| Status of Stando                 | ards Challen                                 | nge Applications (18th June 2024<br>Standard Challenged                         | (4)<br>  Primary Standards Steering  | Subject  | Simplified Summary of Challenge   | Current Process Stage   |
|----------------------------------|--|---|--|--|---|---|
| STDCHAL-000001                   | 07/12/2017                                   | NR/L3/CIV/040.  | Group  Buildings & Civils  | Modular Steel Platforms  | Clarification concerning the current prescribed design life of  |   |
|                                  |  | NR/L3/CIV/030<br>NR/L3/CIV003 - F1990   | , and the second |  | platforms and minimum steel galvanising levels.   | Accepted to Revise Standard   |
| STDCHAL-000002                   | 13/11/2017                                   | O.E.E 156   | Electrical Power   | OLE Mast Design  | Potential for simplification of fabricated overhead line masts.   | Accepted to Revise Standard   |
| STDCHAL-000003                   |  | NR/L2/OHS/044   | Quality, Health, Safety & Environment  | Planning & Managing Construction Work  | Potential for contractor's Construction Phase Plans to be referenced to the Network Rail template sections.   | Not Proceed   |
| STDCHAL-000004<br>STDCHAL-000005 | 17/04/2018<br>17/04/2018                     | NR/L3/TRK/2049/MOD07<br>NR/L3/TRK/2049MOD05                                     | Track<br>Track   | Track Design Handbook Module 07 Gauging Track Design Handbook System Interfaces - Electrical Clearances  |   | Not Proceed Not Proceed   |
| STDCHAL-000006                   | 12/04/2018                                   | NR/L3/TRK/2049MOD05   | Track  | Track Design Handbook System Interfaces - Conductor Rail   | Several sections of the Track Design Handbook reference   | Not Proceed   |
| STDCHAL-000007                   | 12/04/2018                                   | NR/L3/TRK/2049MOD05   | Track  | Track Design Handbook System Interfaces - Platforms  | requirements for other disciplines. Potential for simplification.   | Not Proceed   |
| STDCHAL-000008                   | 12/04/2018                                   | NR/L3/TRK/2049MOD05   | Track  | Track Design Handbook System Interfaces - Level<br>Crossings   |   | Not Proceed   |
| STDCHAL-000009                   | 13/04/2018                                   | NR/SP/OHS/069<br>Non-Compliance – Tracker No 3115<br>NR/CIV/SD/370              | Buildings & Civils   | Lineside Access Steps  | Design requirements for lineside access steps.  | Accepted to Revise Standard   |
| STDCHAL-000010                   | 13/04/2018                                   | NR/L2/RSE/100/Guide   | Network Rail Assurance<br>Panel  | NR/L2/RSE/100/Guide  | Request for document to be withdrawn as it is out of date.  | Standard withdrawn as a result of this challenge application          |
| STDCHAL-000011                   | 17/04/2018                                   | NR/L3/INI/P3M/126/01  | Projects   | Requirements Framework   | Clarification concerning who is accountable for the RRD.  | Standard withdrawn as a result of this challenge application          |
| STDCHAL-000012                   | 16/04/2018                                   | GE/RT8000/HB16, NR/SP/OHS/069   | Electrical Power   | RT3170, ORR Electrical Clearances Policy Statement –<br>Oct 2016, NR (HS) Asset Protection Development<br>Handbook, GL/RT1210, BS EN 50122-1: 2011 | Providing improved clarity in relation to electrical clearance distances.   | Not Proceed   |
| STDCHAL-000013                   | 13/04/2018                                   | NR/SP/OHS/069   | Quality, Health, Safety &<br>Environment   | Positions of Safety  | Providing improved clarity in relation to positions of safety.  | Accepted to Revise Standard   |
| STDCHAL-000014<br>STDCHAL-000015 | 20/04/2018<br>08/06/2018                     | NR/L3/TRK/2049<br>NR/L2/ELP/27325   | Track Electrical Power   | Depot Track Standards  Train borne monitoring of traction power contact  | TREAT AS CONFIDENTIAL  Clarification in relation to a number of requirements in relation  | Accepted to Revise Standard Accepted to Revise Standard               |
| STDCHAL-000016                   |  | NR/L2/TRK/0133  | Track  | systems.  Wheel Impact Load Detection  | to train borne monitoring of traction power contact systems.  Controls applied to trains following measurement of forces at   | In Progress   |
|                                  |  |   |  |  | Wheel Impact Load Detection (WILD) sites.   |   |
| STDCHAL-000017                   | 22/06/2018                                   | NR/L3/ENV/305<br>NAT/TW/InfraInv/ENG/EP6248683                                  | Quality, Health, Safety &<br>Environment   | DNO test points  | Providing test points for DNO supply cubicles.  | Accepted to Revise Standard   |
| STDCHAL-000018                   | 26/06/2018                                   | NAT/REP/MPI/ENG/EP3736860   | Electrical Power   | Points Heating Equipment   | Using lower power points heating strips nearer the switch toe.  | Not Proceed   |
| STDCHAL-000019                   | 04/07/2018                                   | NR/L3/TRK/0030  | Track  | Line Speed following drainage works  | Proposal for a more cost-effective regime for track stabilisation following installation of drainage.   | Applicant advised to progress as variation application.               |
| STDCHAL-000020                   | 04/07/2018                                   | Various   | Track  | Track Affected Zone  | Proposal to change the influence angle for the track affected zone.   | Not Proceed   |
| STDCHAL-000021                   | 05/07/2018                                   | NR/L3/TRK/2049  | Track  | Buffer Locking   | Update to calculations to include vehicles without buffers, autocoupler limits and lateral movement of through-corridor trains.   | Accepted to Revise Standard   |
| STDCHAL-000022                   | 06/07/2018                                   | NR/L2/CIV/177   | Buildings & Civils   | Monitoring track during building works   | Improving clarity of requirements for monitoring of track in various situations.  | Accepted to Revise Standard   |
| STDCHAL-000023                   | 11/07/2018                                   | NR/TRK/6100/Mod3  | Track  | Stretcher Bar settings   | Improving clarity of installation and maintenance instructions for new stretcher bars at switches and crossings.  | Accepted to Revise Standard   |
| STDCHAL-000024                   | 13/07/2018                                   | NR/L2/SIGELP/27418  | Signalling<br>Electrical Power   | Earth electrode/mat connections  | Clarification of requirements for connecting earth electrode/mats.  | Applicant advised to progress as variation application.               |
| STDCHAL-000025                   | 26/07/2018                                   | NR/L3/CIV/020   | Buildings & Civils   | Bridge Strengthening   | Minimum train live loading values applied to bridge strengthening schemes.  | Applicant advised to progress as variation application.               |
| STDCHAL-000026                   | 07/08/2018                                   | NR/L2/RSE/0005  | Network Rail Assurance<br>Panel  | Non-application of Design for Reliability standard to signalling fibre interface   | Potential for non-application of requirements for certain commercial off-the-shelf components   | Accepted to Revise Standard   |
| STDCHAL-000027<br>STDCHAL-000028 | 09/08/2018<br>06/09/2018                     | NR/2/INI/02009/01<br>NR/L2/ELP/27311  | Projects<br>Electrical Power   | Clarity around Authority to Work roles. Engineering Assurance Requirements   | Clarification concerning authority of certain roles. NR/L2/INI/CP0069 listed in the references but document has   | Not Proceed<br>Accepted to Revise Standard                            |
| STDCHAL-000029<br>STDCHAL-000030 | 09/10/2018<br>09/10/2018                     | NR/L2/CIV/072<br>NAT/REP/MPI/ENG/EP3736860                                      | Buildings & Civils Electrical Power  | Wind Loading on OLE structures Points Heating Equipment  | been withdrawn. Change PRS to RRD/DRRD.  Alignment of wind loading equations to BS EN 50119.  Proposed changes to the arrangement drawings for electric                                       | Accepted to Revise Standard Accepted to Revise Standard               |
| STDCHAL-000031                   | 31/10/2018                                   | NR/L2/ELP/40045   | Electrical Power   | Points Heating Equipment   | points heating equipment.  Transformer terminal arrangements for supplying point strip  | Accepted to Revise Standard   |
| STDCHAL-000032                   | 12/11/2018                                   | NR standard drawing NR/EP/SD/439<br>RIS-7016-INS                                | Buildings & Civils   | Platform Crossfall   | heaters.  Ability to construct platforms that achieve the specified   | Not Proceed   |
| STDCHAL-000033                   | 21/01/2019                                   | NR/L3/INI/P3M/131/02  | Projects   | Document Revision Strategy   | crossfall gradient limits.  Difference between the revision strategy specified in the   | Accepted to Revise Standard   |
| STDCHAL-000034                   | 30/01/2019                                   | NR/PS/ELP/00008   | Electrical Power   | Cable Testing Voltages   | standard and the way ProjectWise is configured. Clarification regarding specified testing voltages for single core  | Accepted to Revise Standard   |
| STDCHAL-000035                   | 15/02/2019                                   | NR/SP/ELP/21014<br>NR/L3/SIG/10064  | Signalling   | Document Format  | cable used on 25 kV a.c. systems. Readability of text in subject index.   | Accepted to Revise Standard   |
| STDCHAL-000036<br>STDCHAL-000037 | 21/02/2019                                   | NR/L2/CIV/044<br>NR/L2/CTM/025  | Buildings & Civils Plant   | Boreholes  Driving Licence requirements  | Use of a single borehole to confirm ground conditions for under-<br>track crossing (UTX).  The standard does not relate to the requirements in the  | Applicant advised to progress as variation application.  Not Proceed  |
|                                  |  | Network Rail Training Toolkit Machine<br>Operator – Highway Permissible Vehicle |  |  | training toolbox Delegates section 6.   |   |
| STDCHAL-000038                   | 29/03/2019                                   | NR/L2/CIV/005   | Buildings & Civils   | Operational Property Drainage  | Standard currently does not include operational property drainage systems.  | Not Proceed   |
| STDCHAL-000039                   | 01/04/2019                                   | NR/L2/CIV/044   | Buildings & Civils   | Undertrack Crossings   | Minimum depths could use a risk-based approach and rational could be provided as to the reason for the requirement for minimum depths.  | Accepted to Revise Standard   |
| STDCHAL-000040                   | 01/04/2019                                   | NR/L2/CIV/177   | Buildings & Civils   | Monitoring track during building works   | Duration of monitoring baseline and adopting a risk-based approach.   | Accepted to Revise Standard   |
| STDCHAL-000041                   |  | NR/L3/CIV/030   | Buildings & Architecture   | Platform Copings   | Safe manual handling / lifting of coping stones, and loading requirements.  | Accepted to Revise Standard   |
| STDCHAL-000042                   | 16/04/2019                                   | NR/L2/OHS/0044  | Quality, Health, Safety &<br>Environment   | Task Briefing Sheets   | Format of Task Briefing Sheet.  | Not Proceed   |
| STDCHAL-000043                   | 25/04/2019                                   | NR-L2-TRK-2102 Issue 8<br>NR-L2-TRK-4239 Issue 1                                | Track  | Handback linespeed following track replacement   | Handing back the track at line speed following infrastructure works to replace the track.   | Not Proceed   |
| STDCHAL 000045                   | 25/04/2019                                   | NR/GN/CIV/025   | Buildings & Civils   | Bridge Filler Beams  | Allowance for longitudinal shear resistance offered by metal components protruding into concrete.   | Accepted to Revise Standard   |
| STDCHAL-000045<br>STDCHAL-000046 | 25/04/2019<br>25/04/2019                     | NR/SP/ELP/21041<br>NR/L2/CIV/044  | Electrical Power Buildings & Civils  | Battery Specification Requirements   | Alternative approach to performance calculation of battery life with photovoltaic system.  Proposed performance specification instead of minimum depth  | Not Proceed  Not Proceed  |
| STDCHAL-000046<br>STDCHAL-000047 | 25/04/2019                                   | NR/L2/C1V/044<br>NR/L2/ELP/40068  | Electrical Power   | Undertrack Crossings  Alternative Back-up Power Supplies   | of cover.  Include Uninterruptible Power Supplies (UPS) & Battery back-up   | Not Proceed  Not Proceed  |
| STDCHAL-000048                   | 25/04/2019                                   | NR/CS/CIV/044   | Buildings & Civils   | Functionality in Design  | supplies to signalling Principal Supply Points and Relocatable<br>Equipment Buildings.  Integrated design approach using Functionality in Design.   | Accepted to Revise Standard   |
| STDCHAL-000048                   | 25/04/2019                                   | NR/L3/CIV/071   | Geotechnical   | Design Methodology of Geotechnical Structures  | Alternative design and calculation methods for geotechnical structures.   | Accepted to Revise Standard   |
| STDCHAL-000050                   | 10/04/2019                                   | NR/CIV/SD/3020 – 34   | Buildings & Civils   | Recess beneath Platform Edge   | Standard design dimensions do provide a TSI compliant recess.   | Accepted to Revise Standard   |
| STDCHAL-000051                   |  | NR/L3/SIGELP/50002  | Signalling<br>Electrical Power   | Working on or near Signalling Power Distribution equipment   | Type of equipment covered by the 'test before touch' procedure.   | Not Proceed   |
| STDCHAL-000052<br>STDCHAL-000053 | 29/04/2019<br>22/05/2019                     | NAT/REP/MPI/ENG/EP3736860<br>NR/L3/CIV/020 Issue 1<br>NR/CIV/TUM/400 Rev E      | Electrical Power Buildings & Civils  | Points Heating Equipment Requirements for Footbridges  | Securing of Point Heating Strips Inconsistencies between NR/L3/CIV/020, the standard footbridge design described in NR/CIV/TUM/400 and acceptable design and DET standard Design Standard for | Accepted to Revise Standard Accepted to Revise Standard               |
| STDCHAL OCCUPY                   | 02/06/2010                                   | ND/I 3/CTV//4/0/450C  | Ruildings 9. Civile  | Paguiromente for Clay Painte   | associated drawings, and DFT standard 'Design Standards for Accessible Railway Stations'.   | Accontact to Paville Characterist                                     |
