<b>Downer</b>	

## Inspection and Test Plan - Resurfacing

Site Location: Herbert street RAB , Invercargill

ITP
Prepared
By:

Date:

Nik Basarge

ITP Approved By:

Edward Hailes

Edward Hailes

Hold Point Work shall not proceed past Hold Point until acceptance criteria is reached and verified.

ITP Reference Number	ACTIVITY DESCRIPTION	VERIFICATION ACTIVITY	METHODS OR REFERENCE	FREQUENCY	ACCEPTANCE CRITERIA	Hold Point	Records	Responsible Person	Records/Remarks incl NCR ref (sign & date)
1.0 Gene	eral								
1.1	Public Notification	Communication	Media/Letter Drop	Prior to establishing on site and as situation changes.	*All relevant properties and stakeholders contacted by works notice. *TREIS notification	Mandatory HOLD POINT	Letter	Paving Manager / Contract Manager	
1.2	Crew Instructions / Crew Briefing Plans	Approval	Written Plan	Prior to work commencing.	Crew Instructions available including all surfacing requirements of the site.	Mandatory HOLD POINT	CBPs	Paving Manager / Contract Manager	
1.3	TMP	Approval	Approved Plan	Prior to work commencing.	*Approved plan from Southland TMC (Simon Wilson) *CoPTTM onsite record form used	Mandatory HOLD POINT	TMP	Paving Manager / Contract Manager	
1.4	Pavement Marking - pickup of existing	Data	Road Runner or site measurement	Prior to milling commences	Road Runner or site measurements	Mandatory HOLD POINT	Data	Paving Manager / Contract Manager	
1.5	Weather	Approval	Weather Forecast Data	Daily	Consistent dry weather with no significant rainfall. +10°C for duration of paving operations.	Mandatory HOLD POINT	Site Diary	Foreman / Contract Manager	
1.6	Resurfacing Extents	Approval	Site-visit	Prior to commencement	ICC and Paving Manager visit site to mark and agree extents.	Mandatory HOLD POINT	Site-visit notes	Paving Manager / Contract manager	
2.0 Milli	ng Operations (Fu	ull Mill at 75mm)							
2.1	Services located and marked-out.	Lay out	-	All services within milling limits	Site walk over to confirm all services are marked prior to milling operations beginning and also documented on CBP so all staff are aware.	Mandatory HOLD POINT	Site Photos	Foreman / QA	
2.2	Dip-checks	Measure	Measure each side of the cut the milling machine makes	Every 10m, each mill run	*Dip check during milling to ensure 45mm mill depth achieved prior to placing mix.	Mandatory HOLD POINT	-	QA / Foreman	
2.3	Overmilling	Photos and measurements	Photos and measurements	Prior to resurfacing	ICC and Paving Manager visit site to mark and agree extents.	Mandatory HOLD POINT	Photos and measruements	Paving Manager / QA	
2.4	Pre-levelling	Photos and measurements	Photos and measurements	Prior to resurfacing	*ICC provided opportunity to inspect surface and agree extents of any pre- levelling if required.	Mandatory HOLD POINT	Site-visit notes	Paving Manager / QA	
3.0 AC1	4H Paving (75mm	)							
3.0	AC14H Mix Design verification	Lab Testing	NZTA M/10	Prior to commencement	*Mix design compliant with traffic category (Heavy Traffic) *Mix design compliant	Mandatory HOLD POINT	IANZ Lab Reports	Paving Manager QA	

