

Response to The Examining Authority's First Written Questions by National Highways Limited
Application by Frodsham Solar Ltd for an Order granting Development Consent for the Frodsham Solar Farm
Planning Inspectorate Reference Number: EN010153



National Highways has extracted from the Examining Authority’s First Written Questions those questions which are addressed to National Highways. National Highways has used the same format table as issued by the ExA with its response provided under each relevant question.

Q9.5.3	The applicant, NH	<p>Public rights of way management plan – National Highways approval</p> <p>Referring to Requirement 15 of the dDCO [PD2-005], National Highways [RR-031] said that it required an approval role in relation to any public rights of way management plan as it is the highway authority for the SRN and the SRN fell within the definition of a “street”.</p> <p>The applicant [PD2-027] said that its proposals in terms of managing impacts to public rights of way related to public rights of way that were some distance away from the bridges which pass over the SRN. It therefore considered that National Highways did not need to be a consultee for the plan.</p> <p>i) Please could the applicant clarify how public rights of way on the bridges that pass over the SRN would be managed if they are not to be included in the public rights of way management plan?</p> <p>ii) Does National Highways have any remaining concerns?</p>
<p>National Highways response:</p> <p>National Highways’ response is in relation to the change of use of the PRow crossing Brook Furlong Bridge from a Restricted Byway to a potential vehicular access to a car park and an emergency access route and in relation to the change of use of the PRow crossing Weaver Lane Bridge to include a bridleway or cycle track and an emergency access route.</p> <p>In relation to the NH structures that form part of the SRN (Brook Furlong Bridge and Weaver Lane Bridge), NH has previously expressed concerns that the change of use in the Rights of Way crossing over those bridge structures triggers the need for Structural Review and potentially, Structural Assessment. National Highways understands that the public rights of way management plan will deal with setting out the proposals for the change in use of the PRows over Brook Furlong Bridge and Weaver Lane Bridge and therefore National Highways position remains that it will need to be a consultee to the PRow management plan.</p>		

Furthermore, National Highways has made clear to the applicant on various occasions, including in this examination process, that it will require Structural Reviews in respect of Brook Furlong Bridge and Weaver Lane Bridge before it can accept any change in use to the PRowS crossing them. The outcome of those Structural Reviews will inform National Highways as to whether a further, Structural Assessment, is required. The Applicant has suggested that they don't consider such reviews/assessments ought to be required of them as they don't consider there to be a change in use, this is something that National Highways fundamentally disagree with. Some additional information as to why Structural Reviews/Assessments are required is set out below.

Reasoning for Structural Review and the Requirement for Completing a Record of Structural Review Form (RSRF)

CS 451 Structural review and assessment of highway structures standard in the Design Manual for Roads and Bridges (DMRB) provides a system for the structural review and assessment of highway structures to ensure that their operational capacity remains appropriate for the needs of the Strategic Road Network, taking account of deterioration over time, accidental or other damage and changes in vehicle loading associated with changes in use. The proposed changes in use along Brook Furlong Bridge and Weaver Lane Bridge constitutes a clear trigger for structural review under CS 451. Proceeding without a structural review would be contrary to the objective of CS 451, which is to reduce the risk of structural inadequacy.

Therefore, National Highways requires the completion of a RSRF before we can consider whether the proposed changes of use of the PRowS crossing the bridges are acceptable. The RSRF provides a proportionate and standardised mechanism to review the structural records, to determine the structural form, the current assessed capacity, the current condition, and the clearly defined intended future use, including vehicle types and associated loading. Its purpose in this context is to establish whether the proposed change in use represents any increase in structural or public risk, and whether further structural assessment is necessary to determine whether the structure has sufficient capacity for the proposed change in use.

The RSRF should be undertaken by a Chartered Civil Engineer with relevant experience in highway bridge design, assessment and maintenance.

Based on experience, the RSRF can be completed within 10 working days prior to submission to National Highways for review.

Geometric limitation on Weaver Lane Bridge to Accommodate Combined Vehicle and Cyclist Access

With regard to adding cycle access on Weaver Lane bridge, which is an accommodation bridge (the bridge was designed for farm access only, including farm vehicles), we believe the applicant is proposing to have unsegregated cycle and farm vehicle access. While the change in loading is insignificant and the existing parapet height is appropriate for cyclist use, the existing carriageway width (approximately 3.7m kerb to kerb) is unsuitable for combined vehicle and cyclist use from a safety perspective. Lane widths between 3.25m and 3.9m should be avoided, as drivers are likely to attempt to overtake a cyclist, resulting in a close pass, in accordance with Active Travel England advice and Critical safety issues for walking, wheeling and cycling Guidance (section 3: Lane widths), as well as Section 7.2.10 of the DfT *Cycle Infrastructure Design* Local Transport Note 1/20.

Q9.6.1	NH	<p>SRN</p> <p>National Highways [RR-031] said that dDCO [PD2-005] provisions, including articles 10, 12, 13, 14, 16, 17, 18, 19, 23, 24, 27, 29, 30, 31, 39 and 46, which authorise the interference with its statutory powers and responsibilities and/ or grant the applicant powers over the SRN which would have significant safety implications if not properly and proportionately controlled through protective provisions. The concerns included in relation to powers over the SRN and the use of bridges crossing the SRN. National Highways considered that detailed design approval would deal with vehicular and pedestrian accesses including its bridge structures and said that details submitted in accordance with paragraphs 6(1) and 6(4) of Requirement 6 of the dDCO [PD2-005] need to be submitted to and approved by NH.</p> <p>The applicant [PD2-027] responded, and updated the dDCO [PD2-027], including the protective provisions. It considered that the protective provisions did not need to deal with the interaction of the proposed development with the bridges. The applicant said that there would be no new accesses being built directly from the bridges, that the nearest extent of Work No. 8 was some distance away from the bridges, and so National Highways did not need to be a consultee for Requirement 6.</p> <ul style="list-style-type: none"> i) Please could National Highways set out any outstanding concerns and provide updates during the examination? ii) If the concerns are not addressed to National Highway's satisfaction, please could it submit its proposed changes to the protective provisions, with justification for why the changes are required?
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National Highways response:

- i) NH's concerns in relation to the Articles of the dDCO remain as set out in its Relevant Rep and Deadline 1 Written Submission. Unfortunately, the PP's included in the dDCO do not go far enough to alleviate the concerns that NH has and further detail on this is set out at point ii) below.

In relation to Requirement 6, National Highways' interest isn't confined solely to Works No 8. For example (but not limited only to this example), if the positioning of the solar panels is altered in any way, this would require a new glint and glare assessment to satisfy National Highways that there will be no impact to users of the SRN. For reasons such as this, National Highways considers that it needs to be involved in the detailed design process.

