|  |
| --- |
| **Items specific to CC3 category: National Prequalification System: Guidelines March 2020**  |
| 1 |  | Provide evidence for bridge components where applicant can demonstrate capacity to produce following major steel items -  |  |  |  |  |  |
| 1. Bridge tough, box, welded steel plate, truss and composite steel girders.
 |  |  |  | *(e.g. past project experience, documentation, completion certs etc.)* |  |
| 1. Bridge cross girders, cross frames, lateral bracing and diaphragms, launching noses and trusses
 |  |  |  |  |
| 1. Bridge columns and trestle piers.
 |  |  |  |  |
| 1. Bridge lift spans and supports.
 |  |  |  |  |
| 1. Cantilever and overhead gantries >=10m high
 |  |  |  |  |
| 1. Mast lighting poles >12m high
 |  |  |  |  |
| 1. Bridge components conforming to AS5100.6 except CC2 components.
 |  |  |  |  |
| 2 |  | Can applicant demonstrate knowledge and experience with TfNSW specifications or equivalent? |  |  |  | *(e.g. past project experience, documentation, completion certs etc.)* |  |
| 3 |  | Does applicant have welding coordinator as per ISO14731 and at having least 5year experience? |  |  |  | *(e.g. welding coordinator CV and supporting certificates)* |  |
| 4 |  | Can applicant demonstrate capacity of fabrication shop with substantial lifting and turning capacity? |  |  |  | *(e.g. equipment details, shop plan with dimensions etc)* |  |
| 5 |  | Does applicant have an independently audited QA and WHS system or third party certified integrated management system? |  |  |  | *(ISO 9001 and ISO450001 certificates)* |  |
| 6 |  | Does the applicant hold an IIW MCS accredited valid ISO3834.2 certificate? |  |  |  | *(ISO3834.2 certificate)* |  |
| **Items specific to CC2 category: Registration scheme for construction industry contractors: Guidelines and conditions August 2020** |
| 7 |  | Provide evidence for minor steel items under AS/NZS 5131 CC2 category - |  |  |  |  |  |
| 1. Traffic barrier rails and posts
 |  |  |  | *(e.g. past project experience, documentation, completion certs etc.)* |  |
| 1. Mast arms and overhead gantries <10m tall
 |  |  |  |  |
| 1. Variable message sign support structures.
 |  |  |  |  |
| 1. Mast lighting poles <12m tall.
 |  |  |  |  |
| 1. Sign and traffic control structures
 |  |  |  |  |
| 1. Monorails and supports
 |  |  |  |  |
| 1. Safety screens
 |  |  |  |  |
| 1. Pedestrian railings and fences
 |  |  |  |  |
| 1. Pile casings
 |  |  |  |  |
| 1. Tubular piles
 |  |  |  |  |
| 1. Finger plate expansion joints (other than approved products)
 |  |  |  |  |
| 1. Road furniture as defined in Austroad AP-C87-15
 |  |  |  |  |
| 1. Temporary steelworks used for construction purposes (other than launching nose)
 |  |  |  |  |
| 1. Steel elements specified with CC2 category on construction drawings or B201 Annex A1.
 |  |  |  |  |
| 8 |  | Does the applicant hold an IIW MCS accredited ISO 3834.3 or higher certificate? |  |  |  | *(ISO3834.3 or ISO3834.2 certificate)* |  |
| 9 |  | Are traffic signal site mast arms and posts approved by TfNSW and listed in QA specification TS200 Register of ITS? |  |  |  | *(e.g. list showing applicant’s name, facility address and type of structure listed in TS200)* |  |
| 10 |  | Evidence for high risk items such as mast arms, overhead gantries, VMS support structures, High mast lighting poles as per FP (Fatigue Purpose) weld category. |  |  |  | *(e.g. Project listing, WPS/PQR/Welder qualifications as per AS-NZS 1554.5* |  |
| 11 |  | Does applicant have -  |  |  |  |  |  |
|  |  | 1. Capacity to produce minor steel items
 |  |  |  | *(e.g. equipment details, shop plan with dimensions etc)* |  |
|  |  | 1. Knowledge of TfNSW specifications or equivalent
 |  |  |  | *(e.g. past project experience, documentation, completion certs etc.)* |  |
|  |  | 1. A manager with relevant experience active in operations.
