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Wales and Borders Rail Service and South Wales Metro

Invitation to Submit Final Tender

Volume 9: Core Valley Lines
Infrastructure Management Requirements

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I. Introduction

- I.1 The Infrastructure Manager (“IM”) has a discrete set of responsibilities within the wider responsibilities of the ODP. In this Volume 9, the term IM is used in place of ODP, except where reference is being made to responsibilities that are wider than those simply of the IM.
- I.2 In this Volume 9 you are asked to explain:
- How you will execute these IM responsibilities;
 - How you will discover new information on CVL Assets and
 - Your proposal for IM Mobilisation and CVL Asset Transfer at the beginning of the ODP Grant Agreement.
- I.3 The following table summarises the terminology used for IM responsibilities. Full definitions of defined terms are in Schedule 3A to the ODP Grant Agreement

Asset Operational Management		Train and power control
		Performance reporting
		Regulatory and legal duties and responsibilities ¹
		Compliance and standards
Total Asset Management	Day to Day Asset Management	Fault management
		Weather and season related interventions
		Inspection: routine and periodic
		Maintenance
	Asset Knowledge Management	
	Renewals	Excludes renewals that are being undertaken for CVL Transformation.
Future Enhancements		All enhancements other than those delivered by CVL Transformation

CVL Asset Statement

- I.4 The Authority has released a CVL Asset Statement providing information on the nature, condition and other characteristics of the CVL Assets which the

¹ This includes capacity allocation and charging. At bid stage, the level of activity relating to this responsibility throughout the term of the contract is unknown, therefore you should price for the level of Asset Operational Management effort that will be needed to develop the capacity allocation and charging regime for access of third party freight operators operating the services specified in the document ‘170224 - Future Freight on CVL VI.1 for bidders.pdf’. This pricing will form the basis of any pricing for planning different levels of third party access

ODP will manage. The data, databases and Network Rail systems that comprise the CVL Asset Statement are defined in Appendix 9.G of this Volume 9. You should use this information to shape Responses in this Volume 9, referencing data in the CVL Asset Statement as appropriate.

2. General Requirements

Health, Safety and Environmental Management

- 2.1 You will be required to put in place health and safety management arrangements to meet your statutory and regulatory obligations. Approval of the railway safety management arrangements are the responsibility of the ORR. The Authority seeks confidence that your plans for health and safety will be mature and approved.
- 2.2 You will be required to put in place environmental and stakeholder management arrangements to meet your statutory and regulatory obligations and also to meet the additional Requirements set out in Schedule 13.3 of the ODP Grant Agreement.
- R9.1** Describe how your health and safety management arrangements will ensure and exceed compliance with your statutory and regulatory obligations and how your safety management arrangements will integrate with wider rail and other industry safety initiatives, such as the Reporting Systems and Protocols operated by the RSSB.
- R9.2** Describe how you will act as a 'good neighbour' throughout the ODP Grant Agreement Term, maintaining a clean environment and minimising inconvenience for those adjacent to CVL Assets.

Asset Management Approach

- 2.3 Your Response to Questions R9.3 to R9.9 below should be linked to resourcing described in Volume 11.
- R9.3** Set out your asset management strategy, describing how it will:
- a. Efficiently and economically deliver a safe and high-performing railway within a live operational environment within the annually defined budgetary ceiling;
 - b. Use a whole life cost approach in which the condition of CVL Assets should not be allowed to decline inappropriately nor should premature renewal occur solely to reduce maintenance;
 - c. Ensure that capital investment decisions taken for the implementation of the CVL Transformation works take proper account of the whole asset management cost consequences; and
 - d. Allow efficient handback at the end of the ODP Grant Agreement Term of the CVL Assets in a condition that meets the condition requirements detailed in the ODP Grant Agreement.

- R9.4** Describe how your asset management approach will address the different characteristics of each of the following classes of asset, describing the expected balance of maintenance and renewals:
- a. Track;
 - b. Signalling, Control Systems and Passenger Information Systems;
 - c. Power distribution, electricity and plant;
 - d. Earthworks;
 - e. Structures;
 - f. Buildings and property;
 - g. Off track;
 - h. Telecommunications, Overhead Line Equipment (“OLE”);
 - i. Level crossings; and
 - j. Other assets.
- R9.5** Describe how you will exploit the benefits of vertical integration, taking full advantage your control of both asset management and rail service delivery, to improve operational performance and reliability and reduce cost for the Authority. Your Response should include vehicle/infrastructure interface management and how you will balance operational/infrastructure investment decisions.
- R9.6** Describe how you will use possessions and blockades for CVL Transformation works (as described in your Volume 8 Responses) for Total Asset Management activities (i.e. both Day to Day Asset Management and also Renewals) to maximise the utilisation of those possessions and blockades.
- R9.7** Define what asset condition monitoring systems you will implement, including remote condition monitoring and other asset data collection systems e.g. CCTV recording vehicles, and describe how you will use the information they provide to enable continuous improvement of the asset systems and their asset management over the ODP Grant Agreement Term.
- R9.8** Explain how your spares and special tools strategy, including spares held directly and relationships with spares suppliers, will avoid delays to asset replacement that could affect operational railway performance.
- R9.9** List all material² Support Contracts, >£20,000 per annum which you plan to establish for asset management by asset class, over the ODP Grant Agreement Term. For each, demonstrate how you will ensure that;
- a. each sub-contractor has the appropriate skills and competencies; and

² Where ‘material’ means substantial

- b. that appropriate commercial terms are included in your sub-contractors to enable you to meet your commitments to the Authority and gain best value.

Asset Management Plan

- 2.4 The rolling 5 year Asset Management Plan (AMP) will be renewed annually and will set out how the IM will meet its asset management obligations.
- R9.10** Provide a draft Asset Management Plan as defined in Appendix 9.A of this Volume 9.
- R9.11** Describe how you will proactively engage with the Authority and Independent Reporter to achieve continuous improvement in best value for the Authority, balancing capital, revenue and operational elements and working within the constraints of the Authority's annual priorities and spending objectives.
- R9.12** Describe how you will revise the Asset Management Plan annually to address the Material Discoveries made since the last Asset Management Plan.
- R9.13** Describe how, in the last three years of the ODP Grant Agreement Term, the AMP will prepare for the smooth transfer for IM responsibilities to a successor in satisfactory manner and condition as set out in the ODP Grant Agreement.
- R9.14** Set out the process you would go through to amend the AMP to align to a significant change in the Authority's spending priorities that results in a hypothetical 10% cut in annual funding for Total Asset Management.

Risk Based Management Framework

- 2.5 You will adopt a Risk Based Management Framework for the execution of your IM responsibilities. An example of good practice in risk based management is Network Rail's Business Critical Rules programme.
- R9.15** Describe and illustrate with examples, how you will ensure a consistent and proactive approach so that:
- a) Roles, responsibilities and risk controls are transparent;
 - b) Derogation treatment of non-compliances properly balances consideration of the local conditions and the applicable standards in order to maintain safety and avoid unnecessary expenditure and disruption; and
 - c) There is a clear 'line of sight' from risks to the way in which they are managed.