- ii) The protective provisions currently in the dDCO [REP1-005] at Schedule 27, Article 43 are not agreed by NH. NH's template form was provided to the Applicant in May 2025. The amendments received from the Applicant were substantial, because the Applicant:
 - a. Does not consider that any works are required to the SRN; and
 - b. Does not consider there to be a change of use to the bridge structures and therefore considers that Structural Review/Assessments are not required.

NH considers that the dDCO does include provision for a change of use of the PRoW's that cross both of its bridge structures.

Under dDCO Article 13(9), if a landscape and ecology plan approved by the relevant planning authority under requirement 9 of the Order includes provision for a car park, then from the date that such car park is constructed until the date that such car park is no longer available for public use; notwithstanding s48 of the 2000 Act, the use of mechanically propelled vehicles by the public is authorised on Frodsham Restricted Byway 98 (Brook Furlong) to enable access to and from the car park only.

In addition, Article 13(12), has the effect of authorising emergency service vehicles to use motorised vehicles on Frodsham Restricted Byway 98 (Brook Furlong).

Upon further review, it has come to light that NH ought previously to have set out that it will need to be involved in the approval of the Landscape and Ecology management Plan under Requirement 9 and would therefore ask the Applicant to update Schedule 2, Requirement 9, to this effect.

Under dDCO Article 13(3), the undertaker is authorised to permanently stop up Frodsham FP81 (Weaver Lane), as shown by a dark brown line between point P and Q on the street works, public rights of way, vehicular usage and access plans. Article 13(4) goes on to state that it cannot permanently stop up that footpath until it has provided a bridleway along the route shown by a light brown line between points P1 and Q1 on the same plan.

Further to this, Article 13(12), has the effect of authorising emergency service vehicles to use motorised vehicles on Frodsham Footpath 81 (weaver Lane).

These Articles represent clear changes of use and intensification from the current position and NH cannot agree to the proposed changes unless and until evidence is provided, by way of Structural Review/Assessment, to satisfy NH that those changes can be accommodated by its bridge structures.

Furthermore, NH's view is that without carrying out the Structural Review/Assessments which have been requested, the Applicant cannot satisfy NH that there are no works required to the SRN. NH bridges, namely Brook Furlong and Weaver Lane, are structures maintained by NH as part of the SRN and unless and until NH is provided with evidence to satisfy it that no works will be necessary to those structures as a result of the changes of use and intensification of use, NH requires the protection of its full suite of PP's which can be found at Annex A, below.

- a. The full suite of NH PP's will manage any works to the bridge structures that may be required as part of the Structural Review/Assessment.
- b. A full justification for each of the key provisions and definitions of NH's protective provisions is set out at Annex B, below.

<p>Q9.6.2</p>	<p>The applicant, CWCC, NH</p>	<p>Cumulative effects, including abnormal loads and decommissioning</p> <p>National Highways [RR-031] said that the construction phase would generate the highest level of traffic and it was essential to manage this effectively to minimise disruption, particularly given the number of other developments proposed in the area, which could lead to cumulative impacts on the M56 and M53 junctions and corridors. It said that it was studying the cumulative traffic generation for the major development proposals in the area to understand where the likely impacts would be, the scale of those impacts, and their likely timings. CWCC [RR-037] said that the proportion of the total cumulative impact that would be a direct result of the proposed development would be minimal.</p> <p>The applicant [APP-134] considered cumulative effects with other proposed infrastructure projects. It considered that there was the potential for significant traffic impacts if the construction periods of these projects should overlap with that of the proposed development. The oCTMP [PD2-013] includes a commitment for the applicant to maintain ongoing communications with other major developments to liaise on managing any potential cumulative impacts and, if there was a significant overlap, to establish a Construction Traffic Management Plan Working Group. The applicant assumed that the other developers would work pro-actively with it. The oCEMP [PD2-015] includes that the programme for the works would be prepared cognisant of other nearby developments which could result in cumulative construction effects.</p> <ul style="list-style-type: none"> i) Please could the applicant set out the consideration has been given to potential cumulative impacts in relation to the traffic from any major replacement activities during the operational phase? ii) Please could the applicant comment on the sensitivity of the Transport Assessment [APP-134] to assumptions of timing in relation to the construction of the proposed development and other major development proposals in the area? How can the ExA be satisfied that it has considered as reasonable worst case? iii) Please could National Highways provide its study of the cumulative traffic generation for the major development proposals in the area and set out the proportion of traffic generation that would result from the proposed development?
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		<p>iv) When National Highway's study is available, please could the applicant set out any implications for its Transport Assessment [APP-134] and mitigation proposals?</p> <p>National Highways [RR-031] encouraged the applicant to engage with NH at an early stage to establish an appropriate movement strategy for abnormal loads. CWCC [RR-037] said that impacts of abnormal traffic movements relating to the proposed development and considered cumulatively with other projects needed consideration. The applicant updated the oCTMP [PD2-013] to clarify that it would be a responsibility of the proposed Construction Traffic Management Plan Working Group to co-ordinate the planning of abnormal load movements across the identified cumulative developments.</p> <p>v) Do National Highways or CWCC have any outstanding concerns about the applicant's proposed mitigation measures for abnormal loads?</p> <p>The applicant [APP-134] considered that a reasonable worst case of impacts during the decommissioning phase was those for the construction phase. For the construction phase it considered that there was a potential for significant traffic impacts cumulatively with other proposed infrastructure projects.</p> <p>vi) What reasonable worst case of cumulative traffic impacts during the decommissioning phase does the applicant suggest for the purposes of the planning balance?</p>
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National Highways response:

- iii) NH's study into the cumulative impacts of construction traffic is a high-level tool intended to allow open discussions with planning applicants in Cheshire West & Chester, or those beyond its boundary where there might be an impact with construction movements (for example, the Connah's Quay site in Flintshire which is forecast to see construction movements from Ellesmere Port). It has been created using publicly available data from transport and highways documents produced for DCO applications. As such, the dataset does not currently include all sites which are proposed to come forward due to a lack of information available at this time. However, it is NH's intention to keep the tool up to date, as and when further information is made available.

The tool is not intended to replace the need for planning applicants to undertake assessments of their transport impacts, but to show where and during what periods there is likely to be an overlap in construction movements at

specific junctions to enable better planning. For example, if it is known that three developments are likely to overlap in a given period of time, we would expect the promoters to work together to ensure that impacts are mitigated through planning their construction movements more effectively. The format by which this collaboration might take place is not established, though a dedicated construction traffic working group seems like the most appropriate option. Inclusion of joint planning for construction movements should also be included in the Construction Traffic Management Plan.

A version of the tool is now available for NH use. However, it currently lacks detailed information from many of the other sites due to those details not being currently available, and we would therefore caution against its use at this time. However, we foresee it being useful for NH, CW&C Council and developers in the future through a transport working group or other forum.

