

# Hampstead Heath Ponds Project

PLANNING DRAWINGS AND DESIGN  
I. CATCHPIT

July 2014



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# Catchpit - Planning Drawings and Design

## AIMS

- Minimum intervention for maximum storage.
- Sensitive implementation to minimise the effect on the visual amenity, footpath users, and the scrubland character of the valley.
- Retain the wild and natural character of the Heath.
- Dam embankment merged into the existing natural topography.

## SUMMARY OF PROPOSALS

### Dam:

- New flood storage provided by earth embankment dam, 5.6m high at the lowest point in the valley and 40m wide at the widest point.
- Crest of the dam approximately 100m long. Slopes 1:3 upstream and 1:4 downstream.
- Catchpit is the main focus of works on the Hampstead Chain.

### Spillway:

- Reinforced turf spillway along the whole crest of the dam.
- 750mm pipe under the dam to pass normal flows.
- Abandon existing pipe between catchpit and Mixed Bathing Pond and establish an open stream and the creation of a wetland area.

### Tree Loss:

A: 0   B: 12   C: 49   U:10

### Mitigation:

- Two new silt collection ponds incorporating reed bed filter systems upstream of the dam.
- Wetland scrapes and informal flow channels downstream of dam to control sediment ingress to Mixed Bathing.
- Tree removal within footprint of the dam approximately 60 relatively young predominantly hedgerow tree species and occasional over mature willows, the majority of trees have generated from self sown seed stock from adjacent more mature trees. A number of the category U trees have been blown over during storm events.
- Scrub to be planted on upstream face of new dam. New tree and shrub planting – extent and location to be agreed.

## EXISTING ENVIRONMENTAL CONSIDERATIONS:

- Open meandering stream, catchpit and mature oak trees.
- Natural enclosed character, wooded valley with grass glades, that includes veteran and specimen trees.
- Footpath forming tree lined route across the Heath linking to other important footpaths that have views into the area.
- Use: Amenity, footpath users.
- Close proximity of Pryors Fields to the south.
- Opportunity for environmental improvements, including ecology.

## EXISTING PHOTOGRAPHS

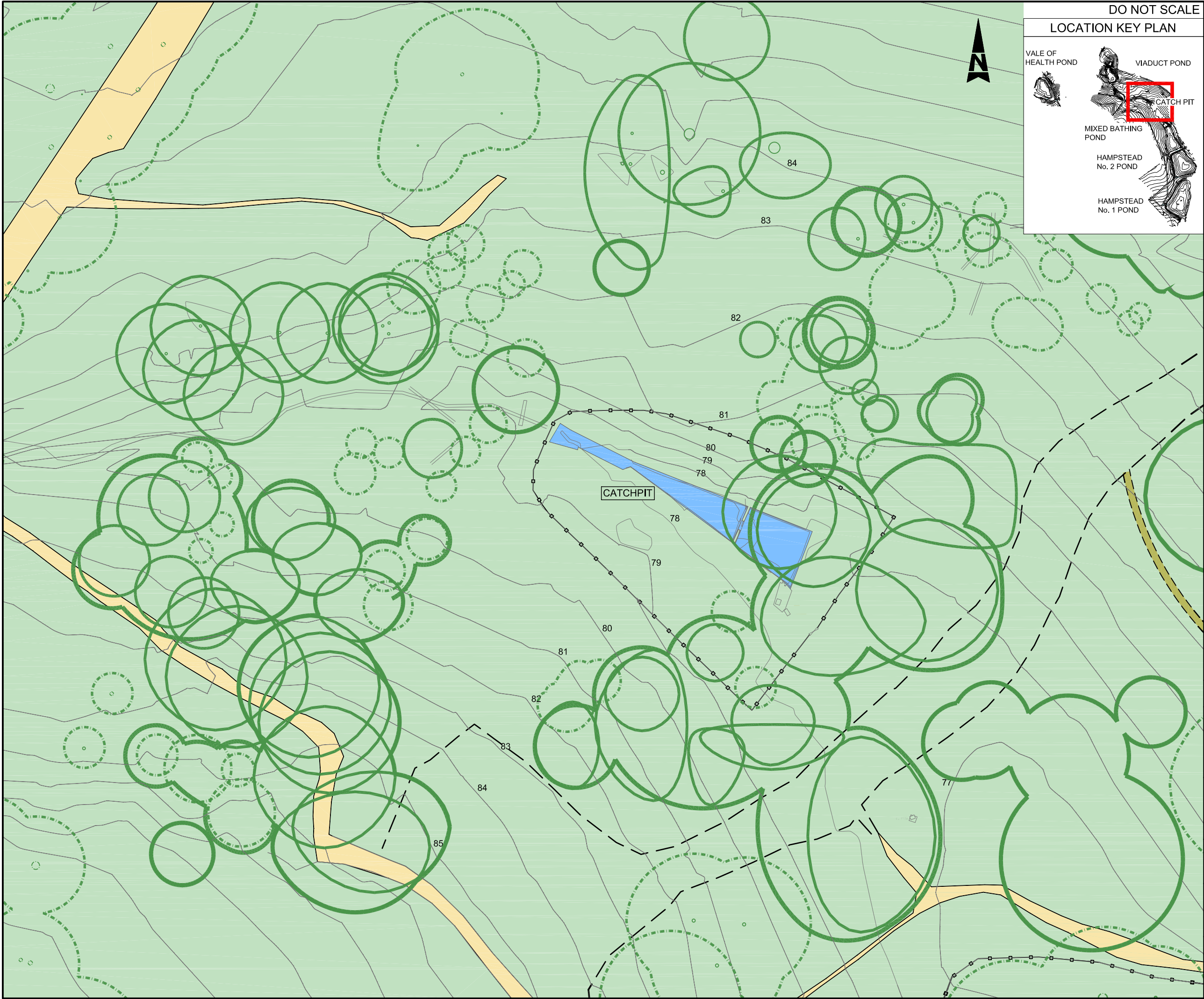


Existing view looking north along grassed path across valley. The proposed dam will be to the left of the photograph over the existing catchpit. The proposed works will be screened by the existing trees.



