

A BACKGROUND MAP-BASED INFORMATION

Altitude (m)

Solid geology code

Distance from source (km)

Height of source (m)

Slope (m/km)

Drift geology code

Significant tributary ?

Water Quality Class

Flow category (1 - 10)

Planform category

Navigation ?

B FIELD SURVEY DETAILS

Site Number :

Mid-site Grid Reference :

River :

Date/...../1997

Time

Surveyor name

Accredited Surveyor ?

No ☐Yes ☐

If yes, state code

Adverse conditions affecting survey ?

No ☐Yes ☐

If yes, state

Bed of river visible ?

No ☐partially ☐entirely ☐

(tick one box)

Duplicate photographs : general character ?

No ☐Yes ☐

(tick one box)

Site surveyed from :

left bank ☐right bank ☐channel ☐

(tick as appropriate)

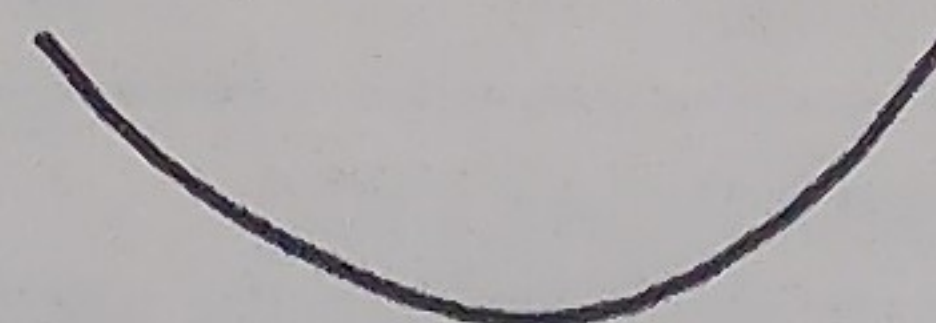
SERCON survey in addition?

No ☐Yes ☐

(tick one box)

C PREDOMINANT VALLEY FORM (tick one box only)☐

shallow vee

☐concave/bowl
(If U-shaped glacial valley
add "U")☐

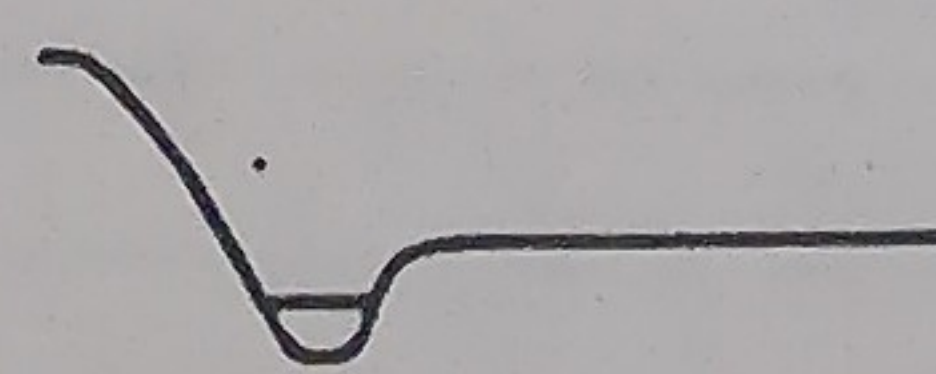
deep vee

☐

symmetrical floodplain

☐

gorge

☐

asymmetrical floodplain

Terraced valley floor ?

