Signal Support Work Package

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Section 1 – Signal Support Works Package Authorisation

|  |  |
| --- | --- |
| Project Name |  |

|  |  |
| --- | --- |
| Location |  |

|  |  |
| --- | --- |
| Registration No |  |

|  |  |
| --- | --- |
| Regional Signalling Representative: |  |

|  |  |
| --- | --- |
| Package Lead: |  |

|  |  |
| --- | --- |
| Track Work Scope: |  |

|  |  |
| --- | --- |
| Site Integrity or Reliability Issues:[Insert or Attach details] |  |

|  |  |
| --- | --- |
| Sign Off: | This work package has been prepared, checked, reviewed, and approved by the persons nominated below. The person approving this package confirms that the Maintenance Signal Engineer's comments and issues documented on the next page have been addressed. |

Prepared by

|  |  |
| --- | --- |
| Name |  |

Checked by

|  |  |
| --- | --- |
| Name |  |
| Classification |  |
| Signature |  |
| Date |  |

Package Approved by

|  |  |
| --- | --- |
| Name |  |
| Classification |  |
| Signature |  |
| Date |  |

Signal Support Works Package Post Review

|  |  |
| --- | --- |
| Package post review conducted by: |  |
| Date: |  |

|  |
| --- |
| Comments |
|  |

Maintenance Signal Engineer Checklist

|  |  |  |
| --- | --- | --- |
|  | Comments/Issue Completed by Maintenance Engineer | Risk MitigationCompleted by Approving Engineer |
| Certificates of CompetencyIn dateCorrect competencies |  |  |
| Permits to WorkIncludes relevant site specific requirements from NMD Signalling induction packagesIn date |  |  |
| Temporary Bonding PlanCorrect TIPAdequate bonding |  |  |
| Temporary Bridging AuthorityIncluded (if required) |  |  |
| Scope clearly identified? |  |  |
| Package appears complete?(e.g. work instructions and disconnections lists available) |  |  |
| Any special local conditions to be considered? |  |  |

|  |
| --- |
| Comments |
|  |

Endorsed by

|  |  |
| --- | --- |
| Signal Maintenance Engineer |  |
| Signature |  |
| Date |  |

Actioned by

|  |  |
| --- | --- |
| Signal Support Service Provider Signal Engineer |  |
| Signature |  |
| Date |  |

Signal Support Work Package Approval Checklist

|  |  |
| --- | --- |
| [ ]  | Track work scope clearly defined |
| [ ]  | Signal support work scope clearly defined |
| [ ]  | Sufficient time available – preparation |
| [ ]  | Sufficient time available – implementation and restoration |
| [ ]  | Input documentation up to date (e.g. checked interim maintenance copies) |
| [ ]  | Material requirements properly scoped and sourced |
| [ ]  | Inspection and test plan and work instructions detailed and complete |
| [ ]  | Temporary bonding plan checked and approved |
| [ ]  | Bridging authorities checked and approved |
| [ ]  | IBA details checked |
| [ ]  | Disconnection list correct and complete |
| [ ]  | Sufficient resourcing of staff  |
| [ ]  | Staff competencies checked against work allocation |
| [ ]  | Signal support work package complete |
| [ ]  | Maintenance Engineer's comments addressed |

Completed by

Signal Support Service Provider Signal Engineer

|  |  |
| --- | --- |
| Name |  |
| Signature |  |
| Date |  |

Section 2 – Project Scope of Work

Project Work Scope

Section 3 – Detailed Signalling Scope and Safeworking Permits

Scope Details (General)

