

Local Highway Operations

Severe Weather Plan



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1.0 Aim of Plan

The aim of this plan is to provide a framework to the team for dealing with severe weather incidents within Local Highway Operations, the governance required, defining the triggers for activating the plan, roles and responsibilities, communications, and risk management relating to various weather conditions

This compliments and works in conjunction with the Corporate Response and Recovery Plan, Corporate Severe weather Plan and the Contractors Incident Response Plan where applicable

This plan focuses specifically on the actions to be taken by Local Highway Operations (LHO) which should broadly follow the principles laid out by the Joint Emergency Service Interoperability Programme

2.0 Emergency preparedness

2.1 Training

All LHO staff shall be trained to undertake their work in a safe manner, completion and updating of the Health and Safety training matrix will ensure they are given the appropriate training.

Further to this, staff should be fully aware of the risks when working in a severe weather event and have read and understood 'RA22 Site Visits with Severe weather and Emergency Situations' risk assessment, as well as undertaking Dynamic Risk Assessments when always working on the network

All staff involved in dealing with an emergency event should complete the E Learning course provided by JESIP on the Joint Doctrine interoperability framework, detailing the principles that should be applied, the link is below.

All Staff E-learning - JESIP Website

2.2 Event planning

With a notice period from various authorities of a severe weather event preparations are made by the service to ensure

- Adequate contractor resource is available including tree surgeon gangs, jetters and supply chain resource
- Adequate plant and equipment are available for emergency deployment, such as Sandbags and signage, pumping equipment, snow plough attachments
- Operations Management Centre (OMC) is set up
- Communication lines are clear and understood
- Inspectors and stewards are contacted to ensure they are available
- Overtime availability sought
- High risk sites are reviewed for risk and diversions planned see appendices

Our priorities during severe weather can be summarised as:

Ensuring the safety of users of the local highway network

- Maintaining and repairing infrastructure on the local highway network
- Managing the traffic flow consequences of severe weather (closures, diversion routes, VMS etc)
- Providing information to residents and road users (one.network, VMS, corporate comms etc)
- Providing support to other agencies and emergency services
- Protecting property from surface water from the highway.

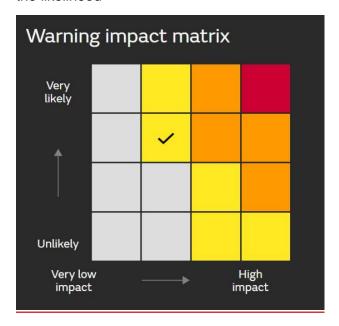
2.3 The scope of this plan covers

- Weather Events
- Flooding events
- Snow/Ice events

3.0 Activation of Plan

3.1 Weather Events

For weather events the Met Office uses the matrix below to signify the level of impact and the likelihood



Activation of this plan due to weather events is at the discretion of the Head of Local Highway Operations for all yellow alerts, the plan **will** be activated for all Amber and Red alerts

For weather events the Met office issue the following levels of risk

Yellow - Possible

- Chance of damage to trees and rooftiles
- Travel cancellations possible
- Small chance of power cuts

Yellow Warning: Many people may be able to continue with their daily routine, but there will be some that will be directly impacted and so it is important to assess if you could be affected. It is important to read the content of yellow warnings to determine which weather situation is being covered by the yellow warning.

Amber - Likely

- Likely damage to property roofs blown off
- · Good chance of danger from flying debris
- · Likely disruption to travel road, rail and air
- Good chance of power cuts/mobile coverage affected
- Falling branches likely

Amber Warning: There is an increased likelihood of impacts from severe weather, which could potentially disrupt the network. This means there is the possibility of travel delays, road

and rail closures, power cuts and the potential risk to life and property. Proceed within the health and Safety guidelines available to you

Red - Expected

- Damage to property roofs blown off
- · Danger from flying debris
- · Disruption to travel road, rail and air
- · Power cuts/ mobile coverage affected
- · Uprooted trees likely

