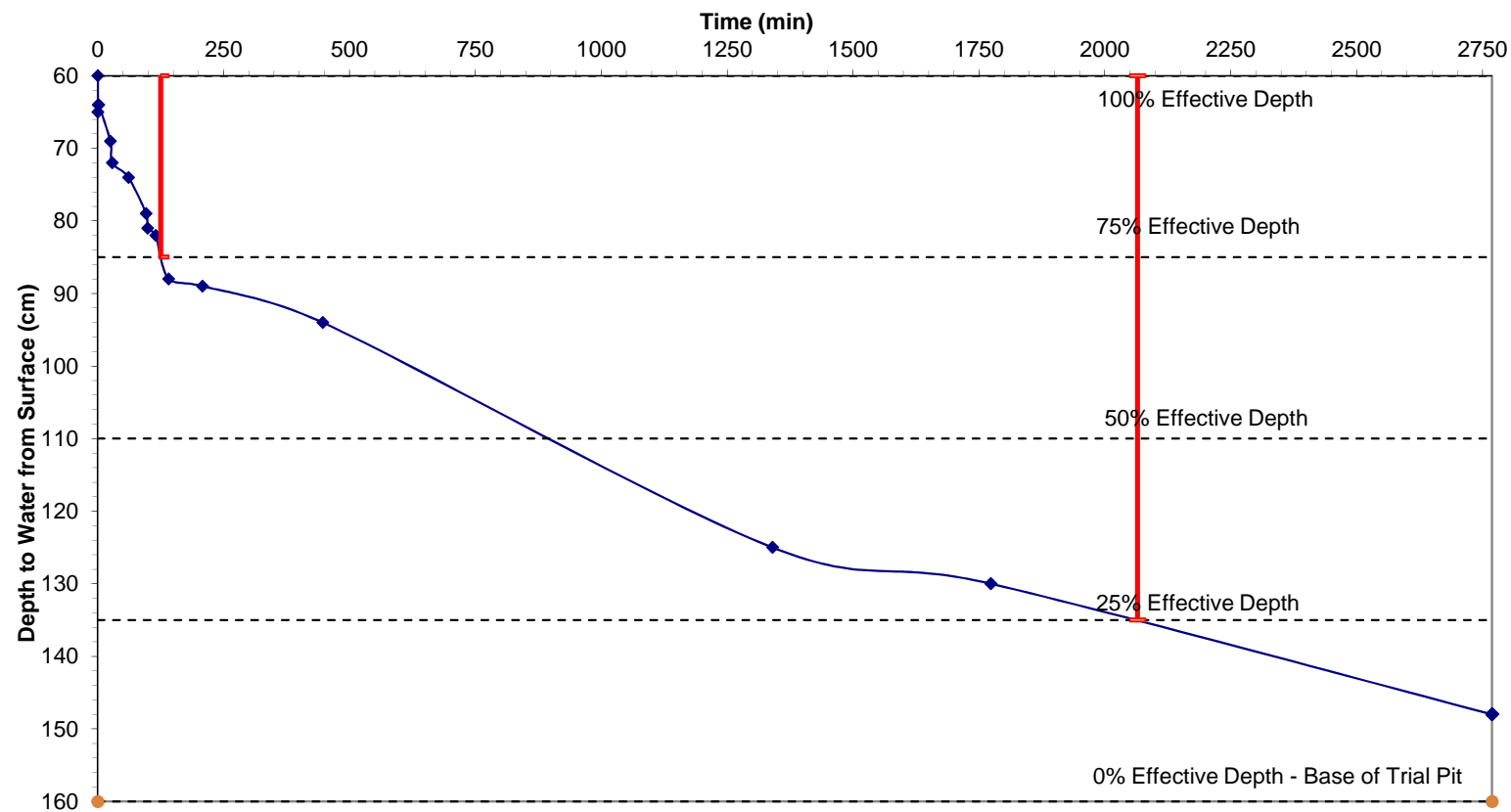
With Reference to: **Figure D-1**

Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT19 Test 1 of 2





## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-15-458  
**Trial Pit:** IT19 Test 2 of 2

