APPENDIX B

Highway Construction Administration Forms

The latest versions of these forms can be found on Alberta Transportation's website: https://www.transportation.alberta.ca/919.htm

SUMMARY TABLE - APPENDIX B HIGHWAY CONSTRUCTION ADMINISTRATION FORMS (TESTING REQUIREMENTS AND REPORTING FORMS)

Form No.	Form Name	Designation			
B.01	Minimum QA Testing Requirements - ACP - Managed QA	MQA/12 (2 Pages)			
B.02	Minimum QA Testing Requirements - ACP - Superpave	SMQA/12 (2 Pages)			
B.03	Minimum QA Testing Requirements - ACP – Hot In-Place Recycle	HIRQA/12 (2 Pages)			
B.04	Minimum QA Testing Requirements – Cold In- Place Recycling	1 CIRQA/12			
B.05	Minimum QA Testing - Subgrade Prep & Grading	SUBGQA/12			
B.06	Minimum QA Testing Requirements – Granular Base Course and Full Depth Reclamation	GBCQA/12			
B.07	Asphalt Mix Design and Job Mix Formula Summary Sheet	ACPJMF/12			
B.08	Superpave Mix Design and Job Mix Formula Summary Sheet	SUPJMF/12			
B.09	Lot Paving Report	MAT 6-78/12			
B.10	Superpave Lot Paving Report	MAT 6-78S/12			
B.11	Hot In-Place Lot Paving Report	MAT 6-78H/12			
B.12	Daily Compaction Report - Grading and Subgrade Projects	MAT 6-1/12			
B.13	Daily Report - Granular Base Course (Used also for FDR Compaction)	MAT 6-60/12			
B.14	Daily Compaction Report - Cold In-Place Recycling	CIR1/12			
B.15	Appeal Initialization Form	MAT 6-92A/11			
B.16	Appeal Testing	MAT 6-92/11			
B.17	Segregation Worksheet	MAT 6 – 95/12			
B.18	Segregation Summary Report	MAT 6 – 95s/12			
B.19	Profilograph Index Report	MAT 6-73/12			
B.20	Ride Quality Summary and Areas of Localized Roughness Summary	Excel Format			
OA Testing and Reporting Requirements for Cuthack Asphalt Mixes Emulsified					

QA Testing and Reporting Requirements for Cutback Asphalt Mixes, Emulsified Asphalt Mixes and Cement Stabilized Base Course are inactive and not included here. If needed, contact Technical Standards Branch.

MINIMUM QUALITY ASSURANCE TESTING REQUIREMENTS ASPHALT CONCRETE PAVEMENT - EPS SPEC 3.50, MANAGED QA

MQA	TEST /12	STANDARD	MINIMUM FREQUENCY	ATT- DATA SHEETS
CAMI	PLING			
1.	Mix	ATT-37	¹ Five per each Lot (full Production)	
2.	Cores (Obtained by Contractor) Stratified Random Test Sites for ACP Projects	ATT-56	Each Lot	MAT 6-82
	Coring (Monitor Contractor's Coring)	ATT-5	One per Segment	
3.	Aggregate	ATT-38	As required for Correction Factor	
1.	TESTING Asphalt Content	ATT-12 Part II or ATT-74	² One per Segment for each QA Acceptance Lot	MAT 6-79 MAT 6- 98 MAT 6- 99 MAT 6- 100
2.	Correction Factor, Extracted Asphalt Content	ATT-12 Part III	As specified in ATT-12 Part III	MAT 6-101 MAT 6-75
3.	Correction Factor, Ignition Asphalt Content	ATT-74	As specified in ATT-74 Part II	MAT 6-99
4.	Mix Moisture Content	ATT-15	¹ Five tests per Lot (Full Production)	MAT 6-80
5.	Field Formed Marshall Briquettes	ATT-13	¹ Five tests per Lot (Full Production)	MAT 6-80
AGGI	REGATE TESTING Extraction or Ignition Sieve Analysis	ATT-26	Each sample, QA Acceptance Lot As required	MAT 6-80
2.	Correction Factor Aggregate Sieve Analysis	ATT-26	As required	MAT 6-75 MAT 6-25
OTHI 1.	ER RELATED TESTING Density Immersion Method, Saturated Surface Dry	ATT-7	Each core or formed specimen	MAT 6-80
2.	Voids Calculations, Cores or Formed Specimens	ATT-36	Each core or formed specimen	MAT 6-80 MAT 6-79
3.	Percent Compaction, Asphalt Concrete Pavement	ATT-67	One per Segment	<u>MAT 6-79</u>
PAVE 1.	MENT SURFACE Smoothness ³	ATT-59	Each Sublot	MAT 6-73
2.	Segregation	Paving Guidelines & Segregation Rating Manual	Each Lane.Km	<u>MAT 6-95</u>

REPORTING 1. All Approved Asphalt Mix Designs and Changes in Job Mix Formula		Email completed Asphalt Mix Design & JMF Summary Sheet to Project Sponsor and Surface Engineering & Aggregates Section at trans.constructqa@gov.ab.ca. Provide written documentation to Contractor for approved designs and JMF changes. Included copies of all mix designs and JMF approvals in Final Details.			
2.	Lot Paving Report	Complete MAT 6-78 Lot Paving Report. Submit on a weekly basis to Project Sponsor and to trans.constructqa@gov.ab.ca			
3.	Profilograph & Segregation	Include MAT 6-73 and MAT 6-95s in Final Details as outlined in Engineering Consultant Guidelines for Highway and Bridge Projects - Volume 2, Construction Contract Administration. Email early submission copy of Final Details ACP EPS or Final Details IRI ACP – EPS form to trans.constructqa@gov.ab.ca within one month of paving completion.			
	 Note: One sample for the first two hours of production; one immediately after, remaining samples at random over the rest of the day. Full production is considered when a Lot has more than eight hours of plant production. Note: On QC Acceptance Lots a minimum of one asphalt content on loose mix using test procedures specified in Table 3.50.4. TEST 				
³ Note:	METHODS ON MANAGED QA PROJECTS 3 Note: California Profilograph method or International Roughness Index method using inertial profilers (testing provided by the Contractor) as outlined in contract.				

Testing requirements as per MQA specifications are briefly summarized as follows:

- Consultant to sample loose mix from behind the paver and form Marshall briquettes.
- Contractor to obtain all core samples at site locations determined by the Consultant.
- Materials processing and QA testing is to done in a laboratory facility (mobile or stationary) that is no further than one hour from the project.
- Contractor quality control test results for asphalt content and gradation will be used for
 conditional acceptance of most Lots. For these QC Acceptance Lots the Consultant is do a
 minimum of one asphalt content test per Lot on loose mix using the specified test procedures.
 For QA Acceptance Lots report only the QA test results on the Lot Paving Report. For QC
 Acceptance Lots report all available QA results and the QC test results for asphalt content and
 gradation. Indicate on the Lot Paving Report which are QC and which are QA.
- On QC Acceptance Lots the Target Asphalt Content is to be used to determine air voids.
- The minimum number of QA Lots in which full QA testing is completed is outlined in section 3.50.1.2 Definitions of Specification 3.50 ACP-EPS.
- At time of publication the Department is transitioning to the use of inertial profilers and International Roughness Index (IRI) criteria for pavement smoothness. Reporting requirements are still to be finalized and will be released in the form of a Construction Bulletin or other means.

MINIMUM QUALITY ASSURANCE TESTING REQUIREMENTS ASPHALT CONCRETE PAVEMENT - SUPERPAVE SPEC 3.53, MANAGED QA

SM	TEST QA/12	STANDARD	MINIMUM FREQUENCY	ATT- DATA SHEETS
CAR	MPLING			
1.	Mix	ATT-37	¹ Five per each Lot (full Production)	
2.	Cores (Obtained by Contractor) Stratified Random Test Sites for ACP Projects	ATT-56	Each Lot	MAT 6-82
3.	Coring (Monitor Contractor's Coring)	ATT-5	One per Segment	
4.	Aggregate	ATT-38	As required for Correction Factor	
мт	X TESTING		² One per Segment for	MAT 6-79
l.	Asphalt Content	ATT-12 Part II or ATT-74	each QA Acceptance Lot	MAT 6- 98 MAT 6- 99
2.	Correction Factor, Extracted Asphalt Content	ATT-12 Part III	As specified in ATT-12 Part III	MAT 6-100 MAT 6-101 MAT 6-75
3.	Correction Factor, Ignition Asphalt Content	ATT-74	As specified in ATT-74 Part II	MAT 6-99
4.	Mix Moisture Content	ATT-15	¹ Five tests per Lot (Full Production)	MAT 6-80s
5.	Field Formed Gyratory Specimens(N design)	AASHTO T 312	¹ Five tests per Lot (Full Production)	MAT 6-80s
AG	GREGATE TESTING			
1.	Extraction or Ignition Sieve Analysis	ATT-26	Each sample, QA Acceptance Lot	MAT 6-75
2.	Correction Factor Aggregate Sieve Analysis	ATT-26	As required	MAT 6-25
ОТІ	HER RELATED TESTING			
1.	Density Immersion Method, Saturated Surface Dry	ATT-7	Each core or formed specimen	MAT 6-80
2.	Voids Calculations, Cores or Formed Specimens using Maximum Specific Gravity(Gmm)	TLT-309	Each core or formed specimen	MAT 6-80s MAT 6-79
3.	Percent Compaction, Asphalt Concrete Pavement (% of Gmm)	TLT-309	One per Segment	<u>MAT 6-79</u>
4.	Maximum Specific Gravity of Bituminous Mixes (Gmm)	ASTM D2041	¹ Five tests per Lot (Full Production)	
PAV	VEMENT SURFACE Smoothness ³	ATT-59	Each Sublot	MAT 6-73
2.	Segregation	Paving Guidelines & Segregation Rating Manual	Each Lane.Km	MAT 6-95

