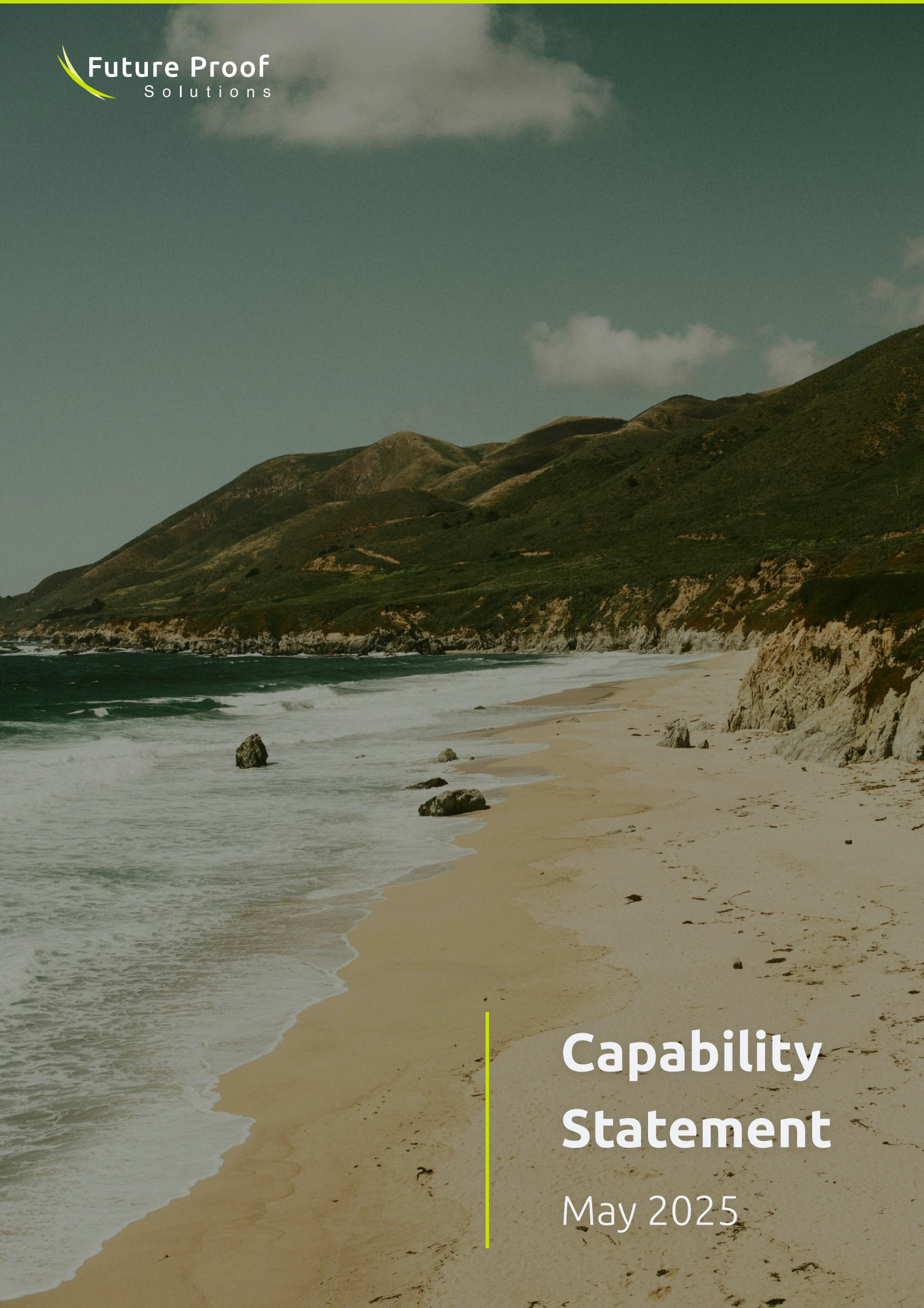


A full-page background image of a coastal landscape. In the foreground, a wide, sandy beach stretches from the bottom left towards the right. Gentle waves with white foam wash onto the shore. Several dark, jagged rocks are scattered along the water's edge and in the shallow surf. In the background, a steep, green hillside rises from the beach, showing some rocky outcrops. The sky is a deep teal color with a few wispy white clouds. The overall mood is serene and natural.

