

### Comhairle Chontae Chill Chainnigh

Halla an Chontae Sraid Eoin Cill Chainnigh

Kilkenny County Council
County Hall John Street Kilkenny



Pobail agus Áiteanna Inbhuanaithe a Chruthú

**Creating Sustainable Communities and Places** 

12th October, 2021.

TO:

AN CATHAOIRLEACH

& EACH MEMBER OF KILKENNY COUNTY COUNCIL

RE:

**WINTER MAINTENANCE PLAN 2021/2022** 

Dear Councillor,

The Winter Maintenance Season for 2021/2022 will extend from the 18th October 2021 to 30th April 2022. Daily monitoring of the road network conditions will be undertaken in this period and winter maintenance resources will be deployed in accordance with the provisions of the Winter Maintenance Plan 2021/2022.

Members are advised that the service delivery target for the Priority 1 and 2 network is to keep these roads frost/ice free 24 hours a day, 7 days a week. This service is provided from the Council's Machinery Yard through the deployment of salt spreaders under the direction of the Duty Engineer.

Notwithstanding the provision by Kilkenny County Council of winter maintenance services, it is the duty of individual road users to ensure that they drive in accordance with prevailing conditions and no assumptions should be made that frost or icy conditions do not prevail on certain areas of the road network.

The total length of the road network to be treated (Priority 1 and 2) is 427km. The routes are selected based on their strategic importance, volumes of traffic and in consideration of the logistics involved in designing the overall routes. Four vehicles will be deployed to deliver the service and, with a capacity of between 12 and 13 tonnes of salt per vehicle. Additional capacity is not achievable without significant capital investment.

A full copy of the Winter Services Plan 2021/2022 will be displayed on the Council's website.

Area Engineers will also present Elected Members, at individual Municipal District Committee Meetings, with the details of the proposed Priority 3 Routes for 2021/2022. These are the routes that do not receive treatment to the standard pertaining to Priority 1 and 2 but which are treated periodically during periods of particularly severe weather.

Elected Members attention is also drawn to the provisions of the Severe Weather Plan which provides for the pooling of resources in the event that particularly severe weather events occur. This includes liaison with the IFA, local schools and other emergency service providers.

In conclusion,p I recommend approval of the Winter Services Plan 2021/2022 in line with the details set out in this memo to Elected Members.

Yours sincerely,

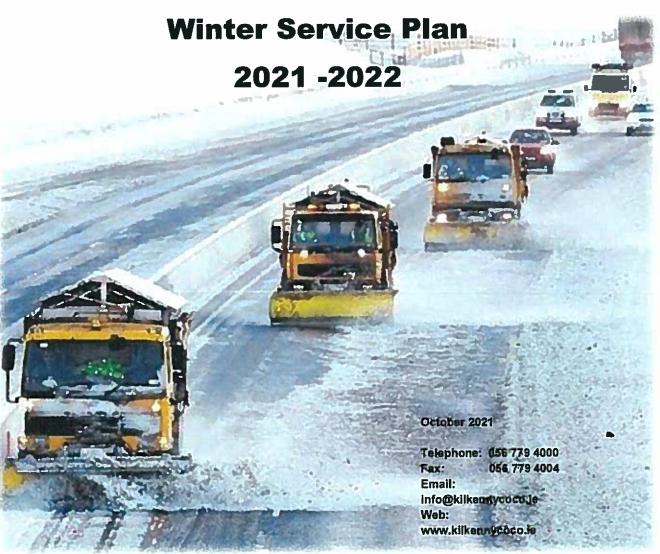
Jun Bulton

Tim Butler

**Director of Services** 

# **Kilkenny County Council**





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#### 1. Document Control

Role	Name	Signature	Date
Prepared By:	William Delaney		
Checked By:	Seamus Kavanagh		
Winter Services Manager	Tim Butler		
Director of Services for Transportation	Tim Butler		

#### 2. Purpose and Scope

The purpose and scope of this document is to identify the processes, procedures and key personnel employed by Kilkenny County Council in the delivery of winter maintenance services throughout County Kilkenny.

#### 3. Winter Maintenance Policy

Motorists have a general duty of care to consider prevailing weather and road conditions when planning and/or undertaking journeys across the public road network.

Due to the length of the road network in County Kilkenny, it is not feasible to treat all roads in the County during the Winter Season (October 18<sup>th</sup>, 2021 to April 30<sup>th</sup>, 2022). Accordingly, a form of prioritisation is necessary, and routes are divided into the following three priority designations:

Kilkenny County Council will seek to ensure, as far as reasonably practicable, the prevention of ice formation and of snow accumulation on **Priority 1 Routes** (Red Routes).

Kilkenny County Council will seek to ensure, as far as reasonably practicable, the prevention of ice formation and of snow accumulation on **Priority 2 Routes (Blue Routes)**.

In extreme weather events and/or in circumstances requiring resource prioritisation,
Priority 1 Routes will take precedence over Priority 2 Routes in terms of the
allocation of available resources.

Kilkenny County Council will provide periodic winter maintenance services on **Priority 3 Routes (Green Routes)**. Such services will only be provided on selected occasions associated with the anticipation of particularly severe weather conditions. Road-users must not assume that pre-salting services have been provided to the Priority 3 Network.