Existing view into concrete catchpit. The concrete catchpit and railing which will be removed as part of the proposed works.





DO NOT SCALE

LOCATION KEY PLAN

VALE OF HEALTH POND

VIADUCT POND

MIXED BATHING POND

HAMPSTEAD No. 2 POND

HAMPSTEAD No. 1 POND

POND

83 CONTOURS (mAOD)

LANDSCAPING AREA INCLUDED IN TOPOGRAPHICAL SURVEY ADJACENT TO PONDS

EXISTING FENCE / LINE OF RAILING

EXISTING FOOTPATHS

FOOTPATH FINISHES:

COMPACT AGGREGATE

TAR SPRAY AND CHIP ON ASPHALT

COMPACT AGGREGATE AND HOGGIN

COMPACT EARTH

GRASS

ASPHALT

COMPACT EARTH AND GRAVEL

HOGGIN

TREES COVERED BY TOPOGRAPHICAL AND ARBORICULTURAL SURVEY

TREES COVERED BY TOPOGRAPHICAL SURVEY

INDICATIVE LOCATION OF EXISTING TREES

EXISTING POND VEGETATION

APPROXIMATE LOCATION OF JAPANESE KNOTWEED

APPROXIMATE LOCATION OF HIMALAYAN BALSAM

APPROXIMATE LOCATION OF HOGWEED

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

2. ALL LEVELS ARE IN METRES TO ORDNANCE SURVEY DATUM (NEWLYN)

SCALE : METRES

Drawing Status

FOR PLANNING

Suitability

S2

ATKINS

Woodcote Grove  
Ashley Road  
Epsom  
Surrey  
KT18 5BW  
Tel: +44 (0)1372 726140  
Fax: +44 (0)1372 740055  
www.atkinsglobal.com

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Client

City of London Corporation

Project Title

HAMPSTEAD HEATH PONDS PROJECT

Drawing Title

CATCHPIT  
EXISTING SITE PLAN

Scale

1:500

Designed

NM

Drawn

IF

Checked

NM

Authorised

LB

Original Size

A3

Date

24/04/14

Date

24/04/14

Date

24/04/14

Date

24/04/14

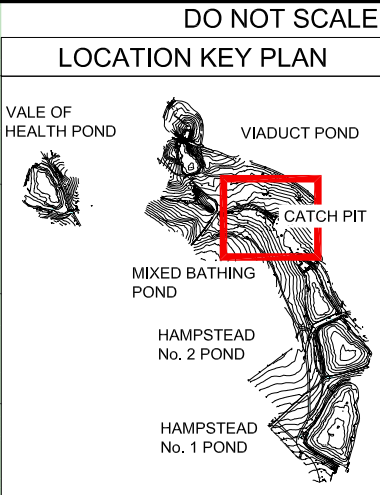
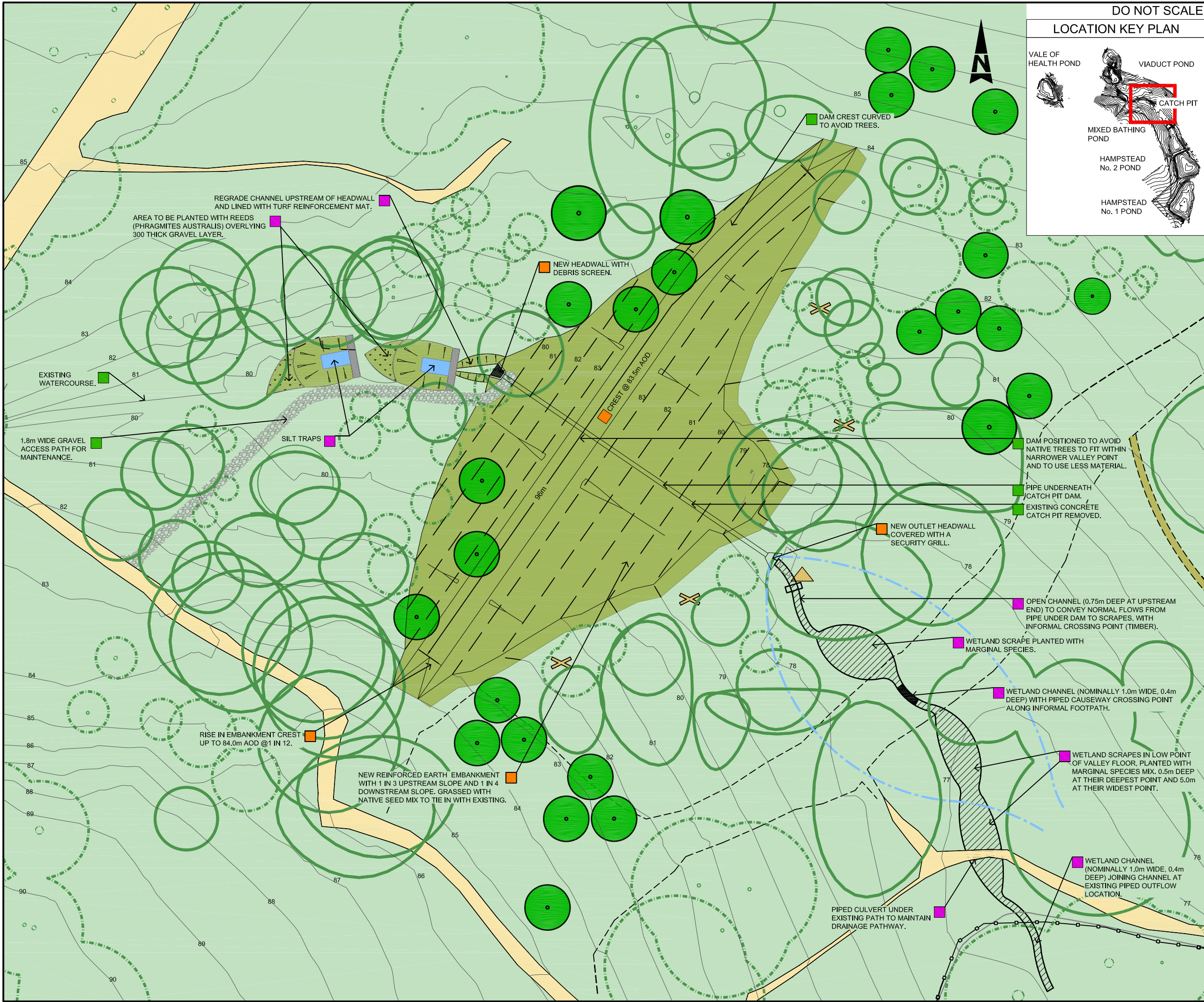
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Revision

