

Phasing	Net Housing Area Ha. (acres)	No. of Houses	Density
I	3.2 (8.0)	60	Low
II	1.4 (3.4)	40	Low
III	2.2 (5.5)	55	Low/Medium
* IV	0.4 (1.0)	25	Medium/High
* V	2.2 (5.5)	90	Medium/High
VI	1.3 (3.1)	30	Medium
Total	10.7 (26.5)	295	

* Excludes Community/Commercial Element

6.12 Building forms should be kept simple and of solid appearance, with roof pitches of between 35-50°, window openings with vertical emphasis, peaked dormers and chimneys located squarely on roof ridges. General weather-keeping qualities together with heating and maintenance costs are also enhanced by the use of well-designed porches, recessed openings, trimmed verges/eaves, etc. Good design and layout should embody best energy-efficiency practice. Selective use of external lighting can greatly reduce "skyglow" and other wasteful aspects of light pollution.

Open Space

6.13 As a general guideline, 10% of the site area of individual housing developments should be laid out to meet recreational and amenity needs. This will include toddler play areas, landscaping and incidental spaces to be provided by developers. Separate provision is made for a major playingfield/park facility of 2 ha.+ which will need to be formed during the initial land engineering work. The Planning Authority will endeavour to ensure that the future maintenance of open spaces is vested with the District Council as Leisure and Recreation Authority, or a suitably constituted community organisation.

Further Advice

Developers are strongly advised to discuss the detailed interpretation of this Brief and their schemes at the initial design stages with the DIVISIONAL PLANNING OFFICER, Ken Johnston, who can be contacted at;

Highland Region Divisional Planning Office
 5 Cameron Square
 FORT WILLIAM
 Lochaber
 tel. 0397-702655 / 705877 / 705878
 fax. 0397-70098

6.10 Gross density guidelines and corresponding housing capacities are indicated in conjunction with the phasing plan (above).

Design and Finishes

6.11 Although not of historical sensitivity, Caol-Lochyside would benefit from restraint in the selection and mixing of finishes. Wet harl and stone offer durability and reduced maintenance. Wall colours should be taken from a white-grey-buff palette, with stronger earth colours reserved for occasional focus. Painterwork should employ predominantly dark stains with bright colour detailing and highlights for accent. Roof finishes should be dark grey or brown.

CAOL-LOCHYSIDE Development Brief

HIGHLAND REGIONAL COUNCIL : Planning Department : March 1994

1. BACKGROUND

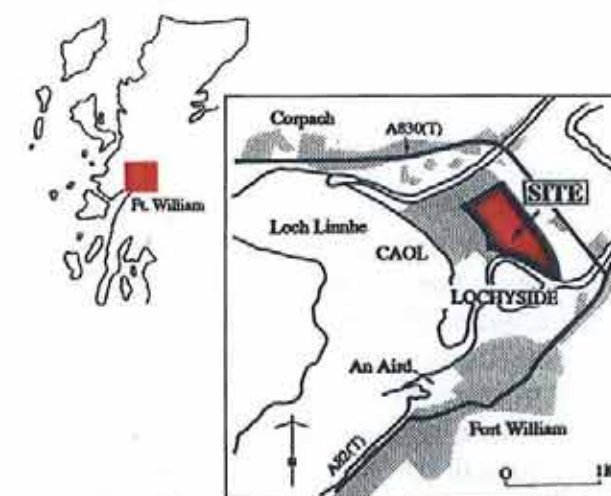
Purpose

1.1 This Brief relates to a major development of housing and community facilities at Fort William extending to some 22 ha. It complies with the Planning Authority's policies and principles as set out in Alteration No.1 to the adopted Local Plan (1993). Scope exists for provision of up to 300 dwellings, spanning a range of private and partnership accommodation, including a measure of low cost/affordable housing. Development is expected to be completed by the year 2001.

1.2 Although housebuilding has recently commenced to the south of this area, ground conditions necessitate a comprehensive package of land preparation and surface water drainage measures in order to secure a safe and economical form of development. Safeguards are also required for certain key elements of infrastructure, notably the projected Caol Link Road. Adjoining land uses, the open nature of the site and scope to maximise outlook south towards the Nevis Range are vital features influencing overall design and layout.

Location

1.3 The development area is situated some two miles north of Fort William town centre. It occupies the floor of the Great Glen between the River Lochy and the Caledonian Canal, bounded by;



- (a) the West Highland railway, Blar Mhor industrial estate and trunk route A830 to the east,
- (b) the Lochyside crofts, together with housing and community facilities accessed off the B8006 to the south, and
- (c) the established community at Caol, notably the local recreational park and light industrial site by Ardgour Road to the north, and ongoing redevelopment of the Dorrans housing scheme across Moor Road to the west.