Asset Knowledge Management

- 2.6 The Authority requires that you adopt best practice in Asset Knowledge Management ("AKM"). Schedule 3A of the ODP Grant Agreement sets out minimum standards for AKM.
- R9.16** Provide a draft Asset Knowledge Management Plan ("AKMP") as set out in Appendix 9.B of this Volume 9:

- 2.7 The rolling five-year AKMP will be renewed annually and will set out how the IM will meet AKM obligations.
- 2.8 You are expected to use web-based collaborative IT platforms to maintain high levels of 'live' transparency, providing the Authority with real-time access to all asset data, data systems, decision support tools, the IM's resources plans, the standards derogations database and other relevant systems.
- R9.17** Summarise key systems, and highlight how your AKMP will enable you to gain, maintain and use accurate asset information to support economic and efficient asset management.

Compliance, Standards and Derogation Management

- 2.9 You will be responsible for developing and implementing a standards and derogations management process that will form part of the supporting framework for attainment of your safety case and other regulatory approvals. This will operate within the principles of your Risk Based Management Framework to provide a long term framework for safe and efficient asset management.

R9.18 Set out your standards and derogations management arrangements as described in Appendix 9.C of this Volume 9.

R9.19 Set out the relationship between your proposed standards derogation management arrangement and NR/L2/CSG/STP001, Module 04, 'Managing variations to Network Rail Standards and Control Documents and Railway Group Standards', explaining how the relationship changes during CVL Transformation.

R9.20 Provide a schedule of the standards you anticipate changing to deliver cost reductions or to improve the value delivered by the assets, including those resulting from your CVL Concept Design. Detail the anticipated associated cost reductions or improvements in the value delivered.

Temporary Operating Restrictions, track access, possessions and blockades

- 2.10 The extent of blockades and possessions during CVL Transformation is set out in your Responses to Volume 8. This section seeks information about the planning and management of possessions and blockades.
- 2.11 Applying your Risk Based Management Framework you will be responsible for identifying, planning, implementing and managing:
- a) All possessions and blockades on the CVL; and
 - b) Any temporary operating restrictions, such as temporary speed restrictions, needed whilst assets are operating in a state of reduced capability, to ensure continued safe operation of the CVL whilst minimising the operational impact on the CVL.

- 2.12 You will also be responsible for setting up commercial arrangements, and managing those arrangements, for the safe access of third parties to maintain and renew third party owned assets on the CVL.
- 2.13 The Rail Delivery Group's report 'Planning and Timing of Engineering Works on the GB Rail Network' sets out a number of examples of good practice in possessions and blockade management.
- R9.21** Outline your proposed process for planning and managing track access, possessions and blockades for the access of the ODP, other parties delivering the CVL Transformation, Renewals and Future Enhancements, those maintaining or renewing third party owned assets on CVL land and other parties that may legitimately require access from time to time such as emergency services, RAIB, ORR and others with a statutory right to require emergency access. Your Response should include:
- a. How the planning of possessions and blockades will be integrated with operational forward planning such as timetable alignment and amendment and detail your proposed classes of possessions and their planning horizons; and
 - b. How possessions or blockades will be managed including:
 - i. Management of route section handover and handback and of an OLE isolation;
 - ii. Access management;
 - iii. Arrangements for control of engineering trains;
 - iv. Discharge of CDM and Safety file responsibilities;
 - v. Updating asset knowledge to reflect the changes during the possession or blockade;
 - vi. Managing the impact on passengers (refer to Volume 8, Section 4) and
 - vii. A description of your balanced approach to providing reasonable access for the maintenance and renewal of third party owned assets whilst avoiding disruption to CVL operations.
- R9.22** Describe how your approach to possessions and blockade management takes full advantage of the vertical integration of asset management and rail service delivery to exceed the efficiency and effectiveness of Network Rail's possession and blockade arrangements.
- R9.23** Detail your arrangements for managing Temporary and Emergency Operating Restrictions, including:
- a. The Temporary Operating Restrictions you anticipate may be required;
 - b. How you will effectively communicate restrictions to operational personnel, including drivers and signallers/train controllers; and

- c. Any supporting arrangements that may be required such as trackside signage.

3. Responsibilities

Discovery

- 3.1 During the Preliminary Design and Discovery Phase, you will be responsible for effective review and survey of the CVL Assets and reporting of Discoveries. Network Rail will be the IM during this period.
- 3.2 Your Interim Asset Knowledge Management arrangement will be a key facilitator of the success of the asset discovery process, capturing the knowledge this provides.

R9.24 Provide a Discovery Plan as described in Appendix 9.D of this Volume 9.

R9.25 Summarise:

- a. The key elements of your approach which maximise the Discoveries that are made in the Preliminary Design and Discovery Phase and enable effective revision of the Asset Management Plan and other required responses to Discoveries; and
- b. How you will work with Network Rail through this phase, including key risks and contingency plans if Network Rail dependencies lead to delay or other issues.

IM Mobilisation and CVL Asset Transfer

- 3.3 The Preliminary Design and Discovery Phase provides a valuable opportunity to plan in detail IM Mobilisation and the CVL Asset Transfer. The Authority expects the ODP to take full advantage of the opportunity so that risks are minimised and the process is smooth.
- 3.4 Questions R8.36 and R8.37 cover the statutory approvals and third party dependencies for IM Mobilisation, CVL Asset Transfer and CVL Transformation.

R9.26 Provide an Initial IM Mobilisation and CVL Asset Transfer Plan that demonstrates how you will achieve the required statutory approvals, will address the third-party dependencies and also provides the detail set out in Appendix 9.E of this Volume 9. You may cross refer to your Responses to Questions R8.36 and R8.37.

Asset Operational Management

- 3.5 As IM, you will be responsible for:
 - a) Signalling and train control on the CVL, interfacing with Network Rail at the system boundary; and
 - b) Operational management of the Train Power Systems on the CVL.

- 3.6 When setting out your arrangements for signalling and train control systems and for train power systems you may cross refer to Volume 8 Responses.
- R9.27** Set out your arrangements for operational management of railway control systems immediately after the IM transfer from Network Rail.
- R9.28** Set out 'steady state' arrangements for operational management of railway control systems after CVL Transformation, clearly setting out the efficiencies CVL Transformation will deliver.
- R9.29** Describe clearly the 'steady state' (after CVL Transformation) interface between railway control systems in CVL where you are IM and the wider network which Network Rail will manage, with responsibilities clearly identified, your reasons for confidence that Network Rail will be willing to accept these arrangements and contingency plans for delay/issues.
- R9.30** Set out key transitional arrangements for railway control systems during CVL Transformation to provide confidence that transition is achievable as planned. Include any proposed arrangements and agreements for subcontracting to Network Rail, and highlight confidence and contingency plans for Network Rail arrangements.
- R9.31** Describe how you will provide signalling and other Asset Operational Management Duties on a day-to-day basis to support the Rail Service requirements during maintenance and any major planned refurbishment or modification periods.
- R9.32** Describe your disaster management and recovery arrangements to ensure that Rail Services can continue to operate in failure scenarios, including:
- a. Where the command and control centre is unavailable due to incident; and
 - b. Where there is a major power failure.
- R9.33** Set out your arrangements for operational management of train power systems and the interface with DNOs and other sub-contractors.

