



Building Code Clause(s) B1 & B2

PRODUCER STATEMENT – PS1 – DESIGN

(Guidance on use of Producer Statements (formerly page 2) is available at www.ipenz.nz)

ISSUED BY: Puhoi to Warkworth Motorway PPP - Design Joint Venture (DJV) (Design Firm)

TO: Northern Express Group (Owner/Developer)

TO BE SUPPLIED TO: Auckland Council (Building Consent Authority)

IN RESPECT OF: Okahu Viaduct (Description of Building Work)

AT: Puhoi (Address)

Town/City: Puhoi (Address) LOT DP SO

We have been engaged by the owner/developer referred to above to provide: Structural and Geotechnical Design

(Extent of Engagement) B1 & B2

services in respect of the requirements of Clause(s) of the Building Code for: All or Part only (as specified in the attachment to this statement), of the proposed building work.

The design carried out by us has been prepared in accordance with:

Compliance Documents issued by the Ministry of Business, Innovation & Employment (verification method/acceptable solution)

Alternative solution as per the attached schedule. (Schedule 1)

The proposed building work covered by this producer statement is described on the drawings titled: as referred to on Schedule 2 and numbered as referred to on Schedule 2 together with the specification, and other documents set out in the schedule attached to this statement.

On behalf of the Design Firm, and subject to: (i) Site verification of the following design assumptions as referred to on Schedule 3 (ii) All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that a) the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached schedule, will comply with the relevant provisions of the Building Code and that b), the persons who have undertaken the design have the necessary competency to do so. I also recommend the following level of construction monitoring/observation:

CM1 CM2 CM3 CM4 CM5 (Engineering Categories) or as per agreement with owner/developer (Architectural)

I, (Name of Design Professional) am: CPEng 10683 # Reg Arch #

I am a Member of: IPENZ NZIA and hold the following qualifications: BE (Hons), FIPENZ

The Design Firm issuing this statement holds a current policy of Professional Indemnity Insurance of no less than \$200,000*.

The Design Firm is a member of ACENZ: [checked]

SIGNED BY: (Name of Design Professional) (Signature)

ON BEHALF OF Puhoi to Warkworth Motorway PPP - Design Joint Venture (DJV) (Design Firm) Date: 2 May 2018

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Design Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of \$200,000*.

This form is to accompany Form 2 of the Building (Forms) Regulations 2004 for the application of a Building Consent. THIS FORM AND ITS CONDITIONS ARE COPYRIGHT TO ACENZ, IPENZ AND NZIA

Schedules to Producer Statement - PS1

▶ Element of Building Work:

This Producer Statement covers the design package of Okahu Viaduct of the Pūhoi to Warkworth Motorway project. This package includes the Drawings and Technical Specifications associated with the structural and geotechnical design of the bridge structure.

▶ Schedule 1 – Alternative Solutions

The compliance documents issued by the Department of Building and Housing for Building Code Clauses B1 and B2 do not adequately cover the design of the element which is the subject of this producer statement.

The design has been prepared in accordance with NZTA Bridge Manual 3rd Edition, Amendment 1, with project specific modifications.

