

CONTINGENCY PLAN

Work description: This work instruction describes the arrangements required for implementing Contingency Plans.

Scope: This work instruction is written specifically for the OCC operating staff of Honolulu Rail Transit.

References: Nil

PPE and precautions	Competencies or qualifications	Licenses or permits required
Nil	OCC Supervisor, Train Controller, Information Controller, Engineering and Fault Controller, Station Attendant	Nil

Tools and equipment required

Nil

**Warning**

Be aware of which station platforms that will no longer be served by trains (which may be served by replacement bus services) if you decided to implement any one of the Contingency Plans.

Contingency Plans

Severe equipment faults or incidents may lead to a line blockage which is a blocked line made inoperable by a disabled train, a total failure of a point, a broken rail, electrical faults, or a BLS activation, etc. A blocked line may lead to longer delays seriously disrupting the overall train service.

To maintain limited train service as much as practicable on the unaffected sections, the OCC Supervisor, with the help from the Train Controller, after assessing the situation may deploy one or more Contingency Plans as appropriate under the operational circumstances.

ATS System contains a list of pre-defined signaling routes which can be used to support the Contingency Plans in revenue service. The altered Destination IDs set by the Train Controller are then used by the Vehicle Regulation for train routing.

**Note**

In case of the Contingency Plan implementation the system shall be set in Headway Regulation. Schedule Regulation under Contingency Plans will be used only during overhaul period that a portion on the line will be unavailable for a longer period (1 week or more) for heavy maintenance activity!

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 1 of 60

CONTINGENCY PLAN

**Note**

For all single-line blockages, the OCC Supervisor may REPLACE the extended train shuttling with replacement bus service for bridging those stations that have been blocked; thus, the handlings can be simplified. This will work only if the replacement bus service is available.

Legend

	Line blockage
	Train Operation Direction
	Bi-directional Train Operation (Reversing)
	2nd Loop: Train Operation Direction
	2nd Loop: Bi-directional Train Operation (Reversing)
	(Optional) Bus Replacement Service

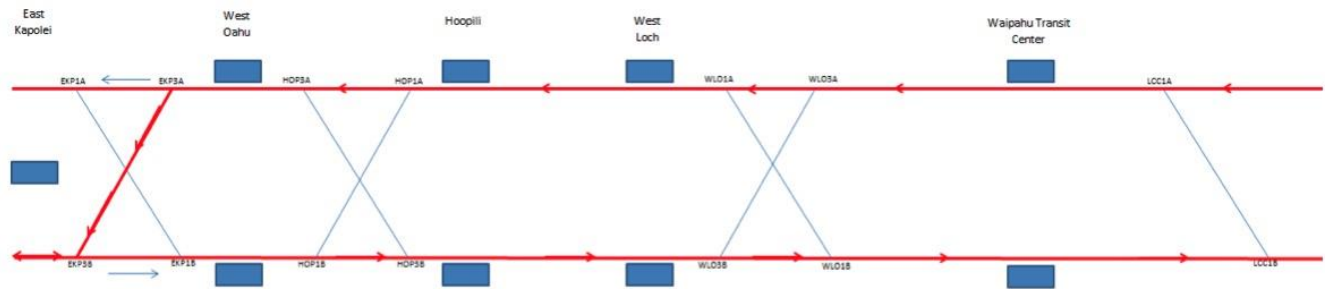
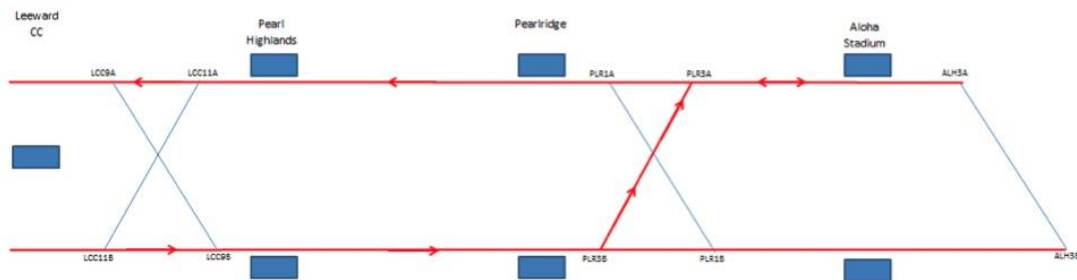
Plan No. 0	Normal Operations Pinched Loop - Intermediate O&M Period 1
Terminus:	East Kapolei DOWN platform (default)<->Aloha Station UP platform (default)

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 2 of 60

CONTINGENCY PLAN

**NORMAL OPERATIONS****Additional Staff Requirements**

Station Attendant(s)	not required
----------------------	--------------

Staff Action

<i>Engineering and Fault Controller</i>	<ul style="list-style-type: none"> carry out duties as usual
<i>Maintainer</i>	<ul style="list-style-type: none"> carry out duties as usual
<i>Train Controller</i>	<ul style="list-style-type: none"> carry out duties as usual
<i>OCC Supervisor</i>	<ul style="list-style-type: none"> carry out duties as usual
<i>Information Controller</i>	<ul style="list-style-type: none"> carry out duties as usual
<i>Station Attendant(s) at East Kapolei</i>	<ul style="list-style-type: none"> carry out duties as usual

End of No. 0

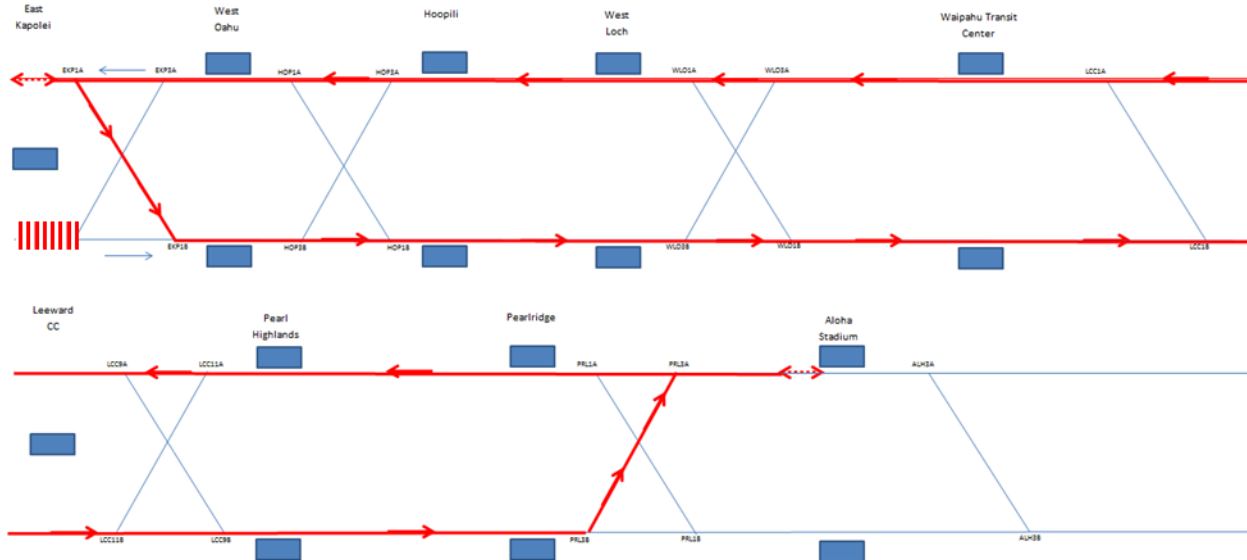
Plan No. 1	This plan handles the blockage at East Kapolei Station DOWN platform
-------------------	--

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

CONTINGENCY PLAN

Terminus

East Kapolei UP platform (alternative platform) <-> Aloha Station UP platform (default)



Additional Staff Requirements

Station Attendant(s)	not required
----------------------	--------------

Staff Action

Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage at East Kapolei DOWN platform
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> no intervention required because the switch to alternative platform is automatic
OCC Supervisor	<ul style="list-style-type: none"> monitor the fault rectifying process closely
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at East Kapolei Station about the use of the UP platform instead
Station Attendant(s) at East Kapolei	<ul style="list-style-type: none"> inform passengers to use the UP platform

End of No. 1

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

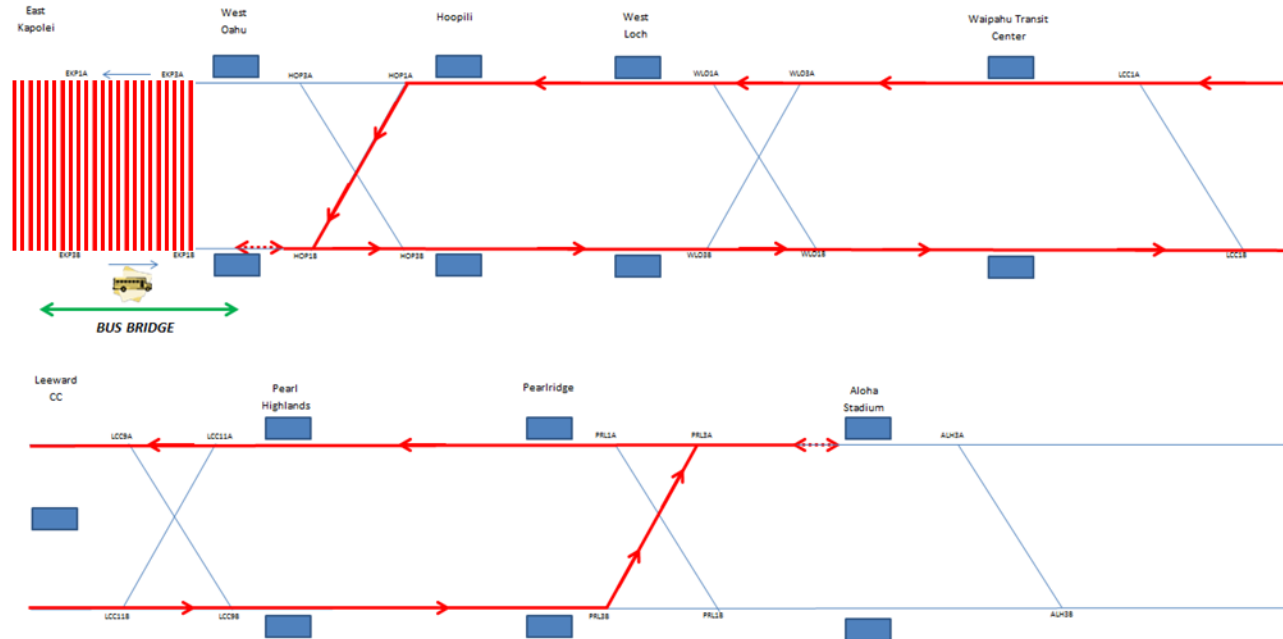
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 4 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 2	This plan handles a double-line blockage covering East Kapolei Station
Terminus:	West Oahu Station DOWN platform<->Aloha Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at West Oahu Station to assist passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage beyond West Oahu Station
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for West Oahu Station arrange the bus bridge service with service provider
Information Controller	<ul style="list-style-type: none"> inform UP track stations that the new terminus is West Oahu Station inform East Kapolei Station and West Oahu the bus access points
Station Attendant(s) at West Oahu Station	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 5 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
<i>Station Attendant(s)</i> <i>at East Kapolei</i> <i>Station</i>	<ul style="list-style-type: none"> • coordinate replacement bus services • assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 2

© P			
Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

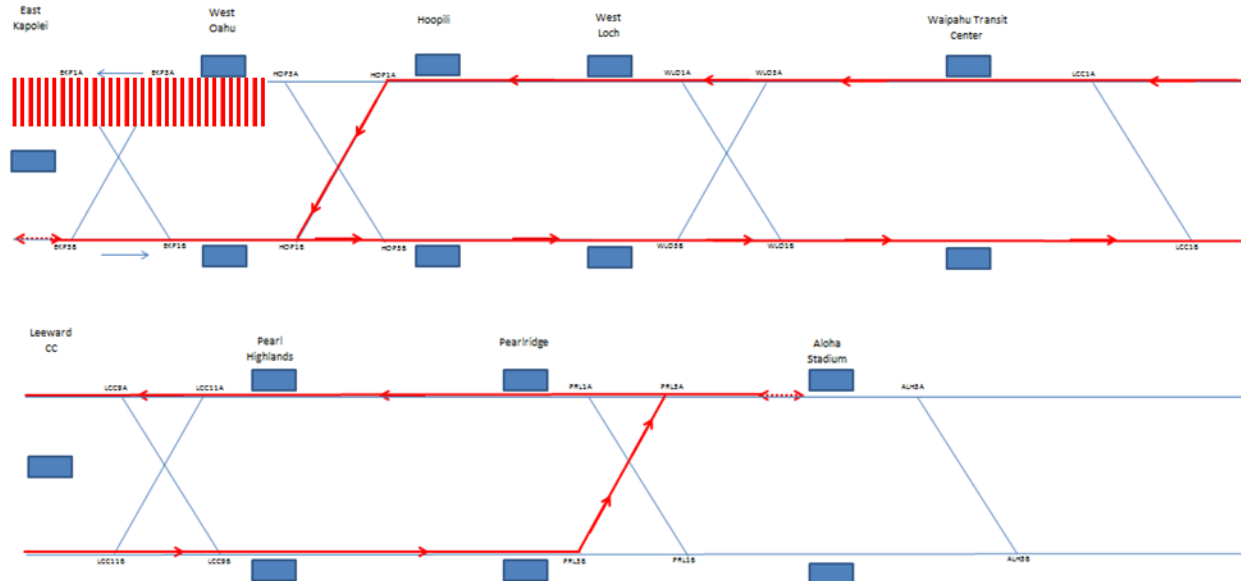
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 6 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 3	This plan handles a single-line blockage from East Kapolei Station to West Oahu Station UP track
Terminus:	East Kapolei Station DOWN platform (default)<->Aloha Station UP platform (default)




Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both East Kapolei Station DOWN platform and West Oahu Station DOWN platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for East Kapolei Station and West Oahu Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at East Kapolei Station about the use of the DOWN platform instead

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 7 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
<i>Station Attendant(s) at East Kapolei Station and West Oahu Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 3

© P			
Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

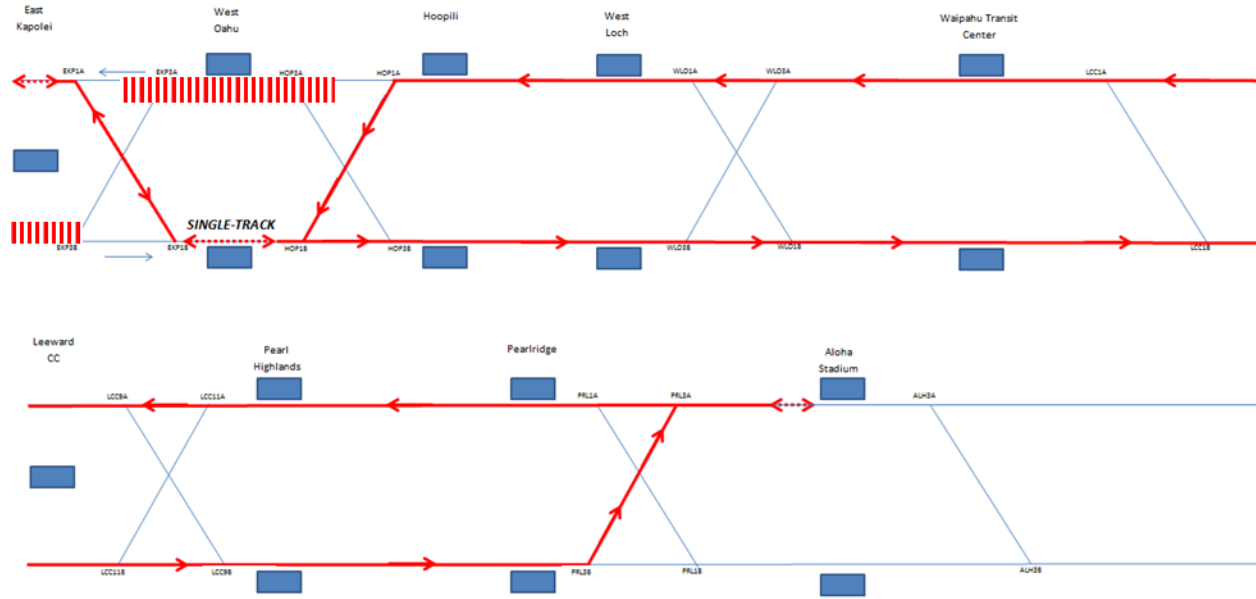
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 8 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 4	This plan handles a single-line blockage at East Kapolei Station DOWN track and at West Oahu Station UP track
Terminus:	East Kapolei UP platform<->Aloha Station UP platform (default)




Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both East Kapolei Station UP platform and West Oahu Station DOWN platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage at the UP track of West Oahu Station and the DOWN track of East Kapolei Station
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set single line operation defined for this plan - hold trains at Hoopili Station UP platform and East Kapolei Station UP platform before releasing them across remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for East Kapolei Station and West Oahu Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at East Kapolei Station about the use of the UP platform only inform Station Attendants at West Oahu Station about the use of the DOWN platform only

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 9 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
Station Attendant(s) at East Kapolei Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control
Station Attendant(s) at West Oahu Station	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 4

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

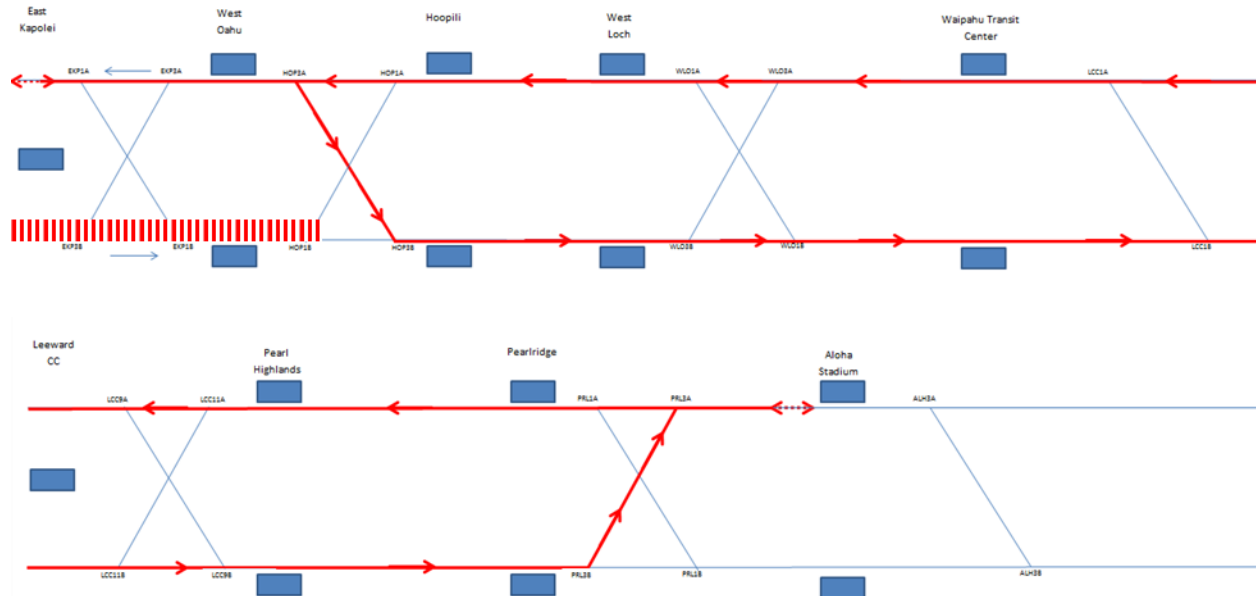
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 10 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 5	This plan handles a single-line blockage from East Kapolei Station to West Oahu Station
Terminus:	East Kapolei UP platform<->Aloha Station UP platform (default)




Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both East Kapolei Station UP platform and West Oahu Station UP platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for East Kapolei Station and West Oahu Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at East Kapolei Station about the use of the UP platform only inform Station Attendants at West Oahu Station about the use of the UP platform only

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 11 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
Station Attendant(s) at East Kapolei Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control
Station Attendant(s) at West Oahu Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 5

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

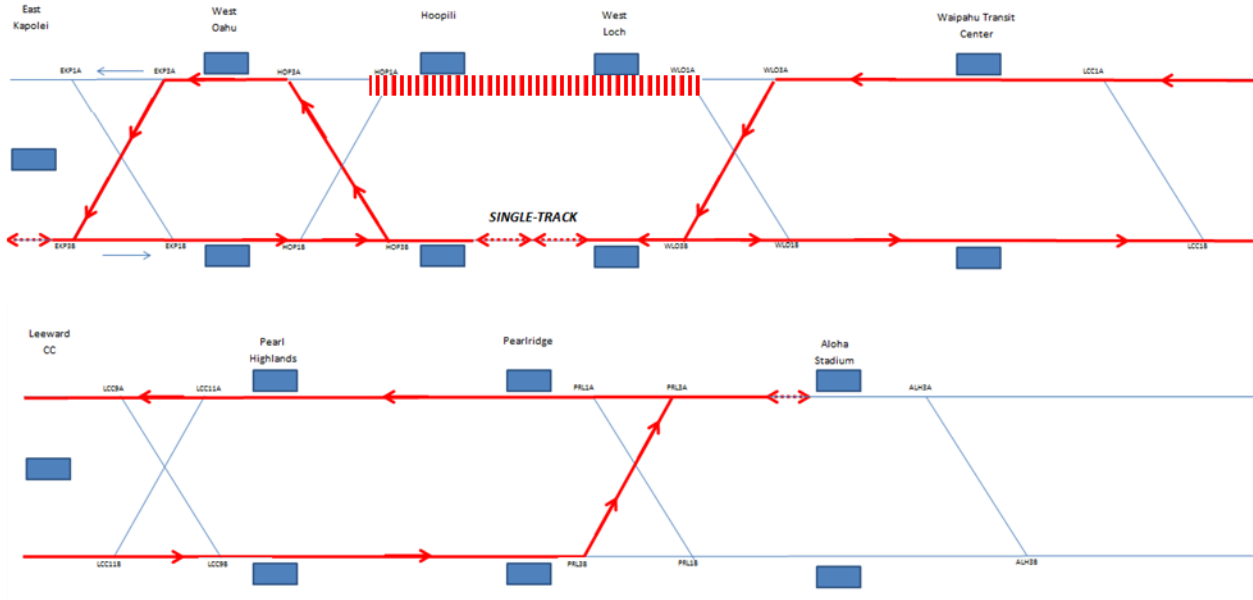
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 12 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 6	This plan handles a single-line blockage from Hoopili Station to West Loch Station
Terminus:	East Kapolei Station DOWN platform (default)<->Aloha Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both Hoopili Station DOWN platform and West Loch Station DOWN platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set single line operation defined for this plan - hold trains at West Oahu Station DOWN platform and at Waipahu Transit Center Station UP platform before releasing them across remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Hoopili Station and West Loch Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at Hoopili Station about the use of the DOWN platform only inform Station Attendants at West Loch Station about the use of the DOWN platform only

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 13 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
Station Attendant(s) at Hoopili Station	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control
Station Attendant(s) at West Loch Station	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 6

© P			
Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

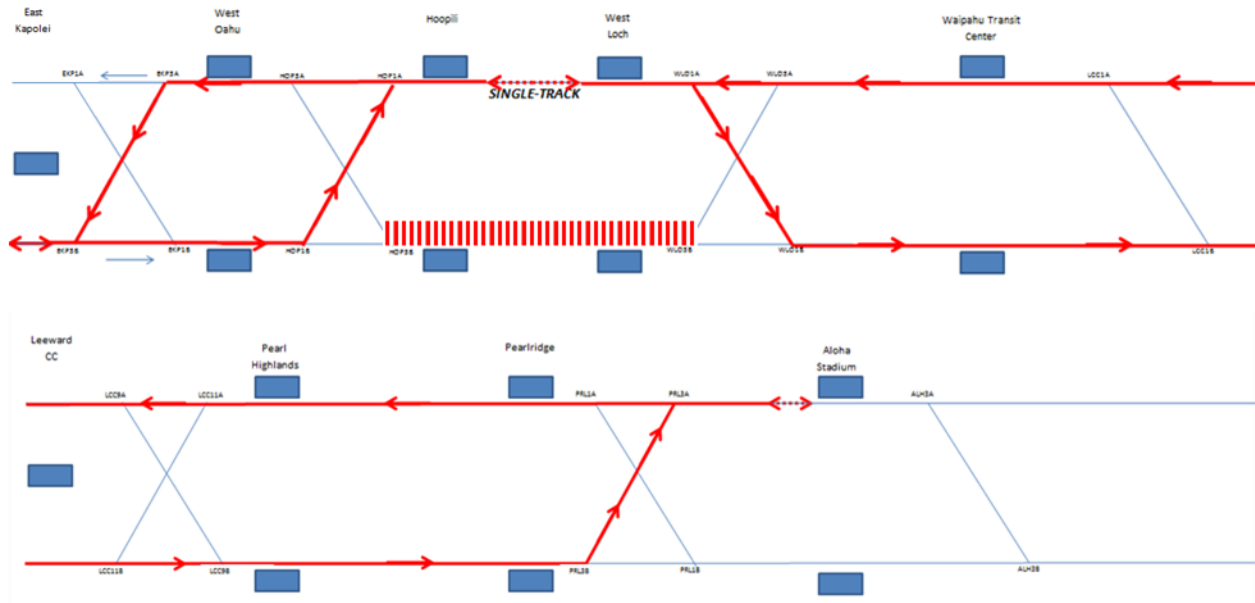
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 14 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 7	This plan handles a single-line blockage from Hoopili Station to West Loch Station
Terminus:	East Kapolei Station DOWN platform (default)<->Aloha Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both Hoopili Station UP platform and West Loch Station UP platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set single line operation defined for this plan - hold trains at Waipahu Transit Center Station UP platform and Pearlridge Station DOWN platform before releasing them across remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Hoopili Station and West Loch Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at Hoopili Station about the use of the UP platform only inform Station Attendants at West Loch Station about the use of the UP platform only