Day to Day Asset Management

- 3.7 Day to Day Asset Management comprises the following activities and responsibilities; fault management, weather and season related interventions, inspections (routine, periodic and arising) and maintenance. Asset Knowledge Management, also part of Day to Day Asset Management, is considered separately in this Volume 9.
- R9.34** Provide a Day-to-Day Asset Management Execution Plan as described in Appendix 9.F.
- 3.8 You should base your Day-to-Day Asset Management Plan on:
- a) The CVL Asset Statement;
 - b) Other information provided by Network Rail and the Authority during the procurement; and

- c) The Indicative CVL Infrastructure Manager Year One Renewals Volumes in Appendix 9.H of this Volume 9.

Renewals

- 3.9 Appendix 9.H sets out indicative CVL Infrastructure Manager Year One Renewals for which a summary method statement is required.

R9.35 Provide a Summary Method Statement for each of the CVL Infrastructure Manager Year One Renewals as set out in Appendix 9.I of this Volume 9.

4. Resourcing and Efficiency Improvement

Discovery and IM Transfer Resourcing

R9.36 Summarise the resources you propose to deliver the Discovery Plan and effect IM Transfer and demonstrate how this is consistent with the relevant financial model information you have provided in response to Volume 12 and the CVL Concept Design.

Asset Operational Management Resourcing

- 4.1 In the Questions below, you should set out your assumptions for the CVL Transformation works to a level of detail that clearly justifies the decisions you have made about the approach to Asset Operational Management, and which provides a basis for adjusting the Asset Operational Management cost, should the Authority chooses to change any aspect of the CVL Transformation works from your stated assumptions. If no assumption is stated about an aspect of the CVL Transformation, it will be assumed that all possible CVL Transformation solutions can be accommodated by your Asset Operational Management solution and pricing.
- 4.2 Resource information you provide below should have a similar level of granularity as the Day to Day Asset Management schedule, but be structured to reflect your Asset Operational Management solution, including;
- a) The organisational structure that you will adopt, the numbers of personnel their competencies and CVs for key personnel, noting where these are to be subcontracted, and using the grade descriptions set out in Appendix 12.B in Volume 12 where not;
 - b) Responsibilities of Asset Operational Management for example Crowd Management, Security, CCTV, Fault Management;
 - c) Working patterns and shift arrangements that dictate the numbers of personnel;
 - d) Location of control centers and the effect of this on resourcing; and
 - e) All other requirements, other than personnel, that are attributable to Asset Operational Management, such as vehicles.
- 4.3 In Responses to the Questions following, resourcing should be consistent with your Volume 11 Responses. Highlight and justify any differences.

- R9.37** Provide resource information for each year below in respect of Asset Operational Management duties, for:
- a. Each of Infrastructure Manager Years One, Two, Three, Four and Five, reflecting the completed and under construction CVL Transformation works (see next full paragraph) in each of those years;
 - b. Infrastructure Manager Year Six when the CVL Transformation works are complete.
- R9.38** Relate the resourcing for Asset Operational Management duties to the relevant financial model templates provided in response to Volume 12 for your Asset Operational Management responsibilities for each of Years One to Six.

Day to Day Asset Management Resourcing

- 4.4 You should set out your resourcing assumptions for the CVL Transformation works to a level of detail that clearly justifies the decisions you have made about the approach to Day to Day Asset Management, and which provides a basis for adjusting the Day to Day Asset Management cost, should the Authority chooses to change any aspect of the CVL Transformation works from your stated assumptions. If no assumption is stated about an aspect of the CVL Transformation, it will be assumed that all possible CVL Transformation solutions can be accommodated by your Day to Day Asset Management solution and pricing. Resourcing information you provide below should include:
- a) Organisation structure and staff numbers, noting where responsibilities are to be subcontracted, and where not, referencing the grade descriptions set out in Appendix 12.B in Volume 12
 - b) Working patterns and shift arrangements that dictate the numbers of personnel;
 - c) Details of plant and equipment, including on track plant
 - d) Infrastructure Depots and material and plant storage
- R9.39** Set out the resources you require to undertake Day to Day Asset Management, for:
- a. Each of IM Years One, two, three, four and five, reflecting the completed and under construction Transformation works (see next full paragraph) in each of those years;
 - b. IM Year Six when the Transformation works are complete.
- R9.40** Relate the resourcing for Day to Day Asset Management duties to the relevant financial model templates provided in response to Volume 12 for your Day to Day Asset Management responsibilities for each of Years One to Six.

Renewals Resourcing

- R9.41** For each of the eight Renewals highlighted in Appendix 9.H set out the resourcing you require to undertake:
- a. The design of renewals to TfW Plan of work Stage C;
 - b. The implementation management of the Renewals; and
 - c. Relate this resourcing to the relevant financial model templates provided in response to Volume 12.

Efficiency Improvement

- 4.5 By the end of CVL Transformation, the CVL will be a stable system which is well understood and on which any change is likely to be small and incremental. In this stable environment, you will be able to apply good operational and asset management practice to achieve annual efficiency improvements.
- 4.6 Candidate areas for delivering efficiency improvement include:
- a) Continuous Improvement through techniques as 'lean management';
 - a) Improved supply chain management;
 - b) Adoption of more flexible working practices, including multiskilling;
 - c) Adoption of new technologies; and
 - d) Adoption of advancements in best practice.
- R9.42** Explain how you will deliver the efficiency improvement commitments for Asset Operational Management for each of years 7 through to 15 that you have set out in the financial model templates in response to Volume 12.
- R9.43** Explain how you will deliver the cumulative efficiency improvement commitment for Day to Day Asset Management for each of years 7 through to 15 that you have set out in the financial model templates in response to Volume 12.

5. Appendix 9.A – Asset Management Plan

- 5.1 This appendix sets out key items which the Authority expects to see in your Draft Asset Management Plan (AMP).
- 5.2 Your Asset Management Plan should address years one to five of the CVL Transformation Stage, setting out all periodic and discrete Total Asset Management activities that the IM will undertake in each year (this should set out clearly how your CVL works, both completed and under construction, are reflected in each year's plan)³. It should:
1. Set out policies for the principal asset classes;
 2. Detail the reliability requirements for asset sub-systems;
 3. Set out how the sub-system reliability and availability requirements combine to provide the whole system reliability and availability needed to deliver the operational performance outputs;
 4. Set out how decision support tools and analysis of asset trends will help you to meet the Authority's Asset Management requirements;
 5. Link to Risk Based Management Framework and Asset Knowledge Management Plan, described elsewhere;
 6. How you will scan and assess the emerging technology landscape so if new or improved technology emerges that can be deployed to deliver a whole life asset management cost savings, this is identified and considered as part of Asset Management Planning process;
 7. Set out your IM Acceptance process for new infrastructure delivered by CVL Transformation, Renewal and other Enhancements; and
 8. Set out how the effects of the introduction of the new Train Fleet on the existing assets will be planned for, monitored and understood; so that strategies to manage these affects can be developed in a proactive timely way.

³ Should you be unable to give the same level detail for years two to five as you have provided for year one, the level should still be of sufficient detail for pricing.

