



Creating what matters for
future generations

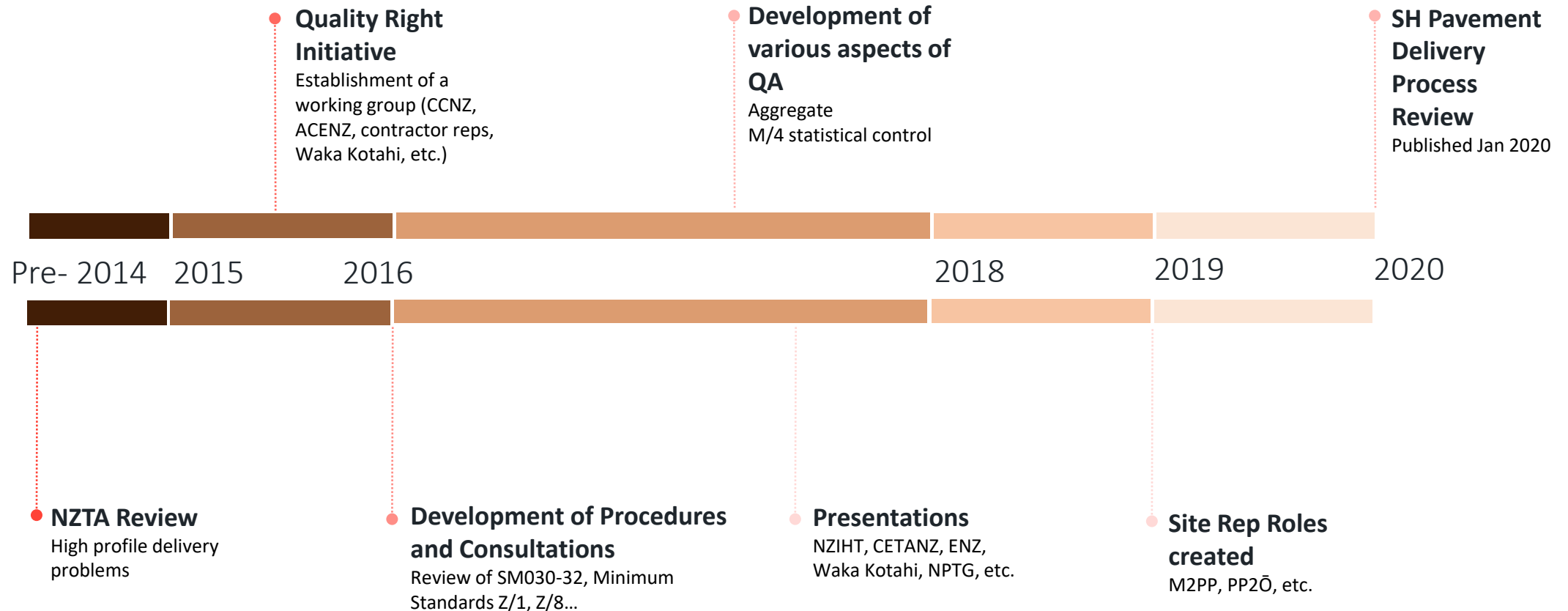
Quality Right

Russell Steele



Quality Right Initiative

Created in response of the high-profile pavement delivery problems



Role of NZTA's Principal's Site Representative

- Quality Right is NOT about diluting the QA responsibility of the contractor
- It is about **enabling the sharing and use of information about the works to support informed, collaborative decision making, delivering sustainable, resilient pavements.**

