

**BRIDGE IT NZ**



# We build bridges

Farm

Council

Pedestrian

Cycleway

Subdivision

Golf Courses

Forestry

Refurbish Old Bridges

Hire a Temporary Bridge

Emergency Bridges

Bridge Certification

Insurance Assessments







*Strengthening of Goldfields Railway bridge Waihi*

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# About Bridge It NZ

## Unlock the value of your land

Bridge It NZ specialise in building small to medium size bridges (6m-50m) and will take care of your entire project for you – from an initial on-site consultation through to design, drawings, fabrication, installation and achieving a code of compliance for your finished structure.

Our company was founded by Pat Seuren in 2009 and we have successfully completed more than 300 bridge projects for farmers, forestry companies, councils, property developers, private property owners, golf courses and engineering consultants right across New Zealand.

A well-designed bridge will improve access to your land and deliver tremendous value – whether you are moving stock, forestry logs, private or heavy vehicles, cyclists or pedestrians. Moving goods from A to B, protecting waterways, and increasing community access and connectivity in a safe, reliable and environmentally-sound way is what we strive for.

Each site is unique, but our experienced team, use their combined extensive knowledge and quality materials to find innovative solutions that best suits your needs, budget and surrounding landscape. We are sensitive to the environment and our bridges are designed to withstand a variety of different flood scenarios (including a 1-in-50 or a 1-in-100 year flood, or less if appropriate for your site), while minimizing disturbance to the aquatic ecosystem below.

## Our Bridges

**Bridge It NZ is proud to offer a wide range of bridges made from different high-quality materials to meet your specific needs. Over the following pages you will find a useful summary of our key products, their suitability and the advantages each one has to offer.**

Most bridges are typically designed to last at least 50 years but if you need a structure to endure for a century, we can do that too. Our vehicle bridges are designed to meet NZTA Bridge Manual standards.

A bridge is a significant long-term investment so you need a trustworthy partner you can rely on. Bridge It NZ is proud to offer a total project management solution and a 'no surprises' pricing policy. We provide a total lump sum price upfront and will let you know early on if any variations could arise that may affect the final price.

Working with us is easy – we ensure your bridge is delivered on time and on budget, and we proactively manage the entire process from start to finish. Unexpected issues or events can de-rail a project, but we'll deal with any problems that arise so you don't have to. Not one of our bridges has ever failed to gain resource consent or a code of compliance.

You can rest assured we are experts at what we do. We will build you a high-quality bridge that will stand the test of time and meet your exact requirements, providing great value for money.

**We look forward to working with you.**

# Bridge Construction Timeline

**Week 1**



Once Bridge It NZ is awarded the contract and your deposit is paid, our engineer will carry out a site investigation. This will include a topographical survey and basic geotechnical testing to help inform the design of your bridge and its foundations.

**Week 2 - 3**



A concept design will be completed and a project checklist drawn up outlining any possible issues that may arise through the design and consenting process.

**Week 4**



You'll be given the opportunity to review the concept design and provide feedback on the proposed location and how it ties in with the rest of your infrastructure.

**Week 5 - 6**



Full detailed design work gets underway including specific bridge details and any retaining required. The abutment and foundation design will also be finalised. For instance, if steel piles are being used, the expected depth along with piling details will be confirmed.

**Week 7 - 8**



Applications for your resource and building consents will be prepared and submitted once the detailed design work is complete.

**Week 9 - 14**



Resource and building consents are processed by your local council. Depending on their workload, this can take up to six weeks to be approved. We've never had a consent knocked back yet!

**Week 14 - 19**



Construction materials for your bridge are procured to meet your project's specifications. Occasionally this can take longer than six weeks depending on supply chain factors.

**Week 20 - 23**



Bridge fabrication takes place in our workshop, along with handrails and precast concrete abutments.

**Week 24 - 25**



Site installation begins. Some bridges can take as little as five days to install, while others are more complex and can take up to three weeks. It all depends on your location, design, span – and the weather!

Remember, the above bridge construction timeline is very fluid and can be much shorter (or occasionally longer) depending on all the parties and factors involved. Our goal is to deliver you a strong, well-designed bridge that is fit-for-purpose in the shortest possible time.

# Concrete Flat Panel Bridges

Concrete is often the fastest and most cost-effective way to construct a durable, high-quality bridge thanks to the ability to pre-plan and pre-cast key elements.

Bridge It NZ's Flat Panel bridges provide 6.5m-10m span options which can be designed to New Zealand Bridge manual 0.85HN or full highway load HN HO 72 specifications. Bridge widths can be varied according to your project requirements.