Depth of Pit (cm):	155.00
Depth of Water at Start of Depth (cm):	55.00
Date of Test:	28 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT19 Test 2 of 2
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.60
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.72
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.36
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.77
Time to reach 75% Effective Depth	$T_{p75\%}$		min	100.00
Time to reach 25% Effective Depth	$T_{p25\%}$		min	N/A
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	N/A
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	N/A

\*To 50% Effective Depth (including base)

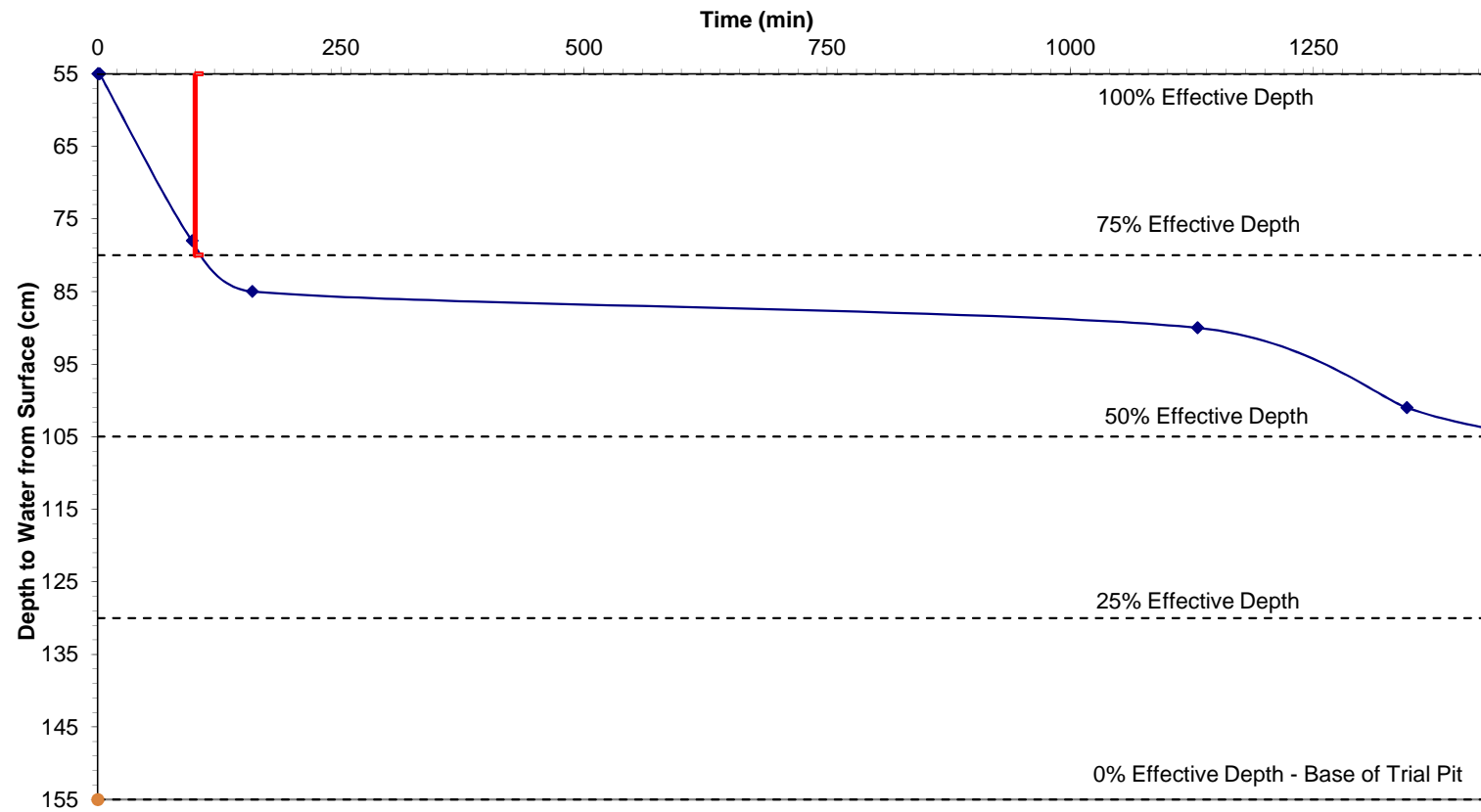
With Reference to: **Figure D-1**

Figure D-1

GEG-15-458

Adastral Park, Ipswich

IT19 Test 2 of 2



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT20 Test 1 of 3

Depth of Pit (cm):	170.00
Depth of Water at Start of Depth (cm):	67.00
Date of Test:	21 June 2017



Time (min)	Depth from Surface (cm)	% Effective Depth