Detailed Site Inspection Form

Turnout Refurbishment Scoping Form

Inspection & Testing Plan

Equipment Disconnection List

Register of Safeworking Forms and Permits

Interface Co-Ordination Plan

Detailed Site Inspection Form







Inspection & Testing Plan

|  |  |  |
| --- | --- | --- |
| Inspection and Testing Plan – Signal Support Works | Package No: |  |
| Listing of Signalling and Assets – Removed / Refitted / Affected | Listing of Signalling Assets: Upgraded / Replaced |
| Asset Type | Description | Asset Type | Description | Asset Type | Description | Asset Type | Description |
|  |  |  |  |  |  |  |  |
| Signalling Safeworking Requirement | Other Requirements |
| Activity | Where and When | Who is responsible | Requirement | Details |
|  |  |  | Possession: |  |
| Other Parties |  |
| Personnel:  |  |
| Special Considerations: |  |
| ConcessionDeviationsBridging Authorities:  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Submitted by: |  |  | Reviewed by: |  |
| Date: |  |  | Date: |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Package No: | Date: | Signal Support WorksDisarranging/Rearranging – Inspection – Testing Detailed Plan & Signalling Safeworking Requirements | Page 1 of 1 |
|  |  |
| Asset Type and Name/s | Activity Type  | Activity Details | W.I No | Activity Details | W.I No |
|  | Design Control Activities | Correlation checking |  | Certification of Drawings |  |
| Inspection Activities | General Inspection |  | Documentation Check |  |
| Testing Activities | Function Testing |  | Operational Function Check |  |
|  | Design Control Activities | Correlation checking |  | Certification of Drawings |  |
| Inspection Activities | General Inspection |  | Documentation Check |  |
| Testing Activities | Function Testing |  | Operational Function Check |  |
|  | Design Control Activities | Correlation checking |  | Certification of Drawings |  |
| Inspection Activities | General Inspection |  | Documentation Check |  |
| Testing Activities | Function Testing |  | Operational Function Check |  |
|  | Design Control Activities | Correlation checking |  | Certification of Drawings |  |
| Inspection Activities | General Inspection |  | Documentation Check |  |
| Testing Activities | Function Testing |  | Operational Function Check |  |
|  | Design Control Activities | Correlation checking |  | Certification of Drawings |  |
| Inspection Activities | General Inspection |  | Documentation Check |  |
| Testing Activities | Function Testing |  | Operational Function Check |  |
|  | Design Control Activities | Correlation checking |  | Certification of Drawings |  |
| Inspection Activities | General Inspection |  | Documentation Check |  |
| Testing Activities | Function Testing |  | Operational Function Check |  |
|  | Design Control Activities | Correlation checking |  | Certification of Drawings |  |
| Inspection Activities | General Inspection |  | Documentation Check |  |
| Testing Activities | Function Testing |  | Operational Function Check |  |
| Signalling Safeworking – MN S 40000 | Equipment Book in / Out |  | Other  |  |

Equipment Disconnection Lists

|  |  |  |  |
| --- | --- | --- | --- |
| Project: |  | Possession No : |  |
| Date/s: |  | Location : |  |
| Track: |  | From Km: |  | To Km: |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Kilometres | Track | Equipment | Location | Details | Disconnected | Reconnected | Comments / Time Restored |
| By | Signature | By | Signature |
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Register of Safeworking Forms Certificates & Permits

|  |  |
| --- | --- |
| Project |  |

|  |  |
| --- | --- |
| Registration No |  |

Signals Representative to plan / investigate requirements and include the requirements in the work package

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Signalling | Required |  | Electrical | Required |
| **Booking Authority** |  |  | High Voltage Feeders Isolation Orders | [ ]  Yes / [ ]  No |
|  NRF 003 | [ ]  Yes / [ ]  No |  | Working High Voltage Instruction  | [ ]  Yes / [ ]  No |
| PR S 40002 FM01 - Authority for temporary bridging of contacts. See PR S 40002. | [ ]  Yes / [ ]  No |  | Mains Access Permit | [ ]  Yes / [ ]  No |
|  | Substation Access Permit | [ ]  Yes / [ ]  No |
| Damage to signalling and safeworking equipment by other parties PR S 40005 FM01 | [ ]  Yes / [ ]  No |  | Low Voltage Access Permit | [ ]  Yes / [ ]  No |
|  |  |  | Authority for Removal of Supply from 1500 Volt Sections | [ ]  Yes / [ ]  No |
|  |  |  | 1500 Volt Overhead Wiring Permit to Work | [ ]  Yes / [ ]  No |
|  |  |  | Advice of Alterations to Electrical System Operating Diagrams | [ ]  Yes / [ ]  No |
|  |  |  | Installation Test Report | [ ]  Yes / [ ]  No |
|  |  |  | Local Supply Authority Notification ff Electrical Work | [ ]  Yes / [ ]  No |

|  |
| --- |
| Checked By |
| Name | {Insert Name} |
| Position | {Insert Position Title} |
| Signature |  | Date: | {dd/mm/yy} |

