



Waterway Environment Handbook



**British
Waterways
Board**

FOREWORD

Quiet dignity, unassuming charm and appeal - these are qualities often attributed to our canals and rivers. They are qualities that have provided this country with an environmental asset of national significance.

Such attributes can be found in daring spectacular engineering structures - aqueducts, tunnels, locks - designed to convey navigable water where it has no right to be. Qualities too, found in the very fabric of the undertakings, in simple buildings and equipment, designed out of functional expediency to do a job and last.

Local characteristics have also, in turn, imparted their influence to establish a rich variety of colour, tradition and history, and as many of our waterways begin to serve a new industry - that of leisure - our attention is increasingly drawn, whatever our involvement, to the conservation of this fascinating appeal.

Whether, concerned with the normal maintenance of waterside structures, or the design and deployment of new amenity features, a whole range of attitudes towards design, colour and scale, can, within a series of constraints, allow the unique appeal of our waterways to flourish. By building in a consistency and order we can jointly prevent, perhaps, our waterways being devalued:

This is what this manual is about - in many cases all that is needed is a coat of paint, and these data sheets describe colours and locations - often so traditional as to be obvious to Waterways Staff and enthusiasts, but of value to other parties who share an interest and involvement in the waterway environment. Often, not only will an attractive result emerge, but also in presenting and efficient, well cared for undertaking, many of the pressures of vandalism and abuse will be avoided.

These loose leaf information sheets describe some basic attitudes; local needs and conditions may require a particular approach that cannot possibly be included specifically in such a document, and similarly at all times the managerial discretion of the Area Engineer will complement the basic information.

Although originally produced in 1972 for the Board's own purposes, the "Waterway Environment Handbook" suggests solutions to the wide range of environmental issues, often involving other parties. Because of this 'liaison' value, it has been widely circulated to most Waterside Local Authorities, Civic Societies, Canal/River Societies, the Boating Industry, to Universities, to Architectural Consultants and Planners.

Resources will always be a vital factor but if a well chosen simple design is adopted then it is likely to be in complete harmony with the straightforward characteristics of the waterway scene.

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ADDRESSES

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Church Road,
Watford WD1 3QA,
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For matters concerning AMENITY/DEVELOPMENT AND MANAGEMENT

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Amenity Services Manager (at Melbury House)

Amenity Development Officer (at Melbury House)

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For matters concerning the WATERWAY ENVIRONMENT

Please contact:

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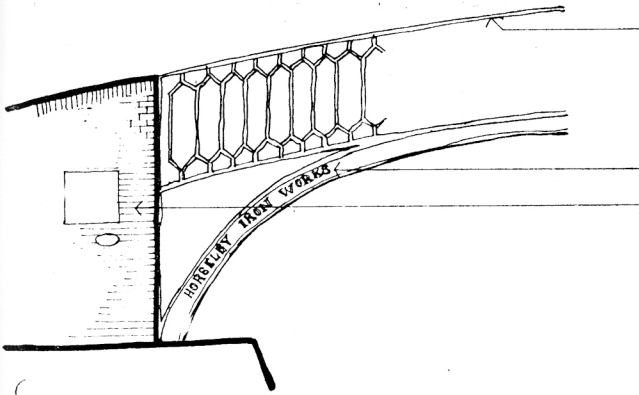
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FIXED BRIDGES 01A

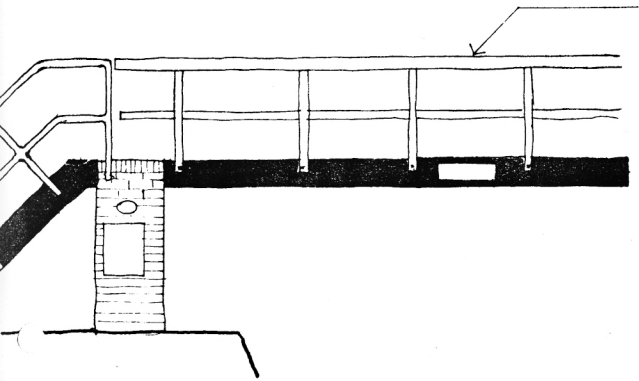


IRONWORK- Black, or
B.S. 10 C 59 (Python)

LETTERING- picked out
in white if expense
permits.

ABUTMENTS- if previous-
ly painted, paint
B.S. 08 B 15 (Magnolia)

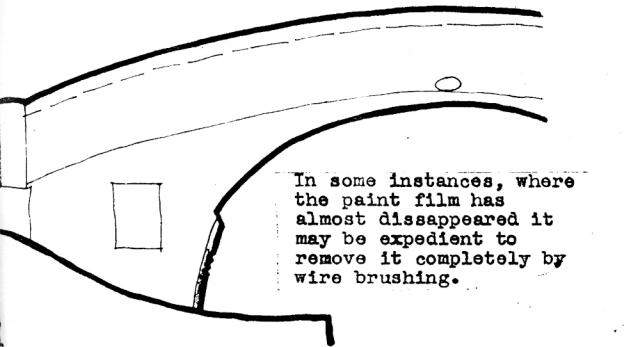
SIGNS- if essential
should be fixed to
abutments rather than
ironwork.



TIMBER BALUSTRADE-
white. Any metal fix-
ings or tie bars may
be painted black.

STRUCTURE- Black. A
white flash may be
painted in the centre
of the navigational
channel, if considered
necessary

SIGNS- if essential,
fixed to support or
abutment.



In some instances, where
the paint film has
almost dissappeared it
may be expedient to
remove it completely by
wire brushing.

MASONRY bridges that
have been previously
painted (this is not
recommended) or rendered-
paint: B.S. 08 B 15
Where it is traditional
to do so the
navigational arch may
be picked out in White.
Only 'Crown Stronghold'
or similar paint should
be used on masonry.

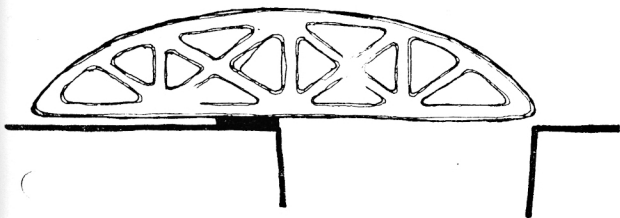
SIGNS- if essential,
fixed to one side of
bridge.

BRIDGE GUARDS where
they exist- paint black.

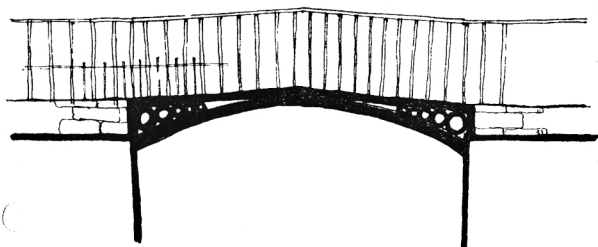
Where there is a built-
in STOP-PLANK STORE
paint door black.

FOOTBRIDGES 01B

BRIDGE NUMBERS- see 06B

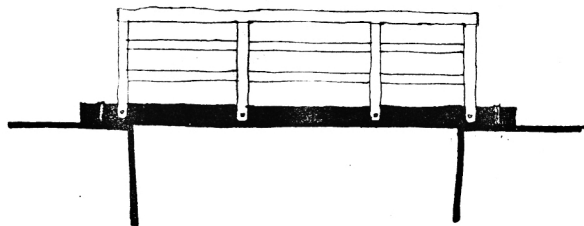


CAST IRON bridge-
paint whole bridge White
or Black or
B.S. 10 C 39 (Python)



BALUSTRADE- White.

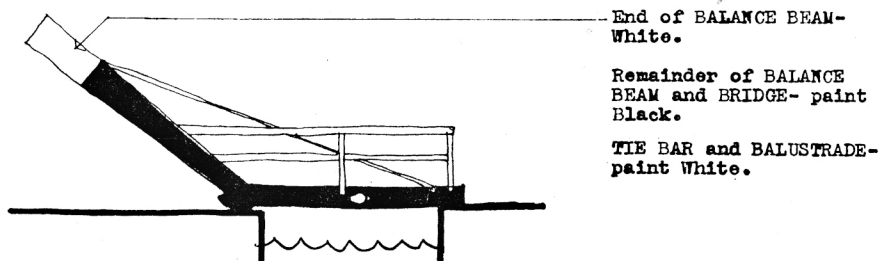
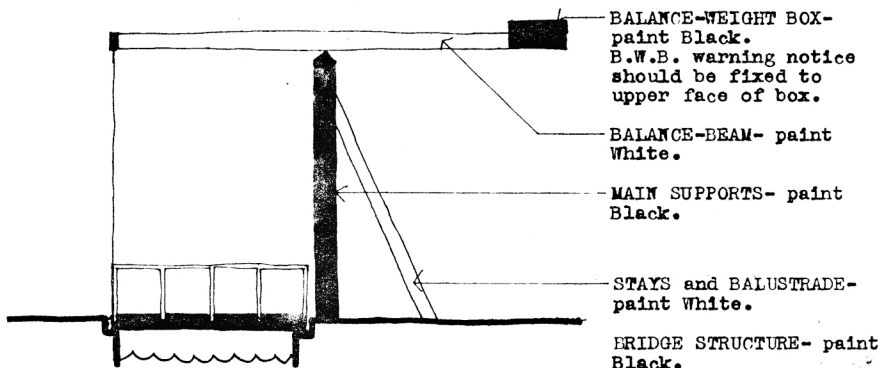
STRUCTURE- Black or
B.S. 10 C 39 (Python)



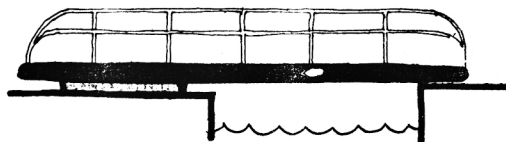
TIMBER BALUSTRADE-
white.

STRUCTURE- Black. A
white flash may be
painted in the centre
of the navigational
channel, if considered
necessary

MOVING BRIDGES 01C



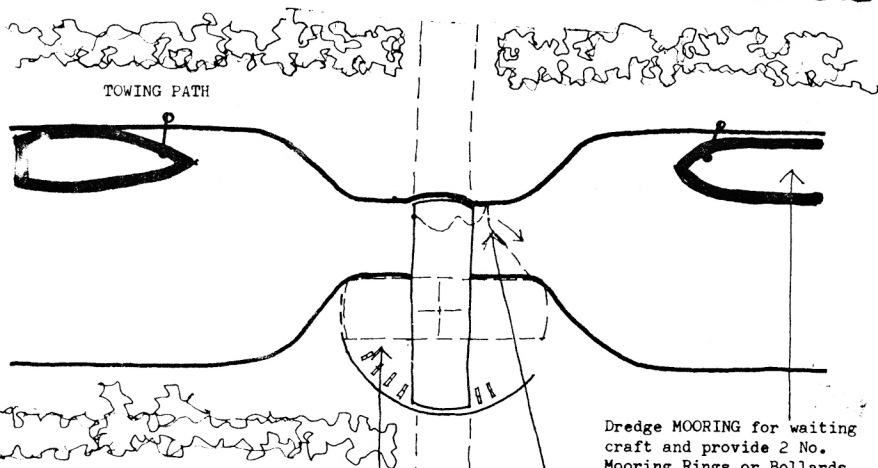
SIGNS, other than
official B.W.B. ones,
should not be fixed to
these bridges.



BALUSTRADE- White.
BRIDGE- Black.

BRIDGE NUMBERS- see 06B

SWING BRIDGES 01E



TOWING PATH

DENSE HEDGE PLANTING to form windshield for approaching boats.

Dredge MOORING for waiting craft and provide 2 No. Mooring Rings or Bollards See Sheet 04A

In rural areas where little use is made of the bridge it should be left open and a chain provided to close it when required, the chain being long enough to lie on the bed of the canal.

HARD SURFACING and possibly HEEL GRIPS to facilitate opening and closing.

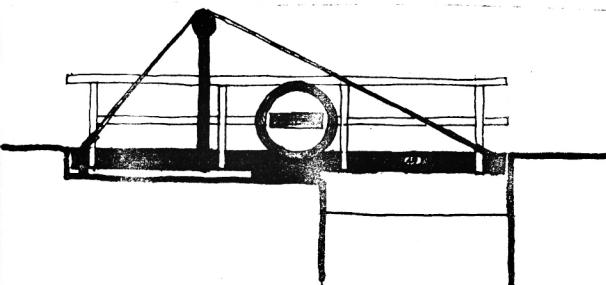
Where these bridges carry road traffic they should be provided with SAFETY BARRIERS that can be closed before the bridge is opened for boats.

TIMBER BALUSTRADE - paint white

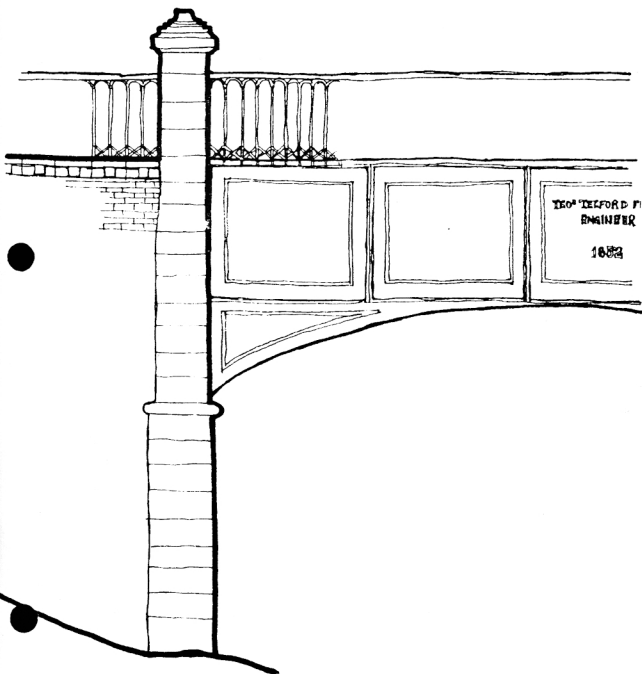
M.O.T. Prohibition SIGN in 'Dayglow' colours red and white, when on traffic route.

STRUCTURE - Black

BRIDGE NUMBERS - See 06B



AQUEDUCTS 02A

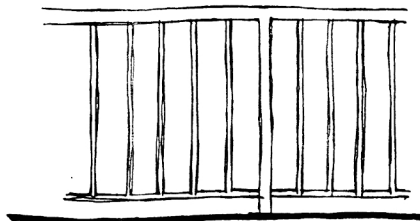


BALUSTRADES- White.

TROUGH and SUPPORTS-
Black. Any lettering
and raised mouldings
picked out in white.

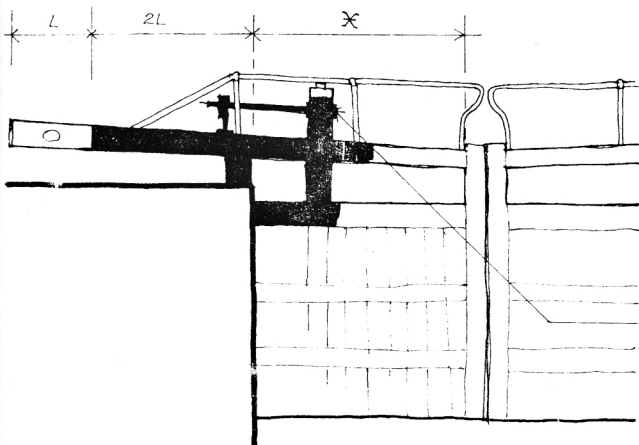
ABUTMENTS- unpainted.

SIGNS, if essential,
should be mounted as
far to one side of the
aqueduct as possible.



If BALUSTRADES need
replacing the ideal is
to conform to the
original pattern. When
this is not possible
the standard D.O.E.
bridge balustrade will
in most cases be
suitable.

LOCK GATES/GEAR 03A

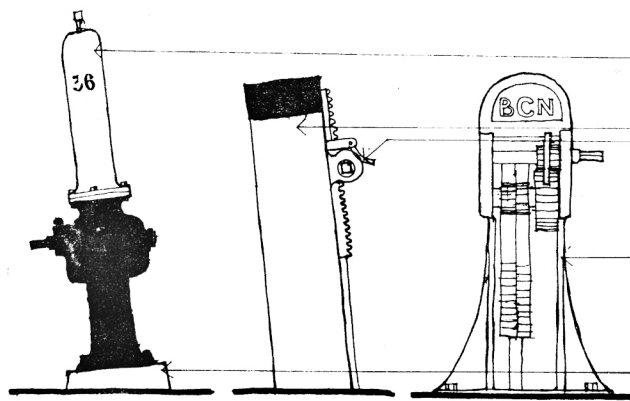


HANDRAILS- white.

BALANCE BEAM- black, with white end.
 * This part of the balance beam may alternatively be painted white, but other variations are not recommended.

GATE-PADDLE GEARING- black with white tip.

GATES- black.

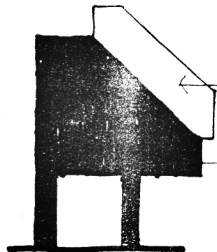


Black stencilled letters
 TOP CASING- white

SUPPORT- white
 PADDLE GEAR and this face of support- black.

ALL- black.

BASE- white.

