## **TORFAEN COUNTY BOROUGH COUNCIL**

#### ECONOMY AND ENVIRONMENT

## **HIGHWAYS WINTER SERVICE PLAN 2022/23**

#### DETAILS OF OBJECTIVES, POLICIES, RESPONSIBILITIES, PROCEEDURES AND ORGANISATION



PRODUCED BY; Highway Network Group

SERVICE Economy and Environment

CONTACT; Mark Thomas

Deputy Director, Highways and Climate Change

01495 766704

### EXTERNAL COPY

ISSUE 1, 25/10/22

		<u>CONTENTS</u>									
1.	INTR	ODUCTION	5								
2.	LIST	OF AMMENDMENTS	6								
3.	STATUTORY DUTY										
4.	OBJE	CCTIVES OF HIGHWAYS WINTER SERVICE	6								
5.	HIGH	IWAYS WINTER SERVICE POLICY	7								
6.	RESILIENCE AND SALT STOCKS										
	6.1	0									
	6.2	Summary of salt use control measures	8								
	6.3	Salt stocks - general	9								
	6.4	Minimum pre-season stock	10								
	6.5	Minimum stocks during winter	10								
	6.6	Overall/Core Winter Period	11								
	6.7	Other resilience issues	11								
7.	ORGANISATION AND STAFFING										
	7.1	Introduction	12								
	7.2	ORGANISATION AND RESPONSIBILITIES OF KEY STAFF	12								
	7.2.1	Highways and Transportation Division	12								
	7.2.2	Highway Network Group	12								
	7.2.3	Call Torfaen	13								
	7.2.4	Out of Hours Control Centre	13								
	7.2.5	Highways and Operations Duty Officers	13								
		Gritter drivers	13								
	7.2.7	Integrated Transport Unit	13								
	7.2.8	Communications, Engagement and Civil Contingencies	13								
	7.2.9	Highway Inspectors and Streetscence officers	14								
	7.3	Winter Standby System	14								
	7.4	Compliance with HGV and working time regulations	15								
	7.5	Staffing off a second precautionary grit during any normal working day	15								
	7.6	Staffing during snow emergencies	15								
	7.0	Staffing during show emergencies Staff training	15								
	1.1	Start training	10								
8.		NT AND VEHICLES	17								
	8.1	Gritting vehicles	17								
	8.2	Gritter Calibration	17								
	8.3	4x4 vehicles	18								
	8.4	Loading Shovels	18								
	8.5	Ride-on mower snow blades	18								
	8.6	Maintenance/repairs	18								
	8.7	Additional plant	19								
	8.8	Location of plant and fuel stocks	19								
9.	WEATHER INFORMATION										
	9.1	Introduction	20								
	9.2	Meteorological Contractor	20								
	9.3	Weather Stations	22								

	9.4 9.5	Inspections by Duty Officer (Early Morning Inspections) Local Reports	24 24							
10.	DECI	SION MAKING PROCESS	25							
	10.1	Background	25							
	10.2	Normal working hours	25							
	10.3	Outside normal hours	25							
	10.4	Decision Making	25							
	10.5	Issuing of Winter Service Action	26							
	10.6	Record Keeping	26							
11.	PRECAUTIONARY SALTING									
	11.1	SELECTION OF CARRIAGEWAY ROUTES FOR PRECAUTIONARY	27							
		Selection of carriageway routes for precautionary salting	27							
		The precautionary salting routes	27							
		Changes to the precautionary salting routes	28							
		Arrangements with adjacent Authorities	28							
		Trunk Roads	28							
		Precautionary salting of Footways and Cycle ways Precautionary salting of refuse/recycling routes	28 29							
		Resilience - Strategic Core Network, precautionary salting	29 29							
	11.1.0	Resilience - Strategie Core Petwork, precationary satting	2)							
	11.2	PRECAUTIONARY SALTING OPERATIONS	30							
		Treatment and Response times	30							
		Recommended practice for precautionary salting	30							
		Updated guidance on reducing salt spread rates	30							
		Spread rates for precautionary salting Salting delayed or affected by rain/sleet/snow	31 31							
		Salting wet areas	31							
		Salting during extreme temperatures/lying snow	32							
		Residual Salt	32							
		Summary of duties of staff involved in precautionary salting operations	33							
12.	ICE /	SNOW CLEARANCE	34							
	12.1	Why we can't keep even the gritting routes free from ice and snow at all times	34							
	12.2	Why snow settles even on treated roads	34							
	12.3	CARRIAGEWAY ROUTES FOR THE CLEARANCE OF ICE AND SNOW	34							
		Selection of carriageway routes for the clearance of ice and snow	35							
	12.3.2	Resilience – Clearance of ice and snow on carriageways	36							
	12.4	CARRIAGEWAY ICE AND SNOW CLEARANCE OPERATIONS	37							
		Spread rates for ice and snow treatment	37							
		Response to isolated icy patches	38							
		Recommended practice for ploughing	38							
		Resilience – Snow clearance	39							
		Snow clearance on dual carriageways	39 20							
		Traffic calmed streets Removal of deep snow	39 30							
	12.4./	Removal of deep snow	39							

13

14.

15.

16.

12.5	ROUTES FOR CLEARANCE OF ICE AND SNOW ON FOOTWAYS, CYCLEWAYS AND ADOPTED CAR PARKS	40
12.5.1	Selection of Footways for the clearance of ice and snow	40
	Resilience – Clearance of ice and snow on footways	41
	Cycle ways	41
12.5.4	Adopted car parks	41
12.6	FOOTWAY ICE AND SNOW CLEARANCE OPERATIONS.	41
12.6.1	Snow/Persistent Ice Clearance on Footways	41
12.6.2	Blaenavon and Pontypool Town Centre and other busy shopping areas footways	41
12.6.3	Other adopted footways	42
12.6.4	Treatment of steel footbridges	42
12.7	ACTION AFTER SNOW	42
GRIT	BINS	43
13.1	Introduction	43
13.2	Maintenance and refilling	43
13.3	Correct use of grit bins	44
13.4	Requests for new grit bins	44
13.5	Resilience – grit bins	45
COM	MUNICATIONS	46
14.1	The Highways Winter Service Plan	46
14.2	Daily gritting action	46
14.3	Communication to Members	46
14.4	Local media and internet	46
14.5	Means of operational communication	47
CONT	FACT US	48
APPE	NDICES	49
А	Precautionary Salting Routes, Plans and Descriptions	50
В	List of alterations to Precautionary Salting Routes since 2021/22 plan	73
С	Torfaen Precautionary Routes treated by Neighbouring Authorities	74
D	Strategic Core Network, Plans and Descriptions	75
E	Grit Bin schedule	84
F	List of secondary priority routes for snow clearance, (internal copies only)	101
G	List of traffic calmed streets (ploughing)	102
Н	Decision making procedure for precautionary salting	104
Ι	Recommended spread rates	106
J	Highways Winter Service Action sheet	107
Κ	Highways Winter Service Gritting Record sheet	108
L	Contact numbers Torfaen County Borough Staff, (internal copies only)	109
М	Winter Standby Rota 2022/23, (internal copies only)	110
Ν	Other useful contact numbers, (internal copies only)	112
0	Highways Winter Service Plant 2022/23, (internal copies only)	113
Р	Additional plant for snow clearance, (internal copies only)	114
Q	Highways Winter Service Grit Bin Evaluation form	115
DISTR	IBUTION LIST	116

#### 1. <u>INTRODUCTION</u>

- 1.1 This document applies to Torfaen County Borough Council's adopted highways only. It does not cover treatment of ice and snow on other council owned land, schools, un-adopted car parks or other council properties which have their own risk assessments and safe working practices to deal with severe weather. A document titled '*Guidance on managing snow and ice on Council Premises*' is available for premises managers from the Corporate Health and Safety Team.
- 1.2 Torfaen covers a relatively small geographic area but has a wide range of topography with roads ranging in elevation from 15m to over 450m above sea level. This often results in challenging and varied weather conditions affecting the highway network across the Borough during the winter period.
- 1.3 In accordance with guidelines set out in Section B7 of Well Managed Highway Infrastructure, A Code of Practice, (October 2016), this document explains Torfaen County Borough Council's policy and responsibilities for keeping Torfaen County Borough Council's adopted highways free of ice and snow, together with how this is to be achieved and how the general public is kept informed.
- 1.4 Revised winter service guidance, contained within Appendix H of the previous Code of Practice, Well-maintained Highways, produced by the National Winter Service Research Group, (NWSRG), was issued in September 2013. This guidance was considerably more detailed and onerous to implement than the previous update in 2011. Following comments and concerns by many Winter Service providers nationally a review of this document was proposed and, together with other Welsh Authorities, the proposals were not fully adopted, until the completion of the review. This guidance has now been revised as part of the update to the Code of Practice, Well Managed Highway Infrastructure, (October 2016) Welsh Highway Authorities have engaged in this appraisal and provided feedback to the document through the Welsh County Surveyors Society. The detailed guidance is now contained in a separate 'NWSRG Practical Guide for Winter Service' referred to in the Code. However, this guidance is still not complete and whilst it will be considered, it will still not be addressed fully until complete. It will then be considered in collaboration with Welsh counterparts via CSS Wales as part of the Authorities updating of future Winter Maintenance Plans.
- 1.5 The plan is effective from 31/10/22 3/04/23. Extension outside this period is subject to weather conditions and approval by the Deputy Director, Highways and Climate Change
- 1.6 This plan is reviewed annually to allow for any changes in the highway network, other local conditions, new legislation, departmental changes and resources available. Any changes to the plan during the 2022/23 season will be issued as an amendment.
- 1.7 This plan is issued in both Internal and External versions. The Internal version is for operational use within the Authority only and contains personal contact details of staff involved, neighbouring authority and emergency services contact details as well as standby rotas and other operational details.
- 1.8 The salt supply situation has improved markedly since the shortages during the severe winters of 2009/10 and 2010/11 caused severe problems to service delivery. Larger stockpiling nationally by local authorities has increased resilience during periods of high use. However, it is anticipated that prolonged severe weather may still lead to difficulty in salt restocking. Therefore, this document retains resilience measures, introduced in 2011 to conserve salt stocks, which set out progressive steps that will be taken to restrict salt usage by reducing the service we provide if stock levels decrease to certain set levels.
- 1.9 Whist every effort is taken, due to sudden weather changes or unexpected conditions, it is not always possible to ensure that even treated highways are kept free from snow and ice at all times.

#### 2. <u>LIST OF AMMENDMENTS</u>

ISSUE NO.	DATE	AMMENDMENT	PAGE/ paragraph.
1	25/10/22		

#### 3. <u>STATUTORY DUTY</u>

- 3.1 Section 111 of the Railways and Transport Act 2003 amended Section 41(1A) of the Highways Act 1980 (duty of a Highway Authority to maintain the highway). The Council now has a statutory duty by virtue of this act: '*In particular, a highway authority are under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice*'. Previous to this legislation the council only had a duty, which remains, to remove obstructions caused by snow, under Section 150 of the Highways Act 1980.
- 3.2 This duty is qualified by the use of '*reasonably practicable*'. This document explains how the Authority provides a prioritised and proportionate response to conditions with the resources available to meet this duty. By the inclusion of this qualification the Act recognises that for example we cannot ensure all parts of the network are kept clear of snow and ice at all times or cleared straight away when they do occur.
- 3.3 In terms of the above legislation a highway includes carriageways, footways and adopted cycle ways or pedestrian areas.

#### 4. <u>OBJECTIVES</u>

- 4.1 The main objectives of the Highways Winter Service which Torfaen County Borough Council aims to provide in adverse winter conditions are as follows;
  - 1. Comply with the Statutory Duty.
  - 2. As far as possible maintain the safe movement of traffic on a selected network of main roads in Torfaen.
  - 3. To minimise delays, accidents and damage resulting from ice and snow on the adopted highway network.
  - 4. To prevent ice from forming on a defined network of routes by precautionary gritting.
  - 5. To remove ice and snow already formed on the defined network by post-gritting and ploughing if necessary.
  - 6. To carry out the operations in an effective, efficient and safe manner.

#### 5. <u>HIGHWAYS WINTER SERVICE POLICY</u>

- 5.1 In practice the objectives above are achieved by precautionary salting of certain routes, provision of grit bins for self help, proactive and reactive action to snow or ice events and by taking account of weather forecasts, monitoring conditions and by consultation with neighbouring authorities.
- 5.2 The precautionary gritting network for this season comprises of 7 routes totalling 232kms of treated carriageway, which allowing for some duplication, equates to approximately 53% of the total adopted road network in Torfaen. This figure seems high when compared to the national average of 37%. However, Torfaen, due to its largely urban nature, does not have long lengths of lightly used roads. This, together with its widespread steep gradients mean that a higher proportion of roads require gritting. These gritting routes comprise of classified A and B roads, bus routes, main distribution routes, and routes in proximity to schools, industrial and retail areas, and other key sites. Minor roads, residential streets/estates and non-through roads are not generally treated as part of the precautionary network. Routes are reviewed annually to allow for any changes in the highway network.
- 5.3 In areas not covered by gritting routes grit bins are provided for self help by the public. There are currently 794 such bins provided and maintained by the Authority.
- 5.4 Footways are not currently precautionary salted and are subject to reactive treatment on a priority basis as required as resources become available.
- 5.5 In times of persistent ice and snow we will attempt to treat and clear all adopted roads as resources allow. The main classified (A&B roads) are cleared first, followed by the rest of the precautionary gritting network and then other carriageways and footways on a priority basis. It is important to realise that in such situations the Authority has to prioritise its response given the limited resources of plant, labour and salt; we can't be everywhere at the same time.
- 5.6 Winter Maintenance on the A4042(T), which crosses Torfaen from Llantarnam to Mamhilad, is carried out by the South Wales Trunk Road Agency on behalf of the Welsh Government as the highway authority for Motorways and Trunk Roads.
- 5.7 The Authority does not treat or supply salt for use on private properties, roads or estates. This includes roads, footways and car parks owned by Bron Afon Community Housing Association.
- 5.8 The series of resilience measures taken to control salt use during 2011 has been revised and retained in this policy, to be implemented if considered necessary by the Deputy Director, Highways and Climate Change



#### 6. <u>RESILIENCE AND SALT STOCKS</u>



#### 6.1 <u>Background</u>

- 6.1.1 Over the winters of 2009/10 and 2010/11 our operations were severely affected by the national shortage of salt as a result of severe weather and lack of resilience in salt stocks nationwide. Long delays in receiving restocking deliveries meant that our supplies reached critical levels and we had to severely reduce the level of service we provided as a result.
- 6.1.2 The national salt shortage has eased due to most authorities across the country stockpiling more salt pre-winter. However, if prolonged severe weather does occur we still anticipate supply problems. As a result the series of progressive measures introduced in 2011, to reduce the service we provide to control salt use as stocks decline to certain set levels, have been revised slightly but retained.
- 6.1.3 Initiation of these control measures will not be automatically controlled by stock levels, but will be made by the Deputy Director, Highways and Climate Change in consultation with the Strategic Director, Economy and Environment and the Highway Network Group. Any decision will consider the likelihood of salt deliveries, the medium term weather forecast and the stage of the winter season.

#### 6.2 <u>Summary of salt use control measures</u>

- 6.2.1 The effect on each aspect of the service is detailed in the relevant section of the plan, but summarised below:
  - All stock levels: Control of salt use on main routes during snow events. Assistance given to emergency services to treat routes for access in an emergency situation if required. Assistance given, where practical, to utility companies if requested to ensure continuation of water, gas, power supplies.
  - 50% 25% stocks: Footway treatment restricted main routes only. Grit bins refilled with salt/sharp sand mix. Ice/snow clearance on more important/steeper side roads only.
  - 25%-10% stocks: Footway treatment restricted to busy shopping area/frontages only. Grit bins not refilled. Ice and Snow clearance on side roads in emergencies only.

• Less than 10% stocks: Reduction of precautionary gritting to Strategic Core Network. No footway salting. Grit bins not refilled. Ice and Snow clearance on side roads in emergencies only



#### 6.3 <u>Salt Stocks - General</u>

- 6.3.1 Stocks of ground rock salt are stored in covered barns located at New Inn and Blaenavon depots. It is aimed to replenish stocks to maximum levels during the summer period and then as required during the winter to maintain sufficient working stock.
- 6.3.2 Salt is currently purchased through the All Wales Salt Purchasing Contract, led by Welsh Government. Salt Union, in Cheshire is our usual supplier through the contract and deliver salt by road to our 2 depots.
- 6.3.3 To improve overall resilience the Authority contributes to an additional salt stock at a Regional Strategic Reserve salt barn in Ebbw Vale, serving former Gwent Authorities. This salt will be maintained at maximum level and drawn upon in emergencies only.
- 6.3.4 The Welsh Government also maintains a strategic salt reserve, which it can make available to local authorities in emergencies, if the authority has failed to replenish its reserves from other sources.
- 6.3.5 6mm (max particle size) dry, untreated, rock salt to BS3247:1991 is used for all gritting operations and refilling of grit bins, (mixed with sharp sand for grit bins if conditions dictate).
- 6.3.6 During the winter the quantity of salt remaining is constantly monitored by the Highways Network Team, so that any additional salt requirements can be ordered in good time to avoid shortages, subject to supplies being available. In common with other Welsh Authorities, Torfaen supply salt stock levels to the Welsh Local Government Association regularly throughout the winter who maintain a national record of salt stocks.
- 6.3.7 One 20gm/sq.m treatment of all routes uses approximately 35 tonnes.

- 6.3.8 One complete refill of all grit bins, assuming all are empty, uses approximately 200 tonnes.
- 6.3.9 One 20gm/sq.m treatment of the Strategic Core Network will use approximately 20 tonnes, allowing up to 30 treatments before stocks are exhausted.
- 6.3.10 A small stock of non-corrosive de-icing material is also maintained for use on steel footbridges.
- 6.3.11 The salt is for use on adopted highways only.

#### 6.4 <u>Minimum pre-season stock</u>

- 6.4.1 Well Managed Highway Infrastructure recommends a minimum pre-season stock to allow 6 x 20gm/sq.m treatments per day for 12 days, which equates to 2,520 tonnes. However, to increase resilience the Welsh Government has requested that all authorities in Wales aim to start the winter with stock levels of at least 1.5 times their annual average usage (over 5 year period 2005-10). This equates to 5600 tonnes for Torfaen.
- 6.4.2 The target availability of rock salt from stock at the start of the winter is as follows: -

Location	<u>Capacity</u>
Blaenavon (barn)	1200 tonnes
New-Inn (barn)	2,500 tonnes
Total for working stock	3,700 tonnes
Regional Strategic Reserve, Ebbw Vale	2,000 tonnes
Overall Total	5,700 tonnes

#### 6.5 <u>Minimum stocks during winter</u>

- 6.5.1 The main factor affecting the resilience of the Winter Service we provide is the availability of salt to allow continued network treatment.
- 6.5.2 'Well Managed Highway Infrastructure' recommends a minimum working salt stock during the winter to allow 6 x 20gm/sq.m treatments per day for 6 days. If severe weather does affect large areas of the UK for a prolonged period, resulting in delivery delays, this stock level may not be achievable at all times.
- 6.5.3 For Torfaen's standard precautionary routes this equates to:

6 x 35 tonne per 20gm treatment x 6 days = 1260 tonnes (approx 30% of our capacity, excluding regional barn)

This 6 day period can be extended to 12 if required by switching to treating the Strategic Core Network if required.

#### 6.6 Overall/Core Winter period

6.6.1 Well Managed Highway Infrastructure recommends definition of the Overall and Core Winter Period when considering minimum salt stocks. However, recent winters have shown that prolonged severe weather can occur at anytime from the end of October until well into April and the authority aims to maintain the minimum recommended salt holding at all times through the winter period.

#### 6.7 Other Resilience issues

6.7.1 <u>Staff</u>

Torfaen retains a large team of trained drivers, mechanics, decision makers and supervisors on a standby rota system through the winter period. In times of severe weather, resources are available to increase the normal standby workforce and operate 24 hours a day, 7 days a week if required

#### 6.7.2 Vehicles

1 large and 1 smaller gritter are held as dedicated spare vehicles to be allow for any breakdowns. Additional 4x4 vehicles are also available for transport of essential staff if required.

#### 6.7.3 <u>Fuel stocks</u>

Stocks of red diesel used by the gritting vehicles are monitored through the winter and maintained at least 50% full at all times. If necessary white diesel is also available to be used.

Fuel capacities (New Inn depot):

Red diesel -13,000 litres, White diesel -66,000 litres



#### 7. ORGANISATION AND STAFFING

#### 7.1 <u>Introduction</u>

7.1.1 Delivery of an efficient Winter Service is dependent on good planning and organisation as well as the correct decisions being made and actions carried out by all the staff involved. The authority maintains a core of experienced and trained managers, decision makers, supervisors and gritter drivers to be able to carry out its operations in a safe and efficient way and provide a rapid response to conditions. This is achieved by the operation of an out of hours standby system with staff mobilised as required at any time of the day or night through the winter. When required, large numbers of additional staff, sourced from across the Economy and Environment service areas, can also be deployed to Winter Service duties.

Contact details for all staff involved in providing the service is included as Appendix L, (internal copies only).



#### 7.2 ORGANISATION AND RESPONSIBILITIES OF KEY STAFF

#### 7.2.1 Highways and Transportation Division

7.2.1.1 The Highways and Transportation Division of Economy and Environment controls and implements all aspects of the Highways Winter Service. The Deputy Director, Highways and Climate Change consults with and briefs the Strategic Director, Economy and Environment as required.

#### 7.2.2 Highway Network Group

- 7.2.2.1 The Highway Network Group has day to day responsibility for the Highways Winter Service. These responsibilities include decision making during normal working hours; evaluation of weather forecasts, initialising and prioritising any response to adverse conditions and ensuring operations are carried out in accordance with this document.
- 7.2.2.3 The team receives requests, via Call Torfaen during working hours, regarding gritting and snow clearance, grit bins etc. for decision on and prioritisation of any response.
- 7.2.2.4 The team select, organise and arrange training for the staff involved and the produce the annual winter standby rota

- 7.2.2.5 The team is responsible for monitoring salt stocks and ordering more salt when required.
- 7.2.2.6 The team is responsible for Highways Winter Service policy and budgetary matters and it reviews and produces the Highways Winter Service Plan annually.

#### 7.2.3 Call Torfaen

7.2.3.1 Call Torfaen receives calls from the public regarding conditions, requests for service and complaints from the public.

#### 7.2.4 Out of Hours Control Centre

7.2.4.1 Outside normal working hours our Control Centre receives all reports regarding conditions, requests for service and complaints from the public or other organisations and pass to the duty officers when required.

#### 7.2.5 Highway and Operations Duty Officers

- 7.2.5.1 At any time through the winter period a team of 2 duty officers are on call outside normal hours. These key staff comprise of experienced officers, sourced from the Highway Network Group and Streetscene Section, who monitor forecasts and conditions, mobilising and supervising the gritting crews when required. The officers also deal with other highway related emergencies such as highway defects, flooding, accidents, dangerous trees etc.
- 7.2.5.2 The **Highways Duty Officer** is responsible for monitoring conditions, evaluating forecasts, decision making and initiating any unplanned action outside office hours and ensures the gritting is carried out in accordance with the policies listed in this plan.
- 7.2.5.3 The **Highways Operations Officer** is responsible for deploying and supervising the gritting staff outside office hours and ensures the gritting is carried out correctly and safely
- 7.2.5.4 In times of severe weather to allow relevant rest periods, these roles are interchangeable.

#### 7.2.6 Gritter drivers

7.2.6.1 HGV and non-HGV qualified staff are sourced from all divisions of Economy and Environment, on a volunteer basis, and receive training and experience as required.

#### 7.2.7 Integrated Transport Unit

- 7.2.7.1 Integrated Transport Unit, part of the Highways and Transportation Division of Economy and Environment, provides and maintains the gritting vehicles.
- 7.2.7.2 Mechanics from this section participate in the Winter Standby Rota to provide an out of hours response to any gritting vehicle breakdowns.

#### 7.2.8 <u>Communications, Engagement and Civil Contingencies</u>

7.2.8.1 In times of severe weather, the Head of Communications, Engagement and Civil Contingencies will liaise with the Strategic Director, Economy and Environment, the Deputy Director, Highways and Climate Change and the Highway Network Group regarding or response, instigation of any resilience measures and instigation of the Councils Emergency Plan.

#### 7.2.9 <u>Highway Inspectors and Streetscene officers</u>

7.2.9.1 In the case of substantial snow events the 4 Highway Inspectors and 2 Streetscene officers are available to monitor conditions, highlight problem areas and report on snow clearing progress. They can also respond and arrange highway repairs, tree work etc, promptly if damaged by severe weather.



#### 7.3 <u>Winter Standby System</u>

- 7.3.1 Precautionary salting is normally undertaken outside normal working hours, although adverse conditions can occur at any time of the day or night. As a result, a core of staff, both supervisory and operational, is required to be available to make decisions and provide a rapid response to conditions 24 hours a day. This is achieved by operation of a Standby System with staff on call for a week at a time, via a rota system, throughout the Highways Winter Service period.
- 7.3.2 For 2022/23 the system is manned by 7 Duty Officers and 29 gritter drivers. At any time 2 Duty Officers, (Highways + Operations), at least 7 drivers and 1 mechanic are available to respond to conditions. In addition to the Highways Winter Service duties this resource can also be used for other emergencies such as response to flooding events.
- 7.3.3 If required, during snow for example when 'plough mates' are required, additional operatives can be called upon on a volunteer basis to assist the Standby staff.
- 7.3.4 A year-round standby system to cover any Highway and Streetscene emergencies also operates. 1 Highway operative and 2 Streetscene operatives, (who can deal with fallen trees), are also available through the winter period.

## A copy of the Standby Rota for all staff covering the Highways Winter Service period is included as Appendix M, (internal copies only).

#### 7.4 <u>Compliance with HGV Driver and Working Time regulations</u>

- 7.4.1 The gritter drivers operate under the UK Domestic Drivers Hours regulations. Each year they sign opt out forms if they wish to allow them to exceed the maximum 48 hr working week specified in the Working Time Regulations. This allows the standby system to function.
- 7.4.2 As normal precautionary gritting of each of the routes can be carried out in 3 hours or under (2 hrs driving, 1 hr loading and washing down) the drivers can carry out this work in addition to their normal 7.5 hour working day and not exceed the daily driving limit of 10 hours or 11hours maximum duty.
- 7.4.3 For ease of operation of the system and consistency of approach drivers of the non-HGV mini gritters are treated in a similar manner to the HGV drivers with regard to drivers working hours.
- 7.4.4 All council HGV's, including gritting vehicles, are equipped with tachographs to record drivers working hours.

#### 7.5 <u>Staffing of a second precautionary grit during any normal working day</u>

- 7.5.1 Due to Drivers Working Time regulations, planned additional gritting during normal weekdays, following an initial precautionary gritting action, is carried out using a second volunteer shift to ensure driver's hours regulations are not infringed. This is to ensure the daily limits of 11 hours duty and 10 hours driving for HGV drivers are not exceeded.
- 7.5.2 If the need for a possible second action is indicated in the daily weather forecast or a second treatment considered to be required by prevailing conditions, such as widespread seepage onto the carriageway, a second shift to man the required number of vehicles, using drivers not on standby for that week is organised. If the need for a second action becomes apparent after 4.00pm the secondary action is classed as an emergency and carried out using the original standby crews who are then given the relevant rest period.
- 7.5.3 Drivers can carry out 2 or more precautionary gritting actions on weekends, bank holidays and other non-working days provided the daily driving limits are not exceeded.

