

**The Highland Council**  
**Caithness & Sutherland Area Committee**  
**23 September 2014**

Agenda Item	<b>12</b>
Report No	<b>CS/ 31/14</b>

**Winter Maintenance Plan for 2014/15**

**Report by Director of Community Services**

**Summary**

This report provides information on winter maintenance preparations and arrangements for the 2014/15 winter period and invites the Committee to approve the Winter Maintenance Plans for this Area.

**1. Introduction**

- 1.1. The Council's Scheme of Delegation to City/Area Committees gives the Caithness and Sutherland Area Committee the power:  
"to approve the winter maintenance plan within the strategy and budget allocated by Community Services Committee."
- 1.2. Under Section 34 of the Roads (Scotland) Act 1984, a Roads Authority shall take such steps as they consider reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads.
- 1.3. The TECS Committee agreed a number of enhancements to the Winter Maintenance service on the 16 May 2013 (Report TEC-41-13). These enhancements included:
  - a) Engage with communities well before the start of next winter to promote the community self-help scheme.
  - b) Provision 3 spare winter maintenance vehicles (one per operational area).
  - c) Continue to use local contractors to provide additional resources to assist with snow clearing.
  - d) Formalise the arrangements for the treatments of footpaths in sheltered housing schemes.
  - e) Continue to ensure that grit bins are kept full.
  - f) Reduce the number of priorities in the Winter Maintenance Policy from 4 to 3.
- 1.4. The TECS Committee approved the revised Winter Maintenance Policy on 19 September 2013 (Report TEC-67-13) which was updated to take account of the enhancements agreed by Members on the 16 May 2013 (Report TEC-41-13).

- 1.5. The Council's Winter Maintenance Policy is in place to ensure a consistent level of service between Areas and to ensure, as far as possible, the safety of drivers/pedestrians. However, the operation of that Policy does not and cannot ensure that every road/footway will be free of ice and/or snow at all times.
- 1.6. The operational management of the Council's Winter Maintenance Policy in Caithness and Sutherland is devolved to the Area Community Services Manager. Each Area prepares its own Winter Maintenance Plan which sets out the operational details required to deliver a service and comply with the Council's policy. The Caithness and Sutherland Area Winter Maintenance Plan take full account of the current policy.

**2. Winter Maintenance Policy**

- 2.1. The Council's Winter Maintenance Policy sets out the hierarchy of priorities for treatment, target times for treatment, and the hours of operation. The current Winter Maintenance Policy is contained in **Appendix A**.
- 2.2. As it is not possible to provide a winter maintenance service to every road at the same time, a network hierarchy has been adopted; this is detailed in the Winter Maintenance Policy. Primary routes are treated first, thereafter Secondary routes and then all Other routes being treated as resources permit.
- 2.3. The percentage of the road network which falls into each of the priority category's is shown in the table below:

	Caithness/North Sutherland	Sutherland
Primary	30.8%	40.8%
Secondary	27.2%	13.6%
Other	42.0%	42.6%

- 2.4. The Council publishes "Winter Services" leaflets for each operational area providing the public with information on snow clearing and gritting of Council roads along with maps showing the Priority attributed to individual roads.
- 2.5. The leaflets and Policy information are provided on the "Winter Maintenance" pages on the Council's web site at:

[www.highland.gov.uk/yourenvironment/roadsandtransport/wintermaintenance](http://www.highland.gov.uk/yourenvironment/roadsandtransport/wintermaintenance)

The Priority maps for the Area are reproduced at **Appendix B**. These are available on the Council's website.

### **3. Winter Maintenance Plans**

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- 3.1. A copy of the Winter Maintenance Plans for the Area will be available at the Committee.

### **4. Forecast / Decision Making**

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- 4.1. The Council employs a professional forecast provider who provides daily and 5 day weather forecasts. Separate forecasts are received for the 7 climatic zones across Highland to support local decision making.
- 4.2. The daily forecast is received at noon and covers the following 24 hours. This forecast is used to plan treatment for the evening and following morning. The forecast is updated at 06:00. If there is any adverse deterioration in the forecast during the forecast period, an update is provided directly to the duty officer(s) by telephone.
- 4.3. Real time data is obtained from 25 ICELERT sites (including 7 located on the trunk road). These sensors provide information on the road surface temperature, surface condition (wet, dry, ice), and the presence of salt, graded 1, 2 or 3. Salt 1 level will prevent freezing down to about minus 2°C and Salt 3 down to minus 8°C.
- 4.4. Area teams operate a “Duty Officer” rota to ensure that there is always a suitably qualified and experienced member of staff available 24 hours a day, 7 days a week, to take decisions on the deployment of appropriate resources to deal with the prevailing weather conditions.
- 4.5. Duty officers have all received training from the weather forecast provider. Training is refreshed every three years.