1.4 It is therefore centrally located in the wider conurbation of Fort William, conveniently placed in relation to employment opportunities, education facilities and other amenities.

Site Features

1.5 Most of the site forms part of the wider Corpach Moss, a raised bog with recorded peat depths of up to 3m. Surface levels range from almost 9m. AOD to the north falling gently to 4m. AOD along the southern margins.

1.6 It is open and relatively featureless terrain interspersed by scattered native woodland, with more densely treed pockets adjoining the railway and crofts to the south. There are no known archaeological features or designated natural heritage sites. The area is relatively exposed to the predominant south-westerly winds and high rainfall.

Tenure

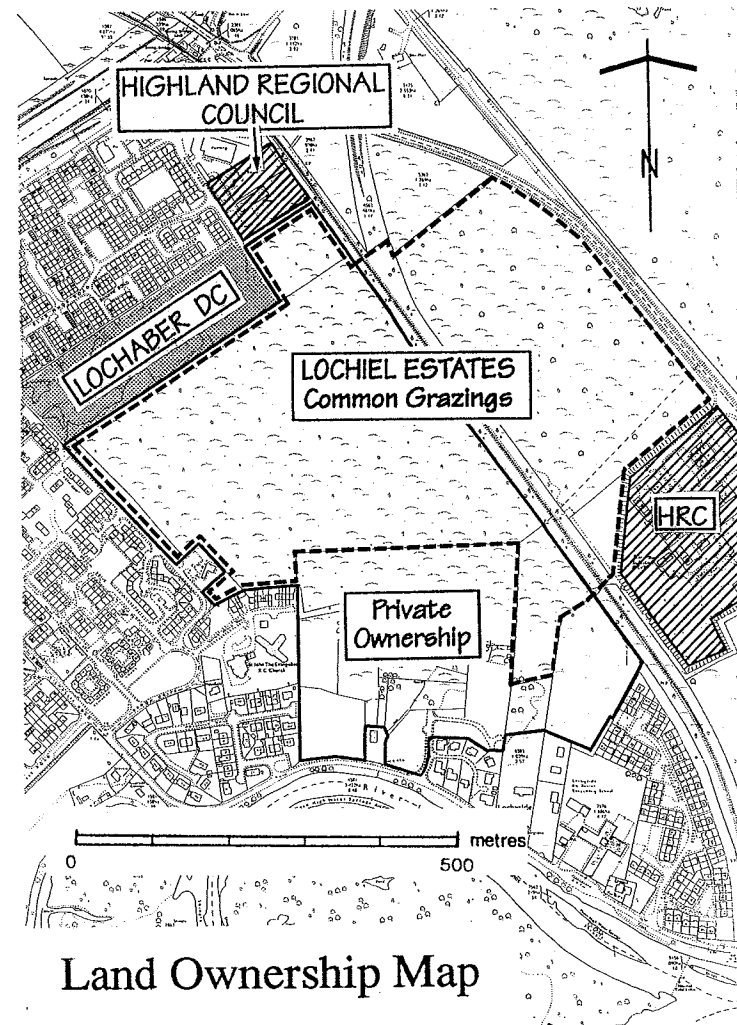
1.7 Virtually all of the ground has been incrofting tenure under the ownership of Lochiel Estate. In-by units to the south have subsequently been purchased and decrofted, whilst Lochaber District Council own the strip of land along the northern boundary. The greater part of the site remains as Common Grazings, linked to other holdings by a stock underpass through the railway embankment. **Although the principle of development has therefore been determined by Local Plan allocation, release of this area will require specific negotiation with the local Grazings Committee and the Estate proprietors.**

2. POLICY

Housing Land

2.1 The Planning Authority, in concert with housing and economic agencies working in Lochaber, has identified a land requirement for in excess of 600 house sites within Fort William during the period up to the year 2001. Less than half of these needs can be met from sites with planning permission and other known commitments.

2.2 Alteration No.1 to the Local Plan undertook a comprehensive assessment of the development potential of alternative locations to make up the shortfall of sites. Lands at Tomonie and Caol-Lochyside were allocated as



Land Ownership Map

the most appropriate "intermediate" sites for housebuilding over the next 5-7 years, (Policy 4.5 refers). Development Briefs are a specific requirement in each case.

2.3 The residential capacity of Caol-Lochyside is estimated as 250 units of mixed density, type and form. As a likely housing "stress" area, the Council expects to enter into S.50 or similar Agreements with the owners or developers of private housing land to ensure that a proportion of plots or dwellings therein are available in perpetuity as low cost accommodation for local people. Land is also to be reserved for future community facilities, including possible deficiencies in the wider locality, and for a major open space of at least 2 ha.