- v) Planning for abnormal loads should be undertaken as part of an established working group, and NH would welcome advanced site of these movements to enable better planning. It is expected that AIL movements will be dealt with through the normal Electronic Service Delivery for Abnormal Loads (ESDA) system, and as such we wouldn't have further comment to make.

Q.10.0.4	Cadent Gas Limited, Frodsham Wind Farm Limited, Inovyn Chlorovinyls Limited and Ineos Fluor Limited, Inovyn Enterprises Limited, National Gas Transmission plc, National Highways, NGET, SP Energy Networks, The Canal & River Trust, United Utilities Water Limited	<p>Individual objections</p> <p>Cadent Gas Limited [RR-020], Frodsham Wind Farm Limited [RR-047], Inovyn Chlorovinyls Limited and Ineos Fluor Limited [RR-004], Inovyn Enterprises Limited [RR-001], National Gas Transmission plc [RR-032], National Highways [RR-031], NGET [RR-021], SP Energy Networks [RR-018], The Canal & River Trust [RR-010], United Utilities Water Limited [RR-006] have commented on the powers requested by the applicant.</p> <ul style="list-style-type: none"> i) Please could each organisation set out any outstanding concerns and provide updates during the examination? ii) If the concerns are not addressed to any organisation's satisfaction, please could it submit its proposed changes to the dDCO [PD2-005], including any protective provisions, with justification for why the changes are required? iii) Please could National Highways advise the full name of its legal entity for relevant land right purposes? iv) Please could SP Energy Networks advise its relation to SP Manweb and the full name of its legal entity for relevant land right purposes?
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National Highways response:

- i) Please see NH comments above in relation to its outstanding concerns.
- ii) Please see NH comments above in relation to the PP's it requires.
- iii) National Highways full name for relevant land rights purposes is National Highways Limited (company number: 09346363).

Annex A

SCHEDULE 27

ARTICLE 43

PROTECTIVE PROVISIONS FOR THE PROTECTION OF NATIONAL HIGHWAYS LIMITED

Application etc.,

1. —(1) The provisions of this Schedule apply for the protection of National Highways and have effect unless otherwise agreed in writing between the undertaker and National Highways.
(2) Except where expressly amended by the Order the operation of the powers and duties of National Highways or the Secretary of State under the 1980 Act, the 1984 Act, the 1991 Act, the Transport Act 2000, or the Town and Country Planning (General Permitted Development) (England) Order 2015 shall continue to apply in respect of the exercise of all National Highways' statutory functions.

Interpretation

2. —(1) Where the terms defined in this Schedule are inconsistent with the terms defined in article 2 (*interpretation*) of this Order the former prevail.
(2) In this Schedule—

“as built information” means one electronic copy of the following information where National Highways deems necessary—

- (a) as constructed drawings in both PDF and AutoCAD DWG formats for anything designed by the undertaker; in compliance with Interim Advice Note 184 or any successor document;
- (b) list of suppliers and materials used, as well as any relevant test results and CCTV surveys (if required to comply with DMRB standards);
- (c) product data sheets and technical specifications for all materials used;
- (d) as constructed information for any utilities discovered or moved during the works;
- (e) method statements for the works carried out;
- (f) in relation to road lighting, signs, and traffic signals any information required by Series 1300 and 1400 of the Specification for Highway Works or any replacement or modification of it;
- (g) organisation and methods manuals for all products used;
- (h) as constructed programme;

- (i) test results and records as required by the detailed design information and during construction phase of the project;
- (i) a stage 3 road safety audit subject to any exceptions to the road safety audit standard as agreed by the undertaker and National Highways;
- (j) the health and safety file; and
- (k) such other information, including CCTV surveys, as is required by National Highways to be used to update all relevant databases and to ensure compliance with National Highway's *Asset Data Management Manual* as is in operation at the relevant time or any successor of it.

"bond" means a bond in the form annexed hereto at Annex 1 (or substantially in such form) duly executed by the undertaker and a reputable UK surety company or other UK financial institution to be previously approved in writing by National Highways (such approval not to be unreasonably withheld or delayed);

"the bond sum" means 200% of the cost of carrying out the specified works (to include all costs plus any commuted sum), or such other sum agreed between the undertaker and National Highways, to be provided to National Highways in the form of:

- A) a bond; or
- B) a cash surety; or
- C) where agreed by National Highways a combination of a bond and cash surety;

"cash surety" means a cash deposit to be paid by the undertaker into an account specified by National Highways;

"commuted sum" means such sum calculated as provided for in paragraph 16 of this Part of this Schedule to be used to fund the future cost of maintaining any new National Highways assets, structures or apparatus provided under the Order;

"condition survey" means a survey of the condition of National Highways structures and assets that in the reasonable opinion of National Highways may be affected by the specified works and further to include a CCTV survey of specified drains that National Highways reasonably considers may be materially and adversely affected by a specified work;

"contractor" means any contractor or subcontractor appointed by the undertaker to carry out the specified works;

"defects period" means the period from the date of the provisional certificate to the date of the final certificate which shall be no less than 12 months from the date of the provisional certificate;

"detailed design information" means such of the following drawings specifications and calculations as are relevant to the specified works—

- a) site clearance details;
- b) boundary, environmental and mitigation fencing;
- c) road restraints systems and supporting road restraint risk appraisal process assessment;

- d) drainage and ducting as required by DMRB CD 535 Drainage asset data and risk management and DMRB CS551 Drainage surveys – standards for Highways
- e) earthworks including supporting geotechnical assessments required by DMRB CD622 Managing geotechnical risk and any required strengthened earthworks appraisal form certification;
- f) pavement, pavement foundations, kerbs, footways and paved areas;
- g) traffic signs and road markings;
- h) traffic signal equipment and associated signal phasing and timing detail;
- i) road lighting (including columns and brackets);
- j) regime of California Bearing Ratio testing;
- k) electrical work for road lighting, traffic signs and signals;
- l) motorway communications as required by DMRB;
- m) highway structures and any required structural approval in principle;
- n) landscaping;
- o) proposed departures from DMRB standards;
- p) walking, cycling and horse riding assessment and review report;
- q) stage 1 and stage 2 road safety audits and exceptions agreed;
- r) utilities diversions;
- s) topographical survey;
- t) maintenance and repair strategy in accordance with DMRB GD304 Designing health and safety into maintenance or any replacement or modification of it;
- u) health and safety information including any asbestos survey required by GG105 or any successor document; and
- v) other such information that may be required by National Highways to be used to inform the detailed design of the specified works;

“DBFO contract” means the design build finance operate contract between National Highways and the highway operations and maintenance contractor for the maintenance and operation of parts of the strategic road network which are within the Order Limits or any successor or replacement contract that may be current at the relevant time;