6. Appendix 9.B – Asset Knowledge Management Plan

- 6.1 This appendix sets out key items which the Authority expects to see in your Draft AKMP. It should include:
1. Your Interim Asset Knowledge Plan setting out how you will manage Asset Knowledge during the Discovery Stage;
 2. Arrangements for the control and management of the asset data, stating for each key class of data whether it will be:
 - a. Retained and managed in whole or in large part by Network Rail;
 - b. A full migration into the IM's own systems; or
 - c. A combination of retention and management of some data by Network Rail with the remaining data to be migrated to, and managed in, the IM's own systems.
 3. Description of systems which you will implement to hold asset knowledge, and the decision support applications that will utilise the data:
 - a. Explaining how they will support economic and efficient asset management;
 - b. Setting out the suppliers and anticipated hosting/maintenance arrangements;
 4. Description of summary processes to ensure that asset data is maintained intact, complete and current throughout the life of the ODP Grant Agreement, including:
 - a. Summary arrangements for secure and successful migration of any data that is to be transferred from Network Rail's systems to the IM's systems;
 - b. Summary arrangements for system and data security that comply with the principles set out in the ISO/IEC 27000 standards series;
 - c. The data architecture solution, including systems into which each data set that is to be migrated, will be migrated;
 - d. Metadata and data dictionary management arrangements;
 - e. How data duplication will be avoided where practical and where it does exist how it will be rigorously managed to avoid deterioration in asset quality and ambiguity of asset currency;
 - f. The use of all Total Asset Management, CVL Transformation and Future Enhancement transactions (inspection observation or change through fault response, maintenance, renewal and enhancement) to maintain and improve the currency of the data; and
 - g. The arrangements that will ensure transfer of the data back to the Authority's own system, or the successor IM's system, in a way that the data remains intact and complete.
 5. How the Bidder will make good Asset Knowledge Management a core part of its IM culture, its wider ODP culture and the culture of the IDPs;
 6. How the IM will ensure that new innovations in asset data management will be adopted over the life of the ODP Grant Agreement to improve efficiency and effectiveness of asset data management and asset management;

7. A description of how it will allow the Authority real-time access to all the IM's asset data and data systems and platforms;
8. A description of how AKM will play a part in, and support, the maintenance of contemporaneous records to support:
 - a. The management of change resulting from Discoveries;
 - b. Agreement of such change and all other contractual matters with the Authority and the Independent Reporter.
9. Details of the annual reporting arrangements for data accuracy and system reliability using the grading systems set out on page 290 to 293 of Network Rail's 2016 Annual Return⁴.

⁴ Available here: https://www.networkrail.co.uk/wp-content/uploads/2016/11/Network-Rail-Infrastructure-Limited_Annual-Return-2016.pdf

7. Appendix 9.C – Standards and derogations management arrangements

7.1 This appendix sets out key items which the Authority expects to see in your standards and derogations arrangements. You should summarise:

1. A high level programme plan to set up compliance, standards and derogations management arrangements;
2. Your proposed engineering authorities for each core asset category and supporting evidence for their selection;
3. The process for considering changes to standards;
4. The process for issuing and controlling agreed standards;
5. The process for considering, agreeing, managing mitigation and communicating a derogation to a standard; and
6. The process for transferring existing Network Rail derogations, actual or implied, to your management and control.

8. Appendix 9.D – Discovery Plan

- 8.1 Describe discovery activities you will undertake during the Preliminary Design and Discovery Phase such as:
1. A desk top analysis of the CVL Asset Statement;
 - a. Inspections and walkthroughs;
 - b. Non-intrusive surveys;
 - c. Intrusive surveys; and
 - d. Analysis of Network Rail's asset knowledge management and wider asset management systems.
 - e. Provide a high level programme plan (Gantt chart) showing key elements of implementation of your Discovery activities;
 2. Explain how you will apply your derogations process to Material Discoveries and to existing Network Rail derogations, actual or implied;
 3. Explain how you will develop, maintain and communicate to the Authority; an assessment of the cumulative impact of Discoveries, including derogations, Temporary Operational Restrictions, changes to Day to Day Asset Management activities and changes to the identified Renewals;
 4. Set out the support needed from on Network Rail to enable you to undertake these activities, how you will procure this support from Network Rail and contingency plans for delay/non co-operation.

9. Appendix 9.E – IM Mobilisation and CVL Asset Transfer Plan

- 9.1 This appendix sets out key items which the Authority expects to see in your IM Mobilisation and CVL Asset Transfer Plan:
1. Key milestones
 2. Activities of both the ODP and other parties to the process
 3. Assumptions made about durations for both activities and approvals by others and explain why those assumptions are considered to be reasonable
 4. Authority Dependencies
 5. Other Third Party Dependencies
 6. Key IT activities
 7. HR, TUPE and IR activities and milestones
 8. Dependencies on other Preliminary Design and Discovery Phase activities such as Asset Characteristic discovery activities and derogation development
 9. Other activities that the Bidder considers key to the successful delivery of their Solution.
 10. Network Rail issues including;
 - a. Agreements
 - b. Plant and materials transfer; and
 - c. TUPE, IR and other personnel matter
 11. Regulatory approvals
 12. Stakeholder management plan
 13. Safety and Risk Management Transition
 14. Proposals for progress reporting
- 9.2 Include your ODP CVL Asset Assumptions. These are to be provided as a separate annexed document to the Draft Asset Management Plan. The annexed document will not count as part of the page limit guidance for the Draft Asset Management Plan.

10. Appendix 9.F – Day to Day Asset Management Execution Plan

10.1 This appendix sets out key items that the Authority expects to see in your Day to Day Asset Management Execution Plan for years one to six inclusive.

1. You are to develop this plan on the basis of the following assumptions:
 - a. The CVL asset system and its Asset characteristics, including age and condition, being as defined by the combination of:
 - i. The CVL Asset Statement (CAS); and
 - ii. Additional information to that given in the CAS, which has been provided by Network Rail and the Authority in the dialogue and bid periods.
 - b. The year one Known Renewals should be assumed for year one; and
 - c. A volume of renewals equal to the volume of year one Known Renewals, should be assumed for subsequent years for pricing ITSFT Day to Day Asset Management Planning purposes;
2. Each year's execution plan is to reflect the then:
 - a. CVL system configuration, which changes through the CVL Transformation stage;
 - b. CVL operational arrangements, which change through the CVL Transformation stage; and
 - c. IM arrangements which your Solution may change during CVL Transformation.
3. Fault Management including:
 - a. Integration of fault management with Asset Operational Management and Rail Services Delivery Management
 - b. Arrangements for clear and timely fault reporting by both IM and wider ODP personnel
 - c. Protocols for prioritisation of fault response
 - d. Fault response team structure and management, including arrangements for
 - i. Location of personnel, travel arrangement and track access arrangements to facilitate rapid response
 - ii. Spares arrangements – strategic spares carried by teams and access to centrally stored spares
 - iii. Response to different asset classes
 - e. Management of faults in systems provided by others, for example NR telecoms
 - f. How your management of faults will ensure compliance with the asset knowledge capture requirements of your Asset Knowledge Management Plan
 - g. How you will continuously improve fault management and reduce disruptive faults
4. Weather and season related interventions to manage the impact of:
 - a. Snow, ice and extreme cold
 - b. Extreme heat

- c. Flooding
 - d. High wind
 - e. Leaf fall
5. Management of routine and periodic inspections including:
- a. Inspection schedules for each asset class; noting
 - i. Any key standards and anticipated asset supplier's that influence these schedules
 - ii. Any proposed variations (additions or reductions) to the above to improve efficiency
 - b. Inspection team structure and management;
 - c. How your management of routine and periodic inspections will ensure compliance with the asset knowledge capture requirements of your Asset Knowledge Management Plan.
6. Management of Maintenance (the delineation of Maintenance and Renewals is defined in Annex 7 of Schedule 3A of the ODP Grant Agreement including:
- a. Schedule of planned Maintenance by asset class and geographical area
 - b. Commentary
 - c. Maintenance team structure and management;
 - d. How your management of Maintenance will ensure compliance with the asset knowledge capture requirements of your Asset Knowledge Management Plan.