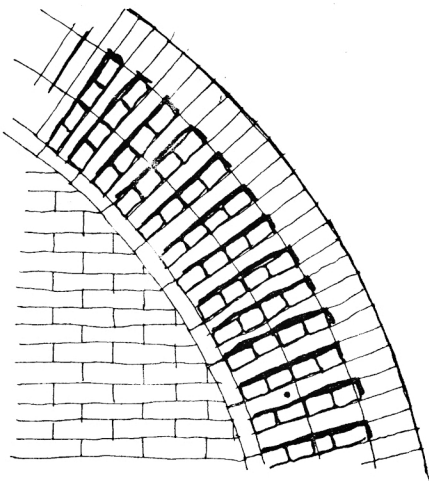


Lock Counter.

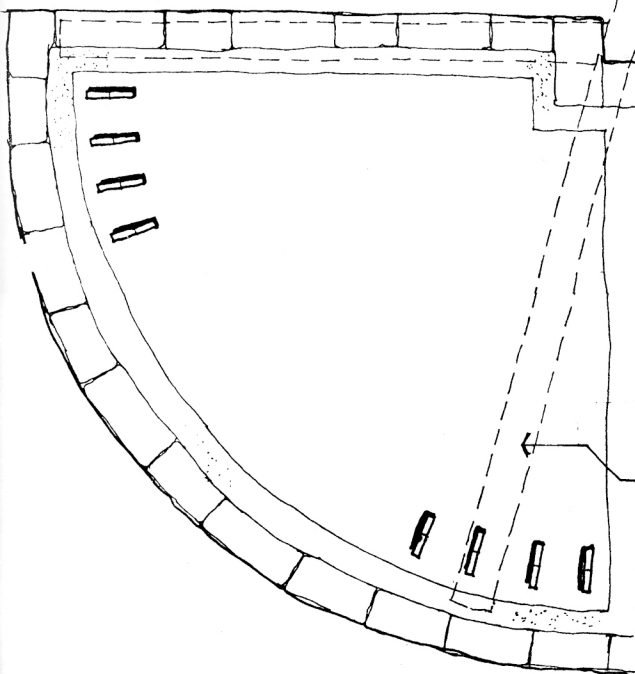
COVER- white.

BASE- black.

HEEL GRIPS 03B



Traditional brick paving under balance beams on the B.C.N. - still recommended if funds are available.

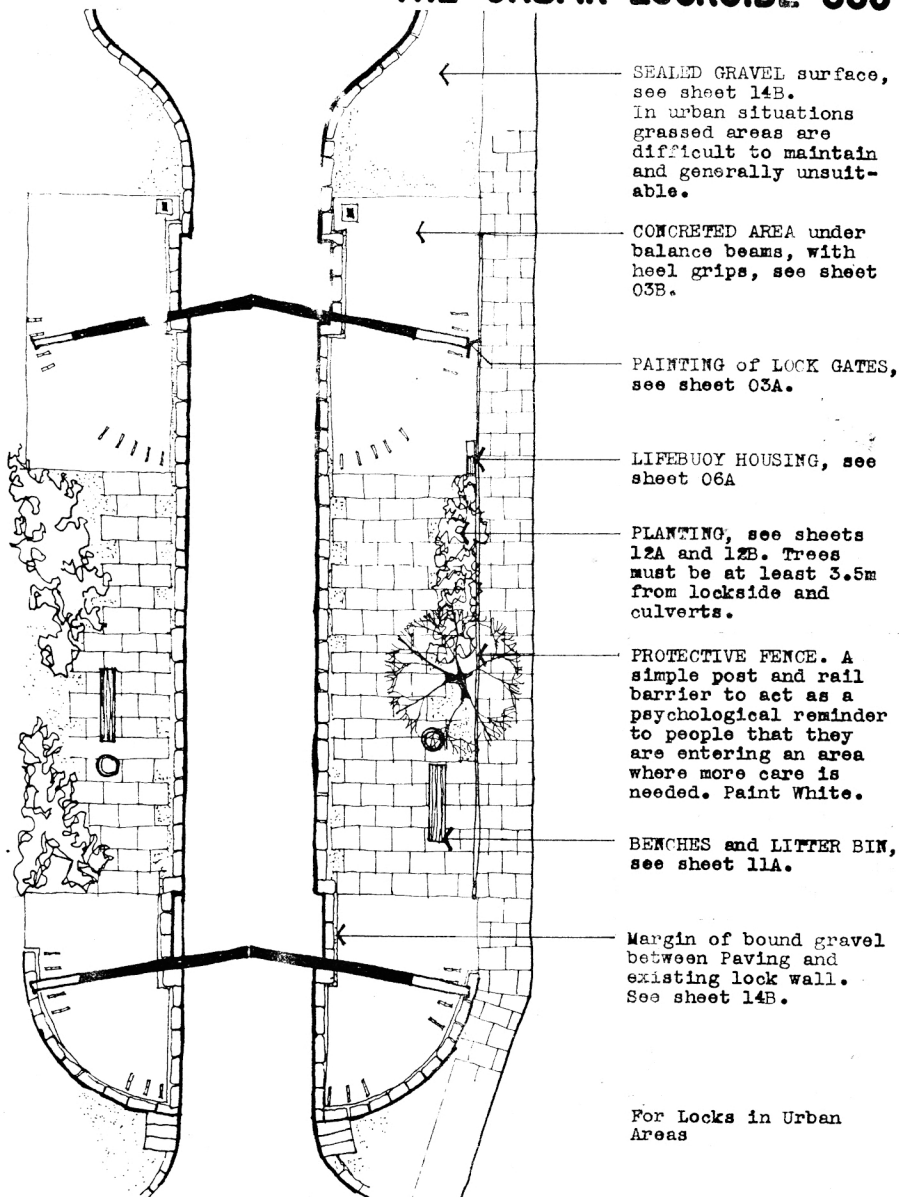


New concreted surface. Leave slightly ridged from the tamping board. Concreted area stops short of any existing stone or brick coping the margin being filled with bound gravel, see specification B on sheet 14B.

Balance beam over.

HEEL GRIPS of engineering bricks on edge, raised 25mm (1").

THE URBAN LOCKSIDE 03C



For Locks in Urban Areas

THE RURAL LOCKSIDE 03D

This sheet illustrates a range of possible improvements at Rural Locksides.

Avoid placing water points, refuse disposal points and the like where boats mooring to use them will be in the way of boats waiting to use the lock.

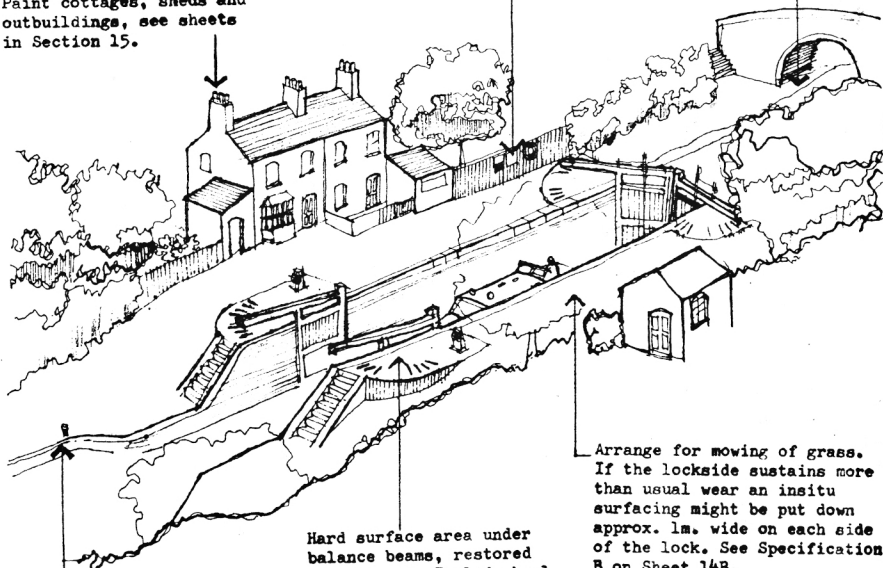
Screen any untidy areas, paint fences, See Sheet 05A.

Plant up to 6 No. advanced nursery stock trees.

Group notices neatly and avoid a "forest" of signs. See Sheets 06A and 06B.

Hard surface to towing path under bridge.

Paint cottages, sheds and outbuildings, see sheets in Section 15.



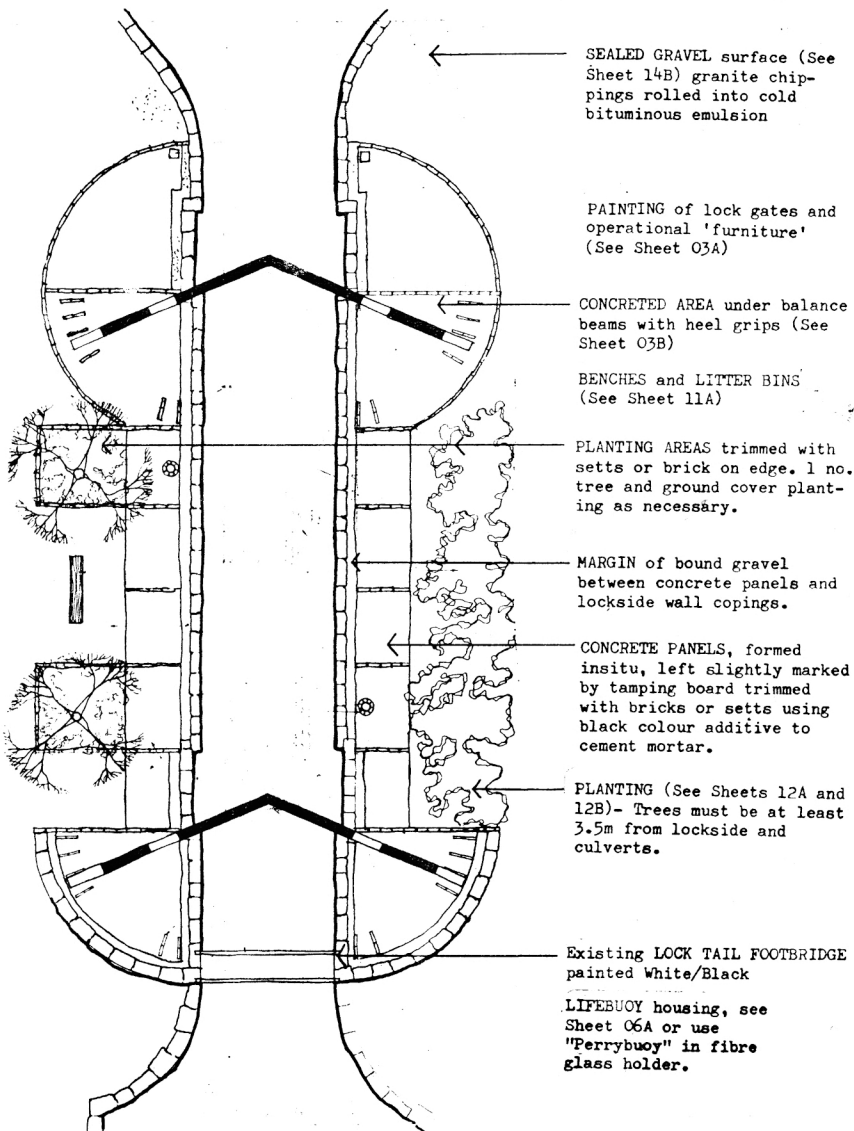
Bollards at lock landings
See Sheet 04A

Hard surface area under balance beams, restored or replaced. Include heel grips if possible. See Sheet 03B.

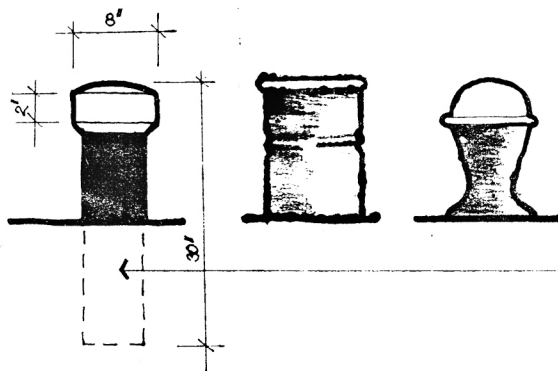
Arrange for mowing of grass. If the lockside sustains more than usual wear an insitu surfacing might be put down approx. 1m. wide on each side of the lock. See Specification B on Sheet 14B.

Painting of Lock gates,
See Sheet 03A.

THE URBAN LOCKSIDE (WIDE CANAL) O3F

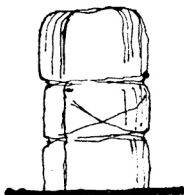


MOORING RINGS/BOLLARDS 04A

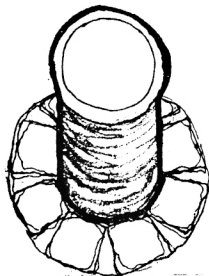
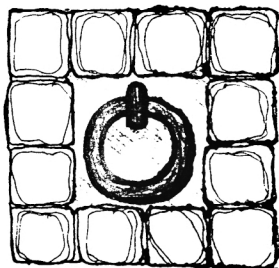


REINFORCED CONCRETE
BOLLARDS,
CAST IRON BOLLARDS,
STEM- Black
CAP- White

This design could be adopted as a standard for new bollards, whether in reinforced concrete or cast iron.



TIMBER BOLLARDS- if previously painted, paint white.

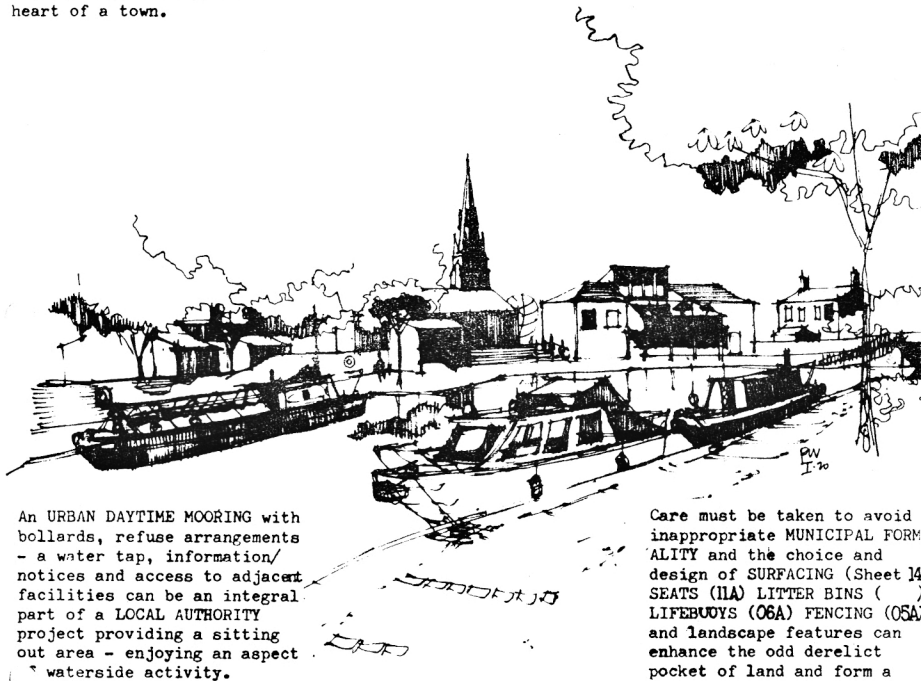


Mooring rings should be sunk flush with ground surface.

Where a bollard or mooring ring is to be set in a new concreted area it is recommended that granite setts be used as a trim. Whenever possible existing cast iron bollards should be re-used for this work.

URBAN DAYTIME MOORINGS 04B

The needs of the waterway user can often be combined with those of the local community to provide a WATERSIDE FEATURE in the heart of a town.



An URBAN DAYTIME MOORING with bollards, refuse arrangements - a water tap, information/ notices and access to adjacent facilities can be an integral part of a LOCAL AUTHORITY project providing a sitting out area - enjoying an aspect of waterside activity.

Care must be taken to avoid inappropriate MUNICIPAL FORMALITY and the choice and design of SURFACING (Sheet 14 SEATS (11A) LITTER BINS () LIFEBOUYS (06A) FENCING (05A) and landscape features can enhance the odd derelict pocket of land and form a canal 'waterfront' or "town wharf" of charm and appeal

Moorings must be placed so as not to cause any hazard to navigation (i.e. near a 'bridge hole' or on the outside of a bend - in the channel) and the Area Engineer will advise on this matter.

Administration/security and management suggest that an "offside" location, as distinct from towing path side is often more satisfactory.

OVERNIGHT RURAL MOORINGS 04C

PUBLIC HOUSE

TO VILLAGE SHOPS/FACILITIES

Sites are to be preferably selected for reasons of ASPECT/SECLUSION and located so as NOT to cause a hazard to normal navigation.

New access RAMP and/or STEPS should be detailed as to sympathise with rural situations (i.e. railway sleeper risers or ramp "strips", with gravel steps/panels.

If possible WATER and REFUSE arrangements should be included with close ACCESS to village facilities or waterside public house.

Pockets of OFFSIDE estate perhaps offer the most ideal situations the site being close to an access road and extending for say a maximum of 4 craft in length (60 - 70m.)

Where towing path PLANTING is possible say 2 trees to "frame" view.

