

TWEED VALLEY HOSPITAL MANAGEMENT PLAN - FLOOD EMERGENCY RESPONSE PLAN

27/06/2019 | ISSUE No: 6.0



Plan Revision Status

Date	Revision (in numbers)	Purpose and Summary of Amendments	Reviewed by	Approved by
05/02/2019	2.0	Initial ERP	LB	Luis Biaggini
24/04/2019	3.0	Update for SSD and TSA Requirements	JT	Luis Biaggini
09/05/2019	4.0	SSD Specific and HI Comments	Monique Windley	Luis Biaggini
16/06/2019	5.0	SSD Final Issue	Monique Windley	Luis Biaggini
27/06/2019	6.0	Flood Specialist Feedback Input	Monique Windley	Luis Biaggini

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State Significant Development Conditions

Name of this Plan (as per SSD Conditions): Flood Emergency Response Sub-Plan (FERSP)

B31. The Flood Emergency Response Sub-Plan (FERSP) must address, but not be limited to, the following:

<p>(a) be prepared by a suitably qualified and experienced person(s);</p>	<p><u>Plan prepared by:</u> Monique Windley – Lendlease Site Environmental Engineer Geoff Barrow – Lendlease Senior Site Manager</p> <p><u>Plan prepared in accordance with recommendations made in:</u> Tweed Valley Hospital – Flooding and Coastal Hazards Assessment – BMT</p> <p><u>Plan reviewed by:</u> Damion Cavanagh – Principle at BMT (an international design, engineering, science and risk management consultancy) – Refer to Review Appendix 10 for evidence of consultation</p>
<p>(b) address the provisions of the Floodplain Risk Management Guideline (OEHL, 2007);</p>	<p>BMT who prepared the Tweed Valley Hospital – Flooding and Coastal Hazards Assessment also have previously prepared flood models and mapping for the Tweed River. The models prepared in these prior studies were used to model the risk of flooding in their assessment.</p> <p>The following studies were used:</p> <ul style="list-style-type: none"> ▣ Tweed Valley Flood Study Update (BMT WBM, 2009); and ▣ Tweed Valley Floodplain Risk Management Study (BMT WBM, 2014).
<p>(c) include details of:</p> <p>(i) the flood emergency responses during the Stage 1 works;</p> <p>(ii) flood warning time and flood notification;</p> <p>(iii) assembly points and evacuation routes for the contractors and employees;</p> <p>(iv) evacuation and refuge protocols; and</p> <p>(v) awareness training for employees and contractors.</p>	<p>(i) Refer to Section 6.0 Emergency Response</p> <p>(ii) Refer to Section 20 Emergency Scenarios Response – Flooding – Notification and Warning</p> <p>(iii) Refer to Appendix Three – Evacuation Diagram and Section 20 Emergency Scenarios Response – Flooding</p> <p>(iv) Refer to Appendix Three – Evacuation Diagram and Section 20 Emergency Scenarios Response – Flooding</p> <p>(v) Refer to Section 20 Emergency Scenarios Response – Flooding – Training and Awareness</p>

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1.0 INTRODUCTION

This Emergency Response Plan (ERP) outlines the general requirements for initiating an emergency response that could occur because of a workplace incident, condition, external threat or natural causes. This plan also outlines the subsequent management and communications response planned for any potential and actual emergencies which may occur on or impact this Project/Workplace.

2.0 SCOPE

This ERP applies to all personnel at the workplace identified above including all employees, contractors, visitors or other workers.

3.0 RELATED DOCUMENTS

- Background documents that support the detail outlined in this Emergency Response Plan are:
Emergency Response Procedure
- Emergency Call Ambulance Poster
- Evacuation / Emergency Drill Evaluation form
- Emergency Planning Committee Charter
- AS3745 Planning for Emergencies in Facilities
- First Aid in the Workplace – Code of Practice (Safe Work Australia)
- First aid facilities and services; Workplace amenities and facilities; Personal protective clothing – Code of Practice (Worksafe WA)
- First Aid in the Workplace – Compliance Code (WorkCover Victoria)
- Floodplain Risk Management Guideline

4.0 DEFINITIONS

Emergency Control Organisation (ECO)

Workplace Manager and nominated representative(s) responsible to direct and control the implementation of the emergency response plan.

Emergency Response Team (ERT)

Specialist personnel appointed to attend specific incidents, to contain, control or eliminate the emergency using emergency response equipment, e.g. fire brigade, ambulance service or paramedic.

Emergency Planning Committee (EPC)

HOSF persons responsible for the documentation and maintenance of the pro-forma emergency plan.

HOSF

Means the EHS Head Office Service Function located within the LLB head office.

Workplace Manager

Means Construction Manager (construction site), Project Manager, General Manager, Practice Manager (Applied Insight), or any other workplace or department specific manager of Lendlease Building with the responsibility for day-to-day management or control of a workplace(s).

5.0 PROTECTION PRIORITIES

Lendlease have the following protection priorities in the event of an emergency:

- Safety of People; then

- Protection of the Environment; and finally
- Safeguarding of commercial considerations

6.0 EMERGENCY RESPONSE

Lendlease has an Emergency Response Plan and a nominated **Emergency Control Organisation Leader** at each of its workplaces. The primary role of the workplace **ECO Leader** is to direct and control the implementation of the emergency response plan and render personnel and facilities safe by the application of local resources and liaison with the Emergency Response Team, i.e. external emergency services.