#### 7.6 <u>Staffing during snow emergencies</u>

- 7.6.1 During periods of persistent ice or lying snow, additional labour resources will become available during normal working hours from Highway Network Group and the Streetscene Section due to cessation of normal duties. Over 100 operatives can be called upon to assist in severe snow conditions, acting as plough mates, clearing side roads and footways and filling grit bins. Actual numbers involved in a response to any ice or snow event will be agreed between the Deputy Director, Highways and Climate Change and the Highway Network and Streetscene officers.
- 7.6.2 If need be 24hr gritting/ploughing can be carried out during initial phases of snow emergencies using both the standby crews and an extended day crew of officers, drivers and plough mates. During prolonged severe conditions a review of the shift system may be required to achieve required rest periods and compliance with Drivers Working Hours legalisation. Decisions on working patterns are to be made jointly between Highway Network Group, Duty Officers and the Integrated Transport Unit who monitor driver's hours.
- 7.6.3 In the case of significant snow events outside normal office hours, a call centre manned by the Operations Duty Officer, the Highways Duty Officer, and additional staff if required, can be set up at the New Inn Depot. This enables high numbers of requests for service to be received efficiently, prioritised and issued to the Standby workforce.

7.6.4 Periods of severe weather are managed within the Economy and Environment service. However, where severe weather is of a prolonged or particularly severe nature, the Head of Communications, Engagement and Civil Contingencies will provide appropriate advice and the relevant parts of the Council's Emergency Plan will be enacted.

#### 7.7 <u>Staff training</u>

Decision making, supervisory and operational staff receive formal and informal training to allow them to carry out their roles in an effective, safe and efficient manner.

The Highway Network Group maintains a record of each individuals training and ensures refreshed/renewed at the recommended intervals.

#### 7.7.1 Decision making/Supervisory/Duty Officer training

All decision makers, supervisors and duty officers receive periodic operations and weather training.

The training consists of:

City and Guilds 6159, Winter Service, Manager/supervisor Unit 021 Weather training provided by the Forecast provider (Meteogroup) Training on interpretation of Weather Station data (Vaisala)

If staff are deemed to have sufficient practical experience of the Winter Service operation the above training whilst desirable is not mandatory. As well as undertaking the above training, new staff shadow and learn from the more experienced officers.

#### 7.7.2 Driver training

All regular gritter drivers are trained and assessed to City and Guild level on a 5 year cycle.

The training consists of:

City and Guilds 6159, Winter Service Operations, Health and Safety, Unit 080 City and Guilds 6159, Winter Service Operations Assessment, Unit 013 (Vehicles over 7500kg) City and Guilds 6159, Winter Service Operations, Driver Assessment, Unit 011 (Vehicles up to 3500kg for mini gritter drivers)

New drivers who volunteer and are selected are utilised as 'training drivers' initially before receiving the formal training. This involves being on standby and accompanying experienced drivers on their routes and associated duties, as well as driving under supervision, to become familiar with the vehicles and procedures.

#### 8. <u>PLANT AND VEHICLES</u>



#### 8.1 Gritting vehicles

- 8.1.1 The Authority has 8 large, (one per route plus 2 spare), permanently mounted, 4x4 gritting vehicles and 1 large non 4x4 multi-use spreader as a further back-up vehicle. (Routes 1-6).
- 8.1.2 There are also 2 smaller, permanently mounted, 4x4 Landrover mounted, mini-gritters. (Route 7).
- 8.1.3 The 9 large gritting vehicles as well as the 2 standby Landrovers can be fitted with snow ploughs when required. Spare ploughs are also available for each vehicle.
- 8.1.4 All vehicles are fitted with a 'Trackyou' tracking system, which records the route followed on each journey as well as the details of the gritting activity of each vehicle. This information is accessed via a secure website. The system also provides a driver alert 'panic button' in each vehicle in case of emergencies.

#### 8.2 Gritter Calibration

- 8.2.1 Calibration of gritting equipment is important to ensure the specified spread rates are achieved.
- 8.2.2 The 9 large gritters are calibrated for salt spread rate, by the manufacturer pre-season (October).
- 8.2.3 Re-calibration is also carried out as required after any maintenance which may affect the salt spreading characteristics or if concern is raised by a driver regarding a particular vehicle.
- 8.2.4 The Snow-Ex mini gritters are not calibrated and are not adjustable. Spreading pattern and rate are checked visibly and adjusted by the in-cab control box. Any large variance in spread rate is gleaned from the amount of salt used in completing the route which usually has a target spread rate of 15 g/sq.m

#### 8.3 <u>4x4 vehicles</u>

- 8.3.1 Two dedicated standby Landrovers are used for driver pick up and for ploughing of narrower routes and side streets in times of snow.
- 8.3.2 In order to be able to carry out their role in a safe and effective measure, in often difficult conditions, the Highways Duty Officer and Operations Duty Officer each have a dedicated 4x4 vehicle to use whilst on standby.

#### 8.4 Loading shovels

8.4.1 Hired loading shovels for loading salt onto the gritters are located at New-Inn and Blaenavon depots. In case of breakdown they can be replaced at short notice. In case an out of hours breakdown of one of the loading shovels, gritters can be loaded at the other depot or a loader and driver hired in from a local contractor.

#### 8.5 <u>Ride-on mower snow blades</u>

8.5.1 To assist footway snow clearance 2 ride-on mowers can be fitted with snow blades for removal of light-moderate accumulations from pedestrian areas.

#### 8.6 <u>Maintenance/repairs</u>

- 8.6.1 Integrated Transport Unit of the Highways and Transportation Division of Economy and Environment maintains and services the gritting vehicles at our New Inn depot
- 8.6.2 Integrated Transport Unit provides a Standby Mechanic to deal with any breakdowns during out of hours gritting operations. In times of severe weather, when continual use of the vehicles makes breakdown or damage more likely additional staff can be arranged.

#### Details of the above plant are shown in Appendix O (internal copies only).



#### 8.7 Additional Plant

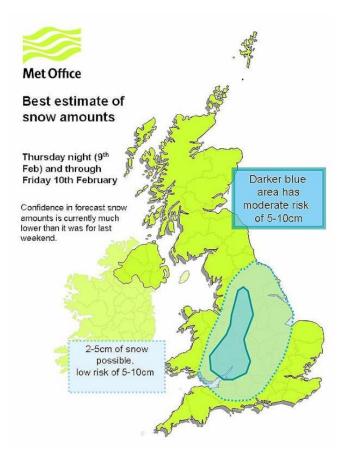
- 8.7.1 In the event a severe snow event it may be necessary to augment the Highways Winter Service fleet by the use of other plant and vehicles from within the organisation.
- 8.7.2 To allow transport of essential staff, a pool of 4x4 vehicles, normally used by other teams, can be made available as required. The use of these vehicles will be implemented in consultation with the Deputy Director, Highways and Climate Change, Head of Communications, Engagement and Civil Contingencies, members of the Highway Network Group and the Group Leader of the Integrated Transport Unit.
- 8.7.3 The council maintains a list of external contractors who have plant available in the event of a severe snow event where snow clearance in addition to normal snow ploughing is required. This list is included as Appendix P (internal copies only).

#### 8.8 Location of Plant and Fuel Stocks

- 8.8.1 The gritting vehicles are garaged at salt storage depots in Blaenavon (Routes 1&2) and New Inn (Routes 3-7).
- 8.8.2 One spare large 4x4 gritter is stationed at Blaenavon and New Inn depots to cover for any vehicle breakdowns. The multi-use vehicle and spare mini gritter are based at New Inn depot.
- 8.8.3 The Integrated Transport Unit is responsible for ensuring adequate supplies of fuel are available at all times. Fuel is held at the New Inn depot.



#### 9. <u>WEATHER INFORMATION</u>



#### 9.1 <u>Introduction</u>

- 9.1.1 An effective and efficient Highways Winter Service is only possible with reliable information on road and weather conditions. The Highway Network Group needs accurate and detailed information in order to implement the operational requirements of this document. The Highway Network Group and outside working hours, the Highways Duty Officer, receive weather information from the following sources:
  - i. Meteorological Contractor (9.2)
  - ii. Weather recording stations located in Torfaen and surrounding areas (9.3)
  - iii. Inspections by duty officers (9.4)
  - iv. Local Reports, Police, public etc (9.5)

#### 9.2 <u>Meteorological Contractor</u>

- 9.2.1 The Authority subscribes to Meteogroup's 'Roadmaster' service jointly with other Local Authorities in the former Gwent Area. This service provides a secure website showing forecasts, latest conditions, radar images, etc. 24 hour and 8 day forecasts are issued daily from 1<sup>st</sup> October to 30<sup>th</sup> April together with updates if the forecast changes. The Authority also receives National Severe Weather Warnings automatically from the Met Office.
- 9.2.2 From October to April the 24hr weather forecast is issued daily at approximately 1100 hours. This is received by e-mail as well as being available on the Meteogroup and Vaisala, (see 9.3), secure websites. The forecast is updated at 0500 and 1700 each day.

9.2.3 Meteogroup constantly monitor the conditions and issue amendments to the forecast when necessary.

#### 9.2.4 An example of the forecast is shown below:

Jerusa	alem_L	Lane 🗸		<ul> <li>actual</li> </ul>	al Ohistor	<b>y</b> 24	Oct 2017	0	08:00 🗸	·					
issue: Tuesday 24 October 10:21															
date time		weathertype	precib- prob. (%)	precip (mm/hour)	Snow (cm/hour)	snowfall height (m)	temperature 1,5m (°C)	temp. (°C)	road condition	dewpoint (°C)	rel. hum. (%)	cloud iness (8/8)	wind directio	windspeed (mph)	windgust (mph)
Tue 24 October 2017															
11:00	Þ	light rain at times	100	0.3	0	3325	15.8	14.8	R	14.2	90	8/8	× 51	v 11.5	23.8
12:00	Þ	drizzle	55	<0.1	0	3305	15.7	15.0	D	14.1	90	8/8	× 51	v 11.5	24.4
13:00	Þ	light rain at times	30	0.2	0	3235	15.7	15.1	R	14.0	90	8/8	× 51	v 12.7	24.9
14:00	Þ	light rain at times	60	0.3	0	3090	15.7	15.2	R	13.9	89	8/8	× 51	v 12.7	24.7
15:00	Þ	light rain at times	55	0.3	0	2940	15.7	15.1	R	13.9	89	8/8	× 51	v 12.7	24.1
16:00	Þ	light rain at times	50	0.2	0	2825	15.6	14.9	R	13.7	89	8/8	× 51	v 12.7	23.5
17:00	Þ	light rain at times	40	0.2	0	2790	15.5	14.6	R	13.5	88	9 7/8	× 51	v 12.7	23.4
18:00	Þ	light rain at times	30	0.1	0	2770	15.5	14.3	R	13.3	87	9 7/8	× 51	v 12.7	23.5
19:00	$\bigcirc$	mostly cloudy	20	<0.1	0	2745	15.4	14.1	w	13.1	86	9 7/8	× 51	v 12.7	23.6
20:00	$\bigcirc$	mostly cloudy	20	<0.1	0	2665	15.1	13.9	w	12.8	86	9 7/8	× 51	v 12.7	23.6
21:00	Þ	light rain at times	20	0.1	0	2555	14.9	13.7	R	12.6	86	9 7/8	× 51	v 12.7	23.4
22:00	Þ	light rain at times	20	0.1	0	2435	14.6	13.5	R	12.4	86	9 7/8	1 55	w 12.7	23.4
23:00	Þ	light rain at times	20	0.1	0	2390	14.4	13.3	R	12.1	86	9 7/8	1 55	w 12.7	23.2
Wed 2	5 Octo	ober 2017													
00:00	P	light rain at times	20	0.1	0	2410	14.2	13.1	R	11.9	86	97/8	× 51	v 12.7	23.0
01:00	P	light rain at times	25	0.2	0	2485	14.0	12.9	R	11.7	86	9 7/8	× 51	v 12.7	22.8
02:00	Þ	light rain at times	40	0.1	0	2715	14.0	12.8	R	11.6	86	9 7/8	× 51	v 11.5	23.1
03:00	Þ	light rain at times	50	0.3	0	2900	14.1	12.8	R	11.7	86	8/8	× 51	v 12.7	23.7
04:00	Þ	light rains	60	0.4	0	2980	14.2	12.9	R	11.9	86	8/8	× 51	v 11.5	23.8
05:00	Þ	light rain at times	55	0.3	0	2765	14.3	12.8	R	12.0	86	9 7/8	× 51	v 11.5	22.7
06:00	Þ	light rain at times	45	0.2	0	2525	14.2	12.7	R	12.0	87	1/8	A ws	w 10.4	20.8
07:00	Þ	drizzle	35	<0.1	0	2300	14.0	12.5	D	11.8	87	<b>4</b> /8	≯ ws	w 9.2	18.9
08:00	$\sim$	partly cloudy	25	0.0	0	2150	13.8	12.2	w	11.5	86	<b>4/8</b>	A ws	w 8.1	17.7
09:00	$\sim$	partly cloudy	15	0.0	0	1985	13.8	12.5	w	11.3	85	<b>4</b> /8	A ws	w 6.9	16.0
10:00	$\sim$	partly cloudy	5	0.0	0	1780	13.9	13.5	w	10.9	82	<b>4</b> /8	≁ ws	w 6.9	14.4
11:00	$\sim$	partly cloudy	5	0.0	0	1705	14.4	15.0	w	10.4	77	<b>4</b> /8	→ v	6.9	14.0
12:00	$\sim$	partly cloudy	0	0.0	0	1700	14.9	17.0	w	10.0	72	0 4/8	→ w	5.8	13.5
13:00	$\sim$	partly cloudy	0	0.0	0	1735	15.4	18.8	D	9.7	69	<b>4</b> /8	≁ ws	w 5.8	12.7
												-			

- 9.2.5 The forecast gives separate information for 3 different domains: roads above 300m, 200-300m and below 200m. Frequently, only the higher routes, which usually have the lowest temperatures, require treatment.
- 9.2.6 The forecast gives a weather summary as well as a prediction of minimum road surface temperatures throughout the forecast period for each domain. The likelihood of weather hazards, such as ice and snow, occurring is also listed

- 9.2.7 In the case of a marginal forecast, (usually min RST below +2 deg C), the forecast will usually be updated by the Highways Duty Officer, via a call to Meteogroup, and by reference to the secure website or weather station information, before any action is confirmed.
- 9.2.8 Meteogroup also produces site specific forecast graphs, showing expected temperatures and air dewpoints for weather stations locations. This allows predicted and actual conditions to be compared during the course of the forecast period and is useful for decision making on marginal nights.
- 9.2.9 Meteogroup operates a 24hr consultation service from November to April which allows the Highways Duty Officer to speak directly to the forecaster, in order to discuss or obtain updates on the forecast. Meteogroup has a copy of the Highways Duty Officer's standby rota, with contact details, and can contact the officer directly if there is an important change to the forecast at any time.



#### 9.3 <u>Weather Stations</u>

9.3.1 Torfaen has access to the information from 3 weather stations located around its boundary, funded and maintained jointly with adjoining authorities. The stations are provided by Vaisala and record road surface and air temperature as well as giving an indication of road state (dry, wet, slushy etc) and dewpoint. They are sited over a range of altitudes and located to give an indication of road conditions over the whole area. The stations at Blaenavon and Hafodyrynys also have cameras, with images of the road surface updated every 10 minutes. This is useful in allowing any snowfall or build up of snow on the carriageway to be monitored remotely.

The stations are located at:

- 1. Jerusalem Lane, New Inn, altitude 115m
- 2. A472, Hafodyrynys, altitude 205m
- 3. B4248, Blaenavon, altitude 425m
- 9.3.2 The information supplied by the weather stations is accessible and recorded via a secure Vaisala website. Meteogroup also has access to these stations to allow verification and improvement of forecasting in the area.
- 9.3.3 The Authority also has access to information from other weather stations in the surrounding, former Gwent, area and on the trunk road network in the region. These include a station on the A4042 trunk road at Llantarnam, within Torfaen.



- 9.3.4 On marginal nights the sensors can be monitored and actual conditions compared to those forecast, using the Meteogroup graphs for each site, to help decide if any action is necessary.
- 9.3.5 Whilst this information is very helpful, we realise conditions can vary widely, and be very localised across Torfaen and actual borough wide inspections (9.4) are still carried out if required.

#### 9.4 <u>Inspections by Duty Officers (Early Morning Inspections)</u>

9.4.1 In cases of a marginal forecast, where pre-gritting may be required, areas of the borough prone to low temperatures, typically the higher exposed routes, can be inspected prior to the time forecast for temperatures to fall below 0°C. If it is decided that temperatures are likely to fall below 0°C and cause ice to form, or it has already formed, gritting action is initiated. Typically these inspections take place on very marginal nights in the early hours of the morning, allowing time for gritting of routes to be initiated and completed by approximately 5.30 am if ice is detected or thought likely to form. Inspections also take place to monitor any forecast snowfall, sleet etc and action is initiated if required.

#### 9.5 <u>Local Reports</u>

9.5.1 Local reports of poor road and or weather conditions are received from the Police, members of the public, and of particular importance from other council staff who live in various parts of the borough and are willing to be contacted regarding weather conditions. During office hours these reports are dealt with, in the first instance, by the Highway Network Group. Outside office hours, the Torfaen Central Control Centre passes any reports to the Highways Duty Officer for consideration and/or action. Reports of ice etc are usually investigated by the Highway Network Group or one of the duty officers before initiating any action to ensure the reports are accurate.



#### 10. DECISION MAKING PROCESS

#### 10.1 <u>Background</u>

- 10.1.1 Given accurate weather forecasting, weather station data and road condition information, (residual salt levels, general wetness or dryness, seepage areas etc), a clear and efficient decision making process reacting to adverse conditions is the foundation for a successful highways winter service.
- 10.1.2 The timing of any treatment will have regard to the duration of the precautionary salting routes which are approximately one hour in Blaenavon and two hours in Pontypool and Cwmbran. Any treatment should be timed to allow its completion before the onset of the adverse conditions whenever possible.
- 10.1.3 Vaisala's 'RoadsDSS Manager', a web-based system from our weather station provider, is used to issue and record all gritting actions and decision making.

#### 10.2 Normal working hours

10.2.1 During normal working hours the decision on any action is made by the Group Leader Highway Maintenance or the Structural Network Officer on receipt of the daily weather forecast at approximately 1200 hours. In the absence of these officers the decision is made by a delegated member of the Highway Network Group, a Highways Duty Officer or the Deputy Director, Highways and Climate Change.

#### 10.3 Outside normal working hours

10.3.1 Outside normal working hours the responsibility for decision making lies with the Highways Duty Officer. On weekends the weather forecast is viewed via the secure Meteogroup or Vaisala websites, and considered for action. The Highways Duty Officer is also responsible for monitoring conditions outside normal working hours, including liaison with Meteogroup if required, and acting on any forecast updates received or information from other sources if necessary.

#### 10.4 Decision making

- 10.4.1 A decision making chart together with guidance notes, which is an extract from Well Maintained Highways, a Code of Practice for Maintenance Management, (2009 version), is included as Appendix H. This chart allows for variations in temperature, precipitation and road condition (wet or dry and any residual salt) and recommends appropriate action for each scenario.
- 10.4.2 However, local conditions and experience must always be allowed for in the decision making process and areas may require isolated or differential action. Areas of seepage, water from leaking mains, and areas known to be prone to icing may require special treatment. Regard must always be given to the 450m difference in altitude across Torfaen which means conditions can vary substantially locally.
- 10.4.3 Where a marginal or sub-zero forecast is received but the decision making officer is confident that sufficient residual salt from previous actions remains on the road surface to prevent ice formation, given the details of the anticipated forecast, no further action or limited seepage treatment only may be carried out. On such occasions reference to Weather Station information or an inspection of routes by one of the Duty Officers may be required to check conditions are as forecast. This scenario would generally take place only on very low risk occasions with dry roads and low dew points meaning little chance of moisture forming on the road surface.

10.4.4 Consideration must also be given to decisions made by neighbouring authorities, which are received by e-mail, to ensure a consistent approach is taken. Discussions take place between officers from each authority if required.

#### 10.5 Issuing of Winter Service Action Plan

- 10.5.1 A member of the Highway Network Group or outside normal hours the Highways Duty Officer, interprets the forecast, decides on any action and issues a Winter Service Action Plan (Appendix J), by 1500 hours, using the Vaisala 'RoadDSS Manager' system. The Action Plan gives details of the action if any for that day, and is sent automatically via e-mail to the Operations Duty Officer, together with other officers, neighbouring local authorities, Gwent Police and Meteogroup
- 10.5.2 Outside normal working hours the Highways Duty Officer records any changes to the action using the Vaisala 'RoadDSS Manager' system, usually updating the Operations Duty Officer of any change by phone.
- 10.5.3 The Operations Duty Officer then contacts and organises the staff required and implements any action required.

#### 10.6 <u>Record keeping</u>

- 10.6.1 The daily Winter Service Action Plans are stored electronically by Vaisala 'RoadDSS Manager' which is updated with details of any changes, additional actions or Meteogroup updates/weather station checks through the 24hr period. All weather forecasts are also stored on this system
- 10.6.2 Outside normal working hours, it is not always possible to record all information in real time, particularly in busy periods. In this case Vaisala 'RoadDSS Manager' can be completed retrospectively by the Highway Network Group on the next working day.
- 10.6.3 The Operations Duty Officer records details of the particular action on the Winter Service Gritting Record Sheet (**Appendix K**), which is filled manually.



#### 11. PRECAUTIONARY SALTING

#### **11.1 PRECAUTIONARY SALTING ROUTES**

#### 11.1.1 Selection of Carriageway routes for Precautionary Salting

- 11.1.1.1 Given the scale of financial and other resources involved in delivering the Highways Winter Service and the vagaries of the weather it is not practically possible to:
  - 1. Provide precautionary salting to all parts of the network.
  - 2. Ensure that even the treated parts of the network are kept free from snow and ice at all times.
- 11.1.1.2 A prioritised network of precautionary treatment routes, which also forms the basis for snow and ice clearance priorities, has been developed based on the network hierarchy, traffic flows and type of use. The criteria used to select these routes is listed below, **(all adopted roads only)**:
  - 1. Principal routes (A&B roads)
  - 2. Main distributor or spine roads
  - 3. Roads to hospitals, police, ambulance, fire and rescue services
  - 4. Main bus routes and roads to main transport interchanges
  - 5. Main routes near main shopping areas, schools, cemeteries, etc
  - 6. Primary routes serving substantial villages/communities
  - 7. Main industrial routes of importance to the local economy
  - 8. Areas where known problems exist, such as exposed areas, steep gradients and other roads liable to icing.
- 11.1.1.3 During selection of the gritting routes allowance has also been made for the 450m difference in altitude across Torfaen. Proportionally more routes in the higher, more exposed areas such as Blaenavon are treated to take account of the more severe conditions usually experienced there.

#### 11.1.2 <u>The Precautionary Salting Routes</u>

- 11.1.2.1 A defined network of routes selected using the above criteria, with regard to local conditions, has been produced and are treated as weather conditions require. There are approximately 232kms. (salted lengths) of priority routes.
- 11.1.2.2 The length of routes are restricted by drivers working time regulations, which allows drivers who have already carried out a normal 7.5 hour working day to work a maximum of another 3.5 hours. The routes from New Inn are designed to be completed within 2hrs, which allows for another hour or so for the drivers to travel to and from the depot, carry out vehicle checks, load the salt and wash down the vehicles on completion. The routes in Blaenavon are shorter to allow a quicker re-treatment time in times of severe weather which is more frequently experienced in the area.
- 11.1.2.3 There are 6 main pre-salting routes which are approximately 25kms. long in Blaenavon and 45kms in Cwmbran and Pontypool, excluding non-salting mileage.
- 11.1.2.4 Route No. 7 uses a smaller vehicle to allow access to narrow, fairly busy routes in Griffithstown, Pontypool, and Abersychan which cannot be travelled by the standard gritters. The roads treated include some of those previously removed from the main routes due to access problems because of parked cars as well as other narrower bus routes and those in proximity to schools.

11.1.2.5 Each pre-salting route has an identification number from 1-7;

- 1. Blaenavon North
- 2. Blaenavon South
- 3. Pontypool North
- 4. Pontypool South
- 5. Cwmbran West
- 6. Cwmbran East
- 7. Pontypool / Aberyschan (mini-gritter)
- 11.1.2.6 Appendix A shows descriptions and plans of precautionary salting routes. The routes are also shown in more detail on the Council's website: <u>http://www.torfaen.gov.uk</u>, following the 'Transport and Streets Roads, Highways and Pavements, 'Winter Maintenance' link.

#### 11.1.3 <u>Changes to the Precautionary Salting Routes</u>

- 11.1.3.1 This defined network is reviewed annually to allow for any changes to the highway network, changes in local conditions or to address known problem areas. Some minor routes included in previous years gritting schedules sometimes have to be removed from the precautionary treated network due to the inability of the gritters to travel the route safely. Historically, the main reason for such changes is the route being made impassable by parked cars.
- 11.1.3.2Any changes to the previous years gritting network are recorded, together with the reason for the alteration in **Appendix B**.

#### 11.1.4 Arrangements with Adjacent Authorities

11.1.4.1 Where gritting routes cross Borough boundaries, agreements are in place with the relevant neighbouring authority to ensure complete network coverage whilst allowing the most efficient route for each authority's vehicles. Routes gritted by other authorities are listed in **Appendix C**.

#### 11.1.5 Trunk Roads

11.1.5.1 The Council is not responsible for the provision of Highways Winter Service on the A4042 trunk road which crosses Torfaen from Llantarnam to Mamhilad. This service is provided by the South Wales Trunk Road Agency (SWTRA), on behalf of the Welsh Assembly Government.

#### 11.1.6 Precautionary salting of footways and cycle ways

- 11.1.6.1 It is the Council's policy to encourage walking and cycling but it is not considered practicable, due to the substantial resources required (which are not currently available) and the operational difficulties, to routinely salt footways or cycle ways on a precautionary basis.
- 11.1.6.2 To assist footway users grit bins are provided at selected locations for self help use by the public on footways as well as carriageways.
- 11.1.6.3 Conventional carriageway salt application does give some coverage to a substantial number of adjacent footways.

#### 11.1.7 Precautionary salting of refuse/recycling routes

11.1.7.1Where significant snow or a very high ice risk is forecast consideration will be given to pre-salting the next day's adopted refuse/recycling collection routes to allow continuation of the service. This will only be carried out if conditions mean that the treatment will be effective and after discussion between the Strategic Director and Deputy Director, Highways and Climate Change, Economy and Environment, and the Highway Network and Streetscene Teams.

#### 11.1.8 Resilience - Strategic Core Network, precautionary salting

- 11.1.8.1 If salt reserves reduce to 10% of maximum capacity, (600 tonnes), the normal precautionary routes may be reduced to a strategic core network of primary and main roads, approximately 50% of the length of the normal network to reduce salt usage. These routes consist of:
  - 1. Main classified routes (A&B roads)
  - 2. Selected main distributor or spine roads
  - 3. Adopted roads to hospitals, police, ambulance, fire and rescue services
  - 4. Adopted roads to main transport interchanges, shopping areas, cemeteries and comprehensive schools
- 11.1.8.2 One 20g/sq.m treatment of the Strategic Core Network will use approximately 20 tonnes.
- 11.1.8.3 The decision to switch to treating this reduced network will be made by the Deputy Director, Highways and Climate Change in consultation with the Strategic Director, Economy and Environment, Head of Communications, Engagement and Civil Contingencies and the Highway Network Group. Any decision will consider the likelihood of salt deliveries, the medium term weather forecast and the stage of the winter season.

#### Appendix D shows descriptions and plans of Strategic Core Network.



#### 11.2 PRECAUTIONARY SALTING OPERATIONS

#### 11.2.1 Treatment and Response Times

- 11.2.1.1The target response time for mobilisation and commencement of gritting for unplanned action is 1 hour.
- 11.2.1.2The duration of the precautionary salting routes are approximately one hour in Blaenavon, (routes1+2) and two hours in Pontypool and Cwmbran, (routes 3-7). Any treatment is timed to allow its completion before the onset of the adverse conditions whenever possible.
- 11.2.1.3Precautionary salting is not usually carried out during normal working hours, (0730-1530), to avoid disruption to normal duties. However, if conditions dictate it can be carried out at any time.
- 11.2.1.4Effective salting during peak times due to volumes of traffic and congestion is difficult, not allowing proper spreading. The preferred earliest start time during the evening is 1800 if possible. If present in sufficient quantity, and other conditions allow, residual salt may be relied on initially to allow a slightly delayed start.