P3

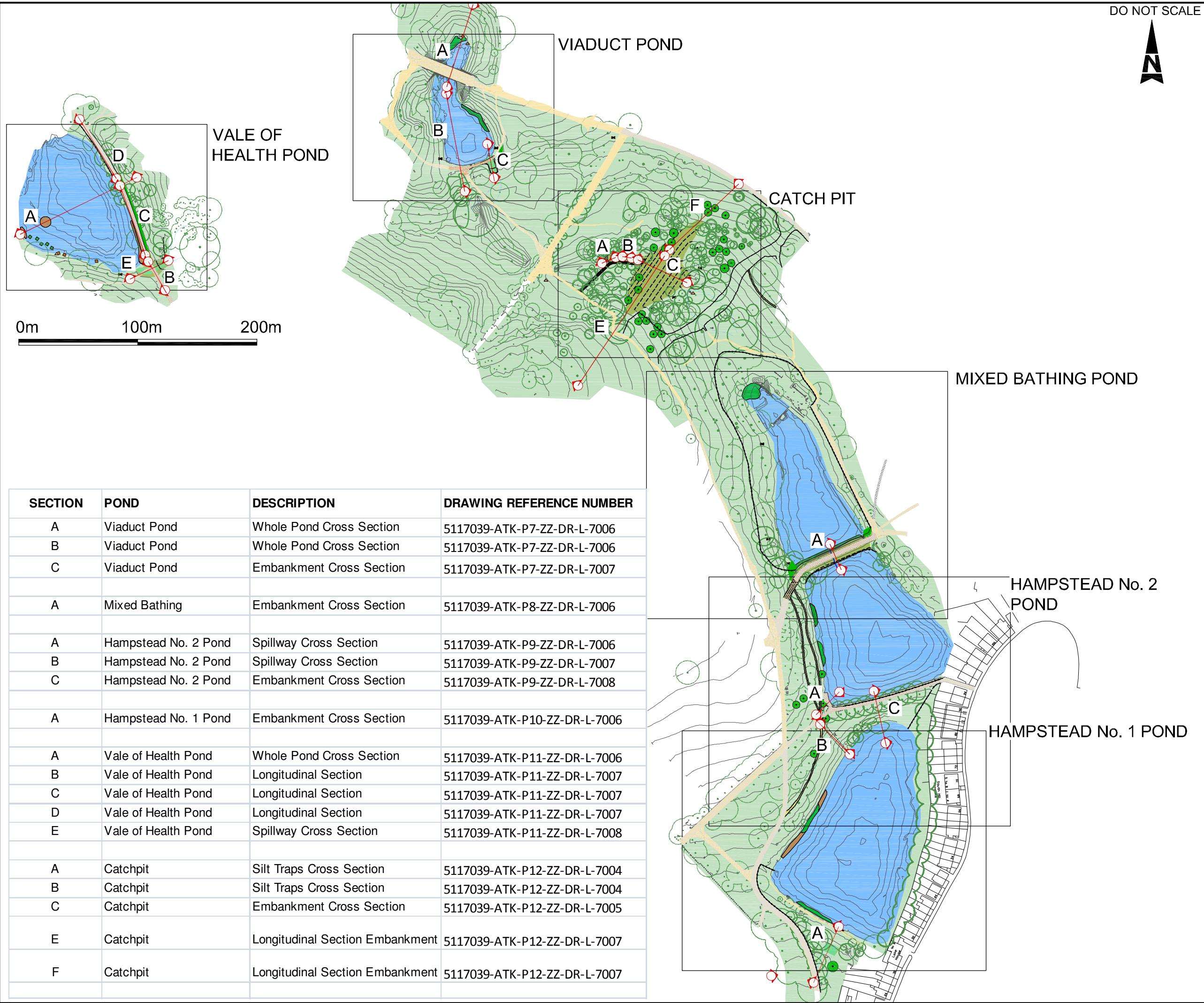




	POND		INDICATIVE ROUTE OF FLOOD WATER
	EXISTING CONTOURS (m AOD)		EXISTING FENCE / LINE OF RAILING
	PROPOSED CONTOURS (m AOD)		PROPOSED FENCE / LINE OF RAILING
	LANDSCAPE AREA INCLUDED IN TOPOGRAPHICAL SURVEY ADJACENT TO PONDS		EXISTING FOOTPATHS
	PROPOSED GRASS SPILLWAY		REINSTATED PATH Existing path to be extended or reinstated and made good
	PROPOSED GRASS SPILLWAY BANKS AND BUNDS		WALL
	PROPOSED RAMP		WILDFLOWER MIX
<b>FOOTPATH FINISHES:</b>			GRASS
	COMPACT AGGREGATE		ASPHALT
	TAR SPRAY AND CHIP ON ASPHALT		COMPACT EARTH AND GRAVEL
	COMPACT AGGREGATE AND HOGGIN		HOGGIN
	COMPACT EARTH		
	TREES COVERED BY TOPOGRAPHICAL AND ARBORICULTURAL SURVEY		PROPOSED LOG AND BRASH PILE - APPROXIMATE LOCATION CONSTRUCTED USING FELLED / CUT MATERIAL
	TREES COVERED BY TOPOGRAPHICAL SURVEY		PROPOSED REPTILE AND AMPHIBIAN HIBERNACULA - APPROXIMATE LOCATION
	INDICATIVE LOCATION OF EXISTING TREES		MANAGEMENT OF JAPANESE KNOTWEED
	TREES COPPICED DURING CONSTRUCTION		MANAGEMENT OF HIMALAYAN BALSAM
	PROPOSED AREA OF TREE AND SHRUB PLANTING TYPE AND EXTENT TO BE AGREED		MANAGEMENT OF GIANT HOGWEED
	EXISTING POND VEGETATION		PROPOSED AERATOR 'A' / AERATOR POWER TO MANAGE WATER QUALITY 'P' OR 'G'
	PROPOSED POND PLANTING		PROPOSED SHEET PILE EDGE
<b>NOTES RELATING TO ENVIRONMENTAL PROPOSALS:</b>			
	WATER QUALITY		LANDSCAPE
	AQUATIC ECOLOGY		TERRESTRIAL ECOLOGY
<b>NOTES:</b>			
1. ALL DIMENSIONS IN METRES UNLESS OTHERWISE STATED AND LEVELS IN METRES TO ABOVE ORDNANCE DATUM (AOD) THE HEIGHT OR VERTICAL DATUM USED BY AN ORDNANCE SURVEY RELATIVE TO AVERAGE SEA LEVEL AT NEWLYN, CORNWALL, UK.			
2. JAPANESE KNOTWEED AND HIMALAYAN BALSAM - APPROXIMATE LOCATIONS IDENTIFIED IN 2013 AS PART OF HABITAT SURVEY FURTHER AREAS MAY BE IDENTIFIED.			
3. TREES ON EDGE OF WORKS TO BE RETAINED AND PROTECTED IN ACCORDANCE WITH BRITISH STANDARDS (BS) 5837 WHERE SITE WORKS ALLOW.			
4. FOR TYPE 1 TO TYPE 5 EDGE DETAILS FOR PROPOSED POND PLANTING REFER TO PLANNING DRAWINGS AND DESIGN POND AND OVERVIEW BOOKLET FOR HIGHGATE AND HAMPSTEAD CHAINS.			