| STDCHAL-000054                   | 03/06/2019                                   | NR/L3/CIV/140/150C  | Buildings & Civils   | Requirements for Clay Bricks   | BS 3921 has been withdrawn hence brick is no longer certified to this standard  Dutier required by the Water Supply (Water Fittings)  | Accepted to Revise Standard   |
| STDCHAL 000055                   |  | NR -GN-CIV-163  | Buildings & Civils   | Water Supply (Water Fittings) Regulations  | Duties required by the Water Supply (Water Fittings) Regulations 1999.  | Not Proceed   |
| STDCHAL-000056<br>STDCHAL-000057 | 04/06/2019                                   | NR/L2/TRK/2500<br>NR/L2/ELP/21131   | Track Electrical Power   | Engineering Assurance Requirements   | Engineering Assurance Arrangements for Track Engineering Projects outputs  Warning sign dimensions for substations  | In Progress   |
| STDCHAL-000057<br>STDCHAL-000058 | 07/06/2019<br>11/06/2019<br>13/05/2019       | NR/L2/ELP/21131<br>NR/SP/ELP/21051<br>NR/GN/ELP/27006<br>NR/L2/INF/02202        | Electrical Power Electrical Power Information Management   | Warning sign dimensions for substations DC circuit breaker protection settings H&S File Memorandum of Agreement and Deliverable                    | Improved guidance for calculation of protection settings for DC circuit breakers  Combine two forms into one.   | Accepted to Revise Standard  Not Proceed  Accepted to Revise Standard |
| STDCHAL-000059<br>STDCHAL-000060 |  | NR/L2/INF/02202<br>NR/L2/INI/02009  | Information Management Projects  | Document Matrix  CRE Competence Requirements   | CRE competence requirements for off-site fabrication / quality  | Accepted to Revise Standard  Not Proceed                              |
| STDCHAL-000060                   | 13/05/2019                                   | NR/L3/CIV/151/F010  | Buildings & Civils   | Requirements for doweling platform coping stones   | assurance.  Clarity on the requirements for doweling coping stones and  | Accepted to Revise Standard   |
|                                  |  |   | J  | , same Spanner   | provision of method for protecting worker from falls from height / moving trains whist working on platforms.  | ,   |
|                                  | <u>.                                    </u> |   | <u> </u>   |  | <u>,                                      </u>  |   |

| Auto-  | ID             | Date Received | Standard Challenged                        | Primary Standards Steering  | Subject  | Simplified Summary of Challenge   | Current Process Stage                                      |
|--|----------------|---------------|--|-----------------------------|--|---|--|
| The color  | STDCHAL-000062 | 01/05/2019    |  | Group<br>Buildings & Civils | Design check categories for platform piling  | Clarification on category of design checks for platform piling.   | Accepted to Revise Standard                                |
| Company  | STDCHAL-000063 | 17/06/2019    | NR/L3/CIV/140/52C                          | Buildings & Civils          | Use of centralisers when soil nailing  |   | Not Proceed  |
| April 1997   Company   C   |                |               | NR/L2/ELP/27715                            |                             |  | Track construction tolerances to provide electrical clearances.   | Accepted to Revise Standard                                |
| Total Control    |                |               |  |                             |  | traction distribution system  |  |
| September   1998   19   |                |               |  |                             | <b>y</b>   | Recording Spoken Safety Critical Communications between<br>Possession Management and Engineering Trains/On-Track  |  |
| 1908-1909-1909-1909-1909-1909-1909-1909-   | STDCHAL-000068 | 27/08/2019    | NR/L2/TRK/001/mod14                        | Track                       | Stress Free Temperature Values   | Stress Free Temperature Value Hierarchy following Project   | Accepted to Revise Standard                                |
| SAMPHINGS   1939   MATERIAN STATE   1934   MATERIAN STATE   MAT   | STDCHAL-000069 | 09/09/2019    |  | Track                       | TEF3069 Pesticide Application Record   | Change to title TEF form to include the word herbicide instead  | Not Proceed  |
| SAMPLE CONTINUES   SAMPLE CONT   | STDCHAL-000070 | 12/09/2019    |  | Track                       | Index of Track Engineering Forms (TEFs)  | Index needs to be updated to accurately reflect the current   | Accepted to Revise Standard                                |
| The color   1905   1907   19   | STDCHAL-000071 | 12/09/2019    | NR/L2/TRK/001/MOD14                        | Track                       | Stress Free Temperature Values   | Review the current Stress Free Temperature values to manage risks associated with disturbance/works in adjacent to track and  | Accepted to Revise Standard                                |
| Additional Content   |                |               |  |                             |  | Alternative arrangements to installing ballast ramps  | Not Proceed<br>Accepted to Revise Standard                 |
| Section   Control   Cont   | STDCHAL-000074 | 24/09/2019    |  | Buildings & Civils          | Wind Loading of OLE and Structures   | with the Approval In Principle document  Correction to cross-reference  | Accepted to Revise Standard                                |
| Section   1997-1997   1997-1   | STDCHAL-000076 | 11/10/2019    | NR/L2/TRK/2102                             | Track                       | Minimum rail length  | be provided to Class II distribution cables.  Minimum rail length required for permanent situation  | Accepted to Revise Standard                                |
| Text  1997   1   |                |               |  | <b>3</b>                    | - '  | within the Network Rail estate  | Not Proceed  Accepted to Revise Standard                   |
|  | STDCHAL-000079 | 23/10/2019    | NR/L3/CIV/039                              | Ruildings & Civils          | Standard designs for DNO supply points and hallast   |   | Accepted to Pevise Standard                                |
| Per   1997   Per   |                |               |  |                             | boards   | boards  | Accepted to Revise Standard                                |
| 175-14   10000   1001   |                |               |  |                             |  | mesh size to allow track ballast to be used as gabion fill<br>material  |  |
| International  |                |               |  |                             |  |   |  |
| STOCK - CORDINAL   TOTAL CORDINAL   TO   |                |               |  |                             | elements   | elements  | Accepted to Revise Standard                                |
| Management   Man   |                |               |  |                             |  | Requirement for protective coating required for cast in holding   | Accepted to Revise Standard Accepted to Revise Standard    |
| STOCKNO, CORRIDO   1911/2009   INDEXESCRIPTION   PROJECT   Company (1911)   | STDCHAL-000085 | 20/11/2019    | NR/L3/MTC/089                              | Maintenance                 | Asset Management Plan optimisation   | Optimisation of the Asset Management Plan (AMP) enabling  | Accepted to Revise Standard                                |
| Procedure  | STDCHAL-000086 | 20/11/2019    | NR/L2/CIV/003                              | Buildings & Civils          | Form 2/3 Completion  | , ,   | Not Proceed  |
| STOCHAL GORBON   2017-2077   INCLUSIONS   SECURD FROM   Surpey & Columb     | STDCHAL-000087 | 11/11/2019    | NR/L2/RSE/100/05                           |                             | Product Acceptance requirements  | Suggested changes to Product Acceptance requirements  | Accepted to Revise Standard                                |
| STOCK   CORRESPONDED   SULTIFICATION   SULTI   | STDCHAL-000088 | 27/11/2019    | NR/SP/ELP/21085                            |                             | Touch Voltages   |   | Accepted to Revise Standard                                |
| STOCK   1987     | STDCHAL-000089 | 02/12/2019    |  | Buildings & Civils          | Design of OLE structures   |   | Not Proceed  |
| STOCK-0.000022   17-107-10799   100-1079-1079-1079-1079-1079-1079-1079-1   | STDCHAL-000090 | 02/12/2019    | NR/L3/CIV/039                              | Buildings & Civils          | Life of coatings   |   | Accepted to Revise Standard                                |
| STOCK40.000097   1797/2000   MINTENCENTION   Mintence   Minteness   Mintenes   |                |               |  | Quality, Health, Safety &   |  | Construction requirements for walkways and also clarity around  | Accepted to Revise Standard<br>Accepted to Revise Standard |
| SECHIAL 000090 (SCA) SECHIAL 0000000 (SCA) SECHIAL 00000000 (SCA) SECHIAL 00000000 (SCA) SECHIAL 00000000 (SCA) SECHIAL 000000000 (SCA) SECHIAL 000000000 (SCA) SECHIAL 000000000 (SCA) SECHIAL 000000000 (SCA) SECHIAL 0000000000 (SCA) SECHIAL 0000000000 (SCA) SECHIAL 0000000000 (SCA) SECHIAL 0000000000 (SCA) SECHIAL 000000000000000000000000000000000000   |                |               |  | Buildings & Architecture    |  | Dimensions of coper stones for platforms.  Some of the specified British Standards are no longer applicable   | Accepted to Revise Standard<br>Accepted to Revise Standard |
| STOCHAL 000097 17/09/2009 MRL 26/1972/39 Conclusion from the control of the contr |                |               |  |                             |  | Requirements for earthing arrangements.   | Accepted to Revise Standard Accepted to Revise Standard    |
| STOCHA.00098 19802000 8803.EXTVISION STOCHA.00099 21002000 8803.EXTVISION STOCHA.00099 21002000 8803.EXTVISION STOCHA.000100 8803.EXTVISION S | STDCHAL-000097 | 17/02/2020    | NR/L3/ELP/27250                            | Electrical Power            | Conductor Rail Drawings  | 3   | Accepted to Revise Standard                                |
| NRL31CW399 NRL12CW300 NRL2FW3000 NRL2FW3000 NRL2FW3000 NRL2FW3000 NRL2FW30000 NRL2FW30000 NRL2FW30000 NRL2FW30000 NRL2FW30000 NRL2FW300000 NRL2FW300000 NRL2FW300000 NRL2FW300000 NRL2FW300000 NRL2FW300000 NRL2FW300000 NRL2FW300000 NRL2FW300000 NRL2FW3000000 NRL2FW3000000 NRL2FW3000000 NRL2FW3000000 NRL2FW3000000 NRL2FW30000000 NRL2FW3000000000 NRL2FW3000000000000000000000000000000000000   |                |               |  |                             | , ,  | Thickness of galvanising.   |  |
| STOCHAL 000100   ASSI/20200   NRIA ZEREPZZEZZ   Recistor Power   OLE Stagger Relaction Volume   Confidence on Prequencies for ARC OLE exginement stagger   Accepted to Review Striction, and provided prequirements for Joint growing requirements for Joint growing and John Strict (Inc.)   Accepted to Review Striction   Accepted to Review Stric | STDCHAL-000099 | 21/02/2020    | NR/L3/CIV/039<br>NR/L3/CIV/040             | Buildings & Civils          | Protective Coating Requirements  |   | Accepted to Revise Standard                                |
| STDCHAL 000102 14/03/200 NR0Z/IRMO0932 Florids | STDCHAL-000100 | 25/02/2020    | NR/L2/ELP/27212                            | Electrical Power            | OLE Stagger Reduction Values   |   | Accepted to Revise Standard                                |
| STDCHAL 5001102 14/03/2020 NREJERNATY/ROUTE/SDA/AD STDCHAL 5001103 14/03/2020 NREJERNATY/ROUTE/SDA/AD STDCHAL 5001103 14/03/2020 NREJERNATY/ROUTE/SDA/AD STDCHAL 5001103 NREJERNATY/ROUTE/SDA/AD STDCHAL 50011 | STDCHAL-000101 | 06/03/2020    |  | Track                       | Rail Grinding for Welding  | Rail grinding requirements for joining rails by aluminothermic  | Not Proceed  |
| STDCHAL 000103 160932020 NRCCVSDIA40 NRCCV | STDCHAL-000102 | 14/03/2020    | NR/L2/RMVP/0200/P508                       | Plant                       | Personal Voltage Detectors   | Mandating the use of personnel voltage detectors when   | Not Proceed  |
| NINCIVISPIA/43   Projects   Building Information Modelling   Requirements for colours used in Building Information   Not Proceed   STDCHAL 000110   25/03/2020   NBLZIVINEDITE/PO971   Buildings & Civils   Asphalt and Yellow Lines for Platforms   Detailed requirements relating to materials used   Accepted to Revies St Not (VIVI) 20/010   NBLZIVINEDITE   NBLZIVINED   | STDCHAL-000103 | 16/03/2020    |  | Buildings & Civils          | Footbridge Ramps   | Inconsistency with requirements for gradients of footbridge   | Accepted to Revise Standard                                |
| STDCHAL 000105 25/03/2020 NRL3/CIV/151/F010 Buildings & Civils Asphalt and Yellow Lines for Plutforms Databet requirements relating to materials used Accepted to Revise St STDCHAL 000106 27/03/2020 NRFR/SIGINT/1733 Signolling Reed Track Circuits Recommendation of the Civils STDCHAL 000107 To 15/04/2020 NRFR/SIGINT/1733 Signolling Reed Track Circuits Recommendation of the Civils Stock Advanced to Recommendation of the Civils Stock Advanced to Revise St STDCHAL 000107 To 15/04/2020 NRFR/SIGINT/1733 Signolling Acvis Montoning took during building works Action limits for measurement of twist Not the Civils Stock Advanced to Revise St Not Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits of the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits of the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for measurement of twist Not the Civil Stock Action limits for from  |                |               | NR/CIV/SD/442<br>NR/CIV/SD/443             |                             |  |   |  |
| NRICTUS/S0/3012   Signalling   Reed Track Circuits   Requirements relating to cable lengths and loop impedance   Accepted to Revise STDCHAL.0001016   NRIVZSCIVIT77   Studings & Civils   Montroing track during building works   Action limits for measurement of twist   Not Proceed STDCHAL.000108   05/05/2000   NRIVZSCIVIT77   Studings & Civils   Montroing track during building works   Action limits for measurement of twist   Not Proceed STDCHAL.000108   05/05/2000   NRIVZSCIVIT77   Studings & Civils   Montroing track during building works   Action limits for measurement of twist   Not Proceed STDCHAL.000110   01/05/2000   NRIVZSCIVIT93   Not Proceed STDCHAL.000110   01/05/2000   NRIVZSCIVIT93   NRIVZSCIVIT93   Not Proceed STDCHAL.000110   01/05/2000   NRIVZSCIVITA/SSCI   Studings & Civils   Use of furnace bottom ash   Requirements for two relationship of the standard to reflect the guidelines in the process of the standard to reflect the guidelines in the process of the standard to reflect the guidelines in the process of the standard to reflect the guidelines in the process of the standard to reflect the guidelines in the process of the standard to reflect the guidelines in the process of the standard to reflect the guidelines in the process of the standard to reflect the guidelines in the process of the standard to reflect the guidelines in the process of the pro   |                |               |  | -                           | , , , , , , , , , , , , , , , , , , ,  | Modelling   |  |