#### 11.2.2 Recommended practice for precautionary salting

- 11.2.2.1Each route is carried out in the prescribed direction by all drivers unless local conditions such as obstructions from parked cars prevent this.
- 11.2.2.2Whilst salting, gritting vehicles travel at a maximum speed of 30mph.
- 11.2.2.3The width of spread is set at 2.0 m less than the width of the carriageway, the channels then being treated by the action of traffic. If ice or snow is present or imminent the full width of carriageway is treated.
- 11.2.2.4The action of traffic is relied upon to treat areas behind small traffic and splitter islands if the road is not travelled in both directions
- 11.2.2.5All roundabouts are fully treated by travelling a full rotation in addition to normal through travel.
- 11.2.2.6The width of spread for Route 7 is set at approximately 4m, for the narrower roads treated, but can be adjusted manually by the drivers in wider areas by controls in the cab.

#### 11.2.3 Updated guidance on reducing salt spread rates

- 11.2.3.1Winter Service Guidance for Local Authority Practitioners was issued by the UK Roads Liaison group in October 2010. One of the main recommendations from this is that the recommended salt spread rates be reduced by approximately 20%, e.g. from the present standard 10g/sq.m. and 15g/sq.m. rates to 8g/sq.m. and 12g/sq.m if gritting equipment allows.
- 11.2.3.2The guidance recommended decreased spread rates based on set temperature bands and road conditions. However, experience has shown that actual temperatures can vary significantly from those forecast and wide temperature variations can also occur across each route with significant variations of altitude, aspect and exposure. Also a wide range of variables, such as wind, traffic flows, road surface type can also affect how much salt reaches and remains on the surface and how effectively it works over the required period. Given this, Torfaen will not currently be adopting the revised spread rates, which it considers to be removing a necessary margin of safety. Spread rates will remain in 5 gram increments from 10-40 grams as detailed above. In practice, our view is that increased resilience can

be more effectively achieved by more careful salt use during snow events, when stocks can be rapidly depleted by uncontrolled and unfocused usage.

#### 11.2.4 Spread rates for precautionary salting

- 11.2.4.1Below is a list of recommended spread rates for various expected conditions. This is intended as a guide only as there are an infinite combination of variations of weather, air and road states, residual salt from previous treatments and timings of these factors. All treatments are considered individually with these variables in mind and the reason for selection of a particular spread rate is recorded on the Daily Action Sheet. Spread rates are summarised in **Appendix I**.
- 11.2.4.2Precautionary salting should normally be at 15 g/sq.m and should be completed prior to the formation of frost.
- 11.2.4.3 Where roads are all definitely dry and residual salt is present or the severity of frost is limited to 0 to 2 °C, 10g/sq.m may be used.
- 11.2.4.4When roads are generally wet from recent rain the spread rate is increased to 20-25g/sq.m depending on amount of water present. The spread rate is increased to the maximum level at large areas of standing water or seepage by the driver as required.
- 11.2.4.5When showers are possible during the below zero period the spread rate is increased to at least 25g/sq.m, or less if residual salt is present, to allow for salt wash off.
- 11.2.4.6When continuous snow is forecast, spreading rates should be increased to 25-40 g/sq.m, depending on anticipated snowfall totals and residual salt already present. The presence of salt is intended to melt the initial fall and provide a wet surface beneath subsequent snow thus easing the work of ploughing.
- 11.2.4.7When persistent ice is expected, as for example from freezing rain, spread rates should be similarly increased to 25-40g/sq.m., according to severity.
- 11.2.4.8 Several routes known to be prone to ice formation, such as the higher exposed routes in the North of the borough and routes where excessive surface water is regularly present are routinely gritted on out and return journeys to increase the levels of salt spread.
- 11.2.4.9To allow completion of Route 7 with one full load the spread rate for this vehicle is generally limited to approximately 15g/sq.m, unless specifically requested. The Snow-Ex spreaders used are not calibrated in g/sq.m and both salt flow rate and width of spread can be adjusted. An approximate spread rate at specified control settings has been derived by the total amount of salt used divided by the area of the route:

Length of route = 15,000 m x 4m spread width, = 60,000 sq.m, Average amount of salt used = 1000 kgAverage spread rate = 1000 divided by 60,000 = 0.0167 kg, say 15g.

#### 11.2.5 Salting delayed or affected by rain/sleet/snow

11.2.5.1When rain is forecast prior to the onset of freezing temperatures or commonly the onset of snow, the gritting crews are mobilised at a set time but gritting is delayed until the rain stops or changes to snow to prevent the salt being washed away before it is required. Careful attention has to be paid as the ideal time to commence gritting can vary across the Authority and consideration given to the fact that completion of each gritting route can take up to two hours. In some cases some accumulation of snow on parts of the routes is unavoidable.

11.2.5.2If rain/sleet, heavy enough to cause wash off of the salt, occurs after or during treatment, and freezing conditions are still likely, re-treatment may be required

#### 11.2.6 Salting wet areas

- 11.2.6.1If all roads are very wet at time of treatment, salt may become diluted/wash off and a complete second treatment may be required at some stage.
- 11.2.6.2During normal precautionary salting if localised wet areas are encountered the salting rate can be temporarily increased, to the maximum rate, automatically by the gritter driver.
- 11.2.6.3Areas with substantial seepage, water from burst mains etc. may require more frequent treatment than the rest of the network. If there is sufficient residual salt on the network generally a treatment of just the wet areas can be carried out, using a reduced number of gritters if applicable. Such wet-spot grits are typically carried out following a full evening action, in the early morning, to be completed before 0530.
- 11.2.6.4In the case of very isolated wet areas where ice is likely or has already formed such areas can be treated manually using available labour or standby crews.

#### 11.2.7 Salting during extreme temperatures/lying snow

- 11.2.7.1Rock salt becomes less effective at temperatures below -7 °C. Where this occurs with dry roads and dry air there is a low risk of frost or ice and normal treatment can be carried out.
- 11.2.7.2Experience has shown that during periods of extreme temperatures combined with high moisture, which typically occur during periods of lying snow to the side of the treated carriageway, roads can refreeze overnight despite an initial treatment. At lower temperatures snow can continue melting and cause problems.
- 11.2.7.3Therefore, in times of lying snow a second treatment is often required to increase salt levels and is generally carried out in the early morning, to be completed by 0530. Typical spread rates will be 2 x 20-25g/sq.m.

#### 11.2.8 Residual Salt

- 11.2.8.1Under certain circumstances residual salt may be relied on to either allow a delayed start to precautionary gritting, usually to avoid rush hour traffic when effective salting is difficult, or to not carry out any treatment at all despite forecast sub-zero temperatures.
- 11.2.8.2Residual salt can only be relied on if the decision maker is confident that sufficient residual salt remains on the road surface to prevent the formation of ice given the forecast conditions. These occasions will usually be in settled dry conditions following at least 2 successive initial treatments, with no wash off and with forecast low dew points when the chance of any ice formation is a low risk anyway. If dry settled conditions persist we may only treat on alternate days to maintain residual salt levels.
- 11.2.8.3When no treatment is carried out, despite forecast sub zero temperatures, conditions are monitored remotely and by site inspection if required to ensure that actual conditions do not vary significantly from those forecast.

#### 11.2.9 <u>Summary of duties of staff involved in Precautionary salting operations</u>

11.2.9.1The gritting vehicle drivers must ensure that:

- 1. Daily vehicle checks are carried out.
- 2. Gritting vehicles are loaded correctly and any lumps of salt left on the hopper grill are removed before leaving the depot.
- 3. Correct spread rate is selected.
- 4. Gritting is constantly monitored to ensure route is fully treated
- 5. Any areas not treated for any reason are reported
- 6. All unused salt is returned to depot and off- loaded
- 7. Any vehicle defects are recorded and reported promptly to the Operations Duty Officer
- 8. Hours worked are recorded on their daily driving records

11.2.9.2The Operations Duty Officer must ensure that:

- 1. Operations are carried out when planned and in a safe manner.
- 2. The actual weather conditions experienced are monitored and recorded
- 3. Start and finish times for each route are recorded
- 4. Any areas not treated for any reason are recorded
- 5. Any vehicle defects are recorded and reported promptly to the Integrated Transport Unit



#### 12. <u>ICE AND SNOW CLEARANCE</u>

Even slight accumulations of snow and ice can lead to treacherous icy surfaces across the highway network. The authority provides a prioritised response to such conditions using a range of vehicles, techniques and staff.



#### 12.1 Why we can't keep even the gritting routes free from ice and snow at all times

Every effort is made to keep the precautionary network clear of ice and snow by sating before a potential ice or snow event begins. However, under certain conditions such as unexpected showers which wash off any salt, freezing rain, heavy snow and where snow is preceded by rain, which prevents effective pre-treatment, accumulations of ice and snow on the precautionary gritting network as well as the rest of the highway network are unavoidable.

#### 12.2 Why snow settles even on treated roads

Snow falling on the highway requires the action of traffic to mix it with salt and begin the melting process. On lighter used roads, or overnight, when traffic is not present, snow will accumulate readily regardless of heavy pre-salting.

Anything more than light snow is still likely to accumulate on the road surface, despite salt and traffic being present and some disruption initially is often unavoidable. This is often compounded by traffic blocking routes and preventing access for our gritting vehicles. This is a particular problem if heavy snow falls during busy periods and does accumulate despite traffic action.

#### 12.3 CARRIAGEWAY ROUTES FOR THE CLEARANCE OF ICE AND SNOW

The Authority will attempt to clear snow and ice from all of the adopted highway network, but only as resources allow and following the priorities set out below.

#### 12.3.1 Selection of Carriageway routes for the Clearance of Ice and Snow

- 12.3.1.1In times of ice and snow priority is given to keeping the main classified (A&B roads) clear first, followed by roads to Hospitals and Emergency Service facilities and then rest of the precautionary gritting network. (1-3)
- 12.3.1.2Assistance will always be given to allow the emergency services access areas, for planned medical, needs such as dialysis patients, to utility companies if requested to ensure continuation of water, gas, electricity supplies and to allow funerals to take place. (4-7)
- 12.3.1.3Other carriageways are treated after the end of snowfall or ice formation only, as resources allow with regard to the likely duration of the conditions and during daylight hours only.
- 12.3.1.4 Often snow only affects the higher routes and a selective response is required involving a reduced number of vehicles.
- 12.3.1.5A priority order and protocol has been established for the clearance of ice and snow on **adopted** roads:

#### Carried out at any time, continuously if required:

- 1. Principal routes (A&B roads)
- 2. Adopted roads to hospitals and emergency service facilities
- 3. The remainder or the precautionary salting network

#### Carried out at any time following request/programmed need:

- 4. Routes to assist access for the emergency services
- 5. Routes for planned medical access (dialysis patients, ambulance requests)
- 6. Routes to assist utility companies if requested to continue supplying water, gas electricity etc.
- 7. Routes to assist funerals to proceed

# Carried out after routes in categories 1-3 are clear, during daylight hours only, as resources allow, only after the cessation of snow or ice formation, and with regard to the forecast for the following period. (Listed in Appendix F – Internal copies only)

- 8. Adopted roads to public facilities schools etc
- 9. Adopted roads to industrial areas
- 11. Remaining bus routes.
- 10. Roads providing main access to communities.
- 12. Busy steep sections of residential roads.

## Carried out after routes in categories 1-12 are clear, during daylight hours only, as resources allow, only after the cessation of snow or ice formation, and with regard to the forecast for the following period.

- 13. Other residential roads.
- 14. Other rural roads
- 15. Roads serving isolated dwellings.
- 16. Remaining adopted roads.

#### Not treated:

17. Private streets, un-surfaced roads, roads belonging to other council departments or external bodies.

- 12.3.1.6When resilience measures do not apply, (salt stocks over 50%), for reasons of practicality the clearance of streets in categories 8-15 may combined into one treatment.
- 12.3.1.7Requests for clearance of snow and ice are prioritised by the Highway Network Group or the Highways Duty Officer using the above hierarchy with regard to the resources available, the location of those resources, and the weather forecast for the following period.
- 12.3.1.8Clearance of ice and snow on unadopted roads in ex-council housing areas and complexes is the responsibility of Bron Afon Community Housing. Other housing associations, such as Melin Homes, Hafod Housing Associations are also responsible for treatment of the roads in their ownership.



#### 12.3.2 <u>Resilience – Clearance of ice and snow on carriageways</u>

12.3.2.1 Large amounts of salt are required to clear ice and snow from all parts of the adopted highway network. To increase resilience, with possible salt supply problems in mind during widespread severe weather, we are faced with restricting salt use during all snow/ice clearance operations to conserve stocks.

12.3.2.2A progressive reduction in the level of service as salt stocks reduce will apply:

- All stock levels: Control of salt use on main routes (1-3) during all snow events. Assistance given to emergency services, other medical needs, utility companies, and funerals (4-7).
- 100% 50% stocks: All adopted roads cleared on a priority basis
- 50% -25% stocks: Precautionary gritting network + selected network of the more important, high use or steeper, side roads cleared (8-12) + other roads in exceptional circumstances.
- 25% 10% stocks: Precautionary gritting network + other roads in exceptional circumstances
- Less than 10%: Strategic Core Network + other roads in exceptional circumstances

12.3.2.3Medical emergencies will be subject to verification by the Aneurin Bevan Local Health Board or the Welsh Ambulance Service.

12.3.2.4The decision to instigate the above measures will be made by the Deputy Director, Highways and Climate Change in consultation with the Strategic Director, Economy and Environment and the Highway Network Group. Any decision will consider the likelihood of salt deliveries, the medium term weather forecast and the stage of the winter season.

#### 12.4 ICE AND SNOW CLEARANCE OPERATIONS

Every effort is made to pre-treat roads before the onset of snow to provide a melted layer at the road surface, which avoids the snow compacting to a hard layer, and makes any subsequent ploughing easier. However, this is not always possible as precipitation frequently begins as rain and turns quickly to snow at some point, washing off any pre-salting carried out.

The routes are cleared by a combination of ploughing and salting.

Reference should be made to 7.6 for guidance on staffing during snow emergencies



#### 12.4.1 Spread rates for Ice and Snow Treatment

- 12.4.1.1 When ice has already formed, salt spreading rates should be 20-40g/sq.m depending on severity.
- 12.4.1.2When snow is forecast a pre-treatment of 25-40g/sq.m should be carried out, depending on anticipated severity.
- 12.4.1.3When ploughing during snow the spread rate used will depend on intensity of snow and the time of operations. During quiet periods no salting, just ploughing may be carried out. Generally a spread rate of 10g/sq.m will be used, increased if need be during peak times.

#### 12.4.2 <u>Response to isolated icy patches</u>

- 12.4.2.1When reports are received about localised icy conditions, a gritter, or other vehicle depending on the extent of the ice, is dispatched to salt the area as required if considered necessary and with regard to weather conditions. Reports of ice on the precautionary gritting routes are given priority.
- 12.4.2.2Where these incidents are due to leaking water mains or public sewers the cost of the treatment may be recharged to Dwr Cymru/Welsh Water.

#### 12.4.3 <u>Recommended Practice for Ploughing</u>

- 12.4.3.1When snowfall exceeds 25mm depth, ploughing operations will commence.
- 12.4.3.2Ploughing operations require each vehicle to be manned by two men for safety reasons.
- 12.4.3.3Drifting snow, particularly on higher exposed routes may require localised ploughing even well after the cessation of snowfall.
- 12.4.3.4Ploughing may be required to remove snow not dispersed by traffic, such as where there is reluctance by traffic to use the right-hand lane on dual carriageways or on lightly used routes.
- 12.4.3.5When prolonged snowfalls occur ploughing continues throughout, if possible, to prevent build up and compaction of the snow by traffic. Such ploughing can be combined with simultaneous salting or not (see 12.4.1.3). When tackling snowdrifts, or where vehicles are operating on gradients, it may be desirable to continue ploughing without salting, as the weight of a salt load will aid vehicle traction when ploughing.



#### 12.4.4 <u>Resilience – Snow clearance operations</u>

12.4.5.1High levels of salt are used during continuous snow clearance of the main network, which is the main cause of the previous national shortages. Following our experiences from the winters of 09/10 and 10/11, the use of salt will be controlled during all major snow events regardless of salt stocks. Generally after an initial pre-treatment before snowfall, operations will be limited to ploughing alone, or salting at a reduced rate of 10g/sq.m if there is insufficient depth to plough, until cessation of the snow, when normal salting will recommence. The exception to this is if snow falls during busy morning or evening periods; salting will be targeted at making roads passable at times of peak traffic flow rather than attempting to maintain access at all times.

#### 12.4.5 Snow clearance on dual carriageways

12.4.6.1Snow on dual carriageways should be cleared a lane at a time, avoiding partial clearance of lanes which could encourage dangerous overtaking manoeuvres. All lanes on these important, high speed routes should be cleared as soon as possible and definitely before any thaw to avoid drivers attempting to use partially clear lanes.

#### 12.4.6 Traffic calmed streets

12.4.7.1Care should be exercised when ploughing in areas of traffic calming, to avoid damage to plant, calming features and injury to operatives.

#### A list of traffic calmed streets is listed in Appendix G.

#### 12.4.7 <u>Removal of Deep Snow</u>

- 12.4.8.1Where deep snow has accumulated its removal may require the use of excavators. In built up areas, snow is removed by lorry to designated sites for disposal.
- 12.4.8.2The Highway Network Group maintains a list of contractors, (Appendix P, internal copies only), who have plant available for snow clearance, together with agreed rates for the season.



#### 12.5 <u>ROUTES FOR CLEARANCE OF ICE AND SNOW ON FOOTWAYS, CYCLEWAYS AND</u> <u>ADOPTED CAR PARKS</u>

#### 12.5.1 Selection of Footways for the Clearance of Ice and Snow

- 12.5.1.1 Footways are only cleared after the cessation of snowfall and with regard to the weather forecast for the following period; if the ice or snow is likely to melt quickly no action is taken. Apart from busy shopping area footways, action is only initiated if the ice or snow is likely to persist for several days.
- 12.5.1.2Where persistent snow or widespread ice does form on adopted footways it is cleared following the priority system below based on footway use and other characteristics, such as gradient.
- 12.5.1.3 Priorities and protocols for adopted footway treatment (persistent ice or snow only);

#### Cleared without request, as resources allow, during normal working hours:

- 1. Pontypool and Blaenavon town centre footways and pedestrian areas. (Cwmbran town centre privately owned)
- 2. Other shopping areas and busy shop frontages

## Cleared on a priority basis if conditions mean that ice or snow will persist for several days, as resources allow, during normal working hours:

- 3. Main pedestrian routes, including, footways in proximity to schools, hospitals, sheltered housing, and OAP areas links to main urban bus routes, raised bus stop platforms, footbridges on main routes.
- 4. Footways in proximity to other public buildings, doctor's surgeries, etc
- 5. Steep sections of busy footways, steep ramps to subways and associated steps.
- 6. Other busy pedestrian routes

## Cleared on a priority basis, in exceptional circumstances of very prolonged severe weather only, as resources allow, during normal working hours:

- 7. Other Residential areas
- 8. Industrial Estates
- 9. Low use rural footways

#### Not treated:

- 10. Any un-adopted footway or pedestrianised area, un-surfaced footpaths, cycle ways, public rights of way.
- 12.5.1.4Footway clearance is a very labour intensive and slow process. Often normal duties can be resumed before all footways are cleared, resulting in a much reduced available workforce. Practically this means that except during very prolonged periods of ice or snow footways in categories 5-9 are not normally treated.
- 12.5.1.5Clearance of ice and snow on unadopted footways in ex-council housing areas and complexes is the responsibility of Bron Afon Community Housing. Other housing associations, such as Melin Homes, Hafod and Eastern Valley Housing Associations are also responsible for treatment of the footways in their ownership.

12.5.1.6Schools, colleges and other council organisations are responsible for their own snow clearance within the facility.

#### 12.5.2 <u>Resilience – Clearance of ice and snow on footways</u>

- 12.5.2.1Clearance of ice and snow on footways uses large amounts of salt. A series of control measures is retained to restrict footway treatment as stocks decline.
  - 50% 25% stocks: Footway treatment restricted to categories 1-6 only
  - 25%-10% stocks: Footway treatment restricted to categories 1 +2 only.
  - Less than 10% stocks: No footway salting.
- 12.5.2.20ther requests for footway treatment will be considered on an individual basis but carried out only in exceptional circumstances.

#### 12.5.3 Cycle ways

12.5.3.1 Some combined cycleway/footway routes will receive treatment as part of normal footway salting. Most dedicated cycle ways do not form part of the adopted highway and are not currently treated

#### 12.5.4 Adopted car parks

12.5.4.1The majority of car parks are not adopted. Adopted car parks are not normally treated but given similar priority for treatment to the footways in the particular area if requests are received.

#### 12.6 FOOTWAY ICE AND SNOW CLEARANCE OPERATIONS

#### 12.6.1 Snow/Persistent Ice Clearance on Footways

- 12.6.1.1Persistant snow and ice is cleared during normal working hours only, following the priorities laid out in 12.5.1.3, as resources are available, as instructed by the Highway Network Group or the Highways Duty Officer.
- 12.6.1.2Snow is cleared first, where possible, either manually or by using one of 3 ride-on mowers equipped with snow blades where possible. Salt is then applied manually or by one of our push along salt spreaders.

#### 12.6.2 <u>Blaenavon and Pontypool Town Centre and other busy shopping area footways</u>

12.6.2.1Snow clearance or treatment of widespread ice in Pontypool and Blaenavon Town Centres is carried out without request, in normal working hours only, by the relevant cleansing staff by hand and using push along broadcast salt spreaders. The staff commence work at 7.30am. We will try to treat overnight falls of snow or ice as soon as practical in these areas, although in severe events full treatment may take several days. It is not practically possible to treat all of the pedestrianised areas but we will attempt to clear a safe route through wide areas as well as all the main footways. Salt, for use by cleansing staff and the public, is stored in 22 grit bins located around Pontypool town centre and 4 large bins along Broad Street in Blaenavon. Some of the central pedestrianised areas of Pontypool Town Centre remain part of precautionary gritting Route 3 which assists both pedestrians and delivery/service traffic.

12.6.2.2Following treatment of Pontypool and Blaenavon Town Centres, or before if resources allow, other adopted busy shopping frontage footways are treated.

#### 12.6.3 Other adopted footways

Other footways are cleared in normal working hours only, according to the priority list in 12.5.1.2, at the request of the Highway Network Group or the Highways Duty Officer, utilising staff who cannot carryout their normal duties because of the snow. The scale of this response is agreed between Deputy Director, Highways and Climate Change, the Highway Network Group and teams with other staff involved, with regard to the likely duration of the adverse conditions.



#### 12.6.4 <u>Treatment of steel footbridges</u>

12.6.4.1To avoid corrosion of steel footbridges a stock of non-corrosive de-icing material is maintained for their treatment which is applied manually.

#### 12.7 ACTION AFTER SNOW

- 12.7.1 Prolonged below freezing temperatures and ploughing operations can cause extensive damage to highway surfacing. Severe flooding can occur if large amounts of snow thaw rapidly. The following measures are put into action after significant snow events.
  - 1. All main culverts checked
  - 2. Flooding incidents addressed with normal drainage crews including gully sucker if required and supplemented with Highways Winter Service crews if required. Particular problems can occur if gullies are still blocked by snow and ice.
  - 3. Highway and Asset Inspectors carry out a tour of their designated area to check for any damage to the fabric of the highway, street furniture etc., from snow and ice or ploughing operations.

#### 13. <u>GRIT BINS</u>

#### 13.1 Introduction

- 13.1.1 Grit bins are provided for self-help by the public, as a first response to severe weather, in areas not covered by the gritting routes and for footway treatment. The bins are sited at specific locations, usually at known trouble spots such as steep gradients or sharp bends. We currently have 794 bins.
- 13.1.2 The bins are sited whenever possible, to not cause an obstruction, on adopted highway, footway or verge. Where this is not possible they can be sited on private property with the agreement of the landowner.
- 13.1.3 The bins remain the property of Torfaen County Borough Council.



- 13.1.4 The salt in the bins is for use on adopted highways only.
- 13.1.5 A schedule of grit bins is included as **Appendix E**. The location of grit bins is also shown on the Council's website: <u>http://www.torfaen.gov.uk</u>, following the 'Transport and Streets Roads, Highways and Pavements, 'Winter Maintenance' link.
- 13.1.6 The location grit bins is reviewed each year and amended as necessary taking into account any changes in gritting routes, previous use, misuse/vandalism and new requests from Councillors and residents.

#### 13.2 <u>Maintenance and refilling</u>

- 13.2.1 The bins are maintained by the Authority and replaced if they go missing or become damaged, as resources allow and if criteria for placement are still met.
- 13.2.2 Vandalism of bins is a big problem and the public are asked to promptly report any such incidents to the Authority or the police. Replacement of vandalised bins means that fewer are available each year to meet new requests. Persistent vandalism and misuse may result in a bin being removed.

- 13.2.3 The bins checked and filled with salt before the beginning of the winter season and routinely, without request, following major snow or ice events.
- 13.2.4 Requests from the public to refill grit bins are logged by Call Torfaen and passed to the Highway Network Group for action. Bins are not refilled over the summer period. During the winter requests to fill individual bins are met as resources become available and may be grouped together in batches to minimise costs.
- 13.2.5 In times of severe weather we may not be able to refill bins straight away. The bins are only normally filled during normal working hours.
- 13.2.6 For requests for grit bin refills please contact Call Torfaen on 01633 648440.

#### 13.3 <u>Correct use of grit bins</u>

- 13.3.1 If used correctly grit bins provide a valuable tool for the public to treat areas affected by snow and ice quickly and effectively. However, they are often used incorrectly, resulting in heavy salt use with little effect. They are also subject to abuse, misuse, theft and the use of the salt is hard to control.
- 13.3.2 The public are reminded to use the salt carefully and correctly:
  - 1. The salt is for use on adopted roads, footways and car parks only
  - 2. Only a small amount of salt is required to be effective, 1 handful should treat several sq. metres
  - 3. Try and clear some of the ice or snow first before applying the salt
  - 4. Rather than using a shovel to spread the salt, fill a bucket and spread using a gloved hand or a small scoop to cover a much larger area.
  - 5. Give the salt time to work
  - 6. Wash any salt off your hands or skin thoroughly
- 13.3.3 Correct use will make the salt in the bin last much longer, in periods when we cannot always fill them up straight away and allow treatment to a much larger area.

#### 13.4 <u>Requests for new grit bins</u>

- 13.4.1 Requests from the public for new grit bins are logged by Call Torfaen and passed to the Highway Network Group for consideration.
- 13.4.2 Each year the Authority purchases as many new bins it can with the budget available. Some of these bins have to be used to replace damaged or missing existing bins, leaving the remainder available to meet new requests.
- 13.4.3 The Authority cannot meet all the requests for new grit bins it receives. Each request is prioritised using the criteria below using a risk-based points system, (**Appendix Q**), to evaluate the requests annually and available bins are supplied to the most deserving locations. Unsuccessful requests are stored in a database for re-consideration in future years when more bins may be available.
- 13.4.4 Criteria for evaluation of grit bin requests:
  - 1. Salt must be for use on the adopted highway
  - 2. Bins are not provided for private roads
  - 3. Suitable location available which does not pose a safety risk to highway users
  - 4. Bins are not normally sited on the precautionary gritting network

- 5. New bin must be a sufficient distance from an existing bin. Minimum spacing generally 100m, depending on site.
- 6. Priority is given to areas with specific hazards which cause problems to movement of vehicular or pedestrian traffic:
  - i. Steep gradients
  - ii. Sharp bends and junctions
  - iii. Junctions of untreated roads with the treated network
  - iv. Areas prone to icing such as where surface water may be present
  - v. Busy areas around facilities or areas used by vulnerable persons
- 7. Priority is also given to areas where the maximum number of residents will benefit from the location of a new bin.
- 8. Requests for bins in areas owned by Bron Afon Community Housing or other Housing Associations, Sheltered Housing Complexes, Un-adopted Shopping areas, Schools and other Council and public facilities are not met be the Highways Network Team and must be referred
  - to,

the relevant body or department.