SCALE METRES 0 5 10 20			

Drawing Status	<b>FOR PLANNING</b>		Suitability	<b>S2</b>
<b>ATKINS</b>		Woodcote Grove Ashley Road Epsom Surrey KT18 5BW Tel: +44 (0)1372 726140 Fax: +44 (0)1372 740055 www.atkinsglobal.com		
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Client <b>City of London Corporation</b>				
Project Title <b>HAMPSTEAD HEATH PONDS PROJECT</b>				
Drawing Title <b>CATCHPIT ENVIRONMENTAL MASTERPLAN</b>				
Scale 1:500	Designed NM	Drawn IF	Checked NM	Authorised LB
Original Size A3	Date 24/04/14	Date 24/04/14	Date 24/04/14	Date 24/04/14
Drawing Number 5117039-ATK-P12-ZZ-DR-L-7003				Revision P3





SECTION	POND	DESCRIPTION	DRAWING REFERENCE NUMBER
A	Viaduct Pond	Whole Pond Cross Section	5117039-ATK-P7-ZZ-DR-L-7006
B	Viaduct Pond	Whole Pond Cross Section	5117039-ATK-P7-ZZ-DR-L-7006
C	Viaduct Pond	Embankment Cross Section	5117039-ATK-P7-ZZ-DR-L-7007
A	Mixed Bathing	Embankment Cross Section	5117039-ATK-P8-ZZ-DR-L-7006
A	Hampstead No. 2 Pond	Spillway Cross Section	5117039-ATK-P9-ZZ-DR-L-7006
B	Hampstead No. 2 Pond	Spillway Cross Section	5117039-ATK-P9-ZZ-DR-L-7007
C	Hampstead No. 2 Pond	Embankment Cross Section	5117039-ATK-P9-ZZ-DR-L-7008
A	Hampstead No. 1 Pond	Embankment Cross Section	5117039-ATK-P10-ZZ-DR-L-7006
A	Vale of Health Pond	Whole Pond Cross Section	5117039-ATK-P11-ZZ-DR-L-7006
B	Vale of Health Pond	Longitudinal Section	5117039-ATK-P11-ZZ-DR-L-7007
C	Vale of Health Pond	Longitudinal Section	5117039-ATK-P11-ZZ-DR-L-7007
D	Vale of Health Pond	Longitudinal Section	5117039-ATK-P11-ZZ-DR-L-7007
E	Vale of Health Pond	Spillway Cross Section	5117039-ATK-P11-ZZ-DR-L-7008
A	Catchpit	Silt Traps Cross Section	5117039-ATK-P12-ZZ-DR-L-7004
B	Catchpit	Silt Traps Cross Section	5117039-ATK-P12-ZZ-DR-L-7004
C	Catchpit	Embankment Cross Section	5117039-ATK-P12-ZZ-DR-L-7005
E	Catchpit	Longitudinal Section Embankment	5117039-ATK-P12-ZZ-DR-L-7007
F	Catchpit	Longitudinal Section Embankment	5117039-ATK-P12-ZZ-DR-L-7007