0	67	100%
1	71	96%
1	76	91%
2	79	88%
2	84	83%
3	89	79%
4	92	76%
5	98	70%
6	105	63%
8	109	59%
9	114	54%
11	118	50%
13	123	46%
15	130	39%
17	132	37%
19	133	36%
21	134	35%
23	136	33%
25	137	32%
27	139	30%
29	143	26%
35	144	25%
40	147	22%
43	148	21%
<i>End of Test</i>		

Parameter	Symbol	Calculation	Units	IT20 Test 1 of 3
Effective Depth of Trial Pit	$d_b$		m	1.03
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.70
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.79
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.39
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.98
Time to reach 75% Effective Depth	$T_{p75\%}$		min	4.10
Time to reach 25% Effective Depth	$T_{p25\%}$		min	35.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	30.9
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	7.13E-05

\*To 50% Effective Depth (including base)

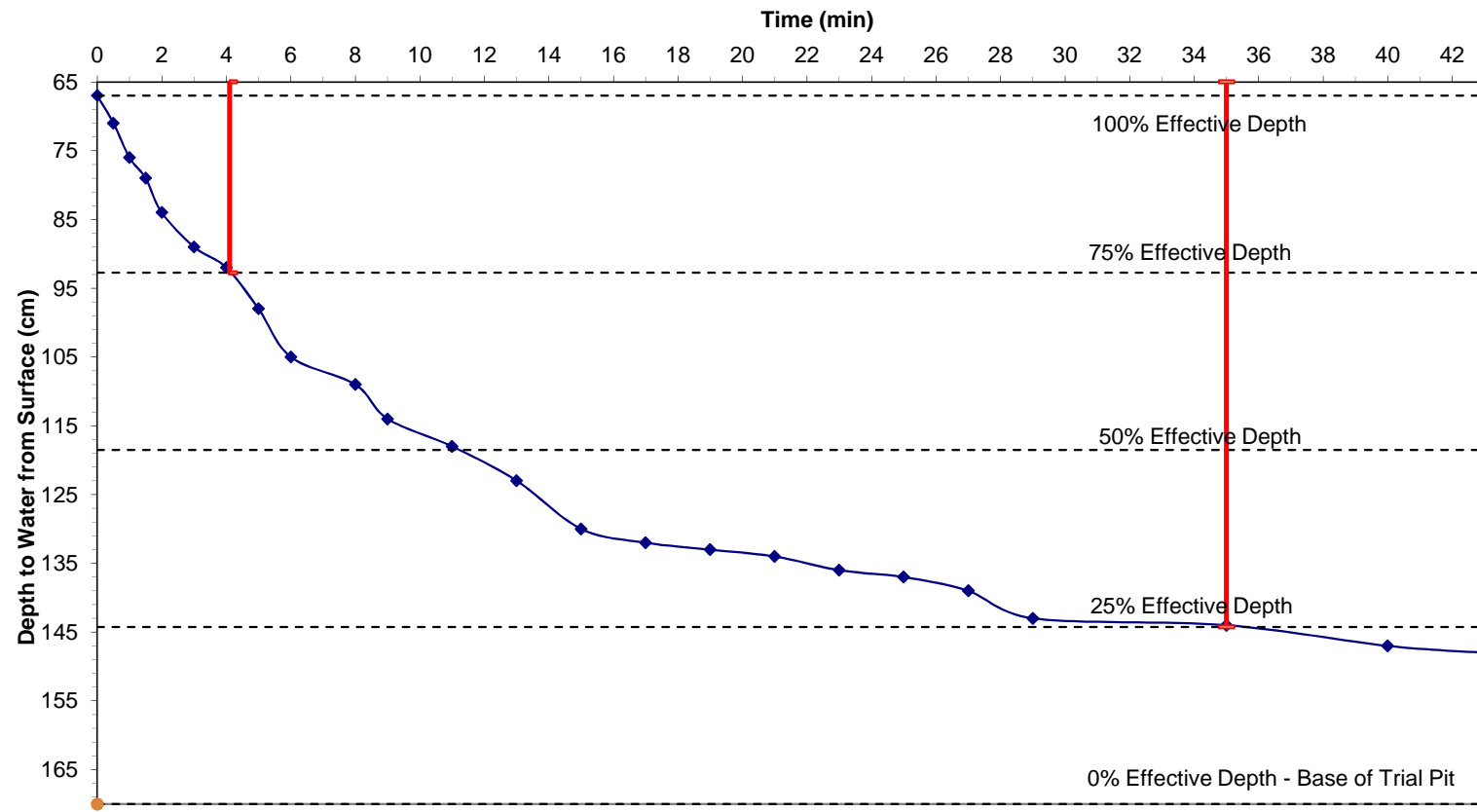
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT20 Test 1 of 3