“DMRB” means the Design Manual for Roads and Bridges or any replacement or modification of it;

“final certificate” means the certificate relating to those aspects of the specified works that have resulted in any alteration to the strategic road network to be issued by National Highways pursuant to paragraph 14;

“the health and safety file” means the file or other permanent record containing the relevant health and safety information for the authorised development required by the Construction Design and Management Regulations 2015 (or such updated or revised regulations as may come into force from time to time);

“highway operations and maintenance contractor” means the contractor appointed by National Highways under the DBFO contract;

“nominated persons” means the undertaker’s representatives or the contractor’s representatives on site during the carrying out of the specified works as notified to National Highways from time to time;

“programme of works” means a document setting out the sequence and timetabling of the specified works;

“provisional certificate” means the certificate of provisional completion relating to those aspects of the specified works that have resulted in any alteration to the strategic road network to be issued by National Highways in accordance with paragraph 10 when it considers the specified works are substantially complete and may be opened for traffic;

“road safety audit” means an audit carried out in accordance with the road safety audit standard and “road safety audits shall be construed accordingly”;

“road safety audit standard” means DMRB Standard HD GG119 or any replacement or modification of it;

“road space booking” means road space bookings in accordance with National Highways’ Asset Management Operational Requirements (AMOR) including Network Occupancy Management System (NOMS) used to manage road space bookings and network occupancy and “road space bookings shall be construed accordingly”;

“Specification for Highways Works” means the specification for highways works forming part of the manual of contract documents for highway works published by National Highways and setting out the requirements and approvals procedures for work, goods or materials used in the construction, improvement or maintenance of the strategic road network or any successor of it;

“specified works” means so much of any work, including highway works, street works, surveys and signalisation, authorised by this Order including any maintenance of that work, as is undertaken on the strategic road network or land in which National Highways has an interest and “specified work” shall be construed accordingly;

“strategic road network” means any part of the road network including trunk roads, special roads or streets for which National Highways is the highway authority including structures, drainage infrastructure, street furniture, verges and vegetation and all other highways assets together with all land, apparatus and rights located in, on, over or under the highway for

“utilities” means any pipes wires cables or equipment belonging to any person or body having power or consent to undertake street works under the New Roads and Street Works Act 1991 (or such updated or revised legislation as may come into force from time to time); and

“winter maintenance” means maintenance of the road surface to deal with snow and ice.

General

3. —In respect of any part of the strategic road network that is managed under a DBFO contract both National Highways and the highway operations and maintenance contractor shall have the benefit of this Part of Schedule 27 but for the purposes of any approvals required under this Part of Schedule 27 the undertaker shall liaise directly with National Highways.
4. —Notwithstanding the limits of deviation permitted pursuant to article 4(2) of this Order, no works in carrying out, maintaining or diverting the authorised development may be carried out in under or over the strategic road network unless such works are agreed in writing with National Highways at the absolute discretion of National Highways.
5. —References to any standards, manuals, contracts, regulations and directives including to specific standards forming part of the DMRB are, for the purposes of this Part of this Schedule, to be construed as a reference to the same as amended, substituted or replaced, and with such modifications as are required in those circumstances.

Works outside the Order limits

6. —If the undertaker proposes to carry out works to the strategic road network that are outside of the Order Limits in connection with the authorised development, the undertaker must enter into an agreement with National Highways in respect of the carrying out of those works prior to the commencement of those works.

Prior approvals and security

7. —(1) The specified works must not commence until—
 - a) a stage 1 and stage 2 road safety audit has been carried out and all recommendations raised by them or any exceptions are approved by National Highways;
 - b) the programme of works has been approved by National Highways;
 - c) the detailed design of the specified works comprising of the following details, insofar as considered relevant by National Highways, has been submitted to and approved by National Highways—
 - (i) the detailed design information, incorporating all recommendations and any exceptions approved by National Highways under sub-paragraph (a);
 - (ii) details of the proposed road space bookings and at the same time as submitting the relevant details the undertaker shall be entitled to submit its application for road space bookings to National Highways;
 - (iii) the identity and qualifications of the contractor and nominated persons;
 - (iv) a process for stakeholder liaison, with key stakeholders to be identified and agreed between National Highways and the undertaker; and
 - (v) information demonstrating that the walking, cycling and horse riding assessment and review process undertaken by the undertaker in relation to the specified works has been adhered to in

accordance with DMRB GG142 – Designing for walking, cycling and horse riding or any successor document;

- d) a scheme of traffic management has been submitted by the undertaker and approved by National Highways such scheme to be capable of amendment by agreement between the undertaker and National Highways from time to time;
- e) stakeholder liaison has taken place in accordance with the process for such liaison agreed between the undertaker and National Highways under sub-paragraph (c)(v) above;
- f) National Highways has approved the audit brief and CVs for all road safety audits and exceptions to items raised in accordance with the road safety audit standard;
- g) the undertaker has agreed the estimate of the commuted sum with National Highways;
- h) the scope of all maintenance operations (routine inspections, incident management, reactive and third party damage) to be carried out by the undertaker during the construction of the specified works (which must include winter maintenance) has been agreed in writing by National Highways;
- i) the undertaker has procured to National Highways collateral warranties in a form approved by National Highways from the contractor and designer of the specified works in favour of National Highways to include covenants requiring the contractor and designer to exercise all reasonable skill care and diligence in designing and constructing the specified works, including in the selection of materials, goods, equipment and plant;
- j) any further information that National Highways may reasonably request within 14 days of the submission of the detailed design of a specified works has been supplied to National Highways; and
- k) a condition survey and regime of monitoring has been agreed in writing by National Highways.

(2)The undertaker must not exercise—

- (a) article 6 (*power to maintain the authorised development*);
- (b) article 9 (*street works*);
- (c) article 10 (*power to alter layout, etc. of streets*);
- (d) article 12 (*Temporary Prohibition or restriction of use of streets and public rights of way, and authorising vehicular use on public rights of way*);
- (e) article 13 (*permanent stopping up of, and creation of new public right of way and authorising vehicular use of public rights of way*);
- (f) article 14 (*access to works*);
- (g) article 16 (*traffic regulation measures*);
- (h) article 17 (*discharge of water*);
- (i) article 18 (*protective works to buildings*);

- (j) article 19 (*authority to survey and investigate the land*);
- (k) article 21 (*compulsory acquisition of land*);
- (l) article 23 (*compulsory acquisition of rights*);
- (m) article 24 (*private rights*) ;
- (n) article 26 (*use of subsoil or airspace only*) ;
- (o) article 27 (*power to override easements and other rights*) ;
- (p) article 29 (*rights under or over streets*);
- (q) article 30 (*temporary use of land for constructing the authorised development*);
- (r) article 31 (*temporary use of land for maintaining the authorised development*); or
- (s) article 39 (*felling or lopping of trees and removal of hedgerows*) of this Order,

over any part of the strategic road network or land in which National Highways has an interest without the consent of National Highways, and National Highways may in connection with any such exercise require the undertaker to provide details of any proposed road space bookings and submit a scheme of traffic management for National Highways' approval.