DO NOT SCALE

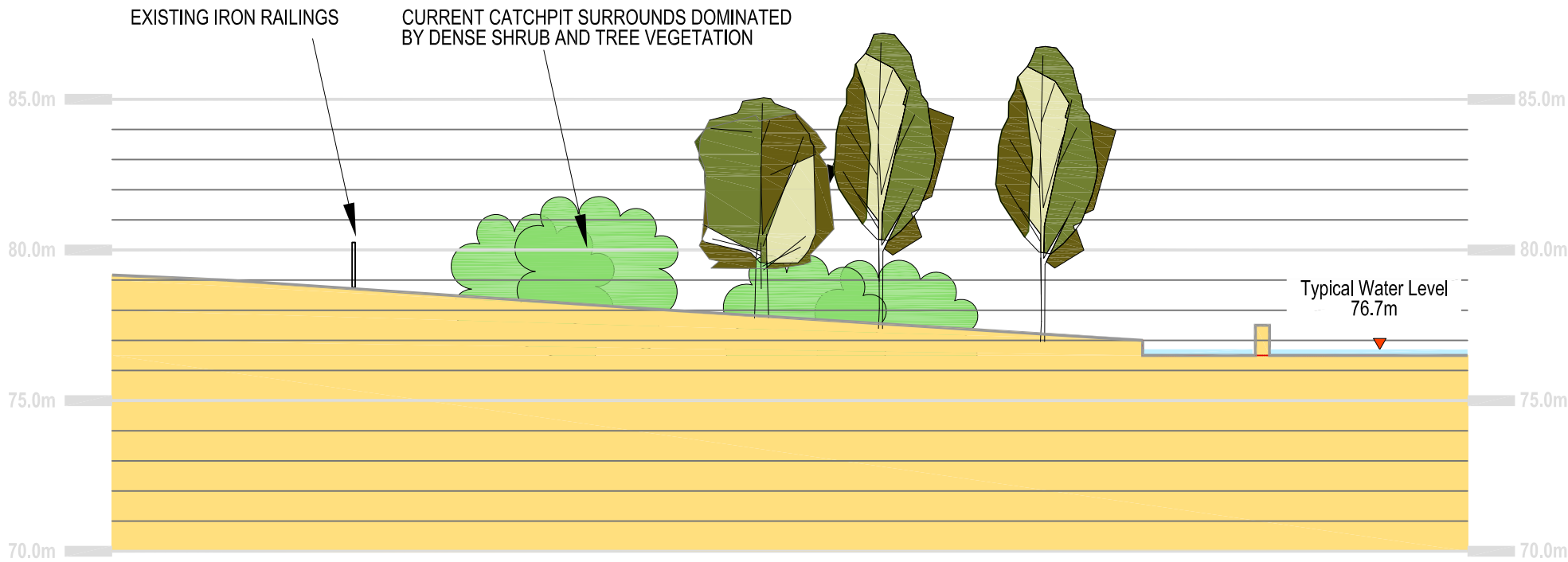
Drawing Status		FOR PLANNING		Subsidiary	
				S2	
Client		City of London Corporation			
Project Title		HAMPSTEAD HEATH PONDS PROJECT			
Drawing Title		HAMPSTEAD CHAIN CROSS SECTION KEY PLAN			
Scale	Designed	Drawn	Checked	Authorised	
NTS	NM	IF	NM	LB	
Original Size	Date	Date	Date	Date	
A3	24/04/14	24/04/14	24/04/14	24/04/14	
Drawing Number				Revision	
5117039-ATK-P7-P12-ZZ-DR-L-7004				P2	

ATKINS

Woodcote Grove  
Ashley Road  
Epsom  
Surrey  
KT18 5BW  
Tel: +44 (0)1372 726140  
Fax: +44 (0)1372 740055  
www.atkinsglobal.com