▶ Schedule 2 – Drawings and Specifications

DRAWING LIST

Drawings Number	Drawing Title	Revision
P2Wk-DRG-SE-00-0010	REINFORCED CONCRETE - GENERAL NOTES SHEET 1	D
P2Wk-DRG-SE-00-0011	REINFORCED CONCRETE - GENERAL NOTES SHEET 2	C
P2Wk-DRG-SE-00-0012	STRUCTURAL STEEL - GENERAL NOTES	C
P2Wk-DRG-SE-00-0030	BARRIERS GENERAL ARRANGEMENT - PRECAST BARRIER PANEL	D
P2Wk-DRG-SE-00-0032	BARRIERS STEEL BRIDGES - TYPICAL SECTIONS	D
P2Wk-DRG-SE-00-0033	BARRIER RAIL STEELWORK DETAILS - SHEET 1	C
P2Wk-DRG-SE-00-0034	BARRIER RAIL STEELWORK DETAILS - SHEET 2	B
P2Wk-DRG-SE-00-0035	BARRIERS WIRE ROPE BARRIER DETAILS	B
P2Wk-DRG-SE-00-0036	BARRIERS COVER PLATE DETAILS	A
P2Wk-DRG-SE-00-0037	BARRIERS TRANSITION BARRIER - SHEET 1	D
P2Wk-DRG-SE-00-0038	BARRIERS TRANSITION BARRIER - SHEET 2	C
P2Wk-DRG-SE-00-0050	EXPANSION JOINTS DETAILS	D
P2Wk-DRG-SE-00-0055	UNDER BRIDGE TREATMENT & SCOUR PROTECTION	B
P2Wk-DRG-SE-00-0070	ACCESS/SECURITY FENCES	B
P2Wk-DRG-SE-19-0001	COVER SHEET LOCATION PLAN AND DRAWING LIST	C
P2Wk-DRG-SE-19-0002	GENERAL NOTES	D
P2Wk-DRG-SE-19-0005	PLAN AND LONGITUDINAL SECTION	F
P2Wk-DRG-SE-19-0006	TYPICAL CROSS SECTIONS	D
P2Wk-DRG-SE-19-0010	GROUND WORKS AND FILLING DETAILS SHEET 1	B
P2Wk-DRG-SE-19-0011	GROUND WORKS AND FILLING DETAILS SHEET 2	B

P2Wk-DRG-SE-19-0015	GEOTECHNICAL INSTRUMENTATION AND MONITORING DETAILS - SHEET 1	B
P2Wk-DRG-SE-19-0016	GEOTECHNICAL INSTRUMENTATION AND MONITORING DETAILS - SHEET 2	B
P2Wk-DRG-SE-19-0020	PILE SETOUT PLAN	D
P2Wk-DRG-SE-19-0021	ABUTMENT PILES GENERAL ARRANGEMENT	D
P2Wk-DRG-SE-19-0022	PIER AND RETAINING WALL PILES GENERAL ARRANGEMENT	C
P2Wk-DRG-SE-19-0025	ABUTMENT PILES REINFORCEMENT DETAILS	B
P2Wk-DRG-SE-19-0026	PIER AND RETAINING WALL PILES REINFORCEMENT DETAILS	B
P2Wk-DRG-SE-19-0030	NORTH ABUTMENT GENERAL ARRANGEMENT - SHEET 1	C
P2Wk-DRG-SE-19-0031	NORTH ABUTMENT GENERAL ARRANGEMENT - SHEET 2	C
P2Wk-DRG-SE-19-0032	NORTH ABUTMENT GENERAL ARRANGEMENT - SHEET 3	C
P2Wk-DRG-SE-19-0036	SOUTH ABUTMENT GENERAL ARRANGEMENT - SHEET 1	C
P2Wk-DRG-SE-19-0037	SOUTH ABUTMENT GENERAL ARRANGEMENT - SHEET 2	C
P2Wk-DRG-SE-19-0038	SOUTH ABUTMENT GENERAL ARRANGEMENT - SHEET 3	B
P2Wk-DRG-SE-19-0040	SOUTH ABUTMENT ANCHOR DETAILS	B
P2Wk-DRG-SE-19-0045	NORTH ABUTMENT REINFORCEMENT SHEET 1 OF 3	B
P2Wk-DRG-SE-19-0046	NORTH ABUTMENT REINFORCEMENT SHEET 2 OF 3	B
P2Wk-DRG-SE-19-0047	NORTH ABUTMENT REINFORCEMENT SHEET 3 OF 3	B
P2Wk-DRG-SE-19-0048	SOUTH ABUTMENT REINFORCEMENT SHEET 1 OF 3	B
P2Wk-DRG-SE-19-0049	SOUTH ABUTMENT REINFORCEMENT SHEET 2 OF 3	B
P2Wk-DRG-SE-19-0055	PIER PILECAP GENERAL ARRANGEMENT	D
P2Wk-DRG-SE-19-0056	PIER PILECAP REINFORCEMENT - SHEET 1	B
P2Wk-DRG-SE-19-0057	PIER PILECAP REINFORCEMENT - SHEET 2	B
P2Wk-DRG-SE-19-0060	PIERS ELEVATIONS	D
P2Wk-DRG-SE-19-0061	PIERS REINFORCEMENT	C
P2Wk-DRG-SE-19-0065	PIER CROSSHEAD GENERAL ARRANGEMENT	C
P2Wk-DRG-SE-19-0066	PIER CROSSHEAD REINFORCEMENT - SHEET 1	C
P2Wk-DRG-SE-19-0067	PIER CROSSHEAD REINFORCEMENT - SHEET 2	C
P2Wk-DRG-SE-19-0070	BEARING LAYOUT PLAN	C
P2Wk-DRG-SE-19-0071	STEELWORK BEARING DETAILS	B
P2Wk-DRG-SE-19-0075	STEELWORK GENERAL ARRANGEMENT - SHEET 1	D
P2Wk-DRG-SE-19-0076	STEELWORK GENERAL ARRANGEMENT - SHEET 2	C
P2Wk-DRG-SE-19-0078	STEELWORK TYPICAL GIRDER ELEVATION - SHEET 1	B
P2Wk-DRG-SE-19-0079	STEELWORK TYPICAL GIRDER ELEVATION - SHEET 2	B
P2Wk-DRG-SE-19-0080	STEELWORK DETAILS - SHEET 1	B
P2Wk-DRG-SE-19-0081	STEELWORK DETAILS - SHEET 2	B



