


# TWA Worksite Protection for Waterfall to Helensburgh

<b>WORK DESCRIPTION</b>	<b>Routine Network Maintenance Activities</b>
<b>WPP NUMBER</b>	<b>SC69D1 10119</b>
<b>SCOPE</b>	<p>This SWI is applicable for the worksite protection arrangements using TWA for routine network maintenance performed by South Coast team</p> <p>Work activities include:</p> <ul style="list-style-type: none"> <li>• Train stop maintenance / Points Maintenance</li> <li>• Track circuit testing</li> <li>• Track Inspection</li> <li>• OHW inspections</li> <li>• KK Testing</li> <li>• Lift and Pack</li> </ul>
<b>AUTHORISATIONS:</b>	<p><b>Protection Officer:</b> Protection Officer Level 3 or higher  <b>Handsignalers:</b> Engineering Handsignaller Level 2.</p>
<b>SAFETY CONTROLS</b> – Track Work Authority (TWA) arrangements:	<p>For work on the <b>Up and Down Illawarra lines</b>, the worksite is protected by:</p> <ul style="list-style-type: none"> <li>• A Handsignaller level 2 must be placed at <b>WL 91 D Signal</b> on the <b>Down Illawarra line</b>.</li> <li>• Handsignaller level 2 must be placed at <b>WG 754 U</b> on the <b>Up Illawarra line</b>.</li> <li>• <b>XYZ Key</b> must be removed from Helensburgh crossovers relay room.</li> <li>• <b>Railway Track Signals</b> must be placed on the departure side of protecting signals.</li> </ul> <p>When rail traffic enters the worksite limits from any direction all workers and equipment must stay clear of the Danger Zone until all rail traffic has passed the worksite limits and protection has been replaced.</p>
<b>PRESTART REQUIREMENTS</b>	<p>Protection Officer assessment checklist must be completed before instructions in this SWI are followed.</p> <p>Tools and equipment required:</p> <ul style="list-style-type: none"> <li>• Protection Officer requires a phone to contact the Signaller</li> <li>• Protection Officer requires SL key to access XYZ Key release</li> <li>• Handsignaller Level 2 requires railway track signals, red flags/lights.</li> </ul>
<b>FURTHER INFORMATION</b>	<p><i>NWT 300 Planning work in the Rail Corridor</i></p> <p><i>NWT 306 Track Work Authority</i></p> <p><i>NPR 702 Using a Track Work Authority</i></p> <p><i>NGE 202 Handsignals</i></p> <p><i>NPR 708 Using X, Y and Z keys</i></p> <p><i>NPR 709 Using railway track signals</i></p> <p><i>NGE 200 Walking in the Danger Zone</i></p> <p><i>NLA 410 Sutherland to Wollongong</i></p>

Protection Officer assessment checklist		
<b>Protection Officer's name:</b>		<b>Yes</b> <i>(Tick if Yes)</i>
This document has not expired 12 months beyond the issue date.		
On-site safety assessment has been completed and additional hazards and controls recorded on the pre-work briefing (Page 3).		
SWI details and protection arrangements have been reviewed and validated for the assessed worksite location.		
Corridor Safety Number	Protection Officer Signature	Date

 **Warning:** *If an above item does not apply, the Protection Officer must not use this Safe Work Instruction. A new worksite protection plan must be completed in accordance with NRF 014 Worksite Protection Pre-work briefing and NRF 015 Worksite Protection Plan.*

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**Worksite Protection Pre-work Briefing**

Briefing date:  /  /

**Protection Officer details**

name       signature       contact no.