13.4.5 These criteria and are also used to re-evaluate the replacement of existing bins, which may have been sited previously before requests were prioritised.

#### 13.5 <u>Resilience – Grit Bins</u>

- 13.5.1 A progressive reduction in the level of service as salt stocks reduce will apply:
  - 100 50% stocks: Bins re-filled normally
  - 50%-25% stocks: Bins refilled with salt/sharp sand mix (50/50)
  - Less than 25% stocks: Bins not refilled



#### 14. <u>COMMUNICATIONS</u>

Effective communication of our Winter Service Policy to members, the public and other key stakeholders, particularly during severe weather, is a vital part of the service we provide. A key part to this is informing these groups of the level of service to expect and ensuring these expectations are realistic and consistent with the resources we have available. This can make the public more aware of the limitations of the service; of what we can't do, and hopefully improve public safety as a result. Information to the public is particularly important if we have to alter the level of service we provide due to such things as salt shortages.

#### 14.1 <u>The Highways Winter Service Plan</u>

- 14.1.1 This Highways Winter Service Plan is accessible to the public through Torfaen's website; <u>http://www.torfaen.gov.uk</u>, following the 'Transport and Streets – Roads, Highways and Pavements' link. The site also provides a more general summary of the Highways Winter Service we provide as well as more detailed gritting route maps and guidance on safe driving during the winter.
- 14.1.2 Copies of this Highways Winter Service Plan are circulated on as shown in the distribution list at the end of this document. Copies are sent to all neighbouring authorities, the emergency services and other key public bodies who are affected by our operations.
- 14.1.3 Torfaen also receives copies of our neighbouring authorities Winter Service Plans and meet regularly to ensure consistency and completeness of treatment at our boundaries.

#### 14.2 Daily Gritting Action

14.2.1 Copies of our Winter Service daily action are e-mailed to other council departments, our neighbouring authorities, the emergency services and other key public bodies. We also receive notification each day of the proposed action of our neighbouring authorities to help ensure consistency of treatment across the region.

#### 14.3 <u>Communications to Members</u>

14.3.1 During severe weather regular briefing notes are supplied to ward members by the Strategic Director Economy and Environment, Deputy Director, Highways and Climate Change and the Councils Press Officer to allow them to respond to and advise residents of the latest conditions, priorities, progress with snow clearance, problems with refuse collections and other services etc.

#### 14.4 Local Media and internet

- 14.4.1 In addition to the Winter Service Plan, guidance notes will be issued to the public through various forms, such as press releases to local newspapers, radio, the Council's website and the Torfaen Talks newsletter.
- 14.4.2 In the event of severe weather, the Head of Communications, Engagement and Civil Contingencies will be supplied with information as required to provide the local media with updates of conditions, details of any specific problems and guidance for the public. Once sent to the press the details will be published on the Council's website and on the Council's social media sites. The Council's Twitter and Facebook page will be updated with short regular updates 24 hours a day, seven days a week.
- 14.4.3 When severe conditions occur and other services such as refuse collection are disrupted the Head of Communications, Engagement and Civil Contingencies will send specific information to the

Councillors in the wards where services have been disrupted. This will be followed up with a press release to local newspapers and radio stations and a news release on the Council's website. When this is done a short version will be sent out to followers of the Council's social media sites.

#### 14.5 Means of operational communication

•

- 14.5.1 Communications will generally be by mobile telephone where possible. A list of names and numbers for mobiles is shown in **Appendix L** (Internal copies only).
- 14.5.2 All gritting vehicles have a hands-free system fitted for mobile phone communication. Staff must comply with current legislation regarding use of hand-held mobile phones whilst driving.

#### 15. <u>CONTACT US</u>

#### Public enquiries, request for treatment of highways, grit bins, etc

#### **Telephone**

Call Torfaen (0830-1800 weekdays)	01495 762200
24 hr Control Room (1800-0830)	01495 762200

#### Website/e-mail

Website	http://www.torfaen.gov.uk
Email:	your.call@torfaen.gov.uk

#### Social media



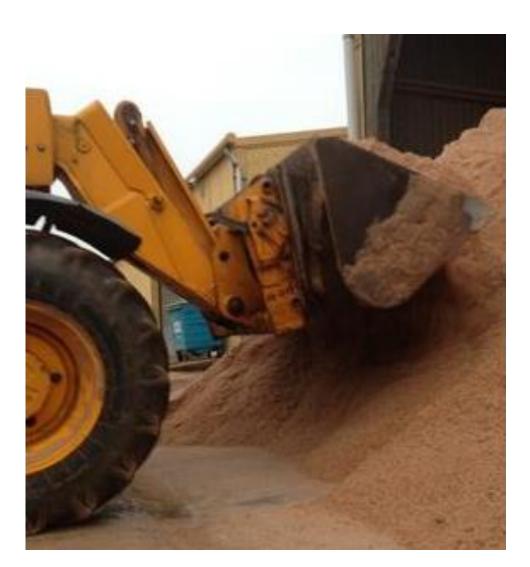
@Torfaencouncil



### /torfaen



# APPENDICIES



#### APPENDIX A

#### PRECAUTIONARY SALTING ROUTES, PLANS AND DESCRIPTIONS

- 1. BLAENAVON NORTH
- 2. BLAENAVON SOUTH
- 3. PONTYPOOL NORTH
- 4. PONTYPOOL SOUTH
- 5. CWMBRAN WEST
- 6. CWMBRAN EAST
- 7. PONTYPOOL/ABERSYCHAN (MINI- GRITTER)

#### Route 1: (Blaenavon north)

#### **Depot – Blaenavon**

#### Exit depot, start salting and proceed along the following roads:

Exit Gilchrist Thomas to North Street to Garn Road junction, Garn Road to Llanelli Hill junction. Return to Abergavenny Road junction, Abergavenny Road to junction of access road to transmitter mast. Return to Rifle Street junction. Rifle Street, Elgam Avenue (middle road), Blorenge Terrace, Llanfoist Crescent, Upper Woodland Street &Llanfoist Crescent

Not salting return via: Blorenge Terrace.

**Salting travel along:** Elgam Avenue (top road), Maxworthy Road, Elgam Avenue (bottom road), Upper Woodland Street, Hillside Avenue, Woodland Street, Upper Coedcae Road, Giles Road & Llanover Road to cattle grid.

Not salting return to: Giles Road junction.

**Salting travel along:** Llanover Road to Black Lane (Middle Coedcae road), access road to Blaenavon Heritage School, round roundabout, back to Black Lane, Coedcae road, Woodland Street.

Not Salting travel along: Hillside Avenue.

Salting travel along: Coedcae Road to junction of Black Lane (Middle Coedcae Road).

Not Salting travel along: Coedcae Road.

**Salting travel along:** Upper Hill Street, Hill Street, James Street, Ton Mawr Road, New James Street, Griffin Avenue & Coed Eithen Street/Capel Newydd Avenue to end of lower road.

Not salting travel along: Cwmavon Road to Coed Road.

Salting travel along: Coed Road.

Not salting travel along: Llanover Road to Ton Mawr Road.

Salting travel along: Ton Mawr Road to junction of New James Street.

Not salting travel along: Ton Mawr Road, James Street

Salting travel along: Market Street, Broad Street (up), King Street, Phillips Street.

**Not Salting travel along:** Maxworthy Row, Rifle Street **Salting travel along:** Elgam Avenue, (Hill 60).

Not Salting travel along: Elgam Avenue, (bottom road).

Salting travel along: Ellick Street, King Street, Upper Waun Street, High Street to junction of Lion Street.

Not Salting travel along: Lion street, Broad Street (up), King Street, North Road, Estate Road to Gilchrist Thomas.

Salting Travel along: Estate Road to Garn Road

**Not salting return to:** Gilchrist Thomas junction with depot access

Salting Travel along: Gilchrist Thomas to Doncaster's, and Big Pit access road to gate.

Not salting return to Depot.

Length of salted carriageway = 23.5 kms. Non salting length = 4.7 kms.

#### Route 2: (Blaenavon south)

#### Depot. –Blaenavon

#### Exit depot, salting and proceed along the following:

North Street (South), Church Road, Prince Street, Cwmavon Road to Ffrwd Square, Cwmavon Road, & return to Ton Mawr Road roundabout.

Not salting travel along: Cwmavon Road to Capel Newydd.

Salting travel along: Capel Newydd (middle road), Coed Road, Gladstone Place, Ton Mawr Road, New William Street,

Not salting travel along: Market Street.

Salting travel along: Broad Street (down), Commercial Street, Ivor Street.

Not salting travel along: Broad Street (down).

Salting travel along: Old William Street.

Not salting travel along: New William Street.

**Salting travel along:** Cwmavon Road to Prince Street, Varteg Road to bus terminus, Slip Road to the Welsh School, Varteg Road, Prince Street, Church Road, Forgeside Road, Forge Road, Coity Terrace, Oxford Terrace, Forge Road, Top Forgeside Road to Varteg Road junction (cemetery).

Not salting travel along: Varteg Road, Prince Street, Church Road to High Street junction.

Salting travel along: High Street to Lion Street junction, Lion Street.

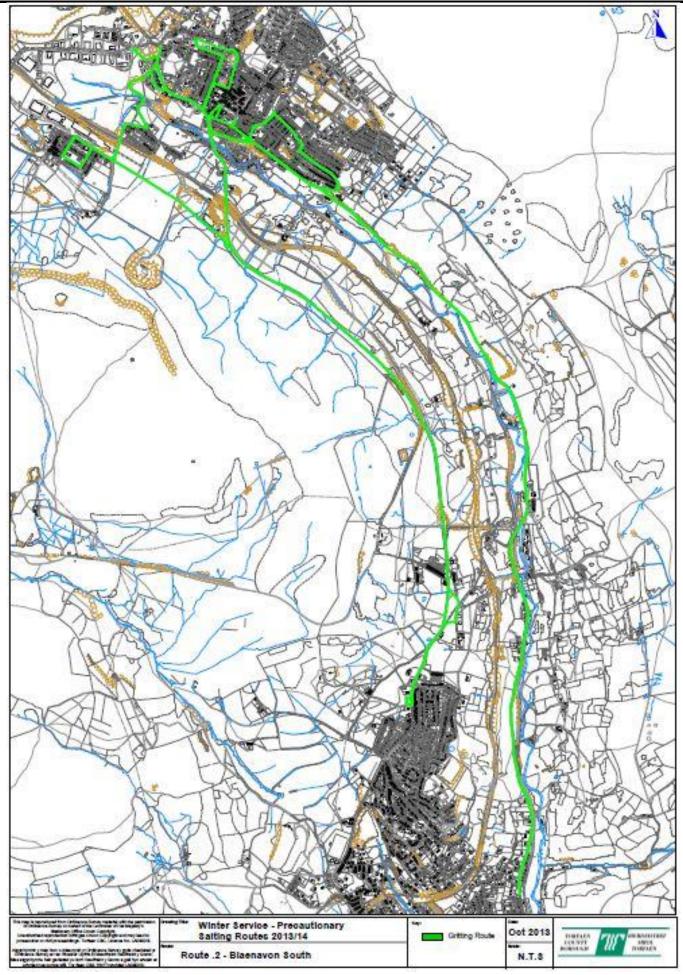
**Not salting travel along:** Broad Street (up), King Street, Upper Waun Street, High Street, Church Road to Park Street junction.

Salting travel along: Park Street to top cut through to high street.

Not salting travel along: High street, Church Road to Kennard Place junction.

Salting travel along: Kennard Crescent, Forgeside Road, North Street and return to depot via Kennard Place.

Length of salted carriageway = 26.0 kms. Non salting length = 3.1 kms.



#### Route 3: (Pontypool north)

#### **Depot - New Inn**

#### Exit depot salting proceed along the following routes:

Panteg Way, New Road (West), Station road to junction Kemys Street, Kemys Street, Sunnybank Road (North), Stafford Road, Link to Blaendare Road, Rockhill Road under A472 bridge, A472 slip road to A4042 Macdonald's roundabout, A472 to Western Bypass roundabout, back to Macdonald's roundabout, A472 towards Pontypool, slip road to Rockhill Road, under A472 bridge onto Rockhill Road towards Pontypool, Clarence Road, around Clarence Corner roundabout, link to A4043 Albion Road roundabout, back to Clarence Corner, Clarence Street, Hanbury Road, Commercial Street, Park Road, around Town Bridge roundabout, Riverside, Osborne Road towards Town Centre, around George Street one way system, back along Osborne Road to George Street, through pedestrianised area with caution, Crane Street, Market Street, loop around The Globe PH under Tesco access ramp, Market Street, Glantorfaen Road to Hanbury Road Junction.

Not salting travel along: Return to Osbourne Road/Riverside junction.

**Salting travel along:** Link to A4043, around roundabout, A4043 Osborne Road (North), St. Lukes Road, Snatchwood Road, Broad Street, Old Road loop, Broad Street, Station Street, New Road, Cwmavon Road to Ffrwd Square.

Not salting return to: Harpers Road

**Salting travel along:** Harpers Road, Stanley Road, Herbert's Road, Varteg Road, Samson's Avenue, Lasgarn View, Lower Ty Gwyn Road, Hillcrest to School loop.

Not Salting return to: Hillcrest junction with Lower Ty Gwyn Road.

**Salting travel along:** Link to Herbert's Road (Bryn Terrace), Penylan Road to junction with Varteg Road. Varteg Road (South), New Road, Emlyn Road, Albert Road, Commercial Road, Church Road, Wellington Road, Waterloo Road, Commercial Road to junction with Church Road.

Not salting return to: New Road junction with Bailey Street.

Salting travel along: Bailey Street, Cross Street to junction with Stanley Road

Not salting travel along: Stanley Road to Hanbury PH

Salting travel along: Link to Bailey Street

**Not salting return to:** Church Road junction with Wellington Road **Salting travel along:** Church Road, Lodge Road, Foundry Road, Union Street, Broad Street, High Street, Church Road, Manor Road & Victoria Road.

Not salting travel along: Lower Harpers Road, New Road, Station Street, Old Road to junction.

**Salting travel along:** Old Road past Afon Court, Limekiln Road, Freeholdland Road, George Street, Osbourne Road (North), St. Lukes Road, Pentrepiod Road, Pentwyn Road, The Promenade.

**Not salting travel along:** Foundry Road, Union Street, Snatchwood Road, St. Lukes Road, Osborne Road to junction of Pontnewynydd Industrial Estate.

Salting travel along: Pontnewynydd Industrial Estate, Plasycoed Road, Pantygasseg Road to cattle grid.

Not salting return to: Hanbury Road.

Salting travel along: Hanbury Road

Not salting travel along: Osborne Road to junction of Merchants Hill.

**Salting travel along:** Merchants Hill, Penywaun Road, Penywaun Lane, Tranch Road (East), Twmpath Road, Crumlin Road (East), Albion Road link to A472.

Not salting travel along: A472 to Western Bypass roundabout, A472 until slip road to Rockhill Road.

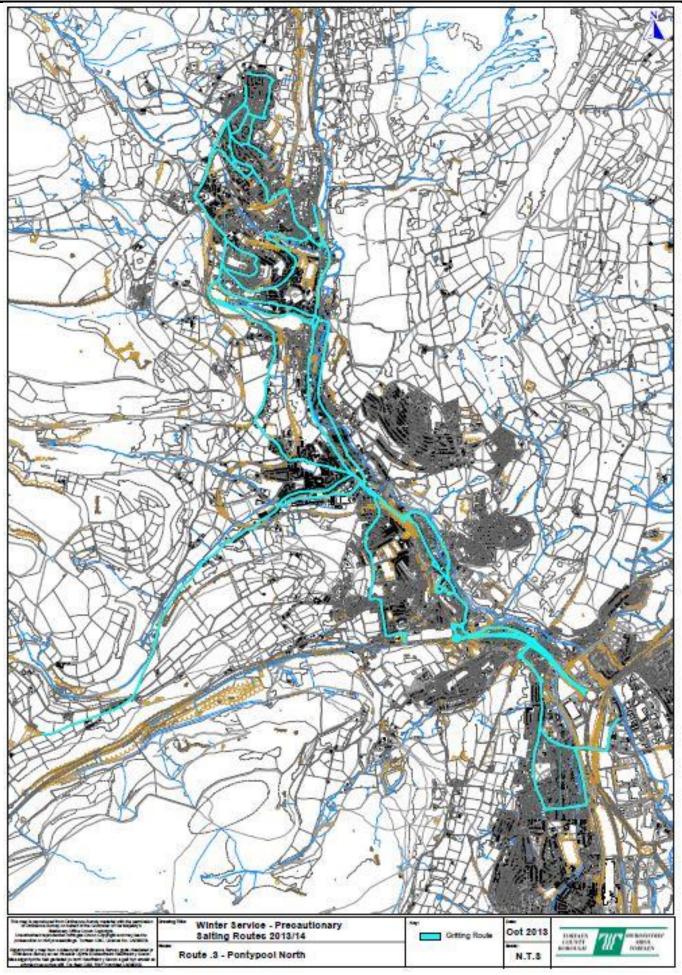
**Salting travel along:** Slip road to Rockhill Road, Rockhill Road to traffic signals, Under A472 to Blaendare Road roundabout.

Not salting travel along: Stafford Road.

Salting travel along: Coed-y-Gric road

Not salting return to Depot

Length of salted carriageway = 38.6 kms. Non salting length = 12.2 kms



#### Route 4: (Pontypool south)

#### **Depot - New Inn**

#### Exit depot, commence salting and proceed along the following roads:

New Road (East), The Highway (North), Golf Road to junction of Laburnum Drive, Laburnum Drive, Palm Close, Popular Avenue, Pinetree Road to Golf Road.

Not salting travel along: Golf Road to junction of Laburnum Drive.

Salting travel along: Golf Road, Jerusalem Lane to 2<sup>nd</sup> junction with Festival Crescent, Festival Crescent.

**Not salting travel along:** Jerusalem Lane, Newport Road to Re-Chem roundabout, back up Newport Road to Pontyfelin Road Junction.

Not salting travel along: Newport Road to junction of Jerusalem Road.

Salting travel along: The Highway to Junction of New road.

Not salting travel along: The Highway to junction of Golf Road.

**Salting travel along:** The Highway, Usk Road to A4042 roundabout, back along Usk Road, Rockhill road, under A472 to Blaendare Road roundabout, Cwmynyscoy Road to Penyrheol Road.

Not salting return to: Junction with link to Hillside Drive.

Salting travel along: Link to Hillside Drive

Not salting travel along: Link to Cwmynyscoy Road, Cwmynyscoy Road to Blaendare Road roundabout.

**Salting travel along:** Blaendare Road, around West Mon School roundabout and bus turning area, Blaendare Road to Upper Race.

Not salting travel along: Blaendare Road to Hillside Road Junction.

Salting travel along: Hillside Drive, St Matthews Road to Blaendare Road.

Not salting travel along: Blaendare Road to A472 slip road (West)

Salting travel along: A472 slip road (West).

Not salting travel along: A472 to A4043 Western Bypass roundabout, link to Albion Road roundabout, around roundabout.

**Salting travel along:** Link to A472 roundabout, round roundabout, link to Albion Road roundabout, A4043 Western Bypass to Crane Street roundabout, High street to Twmpath Road junction. **Not salting travel along:** High street to Broadway junction.

**Salting travel along:** Broadway, A4043 western Bypass (North) to Riverside roundabout, South to Crane Street roundabout, North to George Street, Wainfelin Road to junction Penywaun Road.

Not salting travel along: Merchants Hill, Osborne Road (South) to Hospital Road junction.

Salting travel along: Hospital Road, Lower Leigh Road to Freeholdland Road.

Not salting travel along: Lower Leigh Road to junction with Hospital Road.

**Salting travel along:** Leigh Road, Penygarn Road, St. Cadoc's Road, Ridgeway to junction of Folly Lane, Folly Lane to roundabout, Church Avenue (up), Woodside Road, Glenview Road (up), back down Glenview Road via turning area, Newman Road to Bythway Road junction, Bythway Road to junction of Woodside Road.

Not salting travel along: Bythway Road to Newman Road junction.

Salting travel along: Newman Road to roundabout, Church Avenue to junction of Leigh Road.

Not salting travel along: Penygarn Road to junction with St. Cadocs Road.

Salting travel along: Penygarn Road, Channel View, Penygarn Road (one-way section up hill) to junction with Channel View.

Not salting travel along: Channel View to junction of Penygarn Road (one-way system).

Salting travel along: Penygarn Hill, Park Road to Town Bridge roundabout.

**Not salting travel along:** Park Road, Commercial Street, Hanbury Road, Clarence Street, link to A4043 Western Bypass roundabout.

**Salting travel along:** Albion Road, Old Crumlin Road to junction of A472, A472 to Lower Race, Race Road to turning area at top.

Not salting return to: A472.

Salting travel along: A472 to Western Bypass roundabout.

**Not salting travel along:** A472, Rockhill Road slip road, Rockhill Road, Blaendare Road link, Stafford Road, Sunnybank Road to junction with Kemys Street.

Salting travel along: Greenhill Road, Cwrdy Road to Cwrdy Lane.

Not salting return to: Junction of Sycamore Road.

**Salting travel along:** Sycamore Road, Sycamore Road South, Oaklands Road, The Avenue, West Avenue to junction of Sycamore Road.

Not salting return to: The Avenue.

**Salting travel along:** The Avenue to junction of Cwrdy Road, Greenhill Road to Hawthorn Road junction, Hawthorn Road to The Avenue.

Not salting travel along: The Avenue to junction of Rowan Crescent.

Salting travel along: Rowan Crescent (East), Greenhill Road, South Street, Avondale Road to A4051 Ashbridge roundabout.

Not salting return to: South Street-Station Road junction.

Salting travel along: Station Road to Kemys Street junction.

Not salting return to depot.

Length of salted carriageway = 43.1 kms.

Non salting length = 12.5 kms.

#### Route 5: (Cwmbran west)

Exit depot not salting travel along: Pontyfelin Road & Cwmbran Drive.

Salting travel along: Grove Park, Five Locks Road, Ty Trappa, Mount Pleasant Road & Pontnewydd oneway system.

Not salting travel along: Mount Pleasant Road.

**Salting travel along:** Ty Pwca Road, Maendy Way to Churchwood roundabout, Maendy way to Thornhill Road (salting if required), Thornhill Road to Upper Cwmbran Road junction, Upper Cwmbran Road to bus turning area and back to Thornhill Road, Thornhill Road to 2<sup>nd</sup> Hafren Road Junction, Hafren Road.

**Not Salting travel along:** Thornhill Road until 2<sup>nd</sup> junction with Hafren Road.

**Salting travel along:** Thornhill Road, Ty Gwyn Way to Community Farm roundabout, around roundabout, Greenforge Way to Springvale Roundabout, around roundabout, Greenforge Way to Community Farm roundabout, Ty Gwyn Way to Marlborough Road Junction, Marlborough Road to junction at top of hill – turn.

**Not salting return to:** Ty Gwyn Way

**Salting travel along:** Ty Gwyn Way to Ty Canol Way junction, Ty Canol Way to Penmaes Road, Penmaes Road to Oaklands View, back to Ty Canol Way, Ty Canol Way to junction with Henllys Way, Henllys Way (Wendover) to Fairwater Way roundabout, around roundabout.

Not salting travel along: Henllys Way (Wendover) to Ty Canol Way.

**Salting travel along:** Henllys Way to Henllys Lane, Henllys Lane to Henllys Village Road, Doralt Way to Doralt Close back to Henllys Village Road to Henllys Way.

**Not salting travel along:** Henllys Way to Pensarn Way

Salting travel along: Pensarn Way

Not salting travel along: Henllys Way to Henllys Lane.

**Salting travel along:** Henllys Way to Route 303 Henllys Lane, Henllys Lane to Bettws Lane, return salting if conditions require, Henllys Way to Hollybush Community Centre roundabout, around roundabout, Hollybush Way to Ty Coch Way, Ty Coch way to TA roundabout.

Not salting return to: Hollybush Way.

Salting travel along: Hollybush Way to A4051 Parkway roundabout.

Not salting travel along: Hollybush Way to Mill Tavern roundabout

**Salting travel along:** Two Locks Road to TA roundabout, Ty Coch Way to fire station roundabout, Henllys Way to Hollybush Community Centre roundabout, Penylan Road to Fairwater Way Roundabout, Ty Gwyn Way to Ty Canol Way junction. **Not salting travel along:** Ty Gwyn Way to Ty Gwyn Road.

**Salting travel along:** Ty Gywn Road, Greenmeadow Way to Community Farm roundabout, Greenmeadow Way to Blenheim Road junction, Blenheim Road, Henllys Way to Greenmeadow Way, Greenmeadow Way to Blenheim Road.

Not salting travel along: Greenmeadow Way, Ty Gwyn Road to Fairhill Junction

**Salting travel along:** Fairhill, Fairwater Way to roundabout, return to junction of Fairhill via bus turning area, Fairwater Way to Henllys Way, Ton Road, Two Locks Road to Mill Tavern roundabout back along Two Locks Road, Cocker Avenue, Wesley Street, Commercial Street to Victoria Street junction.

Not salting travel along: Victoria Street (North), Llewellyn Road to Sainsbury's roundabout, link to A4051 B&Q roundabout.

**Salting travel along:** Clomendy Way, Springvale roundabout, Springvale to Woodside Way to Churchwood roundabout, Maendy Way to roundabout.

Not salting return to: Churchwood roundabout

Salting travel along: Springvale Way to Springvale roundabout.

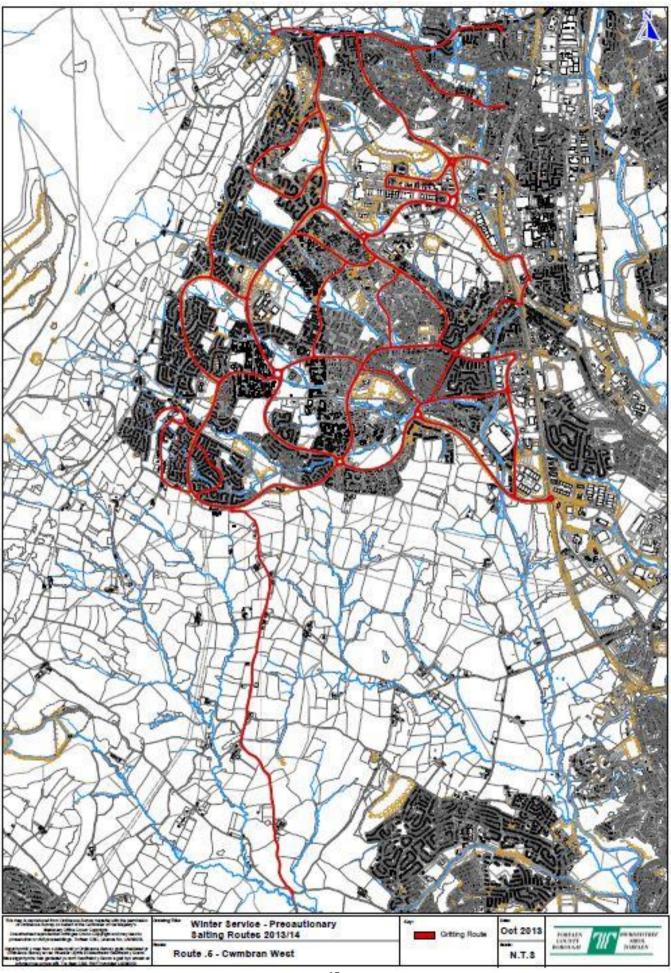
Not salting travel along: Clomendy Way to A4051 B&Q roundabout.

Salt: area alongside splitter approaching Roundabout

**Salting travel along:** A4051 Cwmbran Drive to Aldi roundabout, link to Maendy Way roundabout, Chapel Street, Richmond Road, Lowlands Road, Grove Park to A4051 Pontrhydrun roundabout, Pontrhydrun Road to Avondale Road, Avondale Road to A4051 Ashbridge roundabout.

Not salting return to depot via A4051.

Length of salted carriageway = 47.2 kms. Non salting length = 6.7 kms.