## Appendix D

### Infiltration Tests

**Project Name:** Adastral Park, Ipswich  
**Project Ref.:** GEG-16-458  
**Trial Pit:** IT20 Test 2 of 3

Depth of Pit (cm):	170.00
Depth of Water at Start of Depth (cm):	70.00
Date of Test:	21 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT20 Test 2 of 3
Effective Depth of Trial Pit	$d_p$		m	1.00
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.70
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.77
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.38
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.92
Time to reach 75% Effective Depth	$T_{p75\%}$		min	2.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	17.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	14.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	1.51E-04

\*To 50% Effective Depth (including base)

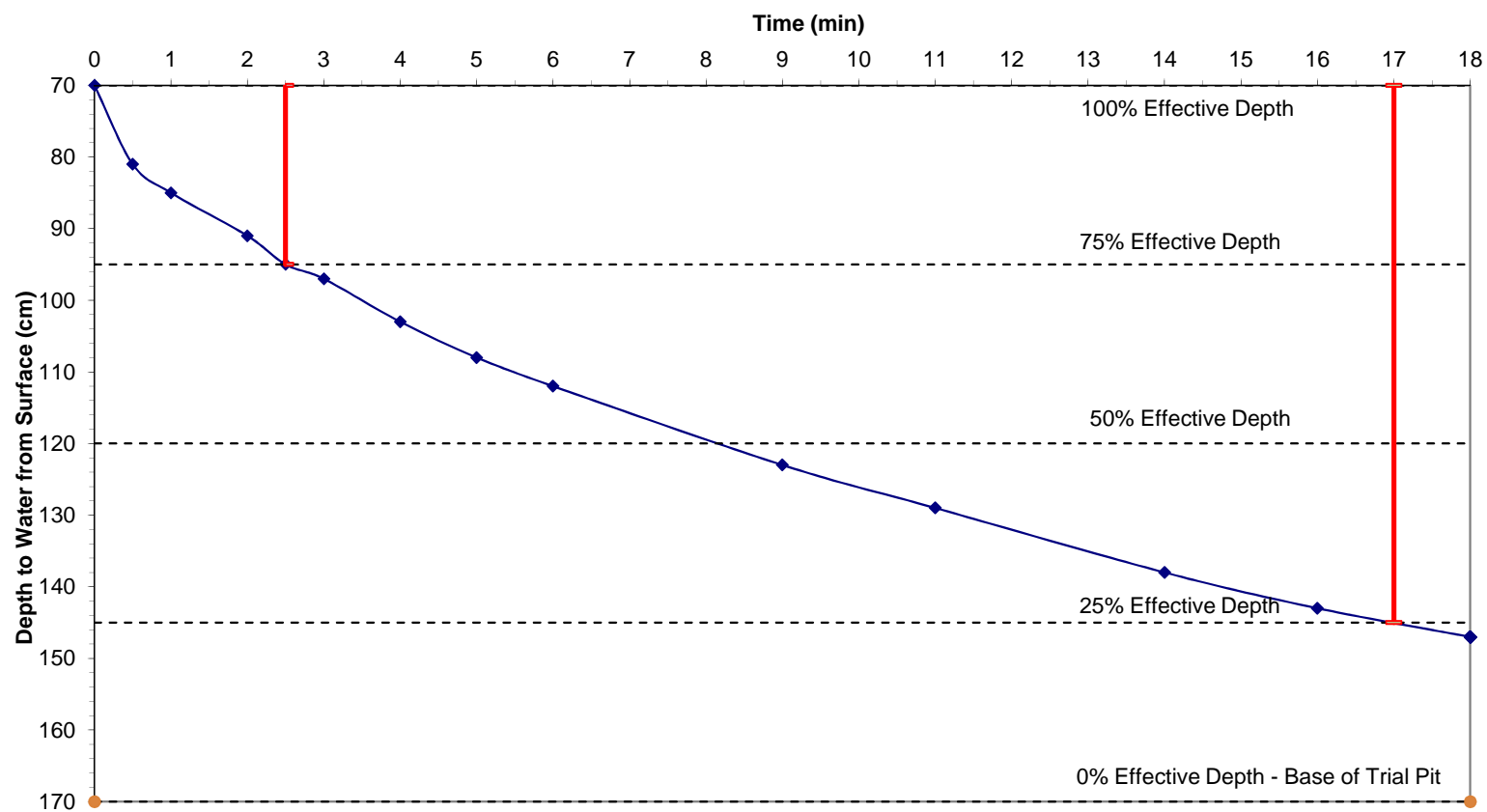
With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT20 Test 2 of 3