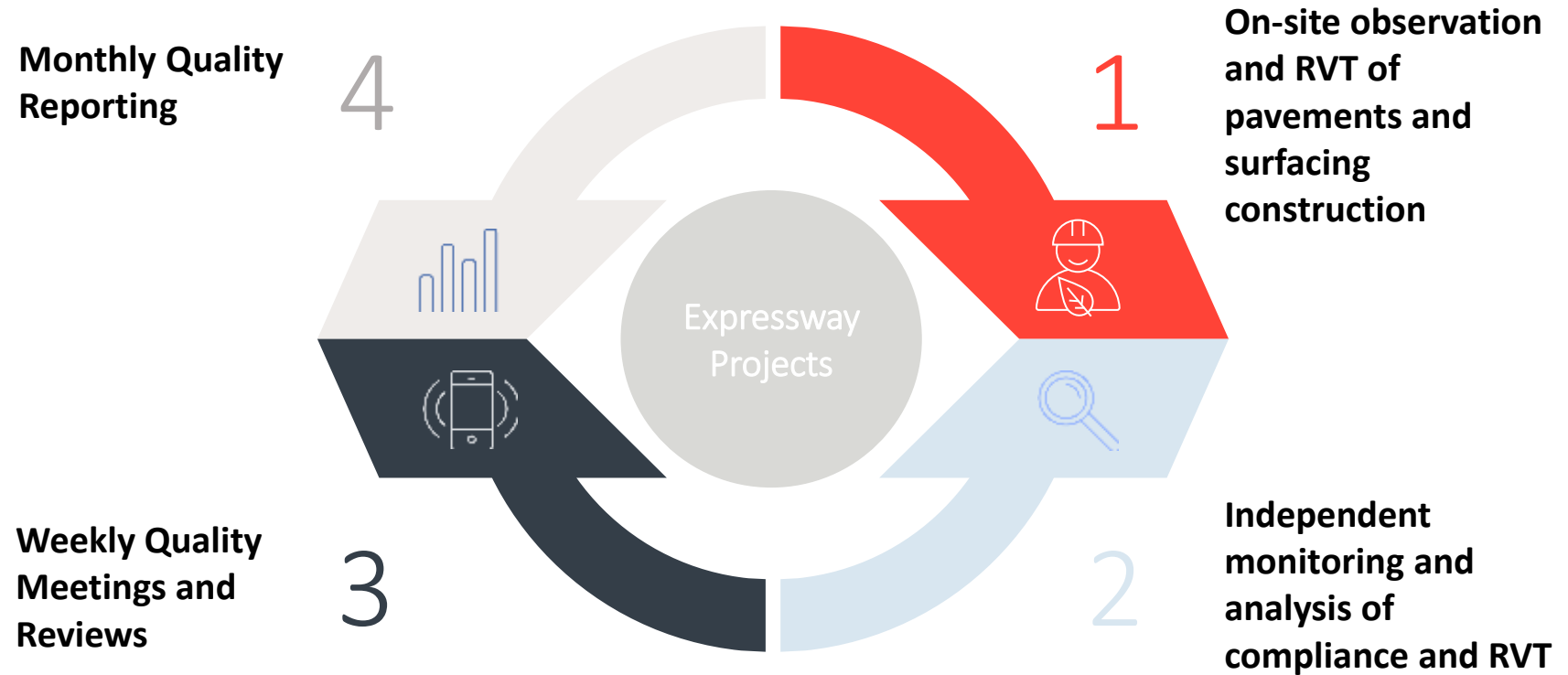
Role:	Principal's Site Representative (Pavement and Surfacing)
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Purpose:	To deliver tangible evidence to NZTA (the Principal) that the pavement and surfacing works have been delivered, fully in accordance with the Contract Specification, Standards and performance measures by: • On site surveillance of the pavement and surfacing works, against the methodology agreed in the Quality Management Plan. • Inspection, testing, verification, certification and hold point reviews of the pavement and surfacing works, in accordance with NZTA Minimum Standards Z/1 and Z/8. .
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Where has Quality Right been Applied?

- Review looked at the following key aspects:
 - ITP and RVT plans
 - Design
 - Supervision
 - Availability/visibility of test data
 - Hold/witness points
 - Quality focussed meetings
- Proposed improvements and recommendations endorsed at senior leadership level

How has Quality Right been Applied?



The Quality Right Team

Collaborative Approach



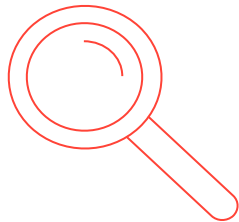
- Ability to communicate across stakeholders
- Awareness of contractual drivers
- Resilience to pushback pressure
- Knowledge sharing

Technical Knowledge



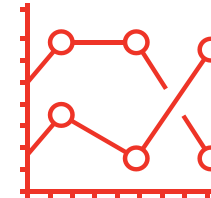
- Experienced practitioners
- Understanding of materials, testing, and analysis
- Wider expert network
- Knowledge sharing

Focus



- Specific focus on constructing compliant pavement and surfacing
- Understanding Specification requirements
- Review
- Hold points and witness points