The initial response to an emergency and the implementation of the emergency response plan may include the following actions:

- R Remove** workers from immediate danger (if safe to do so)
- A** Raise the **Alarm** by contacting appropriate emergency services advising the nature, status and exact location of the incident/condition/external threat and advise what action has been taken or is underway
- C Contain** the incident and its effects and make the area safe – preserve the scene for investigation; and
- E Evacuate** workers if required and undertake a head count

7.0 RESPONSIBILITIES

Various sections of this ERP detail roles and responsibilities allocated to specific position holders for different activities to be undertaken at a specific time or in response to specific events. Principal responsibilities are as follows:

Role	Responsible Person
Emergency Planning Committee (EPC)	Chaired and managed by HOSF
Emergency Control Organisation (ECO)	Chaired and managed by the Workplace Manager
Emergency Response Team (ERT)	Emergency Services e.g. fire brigade, ambulance service or paramedic.

8.0 EMERGENCY SCENARIOS

The Project/Workplace Impacts and Hazards Risk Assessment has identified emergency response at this Project/Workplace as high risk. The following have been identified as credible emergency scenarios:

Type of emergency	Credible Emergency	
	Yes	No
Bogged vehicle - recovery	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bomb threat	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Contact with overhead wires	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contact with in-ground services	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Excavation failure, e.g. partial collapse, ingress of water, contaminated air	<input checked="" type="checkbox"/>	<input type="checkbox"/>
External threat (e.g. terrorist activity, hostages, demonstration or civil unrest)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Failure of temporary containment structure (e.g. erosion and sediment control)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fall arrest - Rescue from a suspended safety harness	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fire or explosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Flooding	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground or other major subsidence	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Immersion of a person(s) in water or a water-body	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Internal emergency - electrical power failure, water supply failure, hoist/lift/plant failure or structural collapse, odour/gas leak/toxic emission	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Medical emergency	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural disaster (e.g. cyclone, bushfire, earthquake);	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Personal Threat / Robbery / Intruder	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pollution or the potential for pollution, e.g. leaks or spills	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roll over of mobile plant	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rescue from tower crane	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rescue from jump form	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rescue from swinging stage scaffold	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Storage of dangerous goods and hazardous substances	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stretcher access/ egress and first aid	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Structural collapse e.g. tilts up/precast high winds/prop failure or formwork partial collapse;	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicular/plant collision (public or project)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Other (List) –		<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Refer to Section 20 for specific emergency response details for the above emergency scenarios. These response details may be printed and placed on notice boards at the workplace at the discretion of the ERT Leader.

9.0 TRAINING

Training requirements for members of the ECO listed in Appendix One shall be reviewed by the Workplace Manager when this plan is first established and thereafter at maximum 12 monthly intervals for offices and plant yards and maximum 6 monthly intervals for construction projects using the LLB Learning and Development Training Matrix. The Workplace Manager is responsible for ensuring that the ECO members are competent to fulfil their appointed ECO roles related to the direction and control of the implementation of the emergency response plan

10.0 PERIODIC DRILLS

This ERP shall be tested to determine its effectiveness at maximum 12 monthly intervals for offices and plant yards and maximum 6 monthly intervals for construction projects. Each emergency exercise shall:

- Test emergency preparedness and response to a predetermined scenario that has been identified in this plan including at least one environmental scenario every 24 months during the life of a construction project or occupancy of the asset.
- Include a documented description of the scenario which is communicated to all emergency exercise participants
- Include a documented review of learnings and actions post exercise which is communicated to all emergency exercise participants by completing the LLB Evacuation/Emergency Drill Evaluation Form or equivalent where the exercise is managed by a 3rd party.

11.0 EMERGENCY CONTACT NUMBERS

Emergency contact numbers are listed in Appendix Two of this ERP and must be displayed in prominent locations at this Project/Workplace.

12.0 EVACUATION DIAGRAM, ROUTES AND ASSEMBLY AREAS

An emergency Evacuation Diagram that complies with AS3745 must be displayed in prominent locations where workers and visitors can view the diagram. A copy of this Evacuation Diagram is contained in [Appendix Three](#) of this ERP.

Evacuation Diagrams shall be reviewed at maximum monthly intervals for all construction workplaces and updated to reflect any change. Evacuation Diagrams shall comply with the Evacuation Diagram Checklist contained in Appendix 3.

13.0 EMERGENCY EQUIPMENT AND FIRST AID LOCATIONS

An Emergency Equipment Diagram that details the location of fire-fighting and spill response equipment plus first aid facilities shall be displayed in prominent locations where workers and visitors can view the diagram. A copy of this diagram is contained in [Appendix Four](#) of this ERP.

At the discretion of the ECO Team Leader, the emergency Evacuation Diagram and Emergency Equipment Diagram may be combined.

A First Aid Risk Assessment shall be conducted upon commencement of works at the workplace and reviewed at maximum 3 monthly intervals for construction projects and where material changes occur at offices or plant yards using the pro-forma included in Appendix Six. This risk assessment will assist in



determining the requirements for first aid facilities and the number of competent first aiders to be provided at the workplace.

The inspection and testing of first aid facilities and equipment shall be undertaken as outlined in Section 19.