REPORTING 1. All Approved Asphalt Mix Designs and Changes in Job Mix Formula		Email completed Superpave Mix Design & JMF Summary Sheet to Project Sponsor and Surface Engineering & Aggregates Section at trans.constructqa@gov.ab.ca. Provide written documentation to Contractor for approved designs and JMF changes. Included copies of all mix designs and JMF approvals in Final Details.			
2.	Superpave Lot Paving Report	Complete MAT 6-78s Superpave Lot Paving Report. Submit on a weekly basis to the Project Sponsor and email to trans.constructqa@gov.ab.ca.			
3.	Profilograph & Segregation	MAT 6-73 and MAT 6-95s to be included in Final Details as outlined in Engineering Consultant Guidelines for Highway and Bridge Projects - Volume 2, Construction Contract Administration. Fax early submission copy of Final Details ACP EPS or Final Details IRI ACP – EPS form to 422-2846 or email to trans.constructqa@gov.ab.ca within one month of paving completion.			
	¹ Note: One sample for the first two hours of production; one immediately after, remaining samples at random over the rest of the day. Full production is considered when a Lot has more than eight hours of plant production.				
² Note:	² Note: On QC Acceptance Lots a minimum of one asphalt content on loose mix using test procedures specified in Table 3.53.4. Test Methods on Superpave Managed QA Projects.				
³ Note:					

Testing requirements as per MQA specifications for Superpave are briefly summarized as follows:

- Consultant to sample loose mix from behind the paver for the formation of Gyratory specimen (to Ndesign) and determination of Maximum Specific Gravity (Gmm).
- Contractor to obtain all core samples at site locations determined by the Consultant.
- Materials processing and QA testing is to done in a laboratory facility (mobile or stationary) that is no further than one hour from the project.
- Contractor quality control test results for asphalt content and gradation will be used for conditional acceptance of most Lots. For these QC Acceptance Lots the Consultant is do a minimum of one asphalt content test per Lot on loose mix using the specified test procedures.
- For QA Acceptance Lots report only the QA test results on the Lot Paving Report. For QC Acceptance Lots report all available QA results and the QC test results for asphalt content and gradation. Indicate on the Lot Paving Report which are QC and which are QA.
- On QC Acceptance Lots the Target Asphalt Content is to be used to determine air voids.
- The minimum number of QA Lots in which full QA testing is completed is outlined in section 3.53.1.2 Definitions of Specification 3.53 Superpave-EPS.
- At time of publication the Department is transitioning to the use of inertial profilers and International Roughness Index (IRI) criteria for pavement smoothness. Reporting requirements are still to be finalized and will be released in the form of a Construction Bulletin or other means.

MINIMUM QUALITY ASSURANCE TESTING REQUIREMENTS HOT IN-PLACE RECYCLED ASPHALT CONCRETE PAVEMENT (HIR)

	HOT IN-PLACE RECYCLED AS				
HIRO	TEST QA/12	STANDARD	MINIMUM FREQUENCY	ATT- DATA SHEETS	
CAM	PLING				
1.	Mix	ATT-37	¹ Five per Lot (full Production)		
2.	Cores (Obtained by Contractor)	ATT-56	Each Lot	MAT 6-82	
	Stratified Random Test Sites for ACP Projects provided by Consultant Consultant Monitors Contractor's Coring	ATT-5	One per Segment		
MIV	TESTING		One 5 000 g sample per		
1.	Asphalt Recovery by Abson or Evaporator	ASTM D1856 or ASTM 5404	typical Lot ²		
2.	Standard Penetration of Recovered Asphalt	ASTM D5	One per Asphalt Recovery ²		
3.	Asphalt Content	ATT-12 Part II	One per Asphalt	MAT 6-79	
4.	Mix Moisture Content	ATT-15	Recovery. Each Mix Sample	MAT 6-80	
5.	Field Formed Marshall Briquettes	ATT-13	Each Mix Sample	MAT 6-80	
AGG	REGATE TESTING Extraction Sieve Analysis	ATT-26	One per Asphalt Recovery	MAT 6-80	
ОТН 1.	ER RELATED TESTING Density Immersion Method, Saturated Surface Dry	ATT-7	Each core or formed specimen	MAT 6-80	
2.	Voids Calculations, Cores or Formed Specimens	ASTM D3203	⁴ Each core or formed specimen	MAT 6-80 MAT 6-79	
3.	Maximum Specific Gravity of Bituminous mix(Gmm)	ASTM D2041	Each mix sample		
4.	Percent Compaction, ACP (% of Gmm)		³ One per Segment	MAT 6-79	
PAV 1.	EMENT SURFACE Smoothness ⁵	ATT-59	Top Lift	<u>MAT 6-73</u>	
2.	Segregation	Paving Guidelines & Segregation Rating Manual	Top Lift	<u>MAT 6-95</u>	
REPORTING 1. HIR Lot Paving Report			HIR Lot Paving Report. Suasis and email to trans.constr		
2.	Profilograph & Segregation	Include MAT 6-73 and MAT 6-95s in Final Details as outlined in Engineering Consultant Guidelines for Highway and Bridge Projects - Volume 2, Construction Contract Administration. Sent early submission copy to Surface Engineering & Aggregates Section by email to trans.constructqa@gov.ab.ca within one month of paving completion.			

¹ Note: One sample for the first 0.5 lane kilometres of equipment operation; the second sample shortly thereafter; remaining samples at random over the remainder of the day(s). Full production is considered when a Lot is approximately 3 lane kilometres of equipment operation. For each sampling instance two duplicate 5000 gram samples shall be bagged, identified and stored. One of the duplicate samples will be used for possible penetration testing of the recovered asphalt. The second duplicate sample is to be available for possible appeal testing for Marshall air voids.

OA testing requirements as per HIR specifications are briefly summarized as follows:

- Contractor to obtain all core samples at site locations determined by the Consultant.
- Core densities for all Lots are to be determined by the Consultant.
- Consultant to sample loose mix from behind the paver to form Marshall briquettes and determine Maximum Specific Gravities (Five each per Lot under full production). All of these tests are to be done in an on-site lab (i.e. located within one hour of the project). For each sampling of loose mix the consultant is to bag, identify and store two 5,000 grams.
- Asphalt recovery and penetration testing of the recovered asphalt shall be completed for each Lot on one of the duplicate loose mix samples collected. No further asphalt testing is required for that Lot if the first test result does not fall within a penalty or reject assessment. If the first test result does fall within the range of penalty or reject then the remaining split samples for that Lot shall be tested for assessment purposes. If the test results for asphalt penetration are within the limits of Figure 1 of the HIR specification amendment for three consecutive Lots, the testing frequency may be reduced to one per five Lots of HIR production.
- Contractor quality control test results for asphalt content and gradation are to be reported on the HIR Lot Paving Report for all Lots.
- Actual testing requirements may be modified by contract special provisions.
- At time of publication the Department is transitioning to the use of inertial profilers and International Roughness Index (IRI) criteria for pavement smoothness. Reporting requirements are still to be finalized and will be released in the form of a Construction Bulletin or other means.

² Note: Up to five per Lot if penetration results of the first sample is in price reduction/rejection range.

³ Note: Frequency refers to Stratified Random Testing. Non-Random test frequency shall be 5 tests per Lot. (See Specification 3.50.4.4.2.4, Exclusions to Random Sampling)

⁴Note: Requires the determination of the mixture's Theoretical Maximum Specific Gravity for each mix sample.

⁵Note: California Profilograph method or International Roughness Index method using inertial profilers (testing provided by the Contractor) as outlined in contract.

MINIMUM QUALITY ASSURANCE TESTING REQUIREMENTS COLD IN-PLACE RECYCLED (CIR)

TEST CIRQA/12		STANDARD	MINIMUM FREQUENCY	
SAMPLING & FORMING MARSHALL BRIQUETTES 1. Loose CIR Mix (Sampled by the Contractor)		ATT-37	Three per Lot	
2.	150 mm by 150 mm Slabs or 150 mm diameter cores (Obtained by Contractor) Stratified random locations provided by the Consultant.	ATT-56 ATT-5	Each Lot One per Segment	Daily Compaction Report - CIR
MATERIAL TESTING 1. Field formed Marshall briquettes (Performed by the Contractor) 2. CIR Mix Moisture Content (Determined by the Contractor) 3. Slab/Core Moisture Content (by Consultant) 4. Bulk Density of Marshall briquettes (Determined by the Contractor) 5. Bulk Density of Slab/Core Samples (by Consultant) 6. Percent Compaction of CIR Mat (Determined by the Consultant)		ATT-13 75 blows at room temperature ATT-15, Part II ATT-15, Part II ASTM D1188 ASTM D6752 ATT-67	Each CIR Mix Sample Each CIR mix sample Each Core/Slab sample Each formed specimen Each slab or core specimen One per Segment	QC Marshall densities and CIR mix moisture results are to be provided to the Consultant. All QC and QA results to be reported on the Daily Compaction Report - CIR
CIR SUI	RFACE Smoothness (Three metre straightedge to be provided by the Contractor)		Check for surface deviations in excess of specification limits.	
REPORTING 1. CIR Mix Designs		Submit verified CIR mix designs to Project Sponsor and email to trans.constructqa@gov.ab.ca		
2. Daily Inspection Report		Completed by the Contractor as per section 3.56.6 Quality Control of Specification 3.56 Cold In-Place Recycling. Include as part of the Final Details submission.		
3.	Densities, Percent Compaction and Moisture Contents.	along with other constr	action Report - CIR. Submit ruction weeklies. Email to Su rans.constructqa@gov.ab.ca.	

MINIMUM QUALITY ASSURANCE TESTING REQUIREMENTS FOR SUBGRADE PREPARATION AND GRADING PROJECTS

TOR SEDGRIDE I			
TEST	STANDARD	FREQUENCY	ATT DATA
SUBGQA/12		(Minimum)	SHEET(S)
MOISTURE DENSITY TESTS			
 Standard Compaction, -5000 um Standard Compaction, +5000 um Standard Compaction, One Point 	ATT-23 ATT-19 ATT-20	One for each representative soil type tested for in-place density.	MAT 6 - 22
DENSITY OF SOIL (In-Place)			
 Sand Cone Method, or Rubber Balloon Method, or Nuclear Density Gauge Method. Correction Factor 	ATT-9 ATT-8 ATT-11 ATT-48	Top 0.3 m, one test per 300 m. Below the top 0.3 m, 3 tests per metre of fill per 1000 m.	MAT 6 - 23 MAT 6 - 34 MAT 6 - 54
Note: The nuclear method may only be used under the following conditions: (a) The gauge calibration is checked			
yearly and a log book of standard counts is maintained as outlined in ATT-11, Section 3.7. (b) Percent compaction and a rock correction are determined as outlined in ATT-11, Section 3.9.1. Correction factors		Each density test corrected.	
done as outlined in ATT-48 SOILS IDENTIFICATION, HAND METHOD	ATT-29		N/A
MOISTURE CONTENT			
Laboratory determination of moisture content of soils.	ATT-15	Each significant soil type as required for moisture control.	MAT 6 - 24 MAT 6 - 34
- Soil and Gravel - Microwave Method	ATT-11		MAKE U - UT
2. Nuclear Moisture Content.			
REPORTING 1. Compaction	Complete MAT (a weekly basis.	5-1 Daily Compaction Report. Sub	mit to Project Sponsor on

The listed standard test methods and frequencies are to serve as a guideline for Consultants to use on "typical" or "average" projects, around which project specific testing programs may be developed. The listed test methods and frequencies are however to be followed in situations of dispute with the contractor, as per contract requirements.

