

To Steve Lunn, AAS Metal Suppliers, Caringbah, NSW, Australia
From Jim Wright, co-owner and restoration project leader, Bowen Island, BC
Re the beach-access handrail and bench with your AAA fittings, September 8, 2021

Steve, thank you again for your reliable assistance that significantly helped us to put finishing touches on our Bowen Island restoration project. A year ago, when I first contacted AAA Metal Suppliers, I hoped you'd direct me to a Canadian supplier of your marine-steel tube fittings, which suited the restoration needs. It turned out you'd supplied British Columbia customers and knew the province firsthand, and you treated my project as a priority. When my selected contractor, a versatile carpenter named Chris, could fit it in, you provided AAA satin-finish fittings, I obtained corresponding tube locally, and Chris did his part well. The results have been enjoyed all summer.

The big picture

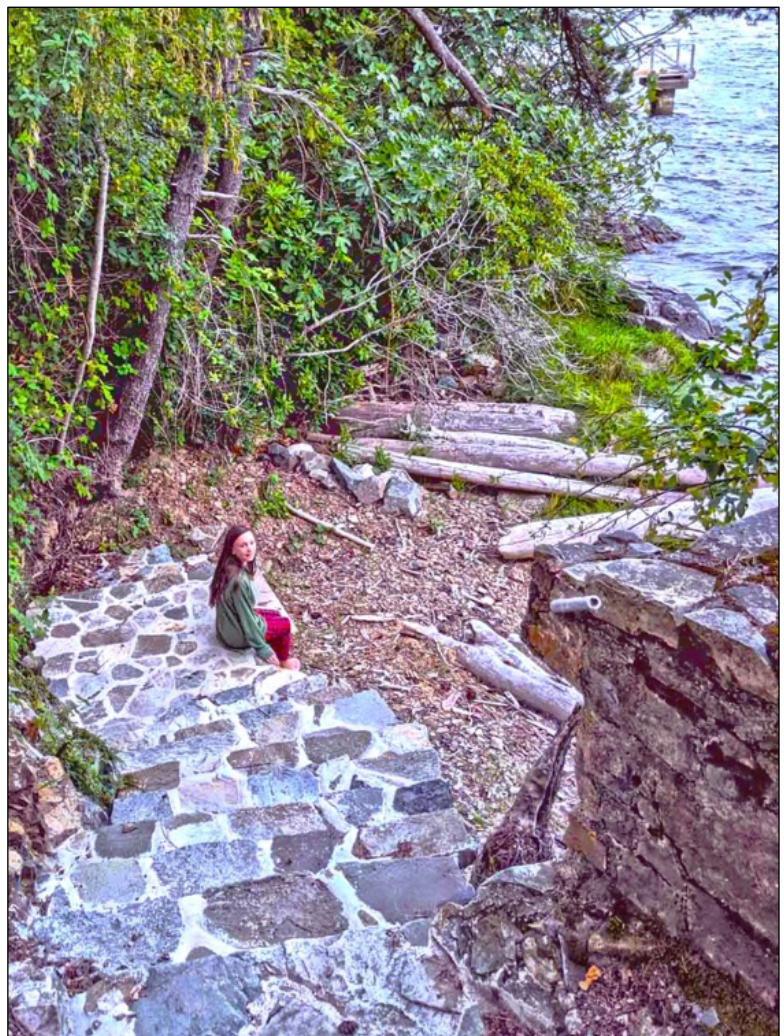
I promised to send you photos, and I'll do so in this PDF. However, I've been thinking about the context that makes your set of fittings so important, and I'll share some of it in case it's of interest. For that and other reflections, I'll use *tinted boxes* to indicate they're supplemental.

The context is the restoration of a beach-access structure built 90 years ago after a barge unloaded a pile of stone on the beach, seen in recent form at right.

Six decades ago, after my family bought the property, they rebuilt the structure in a sturdier, safer way. It's well above the natural boundary with the sea, but factors like king tides combined with the battering of storm-driven logs, taking a relentless toll. It became time for new restoration, with a wary eye to challenges that keep evolving with climate change.

When a Bowen Island stonemason felt ready to meet the needs, he took the grouted-stone steps apart and reused all the stone. While restoring, he added bulk, drainage culverts and reinforcing bars that extend deep into bedrock behind and below the steps.

At right, looking downward, we see the structure at a largely restored stage. The view is from the cliff path that leads into the steps.



The final elements

For the final elements of the restoration—the stairway handrail and beach lookout bench—we aimed to ensure they'd have at least three qualities:

- Safe—heeding the building code and going beyond it
- Attractive—fitting into the setting with simple, graceful strength
- Enduring—designed to serve well for many decades

As decided early on, we consistently used marine steel (316-grade stainless steel), with a kind of matte finish that AAA calls Satin. The kind of steel was a key factor enabling all three qualities.

The handrail for the main set of steps

We obtained 1.5-inch marine-steel tube from the helpful local Metal Supermarkets. The tube finish is compatible with the AAA satin fittings. The tube is annealed—well suited to curving.



In an elongated S-shape, the curved rail that Chris created leads people from the cliff path at the top into the centre of the top step.

It then follows the curve of the steps downward.

Finally, it leads into the centre of the lookout-bench landing. (For optimal safety, it leads toward the bench and away from the front edge of the landing.)

Even though it has no *vertical* curve (just horizontal curve), the rail stays within the handrail-height range stated in the provincial building code.

The AAA fittings



The design of the AAA adjustable post saddles that support the handrail allows for a full handgrip while adding to the simple beauty.



So does the curved handrail bracket that Chris securely attached to the stone wall at the top of steps. (The wall is on the sea side of the cliff path that leads into the steps.)



An AAA end cap securely placed in each end of the rail is a functional, attractive final touch.



The three handrail posts, 1.5-inch marine steel tube like the rail, are embedded deep in the steps so that the rail can withstand 200 pounds of outward pressure (roughly as the building code prescribes). There's an AAA cover plate at the bottom of each post.



From this perspective, which is from the beach, looking westward, the fittings don't draw attention to themselves.

However, the results they enable are suitably safe, fittingly attractive, and designed to endure with a little care.

The beach lookout bench



For the lookout bench on the main landing, just above the beach at the bottom of the long set of railed steps, the bench lumber is durable native Western Red Cedar. Especially since the cedar may need replacing every few decades, the whole bench structure is designed for efficient removal—as a single unit—for restoration when that is eventually needed.

At the back, the cedar bench is supported by threaded steel rods (extending from deep in the cliff bedrock), with washers and tightened nuts visible (from the beach) at the outer end. They secure in place the large cedar board at the back. (It serves like a beam for three joist-like front-to-back boards supporting the set of five boards that comprise the bench seat.)

The two front legs of the bench (marine steel tube, 1.5 inches in diameter, from the local Metal Supermarkets) are held in place by long base plates from AAA Metal Supplies. They were inverted and screwed (upward) into the bottom of the joist-like cedar bench-seat support near each end. At the bottom of each leg, there's an inverted AAA end cap inserted into the tube. The described construction enables strength and may preclude damage when the bench is inevitably rocked or pounded in several directions.



Conclusion

The restoration has exceeded our high expectations, and we thank all who enabled that.