| STDCHAL_000116 2703/2020 NoPLYSIGN1763 Signaling Reed Track Critaris Requirements relating to cable lengths and loop impedance Accepted to Revise St TDCHAL_000107 1506/2020 NoPLYZICNTY7 Substitution of the Students of Stock Monthly Completed Standard Suses and previous version withdrawn. Accepted to Revise St TDCHAL_000108 0 505/2020 NoPLYZICNTS100 Off Track Soundary Measures Manual Incomplete standard Suses and previous version withdrawn. Accepted to Revise St TDCHAL_000110 0 1066/2020 NoPLYZICNTS100 Off Track Soundary Measures Manual Incomplete standard Suses and previous version withdrawn. Accepted to Revise St NoPLYZICNTS100 | STDCHAL-000105 | 25/03/2020    | NR/CIV/SD/3010                             | Buildings & Civils          | Asphalt and Yellow Lines for Platforms   | Detailed requirements relating to materials used  | Accepted to Revise Standard                                |
| STDCHAL-000118   0505/2020   NRIZ/STDY/ST000   Off Track   Boundary Measures Manual   Incomplete standard suses and previous version withfrown   Accepted to Revise STDCHAL-000110   01/06/2020   NRIZ/STDY/ST0000   NRIZ/STDY/ST0000   Maintenance   Travel arrangements during COVID-19 pandemic   New combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   New Combination of Point Operating Equipment and rail type   Not Proceed   Not |                |               | NR/PS/SIG/11763                            | 3                           |  |   | Accepted to Revise Standard                                |
| STDCHAL-000110 01/06/2020 NR/L3/CIV/140/52C Buildings & Civils Use of furnace bottom ash Accepted to Revise St NR/EPS/SIA/06007  STDCHAL-000111 04/06/2020 NR/L3/CIV/140/52C Buildings & Civils Use of furnace bottom ash Accepted to Revise St Na/EPS/SIA/0607  STDCHAL-000112 04/06/2020 NR/L3/CIV/140/52C Buildings & Civils Use of furnace bottom ash Accepted to Revise St Na/EPS/SIA/O607  STDCHAL-000112 04/06/2020 NR/L3/CIV/140/52C Buildings & Civils Number of footbridge risers Discrepancy between NR/L3/CIV/020 Buildings & Civils Number of footbridge risers Discrepancy between NR/L3/CIV/020 Buildings & Civils Buildings & Civils Discrepancy between NR/L3/CIV/020 Buildings & Civils Buildings & Civils Discrepancy between NR/L3/CIV/020 Buildings & Civils Buildings & Civils Buildings & Civils Discrepancy between NR/L3/CIV/020 Buildings & Civils Buil | STDCHAL-000108 | 05/05/2020    | NR/L2/OTK/5100                             | Off Track                   | Boundary Measures Manual   | Incomplete standard issues and previous version withdrawn.  | Accepted to Revise Standard                                |
| STDCHAL-000111 04/06/2020 NR/L3/CIV/140/52C Buildings & Civils Use of furnace bottom ash Amend the standard to reflect the guidelines in the Environment Agency Regulatory Position Statement 172."The regulation of the use of unbound pulserised fuel ash and furnace bottom ash Turnace Bottom Accepted to Revise Standard ash Turnace Davis Position And Turnace Davis Position Accepted to Revise St |                |               | NAT/REP/MPI/ENG/EP3736860<br>NR/EP/SD/4005 |                             |  | New combination of Point Operating Equipment and rail type  | Accepted to Revise Standard                                |
| Fegulation of the use of unbound pulverised fuel ash and furnace bottom ash"   | STDCHAL-000111 | 04/06/2020    |  | Buildings & Civils          | Use of furnace bottom ash  |   | Not Proceed  |
| STDCHAL-000113 04/06/2020 NR/L3/CIV/020 Buildings & Civils Bridge collision loading Use and adapt/adopt UC777-2R within Network Rail standards to provide a more cost efficient design for railway collision loading Use and adapt/adopt UC777-2R within Network Rail standards to provide a more cost efficient design for railway collision loading STDCHAL-000114 11/06/2020 NR/L2/ELP/21085 Electrical Power Along-track screening conductors Teacher and the statement "Along-track screening conductors are not required for signalling power cables" is misleading required for signalling power cables is misleading Not Proceed adiabatic method for different fault levels and statement adiabatic method for different fault  |                |               |  |                             |  | regulation of the use of unbound pulverised fuel ash and  |  |
| STDCHAL-000113 04/06/2020 NR/L3/CIV/020 Buildings & Civils Bridge collision loading Use and adapt/adopt UIC777-2R within Network Rail standards to provide a more cost efficient design for railway collision loading  STDCHAL-000114 11/06/2020 NR/L2/ELP/21085 Electrical Power Along-track screening conductors The statement "Along-track screening conductors are not required for signalling power cables" is misleading  STDCHAL-000115 15/06/2020 NR/L2/ELP/21085 Electrical Power Short circuit rating of conductors  STDCHAL-000116 22/06/2020 NR/L2/ELP/21085 Electrical Power Current contact zone parameter Proposals for the current contact zone parameter in relation to the highest point of the overhead contact line  STDCHAL-000117 23/06/2020 NR/L2/ELP/21085 Electrical Power Aerial earth wire termination bonds Clarify the number of aerial earth wire termination bonds  STDCHAL-000118 01/07/2020 NR/L2/ELP/21085 Electrical Power Aerial earth wire termination loads  STDCHAL-000119 14/07/2020 NR/L3/ELP/21085 Electrical Power Aerial earth wire termination bonds Clarify the number of aerial earth wire termination bonds  STDCHAL-000119 01/07/2020 NR/L3/ELP/21085 Electrical Power Aerial earth wire termination bonds  STDCHAL-000119 01/07/2020 NR/L3/ELP/21085 Electrical Power Aerial earth wire termination bonds  STDCHAL-000119 01/07/2020 NR/L3/ELP/21085 Electrical Power Symbol Library Installation of overhead line foundations.  STDCHAL-000119 01/07/2020 NR/L3/ELP/21120 Electrical Power Symbol Library The symbol library is not up to date.  STDCHAL-000120 14/07/2020 NR/L2/ELP/21120 Electrical Power Record Information Standard working practices and procedures and/or standard working practices and proce | STDCHAL-000112 | 04/06/2020    | NR/L3/CIV/020                              | Buildings & Civils          | Number of footbridge risers  | Discrepancy between NR/L3/CIV/020 and BD29/04 (6.6) and the code of practice, regarding accessible train station design for disabled people for the number of risers and goings for a | Accepted to Revise Standard                                |
| STDCHAL-000114 11/06/2020 NR/L2/ELP/21085 Electrical Power Along-track screening conductors The statement "Along-track screening conductors are not required for signalling power cables"; misleading  STDCHAL-000115 15/06/2020 NR/L2/ELP/21085 Electrical Power Short circuit rating of conductors  STDCHAL-000116 22/06/2020 NR/L2/ELP/21085 Electrical Power Current contact zone parameter Proposals for the current contact zone parameter in relation to the highest point of the overhead contact line  STDCHAL-000117 23/06/2020 NR/L2/ELP/21085 Electrical Power Aerial earth wire termination bonds Clarify the number of aerial earth wire termination bonds NR/L2/ELP/21085 Electrical Power Aerial earth wire termination bonds Clarify the number of aerial earth wire termination bonds NR/L2/ELP/21085 Electrical Power Aerial earth wire termination bonds Removal of the "minimum load" table for the design and Accepted to Revise St Overhead line foundation of overhead line foundations.  STDCHAL-000119 14/07/2020 NR/L3/ELP/27218 Electrical Power Symbol Library The symbol library is not up to date. Accepted to Revise St NR-L2-INI-EDT-CP0091 NR-L2-INI-EDT-CP0091 NR-L2-INI-EDT-CP0091 NR-SP-ELP-27300 Electrical Power Record Information Standards need to be updated to reflect current working practices and procedures and/or standard working practices and/or standard working practices and procedures and/or standard wo | STDCHAL-000113 | 04/06/2020    | NR/L3/CIV/020                              | Buildings & Civils          | Bridge collision loading   | Use and adapt/adopt UIC777-2R within Network Rail standards to provide a more cost efficient design for railway collision   | Not Proceed  |
| STDCHAL-000115 15/06/2020 NR/L2/ELP/21085 Electrical Power Short circuit rating of conductors Dimensioning of conductors for short-circuit rating using the adiabatic method for different fault levels  STDCHAL-000116 22/06/2020 NR/L2/ELP/21085 Electrical Power Current contact zone parameter by the highest point of the overhead contact line  STDCHAL-000117 23/06/2020 NR/L2/ELP/21085 Electrical Power Aerial earth wire termination bonds Clarify the number of aerial earth wire termination bonds Accepted to Revise St STDCHAL-000118 01/07/2020 NR/L2/ELP/21085 Electrical Power Aerial earth wire termination bonds Clarify the number of aerial earth wire termination bonds Removal of the 'minimum load' table for the design and Installation of overhead line foundations.  STDCHAL-000119 14/07/2020 NR/L3/ELP/27218 Electrical Power Symbol Library The symbol library is not up to date. Accepted to Revise St STDCHAL-000120 NR/L2/ELP/21120 NR/L2/ELP/21120 Electrical Power Record Information Standards need to be updated to reflect current working practices and procedures and/or standard working practices need to be made to comply with these procedures.  STDCHAL-000121 16/07/2020 NR/L2/SIG/11201 Signalling Tag Files for SSI records Provision of 'Tag Files etc for SSI' was no longer required by NB26.  STDCHAL-000122 06/08/2020 NR/L2/CIV/193 Buildings and Architecture Lift Commissioning Further clarity required on the requirements for lift Not Proceed  | STDCHAL-000114 | 11/06/2020    | NR/L2/ELP/21085                            | Electrical Power            | Along-track screening conductors   | The statement "Along-track screening conductors are not   | Not Proceed  |
| the highest point of the overhead contact line    STDCHAL-000117   23/06/2020   NR/L2/ELP/21085   Electrical Power   Aerial earth wire termination bonds   Clarify the number of aerial earth wire termination bonds   Accepted to Revise St   |                |               |  |                             | , and the second | Dimensioning of conductors for short-circuit rating using the adiabatic method for different fault levels   |  |
| STDCHAL-000118 01/07/2020 NR/L2/CIV/074 Buildings & Civils Overhead line foundation loads Removal of the 'minimum load' table for the design and Installation of overhead line foundations.  STDCHAL-000119 14/07/2020 NR/L2/ELP/2718 Electrical Power Symbol Library The symbol library is not up to date.  STDCHAL-000120 14/07/2020 NR/L2/ELP/21120 Electrical Power Record Information Standards need to be updated to reflect current working practices and procedures and/or standard working practices need to be made to comply with these procedures.  STDCHAL-000121 16/07/2020 NR/L2/SIG/11201 Signalling Tag Files for SSI records Provision of 'Tag Files etc for SSI' was no longer required by NB26.  STDCHAL-000122 06/08/2020 NR/L2/CIV/193 Buildings and Architecture Lift Commissioning Further clarity required on the requirements for lift Not Proceed   |                |               |  |                             | ·  | the highest point of the overhead contact line  |  |
| STDCHAL-000119 14/07/2020 NR/L3/ELP/27218 Electrical Power Symbol Library The symbol library is not up to date. Accepted to Revise St PSTDCHAL-000120 14/07/2020 NR/L2-INI-EDT-CP0091 NR-L2-INI-EDT-CP0091 NR-SP-ELP-27300 Electrical Power Record Information Standards need to be updated to reflect current working practices and procedures and/or standard working practices need to be made to comply with these procedures.  STDCHAL-000121 16/07/2020 NR/L2/SIG/11201 Signalling Tag Files for SSI records Provision of 'Tag Files etc for SSI' was no longer required by NB26.  STDCHAL-000122 06/08/2020 NR/L2/CIV/193 Buildings and Architecture Lift Commissioning Further clarity required on the requirements for lift Not Proceed commissioning and acceptance.   |                |               |  |                             |  | Removal of the 'minimum load' table for the design and  | Accepted to Revise Standard Accepted to Revise Standard    |
| NR-L2-INI-EDT-CP0091 NR-SP-ELP-27300  STDCHAL-000121  16/07/2020  NR/L2/SIG/11201  Signalling  Tag Files for SSI records  Provision of 'Tag Files etc for SSI' was no longer required by NB26.  STDCHAL-000122  06/08/2020  NR/L2/CIV/193  Buildings and Architecture  Lift Commissioning  Further clarity required on the requirements for lift  Not Proceed commissioning and acceptance.  |                |               |  |                             |  | The symbol library is not up to date.   | Accepted to Revise Standard Accepted to Revise Standard    |
| NB26.  STDCHAL-000122 06/08/2020 NR/L2/CIV/193 Buildings and Architecture Lift Commissioning Further clarity required on the requirements for lift Not Proceed commissioning and acceptance.   |                |               | NR-L2-INI-EDT-CP0091<br>NR-SP-ELP-27300    |                             |  | practices and procedures and/or standard working practices need to be made to comply with these procedures.   |  |
| commissioning and acceptance.  |                |               |  |                             |  | NB26.   | Accepted to Revise Standard                                |
| 10 10 10 10 10 10 10 10 10 10 10 10 10 1   |                |               |  |                             | , and the second | commissioning and acceptance.   |  |
| STDCHAL-000123 09/09/2020 NR/L2/CIV/003 Buildings & Civils Asset Status Reports Provison of Asset Status Reports by the RAM team to ensure the designers are aware of issues with assets which interface with the proposed works to prevent work in later GRIP stages.   | STDCHAL-000123 | 09/09/2020    | NR/L2/CIV/003                              | Buildings & Civils          | Asset Status Reports   |   | Accepted to Revise Standard                                |
| STDCHAL-000124 16/09/2020 NR/L1/OHS/051 Quality, Health, Safety & Drugs and Alcohol Policy Clarification as to whether randon testing applies to PTS card Accepted to Revise St holders or all Sentinel card holders.  | STDCHAL-000124 | 16/09/2020    |  |                             | Drugs and Alcohol Policy   |   | Accepted to Revise Standard                                |

| ID                               | Date Received            | Standard Challenged                   | Primary Standards Steering                                     | Subject   | Simplified Summary of Challenge   | Current Process Stage                                   |