Red Warning: Dangerous weather is expected and, if you haven't already done so, you should act now to keep yourself and others safe from the impact of the severe weather. It is very likely that there will be a risk to life, with substantial disruption to travel, energy supplies. Do not travel the network unless it is critical, and you have obtained permission from the Emergency control hub

Key Actions to consider for Weather Events

Contractor resource available including Tree surgeons and reactive gangs Road closure signs and Traffic management resource available Availability of VMS

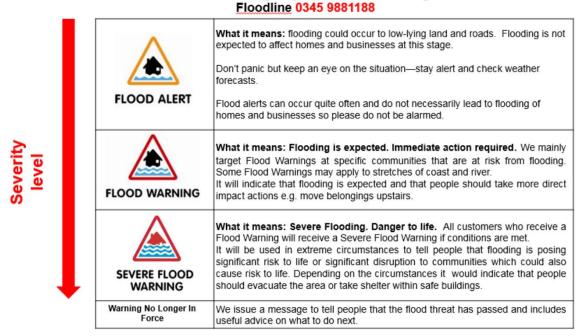
Maintain a communications list and regularly update

3.2 Flooding events

Activation of this plan due to Flooding events is at the discretion of the Head of Local Highway Operations for all flood alerts and warnings, the plan **will** be activated for all Severe Flood warnings and where there is a medium or High impact as detailed below For Flood hazards the Environment Agency post warnings and alerts through the Gov.uk website https://check-for-flooding.service.gov.uk/

There are 3 levels of flood risk warnings, flood alert, flood warning and severe flood warning

Environment Agency Flood Alerts/Warnings



POTENTIAL IMPACTS KEY				
	Very low	Low	Medium	High
Typical impacts	Minimal disruption Generally no impact, however there may still be: isolated and minor flooding of low-lying land and roads Isolated instances of spray/wave overtopping on coastal promenades Little or no disruption to travel although wet road surfaces could lead to difficult driving conditions	Low Minor disruption Localised flooding of land and roads – risk of aquaplaning Localised flooding could affect individual properties Individual properties in coastal locations affected by spray and/or wave overtopping Localised disruption to key sites identified in flood plans (e.g. railways, utilities) Local disruption to travel – longer journey times	Medium Significant disruption Flooding affecting properties and parts of communities Damage to buildings/structures is possible Possible danger to life due to fast flowing/deep water/ wave overtopping/ wave inundation Disruption to key sites identified in flood plans (e.g. railways, utilities, hospitals) Disruption to travel is expected. A number of roads are likely to be closed	High Severe disruption Widespread flooding affecting significant numbers of properties and whole communities Collapse of buildings/structures is possible Danger to life due to fast flowing/ deep water/ wave overtopping/ wave inundation Widespread disruption or loss of infrastructure identified in flood plans (e.g. railways, utilities, hospitals) Large scale evacuation of properties may be required Severe disruption to travel. Risk of motorists becoming stranded

Key Actions to consider for Flooding events

Ensure adequate number of sandbags are available and prioritise distribution Ensure water pumps are available

Ensure Jetting machines are available and consider deployment to known hot spots in advance of anticipated flooding

Identify high risk sites for flooding and send resource out to monitor and report Road closure signs and Traffic management resource available Availability of VMS

Maintain a communications list and regularly update

Set up direct contact with Environment Agency for advice, forecasting and collaborative working Ensure the Subway maintenance contractor is available

3.3 Snow Events

If snow fall is deep enough to cause stranded vehicles, road closures and the winter treatment is not sufficient to clear the network then this plan should be activated

As a guide high impact effects below should activate the plan

- Transport routes and travel services affected for a period of more than 24hours with long delays
- Large numbers of stranded vehicles and wide disruption to rail, road, and air services
- Wide interruptions to power and utility services
- Rural communities cut off for more than 24hours due to deep snow

Key Actions to consider for snow events

Ensure snow ploughs are ready to be used Ensure adequate salt stocks are in place Identify pedestrian areas that need clearing Maintain a communications list and regularly update