14.0 ACTIVATION OF THIS PLAN

This plan may be activated by:

- A member of the ECO at any time
- The sounding of the workplace emergency siren
- The advent of an emergency of the kind identified within this plan

In deciding whether to notify the Lendlease Building Crisis Management Team, the site ECO Team Leader must consider the following:

1. Is external help required beyond project/workplace resources e.g. emergency services?
2. Could the public image of the Company be affected?
3. Could the incident impact on the Company's business or relationship with clients or government?
4. Could the incident have a major adverse impact on the environment?

If the answer to any of the above is "YES" then the requirements of the Lendlease Building Australia Crisis Management Handbook should be followed.

The decision of whether to activate the Lendlease Crisis Management Plan is the responsibility of the Lendlease Building ECO Leader.

15.0 TERMINATION OF AN EMERGENCY

An emergency may be terminated by one of the following:

- By the ECO Team Leader; or
- By the Emergency Response Team Leader; e.g. Fire Brigade Commander
- If the emergency has been escalated to LLB Crisis Management Team, by the LLB Crisis Management Team.

16.0 NOTIFICATION TO EXTERNAL AUTHORITIES

Formal notification to external authorities / regulators (other than emergency services) must be timely and undertaken by the ECO Team Leader after consultation with the relevant Regional EHS Manager and/or Head of EHS.

17.0 PERSONAL EMERGENCY EVACUATION PLAN

The ECO is responsible for developing, implementing and testing at regular intervals, Personal Emergency Evacuation Plan(s) (PEEPs) for people identified at the workplace with disabilities. These plans are attached where applicable at Appendix Five.

18.0 LOG OF EVENTS

The ECO Team Leader shall be responsible for appointing a Communications Officer who shall be responsible for completing the log of events during an emergency as contained in Appendix Seven.

This log shall be used to recording the following events:

- Time emergency was declared
- Time 000 call made to emergency services
- Time head count of workers at evacuation assembly point was finalised
- Time emergency services arrived at the workplace
- Time and detail when incident control was handed over to emergency services
- Time and detail of incoming calls from emergency services, LLB, client and other 3rd parties
- Time and detail of all outgoing calls to emergency services, LLB, client and other third parties
- Time and detail when Regulators attended the workplace
- Time and detail when union or other third parties attended the workplace
- Other actions taken relevant to the emergency scenario
- Time and details when emergency services handed back the workplace or incident control
- Time the emergency was terminated

19.0 ACTION SUMMARY

The ECO Team Leader is responsible for ensuring the following actions are undertaken in line within the designated timeframe:

Action Required	Other	Monthly	Quarterly	6 Monthly	Annually
Review this plan (as per requirements of Project/workplace EHS Management Plan)			<input checked="" type="checkbox"/>		
Emergency Control Organisation Member Training Needs Analysis Offices/Plant Yards					<input checked="" type="checkbox"/>
Emergency Control Organisation Member Training Needs Analysis Construction Projects				<input checked="" type="checkbox"/>	
Conduct emergency scenario drills Offices/Plant Yards					<input checked="" type="checkbox"/>
Conduct emergency scenario drills Construction Projects				<input checked="" type="checkbox"/>	
Review and update Evacuation Diagram, Routes and Assembly Areas Offices/Plant Yards					<input checked="" type="checkbox"/>
Review and update Evacuation Diagram, Routes and Assembly Areas Construction Projects		<input checked="" type="checkbox"/>			
Review First Aid Risk Assessment Construction Projects			<input checked="" type="checkbox"/>		
Routine Check of Evacuation Alarm/Siren (minimum requirement)		<input checked="" type="checkbox"/>			
Check of Evacuation Alarm/Siren after relocation, repair or the like	<input checked="" type="checkbox"/>				
Check Nurse Call system (minimum requirement)		<input checked="" type="checkbox"/>			
Check fire-fighting equipment	Refer to EHS Management Plan				
Weekly Cyclone Checklist	Required weekly during cyclone season by Projects/Workplaces situated within cyclone affected regions (refer Cyclone Plan section 20)				

20.0 EMERGENCY SCENARIOS RESPONSE

Flooding

<p>PLANNING</p>	<ul style="list-style-type: none"> ▪ Contact the local council / shire and confirm flooding risk and planning requirements Check Geoscience Australia website: http://www.ga.gov.au/flood-study-web/#/searchApp/searchBasic ▪ Download the flooding planning guide appropriate to your region/state and implement requirements ▪ Ensure flood response materials are available for immediate use e.g. sand and sandbags, plastic sheeting, loudhailer first aid kit ▪ Ensure all workers are briefed on flooding risk during workplace inductions and at other appropriate times ▪ Subscribe to the National Alert System: http://www.emergencyalert.gov.au/ ▪ Ensure the dangerous goods and hazardous materials register is up to date and all storage is in non-flood prone areas ▪ Ensure the workplace can be effectively secured from intruders if abandoned during a flood event ▪ Ensure all IT systems are backed up regularly to off-site servers ▪ Ensure all isolation points for water, electricity and gas are communicated to all ECO members and included on the Evacuation Diagram or Emergency Equipment Diagram ▪ Gather and reviewing background information of the location of the site – refer to Appendix B Flood Assessment ▪ Determining and assessing the waterway entrance type to site which will lead to the appropriate modelling approach used for determining an ocean water level boundary condition. ▪ Establish a methodology to determine ocean boundary conditions. ▪ Create relative timing of catchment flooding and oceanic inundation. ▪ Determination of design flood levels – refer to Appendix A ▪ Conduct sensitivity testing for key flood events. ▪ Testing the implications of sea level rise on the location of the site.
<p>NOTIFICATION AND WARNING</p>	<ul style="list-style-type: none"> ▪ Site staff are to subscribe to the Bureau of Meteorology (BoM) for regular updates on weather events. ▪ EHS Regional Managers sends alerts to Site Manager and Safety Committee organised to address actions required. ▪ Site Manager is to perform daily checks on BoM and State Emergency Services (SES) – New South Wales ▪ Notification and Warnings to be included in Daily Builders Briefs to all Construction Workers ▪ Refer to Appendix 7
<p>PROJECT SITE ACCESS</p>	<ul style="list-style-type: none"> ▪ The Flood and Coastal Assessment for the Tweed Valley Hospital site – prepared by BMT, identified that there are local access points off Cudgen Road that are flood free in events up to the PMF event. ▪ Cudgen Road connects to other roads that are impacted (refer to map below for roads that affected during 5% and 1% AEP events.