MINIMUM QUALITY ASSURANCE TESTING REQUIREMENTS FOR GRANULAR BASE COURSE AND FULL DEPTH RECLAMATION (COMPACTION ONLY)

TEST GBCQA/12	STANDARD	FREQUENCY (Minimum)	ATT DATA SHEET(S)	
SAMPLING, Gravel and Sand	ATT-38	As required in ATT-38 (3 to 5 per Lot)		
SIEVE ANALYSIS	ATT 25 or 26	As required in ATT-38 (1 to 5 per Lot)	MAT 6-25 or MAT 6-27	
PERCENT FRACTURE	ATT-50	400 m Density Test Sections	MAT 6-26 or MAT 6-28	
DENSITY, Control Strip Method ¹	ATT 58	established every 1000 m.	MAT 6-45 MAT 6-46 & MAT 6- 47	
RANDOM TEST SITE LOCATIONS	ATT-56			
MOISTURE CONTENT, Oven Method, Soil and Gravel	ATT-15		MAT 6-24	
REPORTING	Submit to the Project Sponsor on a weekly basis.			
1. Gradation and Fractures	Complete MAT 6 - 60 Daily Report - Granular Base Course			
2. Density	Complete MAT 6 - 60 Daily Report - Granular Base Course			

NOTES

For Full Depth Reclamation (FDR) projects, compaction testing is to follow the Control Strip Method with modifications as listed in Specification 3.4 Full Depth Reclamation. Compaction results to be reported on the DAILY REPORT – GRANULAR BASE COURSE form.

Alberta Transportation ASPHALT MIX DESIGN AND JOB MIX FORMULA SUMMARY SHEET

		SECTION SECTIO			
Contract No.:		Highway:		Region:	Contractor:
			XX:xx		
Project From:		Project To:		Mix Design Consultant:	QA Review Consultant:
Pit Name and Location:			Blend Sand Pit Name an	d Location:	
Marshall Design No.:	Specified Mix Type:	Date Submitted:	(dd-mmm-year)	RAP Source and Locat	ion:
		SECTION	ON B		
		Mix Design F	Properties		
Combi	ned Aggregate Prop	perties	Des	sign Recommendat	ions
Bulk Speci	fic Gravity		Virgin Asphal	t Content (%)	
% Asphalt	Absorption		Total Asphal	t Content (%)	
% Manufactured Fine	es (in -5000 Portion)		Marshall De	nsity (kg/m³)	
% Two Fac	e Fractures		Air Voi	ids (%)	
% One Fac	e Fractures		V.M.	A (%)	
% Detrimental	Matter Content		V.F.A	A. (%)	
Plasticit	y Index		Theoretical Fi	Im Thickness	
Fine Aggrega	ite Angularity		Stabil	ity (N)	
Asphalt Properties			Flow	(mm)	
Asphalt Grade			Tensile Strength Ratio (no anti-strip)		
Supplier			T.S.R. (with anti-strip) (if applicable)		
Specific Gravity			Liquid Anti-Str	ip Additive (%)	
use drop-de	own bar here to sele	SECT ect either 1. Job M	ION C lix Formula or 2	. Change in Job M	ix Formula
Agg. Gradation	% Passing		Aggregate Pr	oportions (%)	
25 000		Coarse (16.0mm)		Natural Fines	
20 000		Coarse (12.5mm)		Additive	
16 000		Manufactured Fines		Chips	
12 500		Blend Sand		RAP	
10 000		New Target A.C.		New Film Thick.*	
5 000		* Value calculated base	d upon new JMF aggreg	ate gradation and targe	t asphalt content
2 500 (Film Thick.)		with other information in	ncluded in the original m	ix design (<i>must meet d</i>	lesign criteria)
1 250		Reviewed by :		First Lot No. For Cl	nange:
630					
315		Signature:		Date: (dd-mmm-year	^)
160					
80					
Remarks:		•		•	
A1. /	Opposite to the first	a famous de de la colonia de	-11		
Note:	•	m for mix design subn			
		F, comment on what on the product name for a		alt or anti atrin additio	100
Email completed o		onsor and to the Tecl			
Email completed t	opy to the ritigeof op	onsor and to the 1601	oai Glaridalus Dia	non ac tians.constit	orda e gov.ab.oa
					ΔCP IMF/12

Alberta Transportation ASPHALT MIX DESIGN AND JOB MIX FORMULA SUMMARY SHEET

		SECTION SECTIO			
Contract No.:		Highway:		Region:	Contractor:
Project From:	XXX	Project To:	KX:xx	Mix Design Consultant:	QA Review Consultant:
		. 10,001 10.		linix 2 doi.gir doi.iodi.aii.ii	C. C
Pit Name and Location:		1	Blend Sand Pit Name an	d Location:	
Marshall Design No.:	Specified Mix Type: M1	Date Submitted:	(dd-mmm-year)	RAP Source and Locat	ion:
		SECTION	AN B		
		Mix Design F			
Combi	ned Aggregate Prop	perties	Des	sign Recommendat	ions
Bulk Speci	fic Gravity	2.603	Virgin Asphal	t Content (%)	4.8%
% Asphalt /	•	0.97	Total Asphal	t Content (%)	5.2%
% Manufactured Fine	es (in -5000 Portion)	50.2	Marshall De	nsity (kg/m³)	2368
% Two Face	e Fractures	79.0	Air Vo	ids (%)	3.6
% One Face	e Fractures		V.M.	A (%)	13.5
% Detrimental I	Matter Content	1.40	V.F.A	A. (%)	73.2
Plasticit	y Index	NP	Theoretical Fi	Im Thickness	6.40
Fine Aggrega	te Angularity	43.1	Stabil	ity (N)	12,800
Asphalt Properties				(mm)	2.3
Asphalt Grade		PG 52-34	1	Ratio (no anti-strip)	82.4
Supplier		Montana	T.S.R. (with anti-strip, if applicable)		
Specific	Gravity	0.9620	Liquid Anti-Str	ip Additive (%)	0.4%
		SECT Job Mix F			
Agg. Gradation	% Passing		Aggregate Pr	oportions (%)	
25 000	100	Coarse (16.0mm)	0	Natural Fines	16
20 000	100	Coarse (12.5mm)	37	Additive	
16 000	100	Manufactured Fines	24	Chips	
12 500	99	Blend Sand	13	RAP	10
10 000	87	New Target A.C.		New Film Thick.*	
5 000	60		d upon new JMF aggreg	•	•
2 500 (Film Thick.)	51		ncluded in the original m		
1 250	42	Reviewed by :		First Lot No. For Ch	-
630	34			_	1
315	18	Signature:		Date: (dd-mmm-year)
160	10				
80	7.0			1-Jai	n-2013
Remarks:	Redicote liquid anti- Contractor to use a	strip additive used. plant based foaming	for Warm Mix Aspha	lt	
Note:		m for mix design subr			
		F, comment on what o			
		he product name for	•	•	
Email completed c	opy to the Project Sp	onsor and to the Tecl	hnical Standards Bra	nch at "trans.constru	
					ACPJMF/12

Alberta Transportation SUPERPAVE MIX DESIGN AND JOB MIX FORMULA SUMMARY SHEET

		SECTI Project Identifica			
Contract No.:		Highway:		Region:	Contractor:
Project From:		Project To:		Mix Design Consultant:	QA Review Consultant:
Pit Name and Location:			Blend Sand Pit Name an	d Location:	1
Marshall Design No.:	Specified Mix Type:	Date Submitted:	(dd-mmm-year)	RAP Source and Location	n:
		SECTI Mix Design			
Combir	ned Aggregate Prop	perties	De	sign Recommendat	ions
Bulk Specif	ic Gravity		Total Aspha	It Content (%)	
Clay Con	itent, %		Gyratory Do	ensity (kg/m³)	
Fine Aggregate	Angularity, %		% Asphal	t Absorption	
% Two Face	Fractures		_	mm	
% One Face	Fractures		Cini (%) @Nin		
% Elongated			Cdes (%) @Ndes		
% Detrimental N			Cmax(%) @Nmax		
Plasticity	/ Index			A (%)	
Į.	Asphalt Properties			w (%)	
			Fines / Asphalt Ratio Tensile Strength Ratio (no anti-strip)		
Asphalt Grade Supplier				Ratio (no anti-strip) strip) (if applicable)	
Specific	Gravity		Liquia Anti-Si	rip Additive (%)	
		SECT Job Mix	FION C Formula		
Agg. Gradation	% Passing		Aggregate Proportions (%)		
25 000		Coarse (16.0mm)		Natural Fines	
20 000		Coarse (12.5mm)		Additive	
16 000		Manufactured Fines		Chips	
12 500		Blend Sand		RAP	
10 000		New Target A.C.		Fines / Asp. Ratio*	
5 000		* Value calculated base	d upon new JMF aggre	gate gradation and target	asphalt content
2 500 (Film Thick.)		with other information i	ncluded in the original m	nix design (<u>must meet d</u>	
1 250 630		Reviewed by :		First Lot No. For Cha	ange:
315		Signature:		Dato: (dd mmm year)	
160		Signature.		Date: (dd-mmm-year)	
80		_			
Remarks:				1	
Note:		m for mix design subn			
	_	F, comment on what of the product name for	_	alt or anti-strip additiv	(AS