No ☐Yes ☐**D NUMBER OF RIFFLES, POOLS AND POINT BARS (indicate total number)**

Riffles

Unvegetated point bars

Pools

Vegetated point bars

1997 RIVER HABITAT SURVEY: TEN SPOT-CHECKS

Page 2 of 4

Spot-check 1 is at: upstream end ☐ downstream end ☐ of site (tick one box)

E PHYSICAL ATTRIBUTES (to be assessed across channel within 1m wide transect)

¹ = one entry only

1 2 3 4 5 6 7 8 9 10

LEFT BANK

Ring EC or SC if composed of sandy substrate

Material ¹ NY, BE, BO, CO, GS, EA, FE, CL, CC, SP, WP, GA, BR, RR, BW

Bank modification(s) NK, NO, RS, RI, PC(B), BM, EM

Bank feature(s) NY, NO, EC, SC, PB, VP, SB, VS

CHANNEL

GP- ring either G or P if predominant

Channel substrate ¹ NY, BE, BO, CO, GP, SA, SI, CL, PE, AR

Flow type ¹ FF, CH, BW, UW, CF, RP, UP, SM, NP, NO

Channel modification(s) NK, NO, CV, RS, RI, DA, FO

Channel feature(s) NY, NO, RO, MB, VB, ML, TR

RIGHT BANK

Ring EC or SC if composed of sandy substrate

Material ¹ NY, BE, BO, CO, GS, EA, FE, CL, CC, SP, WP, GA, BR, RR, BW

Bank modification(s) NK, NO, RS, RI, PC(B), BM, EM

Bank feature(s) NY, NO, EC, SC, PB, VP, SB, VS

F BANKTOP LAND USE AND VEGETATION STRUCTURE (to be assessed over a 10m wide transect)

Land use: choose one from BL, CP, OR, MH, SC, TH, RP, IG, TL, WL, OW, SU, RS

LAND USE WITHIN 5m OF LEFT BANKTOP

LEFT BANKTOP (structure within 1m) B/U/S/C

LEFT BANK FACE (structure) B/U/S/C

RIGHT BANK FACE (structure) B/U/S/C

RIGHT BANKTOP (structure within 1m) B/U/S/C

LAND USE WITHIN 5m OF RIGHT BANKTOP

G CHANNEL VEGETATION TYPES (to be assessed over a 10m wide transect: use E (≥ 33% area) or ✓ (present))

NONE

Liverworts/mosses/lichens

Emergent broad-leaved herbs

Emergent reeds/sedges/rushes

Floating-leaved (rooted)