3.4 Summary of Activation

Event	Activation Trigger
Severe Weather	Yellow Alert - at the discretion of Head of Highway Operations Amber and Red alerts – Activate
Flooding	Flood alert and Flood warning – at the discretion of the Head of Highway Operations Severe Flood Warning – Activate The impact is medium or High
Snow	High impact effects

4.0 Roles and Responsibilities

4.1 Highways Operational Management Centre (OMC)

This should be located at either Drayton or Clapham depots but if the group cannot get to these locations, it can be a virtual hub via Teams

A collaborative approach will be undertaken but the Chair will be Head of Local Operations Core Membership

Job Title	Organisation	Name	Contact number
Head of Local Highway	WSCC	Michele Hulme	
Operations			
Operational Manager Central	WSCC	Chris Dye	
Operational Manager Eastern	WSCC	Ben Whiffin	
Operation Manager Western	WSCC	Charlotte Weller	
Senior permit Coordinator	WSCC		
Contract Manager	BBLP		
Operations Manager	BBLP		
Senior Agent	BBLP		
		Zoe Capel	

WSCC Cover

If the Head of Local Highways is not available, then the hierarchy lead ladder will be Chris Dye, Ben Whiffin, Charlotte Weller

If the above WSCC staff are on leave or sick leaving the OMC short of resource then the following staff will be considered as back up, the Head of Highway operations, or the nominated deputy, will make that decision

Job Title	Organisation	Name	Contact number
Contract Support Manager	WSCC	Bob Mander	
Inspection Manager	WSCC	Ross Denby	
Cyclical Maintenance Manager	WSCC	Brian Lambarth	
Senior Permit Coordinator	WSCC	Ellie Noble	

4.2 OMC Responsibilities

The OMC will work as one team to ensure the contractor and client staff resources are used effectively, agreeing priorities and communication lines

On going dynamic risk assessments will be made to assess the overall safety of site staff and if necessary, will instruct them to return to the depot or home

Overall control with a holistic view of resource locations and the county pressures that need to be addressed

Collate county wide road closures and inform RET and relevant stakeholders

Develop and maintain an incident log recording actions taken and why, outcomes, date and times of decisions and actions

Keep Cabinet members, relevant stakeholders and senior management updated with key information

Develop rota's for 24/7 hours and out of hours cover, liaise with AHM's

Consider implications of road closures and actions required

Prioritise flooding reactions based on the Resilient Network or where property flooding from the highway is anticipated

4.3 Area Highway Managers (AHM) Responsibilities

In Conjunction with the Customer Service Officers the AHM will triage all incoming reports
In conjunction with the OMC keep Districts, Borough and Parishes within their area updated
Assign enquiries direct to site staff if required

Keep the OMC always updated and at least every 60 minutes

Monitor and check on location and safety of all site staff within their team, be the buddy

Ensure there is team cover between the hours of 7am and 6pm

Keep a record of road closures as they happen and inform the OMC

4.4 Stewards and Inspectors (Site Staff) responsibilities

Be Safe, be extra vigilant and undertake on going dynamic risk assessments, do not take risks and if you feel unsafe stop activities and report to your AHM

Always wear PPE and ensure vehicle trackers are on

Ensure mobile Phones are fully charged

Provide regular updates to your AHM of where you are and network conditions/defects

Raise 2-hour defects where required

May need to adjust working hours to cover the duration of the event

5.0 Risk Management

During all periods of a weather event or emergency the risks will be identified and mitigated by everyone involved

Dynamic risk assessments will be undertaken at all times

There will be a full understanding of RA22 Site visits with severe weather and emergency situations by all WSCC staff involved