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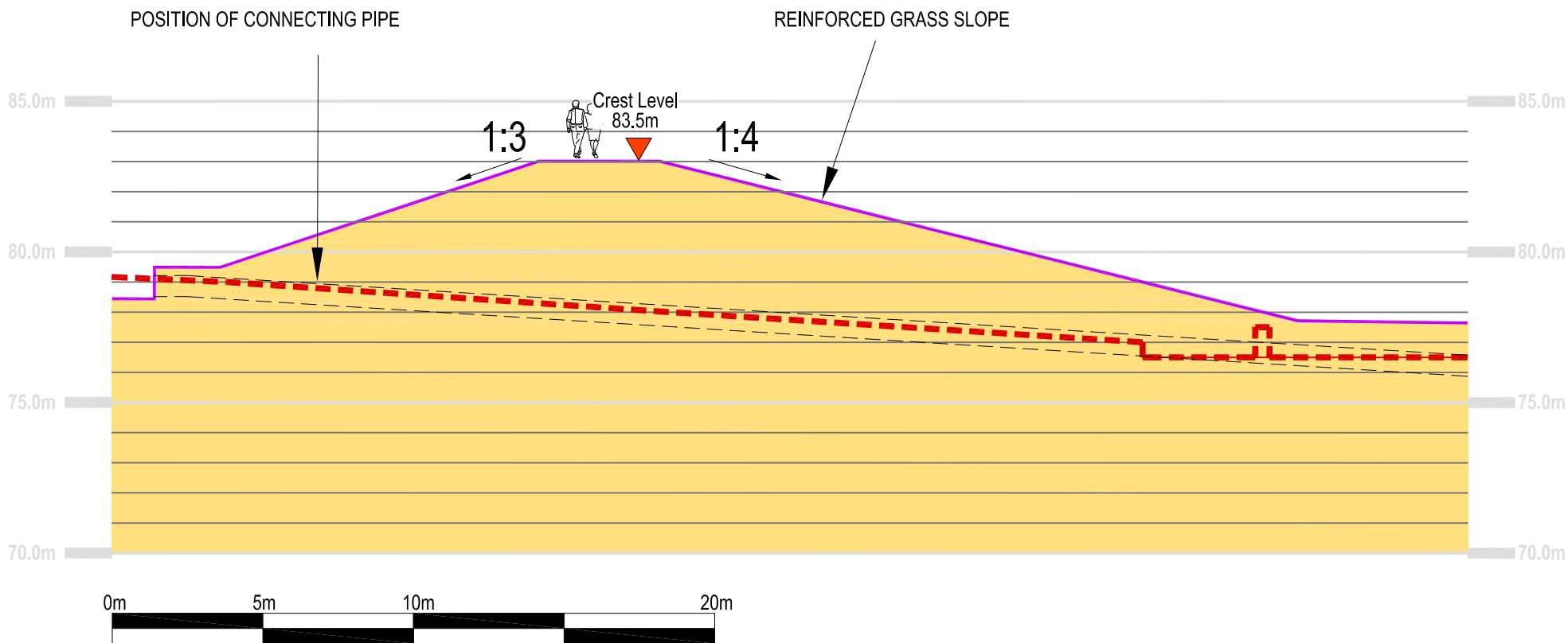


C

P12 7005

CATCHPIT EMBANKMENT CROSS SECTION EXISTING

SCALE 1: 200@A3



C

P12 7005

CATCHPIT EMBANKMENT CROSS SECTION PROPOSED

SCALE 1: 200@A3

KEY

LEVEL MARKER (NOTE: ALL LEVELS IN M AOD)



EXISTING TREES



EXISTING SMALL TREES AND SHRUBS



NEW REED BEDS ON RAISED SHELF

EXISTING SOIL PROFILE



SPILLWAY EXTENT

Stat	Purpose of Issue	Date	Auth	Rev	Description	By	Date	Chk'd	Auth
S2	FOR PLANNING	4/7/14	LB						

ATKINS™

Atkins Limited  
Landscape Architecture,  
Woodcote Grove,  
Ashley Road,  
Epsom, Surrey, England,  
KT18 5BW

Tel: (01372) 726140  
Fax: (01372) 740055  
www.atkinsglobal.com

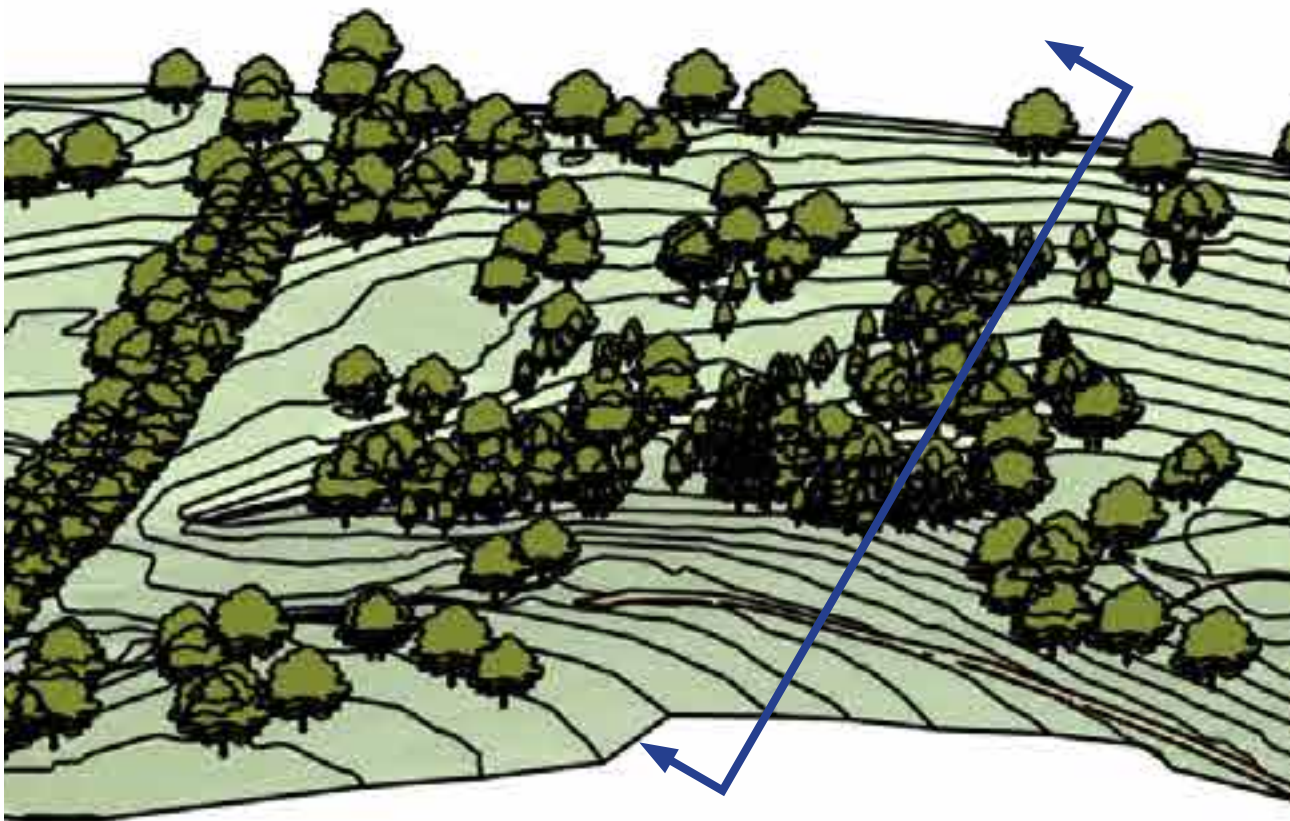
Client City of London Corporation		Title HAMPSTEAD CHAIN CATCHPIT SECTIONS SILT TRAPS CROSS SECTIONS			
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		Date 28.05.14	Date 28.05.14	Date 28.05.14	
Status S2	Drawing Number 5117039-ATK-P12-ZZ-DR-L-7005				Rev P2