|----------------------------------|--------------------------|---------------------------------------|--|---|---|---|
| STDCHAL-000125                   | 16/09/2020               | NR/L2/SCO/302                         | Group Supply Chain Operations                                  | Supplier Qualification & Audit  | Challenge to requirement for the supplier to be able to demonstrate the requirements of the standard without a  | In Progress   |
| STDCHAL-000126                   | 24/09/2020               | NR/L2/RMVP/0200 Module P503           | Plant  | Lifting Operations  | consultant present at the audit  Potential to use existing construction competencies for for  | Not Proceed   |
|                                  |                          |                                       |  |   | lifting operations such as Crane Supervisor and Slinger Signaller.  |   |
| STDCHAL-000127                   | 12/10/2020               | NR/L3/INI/P3M/131/01                  | Projects   | Project Information Management  | Standard does not enable application of modern/best practice.   | Accepted to Revise Standard                             |
| STDCHAL-000128<br>STDCHAL-000129 | 12/10/2020               | NR/L3/INI/P3M/131/02<br>NR/L2/OHS/050 | Projects  Quality, Health, Safety &                            | Document Referencing  Sentinel Scheme Rules   | Standard does not enable application of modern/best practice.  Content is out-of-date and needs revision to reflect current   | Accepted to Revise Standard  Not Proceed                |
| STDCHAL-000129                   | 17/11/2020               | NR/L3/CIV/039                         | Environment Buildings & Civils                                 | Paint Specification   | practice.  Clarify if Paint N18 should be specified for external steelwork.   | Accepted to Revise Standard                             |
| STDCHAL-000131                   | 19/11/2020               | NR/L3/SIG/MG0110                      | Signalling   | Production of TSR and ESR designs   | There is no defined standard for the production of TSR and ESR  | Accepted to Revise Standard                             |
|                                  |                          | NR/L3/SIG/SG0111<br>NR/L3/TRK/7006    |  |   | designs, no competence for the designer clearly defined or defined requirements for the competence of staff installing speed warning equipment for project works (outside the maintenance organisation).  |   |
| STDCHAL-000132                   | 02/11/2020               | NR/L3/CIV/020                         | Buildings & Civils   | Height of parapet   | 1.5m high parapet height over the length of the bridge with mesh infill panels to provide natural light for the bridge  | Not Proceed   |
| STDCHAL-000133                   | 11/12/2020               | NR/GN/CIV/200/01                      | Buildings & Civils   | Flooring slip resistance  | crossing.  Proposal to adopt a minimum target rating of 36 Pendulum   | Accepted to Revise Standard                             |
| STDCHAL-000134                   | 16/12/2020               | NR/L2/SIG/30060                       | Signalling   | Use of Petroleum Jelly Filler   | Test Value for level floors in internal controlled areas Proposal that Petroleum Jelly Filler is removed from the existing standard for all LSZH cable types and is replaced by using specific cable water blocking tapes   | Accepted to Revise Standard                             |
| STDCHAL-000135                   | 16/12/2020               | RT/E/PS/00005                         | Signalling   | Cable specification for sub-surface stations and tunnels  | Revise and update the standard for the construction and fire performance safety requirements for operational use in subsurface section 12 stations and tunnels  | Accepted to Revise Standard                             |
| STDCHAL-000136                   | 18/01/2021               | NR/L2/TEL/30135                       | Telecommunications   | CCT V coverage for fire exits & secondary means of escape   | Expand table 3 (cl.9.4.1) to provide clear requirements for CCTV coverage for fire exits & secondary means of escape  | Accepted to Revise Standard                             |
| STDCHAL-000137                   | 19/01/2021               | NR/L1/ELP/27000                       | Electrical Power   | Operational Sectioning Locations  | Delete clause 4.7.3, (should not be requireemnt for all loops but considered on its merits)   | Accepted to Revise Standard                             |
| STDCHAL-000138<br>STDCHAL-000139 | 28/01/2021<br>10/02/2021 | NR/L3/ELP/27237<br>NR/L1/ELP/27000    | Electrical Power<br>Electrical Power                           | D29 Droppers Design of crossovers & turnouts  | Add details on requirements for installation EP267 is amber. Should be green to align with related clause in  | Not Proceed<br>Accepted to Revise Standard              |
| STDCHAL-000140                   | 10/02/2021               | NR/L3/CIV/020                         | Buildings & Civils   | Accidental derailment loading   | NR/L2/ELP/27715  To be able to use columns not designed for train derailment but that will be protected by the existing platform (at Walton-on-   | Not Proceed   |
| STDCHAL-000141                   | 10/02/2021               | NR/L3/TRK/2049                        | Track  | Non-provision of future OLE clearance   | Thames) To be able to locate footbridge (at Walton-on-Thames) to provide clear distance of 4.64m from rail level to the soffit of   | Not Proceed   |
| STDCHAL-000142                   | 17/02/2021               | NR/L2/OHS/019                         | Quality, Health, Safety &<br>Environment                       | Management of runaway risk  | the bridge.  To update Appendix B of module 05 to allow the user of watchpersons where no barrier can be put in place (removinge conflict with Appendix C).   | Accepted to Revise Standard                             |
| STDCHAL-000143                   | 18/02/2021               | NR/L2/OHS/019                         | Quality, Health, Safety &<br>Environment                       | Management of runaway risk  | conflict with Appendix C)  To be able to use Watchmen (non lookout) with audible system where none of the listed control measures can be implemented & the work is at night or in a tunnel  | Accepted to Revise Standard                             |
| STDCHAL-000144                   | 18/02/2021               | NR/L2/TRK/2500                        | Track  | Roles & responsiblities   | Amended to provide clear responsibility for obtaining the NR/L2/MTC/089/AMP009 and incorporating this information into the design before the form A is issued for approval.   | Accepted to Revise Standard                             |
| STDCHAL-000145                   | 03/03/2021               | NR/L2/ELP/27311                       | Track  | Roles & responsibilties   | Records of Verifying documents - Add a box to the form where references to Verifying documents can be recorded.   | Accepted to Revise Standard                             |
|                                  |                          |                                       |  |   | Certification of consequential works- Provide guidance within the standard as to how consequential works are certified.  Specifically, the replacement of passive fire stopping.  |   |
| STDCHAL-000146                   | 03/03/2021               | NR/L2/OHS/00110                       | Track  | Roles & responsiblities   | Permit contractors to use their own governance for sites they are managing in accordance with their own HSMS: simplifies contract administration.   | Not Proceed   |
| STDCHAL-000147                   | 03/03/2021               | NR/L3/INI/CP0036                      | Track  | Roles & responsiblities   | Permit contractors to use their own governance for the provision of welfare facilities if contractors have suitable arrangements which equal or exceed those of Network Rail.   | Not Proceed   |
| STDCHAL-000148                   | 11/03/2021               | NR/L2/CIV/003                         | Buildings & Civils   | Inspection and Testing  | Section 14 should be reworded into a number of key requirements.  | Accepted to Revise Standard                             |
| STDCHAL-000149                   | 12/03/2021               | NR/L3/CIV/023                         | Buildings & Civils   | Misleading clause 8.2.12.2  | Update the clause to explain that the plastic section modulus should not be used to increase the capacity of members in bending e.g. cross members, that are a part of an outrigger-frame/ U-frame etc.   | Accepted to Revise Standard                             |
| STDCHAL-000150                   | 17/03/2021               | NR/CIV/SD/TUM/400                     | Buildings & Civils   | Clause 3.3 & drainage cover details shown on drawing number NR/CIV/SD/432   | Holes provided in the drainage covers - an alternative design providing slots 3 times the void area.  | Accepted to Revise Standard                             |
| STDCHAL-000151                   | 22/03/2021               | NR/L2/MTC/089                         | Maintenance  | Minimum Asset Data Requirements (MADR)  | Include the MADR as a fully referenced document with a full document number linked to the standard. Provide a formal process within the standard for updating the MADR.   | Not Proceed   |
| STDCHAL-000152                   | 22/03/2021               | NR/L2/OHS/019                         | Quality, Health, Safety &<br>Environment                       | Management of Runaway Risk  | Use of a Watchman (non lookout).  | In Progress   |
| STDCHAL-000153                   | 22/03/2021               | NR/L2/OHS/019                         | Quality, Health, Safety &<br>Environment                       | Reference documentation - Page 5  | Out of date references  | Accepted to Revise Standard                             |
| STDCHAL-000154<br>STDCHAL-000155 | 23/03/2021<br>25/03/2021 | NR/L2/SIG/11201<br>NR/L2/OHS/020      | Signalling<br>Quality, Health, Safety &                        | Sections 1.1.4 & 1.1.5 referencing incorrect General updates required throughout but notably to   | Out of date references Out of date references   | Accepted to Revise Standard Accepted to Revise Standard |
| STDCHAL-000156                   | 28/04/2021               | NR/L2/ELP/21085                       | Environment<br>Electrical Power                                | Sections, 5, 6 and 8. Section 12.1.1.1  | Update to capture GWEP requirements which need to be retained   | Not Proceed   |
| STDCHAL-000157                   | 24/05/2021               | NR/SP/ELP/27044                       | Electrical Power   | Section 4 – Switching Station Designation   | Update 2 character designation to 4 characters. A central, national database of utilised names should be maintained to ensure no clashes or duplications.   | Accepted to Revise Standard                             |
| STDCHAL-000158                   | 25/05/2021               | NR/L3/SIG/11303                       | Signalling   | New method of installing cabinets   | Inclusion of the new Rail Cabinet Base System as at the very least a noted option for cabinet installation.   | In Progress   |
| STDCHAL-000159                   | 26/05/2021               | NR/L3/OPS/251                         | Operations   | Unmanned Aircraft System (Drone / UAS) Operations   | Introduce a new section that covers the use of Class A1 drones (less than 250g)   | Not Proceed   |
| STDCHAL-000160<br>STDCHAL-000161 | 09/09/2021<br>30/06/2021 | NR/L2/OHS/069<br>NR/L3/CIV/006        | Quality, Health, Safety &<br>Environment<br>Buildings & Civils | 6.2 Access Gates  Entering a new asset into the structures database /   | Signs at new access points  The standard is updated to include requirements for new assets and what impactions are possed to list new assets into the   | Not Proceed   |
| STDCHAL-000162                   | 01/07/2021               | NR/L2/TRK/2102                        | Track  | management system.  Amber vs Green sidebars   | and what inspections are needed to list new assets into the management systems  A dotted Green sidebar should be added against the text "Changes in vertical alignment shall not be coincidental with   | In Progress   |
| STDCHAL-000163                   | 06/07/2021               | NR/L3/TRK/2049                        | Track  | mod01: Clause A.5.1 & A.5.2   | Changes in vertical diignment shall not be coincidental with changes in horizontal alignment.".  The level of detail provided in Tables 1 & 2 is "misleading with the potential to cause injury to staff" if the information is used  | Accepted to Revise Standard                             |
| STDCHAL-000164                   | 14/07/2021               | NR/L2/RSE/02009                       | Systems Engineering  | Section B6. CRE construction  | at face value without further detailed reference to the REPW series of drawings.  Out of date references  | In Progress   |
| STDCHAL-000165                   | 19/07/2021               | NR/L2/RSE/02009                       | Systems Engineering  | The Role of 'Design Engineer'   | The requirements for the identification/requirements for a DE and how to assess when one is required is needed to give the standard greater clarity and to allow it to be applied consistently.   | Applicant advised to progress as variation application. |
| STDCHAL-000166                   | 19/07/2021               | NR/L2/TRK/2102                        | Track / Signals  | Design and Construction of Track; plus: NR/L2/SIG/11201, issue 14: Signalling Design Handbook NR/L2/TRK/3100, issue 5: Topographic, engineering, land and measured building surveying                 | Cross Referencing & Clauses   | Accepted to Revise Standard                             |
| STDCHAL-000167<br>STDCHAL-000168 | 21/07/2021<br>22/07/2021 | NR/L2/ELP/40068<br>NR/L2/CIV/193      | Electrical Power Buildings & Architecture                      | Diesel generator minimum running time Footbridges 7 Lift call buttons   | Change of mrt.  Relocate lift call button   | Accepted to Revise Standard<br>Not Proceed              |
| STDCHAL-000169                   | 22/07/2021               | NR/L2/TRK/3203                        | Track  | The available range of Survey Methods in Table E.1 which does not recognise the advances in survey technology and the introduction of new survey equipment since this Standard was published in 2011. | Standard should be revised to include the latest survey equipment and allow alternative (more modern) methods of survey data collection and post-survey processing which can produce more accurate data sets and reduce the unnecessary iterations of design and additional clearance analysis. | Not Proceed Accepted to Revise Standard                 |