(3) National Highways must prior to the commencement of the specified works or the exercise of any power referenced in sub-paragraph (2) inform the undertaker of the identity of the person who will act as a point of contact on behalf of National Highways for consideration of the information required under sub-paragraphs (1) or (2).

(4) Any approval or consent of National Highways required under this paragraph-

(a) must not be unreasonably withheld;

(b) must be given in writing; and

(c) may be subject to any conditions as National Highways considers necessary.

(5) Any change to the identity of the contractor and/or designer of the specified works will be notified to National Highways immediately and details of their suitability to deliver the specified works will be provided on request along with collateral warranties in a form agreed by National Highways.

(6) Any change to the detailed design of the specified works must be approved by National Highways in accordance with paragraph 7(1) of this Part.

(7) Article 47 does not apply to any application for consent, agreement or approval required or contemplated by any of the provisions to this Part of the Schedule

Construction of the specified works

8. —(1) The undertaker must give National Highways 3 months' notice in writing of the date on which the specified works will start unless otherwise agreed by National Highways.
- (2) The undertaker must comply with National Highways' road space booking procedures when booking road space on the strategic road network prior to and during the carrying out of the specified works and no specified works for which a road space booking is required shall commence without a road space booking having first been secured from National Highways.
- (3) The specified works must be carried out by the undertaker to the satisfaction of National Highways in accordance with—
- (a) the relevant detailed design information and programme of works approved pursuant to paragraph 7(1) above or as subsequently varied by agreement between the undertaker and National Highways;
 - (b) the DMRB, the Manual of Contract Documents for Highway Works, including the Specification for Highway Works, together with all other relevant standards as required by National Highways to include, inter alia; all relevant interim advice notes, the Traffic Signs Manual and the Traffic Signs Regulations and General Directions 2016 save to the extent that exceptions from those standards apply which have been approved by National Highways; and
 - (c) all aspects of the Construction (Design and Management) Regulations 2015 or any statutory amendment or variation of the same and in particular the undertaker, as client, must ensure that all client duties (as defined in the said regulations) are undertaken to the satisfaction of National Highways. For the avoidance of doubt no approval or consent issued by National Highways shall be taken to be a consent or approval pursuant to the Construction (Design and Management) Regulations 2015.
- (4) The undertaker must ensure that (where possible) without entering the highway the highway is kept free from mud, soil and litter as a result of carrying out a Specified Works.
- (5) The undertaker must permit and must require the contractor to permit at all reasonable times persons authorised by National Highways (whose identity must have been previously notified to the undertaker by National Highways) to gain access to the specified works pursuant to the Order including all land in which National Highways has an interest for the purposes of inspection and supervision of the specified works.
- (6) If any part of the specified works is constructed-
- (a) other than in accordance with the requirements of this Part of this Schedule; or
 - (b) in a way that causes damage to the highway, highway structure or asset or any other land of National Highways,
- National Highways may by notice in writing require the undertaker, at the undertaker's own expense, to

comply promptly with the requirements of this Part of this Schedule or remedy any damage notified to the undertaker under this Part of this Schedule, to the satisfaction of National Highways.

(7) If during the carrying out of the authorised development the undertaker or its appointed contractors or agents causes damage to the strategic road network then National Highways may by notice in writing require the undertaker, at its own expense, to remedy the damage.

(8) If within 28 days on which a notice under sub-paragraph (6) or sub-paragraph (7) is served on the undertaker (or in the event of there being, in the opinion of National Highways, a danger to road users, within such lesser period as National Highways may stipulate), the undertaker has failed to take the steps required by that notice, National Highways may carry out the steps required of the undertaker and may recover any expenditure incurred by National Highways in so doing, such sum to be payable within 28 days of demand.

(9) Nothing in this Part of this Schedule prevents National Highways from carrying out any work or taking any such action as it reasonably believes to be necessary as a result of or in connection with the carrying out or maintenance of the authorised development without prior notice to the undertaker in the event of an emergency or to prevent the occurrence of danger to the public and National Highways may recover any expenditure it reasonably incurs in so doing.

(10) In constructing the specified works, the undertaker must at its own expense divert or protect all utilities and all agreed alterations and reinstatement of highway over existing utilities must be constructed to the satisfaction of National Highways.

(11) Until such time that National Highways issues the provisional certificate the undertaker must carry out all maintenance (including winter maintenance) in accordance with the scope of maintenance operations agreed by National Highways pursuant to paragraph 7(1)(h) and the undertaker must carry out such maintenance at its own cost.

(12) The undertaker must notify National Highways if it fails to complete the specified works in accordance with the agreed programme pursuant to paragraph 7(1)(b) of this Part or suspends the carrying out of any specified work beyond a reasonable period of time and National Highways reserves the right to withdraw any road space booking granted to the undertaker to ensure compliance with its network occupancy requirements.

Payments

9. —(1) The undertaker must pay to National Highways a sum equal to the costs and expenses which National Highways reasonably and properly incurs (including costs and expenses for using internal or external staff and costs relating to any work which becomes abortive) in relation to the specified works and in relation to any approvals sought under this Order, or otherwise incurred under this Part, including—

- (a) the checking and approval of the information required under paragraph 7(1);
- (b) the supervision of the specified works;

(c) [contractual costs properly payable to the highway operations and maintenance contractor as a consequence of any specified works, including costs incurred by the highway operations and maintenance contractor in carrying out the tasks referred to in sub-paragraphs (a) and (b) of this paragraph, in which case National Highways will be responsible for the payment of any sums received from the undertaker under this paragraph to the highway operations and maintenance contractor];

(d) the checking and approval of the information required to determine approvals under this Order;

(e) all costs in relation to the transfer of any land required for the specified works;

(f) all legal and administrative costs and disbursements incurred by National Highways in connection with the Order and sub-paragraphs (a)-(d); and

(g) any value added tax which is payable by National Highways in respect of such costs and expenses arising under this paragraph and for which it cannot obtain reinstatement from HM Revenue and Customs,

together comprising "the NH costs".

(2) The undertaker must pay to National Highways upon demand and prior to such costs being incurred the total costs that National Highways believe will be properly and necessarily incurred by National Highways in undertaking any statutory procedure or preparing and bringing into force any traffic regulation order or orders necessary to carry out or for effectively implementing the authorised development.