2.4 Outline planning permission for housing, related open space and access roads has been granted covering the "Rankine's" site to the south. Phase 1 containing detached

6.3 Firstly, a series of 25m. deep shelterbelts should be established at right-angles to prevailing winds, that is on a north-west to south-east axis. These tree belts once semi-mature will afford shelter for approximately 200m. in their lee. They also provide an ideal means of compartmentalising the area into a series of smaller housing groups, and will provide effective screening from potential nuisances such as industrial development east of the railway. This suggests a configuration of three belts; firstly, along Moor Road; second, following approximately along the centreline of the site; and lastly, widening out the railway embankment/ transition zone (as described earlier). The function of these new shelterbelts is picked up by the existing woodland groups to the south by Lochyside, which should be reinforced as far as possible.

6.4 The second element of the matrix should be loose-fit formal planting, normally as a single line of trees in the manner of an avenue. These should run roughly at right angles to the shelterbelts, ie. from south-west to north-east. They should be permeable in character, separating different activity areas whilst open to sunlight and maintaining the magnificent views out to the Ben. The overall effect is of a lattice of trees which form the framework of spaces for development.

6.5 Plantings should be predominantly of mixed native species, Scots Pine, Birch, Alder and Rowan. Formal plantings may include more decorative species such as Gean, and key focal points could exceptionally merit the use of an exotic specimen.

Circulation

6.6 Vehicular circulation will be dominated by east-west movement, much of it external traffic, along the Caol Link Road on its eventual completion. Pedestrian movement across this road should be held to a limited number of safe crossing points. To the east, the major footpath which follows the railway could be incorporated as an underpass in the design of the crossing. The other main and most heavily used

"greenway" linking diagonally from Moor Road to the Blar Mhor underpass would merit some form of controlled crossing facility.

6.7 Away from the Link Road, development is served by the normal roads hierarchy of through distributor/bus routes, housing access roads and separate cul-de-sacs/closes. Local paths may link individual housing schemes, connect onto "greenways" or with bus routes such as the B8006. Paths should be limited to routes which are essential for convenient circulation, and consistent with the privacy and security of adjoining homes.

Density and Function

6.8 The "lattice" of individual development areas offers considerable diversity in size and form. Each locality requires careful detailed design to maximise its own special identity and distinguishing features. A distinctive gateway or portal should mark the entrance, with the internal layout building to some focal element. These may be natural landmarks such as a viewpoint, dominant stand of trees or watercourse: in other cases man-made, for example a green, key building, facility, monument or clocktower.

6.9 A wide range of housing provision, including specialist accommodation, is anticipated, although precise requirements will be shaped by contemporary needs and market conditions prevailing during the area's development. As a general principle, lower density family housing should be held to the periphery of the area, which is most appropriate for 1 and 1.5 storey dwellings. Density and building height should increase towards the western central nucleus, where the main community and commercial sites are located. Adjoining housing areas, and indeed flatted or similar development of the upper floors of "public" buildings, should announce their role and presence with suitable massing and embellishment, whilst associated carparking is held to the rear behind the street frontage. Specialist residential accommodation is particularly suited to these locations.

south and Caol industrial site on the northern boundary.

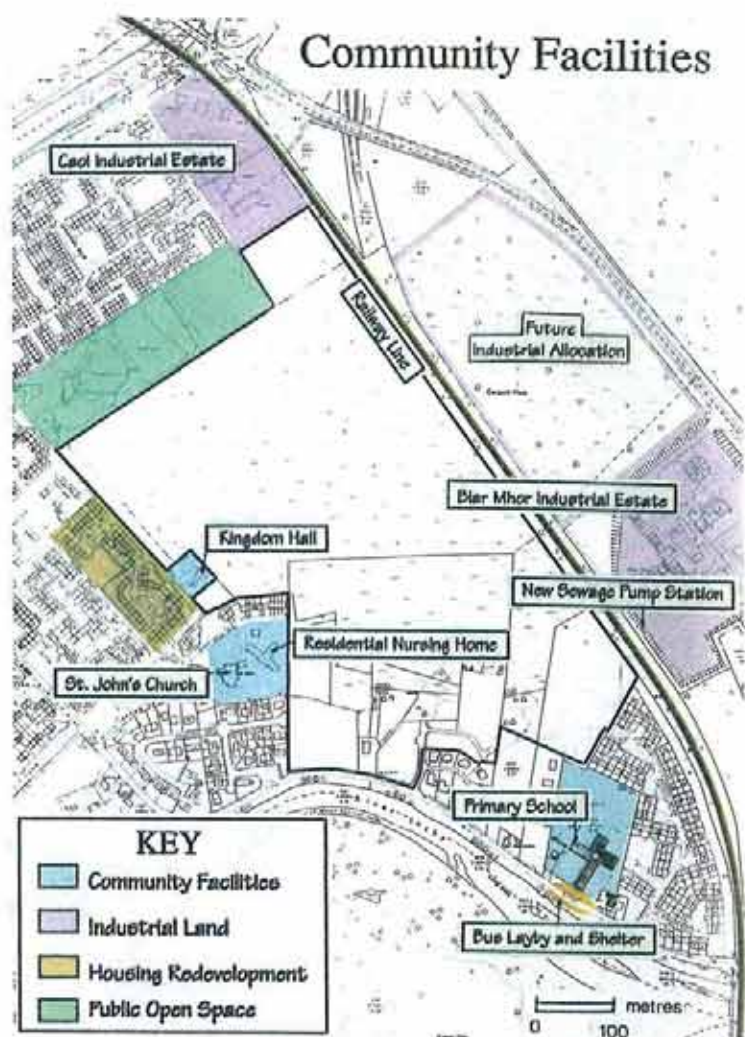
4.11 Other links should connect individual housing areas with the main community facilities (shops, primary school, clinic etc) and open space provision to the north-west at Caol, as well as the RC primary school and Lochaber High at Lochside to the south-east.