A brushed finished deck provides good grip and does not require topping. Bridge It NZ's concrete Flat Panel bridge is designed for longevity, with a 50 year design life. These are low maintenance, durable bridges.

IDEAL FOR >

Residential access

Farm access

Forestry

Low volume public roads

Heavy loading requirements (fully loaded truck and trailer units) & overload design requirements



Birchview Farm  
6.5m x 4.8m

Wiggin, Pakiri  
10m x 4m flat panel bridge





*Bunnik Matangi*  
18m all concrete bridge

## All Concrete

Our heavy duty full concrete beam access bridge is pre-cast off site, and most bridges take just five days to install. Concrete bridges are constructed from pre-stressed, pre-cast concrete beams with built-in continuous concrete kerbs on either side to contain and direct effluent when used on farms.

The balustrades and pipe handrails are made from galvanised steel.

These bridges are designed to Transit New Zealand Bridge Manual standards 0.85HN load capacity. They are suitable for fully-laden road legal vehicles which do not require permits and for situations where the traffic count is less than 100 vehicles per day, with speeds generally below 70km/h.

IDEAL FOR >

Farm access

Low volume public roads

Residential access

Smaller subdivisions

Heavy loading requirements (fully loaded truck and trailer)



*Padrutt farm*  
16m all concrete bridge

# Concrete Hollow Core Bridges

Concrete is often the fastest and most cost-effective way to construct a durable, high-quality bridge thanks to the ability to pre-plan and pre-cast key elements.

They are designed to meet Transit New Zealand Bridge Manual standards, with full highway HN HO 72 loading. These are ideal for subdivisions and high traffic volume areas. They suit a variety of spans and widths. The surface comes with a smooth and light broom top finish, providing good grip for vehicles. Topping concrete or an asphalt layer is also available if required.

Pre-stressed concrete bridges are well-proven to survive the test of time in the harshest of environments, and once in place, provide an immediate working platform.

IDEAL FOR >

High volume traffic requirements

Subdivisions

Full highway loading HN HO 72 requirements







# Concrete Deck Steel Beam Bridges

Bridge It NZ can tailor a package that suits your loading needs – either 0.85HN, HN HO 72 or overweight requirements.

Our Steel Beam bridge is ideal for sites that are difficult to access. Steel structures are either galvanised, zinc thermal-sprayed or painted for improved longevity.

## Features:

- Pre-cast concrete decking panels
- Concrete kerbing
- Steel beam framing for greater single span lengths
- Suitable for heavy vehicles 0.85 HN with a maximum axle loading of up to 7.5 tonne for single axle and 15 tonne for dual axle
- Can be designed to full highway HN HO 72 loading, so it is suitable for heavier, more frequent traffic
- Handrails designed to your requirements
- Specifically designed to any length you need

## IDEAL FOR >

Rural properties

Subdivisions

Forestry



# Heavyweight Timber Deck Steel Beam Bridges

Bridge It NZ's Heavyweight Timber Deck on Steel design is suitable if you need bridge access for heavy farm vehicles or for your work in the forestry sector.

A timber deck provides good aesthetics for a natural environment, allows decks of irregular widths, and is good for use by tracked vehicles and machinery. This solution is ideal if you have challenging site access, and the deck can be built on site.

## Features:

- Galvanised steel balustrades and pipe handrails
- Non-climbable handrails steel or timber
- Timber kerbing
- Can be designed for .85HN (maximum axle loading of up to 7.5 tonne for single axle and 15 tonne for dual axle)
- Can be designed for full highway loading HN HO 72 and overweight vehicles and machinery