Free-floating

Amphibious

Submerged broad-leaved

Submerged linear-leaved

Submerged fine-leaved

Filamentous algae

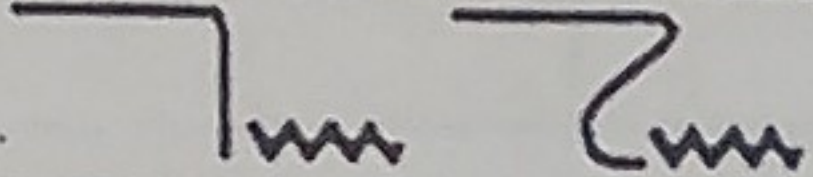
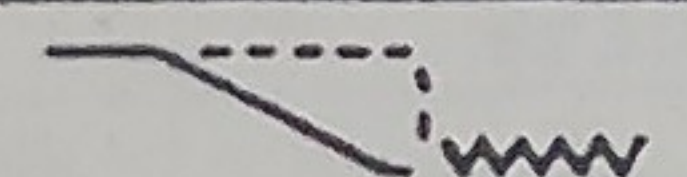
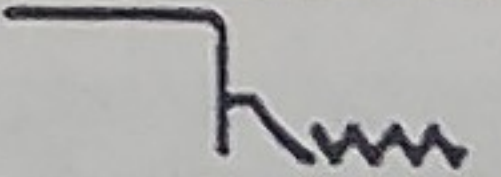
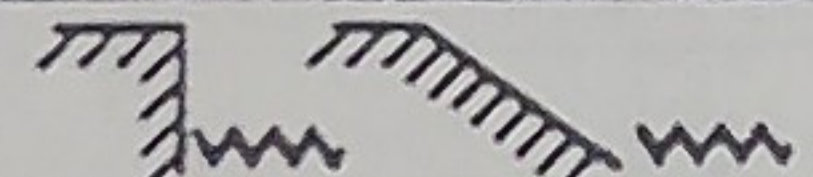
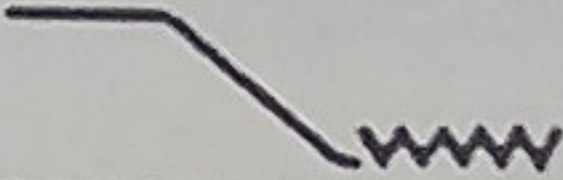
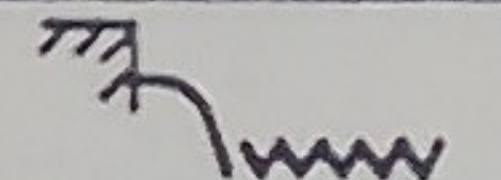
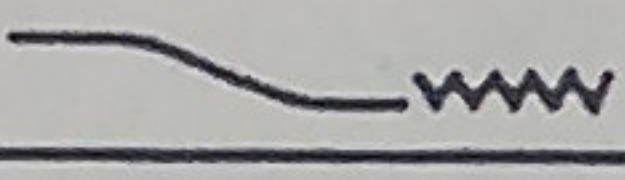
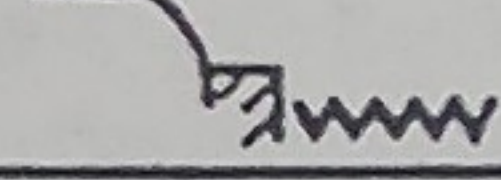
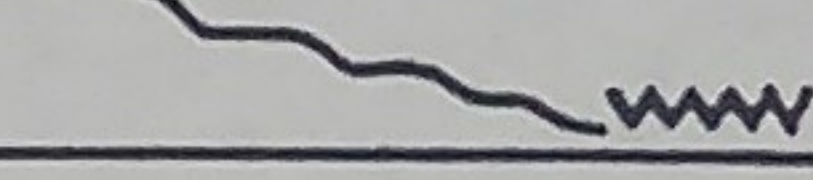
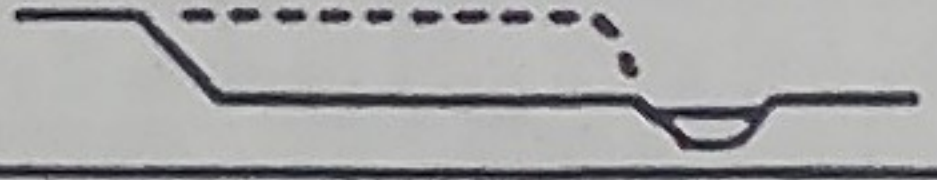
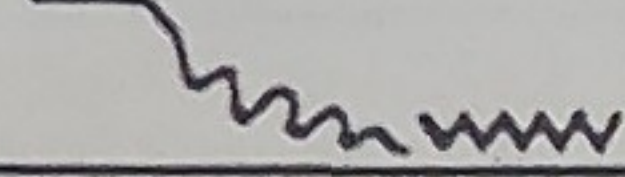
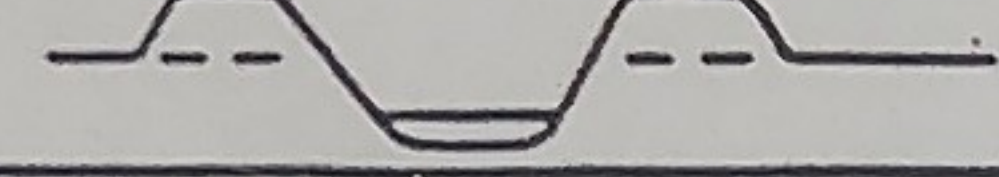
Enter channel substrates not occurring in spot-checks but present in >1% whole site.