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 15 of 60

Work Instruction - Operations	HITACHI Inspire the Next
CONTINGENCY PLAN	

Staff Action	
Station Attendant(s) at Hoopili Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control
Station Attendant(s) at West Loch Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 7

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

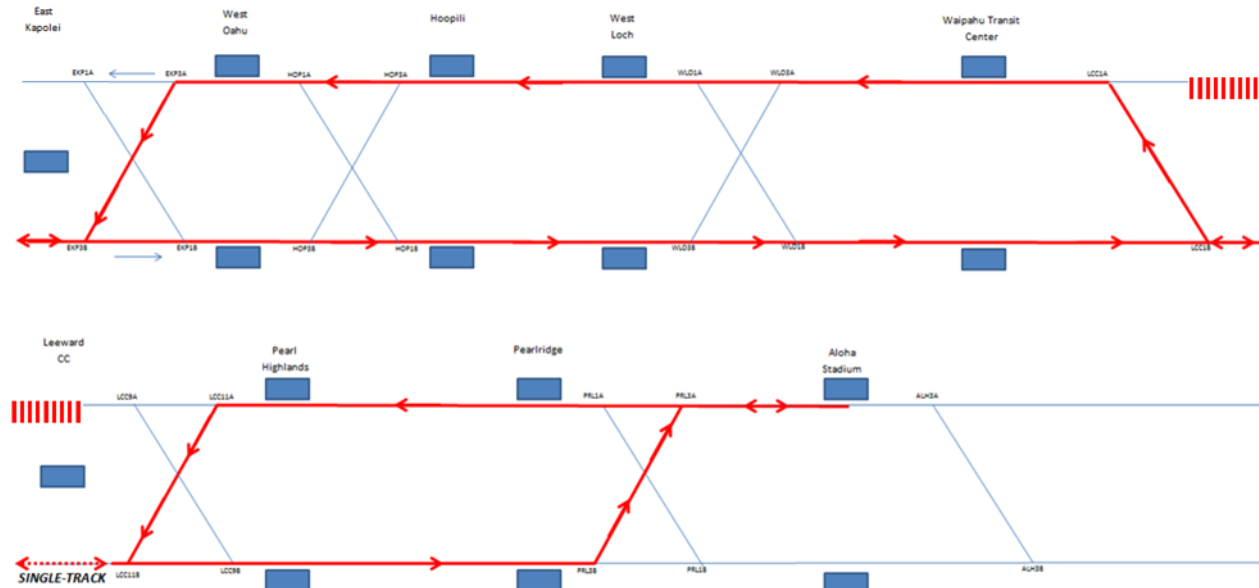
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 16 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 8	This plan handles a single lines blockage at Leeward CC Station UP track
Terminus:	East Kapolei Station DOWN platform (default)<->Aloha Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Leeward CC Station DOWN platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set single line operation defined for this plan - hold trains at Waipahu Transit Center Station DOWN platform and Pearl Highlands Station UP platform before releasing them across remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Leeward CC Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at Leeward CC Station about the use of the DOWN platform only
Station Attendant(s) at Leeward CC Station	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 17 of 60

Work Instruction - Operations	HITACHI Inspire the Next
CONTINGENCY PLAN	

End of No. 8

© P			
Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

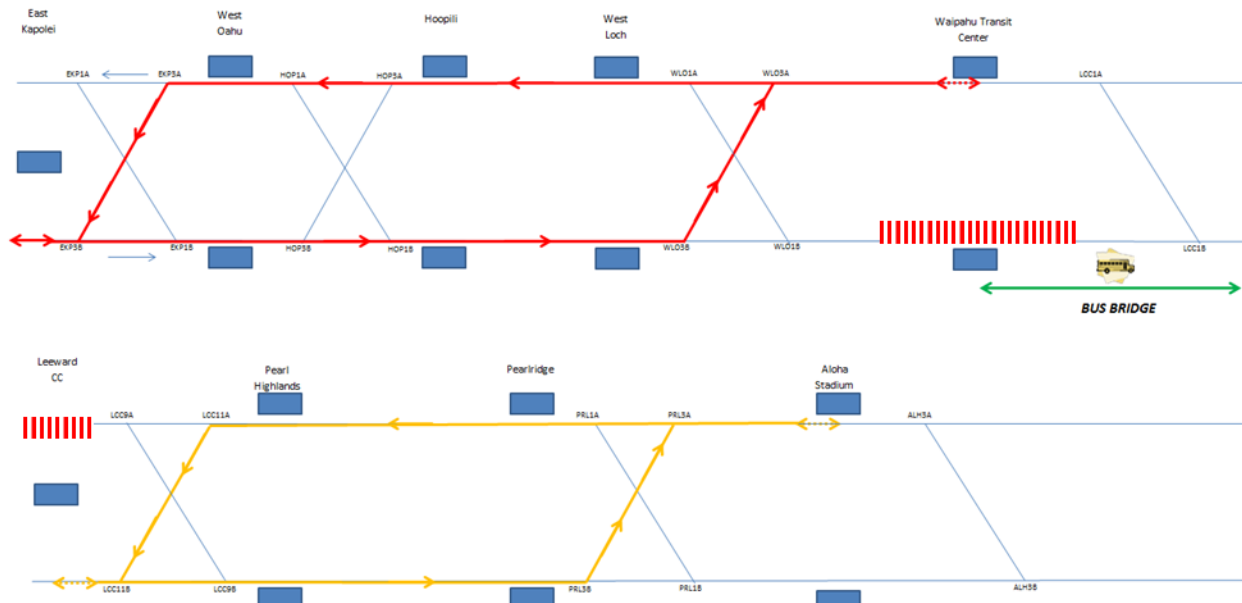
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 18 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 9	This plan handles a single-line blockage at Waipahu Transit Center Station and a single-line blockage at Leeward CC Station UP platform
Terminus:	East Kapolei Station DOWN platform (default)<->Waipahu Transit Center Station UP platform, and Leeward CC Station DOWN platform<->Aloha Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both Waipahu Transit Center Station UP platform and Leeward CC Station DOWN platform to assist passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Waipahu Transit Center Station and Leeward CC Station arrange the bus bridge service with service provider

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 19 of 60

CONTINGENCY PLAN

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform all stations about the new terminuses inform Waipahu Transit Center Station and Leeward CC Station the bus access points
<i>Station Attendant(s) at Waipahu Transit Center Station</i>	<ul style="list-style-type: none"> inform passengers to use the UP platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Leeward CC Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 9

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

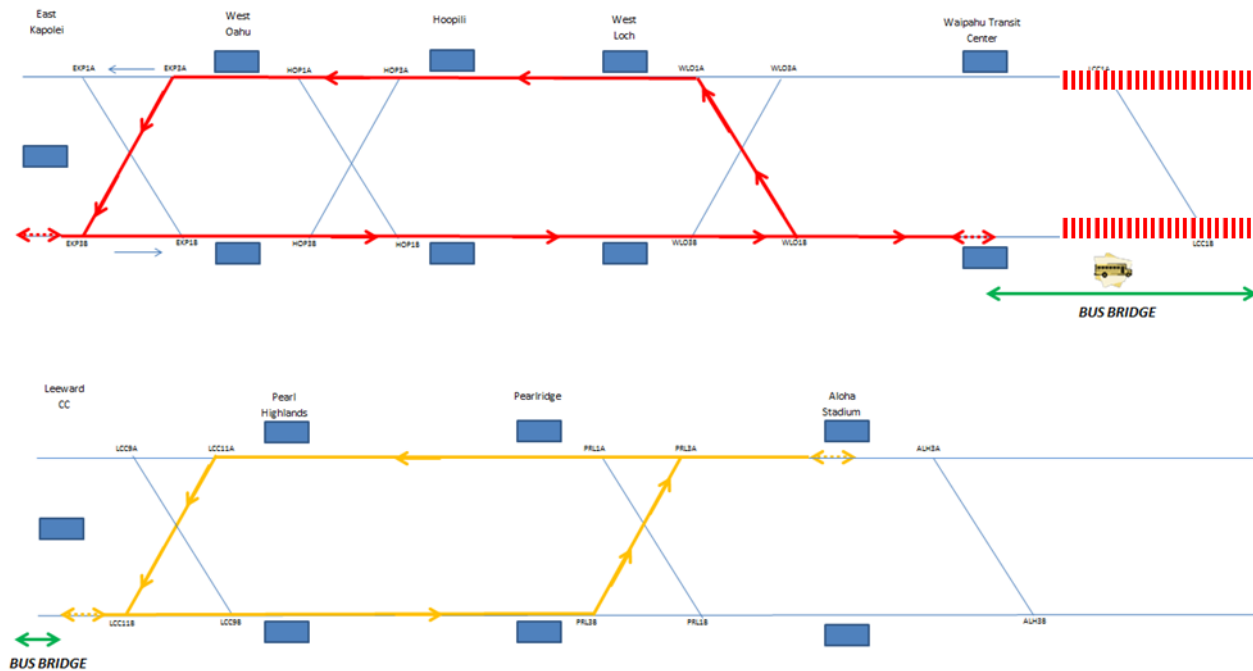
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 20 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 10	This plan handles a double-line blockage between Waipahu Transit Center Station and Leeward CC Station
Terminus:	East Kapolei Station DOWN platform (default)<->Waipahu Transit Center Station DOWN platform, and Leeward CC Station DOWN platform<->Aloha Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both Waipahu Transit Center Station DOWN platform and Leeward CC Station DOWN platform to assist passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Waipahu Transit Center Station and Leeward CC Station arrange the bus bridge service with service provider

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 21 of 60

property of Hitachi Rail STS, 2019, all rights reserved - the copying, reproduction and use of this work in any form whatsoever is forbidden without the written authorization of Hitachi Rail STS

CONTINGENCY PLAN

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform all stations about the new terminuses inform Waipahu Transit Center Station and Leeward CC Station the bus access points
<i>Station Attendant(s) at Waipahu Transit Center Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Leeward CC Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 10

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

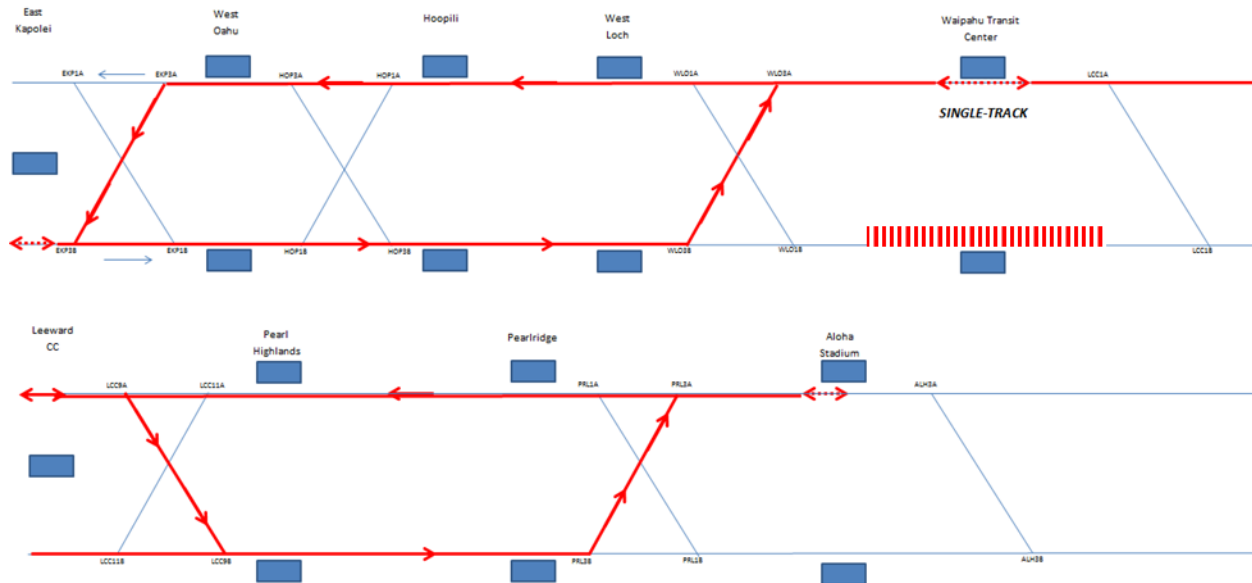
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 22 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 11	This plan handles a single-line blockage at Waipahu Transit Center Station
Terminus:	East Kapolei Station DOWN platform (default) <-> Aloha Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Waipahu Transit Center Station UP platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set single line operation defined for this plan - hold trains at West Loch DOWN platform and hold trains at Pearl Highlands UP platform before releasing them remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Waipahu Transit Center Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at Waipahu Transit Center Station about the use of the UP platform only
Station Attendant(s) at Waipahu Transit Center Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 23 of 60