Email completed copy to the Project Sponsor and to the Technical Standards Branch at "trans.constructqa@gov.ab.ca" SUPJMF/12

Alberta Transportation SUPERPAVE MIX DESIGN AND JOB MIX FORMULA SUMMARY SHEET

		SECTI Project Identifica			
Contract No.:		Highway:		Region:	Contractor:
123	45	Hwy :	XX:xx	Southern	ABC
roject From:		Project To:		Mix Design Consultant:	QA Review Consultan
Jct. Hv	vy. XX	Jct. Hv	ıy. XXX	XYZ	DBC
t Name and Location:			Blend Sand Pit Name a	nd Location:	
	ky Pit 1 NE-29-025-0	2-05		Rocky Pit 2 SW-04-028-2	
arshall Design No.:	Specified Mix Type:	Date Submitted:	(dd-mmm-year)	RAP Source and Location	
12345-S1	20-F-12.5	29-Se	p-2013	<u> </u>	I/A
		SECTI Mix Design			
Combi	ned Aggregate Pro	perties	D	esign Recommendat	ions
Bulk Speci	fic Gravity	2.384	Total Asph	alt Content (%)	5.3
Clay Cor	•	64.10		Density (kg/m ³)	2383
Fine Aggregate		45.7		alt Absorption	0.75
% Two Face	• •	97.0		Gmm	2.500
% One Face		99.0	Cini (%) @Nii		88.2
		2.40	Cdes (%) @Nde		96.0
% Elongate		1.40	• • •		
% Detrimental I			Cmax(%) @Nma		97.40
Plasticit	y Index	NP		MA (%)	14.0
	Asphalt Properties			ow (%)	71.4
				Asphalt Ratio	1.00
Asphalt		PG 64-34		Ratio (no anti-strip)	60.0
Supp		Husky	,	i-strip) (if applicable)	90.0
Specific	Gravity	1.0240	Liquid Anti-S	Strip Additive (%)	0.4%
		SECT Change in Job	TION C Mix Formula		
Agg. Gradation	% Passing		Aggregate	Proportions (%)	
25 000	100	Coarse (16.0mm)	41	Natural Fines	
20 000	100	Coarse (12.5mm)	45	Additive	
16 000	100	Manufactured Fines		Chips	
12 500	96	Blend Sand	• • •	RAP	
10 000	84	New Target A.C.		Fines / Asp. Ratio*	1.12
5 000	60		d		
2 500 (Film Thick.)	41			egate gradation and targe mix design (<i>must meet d</i>	
			iciuded in the original		
1 250	29	Reviewed by :	act Managan	First Lot No. For Ch	ange:
630	22		ect Manager		1
315	13	Signature:		Date: (dd-mmm-year)	
160					
80	5.1			2-Oc	t-2013
Remarks:		or the 80µm sieve incre ti-strip additive used.	ased to 5.1%.		
Noto:	Complete entire fo	ırm for miy design subn	ningiona		

Note: Complete entire form for mix design submissions.

For a change in JMF, comment on what change occurred.

List in the remarks, the product name for any Warm Mix Asphalt or anti-strip additives.

Email completed copy to the Project Sponsor and to the Technical Standards Branch at "trans.constructqa@gov.ab.ca" SUPJMF/12

LOT PAVING REPORT

Albe	nt i	. D	CON	NTRACT	NO.		PROJE	ECT NO.			PROJE	ECT FRO	OM		LO.	T NC	Э.	MST E	ESIGN I	NO.	DE	SIGN NSITY g/m³)		DES AIR VOI		
74 (b 6	100		WE	EK END		CL	NO.	А	CS		PRO	JECT TO)		MIX	TYP	PE	Pľ	ГИАМЕ			SIGN PHALT		DES		
Iran	sporta	atior	YY	MM	DD						PAVING C	CONTRA	CTOR				QA CO	ONSULTA	.NT			RGET		VMA DES		
MAT 6-78/12													0.0				α					PHALT FENT (%)		LIFT THICK		
	LOT A	GGREG	SATE PR	ROPOR	TIONS	FOF	RMED MA	RSHALL	SPECIM		Α	SPHAL	T CON	TENT					L	OT PA			COMPACT	ON DATA		
DATE LAID	COARSE AGGREGATE 12.5mm %	MANUFACTURED FINES %	BLEND SAND %				SITY	* AIR VOIDS	* V.M.A.	MIX MOISTURE CONTENT	SAMPLE SOURCE	COL	EGMEN RRECTI SPHAL ^T ONTEN		TEST METHOD	SEGMENT #	STAT	+	LOCATION	LANE	LIFT	CORE	DENSITY	AIR VOIDS	** COMPACTION	CORE
(dd-mm-yyyy)		Σ	ш			(kg	/m³)	(%)	(%)	(%)			(%)			Ш	(00+	000)				(mm)	(kg/m ³)	(%)	(%)	(%)
																1										
LC	OT PAVI	NG LIMI	ITS (km))	ı											2										
FROM	Т	0	LAN	NE	MAT											3										
																4										
																5										
																Ш										
																		LOT	MEA	N						
<u>ADDITIVE</u>		MAT				C Lots: calc									•							& V.M.A				
RA Reclaim CF Coarse Fines		R RighL Left			void							ction =	(100)	X Lot	Mean	Density	/ (Lot N	/lean N	<i>M</i> arsha	II Density						
BS Blend Sand C 2nd Coarse			terline t Shoulde	r		шш						DATION								ΔSPH	ALT CC	NTENT C	ORRECTION	OT TONNAGE		
OR Other			Shoulder		TEST NO.	SAMPLE				SIEVE A	NALYSIS	- % PA	SSING	(µm)						ASFIL			or QC ACCEF	` ,		
TEST METHOD FE Filterless Extra	action	<u>LANE</u> N North	nbound		NO.	SAI	25,000	20,000	16,000	12,500	10,000	5,000	1,250	630	315	16	60	80					COMME	NTS		
NU Nuclear RE Reflux		S SouthW West	hbound		1														1							
FC Filter Centrifug			bound		2																					
IG Ignition OR Other	_				3														-							
SAMPLE SOURCE	MPLE SOURCE CODE LIFT 5																\dashv		1							
CO Core	O Core B Bottom Lift																<u> </u>		TEG	NO. C	01070					
BP Behind Paver CF Cold Feed		T Top LO Other															丁		TECH	INOLO	GISTS :					
OR Other																		_	С	ONSUL	TANT :					
	LO	T MEA	N														\dashv				NAGER					
				.1	IOB MIX F	ORMULA											-		R	ECEIVI	ED BY :		*** Co	ontractor's Repres	entative	
TOLERAN		± 5	± 5	± 5	± 5	± 5	± 3	± 2	± 2	± 1	1.5	± 1.5	DA ⁻	TE REC	CEIVED			TIME								
MAXIMUM RANGE BETWEEN INDIVIDUAL TEST RESULTS IN A LC								10	10	10	10	10	6	5	4	-	3	3					es receipt of data	a on the date and	time indicated	d

LOT PAVING REPORT

Albe	L	_		NTRACT			PROJE	CT NO.	1110		PROJ	ECT FRC	DM		LO	T NO	0.	MST D	ESIGN N	NO.	DE	SIGN NSITY g/m³)	2370		SIGN OIDS (%)	3.5
JX (be	M			EK END							PRO	JECT TO)		MIX	TYF	PE	PIT	NAME		DE	SIGN		DE	SIGN	
Tran	sport	atior	YY	MM	DD	CL	NO.	Α	CS							M1					CONT	PHALT FENT (%)	5.4	VN	1A (%)	13.5
MAT 0 70/40			уу	mm	dd	HW	XX		xx		PAVING C	ONTRA	CTOR				QA CON	ISULTA	NT		ASI	RGET PHALT	5.4	LIFT TH	SIGN HICKNESS	50
MAT 6-78/12	LOT A	AGGREG	SATE PE	ROPOR	TIONS	FOI	RMED MA	RSHALL	SPECIMI	ENS	Α	SPHAL	T CON	TENT					LO	ΓΡΑΥ		TENT (%)	OMPACTION		mm)	
									-							П					<u> </u>	1				
DATE LAID	COARSE AGGREGATE 12.5mm %	MANUFACTURED FINES %	END SAND %			DEN	ISITY	* AIR VOIDS	* V.M.A.	MIX MOISTURE CONTENT	SAMPLE SOURCE	COF AS	EGMEN RRECTI SPHALT ONTEN		TEST METHOD	SEGMENT #	STATIO	+ OR -	LOCATION	LANE	LIFT	CORE	DENSITY	AIR VOIDS	** COMPACTION	CORE
(dd-mm-yyyy)	,	MA	BL			(kg	/m³)	(%)	(%)	(%)			(%)				(00+000	0)				(mm)	(kg/m³)	(%)	(%)	(%)
1-Jan-2013	80	15	5			23	359	3.8	14.0	0.05	BP		5.53		IG	1	7+86	1 -	4.3	S	В	45	2275	7.2	96.0	0.61
LO	OT PAV	ING LIM	ITS (km)		23	881	2.9	13.2	0.04	BP		6.01		IG	2	2+25	5 -	2.0	S	В	50	2290	6.6	96.6	0.44
FROM	Т	O	LA	NE	MAT	23	375	3.2	13.5	0.07	BP		5.60		IG	3	9+87	2 -	0.7	S	В	52	2282	6.9	96.2	0.63
7+183	7+183 13+239 E R 2								13.7	0.05	BP		5.28		IG	4	11+54	43 -	4.4	S	В	48	2350	4.2	99.1	0.35
									13.6	0.04	BP		5.38		IG	5	12+76	67 -	2.5	s	В	47	2298	6.3	96.9	0.33
	23								1																	
													1													
	23								13.6	0.05			5.56				L	OT I	MEA	N		48	2299	6.2	97.0	0.47
ADDITIVE		MAT			For QC	Lots: cal	culate air	3.5	13.5		* Use	Lot Me	an Corr	ected	asphal	t con	ntent to c	alculat	e Marsh	nall Air	Voids	& V.M.A		6.4		
RA Reclaim CF Coarse Fines		R Righ			void	s using tar	get AC	3.5	13.5			_		ction =	(100)	X Lot	Mean D	ensity)	/ (Lot N	/lean N	Marsha	II Density	y)	0.4		
BS Blend Sand		C Cent	terline			111				_	GRAI	DATION												ONNAGE		5.40 .86
C 2nd Coarse OR Other		RS Right		er	TEST	APLE JRCE				SIEVE A	NALYSIS	- % PA	SSING	(µm)					ASP	HALI			C ACCEPTANG			.00 !C
TEST METHOD		LANE			NO.	SAMPLE	25,000	20,000	16,000	12.500	10.000	F 000	1 250	620	245	4.	60	90				(COMMENT			-
FE Filterless Extra	ection	N North					25,000	20,000	16,000	12,500	10,000	5,000	1,250	630	315	- 1	60	80	STAN	DARD S	SPECIFIC	CATIONS F	OR HIGHWAY C	ONSTRUC	TION - EDITIO	ON 14, 2010
NU Nuclear RE Reflux		S South W West			1	BP	100	100	100	98	89	63	32	23	13	_		5.2						5		- 40.07
FC Filter Centrifug IG Ignition	je	E East	bound		2	BP BP	100	100 100	100 100	99 98	91 89	61 58	32 30	24	15 14		_	6.2 6.0	Q,	A ASPI	nait Co	ntent on	loose mix fro	m Benin	a Paver = :	5.48 %
OR Other	•						100	100	100	97	84	53	26	20	13			5.3								
SAMPLE SOURCE	MPLE SOURCE CODE LIFT 5 BP							100	100	98	89	62	32	24	15	9	.2	6.0								
CO Core BP Behind Paver	Behind Paver T Top Lift																		TECH	NOLO	GISTS :	:				
CF Cold Feed		O Othe			QA1	BP	100	100	100	98	86	57	29	21	12			5.2								
OR Other					QA2	BP 4 E	100	100	100	98	88	59 50	31	23	14			5.6 5.7	1		TANT :					
	LC	T MEA	N			1-5 QA	100	100	100	98 98	88 87	59 58	30	23 22	14 13			5. <i>1</i>			NAGER :					
				J	OB MIX F	ORMULA	100	100	100	98	88	60	31		14	•		6.4	K	LOEIVI	. ום טב	•	*** Contra	actor's Rep	resentative	
TOLERAN	CES FOR	R THE LO	T MEAN	FROM J	OB MIX F	ORMULA		± 5	± 5	± 5	± 5	± 5	± 3	± 2	± 2	-	_	± 1.5	DA	TE REC	CEIVED	ı		TIME		
MAXIMUM RANGE BETWEEN INDIVIDUAL TEST RESULTS IN A LOT							·	10	10	10	10	10	6	5	4	;	3	3		*** (Signature	e indicates	receipt of data or	the date a	nd time indica	ted