Mobilisation and Treatment times are detailed in Table 4.1 below. In the case of Priority 1 and 2 Routes, notification of the intention to commence pre-salting services is required a minimum of five to six hours in advance of the predicted time of ice formation.

Table 4.1

Treatment Route	Priority 1	Priority 2	Priority 3
Mobilisation Time	lhr	1hr	When possible
Treatment Time	2.5hr	3.5hr	When possible

#### 4. Decision Matrix

The Duty Engineer will inspect the forecast system daily from approximately 2pm or as soon thereafter as the Met Eireann forecast has been received. The decision matrix in Table 4.1 consists of the following;

**Table 4.1 Decision Matrix** 

Road Surface		Predicted Road Conditions		
Temperature	Precipitation	Wet	Wet Patches	Dry
May fall below 1°C	No rain No hoar frost No fog	Salt before frost	Salt before	No action likely, monitor
	No rain No hoar frost No fog		(see note a)	weather (see note a)
	Expected hoar frost Expected fog		Salt before frost (see note b)	
Expected to fall below 1°C	Expected rain before freezing	Salt after rain stops (see note c)		
	Expected rain during freezing	Salt before frost and, as required, after rain stops (see note d)		fter rain stops
Possible ho	Possible rain Possible hoar frost Possible fog	Salt before frost we		Monitor weather conditions
Expected Snow		Salt before snow	fall	

The decision to undertake precautionary treatments should be, if appropriate, adjusted to take account of residual salt or surface moisture.

All decisions should be evidence based, recorded and require careful monitoring and review.

#### Notes:

- a) Particular attention should be given to the possibility of water running across carriageways and other running surfaces e.g. surface water off adjacent fields after heavy rains, washing off salt previously deposited. Such locations should be closely monitored. Ideally the source of the run-off should be diverted from the roadway.
- b) When a weather warning contains reference to expected hoar frost, considerable deposits of frost can occur. Hoar frost usually occurs in the early morning and is difficult to cater for because of the probability that any salt deposited on a dry road too soon before its onset, may be dispersed before it can become effective. Careful monitoring is required under this forecast condition which should ideally be treated just as the hoar frost is forming. Such action is usually not practicable and salt may have to be deposited on a dry road prior to but as close as possible to the expected time of the condition. Hoar frost may also be forecast at other times of the day, in which case the timing of salting operations should be adjusted accordingly.
- c) If under these conditions, rain has not ceased by early morning, crews should be called out and action initiated as rain ceases.
- d) Under these circumstances rain will freeze on contact with running surfaces and full precautionary treatment should be provided even on dry roads. This is a most serious condition and should be monitored closely and carefully throughout the danger period.

#### 5. Winter Maintenance Route Mapping Schedule

The following list in Table 5.1 sets out the drawings which indicate the Priority 1, 2 and 3 Routes for Winter Maintenance and also indicate the Section 85 arrangements between Kilkenny County Council and Tipperary County Council whereby, in the interests of efficiency services are provided by one local authority on behalf of another. The mapping for Priority 1, 2 and 3 Routes is contained in the Appendices.

Table 5.1 Winter Maintenance Route Mapping Schedule

Drawing. No.	Drawing Name	Date
KCC-WM-01	Priority 1 & 2 Routes	Oct. 2015
KCC-WMP1&2-01	Route A – N77, N78, R639 & R693	Oct. 2017
KCC-WMP1&2-02	Route B – N76, N24 & R448	Oct. 2015
KCC-WMP1&2-03	Route C – R700, N25 & R704	Oct. 2015
KCC-WMP1&2-04	Route D - N10, R713, R448, R712 & Ring Road	Oct. 2015
KCC-WM-05	Section 85 Kilkenny/Tipperary	Oct.2013
KCC-WM-08	Section 85 Tipperary/Kilkenny	Oct. 2013
KCC-WMP3-01	Priority 3 Route Kilkenny Area	Sept. 2011
KCC-WMP3-02	Priority 3 Route Castlecomer Area	Nov. 2010
KCC-WMP3-04	Priority 3 Route Newrath Area	Nov. 2010

#### 6. <u>Duty Rosters</u>

The duty rosters for Kilkenny Local Authority staff assigned to the winter service plan are contained in Tables 6.1 and 6.2 below.

**Table 6.1 Duty Engineers Roster** 

Duty Engineer	Duty Period Start	Duty Period Finish
Seamus Kavanagh	18/10/2021	24/10/2021
Philippe Beubry	25/10/2021	31/10/2021
Stan Cullen	01/11/2021	07/11/2021
Declan Murphy	08/11/2021	14/11/2021
Seamus Kavanagh	15/11/2021	21/11/2021
Philippe Beubry	22/11/2021	28/11/2021
Stan Cullen	29/11/2021	05/12/2021
Declan Murphy	06/12/2021	12/12/2021
Seamus Kavanagh	13/12/2021	19/12/2021
Philippe Beubry	20/12/2021	26/12/2021
Stan Cullen	27/12/2021	02/01/2022
Declan Murphy	03/01/2022	09/01/2022
Seamus Kavanagh	10/01/2022	16/01/2022
Philippe Beubry	17/01/2022	23/01/2022
Stan Cullen	24/01/2022	30/01/2022
Declan Murphy	31/01/2022	06/02/2022
Seamus Kavanagh	07/02/2022	13/02/2022
Philippe Beubry	14/02/2022	20/02/2022
Stan Cullen	21/02/2022	27/02/2022
Declan Murphy	28/02/2022	06/03/2022
Seamus Kavanagh	07/03/2022	13/03/2022
Philippe Beubry	14/03/2022	20/03/2022
Stan Cullen	21/03/2022	27/03/2022
Declan Murphy	28/03/2022	03/04/2022
Seamus Kavanagh	04/04/2022	10/04/2022
Philippe Beubry	11/04/2022	17/04/2022
Stan Cullen	18/04/2022	24/04/2022
Declan Murphy	25/04/2022	30/04/2022