Work Instruction - Operations	HITACHI Inspire the Next
CONTINGENCY PLAN	

End of No. 11

© P			
Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

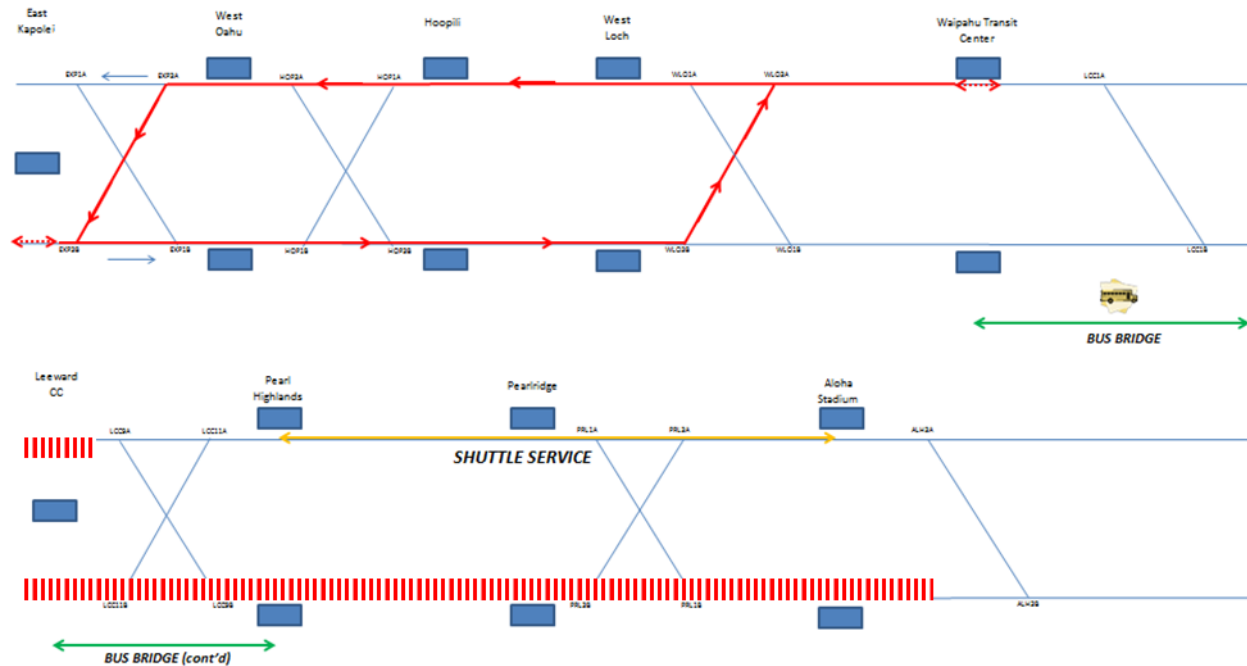
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 24 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 12	This plan handles a double-line blockage at Leeward CC Station and a sing-line blockage from Pearl Highlands Station to Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform (default)<->Waipahu Transit Center Station UP platform, and Pearl Highlands Station UP platform<->Aloha Stadium Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Waipahu Transit Center Station UP platform and Pearl Highlands Station UP platform to assist passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 25 of 60

CONTINGENCY PLAN

Staff Action	
<i>OCC Supervisor</i>	<ul style="list-style-type: none"> request additional workforce for Waipahu Transit Center Station and Pearl Highlands Station arrange the bus bridge service with service provider
<i>Information Controller</i>	<ul style="list-style-type: none"> inform all stations about the new terminuses inform Waipahu Transit Center Station, Leeward CC Station and Pearl Highlands Station the bus access points
<i>Station Attendant(s) at (Waipahu Transit Center Pearl Highlands, Pearlridge, Aloha Stadium) Station</i>	<ul style="list-style-type: none"> inform passengers to use the UP platform coordinate replacement bus services (Pearl Highlands) assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Leeward CC Station</i>	<ul style="list-style-type: none"> coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 12

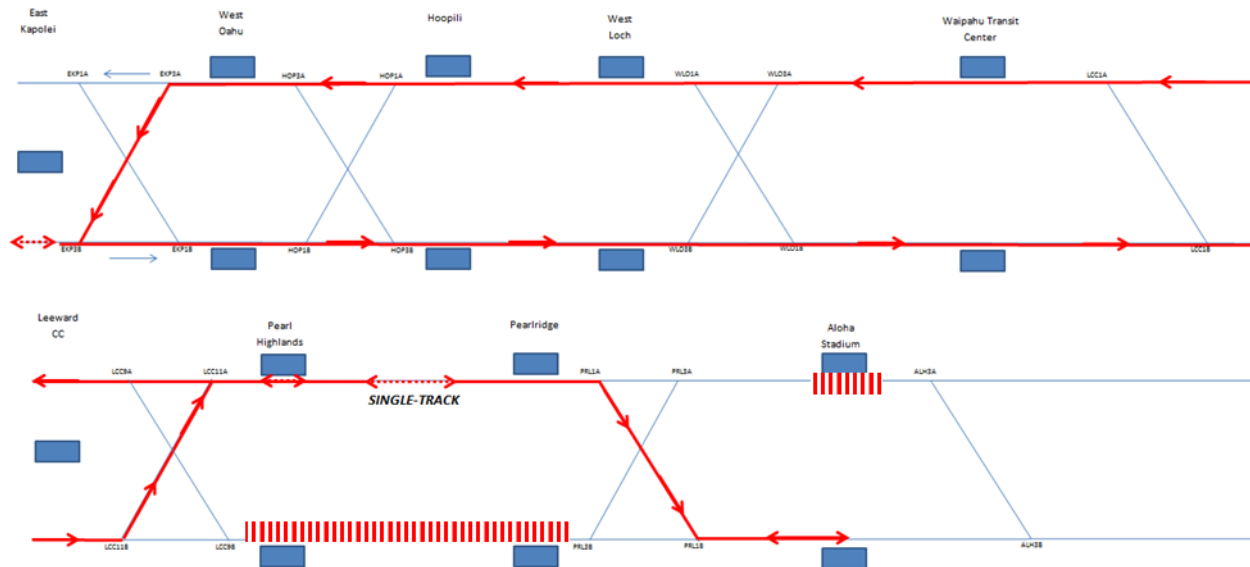
© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 26 of 60

CONTINGENCY PLAN

Plan No. 13	This plan handles a single-line blockage from Pearl Highlands Station to Pearlridge Station and a single-line blockage at Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform (default)<->Aloha Station DOWN platform




Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both Pearl Highlands Station UP platform and Pearlridge Station UP platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set single line operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Pearl Highlands Station and Pearlridge Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at Pearl Highlands Station and Pearlridge Station about the use of the UP platform only
Station Attendant(s) at Pearl Highlands Station and Pearlridge Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 27 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
<i>Station Attendant(s) at Aloha Stadium Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 13

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

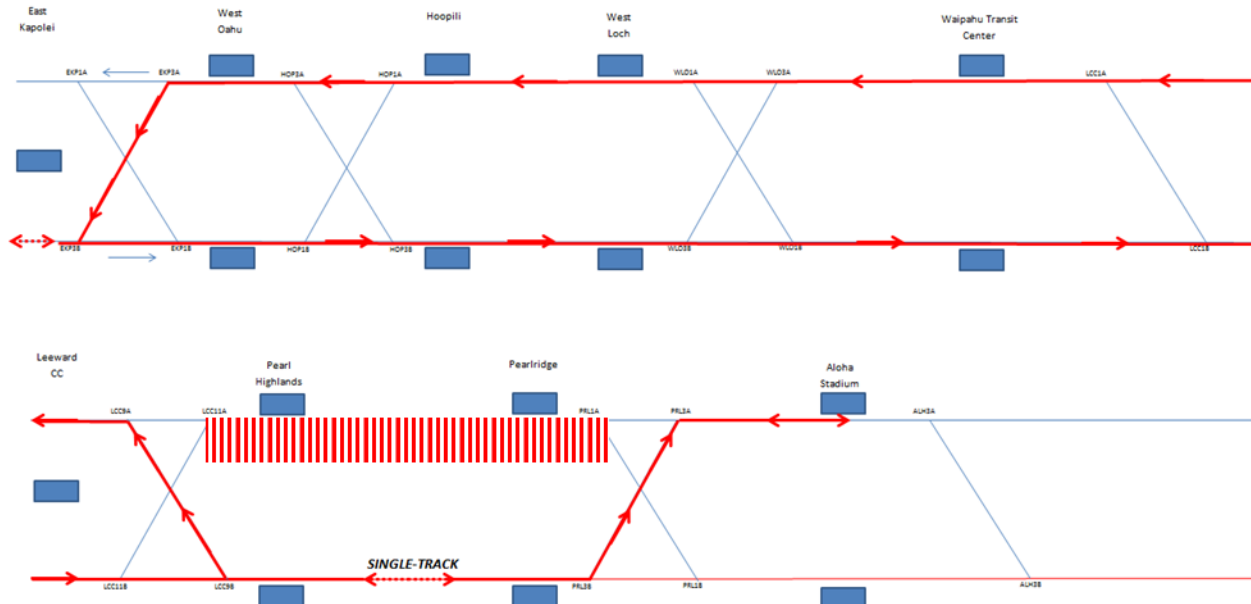
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 28 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 14	This plan handles a single-line blockage from Pearl Highlands Station to Pearlridge Station
Terminus:	East Kapolei Station DOWN platform (default)<->Aloha Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both Pearl Highlands Station DOWN platform and Pearlridge Station DOWN platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set single line operation defined for this plan set single line operation defined for this plan - hold trains at Leeward CC Station DOWN platform and Aloha Station UP platform before releasing them across remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Pearl Highlands Station and Pearlridge Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at Pearl Highlands Station and Pearlridge Station about the use of the DOWN platform only

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 29 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
<i>Station Attendant(s) at Pearl Highlands Station and Pearlridge Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 14

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

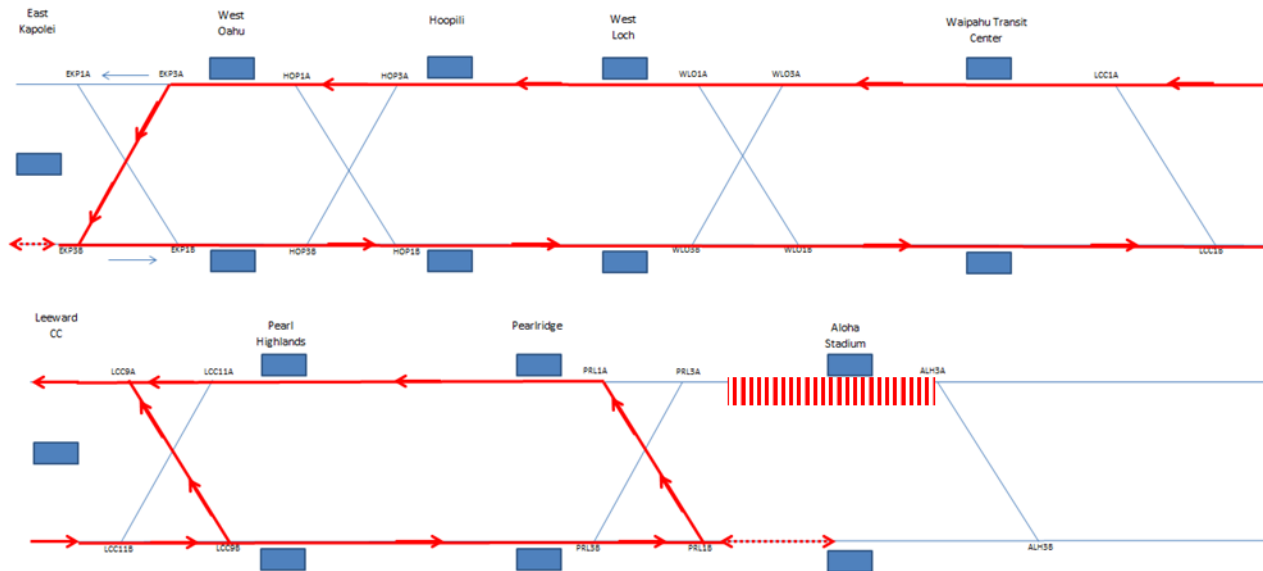
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 30 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 15	This plan handles a single-line blockage at Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform (default)<->Aloha Stadium Station DOWN platform (alternative platform)