11. Appendix 9.G CVL Asset Statement

- 11.1 This appendix sets out the data that comprises the CVL Asset Statement. Volumes 1 and 9 set out how this data is to be treated as a basis for the development of your Final Tender.
- 11.2 For the avoidance of doubt, should any other asset data in the ITSFT contradict the data set out in this appendix, the data set out in this appendix shall take priority because it is the most up to date. If you have any questions regarding data integrity you should submit a RFC to the Authority.
- 11.3 Access to the following data repositories is provided via access to live Network Rail systems
1. Linear Asset Decision Support (LADS), via the Network Rail laptop and Network Connect login that has been issued to you;
 2. Civil Asset Register and Reporting System (CARRS), via the browser based login with which you have been provided;
 3. GEO RINM for network survey and 'network model', via the Network Rail laptop and Network Intranet login that has been issued to you; and
 4. the 065 database, via the browser based login with which you have been provided
- 11.4 The data contained within the above live LADS, CARRS and 065 systems shall take priority over any information contained within any other part of the asset statement. Where there is an inconsistency or discrepancy between any data contained within the LADS, CARRS and 065 systems and any data forming any other part of the asset statement, the data derived from the LADS, CARRS and 065 systems shall take precedence.
- 11.5 The data contained within any part of CVL Asset Statement excluding the GEO RINM system shall take priority over any information contained within the GEO RINM system.
- 11.6 For clarity, a discrepancy between the LADS, CARRS and 065 systems and any other part of the CVL Asset Statement will not be a valid basis for a Discovery. If you have any questions regarding data integrity you should submit a RFC to the Authority.
- 11.7 Except for the information provided in the live Network Rail systems noted above, all data repositories, data sets or databases have been loaded onto the Award System.
- 11.8 The following tables:
1. Are organised by asset class;
 2. State the name of each data repository, data set or database;
 3. State whether the data repository, data set or database is in Award or is in one of the four data repositories noted in paragraph 11.3 of this appendix and in the case of the former where in Award it is located; and
 4. Provide a brief description of the data in data repository, data set or database
- 11.9 The Authority may provide additional data, to the data provided on issue of the ITSFT in the repositories, data sets or databases in Award, during the tender period in response to RFCs where it is available.
- 11.10 Except for additional information provided in accordance with the previous paragraph, all data in Award will be frozen on the date of issue of the ITSFT.

- 11.11 The arrangements for treating the data in the live Network Rail data repository LADS is:
1. Access to the LADS will be provided for the full tender period;
 2. The data in the LADS will be treated as frozen on the day of the 8-week anniversary of the issue of the ITSFT and any data added after this day:
 - a. cannot be used as a basis for the preparation of your tender; and
 - b. may be treated as the basis for a Material Discovery.
 3. On the day of the 8-week anniversary of the issue of the ITSFT, the Authority will have a PDF copy printed of all CVL information in LADS;
 4. The Authority will issue the record noted in the previous paragraph to Bidders no later than the day of the 10-week anniversary of the issue of the ITSFT;
- 11.12 The arrangements for treating the data in the live Network Rail data repository CARRS is
1. Access to the CARRS database will be provided for the full tender period;
 2. The data in the CARRS database will be treated as frozen on the day of the 8-week anniversary of the issue of the ITSFT and any data added after this day:
 - a. cannot be used as a basis for the preparation of your tender; and
 - b. may be treated as the basis for a Material Discovery.
 3. On the day of the 8-week anniversary of the issue of the ITSFT, the Authority will record the date of the last minor and major inspection reports and any information on additional inspections or comments for each of the structures on the Core Valley Lines in CARRS;
 4. The Authority will issue the record noted in the previous paragraph to Bidders no later than the day of the 10-week anniversary of the issue of the ITSFT.
- 11.13 The arrangements for treating the data in the live Network Rail data repository 065 is:
1. Access to the 065 database will be provided for the full tender period;
 2. The data in the 065 database will be treated as frozen on the day of the 8-week anniversary of the issue of the ITSFT and any data added after this day
 - a. cannot be used as a basis for the preparation of your tender; and
 - b. may be treated as the basis for a Material Discovery
 3. On the day of the 8-week anniversary of the issue of the ITSFT, the authority will download a spreadsheet from the 065-database recording the date of all the Earthworks Inspections, Flood Warnings and Reports, Historic Unfinished Inspections and Recommendations in the 065 database on that day;
 4. The Authority will issue the record noted in the previous paragraph to Bidders no later than the day of the 10-week anniversary of the issue of the ITSFT;
- 11.14 The arrangements for treating the data in the live GEO-RINM application is:
1. Access to the GEO-RINM application will be provided for the full tender period;

2. The nature of GEO-RINM application precludes date freezing of the information it provides;
3. GEO-RINM is provided to assist in the interpretation of data provided in the other CVL Asset Statement systems and no reliance should be made on data in GEO-RINM unless confirmed by the Authority as being allowing through a RFC.
4. If, because of referring to GEO-RINM, you have any questions regarding data integrity in other systems you should submit a RFC to the Authority.

Structures

Tunnels

TfW Ref	Name	Location (in data room) File Name	Description
T1	CARRS	Network Rail Structures Dashboard	Master Network Rail Database showing structures location and inspections
T2	[redacted]	[redacted]	[redacted]
T3	Structures Minor Works	(7.001) 7.001 Structures Minor Works.xlsx	Database showing minor works carried out to structures
T4	Structures PPM Works	(7.001) 7.001 Structures PPM Works.xlsx	Database showing work carried out by the PPM Team
T5	Structures Cardiff Valleys Data	(14.001) Structures Cardiff Valleys Data.xls	Contains the location of structures along the Core Valleys Route.