(3) National Highways must provide the undertaker with a schedule showing its estimate of the NH costs prior to the commencement of the specified works and the undertaker must pay to National Highways the estimate of the NH costs prior to commencing the specified works and in any event prior to National Highways incurring any cost.

(4) If at any time after the payment referred to in sub-paragraph (3) has become payable, National Highways reasonably believes that the NH costs will exceed the estimated NH costs it may give notice to the undertaker of the amount that it believes the NH costs will exceed the estimate (the excess) and the undertaker must pay to National Highways within 28 days of the date of the notice a sum equal to the excess.

(5) National Highways must give the undertaker a final account of the NH costs referred to in sub-paragraph (1) above within 91 days of the issue of the provisional certificate issued pursuant to paragraph 10(4).

(6) Within 28 days of the issue of the final account:

(a) if the final account shows a further sum as due to National Highways the undertaker must pay to National Highways the sum shown due to it;

(b) if the account shows that the payment or payments previously made by the undertaker have exceeded the costs incurred by National Highways, National Highways must refund the difference to the undertaker.

(7) If any payment due under any of the provisions of this Part of this Schedule is not made on or before the date on which it falls due the party from whom it was due must at the same time as making the payment pay to the other party interest at 3% above the Bank of England base lending rate from time to time being in force for the period starting on the date upon which the payment fell due and ending with the date of payment of the sum on which interest is payable together with that interest.

Provisional Certificate

10.—(1) Following the completion of any specified works or prior to reopening any part of the strategic road network following any closure or partial closure, whichever shall be sooner, the undertaker shall notify National Highways who will carry out a site inspection to satisfy itself that the strategic road network is, in its opinion, safe for traffic and the undertaker must comply with any requirements of National Highways following the site inspection.

(2) As soon as the undertaker considers that the provisional certificate may be properly issued it must apply to National Highways for the provisional certificate.

(3) Following an application for a provisional certificate, National Highways must as soon as reasonably practicable:

(a) inspect the specified works; and

(b) provide the undertaker with a written list of works that are required for the provisional certificate to be issued or confirmation that no further works are required for this purpose.

(4) When—

(a) a stage 3 road safety audit for the specified works has been carried out and all recommendations raised including remedial works have (subject to any exceptions agreed) been approved by National Highways;

(b) the specified works incorporating the approved remedial works under sub-paragraph (4)(a) and any further works notified to the undertaker pursuant to sub-paragraph (3)(b) have been completed to the satisfaction of National Highways;

(c) the as built information has been provided to National Highways; and

(d) the undertaker has paid the commuted sum to National Highways,

National Highways must issue the provisional certificate.

(5) Following the issue of the provisional certificate, National Highways shall reduce the bond sum in writing to 20% provided that in the event any claim or claims have been made against the undertaker or liability on its part has arisen under the bond sum (which here shall also include any claim or claims to which National Highways are joined howsoever they arise) before that date National Highways will be at liberty to retain a sufficient sum in addition to the 20% to ensure it does not have to meet any costs for and/or arising from and/or in connection with the specified works.

(6) The undertaker must submit a stage 4 road safety audits as required by and in line with the timescales stipulated in the road safety audit standard. The undertaker must comply with the findings of the stage 4 road safety audit and must pay all costs of and incidental to such and provide updated as-built information to National Highways.

Opening

11.— Unless otherwise agreed in writing by National Highways the undertaker must notify National Highways not less than 56 days in advance of the intended date of opening to the public of the strategic road network and the undertaker must notify National Highways of the actual date the strategic road network will be opened to the public within 14 days of that date and must not open the strategic road network to the public prior to the expiration of the requisite notice period.

Final condition survey

12.—(1) The undertaker must, as soon as reasonably practicable after making its application for a provisional certificate pursuant to paragraph 10(2), arrange for the highways structures and assets that were the subject of the condition survey to be re-surveyed and must submit the re-survey to National Highways for its approval. The re-survey will include a renewed geotechnical assessment required by DMRB CD622 if the specified works include any works beneath the strategic road network.

(2) If the re-surveys carried out pursuant to paragraph 12(1) indicates that any damage has been caused to a structure or asset, the undertaker must submit a scheme for remedial works in writing to National Highways for its approval in writing and the undertaker must carry out the remedial works at its own cost and in accordance with the scheme submitted and such programme as National Highways may require.

(3) If the undertaker fails to carry out the remedial work in accordance with the approved scheme and programme pursuant to paragraph 12(2) or fails to submit a scheme for remedial works to National Highways, National Highways may carry out the steps required of the undertaker and may recover on demand any expenditure from the undertaker it reasonably incurs in so doing.

(4) National Highways may, at its discretion, at the same time as giving its approval to the re-surveys pursuant to paragraph 12(1) give notice in writing that National Highways will remedy any damage identified in the re-surveys and National Highways may recover on demand any expenditure from the undertaker it reasonably incurs in so doing.

(5) The undertaker must make available to National Highways upon request copies of any survey or inspection reports produced pursuant to any inspection or survey of any specified work following its completion that the undertaker may from time to time carry out.

Defects Period

- 13.—(1) The undertaker must at its own expense remedy any defects in the strategic road network as are reasonably required by National Highways to be remedied during the defects period. All identified defects must be remedied in accordance with the following timescales—
- (a) in respect of matters of urgency, within 24 hours of receiving notification for the same (urgency to be determined at the absolute discretion of National Highways);
 - (b) in respect of matters which National Highways considers to be serious defects or faults, within 14 days of receiving notification of the same; and
 - (c) in respect of all other defects notified to the undertaker, within 4 weeks of receiving notification of the same.
- (2) Following the issuing of the provisional certificate National Highways has responsibility for routine maintenance of the strategic road network save for any soft landscaping works which must be established and which must thereafter be maintained for a period of 3 years by and at the expense of the undertaker.

Final Certificate

14. —(1) The undertaker must apply to National Highways for the final certificate no sooner than 12 months from the date of the provisional certificate.
- (2) Following receipt of the application for the final certificate, National Highways must as soon as reasonably practicable:
- (a) inspect the strategic road network; and
 - (b) provide the undertaker with a written list of any further works required to remedy or make good any defect or damage in the strategic road network or confirmation that no such works are required for this purpose.
- (3) The undertaker must carry out such works notified to it pursuant to sub-paragraph 14(2).
- (4) When National Highways is satisfied that:
- (a) any defects or damage arising from defects during the defects period and any defects notified to the undertaker pursuant to sub-paragraph 14(2) and any remedial works required as a result of the stage 4 road safety audit have been made good to the satisfaction of National Highways; and
 - (b) the NH costs have been paid to National Highways in full;
- National Highways must issue the final certificate and upon the issue of the final certificate reduce the bond sum in full provided that in the event any claim or claims have been made against the undertaker or liability on its part has arisen under the bond sum (which here shall also include any claim or claims to which National Highways are joined howsoever they arise) National Highways will be at liberty to retain a

sufficient sum to ensure it does not have to meet any costs for and/or arising from and/or in connection with the specified works.