RA 22 Site visits in severe weather.docx

Lone working risk assessment should be read



RA 02 Lone Working.docx

The Flooding risk assessment should be read

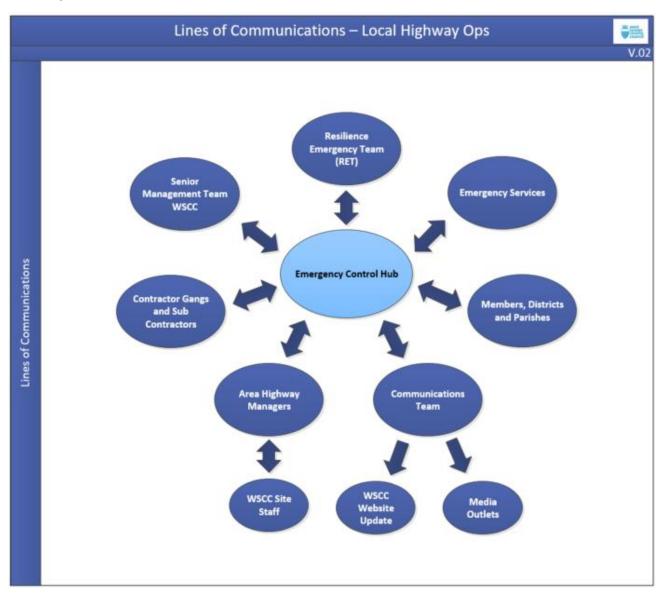


RA 13 Flooding.docx

Inexperienced or new staff will not undertake lone working, the Area Highway Managers will determine who this applies to within their teams

6.0 Communications

The diagram below details the lines of communication that should be followed



It is essential that the OMC has an oversight of events happening across the county and then communicates updates, information and impacts with key stakeholders. For all groups a communication log should be prepared that includes telephone numbers and email addresses

Key messages to the public should be

- Listen to weather warnings; take action to protect your property but don't risk your life.
- Prepare an emergency kit for your home containing vital supplies for your family.
- Avoid non-essential journeys and be aware of local road closures, school closures and disruption to public transport.
- If travelling by car, let others know of your plans, take warm/waterproofed clothes, a sleeping bag, some hot drink and food.
- Your business should be prepared for weather-related disruption, make sure

you have a plan and have shared it with your staff, suppliers and other key stakeholders.

7.0 Joint Emergency Service Interoperability Programme (JESIP)

JESIP defines a framework for dealing with emergency events providing a standard approach to multi agency working using tried and tested models and principles The link below is to the Joint Doctrine framework

http://teamspace.westsussex.gov.uk/teams/HT/ho/Shared%20Documents/Severe%20weather%20pln/JESIP-Joint-Doctrine-October-2021 ACCESSIBLE.pdf

The high-level principles are detailed below

Co-locate

Co-locate with other responders as soon as practicably possible at a single, safe and easily identified location.

Communicate

Communicate using language which is clear, and free from technical jargon and abbreviations.

Co-ordinate

Co-ordinate by agreeing the lead organisation. Identify priorities, resources, capabilities and limitations for an effective response, including the timing of further meetings.

Jointly Understand Risk

Jointly understand risk by sharing information about the likelihood and potential impact of threats and hazards, to agree appropriate control measures.

Shared Situational Awareness

Establish Situational Awareness by using METHANE and the Joint Decision Model.

Co Locate

There are many benefits of co-location, such as improved communication and understanding that support joint working. With the use of technology, co-location can be virtual; this may be particularly beneficial for incidents that involve a regional or national response or are protracted.

Communication

People should start from a position of considering the risks and harm if they do not share information.

The following principles supports successful communications between responders

- Exchanging reliable and accurate information, such as critical information about hazards, risks and threats
- Ensuring the information shared is free from abbreviations and other potential sources of confusion
- Understanding of the responsibilities, capabilities and limitations of each of the responder organisations involved
- Clarifying that information shared, including terminology and symbols, is understood and agreed by all involved in the response
- Nominating a point of contact in each control room or group and establishing a method of communication between all of them

Co-ordination

Co-ordination involves control rooms and responders of all levels, be they on scene or at a Tactical or Strategic Coordinating Group, discussing the available resources and activities of each responder organisation, agreeing priorities and making joint decisions throughout the incident.

To decide who the lead should be, factors such as the phase of the incident, the need for specialist capabilities and investigation, during both the response and recovery phases should be considered.

Jointly Understand risk

Each organisation should carry out their own risk assessments, then share the results so that they can plan control measures and contingencies together more effectively. Individual dynamic risk assessment findings may be used to develop the analytical risk assessment for the incident.