## Infiltration Tests

IT20 Test 3 of 3

21 June 2017

[illegible]

Parameter	Symbol	Calculation	Units	IT20 Test 3 of 3
Effective Depth of Trial Pit	$d_p$		m	1.02
Width of Trial Pit	$w$		m	0.45
Length of Trial Pit	$l$		m	1.70
Volume of Trial Pit	$V$	$= d_p \times w \times l$	$m^3$	0.78
Volume of Trial Pit at 50% Effective Depth	$V_{50\%}$	$= V \times 0.5$	$m^3$	0.39
Internal Surface Area of Trial Pit*	$a_{p50\%}$	$= l \times w + d_p \times (w + l)$	$m^2$	2.96
Time to reach 75% Effective Depth	$T_{p75\%}$		min	6.50
Time to reach 25% Effective Depth	$T_{p25\%}$		min	34.00
Time 75% - 25%	$T_{p75\%-25\%}$	$= T_{p25\%} - T_{p75\%}$	min	27.5
Infiltration Rate	$f$	$= V_{50\%} / a_{p50\%} \times (T_{p75\%-25\%})$	m/s	<b>7.99E-05</b>

\*To 50% Effective Depth (including base)

\*Test pit re-excavated due to collapse after Test 2

With Reference to: **Figure D-1**

Figure D-1

GEG-16-458

Adastral Park, Ipswich

IT20 Test 3 of 3