 |  |  |  | *(e.g. CV with relevant qualification certificates)* |  |
|  |  | 1. Qualified welders on staff.
 |  |  |  | *(e.g. welder qualification register)* |  |
|  |  | 1. A suitable quality management system demonstrating product conformance.
 |  |  |  | *(e.g. audit summary report, QMS/WHS certificates etc)* |  |
|  |  | 1. A suitable WHS management system which demonstrates compliance with NSW Government WHS requirements.
 |  |  |  | *(e.g. certificate, correspondence confirming compliance).* |  |
| **Items for both CC2 and CC3 categories: B201 Ed.1 Rev.1 / AS-NZS 5131 2016**  |
| 12 | **5131: 4.4.2:** Scope of documentation | Does the Shop detailing documentation show complete information as per clause 4.4.2? |  |  |  | *[E.g. past project documentation]* |  |
| 13 | **B201: 4.6.3** Shop drawing detail requirements | Does the shop drawing(s) conform/correlate to design drawings and other requirements in clauses 4.6.3(a) to (l)? |  |  |  | *[E.g. past project documentation]* |   |
| 14 | **5131: 4.4.3** Production of shop detail documentation | Does Production of shop detail documentation comply with – 1. Numbering system allowing traceability of the document/drawing?
 |  |  |  | *[E.g. past project documentation]* |  |
| 1. Detailed dimensional information
 |  |  |  | *[E.g. past project dimensional information]* |  |
| 1. Request for information: Written record of inquiries and responses
 |  |  |  | *[E.g. past project RFI]* |  |
| 15 | **B201: 4.6.2** Verification of Shop Drawings | Is the Approval of shop drawings by Principal or Designer obtained? |  |  |  | *[E.g. past project approval of drawings]* |  |
| 16 | **5131: 4.5.1** Quality documentation | Are Quality documentation (such as Quality Plan, Inspection and Test Plan, Procedure, Work Method Statements) prepared for each Project as required by Cl. 4.5.1? |  |  |  | *[E.g. past project quality plan and ITP, WMS]* |  |
| 17 | **B201: 4.7.1** Quality Assurance | Is the organization certified for - 1. Quality Management System Certification (ISO 9001).
 |  |  |  | *[E.g. Certificate]* |  |
| 1. Quality requirements in Welding (ISO3834 Part 2 or 3)
 |  |  |  | *[E.g. Certificate]* |  |
| 18 | **5131: 4.5.2** Quality plan**B201:** 1.2.4 & Annex D: Quality Plan | Does the Quality Plan comply with the requirements of 5131: 4.5.2? |  |  |  | *[E.g. past project Quality Plan]* |  |
| Does the Quality Plan comply with the requirements of B201: 1.2.4 & Annex D? |  |  |  | *[E.g. past project Quality Plan]* |  |
| 19 | **5131: 4.5.3** Safety of the work**B201:1.4** Work Health and Safety (WHS) | Does the Work Health and Safety management comply with the specification TfNSW G22 |  |  |  | *[E.g. Accreditation Certificate]* |  |
| Do the Project WHS Management Plan & SWMS comply with the requirements of TfNSW G22? |  |  |  | *[E.g. past project WHS management plan, SWMS]* |  |
| 20 | **5131: 4.5.4/ B201: 15** As-built documentationCertification of completion of fabrication | Is the “As-built documentation of the works that has been carried out, prepared for every Project? |  |  |  | *[E.g. past project table of contents for as-built]* |  |
| Does the “certification of completion” comply with Clause 15 of TfNSW B201? |  |  |  | *[E.g. past project certificate of completion]* |  |
| 21 | **B201: 1.5** Environmental Protection | Does the organization have Environmental Protection Plan and Processes in accordance with TfNSW G36? |  |  |  | *[E.g. past project Environmental Protection Plan]* |  |
| 22 | **5131: 4.6.1** Purchasing components and subcontracted services | 1. Is there a documented purchasing procedure for (a) purchasing components and (b) for purchase/hire of subcontracted services?
 |  |  |  | *[E.g. QMS purchasing procedure]* |  |
| 1. Does the Purchasing procedure assign a responsibility for operating the procedure?