	<ul style="list-style-type: none"> ▪ The M1 and Tweed Coast Road are inundated during the 5% AEP event, and broadly similar flood inundation pattern and predicted locations of road closures during 1%. ▪ Southern coastal populations can access to site in this eventuality via Casuarina Way/Tweed Coast Road, or via M1/Clothiers Creek Road/Farrants Road/Eviron Road/Duranbah Road and Cudgen Road. ▪ TMR have confirmed that the flood prone areas (M1 near Exit 87 and 82) are subject to current upgrade projects which may improve their existing flood immunity. ▪ Northern Living Workers would be advised to leave prior to flood event. ▪ Refer to Appendix 9 ▪ Road Conditions can also be determined from RTA Live Traffic Info for access to and from the site during flood events
<p>OBEY INSTRUCTIONS</p>	<ul style="list-style-type: none"> ▪ Do exactly as you are advised via the National Alert System ▪ Follow Evacuation guidelines as outlined in this ERP. ▪ Assembly points and evacuation routes – Refer to Appendix C ▪ Isolate all services when leaving site ▪ Eliminate unnecessary travel
<p>TRAINING AND AWARENESS</p>	<ul style="list-style-type: none"> ▪ Flood Training is included within the Tweed Valley Hospital Induction Presentation for all employees and sub-contractors. ▪ Presentation includes the likelihood of the site flooding, assembly points and evacuation procedure if required.

For further information:

<http://www.abc.net.au/news/emergency/>
<http://www.abc.net.au/radio/frequency-finder/>
<https://www.environment.nsw.gov.au/>

<p>OTHER WORKPLACE SPECIFIC</p>	<ul style="list-style-type: none"> ▪ Refer to Figures below for Mapping Models and affected roads in 1% and 5% AEP events.
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APPENDIX ONE – EMERGENCY CONTROL ORGANISATION (ECO)
RESPONSIBILITIES AND MEMBERSHIP

Role	Responsibilities
Emergency Control Organisation Team Leader	<ul style="list-style-type: none"> ▪ Ensure this Plan is completed, regularly reviewed, implemented and tested. ▪ Review and approve all modifications to the emergency response system, facilities and ECO team members (including action on any post incident or exercise report recommendations) ▪ Establish and maintain an Emergency Control Centre (ECC) and support facilities ▪ Establish an emergency response exercise schedule as required by this plan. ▪ Integrate the emergency response exercise schedule with the Lendlease ECO and workplace EHS Committee/EHS Consultation Group in order to ensure the effectiveness of site - ECO communications interface ▪ Ensure any third party (non-Lendlease) personnel who may be co-opted in an emergency response are fully aware of expectations on them and are prepared to become immediately effective in an Emergency ▪ Promote the Lendlease Emergency Response arrangements to all site personnel ▪ Maintain familiarisation with obligations under this plan including reporting requirements, notifications etc. ▪ Ensure that all Lendlease Project Managers, Supervisors and ECO members receive an awareness session on their roles, responsibilities and requirements of this plan ▪ Provide single point of contact with the Emergency Response Team; i.e. Emergency Services and any related Client ▪ Other
Deputy ECO Team Leader	<ul style="list-style-type: none"> ▪ Undertake duties delegated by the ECO Team Leader; and ▪ In the absence of the ECO Team Leader, fulfil the role of ECO Team Leader ▪ Other
Communications Officer	<ul style="list-style-type: none"> ▪ Responsible for managing all incoming calls ▪ Responsible for managing outgoing calls as delegated by ERO Team Leader ▪ Completing log of events ▪ Other
Area Warden(s)	<ul style="list-style-type: none"> ▪ Ensuring the safe evacuation of all site personnel in the event of an emergency. ▪ Conduct a head count and advise the ECO Team Leader/Deputy of the results ▪ Establish a watch for arriving emergency vehicles and provide an initial brief to the responding agency Emergency Response Team Controller ▪ Undertake traffic control duties ▪ Other
First Aider	<ul style="list-style-type: none"> ▪ Proceed to the Emergency Assembly Area/Muster Point and provide first aid as required ▪ Other

APPENDIX TWO – EMERGENCY CONTACT NUMBERS

Name	Workplace Position	Contact Number
Geoff Barrow	Senior Site Manager	0408 290 123
Luis Biaggini	Construction Manager	0412 814 561
Lee Hughes	Project Director	0404 812 402
Darren Chow	Senior Project Engineer	0407 621 429
Jenny Third	Project Engineer	0416 767 588
Monique Windley	Site Environmental Engineer	0437 137 210
Geoff Lobdell	Site Engineer	0450 095 648