### **5. Operatives**

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- 5.1. The number of manual workers allocated to road maintenance is determined from the number of routes required to deliver the winter maintenance policy, and the Caithness and Sutherland establishment currently stands at 38 for Caithness and 26 for Sutherland. The majority of operatives hold an LGV driving licence.
- 5.2. Operatives normally allocated to grounds maintenance and street sweeping are used to provide resources for treating footpaths. A number have been trained as LGV drivers, however the majority of these operatives hold ordinary driving licences, which generally restricts their involvement to the operating of mini tractors and vehicles of 3.5 Tonnes or less.
- 5.3. A standby system is put in place over the winter period to ensure sufficient drivers are available to cover weekends. A small number of operatives are also put on standby during the week which allows an initial response to emergencies out of hours.

## **6. Vehicles and Plant**

- 6.1. There are 35 front-line winter maintenance vehicles available to be deployed along with 11 footpath tractors.
- 6.2. The number of front line vehicles has reduced over recent years; however the combined spreading capacity has increased as we now operate larger vehicles which are more efficient and are able to treat longer routes. Three spare gritter vehicles are available for use across the Highlands.
- 6.3. Each vehicle treats, on average, 33 km of Primary and Secondary routes followed (should conditions dictate) by 37 km of other routes. The nature of the network is such that very few routes are circular so there is significant dead mileage incurred in returning to base after a route is completed.
- 6.4. Some footway tractors treat several villages, which involves travel time between routes and reduces the length they can treat in a day.

## **7. Treatments**

- 7.1. Winter maintenance treatments consist of morning routes, evening precautionary treatment routes and, during extreme/poor conditions, continuous or all day treatments. Operations begin at 0600hrs and can continue to 2100hrs. Sunday operations begin at 0700hrs and treat Primary routes and service bus routes. The routes covered on a Sunday may be extended during snow conditions.
- 7.2. Treatments consist of the application of pure salt or occasionally salt/sand mix and where required blading or ploughing of the road surface. A spread rate for salt application has been agreed by Council, dependant on weather conditions.
- 7.3. In all cases the Council is required to comply with the Driver Hours Regulations which restrict the number of hours a driver can operate both on a daily basis and throughout the week

## **8. Salt**

- 8.1. The average annual usage of salt for Caithness and Sutherland has increased over recent winters and is now around 25,000 tonnes.
- 8.2. Salt is stored at Depots at Ardgay, Dornoch, Durness, Kinlochbervie, Lairg, Lochinver, Strathsteven, Strathy, Thurso, Tongue and Wick.

8.3. Salt usage varies with prevailing weather conditions. Typical daily usage levels are shown below:

	Caithness	Sutherland
Evening treatment	44 tonnes	34 tonnes
Morning treatment for ice	74 tonnes	73 tonnes
Snow (repeated treatments)	220 tonnes	219 tonnes

## 9. Provision of Grit/Salt Bins

- 9.1. Grit/salt bins generally placed at locations with steep gradients where we are not providing a regular road or footway gritting service.
- 9.2. The bins are filled before the onset of winter conditions. They are replenished regularly over defined routes as well as on an ad-hoc basis as required subject to availability of resources.
- 9.3. Requests for additional bins are considered taking into account the following factors:
- the elevation and steepness of the road/footpath
  - whether a regular road or footway gritting service is already provided
  - the needs and numbers of the regular users of the footpath/road
  - the resources available to service the bins

## 10. Co-ordination and Support for Other Services

- 10.1. There is on-going co-ordination between Council Services and in particular Community Services, Care and Learning and the NHS to close any local gaps in the winter maintenance service at the schools, care homes and housing estates. For example Community Services supplies schools with salt suitable for facilities management staff to spread on the paths and roads within school grounds.
- 10.2. At times of extreme weather Council Services meet as a group to coordinate action to address issues of access to schools, health services and care services. Representatives from the Council's Emergency Planning section, Police, HIFRS, NHS, Transport Scotland, Trunk Road Operating Companies and other key agencies are involved if there is a requirement to consider the wider implications of a winter emergency. The meetings are normally chaired by a representative from Police Scotland or the Chief Executive's Office. The Council's Corporate Communications Office is kept informed to enable appropriate communication with the public through media and social networking channels.

## **11. Exceptional Conditions**

- 11.1. While the resources set out above will deal with the majority of winter events, there may be occasions, for example periods of heavy prolonged snowfall, when additional resources are required.
- 11.2. To help deal with these exceptional situations a framework contract is in place which allows us to bring in additional resources at short notice. Local contractors are available who can supply equipment and operators to assist in clearing deep snow at short notice.
- 11.3. Community Service resources are also available to assist with the treatment of footpaths.