5. COMMUNITY FACILITIES

5.1 The Caol and Lochside communities are already well-served by a wide range of community and commercial facilities. Development of several hundred additional dwellings in the area covered by this Brief will not significantly alter the range, viability or distribution of amenities per se. Three kinds of provision may arise, however, as follows;

- (a) new types of facility, such as the recent Highfield Nursing Home, for which reserved sites are now virtually exhausted in Caol.
- (b) higher profile commercial activities which would benefit from siting adjacent to the Caol Link Road when eventually this is completed.
- (c) local needs such as a corner shop, club house and play areas/pitches.

5.2 Provision for these future requirements is made principally along the central east-west axis of the area. Approximately 0.8ha. is allocated for community/commercial buildings, and a further 2ha. for a central playingfield/ small park facility. Scope may also exist for a corner shop by the industrial estate to the north. Since it is normal for development of these uses to lag well behind that of adjoining housing, it is vital to protect them from competing pressures prior to the community's needs being fully articulated. ***It is strongly recommended that some or all of these sites are brought into public ownership, and reserved specifically for those longer term purposes which are essential for development of a balanced community.***



6. LAYOUT AND DESIGN

General

6.1 The principal design considerations at Caol-Lochside derive from its flatness, climatic exposure, good aspect and superb outlook to the south-east. Several nuclei of native woodland survive on the enclosed crofts and railway margins. Surrounding development is predominantly 1.5/2-storey housing. This is barely differentiated from the few focal public buildings, such as St. John's Church and Lochside School, which rise to 2.5/3 storeys. Several pedestrian desire-lines cross the area.

Landscape Framework

6.2 The establishment of a suitable woodland matrix across the area is an early priority. This should have two main components.



owner-occupied properties at Riverside Park is already nearing completion. A further 60 plots are in prospect here, maintaining the established 16m. building line setback from the B8006.

2.5 Overall phasing of development across Caol-Lochside will proceed from south to north consistent with site preparation and infrastructure requirements (see below).

Other Neighbouring Uses

2.6 Land to the extreme north of the site is allocated for light industrial development in the 1985 Local Plan as a final phase of the Caol

Industrial Estate. Similarly, ground immediately across the railway as far as the trunk road remains zoned for industrial use. The principle of development here has already been established in the Land Court, with timing subject to the uptake of plots and premises in the established Blar Mhor estate to the south.

Link Road

2.7 The Planning Authority is also continuing to reserve a corridor of land for the eventual construction of a Caol Link Road. This route would connect from An Aird across the Lochy to Caol and, possibly thereafter, across the railway to join the A830(T) Mallaigh road. It

would reduce the journey from Caol into Fort William by more than half and facilitate other traffic movements, although engineering feasibility and costs require further substantial investigation. Although this road is not a current priority project, the Regional Council will ensure that development at Caol-Lochyside is consistent with its eventual construction. Upgrading of the B.8006 will be required if construction of the Link Road does not proceed.

3. LAND PREPARATION

Peat Overburden

3.1 A number of studies have been made of the ground conditions at Caol-Lochyside, most notably in the Jamieson Mackay and Partners report on Corpach Moss commissioned by the SDA/HRC/HIDB in August 1980. That study estimated that some 370,000 cu.m. of peat and underlying clays would have to be stripped from the site of this Brief. This would expose intermediate sand and gravel strata requiring further levelling/upfilling. Approximately 25,000 cu.m. of additional free-draining granular material would be sufficient to create a finished level sitting 1 m. above the surface water drainage system required for the area.