#### Route 6: (Cwmbran east)

Depot - New Inn

Exit depot not salting:

Not Salting travel along: New Road.

Salting travel along: Pontyfelin Road.

**Salting travel along:** Newport Road, A4051 Cwmbran Drive to Ashbridge roundabout, around roundabout, A4051 Cwmbran Drive to Pontrydrun roundabout, around roundabout, A4051 Cwmbran Drive to B&Q roundabout, link to Sainsbury's roundabout, Llewellyn Road (South), Victoria Street, Llantarnam Road (North), St David's Road to Tudor Road roundabout, around roundabout, St David's Road to Morrison's roundabout, around roundabout, St David's Road (South) to end of splitter island past Tudor road roundabout.

Not salting travel along: St. David's Road (South) to Llewellyn Road roundabout.

**Salting travel along:** Llewellyn Road to Sainsbury's roundabout, Tudor Road to B&Q roundabout, A4051 Cwmbran Drive to Stadium roundabout, link to fire station roundabout, Henllys Way to Llantarnam Road, around roundabout.

Not salting return to: Henllys Way to fire station roundabout.

**Salting travel along:** Link to A4051 Cwmbran Drive, A4051 Cwmbran Drive to Parkway roundabout, Llantarnam Park Way to Lake View roundabout, around roundabout, Llantarnam Park Way to Newport Road roundabout, around roundabout.

**Not salting return to:** Llantarnam Park Way to Parkway roundabout.

**Salting travel along:** A4051 Cwmbran Drive to Woodlands roundabout, link to A4042 Croes-y-Mwyalch roundabout, link to Woodlands roundabout, Newport Road to A4042 Llanfrechfa Way roundabout.

Not salting travel along: Newport Road to Llantarnam Road junction.

**Salting travel along:** Llantarnam Road to Oakfield Road junction, Oakfield Road, Llandowlais Street to TA roundabout.

**Not salting return to:** Llantarnam Road – Oakfield Road junction.

**Salting travel along:** Llantarnam Road to Henllys Way roundabout, Court Road, back to Llantarnam Road (for ambulance station Court rd).

**Not Salting travel along:** Llantarnam Road to Llanfrechfa Way roundabout. **Salting travel along:** Llanfrechfa Way to A4042 roundabout.

Not salting travel along: Llanfrechfa Way to Llanyrafon Way.

**Salting travel along:** Llanyrafon Way to Turnpike Road Junction, Turnpike Road to A4042 Police HQ roundabout, B4236 Caerleon Road to Ponthir until Afon Close. **Not salting return to:** Turnpike Road, junction with Llanyrafon Way. Salting travel along: Turnpike Road, around County Hall roundabout, through Police HQ,

Not salting return to: County Hall Roundabout

**Salting travel along:** The Highway to North Road junction, North Road to junction of Bryn Eglws, Bryn Eglws to Woodland Road, around Edlogan Way roundabout.

Not salting travel along: Woodland Road, Bryn Eglws to junction of North Road.

**Salting travel along:** North Road to junction with Edlogan Way, Edlogan Way to junction of Caerwent Road, Caerwent Road to bus turning area.

Not salting return along: Caerwent Road to Edlogan Way.

Salting travel along: Edlogan Way to A4042 Crematorium roundabout, link to Chapel lane.

Not salting travel along: Edlogan way to junction of North Road.

**Salting travel along:** Edlogan Way to Morrison's roundabout, St. David's Road (North) to Station Road junction, Station Road (East), Woodland Road to junction with The Highway/Turnpike Road.

Not salting travel along: The Highway to junction of North Road.

**Salting travel along:** The Highway, Chapel Lane to Avondale Road junction, Avondale Road to Caldicot Way junction, Caldicot Way, Avondale Way to Pontrhydyrun Road.

Not salting return along: Avondale Way to Blaenwern junction

**Salting travel along:** Blaenwern, Avondale Road, through Station Road Junction, St Davids Road to Morrison's roundabout, Edlogan Way to Somerset Road junction, Somerset Road to Station Road junction, Station Road to Chapel Street.

Not salting travel along: Chapel Street to Maendy Way roundabout.

**Salting travel along:** Link to A4051 Cwmbran Drive Aldi roundabout, around roundabout, link to Maendy Way, Maendy Way (East), Caradoc Road, Glyndwr Road, Tudor Road to Sainsbury's roundabout, Llewellyn Road (North), Caradoc Road, Glyndwr Road to Tudor Road junction.

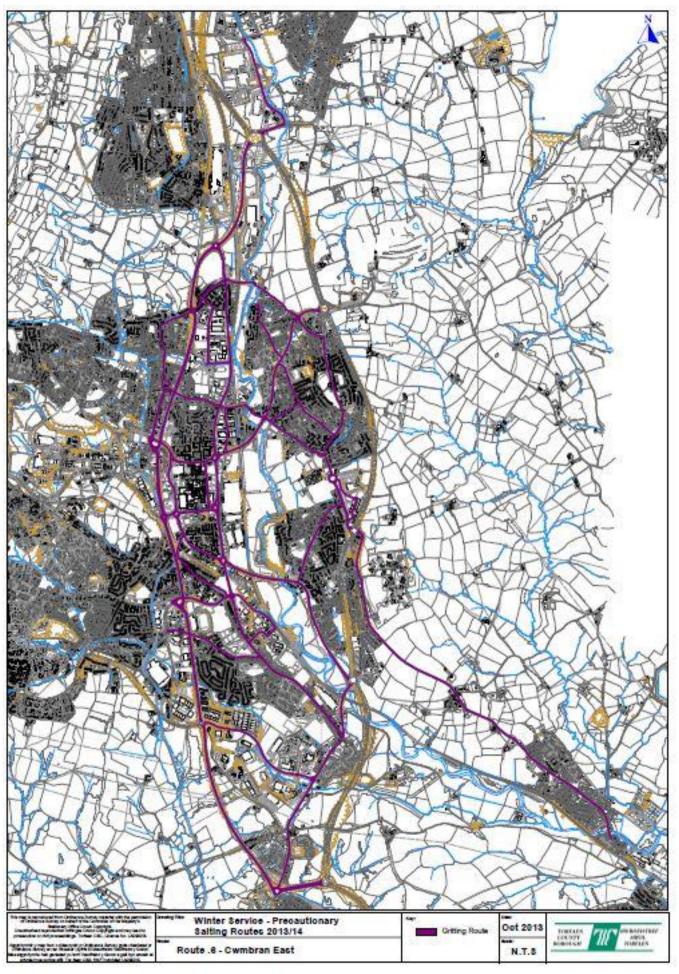
**Not salting travel along:** Tudor Road to Sainsbury's roundabout, Llewellyn Road (North), Caradoc Road to junction with Glyndwr Road.

Salting travel along: Caradoc Road to Morrison's roundabout

Not salting travel along: St. David's Road, Tudor Road to A4051 B&Q roundabout.

Not salting return to depot.

Length of salted carriageway = 43.2 kms. Non salting length = 11.3 kms.



#### **Route 7: Pontypool (mini-gritter)**

#### **Depot - New Inn**

**Exit depot, not Salting travel along:** New Road, Coed-y-cric Road, Stafford Road, Maesderwen Road, A472 then A4043 to Wainfelin Road junction.

Salting travel along: Conway Road, King Street, South View, Edward Street, Brynwern (not crescent)

Not salting travel along: High Street to junction with Tranch Road

Salting travel along: Tranch Road, Parkes Lane and Wentsland Crescent loop

Not salting travel along: High Street to North Road Junction

Salting travel along: North Road

Not salting travel along: Broadway

Salting travel along: Conway Road to junction with Penywaun Lane

Not salting travel along: Penywain Road to junction with Wainfelin Avenue

Salting travel along: Wainfelin Avenue

Not salting travel along: Wainfelin Road, Merchants Hill, Osbourne Road (A4043)

**Salting travel along:** Hanbury Road, Chapel Road to Waunddu junction, around Waunddu, Chapel Road to junction Pentrepoid road.

Not salting travel along: Pentrepoid Road, St. Luke's Road, Snatchwood Road, Broad Street, Abersychan

**Salting travel along:** Ffrwd Road (one way), Incline Road to School Car Park roundabout, back to Ffrwd road, Ffrwd Road to junction of Harpers Road

Not salting travel along: Harpers Road to Junction of Viaduct Road

**Salting travel along:** Viaduct Road, Pisgah Road to Commercial Road junction, British Road to where road splits to Elizabeth Row, turn, back to Commercial Road

Not Salting travel along: Commercial Street, Waterloo Road

Salting travel along: Waterloo Road from junction with Wellington Drive, Steepfield, Old Lane

Not salting travel along: Station Street, Old Road, Limekiln Road, Lower Leigh Road, Leigh Road

Salting travel along: Steep access to Upland drive, Upland Drive (East), link to Newman Road

Not salting travel along: Newman Road, Bythway Road.

Salting travel along: Central Drive Not salting travel along: Glen View Road, Newman Road Salting travel along: Beeches Road to Belle View Close, return to Upland Drive, travel full length to Leigh Road.

Not salting return to: Commercial Street Pontypool

Salting travel along: Trosnant Street to junction with Clarence Road

Not salting return to: New Inn Depot to refill gritter. Travel to Upper Cwmbran Road to bus turning area

**Salting travel along :** Road to The Square, turn by church, return to bus turning area, Mountain Road, Penyrheol Road to Cwmynsyscoy

Not salting return to: Kemys Street, Griffithstown

Salting travel along: Commercial Street, Hill Street, Edward Street

Not salting travel along: Sunnybank Road

Salting travel along: St Mary Street, Greenway Drive, Maple Road, Maple Crescent, Maple Road South

Not salting travel along: Oaklands Road

Salting travel along: Springfield Road to junction with Sycamore Road

Not salting travel along: West Avenue

Salting travel along: South Avenue

Not salting travel along: Oaklands Drive, Maple Road South

Salting travel along: Beech Road

Not salting travel along: South Avenue, Oaklands Drive, Maple Road South, Beech road

Salting travel along: Hawthorn road to junction with The Avenue

Not salting travel along: The Avenue, Greenhill Road, Kemys Street

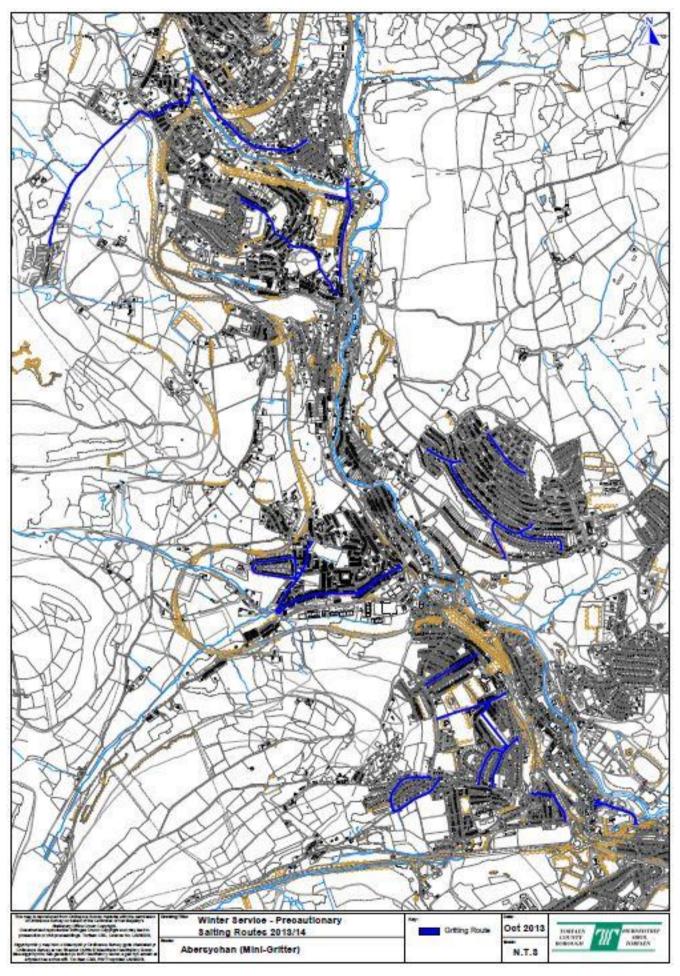
Salting travel along: Cambria Street, Charles Street, Picton Street

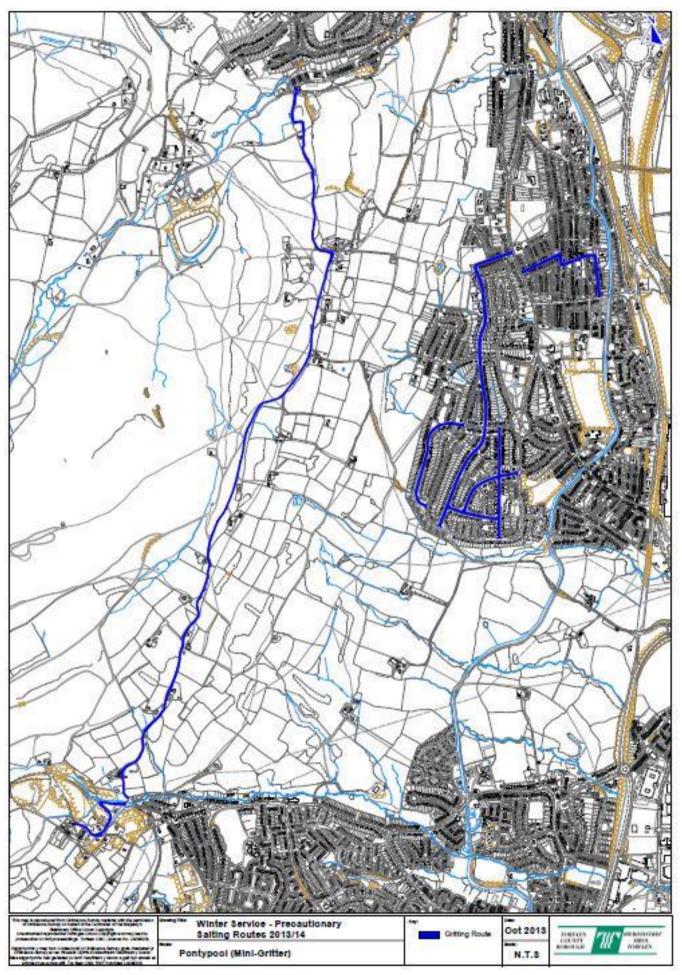
Not salting travel along: Coed-y-Cric Road

Salting travel along: Broad Street, Windsor Road, Oxford Street

Not Salting return to: Depot

Length of salted carriageway = 15.0 kms. Non salting length = 10.0 kms.





#### **APPENDIX B**

# LIST OF ALTERATIONS TO PRECAUTIONARY SALTING ROUTES SINCE PREVIOUS HIGHWAYS WINTER SERVICE PLAN

#### PREVIOUS PLAN 2021/2022

ROUTE

STREET

**ON/OFF** 

REASON

## **APPENDIX C**

# TORFAEN PRECAUTIONARY ROUTES TREATED BY NEIGHBOURING AUTHORITIES BY AGREEMENT

Area	Road	Gritted by
New Inn	Sluvad Road, full length, Jerusalem Lane to Boundary	Monmouthshire
New Inn	Jerusalem Lane, Golf Road junction to Boundary	Monmouthshire
Croesyceiliog	Treherbert Road, A4042 roundabout to Boundary	Monmouthshire
Mamhilad	Old Abergavenny Road, Mamhilad, A4042 to Boundary	Monmouthshire
Henllys	Henllys Lane, junction with Bettws Lane to Boundary	Newport
A472 Pontypool	A472 junction with Old Crumlin Road to Boundary	Caerphilly

# **APPENDIX D**

# STRATEGIC CORE NETWORK, PLANS AND DESCRIPTIONS

- S1. BLAENAVON
- S2. PONTYPOOL
- S3. CWMBRAN

#### Route S1: Blaenavon

#### Depot – Blaenavon

#### Exit depot, start salting and proceed along the following roads:

Exit Gilchrist Thomas Industrial Estate onto Estate Road, proceed to B4248 Garn Road junction, Garn Road to Llanelli Hill.

Not salting return to: Estate Road junction.

**Salting travel along:** Garn Road to B4246 Abergavenny Road junction, turn left, B4246 Abergavenny Road to access road to transmitter mast.

Not salting return to: Garn Road junction.

**Salting travel along:** B4246 North Road, Church Road, Prince Street, Varteg Road to Garndiffaith bus turning area, around turning area, Varteg Road, New Road, Emlyn Road, Albert Road, Commercial Street, Church Road, Lodge Road, Foundry Road, Union Street, left at Broad Street (Abersychan) junction, A4043 Broad Street, Station Street, Cwmavon Road to Lower Harpers Road, Ffrwd Road, Incline Road to Abersychan School turning area.

Not salting return to: Cwmavon Road

Salting travel along: Cwmavon Road to Prince Street junction.

Not salting travel along: Prince Street to Junction with Ivor Street

Salting travel along: Ivor Street, Lower Broad Street, Commercial Street to traffic signals.

Not salting return to: Broad Street via Ivor Street

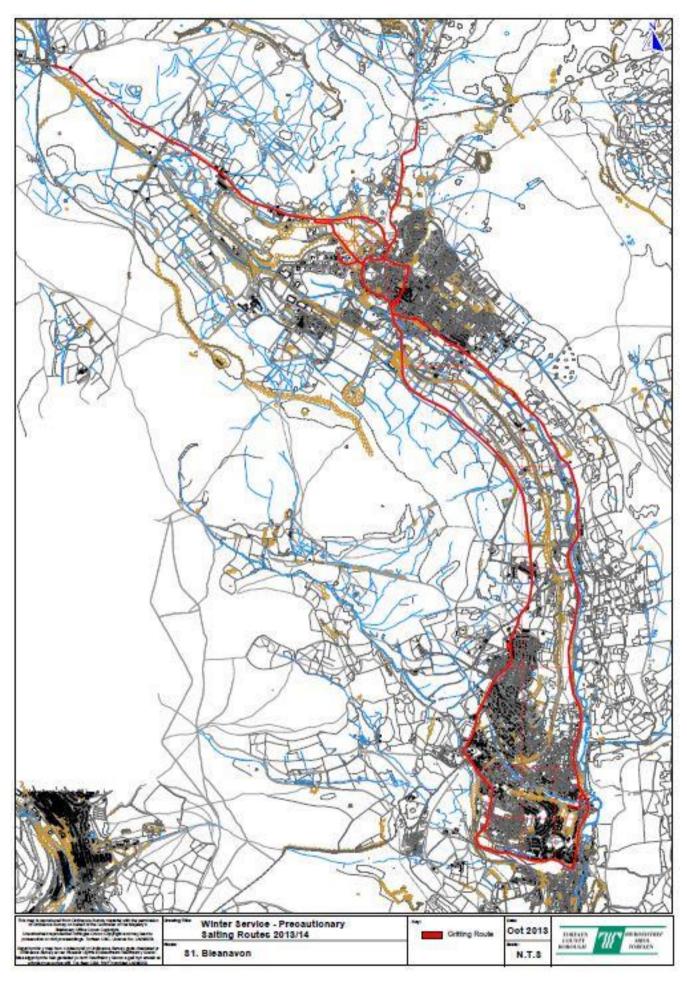
Salting travel along: Broad Street, Lion Street, High Street, Upper Waun Street to North Road junction

Not Salting return to: Estate Road Junction

Salting travel along: Estate Road to Gilchrist Thomas Industrial Estate junction

Not Salting return to: Depot

Length of salted carriageway = 21.8 kms. Non salting length = 5.0 kms.



#### Route S2: Pontypool

#### Depot. – New Inn

#### Exit depot salting proceed along the following routes:

Panteg Way, New Road (East), The Highway, Usk Road to A4042 roundabout, around roundabout, back along Usk Road to end of roundabout splitter island.

Not salting return to: The Highway roundabout

**Salting travel along:** Usk Road, Rockhill Road, straight on under bridge to Blaendare Road roundabout, around roundabout, Blaendare Road to West Mon school turning area, around turning area and Victoria Road roundabout back to Blaendare Road Roundabout, Rockhill Road under bridge, turn left, Rockhill Road, Clarence Road, around Clarence Street roundabout, link to A4043 roundabout, around roundabout, A4043 to A472 roundabout, around roundabout, A472 to A4042 McDonalds roundabout, do not salt roundabout, A472 to Borough boundary nr Hafodyrynys.

Not salting return to: A4043 roundabout splitter island.

Salting travel along: A4043, going around all roundabouts, to Broad Street, Abersychan, around Old Road loop.

Not salting travel along: Broad Street, Old Road loop

**Salting travel along:** Afon Square over bridge, Limekiln Road (fire station), Freeholdland Road, George Street to A4043 junction.

Not salting return to: Wainfelin Road junction on A4043.

Salting travel along: Wainfelin Road (Ambulance Station), Merchants Hill back to A4043

**Generally not Salting return to:** A4043 Albion Road Roundabout, **salting** wider areas at traffic signals, behind splitter islands, approaches and accesses from Roundabouts etc

**Salting travel along:** link to Clarence Street Roundabout, Clarence Street to town centre, Hanbury Road, Commercial Street, Commercial Street through 2 sets of rising bollards, George Street/Osborne Road loop, Osbourne Road to Riverside, Riverside to A4043 roundabout, back along Riverside to Park Road roundabout, Park Road, Penygarn Road, Channel View, Penygarn Road, Leigh Road, Church Avenue to shops roundabout, Folly Road, St Cadoc's Road, back to Penygarn Road.

#### Not salting return to: Park Road roundabout

Salting travel along: Park Road

Not salting travel along: Commercial Street through rising bollards

**Salting travel along:** Crane Street through rising bollards, Market Street, loop past side of Police Station, reversing back to treat opposite side of splitter island, under superstore access, back to Market Street.

Not salting travel along: Market Street

Salting travel along: Glantorfaen Road to junction of Hanbury Road

Not salting return to: A4043, travel along A472 South to Rockhill Road slip road

Salting travel along: slip road, Rockhill Road, through lights, slip road to A472 south.

Not salting travel: A472, around McDonald's roundabout, back along A472 to slip Road to Blaendare Road.

Salting travel along: slip road to Blaendare Road straight across junction, up slip road to A472.

Generally not salting travel along: A472, A4043, Clarence Road, Rockhill Road. Salt areas behind splitter islands

Not salting travel to: Blaendare Road roundabout, turn left onto Stafford Road

Salting travel along: Stafford Road, Coed y Gric Road past Hospital, Station Road, Avondale Road to Ashbridge roundabout.

Generally not salting return to: South Street junction salting other side of splitter islands.

Salting travel along: South Street, Greenhill Road, Sunnybank Road to Coed y Gric junction.

Not salting travel along: Coed y Gric Road to Station Road junction with Kemys Street.

Salting travel along: Kemys Street.

Return to: Coed y Gric Road, junction with Station Road.

Salting travel along: New Road and return to depot entrance.

Length of salted carriageway = 33.4 kms.

Non salting length = 13.1 kms.

#### Route S3: Cwmbran

#### **Depot.** – New Inn

Exit depot not salting and proceed along the following: New Road to the Highway, turn right

Salting travel along: The Highway, Newport Road to A4042 roundabout

Not salting travel around roundabout to: A4051, Cwmbran Drive exit.

**Salting travel along:** A4051, Cwmbran Drive to Woodlands roundabout, travelling around all roundabouts. A4051, 1 ink to A4042 Croes y Mywlach roundabout and back to Woodlands Roundabout, Newport Road to A4042, Crown roundabout, Llanfrechfa Way to Llantarnam Road roundabout, around roundabout, St. David's Road to Tudor Road roundabout, around roundabout, Tudor Road to Sainsbury's Roundabout, around roundabout, link to A4051 and back to Sainsbury's roundabout, Llewellyn Road, Caradoc Road, Glyndwr Road, St David's Road north around Morrison's roundabout, link to Glyndwr Road.

Not salting travel along: Glyndwr Road, Tudor Road (north) to Morrison's roundabout.

Salting travel along: St. David's Road, Avondale Road to A4051 Ashbridge roundabout.

Not salting return to: A4051 Pontryhdrun roundabout.

**Salting travel along**: Grove Park, Lowlands Crescent, Five locks Road, Ty Pwca Road, Upper Cwmbran Road, Thornhill Road, Ty Gwyn Road to Community Farm roundabout, Greenforge Way to A4051 Cwmbran Drive Sainsbury's roundabout. A4051 Cwmbran Drive (north), around Aldi roundabout, link to Maendy Way, around roundabout, link to A4051 roundabout.

Not salting return to: Maendy Way

Salting travel along: Maendy Way to Caradoc Road

Not salting travel along: Caradoc Road to Glyndwr Road

Salting travel along: Link to St David's Way roundabout, Edlogan Way to A4042 Crematorium roundabout,

Not salting return to: Chapel Lane Roundabout

Salting travel along: Chapel Lane, The Highway, right into Woodland Road to Edlogan Way, around roundabout.

Not salting return to: Turnpike Road

Salting travel along: Turnpike Road, around County Hall roundabout, through police HQ, Turnpike Road back to County Hall roundabout.

Not salting return to: Police HQ junction on turnpike Road.

**Salting travel along:** Turnpike Road to A4042 Police HQ roundabout. **Not salting travel:** Across roundabout to B4236, Caerleon Road junctio Salting travel along: B4236, Caerleon Road to junction of Afon Gardens, Ponthir (Borough boundary)

**Not salting travel along:** Caerleon Road, A4042 to Crown roundabout, Newport Road to Llantarnam Road junction.

Salting travel along: Llantarnam Road to Llanfrechfa Way roundabout.

Not salting return to: Henllys Way Roundabout.

Salting travel along: Court Road Industrial Estate to Ambulance Station

**Salting travel:** Around roundabout, Henllys Way to fire station roundabout, around roundabout, link to A4051, around roundabout, link back to fire station roundabout, Henllys Way to R303 junction, R303, Henllys Lane to Newport CC boundary.

Not salting return to: Henllys Way

**Salting travel along:** Henllys Way to Fairwater Way roundabout, around roundabout, Ty Gwyn Way to Junction with Thornhill Road.

Not salting return to: Fairwater Way roundabout.

Salting travel along: Fairwater Way

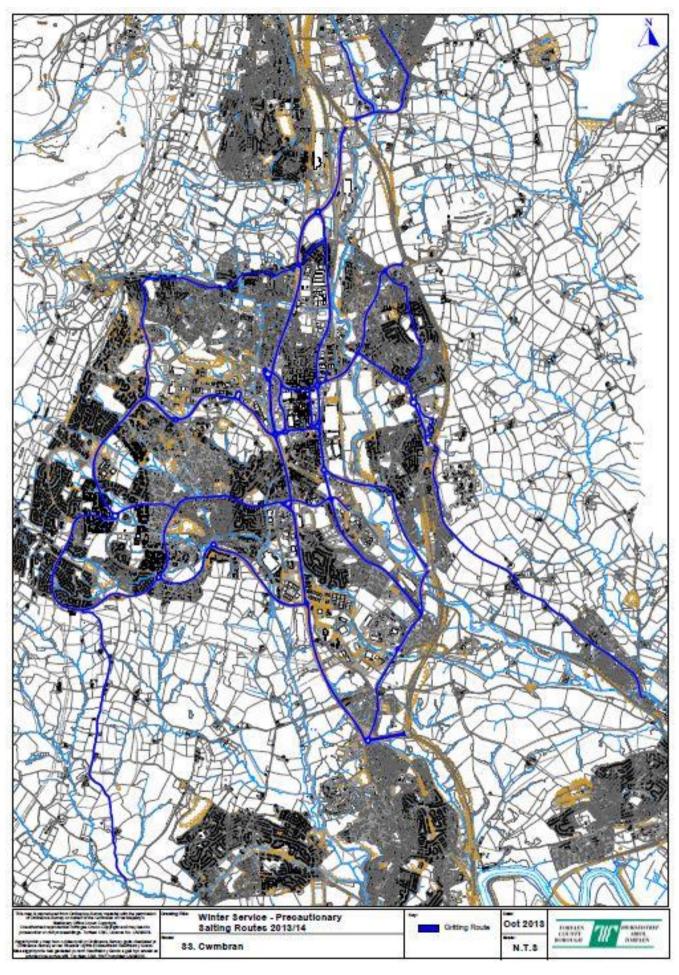
Not salting travel along: Henllys Way to Hollybush Way roundabout

Salting travel along: Hollybush Way to A4051, Parkway roundabout, Llantarnam Park Way to Newport Road.