## **12. Community Self-Help**

- 12.1. The Council also encourages communities to “self-help” as much as possible and to generate awareness of people within their community that may need assistance from neighbours in clearing snow and ice or possibly shopping or accessing health and social services during extreme weather conditions.
- 12.2. Community self-help is also being encouraged under the Councils “Winter Resilience” scheme whereby communities can submit an application via their community council to carry out footway gritting operations within an agreed area. The Council will provide the community with salt/grit, bins, scrapers and reflective waistcoats. Currently we have received an initial enquiry from Tannach & District Community Council for the forthcoming winter. It is important to note that this does not replace the service provided by the Council, but allows the community to provide an enhanced level of service.

A letter to all Highland Community Councils is being issued during September to remind them of the scheme.

- 12.3. Guidance is also published on the Council web site and by the Scottish Government on their “Ready Scotland” web site urging people to be prepared for emergencies and extreme weather.
- 12.4. The Council also provides (on request) salt/gritting services for key strategic local service providers, including hospitals, health centres, fire stations, airports and train stations etc.

## **13. Implications**

- 13.1. This report has no impact on equality, Gaelic, Climate Change/Carbon Clever or rural considerations nor are there any resource, legal or risk implications.
- 13.2. In relation to Carbon Emissions the Service provides specialist training for all operatives in respect to fuel efficient driving, and route plans are in place to achieve the most efficient routing of vehicles.

**Recommendation**

The Committee is invited to approve the Winter Maintenance Plans for Caithness and Sutherland Area for 2014/15, which includes the priority road maps presented in **Appendix B**.

Designation: Director of Community Services

Date: 2 August 2014

Author: Campbell Stewart, Area Community Services Manager Caithness and Sutherland

## **Appendix A**

### **Winter Maintenance Policy**





# The Highland Council

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Transport, Environmental & Community Services

## Winter Maintenance Policy

August 2013

# Winter Maintenance Policy

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- 1.0 BACKGROUND
- 2.0 GENERAL
- 3.0 TREATMENT OF ROADS.
- 4.0 TREATMENT OF FOOTWAYS.

# THE HIGHLAND COUNCIL

## Transport, Environmental and Community Services

### Winter Maintenance Policy

#### 1.0 BACKGROUND

- 1.1 Under Section 34 of the Roads (Scotland) Act 1984, a Roads Authority shall take such steps as they consider reasonable to prevent snow and ice endangering the safe passage of pedestrians and vehicles over public roads.
- 1.2 This Winter Maintenance Policy relates to the Council's responsibilities as Roads Authority for adopted roads, cycle ways, footways and footpaths.
- 1.3 Cross Service Working arrangements exist between Services to ensure that Council properties receive an appropriate winter maintenance service. The appropriate Service Director will determine the appropriate level of winter maintenance service for footpaths, car parks and other areas that are the responsibility of the Council but are not on the list of public Roads.

#### 2.0 GENERAL

- 2.1 With the operational management devolved to the Areas it is essential that a common Winter Maintenance Policy is in place to ensure a consistent service for drivers passing between local Areas.
- 2.2 It is the aim of Highland Council in respect of its winter maintenance service to:-
  - 2.2.1 Provide a winter gritting and snow clearing service which, as far as is reasonably practical, using the resources available, permits the safe movement of vehicles and pedestrians on the adopted road and footway network and seeks to minimise delays attributable to weather conditions.
  - 2.2.2 Conduct operations having regard to the requirements of the Health and Safety at Work Act 1974 and EU and Domestic Driver Hours Regulations.
- 2.3 The Council as Roads Authority is not responsible for Winter Maintenance on unadopted roads and will not provide a Winter Maintenance service for unadopted roads. It will however make every effort to provide assistance for emergency and medical services during severe weather conditions where there is an urgent need for safe access.
- 2.4 The responsibility for Winter Maintenance on Trunk Roads lies with Transport Scotland.

2.5 The Council will source Winter Weather Forecasting Services from recognised Meteorological Service Providers during the period 1st October to 30th April.

**3.0 TREATMENT OF ROADS**

The Council will endeavour to provide the highest level of service possible within the resource available. During winter, especially during severe weather, it may not be possible to keep every road free from ice and snow at all times.

The treatment of roads will be carried out based on a hierarchical system dependant on route priority. The time taken to complete the treatment of routes will vary from day to day depending on actual weather conditions and can be expected to increase significantly during periods of snow due to having to plough both sides of the road.

**3.1 NETWORK HIERARCHY**

The following prioritised hierarchy will be used to determine the order of treatment of roads.

<p><b>PRIMARY</b> (Highest)</p>	<p>Strategic, Regional, Sub Regional and Link roads which serve the larger communities and permit the majority of road users to travel across the region. Main &amp; Local distributor roads in the larger urban settlements. High frequency service bus routes operating at least 6 days a week and starting prior to 7am with identified hazards.</p>
<p><b>SECONDARY</b></p>	<p>Roads connecting smaller communities to the primary network. Link and Service roads within the larger urban settlements. Service and school* bus routes not covered by the Primary network.</p>
<p><b>OTHER</b></p>	<p>Minor rural and local access roads. Residential roads in urban settlements.</p>

Gritting may not be completed on all routes before buses start their journeys.