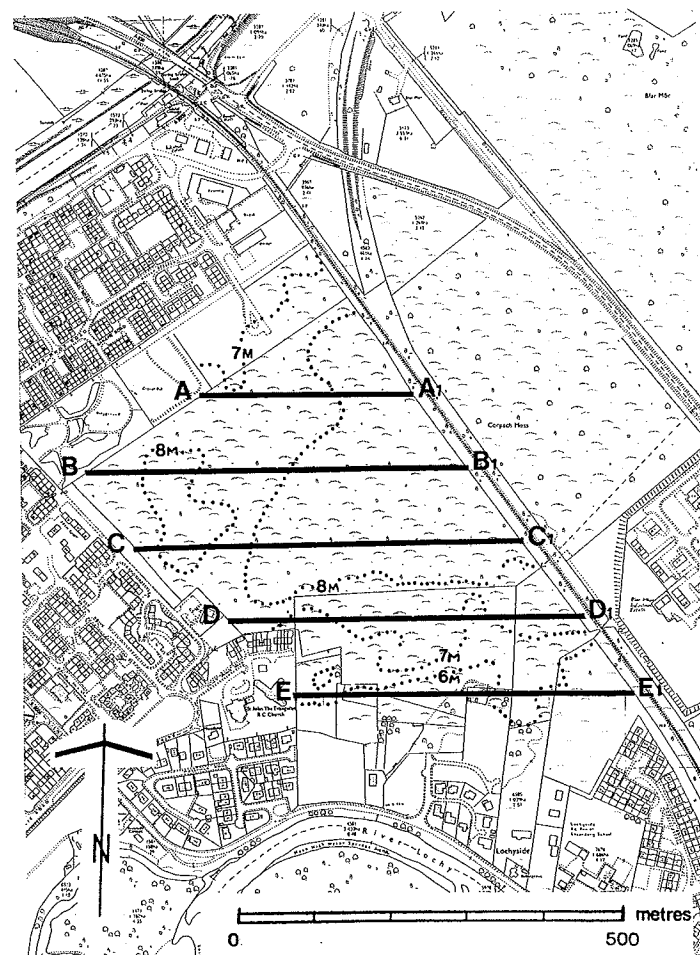
3.2 Such a formation would be capable of withstanding a ground pressure of c.200 kN/sq.m. (equivalent to 2-storey housing) without special foundations*. Finished site levels range from 7m. AOD at the north-eastern limits of the site down to 4.5m. AOD at the south-western edges.