Not salting return to: Newport Road, New Inn along A4042

Salting travel along: Pontyfelin Road to New Road junction and return to depot.

Length of salted carriageway = 47.1 kms. Non salting length = 18.5 kms.



# **GRIT BIN SCHEDULE**

# APPENDIX E

Ref	Area	Location	Туре	Base
B1	Blaenavon	Avon Road so the Club	Plastic	Verge
B2	Blaenavon	so Glantorfaen Terrace Upper Nr Garages	Plastic	Verge
B3	Blaenavon	Forgeside Road juc with Lower Glantorfaen Terrace	Plastic	Verge
B4	Blaenavon	os Kennard Court	Plastic	Verge
B5	Blaenavon	Entrance to The Park	Plastic	Footway
B6	Blaenavon	os 1. Rifle Street	Plastic	Verge
B7	Blaenavon	Rifle Green os 1. Maxworthy Road	Plastic	Verge
B8	Blaenavon	opp 13. Castle Street	Plastic	Verge
B9	Blaenavon	os 4. Park Gardens	Plastic	Footway
B10	Blaenavon	opp 94. Lower Hill Street	Plastic	Verge
B11	Blaenavon	juc with Ton-mawr Road and Morgan Street	Plastic	Verge
B12	Blaenavon	os 24. Ton-mawr Road	Plastic	Verge
B13	Blaenavon	So 25 Cross Street	Plastic	Car Park
B14	Blaenavon	os 1-33. Trem-y-Mynydd	Plastic	Footway
B15	Blaenavon	opp 6. Griffin Avenue	Plastic	Verge
B16	Blaenavon	The Firs opp Coppins	Plastic	Verge
B17	Blaenavon	Brights Lane so Firs View	Plastic	Verge
B18	Blaenavon	Brights Lane os Rustic View	Plastic	Verge
B19	Blaenavon	so Ardenier The Firs	Plastic	Verge
B20	Blaenavon	so Shangri-la The Firs	Plastic	Verge
B21	Blaenavon	os 28 Ty Mynydd	Plastic	Verge
B22	Blaenavon	so 89. Hillside Avenue	Plastic	Road
B23	Blaenavon	so 7. Garn Durus Mount	Plastic	Verge
B24	Blaenavon	ro 6. Blorenge Terrace	Plastic	Verge
B25	Blaenavon	os 75 Elgam Avenue	Plastic	Verge
B26	Blaenavon	On green between 80-81. Elgam Avenue	Plastic	Footway
B27	Blaenavon	so 1. Gwaunfelin Walk	Plastic	Verge
B28	Blaenavon	so 1-2 Caradoc Walk	Plastic	Verge
B29	Blaenavon	os 28-29 Bowen Close	Plastic	Verge
B30	Blaenavon	os Recreation Centre Middle Coedcae Road	Plastic	Verge
B31	Blaenavon	os 8. Upper Coedcae Road	Plastic	Verge
B32	Blaenavon	so 22-24. Giles Road	Plastic	Footway
B33	Blaenavon	so 5. Giles Street	Plastic	Verge
B34	Blaenavon	os 25. Giles Street	Plastic	Road
B35	Blaenavon	ro 1. Oak View	Plastic	Footway
B36	Blaenavon	so 1. Giles Road	Plastic	Verge
B37	Blaenavon	Steps by Moriah Chapel, George Street	Plastic	Footway
B38	Blaenavon	jun Charles Street with Lanover Road	Plastic	Verge
B39	Blaenavon	so 1 Railway Terrace, Forgeside	Plastic	Verge
B40	Blaenavon	entrance to Coed Lwyd Close	Plastic	Footway
B41	Blaenavon	opp jun Tonmawr Rd with Cwmavon Road	Plastic	Footway
B42	Blaenavon	os Valhalla, Ton Mawr Ave	Plastic	Footway
B43	Blaenavon	opp 15 Lower Garn Terrace	Plastic	Verge
B44	Blaenavon	jun BigPit Access with Garn Road	Plastic	Verge

B45	Blaenavon	Opp 15 Oak View Court	Plastic	Verge
B46	Blaenavon	nr 1 Lower Garn Terrace	Plastic	Verge
B47	Blaenavon	ro 20 Lower Garn Terrace	Plastic	Verge
B48	Blaenavon	West View Terrace	Plastic	Verge
B49	Blaenavon	Jun West View Terrace with Estate Road	Plastic	Verge
B50	Blaenavon	os Lamb Cottage, Forgeside Road	Plastic	Footway
B51	Blaenavon	Car park top of Broad Street	Plastic	Footway
B52	Blaenavon	Lion Street Car Park	Plastic	Car park
B53	Blaenavon	Car Park at rear of 11 Ivor Street	Plastic	Footway
B54	Blaenavon	Jun Queen Street with New Queen Street	Plastic	Verge
B55	Blaenavon	Top of Coed Road	Plastic	Verge
B56	Blaenavon	Top of path opp 3 Barnfield Terrace	Plastic	Verge
B57	Blaenavon	opp 13 Clapham Terrace, Forgeside	Plastic	Verge
B58	Blaenavon	so 16 D Row, Forgeside	Plastic	Verge
B60	Blaenavon	Brankleys Houses, Llanover Road	Plastic	Road
B61	Blaenavon	so 15 Oak View	Plastic	Footway
B62	Blaenavon	so 20 Oak View	Plastic	Footway
B63	Blaenavon	Car park so 35 Llanover Road	Plastic	Car park
B64	Blaenavon	In cemetry, Varteg Road	Plastic	Verge
B65	Blaenavon	opp 20 Ty Fry Close	Plastic	Verge
B66	Blaenavon	opp 29 Woodland Street	Plastic	Footway
B67	Blaenavon	so 116 Hillside Avenue	Plastic	Verge
B68	Blaenavon	entrance to Bryn Welon Close	Plastic	Verge
B69	Blaenavon	Stable Row, rear of engineering works	Plastic	Verge
B70	Blaenavon	so 121 Elgam Avenue	Plastic	Footway
B71	Blaenavon	Stoney Heights, Upper Coed Cae Road	Plastic	Verge
B72	Blaenavon	so 15 New James Street	Plastic	Footway
B73	Blaenavon	opp 2 Park Gardens	Plastic	Verge
B74	Blaenavon	os 22 Kennard Court	Plastic	Verge
B75	Blaenavon	Junction Bridge Street with Riverside Drive	Plastic	Verge
B76	Blaenavon	Car Park so 48 Riverside Drive	Plastic	Car park
B77	Blaenavon	Car Park so 16 Caradoc Walk	Plastic	Car park
B78	Blaenavon	Os 37 Elgam Avenue	Plastic	Verge
B79	Blaenavon	Os 18 Llanover Road Estate	Plastic	Road
B80	Blaenavon	Ro 11 Broad Street	Plastic	Verge
B81	Blaenavon	Park Street, junct Park Gardens	Plastic	Verge
B82	Blaenavon	Curwood, nr steamhammer car park	Plastic	Verge
B83	Blaenavon	Curwood nr No.21	Plastic	Verge
B84	Blaenavon	Curwood access to No. 22-36	Plastic	Verge
B85	Blaenavon	o/s Vipond House, Car Park opp Heritage Centre	Plastic	Verge
B86	Blaenavon	Top of steps, rear of 73 Broad Street	Plastic	Footway
B87	Blaenavon	Side of 20 Duke Street	Plastic	Verge
B88	Blaenavon	Opp 1 C Row Forgeside	Plastic	Road
A1	Abersychan	Lock-up Lane os The Haven	Plastic	Footway
A2	Abersychan	Snatchwood Terrace os The Nook	Plastic	Road
A3	Abersychan	opp Glen View North Road	Plastic	Verge
A4	Abersychan	ro 1. Hollyoak Terrace	Plastic	Verge
<u> </u>				

A5	Abersychan	Oaks Road os San Remo	Plastic	Road
A6	Abersychan	os 11. Oaks Court	Plastic	Footway
A7	Abersychan	so 11. Pentwyn Lane	Plastic	Footway
A8	Abersychan	Under Bridge Pentwyn Lane	Plastic	Road
A9	Abersychan	ro 2 Caradoc Street, Pentwyn	Plastic	Footway
A10	Abersychan	opp 15 Pentwyn Heights	Plastic	Verge
A11	Abersychan	opp Lasgarn House, Coronation Terrace	Plastic	Road
A12	Abersychan	Entrance to Lasgarn Place	Plastic	Verge
A13	Abersychan	Factory Lane juc with Lewis Street	Plastic	Footway
A14	Abersychan	Lewis Street opp Prospect Place	Plastic	Road
A15	Abersychan	os Brynderwen Old Place	Plastic	Road
A16	Abersychan	so 123 Manor Road	Plastic	Road
A17	Abersychan	so Steepfield House Waterloo Road	Plastic	Road
A18	Abersychan	Os 147 Manor Way	Plastic	Footway
A19	Abersychan	Farm Road juc with Castlewood	Plastic	Verge
A20	Abersychan	British Road juc with East Veiw Cottages	Plastic	Verge
A21	Abersychan	End of Pembrooke Terrace	Plastic	Verge
A22	Abersychan	Bottom of Snail Creep Terrace	Plastic	Verge
A23	Abersychan	Link Road between Shop Road and Snail Creep Terrace	Plastic	Road
A24	Abersychan	opp 36 Rock Villa Close	Plastic	Verge
A25	Abersychan	Top Road, nr junction of Eridge Road	Plastic	Road
A26	Abersychan	Rear of 20 British School Close	Plastic	Footpath
A27	Abersychan	The Avenue, Garndiffaith	Plastic	Verge
A28	Abersychan	so 32. Greenway, Talywain	Plastic	Footway
A29	Abersychan	Entrance to High Street, Garndiffaith	Plastic	Verge
A30	Abersychan	High Street juc with Chapel Close	Plastic	Footway
A31	Abersychan	Cross Street juc with Neville Street	Plastic	Verge
A32	Abersychan	so Sid Griffiths Court	Plastic	Verge
A33	Abersychan	so 36. Pisgah Road	Plastic	Verge
A34	Abersychan	os Kjaora Pisgah Road	Plastic	Road
A35	Abersychan	os Talywain House	Plastic	Verge
A36	Abersychan	so 12. Bluetts Road	Plastic	Road
A37	Abersychan	os Twyn-y-Ffrwd Inn Ffrwd Road	Plastic	Verge
A38	Abersychan	opp Marbry Incline Road	Plastic	Verge
A39	Abersychan	Harpers Road juc with Stoney Road	Plastic	Road
A40	Abersychan	os Lasgarn View Lower Stoney Road	Plastic	Road
A41	Abersychan	os The Laurels Lower Stoney Road	Plastic	Verge
A42	Abersychan	os Ashgrove Viaduct Road	Plastic	Road
A43	Abersychan	Cwmavon Road juc with Vicarage Lane	Plastic	Footway
A44	Abersychan	os Cwmavon Lodge Vicarge Lane	Plastic	Road
A45	Abersychan	Waterworks Lane on old railway line	Plastic	Road
A46	Abersychan	opp Ivanhoe House Llanover Road	Plastic	Verge
A47	Abersychan	Entrance to Llanover Road	Plastic	Verge
A48	Abersychan	os Albany Houses Cwmavon Road	Plastic	Footway
A49	Abersychan	Bottom of Old Lane juc with Station Street	Plastic	Road
A50	Abersychan	os Glan Cwmbergwyn, Neville Street	Plastic	Road
A51	Abersychan	so Disused railway bridge, Harpers Road	Plastic	Verge

A52	Abersychan	nr river bridge, Waterworks Lane	Plastic	Verge
A53	Abersychan	nr East View Cottages, British Road	Plastic	Verge
A54	Abersychan	so Coed-yr-Eos Cottage, Valentine Road	Plastic	Verge
A55	Abersychan	so 1 Saxons Houses	Plastic	Verge
A56	Abersychan	os Surgery Old Road	Plastic	Footway
A57	Abersychan	nr top corner of cricket ground, lane, Pentwyn	Plastic	Verge
A58	Abersychan	nr Heol House, lane, Pentwyn	Plastic	Verge
A59	Abersychan	opp Woodland Terrace, Cwmavon Road, Cwmavon	Plastic	Verge
A60	Abersychan	Bottom of Shop Road nr Cwmavon Road	Plastic	Verge
A61	Abersychan	so Varteg Terrace, Shop Road	Plastic	Verge
A62	Abersychan	corner opp Old Shop Farm, Shop Road	Plastic	Verge
A63	Abersychan	opp 1 Commercial Close, Talywain	Plastic	Verge
A64	Abersychan	so 31 Raglan Close, Talywain	Plastic	Verge
A65	Abersychan	Hynam Place, Victoria Village	Plastic	Footway
A66	Abersychan	end of Manor Way os Drws-y-Coed	Plastic	Verge
A67	Abersychan	jun Pembrooke Place with Salisbury Tce, Varteg	Plastic	Verge
A68	Abersychan	opp 9 Lower Ty Gwyn Road, Garndiffaith	Plastic	Verge
A69	Abersychan	nr disused rail bridge, Denbridge Lane, Cwmavon	Plastic	Verge
A70	Abersychan	nr river bridge, Denbridge Lane, Cwmavon	Plastic	Verge
A71	Abersychan	os 14 Rock Villa Close, Varteg	Plastic	Verge
A72	Abersychan	opp Blaen-y-garn, Stoney Road	Stone	Verge
A73	Abersychan	Railway Close, Albert Road	Plastic	Footway
A74	Abersychan	os 4 Lower Ty Gwyn Road	Plastic	Footway
A75	Abersychan	entrance to ols school Top Road	Plastic	Verge
A76	Abersychan	opp 16 Top Road	Plastic	Verge
A77	Abersychan	os Pen-y-Bryn, Earl Close	Plastic	Verge
A78	Abersychan	opp Stonecroft, Neville Street	Plastic	Verge
A79	Abersychan	opp 3 Harpers Road	Plastic	Verge
A80	Abersychan	opp The Nook, Pisgah Road	Plastic	Road
A81	Abersychan	os 4 Hynan Place	Plastic	Footway
A82	Abersychan	entrance to Hynan Place	Plastic	Footway
A83	Abersychan	os 191 Manor Road	Plastic	Verge
A84	Abersychan	os 1 Mount Pleasant, Waterloo Road	Plastic	Verge
A85	Abersychan	Balance Meadows, Varteg	Plastic	Verge
A86	Abersychan	top of Bell Lane	Plastic	Garden
A87	Abersychan	ro 18 Owendale Terrace, Snatchwood	Plastic	Verge
A88	Abersychan	nr 73 Club Row, Snatchwood	Plastic	Verge
A89	Abersychan	os Wood View, Waterworks Lane	Plastic	Road
A90	Abersychan	Pen-yr-heol Farm, Waterworks Lane	Plastic	Verge
A91	Abersychan	os Bryndawe, top of Shop road	Plastic	Verge
A92	Abersychan	opp 2 North Road	Plastic	Verge
A93	Abersychan	top of School Lane	Plastic	Verge
A94	Abersychan	Gladstone Terrace, Varteg	Plastic	Verge
A95	Abersychan	Greenfield Terrace, Varteg	Plastic	Verge
A96	Abersychan	double bend, Waterworks Lane	Plastic	Verge
A97	Abersychan	by reservoir, Waterworks Lane	Plastic	Verge
A98	Abersychan	nr bridge, Bluetts Lane	Plastic	Verge

A99	Abersychan	opp High Tor, Oaks Road	Plastic	Verge
A100	Abersychan	Pleasant Court, Limekiln Road	Plastic	Verge
A101	Abersychan	o/s 46 Snatchwood Road	Plastic	Road
A102	Abersychan	Greenway nr junct Emlyn Road	Plastic	Road
A103	Abersychan	o/s Police Station, Stanley Road	Plastic	Verge
A104	Abersychan	s/o 15 Gelli Rhwy Road	Plastic	Footway
A105	Abersychan	s/o 42 Brynamlwg	Plastic	Verge
A106	Abersychan	o/s Braeside Manor Way	Plastic	Verge
A107	Abersychan	r/o 7 Elizabeth Row	Plastic	Verge
A108	Abersychan	o/s Davlyn, Pentwyn Village	Plastic	Verge
A109	Abersychan	End of Caradoc Street, Pentwyn	Plastic	Verge
A110	Abersychan	Entrance to Salisbury Terrace, Varteg	Plastic	Verge
A111	Abersychan	Woodside Villas, Castlewood	Plastic	Verge
A112	Abersychan	Pisgah Close, rear of 17	Plastic	Verge
A113	Abersychan	Pisgah Close, opp no. 4	Plastic	Verge
A114	Abersychan	o/s Library, Brynteg, High Street	Plastic	Footway
A115	Abersychan	St Thomas Court, Commercial Road	Plastic	Verge
A116	Abersychan	o/s 2 Cwrt y Porth Fawr, Church Road	Plastic	Verge
A117	Abersychan	Eridge Road, Garndiffaith	Plastic	Road
A118	Abersychan	Denbridge Road, junction Old Mill Farm	Plastic	Verge
A119	Abersychan	School Lane, Victoria Village, opp High banks	Plastic	Verge
A120	Abersychan	7 Stanley Road, Garndiffaith	Plastic	Verge
A121	Abersychan	Green, Heol Waun	Plastic	Verge
A122	Abersychan	Opp Golynos Place, Albert Road, Talywain	Plastic	Verge
A123	Abersychan	o/s 20 Brynamlwg, Talywain	Plastic	Footway
A124	Abersychan	Entrance to Hillrise, Victoria Village	Plastic	Footway
P1	Pontypool	os 30. St Davids Close	Plastic	Footway
P2	Pontypool	os 39. St Davids Close	Plastic	Footway
P3	Pontypool	os Post office Channel View	Plastic	Footway
P4	Pontypool	Side of 57 Albion Road, Nicholas Street	Plastic	Footway
P5	Pontypool	so Trevethin Shops	Plastic	Verge
P6	Pontypool	os Ty-Gwent Penygarn Road	Plastic	Footway
P7	Pontypool	Wern Hill, rear of 7 Brynwern	Plastic	Road
P8	Pontypool	os 41. Twympath Road	Plastic	Footway
P9	Pontypool	os 30. Twympath Road	Plastic	Footway
P10	Pontypool	ro 34. Pine Gardens	Plastic	Footway
P11	Pontypool	os The Sally (Ph) Parkes Lane	Plastic	Road
P12	Pontypool	os 23. Parks Lane	Plastic	Footway
P13	Pontypool	so Gorsedd Tranch Road	Plastic	Footway
P14	Pontypool	opp 8. Helpstone Terrace	Plastic	Verge
P15	Pontypool	os St Matthews Church Victoria Road	Plastic	Verge
P16	Pontypool	Crumlin Road juc with Parke's lane	Stone	Verge
P17	Pontypool	Tranch Road juc with Twissels Road	Plastic	Road
P18	Pontypool	Tranch Road juc with Club Road	Plastic	Verge
P19	Pontypool	so 90. Wainfelin Avenue	Plastic	Verge
P20	Pontypool	ro Traffic lights George Street	Plastic	Footway
P21	Pontypool	Top Of Kitchener Street, Cwm Ffrwd-oer	Plastic	Footway

P22	Pontypool	Nr Upper Gellypystyll Tranch Road	Stone	Verge
P23	Pontypool	opp 4. Bush Terrace Pantygasseg Road	Plastic	Verge
P24	Pontypool	opp Playground Pantygasseg Road	Stone	Verge
P25	Pontypool	os Cwmffrwdoer Primary School Waunddu	Plastic	Footway
P26	Pontypool	Waunddu os Ebenezer United Reform Church	Plastic	Footway
P27	Pontypool	so Beech Tree Terrace Mount Pleasant Road	Plastic	Verge
P28	Pontypool	so 11. Mount Pleasant Road	Plastic	Footway
P29	Pontypool	so 29. Oakdale Place	Plastic	Verge
P30	Pontypool	Nr Wellwood Cottages Mount Pleasant Road	Plastic	Footway
P31	Pontypool	opp Sawtells Terrace Chapel Road	Plastic	Footway
P32	Pontypool	Side of 8 Poplar Terrace, Charlesville	Plastic	Verge
P33	Pontypool	os 12. Pentrepiod Road	Plastic	Road
P34	Pontypool	Entrance to St. Dunstan's Close, Sebastopol	Plastic	Verge
P35	Pontypool	Os 51 St. Dunstan's Close, Sebastopol	Plastic	Footway
P36	Pontypool	Os 23 St. Dunstan's Close, Sebastopol	Plastic	Verge
P37	Pontypool	Nr playground, Churchwood, Sebastopol	Plastic	Verge
P38	Pontypool	Chapel Road juc with Lewis wood	Plastic	Footway
P39	Pontypool	Top of Buller Street, Cwm Ffrwd-oer	Plastic	Footway
P40	Pontypool	os Mountain Lodge Penygarn Road	Plastic	Verge
P41	Pontypool	os Gwyn Garth Penygarn Road	Plastic	Verge
P42	Pontypool	os Civic Centre Glantorfaen Road	Plastic	Verge
P43	Pontypool	opp Tircwm Leigh Road	Plastic	Verge
P44	Pontypool	o/s Wrekin Bungalow, Pentrepoid Road	Plastic	Verge
P45	Pontypool	os 7. Park Veiw off Freeholdland Road	Plastic	Footway
P46	Pontypool	ro Trefloyd John Street	Plastic	Footway
P47	Pontypool	os 1. Dingle Road	Plastic	Footway
P48	Pontypool	os 1-3. Mynydd View	Plastic	Verge
P49	Pontypool	4. Mynydd Veiw	Plastic	Footway
P50	Pontypool	os Spar Shop Hillside Drive	Plastic	Footway
P51	Pontypool	so Viaduct Court Cwmynyscoy Road	Plastic	Footway
P52	Pontypool	so The Mount Penyrheol Road	Plastic	Verge
P53	Pontypool	Nr Chaintree Cottages Mountain Road	Stone	Verge
P54	Pontypool	so Lamb Inn (Ph) Mountain Road	Plastic	Road
P55	Pontypool	o/s 61 Open Hearth Close, Griffithstown	Plastic	Footway
P56	Pontypool	os 68. Usk Road	Plastic	Footway
P57	Pontypool	opp 105. Usk Road	Plastic	Verge
P58	Pontypool	opp 81. Usk Road	Plastic	Verge
P59	Pontypool	opp 1. Lodgewood	Plastic	Footway
P60	Pontypool	so Ty Cornet Coed-y-Cando Road	Plastic	Verge
P61	Pontypool	opp 7. Coed-y-Cando Road	Plastic	Verge
P62	Pontypool	Nr Garages Heol Beuno	Plastic	Road
P63	Pontypool	so 28. Heol Isaf	Plastic	Footway
P64	Pontypool	opp 2. Heol Madoc	Plastic	Footway
P65	Pontypool	os 2. Heol Teilo	Plastic	Footway
P66	Pontypool	os 16. Heol Padarn	Plastic	Footway
P67	Pontypool	os 30. Heol Madoc	Plastic	Footway
P68	Pontypool	Heol Derwen juc with Heol Madoc	Plastic	Verge

P69	Pontypool	opp 12. Larch Close	Plastic	Footway
P70	Pontypool	os 42. Laburnum Drive	Plastic	Footway
P71	Pontypool	End of Chestnut Close	Plastic	Verge
P72	Pontypool	os 23. Hazel Close	Plastic	Verge
P73	Pontypool	os 1 Churchwood, Sebastopol	Plastic	Footway
P74	Pontypool	os 15. Chester Close	Plastic	Footway
P75	Pontypool	os 158. Chester Close	Plastic	Footway
P76	Pontypool	Entrance to Hillcrest	Plastic	Verge
P77	Pontypool	os New Inn Infants Nursery School	Plastic	Verge
P78	Pontypool	so 10. Russel Close	Plastic	Road
P79	Pontypool	so 1. Russel Close	Plastic	Footway
P80	Pontypool	os 1 hill Cottages, Penyrheol	Plastic	Road
P81	Pontypool	os 25. The Walk, New Inn	Plastic	Verge
P82	Pontypool	os Delfryn Sluvad Road	Plastic	Road
P83	Pontypool	17-22. Warwick Close	Plastic	Road
P84	Pontypool	so 11. Bryn Heulog	Plastic	Verge
P85	Pontypool	os 2. Bryn Heulog	Plastic	Footway
P86	Pontypool	opp 9. Bryn Heulog	Plastic	Verge
P87	Pontypool	Entrance to Meas-y-celyn	Plastic	Footway
P88	Pontypool	os 5. Bryn Heulog	Plastic	Footway
P89	Pontypool	Entrance to Bryn Heulog	Plastic	Footway
P90	Pontypool	os 39. St Mary Street	Plastic	Verge
P91	Pontypool	so 1. Greenway Walk	Plastic	Footway
P92	Pontypool	os 19. Sunnybank Way	Plastic	Road
P93	Pontypool	os 1. Greenway Drive	Plastic	Footway
P94	Pontypool	os 88. St Augustine Road	Plastic	Footway
P95	Pontypool	os 68. St Augustine Road	Plastic	Verge
P96	Pontypool	Entrance to St Benedict Close	Plastic	Verge
P97	Pontypool	o/s 21 Lancaster Road, New Inn	Plastic	Verge
P98	Pontypool	ro 4. Cwrdy Walk	Plastic	Verge
P99	Pontypool	opp 40. Lansdowne	Plastic	Footway
P100	Pontypool	opp 20. Berkeley Crescent	Plastic	Verge
P101	Pontypool	Entrance to Crown Bridge School	Plastic	Road
P102	Pontypool	opp 16 Greys Road, Cwmynyscoy	Plastic	Verge
P103	Pontypool	ro 32 Ashgrove Close Sebastopol	Plastic	Verge
P104	Pontypool	os 1 St Davids Close, Penygarn	Plastic	Footway
P105	Pontypool	Maesderwen Cresent os No. 1	Plastic	Footway
P106	Pontypool	Maesderwen Cresent opp Claremont	Plastic	Footway
P107	Pontypool	os 40 Coed y Cando Road, New Inn	Plastic	Footway
P108	Pontypool	sharp bend nr The Mount, Penyrheol Road	Plastic	Verge
P109	Pontypool	so 1 Bushy Park, Wainfelin	Plastic	Verge
P110	Pontypool	opp Hillcrest Bungalow, Cefn-y-Crib	Plastic	Verge
P111	Pontypool	opp Ty Richard Jones , Cefn-y-Crib	Plastic	Verge
P112	Pontypool	so 1 Rhiw Cottages, Cefn-y-Crib	Plastic	Verge
P113	Pontypool	Grosmont Road, New Inn, nr junction Golf Road		
P114	Pontypool	os old school, Pantegasseg	Plastic	Verge
P115	Pontypool	jun access track to reservoir, Folly Lane	Plastic	Verge