## IDEAL FOR >

Residential access

Farm access

Earth work contractors

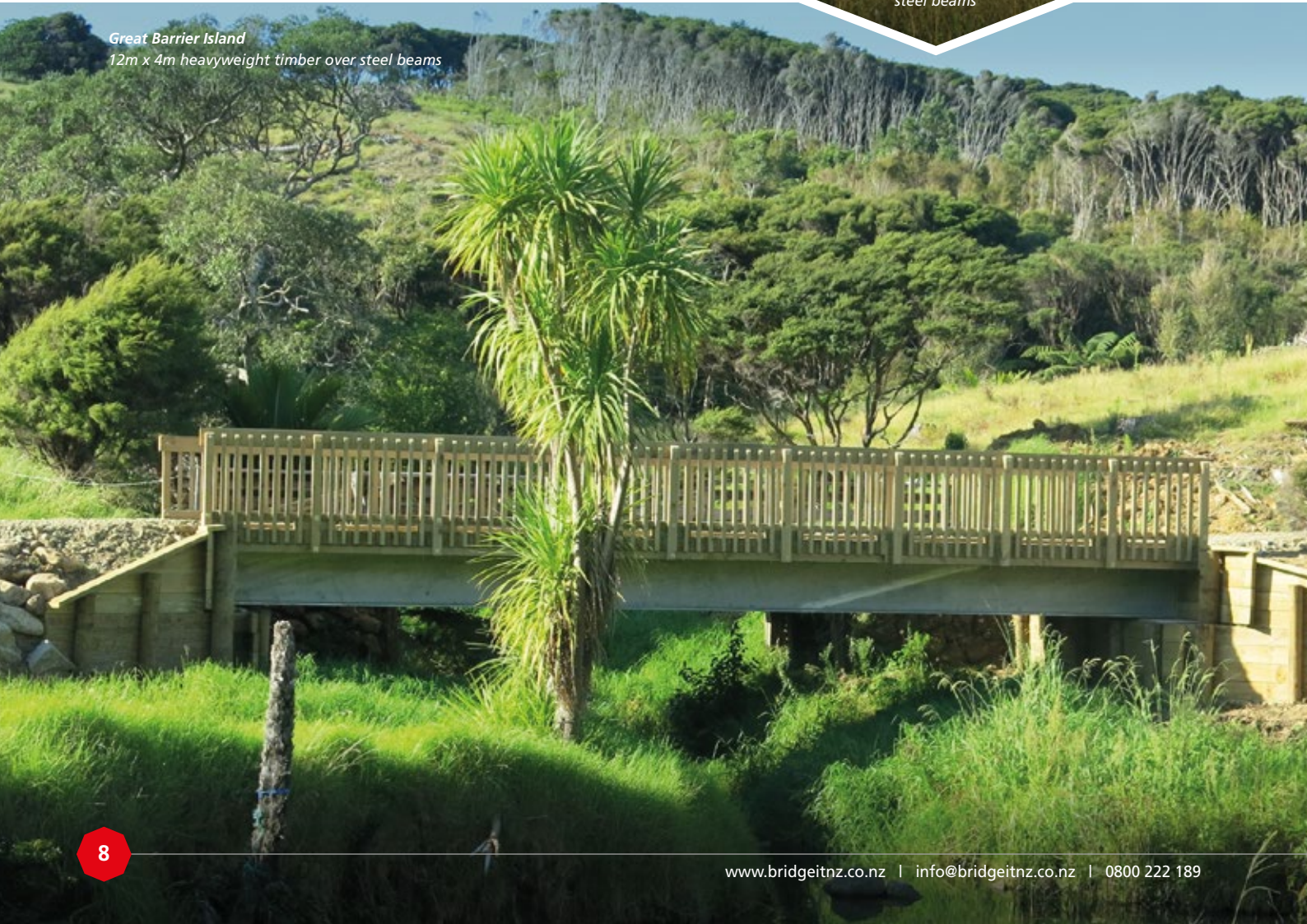
Forestry

Private roads



Great Barrier Island  
12m x 4m heavyweight timber over steel beams

Great Barrier Island  
12m x 4m heavyweight timber over steel beams





*Waihi Beach Reservoir  
10m x 2.4m lightweight timber deck*

# Lightweight Timber Deck Steel Beam Bridges

If you need bridge access for light vehicles but there is no need for heavy traffic to pass, then this bridge design is your most cost-effective solution.

This bridge is also ideal for cycleways and pedestrian bridge requirements. It is often a suitable and affordable option for developers and councils who want to improve local community access in a particular area.

#### Features:

- Non-climbable handrails and other safety features can be added
- Maximum axle loading of up to 2 tonne per axle, 2.4m wide
- Width can be increased for cycleway and pedestrian bridges

#### IDEAL FOR >

Light traffic

Pedestrians or cycleways

Reserves



*University of Canterbury  
Steel beam timber non-climbable  
handrails*

# CUTE Bridges

If you need bridge access for light farm vehicles such as utes and quad bikes as well as livestock but there is no need for heavy traffic to pass, then this lightweight timber deck on steel truss design will fit your needs. Purposely designed for cattle and light farm traffic (aka cow and ute), Bridge It NZ has named these bridges 'CUTE'.