Additional Staff Requirements	
Station Attendant(s)	none

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> no intervention as the default platform will change to use the alternative platform automatically when the default platform is blocked
OCC Supervisor	<ul style="list-style-type: none"> no intervention
Information Controller	<ul style="list-style-type: none"> no intervention because the announcement on train arrival/departure will automatically adjust to use the alternative platform at Aloha Stadium Station
Station Attendant(s) at Aloha Stadium Station	<ul style="list-style-type: none"> inform passengers to use the DOWN platform

End of No. 15

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 31 of 60

Work Instruction - Operations	HITACHI Inspire the Next
CONTINGENCY PLAN	

© P			
Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

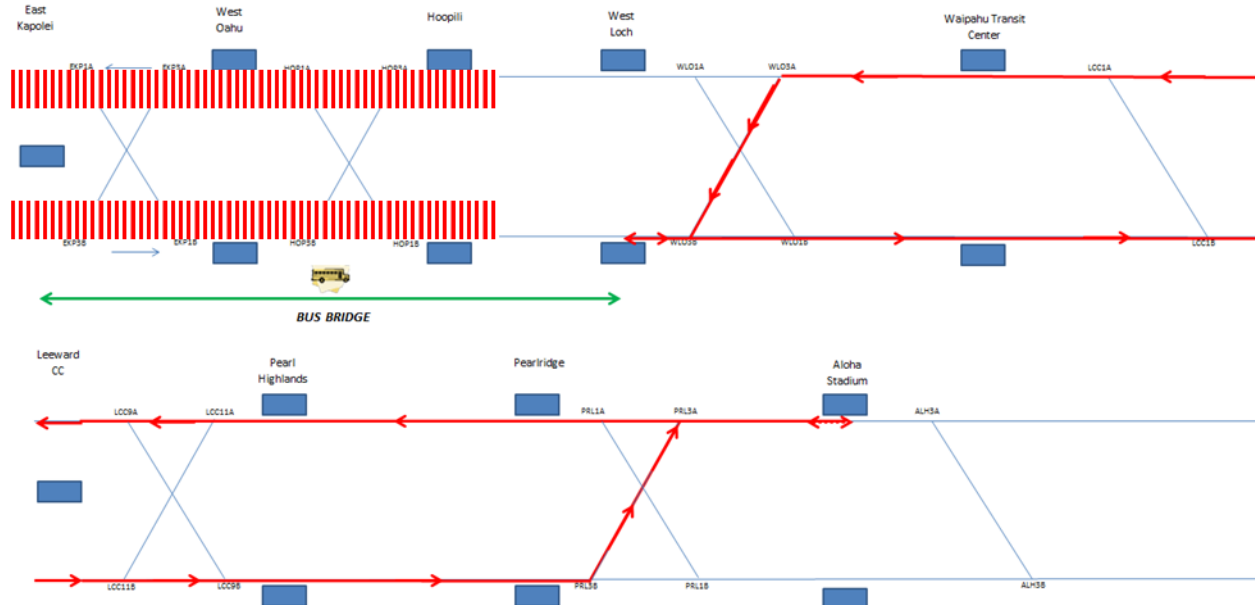
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 32 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 16	This plan handles a double-line blockage from East Kapolei Station to Hoopili Station
Terminus:	West Loch Station DOWN platform<->Aloha Stadium Station UP platform (default)




Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at West Loch Station DOWN platform to assist passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for West Loch Station arrange the bus bridge service with service provider
Information Controller	<ul style="list-style-type: none"> inform UP track stations that the new terminus is West Loch Station inform East Kapolei Station, West Oahu Station, Hoopili Station and West Loch Station the bus access points
Station Attendant(s) at West Loch Station	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 33 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
<i>Station Attendant(s) at East Kapolei Station, West Oahu Station and Hoopili Station</i>	<ul style="list-style-type: none"> • coordinate replacement bus services • assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 16

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

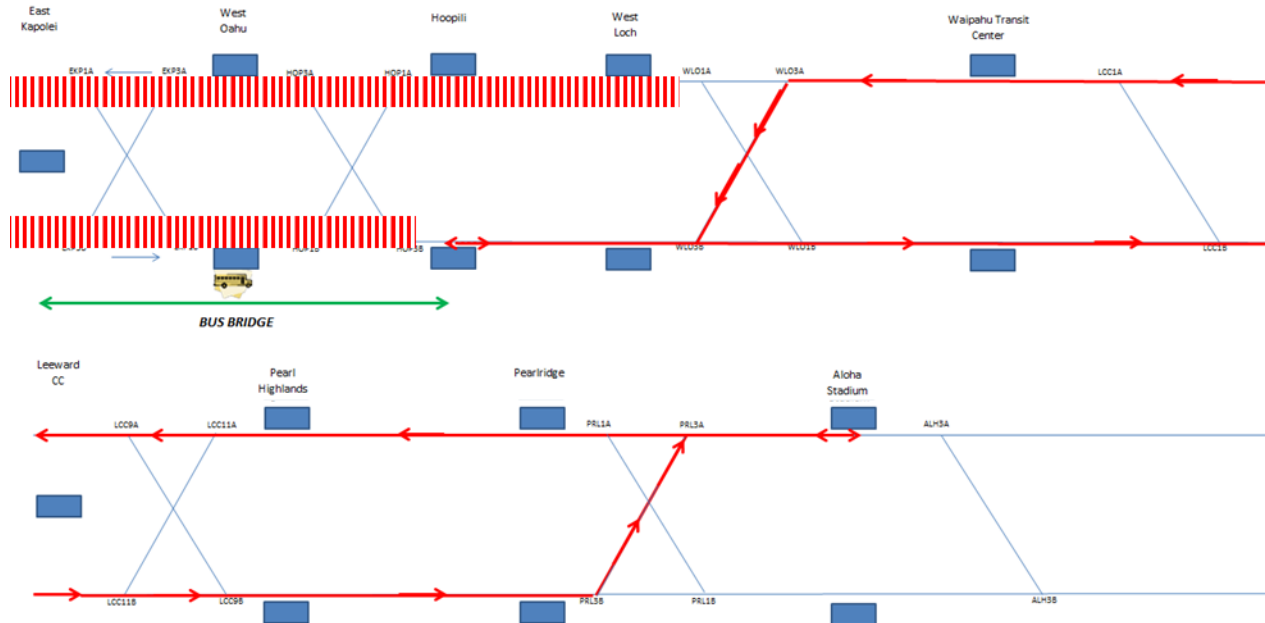
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 34 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 17	This plan handles a double-line blockage from East Kapolei Station to West Oahu Station and a single-line blockage from Hoopili Station to West Loch Station UP track
Terminus:	Hoopili Station DOWN platform<->Aloha Stadium UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both West Loch Station DOWN platform and Hoopili Station DOWN platform to assist passengers going eastbound / westbound or transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Hoopili Station and West Loch Station arrange the bus bridge service with service provider

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 35 of 60

CONTINGENCY PLAN

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform UP track stations that the new terminus is Hoopili Station inform Hoopili Station, West Oahu Station, East Kapolei Station the bus access points
<i>Station Attendant(s) at Hoopili Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at West Loch Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 17

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

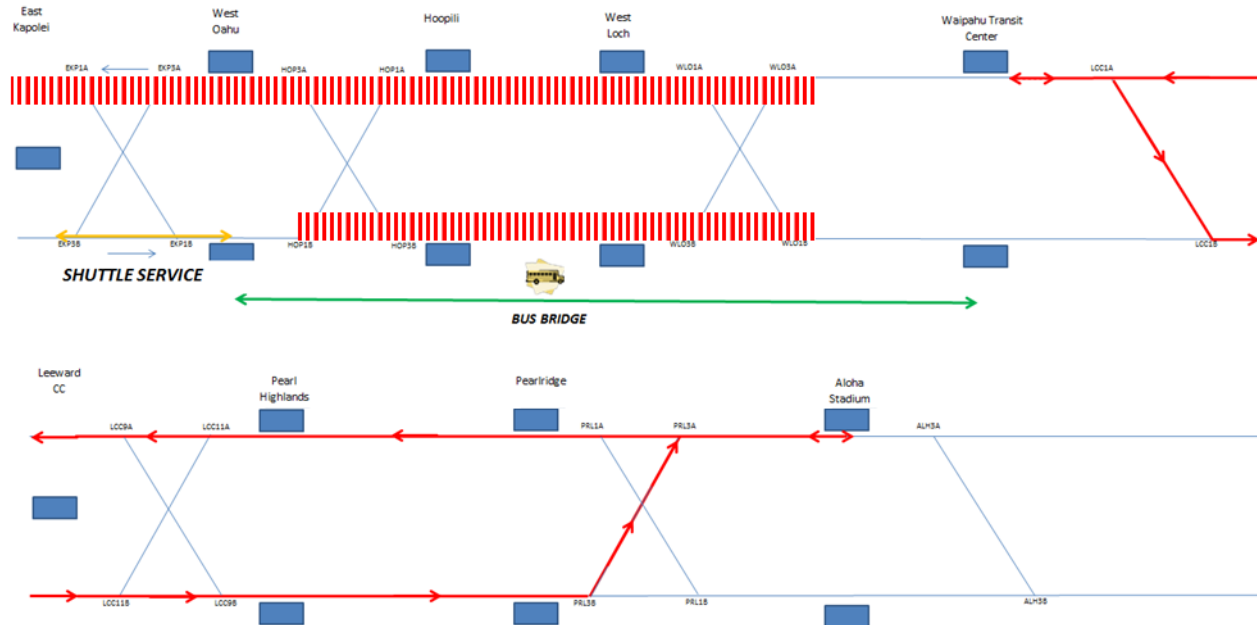
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 36 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 18	This plan handles a single-line blockage from East Kapolei Station to West Oahu Station UP track and a double-line blockage from beyond West Oahu Station to West Loch Station
Terminus:	East Kapolei Station DOWN platform, West Oahu Station DOWN platform (default)<->West Oahu Station DOWN platform, and Waipahu Transit Center Station UP platform, Aloha Stadium Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at West Oahu Station DOWN platform and Waipahu Transit Center Station UP platform to assist passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for West Oahu Station and Waipahu Transit Center Station arrange the bus bridge service with service provider

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 37 of 60

property of Hitachi Rail STS, 2019, all rights reserved - the copying, reproduction and use of this work in any form whatsoever is forbidden without the written authorization of Hitachi Rail STS

CONTINGENCY PLAN

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform UP track stations that the new terminus is Waipahu Transit Center Station inform West Oahu Station, Hoopili Station, West Loch Station and Waipahu Transit Center Station the bus access points
<i>Station Attendant(s) at West Oahu Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Waipahu Transit Center Station</i>	<ul style="list-style-type: none"> inform passengers to use the UP platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Hoopili Station and West Loch Station</i>	<ul style="list-style-type: none"> coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 18

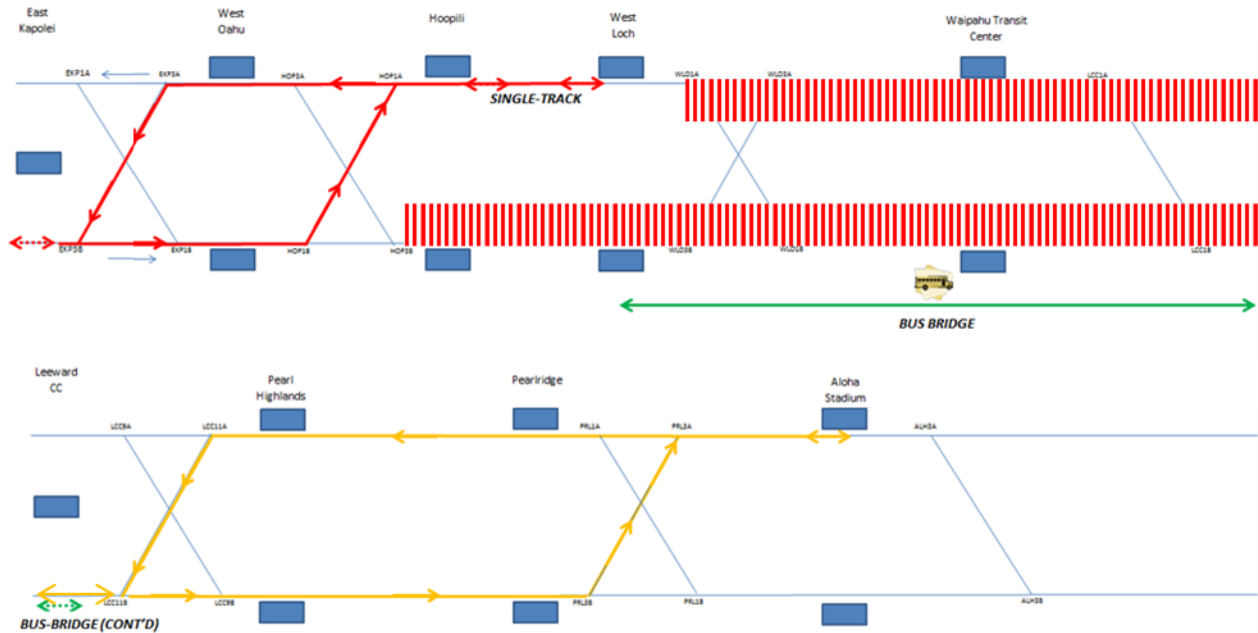
© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 38 of 60