Interface Co-ordination Plan

In addition to the provisions included in the Project Works Notification this Plan nominates personnel and interface matters between the parties.

|  |  |
| --- | --- |
| Support Package Registration No: | Work Description / Location: |
|  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| # | Role | Name: | Contact Details: |
| 1. | Regional Signal Rep: |  |  |
| 2. | Signal Support Rep: |  |  |
| 3. | Track Work Project Rep: |  |  |
| 4. | Electrical Work Project Rep: |  |  |
| 5. |  |  |  |
| 6. |  |  |  |

|  |
| --- |
| Program activities requiring Notification, Witness or Hold points:  |
| Milestone / Activity Description. | Who | N= Notify | W= Witness | H= Hold |
| 1. | Signal Support Package Endorsement. | Regional Signal Representative |  |  | H |
| 2. | Signal Support Package Approval | Signal Support Service Provider |  |  | H |
| 3. | Practical Completion - Minor defects. | Regional Signal Representative & Signal Support Service Provider |  |  | H |
| 4. |  |  |  |  |  |
| 5. |  |  |  |  |  |
| 6. |  |  |  |  |  |

Interface Identification

|  |
| --- |
| Does the project have management and/or functional interfaces to other areas? |
| [ ]  | Signal Design | [ ]  | Control Systems | [ ]  | Communications |
| [ ]  | Engineering | [ ]  | Track | [ ]  | Electrical |
| [ ]  | Operations | [ ]  | Train Crew | [ ]  | Station Staff |
| [ ]  | Other: |  | [ ]  | Other: |  | [ ]  | Other: |  |
| Details of the actions required across each interface are to be included in the Interface Management Plan sections of this Plan. |

Site Integrity Agreement & Site Assessment

The parties are to assess the condition of existing infrastructure, interface locations and signalling equipment in the vicinity of the works.

| Question | Yes | No | Detail |
| --- | --- | --- | --- |
| Is any pre-existing equipment to be utilised / reused by this project? | [ ]  | [ ]  | If yes, detail any conditions |
| Enter detail here as applicable |
| Will there be redundant material as a result of this project? | [ ]  | [ ]  | If yes, detail any disposal requirement |
| Enter detail here as applicable |
| Is there any other signal jobs current at the location or for which the submission of “Certified Office Copies” (COC) is outstanding? | [ ]  | [ ]  | If yes, Detail |
| Enter detail here as applicable |
| Is there any new or altered signal design for the area not yet updated to Maintenance Copies? | [ ]  | [ ]  | If yes, Detail |
| Enter detail here as applicable |
| Has the assessment identified any requirements for track, civil or electrical infrastructure particularly associated with access, reliability and / or maintainability of the signalling infrastructure? | [ ]  | [ ]  | If yes, Detail the requirement |
| Enter detail here as applicable |
| Has the “Electrical risk Assessment” identified any hazards and agreed on precautions to be adopted and responsibilities? | [ ]  | [ ]  | If yes, Provide details |
| Enter detail here as applicable |
| Details of insulation records are to be advised by the Region, particularly known defects. | [ ]  | [ ]  | If yes, Provide details |
| Enter detail here as applicable |
| The Regional signal representative authorises work to commence in the following location / s | [ ]  | [ ]  | If yes, Provide details |
| Enter detail here as applicable |
| Other: | [ ]  | [ ]  | If yes, Provide details |
| Enter detail here as applicable |

Signalling Access Arrangements

|  |
| --- |
| Access to relay room / location permitted between: |
| [ ]  |  |
| [ ]  | Other: | Click here |

|  |  |  |  |
| --- | --- | --- | --- |
| Question | Yes | No | Detail |
| Special access required (e.g. Electronic token): | [ ]  | [ ]  | Enter detail here as applicable |
| Material to be stored on-site: | [ ]  | [ ]  | Enter detail here as applicable |
| Notes: |
| Enter any special conditions relating to the access required for this project |

Operational Issues

|  |  |  |
| --- | --- | --- |
| Question | Yes | No |
| Are there any operational issues to be managed by the support job? | [ ]  | [ ]  |
| List - including responsibility assignment: |
|  |