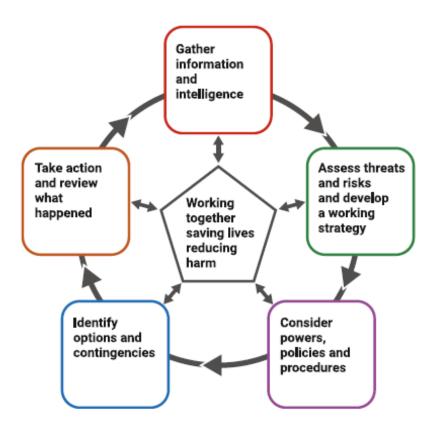
By jointly understanding risks and the associated mitigating actions, organisations can promote the safety of responders and reduce the impact that risks may have on members of the public, infrastructure and the environment.

Shared situational awareness

Discussion between control rooms should be frequent and cover the following key points:

- Is it clear who the lead organisation is at this point? If so, who is it?
- What information and intelligence does each organisation hold at this point?
- What hazards and risks are known by each organisation at this point?
- What assets have been, or are being, deployed at this point and why?
- How will the required agencies continue communicating with each other?
- At what point will multi-agency interoperable voice communications be required, and how will it be achieved?

The Joint decision model is recommended



The pentagon at the centre of the JDM reminds responders that all joint decisions should be made with reference to the overarching or primary aim of any response to an emergency – to save lives and reduce harm.

Responder organisations should consider and not discount sources of local or specialist knowledge, as they may be able to provide information about the incident or the location.

Assess threats and risks and develop a working strategy

Working together saving lives reducing

Gather information and intelligence

The following process should be followed to assess risks and actions

Identify Hazards

This begins with the initial call to a control room and continues as first responders arrive on scene. Information gathered by individual agencies should be disseminated to all first responders, control rooms and partner agencies effectively.

Carry out a Dynamic Risk Assessment (DRA)

Individual agencies carry out dynamic risk assessments, reflecting the tasks and objectives to be achieved, the hazards identified and the likelihood of harm from those hazards. The results should then be shared with all agencies involved.

Identify Tasks

Each individual organisation should identify and consider their specific tasks, according to their role and responsibilities. These tasks should then be assessed in the context of the incident.

Apply Risk Control Measures

Each organisation should consider and apply appropriate control measures to ensure any risk is as low as reasonably practicable. The hierarchy of control should be considered when agreeing a co-ordinated control measure approach: Elimination, substitution, engineering controls, administrative controls, and personal protective clothing and equipment.

Have an Integrated Multi-agency Operational Response Plan

The outcomes of the hazard assessments and risk assessments should be considered when developing this plan, within the context of the agreed priorities for the incident. If the activity of one organisation creates hazards for a partner organisation, a solution must be implemented to reduce the risk to as low as reasonably practicable.

Record Decisions

The outcomes of the joint assessment of risk should be recorded, together with the jointly agreed priorities and the agreed multi-agency response plan, when resources permit. This may not be possible in the early stages of the incident, but post-incident scrutiny focuses on the earliest decision-making.

Consider powers, policies and

A common understanding of relevant powers, policies and procedures is essential, to ensure that the activities of responder organisations complement rather than compromise each other.

Identify options and contingencies

Potential options or courses of action should be evaluated, considering:

Suitability

Does it fit with the strategic direction?

Feasibility

Can it be done with the available resources?

Acceptability

Is it legal, morally defensible and justifiable?

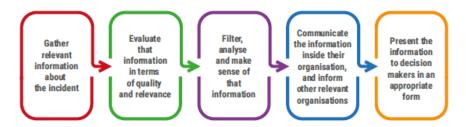
Take action and review what happened

Building shared situational awareness, setting direction, evaluating options and making decisions all lead to taking the actions that are judged to be the most effective and efficient in resolving an emergency and returning to a new normality.