Capability Statement

May 2025

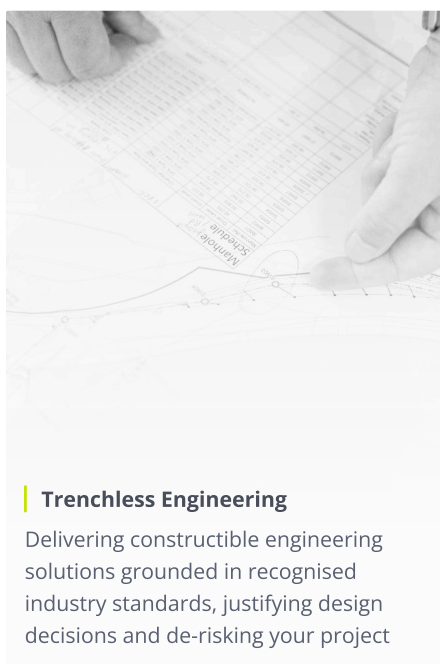
See the future in **Trenchless**

Future Proof Solutions is a specialised trenchless design and engineering firm delivering constructible trenchless solutions for infrastructure projects around the world. We focus exclusively on trenchless construction methods, including **Horizontal Directional Drilling (HDD), Microtunnelling, Horizontal Auger Boring, Pipe Ramming and Hammering, Direct Steerable Pipe Thrusting**, and a range of **hybrid trenchless techniques**.

Our **approach combines** detailed knowledge of trenchless construction **methodology** with robust **engineering** principles to produce trenchless designs that are both **technically sound and practically constructible**. Our designs are **trusted across industries** for their clarity, constructability, and alignment with **real-world construction practices**.

Whether the project is urban, remote, or offshore, Future Proof Solutions provides the technical leadership and design expertise to help make even the most complex trenchless crossings constructible. **We see the future in trenchless.**

Our key services



Trenchless Engineering
Delivering constructible engineering solutions grounded in recognised industry standards, justifying design decisions and de-risking your project

Constructibility Review
Assessment of design and construction risks to guide practical, cost-effective project decisions

Subject Matter Expertise
Engage with industry specialists to smoothly and efficiently implement your trenchless project

Superintendent Representation
Objective representation of the principal contractor

Tender Management
Specialist trenchless commercial management and guidance



Site Support
Site ready personnel, equipped and experienced in trenchless construction

Autonomous Onsite Services (AOS)

Future-Proof Solutions **AOS** delivers trenchless engineering services and support on site.



Engineering and monitoring on site



Mobile for trenchless construction



Experienced trenchless personnel resourced in the field

Powered Anywhere

With its **mounted solar panels** and **battery storage**, the FPS AOS is powered for continuous service delivery at any **trenchless site**.

Mobile for trenchless

Mobile for **optimal positioning** on ever-changing trenchless sites, enabling continuous service delivery from any side of any crossing.

Science Onsite

Onboard testing and laboratory equipment for ground conditions, water sampling, drilling fluid analysis, and noise monitoring ensures effective monitoring of sites with **complex compliance requirements**.

Prepared for all sites and conditions

All weather gear, 5G + satellite connectivity, 240v onboard power, electric climate control, x2 fully fitted workstations and much more, the FPS AOS comes prepared.

Trenchless Design Standards

Future Proof Solutions delivers trenchless designs and supporting engineering in accordance with the internationally recognised and documented trenchless design standards.

NASTT Pipe Jacking Good Practices Guidelines 1st Ed (2020)

NASTT Introduction to Trenchless Technology New Installation Methods Good Practices Guidelines 1st Ed (2017)

ASCE Manuals and Reports on Engineering Practice No. 106 - ASCE - Horizontal Auger Boring Projects 2nd Ed (2017)

ASCE Manuals and Reports on Engineering Practice No. 133 - Pilot Tube and Other Guided Boring Methods 1st Ed (2017)

PJA An Introduction to Pipe Jacking and Microtunnelling 1st Ed (2017)

James C.Thomson Pipejacking and Microtunnelling, 1st Ed, (2019)

ASCE Manuals and Reports on Engineering Practice No. 155 Direct Steerable Pipe Thrusting, 1st Ed (2023)

ASCE Manuals and Reports on Engineering Practice No. 115 Pipe Ramming Good Practices Guidelines 2nd Ed (2017)

NASTT Pipe Ramming Good Practices Guidelines 1st Ed (2020)

PR-277-144507-E01 Installation of Pipelines by HDD, An Engineering Design Guide (2015)

ASTM F1962-2025 Standard Guide for Use of Maxi-HDD for Placement of Polyethylene Pipe or Conduit Under Obstacles, Including River Crossings

NASTT Horizontal Directional Drilling (HDD) Good Practices Guidelines 5th Ed (2024)

ASCE Manuals and Reports on Engineering Practice No. 108 Pipeline Design for Installation by Horizontal Directional Drilling 3rd Ed (2024)

DCA - Technical Guidelines Information and Recommendation for the Planning, Construction and Documentation of HDD Project (2015)

Projects/Experience

Cudgen Road

At Future-Proof Solutions, we're focused on the engineering and delivery of trenchless projects. Our range of products and services, combined with cutting edge technology, project experience, and our network of industry specialists, allow us to...