Work location:

Scope of work:

Worksite protection:  Refer to Worksite Protection Plan for details

Hazards (e.g. environment, plant, equipment, human error)	Controls (to be implemented to eliminate or reduce the risk to the lowest practicable level)	Person responsible for Control
<b>Approaching rail traffic</b>	TWA implemented.	Protection Officer
<b>Adjacent live lines</b>	Designated work and walk areas as per Protection Officer's instructions. All work is to stop and workers must move to a safe place when warned by Protection Officer.	Protection Officer
<b>Multiple entry points into worksite</b>	TWA implemented. Removal of XYZ Keys to prevent bidirectional running.	Protection Officer
<b>Access to / Egress from worksite</b>	Protection Officer will assess and instruct when it is safe for workers to use NGE 200 Walking in the Danger Zone to move to the worksite or Safe Place.	All
<b>Mobile phone distraction</b>	Mobile phone usage is only allowed in the Danger Zone when required for work purposes. Other than being used for work purposes, mobile phones may be used only in a safe place after informing the Protection Officer.	All

A final site inspection has been conducted immediately before commencing work, and any new hazards and controls have been included.

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**Worksite Protection Plan – Track Work Authority**

**Protection Officer details**

<input type="text" value="name"/>	<input type="text" value="signature"/>	<input type="text" value="contact no."/>
<input type="text" value="RSW or RIW no."/>	<input type="text" value="designation"/>	Planned duration <input type="text"/>

Workplace Supervisor details:

Type of work:

<b>Worksite Location</b>					
on the	<b>Up Illawarra Line</b>	between	<b>WL 96 U Signal</b>	and	<b>WG 760 U Signal</b>
on the	<b>Down Illawarra Line</b>	between	<b>WL 94 D Signal</b>	and	<b>WG 758 D Signal</b>

**TWA worksite kilometre location**

on the	<b>Up Illawarra line</b>	from	<b>40.222 km</b>	to	<b>45.741 km</b>
on the	<b>Down Illawarra line</b>	from	<b>40.222 km</b>	to	<b>45.741 km</b>

**Signal protection**

<input type="text" value="WL 93 U Sig"/>	<input type="text" value="WL 91 D Sig"/>	<input type="text" value="WG 754 U Sig"/>	<input type="text" value="WG 752 D Sig"/>
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**Handsignaller details**

1	<input type="text" value="name"/>	<b>WL 91 D Signal/39.239 Km</b>	Sig/km
2	<input type="text" value="name"/>	<b>WG 754 U Signal/ 46.250 Km</b>	Sig/km
3	<input type="text" value="name"/>		Sig/km
4	<input type="text" value="name"/>		Sig/km
5	<input type="text" value="name"/>		Sig/km
6	<input type="text" value="name"/>		Sig/km
7	<input type="text" value="name"/>		Sig/km
8	<input type="text" value="name"/>		Sig/km

**Assurances (confirm the details provided by the Signaller)**

The last rail traffic to pass the protection was  The last known location of rail traffic is

Confirm that there is no approaching rail traffic between protection and worksite

**Signaller Details**

<input type="text" value="name"/>	<input type="text" value="location"/>	<input type="text" value="Contact no."/>
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**Notes**