P2Wk-DRG-SE-19-0082	STEELWORK DETAILS - SHEET 3	B
P2Wk-DRG-SE-19-0083	STEELWORK DETAILS - SHEET 4	B
P2Wk-DRG-SE-19-0084	STEELWORK DETAILS - SHEET 5	B
P2Wk-DRG-SE-19-0085	STEELWORK DETAILS - SHEET 6	B
P2Wk-DRG-SE-19-0086	STEELWORK DETAILS - SHEET 7	B
P2Wk-DRG-SE-19-0087	STEELWORK DETAILS - SHEET 8	B
P2Wk-DRG-SE-19-0088	STEELWORK DETAILS - SHEET 9	C
P2Wk-DRG-SE-19-0089	STEELWORK DETAILS - SHEET 10	B
P2Wk-DRG-SE-19-0090	STEELWORK GIRDERS PRECAMBER DETAILS – SHEET 1	A
P2Wk-DRG-SE-19-0091	STEELWORK GIRDERS PRECAMBER DETAILS – SHEET 2	A
P2Wk-DRG-SE-19-0095	MAINTENANCE WALKWAY GENERAL ARRANGEMENT	B
P2Wk-DRG-SE-19-0096	MAINTENANCE WALKWAY DETAILS –SHEET 1	B
P2Wk-DRG-SE-19-0100	PRECAST DECK PLANKS LAYOUT - SHEET 1	C
P2Wk-DRG-SE-19-0101	PRECAST DECK PLANKS LAYOUT - SHEET 2	C
P2Wk-DRG-SE-19-0102	PRECAST DECK PLANKS LAYOUT - SHEET 3	C
P2Wk-DRG-SE-19-0105	PRECAST DECK PLANKS REINFORCEMENT DETAILS - SHEET 1	C
P2Wk-DRG-SE-19-0106	PRECAST DECK PLANKS REINFORCEMENT DETAILS - SHEET 2	C
P2Wk-DRG-SE-19-0107	PRECAST DECK PLANKS REINFORCEMENT DETAILS - SHEET 3	C
P2Wk-DRG-SE-19-0108	PRECAST DECK PLANKS REINFORCEMENT DETAILS - SHEET 4	C
P2Wk-DRG-SE-19-0110	CAST INSITU DECK REINFORCEMENT DETAILS - SHEET 1	B
P2Wk-DRG-SE-19-0111	CAST INSITU DECK REINFORCEMENT DETAILS - SHEET 2	C
P2Wk-DRG-SE-19-0120	LIGHTING SUPPORT BRACKET	B
P2Wk-DRG-SE-19-0125	BARRIER LAYOUT PLAN	B
P2Wk-DRG-SE-19-0130	DECK DRAINAGE DETAILS - SHEET 1	C
P2Wk-DRG-SE-19-0135	SERVICES SUPPORT DETAILS	C
P2Wk-DRG-SE-19-0140	JACKING LOCATIONS AND DETAILS	C
P2Wk-DRG-SE-19-0150	SOUTHERN APPROACH -SHEET 1	B
P2Wk-DRG-SE-19-0151	SOUTHERN APPROACH -SHEET 2	B
P2Wk-DRG-SE-19-0152	SOUTHERN APPROACH -SHEET 3	C
P2Wk-DRG-SE-19-0153	SOUTHERN APPROACH -SHEET 4	B
P2Wk-DRG-SE-19-0154	SOUTHERN APPROACH -SHEET 5	B
P2Wk-DRG-SE-19-0155	SOUTHERN APPROACH -SHEET 6	B
P2Wk-DRG-SE-19-0156	SOUTHERN APPROACH -SHEET 7	C
P2Wk-DRG-SE-19-0157	SOUTHERN APPROACH -SHEET 8	C
P2Wk-DRG-SE-19-0160	SOUTH ABUTMENT MSE WALL SETOUT AND DETAILS - SHEET 1	B
P2Wk-DRG-SE-19-0161	SOUTH ABUTMENT MSE WALL SETOUT AND DETAILS - SHEET 2	B