Edge of canal (preferably piled already) but DREDGED to afford wharfside mooring.

Small REFUSE COLLECTION compound/close boarded screen, handstanding and roof.
Sheet 07B

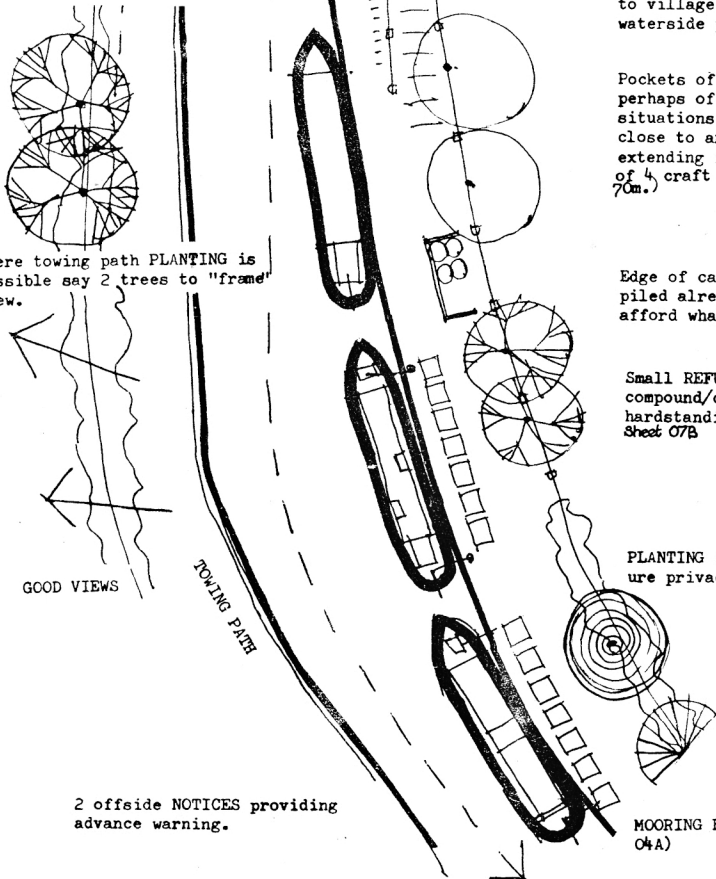
PLANTING for shelter/enclosure privacy.

GOOD VIEWS

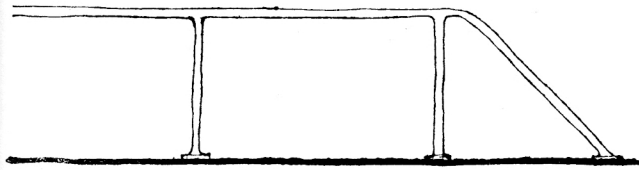
TOWING PATH

2 offside NOTICES providing advance warning.

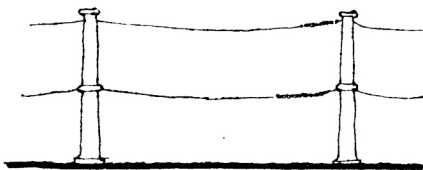
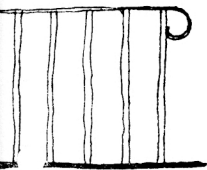
MOORING BOLLARDS (See Sheet 04A)



FENCES 05A



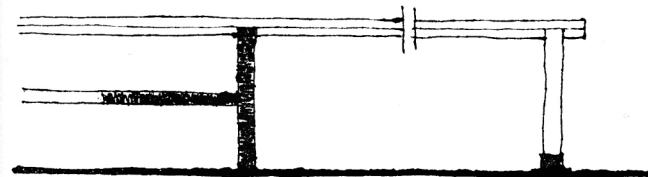
PROTECTIVE FENCING-
paint White. New
fences between canal
and towing path should
preferably have lead-
ing and trailing
edges as shown.



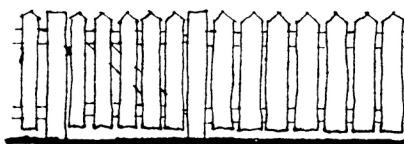
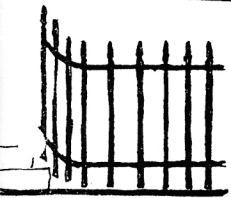
CAST IRON RAILINGS-
paint all black or all
white.

POST AND CHAIN
FENCING- paint White.

CHAIN-LINK FENCING-
see 05B

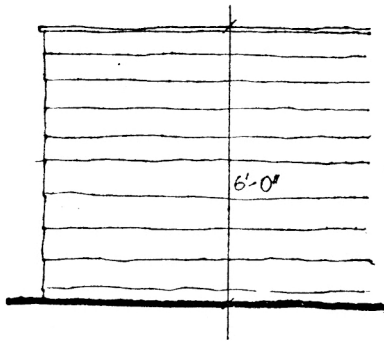
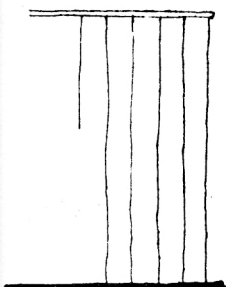


POST AND RAIL FENCING-
Top Rail- White.
Posts- Black, or, if
housed in a metal foot,
paint timber white and
metal black.
Paint any additional
rail black.



CAST IRON RAILINGS
outside buildings-
paint Black.

PALING FENCES outside
cottages paint white.



SCREEN FENCES may be
made from lapped
boards on 4"x4" up-
rights and creosoted.

Existing Screen
Fences, if previously
painted, paint Black
or B.S.-
10 C 39 (Python) or
08 B 29 (Donkey) or
10 B 25 (Turtle).

Corrugated Iron used
as fencing (not
recommended) should be
painted Black.

YARD ENTRANCES 05B

TIMBER ENTRANCE GATES-

paint Black or B.S.

- 10 C 39 (Python)
- 08 B 29 (Donkey)
- 06 C 39 (Chestnut)
- 04 B 25 (Leather)
- 08 B 25 (Beaver)

TIMBER GATE POSTS,
where they exist-
paint white.

SIGN mounted just over
top of wire.

GATE POSTS, METAL GATES,
and MESH- Black.

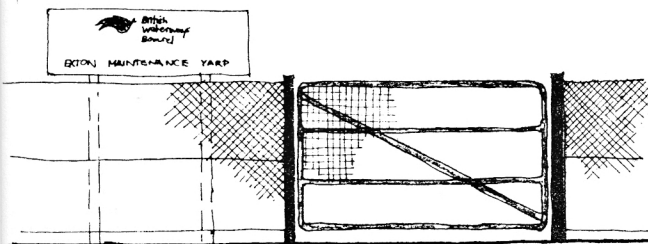
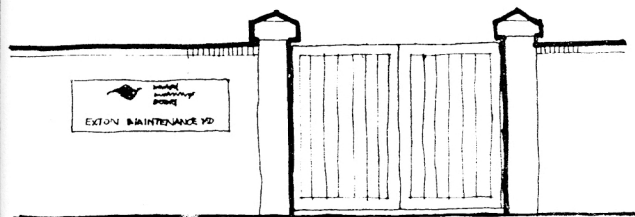
WIRE MESH FENCE-
galvanised or prefer-
ably black plastic
coated. (Green not
recommended)

This type of fence is
only suitable for use
in rural areas, where
climbing plants can
soften its impact.

FENCE POSTS, if painted
and Posts to SIGN-
Black.

ORNAMENTAL IRON GATES-
paint black.

The YARD SIGN need not
necessarily be
adjacent to the gates.
If mounted on a build-
ing it should be lined
up with any existing
windows or doors.



NOTICE BOARDS/EQUIPMENT 06A

Generally notice boards, life-buoy stands, and the like should be fixed to walls and fences rather than being free standing on their own posts. To prevent damp penetration notices should be fixed on battens with approx. 50mm gap between wall and notice.

Where a number of notices are to be fixed to a wall they should, as far as possible, be grouped together and arranged to line with existing features such as windows and doors.

STOPPAGE NOTICE and INFORMATION BOARD- paint black outside and white inside.

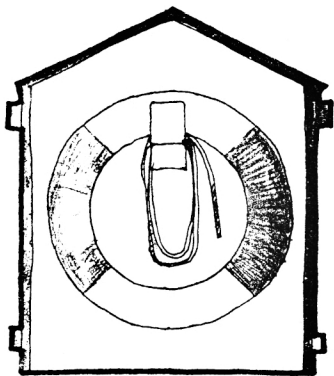
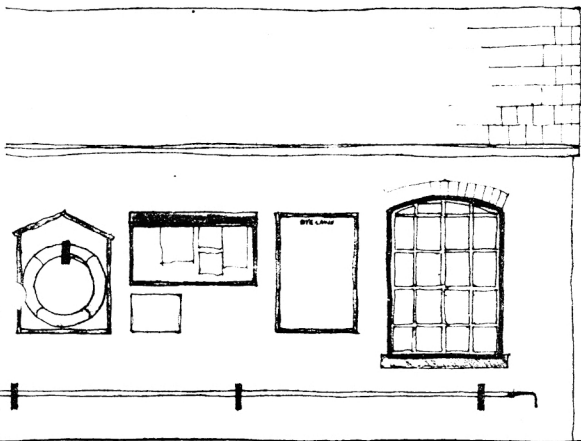
BYE-LAWS and similar notices- paint frame black.

KEB/RAKES, where possible, should be bracketed to buildings, Paint shaft white, head and brackets black. When there is an independent stand paint black.

LIFE-BUOY HOUSINGS- paint black outside and white inside.

LIFE-BUOYS- paint in quadrants, white and signal red.

Remove unwanted notices and signs unless they are of historical interest.

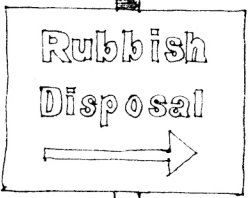
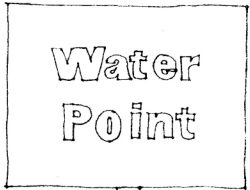


SIGNS 06B

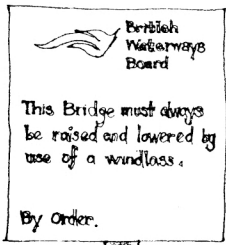


BRIDGE NUMBERS- on a light background- raised edge and characters- Black. ground- White.

On a dark background- raised edge and characters- White, ground- Black.



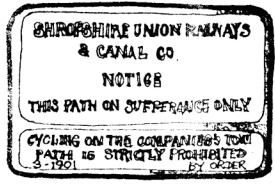
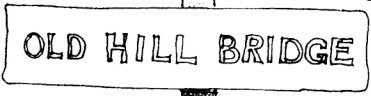
All NEW NOTICES should be in accordance with British Waterways Board's Code of Practice, 1970, Signs and Notice Boards.



Whenever possible signs and notice boards should be fixed directly to walls and not on a post.

When posts are used they should be painted black.

When two notices are to be erected close to one another put both of them on the same post.



Time and expense permitting, old CAST IRON NOTICES, MILE POSTS, and the like should be painted up in black and white. In some circumstances this might be done in association with a local industrial archaeology society or other voluntary group, at the discretion of the Area Engineer.

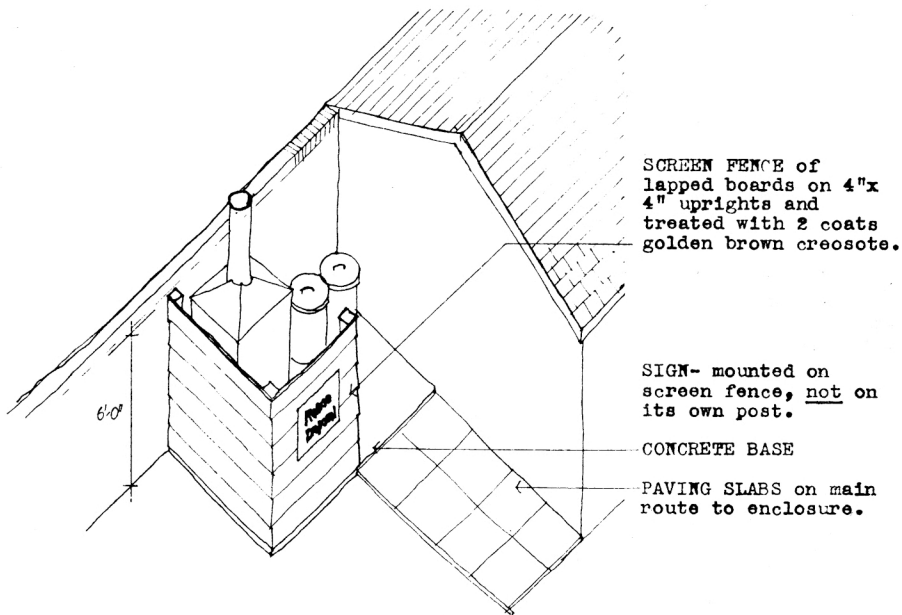
DUSTBINS/INCINERATORS 07A

Many waterside sites are marred by unsightly collections of dustbins and rusting incinerators and it is suggested that wherever possible they be screened. Often an existing structure, for example part of an open store, could be used for this and many of the new chemical-toilet disposal stations incorporate an enclosure for dustbins.

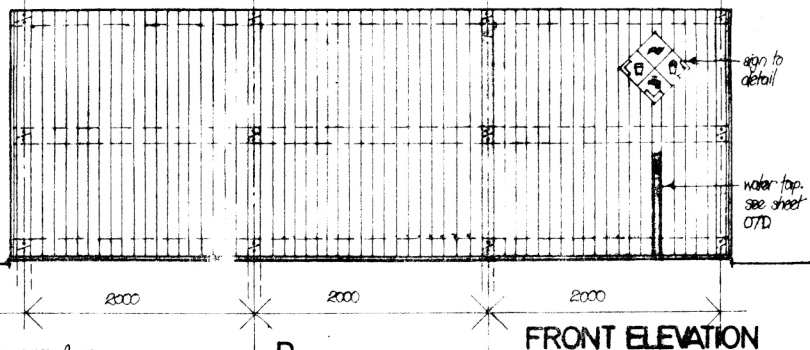
Individual sites will present different opportunities but generally it may be said that dustbins need not be sited right at the water's edge and from a visual point of view it is often better that they are not. The new B.W.B. signs can be used to direct people to locations hidden behind walls or buildings.

When they cannot be hidden dustbins and incinerators should always be painted black, (incinerators with heat-resistant paint) never blue.

Heavy rubber lids are more likely to stay on than metal ones.

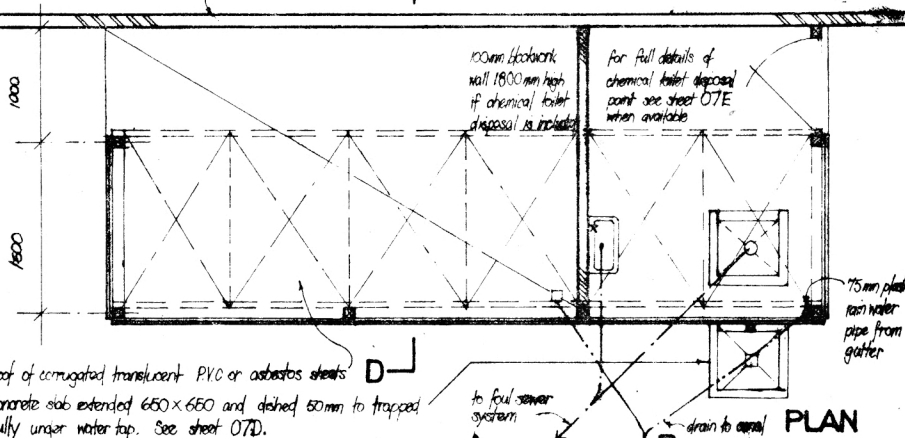


SCREENING FOR DUSTBINS 07/B



string wall or screen fence

D



roof of corrugated translucent PVC or asbestos sheets
concrete slab extended 650 x 650 and dished 50mm to trapped gully under water tap. See sheet 07D.

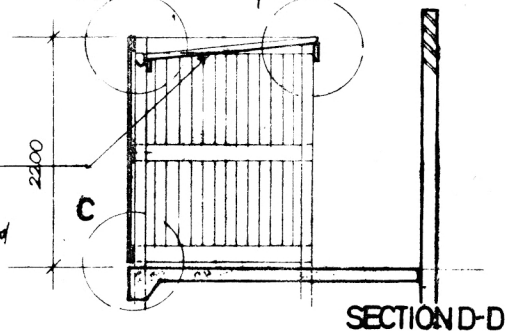
Screening can be 2m, 4m or 6m long according to need. In some circumstances the unit could be adapted to include a chemical toilet disposal hopper and hand-basin as shown.

Not to scale. All dimensions in millimetres

N.B. If more than one bay is proposed roof must slope in opposite direction to allow through run for gutter.

100mm concrete slab, on 150mm hardcore, laid to fall to trapped gully.