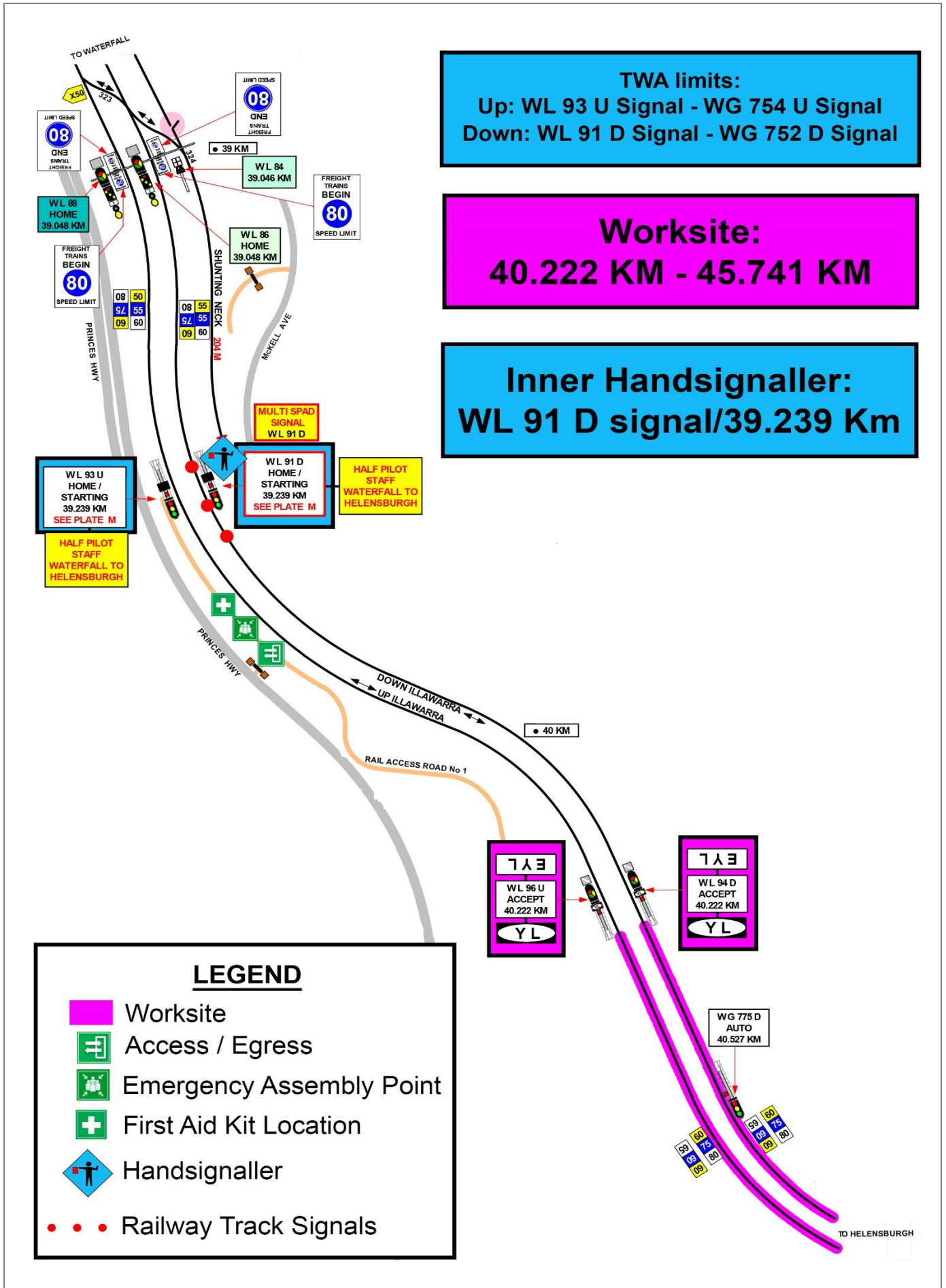
Protection Officer's log, diagrams, notes and detailed instructions are over the next pages. These are to be read and followed as part of this worksite protection plan for Track Work Authority.