CONTINGENCY PLAN

Plan No. 19	This plan handles a double-line blockage at Waipahu Transit Center Station and a single-line blockage from Hoopili Station to West Loch Station
Terminus:	East Kapolei Station DOWN platform (default)<->West Loch Station UP platform, Leeward CC Station DOWN platform<->Aloha Stadium Station UP platform (default)



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Hoopili Station UP platform, West Loch Station UP platform and Leeward CC Station DOWN platform to assist passengers going eastbound / westbound and passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Hoopili Station, West Loch Station and Leeward CC Station arrange the bus bridge service with service provider

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 39 of 60

CONTINGENCY PLAN

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform stations about the new terminuses inform West Loch Station, Waipahu Transit Center Station and Leeward CC Station the bus access points
<i>Station Attendant(s) at Hoopili Station and West Loch Station</i>	<ul style="list-style-type: none"> inform passengers to use the UP platform coordinate replacement bus services if applicable arrange Station Attendants to assist passengers assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Leeward CC Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services arrange Station Attendants to assist passengers assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Waipahu Transit Center Station</i>	<ul style="list-style-type: none"> coordinate replacement bus services arrange Station Attendants to assist passengers assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 19

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

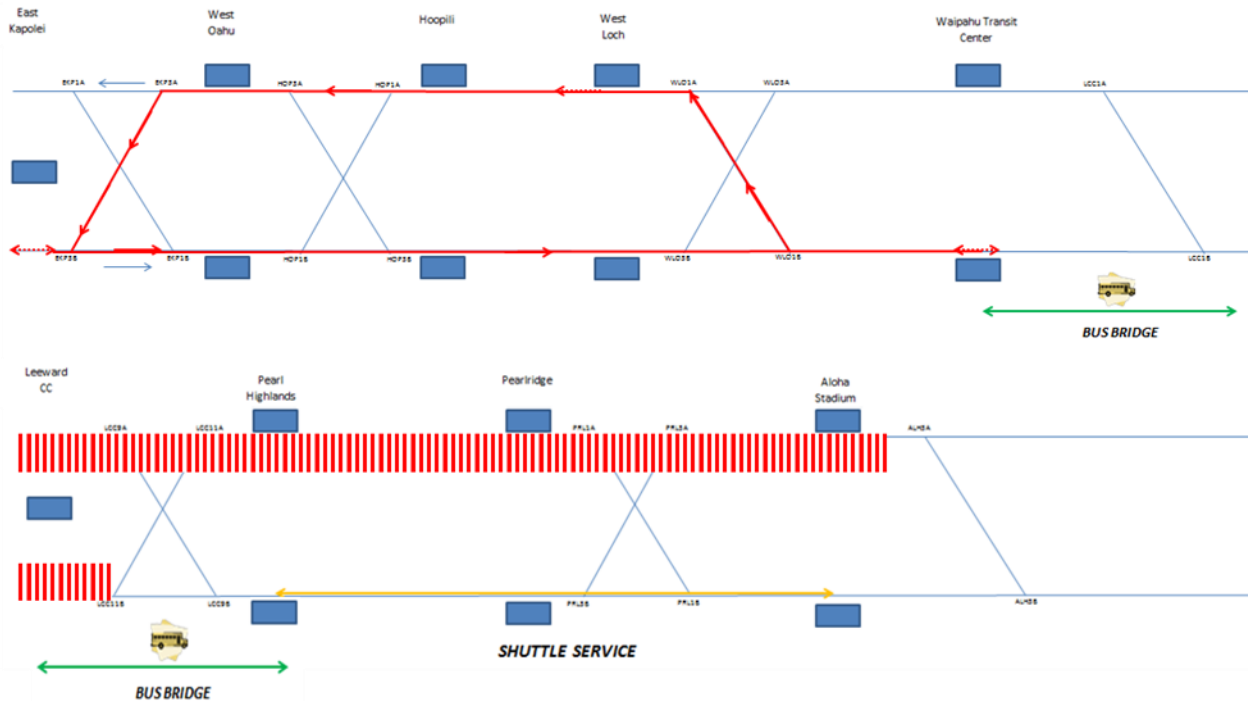
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 40 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 20	This plan handles a double-line blockage at Leeward CC Station and a single-line blockage from Pearl Highlands Station to Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform (default)<->Waipahu Transit Center Station DOWN platform, Pearl Highlands Station DOWN platform<->Aloha Stadium Station DOWN platform



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Waipahu Transit Center Station DOWN platform and Pearl Highlands Station DOWN platform to assist passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Waipahu Transit Center Station and Pearl Highlands Station arrange the bus bridge service with service provider

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 41 of 60

CONTINGENCY PLAN

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform all stations about the new terminuses inform Waipahu Transit Center Station, Leeward CC Station and Pearl Highlands Station the bus access points
<i>Station Attendant(s) at (Waipahu Transit Center, Pearl Highlands, Pearlridge, Aloha Stadium) Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Leeward CC Station and Pearl Highlands</i>	<ul style="list-style-type: none"> coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 20

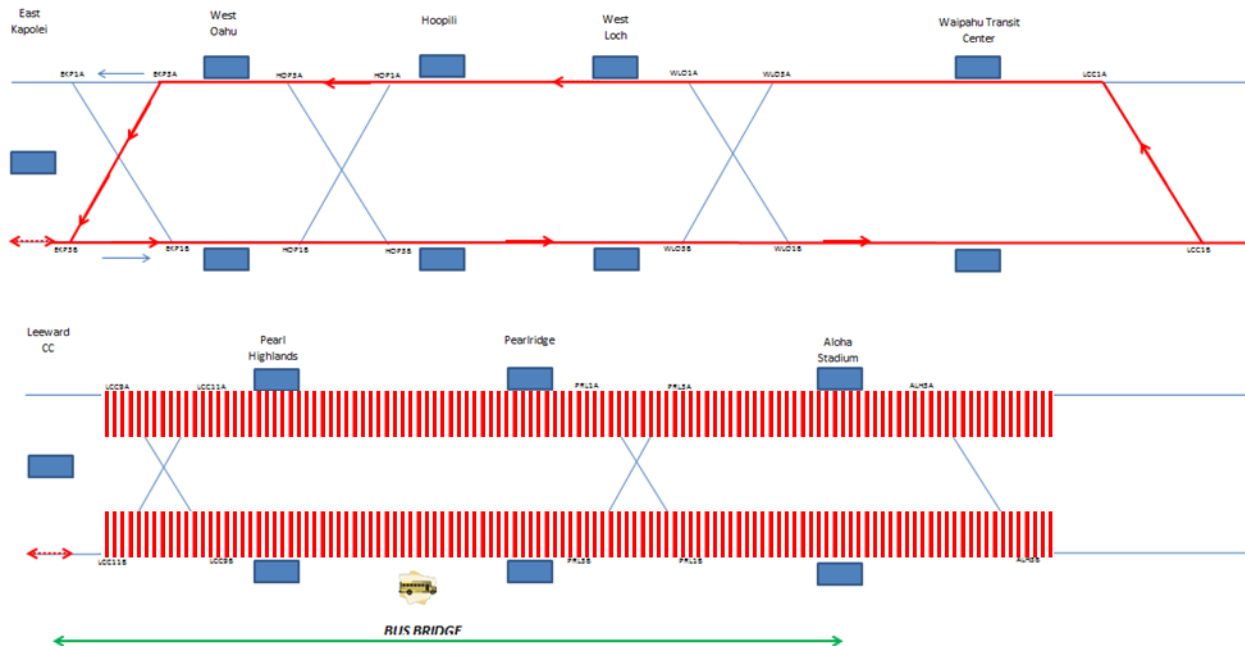
© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 42 of 60

CONTINGENCY PLAN

Plan No. 21	This plan handles a double-line blockage from Pearl Highlands Station to Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform (default), Leeward CC Station DOWN platform



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Leeward CC Station DOWN platform to assist passengers transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Leeward CC Station arrange the bus bridge service with service provider
Information Controller	<ul style="list-style-type: none"> inform DOWN track stations that the new terminus is Leeward CC Station inform Leeward Station, Pearl Highlands Station, Pearlridge Station and Aloha Stadium Station the bus access points

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 43 of 60

CONTINGENCY PLAN

Staff Action	
Station Attendant(s) at Leeward CC Station	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control
Station Attendant(s) at (Pearl Highlands, Pearlridge, Aloha Stadium) Station	<ul style="list-style-type: none"> coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 21

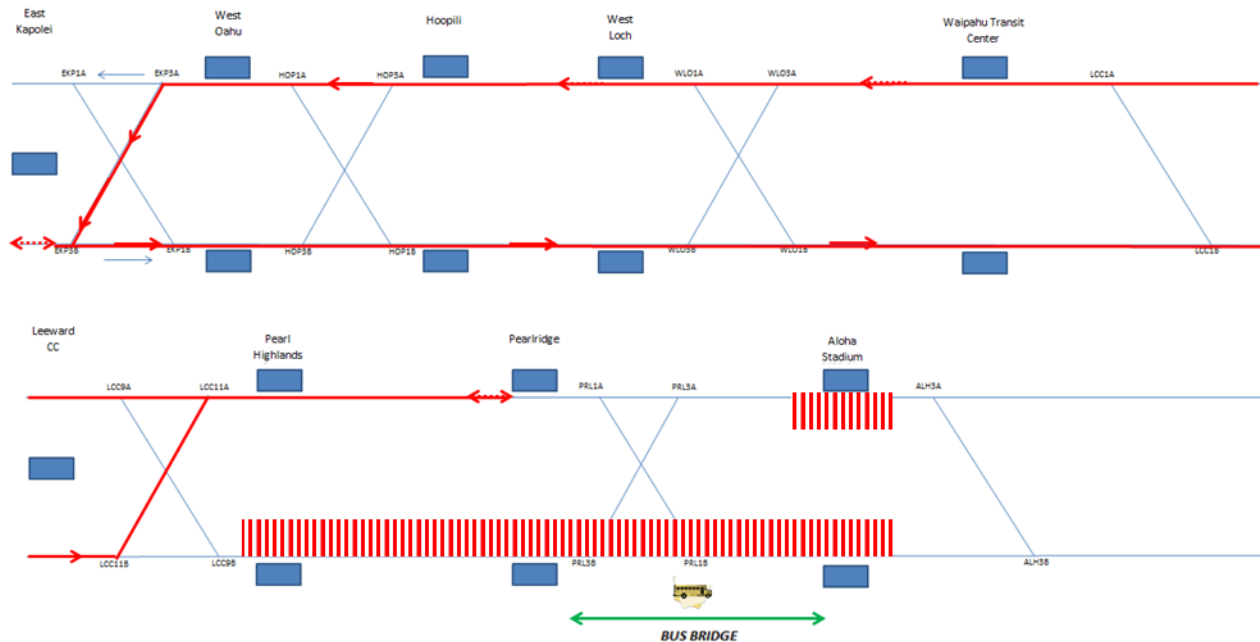
© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 44 of 60

CONTINGENCY PLAN

Plan No. 22	This plan handles a double-line blockage at Aloha Stadium Station and a single-line blockage from Pearl Highlands Station to Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform (default), Pearlridge Station UP platform



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Pearlridge Station UP platform to assist passengers going westbound or transferring buses to and from Aloha Station

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Pearl Highlands Station and Pearlridge Station
Information Controller	<ul style="list-style-type: none"> inform DOWN track stations that the new terminus is Pearlridge Station inform Pearlridge Station and Aloha Stadium Station the bus access points
Station Attendant(s) at Pearlridge Station	<ul style="list-style-type: none"> inform passengers to use the UP platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 45 of 60

CONTINGENCY PLAN

Staff Action	
Station Attendant(s) at Pearl Highlands Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control
Station Attendant(s) at Aloha Stadium Station	<ul style="list-style-type: none"> coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 22