Special Requirements

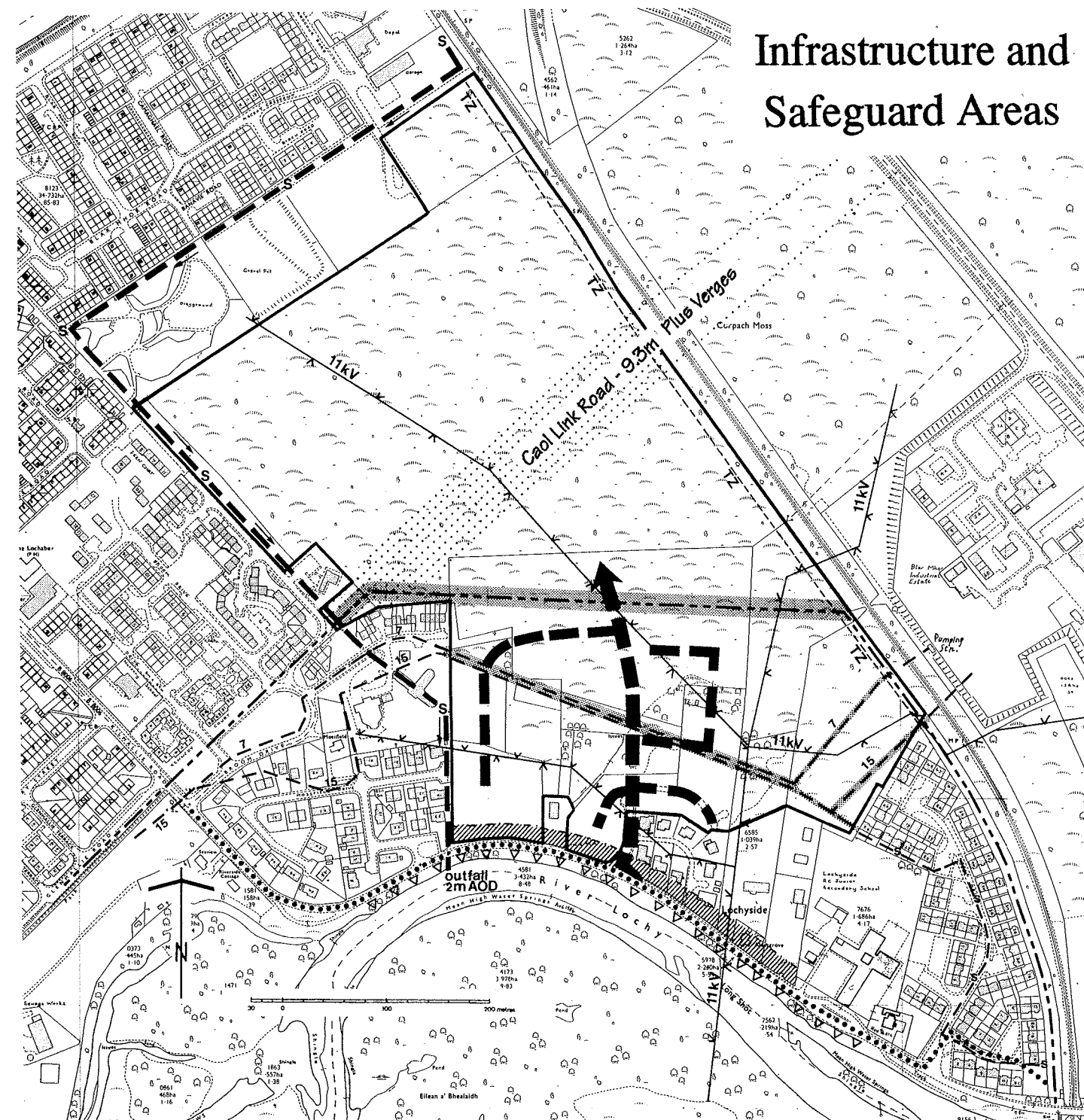
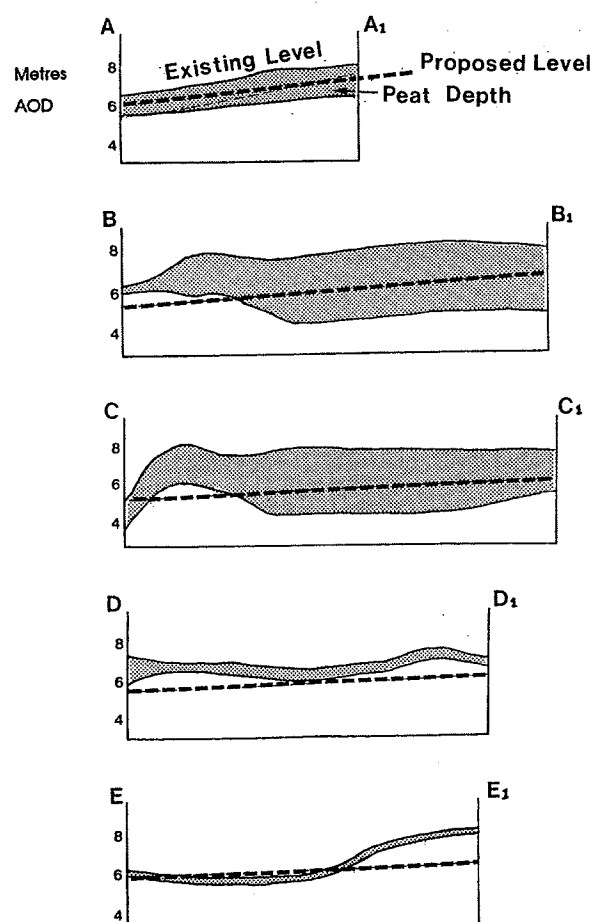
3.3 Further points of interest are as follows;

- (a) the sequence of site engineering works needs to commence at the lowest point in the area (in the south west), and proceed in stages to the north so as to maintain effective surface water drainage control.

* readers are advised to check all technical information and specifications in source publications. This material is not warranted by the Regional Council.



Contours Map and Sections



KEY		
	10m Transition Zone for Floated Rail Embankment	
	Local Distributor Road - 7.3m with 2 x 2m Footpaths and Right Turn Lane	
	Surface Water Drain - Scope for Dualling / Enlargement	
	Paper Mill Process Water Pipe 36" - Wayleave of 15m	
	Hydro Lines - 11kv. and Low Voltage Overhead Only	

Surface Water Drainage

4.4 Because of their low-lying nature, some parts of the existing communities at Caol and Lochyside are prone to occasional flooding in exceptional circumstances. Periods of high catchment runoff and tidal/storm surge on the River Lochy have resulted in localised overtopping onto the B8006 in the past. The Regional Council intends to construct a barrier along a 500m. section of the river banking by 1997. This will give protection against flood events with a 100 year return period.

4.5 A related problem arises on the northern and western boundaries of the site which carry a major surface water system serving a catchment area at Caol and from across the railway at Banavie. This culvert, comprising pipes of increasing dimensions, discharges into the Lochy at 2m. AOD. With peak flood flows of 4m. on the river, stormwater backs up the system and has resulted in localised flooding of land and property to the north at Caol.