**Table 6.2 Drivers and Fitters Roster** 

Drivers	Fitters	Duty Period Start	Duty Period Finish
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Michael Lonergan/Declan Lawlor	18/10/2021	24/10/2021
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Andy Cleere/James Fenion	25/10/2021	31/10/2021
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Paul Hogan/Pat Kavanagh	01/11/2021	07/11/2021
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Michael Lonergan/Declan Lawlor	08/11/2021	14/11/2021
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Andy Cleere/James Fenion	15/11/2021	21/11/2021
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Paul Hogan/Pat Kavanagh	22/11/2021	28/11/2021
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Michael Lonergan/Declan Lawlor	29/11/2021	05/12/2021
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Andy Cleere/James Fenion	06/12/2021	12/12/2021
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Paul Hogan/Pat Kavanagh	13/12/2021	19/12/2021
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Michael Lonergan/Declan Lawlor	20/12/201	26/12/2021
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Andy Cleere/James Fenion	27/12/2021	02/01/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Paul Hogan/Pat Kavanagh	03/01/2022	09/01/2022
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Michael Lonergan/Declan Lawlor	10/01/2022	16/01/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Andy Cleere/James Fenion	17/01/2022	23/01/2022
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Paul Hogan/Pat Kavanagh	24/01/2022	30/01/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Michael Lonergan/Declan Lawlor	31/01/2022	06/02/2022
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Andy Cleere/James Fenion	07/02/2022	13/02/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Paul Hogan/Pat Kavanagh	14/02/2022	20/02/2022
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Michael Lonergan/Declan Lawlor	21/02/2022	27/02/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Andy Cleere/James Fenion	28/02/2022	06/03/2022
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Paul Hogan/Pat Kavanagh	07/03/2022	13/03/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Michael Lonergan/Declan Lawlor	14/03/2022	20/03/2022
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Andy Cleere/James Fenion	21/03/2022	27/03/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Paul Hogan/Pat Kavanagh	28/03/2022	03/04/2022
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Michael Lonergan/Declan Lawlor	04/04/2022	10/04/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Andy Cleere/James Fenion	11/04/2022	17/04/2022
Matty Foley, Colm Killian, Nicky Grace, Pat Sweeney	Paul Hogan/Pat Kavanagh	18/04/2022	24/04/2022
David Dooley, Martin Morrissey, Mick Brennan, Michael Reade	Michael Lonergan/Declan Lawlor	25/04/2022	30/04/2022

#### 7. Treatment Matrix

The following information outlines the application rates for pre-salting:

- Pre-salting is provided at a rate of 10g/m<sup>2</sup>
- At selected sections of pre-salting routes or on particularly severe events,
   application rates may be increased to reflect localised conditions.
- Routes have been designed to allow a treatment at 15g/m² when conditions
  dictate (For example during nights with prolonged cold periods or excess
  residual water).

#### 8. Plant, Vehicles and Equipment

Kilkenny County Council operates 4 No. demountable salt spreaders which are permanently mounted on trucks for the duration of the winter maintenance season. Also, Kilkenny County Council has 3 No. demountable salt spreaders which are permanently mounted on trucks to provide extra cover in the event of a breakdown or extreme conditions. In addition to the above plant, Kilkenny County Council maintains 3 No. salt spreaders in the Machinery Yard which can be mobilised in extreme conditions when required.

Kilkenny County Council has 7 No. snow ploughs available for deployment in the event of snow conditions. 5 No. of these snow ploughs are truck mounted and the other 2 No. have been adapted to fit loading shovels.

Kilkenny County Council also operates 7 No. demountable salt spreaders and 3 No. towed salt spreaders.

The list of plant and service records are itemised in Tables 9.1 and 9.2 below:

Table 9.1 Salt Spreaders – Service Record

Description	Depot	Capacity	Date	Date	Date of Next	Date of next
	Location	Jupine	Calibrated	Serviced	Calibration	Service
SG10 – Demountable	Machinery Yard	9m³ Pre- Wet	Oct '21	Oct '21	Oct '22	Oct '22
SG9 – Demountable	Machinery Yard	9m³ Pre Wet	Oct '21	Oct '21	Oct '22	Oct '22
SG8 – Demountable	Machinery Yard	9m³	Oct '21	Oct '21	Oct '22	Oct '22
SG7 – Demountable	Machinery Yard	9m³	Oct '21	Oct '21	Oct '22	Oct '22
SG6 – Demountable	Machinery Yard	9m³	Oct '21	Oct '21	Oct '22	Oct '22
SG5 – Demountable	Machinery Yard	9m³	Oct '21	Oct '21	Oct '22	Oct '22
SG4 – Demountable	Machinery Yard	7m³	Oct '21	Oct '21	Oct '22	Oct '22
SG3 – Demountable	Machinery Yard	6m³				
SG2 – Demountable	Machinery Yard	6m³				
SG1 – Demountable	Machinery Yard	5m³				
CLN1 - Demountable	Thomastown Depot	3m³				
CLN2 - Demountable	Callan Depot	1.5m³				
CLN3 – Demountable	Kilmaganny Depot	1.5m³				
CLN4 – Towable	Kilkenny Depot	3m³				
CC1 - Towable	Johnstown Depot	4.5m³				
CC2 – Towable	Castlecomer Depot	4.5m³				
N1 - Demountable	Listerlin Depot	3m³				
KK1 - Demountable	Machinery Yard	3m³				
TT1 - Demountable	Graignamanagh Depot	3.8m³				
TT2 - Demountable	Gowran Depot	2.6m³				
TT3 – Towable	Thomastown Depot	4.5m³				

Table 9.2 Snow Ploughs & Loading Shovels

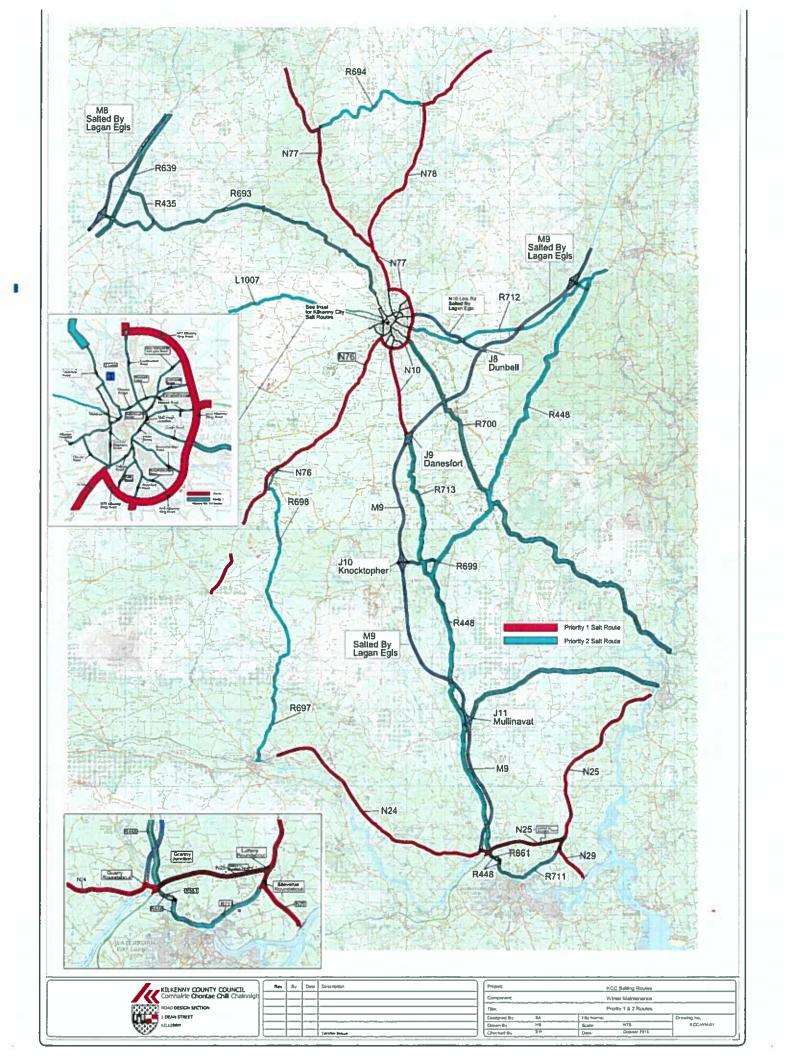
Snowploughs & Loading Shovels	Depot Location	Fitted to	Date Serviced	Date of Next Service
86T – Loading Shovel	Machinery Yard		Regular Servicing	
101T – Manitou Teleporter	Machinery Yard		Regular Servicing	
102T – Manitou Teleporter	Newrath Depot		Regular Servicing	
77T – Manitou Teleporter	Machinery Yard		Regular Servicing	
SP - MY1	Machinery Yard			
SP - MY2	Machinery Yard			
SP - MY3	Machinery Yard			All Market in the Alaska
SP - MY4	Machinery Yard			
SP - MY5	Machinery Yard			
SP - MY6	Machinery Yard			
SP – MY7	Machinery Yard			