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<b>INSTRUCTIONS:</b>	<ol style="list-style-type: none"> <li>1. Workers enter the rail corridor via <b>100 45.495 D</b> Access Gate</li> <li>2. Protection Officer briefs workers about the worksite protection arrangements.</li> <li>3. Protection Officer places Inner Handsignaller for the Down Illawarra line at WL 91 D Signal</li> <li>4. Protection Officer places Inner Handsignaller for the Up Illawarra line at <b>WG 754 U Signal</b></li> <li>5. Inner Handsignaller contact the Signaller at Wollongong North Panel to confirm effective communications with the Signaller.</li> <li>6. Inner Handsignallers check effective communications with the Protection Officer and confirms to the Protection Officer that effective communication with the Signaller was established.</li> <li>7. Protection Officer contacts the Signaller Wollongong North Panel and requests a TWA.</li> <li>8. After the TWA is authorised instruct Qualified Workers to:                         <ol style="list-style-type: none"> <li>a. Remove either <b>X, Y or Z Key</b> after obtaining release and confirm removal time with Signaller.</li> <li>b. Place <b>3x Railway Track Signals</b> on departure side of protecting signal.</li> </ol> </li> <li>9. Protection Officer confirms with Inner Handsignaller that protection has been placed.</li> <li>10. Workers start work in the Danger Zone.</li> <li>11. Workers move to safe place after work is complete.</li> <li>12. Protection Officer instructs the Inner Handsignaller to remove protection if safe to do so and confirm once removed.</li> <li>13. Workers egress worksite via <b>100 45.555 D</b> Access Gate</li> <li>14. Protection Officer contacts the Wollongong North Panel to fulfil the TWA and confirm replacement of <b>X, Y or Z Key</b>.</li> </ol>
<b>ADDITIONAL DETAILS</b>	<p><u>XYZ Key</u></p> <p>XYZ Key is removed to prevent bi-directional movements on both the Up and Down Illawarra Lines. The XYZ key can be found at the Helensburgh Crossovers relay room.</p> <p>Signaller is required to 'release' key in order for you to remove XYZ. Any of the 'X', 'Y' or 'Z' keys can be used.</p>

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**TWA limits:**  
Up: WL 93 U Signal - WG 754 U Signal  
Down: WL 91 D Signal - WG 752 D Signal