LOT PAVING REPORT

An	L			NTRACT			PROJE	CT NO.	1110		PROJI	ECT FRO	M		LO	T N	Ю.	MST	DE	SIGN N	Ю.	DE	SIGN NSITY	2370		SIGN OIDS (%)	3.5
Albe	M			EK END							PRO	JECT TO)		MIX	TY	PE	F	PIT N	IAME		DE	g/m³) SIGN		Di	ESIGN	
Tran	sport	atior	YY	MM	DD	CL	NO.	Α	CS							M1						CONT	PHALT ENT (%)	5.4	VN	ЛА (%)	13.5
MAT 6-78/12			уу	mm	dd	нw	ХX		ХХ	ı	PAVING C	CONTRAC	CTOR				QA CC	ONSULT	AN ⁻	Γ		ASI	RGET PHALT	5.4	LIFT TH	SIGN HICKNESS	50
IVIA 1 0-70/12	LOT A	AGGREG	SATE P	ROPOR	TIONS	FOR	RMED MA	RSHALL	SPECIMI	ENS	ļ	SPHAL	T CON	TENT						LOT	PAV		ENT (%) T AND C	OMPACTIO		mm)	
		Ω	٠,0							Ш.		C.F	GMEN	_									m			Z	l
DATE LAID	COARSE AGGREGATE 12.5mm %	MANUFACTURED FINES %	END SAND %			DEN	ISITY	* AIR VOIDS	* V.M.A.	MIX MOISTURE CONTENT	SAMPLE SOURCE	COF AS	RRECTI SPHAL ^T ONTEN		TEST METHOD	SEGMENT #	STAT	TION	+ OR -	LOCATION	LANE	LIFT	CORE	DENSITY	AIR VOIDS	** COMPACTION	CORE
(dd-mm-yyyy)	,	MA	BL			(kg	/m³)	(%)	(%)	(%)			(%)				(00+0	000)					(mm)	(kg/m ³)	(%)	(%)	(%)
1-Jan-2013	80	15	5			23	59	3.8	14.0	0.05	СО		5.53		IG	1	7+8	61	-	4.3	S	В	45	2275	7.2	96.0	0.61
LO	OT PAV	ING LIM	ITS (km)		23	81	2.9	13.2	0.04	CO		6.01		IG	2	2+2	255	-	2.0	S	В	50	2290	6.6	96.6	0.44
FROM	Т	0	LA	NE	MAT	23	75	3.2	13.5	0.07	СО		5.60		IG	3	9+8	72	-	0.7	S	В	52	2282	6.9	96.2	0.63
7+183	13+	-239	E	Ē	R	23	869	3.4	13.7	0.05	СО		5.28		IG	4	11+	543	-	4.4	S	В	48	2350	4.2	99.1	0.35
						23	371	3.3	13.6	0.04	СО		5.38		IG	5	12+7	767	-	2.5	S	В	47	2298	6.3	96.9	0.33
												\															
								3.3	13.6	0.05			5.56					LOT	M	IEAI	١		48	2299	6.2	97.0	0.47
ADDITIVE		<u>MAT</u>			For QC	C Lots: cal	culate air				* Use	Lot Me	an Corr	ected	asphal	t cor	ntent to	calcul	ate	Marsh	all Air	Voids	& V.M.A	١.			
RA Reclaim CF Coarse Fines		R Right L Left			void	s using tar	get AC							ction =	(100)	X Lot	t Mean	Densit	y) /	(Lot M	lean N	/larsha	II Density	•			
BS Blend Sand		C Cen	terline			шШ					GRAI	DATION							4	A CDI	IALT	CONTE	NT CODE	LOT TO RECTION FAC	ONNAGE		5.40 .86
C 2nd Coarse OR Other		RS Righ LS Left	Shoulder		TEST NO.	SAMPLE				SIEVE AI	NALYSIS	5 - % PA	SSING	(µm)					ŀ	ASFI	TALI			C ACCEPTAN			.00 !A
TEST METHOD FE Filterless Extra	action	LANE N North	nbound		NO.	SAI	25,000	20,000	16,000	12,500	10,000	5,000	1,250	630	315	1	160	80		STANI	DARD S	SPECIFIC	CATIONS F	COMMENT:		TION - EDITIO	ON 14, 2010
NU Nuclear RE Reflux		S South West			1	CO	100	100	100	98	89	63	32	23	13	8	3.4	5.2									
FC Filter Centrifug	ge	E East			2	CO	100	100	100	99	91	61	32	24	15		9.5	6.2									
OR Other	Ignition 3						100	100 100	100	98 97	89 84	58 53	30 26	23 20	14 13		9.2 3.3	6.0 5.3	-								
SAMPLE SOURCE	MPLE SOURCE CODE LIFT 5						100	100	100	98	89	62	32	24	15		9.2	6.0	-								
CO Core	D Core B Bottom Lift																		#	TEQ! "	VOI 01	OLOTO					
BP Behind Paver CF Cold Feed	Cold Feed O Other Lifts																			TECHI	NOLO(: ۱۵ داد					
OR Other						4 -	400	460	465	0.0	-	-	-	00	4.				4			TANT :					
	LC	T MEA	N			1-5	100	100	100	98	88	59	30	23	14	8	3.9	5.7	+			NAGER :					
				J	OB MIX F	FORMULA	100	100	100	98	88	60	31	23	14	9	9.5	6.4	╅	KE	CEIVE	D BY :		*** Contr	actor's Rep	resentative	
TOLERAN	TOLERANCES FOR THE LOT MEAN FROM JOB MIX FORMUL							± 5	± 5	± 5	± 5	± 5	± 3	± 2	± 2	-	1.5	± 1.5	7	DAT	E REC	EIVED			TIME		
MAXIMUM RANGE BETWEEN INDIVIDUAL TEST RESULTS IN								10	10	10	10	10	6	5	4		3	3			*** 5	Signature	indicates	receipt of data or	the date a	nd time indica	ted