Name	Workplace Position	Contact Number
SES		132 500
Gas	LPG	13 11 61
Electricity	Essential Energy	13 20 80
Hospital	Tweed Heads Hospital	(07) 5536 1133
Fire rescue	Tweed Heads Fire Station	000 07 5536 2222
Fire rescue	Kingscliff Fire Station	000 (02) 6674 1271
Police	Tweed Heads Police	000 (07) 5506 9499
Police	Kingscliff Police	000 (02) 6674 9399
Poisons Information		131 126
EPA		131 555
Water and Sewer	Tweed Shire Council	1800 818 326
LLB Injury Management Hotline		1800 825 055



APPENDIX THREE – EVACUATION DIAGRAM



APPENDIX FOUR – EMERGENCY EQUIPMENT AND FIRST AID LOCATIONS

See Early Works Emergency Evacuation Diagram Appendix C





Revision	Description	Appr.	Date
1	Site Accomm- Prelim	LB	2/11/18
2	Site Accomm- Prelim	LB	21/03/19

Client: **HEALTH INFRASTRUCTURE NSW**


Project: **TWEED VALLEY HOSPITAL**

Project No.: 261063

Drawing No.: TW-ACC-001

Project Address: 771 Cudgen Rd, Kingscliff

ACONEX REFERENCE:



LEGEND

- TITLE DESCRIPTION LOT 100 DP...
- APPROXIMATE SITE AREA 23ha
- SITE WITHIN NEW COASTAL ZONE...
- REFER TO AN OVERLAY OF THE PRELIM LAND CATEGORY 1 VEG...

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DIMENSIONS

VERIFY ALL DIMENSIONS ON THE SITE BEFORE WORKING OR MAKING ANY OTHER DECISIONS. DIMENSIONS ARE SHOWN IN METERS AND MILLIMETERS. DIMENSIONS ARE SHOWN TO THE CENTERLINE OF THE LINE UNLESS OTHERWISE SPECIFIED.

FIXTURES, FITTINGS & EQUIPMENT SCHEDULE

SUBSTITUTE THE EQUIPMENT SCHEDULES WITH THE EQUIPMENT SCHEDULES PROVIDED BY THE CLIENT. THE ARCHITECTS SHALL BE RESPONSIBLE FOR VERIFYING THE APPROPRIATE SPECIFICATIONS, INCLUDING ALL RELEVANT STANDARDS AND REGULATIONS, AND FOR PROVIDING THE CLIENT WITH THE NECESSARY INFORMATION TO OBTAIN THE NECESSARY APPROVALS AND PERMITS. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY APPROVALS AND PERMITS. THE ARCHITECTS SHALL BE RESPONSIBLE FOR PROVIDING THE CLIENT WITH THE NECESSARY INFORMATION TO OBTAIN THE NECESSARY APPROVALS AND PERMITS.

SERVICE POINTS DISCLAIMER

THE SERVICE POINTS SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY AND DO NOT REPRESENT THE ARCHITECTS' LIABILITY FOR THE DESIGN OR CONSTRUCTION OF THE PROJECT. THE ARCHITECTS SHALL BE RESPONSIBLE FOR VERIFYING THE APPROPRIATE SPECIFICATIONS, INCLUDING ALL RELEVANT STANDARDS AND REGULATIONS, AND FOR PROVIDING THE CLIENT WITH THE NECESSARY INFORMATION TO OBTAIN THE NECESSARY APPROVALS AND PERMITS. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY APPROVALS AND PERMITS. THE ARCHITECTS SHALL BE RESPONSIBLE FOR PROVIDING THE CLIENT WITH THE NECESSARY INFORMATION TO OBTAIN THE NECESSARY APPROVALS AND PERMITS.

ISSUED FOR INFORMATION

ARCHITECTS:

STH BATES

ARCHITECTS

DATE: 21/03/19
 DRAWN BY: J. BATES
 CHECKED BY: J. BATES
 PROJECT NO.: 261063
 DRAWING NO.: TW-ACC-001

TSA
 MANAGEMENT

CLIENT
 Health Infrastructure NSW

PROJECT
 TWEED VALLEY HOSPITAL
 771 Cudgen Road, Kingscliff

SITE PLAN

SCALE: DATE: DRAWN BY: A.S. 03/14/19

APPENDIX FIVE – FIRST AID RISK ASSESSMENT

The size and location of the workplace		
Scope of workplace		
Access between floors		
Geographic size of workplace		m ²
Nearest Hospital		
Maximum time to medical service		
The number and composition of the workers and other persons at the workplace.		
Number of workers		
Number of other persons		
Shifts worked		
Overtime worked		
Remote or isolated workers		
Known health conditions effecting risk		
Injuries, illnesses and incidents		
Last 12 months incident data		
Incidents not resulting in injury		
Other		
Nature of the work carried out and the nature of the hazards at the workplace		
Hazards	How the hazard could cause harm	Likelihood of occurrence and degree of harm
Work at Heights	Falls of material/people	Possible risk of daily exposure. Major injuries
Electrical	Shock	Possible risk of daily exposure.
Hazardous chemicals: <ul style="list-style-type: none"> • Solvents • Hydrocarbons • Disinfectants • Cement slurries 	Respiratory illnesses, cancers, dermatitis, chemical burns and the like Many SDS confirm a first aid response is required	Possible risk of daily exposure to hazardous chemicals.
Plant & Equipment	Contact with, operator error, failure of, exposure too flash or grinding sparks or the like	Possible risk of daily exposure.