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

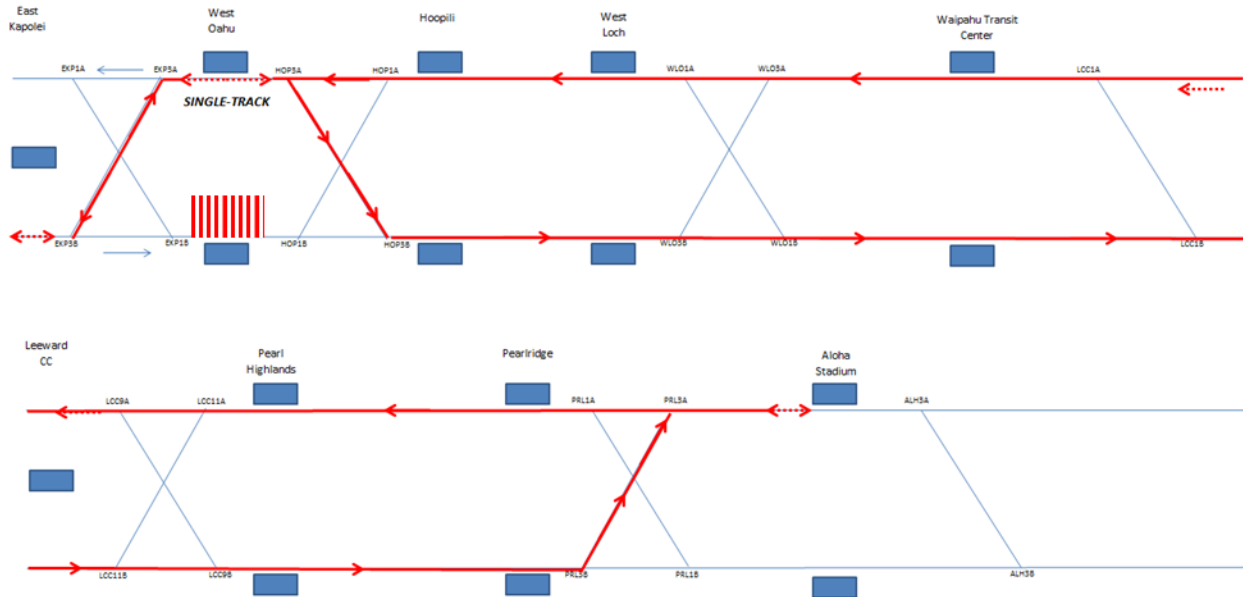
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 46 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 23	This plan handles a single-line blockage at West Oahu Station DOWN platform
Terminus:	East Kapolei Station DOWN platform (default) and Aloha Stadium Station UP platform (default)



Additional Staff Requirements

Station Attendant(s)	1 to 2 additional staff required at West Oahu Station UP platform to assist passengers going eastbound / westbound
-----------------------------	--

Staff Action

Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set single line operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for West Oahu Station
Information Controller	<ul style="list-style-type: none"> inform Station Attendants at West Oahu Station about the use of the UP platform instead
Station Attendant(s) at West Oahu Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 47 of 60

Work Instruction - Operations	HITACHI Inspire the Next
CONTINGENCY PLAN	

End of No. 23

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

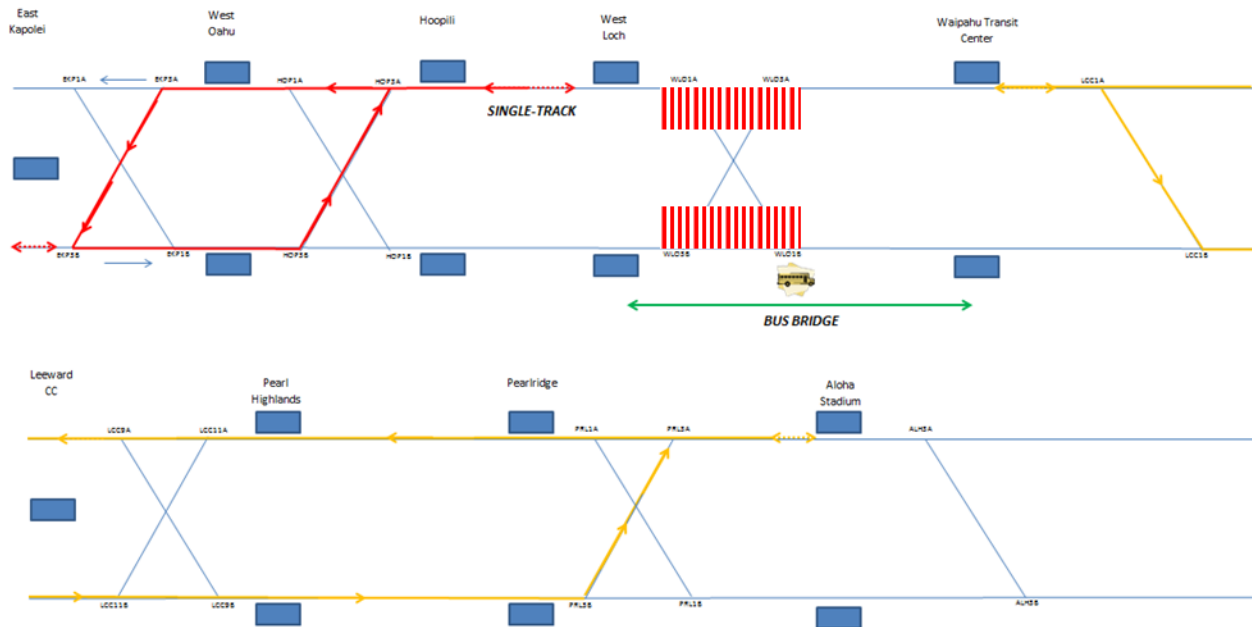
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 48 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 24	This plan handles a double lines blockage between West Loch Station and Waipahu Transit Center Station
Terminus:	East Kapolei Station DOWN platform<->West Loch Station UP platform, and Waipahu Transit Center UP platform<->Aloha Stadium UP platform




Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at West Loch Station and Waipahu Transit Station to assist passengers using the replacement bus services

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage between West Loch Station and Waipahu Transit Center Station
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for West Loch Station and Waipahu Transit Station
Information Controller	<ul style="list-style-type: none"> inform UP track stations about the new terminus and the bus access point

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 49 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
<i>Station Attendant(s) at West Loch Station and Waipahu Transit Station</i>	<ul style="list-style-type: none"> • coordinate replacement bus services • arrange Station Attendants to assist passengers • assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 24

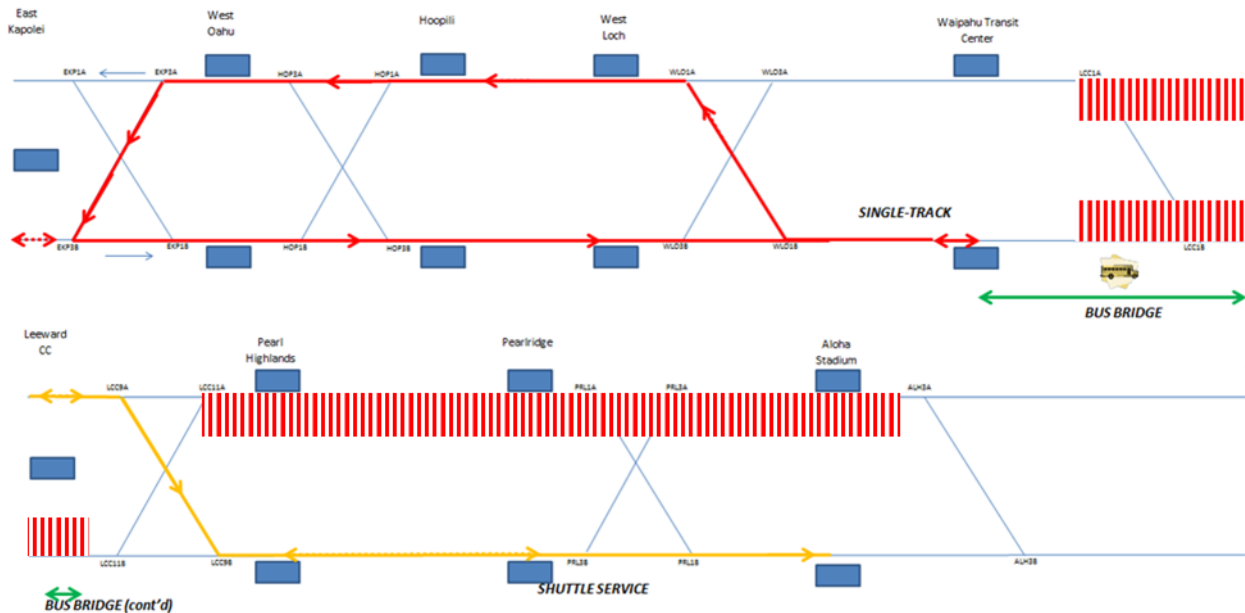
© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 50 of 60

CONTINGENCY PLAN

Plan No. 25	This plan handles a double lines blockage between Waipahu Transit Center Station and Leeward CC Station, a single-line blockage at Leeward CC Station, and a single-line blockage from Pearl Highlands Station to Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform<->Waipahu Transit Center Station DOWN platform, Leeward CC Station UP platform<->Aloha Stadium Station DOWN platform



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Waipahu Transit Center Station DOWN platform, Leeward CC Station UP platform, Pearl Highlands Station DOWN platform, Pearlridge Station DOWN platform and Aloha Stadium Station DOWN platform to assist passengers going eastbound / westbound or transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Waipahu Transit Center, Leeward CC Station, Pearl Highlands Station, Pearlridge Station and Aloha Stadium Station arrange the bus bridge service with service provider

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 51 of 60

CONTINGENCY PLAN

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform all stations about the new terminuses inform Waipahu Transit Center Station and Leeward CC Station the bus access points
<i>Station Attendant(s) at (Pearl Highlands, Pearlridge, Aloha Stadium) Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Waipahu Transit Center Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Leeward CC Station</i>	<ul style="list-style-type: none"> inform passengers to use the UP platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 25

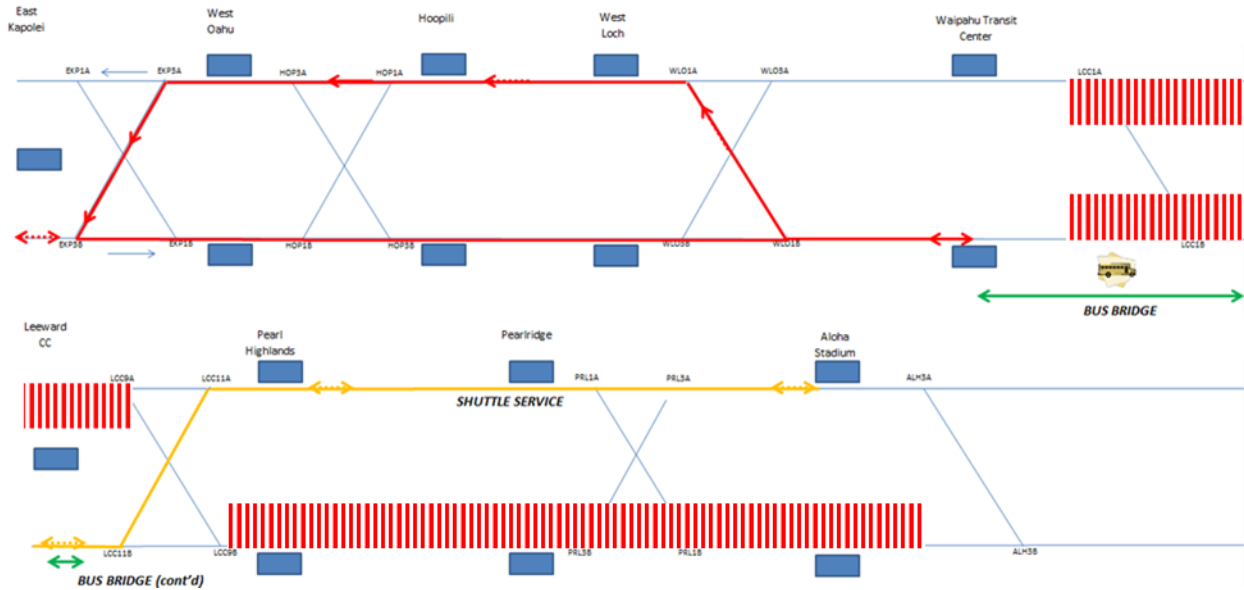
© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 52 of 60

CONTINGENCY PLAN

Plan No. 26	This plan handles a double lines blockage between Waipahu Transit Center Station and Leeward CC Station, a single-line blockage at Leeward CC Station, and a single-line blockage from Pearl Highlands Station to Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform<->Waipahu Transit Center Station DOWN platform, Leeward CC Station DOWN platform<->Aloha Stadium Station UP platform