Use end "catch-all" column for types not occurring in spot checks as well as overall assessment over 500m (use E or ✓)

H LAND USE WITHIN 50m OF BANKTOP Use E ($\geq 33\%$ banklength) or $\checkmark$ (present)

	L	R		L	R
Badleaf/mixed woodland (BL)			Rough pasture (RP)		
Coniferous plantation (CP)			Improved/semi-improved grass (IG)		
Orchard (OR)			Tilled land (TL)		
Moorland/heath (MH)			Wetland (eg bog, marsh, fen) (WL)		
Scrub (SC)			Open water (OW)		
Tall herbs /rank vegetation (TH)			Suburban/urban development (SU)		
			Rock and scree (RS)		

I BANK PROFILES Use E ($\geq 33\%$ banklength) or $\checkmark$ (present)

Natural/unmodified	L	R	Artificial/modified	L	R
Vertical/undercut 			Resectioned 		
Vertical + toe 			Reinforced - whole bank 		
Steep ($>45^\circ$) 			Reinforced - top only 		
Gentle 			Reinforced - toe only 		
Composite 			Artificial two-stage 		
			Poached 		
			Embanked 		
			Set-back embankments 		

J EXTENT OF TREES AND ASSOCIATED FEATURES

TREES (tick one box per bank)

	Left	Right
None	☐	☐
Isolated/scattered	☐	☐
Regularly spaced, single	☐	☐
Occasional clumps	☐	☐
Semi-continuous	☐	☐
Continuous	☐	☐

ASSOCIATED FEATURES (tick one box per feature)

	None	Present	E ($\geq 33\%$)
Shading of channel	☐	☐	☐
Overhanging boughs	☐	☐	☐
Exposed bankside roots	☐	☐	☐
Underwater tree roots	☐	☐	☐
Fallen trees	☐	☐	☐
Coarse woody debris	☐	☐	☐

K EXTENT OF CHANNEL FEATURES (tick one box per feature)

	None	Present	E ($\geq 33\%$)
Waterfall(s)	☐	☐	☐
Cascade(s)	☐	☐	☐
Rapid(s)	☐	☐	☐
Riffle(s)	☐	☐	☐
Run(s)	☐	☐	☐
Boil(s)	☐	☐	☐
Glide(s)	☐	☐	☐
Pool(s)	☐	☐	☐
Ponded Reach(es)	☐	☐	☐

	None	Present	E ($\geq 33\%$)
Marginal deadwater	☐	☐	☐
Exposed bedrock	☐	☐	☐
Exposed boulders	☐	☐	☐
Unvegetated mid-channel bar(s)	☐	☐	☐
Vegetated mid-channel bar(s)	☐	☐	☐
Mature island(s)	☐	☐	☐
Unvegetated side bar(s)	☐	☐	☐
Vegetated side bar(s)	☐	☐	☐
Discrete silt deposit(s)	☐	☐	☐
Discrete sand deposit(s)	☐	☐	☐

L CHANNEL DIMENSIONS (to be measured at one site on a straight uniform section, preferably across a riffle)

LEFT BANK	CHANNEL	RIGHT BANK
Banktop height (m)	Bankfull width (m)	Banktop height (m)
Is banktop height also bankfull height? (Y or N)	Water width (m)	Is banktop height also bankfull height? (Y or N)
Embanked height (m)	Water depth (m)	Embanked height (m)

If trashline is lower than banktop break in slope, indicate: height above water (m) =

Bed material at site is: consolidated (compact) ☐ unconsolidated (loose) ☐ unknown ☐

Location of measurement is: riffle ☐ run or glide ☐ other ☐

M ARTIFICIAL FEATURES (indicate total number or tick appropriate box)

None	Major	Intermediate	Minor	Major	Intermediate	Minor
☐	Weirs			Revetments		
	Sluices			Outfalls		
	Culverts			Fords		
	Bridges			Deflectors		
				Other (state)		

Is water impounded by weir/dam? No ☐ Yes, <33% of site ☐ >33% of site ☐

N EVIDENCE OF RECENT MANAGEMENT (tick appropriate box(es))

None ☐ Dredging ☐ Mowing ☐ Weed-cutting ☐
Enhancement ☐ Other (state).....