Manual handling	Muscular strain, cuts lacerations, puncture wounds and the like	Possible risk of daily exposure.
Housekeeping	Slips/Trips/Falls	Possible risk of daily exposure.
Afternoon shift	Worker fatigue Reduced visibility (hours of darkness)	Possible risk of daily exposure. Major injuries
Radiation	Welding activities; and Work in direct sunlight	Possible risk of daily exposure.
Infection risk for First Aiders	Application of first aid	Risk of exposure to infectious disease

Required First Aid

Number of first aiders needed	
Training and competencies for LLB first aiders	
Number and location of kits	
Contents of first aid kits and modules	
Other First Aid Items	
Kit maintenance	EHS Committee & First Aiders on the weekly walk to check all First Aid Kits

Consultation Arrangements

Risk Assessment	Conducted with EHS Committee
Subcontractors	Requirements for subcontractor first aid confirmed during Works to Proceed meeting
Workers	Via workplace induction

APPENDIX SEVEN – TWEED SHIRE COUNCIL EMERGENCY DASHBOARD

 **TWEED SHIRE COUNCIL** | EMERGENCY DASHBOARD

Contact Council  













The purpose of this Emergency Dashboard is to provide Tweed residents with links, useful information and contacts in an emergency. Please note, Council is not the main authority in emergencies.

For life-threatening emergencies ☎ 000



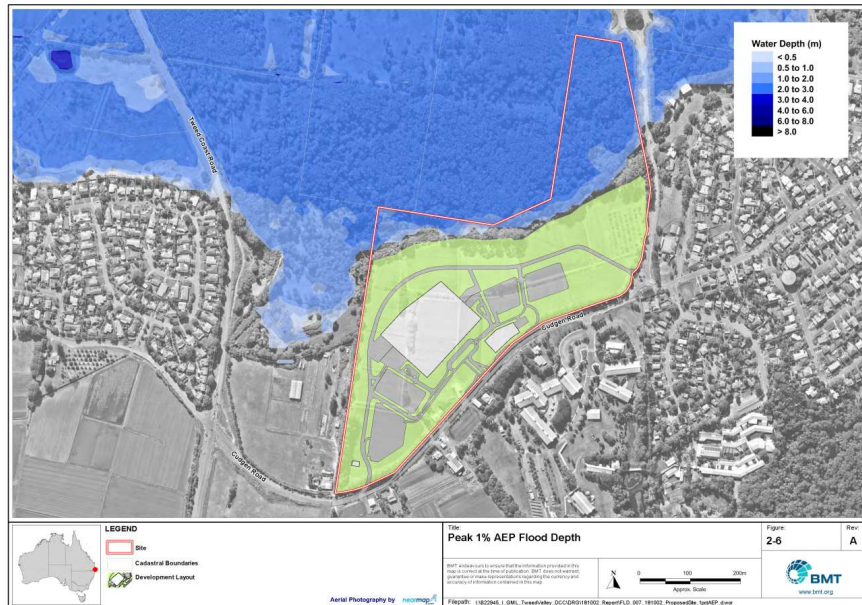
Listen live to the emergency radio broadcaster, ABC North Coast, on FM 94.5 or AM 720.

Social media
Council news

 <p>Flood, storm or tsunami ☎ 132 500 or visit www.ses.nsw.gov.au</p>	 <p>House fire ☎ 000 or visit www.fire.nsw.gov.au</p>	 <p>Bushfire ☎ 000 or visit www.rfs.nsw.gov.au</p>	
 0 Weather <small>NSW weather warnings</small>	 0 River heights <small>Latest local river heights</small>	 0 Rainfall <small>Rainfall and river conditions</small>	 1 Road hazards and closures
 1 Power outages <small>Current power interruptions</small>	 3 Water and sewer <small>Service interruptions</small>	 0 Waste <small>Collection and services</small>	 0 Services and facilities <small>Current status and updates</small>
I want to help	Business support	Flood information	 Report a problem <small>For non-urgent requests</small>
Plan and prepare	Recovery	Water and wastewater	