4.6 A study by Mott MacDonald for the Regional Council in 1990 recommended a comprehensive storm drainage strategy covering both existing and proposed development areas. Finished ground levels are critical, with the earlier Jameson and Mackay report showing sites down to 4.5m. Possible measures include replacement of the existing drain with a 1.5m. pipe, or more likely, installation of a second culvert. Peak flows will require controlled surcharging or pumping facilities at appropriate points. ***This system must have early priority for design and progressive implementation before any substantial development proceeds.***

Electricity and Telecommunications

4.7 The area is crossed by several 11 kV and low voltage overhead lines at present (see plan). This network will require re-siting underground in the course of the proposed land engineering works, with suitable sites reserved for sub-stations feeding different housing areas. British Telecommunications do not envisage difficulties in extending the existing telephone network. Ducting should be

incorporated at key crossing points where new roads are being laid into sites.

Roads

4.8 The Local Plan acknowledges the circuitous road connections serving Caol and the wider wish to secure a Link Road in due course (see above). A prospective road line, including connection through to the A830(T), crosses the Caol-Lochyside site and will be safeguarded. This takes in extensive land margins required to effect a crossing of the railway by bridge which would be British Rail's preferred solution. Other designs have followed an "at grade" level crossing pattern which would be considerably cheaper and much less intrusive visually. This road will be constructed to 9.3m. width with 2m. verges, and no direct frontage access permitted. A roundabout will be formed to provide access onto local housing distributors.

4.9 Two such local distributors are envisaged running roughly north-south across the site. Their basic specification requires a 7.3m carriageway with 2m footways and limited frontage access. Development has commenced along the first of these at Riverside Park, where a right turn lane will also be constructed on the B8006 in due course. Later phases of development will require construction of the second link, connecting with Ardgor Road to the north, and completing a basic bus loop.

Cycle/Footways

4.10 Scope exists for a number of segregated pedestrian and cycle ways connecting key destinations and public places in and around Caol-Lochyside. In particular, major "greenways" should be established along;

- (a) the route of the process water pipeline which links from the Broom Drive area of Caol, various community/commercial facilities and across to the railway underpass into the Blar Mhor industrial estate.
- (b) the flank of the railway embankment connecting between Castle Drive in the

- (b) the railway embankment has been "floated" directly onto the Moss. A transition zone of 10 m. must therefore be retained beyond the base of the embankment in order to minimise risk of deformation to the railway. Peat within this zone should be finished to a side slope not exceeding 15°.
- (c) timing of work should ideally exploit the driest period of the year ie. the early summer months.
- (d) arrangements should be made to record any archaeological remains which may exist in the over-burden.
- (e) attempts should be made to achieve recycling of as much of the peat/clay overburden as possible. Limited quantities may be retained on-site for landscaping/ground finishing works. Research in 1980 suggested that different parts of the peat profile were suitable for horticultural and fuel purposes. These could be shipped out in bulk using the adjoining railway or by sea. However, the uneven landform/depths and limited quantities/timescale probably militate against commercial exploitation. Final disposal by tipping may therefore be the only realistic arrangement.

Implementation

3.4 Jamieson Mackay estimated the total cost of removing and disposing of peat off-site, together with importation of suitable infill material from a local source at £1.075m [equivalent to £2.25m. at 1993 (RPI) prices]. ***The scale and special nature of these on-costs necessitate co-ordinated effort and funding support from the public sector.***

3.5 Given possible economies of scale, drainage and other infrastructure linkages, there may also be advantages in pursuing the land preparation contract in concert with Phase 2 of the Blar Mhor Industrial Estate (where comparable quantities of peat and replacement upfill material are involved). ***A suitable***

development/partnership package needs to be organised as a matter of priority.