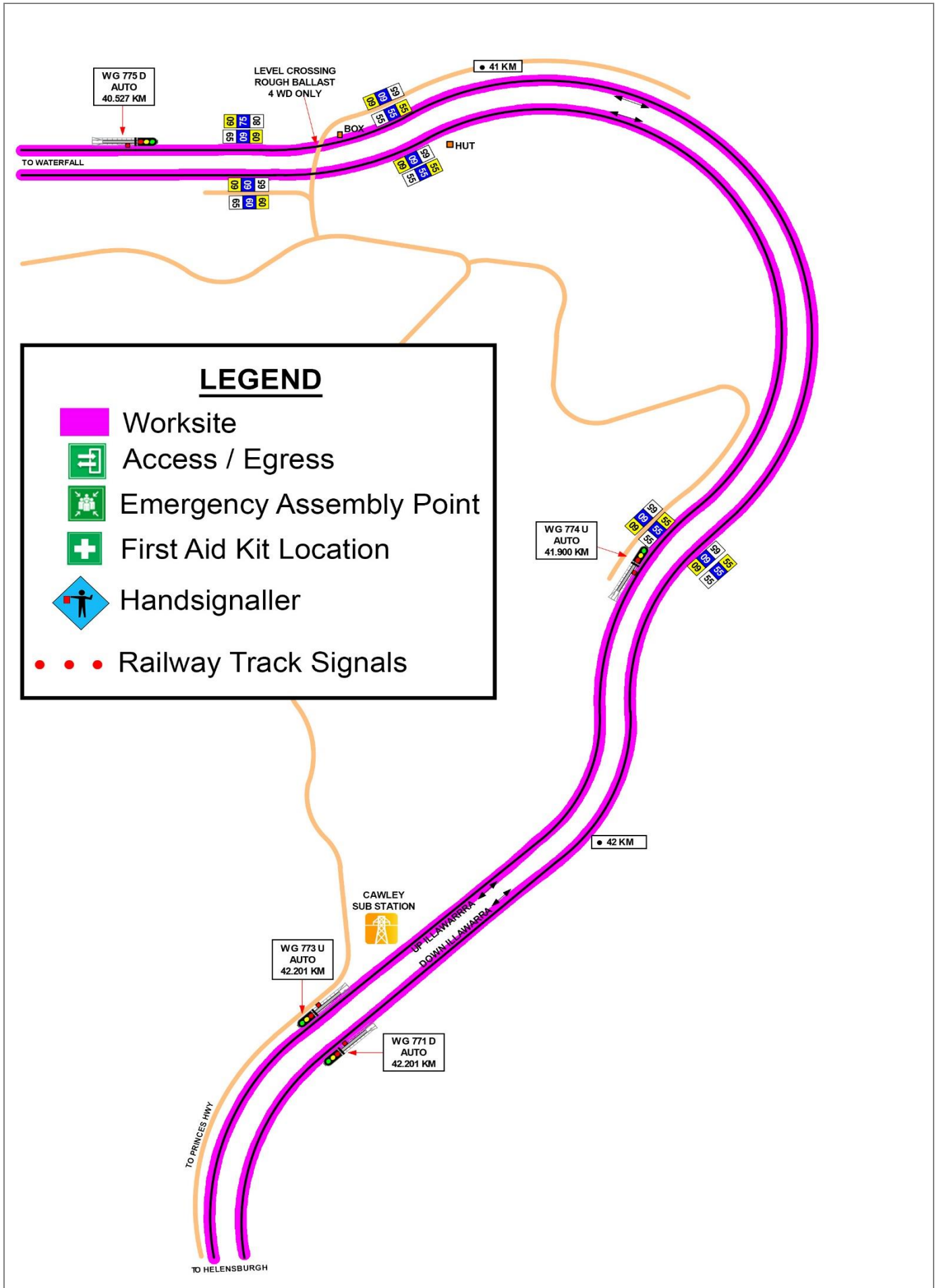
**Worksite:**  
40.222 KM - 45.741 KM

**Inner Handsignaller:**  
WL 91 D signal/39.239 Km

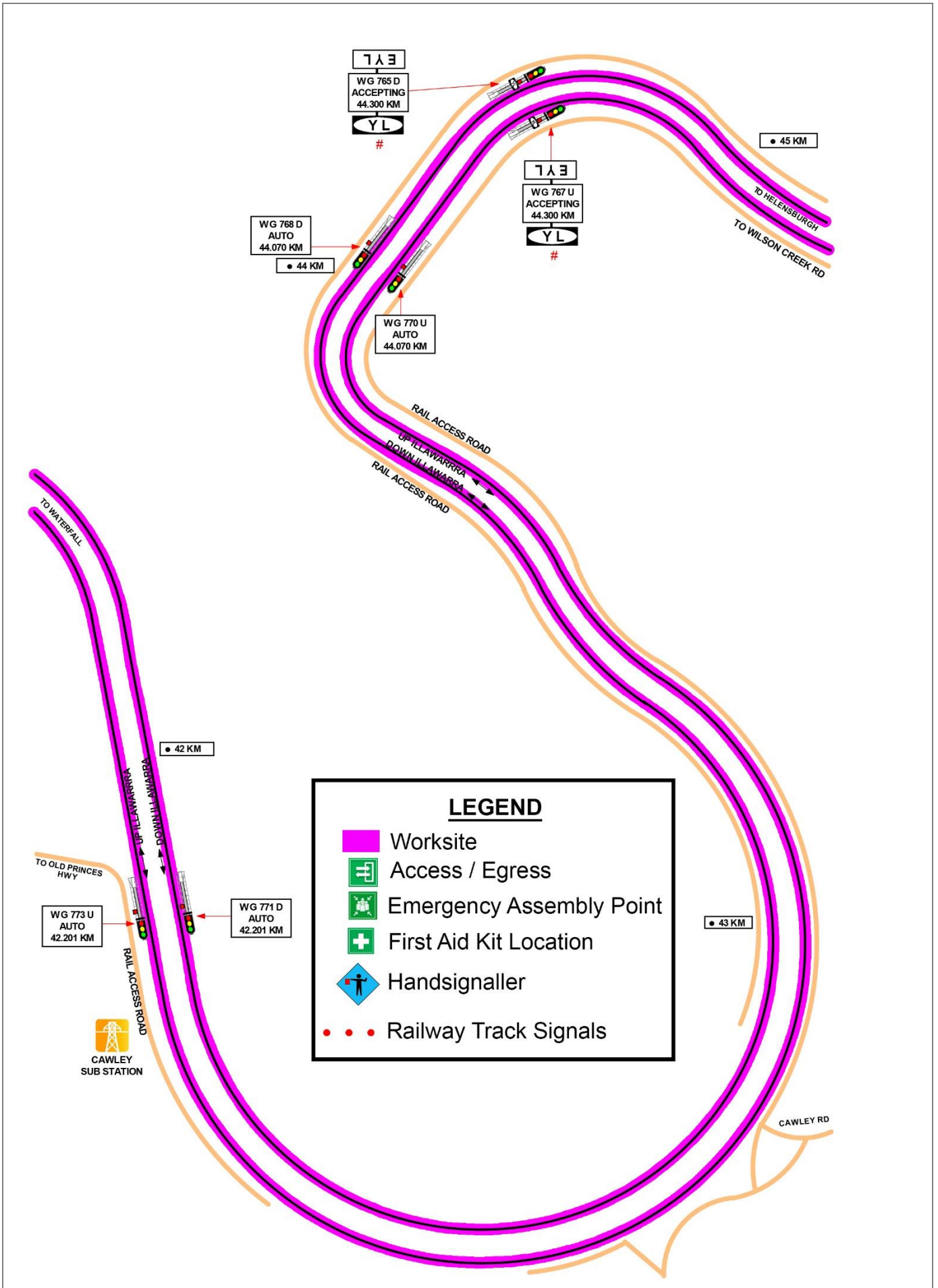
**LEGEND**

- Worksite