Bridges

TfW Ref	Name	Location (in data room) File Name	Description
B1	CARRS	Network Rail Structures Dashboard	Master Network Rail Database showing structures location and inspections
B2	MAI 4 CAM	(17.006) 17.006 - MAI_4_CAM-02206T-DKI_Redacted.pdf	Level 0 Inspection for Bridge at CAM 22.0148

TfW Ref	Name	Location (in data room) File Name	Description
B3	MSI ST3 (including bridge strikes)	(17.006) 17.006 - MSI ST3 (Inc Bridge Strikes) UPDATED.xlsx	Incident database including structure failure and bridge strikes
B4	Reduced Interval Inspections	(17.006) 17.006 - Reduced Interval Examinations.xlsx	Databases showing structures that are on a reduced interval inspection regime
B5	ST4 Scour	17.006 17.006 - ST4 - Scour.xlsx	Database of structures considered to be at risk of scour
B6	THT 01233 Asset Calcs	(17.006) 17.006 - THT 02133½ Asst Calcs 19890806 001.pdf 17.006 - THT 02133½ Asst Calcs 19890806 002.pdf 17.006 - THT 02133½ Asst Notes 19960000 001.pdf	Inspection reports for Bridge at THT 21.331/2
B7	UMB15 THT 02207	(17.006) 17.006 - UBMI_5_THT-02207H-DK1-REV2_Redacted.pdf	Level 0 Inspection for Bridge at THT 22.0165
B8	UMB2 0 THT 02111	(17.006) 17.006 - UBMI_5_THT-02309-DK1.REV4 TLI Apr 2016.pdf 17.006 - UBMI_5_THT-02309-DK1.REV4.pdf 17.006 - UBM2_0_THT-02111T-DK2 - Outputs_Redacted.pdf	Inspection Report for Bridge at THT 21.0259
B9	ST5 LONG TIMBERS	(17.006) 17.006 - ST5 - LONG TIMBERS.xlsx	List of long timber bridges
B10	Structures Cardiff Valleys Data	(14.001) Structures Cardiff Valleys Data.xls	Contains the location of structures along the Core Valleys Route.

TfW Ref	Name	Location (in data room) File Name	Description
B11	Structures Minor Works	(7.001) 7.001 Structures Minor Works.xlsx	Database showing minor works carried out to structures
B12	Structures PPM Works	(7.001) 7.001 Structures PPM Works.xlsx	Database showing work carried out by the PPM Team
B13	[redacted]	[redacted]	[redacted]
B14	[redacted]	[redacted]	[redacted]
B15	[redacted]	[redacted]	[redacted]
B16	[redacted]	[redacted]	[redacted]
B17	Off Track Asset Download Ellipse	<u>14.001</u> Off Track Asset Download Ellipse.xls	Download from the Network Rail Ellipse database showing low value off track structures assets including any inspections or maintenance.
B18	Structures – Wales	17.003 17.003 - Structures - Wales (10) _redacted.pdf	Engineering Verification Report on Structures

Buildings

TfW Ref	Name	Location (in data room) File Name	Description
BD1	CARRS	Network Rail Structures Dashboard	Master Network Rail Database showing structures location and inspections
BD2	Buildings Minor Works Altrium	(7.001) 7.001 Buildings Minor Works Atrium (reactive).xlsx	Spreadsheet showing minor works instances for Network Rail buildings
BD3	Buildings Property Examinations	(7.001) 7.001 Buildings Property Examinations.xlsx	Spreadsheet showing stations along the route and station cost codes.
BD4	Building Asset List	(14.001) Buildings asset list.xls	A database showing the buildings associated with the Core Valleys Route.

Minor structures

TfW Ref	Name	Location (in data room) File Name	Description
MS1	CARRS	Network Rail Structures Dashboard	Master Network Rail Database showing structures location and inspections
MS2	Structures Minor Works	(7.001) 7.001 Structures Minor Works.xlsx	Database showing minor works carried out to structures
MS3	Structures PPM Works	(7.001) 7.001 Structures PPM Works.xlsx	Database showing work carried out by the PPM Team
MS4	Structures Cardiff Valleys Data	(14.001) Structures Cardiff Valleys Data.xls	Contains the location of structures along the Core Valleys Route.
MS5	MS1 ST3 (including bridge strikes)	(17.006) 17.006 - MS1 ST3 (Inc Bridge Strikes) UPDATED.xlsx	Incident database including structure failure and bridge strikes
MS6	Reduced Interval Inspections	(17.006) 17.006 - Reduced Interval Examinations.xlsx	Databases showing structures that are on a reduced interval inspection regime
MS7	Structures – Wales	(17.003) 17.003 - Structures - Wales (10)_redacted.pdf	Engineering Verification Report on Structures

Track

TfW Ref	Name	Location (in data room) File Name	Description
T1	LADS (Linear Asset Data Store)	Access provided via Network Rail Laptop	LADS provides a rich data on track age, condition and defects.
T2	Metro Track Quality	(2.001) 2.001 - Metro Track Quality.xlsx	A database showing WT35, AL35, MT70 and AL70 data
T3	Steel Sleepers	(2.001) Steel Sleepers- Metro Track Assets Detailed Age of Road April 2016.xlsx	A database showing the location of Steel Sleepers
T4	Ellipse (All asset types inc track)	(9.019) 9.019 CVL Ellipse data cut.xlsx Ellipse Data.zip	An asset database used to raise and record maintenance work
T5	GEOGIS	(9.030) 9.030 - GEOGIS Age of Road Track Asset Wales April 2017.xlsx	A database used to record Network Rail Assets
T6	Age of Road	(14.001) Detailed Age of Road April 2016.xlsx	A database showing the age and specification of track along the route
T7	Rail Defects Database	(17.008) 17.008 - TfW request Defects and Breaks Cardiff Valleys.xlsx	A database showing recorded rail defects
T8	Broken Rails Register	(17.008) 17.008 - TfW request Defects and Breaks Cardiff Valleys.xlsx	A cut from the rail defect management system showing the location and status of broken rails
T9	Broken Rail Incident Reports (x5)	[redacted]	[redacted]
T10	Email	17.008 - T4&T9 - BACKGROUND E-MAIL.docx	Background email concerning the provision of broken rail information.
T11	Level 2 Exceedances	(17.008) 17.008 - Level 2 Exceedances.xlsx	A database showing instances of Level 2 Exceedance
T12	Sidewear Records	(17.008)	Records of rail side wear

		17.008 - Sidewear Records.zip	
T13	Switches and Crossing Drawings	(17.008) 17.008 - Switches and Crossing Drawings.zip	Digital drawings of switches and crossings across the route, where available.

Level Crossings

TfW Ref	Name	Location (in data room) File Name	Description
LC1	Level Crossings Risk Detailed Report	(9.003) 9.003 - Level Crossings Risk Details Report 22_05_17.xls	Spreadsheet showing all level crossings across the Wales Route with individual risk and collective risk assessment grading
LC2	Level Crossing Strategy	(9.003) 9.003 Level Crossings strategy and plans.zip	Contains three documents; 1, Planned Level Crossing closures in CP5 (N.B. None of these are within the CVL) 2, Network Rail Level Crossing risk policy 3, Network Rail policy on reducing risks at Level Crossings
LC3	List of all Level Crossings	(14.001) List of Level Crossings.xlsx	Contains a list of all the Level Crossings on the Core Valley Lines
LC4	Level Crossing Risk Assessments	(17.002)	This folder contains all the detailed assessments provided by Network Rail (see note above)

Earthworks

TfW Ref	Name	Location (in data room) File Name	Description
E1	Specification for Invasive Species Clearance	(2.001) CAR-1103-B - TO011 - Specification for Invasive Species Clearance.pdf	Study conducted by Mott MacDonald in 2016 concerning or otherwise regulated species of plant along the route

E2	Earthworks Breakdown	(14.001) Earthworks Breakdown.xlsx	A database showing location, inspection status and risk rating of earthworks
E3	065 Database (x10)	Not used as now accessible via E4. Record version accessible on Award is not to be used.	Not used as now accessible via E4. Record version accessible on Award is not to be used.
E4	065 Database	Logins provided to an online based read-only version	Earthworks Examination Database
E5	WERM2	(17.009) All content of folder	Water Concentration Database
E6	GEO-RINM	Access provided via Network Rail Laptop	Aerial Survey viewer with Utilities and Boundaries information