[Check Project →](#)

 Method HDD, AUGR, MICR, HAMR, DSPT	 Crossing types / Total # ROAD, RAIL, SVC, ENV, OUTF 12 Crossing	 Crossing length 150m - 1100m	 Borehole Diameter 12" - 42" 	 Location East Brisbane, QLD, Australia
 Pipe utilisation Pressure Sewage and Sludges	 Pipe types Steel, HDPE, Concrete, Socketed, Drill Pipe	 Specifications MRTS 140, MRTS 141, MRTS 142	 Design Types Simple, Complex, Intersect, Outfall/Shore Approach	 Completion Date 12th March 2021

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Our Team



Anna Black 
Trenchless Designer/
Production Manager

Qualifications:

- Diploma of Engineering
- Diploma of Project Management

Anna **leads the team of trenchless designers** with her **passion for pipelines**. With several plus years of experience in quality management, combined with her equally extensive background in trenchless design across the various methods and crossing types, Anna has been instrumental in delivering **hundreds of successful trenchless crossings designs**. At Future Proof Solutions, Anna applies her proven design expertise to the wide variety of new and complex trenchless projects. Her experience extends beyond off site design, encompassing **field-based delivery** of trenchless works, including crossings of rivers, roads, rail, and ocean outfall/shore approaches. Where Anna provides live adjustments to the trenchless designs in response to unforeseen or challenging ground conditions and method constraints. Anna works closely with trenchless contractors to ensure **every pipe gets installed successfully**, no matter the complexity of the crossing.



Kerry-Anne D'Arcy 
Trenchless Designer

Qualifications:

- DMACC/Vermeer HDD Circuit Program
- Cert IV in Environmentally Sustainable Management

With her extensive procurement experience in the oil, gas, and energy infrastructure industries, Kerry-Anne has seen first-hand the value of **well-designed, well-planned, and well-engineered infrastructure projects**. Drawing on her experience both onsite and off, she has developed a strong ambition to design trenchless solutions where no other construction method is viable. Kerry-Anne excels in the **design, engineering, and delivery of trenchless ocean outfalls and shore approach crossings**. Her deep understanding of project cost drivers allows her to optimise trenchless designs effectively, ensuring compliant yet constructible outcomes for these high-risk and technically demanding crossings. This **specialisation in the less common area of trenchless design** has led Kerry-Anne to deliver successful outfall and shore approach designs around the world, while also applying her expertise to more common crossing types that share similar technical and environmental challenges.



Andrew McFarlane 
Trenchless Designer/
General Manager

Qualifications:

- Diploma of Project Management
- Cert IV in Work Health Safety

Andrew's background in **Quality, Safety, and Environmental Assurance, Compliance, and Auditing** has been central to his success as a trenchless designer. He specialises in the interpretation of construction specifications of asset owners and third-party authorities, incorporating their **compliance expectations** into constructible trenchless designs supported by clear and compliant engineering. He has spent several years developing and **delivering trenchless crossings in heavily urbanised areas**, where dense networks of existing utilities must be avoided. Andrew consistently integrates trenchless engineering principles with practical construction methodologies to deliver utility crossings that meet the needs of all stakeholders. While he is often focused on preparing compliant designs offsite, Andrew is equally eager to engage onsite to help ensure the clear understanding of the trenchless method.



Eve Guidici 
Trenchless Designer

Qualifications:

- Master's Degree of Architecture
- Diploma of Civil and Structural Engineering (Materials Testing)

Originally from France, Eve relocated to the other side of the world, where her background in architecture seamlessly transitioned into the trenchless design field. With a growing interest in designing what is unseen underground, Eve has developed advanced skills in creating constructible trenchless solutions, **balancing innovative geometry with the constraints of challenging ground conditions**. Eve now delivers **specialised designs for complex crossings worldwide**, with a focus on maxi-HDD installations under waterways with fractured ground conditions. Her designs consistently enable the successful construction of some of the most challenging trenchless works. Several years on, she continues to take on technically demanding projects that require a detailed and practical design approach to deliver design suitable to both asset owners and trenchless contractors.