 |  |  |  | *[E.g. past project purchase order]* |  |
| 1. Is there a purchase order or any other document that covers requirements (a) to (e) of clause 4.6.1?
 |  |  |  | *[E.g. past project purchase order]* |  |
| 23 | **5131: 4.7 , 5.2.3 & 6.2** Traceability**B201: 4.9** Traceability | 1. Is there a documented procedure to meet “full traceability” requirements from ‘raw material’ stage to the ‘fabricated component’ stage?
 |  |  |  | *[E.g. past project traceability]* |  |
| 1. Are the requirements of 5131 Cl 6.2 for hard stamping complied with?
 |  |  |  | *[E.g. photo of past project hard stamping]* |  |
| 24 | **5131: 5.0** Materials**B201: 5.0** Materials | Are following requirements specified when purchasing the materials 1. Thickness tolerance (5131 - 5.3.2)
 |  |  |  | *[E.g. past project purchase order]* |  |
| 1. Surface condition (5131 – 5.3.3)
 |  |  |  |  |  |
| 1. Lamellar tearing (5131 – 5.3.5 & B201 – 5.3.5)
 |  |  |  |  |  |
| 1. Silicon content (B201 – 5.1.2)
 |  |  |  |  |  |
| 1. Boron content (B201 – 5.1.3)
 |  |  |  |  |  |
| 1. Product conformity Assessment (B201 – 5.1.4)
 |  |  |  | *[E.g. past project ACRS/ATIC Scheme 10]* |  |
| 1. Do all the welding consumables comply with relevant part of AS/NZS 1554?
 |  |  |  | *[E.g. past project consumable certificate]* |  |
| 25 | **B201: 5.4.2** Mechanical Fasteners | Do all mechanical fasteners comply with the requirements of TfNSW B240? |  |  |  | *[E.g. past project fastener documentation]* |  |
| Is the requirement of Product Conformity (Cl 4.0 of B240) specified when purchasing fasteners? |  |  |  | *[E.g. past project hold point release documentation]* |  |
| 26 | **5131:5.6** & **B201: 5.4.3** Studs and shear connectors | Do studs & shear connectors for arc stud welding, comply with the requirements of the AS 2327.1? Is the supplier certificate of conformity for the studs and shear connectors obtained in accordance with Cl 2.2.3 and Appendix C Paragraph C10, of AS/NZS 1554.2?  |  |  |  | *[E.g. past project shear stud documentation]* |  |
| 27 | **5131:5.8** Grouting material | Does the grouting material comply with 5131 Paragraph 5.8 and TfNSW B80? |  |  |  |  |  |
| 28 | **5131 :5.9** Storage of materials | Is material ‘as-received’ stored as per Manufacturer’s recommendation?  |  |  |  | *[E.g. past project QMS procedure for storage]* |  |
| 29 | **5131: 6.1.3** Work Method Statements | Is the work method statement for all activities that are taken up in preparation, assembly and fabrication of the product? (Such as Laser or Flame Cutting, Flame Straightening, Shaping, Holing, Hot Forming, Cold Forming, Shop Assembly, Transport to Site – as applicable)  |  |  |  | *[E.g. past project work method statements ]* |  |
| 30 | **5131:6.2** Identification and traceability of Welds | Are all welds traceable to welding procedure and welders involved? |  |  |  | *[E.g. past project weld traceability/weld maps]* |  |
| 31 | **5131:6.3** Handling and Storage  | Does the handling and storage of painted steel member or component comply with 5131 Cl. 9.9.19? |  |  |  | *[E.g. past project QMS procedure for storage]* |  |
| 32 | **B201:6.3** Handling and Storage | 1. Are there cranes and lifting equipment for safe lifting and turning of steel work?
 |  |  |  | *[E.g. crane SWL, height under the hook]* |  |
| 1. Is there a documented safe operations procedure (including lift studies, lift maps & sequence diagram) for lifts over 5tons?
 |  |  |  | *[E.g. past project lifting procedure]* |  |
| 1. Does the storage of steel done at least 200 mm above the ground?