Actions and the subsequent outcomes should be regularly reviewed. As information or intelligence becomes available or changes during the incident, responders should use the this to inform their decision-making until the incident is resolved.

Information assessment and use

An organisation responding to a crisis or incident should:



Recording Decisions

As an absolute minimum, decision logs should contain the:

- **Decision** what decision has been made?
- **Rationale** what is the rationale behind this decision, including consideration of other options?
- Action what action is required to implement the decision, by whom and by when?
- Date and time the decision was made

High Risk sites

A29 Church Hill Pulborough – Potential landslips

Event Detail

Due to private land issues, the A29, Church Hill, Pulborough is at risk of material and trees entering the footway and carriageway. As a result, when certain weather events are forecast, or risks observed, there may be occasions when a road closure and formal diversion are implemented. This section of the A29 is part of the Resilient Network and its closure has an impact on the local and countywide services, as well as impacting the free flow of traffic in the local area and wider afield.

First response

- If an amber or red weather warning for wind is issued, this should be reviewed by officers to understand the duration and severity. If there are concerns with the impact this warning may have on the safety of the highway user, Landbuild should be instructed with as much notice as possible to close Church Hill and implement the formal diversion route, as attached below.
- If red weather warning is issued for rain, and in some cases of prolonged rainfall under an
 amber warning, officers should review the duration and severity of the adverse weather
 to make an informed decision of what action is required. If there are concerns with the
 impact this warning may have on the safety of the highway user, Landbuild should be
 instructed to close Church Hill and put out a diversion route, as attached below.
- If Landbuild or WSP, whilst undertaking pre-agreed daily or monthly inspections respectively, report concerns with any part of the private land flanking Church Hill this should be reviewed by officers with the appropriate and proportionate actions taken depending on the risk(s) presented.
- If a customer or stakeholder enquiry is issued with concerns of the embankments or trees, this should be reviewed, assessed by a suitably experienced officer, with the appropriate and proportionate actions taken depending on the risk(s) presented.
- If an OOH call is received regarding the concerns, the gang should attend site within 2 hours to establish the issues at the site and report back to the Duty Agent. The Duty Agent should contact the Duty OOH Manager to discuss the issues and formulate a plan depending on the risk(s) presented.
- If a closure is required OOH, BBLP are to deliver the initial closure and direct contact to be made with Landbuild's TM company Safe TM (With Landbuild contacted to be made aware) who will take over the BBLP closure once the diversion signs have been implemented.
- Any closure should be followed up with a robust comms approach as set out below:
 - Send a internal key stakeholder email to the list of contacts below providing an update of the incident that has occurred, action being taken and likely timescales where applicable.

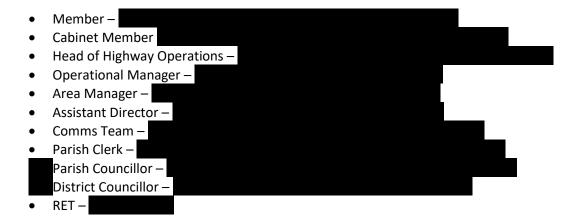
- Send an external stakeholder email to key business, schools etc, with similar information to the internal email (See attached email)
- Liaise with the Comms Team and Zoe Capel to get proactive media and social media comms out.
- If an OOH closure is required, the OOH Duty Manager should inform the Duty Comms rep, the Duty RET rep and the Duty Director.

File note:

• Daily inspections are undertaken by Richard Finn at Landbuild and monthly principal inspections are being undertaken by WSP.

Communications

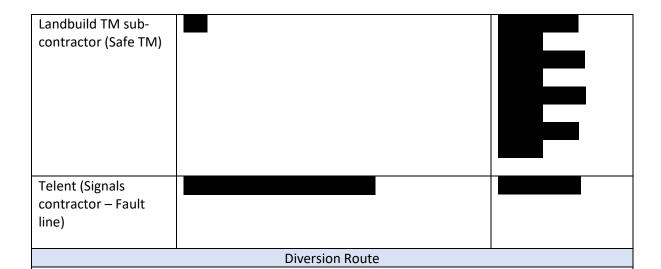
Who to contact for internal key stakeholder:



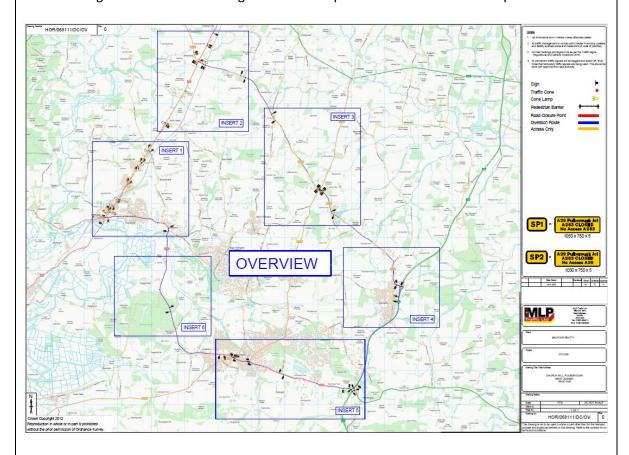
Who to contact for external stakeholder, see list in attached email:



Key Contact numbers			
Contact	E mail		Mobile
Michele Hulme			
Chris Dye			
Adam Bazley			
Richard Finn (Landbuild)			
Citywatch (BBLP OOH provider)			02380798104
Kenny Hills (BBLP)			
Dan Clover (BBLP)			
Owen Seymour (WSP			
Geotechnical			
Engineer)			
Signals Team			



The following attachments are the agreed diversion plan and the list of roads in question.



Closure

A29 London Road, Coldwaltham just south of Swan Bridge

Diversion

A29 Bury

A29 Bury Hill

A29 Whiteways Lodge Roundabout

A284 London Road, Houghton

A284 Arundel By Pass

A27 Ford Road Roundabout

A27 Arundel Relief Road

A27 The Causeway, Arundel

A27 Station Road, Arundel

A27 Arundel Road

A27 Crossbush By Pass

A27 Arundel Road

A27 PATCHING EASTBOUND EXIT SLIP

PATCHING NORTHERN ROUNDABOUT

A280 Long Furlong

A24 Findon Roundabout

A24 Horsham Road

A24 Washington Roundabout

A283 Storrington Road

A283 Washington Road

A283 High Street, Storrington

A283 West Street, Storrington

A283 Pulborough Road

A283 Wiggonholt

A283 Mare Hill Road, Pulborough

A283 Lower Street, Pulborough

A29 London Road

Closure

A29 Church Hill, Pulborough

Diversion

The A29 Church Hill, Pulborough is closed between the junctions of Church Place and the A283 Lower Street. Please use the official diversion route to avoid disruption to local residents. Local businesses remain open.

The diversion route is as follows:

- 1. A283 via Storrington
- 2. A283 via Washington
- 3. A24 Northbound via Ashington
- 4. A24 Northbound via Shipley
- 5. A24 Northbound via West Grinstead
- 6. A272 Westbound via Shipley
- 7. A272 Westbound via Coolham
- 8. A272 Westbound via Coneyhurst
- 9. A272 Westbound via Billingshurst
- 10. A29 via Billingshurst
- 11. A29 via Adversane
- 12. A29 Pulborough

The only element not captured on the plan is the provision of no parking cones (NPC) for the entire length of New Place Road, which are required to cater for the vehicles using New Place Road, Link Lane and Rectory Lane as an informal and unapproved diversion route. Please request NPC if the duration of the closure exceeds more than 4 hours.



Aftermath actions

- Contact Landbuild, Richard Finn, for any site related issues
- Contact the Signals Team to discuss the existing signals and any requests for Telent to support.
- Arrange for daily inspections of diversion route signage.
- Undertake periodic checks of the side roads affected by a closure, predominantly, New Place Road, Link Lane, and Rectory Lane.
- Liaise with local landowners to make them aware of the decisions made and the reasons why.
- Inform Legal services of the decisions made.
- Keep a record of costs associated with closure and any related civils works.
- Keep stakeholders updated with regular communications