SUPERPAVE LOT PAVING REPORT

Albe	at a		CON	ITRACT I	NO.		PROJE	CT NO.			PROJI	ECT FROM	М		LC	OT NO	D. MS	ST DE	ESIGN N	NO.	DEI (kạ	SIGN NSITY g/m³)		DES AIR VOI		
Trans			YY	EK ENDII	NG DD	CL	NO.	А	CS		PRO	JECT TO			MIX	X TYF	PE	PIT	NAME		ASF	SIGN PHALT ENT (%)		DES VMA		
ITATIS	ρυπα	LIOI									PAVING C	CONTRAC	TOR				QA CONSUL	TAN	Т		TAI	RGET PHALT		DES		
MAT 6-78S/12																					CONT	ENT (%)		LIFT THICK	NESS (mm)	
				G			MED SPE	CIMENS					MI	X					LO	ΓPAV	EMEN	Γ AND C	OMPACTI	ON DATA		
DATE LAID	DENS			Т		ENSITY of Gmm)			* V	OLUMETR @ N _{design}		Maxir Spec		CORRI D ASP	HALT	# 5	STATION		NO			CORE THICKNESS	DENSITY	AIR VOIDS	** CORE	CORE
	@N _d	lesign	Cir	ni	C	des	C _n	nax	AIR VOIDS	V.M.A.	V.F.A.	Gra		CONT (T.M)	SEGMENT		+ OR	LOCATION	LANE	Fil	S HE			DENSITY % of G _{mm}	CC
(dd-mmm-yyyy)	(kg/ı	m ³)							(%)	(%)	(%)	Gm	nm	(%	5)		(00+000)	Ш				(mm)	(kg/m ³)	(%)	(%)	(%)
																1										
LOT AGGREGATE																2										
PROPORTIONS																3										
COARSE AGG. %																4										
MF %																5										
BLEND SAND %																										
RAP %																										
																		Ħ								
																					<u> </u>					
																	LO	T N	IEAN	1						
ADDITIVE RA Reclaim		MAT R Righ	t		* U:	se Lot Me	an Correc	ted Asph	alt Conte	nt to calcul	ate Gyrato	ry V.M.A.	%.				** % (Comp	action	= (Roa	ad Dry	Density)	/ (Lot Mea	n Maximum	Specific Gra	avity / 10)
CF Coarse Fines BS Blend Sand		L Left C Cent	erline	-								GRAD	ATION										LC	T TONNAGE		
C 2nd Coarse	į.	RS Right	Shoulde	r	TEST	SAMPLE					SIEVE AN	ALYSIS -	· % PAS	SING (L	ım)									FACTOR (%)		
OR Other	-	LS Left	Snoulder		NO.	AMF		1		ı	ı	ı		``	,		T.						QC ACCEP	TANCE LOT)		
TEST METHOD FE Filterless Extracti NU Nuclear		LANE N North	bound			S) S)	25,000	20,000	16,000	12,500	10,000	5,000	2,500	1,250	630	3	15 16	0	8	0	COMN	MENTS				
RE Reflux		W West	bound		1																					
FC Filter Centrifuge IG Ignition	ľ	E East	bound	-	2																	2014	ı	/ING LIMITS	r` '	I
OR Other																					F	ROM	TO	LANE	MAT	
SAMPLE SOURCE O	CODE	LIFT			5																					
CO Core	B Bottom Lift I Paver T Top Lift																									
BP Behind Paver CF Cold Feed		T Top L O Othe		F																		TECHNO	DLOGISTS :		,	•
OR Other																						CON	ISULTANT :			_
	LOT	MEAN	1			1-5															PF	ROJECT I	MANAGER :			
					DD 1407						<u> </u>]											EIVED BY :	ntative		
TOLERANC			FORMULA					<u> </u>			. 2			.2	_	. 4	E									
MAXIMUM RANG								± 5	± 5	± 5	± 5	±5	± 5	± 3	±2 5	_	±2 - 4 -		± 1			E REC'D		data on the date	TIME	
IVII O CIIVIO IVI TOAINO	1 7 7							10	10	10	10	10	10	U	J					,	■ Sigi	iature midic	ares receibi oi	uata un the date	and time matc	aidu

SUPERPAVE LOT PAVING REPORT

		_							. /\\.	110 11	. — .	, i \ i								_		_	·		
1		CO	NTRACT	NO.		DDO II	CT NO.			PROJI	ECT FRO	M		LO	OT NO.	. M	ST D	ESIGN N	10.		SIGN NSITY	2240	DES	IGN	4.0
Miss	ntan		xxxx	X		PROJE	CT NO.								1						g/m ³)	2310	AIR VO	DS (%)	4.0
JA (De	$m\omega$	W	EEK END	ING				1		PRO	JECT TO			MI	X TYPE	E	PIT	NAME			SIGN		DES	ICN	
Trans	sportation	YY	MM	DD	CL	NO.	Α	CS							C-12						PHALT FENT (%)	6.0	VMA		15.0
IIaik	spoi tatioi			ماما	1.134/	VV				PAVING C	CONTRAC	TOR				QA CONSU	LTAN	IT		TA	RGET	6.0	DES	IGN	20
MAT 6-78S/12		уу	mm	dd	HW	XX		XX													PHALT <u>[ENT (%)</u>	6.0	LIFT THICK	NESS (mm)	30
			(GYRAT	ORY FOR	RMED SPI	CIMENS	3				MI	Χ					LOT	ΓPAV	/EMEN	T AND (COMPACTI	ON DATA		
					ENSITY			* V	OLUMETR	RICS			CORR	ECTE							S			**	
DATE LAID	DENSITY			(%	of Gmm)				@ N _{design}	1	Maxir		D ASP		# E	CTATION	١.	Z			CORE	DENOITY	AID VOIDO	CORE	CORE
	@N _{design}		o S _{ini}		C _{des}	C	max	AIR	V.M.A.	V.F.A.	Spe Gra		CONT	LENT	MEN	STATION	OR.	LOCATION	LANE	FFI	8 5	DENSITY	AIR VOIDS	DENSITY % of G _{mm}	SIO IS
			-ini		des		пах	VOIDS	v.ivi.A.	V.I .A.		,	(T.M)	SEGMENT		+	9	-	-	Ė			% Of G _{mm}	Σ
(dd-mmm-yyyy)	(kg/m ³)							(%)	(%)	(%)	Gm	nm	(%	6)	"	(00+000)					(mm)	(kg/m ³)	(%)	(%)	(%)
1-Jan-2013	2308	8	4.0	9	92.9	94	1.2	7.2	16.4	75.0	2.4	.88	5.5		1	12+000	Τ-	4.3	s	В	45	2173	12.7	88.2	1.54
LOT	2329	+ -	6.0		95.6		7.2	4.4	15.6	75.0	2.4		6.0		_	12+800	_	2.0	s	-	50	2181	12.3	88.5	1.40
AGGREGATE						<u> </u>					-					_	+			В				88.9	1.48
PROPORTIONS COARSE	2346	_	5.5	1	95.4	+	7.0	4.6	15.0	74.0	2.4		5.6		3	23+450	+	0.7	S	+	52	2190	12.0		
AGG. % 54	2330	84	4.8	,	94.2	9	5.7	5.8	15.6	73.0	2.4	74	5.2		4	12+155	_	4.4	S	_	48	2208	11.3	89.6	1.03
MF % 23													5.3	38	5	13+456	1	2.5	S	В	47	2238	10.0	90.8	0.66
BLEND SAND % 16																									
RAP % 7																									
																		•							
	2328	8	5.1	9	94.5	96	6.0	5.5	15.7	74.3	2.4	64	5.	56		LO	ΤN	/IEAN	1		48	2198	11.7	89.2	1.22
		* Use Lot Mean Corrected Asphalt Content to calculate Gyratory V.M.A. %. ** % Cor														4:	/D -	I D	D :t)	\	. Massissons	0ifi- 0-	it / 40\		
ADDITIVE RA Reclaim	MAT R Ri	* Use Lot Mean Corrected Asphalt Content to calculate Gyratory V.M.A. %. ** % Compaction														= (KC	Dad Dry	Density,) / (Lot iviea	n waximum	Specific Gr	avity / 10)			
CF Coarse Fines	L Le	eft						\rightarrow	_		GRAD	ATION								T		10	T TONNAGE	200	0.00
BS Blend Sand C 2nd Coarse		enterline ght Should	ler		щЖ						_									1	A.C. CO	RRECTION I		-0.	
OR Other		ft Shoulde		TEST	SAMPLE					SIEVE AN	IALYSIS -	- % PAS	SSING (µm)						MC		QC ACCEP	` '		(A
TEST METHOD	LANE			NO.	SAI	25 000	20,000	16,000	10 500	10.000	F 000	2 500	1.050	620	24	F 46	.0	0	0	COM	MENTS			•	
FE Filterless Extrac		rthbound				25,000	20,000	16,000	12,500	10,000	5,000	2,500	1,250	630	31	5 16	O	8	U	STD.	SPECIFIC	ATIONS FOR H	IWY CONSTRU	CTION - EDITION	ON 14, 2010
NU Nuclear RE Reflux		uthbound estbound		1	CO	100	100	100	95	83	50	33	25	19	14	_		5.							
FC Filter Centrifuge	E Ea	astbound		3	CO	100	100	100	96	85	51	33	24	18	14	_	_	5.				_	/ING LIMITS		
IG Ignition OR Other	G Ignition OR Other					100	100	100	96	85	54	35	25	19	14	_		6.			ROM	TO	LANE	MAT	4
CAMPLE COURCE		5	CO	100	100 100	100	96 96	84 82	51 49	33 32	24	18 18	14		_	5. 5.		10	+000	11+000	E	R	-		
SAMPLE SOURCE CO Core	CODE LIFT B Bo	-	1 00	100	100	100	96	ŏ∠	49	<u>32</u>	<u> </u>	Ιδ	<u> </u>	-, 0.	o	ე.	+	╂		1			1		
BP Behind Paver	T To	p Lift		<u> </u>										<u> </u>						╁	TECHN	OLOGISTS :			<u> </u>
CF Cold Feed OR Other	O Ot	ner Lift		\vdash	1															1		NSULTANT :			
				-	1-5	100	100	100	96	84	51	33	24	18	14	4 9.	2	5.	6	PI		MANAGER :			
	LOT ME	AN				1					<u> </u>	-	<u> </u>		<u> </u>		_	<u> </u>		1		CEIVED BY :			
			J	JOB MIX	FORMULA	100	100	100	96	82	49	30	20	15	10	0 6.	2	3.	9	1		ctor's Represer			
TOLERANG	CES FOR THE L	OT MEAN	I FROM J	JOB MIX	FORMULA	4	± 5	±5	±5	±5	±5	± 3	± 3	±2	±2	2 -		± 1	.5	DAT	E REC'D			TIME	
MAXIMUM RAN	GE BETWEEN I	AL TEST I	RESULT	S IN A LOT	Γ	10	10	10	10	10	10	6	5	4	-		3	3	*** Sig	nature indic	cates receipt of	data on the date	and time indic	cated	