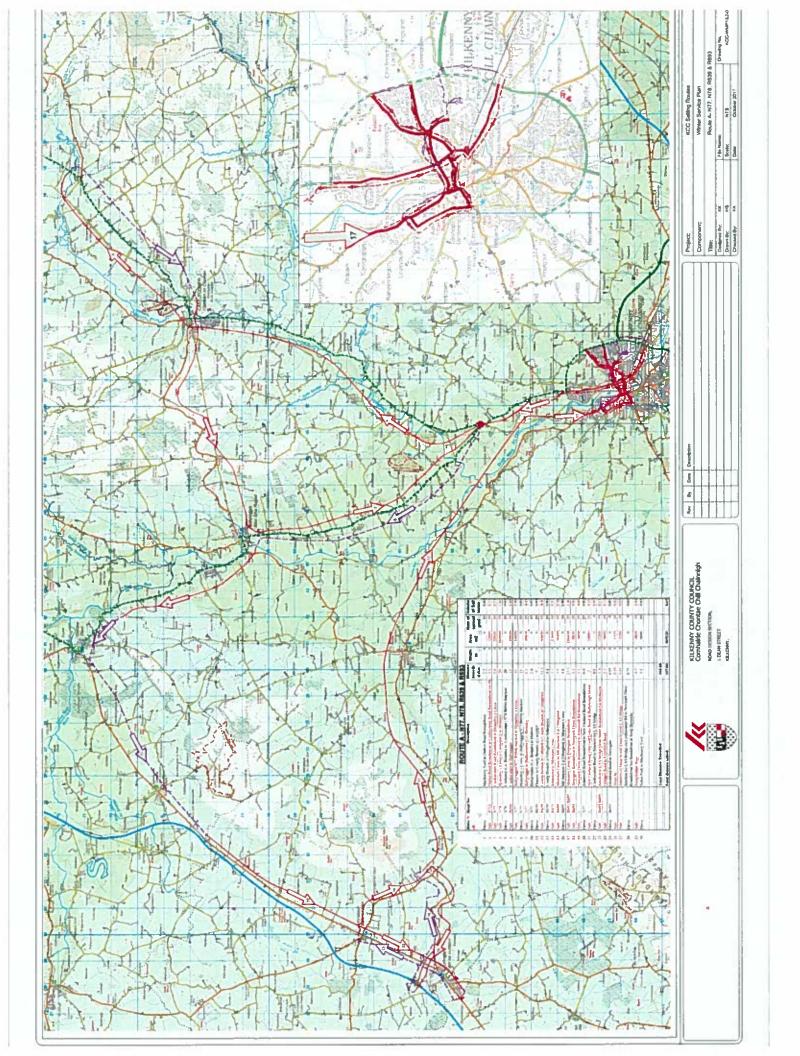
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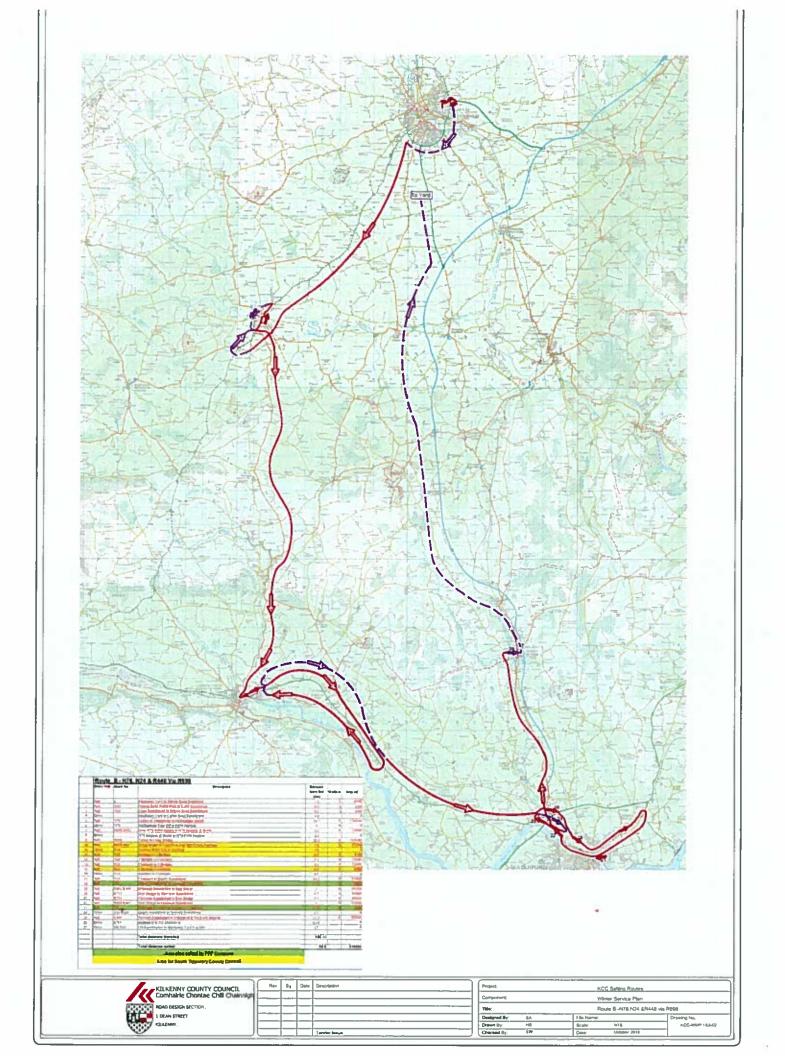
## 9. Winter Service Plan Distribution List