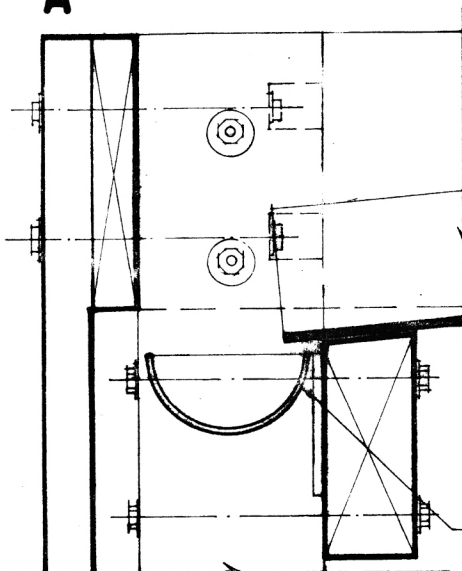
See details on separate sheet.



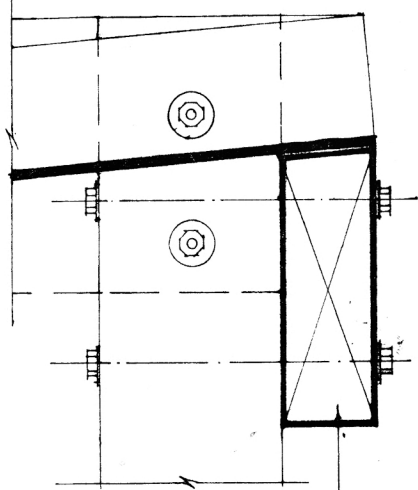
SCREENING FOR DUSTBINS

Details, to be read with sheet 07B

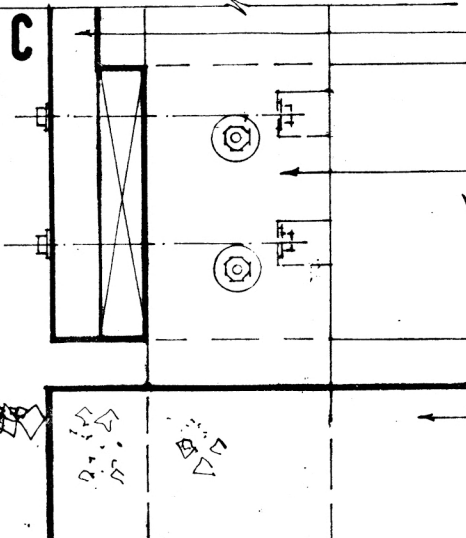
A



B



C



75mm plastics gutter.
50x150 beam (increase depth for longer span) bolted to uprights supporting corrugated translucent PVC or asbestos sheeting fixed in accordance with manufacturer's instr.

25x100 sawn boards nailed to 25x150 cross members. These panels may be prefabricated in workshop and bolted to uprights on site.

100x100 6mm posts 2800 long, bedded in concrete at 2000 centres.

N.B. If more than one bay is proposed roof must slope in opposite direction to allow through run for gutter.

25mm gap at base

100mm concrete slab on 150mm well consolidated hardcore, laid to fall to trapped gully.

All dimensions in mm.

SCALE 1:25

Wall of building

Sign "Water Point" to B.W.B. Code of Practice, Signs and notice boards 1970.

75 mm o.d. steel tube with cap and steel plate, welded to base to prevent extraction, drilled at front and back, front to receive bib-cock, rear hole to assist assembly. Paint post black. If sign is not required usec shorted post and weld on cap.

700

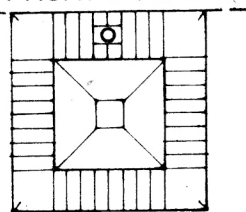
hose union welded on.

For siting of Water Points see second sheet.

800

229 bullnose engineering brick on edge kerb with black Cementone additive to mortar, on 230 thick concrete slab dished 60 mm to trapped gully with 75 mm drain discharging to canal below water level.

FRONT ELEVATION



600

PLAN

SECTION 1:10

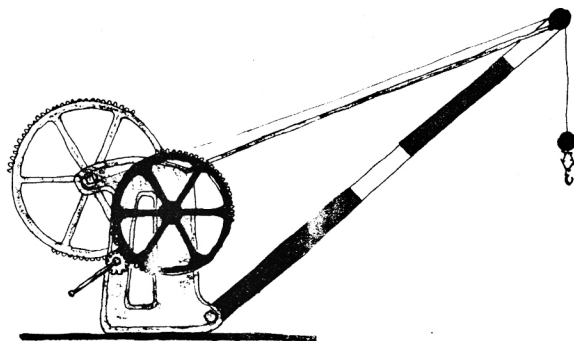
150 well consolidated hardcore and blinding.

Water supply with stop cock, (to allow the stand pipe to be drained in winter,) at convenient location.

Where the drain discharges directly into the canal a trap is not required.

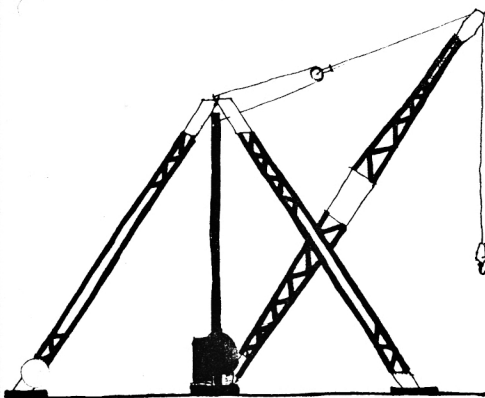
All dimensions in mm.

YARD CRANES 09A



TIE BARS and JIB- Black, except for white section at head and mid-span.

REMAINDER- Black.

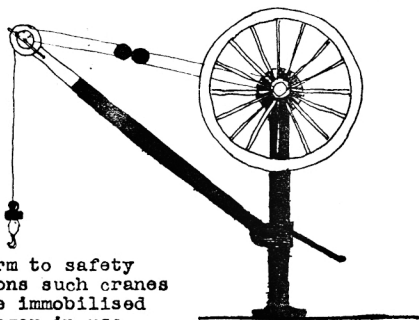


JIB- Black with white at head and mid-span. or all White.

CENTRE POST, MOTOR/GEAR HOUSING, any CAB-paint black.

STAYS- Black with white head and foot.

In the case of very large derricks other colouring may be required to conform to safety regulations.



To conform to safety regulations such cranes should be immobilised if no longer in use.

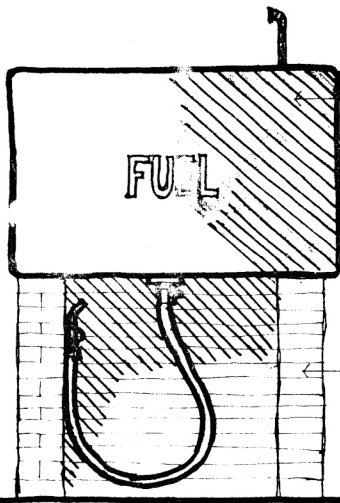
This type of crane, even if no longer in use, is an important item of canal archaeology and should be preserved whenever possible.

JIB- Black with White head.

LARGE WHEEL- White.

POST- Black.

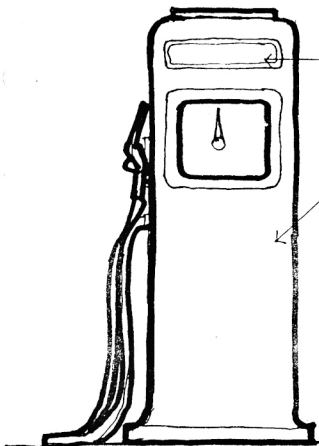
FUEL TANKS/PUMPS 10A



FUEL TANKS- paint Black.
White Lettering.

MASONRY SUPPORTS-
unpainted. If previous-
ly painted, paint
B.S. 10 C 39 (Python)

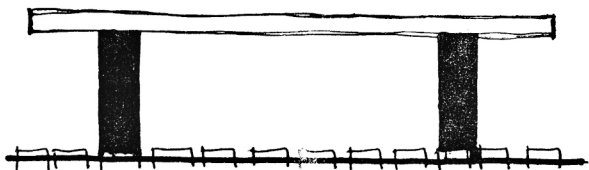
FUEL PUMPS of all kinds.



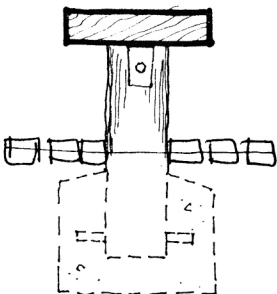
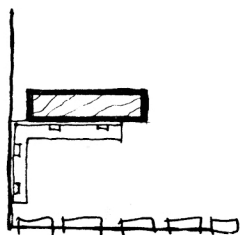
PANELS- White.

BODY- B.S. 08 C 37
(Autumn) or
B.S. 10 B 21 (Lizard)

CANALSIDE BENCHES 11A

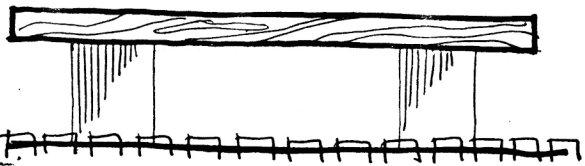
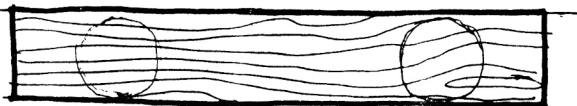


TRADITIONAL LOCKSIDE BENCH,
SEAT- White,
SUPPORTS- Black,
or all Black.



VANDAL-PROOF BENCHES
for canalside walks can
be made from solid
balks of timber, secure-
ly cantilevered from
walls or on solid legs
set in concrete, with
pin to prevent extract-
ion. Finish with
'Presotim' or other
suitable preservative.

The area under and
around benches should
be surfaced with setts
or paving slabs.



ALTERNATIVE

SEAT BENCH made from
'STOP PLANKS' or railway
sleepers, supported on
TELEGRAPH pole supports,
set in concrete and
trimmed as bollards
(See Sheet 04A)

WATERSIDE PLANTING 12

INTRODUCTION

The following list of tree species suitable for waterside landscaping has been jointly prepared by the British Waterways Board and the Department of the Environment's Landscape Consultants, after consultation with the Royal Botanic Gardens at Kew.

The data sheets contain a general outline only, and for the detailed requirements of a particular location, more specific information should be sought from a nurseryman or landscape architect, so that a 'harmony' can be achieved with existing local landscape, man made and natural features.

Damage to the fabric of the waterway, lock walls, etc., MUST BE AVOIDED and the minimum dimension, for mature planting, should be approximately 3.5m. (or 12' 0") from the water's edge. This is because of operational necessity; (i.e. along towing paths and lockside areas where clear access is required), but also because DAMAGE FROM WATER-SEEKING roots must be strictly AVOIDED.

Trees can sometimes present a navigational hazard by falling across the canal, slipping into it, or blowing over and taking part of the canal bank with them. Each proposal/location has to be judged on its merits (i.e. tree planting on canal embankments can often include larger trees at the base of the structure whilst shrubs and cover can be introduced towards the top). Technical advice, common sense, and a close liaison with the appropriate Area Engineer are essential for a successful waterside landscape scheme.

Mostly native British species have been included and the use of 'exotics' is discouraged as being inappropriate to the waterside scene. Ornamental varieties such as 'flowering cherries' and the wholesale introduction of weeping willows are often 'foreign', over delicate, INTRUSIONS into the otherwise strong straightforward simplicity of the waterside environment.

TREE PLANTING 12A

LIST OF SUITABLE SPECIES

Sheet No. 1 of 2

Before adopting a detailed selection towards a landscape scheme, please read introductory notes WATERSIDE PLANTING 12 (INTRODUCTION)

<u>Proper Name</u>	<u>Common Name</u>	<u>Height</u> ft.	<u>Spread</u>	<u>Remarks</u>
Acer campestre	Field Maple	36	30	Colours clear yellow, sometimes flushed red on heavy soils in autumn.
Acer platinoides	Norway Maple	70	50	Early flowering. In autumn the foliage turns a clear yellow.
Acer platinoides 'Schwedleri'	Norway Maple (Cultivar)	60	40	The purple form of Norway Maple. Do not use too many as the purple colouring will be too heavy; just a group here and there.
Acer pseudoplatanus 'Brilliantissimum'	Sycamore (Cultivar)	60	40	Again use one here and there. Leaves in spring a shrimp pink which changes to pale yellow-green finally green.
Aesculus x carnea 'Briotii'	Red Horse Chestnut	35	25	Late spring and early summer flowers, thrives in any soil. Use one here and there.
Alnus glutinosa	Common Alder	50	30	Will grow in extremely wet positions, likes strong loams and heavy soils but is adaptable. Can be grown as a tree with three or four trunks springing from ground level so as to reduce height. Should not be lopped and trees should be properly trained.
Alnus glutinosa 'Aurea'	Common Alder (Cultivar)	50	30	Leaves pale yellow, particularly noticeable in spring and early summer. Use one here and there.
Alnus incana	Grey Alder	60	30	Ideal for cold and wet ground and situations.
Alnus incana 'Aurea'	Grey Alder	60	30	This cultivar has the young shoots and yellow foliage, and catkins conspicuously red-tinted. One here and there.
Betula Pendula	Silver Birch	60	25	Likes dry situations such as light sandy loam, prefers acid or neutral rather than alkaline soils. A British tree.
Taxodium distichum	Deciduous Cypress	50	25	Can be grown in water logged conditions. Green shoots in spring, bronze yellow in autumn.

TREE PLANTING 12A

LIST OF SUITABLE SPECIES

Sheet No. 2 of 2

Before adopting a detailed selection towards a landscape scheme, please read introductory notes WATERSIDE PLANTING 12 (INTRODUCTION)

<u>Proper Name</u>	<u>Common Name</u>	<u>Height</u> ft.	<u>Spread</u>	<u>Remarks</u>
Betula pubescens	Common White	60	25	Likes wet situations. A British tree.
Carpinus betulus	Hornbeam	60	60	Tolerant of a large range of soils at best on silt or gravel overlying heavy sub soil or shallow soil over chalk. Coppiced would be ideal. British.
Castanea sativa	Spanish or Sweet Chestnut	70	60	Needs well drained sandy soil. Coppiced would be ideal. Non British but has been accepted.
Corylus avellana	Hazel	15	10	Nothing is better when coppiced. A native species.
Crataegus monogyna	Common Hawthorn	30	20	Tolerant of both dryness and excessive moisture;
Crataegus oxycantha	Hawthorn	30	20	Flowers in May. Both the above are British species, but although subject to Fireblight disease are very useful.
Populus tremula	Aspen	40	20	A British species thriving in all types of soil even when wet or boggy. Should not be planted near buildings.
Prunus avium	Wild Cherry	50	30	A British species which thrives on alkaline soils of fairly open texture but very tolerant of other soils.
Robinia pseudoacacia	False Acacia	70	40	Light poor soils. Useful for holding up sandy banks.
Pterocarya x rehderana	Wing Nut	70	40	A hardy fast growing tree tolerant of all types of soils. Useful for growing near water as roots form a binder for banks.
Salix caprea	Goat willow)	40	30	May be grown on loamy soils and flourish in damp situations. Should not be grown near buildings. British subjects.
Salix cinerea	Grey Sallow)			
Salix pentandra	Bay willow)			
Salix viminalis	Common Osier)			
Metasequoia glyptostroboides	Dawn Redwood	-	-	A deciduous conifer, strong growing and vigorous. Green in summer, tawny pink in autumn. Thrives best in moist but well drained conditions.

SHRUB PLANTING 12B

LIST OF SUITABLE SPECIES

Sheet No. 1 of 2

Before adopting a detailed selection towards a landscape scheme, please read introductory notes WATERSIDE PLANTING 12 (INTRODUCTION)

<u>Proper Name</u>	<u>Common Name</u>	<u>Remarks</u>
Berberis x stenophylla	Barberry	Useful in any soil provided it is not water logged. Evergreen and can make a thicket. Yellow flowers in autumn. Non British.
Berberis vulgaris	Common Barberry	A medium size shrub producing bright red translucent berries. British.
Berberis vulgaris 'Atropurpurea'	Purple-leaf Barberry	A few here and there.
Caragana arborescens	Caragana	A small shrubby tree which is tough and succeeds in the most exposed areas on all types of soil. Flowers yellow. Non British.
Colutea arborescens	Bladder Senna	A vigorous bush often naturalised on railway embankments. Flowers yellow. British.
Cornus alba 'Siberica'	Red barked Dogwood	Non British; but a bold clump here and there gives colour especially if hard pruned every other year in March.
Cytisus scoparius	Common Broom	Does best in neutral soil, will not succeed for long on poor shallow, chalky soils, nor in <u>extremely</u> acid soils. A sun lover and light demander.
Hydrangea 'Hortensia' Cultivars	-	Useful for seaside planting. Many different colours, red/pink/purple. 'Joseph Banks' which has large cream heads turning to pale pink or blue a useful plant.
Lonicera involucrata (Ledebourii)	Shrubby honeysuckle	Cultivated in any soil. Vigorous spreading shrub with yellow flowers.
Pernettya mucronata	-	Develop marble-like berries and like full sun. Acid soil essential.
Potentilla fruticosa	-	Thrive in any soil, in sun or partial shade. Has yellow flowers from May to September. Many cultivars.