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Waipahu Transit Center Station DOWN platform, Leeward CC Station DOWN platform, Pearl Highlands Station UP platform, Pearlridge Station UP platform and Aloha Stadium Station UP platform to assist passengers going eastbound / westbound or transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Waipahu Transit Center, Leeward CC Station, Pearl Highlands Station, Pearlridge Station and Aloha Stadium Station arrange the bus bridge service with service provider

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 53 of 60

CONTINGENCY PLAN

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform all stations about the new terminuses inform Waipahu Transit Center Station and Leeward CC Station the bus access points
<i>Station Attendant(s) at (Pearl Highlands, Pearlridge, Aloha Stadium) Station</i>	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Waipahu Transit Center Station and Leeward CC Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 26

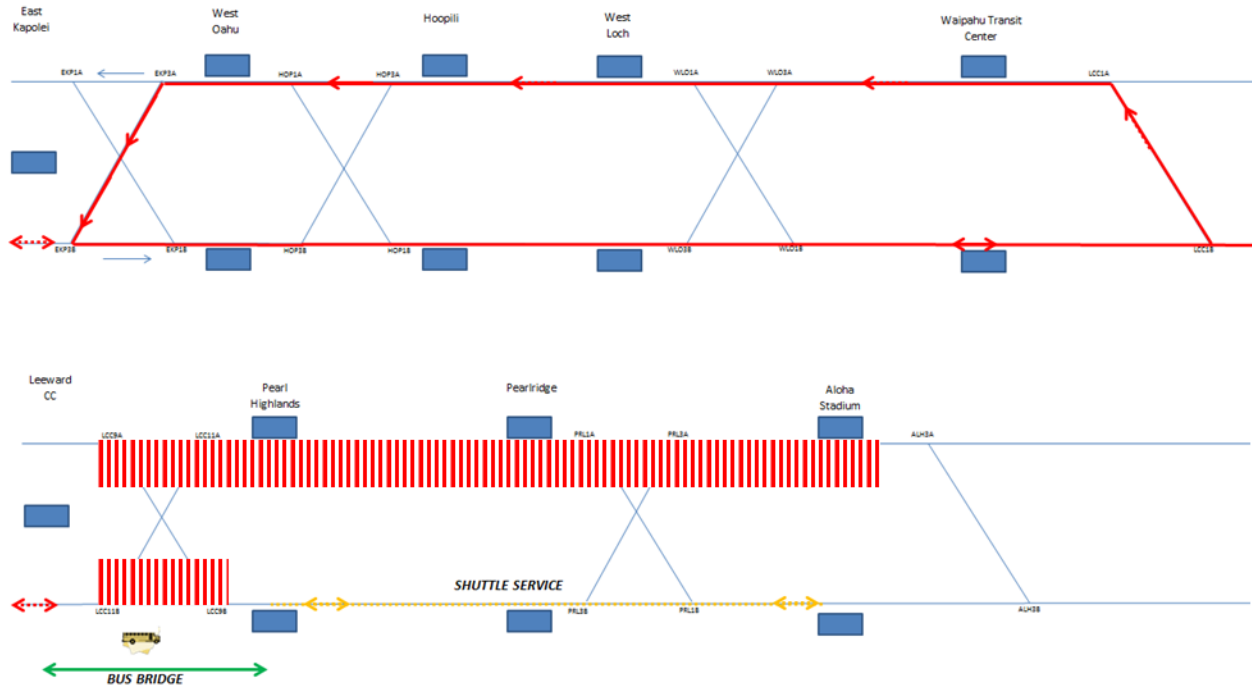
© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 54 of 60

CONTINGENCY PLAN

Plan No. 27	This plan handles a double lines blockage between Leeward CC Station and Pearl Highlands Station, and a single-line blockage from Pearl Highlands Station to Aloha Stadium Station
Terminus:	East Kapolei Station DOWN platform<->Leeward CC Station DOWN platform, Pearl Highlands Station DOWN platform<->Aloha Stadium Station DOWN platform



Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at Leeward CC Station DOWN platform, Pearl Highlands Station DOWN platform, Pearlridge Station DOWN platform and Aloha Stadium Station DOWN platform to assist passengers going eastbound / westbound or transferring among buses/trains

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 55 of 60

CONTINGENCY PLAN

Staff Action	
<i>OCC Supervisor</i>	<ul style="list-style-type: none"> request additional workforce for Leeward CC Station, Pearl Highlands Station, Pearlridge Station and Aloha Stadium Station arrange the bus bridge service with service provider
<i>Information Controller</i>	<ul style="list-style-type: none"> inform all stations about the new terminuses inform Pearl Highlands Station and Leeward CC Station the bus access points
<i>Station Attendant(s) at (Pearlridge, Aloha Stadium) Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control
<i>Station Attendant(s) at Pearl Highlands Station and Leeward CC Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform coordinate replacement bus services assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 27

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

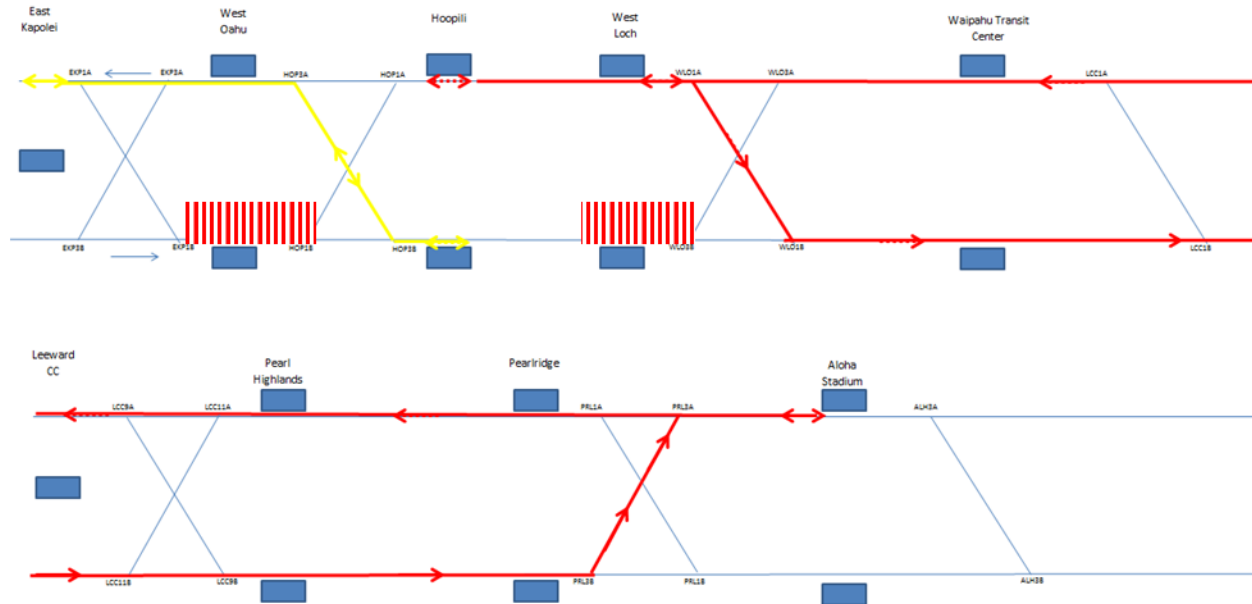
Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 56 of 60

Work Instruction - Operations

CONTINGENCY PLAN

HITACHI
Inspire the Next

Plan No. 28	This plan handles 2 single-line blockages: at West Loch Station, and at West Oahu Station
Terminus:	East Kapolei Station UP platform <->, Hoopili Station DOWN platform, and Hoopili Station UP platform<->Aloha Stadium Station UP platform




Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at West Oahu Station UP platform and West Loch Station UP platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set shuttle operation defined for this plan remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for West Oahu Station and West Loch Station
Information Controller	<ul style="list-style-type: none"> inform all stations about the new terminuses

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 57 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
Station Attendant(s) at (East Kapolei, West Oahu, West Loch) Station	<ul style="list-style-type: none"> inform passengers to use the UP platform assist passenger, monitor passenger flow, and prepare for crowd control
Station Attendant(s) at Hoopili Station	<ul style="list-style-type: none"> inform passengers to use the UP platform for trains to Aloha Stadium Station inform passengers to use the DOWN platform for trains to East Kapolei Station assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 28

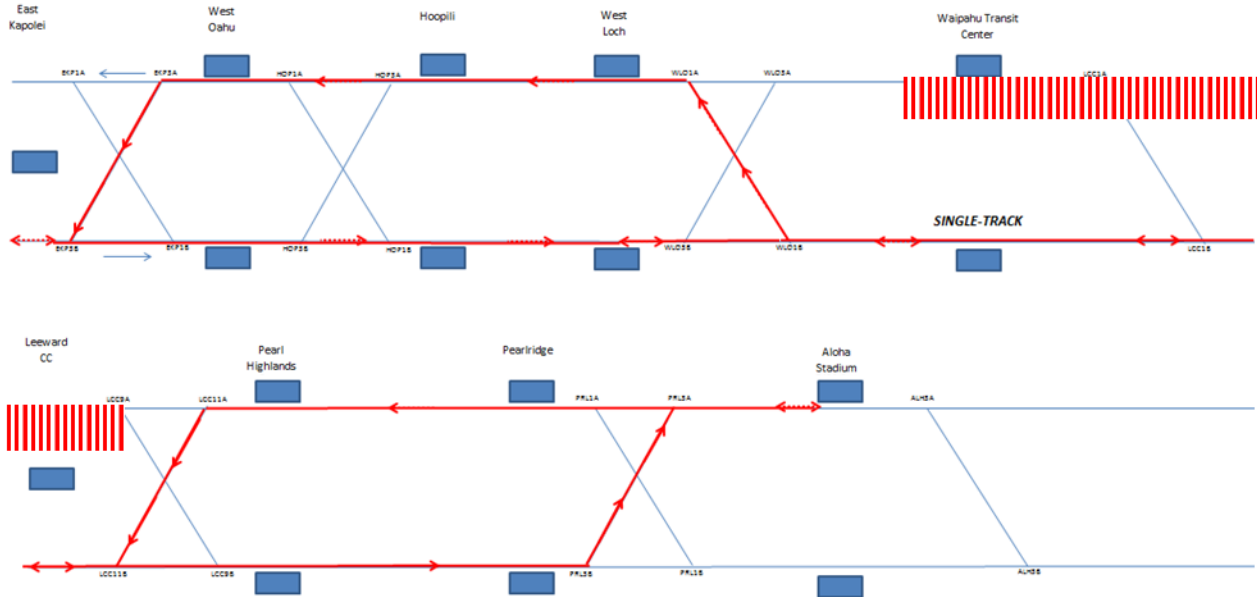
© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 58 of 60

CONTINGENCY PLAN

Plan No. 29	This plan handles a single-line blockage from Waipahu Transit Center Station to Leeward CC Station
Terminus:	East Kapolei Station DOWN platform (default) and Aloha Stadium Station UP platform (default)




Additional Staff Requirements	
Station Attendant(s)	1 to 2 additional staff required at both Waipahu Transit Center Station DOWN platform and Leeward CC Station DOWN platform to assist passengers going eastbound / westbound

Staff Action	
Engineering and Fault Controller	<ul style="list-style-type: none"> coordinate with maintainer to address the blockage
Maintainer	<ul style="list-style-type: none"> send maintenance unit to the scene to address the blockage de-energize and isolate the blocked area from the running line
Train Controller	<ul style="list-style-type: none"> set short turn back operation defined for this plan set single line operation defined for this plan - hold trains at Pearl Highlands Station UP platform and at West Loch Station DOWN platform before releasing them across remove excessive trains if required
OCC Supervisor	<ul style="list-style-type: none"> request additional workforce for Waipahu Transit Center Station and Leeward CC Station

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 59 of 60

Work Instruction - Operations	
CONTINGENCY PLAN	

Staff Action	
<i>Information Controller</i>	<ul style="list-style-type: none"> inform Station Attendants at Waipahu Transit Center Station and Leeward CC Station about the use of the DOWN platform only
<i>Station Attendant(s) at Waipahu Transit Center Station and Leeward CC Station</i>	<ul style="list-style-type: none"> inform passengers to use the DOWN platform assist passenger, monitor passenger flow, and prepare for crowd control

End of No. 29

© P

Approved By:	<input type="checkbox"/> Director, Operations and Maintenance	<input type="checkbox"/> Department Manager	<input type="checkbox"/> Manager, HSE (Operations and Maintenance)
Signature:			
Date:			

Document Code	HNL-09421 - Contingency Plan (Alternate Service Plan)	Effective Date:	
File Name	-e	Rev No.	Page 60 of 60