P116	Pontypool	Folly cark park , Folly Lane	Plastic	Verge
P117	Pontypool	Prescoch Lane nr Prescoch Cottage	Plastic	Verge
P118	Pontypool	Prescoch Lane nr Vicars Land Cottage	Plastic	Verge
P119	Pontypool	jun Wentsland Crescent with Parkes Lane	Plastic	Verge
P120	Pontypool	nr Folly View Cwmoody Lane, Mamhilad	Plastic	Verge
P121	Pontypool	on green Ashgrove Close, Sebastopol	Plastic	Verge
P122	Pontypool	so 27 St Augustine Road, Sebastopol	Plastic	Footway
P123	Pontypool	jun Meadow Close with Richmond Road	Plastic	Footway
P124	Pontypool	os 2 Elm Grove, Sebastopol	Plastic	Verge
P125	Pontypool	bottom of access to Coed Camlas, New Inn	Plastic	Footway
P126	Pontypool	jun Coed Camlas with The Highway, New Inn	Plastic	Footway
P127	Pontypool	opp 4 Hand Farm Road, New Inn	Plastic	Footway
P128	Pontypool	jun Oaklands rd with Maple Road South	Stone	Verge
P129	Pontypool	so 71 Oaklands Rd, Sebastopol	Stone	Verge
P130	Pontypool	so 19 Price Close Trevethin	Plastic	Verge
P131	Pontypool	Clarence Place, Pontypool	Plastic	Road
P132	Pontypool	Merchants Hill Close	Plastic	Footway
P133	Pontypool	jun Church Ave with Talfan Close, Trevethin	Plastic	Verge
P134	Pontypool	Springfield Terrace, Plasycoed Road	Plastic	Verge
P135	Pontypool	Penygraig Tce, Blaendare	Plastic	Footway
P136	Pontypool	Park View, Blaendare	Plastic	Footway
P137	Pontypool	North Road, Brynwern	Plastic	Footway
P138	Pontypool	Cwrdy Lane os Graig Cottage	Plastic	Verge
P139	Pontypool	Malthouse Lane, nr Keiths cabin	Plastic	Footway
P140	Pontypool	os Waterloo Court, Railway Tce, Sebastopol	Plastic	Verge
P141	Pontypool	opp 1 Twmpath Road	Stone	Verge
P142	Pontypool	opp 1 Twmpath Gardens	Plastic	Verge
P143	Pontypool	St James's Field, on hill	Plastic	Footway
P144	Pontypool	Top of The Link, Crane Street	BI.Plastic	Footway
P145	Pontypool	Middle of The Link, Crane Street	BI.Plastic	Footway
P146	Pontypool	Bottom of The Link, Crane Street	BI.Plastic	Footway
P147	Pontypool	os church , Crane Street	BI.Plastic	Footway
P148	Pontypool	Top of Steps, Kwik Save, Crane Street	BI.Plastic	Footway
P149	Pontypool	Bottom of steps, Kwik Save, Crane Street	BI.Plastic	Footway
P150	Pontypool	so 17 Commercial Street	BI.Plastic	Footway
P151	Pontypool	so 3 Market Street	BI.Plastic	Footway
P152	Pontypool	so Natwest Bank, Osbourne Road	BI.Plastic	Footway
P153	Pontypool	so Natwest Bank, Osbourne Road	BI.Plastic	Footway
P154	Pontypool	entrace to top multi-storey car park, Osbourne Road	Plastic	Footway
P155	Pontypool	Civic Centre, entrance	Plastic	Footway
P156	Pontypool	Civic Centre, turning circle	Plastic	Footway
P157	Pontypool	ro Civic Centre, on access road	Plastic	Road
P158	Pontypool	top of George Street, nr subway	Plastic	Footway
P150	Pontypool	os chemists, George Street	Plastic	Footway
P159	Pontypool	os 23 Belle vue Close, Trevethin	Plastic	Footway
P160	Pontypool	os 116 Newman Road, West Hill Road	Plastic	Verge
P161	Pontypool	Abergelli Cottages, Plasycoed Road	Plastic	Verge
FTUZ	i ontypool	Abergein Collages, Flasycoed Road	1 10010	verge

P163	Pontypool	jun Ruth Road/The Highway	Plastic	Footway
P164	Pontypool	Playground, Hanbury Grove	Plastic	Footway
P165	Pontypool	os Pleasant View, Club Road, Tranch	Plastic	Verge
P166	Pontypool	nr 22 Twissels Road, Tranch	Plastic	Verge
P167	Pontypool	Cock-y-North Road	Plastic	Verge
P168	Pontypool	end of Belle Vue Close, Trevethin	Plastic	Verge
P169	Pontypool	jun Parkes Lane, Wentsland Crescent	Plastic	Verge
P170	Pontypool	opp 15 Bushy Park	Plastic	Verge
P171	Pontypool	end of Sunlea Crescent	Plastic	Footway
P172	Pontypool	os Elrosa, Sunlea Crecent	Plastic	Road
P173	Pontypool	opp 2 Lodge Wood	Plastic	Verge
P174	Pontypool	end of Lodge Wood	Plastic	Road
P175	Pontypool	entrance to Glengariff Court	Plastic	Footway
P176	Pontypool	entrance to Riverside multi storey car park	Plastic	Road
P177	Pontypool	garages, rear of Mynydd Court, Cwynyscoy	Plastic	Verge
P178	Pontypool	os 35 Club Road, Tranch	Plastic	Verge
P179	Pontypool	os 35 Upper Gellipystyll Farm, Tranch	Plastic	
P180	Pontypool		Plastic	Verge
P181	Pontypool	entrance to the Moorings, Maesderwen Road	Plastic	Verge
	Pontypool	Jubilee Terrace, Fowler Street, Wainfelin	Plastic	Road
P182	Pontypool	end of School Lane, Wainfelin	Plastic	Road
P183	Pontypool	so 73 Trosnant Street	Plastic	Footway
P184	Pontypool	os Surgery, Trosnant Street		Verge
P185	Pontypool	nr Bryn Teg, Sluvad Road	Stone	Verge
P186	Pontypool	Sluvad Road, hill to reservoir	Plastic	Verge
P187	Pontypool	Cefn Crib Rd, between boundary and P111	Plastic	Verge
P188	Pontypool	Mountain Road, nr entrance to Cefn Llyd Farm	Plastic	Verge
P189		Mountain Road, opp Hawthorn Cottage	Plastic	Verge
P190	Pontypool Pontypool	Penyrheol Road, just south of cattlegrid	Plastic	Verge
P191		Penyrheol Road, between The Mount and cattlegrid	Plastic	Verge
P192	Pontypool	bottom of Penyrheol Road, nr Hillcrest	Plastic BI.Plastic	Verge
P193	Pontypool	Commercial Street, os St. Davids Foundation	BI.Plastic BI.Plastic	Footway
P194	Pontypool	Hanbury Road, os St James' Church		Footway
P195	Pontypool	Italian Gardens, for use by Streetscene dept	Plastic	Verge
P196	Pontypool	so 59 Winstone Rd, Trevethin	Plastic	Verge
P197	Pontypool	1 Beechwood Walk, Trevethin	Plastic	Verge
P198	Pontypool	White Houses, Penrepoid Road	Plastic	Verge
P199	Pontypool	so 122 Chester Close, New Inn	Plastic	Footway
P200	Pontypool	so 35 Chester Close, New Inn	Plastic	Footway
P201	Pontypool	o/s Osborne House, The Beeches, Leigh Road	Plastic	Road
P202	Pontypool	Jun Wern Road with Austin Road, Sebastopol	Plastic	Footway
P203	Pontypool	entrance to Chester Close, New Inn	Plastic	Verge
P204	Pontypool	entrance to Blaen-y-Cwm farm, Pantegasseg	Plastic	Verge
P205	Pontypool	os 29 Pine Gardens, Tranch	Plastic	Footway
P206	Pontypool	entrance to Avalon Court, Wainfelin	Plastic	Footway
P207	Pontypool	o/s Mountain Rise, Blendare Farm Lane	Plastic	Verge
P208	Pontypool	Jun The Darren with Blaendare Farm Lane	Plastic	Verge
P209	Pontypool	os Lynwood, Park View, Blaendare	Plastic	Footway

P210	Pontypool	os Firtree Cottage, Penyrheol	Plastic	Verge
P211	Pontypool	os Surgery, Mill Road	Plastic	Footway
P212	Pontypool	Opp Cae Bryn, Bont Prem	Plastic	Verge
P213	Pontypool	Os 3 St. Davids Close	Plastic	Footway
P214	Pontypool	Folly Lane, layby nr Nant y Gollen	Plastic	Verge
P215	Pontypool	The Mount, r/o George Street, Pontypool	Plastic	Footway
P216	Pontypool	Access road to Pontypool Museum/ St Albans School	Plastic	Verge
P217	Pontypool	o/s 19 Wentsland Road	Plastic	Verge
P218	Pontypool	Nr access rd to Blaen-llwynau, Bont Prem	Plastic	Verge
P219	Pontypool	Between 218 and Cwm Farm, Bont Prem	Plastic	Verge
P220	Pontypool	Entrance to Lower Mill. Pontymoel	Plastic	Verge
P221	Pontypool	o/s 12 St. Mary's Close, Griffithstown	Plastic	Road
P222	Pontypool	Opp 23 Coedcae Place	Plastic	Verge
P223	Pontypool	Nr footbridge, Park view, Blaendare	Plastic	Verge
P224	Pontypool	Nr SEC, Polo Gounds ind est	Plastic	Verge
P225	Pontypool	Opp 6 Elm Close, Trevethin	Plastic	Verge
P226	Pontypool	Junct Uplands Drive with The Beeches, Trevethin	Plastic	Verge
P227	Pontypool	Lower Bridge Street, nr exit from Tesco's	Plastic	Verge
P228	Pontypool	Entrance to Afon Close, New Inn	Plastic	Verge
P229	Pontypool	o/s 2 Museum Court, Griffithstown	Plastic	Verge
P230	Pontypool	s/o 1 Farm Rd, Cwmynynscoy	Plastic	Verge
P231	Pontypool	Os 41 Hanbury Grove, Brynwern	Plastic	Verge
P232	Pontypool	Watchtower Cottage, Govera Lane	Plastic	Verge
P233	Pontypool	Hand Farm Road o/s Hand Farm	Plastic	Verge
P234	Pontypool	Nr Cwm Ffrwd-oer Farm, Gypsy Lane	Plastic	Verge
P235	Pontypool	Mountain Lane, Sunnybank Rd, Griffithstown	Plastic	Road
P235	Pontypool	Junct of Coed y Gric Rd and Stafford Rd Griffithstown	Plastic	Footway
P236	Pontypool	School Lane, Wainfelin, opp 'Dales'	Plastic	Footway
P237	Pontypool	Church Lane, Pontnewynydd, o/s Bryn Meirion	Plastic	Verge
P238	Pontypool	Mountain View, Pontnewynydd, rear of 4 Coronation Tce	Plastic	Footway
P239	Pontypool	Hanbury Gardens/ Oakdale Sq access, Pontnewynydd	Plastic	Verge
P240	Pontypool	St Hilda's Road, Griffithstown, os church hall	Plastic	Footway
P241	Pontypool	James Street, Penygarn, o/s No. 33	Plastic	Footway
P242	Pontypool	James Street, Penygarn, o/s No. 7	Plastic	Footway
P243	Pontypool	Junct of Coed y Gric Rd and Stafford Rd Griffithstown	Plastic	Footway
P243	Pontypool	So 7 School Terrace, Pontnewynydd	Plastic	Road
P245	Pontypool	Front of 7 Clifton Square, Griffithstown	Plastic	Verge
P245	Pontypool	Car park Clifton Sq, rear of 50 Windsor Rd Griffithstown	Plastic	Footway
P240	Pontypool	Entrance to Parc Panteg, Sebastopol	Plastic	Verge
P248	Pontypool	Coed y Felin, junction with Maes y Felin, New Inn	Plastic	Footway
P240 P249	Pontypool		Plastic	
P249 P250	Pontypool	Coed y Felin, opp nr 29 Entrance to Cobner Close, Trevethin	Plastic	Footway
	Pontypool		Plastic	Verge
P251	Pontypool	Side of 16 Bythway Road, Trevethin	Plastic	Verge
P252	Pontypool	Entrance to Grove Crescent, Bythway Rd, Trevethin	Plastic	Verge
P253	Pontypool	Entrance to Ivy Dene Close, Bythway Rd, Trevethin	Plastic	Verge
P254	Pontypool	Entrance to Elmhurst Close, Central Drive, Trevethin	Plastic	Verge
P255		Near sub station, rear of 38 Central Drive, Trevethin	1 103110	Verge

P256	Pontypool	Opp 61 Greenland Road, Trevethin	Plastic	Verge
P257	Pontypool	Opp19 Greenland Road, Trevethin	Plastic	Verge
P258	Pontypool	Fountain Road, outside Pontymoile Basin car park	Plastic	Verge
P259	Pontypool	Opp 40 Fountain Road, Pontymoile	Plastic	Verge
P260	Pontypool	Opp 85 Llandegfedd Way, New Inn	Plastic	Verge
P261	Pontypool	Opp 49 Llandegfedd Way, New Inn	Plastic	Verge
P262	Pontypool	Opp 27 Llandegfedd Way, New Inn	Plastic	Verge
P263	Pontypool	Side of 55 Charles Street, Griffithstown	Plastic	Verge
P264	Pontypool	o/s 70 Caroline Road, New Inn	Plastic	Footway
P265	Pontypool	nr 34 Caroline Road, New Inn	Plastic	Verge
P266	Pontypool	Side of 47 Bythway Road, Trevethin	Plastic	Road
P267	Pontypool	Side of 57 Bythway Road, Trevethin	Plastic	Verge
C1	Cwmbran	entrance to Grove Park Avenue	Plastic	Verge
C2	Cwmbran	The Square os The Ebenezer Chapel	Plastic	Verge
C3	Cwmbran	The Square os Coed Melyn	Plastic	Verge
C4	Cwmbran	The Square below The Water Works	Plastic	Verge
C5	Cwmbran	Mountain Road os Glyn Bran Farm House	Plastic	Road
C6	Cwmbran	Mountain Road opp Heol Mynydd Farm	Plastic	Verge
C7	Cwmbran	Mountain Road os Mountain Air Ph	Plastic	Road
C8	Cwmbran	Bethel Lane so Bethel Chapel	Plastic	Road
C9	Cwmbran	so 8. Tern Court	Plastic	Footway
C10	Cwmbran	so 2. Coed Cae	Plastic	Footway
C11	Cwmbran	Trinity Road so Churchwood	Plastic	Verge
C12	Cwmbran	Trinity Road juc with Hillside Court	Plastic	Verge
C13	Cwmbran	so 87. Ty Box Road	Plastic	Footway
C14	Cwmbran	opp 13-14. Ty Box Close	Plastic	Verge
C15	Cwmbran	Richmond Place opp the Gables	Plastic	Road
C16	Cwmbran	os 2. Parklawn Close	Plastic	Footway
C17	Cwmbran	Park View os Sub Station	Plastic	Footway
C18	Cwmbran	opp 8. Woodland Street	Plastic	Verge
C19	Cwmbran	os 20 Sycamore Court, Henllys	Plastic	Verge
C20	Cwmbran	Blenheim Road os 1-6. Drayton Court	Plastic	Verge
C21	Cwmbran	Entrance to Canberra Close	Plastic	Verge
C22	Cwmbran	opp 1-26. The Beeches	Plastic	Verge
C23	Cwmbran	Hill Top Road opp Mountain View	Plastic	Verge
C24	Cwmbran	St Dials Road juc with HillTop Road	Plastic	Footway
C25	Cwmbran	Entrance to Grosmont Place	Plastic	Verge
C26	Cwmbran	Chapel lane juc with Dany Craig	Plastic	Verge
C27	Cwmbran	so 148. Brynhyfryd	Plastic	Footway
C28	Cwmbran	os Craig Wen Clare Drew Way	Plastic	Verge
C29	Cwmbran	os 30. The Garw	Plastic	Footway
C30	Cwmbran	Entrance to Tewdric Court	Plastic	Footway
C31	Cwmbran	Rose Gardens North Road	Plastic	Footway
C32	Cwmbran	Selby Close	Plastic	Footway
C33	Cwmbran	so 8. Crown Rise	Plastic	Verge
	Cwmbran	Entrance to Bath Green	Plastic	Footway
C34				

C36	Cwmbran	so Pen-y-rheol Crown Road	Plastic	Road
C37	Cwmbran	os Estoril Bryn Rhedyn	Plastic	Verge
C38	Cwmbran	Entrance to Edge Hill	Stone	Verge
C39	Cwmbran	opp Ty Lwyth Barn Caerleon Road	Plastic	Footway
C40	Cwmbran	os Ty Lwyth Barn Caerleon Road	Plastic	Verge
C41	Cwmbran	opp The Raj Gate Caerleon Road	Plastic	Footway
C42	Cwmbran	os Gate House Church Road	Plastic	Verge
C43	Cwmbran	so 16. Paddock Rise	Stone	Verge
C44	Cwmbran	Entrance to Grange Industrial Estate	Plastic	Verge
C45	Cwmbran	os 1. Glan-y-Nant Close	Plastic	Footway
C46	Cwmbran	os 68. Bryn Milwr	Plastic	Verge
C47	Cwmbran	opp 83. Trostrey	Plastic	Verge
C48	Cwmbran	Entrance to Brynglas	Plastic	Verge
C49	Cwmbran	Entrance to Sandybrook Close	Plastic	Verge
C50	Cwmbran	Entrance to Meyricks	Plastic	Footway
C51	Cwmbran	Entrance to Forest Close	Plastic	Verge
C52	Cwmbran	os 96. Glan Rhyd	Plastic	Footway
C53	Cwmbran	Entrance to Glade Close	Plastic	Verge
C54	Cwmbran	so 89. Glan Rhyd	Plastic	Footway
C55	Cwmbran	os 25. Pant-y-Rheol Close	Plastic	Footway
C56	Cwmbran	Pensarn way juc with Nant-y-Milwr Close	Plastic	Verge
C57	Cwmbran	o/s 276 Pandy, Greenmeadow	Plastic	Verge
C58	Cwmbran	Nr School House Henllys Lane	Plastic	Verge
C59	Cwmbran	os 73. Farlays	Plastic	Verge
C60	Cwmbran	os 9. Neerings	Plastic	Verge
C61	Cwmbran	Tramway Close	Plastic	Verge
C62	Cwmbran	Henllys Village Road os The Dorallt Inn Ph	Plastic	Verge
C63	Cwmbran	Henllys Lane Nr The Dorallt Inn Ph	Plastic	Verge
C64	Cwmbran	Dorallt Way juc with Dorallt Close	Plastic	Footway
C65	Cwmbran	os New Row Old Row Henllys Lane	Plastic	Road
C66	Cwmbran	os Four Houses Henllys Lane	Plastic	Verge
C67	Cwmbran	opp Bellevue Terrace Henllys Lane	Plastic	Verge
C68	Cwmbran	Os 38 Glan Rhyd, Coed Eva	Plastic	Footway
C69	Cwmbran	so 24. Heather Court	Plastic	Footway
C70	Cwmbran	so 26. Clover Court	Plastic	Verge
C71	Cwmbran	so 39. Heather Court	Plastic	Footway
C72	Cwmbran	os 63. Buttercup Court	Plastic	Footway
C73	Cwmbran	os 78. Hawks Ridge	Plastic	Footway
C74	Cwmbran	so 38. Celandine Court	Plastic	Footway
C75	Cwmbran	so 1. Bluebell Court	Plastic	Footway
C76	Cwmbran	os 21. Primrose Court	Plastic	Footway
C77	Cwmbran	os 49. Primrose Court	Plastic	Footway
C78	Cwmbran	so 77. Daffodil Court	Plastic	Footway
C79	Cwmbran	os 19. Rosemead	Plastic	Footway
C80	Cwmbran	Penmaes Road juc with Beechleigh Close	Plastic	Verge
C81	Cwmbran	os 36. Beechleigh Close	Plastic	Footway
C82	Cwmbran	Entrance to Marlbourgh Road	Plastic	Footway

Cwmbran	so 14. Marlbourgh Road	Plastic	Verge
Cwmbran		Plastic	Verge
			Footway
	••		Verge
			Footway
			Verge
			Footway
			Verge
			Verge
			Footway
			Footway
			Footway
Cwmbran	jun Oaklands View with Penmaes Road		Verge
Cwmbran			Verge
Cwmbran		Plastic	Verge
			Verge
			Verge
			Verge
Cwmbran	· · · · · · · · · · · · · · · · · · ·	Plastic	Road
Cwmbran		Plastic	Verge
Cwmbran	ż	Plastic	Road
Cwmbran	·	Plastic	Verge
Cwmbran			Verge
Cwmbran		Plastic	Verge
Cwmbran	opp 29 Tramway Close	Plastic	Verge
Cwmbran		Plastic	Verge
Cwmbran	o/s 15 Doralt Close, Henllys	Plastic	Verge
Cwmbran	jun Vale View, Henllys Village Road	Plastic	Verge
Cwmbran	jun Llys Gwyrdd with Henllys Way	Plastic	Verge
Cwmbran	os 21 Llys Gwyrdd	Plastic	Verge
Cwmbran	jun Pentre Close with Henllys Way	Plastic	Verge
Cwmbran	jun Marlborough Road with Norfolk Close	Plastic	Verge
Cwmbran	so 4 Heather Court, Ty Canol	Plastic	Footway
Cwmbran	os 5 Longbridge Ponthir	Plastic	Footway
			In Garden
			Verge
			Verge
	-		Verge
		Plastic	Verge
Cwmbran	ro 23 Teynes, Coed Eva	Plactic	VAINA
	Cwmbran Cwmbran	Cwmbran         os 2. Marlbourgh Road           Cwmbran         Opp 5. Warwick Close           Cwmbran         Wellington Drive juc with Arundel Close           Cwmbran         so 38. Spring Grove           Cwmbran         Nr 94. Spring Grove           Cwmbran         os The Castell-y-bwch Ph           Cwmbran         Bellevue, Bellevue Lane Upper Cwmbran           Ownbran         Bellevue, Bellevue Lane Upper Cwmbran           Cwmbran         os 15 Ashleigh Court           Cwmbran         os 15 Ashleigh Court           Cwmbran         os 45 Ashleigh Court           Cwmbran         os 45 Primrose Court, Ty Canol           Cwmbran         os 27 Thistle Court, Ty Canol           Cwmbran         os 27 Thistle Court, Ty Canol           Cwmbran         os 27 Thistle Court, Greenmeadow           Cwmbran         opp 47 Salisbury Court, Greenmeadow           Cwmbran         opp 47 Salisbury Court, Greenmeadow           Cwmbran         jun Daffodil Court with Ty Canol Way           Cwmbran         opp 46 Greenwood Drive, Henllys           Cwmbran         opp 70 Pa Bush Inn, Graig Road, Upp Cwmbran           Cwmbran         os 3 Blackbirds PH, Pentre Lane           Cwmbran         os Gilyn Bran, Mountain Road           Cwmbran <td< td=""><td>Cwmbranos 2. Maribourgh RoadPlasticCwmbranopp 5. Warwick ClosePlasticCwmbranWellington Drive juc with Arundel CloseStoneCwmbranso 38. Spring GrovePlasticCwmbranos The Castell-y-bwch PhPlasticCwmbranos The Castell-y-bwch PhPlasticCwmbranBellevue, Bellevue Lane Upper CwmbranPlasticCwmbranBellevue, Bellevue Lane Upper CwmbranPlasticCwmbranos 15 Ashleigh Court, HenllysPlasticCwmbranos 5 Ashleigh Court, Ty CanolPlasticCwmbranos 45 Primrose Court, Ty CanolPlasticCwmbranog 45 Ashleigh Court, GreenmeadowPlasticCwmbranog 47 Thistle Court, GreenmeadowPlasticCwmbranjun Oaklands View with Penmaes RoadPlasticCwmbranjun Dalfodil Court with Ty Canol WayPlasticCwmbranjun Dalfodil Court with Ty Canol WayPlasticCwmbranjun Daffodil Court with Ty Canol WayPlasticCwmbranop 7 The Bush Inn, Graig Road, Upp CwmbranPlasticCwmbranos 3 Blackbirds PH, Pentre LanePlasticCwmbranos 69 Is Rang, Mountain RoadPlasticCwmbranos 69 Is Torat Close, HenllysPlasticCwmbranos 69 Is Drant Close, HenllysPlasticCwmbranos 3 Blackbirds PH, Pentre LanePlasticCwmbranos 15 Dorat Close, Henllys WayPlasticCwmbranos 69 Is Orat Klose, Henllys WayPlasticCwmbran&lt;</td></td<>	Cwmbranos 2. Maribourgh RoadPlasticCwmbranopp 5. Warwick ClosePlasticCwmbranWellington Drive juc with Arundel CloseStoneCwmbranso 38. Spring GrovePlasticCwmbranos The Castell-y-bwch PhPlasticCwmbranos The Castell-y-bwch PhPlasticCwmbranBellevue, Bellevue Lane Upper CwmbranPlasticCwmbranBellevue, Bellevue Lane Upper CwmbranPlasticCwmbranos 15 Ashleigh Court, HenllysPlasticCwmbranos 5 Ashleigh Court, Ty CanolPlasticCwmbranos 45 Primrose Court, Ty CanolPlasticCwmbranog 45 Ashleigh Court, GreenmeadowPlasticCwmbranog 47 Thistle Court, GreenmeadowPlasticCwmbranjun Oaklands View with Penmaes RoadPlasticCwmbranjun Dalfodil Court with Ty Canol WayPlasticCwmbranjun Dalfodil Court with Ty Canol WayPlasticCwmbranjun Daffodil Court with Ty Canol WayPlasticCwmbranop 7 The Bush Inn, Graig Road, Upp CwmbranPlasticCwmbranos 3 Blackbirds PH, Pentre LanePlasticCwmbranos 69 Is Rang, Mountain RoadPlasticCwmbranos 69 Is Torat Close, HenllysPlasticCwmbranos 69 Is Drant Close, HenllysPlasticCwmbranos 3 Blackbirds PH, Pentre LanePlasticCwmbranos 15 Dorat Close, Henllys WayPlasticCwmbranos 69 Is Orat Klose, Henllys WayPlasticCwmbran<

C130	Cwmbran	os 2 Twmbarlem Rise, Henllys	Plastic	Verge
C131	Cwmbran	os 41 Greenwood Drive, Henllys	Plastic	Verge
C132	Cwmbran	os 30 Greenwood Drive, Henllys	Plastic	Verge
C133	Cwmbran	opp 39 Greenwood Drive, Henllys	Plastic	Verge
C134	Cwmbran	opp 28 Doralt Way, Henllys	Plastic	Verge
C135	Cwmbran	os 1 Forest View, Doralt Way, Henllys	Plastic	Verge
C136	Cwmbran	os 20 Forest View, Doralt Way, Henllys	Plastic	Verge
C137	Cwmbran	Henllys Village Road os garages so Four Houses	Plastic	Verge
C138	Cwmbran	opp 14 Cefn Millwr	Plastic	Verge
C139	Cwmbran	os 36 Cefn Millwr	Plastic	Verge
C140	Cwmbran	opp 48 Cefn Millwr	Plastic	Verge
C141	Cwmbran	Tump Lane, Henllys, No.1	Plastic	Verge
C142	Cwmbran	Tump Lane, Henllys, No.2	Plastic	Verge
C143	Cwmbran	Tump Lane, Henllys, No.3	Plastic	Verge
C144	Cwmbran	Tump Lane, Henllys, os Penheol-y-badd-fawr	Plastic	Road
C145	Cwmbran	so 1 Tolpath, Fairwater	Plastic	Footway
C146	Cwmbran	os 9 Buttercup Court, Ty Canol	Plastic	Footway
C147	Cwmbran	ro 64 Buttercup Court, Ty Canol	Plastic	Footway
C148	Cwmbran	os 46 Buttercup Court, Ty Canol	Plastic	Footway
C149	Cwmbran	so 32 Celandine Court, Ty Canol	Plastic	Footway
C150	Cwmbran	os 7 Celandine Court, Ty Canol	Plastic	Footway
C151	Cwmbran	Pant Gywn Close, Henllys	Plastic	Verge
C152	Cwmbran	os 50 Pant-y Rheol Close	Plastic	Footway
C153	Cwmbran	Jun Pensarn Way with Castle Court	Plastic	Verge
C154	Cwmbran	nr 5 Pensarn Way	Plastic	Verge
C155	Cwmbran	entrance to Glan Rhyd	Plastic	Verge
C156	Cwmbran	so Windfold, Crown Rise, Llanfrechfa	Plastic	Verge
C157	Cwmbran	so 19 John Baker Close, Llantarnam Park	Plastic	Verge
C158	Cwmbran	so 28 Forest Close, Coed Eva	Plastic	Verge
C159	Cwmbran	os 14 Oldbridge Court, Hafod Court Road	Plastic	Verge
C160	Cwmbran	os 27 Doralt Way, Henllys	Plastic	Footway
C161	Cwmbran	opp 39 Daffodil Court, Ty Canol	Plastic	Verge
C162	Cwmbran	jun Rosemead with Meadowside	Plastic	Verge
C163	Cwmbran	opp 14 Rosemead	Plastic	Verge
C164	Cwmbran	os 17 Hawkes Ridge, Ty Canol	Plastic	Footway
C165	Cwmbran	os 33 Hawkes Ridge, Ty Canol	Plastic	Footway
C166	Cwmbran	so 25 Usk Court, Thornhill	Plastic	Verge
C167	Cwmbran	nr cattlegrid, south of Mountain Air PH	Plastic	Verge
C168	Cwmbran	os 36 Oaklands Road, Sebastopol	Plastic	Footway
C169	Cwmbran	os 44 Beechleigh Close	Plastic	Verge
C170	Cwmbran	Mountain Road, north of Glyn Bran Farm	Plastic	Verge
C171	Cwmbran	nr culvert entrance south of Glyn Bran Farm	Plastic	Verge
C172	Cwmbran	os 92 Marlborough Road	Plastic	Verge
C173	Cwmbran	os 59 Marlborough Road	Plastic	Verge
C174	Cwmbran	North Road shops, opp 6 in Hand PH	Plastic	Verge
C175	Cwmbran	os Church Cottage Henllys Lanes	Plastic	Verge
C176	Cwmbran	top Of Hollybush View, Cefn Millwr	Plastic	Footway