\* Contracted school buses and/or mini buses (9 passenger seats or more)

The priority network will be agreed by Area Committee. Leaflets with maps showing the Primary and Secondary network will be made available to the public at the start of each winter period.

**3.2 TREATMENT TIMES - MONDAY TO SATURDAY**

The service will be provided between 6am and 9pm. Treatment after 6pm will in general be restricted to Primary routes only.

### **3.3 TREATMENT TIMES – SUNDAYS AND PUBLIC HOLIDAYS**

#### **3.3.1 Sundays, 25<sup>th</sup> December and 1<sup>st</sup> January**

The service will be provided between 7am and 9pm and will be restricted to the Primary network only. During periods of sustained snow, or where significant snow conditions are forecast, the service may be extended to include difficult Secondary routes.

#### **3.3.2 26<sup>th</sup> December and 2<sup>nd</sup> January**

The service will be provided between 7am and 9pm and treatment will be restricted to the Primary and Secondary networks only. Where December 26th and January 2nd fall on a Sunday then a Sunday service will be provided.

### **3.4 PRECAUTIONARY TREATMENT**

Precautionary treatment carried out the previous evening, normally before 9pm, in advance of forecasted adverse weather, will in general be restricted to Primary routes only.

### **3.5 TREATMENT DURING SNOW CONDITIONS**

In times of severe weather, resources will be concentrated on keeping the Primary network clear and as a result there may be a delay before it is possible to treat the Secondary and Other road network, including residential streets. In exceptional snow conditions external contractors will be deployed to assist with snow clearance.

### **3.6 SNOW GATES**

For safety reasons Snow Gates are located on routes where drifting snow can make the route impassable very quickly. The closure and subsequent opening of snow gates will only take place with the authority of the Police.

The roads controlled by snow gates within the Highland area are as follows:

- A939 Bridge of Brown
- A939 Grantown to Dava
- A939 Dava to Ferness
- A832 Braemore to Dundonnell
- B9007 Carrbridge to Ferness
- B9176 Struie Hill Road
- Cairngorm Ski Road
- Bealach na Ba

In severe snow conditions the Council may withdraw resources from these roads and allow the storm to abate. In such circumstances resources may be diverted to assist snow clearing operations on other parts of the network. Additional resources may be employed during such snow conditions.

### 3.7 TARGET TREATMENT TIMES

The following are the target times for completion of routes during conditions of ice and light snow.

#### 3.7.1 Monday to Saturday

PRIMARY ROUTES	8.30am
SECONDARY ROUTES	9.00am
OTHER	As resources and conditions permit.

#### 3.7.2 Sundays, 25<sup>th</sup> / 26<sup>th</sup> December and 1<sup>st</sup> / 2<sup>nd</sup> January

PRIMARY ROUTES	9.30am
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### 3.8 TREATMENT OF DIVERSION ROUTES.

Where a road, including a trunk road, is closed to traffic due to either planned works or an emergency situation then the agreed diversion route will be treated as follows.

#### **Trunk Road Closure.**

The agreed diversion route will be treated to Primary standard and signs erected at each end of the diversion and any other junctions with trunk roads, stating that there will be no overnight salting.

In an emergency situation and after Transport Scotland or its trunk road management and maintenance agents have notified the Council of the closure, every endeavour will be made to both treat the agreed diversion route appropriately and erect signs before the first overnight period.

#### **Council Road Closure.**

Any part of the agreed diversion route that is of a lower priority than the closed road will be treated to the same priority as the closed road.

### 4.0 TREATMENT OF FOOTWAYS, FOOTPATHS AND CYCLE WAYS.

Treatment for ice and light snow conditions on adopted footways, footpaths and cycle ways will be carried out as set out below. Each gritting route will take a significant length of time to complete. The length of time taken will vary from day to day depending on actual weather conditions.

**4.1 NETWORK HIERARCHY**

The following prioritised hierarchy will be used in determining the order of treatment of footways.

Priority	Description
PRIMARY	Main urban shopping centres. Primary cycleways.
SECONDARY	Footways serving main urban areas, schools, hospitals and minor shopping areas. Sheltered Housing and locations of special need with known identified hazards.
OTHER	Other footways as resources allow.

**4.2 TREATMENT TIMES - MONDAY TO SATURDAY**

The winter maintenance service will be provided between 6am and 6pm and routes will be treated on a priority basis as resources permit

**4.3 TREATMENT TIMES - SUNDAYS AND PUBLIC HOLIDAYS**

A service will be provided between 7am and Noon on Primary routes only.

There will be no service for footways on Christmas Day or New Years Day.