Regional Signalling Representative

For each signalling works project the Asset engineer, signals (or as otherwise nominated) shall perform the following activities in the capacity of Regional signal representative:

Provides a single point gateway between the signal support section and the region, progresses, monitors and reports on internal territory division aspects of the required processes

Provide interface coordination within the Territory division for signal support matters

* Review and approve in principle – signal support work packages
* Other duties as nominated as follows:

|  |
| --- |
| Nominate any other reporting requirements for this project. If so, detail: |
| Enter detail here as applicable |

Pre -Existing Safety Issues

|  |  |  |
| --- | --- | --- |
| Question | Yes | No |
| Is there any employee safety issues, risks and mitigation strategies used by maintenance personnel to be communicated and incorporated in the planning and site safety management system to be utilised by the signal support group? | [ ]  | [ ]  |
| List - including who is responsible: |
|  |

Signalling Maintenance Responsibility

|  |  |  |  |
| --- | --- | --- | --- |
| Question | Yes | No | Detail |
| Post- arrange attendance for follow up activities, e.g. points adjustments due to track settlement and stand-by. | [ ]  | [ ]  | Enter detail here as applicable |
| Are there any other maintenance responsibilities for the Project? | [ ]  | [ ]  | Enter detail here as applicable |
| Collaborate for the review of work packages | [ ]  | [ ]  | Enter detail here as applicable |
| Collaborate and attend the detailed site assessment inspection and the development of the Site Integrity Agreement | [ ]  | [ ]  | Enter detail here as applicable |
| Regional Signal Representative Site Specific Comments: |
|  |

Documentation & Handover Schedule

|  |
| --- |
| Documentation shall be provided to the Regional representative as specified below: |
| Handover Package | 2 Days or Other: |  |

Handover Documentation Package

The Handover Documentation Package shall include copies of the following:

IBA Forms and disconnection lists

Signal Support Certificate

Track History Records

Forms

Checklist from the Inspection and Testing Specifications

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Spec /Clause | Summary of Requirement | Applicable | Spec /Clause | Summary of Requirement | Applicable |
| Yes | No | Yes | No |
| 47111 /Cl 5.1 | Project Works Notification to be submitted | [ ]  | [ ]  | 47111 /Cl 6.12 | Regional representative to approve in principle the Signal Support Works Packages | [ ]  | [ ]  |
| 47111 /Cl 6.1 | Accuracy of existing designs at work location, consult Regional Signal Rep- Re-Status. | [ ]  | [ ]  | 47111 /Cl 6.12 | Collaborate the implementation of the works with the regional personnel | [ ]  | [ ]  |
| 47111 /Cl 6.5 | Consult and agree with the Regional Signals Representative re–safe access to equipment | [ ]  | [ ]  | 47112 /Cl 2.1 | A job status review including status of other modifications/jobs issued for the area to be conducted | [ ]  | [ ]  |
| 47111 /Cl 6.12 | Regional Signal Representatives to collaborate for the provision of track possessions, SAFE Notices, Weekly Notice, Test Locomotives, Arrange for follow up maintenance activities post possession | [ ]  | [ ]  | 47116 /Cl 1.6 | The Regional Signal Representative shall ensure that an Interface Coordination Plan and a Project Works Notification are agreed with all Regional stakeholders prior to authorising site work to commence | [ ]  | [ ]  |

Requirements may be further detailed in the following NOTES section.

Interface Management Plan – Others

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Activity | Details of Agreement  | Required? | Activity | Details of Agreement | Required? |
| Yes | No | Yes | No |
| Electrical, Traction supply | Arrangements at substations and section huts | [ ]  | [ ]  | Track, Track work | Signal clearances | [ ]  | [ ]  |
| Electrical, Traction supply | New overhead wiring structures to be installed so as to minimise signal sighting restrictions | [ ]  | [ ]  | Civil, Civil work | Embankment widening and drainage work | [ ]  | [ ]  |
| Electrical, Traction supply | Air gap locations,  | [ ]  | [ ]  | Civil, Civil work | Roadways and access points | [ ]  | [ ]  |
| Electrical, Traction supply | Overhead wiring clearances,  | [ ]  | [ ]  | Civil, Civil work | Level Crossing arrangements  | [ ]  | [ ]  |
| Track, Track work | Track drainage & reconditioning requirements – track circuit reliability | [ ]  | [ ]  | External Service Owners | Approvals, locations, protection and supervision for services on Sydney Trains Land | [ ]  | [ ]  |
| Track, Track work | Points - new and reconditioning requirements | [ ]  | [ ]  |  |  | [ ]  | [ ]  |