Farmers are increasingly required to protect our waterways, and Bridge It NZ offers an innovative solution to keep stock and effluent away from the water. Our CUTE bridge is a cost-effective, fully-installed engineered solution for your farm.

## Features:

- Low cost wooden deck, steel truss bridge
- Comfortably takes livestock, utes, quad bikes
- Handrails and other safety features can be added
- Maximum axle loading of up to 2 tonne per axle, 2.4m wide

IDEAL FOR >

Light farm traffic

Stock crossings



Alderson, Dannevirke  
18m x 2.4m CUTE bridge

Scott - Waihi  
20m x 2.4m CUTE Bridge - steel handrails





*Waimahanga Cycleway - Whangarei Distict Council  
24m and 21m Glulam timber beam bridges*

## Laminated Timber Bridges

These bridges combine an attractive design with solid engineering and construction. Glued laminated timber (glulam) is a structurally engineered wood product comprising several layers of dimensioned timber bonded together with durable adhesives.

The high strength-to-weight ratio of laminated timber provides a lightweight, sturdy bridging solution suitable for pedestrian and cyclists.

IDEAL FOR >

Cycleways

Pedestrian access

Parks and reserves



*Alfred Cox walkway - Gisbourne City Council  
22m laminated timber  
pedestrian bridge*

# Submersible Bridges

If flooding is a regular occurrence, building a bridge that is designed to submerge beneath the water during extreme weather events can be the most practical and cost-effective solution.

Our low level concrete submersible bridges are built to handle a full highway load (HN HO-72) and withstand being over-topped several times a year. They are designed to maintain both water flow and fish passage and are considered a relatively low risk from a flood hazard perspective.

Installation of these slim profile bridges is very straight-forward, and their low level can often avoid the need to obtain building consent.

### Features:

- Robust units
- Adaptable to different crossing widths and alignments
- Designed to allow for debris and hydraulic loads
- Can be relocatable in some cases
- Can be used (site dependent) in place of a larger span bridge required to clear flood heights, making it a more cost-effective solution

- Suitable for heavy vehicles 0.85 HN with a maximum axle loading of up to 7.5 tonne for single axle and 15 tonne for dual axle loading
- Can be designed to full highway HN HO 72 loading, suitable for heavier, more frequent traffic
- Clear spans up to 12m, typical depth 350mm

### IDEAL FOR >

Locations where it's not viable for a bridge to sit above the required flood level

Waterways which flood multiple times a year

Sites with a good rock layer (not erodible soils)



Aratu Forest Ltd, Kopua South  
Low Level Submersible bridge

Aratu Forest Ltd  
10m x 4m submersible bridge



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## Upright Truss Bridges

The superstructure of an upright truss bridge sits above the deck rather than beneath it, allowing for lower approaches on either side. This is ideal when space might be tight or the approach height needs to be kept to a minimum to avoid extra retaining work or to keep the gradient as level as possible.

They are strong and ideal for longer spans (although they can be used for short spans). The upright truss sections are made from steel and can be galvanised, painted or powder coated. The associated decking material can be FRP, timber or concrete depending on the application.

These bridges are designed for pedestrian / cycleway loads or to take a 0.85HN loading up to HNH072 (or overload). They can be made in modular sections so the bridge can be easily relocated and transformed into a shorter span bridge if necessary.

The width of upright truss bridges can be customised to suit your needs. We suggest 1.8m width for pedestrian, 2.5m-3m for cycleways, and 4m-4.4m for vehicles or extra wide machinery.

### IDEAL FOR >

Cycleways

Pedestrian bridges

Vehicle use (forestry, private property and farms)



# FRP Bridges

FRP bridges (Fiber Reinforced Polymer) are strong, lightweight, and durable as they're not prone to corrosion, rot, expansion or contraction. This composite material will withstand the harshest environments including coastal, marine, and environmentally sensitive areas, and is resistant to almost all forms of vandalism including graffiti and fire. They're available in clear spans from 2m to 42m.

These bridges require very little maintenance as FRP is not affected by moisture, rot, fungi or temperature. The outer surface is finished in a high quality gel coat or top coat and the colour choice is yours – allowing your bridge to blend in with the environment or complement the style of the surroundings.

FRP is covered by a 50 year guarantee from the product's manufacturer, and we design these bridges to last 100 years, making them an extremely cost-effective solution.