O FEATURES OF SPECIAL INTEREST (use ✓ or E (≥ 33% length))

None ☐	Artificial open water ☐	Bog ☐	Fringing reed-bank ☐
Waterfalls > 5m high ☐	Natural open water ☐	Carr ☐	Floating mat ☐
Braided/side channels ☐	Water meadow ☐	Marsh ☐	Other (state).....
Debris dams ☐	Fen ☐	Flush ☐	
Leafy debris ☐			

P CHOKED CHANNEL (tick one box)

Is 33% or more of the channel choked with vegetation? No ☐ Yes ☐

Q NOTABLE NUISANCE PLANT SPECIES (Use ✓ or E (≥ 33% length))

None ☐ Giant Hogweed ☐ Himalayan Balsam ☐ Japanese Knotweed ☐ Other (state).....

R OVERALL CHARACTERISTICS (Circle appropriate words, add others as necessary)

Major impacts: landfill - tipping - litter - sewage - pollution - drought - abstraction - mill - dam - road - rail - industry - housing - mining - quarrying - overdeepening - afforestation - fisheries management - silting

Land Management: set-aside - buffer strip - headland - abandoned land - parkland - MoD

Animals: otter - mink - water vole - kingfisher - dipper - grey wagtail - sand martin - heron - dragonflies/damselflies

Other significant observations:

S ALDERS (tick appropriate box(es))

Alders? None ☐ Present ☐ Extensive ☐ Diseased Alders? None ☐ Present ☐ Extensive ☐

PHYSICAL ATTRIBUTES (SECTION E)

BANKS

CHANNEL

Predominant bank material

NV = not visible

BE = bedrock
BO = boulder
CO = cobble
GS = gravel/sand
EA = earth (crumbly)
CL = sticky clay

CC = concrete
SP = sheet piling
WP = wood piling
GA = gabion
BR = brick/laid stone
RR = rip-rap
BW = builders' waste

Bank modifications

NK = not known
NO = none

RS = resectioned
RI = reinforced
PC = poached
PC(B) = poached (bare)
BM = berm
EM = embanked

Bank features

NV = not visible (eg far bank)
NO = none

EC = eroding earth cliff (ring if sandy substrate)
SC = stable earth cliff (ring if sandy substrate)

PB = unvegetated point bar
VP = vegetated point bar

SB = unvegetated side bar
VS = vegetated side bar

Predominant substrate

NV = not visible

BE = bedrock
BO = boulder
CO = cobble
GP = gravel/pebble (ring G or P if predominant)
SA = sand
SI = silt/mud
CL = clay
PE = peat
AR = artificial

Predominant flow (see below)

FF = freefall
CH = chute
BW = broken standing waves (white-water)
UW = unbroken standing wave
CF = chaotic flow
RP = rippled
UP = upwelling
SM = smooth
NP = no perceptible flow
NO = No flow (dry)

Channel modifications

NK = not known
NO = none

CV = culverted
RS = resectioned
RI = reinforced
DA = dam/weir
FO = ford (man-made)

Channel features

NV = not visible
NO = none

RO = exposed bedrock/boulders
MB = unvegetated channel bar
VB = vegetated mid channel bar
MI = mature island
TR = urban debris (trunk)

FLOW TYPES

FF: Free fall

CH: Chute

BW: Broken standing waves

UW: Unbroken standing waves

CF: Chaotic flow

RP: Rippled

UP: Upwelling

SM: Smooth

NP: No perceptible flow

NO: No flow

ASSOCIATED CHANNEL FEATURES

clearly separates from back-wall of vertical feature ~ associated with waterfalls.

low curving fall in contact with substrate.

white-water tumbling wave must be present ~ associated with rapids.