SHRUB PLANTING 12 B

Sheet No. 2 of 2

LIST OF SUITABLE SPECIES

Before adopting a detailed selection towards a landscape scheme, please read introductory notes WATERSIDE PLANTING 12 (INTRODUCTION)

<u>Proper Name</u>	<u>Common Name</u>	<u>Remarks</u>
Alix alba 'Vitellina'	Golden Willow	Conspicuous in winter especially if branches are cut down annually or pruned severely every other year to give colour.
Alix purpurea	Purple Osier	A medium to large size shrub with long shoots. British.
Salix elaeagnos (Rosmarinifolia)	Hoary Willow	Medium to large size shrub of dense bushy habit. Attractive leaves.
Ulex europaeus	Common Gorse Furze (Whin)	Valuable for covering dry banks. Chrome-yellow flowers from March to May. British
Genista hispanica	Spanish Gorse	Useful for sunny sites dry banks. Flowers May/June. Good planted in thick groups.
Genista sagittalis	Arrow broom	Good for dry banks but not always effective. Experiment.
Mahonia aquifolium	Oregon Grape	Likes sun or shade and should be planted in bold groups. Rich yellow flowers.
Sambucus nigra	Common Elder	A native shrub with cream flowers which then turn to black fruits. Useful plant for chalky sites.
Amelanchier canadensis	Snowy Mespilus	Thrive in moist well drained lime-free soils. A medium or large size shrub which suckers. Very attractive foliage
Rosa rugosa	Ramanas Rose	A perpetual flowering shrub with purplish-rose flowers. Forms dense thickets because of its suckering habit. Useful for coastal planting.
Salix alba 'Chermesina'	Scarlet Willow	Conspicuous in winter especially if branches are cut down annually or pruned severely every other year to give colour.

GROUND COVER PLANTING 12C

Sheet No. 1 of 2

LIST OF SUITABLE SPECIES

Before adopting a detailed selection towards a landscape scheme, please read introductory notes WATERSIDE PLANTING 12 (INTRODUCTION)

<u>Proper Name</u>	<u>Common Name</u>	<u>Remarks</u>
<i>Calluna vulgaris</i>	"Heather" or "Ling"	This is ideal for steep banks or acid soil. Happy in full sun. a great number of forms are cultivated in gardens, varying in colour of flower, and foliage, time of flowering or habit.
<i>Cotoneaster congestus</i>	Cotoneaster	Non British. Tolerant of all soils and conditions. A dense habited creeping evergreen forming a series of molehill-like mounds of small bluish green leaves. Fruits red.
<i>Cotoneaster microphyllus</i>	"	Dwarf glossy green evergreen with scarlet fruits.
<i>Cotoneaster rotundifolius</i>	"	A semi prostrate species with long arching branches.
<i>Cotoneaster rotundifolius lanata</i>	"	Long arching semi prostrate branches extend for many feet. Taller than other above.
<i>Erica</i>	Heath	Generally lime-hating and thrive best in acid soils of a sandy nature. Best in full sun. Flower for most months in the year. The undermentioned are easy to grow.
<i>Erica carnea</i> 'Springwood White'	-	Flowers January/March
<i>Erica x darleyensis</i> 'Silberschmelze'	-	A good winter white, flowers from January until April.
<i>Erica vagans</i> numerous cultivars	-	The Cornish Heath flowering during August and September Mrs. D F Maxwell with flowers of deep rose-cerise and Lyonesse, a pure white, are good plants.

N.B. Wherever possible canal-side verge and hedgerow wild flowers, plants etc., should be conserved as they form such a distinctive part of the rural waterside scene.

GROUND COVER PLANTING 12C

Sheet No. 2 of 2

LIST OF SUITABLE SPECIES

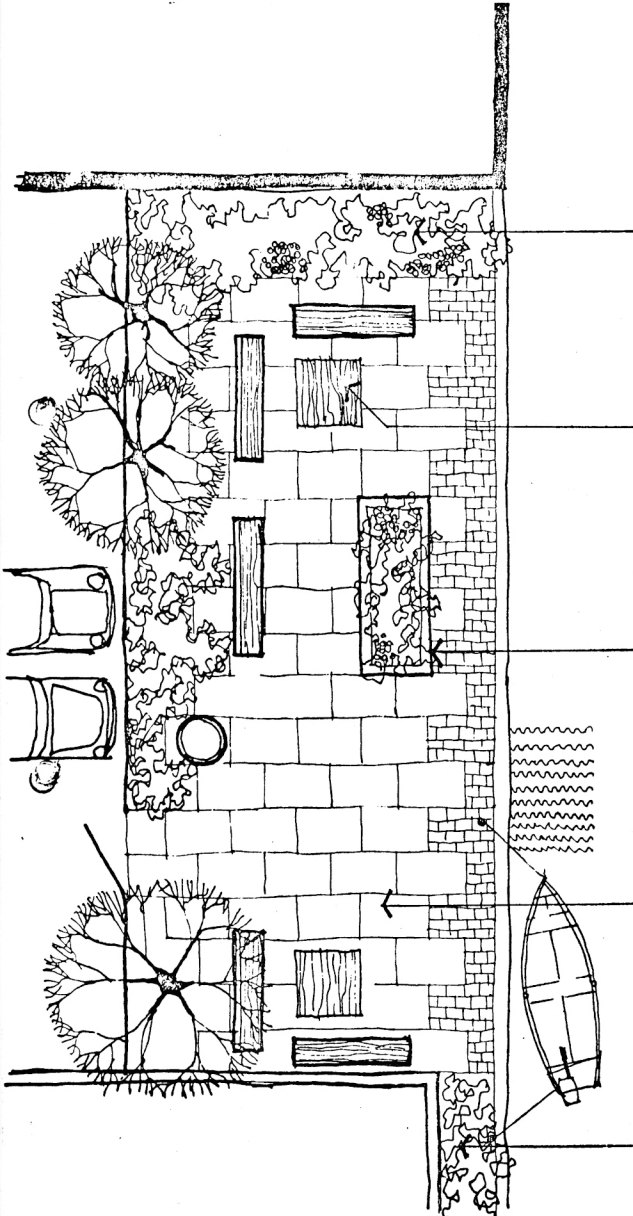
Before adopting a detailed selection towards a landscape scheme, please read introductory notes WATERSIDE PLANTING 12 (INTRODUCTION)

<u>Proper Name</u>	<u>Common Name</u>	<u>Remarks</u>
<i>Lonicera pileata</i>	"Shrubby honeysuckle"	A dwarf semi-evergreen useful for under planting and in shade. Pretty spring growth.
<i>Pacysandra terminalis</i>	-	Useful in moist, shaded sites. Do not like shallow chalk soils.
<i>Ulex major</i>	Gorse	Dwarf with flowers half size of <i>europaeus</i> . Must have "starvation" diet.
<i>Vinca major</i>	Greater Periwinkle	A rampant trailer with bright blue flowers from April to June. Thrives in shade. British by naturalisation.
<i>Hebe rakaiensis</i>	Hebe (formerly Veronica)	A dwarf shrub evergreen. Good in full sun.
<i>Hedera helix</i>	Common Ivy	Good ground cover where little else will grow, also a climber but watch it!
<i>Euonymus radicans</i> 'Variegatus'	-	This has thick greyish-green leaves margined white, often tinged pink. Will either climb or trail. Thrives in any soil, especially chalk.
<i>Gaultheria shallon</i>	-	Leaves broad and leathery, flowers pinkish white. Thrives on sandy acid soil and a shady position.
<i>Hypericum calycinum</i>	Rose of Sharon	Has large leaves and golden flowers, excellent for dry and shaded places. Thrives in well drained soil.
<i>Hypericum x moseranum</i>	-	Reddish stems. Flowers golden-yellow.

N.B. Wherever possible canal-side verge and hedgerow wild flowers, plants etc., should be conserved as they form such a distinctive part of the rural waterside scene.

LUNCH-HOUR LEISURE SPACES 13A

A pleasant place to sit to eat sandwiches and watch boats go by would be a useful asset to many canal-side factories.



PLANTING, see sheets 12A and 12B.

In many cases planting and screening could be introduced on the opposite bank to provide a pleasant aspect.

SEATS and TABLES, see sheet 11.

RAISED PLANTING BED.

SECURITY FENCE moved back from water's edge. In most cases this should also be a screen fence, made perhaps from lapped oak boards and creosoted.

PAVING, see sheet 14A.

PLANTING where space permits.

THE URBAN TOWING PATH 13B

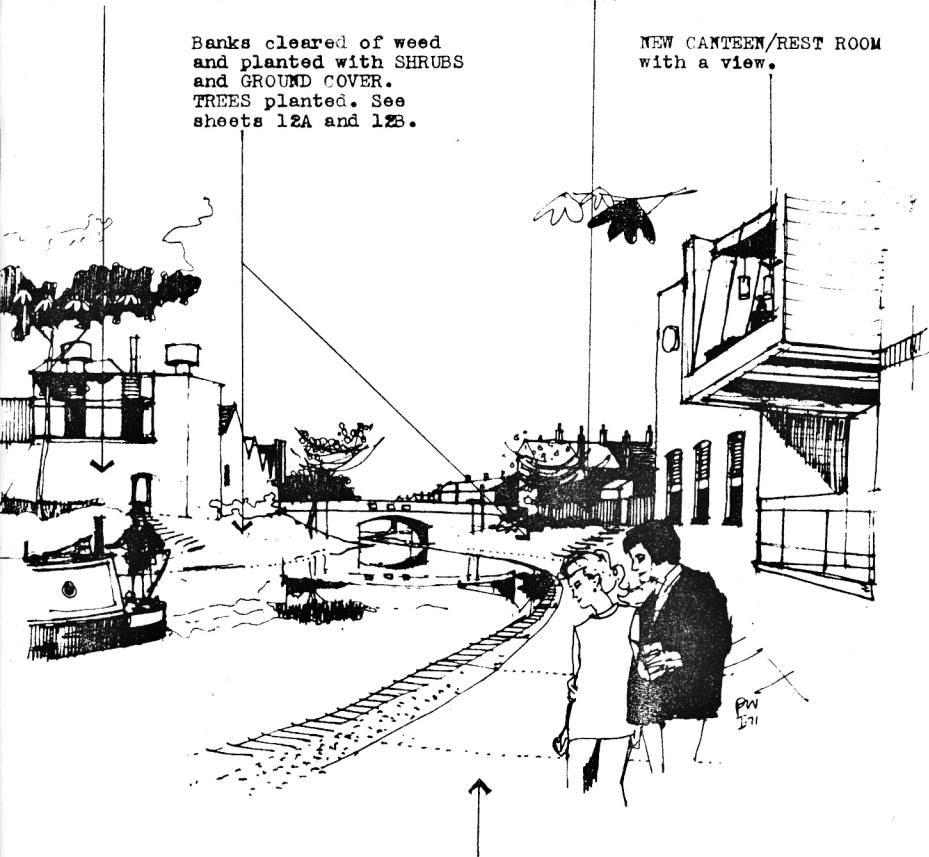
This sheet illustrates a range of possible improvements in industrial areas.

BUILDINGS PAINTED in sympathetic colours.
see sheets in section 15.

SCREEN FENCING, see sheet 05A, with NEW ACCESS and STEPS.

Banks cleared of weed and planted with SHRUBS and GROUND COVER. TREES planted. See sheets 12A and 12B.

NEW CANTEEN/REST ROOM with a view.

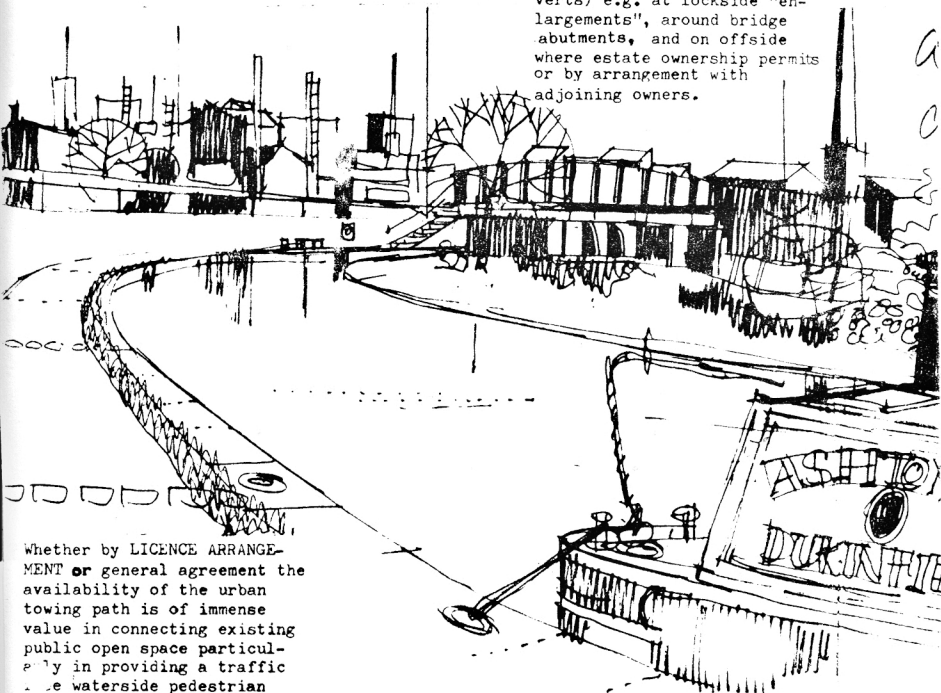


NEW SURFACE to towing path,
see sheets 14A and 14B.

URBAN TOWING PATH WALK 13C

ACCESS at bridges suitably arranged with steps/ramp and information/direction signs statgically placed.

Pockets of TREE PLANTING where towing path width permits/trees must be at least 3.5m from lockside and culverts) e.g. at lockside "enlargements", around bridge abutments, and on offside where estate ownership permits or by arrangement with adjoining owners.



Whether by LICENCE ARRANGEMENT or general agreement the availability of the urban towing path is of immense value in connecting existing public open space particularly in providing a traffic free waterside pedestrian walk, in urban areas.

BENCHES and LITTER BINS
(See Sheet 11A)

LIFEBUOY HOUSING (see Sheet 06A) or use "Ferrybuoy" belt and housing or similar ready made type.

GRASS MARGIN retained at rear of waterside copings 1.0 m wide (inclusive)

PLANTING AREAS at rear of towing path in rough grass using indigenous planting species such as gorse, ferns, bramble, mahonia, and ground cover planting - hederia helix etc (See Sheets 12A - 12B) Retain habitat for canalside wild flowers.

TYPICAL TREATMENT OF TOWPATH

Sealed GRAVEL SURFACE to walkway - granite chippings rolled into cold bituminous emulsion (See Sheet 14B) - 1.5 m wide.

NOTE →

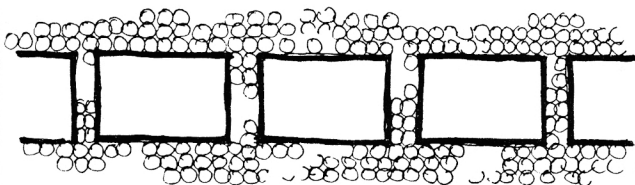
PAVEMENTS 14A



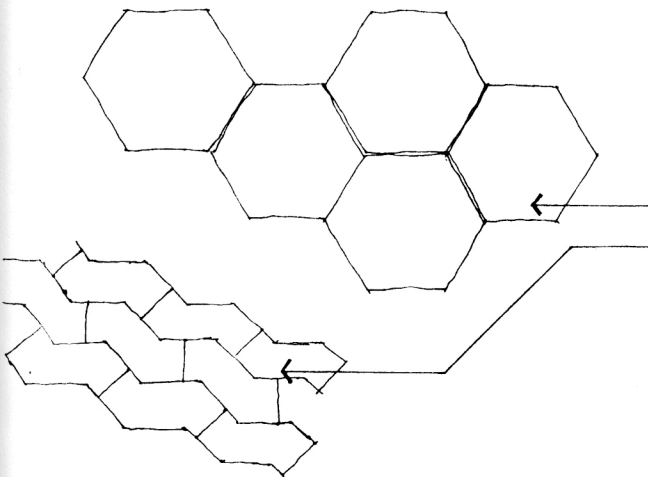
Much of the quality of the waterway environment depends on the use of the right kind of ground surfacing. In this, scale (the size of paving units), texture and colour are important factors.

The use of bricks and sets is the traditional method of paving and still the best. However in many instances this will prove too expensive and larger precast units must be used.

Of these, exposed natural aggregate paving slabs are the most suitable. Only natural colours should be used.



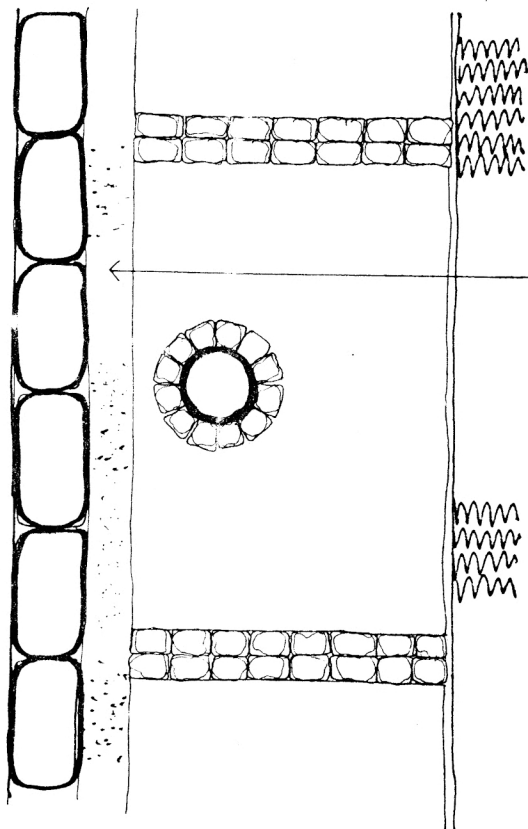
Larger paving units can often be trimmed by bricks or sets at edges and around planting areas.