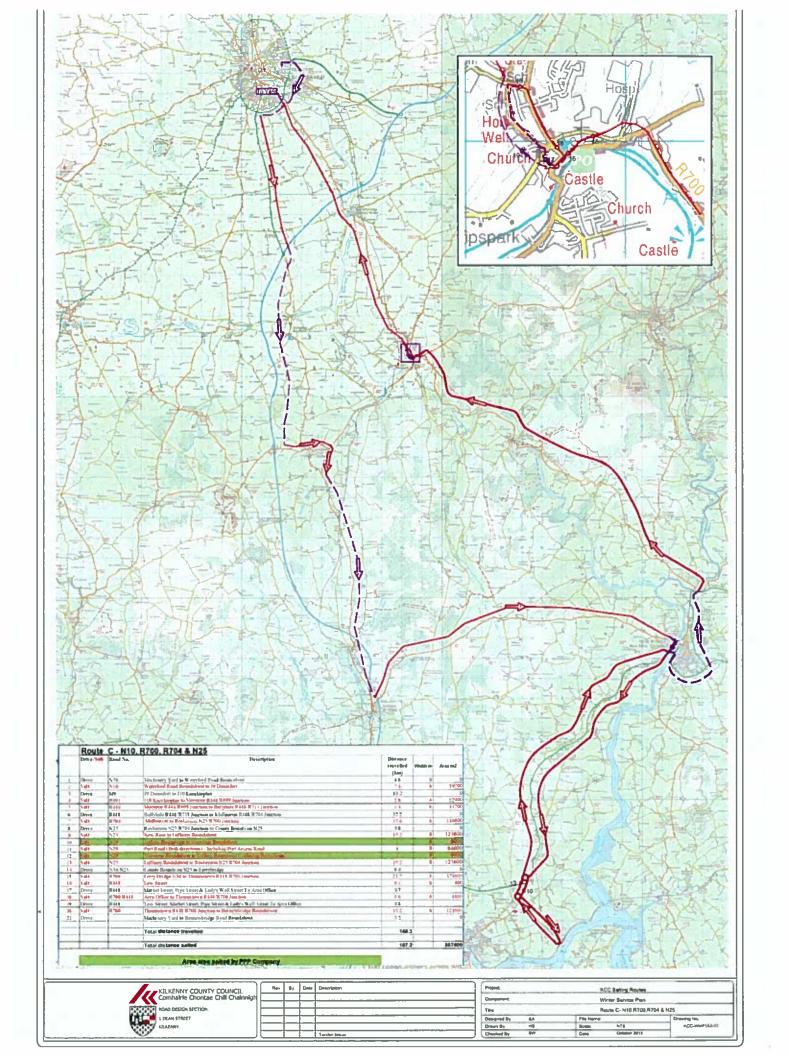
Issued to	Position	Organisation	Location
Colette Byrne	Chief Executive	Kilkenny County Council	County Hall, Kilkenny
Tim Butler	Director of Services	Kilkenny County Council	County Hall, Kilkenny
Seamus Kavanagh	Senior Engineer Roads & Water	Kilkenny County Council	County Hall, Kilkenny
Ian Gardner	Senior Engineer Kilkenny Municipal Area	Kilkenny County Council	City Hall
Brendan Sheehan	Executive Engineer Kilkenny Municipal Urban Area	Kilkenny County Council	City Hall
Eamon Mahon	Area Engineer Kilkenny Municipal Rural Area	Kilkenny County Council	County Hall, Kilkenny
Stan Cullen	Area Engineer Newrath Municipal Area	Kilkenny County Council	Piltown Area Office
Philippe Beubry	Area Engineer Castlecomer Municipal Area	Kilkenny County Council	Castlecomer Area Office
Declan Murphy	Area Engineer Thomastown/Callan Municipal Areas	Kilkenny County Council	Thomastown Area Office
William Delaney	Machinery Yard Engineer	Kilkenny County Council	Machinery Yard
Art Hennessy	Technical Services Supervisor	Kilkenny County Council	Machinery Yard
Lisa Bolger Hynes	Health & Safety Officer	Kilkenny County Council	County Hall, Kilkenny
Ray Wickham	Senior Executive Engineer	Carlow County Council	1-100
Adrian Barrett	Senior Engineer	Laois County Council	
Liam Brett	Senior Engineer	Tipperary County Council	
Sinead Casey	Senior Engineer	Wexford County Council	
Gabriel Hynes	Senior Engineer	Waterford Council	
Stephen Smyth	Winter Maintenance Manager	National Roads Authority	
John Moore	Winter Maintenance Manager	Lagan Egis	N25 Toll Plaza
Evelyn Cusack	Head of Forecasting	Met Eireann	Glasnevin Hill, Dublin 9.
Superintendent Derek Hughes	Traffic Corps	An Garda Siochana	Kilkenny Garda Station
Inspector Claire Kinealy	Traffic Corps	An Garda Siochana	Thomastown Garda Station