Signalling

Signalling Design

TfW Ref	Name	Location (in data room) File Name	Description
SD1	[redacted]	[redacted]	[redacted]
SD2	[redacted]	[redacted]	[redacted]
SD3	[redacted]	[redacted]	[redacted]
SD4	[redacted]	[redacted]	[redacted]
SD5	[redacted]	[redacted]	[redacted]
SD6	[redacted]	[redacted]	[redacted]
SD7	[redacted]	[redacted]	[redacted]
SD8	[redacted]	[redacted]	[redacted]
SD9	[redacted]	[redacted]	[redacted]
SD10	[redacted]	[redacted]	[redacted]
SD11	[redacted]	[redacted]	[redacted]
SD12	[redacted]	[redacted]	[redacted]

Signalling Condition and Maintenance

TfW Ref	Name	Location (in data room) File Name	Description
SCI	CVL Ellipse Data (all asset types)	(9.019) 9.019 CVL Ellipse data cut.xlsx Ellipse Data.zip	Ellipse is the master asset database for Network Rail for

			storing and raising maintenance reports
SC2	CVL SMTH INFO (2015,2016,2017)	(9.037) 9.037 Cardiff Valleys SMTH info 2015.xlsx 9.037 Cardiff Valleys SMTH info 2016.xlsx 9.037 Cardiff Valleys SMTH info 2017.xlsx	Data on signalling and related (e.g. points) failures
SC3	S and T Metro Assets 30/03	(14.001) SandT Metro Assets 30 03 106.xls	Database showing the signalling and telecom assets
SC4	[redacted]	[redacted]	[redacted]
SC5	[redacted]	[redacted]	[redacted]

Telecoms

TfW Ref	Name	Location (in data room) File Name	Description
T1	CVL Ellipse Data Cut (All Asset Types)	(9.019) 9.019 CVL Ellipse data cut.xlsx Ellipse Data.zip	Ellipse is the master asset database for Network Rail for storing and raising maintenance reports
T2	Extract from NR Decision Support Tool for Telecoms Assets	(9.021) 9.021 - Extract from NR Decision Support Tool for Telecoms Assets.pdf	Extract showing FTN assets in the South Wales area (not exclusively CVL)
T3	[redacted]	[redacted]	[redacted]
T4	[redacted]	[redacted]	[redacted]
T5	Core Valleys Telecom Assets V2	(9.021) 9.021 Core Valleys Telecom Assets V2.xlsx	Database showing the location of telecoms assets
T6	Wales Metro Telecoms Assets 190416	(9.021) 9.021 Wales Metro Telecoms Assets 190416.xlsx	Database showing telecoms maintenance
T7	Wales Metro Telecoms Assets 110416	(14.001) Wales Metro Telecoms Assets 110416.xlsx	Database showing the location of telecoms assets
T8	Wales Metro Telecoms Maintenance	(14.001) Wales Metro Telecoms Maintenance.xlsx	Database showing the location of telecoms assets with some maintenance information

Electricity and Power

TfW Ref	Name	Location (in data room) File Name	Description
EP1	E and P asset list	(9.023) 9.023 EandP asset list.xlsx	A list of the Electricity and Power assets across the Core Valleys
EP2	[redacted]	[redacted]	[redacted]
EP3	[redacted]	[redacted]	[redacted]
EP4	E and P asset list	(14.001) EandP asset list.xlsx	A list of the Electricity and Power assets across the Core Valleys

Stations

TfW Ref	Name	Location (in data room) File Name	Description
S1	[redacted]	[redacted]	[redacted]
S2	Listed stations	(9.023) 9.023 Listed stations.docx	A document showing listed stations across the Wales Route
S3	[redacted]	[redacted]	[redacted]
S4	[redacted]	[redacted]	[redacted]
S5	NR Station Ownership Plans CVL	(11.002) 11.002 NR Station Ownership Plans CVL.pdf	Document containing site plans for each of the stations along the Core Valley
S6	Station Boundaries and agreements for categories	(11.002) 11.002 Station Boundaries and agreements for categories.zip	Contains more detailed information on certain stations

TfW Ref	Name	Location (in data room) File Name	Description
S7	[redacted]	[redacted]	[redacted]
S8	Station Maintenance Plans	(11.008) 11.008 SFO Station Maintenance Plan Reactive Station Maintenance for 2016.xlsx 11.008 SFO Station Maintenance Plan.doc 11.008 Stations Station Maintenance Plans Part 2 Revised on 31 October 2016.xlsx	- SFO Station Maintenance Plan Reactive Station Maintenance for 2016 -SFO Station Maintenance Plan -Stations Station Maintenance Plans Part 2 Revised on 31 October 2016 - SFO Station Maintenance Plan, Annual Water Testing Cost Clarification
S9	Stations Database	(11.013) 11.013 Stations Database.xls	A database of stations across the Wales Route
S10	Stations Database Revised March 2017	(11.013) 11.013 – Stations Database Revised March 2017.xls	Revised version of the database of stations across the Wales Route
S11	List of Stations with Accredited Secure Station Status	(11.014) 11.014 – List of Stations with Accredited Secure Station Status.docx	Document showing all the stations along the Wales Route with accredited secure status

Non-compliances and Derogations

TfW Ref	Name	Location (in data room) File Name	Description
NCI	Copy of NC's and TV'S National	(17.003) 17.003 - Copy of NCs Derogations and	Spreadsheet showing non-compliance derogations and temporary variations nationally

TfW Ref	Name	Location (in data room) File Name	Description
		TVs_National_2017071_Redacted.xls	
NC2	Copy of NC's and TV's Wales	(17.003) 17.003 - Copy of NCs Derogations and TVs_ Wales only_20170710_Redacted.xls	Spreadsheet showing non-compliance derogations and temporary variations on the Wales route
NC3	Engineering Verification Tracker	(17.003) 17.003 - SSM Cardiff EV Report final v2 0_Redacted.doc	Spreadsheet showing reported non-compliances and remedial actions
NC4	[redacted]	[redacted]	[redacted]
NC5	[redacted]	[redacted]	[redacted]
NC6	[redacted]	[redacted]	[redacted]
NC7	[redacted]	[redacted]	[redacted]
NC8	Structures – Wales	(17.003) 17.003 - Structures - Wales (10)_redacted.pdf	Engineering Verification Report on Structures
NC9	Telecoms Wales	(17.003) 17.003 - Telecoms Engineering Verification Wales Period 3 Wales ROC-signed_Redacted.pdf 17.003 - Telecoms Engineering Verification Wales Period 7_Redacted.pdf	Engineering Verification Report on Telecoms

Renewals

TfW Ref	Name	Location (in data room) File Name	Description
RI	Cost and Volumes handbook	17.004 - Costs & Volumes Handbook.zip	A handbook used by Network Rail to define maintenance and renewals volumes