PRECAST PAVING SLABS.
 "Metric Four Square" paving, (white, cream or silver-grey agg.),
 "Wettern" exposed aggregate paving,
 "Monohex" hexagonal paving system,
 "Monolok Stones" paving system,
 All the above by Mono Concrete Limited.

Nonslip Paving with punched or pooled finish and $\frac{1}{2}$ " margin,
 "Perfecta Paving" (natural colour),
 "Marshallite Coloured Paving" (natural colour)
 All the above by S. Marshall & Sons Ltd.

GROUND SURFACING 14B



CONCRETE- this can be an acceptable surfacing medium if left slightly marked by the tamping board or the aggregate exposed by brushing. Areas of concrete should be broken by lines of setts or bricks as shown.

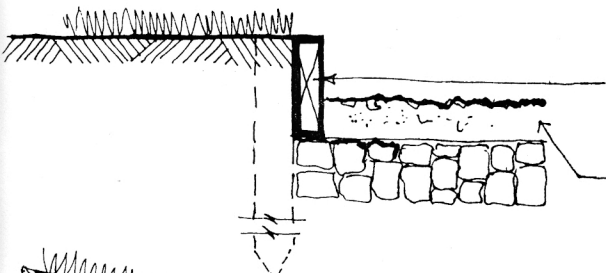
Margin of bound gravel between concreted area and existing waterway wall.

ASPHALT- not generally recommended but if used it should be broken into small areas as for concrete.

GRAVEL
Specification A
Suitable for yard surfacing, car parks, etc.- on a suitable base spread 20mm clean chippings or sharp gravel, well watered and consolidated. Apply cold bituminous emulsion and evenly cover with 6mm stone chippings or clean sharp shingle. Two days later a second dressing should be applied and covered with 6mm stone chippings and well rolled.

Specification B
Suitable for areas adjacent to locks etc.- use a proprietary insitu material, for example, "Breedon Golden Amber Gravel", manufactured by the Breedon and Cloud Hill Lime Works Ltd., Breedon-on-the-Hill, Derby. This is laid to a depth of 30 to 50 mm and rolled with a wet tandem roller.

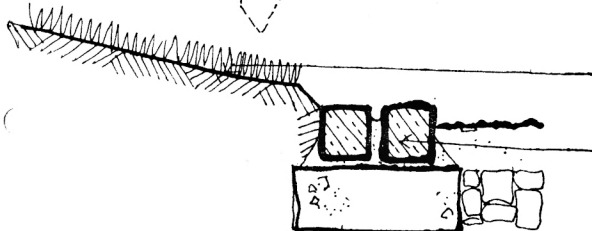
TRIM 14C



DETAIL 1 TIMBER RAIL CURB.

125mm X 30mm timber rail on posts 50mm X 50mm X 610mm long at 1m crs.

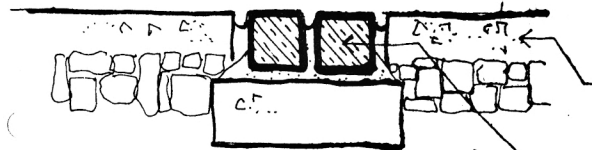
Gravel path on 100mm hardcore.



DETAIL 2 GRANITE SETT CURB.

Max. slope of grassed areas 1:3 to avoid ponding.

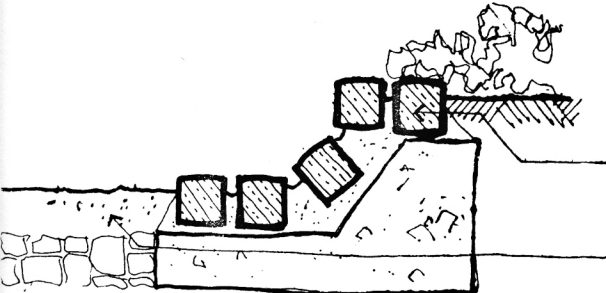
100mm granite setts bedded in cement mortar on 300mm X 75mm concrete strip footing. 15mm joints pointed with black cement mortar. "Bucket handle" joints.



DETAIL 3 TRIM BETWEEN BAYS OF CONCRETE.

75mm unreinforced insitu concrete paving on 75mm hardcore. See sheet 14B.

100mm granite setts bedded in cement mortar as detail 2.



DETAIL 4 EDGING TO SHRUB BED

100mm granite setts bedded in cement mortar on 75mm concrete strip footing. 15mm joints pointed as for detail 2.

75mm gravel or other surface.

PAINING DWELLINGS 15A



GUTTERS and DOWN PIPES-
paint Black.
EAVES- paint White.

SILLS and LINTELS- see
sheet 15G.

SASHES and CASEMENTS-
paint White.

BLIND WINDOW, if
previously painted-
paint B.S. 10 C 39
(Python)

ARCHITRAVE- Background
- as for sills.
Pilasters and Lintel -
paint white.

DOOR- see sheet 15G.

DOORS to sheds and out-
buildings- paint Black.



GUTTERS and DOWN PIPES-
paint Black.
EAVES- paint White.
BARGEBOARDS- as sills or
White.

SILLS- see sheet 15G.

SASHES and CASEMENTS-
paint White.
FRAMES- paint Black.

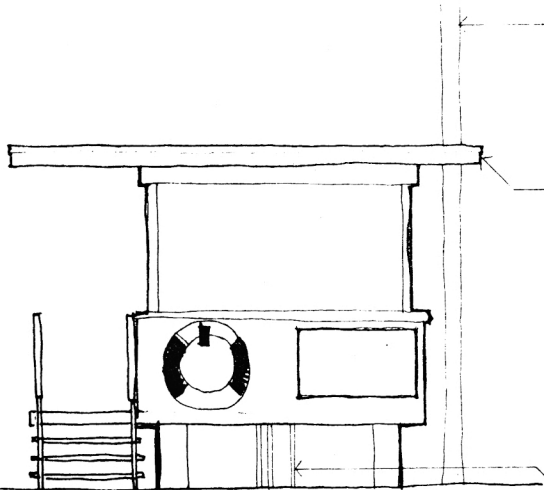
DOOR- see sheet 15G.

WALLS, if previously
painted- see sheet 15G.

FENCES- see sheet 05A.

SIGNS/NOTICES- see sheet
06A, 06B.

PAINING LOCKSIDE BUILDINGS 15B



POLES for lighting,
electricity supply,
etc.- paint Black or
B.S. 00 A 09 (Flint)

GUTTERING and DOWN PIPES-
paint Black.

EAVES of canopy- paint
Black

SOFFIT of canopy and
WINDOW FRAMES- paint
White.

DOOR- paint Black.

BALUSTRADES- paint White.

LIFE-BUOY- paint in
quadrants, White and
Signal Red.

CONDUIT- paint Black.



GUTTERING and DOWN PIPES-
paint Black.

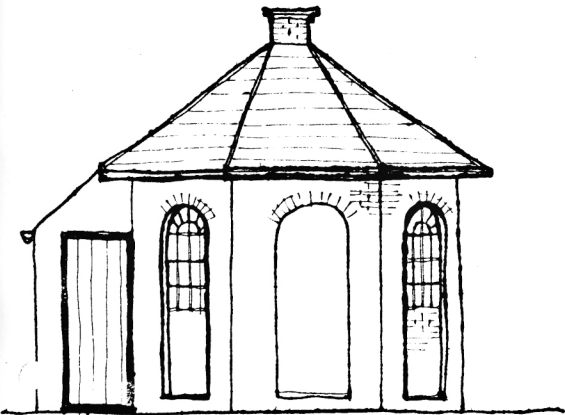
WALLS, if previously
painted- see Sheet 15G.

DOOR- paint Black.

WINDOW FRAMES- paint
White.

NOTICES- see Sheet 06A.

PAINING TOLL OFFICES 15C



Any CHIMNEYS- unpainted.

WALLS, if previously
painted- paint B.S.
08 B 15 (Magnolia)

WINDOW FRAMES- paint
White.

DOOR- paint Black.

WATERWAY COLOUR RANGE 15G

This sheet to be read with other sheets in section 15.

Each waterway has its own personality - architecture, materials, topography and engineering features all provide character and interest. The choice of colour can complement this intrinsic charm, and the colours indicated below are those which have been adopted for the painting of the Board's Estate and Operational buildings.

All colours are inter-related to achieve an overall harmony suitable for the waterway environment:

The numbers refer to the BS.4800 (1972) "paint colours for building purposes" 86 colour range. Names of colours may vary from one paint firm to another.

Selected colours from BS.4800 (1972) 86 colour range

08 B 15	Magnolia	06 C 39	Chestnut
08 C 31	Ecrú	10 B 17	Greystone
08 B 17	Woodsmoke	10 A 03	Ash Grey
08 B 21	Antelope	10 B 21	Lizard
10 B 25	Turtle	10 C 39	Python
08 B 25	Beaver	12 B 29	Juniper
08 B 29	Donkey	04 B 25	Leather
10 B 15	Ivory	12 B 25	Thyme
10 C 31	Champagne	10 D 45	Sunflower
10 C 33	Cornsilk	12 D 45	Laurel
08 C 35	Flaxen	10 C 35	Golden Bronze
08 C 37	Autumn		

WATERWAY COLOUR RANGE 15H

The following list indicates those particular colours which have been selected for the Board's property on particular waterways.

The numbers relate to BS.4800 (1972) 86 colour range.

CASTLEFORD AREA

	Walls	Sills	Doors
Aire & Calder Navigation	08 B 15	10 B 21	08 C 37
Calder & Hebble Navigation	08 B 17	10 B 25	10 D 45
Huddersfield Canal	08 B 15	10 B 21	10 C 35
New Junction Canal	08 B 17	10 B 21	06 C 39
Pocklington Canal	08 B 15	10 B 25	08 B 29
Ripon Canal/Ure Navigation	08 B 15	10 B 21	10 B 25
Selby Canal	08 B 17	10 B 25	10 D 45
Sheffield and South Yorkshire Canal	(08 B 15	10 B 25	10 C 35
	(08 B 17	10 B 21	08 C 37

WIGAN AREA

Ashton Canal	08 C 31	08 B 17	08 C 35
Lancaster Canal	(10 B 15	10 B 21	10 D 45
	(10 B 15	10 B 17	10 B 21
Leeds and Liverpool Canal	(10 B 15	10 B 17	12 D 45
	(08 B 17	10 B 21	08 C 37
	(10 C 31	08 B 21	08 B 25
St. Helens Canal	08 B 15	08 B 21	08 C 35

NORTHWICH AREA

Caldon Canal	10 C 35	10 B 25	08 C 37
Llangollen Canal	08 C 31	10 B 21	08 B 25
Macclesfield Canal	10 C 31	10 B 17	08 C 35
Montgomery Canal	10 C 31	10 B 21	10 D 45
Peak Forest Canal	08 C 31	10 B 17	10 C 35
Shropshire Union Canal	(10 C 31	10 B 21	08 B 25
	(08 C 31	10 B 17	08 C 37
Staffs & Worcs. Canal	08 C 31	10 B 21	12 B 29
Trent and Mersey Canal	(08 B 17	10 B 25	10 D 45
	(10 B 17	10 B 21	10 C 39

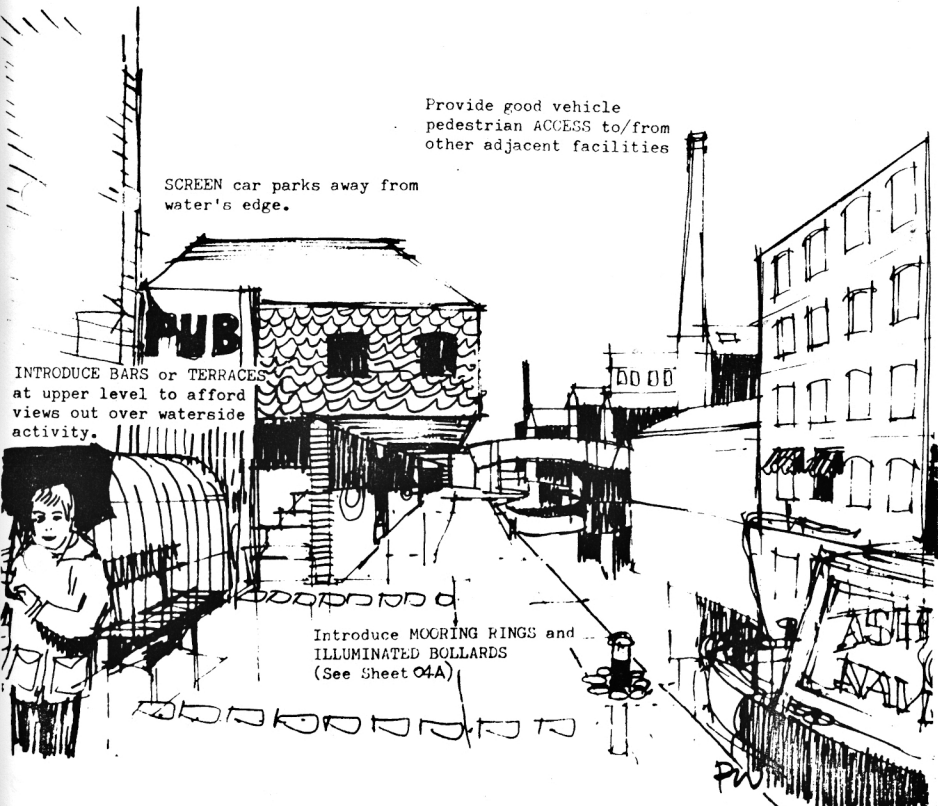
NOTTINGHAM AREA

Chesterfield Canal	08 C 35	08 B 21	12 B 29
Cromford Canal	08 B 17	10 B 21	10 C 39
Erewash Canal	08 C 37	10 B 17	08 B 29
Fosdyke Navigation	08 B 17	10 B 17	10 D 45
Witham Navigation	08 C 35	10 B 21	08 B 29
Grantham Canal	08 C 37	08 B 21	12 B 29
Grand Union Canal	08 B 17	08 B 21	08 B 29
Trent and Mersey Canal	08 C 35	10 B 17	10 C 39
River Trent	(08 C 37	10 B 17	12 B 29
	(08 C 35	10 B 21	08 B 29

WATERSIDE PUBLIC HOUSES 16A

EXCITING OPPORTUNITIES both in development of NEW LICENSED PREMISES or re-conversion of EXISTING HOUSES to satisfy needs of waterway user in town and country.

RURAL situations - opportunity to create water fringe "picnic" area adjacent to screened car park - (See Sheet 16D)



Provide good vehicle pedestrian ACCESS to/from other adjacent facilities

SCREEN car parks away from water's edge.

INTRODUCE BARS or TERRACES at upper level to afford views out over waterside activity.

Introduce MOORING RINGS and ILLUMINATED BOLLARDS (See Sheet 04A)

BEER GARDEN terrace/patio (walled screen/hard surface - paving) (See Sheets 14A, 14B)

DREDGE wharf moorings to accommodate up to 6 visiting craft.

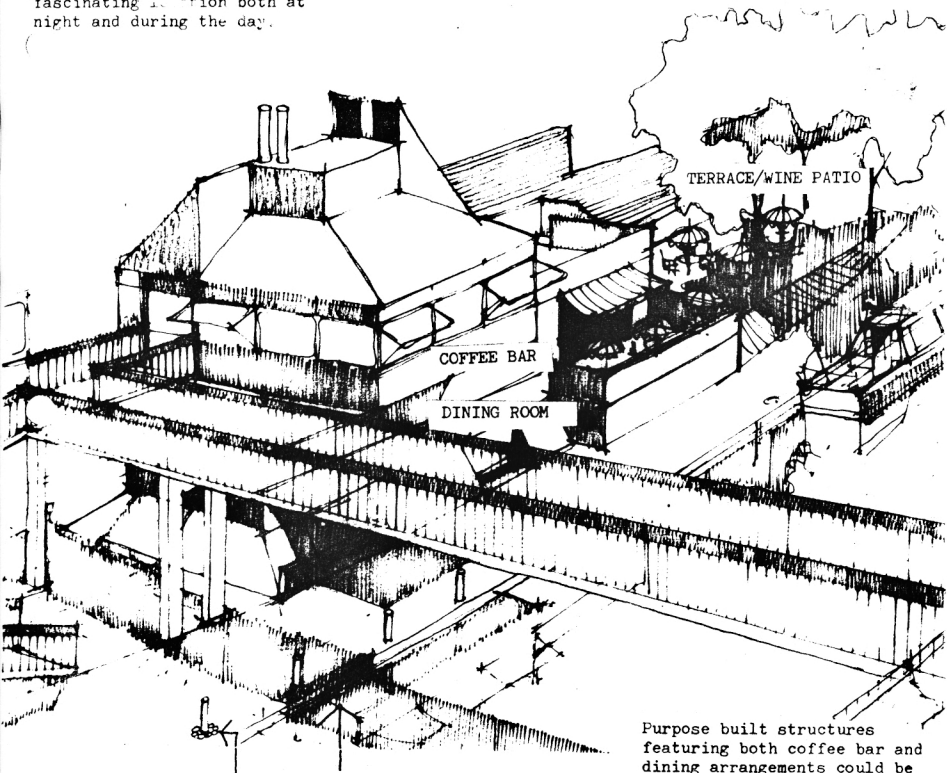
Develop TRIP BOAT in conjunction with lock free run (1 - 2 hours)

WATERSIDE RESTAURANTS 16B

Associated with adjacent housing and commercial waterside schemes, and possibly as part of a project using the canal TOWING PATH as an "adopted" public walkway - by licence arrangement, CAFES and RESTAURANTS can provide a motivation towards adopting the urban waterway into the life of the community.