-- End of Policy Statement --

## **Appendix B**

**Winter Maintenance Plan 2014/15**

**Caithness and Sutherland Area**

**Priority Road Maps and schedule**



## Winter Maintenance Priorities 2014-15

### Primary Roads

Road Number / Name	From	To
A836	Meikle Ferry Roundabout	John O'Groats
A837	Invershin	Lochinver
A838	Dalchork Junction	Tongue
A894	Skiag Junction	Laxford Bridge
A897	Helmsdale	Melvich
A949	Dornoch	Bonar Bridge
A99	Wick	John O' Groats
B874	Princes St Thurso	A9 Hoy Junction
B876	A99 junction	A836 junction
B877	High Street, Thurso	Shore Street, Thurso
B9168	Dornoch War Memorial	Trentham
B9176	Struie Road	
C1001	Glengolly	Reay
C1025	Mountpleasant Road, Thurso	
C1041	Willowbank, Wick	Church Street, Wick
C1073	Macarthur Street, Wick	Northcote Street
C1077	A9	B877
C1081	Lovers Lane, Thurso	
U1344	Airport Road, Wick	Wick Industrial Estate Road
U3261	Embo Road	
U3311	Dornoch	Embo junction
U3420	Ackergill Street, Wick	
U3458	Bankhead Road, Wick	
U3494	St Fergus Road, Wick	
U3500	Coach Road, Wick	
U3558	Stafford Terrace, Brora	
U3603	Martha Terrace, Wick	
U3624	North Murchison Street, Wick	
U3632	River Street, Wick	
U3647	Scalesburn, Wick	
U3651	Shore Lane, Wick	
U3660	Wellington Street, Wick	
U3664	Whitechapel Road, Wick	
U3805	Station Road, Wick	
U4003	Castlegreen Road, Thurso	
U4070	Janet Street, Thurso	
U4088	Millbank Road, Thurso	
U4135	Riverside Road, Thurso	
U4313	Provost Cormack Drive, Thurso	
U4341	Henderson Street, Thurso	
U4343	Provost Sinclair Road, Thurso	
U5063	Sir John's Square, Thurso	