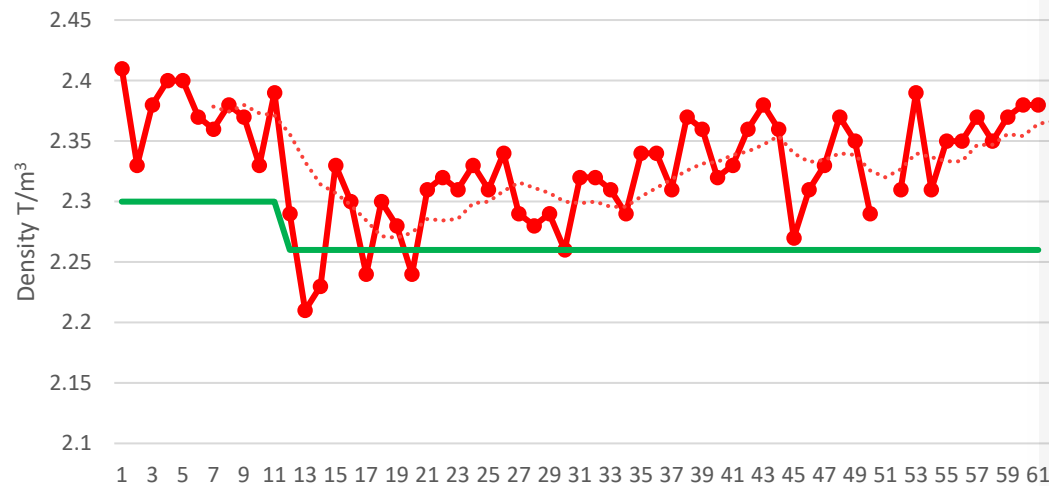
Digital Tools



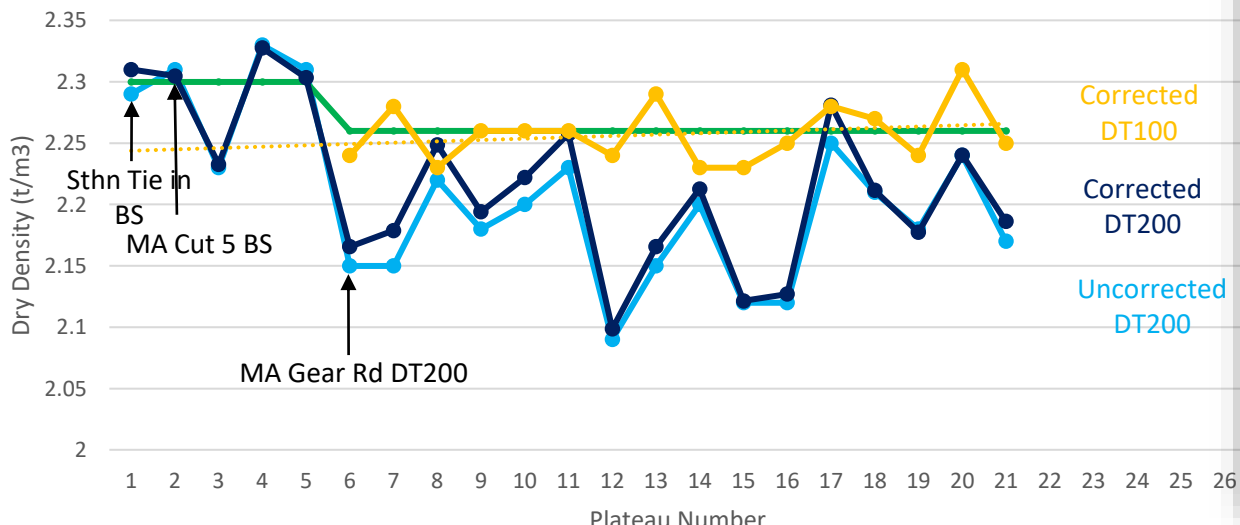
- Awareness and utilisation of tools
- Sound documentation
- Strive to standardisation
- Up-to-date reporting (Dashboard)

Tracking and Analysis

Post Hoe Laboratory Stab. PP65 MDD Tracking



Stabilised PP65 Plateau MDD Tracking



CH4700-7000 (Cut 5) Northbound Redo

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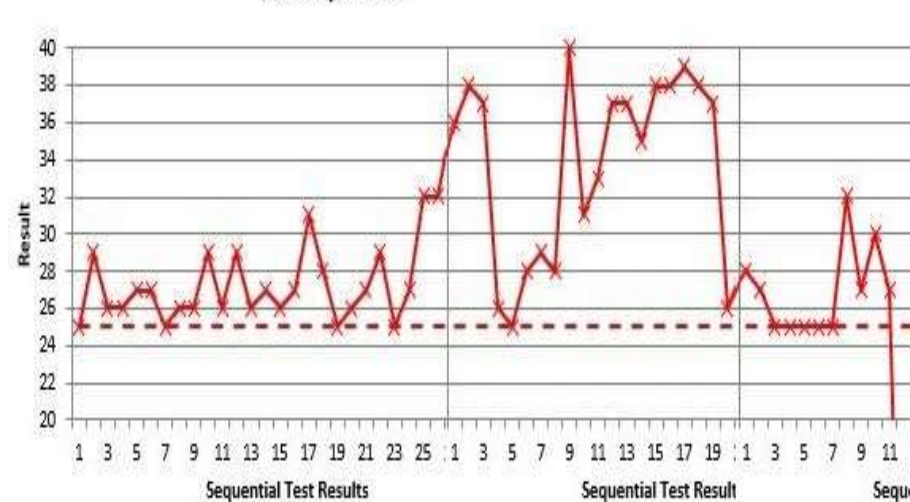
CH4700-7000 (Cut 5) Southbound Redo (trials CH5320-7000 SB)