| STDCHAL-000170                   | 06/08/2021               | NR/L3/ELP/27250                       | Electrical Power   | Sheet 602 – Symbols for cable and bonds used on negative drawings   | Due to on-going 150mm2 alu cable shortages, the only alternate provided by the table is a 161mm2 copper cables. In most cases copper cables are non preferred due to likely cable theft risk  | In Progress   |
| STDCHAL-000171                   | 13/08/2021               | NR/L2/CIV/177                         | Buildings & Civils   | Figure 1 in section 5 and Table 3 in section 6  | theft risk.  The order of tests in figure 1 does not match the wording of section 5, and the wording in the table is unclear and is being   | Accepted to Revise Standard                             |
|                                  |                          |                                       |  |   | misapplied in practice  |   |

| ID  | Date Received            | Standard Challenged                                  | Primary Standards Steerin           | g Subject  | Simplified Summary of Challenge   | Current Process Stage                                   |
|---|--------------------------|--|-------------------------------------|--|---|---|
| STDCHAL-000172                            | 16/08/2021               | NR NR/L2/CIV/005                                     | Group Buildings & Civils            | 10 Post- Installation  | Stdnard should:   | Not Proceed   |
|   |                          |  |                                     |  | - Clearly stated requirement for post installation CCTV surveys to be undertaken.   |   |
|   |                          |  |                                     |  | - require that copies of any discharge consent are provided to the RAM as part of the handover.   |   |
|   |                          |  |                                     |  | - provide clarity on the need to provide operation and maintenance manuals for non-standard items such as oil   |   |
| STDCHAL-000173                            | 17/08/2021               | NR/L2/CIV/096  | Mining and Tunnels                  | Drafting errors  | Inceptors etc.  | Accepted to Revise Standard                             |
|   |                          | NR/L2/CIV/096  |                                     |  | The standard seems to contain some drafting errors. The challenge seeks to resolve these to improve clarity.  |   |
| STDCHAL-000174<br>STDCHAL-000175          | 13/09/2021<br>15/09/2021 | NR/L2/ELP/23001<br>NR/L2/ELP/27550                   | Electrical Power Electrical Power   | 6.2 Environmental Conditions 5.3.2 Interdisciplinary Check and Review Evidence   | COTS vs full engineered to order solution.  Issue 2 of the standard included some updates which adversely   | In Progress Accepted to Revise Standard                 |
| STDCHAL-000176                            | 29/09/2021               | NR/L2/RSE/02009                                      | Systems Engineering                 | Clause 10.4.6 and all sub-clauses, Plus Module 1   | affected the clarity of cl.5.3.2. Recording of competencies   | Accepted to Revise Standard                             |
| STDCHAL-000177                            | 30/09/2021               | NR/GN/CIV/202  | Buildings & Civils                  | Appendix B.5 Guidance on information signage   | The requirement for signs "on the left" side of the bridge is   | Not Proceed   |
| STDCHAL-000178                            | 30/09/2021               | NR/L2/RSE/02009                                      | Systems Engineering                 | Clause 10.4.6 and all sub-clauses, Plus Module 1   | unclear.  Recording of competencies   | Accepted to Revise Standard                             |
| STDCHAL-000179                            | 05/10/2021               | NR/L2/RSE/02009                                      | Systems Engineering                 | Appendix B.5 Clause 10.4.6 and all sub-clauses, Plus Module 1  | Recording of competencies   | Accepted to Revise Standard                             |
| STDCHAL-000180                            | 06/10/2021               | NR/L2/ELP/27715                                      | Electrical Power                    | Appendix B.5 Flexibility when positioning DEP (Designated Earthing   | Standard (and others as applicable) should not intentionally  | In Progress   |
| STDCHAL-000181                            | 07/10/2021               | NR/L2/MTC/006  | Quality, Health, Safety &           | Point) locations Standard out of date  | provide conflict with NR/L3/ELP/29987/07. Update Standard   | Accepted to Revise Standard                             |
| STDCHAL-000182                            | 12/10/2021               | NR/L2/CIV/177  | Environment Buildings & Civils      | Section 4 definition of track support zone & Section 6   | Update Standard Sections  | Accepted to Revise Standard                             |
| STDCHAL-000183                            | 13/10/2021               | NR/L2/TRK/4040                                       | Track                               | table 3  Design Requirements   | - When installing a Level crossing system as a temporary RRAP   | In Progress   |
|   |                          |  |                                     |  | under standard NR/L2/RMVP/0200/P301 where ballast is used instead of a road surfacing.  - Devices placed centrally between the rails over a width of 300 mm & angled down at 45° to deflect anything hanging from a train which could otherwise damage or displace an end internal panel. |   |
| STDCHAL-000184                            | 25/10/2021               | NR/L3/CIV/020 ISSUE 1                                | Buildings & Civils                  | Duration of time between maintenance based on  | The standard is updated to include guidance on the preferred  | Not Proceed   |
| STDCHAL-000185                            | 22/10/2021               | NR/L2/RSE/30041                                      | Systems Engineering                 | whole life cost  Application of BS EN 50121-4 within the railway boundary  | interventions periods.  Limit application of BS EN 50121-4 to safety critical Signalling and Telecommunication equipment located within 3m of the   | Not Proceed   |
| STDCHAL-000186                            | 17/11/2021               | NR/L3/CIV/006/2A                                     | Buildings & Civils                  | The examiner should also be required to check the height limit as shown on the bridge matches the                      | nearest rail of an electrified line.  An additional check is included to ensure data used for sat navs is correct   | Not Proceed   |
| STDCHAL-000187                            | 17/12/2021               | NR/L3/CIV/071  | Geotechnical                        | records held in the National street Gazetteer, Geotechnical parameters   | An additional clause is added to the standard to require  | Accepted to Revise Standard                             |
|   |                          |  |                                     | F  | designers to specify additional geotechnical investigations at the start of the site works to confirm the validity of the Geotechnical parameters used in the design.   |   |
| STDCHAL-000188                            | 16/12/2021               | NR/L3/CIV/0063                                       | Buildings & Civils                  | Purpose, Sections 5.1 & Appendix B   | Purpose - updated doc to have commonly defined terms  | Accepted to Revise Standard                             |
|   |                          |  |                                     |  | Section 5.1 - The hierarchy is replaced with a flow diagram and clear definition of hazards which needed assessment for possible collapse on to NR property which are not mitigated by  |   |
|   |                          |  |                                     |  | possible cointigs on to NK property which are not minigated by this standard.  Appendix B - Update diagrams to match requirements of  |   |
|   |                          |  |                                     |  | standard.   |   |
| STDCHAL-000189                            | 20/12/2021               | NR/L2/CIV/003  | Buildings & Civils                  | General issue relating to activities post issue of approved design for construction                                    | Approval of fabrication drawings  | Not Proceed   |
| STDCHAL-000190                            | 23/12/2021               | NR/L2/ELP/40045                                      | Electrical Power                    | 6.2 performance requirements   | Update of standard to include requirements for energy efficiency / heat loss prevention / use of smart control systems to avoid unnecessary running time / supervisory control and  | Accepted to Revise Standard                             |
| STDCHAL-000191                            | 24/12/2021               | NR/L2/RSE/02009                                      | Systems Engineering                 | Various  | data acquisition.  Various changes to align with project SPEED and improve  | Not Proceed   |
| STDCHAL-000192                            | 29/12/2021               | NR/L2/TRK/4239                                       | Track                               | Re suppliers using virgin fill from a quarry (eg.Type 1),  | delivery by the reduction of complexity.  It is proposed that the extract of cl.5.5.4.4 above be amended  | Accepted to Revise Standard                             |
|   |                          |  |                                     | not recycled (eg 6F4).   | to clarify that recycled materials from SCO are compliant for use in the trackbed.  |   |
| STDCHAL-000193                            | 29/12/2021               | NR/L2/TRK/4239                                       | Track                               | cl.6.7 Supervision and Monitoring  | It would be helpful for the wider industry if NR updated their guidance and standards to provide consistency and clarity over what is considered to be a) track and b) track bed or formation,  | Not Proceed   |
|   |                          |  |                                     |  | and the product approval requirements that apply to each  |   |
| STDCHAL-000194<br>STDCHAL-000195          |                          | NR/L3/TRK/002<br>NR/L3/ELP/29987                     | Track<br>Electrical Power           | Various - Standard "out of date" 3.1 Areas of Reduced Wire Height  | Update Standard 3.1 mandates a set of requirements for a specific hazard, no  | In Progress<br>In Progress                              |
|   |                          |  |                                     | 3  | requirements are provided for how the locations of the known<br>hazard (reduce wire height) is communicated to the wider  |   |
| STDCHAL-000196                            | 28/01/2022               | NR/L3/CIV/151  | Buildings & Civils                  | Details on drawing NR/CIV/SD/263 issue E   | railway industry.   | Not Proceed   |
| STDCHAL-000197                            | 04/02/2022               | NR/L2/OHS/0044                                       | Workforce Safety                    | L2/OHS/0044F01<br>L2/OHS/0044F02   | Change in wording to L2/OHS/0044F01, and addition of signature box and wording to L2/OHS/0044/F02 and F03   | Not Proceed   |
| STDCHAL-000198                            | 15/02/2022               | NR/L3/TRK/003  | Track                               | L2/OHS/0044F03<br>Item 14 Sleeper / Bearers  | The form currently is silent with respect to longitudinal timbers   | Accepted to Revise Standard                             |
| 31DCHAL-000138                            | 13/02/2022               | INIA/ES/TINA/OUS                                     | Truck                               | ten 14 sieeper/ beureis  | and provides no prompt to specific hand back requirements for longitudinal bearers  | Accepted to Nevise Standard                             |
| STDCHAL-000199                            | 02/03/2022               | NR/L2/TRK/1019                                       | Track                               | General visual inspection minimum illuminance requirements   | Lower the minimum illumnance requriements.  | Accepted to Revise Standard                             |
| STDCHAL-000200                            | 07/03/2022               | NR/L2/OHS/00130                                      | Workforce Safety                    | Fixed Permanent and fixed temporary barriers   | Update the standard to remove the 2.75m requirement but inset a requirement to risk access from the proximity to the live   | Not Proceed   |
| STDCHAL-000201                            | 07/03/2022               | NR/L3/CIV/006  | Buildings & Civils                  | 6.7 Watercourses   | OLE An additional check is included to ensure trash screens are   | Not Proceed   |
| STDCHAL-000201                            | 23/03/2022               | NR/L2/OHS/021  | Workforce Safety                    | Various  | designed / working as per current best practice  Update Standard  |   |
| STDCHAL-000203                            | 30/03/2022               | NR/L3/TRK/7012                                       | Track                               | Various  | Various   | Accepted to Revise Standard Accepted to Revise Standard |
| STDCHAL-000204                            | 04/04/2022               | NR/CIV/SD/TUM/101                                    | Buildings & Civils                  | 3.1.3 Intrusive weeds 5.10 / 5.11 / 5.12 Cracks  | Mixing of Weed killer. Update to provide requirements and details for the provision of date tabs.   | Accepted to Revise Standard                             |
| STDCHAL-000205<br>STDCHAL-000206          | 29/04/2022<br>29/04/2022 | NR/I2/TRK/2102<br>NR/L2/CIV/295                      | Track<br>Buildings & Civils         | cl.10.3.4 Ballast excavation  It's not obvious how the tidal velocity should be used in                                | Provide guidance on control measures to reduce risks.   | Not Proceed<br>Accepted to Revise Standard              |
|   |                          | NR/L2/CIV/295<br>NR/L2/INI/CP1030                    |                                     | Figure A.9 EX2502 calculation sheet  | management teams to appropriately manage tidal scour.   | ·   |
| STDCHAL-000207                            | 06/05/2022               | 100/LZ/1101/CF 1030                                  | Workforce Safety                    | Various  | Scope, Requirements – types what Level 2 / How Level 3, Accessibility of forms, Requirements – restrictions from product acceptance process, Requirements – harmonisation with  | Accepted to Revise Standard                             |