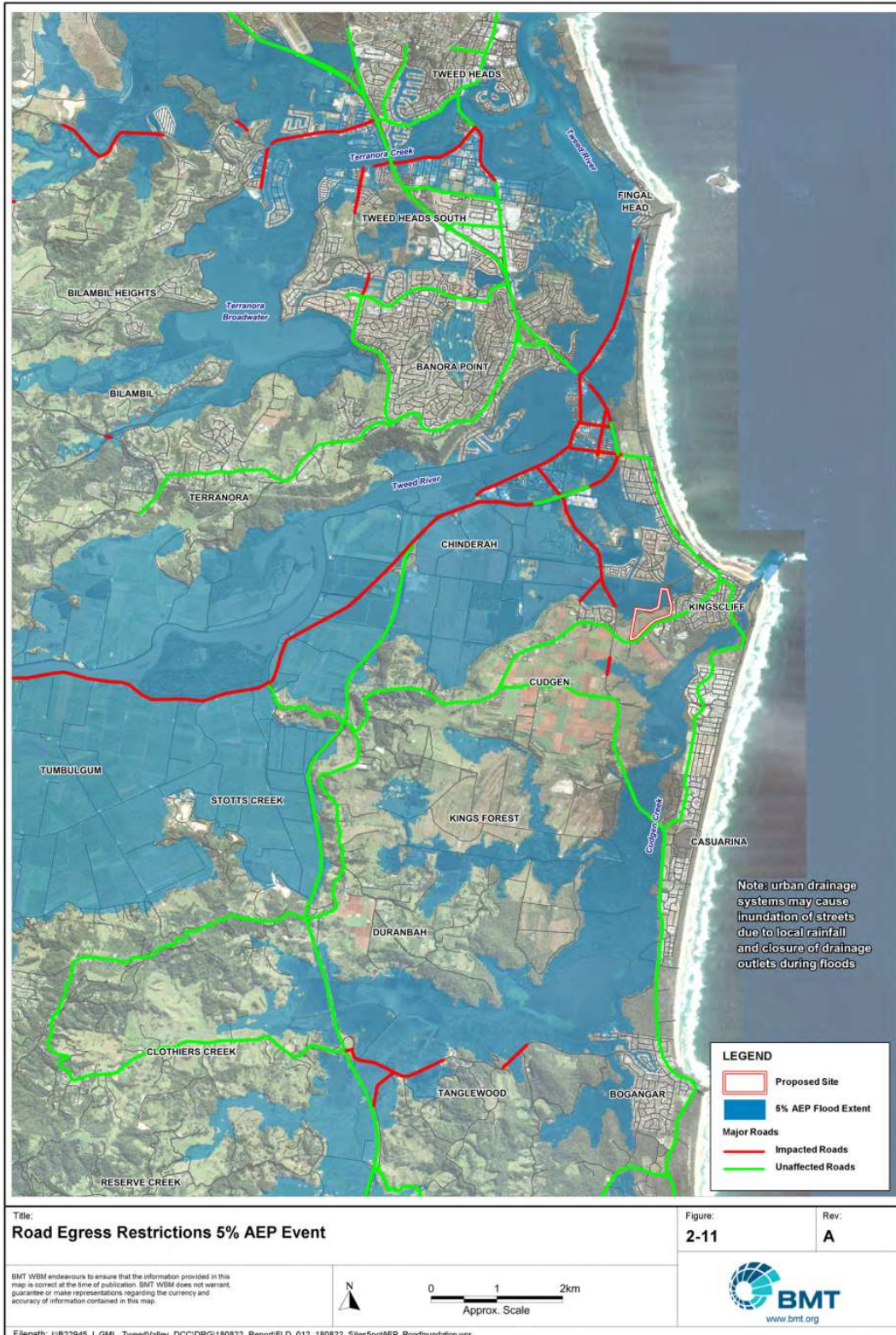


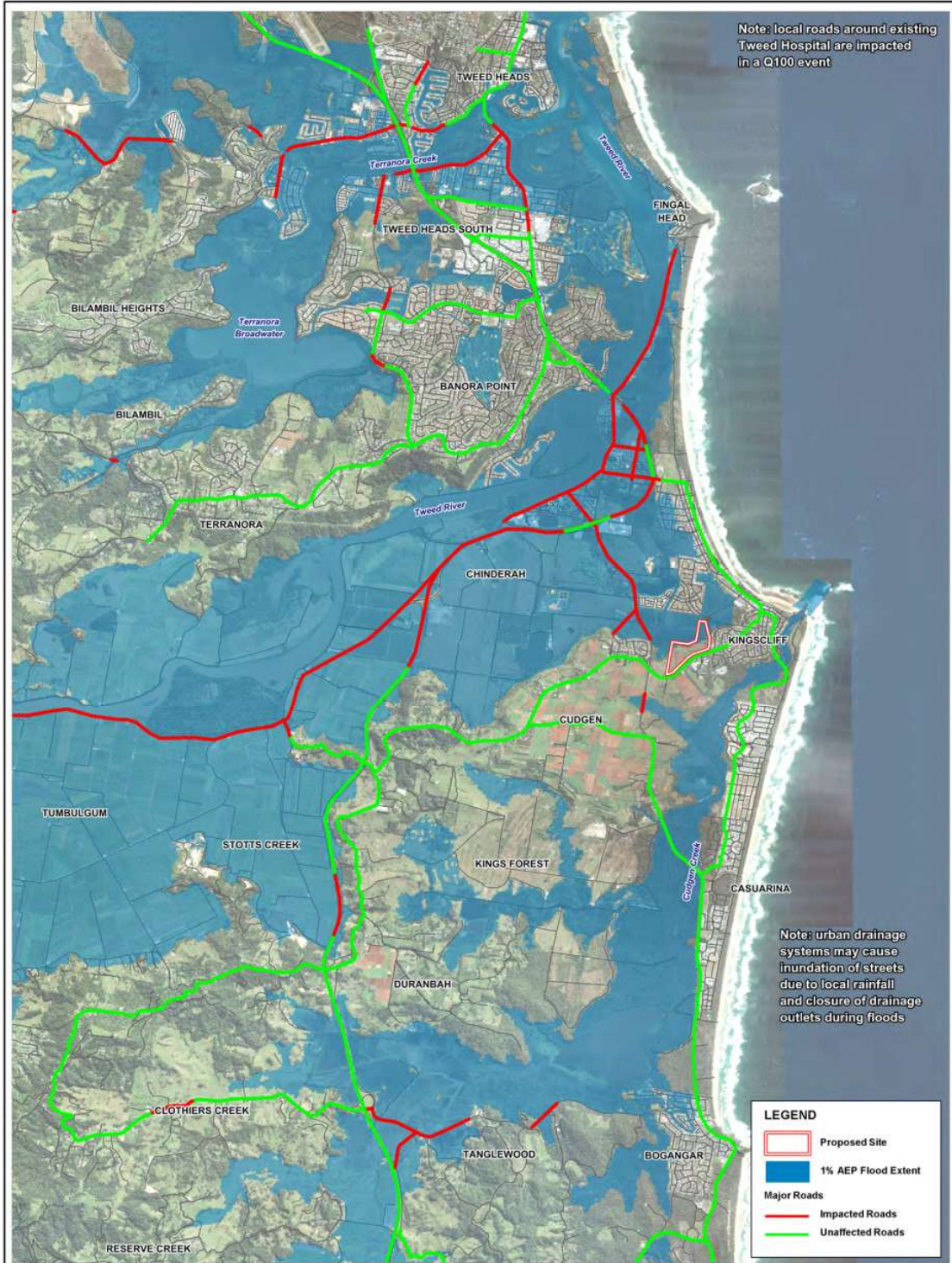
APPENDIX EIGHT – PROJECT SITE FLOOD PLANS