(5) The undertaker must pay to National Highways within 28 days of demand the costs incurred by National Highways in identifying the defects and supervising and inspecting the undertaker's work to remedy the defects that it is required to remedy pursuant to this paragraph 14.

Security

15—(1) The specified works must not commence until the undertaker procures that the specified works are secured by the bond sum to indemnify National Highways against all losses, damages, costs or expenses arising from any breach of any one or more of the obligations of the undertaker in respect of the exercise of the powers under this Order and the specified works under the provisions of this Part of this Schedule.

(2) If at any time the undertaker is in breach of these provisions of this Part of this Schedule or becomes insolvent without prejudice to any other remedy National Highways is entitled upon giving notice to the undertaker to use such parts of the bond sum as National Highways considers necessary. For the avoidance of doubt should National Highways have to carry out works pursuant to this Part of this Schedule it may, at its sole discretion, use the bond sum to forward fund such works.

Commuted sums

16. —(1) National Highways must provide to the undertaker an estimate of the commuted sum, calculated in accordance with FS Guidance S278 Commuted Lump Sum Calculation Method dated 18 January 2010 or any successor guidance, prior to the commencement of the specified works.

(2) The undertaker must pay to National Highways the commuted sum prior to the issue of the provisional certificate.

Insurance

17. —(1) Prior to the commencement of the specified works the undertaker must effect public liability insurance with an insurer in the minimum sum of £50,000,000.00 (fifty million pounds) in respect of any one claim against any legal liability for damage loss or injury to any property or any person as a direct result of the execution of specified works or use of the strategic road network by the undertaker.

Indemnity

18.—(1) The undertaker fully indemnifies National Highways from and against all costs, claims, expenses, damages, losses and liabilities suffered by National Highways arising from or in connection to the construction, maintenance or use of the specified works or exercise of or failure to exercise any power under this Order and any such costs shall be paid to

National Highways within 14 days of demand save for any loss arising out of or in consequence of any negligent act or default of National Highways.

Maintenance of the specified works

19. —(1) The undertaker must, prior to the commencement of any works of maintenance to the specified works, give National Highways 28 days' notice in writing of the date on which those works will start unless otherwise agreed by National Highways, acting reasonably.

(2) If, for the purposes of maintaining the specified works, the undertaker needs to occupy any road space, the undertaker must comply with National Highways' road space booking requirements and no maintenance of the specified works for which a road space booking is required shall commence without a road space booking having first been secured.

(3) During any maintenance works, the undertaker must comply with any requirements that National Highways may notify to the undertaker, such requirements to be notified to the undertaker not less than 7 days' in advance of the planned commencement date of the maintenance works.

(4) The provisions of paragraph 11 shall apply to the opening of any part of the strategic road network following occupation of any road space under this paragraph.

Land

20. —(1) Following the issue of the final certificate pursuant to paragraph 14(4) National Highways may serve notice on the undertaker that it wishes to take a freehold transfer of land within the extent of strategic road network boundary which is not in the ownership of National Highways but has been acquired by the undertaker for the purposes of carrying out the specified works.

(2) If the undertaker receives notice under sub-paragraph (1) then the undertaker must effect a freehold transfer of the land which is the subject of the notice and complete such transfer as soon as reasonably practicable at no cost to National Highways.

(3) The undertaker must not exercise the powers of this Order:

(a) acquire or use land forming part of;

(b) acquire new or existing rights over; or

(c) seek to impose or extinguish any restrictive covenants over;

any part of the strategic road network or land owned by National Highways, or extinguish any existing rights of or interfere with apparatus of National Highways in respect of any third party property, except with the consent of National Highways by written request to legalservicesinbox@nationalhighways.co.uk

(4) Where any land or interest is proposed to be acquired pursuant to this Order for the benefit of National Highways, the undertaker must, unless otherwise agreed by National Highways, exercise article 21 (*compulsory acquisition of land*) and article 23 (*compulsory acquisition of rights and imposition of restrictive covenants*) as applied by article 25 (*application of the 1981 Act*) of this Order to directly vest in National Highways any such land or interest.

Expert Determination

21. —(1) Article 42 (*arbitration*) of the Order does not apply to this Part of this Schedule.

(2) Any difference under this Part of this Schedule may be referred to and settled by a single independent and suitable person who holds appropriate professional qualifications and is a member of a professional body relevant to the matter in dispute acting as an expert, such person to be agreed by the differing parties or, in the absence of agreement, identified by the President of the Institution of Civil Engineers.

(3) On notification by either party of a dispute, the parties must jointly instruct an expert within 14 days of notification of the dispute.

(4) All parties involved in settling any difference must use best endeavours to do so within 21 days from the date that an expert is appointed.

(5) The expert must—

(a) invite the parties to make submission to the expert in writing and copied to the other party to be received by the expert within 7 days of the expert's appointment;

(b) permit a party to comment on the submissions made by the other party within 7 days of receipt of the submission;

(c) issue a decision within 7 days of receipt of the submissions under sub-paragraph (b); and

(d) give reasons for the decision.

(6) Any determination by the expert is final and binding, except in the case of manifest error in which case the difference that has been subject to expert determination may be referred to and settled by arbitration under article 42 (*arbitration*).

(7) The fees of the expert are payable by the parties in such proportions as the expert may determine or, in the absence of such determination, equally.

Annex B

Justification for each of the key provisions and definitions of NH's protective provisions

Paragraph	Heading	Justification
1	Application	This provision has effect to preserve the statutory powers and duties of NH except where expressly amended by the Order.
2	Interpretation	<p>Key provisions:</p> <p>“as built information” – contains the relevant information required by NH in order to issue the provisional certificate, certifying that works in, on under or over the SRN are satisfactorily complete and safe from NH's perspective.</p> <p>“bond sum” – this provides that a bond sum required is 200% of the cost of the specified works in, on under or over the SRN. The bond required is not the total cost of the works but rather the section of works specifically impacting the SRN. Much in the same way as a section 278 agreement, bonding is required to protect NH from financial liability in the event that the Applicant defaulted on the works which impact the SRN.</p> <p>“commuted sum” – provision of financial security to NH for any assets which require ongoing maintenance. Where the authorised development includes works which will require ongoing maintenance, this should be funded by the Applicant and not become a burden on the public purse.</p> <p>“detailed design information” – contains the relevant information required by NH in order to approve the commencement of the specified works affecting the SRN. In the experience of NH's highway engineers, this definition includes all necessary drawings, specifications and</p>