12. Appendix 9.H - Table of Indicative CVL Infrastructure Manager Year One Renewals

- 12.1 This table sets out the Indicative CVL Infrastructure Manager Year One Renewals that are to act at the basis of the pricing of Maintenance. It also sets out the eight Indicative Year One Renewals for:
1. Design of Renewals to TfW Plan of Works Stage E; and
 2. Implementation Management of Renewals, either by the ODP or by an IDP.
- 12.2 Descriptions of categories are based on Network Rail's Cost and Volumes Handbook located in Award in the CVL Asset Statement directory. Routes are defined by Engineering Line References an index of which is in Award.
- Track Renewals**
- 12.3 Renewal of both rails including re-padding and re-stressing at the following worksites.
1. CAM 13m 990 yards to CAM 13m 1430 yards on the UP line. (*Renewal example 1 of 8 for which a Summary Method Statement, a Design Statement and an Implementation Management Price is required)
 2. CAR 302 Yards
 3. CAR 208 Yards
- 12.4 Renewal of ballast including formation treatment (demonstrated at track bed investigation).
1. CAR 247 Yards
 2. CAM 1,006 Yards
 3. CAR 247 Yards
- 12.5 Renewal of ballast at the following worksites:
1. CAR 302 Yards
 2. CAR 402 Yards
 3. THT 137 Yards
 4. CRYI 19 Yards
- 12.6 Renewal of rail and sleepers and replacing existing sleeper types with concrete sleepers:
1. CAM 262 Yards
- 12.7 Contiguous Renewals on CAR (*Renewal example 2 of 8 for which a Summary Method Statement, a Design Price and an Implementation Management Price is required), comprising
1. CAR 23m 732 yards to CAR 23m 1080 yards: Renewal of both rails including re-padding and re-stressing; and

2. CAR 23m 1080 yards to CAR 23m 1215 yards: Complete renewal of Rail Sleepers and Ballast. Additionally, formation treatment where this is demonstrated to be required through track bed investigation

12.8 Contiguous Renewals on THT:

1. 398 Yards: Renewal of one rail including re-padding and re-stressing
2. 350 Yards: Renewal of both rails including re-padding and re-stressing

Structures Renewals

12.9 Repair and waterproofing of Tunnel (*Renewal example 3 of 8 for which a Summary Method Statement a Design Price and an Implementation Management Price is required) comprising:

1. [redacted] repoint 25m² of tunnel entrance; and
2. [redacted], Re-lining at 18 ¾ chains from the Lisvane Portal 175m²

12.10 Remediation of brick retaining wall including installation of tie bars;

12.11 THT: 575 m²

12.12 Timber Deck Replacement, steelwork repairs and paint of Mill [redacted]: 450m² (Bridge at VON 23m 192 yards) (*Renewal example 4 of 8 for which a Summary Method Statement, a Design Price and an Implementation Management Price is required)

12.13 Structural relining of culvert;

12.14 ABD, Unnamed Culvert: 20m²

12.15 Strengthen main girder and paint footbridge;

12.16 CAM, [redacted] Footbridge

12.17 Spot brick repairs and total repointing of retaining wall;

12.18 CAM, Feeder Canal Retaining Wall: 300m²

12.19 Strengthen and Repaint overbridge;

12.20 THT

12.21 Replace culvert;

12.22 ABD: 25m²

12.23 Replace retaining wall starting at CAM 18m 1540 yards for 158m² in the up (Merthyr) direction. (*Renewal example 5 of 8 for which a Summary Method Statement, a Design Price and an Implementation Management Price is required)

Signalling and Control Systems and Passenger Information System Renewals

- 12.24 No signalling and control systems and passenger information system renewals will be funded during the first ten years of the Grant Agreement Term. Where the OPD wishes to use the existing signalling system functionality as part of its Transformation solution, but is unable to assure the Authority that parts of the existing signalling system can be life extended to the end of the first ten years of the Grant Agreement Term, the ODP is to renew those parts in the Transformation.
- 12.25 Schedule 3A Definitions set out the arrangement for Renewals in years eleven to fifteen of the Grant Agreement Term

Telecommunications Renewals

- 12.26 The Initial Telecommunications Plan required in accordance with Appendix 8.H of Volume 8 includes the Requirement that your Solution for CVL Transformation must include all of the telecommunications renewals and enhancements that are needed to deliver your Rail Services over the ODP Grant Agreement Term. Accordingly, no renewals are included in Appendix 9.H for Telecommunications.

Earthworks Renewals

- 12.27 Contiguous Renewals, CAM 15m 880 yards to 5m 1650 yards (*Renewal example 6 of 8 for which a Summary Method Statement, a Design Price and an Implementation Management Price is required), comprising:
1. 5chs of Embankment Renewal
 2. 20ch of Embankment Refurbish
 3. 10ch of Soil Cutting Refurbish
- 12.28 Not used
- 12.29 Not used

Property and Buildings (Including Stations) Renewals

- 12.30 Platform re-construction;
[redacted]250 m2
- 12.31 Canopy Refurbishment at [redacted]of 657 m2 continuously from the Cardiff end of the station.
(*Renewal example 7 of 8 for which a Summary Method Statement, a Design Price and an Implementation Management Price is required)
- 12.32 Footbridge Strengthening and Refurbishment;
[redacted] 111 m2
- 12.33 Footbridge Refurbishment
[redacted] 75 m2

Power Distribution and Electricity and Plant Renewals

- 12.34 It has been assumed that there will be no renewals during the ODP Grant Agreement Term of any assets forming part of the OLE system, including any existing assets forming part of the system. You are required to strengthen or renew any such existing assets as part of the CVL Transformation works.
- 12.35 The following Infrastructure Manager Year one renewals are for E & P assets that are not directly associated with the OLE system.
1. Signalling power renewal of 12km of 650kv cable relating to FSP upgrades. Bidders should assume that the cable troughing has sufficient capacity for the cabling, but should also assume that cabling made redundant by this renewal is to be removed, or, where this is not practical, clearly labelled as redundant. (*Renewal example 8 of 8 for which a Summary Method Statement, a Design Price and an Implementation Management Price is required)
 2. UPS mid-life refurbishment: 1 UPS renewal
 3. DNO renewal: 1 DNO replacement
 4. Generator renewal: 1 generator renewal
 5. FSP renewals: 6 FSP renewals

12.36 Not used

Level Crossing Renewals

12.37 It is assumed that works to level crossings to accommodate any changes needed to facilitate your Solution for CVL Transformation will be undertaken as part of the CVL Transformation. No renewals work on Level Crossings is anticipated for the first five Infrastructure Manager Years

Off Track Renewals

- 12.38 1000m of pipe
- 12.39 200m of Ditch/Channel
- 12.40 40 Catch Pits
- 12.41 11,938m of fencing
- 12.42 5 Access Points

13. Appendix 9.1 Summary Method Statement Requirements for each CVL Infrastructure Manager Year One Renewal Example

- 13.1 This appendix sets out key items which the Authority expects to see in your Methodology for each Confirmed Known Renewal:
1. Programme and key milestones
 2. Third Party dependencies
 3. Site and access arrangements
 4. Possession, Blockade and Temporary Operational Restriction requirements
 5. Management of Neighbours and other Stakeholders
 6. Plant and Materials
 7. HSQE
 8. Interdisciplinary and Systems integration issues
 9. Handover, Testing and Commissioning and Handback
 10. Risk Management including mitigation of possession and blockage overruns
 11. Any additional information required