More flexible LICENCING ARRANGEMENTS are likely to attract waterside TERRACES/BISTROS taking advantage of a fascinating location both at night and during the day.

Great character and style can be associated with the sensitive conversion of old canal buildings when both the waterway's architectural back drop can be retained; as well as the creation of pleasing simple interiors serving the needs of the impulse COFFEE BAR patron or, at the other end of the scale, the SOPHISTICATED GOURMET.

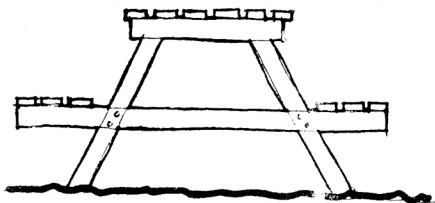


Introduce MOORING RINGS and BOLLARDS (See Sheet 04A)

MOORINGS for say 6 craft

Purpose built structures featuring both coffee bar and dining arrangements could be prefabricated and built on an insitu "plinth", with appropriate services.

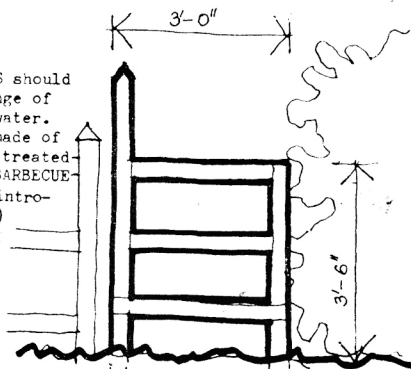
PICNIC SITES 16D



The former could possibly be related to facilities similar to those at an OVERNIGHT MOORING POINT (See Sheet O4C) being no vehicle access and administered possibly as an extension of the rural towing path by the NAVIGATION AUTHORITY.

The latter, much more extensive arrangement, would need to be administered by the LOCAL AUTHORITY concerned.

PICNIC TABLES/BENCHES should be introduced on fringe of open spaces or near water. 6' - 8' 0" long and made of 2" x 4" preservative treated softwood - (possible BARBECUE facilities could be introduced with some care.)



SIMPLE STOCK PROOF STILES to be inserted between towing path - adjoining land and footpaths. Finished in solid unseasoned oak.

canalside FEATURE to provide site with interest/identity.

WARNING NOTICES on roadway for ACCESS POINT should be considered depending on sight lines etc.

WARNING NOTICES

PUBLIC FOOTPATH

PROVIDE public rights of way - affording possibility of CIRCULAR WALKS incorporating rural towing path.

CANAL

CANAL FEATURE

TOWING PATH

Surfacing of car access could be as in (Sheet 16J) with an appropriate "rural" finish i.e. grass/concrete - indestructible grassy areas, using pre-cast units or insitu formed apertures)

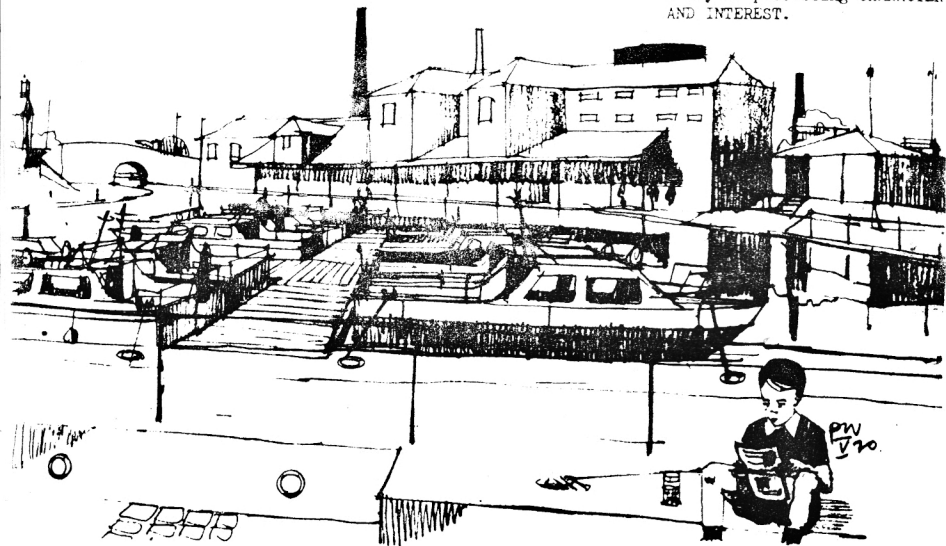
Extensive SCREENING and SHELTER together with EARTH MOUNDING is important to prevent the INTRUSION of parked vehicles into canal scene.

BOAT CLUB FACILITIES 16E

The delightful phenomena of the British to band together "pays off" when considering the problems of ADMINISTRATION SECURITY and MANAGEMENT of large groups of MOORINGS.

CLUB ACCOMMODATION is best absorbed into EXISTING BUILDINGS where possible -

redundant pump houses, warehouses, cottages, sheds etc. can often form the NUCLEUS of a layout possessing CHARACTER AND INTEREST.



The establishment of BOAT CLUBS obviously "pools resources" so that, SLIPWAYS, D.I.Y. PREMISES, CRUISING ARRANGEMENTS, SOCIAL LIFE, BARS and WATERWAY MEETINGS and INFORMATION etc. can all flourish in the collective interest.

With much INVESTMENT being in the boats themselves, often the visual quality of the "SHORE INSTALLATIONS" tend to suffer - cheap low cost structures often being found EXPEDIENT to serve many requirements.

FACILITIES for inter-club cruising and mooring are worth exploring together with usual boating needs for VISITING CRAFT - so avoiding the often (unsought) "exclusive" label.

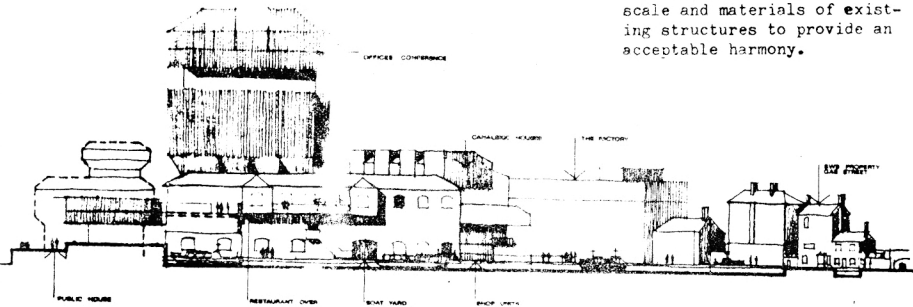
By PLANTING and SCREENING (See Sheets 12A, 12B) and ideally having a retired "HARBOURMASTER" living on site the complex can be made to appear to other waterway users as a visual asset rather than an untidy mess.

Boat maintenance/building operations can appear fascinating when working areas and storage compounds look efficient and well run.

CENTRAL AREA DEVELOPMENT 16F

CENTRAL AREA waterside sites can often, by sensitive layout rediscover, for a town or city a "WATERFRONT", (hidden and ignored previously).

ARCHITECTURAL FORM of new buildings should reflect the scale and materials of existing structures to provide an acceptable harmony.



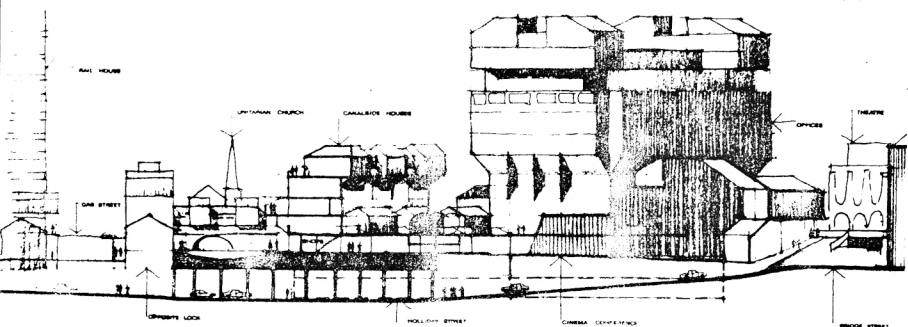
Conserving the SPATIAL ENCLOSURE, restoring buildings where appropriate, and inserting new uses, retains the HISTORICAL ASSOCIATIONS of commercial wharves - often the origin 18th and 19th Century prosperity.

OLD WAREHOUSES can be converted to include restaurants/bistros at upper levels whilst canal-side can be devoted to boating activity

BOATING BUSINESS in central urban areas can provide for Waterborn "visitor" and his immediate needs, whilst SECURITY and SUPERVISION can often support private moorings too. Often a HOUSEBOAT will be useful in providing residential presence or "harbour master's" function.

SHOPS at water level, associated with FLATS and OFFICES, RESTAURANTS and PUBLIC HOUSES can be so created to provide a privileged aspect out over waterside activity - with all its interest and reflections.

GLIMPSES - CHANGES OF LEVEL surprise, are all much more interesting than blatant "opening out".

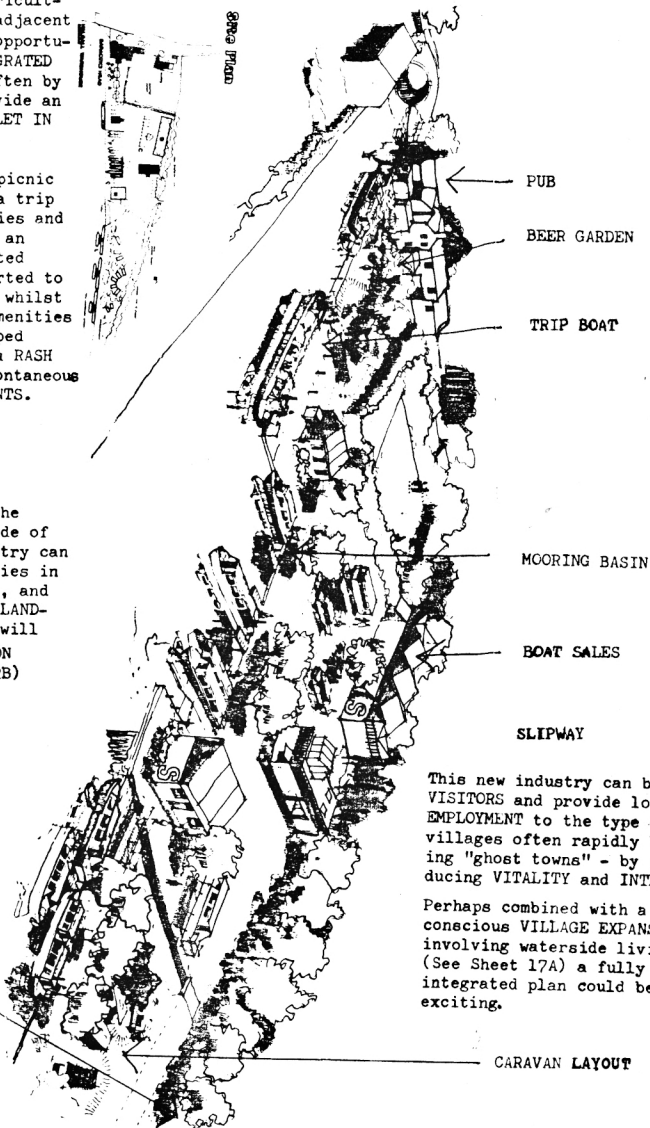


RURAL WATERSIDE DEVELOPMENT 16G

Around an existing agricultural or timber wharf adjacent to a village pub the opportunity to adopt an **INTEGRATED AMENITY CENTRE** can, often by sensitive layout, provide an essential **LEISURE OUTLET** IN RURAL SURROUNDINGS.

By **GROUPING** together picnic sites, beer gardens, a trip boat, boating facilities and mooring arrangements, an earlier canal orientated industry can be converted to satisfy new demands - whilst **CONCENTRATING** these amenities at fairly high developed **CENTRES** - will avoid a RASH of considered, spontaneous **SMALL SCALE DEVELOPMENTS**.

Layouts catering for the **PROMOTION** and sales side of the leisure life industry can **DEMONSTRATE** opportunities in an appropriate context, and essential large scale **LANDSCAPING AND SCREENING** will prevent local **INTRUSION** (See Sheets 12A and 12B)



This new industry can bring **VISITORS** and provide local **EMPLOYMENT** to the type of villages often rapidly becoming "ghost towns" - by introducing **VITALITY** and **INTEREST**

Perhaps combined with a conscious **VILLAGE EXPANSION**, involving waterside living (See Sheet 17A) a fully integrated plan could be really exciting.

LANDSCAPING

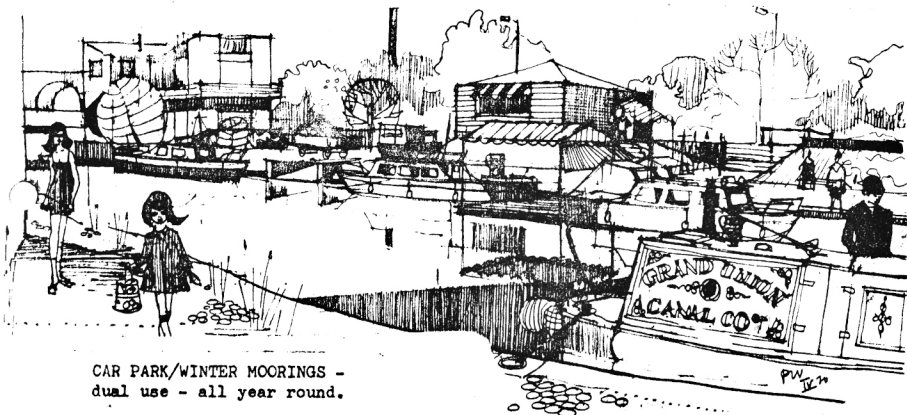
CARAVAN LAYOUT

HIRE CRUISER BASE 16H

Small OFFSIDE site development adjacent to existing pub/village etc.

FORM/MATERIAL of low cost structures to be sympathetic with canal/scene

HIRERS' CARS - contain under cover or in screened compound

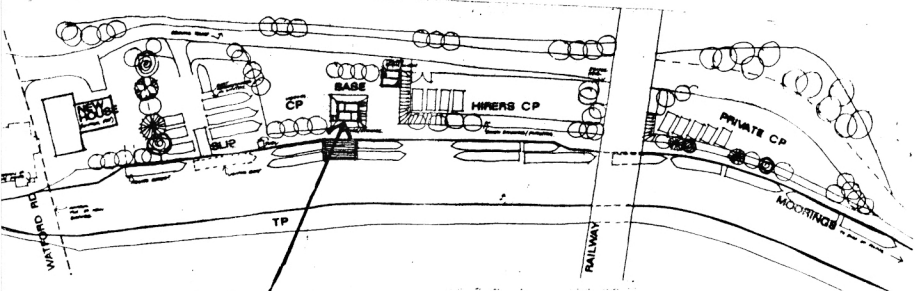


CAR PARK/WINTER MOORINGS - dual use - all year round.

RESIDENTIAL presence important in providing security/supervision

AVOID bogus "naval" estuary/ maritime appearance - blend into canal surroundings using appropriate colours/canal traditions.

SLIPWAY and MOORINGS included for additional private craft facilities.



OFFICE/RECEPTION - workshop/storage under.

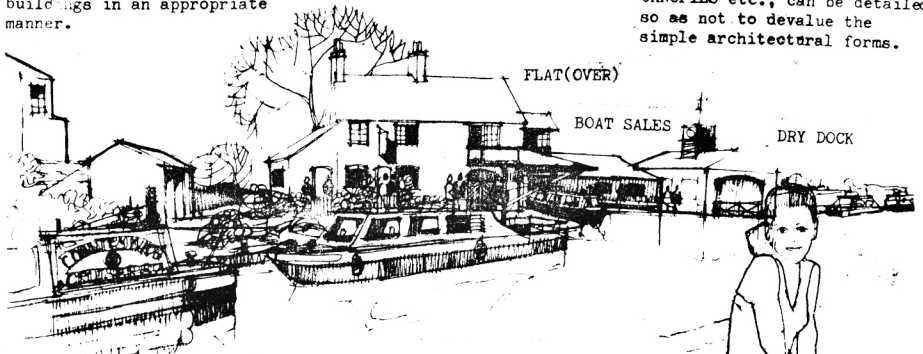
TOILETS and SANITARY STATION/WATER POINT available for passing craft.

INTRUSION of parked vehicles screened by fence/mounding/ planting.