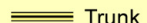


## Secondary Roads

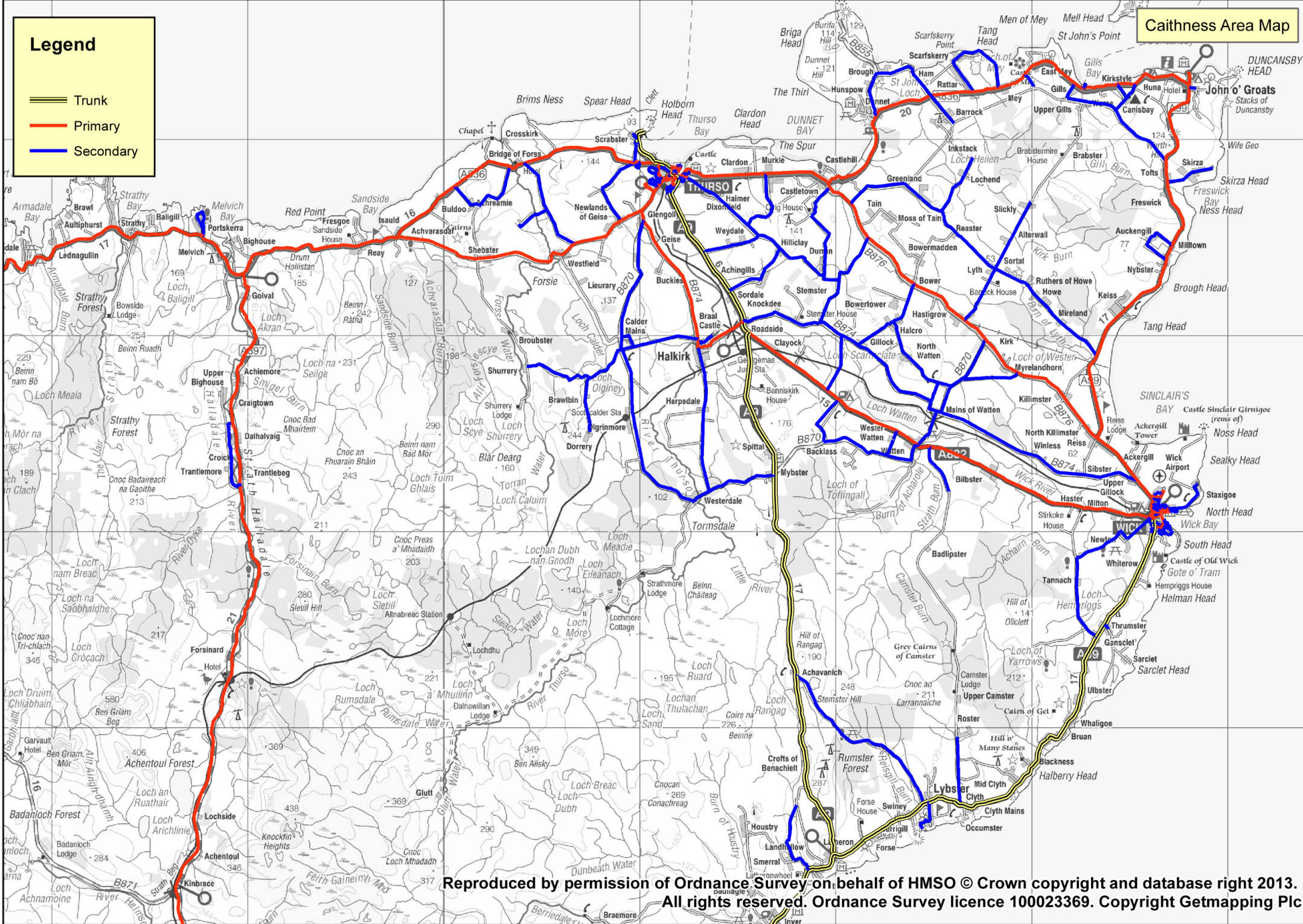
Road Number/ Name	From	To
B855	Dunnet	Brough
B869	Lochinver	Newton
B870	B876 junction	B874 junction
B874	A9 Hoy junction	A99 Junction
C1006	Wester Bridge - Greenland Road	
C1010	Mey - Skarfskerry - Whitebridge road	
C1018	Westerdale	Halkirk
C1019	Old Caithness Road	
C1025	Mountpleasant	Durran
C1026	Skelbo Station	Dornoch
C1030	Gower Street, Brora	
C1033	B876 junction	Greenland
C1033	Upper Gills	Everley
C1037	Hastigrow	Slickly Road junction
C1038	Achnhuie	Rovie Lodge
C1041	Broadhaven Road, Wick	Staxigoe
C1042	Rearquhar	Birichen
C1045	Main Street, Lybster	Jcn A99(T)
C1046	Gartymore	West Helmsdale
C1048	Castletown - Durran Mains road	
C1049	Evelix	Rearquhar
C1057	Thrumster/Haster Road, Jcn A99(T)	Puldagon
C1058	Doll to Kilmain Road	
C1061	Duncansby Road, A99 jcn	Beil Road junction
C1069	Poolhoy to Wester road	
C1074	Altass Road	
C1078	Tirryside Road, Lairg	
C1085	Gills West Branch Road	
C1089	Dunbeath Brae Road (including to war memorial)	
C1102	A839 junction	Schiberscross junction
C1103	Poles	Skelbo Station Road
C1109	Rosehall Link Road	
C1138	Carron Bridge	Baldounie
C1140	Baldounie Bridge	Gledfield
C1148	Link Road A897	A9(T)
C1247	Brough	Barrock
U1053	Achmelvich Road	
U1065	Latheronwheel - Braehungie Road, jcn A99(T)	Boultach
U1237	Puldagon - Newton - Whitebridge Road	
U1280	Wester Watten - Newton Road	
U1300	Gersa - Halcro road	

U1316	Myrelandhorn/Quoybrae road	
U1553	Auckengill Township Road	
U1557	Freswick/Skirza Road	
U1609	Seater/Canisbay/Hill of Warse Road	
U1613	Kirkstyle - Canisbay Road	
U1633	Mey Road	
U1707	Lower Marrel Road	Lochend Road
U1755	Bowermadden - Gillock Road	
U1802	Dunn - Lannergill Road	
U1865	Braal Terrace	
U1871	Halkirk/Plocan Road	
U1913	Plocan - Brawlbin - Dorrery Road	
U1927	Brawlbin - Shurrery Road	
U2052	Forss	Achreamie
U2066	Buldoo/Achreamie Road	
U2105	Forss - Westfield Road	
U2110	Lythmore Road	
U2144	Newlands of Geise - Langland Road	
U2158	Holburn Head Road - round loop St Clair Ave/Holburn Place	
U2188	Weydale Road	
U2196	Sordale - Hilliclay Road	
U2202	Knockarthur Road	
U2211	Muie Road	
U2220	Stonegun	Sibmister
U2247	Acheilidh	Inchcape
U2257	East Langwell Road	
U2385	Munro's Bridge	West Helmsdale
U2390	Link Road U2385	U2394
U2394	Link Road C1148	C1046
U2485	Wick Industrial Estate	
U2532	Lower Marrel Road	
U2560	Marrel Road	
U2766	Lothmore Road	
U2780	Portgower Old Village Road	
U2847	Johnstone Place, Brora	
U2851	Johnstone Crescent, Brora	
U2855	Tarbet Crescent, Brora	
U2859	Seaforth Place, Brora	
U2894	Dudgeon Par drive, Brora	
U2929	Doll School Road	
U2933	East Doll Road	
U3103	Dunrobin Glen Road	Argo Terrace
U3140	Nursery Road, Backies	
U3166	Backies Road, Golspie	