 |  |  |  | *[E.g. past project QMS procedure for storage]* |  |
| 33 | **5131: 7.1.3** Welding details on drawings | Do shop drawings for welding provide all the information required in Cl.7.1.3 (a) to (f)? |  |  |  | *[E.g. past project weld maps]* |  |
| 34 | **5131:7.2.2** Contents of welding plan | Is the welding plan developed for each Project/Fabricated component? |  |  |  | *[E.g. past project welding plan]* |  |
| Does the welding plan include all the information required by 5131:7.2.2(a) to (m)? |  |  |  |  |  |
| 35 | **5131: 7.4.1** Welding Procedure | Is there a qualified welding procedure (WPS & PQR) for the fabrication that is usually done for the Project? |  |  |  | *[E.g. past project WPS & PQR]* |  |
| 36 | **5131: 7.4.2 and B201:7.4.2** Qualification of Welder | Are welders qualified to ISO9606-1? |  |  |  | *[E.g. Welder Certificate]* |  |
| 37 | **5131: 7.4.3** Welding Coordination | Are welding coordination personnel suitably qualified? (For Category CC2 – As per AS/NZS 1554. For Category CC3 – As per ISO 14731)? |  |  |  | *[E.g. Welding Personnel Qualification certificate]* |  |
| 38 | **5131 & B201: 8** Mechanical Fastening | Is a work method statement for all activities that are taken up in mechanical fastening, available? (Such as Requirements for Nuts, Bolts & Washers, details of packing Preparation of contact surfaces, Tensioning, Fastening of thin gauge components, Specialized Fasteners, Anchors, Requirement for Personnel, Requirement for Supervisors) |  |  |  | *[E.g. past project WMS for bolting]* |  |
| 39 | **5131: 9 B220 1.5** Surface Treatment and Corrosion Protection and Project Quality Plan | 1. Does the Project Quality Plan for Painting covers all the requirements of B220:1.5 and B220: Annex D?
 |  |  |  | *[E.g. past project painting quality plan]* |  |
| 1. Is there a similar Project Quality Plan for Galvanizing that meets above requirements?
 |  |  |  | *[E.g. past project galvanizing quality plan]* |  |
| 40 | **5131: 10.4 & 10.5** Additional Fabrication Requirements for AESS | Does the procedure for fabrication and erection of AESS (Architecturally Exposed Structural Steel) work addresses all the requirements in 10.4 (a) to (m)? |  |  |  | *[E.g. past project AESS fabrication and erection procedure]* |  |
| 41 | **5131: 11.2.1** Safety Plan | Does the Project WHS Management Plan & SWMS comply with the requirements of TfNSW G22? |  |  |  | *[E.g. past project WHS management plan, SWMS]* |  |
| 42 | **5131:11.2.3** Work methods statement  | Is the Work Method statement (WMS) for erection work prepared for each Erection activity?Examples of these activities (& 5131 requirements clause in bracket): Installation of temporary support (11.5.3), Temporary members (11.5.4), Inspection and removal of temporary supports (11.5.5), Handling and storage (11.5.6), Assembly and alignment (11.5.7), Erection drawings (11.6.4). |  |  |  | *[E.g. past project WMS for erection]* |  |
| 43 | **5131: 11.2.4** Risk Assessment | Is Hazard Identification and Risk Assessment carried out before any erection work? |  |  |  | *[E.g. past project hazard identification and risk assessment]* |  |
| 44 | **5131: 11.2.5** Lifting equipment and associated personnel | 1. Is lifting study (or a lifting procedure) that includes maps, sequencing diagram, competency of personnel etc. prepared for every erection work involving large or complex items?
 |  |  |  | *[E.g. past project lifting procedure and associated competency of personnel and operator certification ]* |  |
| 1. Is the maintenance and inspection record of all the lifting equipment available?
 |  |  |  | *[E.g. past project maintenance and inspection record]* |  |
| 1. Is the record of certification for Operators involved in lifting activities available?
 |  |  |  | *[E.g. past project record of certification for operators]* |  |
| 45 | **5131:11.3** Site Survey  | 1. Is there a system/procedure established for the setting out and measurement of the construction works?
 |  |  |  | *[E.g. past project site survey procedure]* |  |
| 1. Is this procedure approved by a competent personnel?