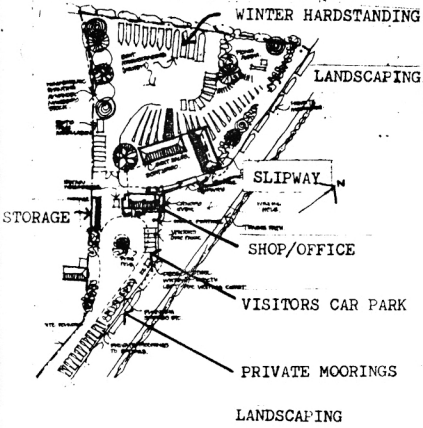
HIRE CRUISER BASE 161

The canal side scene is greatly enhanced by the RETENTION of agricultural wharves, cottages and warehouses and it is in their MODIFICATION to serve the new needs of the leisure industry that investment can be encouraged to CONSERVE old buildings in an appropriate manner.

Old features such as WHARF CRANES can provide character and interest whilst new CANOPIES etc., can be detailed so as not to devalue the simple architectural forms.



A two storey cottage/warehouse can accommodate a MANAGER'S FLAT above; hire cruiser base RECEPTION/OFFICE/SHOP/TOILETS with adjoining STORAGE at wharf level; whilst new structures such as DRY DOCK and "SALES ROOM" and SLIPWAY can be incorporated unobtrusively.



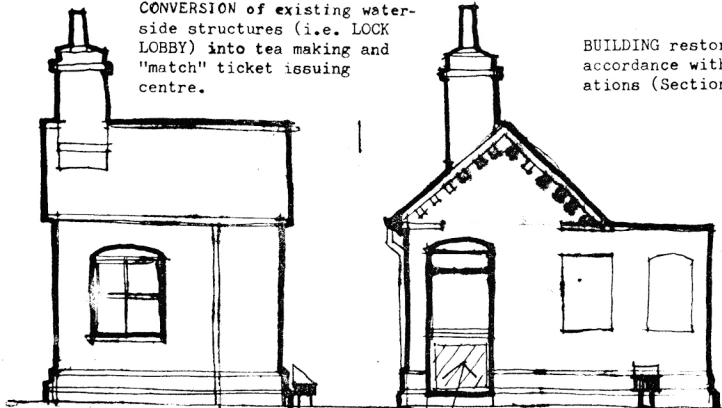
Summer time CAR PARKS can serve as winter HARDSTANDING for boats and LANDSCAPING to screen such areas can often include a PICNIC AREA.

D.I.Y. FACILITIES can serve needs of private boat owners.

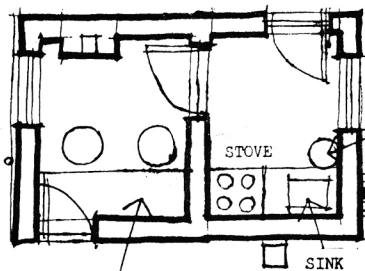
MATCH FISHING FACILITIES 16J

CONVERSION of existing water-side structures (i.e. LOCK LOBBY) into tea making and "match" ticket issuing centre.

BUILDING restored in accordance with recommendations (Section 15)



"STABLE" door and counter



HOT WATER HEATER

WATER TAP
DRAIN
TO CANAL

STOVE

SINK

LAYOUT related to "rurally" surfaced car park for say 20 cars + (2 - 3) coaches + area for "camping" meals (using 'camping gaz' or similar stoves).

MEALS AREA - possible picnic type furniture as necessary (See Sheet 16D)

TICKET COUNTER + 2 stools

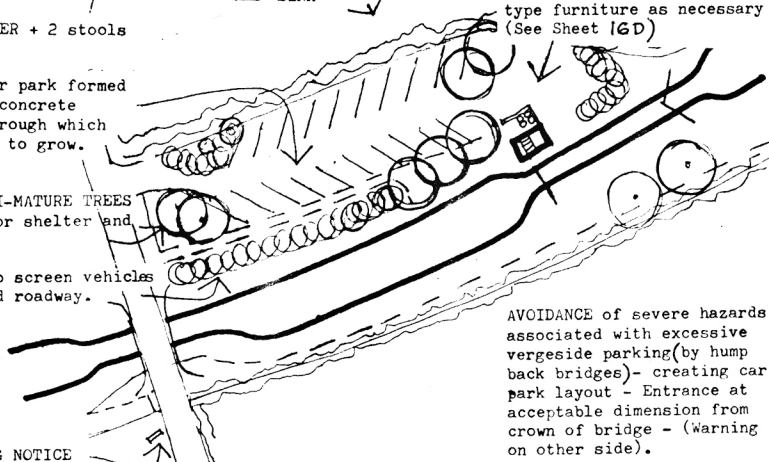
SURFACE of car park formed using insitu concrete apertures through which grass allowed to grow.

Say 6 no. SEMI-MATURE TREES around site for shelter and enclosure.

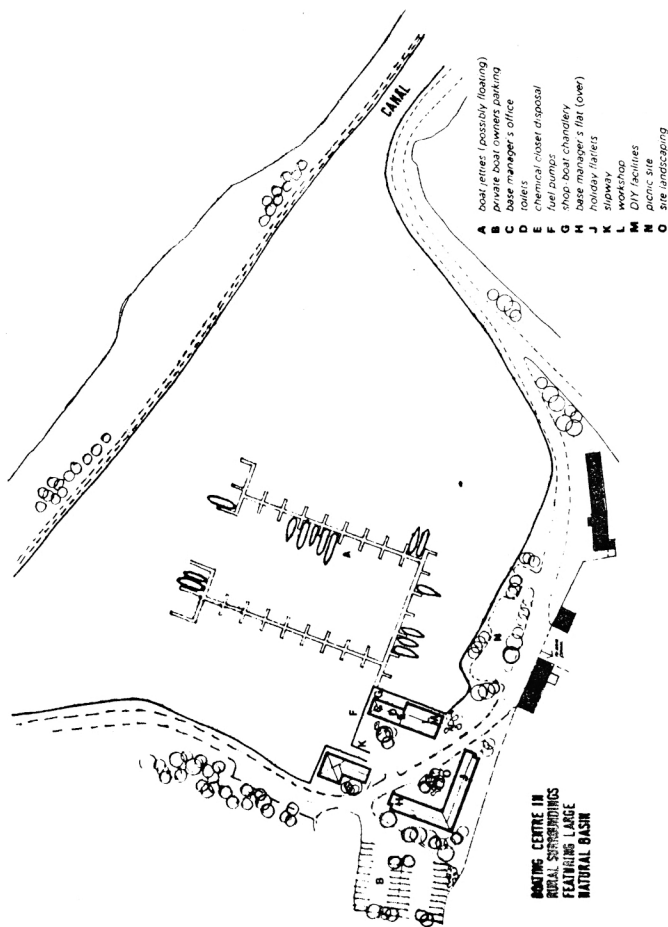
LANDSCAPING to screen vehicles from canal and roadway.

WARNING NOTICE

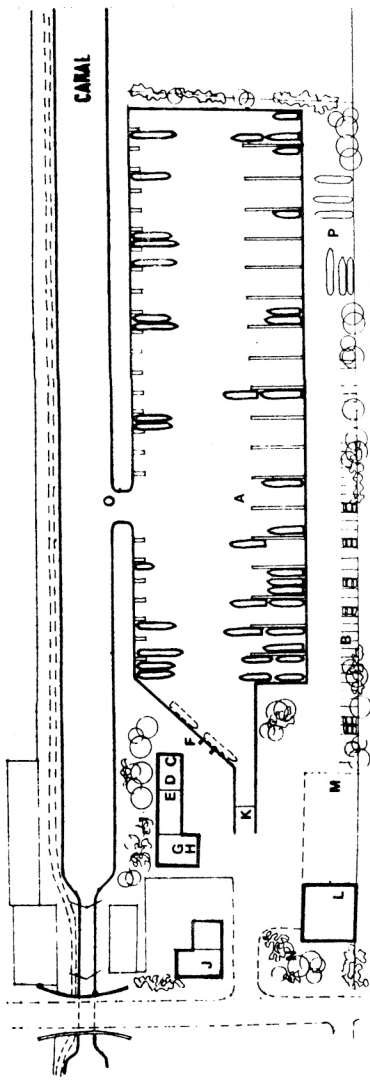
AVOIDANCE of severe hazards associated with excessive vergeside parking (by hump back bridges) - creating car park layout - Entrance at acceptable dimension from crown of bridge - (Warning on other side).



BOATING CENTRE LAYOUT 16L



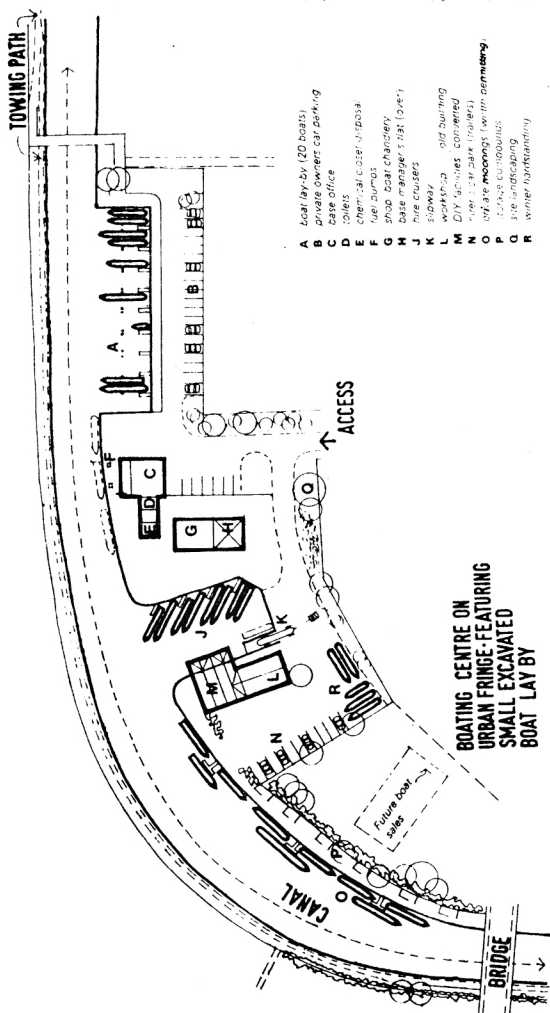
BOATING CENTRE LAYOUT 16M



- A boat jetties
- B private owners parking
- C base manager's office
- D toilets
- E chemical/closet disposal
- F fuel pumps
- G shop, boat chandlery
- H base manager's flat (over)
- I public house/restaurant
- J boat stop
- K future boat sales
- L site landscaping
- M basin entrance (stop planks)
- N winter handstanding
- P

**BOATING CENTRE IN
RURAL SURROUNDINGS
FEATURING LARGE
ARTIFICIAL BASIN**

BOATING CENTRE LAYOUT 16N



- A boat lay-by (20 boats)
- B private owners car parking
- C base office
- D toilets
- E chemical store/depot
- F fuel drums
- G shop boat chandlery
- H base manager's flat (over)
- I hire cranes
- J slipway
- K workshop
- L old building
- M dry dock
- N dry dock converted
- O dry dock (over)
- P dry dock (over)
- Q dry dock (over)
- R winter hibernating

**BOATING CENTRE ON
URBAN FRINGE-FEATUREING
SMALL EXCAVATED
BOAT LAY BY**

WATERSIDE HOUSING 17A

Badly orientated RESIDENTIAL LAYOUT has presented many waterways with indifferent surroundings - THIS NEED NOT BE SO!

ACCESS arrangements can be made to towing path

Whether enjoying DIRECT ACCESS, or simply a VISUAL ASPECT, waterside living presents outstanding possibilities.

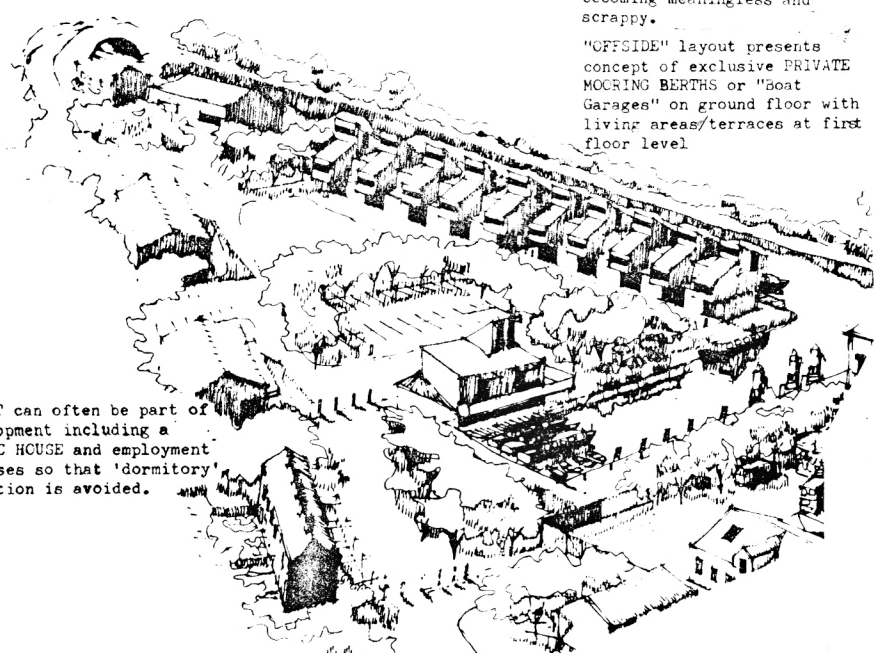
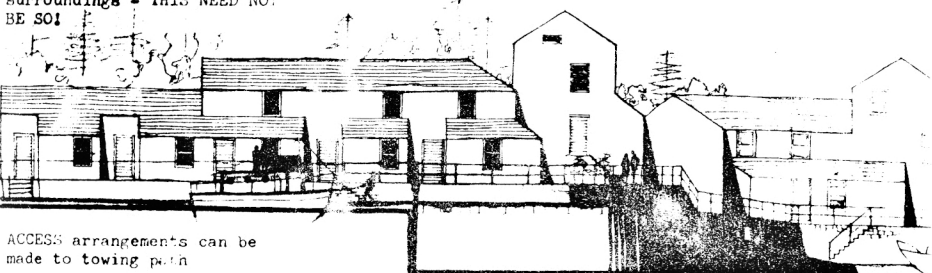
Either grafted on to existing settlement as infill, or more excitingly forming new canal-side "villages", this ingredient should be "planned in" to prevent waterside scene becoming meaningless and scrappy.

"OFFSIDE" layout presents concept of exclusive PRIVATE MOORING BERTHS or "Boat Garages" on ground floor with living areas/terraces at first floor level.

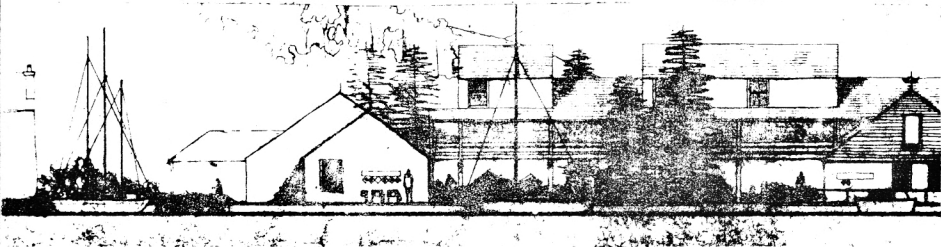
LAYOUT can often be part of development including a PUBLIC HOUSE and employment premises so that 'dormitory' situation is avoided.

SENSITIVE consideration to scale and existing architectural forms can often be the "key" to a successful scheme.

A wide mixture of ACCOMMODATION (2 person flats to 5-6 person houses) helps widen the social range.



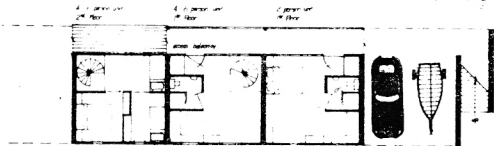
British Waterways Board. Waterway Environment Information Sheet.
WATERSIDE HOLIDAY ACCOMMODATION 17B



At a range of say 1 - 2 hours driving from major areas of population, and sited at inland "RESORTS", the opportunity exists to establish, (particularly at river/estuary situations) a series of 'SECURE HOMES' for boat owners.

HOLIDAY FLATS

This holiday accommodation can be organised to appeal to a wide range of people (catering for 2 person flats as well as 4 - 6 person units) serving yacht owners whose "below deck" accommodation prevents boating weekends.



The SCALE and LAYOUT of the scheme must sympathise with local characteristics, and can often be incorporated into a layout including a BOAT YARD/MOORINGS, PUBLIC HOUSE, RESTAURANT, PICNIC AREAS, LANDSCAPING etc.



A mixture of holiday RENTAL ACCOMMODATION with SEMI-PERMANENT LEASEHOLDS would prevent developments becoming "seasonally dead", and is clearly a better prospect than scrappy caravan layouts which often exist at present.

Around existing ESTABLISHED MOORING BASINS AND ARMS, linear waterside residential proposals can often be introduced to provide a SELF-PROTECTING element (a built-in deterrent to vandalism and abuse) whilst architecturally providing SHELTER and ENCLOSURE (Similar to those characteristics on Sheet 17A)