upstream facing wavelets which are not broken ~ associated with riffles

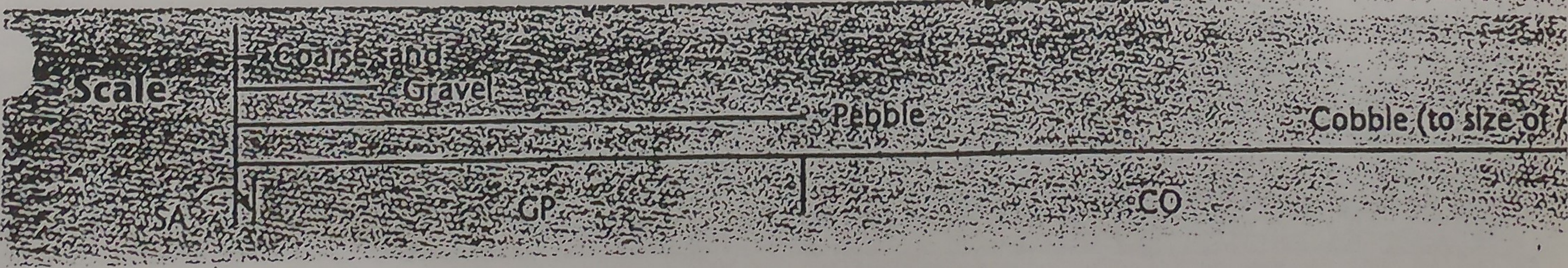
a mixture of 3 or more 'rough' flow types on no organised pattern.

no waves, but general flow direction is downstream with disturbed rippled surface associated with runs.

heaving water as upwellings break the surface ~ associated with boils.

perceptible downstream movement is smooth (no eddies) ~ associated with glides.

no net downstream flow ~ associated with pools, ponded reaches and marginal deposits
dry.



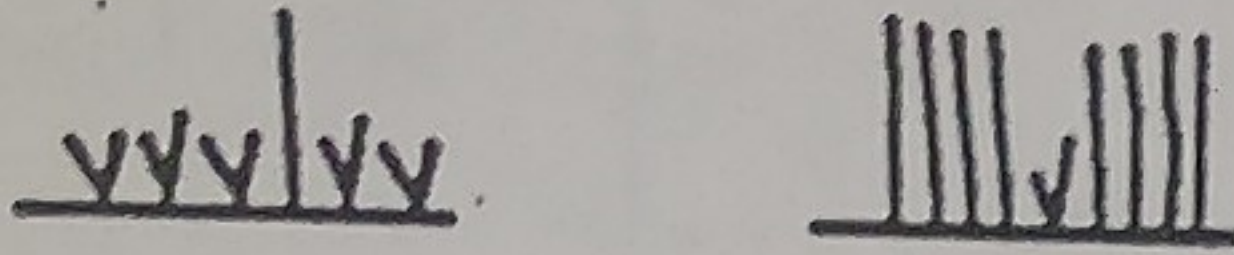
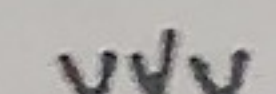
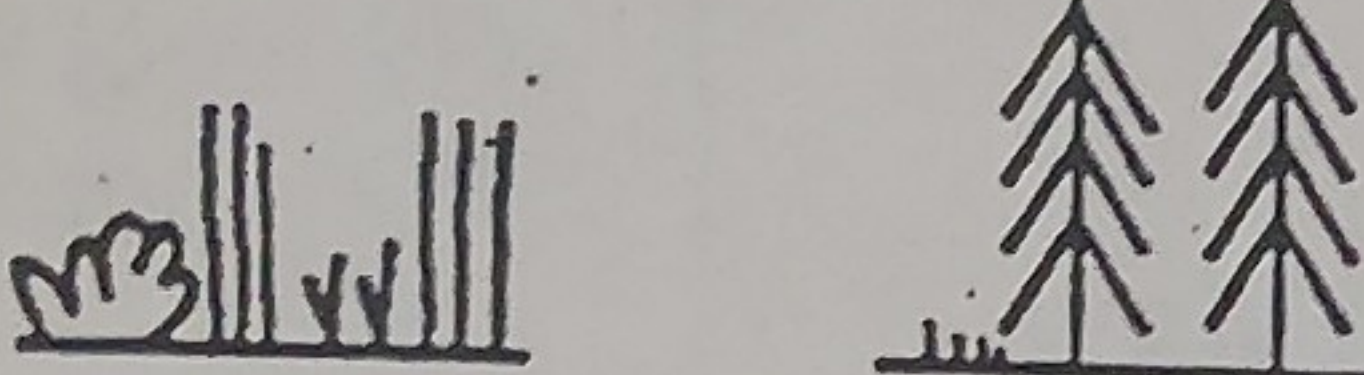
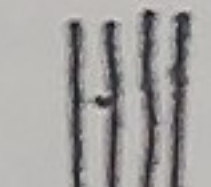
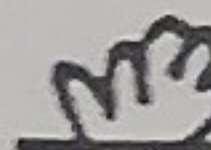
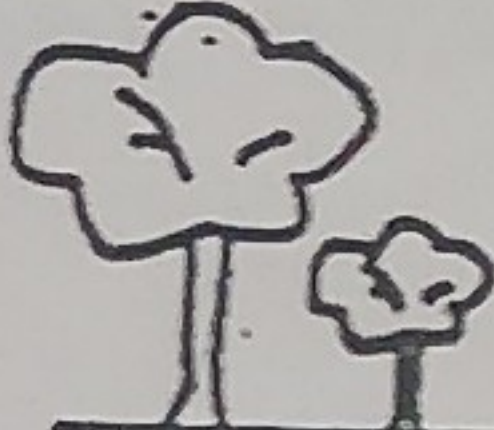
LAND USE WITHIN 5m OF BANKTOP (SECTION F)