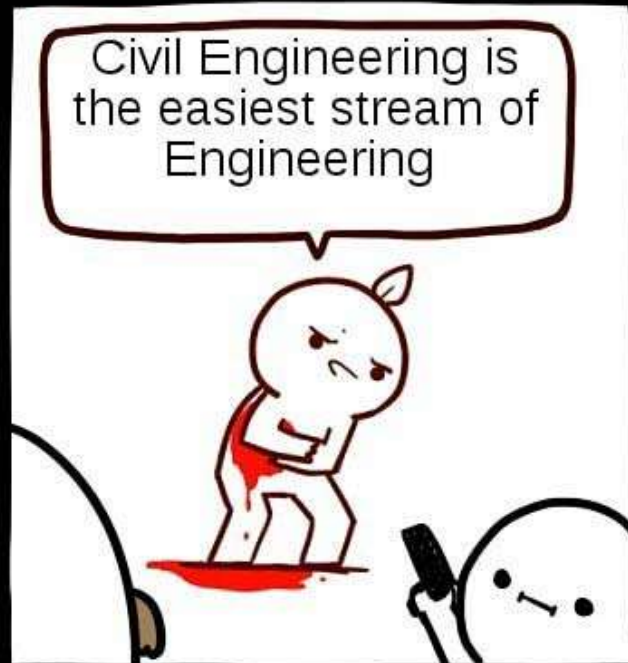
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CH7000-8050 (Bridge 8 to School Rd)

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Sand Equivalent





SRGRAFO

Observations / Interventions

QA – Testing & RVT

Issues with calculation error in testing document, incorrect completion of test, non compliant application of random testing of lots, some non complying material
RVT carried out to clarify situations

QA - Analysis

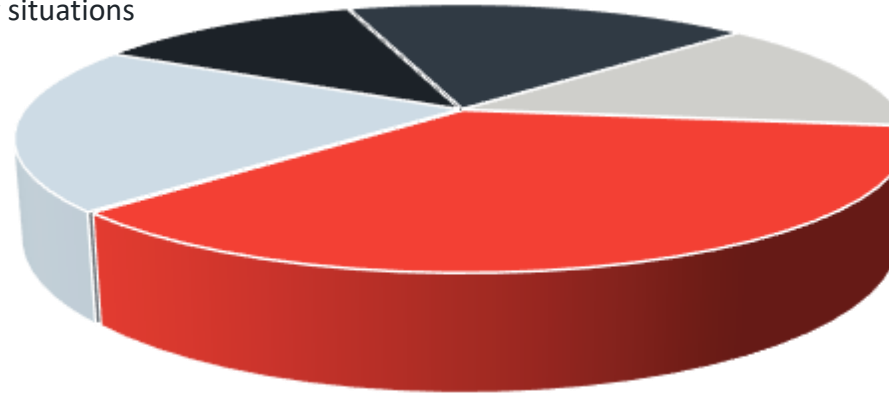
Data analysis has shown variability within the pavement layer that could lead to premature failure and requires investigation

QA - Reporting

A significant number of issues raised with respect to test result accuracy, reporting and storage
Lack of information on hold and witness point sign-off
Both mean very poor audit trail

NCR's, QIR's

- Non-conformance reports raised by contractor once test result analysis completed



Construction

- A number of changes to construction methods were suggested by QR and adopted.
- Focus on pavement construction methodologies and poor quality of finished pavements
- RVT on construction levels

Asphalt Production

- Use of different asphalt plants meant production required careful review to ensure compliance

Technical Review

Independent specialist to review potential construction issue
Advice sought from other industry specialists
Issues of asphalt quality triggered internal asphalt production reviews and redesigns

Grade 6 Chip Seal



Core Locations and Backfilling



NDM DT Mode



NDM DT Mode



NDM DT Mode



Values of Quality Right