U3299	Ardshave Road	
U3316	Torboll Street	
U3470	Battery Road, Wick	
U3474	Airdens Road	Garbh Leathad junction
U3489	Loch Migdale Road	
U3497	Cairndhuna Terrace, Wick	Garbh Leathad junction
U3520	Girnigoe Street, Wick	
U3521	A9(T)	Torboll Road
U3521	Lairg Road	Clashcoig
U3523	Glamis Road, Wick	
U3524	Migdale Manse Road	Loch Migdale Road
U3541	Harrow Hill, Wick	
U3547	Henrietta Street, Wick	
U3551	Hill Avenue, Wick	
U3557	Hospital Road, Wick	
U3560	Huddart Street, Wick	
U3561	Croik Manse Road	
U3564	Baldounie Bridge	Amat
U3565	Kenneth Street, Wick	
U3577	Leishman Avenue, Wick	
U3618	Newton Road, Wick	
U3637	Roxburgh Road, Wick	
U3649	Seaforth Avenue, Wick	
U3654	Smith Terrace, Wick	
U3659	Wellington Avenue, Wick	Battery Road
U4017	Dale Road, Thurso	
U4057	Heathfield Road, Thurso	
U4064	Howburn Road, Thurso	
U4115	Park Avenue, Thurso	
U4119	Pennyland Drive, Thurso	
U4151	St Andrews Drive, Thurso	
U4293	Thorfinn Terrace, Thurso	
U4299	Towerhill Road, Thurso	
U4305	West Church Street, Thurso	
U5431	Thurso Business Park	