| STDCHAL-000208                            | 16/05/2022               | NR/L2/CIV/044  | Buildings & Civils                  | cl.8.4.1 Depth of Cover  | PAS128 Update drawings to reflect the shallower depth stated in the   | Accepted to Revise Standard                             |
| STDCHAL-000209                            | 23/05/2022               | NR/L2/OHS/021  | Workforce Safety                    | Requirement for general purpose gloves when working  | standard.  Change requirement for gloves with a cut resistance Level 5.   | Not Proceed   |
| STDCHAL-000210                            | 23/05/2022               | NR-L2-ELP-21106                                      | Electrical Power                    | on site  Network Rail do not have a standard for calculation of protection settings for their Auto Transformer systems | Expand scope to include Auto Transformer Systems & bring  | Accepted to Revise Standard                             |
| STDCHAL-000211                            | 23/05/2022               | NR-L3-ELP-21085                                      | Electrical Power                    | Various  | Improve the contents of the standard.   | Accepted to Revise Standard                             |
| STDCHAL-000211                            |                          | NR/L2/OHS/00130                                      | Workforce Safety                    | Various  | Affordability of the protection methods detailed within the standard.   | Accepted to Revise Standard                             |
| STDCHAL-000213<br>STDCHAL-000214          | 13/06/2022<br>14/06/2022 | NR/SP/ELP/27242<br>NR/L2/CIV/177                     | Electrical Power Buildings & Civils | Standard out of date Type of monitoring  | Complete revision  Clearly define allowable methodology for monitoring the track  | Accepted to Revise Standard Not Proceed                 |
| STDCHAL-000214                            | 01/07/2022               | NR/L2/CIV/178  | Buildings & Civils                  | Definition of Working Platform   | Amend the definition of Working Platform.   | Not Proceed   |
| STDCHAL-000213                            | 28/07/2022               | NR/L2/TRK/2102                                       | Track                               | Changes in horizontal alignment  | Where track lowers are being considered for Electrification or gauge clearance allow vertical alignment changes to be coincident with horizontal transitions  | In Progress   |
| STDCHAL-000217                            | 28/07/2022               | NR/L2/TRK/2102                                       | Track                               | Constant grade 30m either side of an overbridge  | Where track lowers are being considered for Electrification or gauge clearance, allow vertical curves to be designed through  | In Progress   |
| STDCHAL-000218                            | 28/07/2022               | NR/L2/TRK/2102                                       | Track                               | Vertical element (constant gradient)   | an overbridge  Where track lowers are being considered for Electrification or gauge clearance allow vertical element lengths less than 2  | In Progress   |
| STDCHAL-000219                            | 03/08/2022               | NR/L2/CTM/220  | Competence & Training               | Various  | seconds at maximum linespeed  Various   | Not Proceed   |
| STDCHAL-000219<br>STDCHAL-000220<br>CHL/1 | 09/08/2022<br>30/09/2022 | NR/L2/CTM/220<br>NR/L2/ELP/21085<br>NR/L3/OHS/019-IP | Electrical Power Workforce Safety   | Guidance for Bonding in complex areas Planned removal of standard  | Clause 18.2.2 is updated to include a guidance section.  Removal of the requirements of NR/L3/OHS/019 ahead of the  | In Progress Accepted to Revise Standard                 |
| CHL/1                                     | 03/10/2022               | NR/L2/CIV/044  | Buildings & Civils                  | Depth of UTX cover to be a minimum of 900mm  | planned date of December 2022.  A reduction in the desirable depth of cover without additional  | Not Proceed   |
|   |                          |  | J 2. 2                              | between sleeper soffit and crown of pipe.  | measures to 600mm.  |   |
| CHL/3                                     | 04/10/2022               | NR/L3/OHS/019-IP                                     | Workforce Safety                    | Withdrawl of standard  | Work to NR/L2/OHS/019 Issue 11 and disregard  | Accepted to Revise Standard                             |

| ID   | Date Received  | Standard Challenged  | Primary Standards Steering<br>Group  | Subject   | Simplified Summary of Challenge  | Current Process Stage  |
|--|--|--|--|---|--|--|
| CHL/4<br>CHL/5   | 04/10/2022   | NR/L1/ELP/27000  | Electrical Power   | Various   | EP-23 & Clause 4.5.9 to be corrected. Missing Appendices   | Not Proceed  |
| CHL/6<br>CHL/7   | 24/10/2022   | NR/L2/CIV/003  | Buildings & Civils   | RACI chart  | Asset Manager responsibility   | Accepted to Revise Standard  |
| CHL/8<br>CHL/9   | 07/11/2022   | NR/L2/CIV/177  | Buildings & Civils   | Varous  | Reference to other standards   | Not Proceed  |
| CHL/10   | 14/11/2022   | NR/L2/OHS/00130  | Workforce Safety   | COSS as Site Controller   | Mandatory use of a COSS on every site  | Accepted to Revise Standard  |
| CHL/11   | 14/11/2022   | NR/L2/RSE/02009  | Systems Engineering  | The mandatory requirement for IDC on simple, single discipline projects   | A simpler and quicker process.   | Not Proceed  |
| CHL/12   |  | NR/L2/TRK/2102   | Track  | All As Built standards  | A new standard to capture all the requirements of As Built information.  | Accepted to Revise Standard  |
| CHL/13   | 29/11/2022   | NR/L2/RMVP/0200  | Rail Mounted Vehicle Plant   | Approach to minimum exclusion zone for flailing works   | Implement a risk-based approach to determining the minimum exclusion zone for flailing works   | Not Proceed  |
| CHL/14   | 30/11/2022   | NR/L3/TRK/002  | Track  | Track Maintenance Handbook & Vegetation Clearance   | A reference to NR/L2/RMVP/0200/P511 - Infrastructure Plant Manual: Vegetation Management should be added to this document & the requirements harmonised between the two documents.   | Accepted to Revise Standard  |
| CHL/15   | 12/12/2022   | NR/L2/OHS/00124  | Health and Wellbeing   | Hearing Test  | Variation for those with certain hearing aids & medical test updated.  | Accepted to Revise Standard  |
| CHL/16   | 16/12/2022   | NR/L3/CIV/006  | Buildings & Civils   | Inspection of 3rd party land on either side of a structure  | Defects in 3rd part land should be sent to the landowner to resolve and not undertaken by the railway.   | Not Proceed  |
| CHL/17   | 20/12/2022   | NR/L3/CIV/006  | Buildings & Civils   | Recommendations related to actions to deal with identified problems   | Recommendations related to actions to deal with identified problems should be removed from the standard.   | Not Proceed  |
| CHL/18   | 20/12/2022   | NR/L3/INI/CP0036   | Workforce Safety   | Standard was written due to the introduction of new   | Delete or update standard  | Accepted to Revise Standard  |
| CHL/19   | 16/01/2023   | NR/L2/ELP/27224<br>NR/L3/SIG/11231   | Electrical Power   | Legislation which is now well understood.  Various Clauses  | Clauses 7.3, 8.5 and 8.9   | Accepted to Revise Standard  |
| CHL/20<br>CHL/21   | 24/01/2023   | NR/L3/SIG/11231  | Signalling Signalling  | NR/SMTH/PART 04 - Part 04 [Issue 14]  NR/SMTH/Part 06 - (NR/L3/SIG/11231) Part 06 [Issue  | Clarification as to whether all SMTH Test Plan steps are to be considered mandatory, unless specified otherwise. Rewrite of highlighted Test Plans.  Clarification as to whether all SMTH Test Plan steps are to be  | Not Proceed  Not Proceed   |
| CHL/22   | 24/01/2023   | NR/L3/SIG/10663  | Signalling   |   | considered mandatory, unless specified otherwise. Rewrite of highlighted Test Plans.  Clarification as to whether all SMS Test steps are to be   | Not Proceed  |
| GU 122   | 20/04/2022   | No. 10 Table 20  |  | Tests Index [Issue 15]  | considered mandatory, unless specified otherwise. Rewrite of highlighted Test Plans to clarify ambiguous wording and unnecessary steps.  |  |
| CHL/23   | 30/01/2023   | NR/L2/TRK/2102   | Track  | Clause not output based, i.e. it sets limits on adjacent track vertical position to ensure the sixfoot ballast shoulder is self supporting.   | The clause should be rewritten based on a known ballast shoulder slope that is self supporting. This would then take into account variances in sleeper (Eg47 versus G44) and ballast shoulder width (375mm versus 450mm)   | Accepted to Revise Standard  |
| CHL/24   | 01/02/2023   | NR/L2/RSE/100  | Systems Engineering  | The Product Acceptance Service Guidance Note 'How to decide what needs product acceptance' (currently at  | The items listed in this guidance document and the applicability of NR/L2/RSE/100/05 is reconsidered.  | Not Proceed  |
| CHL/25   | 01/02/2023   | NR/L3/ENV/305  | Environment and  | Issue 1.1) Broken PEN conductors Guidance   | Several amendments to Guidance   | Not Proceed  |
| CHL/26   | 16/02/2023   | NR/GN/OTK/5000   | Sustainability Off Track   | The specification for posts should be expanded to   | Update specification to include steel posts as well as timber eg   | Not Proceed  |
| CHL/27   | 24/02/2023   | NR/L2/TRK/2102   | Track  | include requirements for steel posts.  Cant deficiency and line speed improvements  | following product https://mcveighparker.com/clipex Clause 8.5.8 Cant deficiency and line speed improvements  | Accepted to Revise Standard  |
| CHL/28   | 24/02/2023   | NR/L2/TRK/2102   | Track  | "Legacy CWR" and "modern CWR"   | should be revised and reissued.  'Definitions' term for "modern CWR" should be revised to clarify  | Accepted to Revise Standard  |
| CHL/28   |  | NR/L2/RSE/02009  | Systems Engineering  | Requirement for engineers to demonstrate DE01   | the design intent.  Consultants own competency system is used to assess and  | Not Proceed  |
| CHL/29   | 27/02/2023   | NR/L2/R3E/02009  | Systems Engineering  | competence (via Competence Quads) plus ongoing review.  | record competency.   | Not Proceed  |
| CHL/30   | 27/02/2023   | NR/L2/TRK/2102   | Track  | Challenge against a previous issue of the standard.   | Current issue addresses issues raised in the challenge.  | Not Proceed  |
| CHL/31<br>CHL/32   | 04/04/2023   | NR/L2/ELP/1007   | Electrical Power   | Wording of the existing clauses   | DLR interface with the SCADA system  | Accepted to Revise Standard  |
| CHL/33<br>CHL/34   | 25/04/2023<br>04/05/2023   | NR/L2/SIG/11201<br>NR/L2/OHS/00124   | Signalling<br>Health and Wellbeing   | New MCB-CCTV crossings lighting levels Changing to the prescribed 38 plate edition from 24  | Lower the 40 lux requirement in NR/L2/SIG/11201/Mod X23.  Permitting use of 24 plate edition and stating the permitted   | Not Proceed Accepted to Revise Standard  |
| CHL/35   |  |  |  | plate edition.<br>13.4.10 is worded incorrectly.  | number of failed plates proportionately. 13.4.10 should state 14 of 17 plates read correctly are a pass and 4 or more failed plates is a fail.   | Not Proceed  |
| CHL/36   | 27/05/2023   | NR/L3/SIG/11303  | Signalling   | Module 2P10 - Signalling Installation - Track Circuits:<br>Rail Terminations [Issue 2]  | Process missing the use of over-rail mounted drills & does not clearly define some key steps to mounting the moulded TC tail   | In Progress  |
| CHL/37   | 31/05/2023   | NR/L3/CIV/0063   | Buildings & Civils   | Section 12.2.2  | Revert to the previous methods of designing Tower Cranes &   | Accepted to Revise Standard  |
| CHL/37   |  | NR/L2/SIG/11201  | _  |   | managing lifting operations.   | <u> </u>   |
| CHL/38   | 27/06/2023   | NR/L2/SIG/11201  | Signalling   | Confusion between Mod B7 and F060 Appendix 3.   | Amend Mod B7 3.7.1 text or clarify the specific, perhaps historic conditions when the Mod B7 text would override that in F060.   | Accepted to Revise Standard  |
| CHL/39   | 14/07/2023   | NR/L3/CIV/006  | Buildings & Civils   | Details of ordnance survey coordinates format to be used  | Standard should be updated to ensure data is collected & presented in accordance with NR/L1/ADG/004 ISSUE 1 - Geospatial Referencing   | Accepted to Revise Standard  |
| CHL/40   | 14/07/2023   | NR/L2/CIV/003  | Buildings & Civils   | Front page tile table on all forms A to H   | Update to reflect the requirements of NR/L1/ADG/004 ISSUE  | Accepted to Revise Standard  |
| CHL/41   | 14/07/2023   | NR/L2/CIV/003  | Buildings & Civils   | Sign off boxes  | Should be included in the template for: Gauging Engineer & Fire Engineer, Station Security & Contingency Planning Specialist Station Pedestrian Capacity & Evacuation Review Town Planner ( listed Structures)   | Accepted to Revise Standard  |
| CHL/42   | 20/07/2023   | NR/L2/CIV/035  | Buildings & Civils   | Title block   | Updated to reflect the requirements of NR/L1/ADG/004 ISSUE 1 update the current requirement to provide OS grid ref   | Accepted to Revise Standard  |
| CHL/43   | 20/07/2023   | NR/L2/CIV/191  | Buildings & Civils   | Cover sheets templates  | Updated to state what coordinate system is to be used as per   | Accepted to Revise Standard  |
| CHL/44   | 24/07/2023   | NR/L2/ELP/40045  | Electrical Power   | Points heating standard drawings  | NR/L1/ADG/004 ISSUE 1 Points heating standard drawings to be aligned to the current  | Accepted to Revise Standard  |
| CHL/45   | 04/08/2023   | NR/L2/CIV/005  | Buildings & Civils   | Asset data for drainage systems   | track drawings.  Inclusion of the requirement to include Geospatial position as  | Not Proceed  |
| CHL/46   |  | NR/L2/ELP/27715  | Electrical Power   |   | part of the design output / As built drawings  |  |
| CHL/47   |  | NR/LZ/ELP/Z//15  |  | resting of voltage proving devices  | A simple specification for test cages added to the document  | In Progress  |
| CHL/48   | 22/08/2023   | NR/L2/ELP/2/715<br>NR/L2/SIG/11201   | Signalling   | Testing of voltage proving devices  Clause 5.1.3: 'Sites that are not suitable are: a)  | A simple specification for test cages added to the document with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the  | In Progress  Not Proceed   |
| CHL/49   | 22/08/2023<br>05/09/2023   |  |  | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  | with desirable geographical distances between test cages.  | Not Proceed  |
|  |  | NR/L2/SIG/11201  | Signalling  Rail Mounted Vehicle Plant  Signalling   | Clause 5.1.3: 'Sites that are not suitable are: a)  | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  |  |