- Access / Egress
- Emergency Assembly Point
- First Aid Kit Location
- Handsignaller
- Railway Track Signals

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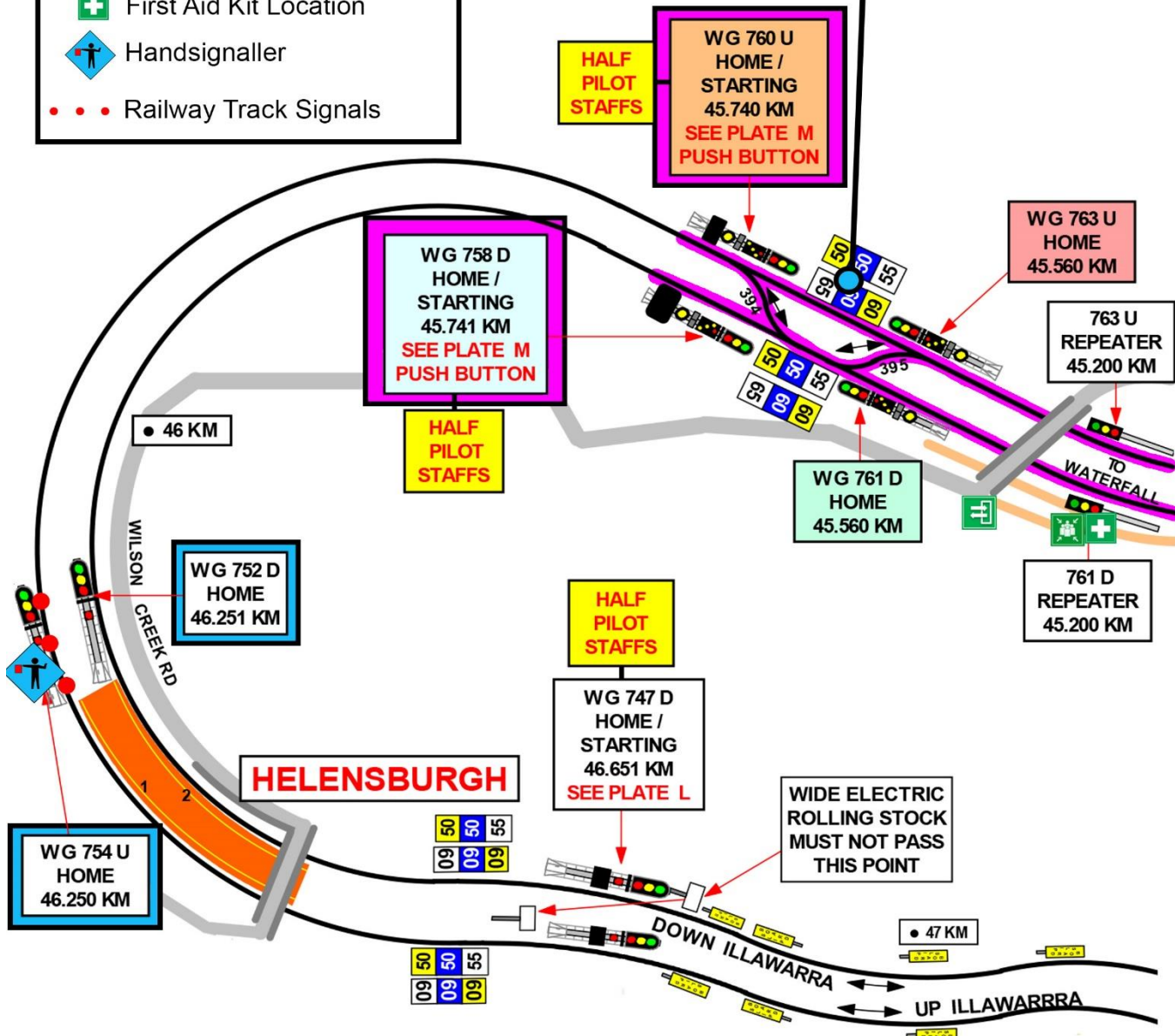