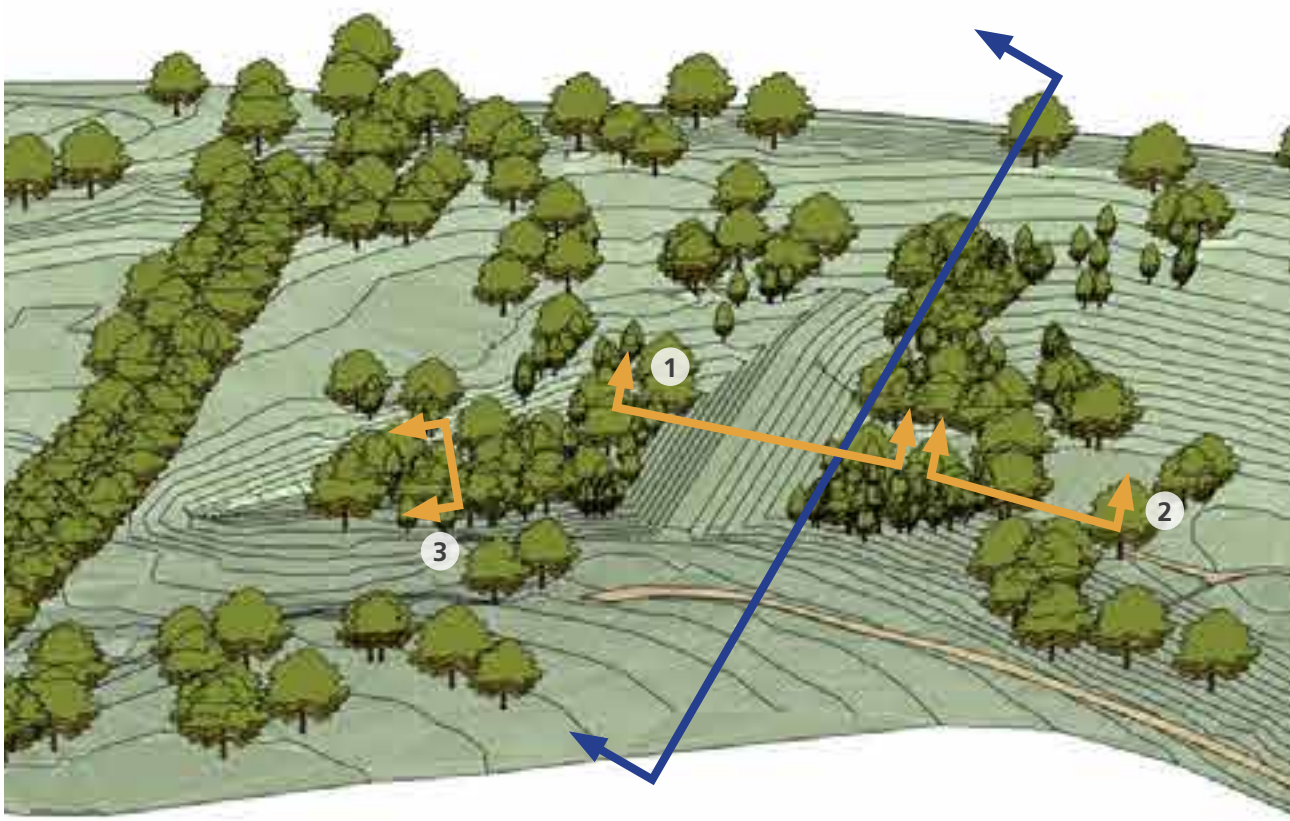
Title				
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Sheet Size	Original Scale	Designed/Drawn MS	Checked NM	Authorised LB
<b>A1</b>	1:500@A1 1:1000@A3	Date 28,05,14	Date 28,05,14	Date 28,05,14
Status	Drawing Number			Rev
S2	5117039-ATK-P12-ZZ-DR-L-7007			P2