| CHL/50   | 05/09/2023   | NR/L2/SIG/11201<br>NR/L2/RMVP/40069  | Rail Mounted Vehicle Plant   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming  | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the  | Not Proceed  Accepted to Revise Standard   |
| CHL/51   | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023   | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201   | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling  | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with  Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required   | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  |
| CHL/51   | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023   | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.   | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  Accepted to Revise Standard   |
| CHL/51  CHL/52  CHL/53   | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023   | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils Track   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals  | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  |
| CHL/51  CHL/52  CHL/53  CHL/54   | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023   | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/003  NR/L2/CIV/0047   | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils Track Workforce Safety  | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  Hazard Record Log   | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals  A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OHS/0047.   | Not Proceed  Accepted to Revise Standard In Progress Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55   | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023   | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/0047  NR/L2/CIV/095   | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils Track Workforce Safety Mining and Tunnels   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers Hazard Record Log  Repair and replacement of highway signs process  | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with  Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals  A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OHS/0047.  Creation of fast track process for 3rd party works which are safety critical   | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55  CHL/56   | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023<br>03/10/2023   | NR/L2/SIG/11201  NR/L2/SIG/11201  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/TRK/3011  NR/L2/CIV/095  NR/L2/TRK/2102  | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils Track Workforce Safety Mining and Tunnels Track   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  Hazard Record Log  Repair and replacement of highway signs process  Quality and net zero carbon objectives.   | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with  Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals  A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OHS/0047.  Creation of fast track process for 3rd party works which are safety critical  Mention of carbon in a way that uses standards to reduce carbon throughout the design & construction process.  | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed  In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  Accepted to Revise Standard  |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55   | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023   | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/0047  NR/L2/CIV/095   | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils Track Workforce Safety Mining and Tunnels   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers Hazard Record Log  Repair and replacement of highway signs process  | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with  Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals  A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OHS/0047.  Creation of fast track process for 3rd party works which are safety critical  Mention of carbon in a way that uses standards to reduce carbon throughout the design & construction process.  The document is updated as currently it is silent with respect to the current standard designs for fencing & bonding of fencing  | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55  CHL/55  CHL/56  CHL/57                         | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023<br>03/10/2023<br>04/10/2023   | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/003  NR/L2/TRK/3011  NR/L2/CIV/095  NR/L2/CIV/140  NR/L2/CIV/140  | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils  Track Workforce Safety Mining and Tunnels Track Buildings & Civils   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  Hazard Record Log  Repair and replacement of highway signs process  Quality and net zero carbon objectives.  240.001 and 240.004 and general update  EP-53 - Tensioning Arrangements  | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with  Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals  A common Hazard Record/Log template is created by & referenced in both NR/L2/RSF/100/02 and NR/L2/OHS/0047.  Creation of fast track process for 3rd party works which are safety critical  Mention of carbon in a way that uses standards to reduce carbon throughout the design & construction process.  The document is updated as currently it is silent with respect to the current standard designs for fencing & bonding of fencing within the OLCZ  Clause to be changed from Amber to Green   | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  Accepted to Revise Standard  Accepted to Revise Standard  |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55  CHL/56  CHL/57  CHL/57                         | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023<br>03/10/2023<br>04/10/2023<br>16/10/2023                             | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/0047  NR/L2/CIV/095  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils  Track Workforce Safety Mining and Tunnels Track Buildings & Civils  Electrical Power Buildings & Civils  | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  Hazard Record Log  Repair and replacement of highway signs process  Quality and net zero carbon objectives.  240.001 and 240.004 and general update  EP-53 - Tensioning Arrangements Out of Date document  | with desirable geographical distances between test cages. Amend the clause to say where the station is out of sight of the crossing user Update to reflect issues from global warming Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk Rename form to avoid duplication of terminology with Overhead Line Permit Form C RSSB Form RT3116 12-18 A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OHS/0047.  Creation of fast track process for 3rd party works which are safety critical Mention of carbon in a way that uses standards to reduce carbon throughout the design & construction process.  The document is updated as currently it is silent with respect to the current standard designs for fencing & bonding of fencing within the OLCZ  Clause to be changed from Amber to Green Withdraw standard and use NR/GN/CIV/208 - Ground Investigation only  | Not Proceed  Accepted to Revise Standard In Progress Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  Accepted to Revise Standard  |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55  CHL/55  CHL/56  CHL/57                         | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023<br>03/10/2023<br>04/10/2023   | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/003  NR/L2/TRK/3011  NR/L2/CIV/095  NR/L2/CIV/140  NR/L2/CIV/140  | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils  Track Workforce Safety Mining and Tunnels Track Buildings & Civils   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  Hazard Record Log  Repair and replacement of highway signs process  Quality and net zero carbon objectives.  240.001 and 240.004 and general update  EP-53 - Tensioning Arrangements  | with desirable geographical distances between test cages.  Amend the clause to say where the station is out of sight of the crossing user  Update to reflect issues from global warming  Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk  Rename form to avoid duplication of terminology with Overhead Line Permit Form C RSSB Form RT3116 12-18  A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals  A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OHS/0047.  Creation of fast track process for 3rd party works which are safety critical  Mention of carbon in a way that uses standards to reduce carbon throughout the design & construction process.  The document is updated as currently it is silent with respect to the current standard designs for fencing & bonding of fencing within the OLCZ  Clause to be changed from Amber to Green  Withdraw standard and use NR/GN/CIV/208 - Ground   | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  Accepted to Revise Standard  Accepted to Revise Standard  |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55  CHL/56  CHL/57  CHL/57                         | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023<br>03/10/2023<br>04/10/2023<br>16/10/2023                             | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/0047  NR/L2/CIV/095  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils  Track Workforce Safety Mining and Tunnels Track Buildings & Civils  Electrical Power Buildings & Civils  | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  Hazard Record Log  Repair and replacement of highway signs process  Quality and net zero carbon objectives.  240.001 and 240.004 and general update  EP-53 - Tensioning Arrangements Out of Date document  | with desirable geographical distances between test cages. Amend the clause to say where the station is out of sight of the crossing user Update to reflect issues from global warming Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk Rename form to avoid duplication of terminology with Overhead Line Permit Form C RSSB Form RT3116 12-18 A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OHS/0047. Creation of fast track process for 3rd party works which are safety critical Mention of carbon in a way that uses standards to reduce carbon throughout the design & construction process. The document is updated as currently it is silent with respect to the current standard designs for fencing & bonding of fencing within the OLCZ Clause to be changed from Amber to Green Withdraw standard and use NR/L0/CIV/208 - Ground Investigation only Withdraw standard and use NR/L0/CIV/208 - Ground Investigation only Withdraw standard and use NR/L0/CIV/208 - Ground Investigation only Withdraw standard and use NR/L0/CIV/208 - Ground Investigation only Withdraw standard and use NR/L0/CIV/208 - Ground Investigation only Withdraw standard and use NR/L0/CIV/208 - Ground Investigation only Withdraw standard and use NR/L0/CIV/208 - Ground Investigation only Withdraw standard and use NR/L0/CIV/208 - Ground Investigation only | Not Proceed  Accepted to Revise Standard In Progress Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  Accepted to Revise Standard  |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55  CHL/56  CHL/57  CHL/57  CHL/58  CHL/59  CHL/60 | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023<br>03/10/2023<br>04/10/2023<br>16/10/2023<br>16/10/2023               | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/003  NR/L2/CIV/0047  NR/L2/CIV/095  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140   | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils  Track Workforce Safety Mining and Tunnels  Track Buildings & Civils  Electrical Power Buildings & Civils  Buildings & Civils   | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  Hazard Record Log  Repair and replacement of highway signs process  Quality and net zero carbon objectives.  240.001 and 240.004 and general update  EP-53 - Tensioning Arrangements  Out of Date document  Consideration of climate change and flood risk within   | with desirable geographical distances between test cages. Amend the clause to say where the station is out of sight of the crossing user Update to reflect issues from global warming Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk Rename form to avoid duplication of terminology with Overhead Line Permit Form C RSSB Form RT3116 12-18 A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OHS/0047. Creation of fast track process for 3rd party works which are safety critical Mention of carbon in a way that uses standards to reduce carbon throughout the design & construction process. The document is updated as currently it is silent with respect to the current standard designs for fencing & bonding of fencing within the OLCZ  Clause to be changed from Amber to Green Withdraw standard and use NR/GN/CIV/208 - Ground Investigation only Withdraw standard and use NR/LS/OTK/5201 ISSUE 5 - Lineside Vegetation Management Manual only Section 8.3 list a) item 5 & appendix A "known problems" should be expanded to include flood risk to signalling assets affected by the planned renewal.as defined by NR/L1/SIG/50021/04 item 3.4 Mandate the use of recycled plastic fence posts The duties as defined by the CDM regs are added to the Roles & Responsibilities RACI matrix in section 3.                                   | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  Accepted to Revise Standard   |