C177	Cwmbran	Tump Farm Lane, Henllys ro 18 Greenwood Drive	Plastic	Verge
C178	Cwmbran	os 11 Glade Close	Plastic	Verge
C179	Cwmbran	os 26 Wellington Drive	Plastic	Verge
C180	Cwmbran	front of 1 Canberra Close, Greenmeadow	Plastic	Car Park
C181	Cwmbran	os 142 Charston, Greenmeadow	Plastic	Verge
C182	Cwmbran	nr 219 Charston, Greenmeadow	Plastic	Verge
C183	Cwmbran	os 23 Archer Road, Greenmeadow	Plastic	Verge
C184	Cwmbran	opp 7 Manor Gate, Greenmeadow	Plastic	Verge
C185	Cwmbran	Sirhowy Court, Thornhill	Plastic	Verge
C186	Cwmbran	Cwm y Nant Fields, Cocker Avenue	Plastic	Footway
C187	Cwmbran	os 17 Brunel Road	Plastic	Footway
C188	Cwmbran	opp 5 Church Road, Pontnewydd	Plastic	Road
C189	Cwmbran	entrance to Hawkes Ridge, Ty Canol	Plastic	Verge
C190	Cwmbran	opp 56 Greenwood Avenue, West Pontnewydd	Plastic	Verge
C191	Cwmbran	os Surgery, Leadon Court, Thornhill	Plastic	Verge
C192	Cwmbran	Garn Wen, Belle Vue Lane, Upper Cwmbran	Plastic	Verge
C193	Cwmbran	entrance to School, Bryn Celyn Road	Plastic	Verge
C194	Cwmbran	so 2 Crown Rise, Llanfrechfa	Plastic	Verge
C195	Cwmbran	opp 32 Garth Road	Plastic	Verge
C196	Cwmbran	Entrance to Mill House Court	Plastic	Verge
C197	Cwmbran	Entrance to Oaksford	Plastic	Verge
C198	Cwmbran	opp 205 Oaksford	Plastic	Verge
C199	Cwmbran	so 133 Oaksford	Plastic	Verge
C200	Cwmbran	opp 11 Woolpitch	Plastic	Verge
C201	Cwmbran	opp 41 Woolpitch	Plastic	Verge
C202	Cwmbran	os 8 Coldstream Close	Plastic	Footway
C203	Cwmbran	os 162 Bowlease	Plastic	Verge
C204	Cwmbran	os 70 Bowlease	Plastic	Verge
C205	Cwmbran	Turning circle, Ponthir village school	Plastic	Verge
C206	Cwmbran	Entrance to The Manor	Plastic	Verge
C207	Cwmbran	so 17 The Manor	Plastic	Footway
C208	Cwmbran	Os 66 Hawkes Ridge	Plastic	Footway
C209	Cwmbran	Entrance to Heather Court	Plastic	Verge
C210	Cwmbran	Entrance to Kingsland Walk	Plastic	Verge
C211	Cwmbran	Opp 50 Kingsland Walk	Plastic	Verge
C212	Cwmbran	So 110 Daffodil Court	Plastic	Verge
C213	Cwmbran	So 44 Daffodil Court	Plastic	Footway
C214	Cwmbran	Opp 22 Marlbourough Road	Plastic	Verge
C215	Cwmbran	Os 17 Thornhill Close	Plastic	Footway
C216	Cwmbran	Access to garages Chepstow Rise	Plastic	Verge
C217	Cwmbran	Os 145 Brynglas	Plastic	Footway
C218	Cwmbran	Opp 2 Meadowside off Rosemead		
C219	Cwmbran	Broad View, West Pontnewydd	Plastic	Verge
C220	Cwmbran	Entrance to Highfield Close, off Crown Road	Plastic	Footway
C221	Cwmbran	nr 50 Tolpath, Coed Eva	Plastic	Verge
C222	Cwmbran	o/s St Gabriel's church, Old Cwmbran	Plastic	Footway
C223	Cwmbran	Tump Lane, nr 17 Forest View	Plastic	Verge

C224	Cwmbran	o/s 7 Barnets, Greenmeadow	Plastic	Verge
C225	Cwmbran	Opp 69 Barnets, Greenmeadow	Plastic	Verge
C226	Cwmbran	o/s 69 Beddick, Greenmeadow	Plastic	Verge
C227	Cwmbran	o/s 19 Trostrey, Hollybush	Plastic	Verge
C228	Cwmbran	o/s 1 Longhouse Grove, Henllys	Plastic	Footway
C229	Cwmbran	o/s 2 Greencourt, Brynhyfryd	Plastic	Verge
C230	Cwmbran	o/s 40 Oakleigh Court, Henllys	Plastic	Footway
C231	Cwmbran	Entrance to Farlays	Plastic	Verge
C232	Cwmbran	Opp 132 Monnow Court, Thornhill	Plastic	Verge
C233	Cwmbran	Nr 7 Teynes, Coed Eva	Plastic	Verge
C234	Cwmbran	o/s 130 Gifford Close, Two Locks	Plastic	Footway
C235	Cwmbran	opp 8 Ravenscourt, Greenmeadow	Plastic	Verge
C236	Cwmbran	Opp 1 Stour Court, Thornhill	Plastic	Verge
C237	Cwmbran	End of Clomendy Road, Old Cwmbran	Plastic	Verge
C238	Cwmbran	o/s 36 Llantarnam Close, Llantarnam	Plastic	Verge
C239	Cwmbran	Nr 1 Tudor Woods, Llanyrafon	Plastic	Verge
C240	Cwmbran	Entrance to Birch Grove, Henllys	Plastic	Verge
C241	Cwmbran	Opp 45 Birch Grove, Henllys	Plastic	Verge
C242	Cwmbran	Nr 21 Juniper Crescent, Henllys	Plastic	Verge
C243	Cwmbran	Opp 6 Glan Rhyd, Coed Eva	Plastic	Verge
C244	Cwmbran	Brynhyfryd, junction with Meadow Close	Plastic	Verge
C245	Cwmbran	Os 3 Brynhyfryd	Plastic	Verge
C246	Cwmbran	Byways, opp 17 The Courtlands	Plastic	Verge
C247	Cwmbran	Byways, os Maybury House	Plastic	Verge
C248	Cwmbran	Byways, os 35 Earlsmede	Plastic	Verge
C249	Cwmbran	Byways, os 1 Littledene	Plastic	Verge
C250	Cwmbran	Byways, os 3 Deerbrook	Plastic	Verge
C251	Cwmbran	St Dials Road, nr Community Farm car park	Plastic	Verge
C252	Cwmbran	St Dials Road, nr 1 Uplands Terrace	Plastic	Verge
C253	Cwmbran	St Dials Road, bend by end of allotments	Plastic	Verge
C254	Cwmbran	St Dials Road, approach to Hodges Terrace	Plastic	Verge
C255	Cwmbran	Entrance to Marl Court, Thornhill	Plastic	Verge
C256	Cwmbran	Nr 1 Bagley Court, Thornhill	Plastic	Verge
C257	Cwmbran	Nr 46 Bagley Court, Thornhill	Plastic	Verge
C258	Cwmbran	Nr 50 Monnow Court, Thornhill	Plastic	Verge
C259	Cwmbran	Nr 21 Trannon Court, Thornhill	Plastic	Verge
C260	Cwmbran	Entrance to Neath Court, Thornhill	Plastic	Verge
C261	Cwmbran	o/s 1 Wye Court, Thornhill	Plastic	Verge
C262	Cwmbran	Nr 20 Wye Court, Thornhill	Plastic	Verge
C263	Cwmbran	Entrance to Usk Court, Thornhill	Plastic	Verge
C263	Cwmbran	o/s 43 Tern Court, Thornhill	Plastic	Verge
C265	Cwmbran	Nr 1 Rhymney Court, Thornhill	Plastic	Verge
C265	Cwmbran	Entrance to Perry Court, Thornhill	Plastic	Verge
C267	Cwmbran	Opp 1-12 Arran Court, Thornhill	Plastic	Verge
C267	Cwmbran	Opp 90 Arran Court, Thornhill	Plastic	Verge
C268	Cwmbran	Opp 58 Arran Court, Thornhill	Plastic	Verge
C269 C270	Cwmbran	Electric Sub station, Penywaun Road, St.Dials	Plastic	
0270	Ownoran	Electric Sub Station, Penywaun Koad, St. Dials	1 103110	Verge

C271	Cwmbran	Side of 45 Chestnut Green, Thornhill	Plastic	Verge
C272	Cwmbran	Entrance to Paddock Close, Trinity Road, Pontnewydd	Plastic	Verge
C273	Cwmbran	Junction of Thorncliffe Way and Cresswell Walk	Plastic	Footway
C274	Cwmbran	Cresswell o/s 29	Plastic	Verge
C275	Cwmbran	Thorncliff Way nr No. 3	Plastic	Footway
C276	Cwmbran	Thorncliffe Road o/s 31	Plastic	Footway
C277	Cwmbran	Thorncliffe Way, Nr no. 26	Plastic	Verge
C278	Cwmbran	Side of 1 Garw Wood Drive	Plastic	Verge
C279	Cwmbran	Ton Road, nr no. 74	Plastic	Verge
C280	Cwmbran	Junction of Trussle and Porthmawr Road, Northville	Plastic	Verge
C281	Cwmbran	o/s 76 Hawkes Ridge, Ty Canol	Plastic	Verge
C282	Cwmbran	o/s 63 Neerings, Fairwater	Plastic	Verge
C283	Cwmbran	o/s 119 Neerings, Fairwater	Plastic	Verge
C284	Cwmbran	o/s 1 Glenside, Pontnewydd	Plastic	Verge
C285	Cwmbran	o/s 13 Crown Close, Pontnewydd	Plastic	Verge
C286	Cwmbran	Entrance to Glaslyn Court, Croesyceiliog	Plastic	Verge
C287	Cwmbran	o/s 4 Chepstow Close, Croesyceiliog	Plastic	Verge
C288	Cwmbran	Opp Surgery, rear access Fairwater shops	Plastic	Verge
C289	Cwmbran	o/s 2 Ton Road, nr Fairwater Shops, Fairwater	Plastic	Verge
C290	Cwmbran	opp 1 Picton Walk, Windsor Road, Fairwater	Plastic	Verge
C291	Cwmbran	o/s 1 Llanerch Path, Windsor Road, Fairwater	Plastic	Verge
C292	Cwmbran	Opp 28 Windsor Road, Fairwater	Plastic	Verge
C293	Cwmbran	Windsor Road, Nr Trevine Path, Fairwater	Plastic	Verge
C294	Cwmbran	Opp 26 Shakespeare Road, St Dials	Plastic	Verge
C295	Cwmbran	Opp 51 Shakespeare Road, St Dials	Plastic	Footway
C296	Cwmbran	Opp 21 Cedar Walk, West Pontnewydd	Plastic	Verge
C297	Cwmbran	Entrance to Sycamore Place, Upper Cwmbran	Plastic	Verge
C298	Cwmbran	Junct Maendy Wood Rise + Heol Y Pwca, Pontnewydd	Plastic	Verge
C299	Cwmbran	Side of 8 Mynydd Maen Road, West Pontnewydd	Plastic	Verge
C300	Cwmbran	Side of 18 Mynydd Maen Road, West Pontnewydd	Plastic	Verge
C301	Cwmbran	Junt Ysgol Place, Mynydd Maen Rd, West Pontnewydd	Plastic	Verge
C302	Cwmbran	Junct Plas Bryn Gomer d Chepstow Rise, Croesyceiliog	Plastic	Verge
C303	Cwmbran	Top of ramp Caradoc Road subway, Northville	Plastic	Planting area
C304	Cwmbran	Front of 6 5 Locks Close, Pontnewydd	Plastic	Parking area
C305	Cwmbran	Opp 2 Commodore Lane, Llanyrafon	Plastic	Verge
C306	Cwmbran	Entrance to Grayson Way, LLantarnam	Plastic	Footway
C307	Cwmbran	Entrance to 1-5 Dorallt Way, Henllys	Plastic	Verge
C308	Cwmbran	o/s 40 Maesgwyn, Pontnewydd	Plastic	Footway
C309	Cwmbran	o/s 5 Greenfield Close, Pontnewydd	Plastic	Verge
C310	Cwmbran	Opp 27 Farlow Walk	Plastic	Verge
C311	Cwmbran	Opp 2 Tenby Close, Llanyrafon	Plastic	Verge
C312	Cwmbran	Opp 6 Jule Road, Fairwater	Plastic	Verge
C313	Cwmbran	o/s 20 The Haldens, Pace Road, Fairwater	Plastic	Verge
C314	Cwmbran	Side of 1 Granston Square, Fairwater	Plastic	Verge
C315	Cwmbran	Entrance to Stiels, Coed Eva	Plastic	Verge

# LIST OF SECONDARY PRIORITY STREETS FOR SNOW CLEARANCE APPENDIX F

# LIST OF TRAFFIC CALMED STREETS

## **APPENDIX G**

Location	Type of features
Abbey Fields, Llantarnam	Full width road humps (block paving)
Blaendare Road, Cwmynyscoy	Speed Cushions (bolt down) Full width road humps (block paving)
Byways, Fairwater	Speed Cushions (bitmac)
Caernarfon Crescent, Llanyrafon	Speed Cushions (bitmac)
Cocker avenue, Two Locks	Full width road humps (block paving)
Coed Camlas, New Inn	Rumble strips
Church Avenue, Trevethin	Full width road humps (block paving)
Commercial Street, Pontypool	Raised pedestrian crossing
Cwmynyscoy Road, Cwmynyscoy	Speed Cushions (bolt down)
Edlogan Way, Croesyceiliog	Speed Cushions (bolt down)
Fairhill, Fairwater	Speed Cushions (bolt down)
Greenmeadow Way, Greenmeadow	Speed Cushions (bolt down)
Hanbury Road, Pontypool	Raised pedestrian crossing
High Street, Abersychan	Speed Cushions (bolt down)
Hillcrest, Garndiffaith	Full width road humps (bolt down)
Hillside Drive, Cwmynyscoy	Speed Cushions (bolt down)
Leigh Road, Trevethin	Speed Cushions (bolt down)
Llandegffedd Way, New Inn	Full width road humps (bitmac)
Llanyrafon Way, Llanyrafon	Speed Cushions (bolt down and bitmac) Raised table o/s Primary School
Llewellyn Road, Southville	Speed Cushions (bitmac)
Llewellyn Road, Cwmbran Centre o/s Sainsbury's	Raised pedestrian crossing
Lliswerry Drive, Llanyrafon	Speed Cushions (bitmac)

Lower Leigh Road, Trevethin	Speed Cushions (bolt down)
Lower Ty Gwyn Road, Gardiffaith	Full width road humps (bolt down)
Maendy Way, West Pontnewydd	Speed Cushions (bitmac) and build outs
Newman Road, Trevethin	Speed Cushions (bitmac) and build outs
Osborne Road, Pontypool	Full width road humps (bitmac)
Pensarn Way, Henllys	Full width road humps (bitmac)
Penygarn Road, o/s School, Penygarn	Speed Cushions (bolt down)
Penylan Road, Garndiffaith	Full width road humps (bolt down)
Two Locks Road, Two Locks	Full width road humps (block paving)
Twmbarlem View, Llanfrechfa	Full width road humps (bitmac)
Ty Canol Way, Ty Canol	Speed Cushions (bolt down)
Shakespeare Road, St. Dials	Speed Cushions (bitmac)
Station Farm, Croesyceiliog	Full width road humps (bitmac & block paving)
Waun Road, St.Dials	Full width road humps (bitmac)
Woodland Road, Croesyceiliog	Speed Cushions (bitmac) Raised table at entrance to Rec. Ground
Woodside Road, Trevethin	Full width road humps (bitmac)

# Table adapted from Appendix H, Well Maintained Highways, 2009

DECISION MAKING PROCEDURE FOR PRECAUTIONARY SALTING						
Road surface	Precipitation	Pı	redicted Road Cond	litions		
temperature		Wet	Wet patches	Dry		
May fall below 1°C	No rain No Hoar Frost No fog		Salt before frost	No action likely, monitor		
	No rain No Hoar Frost No fog	Salt before frost	(see note a)	conditions (see note a)		
	Expected Hoar Frost Expected fog	Salt befo		re 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, as required during rain and after rain stops (see note d)				
	Possible rain Possible hoar frost Possible fog	Salt before frost		Monitor weather conditions		
Expec	Expected snowfall		Salt before snowfall			
Rain tu	rning to snow	Commence sa	alting as soon as sno only part of route			

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

2. Different actions may be required for each route or even parts of routes.

**3.** The decision making process should be recorded on the Highways Winter Service Action Sheet.

4. Continuous monitoring of conditions and review of decisions made should take place

# **APPENDIX H (Continued)**

#### Notes for Decision Making Procedure table

- a) Particular attention should be given to the possibility of water running across carriageways eg. off adjacent fields after heavy rains, washing off salt previously deposited. Such locations may require treating in the evening and morning, and possibly on other occasions.
- b) When a weather forecast indicates possible hoar frost considerable ice deposits can occur on the road surface. This forecasted condition is ideally treated just before or as the hoar frost is forming. Monitoring of routes following treatment or re-treatment can take place if a particularly heavy hoar frost occurs.
- c) If possible the action is delayed slightly after rain to allow surface water to disperse. Where freezing conditions are expected soon after the rain ends the crews can be mobilised, held in the depot and commence salting as soon as the rain ends.
- d) Under these circumstances rain will freeze on contact with the road surface and full precautionary salting should take place even on dry roads. This is a most serious condition and should be monitored closely and continuously throughout the danger period.

Recommended spre	ad rates	(2021-2022) APPEN				
Weather Conditions	Road	Treatment				
Road Surface Conditions	Temp º C	Dry Salting (g/m²)	Ploughing			
Forecast RST at or above -2°C and dry road conditions, no hoar frost likely (dry air, low dew point)	+1 to -2	10	No			
Forecast RST at or above - 2°C and damp road conditions or hoar frost likely.	+1 to -2	15	No			
Forecast RST at or above - 2°C and wet road conditions or heavy hoar frost likely.	+1 to -2	20-25 (with possible retreatment)	No			
Forecast RST below - 2°C and dry road conditions, no hoar frost likely (dry air, low dew point).	Below -2	15	No			
Forecast RST below -2°C and damp road conditions or hoar frost likely	Below -2	15-20	No			
Forecast RST below -2°C and wet road conditions or heavy hoar frost <i>l</i> ikely.	Below -2	20-25 (with possible retreatment)	No			
Light snow forecast (<10mm)		25	No			
Medium/heavy snow or freezing rain forecast		25-40	No			
Freezing rain falling		25 (successive)	No			
Ice already formed or after freezing rain		20-25 (successive if required, higher if localised)	No			
Snow falling or fallen with covering exceeding 25mm		0-20 (successive)	Yes			
Slush following snow, temps forecast to fall below freezing.		20-25 (successive as required)	Yes			
Hard packed snow/ice		20 -25 (successive as required)	No			
Roads clear, lying snow on verges, (roads liable to re-icing)		20-25	Possibly, (drifting)			
		(with possible retreatment)				

#### Notes

- 1. All spread rates may be reduced by the decision maker to allow for residual salt on the network or no action carried out at all in dry conditions if sufficient levels are present. Reasons for alteration of recommended rate to be recorded on Daily Action Sheet.
- 2. Given variations of altitude and aspect treatments can be adjusted across routes if required to target specific areas. Spread rates for treatment of snow and ice etc. are generally set to allow completion of route using one load but can be increased locally within route if required. Any such adjustments to be recorded on Daily Action Sheet.
- 3. Where seepage exists this may require localised maximum spread rate (40g) and possible retreatment.
- 4. Due to restriction on amount of salt carried, spread rate on Route 7 is usually limited to 15g.

# **APPENDIX J**

# HIGHWAYS WINTER SERVICE ACTION SHEET

## **BLAENAVON DEPOT - Action Plans**

Route	Action	Cause	Start Time	Forecast Min Road Temp
1. Blaenavon (N)	Dry Salt 20g/m <sup>2</sup>	Forecast RST at or above -2°C. Wet road or heavy hoar frost likely wers and amend action if required	04.02.2022 20:00	-1.9
2. Blaenavon (S)	Dry Salt 20g/m <sup>2</sup>	Forecast RST at or above -2°C. Wet road or heavy hoar frost likely wers and amend action if required	04.02.2022 20:00	-1.9
NEW INN DE	POT - Action	Plans		
Route	Action	Cause	Start Time	Forecast Min Road Temp
3. Pontypool (N)	Dry Salt 20g/m <sup>2</sup>	Forecast RST at or above -2°C. Wet road or heavy hoar frost likely	04.02.2022 20:00	-1.9
Standby officer to	monitor any sho	wers and amend action if required		
4. Pontypool (S)	Dry Salt 20g/m²	Forecast RST at or above -2°C. Wet road or heavy hoar frost likely	04.02.2022 20:00	-1.9
Standby officer to	monitor any sho	wers and amend action if required		
4. Pontypool (S)	Blast wet areas	SECONDARY ACTION – SEEPAGE AREAS	05.02.2022 04:30	
Retreatment of w	et spots on all ro	utes using one vehicle		
5. Cwmbran (W) Dry Salt 20g/m <sup>2</sup>		Forecast RST at or above -2°C. Wet road or heavy hoar frost likely	04.02.2022 20:00	-1.9
Standby officer to	monitor any sho	wers and amend action if required		
6. Cwmbran (E) Dry Salt 20g/m <sup>2</sup>		Forecast RST at or above -2°C. Wet road or heavy hoar frost likely	04.02.2022 20:00	-1.9
Standby officer to	monitor any sho	wers and amend action if required		
7. Pontypool are mini gritter	20g/m <sup>2</sup>	Forecast RST at or above -2°C. Wet road or heavy hoar frost likely	04.02.2022 20:00	-1.9
Standby officer to	monitor any sho	wers and amend action if required		

 $ABX\Delta E$ 

#### **HIGHWAYS WINTER SERVICE GRITTING RECORD 2022/23**

#### **APPENDIX K**

REQUESTED BY				DATE		TIME		ROCC JOB NO.				
ROUTE	DRIVER INITIALS	NORMAL	NORMAL W	ITH PICK UP	NORMAL	NORMAL W	ITH PICK UP	SNOW CLEARING / DELAYED START HRS	START TIME	FINISH TIME	NO. OF LOADS	PLOUGHS FITTED
BLAENAVON N									Hrs	Hrs		
BLAENAVON S									Hrs	Hrs		
PONTYPOOL N									Hrs	Hrs		
PONTYPOOL S									Hrs	Hrs		
CWMBRAN W									Hrs	Hrs		
CWMBRAN E									Hrs	Hrs		
MINI GRITTER									Hrs	Hrs		
SPARE DRIVER									Hrs	Hrs		
TRAINING									Hrs	Hrs		
TRAINING MINI									Hrs	Hrs		
MINI GRITTER 2					•	•	•		Hrs	Hrs		
SUPERVISOR		Hrs		Hrs	5				Hrs	Hrs		

Temperature Recordings					
Location	Air	Road	Time		
Blaenavon - (Keepers) Trevethin					
Route 303					
New Inn Depot					
A472 Lower Race - Boundary					
TIME OF COMMENCEMENT/FINISH OF SNOW		Hr	rs Hrs		
LYING SNOW ON FOOTWAYS		YES/NO			
AREAS AFFECTED					

Details of No Access & Action Taken
Details OF Vehicle Breakdown & Action
Taken

STANDBY SUPERVISOR SIGNITURE

#### HIGHWAYS WINTER SERVICE/STANDBY CONTACT NOs 2022/23

#### APPENDIX L

# (INTERNAL COPIES ONLY)

APPENDIX M

# WINTER STANDBY ROTA 2022/23

# **OTHER USEFUL CONTACT NUMBERS**

#### **APPENDIX N**

# **APPENDIX O**

# HIGHWAYS WINTER SERVICE PLANT

#### **APPENDIX P**

# ADDITIONAL PLANT FOR SNOW CLEARANCE

# **APPENDIX Q**

<b>HIGHWAYS WINTER SERVICE – GRIT BIN EVALUATION</b>		REQUEST NO. DATE	
Bin location (Street)			
Ward			
Request by			
Contact details			
Duplicate request?		If <b>Yes</b> do not proceed	

Carriageway treatment Yes/No		
Footway treatment Yes/No		
Public Highway	If <b>No</b> do not proceed	
Is there a safe location for the bin? Yes/No		

Comments

CRITERIA	SEVERITY/FEATURE	POINTS	POINTS SCORED
Altitude	• > 200m	100	
	• 100 - 200m	50	
	• < 100m	0	
Gradient			
Maximum highway gradient	10 points for each 1% of measured		
within 50m of request location.	gradient		
Bend or junction within 50m of	<ul> <li>Bend 90deg or sharper</li> </ul>	50	
request location.	• Bend 90-135 deg	25	
	<ul> <li>Bend 135-180deg</li> </ul>	0	
	T junction	50	
	• Junction with busy main route	50	
Distance to existing bin	Less than 100m	-200	
	• 100-200m	25	
	<ul> <li>greater than 200m</li> </ul>	50	
Gritting routes	On gritting route	-200	
Known icing problem	History of ice problems	100	
Number of properties served	• > 30	50	
(only access)	• 10-30	25	
	Less than 10	0	
Nearby facilities	Shops	50	
	School/Nursery	50	
	Medical centre	50	
	Community centre	50	
	Near OAP/Disabled facility	50	
Access available to fill from	• Yes	0	
vehicle	• No	-100	
		TOTAL POINTS	

## **DISTRIBUTION LIST**

Copy No.To Whom Sent(I) Internal Copy(E) External copy

The Winter Service Plan (external version) is on Torfaen's website: <u>http://www.torfaen.gov.uk</u>

Economy and Environment:

Strategic Director, Economy and Environment (I) Deputy Director, Highways and Climate Change, Economy and Environment (I) Highways Duty Officers (I) (3 copies) Operations Duty Officers (I), (4 copies) Group Leader Transportation (I) Group Leader Highway Network (I) Structures and Network Manager, (I) Senior Highways Inspector (I)

#### **Other Council Departments:**

Head of Communications, Engagement and Civil Contingencies (I) Chief Financial Officer (E) Risk Manager, Finance (E) Call Torfaen (E) Control Centre, Blaenavon (E)

#### External bodies, via link:

Bron Afon Community Housing Association (E) South Wales Trunk Road Agent (E) Highways Group Manager, Caerphilly County Borough Council (E) Head of Environmental Management, Blaenau Gwent (E) Head of Engineering and Construction, Newport C.C. (E) Operations Manager, Monmouthshire County Council (E) Chief Police Officer, Gwent Police (E) Chief Fire Officer, South Wales Fire and Rescue (E) Chief Officer, South Wales Ambulance Service (E)