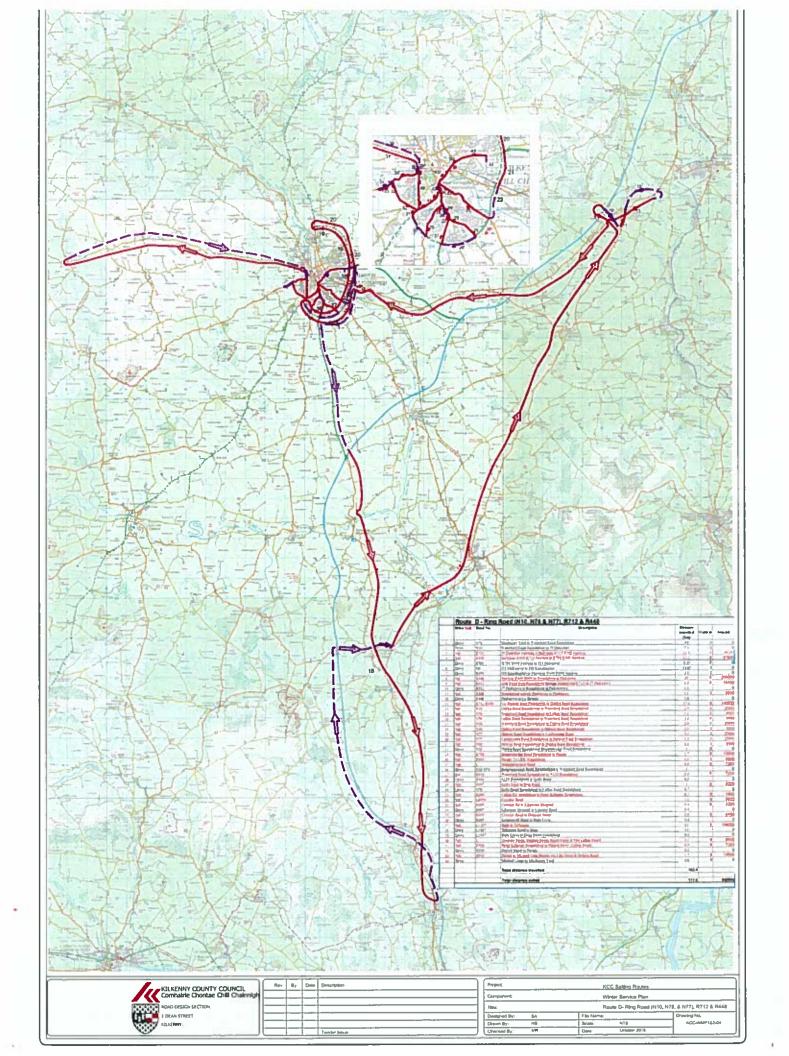
# Appendix 1 - Priority 1 & Priority 2 Treatment Routes