P2Wk-DRG-SE-19-0165	SOUTH ABUTMENT PA ENCROACHMENT - SHEET 1	C
P2Wk-DRG-SE-19-0166	SOUTH ABUTMENT PA ENCROACHMENT - SHEET 2	B
P2Wk-DRG-SE-19-0200	BASIS OF DESIGN CONSTRUCTION SEQUENCE SHEET 1	D
P2Wk-DRG-SE-19-0201	BASIS OF DESIGN CONSTRUCTION SEQUENCE SHEET 2	D
P2Wk-DRG-SE-19-0202	BASIS OF DESIGN CONSTRUCTION SEQUENCE SHEET 3	D

SPECIFICATION LIST

Specification Number	Title	Revision
650-SPEC-001-NX2	SUBSOIL DRAINAGE FOR EARTHWORKS	2A
650-SPEC-002-NX2	EARTHWORKS	4
650-SPEC-003-NX2	GEOTECHNICAL INSTRUMENTATION	2A
650-SPEC-006-NX2	MECHANICAL STABILISED EARTH	C
650-SPEC-007-NX2	GROUND ANCHORS	C
650-SPEC-008-NX2	BORED PILES	A
680-SPEC-001-NX2	REINFORCED CONCRETE SUPPLY	1A
680-SPEC-002-NX2	CONCRETE CONSTRUCTION	1A
680-SPEC-004-NX2	CONCRETE REPAIR	B
680-SPEC-005-NX2	STRUCTURAL STEELWORK	B
680-SPEC-006-NX2	PROTECTIVE COATINGS	B
680-SPEC-007-NX2	BEARING AND DECK JOINTS	B

► Schedule 3 – Site Verification of Design Assumptions

Certain elements of the design for the Okahu Viaduct will be subject to site verification. More specifically founding levels, subgrade conditions shall be confirmed on site depending on actual ground conditions. Set out of elements shall be confirmed on site depending on as-built values and geometry. Any subsequent modifications will be based on the actual conditions encountered, and represent accepted practice for engineering.

Signed:



s 9(2)(a)

Date:

8 May 2018

On behalf of Puhoi to Warkworth Motorway PPP - Design Joint Venture (DJV).