Production Testing: Binder Content, Aggregate Grading, Maximum Specific Gravity, Temperature	Lab Testing	NZTA M/10	1 / 200t or maximum of 3 required per production lot	*As per material mix design and JMF specification and within production tolerances of table 5.3 NZTA M/10. *[exception to production testing that night if <100T were produced after a night where production testing was performed]		IANZ Lab Reports	Paving Manager QA
Membrane	On-site check	NZTA M/10	Prior to AC14H	*Single coat G4 chipseal with 1.5 l/m² residual binder.	Mandatory HOLD POINT	Photos	Paving Manager QA
Preparation	Visual	NZTA M/10	Every section	Paving Plan to be completed for every night with dimensions		Paving plan and CBPs	Paving Manager / Foreman
Cold Joints	Visual	NZTA M/10	Every join	*joints not to be below a trafficked wheel path - M10 *transverse joints (start and finish) to be offset by 2m in each layer		Photos	Foreman
Check asphalt surface for deficienceis and self identify	Visual Inspection	NZTA M/10	Continuous during paving operation and site walk over post paving.	*Visual inspection during paving operation, any areas of segregation are to be addressed prior to compaction	Mandatory HOLD POINT	Photos and visual inspeciton	Paving Manager / QA
Laying Temperature and Compaction	Approval	NZTA M/10	Every truck load	*Arrival temperature within 150deg +/- 10deg to ensure compaction can be achieved as per mix design.	Mandatory HOLD POINT	IANZ Lab Reports	QA
lity Assurance							
AC14H Sample Results Submission	Lab Testing	NZTA M/10	Once samples have been tested	*Production samples meet NZTA M/10 specification		IANZ Lab Reports	Paving Manager
Core sampling result submission	Lab Testing	NZTA M/10	Once samples have been tested	*Core samples meet NZTA M/10 specification		IANZ Lab Reports	Paving Manager
Surface Inspection	Check ride quality and surface irregularities using straight edge	NZTA M/10 T/10	Continuous	*Site passes the initial NAASRA, <5mm deviation from 3m Straight edge.		Site Inspection Record, NAASRA report	Paving Manager
Pavement Marking	Completed	NZTA P/22	Once	*Re-applied as per the existing layout and complies with NZTA P/22 specifications *reinstatement within 24hrs of project finishing. Temporary limit lines installed daily.		-	Paving Manager
Service Lids	Completed	-	At completion	Any service lids that were lowered and not at correct level following works are raised.		-	Paving Manager / QA
Bandaging	Completed	-	At completion	Start and stop extents bandaged.		-	Foreman / QA
RAMM pavement and surface records	RAMM records	As requested by Asset Management Team	Within 7 working days of work completed.	*Pavement structural layer extents recorded and verified by Paving Manager *Surfacing layer extents recorded and verified by Paving Manager *Mix design information of all mix provided.		RAMM records	Paving Manager
Final Measurement Check	Site measurements	Standard practice	At completion	Accurate as-built measurements recorded for claim.		As Builts	QA / Paving Manager
	Binder Content, Aggregate Grading, Maximum Specific Gravity, Temperature  Membrane  Preparation  Cold Joints  Check asphalt surface for deficienceis and self identify  Laying Temperature and Compaction  lity Assurance  AC14H Sample Results Submission  Core sampling result submission  Surface Inspection  Pavement Marking  Service Lids  Bandaging  RAMM pavement and surface records  Final Measurement	Binder Content, Aggregate Grading, Maximum Specific Gravity, Temperature  Membrane  On-site check  Preparation  Visual  Cold Joints  Visual  Check asphalt surface for deficience and self identify  Laying Temperature and Compaction  Laying Temperature and Compaction  Laying Temperature and Compaction  Laying Temperature and Compaction  Core sampling results Lab Testing  Core sampling result submission  Surface Inspection  Check ride quality and surface irregularities using straight edge  Pavement Marking  Completed  Bandaging  Completed  RAMM pavement and surface records  Final Measurement  Site massurements	Binder Content, Aggregate Grading, Maximum Specific Gravity, Temperature  Membrane  On-site check  NZTA M/10  Preparation  Visual  NZTA M/10  Cold Joints  Visual  NZTA M/10  Check asphalt surface for deficienceis and self identify  Laying Temperature and Compaction  Laying Temperature and Compaction  Approval  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  Ity Assurance  AC14H Sample Results Submission  Core sampling result submission  Core sampling result submission  Check ride quality and surface Inspection  Straight edge  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10  NZTA M/10  Approval  NZTA M/10  NZTA M/10	Sinder Content, Aggregate Grading, Maximum Specific Gravity, Temperature	Froduction Testing: Elinder Content, Aggregate Grading, Aggregate Grading, Blinder Content, Aggregate Grading, Begelific Gravity, Temperature  Membrane  On-site check  NZTA M/10  Prior to AC14H  Freparation  Visual  NZTA M/10  Prior to AC14H  Freparation  Visual  NZTA M/10  Every section  With dimensions  Visual  NZTA M/10  Every section  With dimensions  Visual  NZTA M/10  Every join  Transverse joints (start and finish) to be offset by Zm in each layer deficiencies and self identity  Laying Temperature and Compaction  Compaction  Approval  Approval  NZTA M/10  NZTA M/10  Every truck load  Continuous during paving operation, and site walk over post paving.  Laying Temperature within 150deg +/- 10deg to ensure content on an be achieved as per mix design.  Italy ASSURANCE  AC14H  Sample Results Submission  NZTA M/10  NZTA M/10  Conce samples have been tested Submission  Surface Inspection  Visuality and surface for deficiencies and self identity  AC14H  Sample Results Submission  Core sampling result Submission  Surface irregularities using straight edge  NZTA M/10  NZTA M/10  Conce samples have been tested Submission  Surface irregularities using Straight edge  NZTA M/10  Continuous  Sirile passes the initial NASARA, <5mm deviation from 3m Straight edge.  Re-applied as per the existing layout and compiles with NZTA P/22 specifications  Pavement Marking  Completed  - At completion  Any service lids that were lowered and not at correct level following works are raised.  RAMM pavement and surface records  Final Measurement  Six measurement  Six measurement  Six measurement  Six measurement  Accurate as-built measurements recorded  Accurate as-built measurements recorded	Indication (Esting) Bridge Commit, Aggregate Grading, Aggregate Gradin	Production feating   Border Content   Border Content

Quality Record Close Out:		Date:		
	(signature)			

(name)

This record to Contract File.