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**LEGEND**

-  Worksite
-  Access / Egress
-  Emergency Assembly Point
-  First Aid Kit Location
-  Handsignaller
-  Railway Track Signals

**XYZ Key**  
XYZ Key for Waterfall to Helensburgh section  
located at Helensburgh Relay Room



**TWA limits:**  
Up: WL 93 U Signal - WG 754 U Signal  
Down: WL 91 D Signal - WG 752 D Signal

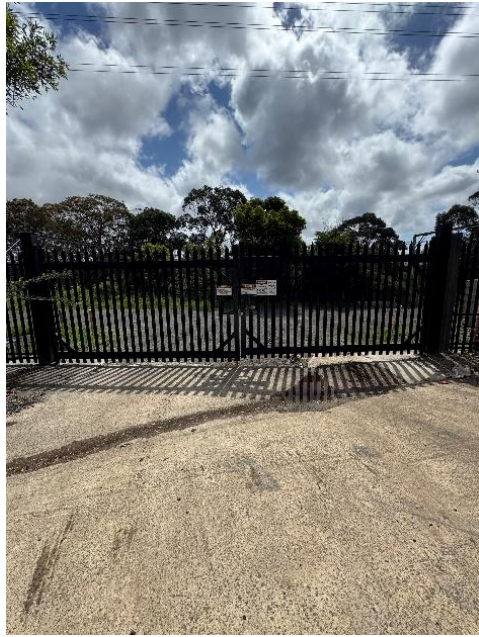
**Worksite:**  
40.222 KM - 45.741 KM

**Inner Handsignaller:**  
WG 754 U signal/46.250 Km

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ACCESS/  
EGRESS:



**Image 1:** Access gate **100 39.004** to Handsignaller location at WL 91 D Signal (McKell Ave)



**Image 2:** Access gate **100 46.168 U** to Handsignaller location at **46.250 KM** (Rail access road off Old Sta RD)



**Image 3:** Access gate **100 45.495 D** for worker access to the worksite

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HANDSIGNALLER  
LOCATION:



Image 4: Inner Handsignaller at WL 91 D Signal



Image 5: Inner Handsignaller at WG 754 U Signal

XYZ KEY:



Image 6: XYZ Keys at Helensburgh Crossovers

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