HIR LOT PAVING REPORT

						.,	<u> </u>	****	O IVE	<u></u>	<u> </u>												
Albe	enta n	С	ONTRAG	CT NO.		PROJE	CT NO.			PROJ	ECT FROM	LO	TN	IO. MS	T DI	ESIGN N		DEI (k	SIGN NSITY g/m³)			ESIGN OIDS (%)	
74 (146		٧	/EEK EN	NDING						PRC	JECT TO	MIX	(TY	/PE	PIT	NAME			SIGN		DE	SIGN	
Trans	sportation	YY	MM	DD	CL	NO.	Α	CS										_	PHALT ENT (%)			131GN MA (%)	
	oportatio.	<u> </u>								PAVING (CONTRACTOR			QA CONSUL	TAN	IT			RGET		DE	SIGN	
MAT C 7011/40																			PHALT			HICKNESS	
MAT 6-78H/12	1	ADDITI	/F0	l				MIV OI	LABAGTE	DIOTION			1				- DAV		ENT (%)			mm)	
		ADDITI	/ES	_				MIX CF	IARACTE							LOI	PAVI	MEN	AND C	OMPACTION	DAIA		
DATE LAID	AD	MIX		REJUV. AGENT TYPE <u>XX</u>	SPE	IMUM CIFIC VITY	MARS DEN	SHALL ISITY	* AIR VOIDS	MIX MOISTURE CONTENT	ASPHALT CONTENT	RECOVERED ASPHALT PEN.	SEGMENT #	STATION	+ OR -	LOCATION	LANE	LIFT	CORE	DENSITY	AIR VOIDS	** COMPACTION	CORE
(dd-mm-yyyy)	% Added	Coati	ng %	Rejuv. %	(G	_{mm})	(kg	/m ³)	(%)	(%)	(%)	(dmm)	"	(00+000)					(mm)	(kg/m³)	(%)	(%)	(%)
													1										
	LOT PAVING L	IMITS (k	m)										2										
FROM	ТО	LA	NE	MAT									3										
													4										
													5										
													۲										
													1										
														LO	T	ИЕА	N						
				* Use Maxii	num Spe	cific Grav	ity and M	arshall De	ensity to ca	alculate A	Air Voids.							Dry D	ensity) /	(Lot Mean M	aximum	Specific G	ravi

REJUVINATING AGENT								GRAI	OITAC	1					LOT	SQUARE METERS	
CY Cyclogen "L" Blend RE Rejuvoil "1" OR Other		TEST NO.	SAMPLE				SIEVE A	NALYSIS	6 - % P <i>F</i>	ASSING	(µm)						
FE Filterless Extraction	MAT R Right		SC SC	25,000	20,000	16,000	12,500	10,000	5,000	1,250	630	315	160	80		COMMENTS	
NU Nuclear RE Reflux	L Left C Centerline	1															
	RS Right Shoulder	2															
	LS Left Shoulder	3															
OR Other		4															
SAMPLE SOURCE CODE	<u>LANE</u>	5															
CO Core BP Behind Paver	N Northbound														TECHNOLOGISTS:		
	S Southbound W Westbound														TEGINOLOGISTS.		
OR Other	E Eastbound														CONSULTANT:		
	OT MEAN		1-5												PROJECT MANAGER :		
'	OT WEAN														RECEIVED BY :		
		JOB MIX FO	RMULA													*** Contractor's	Representative
MAYIMI IM DEDMICCADI E	VARIATION FROM THE	IOD MIX FORM	ALII A (./)		ENTER	R AS SPE	CIFIED		±6	±5	±4	±3.5	±3.0	±2.5	DATE RECEIVED	TIME	
IVIAAIIVIUIVI PERIVIISSABLE	MAXIMUM PERMISSABLE VARIATION FROM THE JOB M				IN TH	IE CONT	RACT								*** Signature indicates re	eceipt of data on the date ar	nd time indicated

HIR LOT PAVING REPORT

M	CONTRACT NO. XXXXXX WEEK ENDING Transportation YY MM DI					PROJE	ECT NO.			PROJE	ECT FROM	ı	ьот 1		MS		SIGN N	NO.	DE	SIGN NSITY g/m³)	2350		ESIGN OIDS (%)	2.6
JA (be	enortation	YY			CL	NO.	А	CS		PRO	JECT TO	N		TYPE		PIT	NAME Rive	r #2	DE ASI	SIGN PHALT	5.7		ESIGN MA (%)	13.5
MAT 6-78H/12	sportation	уу	mm	dd	HW	XX		xx		PAVING C	CONTRACTOR		<u> 111</u>		CONSUL			:I #Z	TA ASI	ENT (%) RGET PHALT	5.7	DE LIFT TI	ESIGN HICKNESS	50
MAT 6-78H/12		ADDITI	/ES					MIX CH	IARACTE	RISTICS							LOT	PAVI		ENT (%) T AND C	OMPACTIO		mm)	
DATE LAID	DATE LAID ADMIX T					MUM CIFIC VITY		SHALL ISITY	* AIR VOIDS	MIX MOISTURE CONTENT	ASPHALT CONTENT	RECOVERI ASPHALT PEN.	ED F	# SEGMENT #	ATION	+ OR -	LOCATION	LANE	LIFT	CORE	DENSITY	AIR VOIDS	** COMPACTION	CORE
(dd-mm-yyyy)	% Added	Coati	ng %	Rejuv. %	(G _r	_{mm})	(kg	/m³)	(%)	(%)	(%)	(dmm)		(00)+000)					(mm)	(kg/m ³)	(%)	(%)	(%)
1-Jan-2013	10	4.0	00	0.30	2.4	130	23	367	2.6	0.01	5.74			1 5·	+190	+	2.2	Е	1	54	2300	5.3	94.9	0.91
l	LOT PAVING LI	MITS (k	m)		2.4	25	23	350	3.1	0.02	5.71	83		2 6	+390	+	2.5	Е	1	53	2289	5.6	94.4	0.78
FROM	TO	LA	NE	MAT	2.4	132	23	355	3.2	0.01	5.81		;	3 6	+990	+	3.0	Ε	1	48	2294	5.7	94.6	0.91
5+120	8+230	E		R	2.4	119	23	346	3.0	0.03	5.66		\	4 7·	+400	+	0.9	Е	1	51	2299	5.0	94.8	1.01
					2.4	115	23	360	2.3	0.01	5.71		4	5 8	+005	+	1.3	Ε	1	51	2310	4.3	95.3	1.10
			2.4	124	23	356	2.8	0.02	5.73	83			LO	T N	ΛΕΑ	N		51	2298	5.2	94.8	0.94		

^{*} Use Maximum Specific Gravity and Marshall Density to calculate Air Voids.

^{** %} Compaction = (Road Dry Density) / (Lot Mean Maximum Specific Gravity / 10)

REJUVINATING AGENT								GRA	DATION	١					LO	T SQUARE METERS	11,510
CY Cyclogen "L" Blend RE Rejuvoil "1" OR Other		TEST NO.	SAMPLE				SIEVE A	NALYSIS	6 - % P/	ASSING	(µm)						
E Filterless Extraction	MAT R Right		os √s	25,000	20,000	16,000	12,500	10,000	5,000	1,250	630	315	160	80	Recovered as	COMMENTS phalt penetration is for	or Lot 5.
IU Nuclear E Reflux	L Left C Centerline	1	CO	100	100	100	100	88	66	43	36	28	18.0	9.9	Testing now red	uced to one test per	five Lots.
C Filter Centrifuge	RS Right Shoulder	2	CO	100	100	100	98	87	68	44	38	26	17.0	10.0			
G Ignition	LS Left Shoulder	3	СО	100	100	100	99	89	70	42	38	27	16.0	10.5			
OR Other		4	СО	100	100	100	99	87	65	40	39	24	19.0	10.1			
SAMPLE SOURCE CODE	LANE	5	СО	100	100	100	100	82	69	41	35	28	19.0	9.3			
O Core P Behind Paver F Cold Feed	N Northbound S Southbound W Westbound														TECHNOLOGISTS:		
OR Other	E Eastbound														CONSULTANT:		
	LOT MEAN	<u>=</u>	1-5	100	100	100	99	87	68	42	37	27	17.8	10.0	PROJECT MANAGER :		
	LOT WEAN														RECEIVED BY :		
		JOB MIX FC	RMULA	100	100	100	99	85	65	39	34	25	15.0	8.9		*** Contractor's	Representative
MAXIMUM PERMISSABLI	VARIATION FROM THE	JOB MIX FORM	/JULA (+/-)			AS SPE			±6	±5	±4	±3.5	±3.0	±2.5	DATE RECEIVED *** Signature indicates in	TIME eceipt of data on the date an	nd time indicated

1	,		D	AILY COM	PACTION	REPORT - (GRADING .	AND SUBG	RADE	PROJECTS
Alb	etan nsportation	CONTRACT NO. :			% COMPLETED) :			QA CO	NSULTANT:
Tra	nsportation	PROJECT:			PROJECT FRO	M :			PROJE	ст то:
MAT 6-1/12	noportation	DATE TESTED :			CONTRACTOR	:			PRIME	CONSULTANT:
DEPTH BELOW GRADE	STATION	LOCATION	UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)	PROC	MOISTURE	CONSTR	MOISTURE	COMPACTION	MODE	MODE - NUCLEAR "N" BALLOON "B" SAND "S" if "N" NUCLEAR CORRECTION FACTORS (ATT 48) DENSITY CORRECTION FACTORkg/m ³ MOISTURE CORRECTION FACTORkg/m ³
(m)	00+000		(0303)	kg/m³	%	kg/m³	%	%		REMARKS
		1			1	AVERAGE CO	OMPACTION			
COMMENTS:								TECHNOLOG	ISTS	
								PROJECT MAN	AGER	
								RECEIVED I	ВҮ	*** Contractor's Representative
								DATE RE	CEIVED	TIME
								*** Signa	ture indic	ates receipt of data on the date and time indicated