Elevations



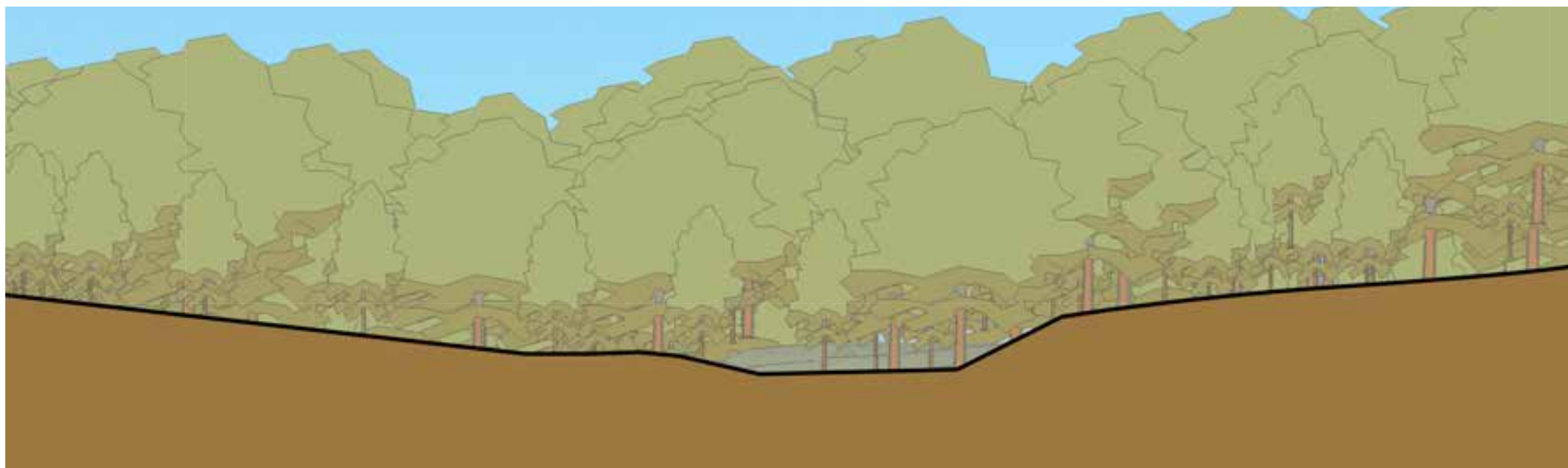
Catchpit - Existing Elevation Location Plan



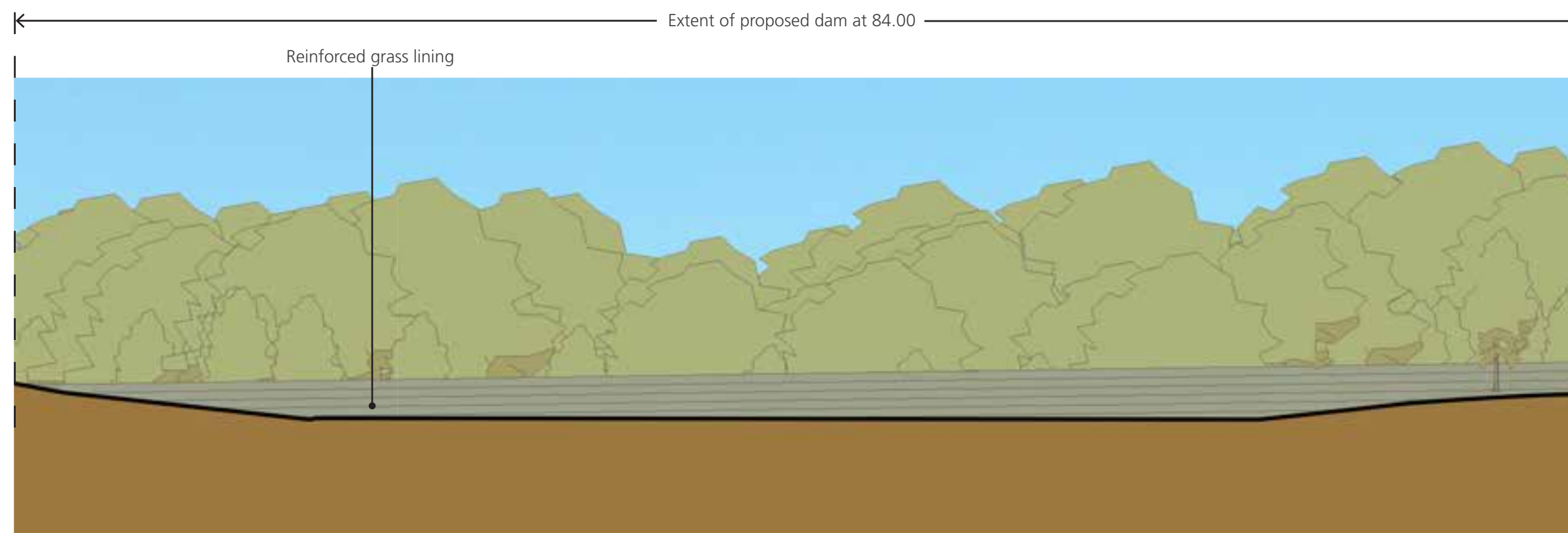
Catchpit - Proposed Elevation Location Plan

Key  
Upstream view

Detail Sections



Catchpit Upstream View Existing Elevation



Catchpit Upstream View Proposed Elevation



SCALE 1:200 @ A3 (METRES)

All dimensions in metres unless otherwise stated and levels in metres to Above Ordnance Datum (AOD) - the height or vertical datum used by an Ordnance Survey relative to the average sea level at Newlyn, Cornwall UK.

All elevations are illustrative and have been rendered from the 3D Sketchup model











# ATKINS

Epsom Gateway  
2 Ashley Avenue  
Epsom  
Surrey  
KT18 5AL  
England

Telephone +44 (0) 1372 75 6280  
Mobile +44 (0) 7710 36 3354  
Email: [mike.woolgar@atkinsglobal.com](mailto:mike.woolgar@atkinsglobal.com)

[www.atkinsglobal.com](http://www.atkinsglobal.com)