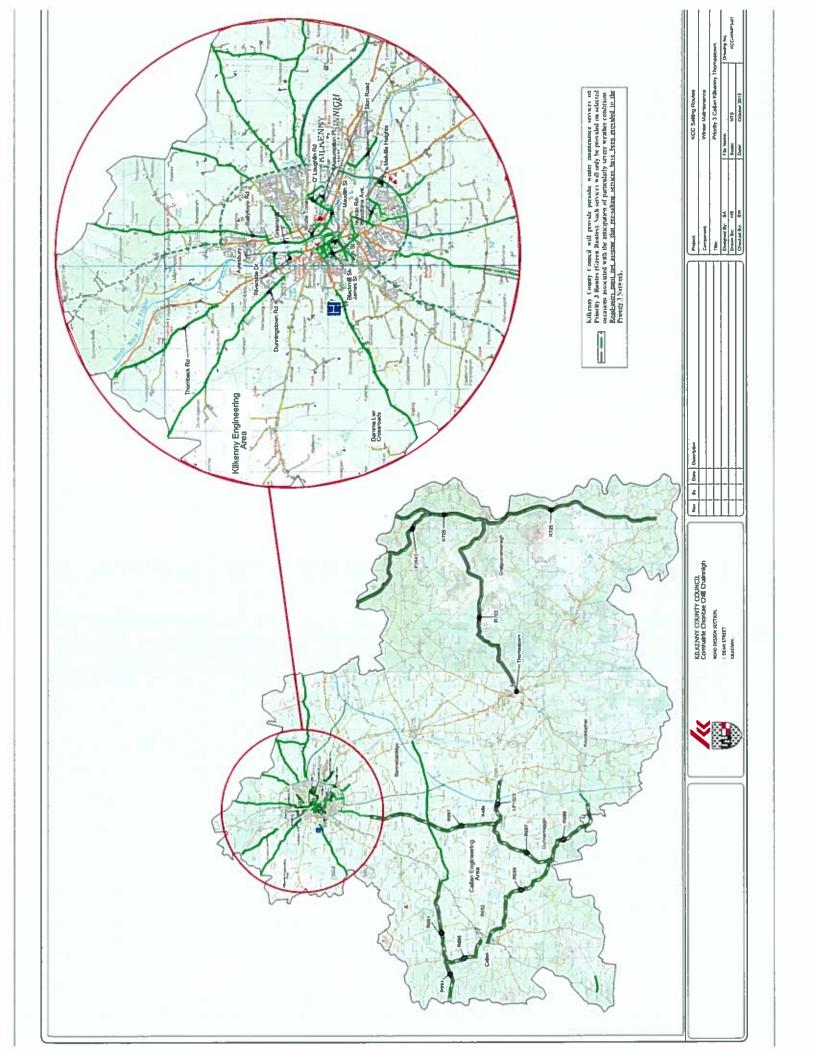


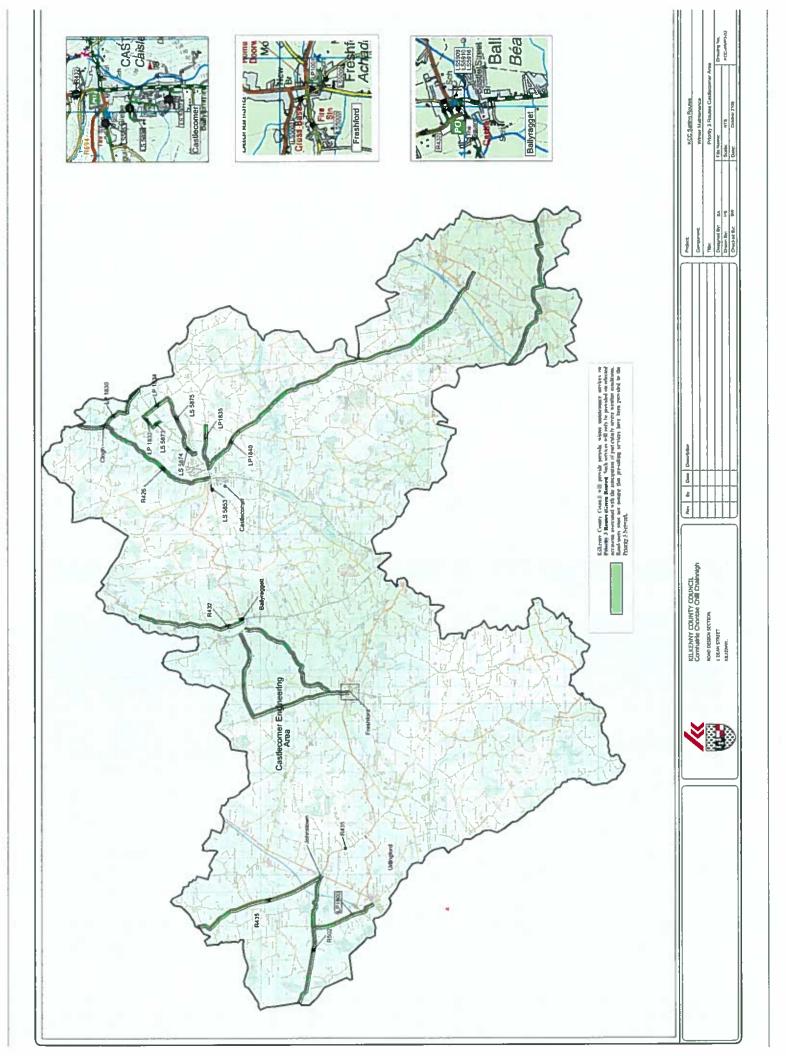


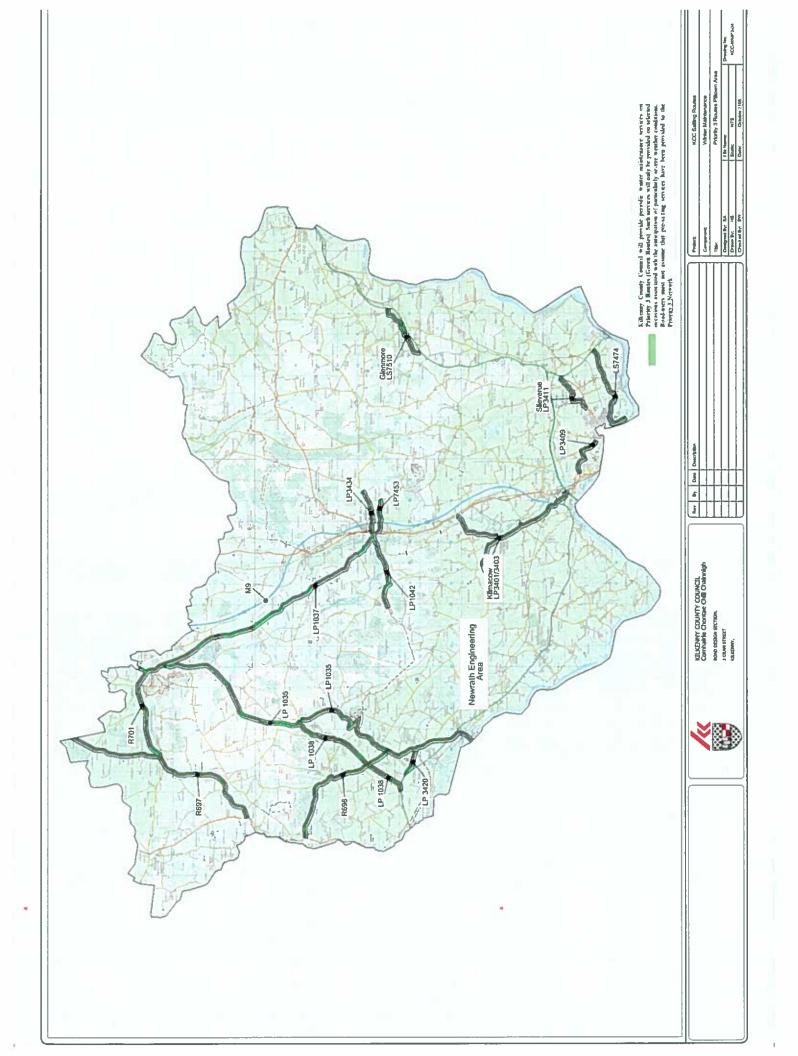




# Appendix 2 - Priority 3 Treatment Routes







# <u>Appendix 3 - Section 85 -</u> <u>Treatment Routes Maps</u>