Matt Harris 
Trenchless Onsite Coordinator

Qualifications:

- High Risk Work Licences (inc. EWP, Dogman, VLC, Forklift, Int Rigging, Int Scaffolding)
- Cert IV in Work Health Safety

With years of experience on residential and high-rise construction sites, Matthew developed a strong interest in civil works, especially in connecting properties to essential services. He later entered the **international trenchless market**, mobilising equipment to and from **countries such as Indonesia, Papua New Guinea, New Zealand, and remote regions of Australia**. Onsite, he coordinated support services to ensure continuous trenchless operations, including sourcing downhole tooling, procuring specialised equipment, and managing the various site logistics. With several plus years of **direct experience alongside trenchless contractors**, Matthew has built a **detailed understanding of trenchless methods**, their challenges, and how to deliver successful, compliant crossings. He can be found onsite engaging with asset owner and contractor alike, **advocating for the trenchless method**.

Check the full Team →

Trenchless Design Products

Future Proof Solutions supplies the comprehensive suite of Trenchless Design and Supporting Engineering products across the various trenchless methods.

Trenchless Design

All trenchless design and engineering services completed by Future Proof Solutions that involve the application of engineering principles are undertaken under the supervision of either a registered NER and/or **Profile & Alignment**

Trenchless Method

All trenchless design and engineering services completed by Future Proof Solutions that involve the application of engineering principles are undertaken under the supervision of either a registered NER and/or **Site Layouts; Execution Summaries; BHA Summaries; ITPS & Logs**

Trenchless Implementation

All trenchless design and engineering services completed by Future Proof Solutions that involve the application of engineering principles are undertaken under the supervision of either a registered NER and/or **Drilling Fluid/Equipment Plan; Group Mix/Equipment Plan; Breakover Drawing; Anchor & Thrust Restraint Design; Pulling Head Design**

Materials Analysis

All trenchless design and engineering services completed by Future Proof Solutions that involve the application of engineering principles are undertaken under the supervision of either a registered NER and/or **Installation & Thrust Calculation; Pipe Integrity Analysis; Enveloper Integrity Analysis; Breakover Analysis**

Execution Analysis

All trenchless design and engineering services completed by Future Proof Solutions that involve the application of engineering principles are undertaken under the supervision of either a registered NER and/or **Settlement Analysis; Hydrofracture Analysis; Vibration Analysis; Heave Analysis; Torque & Drag Analysis**

Independent reviewers

All **trenchless design and engineering services** completed by **Future Proof Solutions** that involve the application of engineering principles are undertaken under the supervision of either a **registered NER** and/or **RPEQ engineer**, based on the client's preference. Designs are **independently reviewed** by internal and/or external **registered professionals** to ensure **compliance with industry standards, appropriate trenchless methodologies, pipe material specifications, and project-specific requirements**. Independent reviews extend beyond trenchless design principles to assess **material performance, long-term pipe suitability**, and interfaces with existing services and infrastructure. Refer to your design deliverables for the names and registration credentials of the assigned independent reviewers.

Quality management and insurances

Trenchless designs and engineering by Future Proof Solutions are prepared in compliance with our Integrated Management Systems, and within the scope of our Insurance Coverage.



ISO 45001:2018
OHS Management
Systems
ID: FPSQ01-CCWW03



ISO 9001:2015
Quality management
systems
ID: FPSQ01-CCCQ03



ISO 14001:2015
Environmental
management systems
ID: FPSQ01-CCEE03



Professional Indemnity Insurance / 2025

Future Proof Solutions maintains annually renewed Professional Indemnity Insurance that covers the **full scope of our trenchless construction design services** of up to **\$5 million** per claim. All engineering outputs, technical representations, and deliverables provided by our team are included under this policy, ensuring protection and accountability across all trenchless design projects we undertake.

Public and Products Liability Insurance / 2025

Future Proof Solutions maintains annually renewed Public and Products Liability Insurance that provides coverage of up to **\$20 million** per claim. This policy ensures protection against **third-party personal injury and property damage** arising from our operations, equipment, or deliverables, supporting accountability and risk management across **all trenchless construction works we are involved with onsite**.



Contact Us

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Future Proof Solutions, a **BORELY** user



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