4. INFRASTRUCTURE

Water and Sewerage

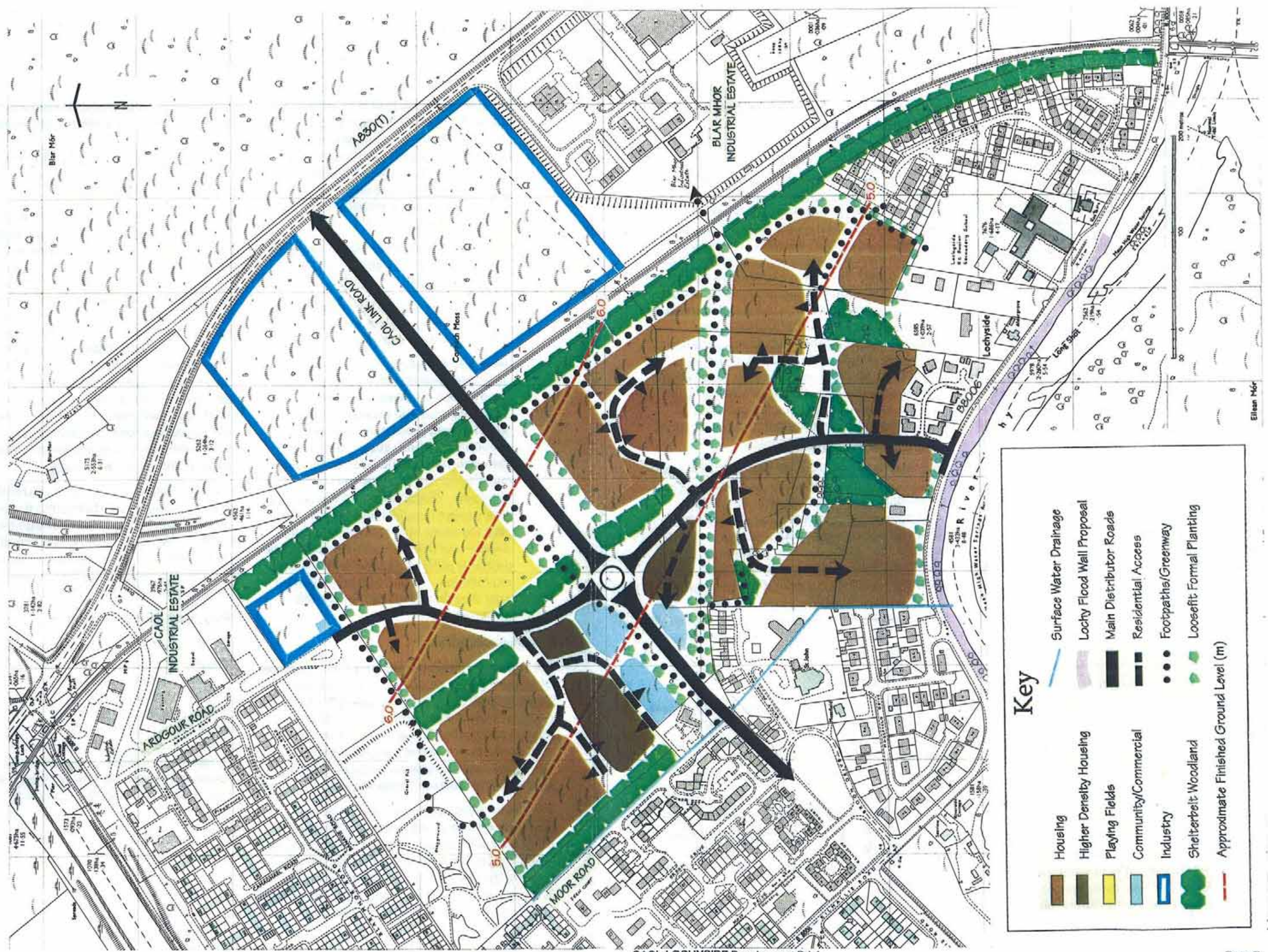
4.1 Existing services cross the southern margins of the site, and no special difficulties are envisaged for the initial phases I and II. A 6" water main skirts the B8006 supplying Lochyside and Caol - a duplicate supply will be brought into the area as demand requires. A 15" trunk sewer and recent 7" pumping main connect Lochyside and the Blar Mhor industrial site with the Caol treatment works to the west. These sewers are flanked either side by 3m. wayleaves which cannot be built over, except as roads and footpaths. Drainage for phases III-VI will need new trunk sewers linking from the collecting network within these developments to existing pump stations at the present treatment works site.

4.2 The Regional Council is currently investing £18m. on major improvements to the Fort William water supply and sewage treatment facilities. Although work is not scheduled to be completed until 1997/98, this is not expected to impose any restrictions upon phased development at Caol-Lochyside.

Process Water Pipeline

4.3 A 36" concrete pipeline supplying the Arjo Wiggins Paper Mill with bulk process water crosses the site. This operates under pumping pressure and is capable of delivering up to 1m. gallons per hour at peak flow. A 15m. wide wayleave is maintained by the Company for periodic inspection and safety work. No built development will be permitted in this corridor. Landscaping and service crossings will require prior agreement with the Company.

Caol - Lochyside Master Plan



Key

	Housing		Surface Water Drainage
	Higher Density Housing		Lochy Flood Wall Proposal
	Playing Fields		Main Distributor Roads
	Community/Commercial		Residential Access
	Industry		Footpaths/Greenway
	Shelterbelt/Woodland		Loosefit Formal Planting
	Approximate Finished Ground Level (m)		