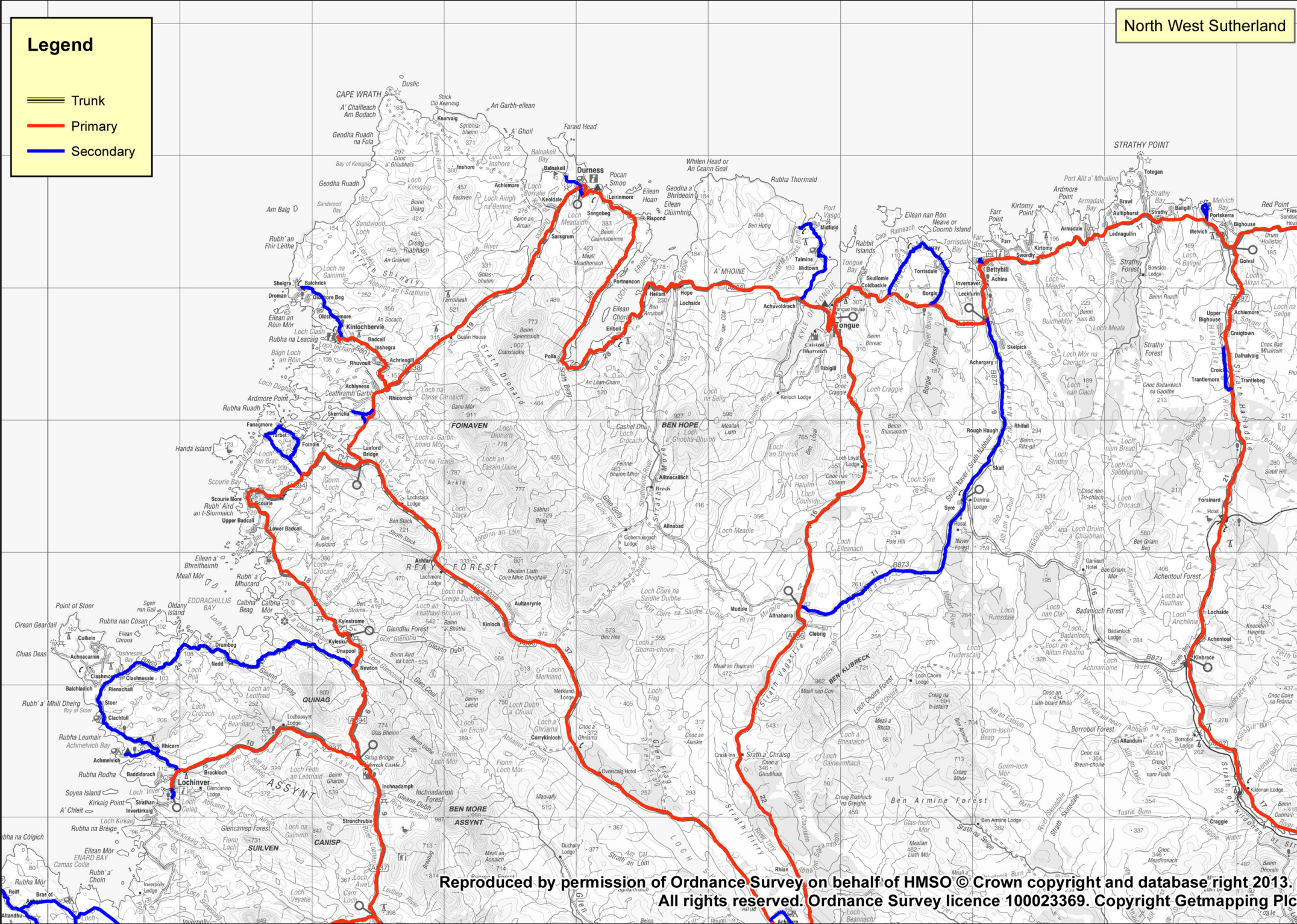
Legend

-  Trunk
-  Primary
-  Secondary



Legend

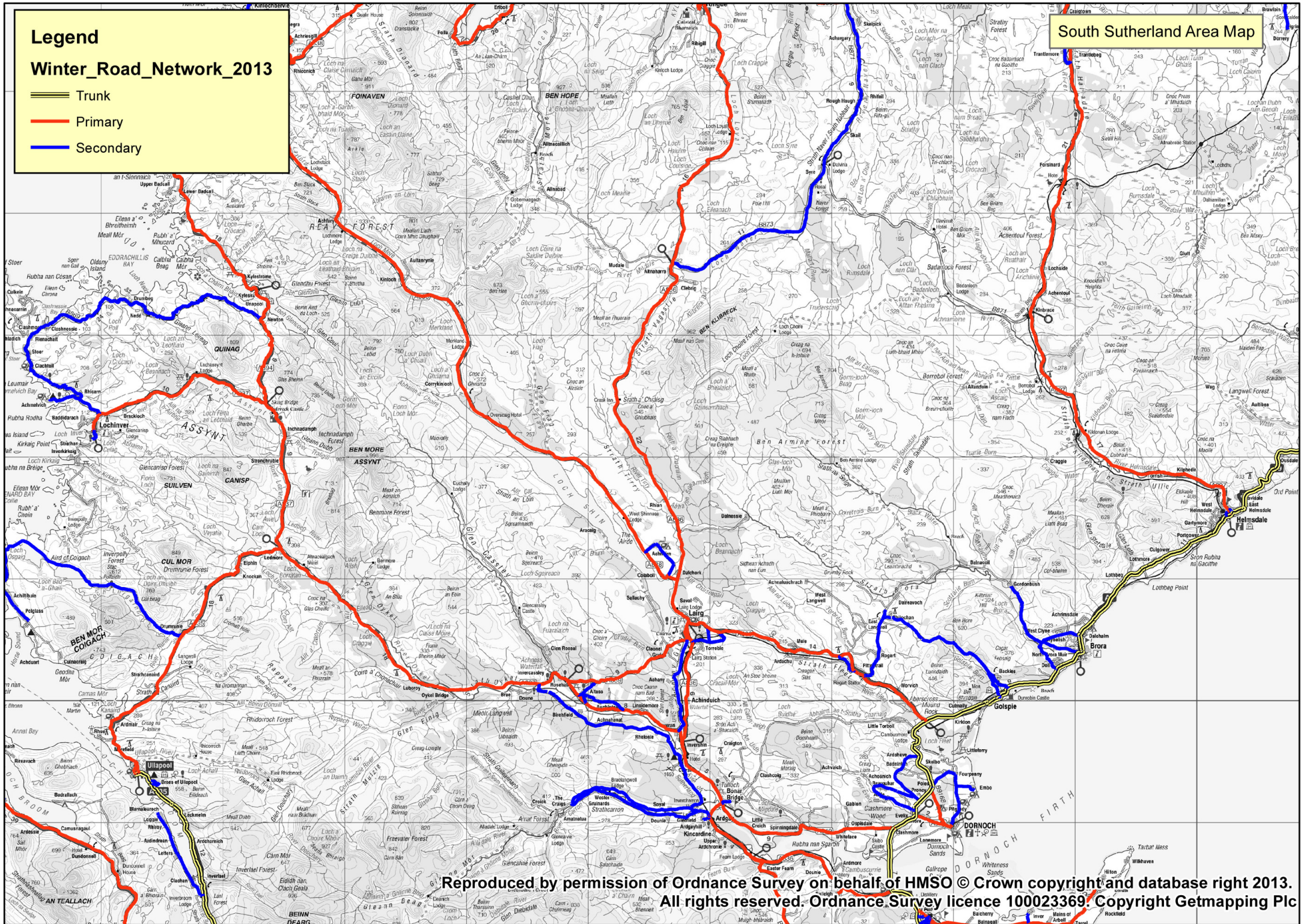
-  Trunk
-  Primary
-  Secondary



# Legend Winter\_Road\_Network\_2013

- Trunk
- Primary
- Secondary



## South Sutherland Area Map



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**Legend**

**Winter\_Road\_Network\_2013**

-  Trunk
-  Primary
-  Secondary