#### IDEAL FOR >

- Pedestrian
- Cycleways
- Parks
- Golf courses
- Clip-on pedestrian/cycleways to existing bridges



Waihi Beach, Western Bay of Plenty District Council  
10m x 2.5m







*Longreach subdivision, Coromandel  
35m boardwalk*

## Boardwalks

In addition to bridges, our product range includes timber or FRP boardwalks, enabling us to further provide the best fit solutions for our customers. Boardwalks are a wonderful way to enhance community access and improve aesthetics, and are growing in popularity.

Our boardwalks can either be raised or constructed at low level, and are designed to carry a variety of loads including 4Kpa, 5Kpa or a custom load to suit your requirements. Kerbs and handrails can also be supplied if you wish.

Regardless of which material you use, the end result will be an attractive, sturdy boardwalk that will last for decades to come.

IDEAL FOR >

Pedestrian access

Parks and reserves

Cycleways



*Wairoa River boardwalk  
Tauranga City Council*

# Temporary Bridges, Bridge Repairs and Refurbishment

## Emergency and Temporary Bridges

If you need temporary access to a site, or a bridge solution following a flood or other natural disaster, Bridge It NZ has a customised temporary bridging solution to meet your needs. We stock temporary bridges and can put a solution in place quickly for you. This is ideal for adhoc situations or short harvest durations.

Temporary bridges can also be used during subdivision development or when you need to move heavy loads to remote locations. Please contact the Bridge It NZ team to discuss your requirements.



18m Semi permanent bridge

## Bridge Repair and Refurbishment

Your existing bridge structure may only need repairing or refurbishing, and a range of repairs can be carried out on all types of bridges.

Sound but rusty steel work can be sandblasted and protected for the future, and existing beams and abutments can be strengthened. Coupled with re-decking, this can improve the load capacity of an existing bridge without having to build a brand new one.

Bridge It NZ's experienced engineers can assess existing structures and discuss options for refurbishment:

- Strip and replace existing bridge planks
- Repair or reinforce existing bridge foundations
- Sandblast and/or repair existing bridge steelworks
- Advise you on the best options available

12m Temporary bridge



BRIDGE IT NZ

*“Waiwhakaata Maori Trust block purchased the neighbouring farm to extend our dairy farming capability. This meant we required a 38m bridge.*

*We contacted three bridge companies, and from the outset it was obvious which company was the most professional.*

*Bridge It NZ took care of everything, they walked us through the design phase, including consenting requirements with councils and built the bridge without a hitch.*

*For us, dealing with banks and councils was no fun, but liaising with the Bridge It NZ team was easy and smooth.*

*We have a bridge we use every day. It’s not only safe, compliant and useful, it’s beautiful.”*

**James Pinfeld, Chairman Waiwhakaata Trust**



**Waiwhakaata Trust**  
38m x 4m steel beam concrete deck bridge

## Bridge Planning

Building bridges is our area of expertise. We have the process down to a fine art and can pre-empt most problems before they even arise. Your Bridge It NZ project manager will keep you informed every step of the way and we provide complete management of your project including site investigation and assessment, full design, fabrication and installation, resource and building consents and code of compliance certification. We liaise with all relevant stakeholders and always look for solutions and ways to speed things along.

### Bridge Certification

Councils, dairy companies, transport companies and contractors often require current bridge certification, which is especially important when existing bridge structures are ageing. Our team can assess and provide this documentation for you.

### Bridge Insurance Assessments

Bridge It NZ can carry out risk assessments of existing bridging structures and cost valuations so that indemnity values can be established. Assessments of repair and replacement costs for insurance policies can also be arranged.

#### Let us manage the details



Site investigation  
& assessment



Full design, drawings,  
fabrication &  
installation



Resource &  
building consents



Compliance  
certificate



TRAC management  
plans

# What our clients are saying

*"The maintenance you can spend on culverts and pipes can get pretty hefty, pretty quick. And that's where the bridge really shines for us. It's pretty much a case of 'put it in, walk away' and not have to worry. Bridge It NZ were great at communicating with us, they were easy to deal with and very forthcoming."*

**Juken NZ Ltd's Planning and Engineering Manager, Patrick Bethel**

*"Bridge It NZ helped us through the selection process and were transparent in suggesting the best and most cost-effective options. We really liked the fact they could give us a quote for the design and construction right up front. They could design and manufacture as one complete package which was a huge advantage."*

**Crang Civil Senior Engineer, Tom Henderson**

*"The beauty of Bridge It NZ is they're essentially a one-stop shop, with cost-effective, reliable pricing, and at the same time they allow us room to collaborate and work in partnership with them."*

**Aratu Forests Roading Manager, Scott Weston-Arnold**



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# BRIDGE IT NZ