Notes

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Interface Coordination Plan Agreement

The works are authorised to proceed recognising the provisions set out in this Interface Coordination Plan:

Submitted By:

|  |
| --- |
| Signal Support Representative |
| Name: |  |
| Signature: |  | Date: |  |

**Agreed By:**

|  |
| --- |
| Regional Signalling Representative |
| Name: |  |
| Signature: |  | Date: |  |

|  |
| --- |
| Other: Track Representative |
| Name: |  |
| Signature: |  | Date: |  |

|  |
| --- |
| Other: Electrical Representative  |
| Name: |  |
| Signature: |  | Date: |  |

|  |
| --- |
| Other  |
| Name: |  |
| Signature: |  | Date: |  |

Section 4 – Register of Work Instructions

Register of Work Instructions

Register of Signal Support Work Instructions

|  |  |  |  |
| --- | --- | --- | --- |
| Project: |  | Project Date: |  |
| Location: |  | Registration No: |  |
| WI No. | Version No. | Team No. | Work description: | Issuing Officer (sign/Date) | IssuedTo(Sign/Date) | Completedby (Sign/Date) | Checked by (Sign/Date) |
| 1 |  |  |  |  |  |  |  |
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Section 5 – Prepared and Completed Work Instructions

Work Instructions

Section 6 – Activity Log

Signal Support Activity Log

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Signal Support Activity Log | Page |  | of |  |
| Project:  |  | Registration No: |  |
| LineItemNo. | Date/Time | Team | Report By | Report Details | Action Taken ORTransferred to WI NoOR See Line Item No. |
| 1 |  |  |  |  |  |
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| 2 |  |  |  |  |  |
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| 9 |  |  |  |  |  |
|  |  |
| Checked / Actioned By: |
| Name: |  | Position: |  |
| Sign off when complete | Signature |  | Date |  | Time |  |

Section 7 – Signal Support Status Certificate

Signal Support Status Certificate

|  |  |
| --- | --- |
| **Signal Support Status Certificate** | Page 1 of 1 |
| Project:  |  | Registration No:  |  |
| Location: |  | Date: |  |
| Project Scope:  |  |
| Item | Work Activity | Status | Signature |
| 1.0 | Work Instructions All Checked and Actioned |  |  |
| 2.0 | LogAll Entries Checked and Actioned |  |  |
| 3.0 | Documents Checked, Complete and Certified |
| 3.1 | Copy of Track History Cards |  |  |
| 3.2 | Trainstops |  |  |
| 3.3 | F.P.L. and Detection |  |  |
| 3.4 | Level Crossings |  |  |
| 3.5 | Damage Reports |  |  |
| 3.6 |  |  |  |
| 3.7 |  |  |  |
| 3.8 |  |  |  |
| Status Statement - I certify that the work as detailed on this certificate has been inspected and tested and is functional and fit for purpose in accordance with the specified requirements, and ready to be booked into use |
| Signature: |  |
| Date / Time: |  |
| Name:  |  |
| Position: |  |

Section 8 – Working & Completed Documents

Working Documents

Completed Infrastructure Booking Authorities / Permits

Pre-Work Briefs

Transmittals

Section 9 – Spare Forms

Spare Forms

Spare Work Instruction

Spare Log Sheets

PR S 40002 FM01 – Authority for temporary bridging of contacts

PR S 40005 FM01 – Damage to signalling and safeworking equipment by other parties

Spare Work Instruction for “Like for Like Replacement” - for emergency repairs

Spare Track Circuit History Cards

Reference Documents

Drop Away Minimum Shunt Values (from PR S 40025).

Attach “site reference copies” of any relevant Maintenance Manual/s that may be required for reference

Cable and Services searches

Section 10 – Rosters

Rosters

Permits to Work

Certificates of Competency