BL = Broadleaf/mixed woodland
CP = Coniferous/plantation
OR = Orchard
MH = Moorland/heath

SC = Scrub
TH = Tall herbs
RP = Rough pasture
IG = Improved grass

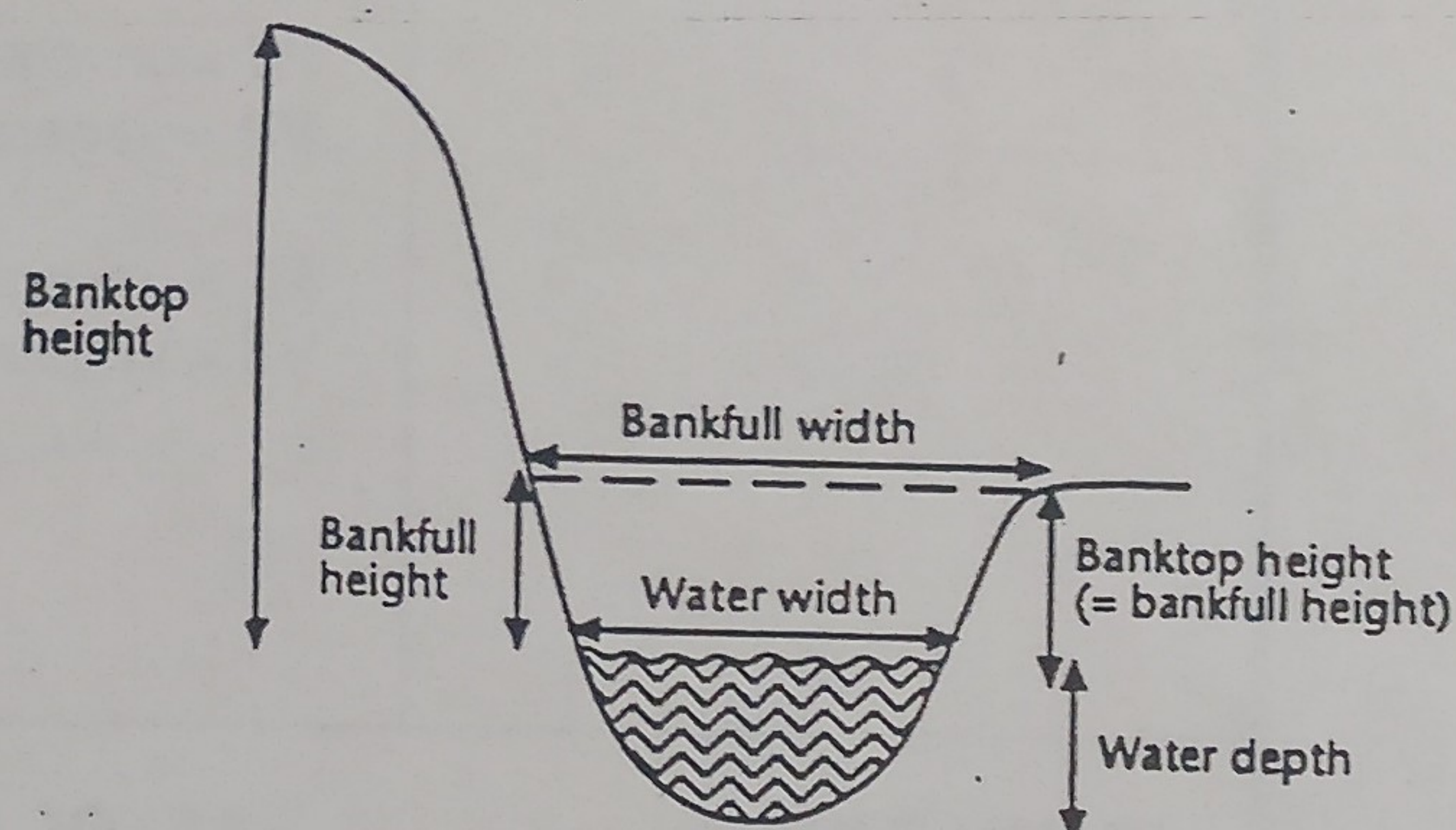
TL = Tilled land
WL = Wetland
OW = Open water
SU = Suburban/urban
RS = Rock & scree

BANKTOP AND BANKFACE VEGETATION STRUCTURE To be assessed within a 10m wide transect (SECTION I)

bare	B	bare earth/rock etc.	vegetation types
uniform 	U	predominantly one type (no scrub or trees)	 bryophytes  short herbs/creeping grasses
simple 	S	two or three vegetation types	 tall herbs/grasses  scrub/brambles etc.
complex 	C	four or more types	 saplings and trees

Channel dimensions guidance (Section L)

- Select location on uniform section.
- If riffle is present, measure there.
If not, measure at straightest and shallowest point.
- Banktop = first major break in slope above which cultivation or development is possible.
- Bankfull = point where river first spills onto flood plain.



WORKING ALONE: CHECKLIST

- PREPARATION
- IMPLEMENT REPORTING-IN PROCEDURE
- WEAR PROTECTIVE CLOTHING
- DO NOT RUSH
- NEVER ENTER CONFINED SPACES
- OBSERVE HYGIENE RULES
- WATCH FOR CHANGING CONDITIONS

WEIL'S DISEASE

INSTRUCTION TO CARD HOLDERS

1. As infection may enter through breaks in the skin ensure that any cut, scratch or abrasion is thoroughly cleansed and covered with a waterproof plaster.
2. Avoid rubbing your eyes, nose and mouth during work.
3. Clean protective clothing, footwear and equipment etc., after use.
5. Report all accidents and/or injuries however slight.
6. Keep your card with you at all times.



ENVIRONMENT
AGENCY

EMERGENCY HOTLINE 0800 80 70 60

24-hour free emergency telephone line for reporting all environmental incidents relating to air, land and water.