| CHL/51  CHL/52  CHL/53  CHL/54  CHL/55  CHL/56  CHL/57  CHL/57  CHL/60  CHL/61         | 05/09/2023<br>06/09/2023<br>13/09/2023<br>14/09/2023<br>14/09/2023<br>14/09/2023<br>22/09/2023<br>22/09/2023<br>03/10/2023<br>16/10/2023<br>16/10/2023<br>23/10/2023 | NR/L2/SIG/11201  NR/L2/RMVP/40069  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/SIG/11201  NR/L2/SIG/11201  NR/L2/CIV/003  NR/L2/CIV/003  NR/L2/CIV/0047  NR/L2/CIV/095  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140  NR/L2/CIV/140 | Rail Mounted Vehicle Plant Signalling Buildings & Civils Signalling Buildings & Civils  Track Workforce Safety Mining and Tunnels Track Buildings & Civils  Electrical Power Buildings & Civils  Buildings & Civils  Track Off Track Operations Principles and | Clause 5.1.3: 'Sites that are not suitable are: a) stations;'.  Issues related to global warming Assessment of infrastructure for climate change  NR/L2/CIV/003/FormC  Current wording states 'An entry will be made for ARS Sub-Area(s) required in manual to prevent opposing, parallel and adjoining routes.'  Wording in 13.2 Temporary works operations.  Stressing Rollers  Hazard Record Log  Repair and replacement of highway signs process  Quality and net zero carbon objectives.  240.001 and 240.004 and general update  EP-53 - Tensioning Arrangements  Out of Date document  Out of Date document  Consideration of climate change and flood risk within problem statements  Use of timber fence posts | with desirable geographical distances between test cages. Amend the clause to say where the station is out of sight of the crossing user Update to reflect issues from global warming Item added to the requirements in appendix A to review the placing of signalling equipment areas of known flood risk Rename form to avoid duplication of terminology with Overhead Line Permit Form C RSSB Form RT3116 12-18 A definition of the three terms, 'opposing', 'parallel' and 'adjoining' is required  Wording to be changed to give more clarity to the intention behind view on what is defined by "a" (singular in context ) item of temporary works design.  Standard references both traditional under roller/side arm interval requirements and Vortox Stressing Roller intervals A common Hazard Record/Log template is created by & referenced in both NR/L2/RSE/100/02 and NR/L2/OH5/0047.  Creation of fast track process for 3rd party works which are safety critical Mention of carbon in a way that uses standards to reduce carbon throughout the design & construction process.  The document is updated as currently it is silent with respect to the current standard designs for fencing & bonding of fencing within the OLCZ  Clause to be changed from Amber to Green  Withdraw standard and use NR/GN/CIV/208 - Ground Investigation only  Withdraw standard and use NR/L2/OTK/5201 ISSUE 5 - Lineside Vegetation Management Manual only  Section 8.3 list a) item 5 & appendix A "known problems" should be expanded to include flood risk to signalling assets affected by the planned renewal.as defined by NR/L1/SIG/50021/04 item 3.4  Mandate the use of recycled plastic fence posts  The duties as defined by the CDM regs are added to the Roles   | Not Proceed  Accepted to Revise Standard In Progress  Not Proceed In Progress  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed  Not Proceed  Accepted to Revise Standard  In Progress Accepted to Revise Standard  Accepted to Revise Standard  Accepted to Revise Standard  Not Proceed |

| ID               | Date Received            | Standard Challenged                | Primary Standards Steering          | Subject  | Simplified Summary of Challenge  | Current Process Stage           |
|------------------|--------------------------|------------------------------------|-------------------------------------|--|--|---------------------------------|
| CHL/65           | 22/11/2023               | NR/L3/TEL/30175                    | Group Telecommunications            | RAMP Test  | The VIAVI approach is to test the circuit at CIR for the configured time and then IF ONLY IF the test fails will a RAMP  | Accepted to Revise Standard     |
| CHL/66           | 30/11/2023               | NR/L3/CIV/006                      | Buildings & Civils                  | Detailed Examination Requirements  | test be performed  The common requirements for all bridges should include the need to record differing depths of ballast at the ends of each span as a indicator to slow progressive settlement of the structure or uneven loading of the structure  | Not Proceed                     |
| CHL/67           | 21/12/2023               | BR 829                             | Signalling                          | Out of Date document   | What is being proposed? A stakeholder review to develop a modern standard that reflects current practices and test methods.  | Not Proceed - DECISION APPEALED |
| CHL/68           | 07/02/2024               | NR/L2/CIV/191                      | Mining and Tunnels                  | Provision of mining reports  | Add list of exclusions for types of work where stage 1 reports   | Not Proceed                     |
| CHL/69           | 09/02/2024               | NR/L2/OHS/019                      | Workforce Safety                    | Accountabilities and Responsibilities  | are not required  Expand the clause to include that the PIC sentinel sponsor is to to provide Mobile information technology apparatus for use with planning system when staff are on or near the line.   | Not Proceed                     |
| CHL/70           | 20/02/2024               | NR/L2/OHS/019                      | ■Vorkforce Safety                   | Responsibilities for planning and working in a   | Default use of points operators within possessions   | Not Proceed                     |
| CHL/71           | 21/02/2024               | NR/L2/ELP/CTM015                   | Electrical Power                    | possession Medical restrictions for colour blindness   | A separate module for reading drawings where blue, red and   | In Progress                     |
| CHL/72           | 27/02/2024               | NR/L2/SIG/19609                    | Signalling                          | Section updates not reflected in other standards   | green are used to define the cable for scope of works.  Confirm that the clauses from NR/L2/SIG/19609, 10.1.3 are still valid & they will be updated in NR/L2/SIG/30009 F060 &/or RIS-0703-CCS. Or they are confirmed as no longer being valid requirements & hence their omission in the current standards.   | Not Proceed                     |
| CHL/73           | 04/03/2024               | NR/L2/SIG/11201                    | Signalling                          | Signal Route and Aspect 27B(M)   | The example should include track 'BB' in the OCC column to reflect that the signal is restricted to a yellow aspect until this track is occupied.  | Accepted to Revise Standard     |
| CHL/74           | 11/03/2024               | NR/L3/TRK/003                      | Track                               | Clearances for Non structure apparatus stored lineside   | Appendix 2 should be updated to include required clearances for scrap / stored rails and other apparatus such as tools which are left lineside   | In Progress                     |
| CHL/75           | 14/03/2024               | NR/L2/CIV/003                      | Buildings & Civils                  | Handrail   | The handrail at the last step should protrude 300mm on the horizontal  | Not Proceed                     |
| CHL/76           | 14/03/2024               | NR/L3/CIV/151                      | Buildings & Civils                  | Handrail   | The handrail at the last step should protrude 300mm on the horizontal  | In Progress                     |
| CHL/77           | 21/03/2024               | NR/L3/TRK/003                      | Track                               | Use of undefined acronyms in declaration   | The current numerous undefined acronyms in declaration are updated with full text or properly written defined acronyms   | In Progress                     |
| CHL/78           | 28/03/2024               | NR/L2/TEL/31107                    | Telecommunications                  | VL/VT testing  | Either increase the sampling ratio to 100 kS/s for all scenarios, or clearly state that the 10 S/s can be used if the monitoring device has the capability to do the high sampling post-processing internally  | In Progress                     |
| CHL/79<br>CHL/80 | 28/03/2024<br>28/03/2024 | NR/L2/ELP/27238<br>NR/L2/TEL/30084 | Electrical Power Telecommunications | Insulation (2Mohm) and continuity tests of all strips.<br>Redundant telephones on platforms  | All the assets to now be monitored using RCM Remove telephones from stations.  | Not Proceed<br>In Progress      |
| CHL/81           | 28/03/2024               | NR/L2/TRK/3100                     | Track                               | References to the out-dated, Signalling Asset Survey   | References to the outdated GRD016 (Signalling Asset Survey   | In Progress                     |
| CHL/82           | 28/03/2024               | NR/L2/TRK/2102                     | Track                               | Data Specification (GRD016) Relative position of adjacent tracks   | Data Specification) to be removed.  Update the standard to include a diagram showing where the   | Accepted to Revise Standard     |
| CHL/83           | 28/03/2024               | NR/L2/OHS/00124                    | Health and Wellbeing                | Inconsistency between 7.1 and 6.4 & 6.5.   | measurement is taken.  Notes added to show employees can meet level with   | In Progress                     |
| CHL/84           |                          | NR/L2/OHS/019                      | Workforce Safety                    | Line No 2 of 'Fenced site of work' states in the   | restrictions.  This is incorrect and should read 1.25m as per the handbook 7 issue 8 page 11   | Accepted to Revise Standard     |
| CHL/85           | 24/04/2024               | NR/L2/SIG/30009                    | Signalling                          | of 0-40mph is 'at least 2m'.  Shunt unrestricted has been used with calling-on class   | Change the entry to refer to the correct class of route, Shunt   | In Progress                     |
| CHL/86           | 24/04/2024               | NR/SP/ELP/27242                    | Electrical Power                    | route for a lot of the examples.  Clause 9.3.2 states that any cable operating at a voltage in excess of 110v shall be installed in under track crossings at a minimum depth of 1.2 metres below rail level. However, when reviewing the cable management standard (NR/L2/SIG/19812), table 3 states that mains cables for track category 3, 4, 5 & 6 should first be installed in hollow bearers. | Occupied (SO).  Amend in line with the requirements of NR/L2/SIG/19812. This would then prevent the requirement to apply for a derogation every time that a CAT 3, 4, 5 & 6 track requires a cable operating at a voltage in excess of 110v to be placed in a hollow bearer.   | In Progress                     |
| CHL/87           | 30/04/2024               | NR/L1/ELP/27000                    | Electrical Power                    | Clause 4.7.3   | It is proposed that this clause in this instance should be considered a green clause.  | In Progress                     |
| CHL/88<br>CHL/89 | 15/05/2024               | NR/L2/TRK/001                      | Track                               | 8.3 TEF3227 Report The TEF adds little value and is onerous to review for the section managers department on a 4 weekly interval as PLPR regimes stipulates.   | Removing this review will allow more time for section managers team to carry out other more justified maintenance works or data analysis   | In Progress                     |
| CHL/90           | 16/05/2024               | NR/L2/CIV/193                      | Buildings & Architecture            | Reliability improvement for lifts in an external environment   | A 2D infra-red safety edge curtain to the the full height of the car doors   | In Progress                     |
| CHL/91           | 16/05/2024               | NR/L2/CIV/193                      | Buildings & Architecture            | Space restrictions or long step over point with a fixed wall-mounted ladder and manual handling issues with a folding ladder fixed to the floor.   | A wall fixed ladder that be can unfolded to be accessed safely. This will come with an electrical interlock that will prevent the lift running unless returned to its stored position.   | In Progress                     |
| CHL/92           | 16/05/2024               | NR/L2/CIV/193                      | Buildings & Architecture            | Removal of secondary alarm and flashing strobe   | Advice of alarm through telecommunication. Utilisation of the remote monitoring system to negate hard-wiring   | In Progress                     |
| CHL/93           | 16/05/2024               | NR/L2/RSE/0005                     | Systems Engineering                 | No Clear path or graduation for when NR have designed the product and defined standards that define the level of testing and control of the part.  | Additional paths that cover NR developed and full defined production controlled sections. Suggested title "Proof of Manufacture to NR Design".   | In Progress                     |
| CHL/94           | 20/05/2024               | NR/L2/ELP/27716                    | Electrical Power                    | Sketch could introduce an element of uncertainty due to misalignment with BS EN 50119 (definition of HCW is defined i.e. as measured to datum point in standard but perpendicular to plane in BS EN 50119)   | Minor revision to sketch   | In Progress                     |
| CHL/95<br>CHL/96 | 29/05/2024               | NR/L2/SIG/19812                    | Signalling                          | Clause 8.1, Clause 8.3 and Appendix B (Figure 3) is  | Clear and unambiguous text and correct cross referencing will  | In Progress                     |
|                  |                          |                                    |                                     | ambiguous  | reduce confusion, enhance understanding and avoid expensive design errors in detailed track designs  |                                 |
| CHL/97           | 04/06/2024               | NR/L2/SIG/10160                    | Signalling                          | Clause 4.2.2   | It is proposed to either: - change this clause from amber to green - allow a review with the PRE (similar to those being appointed as Responsible Signal Engineer) - re-write this clause to allow other controls  | In Progress                     |
| CHL/98           | 07/06/2024               | NR/L3/SIG/11231                    | Signalling                          | Test Plan EL22 Replace a Howells LED SL35 Light<br>Engine  | Update SMTH/EL22 to include conversion of SL35 to Howells<br>Light Engine  | In Progress                     |
| CHL/99           | 10/06/2024               | NR/L2/CIV/191                      | Buildings & Civils                  | Clause 2   | For temporary works and construction compounds, particularly those constructed 'off' railway land and those away from operational railway, then the requirements of CIV/191 are difficult to fully apply in the timescales that are available. Where the location of the proposed temporary works/construction compound is not covered already in a permanent works MRA, then align CIV/191 with the Form C requirements in CIV/003 issue 8 Clause 13.2. | In Progress                     |
| CHL/100          | 12/06/2024               | NR/L3/CIV/020                      | Buildings & Civils                  | 11 General Loading requirements  | The bullet points for General Loading requirements as presented in section 11 should be updated to omit the generic listing for "maintenance activities" which should be added to with specific works which are foreseeable in the life of the structure   | In Progress                     |