		<p>calculations required for signing off works in, on, under or over the SRN but may need to be supplemented depending on the nature of the project.</p> <p>“road space booking” – NH has a strict procedure for managing network occupancy to ensure that they are aware of who is working on the SRN at any given point. It also ensures that sections of the SRN are not subject to conflicting or multiple sets of maintenance work.</p> <p>“specified works” – any work authorised by the order (including maintenance) which is on, in, under or over the strategic road network. Importantly, this covers the highway estate as well as the operational highway land to ensure that works beneath the highway or above it are subject to the same requirements as work to the highway stratum itself. Critically, works which occur under or over the SRN can still have a detrimental operational impact to the functioning of the undertaking and can result in significant safety impacts.</p> <p>“strategic road network” includes all operational land of NH within the order limits and also the highway estate itself to protect the safe functioning of the SRN.</p>
3	General	<p>Parts of the SRN are routinely managed by design build finance and operate contractors, who have primary responsibility for managing the asset. The purpose of these provisions is to ensure that, where the road subject to the specified works is managed under a DBFO contract, the highway operations and maintenance contractor can take the benefit of the protective provisions. Otherwise, any claim that the highway operations and maintenance contractor had against the Applicant by virtue of its stewardship of the asset would need to be through a claim made by National Highways and sub-recovered by the DBFO contractor. This is unnecessary, inefficient and creates a contractual risk to National Highways, as the DBFO contract does not cater for risks occasioned by third party development .</p>
7	Prior approvals and security	<p>To ensure that the specification of the specified works and all associated processes inc. traffic management, financial provision for ongoing maintenance liabilities, scope of maintenance, condition surveys and road safety audits are addressed prior to commencement of works affecting the SRN. All of this information is required whether the specified works comprise of works to the highway or not. For example, scaffolding erected</p>

		<p>either side of the highway to install overhead lines would require a scheme of traffic management, as it would not be safe to carry out such dangerous works over an online part of the SRN. Likewise, undergrounding a pipeline or cable via horizontal directional drilling could not take place without condition surveys of the SRN taking place prior to commencement of works, as without this it would be impossible to know whether the specified works had caused subsidence or displacement in the carriageway.</p> <p>NH also requires collateral warranties from any contractor and designer of the specified works affecting the SRN, to ensure appropriate contractual liabilities are recoverable.</p> <p>No exercise of any article set out in 7(2) should take place without the express consent of NH, to ensure that NH is aware of the progress of the specified works affecting the SRN, the scope of those operations, the potential impact to road users and to ensure that compulsory acquisition is managed appropriately and proportionately. Note, that any approval required of NH must not be unreasonably withheld or delayed but will be deemed refused if not given within 2 months. It is very likely that a response will have been received from NH within that period, however in some instances this may not be possible due to the technical information submitted and the service level agreements that NH has with external consultants. In such circumstances, it would be disproportionate to deem the request approved, which could have potentially catastrophic consequences where procedures had not been followed or there was a concern that was being investigated.</p>
8	Construction of the specified works	The construction of the specified works must be carried out in accordance with NH's road space booking procedures to ensure the safety of road users and other contractors on the network. They must also be carried out in accordance with the relevant technical standards where relevant to the works, to ensure consistency with the SRN. Emergency access is to be granted to NH in the event of or to prevent the occurrence of danger to the public.
9	Payments	The reasonable costs incurred by NH in the administration of the design approval process, the transfer of land, supervision of works, legal costs and VAT should be payable by the

		Applicant. But for the Applicant's scheme, NH would not have to expend resources on the specified works.
10	Provisional Certificate	Where any specified work is proposed to the SRN, on, over or under the highway, the requirements of NH's design checking and approval process is required to be discharged. Works underneath the highway or oversailing it have significant potential to cause damage both to the highway itself and to road users and it is critical to the safe and efficient operation of the SRN that works are signed off by NH engineers as safe, where there is an interface with the SRN. This provision is also required for the purposes of the Applicant as it has the effect of reducing the bond sum to 20% on the issue of the provisional certificate.
11	Opening	This is relevant only where the SRN has been subject to traffic management orders or temporary closure as a result of the Authorised Development.
12	Final Condition Survey	<p>Where specified works include horizontal directional drilling, as part of the approval of works and prior to commencement, a condition survey of the highway is required. A final condition survey is required on completion of the horizontal directional drilling works, to identify any settlement of the carriageway in accordance with the threshold levels set out in technical standard DMRB CD622. If any settlement beyond tolerance is identified, this would pose a safety risk to road users, as part of the carriageway would have collapsed to unsafe levels. NH would require this defect to be remedied.</p> <p>This provision also applies to works to the SRN itself as any final condition survey would inform the decision on issue of the final certificate.</p>
13	Defects Period	On the issue of the provisional certificate, the Applicant will be required to remedy any defect in the SRN caused by the specified works for a period of 12 months. Where NH's network is damaged by works carried out pursuant to the DCO, it is for the Applicant to remedy that damage.

14	Final Certificate	This provision is required in order to release the bond in full, to ensure that the NH costs are paid by the Applicant and to ensure that NH is given a final opportunity to inspect the SRN and be satisfied that the specified works have not resulted in damage to the statutory undertaking.
15	Security	This provision is required by NH to ensure financial and operational protection if the Applicant breaches obligations or fails to complete works under the Order which could impact the SRN, using a bond and cash surety to cover potential losses, remedial costs, and maintain safety on the SRN. This is commonly required by statutory undertakers to reduce risk to public infrastructure and taxpayers.
16	Commuted Sum	Where the Applicant proposes to install apparatus on the highway, a commuted sum is required to contribute to the maintenance of the apparatus. It is not for the public purse to pay for maintenance of apparatus that is added to the highway estate as a consequence of third party development, without contribution.
17	Insurance	Insurance is required of all contractors working on the SRN and this should extend to operations carried on over and under the highway due to the potential for damage to infrastructure, highway assets and road users.
18	Indemnity	NH must be held harmless for the construction, maintenance and operation of the Authorised Development and any resultant impacts and it is common practice for statutory undertakers to be indemnified in such circumstances. It should not be for the public purse to cover instances of loss or damage occasioned by third party works.
19	Maintenance of the specified works	To ensure that where maintenance to a specified work is required, the relevant road space booking procedures are complied with to ensure the safety of contractors and road users.
20	Land	To ensure that matters of compulsory acquisition are directed to the legal team at NH and to ensure that powers are not exercised by way of GVD circumventing NH's ability to

		impose restrictions and controls on the use of the land in a way which would impact on the SRN or be detrimental to safety.
21	Expert Determination	Expert determination is preferred due to the speed of the process and the often technical nature of the points in dispute being more suited to determination by an Engineer or other highway professional.