 |  |  |  | *[E.g. past project site survey procedure approval by competent personnel]* |  |
| 46 | **5131:11.4** Erection DesignStability Checking | Is the stability design checked for each stage of erection up to completion?  |  |  |  | *[E.g. past project erection design]* |  |
| 47 | **5131:11.5.1** Erection sequence methodology(ESM) | Does the erection sequence methodology (ESM) contain as a minimum the requirement of Classes 11.5.2, 11.5.3 and 11.5.4?  |  |  |  | *[E.g. past project erection sequence procedure]* |  |
| 48 | **5131:11.5.2** Equipment support | Does the equipment support is in accordance with the provision of, AS/NZS 5100.6?  |  |  |  | *[E.g. past project equipment support design and procedure]* |  |
| 49 | **5131:11.6.1** Permanent Support | Is the suitability of permanent support checked by (a) A documented survey (b) A documented visual examination? |  |  |  | *[E.g. past project permanent support design and procedure]* |  |
| 50 | **5131: 11.6.2** Bearings, Anchor bolts and anchoring devices | Is the installation of bearings, anchor bolts and anchoring devices done in accordance with this clause? |  |  |  | *[E.g. past project installation procedure]* |  |
| 51 | **5131:12.1** General**5131: Appendix F** | 1. Is the procedure for dimensional control of fabricated parts & components available?
 |  |  |  | *[E.g. past project dimensional control procedure]* |  |
| 1. Is the procedure for dimensional control of erected parts and components available?
 |  |  |  | *[E.g. past project dimensional control procedure]* |  |
| 1. Is there a reference to ISO7976-1 and ISO7976-2 for selection of method for measurements? (See 5131 13.4)
 |  |  |  | *[E.g. past project dimensional control procedure]* |  |
| 1. Is there reference to ISO17123 for accuracy of measurement? (See 5131 13.4)?
 |  |  |  | *[E.g. past project dimensional control procedure]* |  |
| 1. For a. & b. above, is there reference to 5131 Appendix F?
 |  |  |  | *[E.g. past project dimensional control procedure]* |  |
| 52 | **5131:13.3.2, 13.5.1, 13.6.1,13.7.1, 13.8.1, 13.9.1, 13.11.1 (and also related to 4.5.1)** Inspection and Test Plan  | Is ITP (or ITPs) prepared for – 1. Materials and components
 |  |  |  | *[E.g. past project ITP]* |  |
| 1. Preparation and Assembly
 |  |  |  |  |  |
| 1. Weldments
 |  |  |  |  |  |
| 1. Mechanical Fastening
 |  |  |  |  |  |
| 1. Surface Treatment
 |  |  |  |  |  |
| 1. Paint / Coatings
 |  |  |  |  |  |
| 1. Erection
 |  |  |  |  |  |
| 53 | **5131: 13.6.1.3** Inspection personnel | Are NDT inspectors having NDT Level 2 certification from AINDT in accordance with AS3998? |  |  |  | *[E.g. NDT Personnel Qualification certificate]* |  |
| 54 | **B201, B220, B240:** Hold and Witness Points | 1. Does the ITP(s) for steel structure fabrication covers all the Hold/Witness Points and Identified records in B201?
 |  |  |  | *[E.g. past project fabrication hold point/witness point/ identified records documentation]* |  |
| 1. Does the ITP(s) for mechanical fasteners cover all the Hold/Witness Points and Identified records of B240?
 |  |  |  | *[E.g. past project fastener hold point/witness point/ identified records documentation]* |  |
| 1. Does the ITP(s) for surface preparation, painting and coating cover all the Hold/Witness Points and Identified records in B220?
 |  |  |  | *[E.g. past project protective coating hold point/witness point/ identified records documentation]* |  |
| 55 | **B201 7.4.3:** Welding Coordination | Is welding supervisor qualified in accordance with AS/NZS 1554.1 Cl. 4.12.1(a) to (d)? |  |  |  | *[E.g. NDT Personnel Qualification certificate]* |  |
| 56 | **B201: Annex L** inspection and Testing | Does the extent of inspection and testing comply with L1.2 or L2? |  |  |  | *[E.g. past project ITP]* |  |
| 57 | **5131 14:**Site modifications | Is there a documented procedure for site modifications? |  |  |  | *[E.g. past project site modification procedure for storage]* |  |