APPENDIX NINE | ROADS CLOSED DUE TO FLOODING SURROUNDING SITE





Title: **Road Egress Restrictions 1% AEP Event**

Figure: **2-12**

Rev: **A**

BMT WBM endeavours to ensure that the information provided in this map is correct at the time of publication. BMT WBM does not warrant, guarantee or make representations regarding the currency and accuracy of information contained in this map.



Filepath: I:\B22945_L_GML_TweedValley_DCC\DRG\160822_Report\FLD_013_160822_Sites\pctAEP_RoadInundation.vor



Windley, Monique

From: Damion Cavanagh <Damion.Cavanagh@bmtglobal.com>
Sent: Monday, 24 June 2019 12:43 PM
To: Windley, Monique
Cc: sfolliott@tsamanagement.com.au; Stuart Clark
Subject: [EXT]:RE: [External] Flood management plan for the Tweed Valley Hospital

Hi Monique

Thanks for you patience here

I have the following general observations and comments for consideration.

– The Flood Emergency Response Plan (FERP) appears to make the correct references to the flood studies and background reports reporting assessments for the TVH

- Section 8, it is not clear why a number of other emergency scenarios are intermixed in the FERP. This seems to dilute the messages of the FERP as the details are buried within a much larger document.
- Section 20 – in relation to flood planning many of the elements here could be removed (as these were part of the flood study preparation) and or adjusted. The most relevant flood planning studies are available on Councils' website <https://www.tweed.nsw.gov.au/Flooding>. Council also have a link for emergencies including flood emergencies which directs traffic to the relevant organisations such as SES <https://emergency.tweed.nsw.gov.au/>.
- The key flood risks at the site are due to regional floods and flood watch / flood warnings will be on the BoMs website and probably also SES. To the best of my knowledge there is no flood warning system for the Tweed Shire as yet. Planning and response to a local catchment event may be more difficult due to an inability to accurately forecast the timing of the event and limited time to prepare a response to such a flood event.
- Road conditions can be determined from RTA Live Traffic Info and the equivalent Qld system for access to and from the site during flood events. Note the loss of access on the M1 and Tweed Coast Road (and other roads) happened for 3 to 4 days in 2017 due to flooding, so it is something that can occur at the site.
- Appendix C or Appendix 3 talks about the evacuation diagram – however, there is no figure included in this appendix. The main body of the document indicates that the figure will be in this appendix. Also Appendix C/Appendix 3 used inconsistently through the FERP (which is the correct terminology?)
- Appendix 4 - This purpose of the figure in the appendix is unclear

Please note that the review completed is preliminary and has primarily been conducted from the perspective of verifying flood information sources and references to previous flood work completed by BMT for the TVH. In this regard the FERP appears reasonable. There were some observations and suggestions in relation to the plan provided above. Detailed review of other listed emergencies has not been completed. Additionally, review of LLB internal emergency and risk processes as documented is taken on face value and accepted as accurate and appropriate.

If you have any questions on the above review comments, please be in touch with the undersigned.

Regards
Damion

Damion Cavanagh
Principal

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Mob: 0447 172 123
Web: www.bmt.org



[LinkedIn](#) | [Twitter](#) | [Facebook](#) | [YouTube](#)

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From: Windley, Monique <Monique.Windley@lendlease.com>
Sent: Friday, 21 June 2019 2:36 PM
To: Damion Cavanagh <Damion.Cavanagh@bmtglobal.com>
Cc: sfolliott@tsamanagement.com.au; Stuart Clark <sclark@tsamanagement.com.au>
Subject: [External] Flood management plan for the Tweed Valley Hospital

Hi Damion,

Just wanting to reach out as Sue will be away from this afternoon and she has requested to you to review the flood management plan for the Tweed Valley Hospital.

Due to the critical nature of this report and all the other management plans, when you do send it through, could you please also cc me in the conversation so that it doesn't sit in her inbox whilst she is away.

Thanks for your assistance, it is much appreciated.

Have a good weekend!

Kind Regards

Monique Windley

Site Engineer, New Tweed Valley Hospital Project

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Tweed Office: Suite B, Level 2, 21 Bretts Street, Tweed Heads, 2485 NSW Australia

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