1	,		<u> </u>	DAILY CON	IPACTION	REPORT -	GRADING	AND SUBG	RADE	PROJECTS			
Alb	erta nsportation	CONTRACT NO. :	XXX	XXX	% COMPLETED) :		10%	QA CON	ISULTANT :			
Tra	nenortation	PROJECT :	Hwy 2	XX:xx	PROJECT FRO	M :			PROJEC	CT TO:			
MAT 6-1/12	risportation	DATE TESTED :	1-Jan-	-2013	CONTRACTOR	:			PRIME (CONSULTANT :			
WAT 0-1/12				PRO	CTOR	CONST	RUCTED	I		MODE - NUCL	EAR "N" BAL	LOON "B"	SAND "S"
DEPTH BELOW GRADE	STATION	LOCATION	UNIFIED SOIL CLASSIFICATION SYSTEM	DENSITY	MOISTURE	DENSITY	MOISTURE	COMPACTION	MODE	if "N" NUCLEAR DENSITY CORRE MOISTURE COR	ECTION FAC	TOR	RS (ATT 48) kg/m ³ kg/m ³
(m)	00+000		(USCS)	kg/m³	%	kg/m³	%	%			REMAR	KS	
0.00	22+620	cl	CI	1938	11.7	1972	12.0	101.8	В				
0.00	22+875	4 m Rt		1938	11.7	1960	12.1	101.1	В	These densities	are re-tests	s after we	eeks of rain.
0.00	23+245	3 m Rt		1938	11.7	1950	11.5	100.6	В				
0.00	20+520	1.5 m Rt		1938	11.7	1945	12.2	100.4	В	Contractor has b	een rippin	g, discing	g, drying and
0.00	20+810	cl		1938	11.7	1940	11.8	100.1	В	recompacting roa	dtop as we	ell as fini	shing ditches
0.00	21+100	2m Lt		1938	11.7	1940	11.0	100.1	В		and slop	es.	
0.00	18+960	3m Lt		1938	11.7	1935	11.9	99.8	В				
0.00	19+260	2m Lt		1938	11.7	1930	12.0	99.6	В				
0.00	19+580	2m Lt		1938	11.7	1930	12.5	99.6	В				
0.00	19+870	cl	CI	1766	15.0	1756	15.4	99.4	В				
0.00	20+250	2m Rt	CI	1938	11.7	1959	12.0	101.1	В				
0.00	21+470	2m Lt		1938	11.7	1944	12.1	100.3	В	REQUIRE	D COMPA	CTION =	100%
0.00	21+740	2m Lt		1938	11.7	1925	11.7	99.3	В				
0.00	22+010	3m Lt	CI	1804	15.3	1786	15.5	99.0	В				
						AVERAGE C	OMPACTION	100.2					
COMMENTS:								TECHNOLOG	ISTS				
Verv heavy com	paction equipment	on this project (826	6 Cat and 4 padfoo	t drums).				PROJECT MAN	IAGER				
	e ripping the top 10	. , \	·	,									
		a						RECEIVED	BY	*** Cont	ractor's Re	enresents	ative
Layor and Donoi	ity Requirements (S	consideration 2.2 Cr	ading 224751\	· compacted la	wore not to ever	and 0.15m in do	nth	DATE RE	CEIVED		TIME		14:30
Layer and Densi	ity requirements (S	pecification 2.3 Gr	auing, 2.3.4.7.5.1)	. compacted is	ayers not to exce	eu o. rom in de	pui	DATERE	CEIVED	2-Jan-2013	I IIVIE		14.30

Revised December 2013 Appendix B.12

*** Signature indicates receipt of data on the date and time indicated

below 0.30m - compacted to 95%

0.0 to 0.30m - minimum average of 100% compaction (with no tests <97%)



DAILY REPORT - GRANULAR BASE COURSE

USE ALSO FOR REPORTING FULL DEPTH RECLAMATION COMPACTION								
CONTRACT NO.	PROJECT	CONTRACTOR	PRIME CONSULTANT					
PROJECT FROM	PROJECT TO	DES. CLASS	QA CONSULTANT					

^{1.}COMPACTION - CONTROL STRIP METHOD

DATE TESTED	TEST SECTION	LIFT	LIFT	TEST SEC	TION LIMITS	CON	TROL	TES	ST SECTION	AVERAGE PERCENT	NO. TES		TEST SECTION RE-TEST	
DATE TESTED	NO.	LIFT	THICKNESS	FROM	то	DRY DENSITY kg/m³	MOISTURE %	DRY DENSITY kg/m³	MOISTURE %	CONTROL DENSITY	TOTAL NO.	BELOW 95%		

² GRADATION and FRACTURES

DATE SAMPLED	LOT NO.	TEST	LIFT	LOT	LIMITS	PERCENT FRACTURE					S	SIEVE ANALYSIS - 9	% PASSING (μ	m)				
DATE SAMIFLED	LOT NO.	NO.	LIFT	FROM	то	BY WEIGHT (2 FACES)	50 000	40 000	25 000	20 000	16 000	10 000	5 000	1250	630	315	160	80
	LOT MEAN																	
SPEC	SPECIFICATION LIMITS (Table 3.2.3.1) Upper Limit Lower Limit																	

Test Section Frequency Outlined in ATT 58. Windrow Sampling and Frequency Outlined in ATT 38.	LOT TONNAGE	t	MAT 6 - 60	0 / 12
COMMENTS	TECHNOLOGISTS			
	PROJECT MANAGER			
	RECEIVED BY			
		*** Contractor's F	Representative	
	DATE RECEIVED		TIME	

^{***} Signature indicates receipt of data on the date and time indicated



DAILY REPORT - GRANULAR BASE COURSE USE ALSO FOR REPORTING FULL DEPTH RECLAMATION COMPACTION

CONTRACT NO.		PROJECT		CONTRACTOR	GOOD ROAD	PRIME CONSULTANT					
	777710	Hwy 99:99			BUILDER	ABC CONSULTING					
PROJECT FROM	km 0.000	PROJECT TO	km 7.000	DES. CLASS	2-20	QA CONSULTANT ABC CONSULTING					

¹COMPACTION - CONTROL STRIP METHOD

TEST DATE TESTED SECTION LIFT		LIET	LIFT	TEST SECTION LIMITS		CON	TROL	TES	ST SECTION	AVERAGE PERCENT	NO. OF TESTS		TEST SECTION	
DATE TESTED	NO.	LIFT	THICKNESS	FROM	то	DRY DENSITY kg/m³	MOISTURE %	DRY DENSITY kg/m ³	MOISTURE %	CONTROL DENSITY	TOTAL NO.	BELOW 95%	RE-TEST	
15-May-2006	1	1	200	11+000	11+400	2110	4.0	2080	3.8	98.6	10	no		
									1					

²·GRADATION and FRACTURES

DATE SAMPLED	LOT NO.	TEST	LIFT	LOT	LOT LIMITS						s	SIEVE ANALYSIS - 9	6 PASSING (μ	m)				
DATE SAMPLED	LOT NO.	NO.	LIFI	FROM	то	BY WEIGHT (2 FACES)	50 000	40 000	25 000	20 000	16 000	10 000	5 000	1250	630	315	160	80
15-May-2006	1	1	1	11+000	11+400	61.1	100	100	100	99	93	69	52	40	27	20	8.3	4.6
15-May-2006	1	2	1	11+000	11+400	60.2	100	100	100	100	87	67	50	38	28	19	7.6	4.2
15-May-2006	1	3	1	11+000	11+400	66.8	100	100	100	100	88	68	47	34	29	18	8.1	4.2
	L	OT MEA	N			62.7	100	100	100	100	89	68	50	37	28	19	8.0	4.3
SDEC	Upper Limit				60+				100	94	86	67	43	34	26	18	10	
SPECIFICATION LIMITS (Table 3.2.3.1) Lower Limit			Lower Limit	00+				100	84	63	40	20	14	9	5	2		

1.Test Section Fred	quency Outlined in ATT 58.				MAT 6 - 60 / 1
	g and Frequency Outlined in ATT 38.	LOT TONNAGE	1,000.00 t	_	
COMMENTS	A tolerance of 3% passing the topsize is allowed, provided that the next higher sieve has 100% passing.	TECHNOLOGISTS			
	100 % passing.	PROJECT MANAGER			
		RECEIVED BY			
				*** Contractor's Representative	
		DATE RECEIVED		TIME	

^{***} Signature indicates receipt of data on the date and time indicated



DAILY COMPACTION REPORT - Cold In-Place Recycling (CIR)

Ī	CONTRACT NO.	PROJECT NO.	CONTRACTOR	PRIME CONSULTANT
	PROJECT FROM	PROJECT TO	DESIGN PROCTOR	QA CONSULTANT
			kg/m ³	

CIR1/	12

	CIR I	MIX			CIR PAVEMENT										
DATE SAMPLED	LOT NO.	DENSITY kg/m³	MOISTURE CONTENT %	DATE SAMPLED	LOT NO.	LANE	STATION	OFFSET m	SLAB DENSITY kg/m³	SLAB MOISTURE %	COMPACTION %				
		<u> </u>													
Lot Average															

COMMENTS:	Lot No.	Lane	From	То	Area (m²)	TECHNOLOGISTS:	
						PROJECT MANAGER:	
						RECEIVED BY:	
			TV	PE	AMOUNT		*** Contractors Representative
					%		
	BITUM STABI	INOUS LIZING					
	ADDI					DATE RECEIVED:	TIME:
	CEM						
	ADDI	ITIVE				*** Signature indicate	es receipt of data on the date and time indicated



DAILY COMPACTION REPORT - Cold In-Place Recycling (CIR)

CONTRACT NO.	100051	PROJECT NO.		CONTRACTOR		PRIME CONSULTANT
	123654		Hwy XX:xx			
PROJECT FROM		PROJECT TO		DESIGN PROCTOR		QA CONSULTANT
				2065	kg/m³	

CIR1/12

	CIR	MIX		CIR PAVEMENT							
DATE SAMPLED	LOT NO.	MARSHALL DENSITY	MOISTURE CONTENT	DATE SAMPLED	LOT NO.	LANE	STATION	OFFSET	SLAB DENSITY	SLAB MOISTURE	COMPACTION
	140.	kg/m ³	%					m	kg/m ³	%	%
18-Jun-2012	12	2105	4.8	29-Jun-2012	12	EBL	16+120	2.1 rt	2110	2.2	100.3
18-Jun-2012	12	2100	5.0	29-Jun-2012	12	EBL	16+905	3.0 rt	2101	1.9	99.9
18-Jun-2012	12	2106	4.1	29-Jun-2012	12	EBL	17+504	2.2 rt	2097	1.9	99.7
Lot Average		2104	4.6						2103	2.0	100.0

COMMENTS:	Lot No.	Lane	From	То	Area (m²)	TECHNOLOGISTS:	
Lot 12 CIR has sufficiently cured for ACP placement.	12	EBL	15+910	17+605	6,272		
						PROJECT MANAGER:	
						_	
						RECEIVED BY:	
			TY	PE	AMOUNT		*** Contractors Representative
					%		
		LIZING	CR	S-2	1.4		
	ADDI	IIVE				DATE RECEIVED:	TIME:
	CEM ADDI		G	U	1.0	*** Oliverature in disease a section	
						*** Signature indicates receip	t of data on the date and time indicated



APPEAL INITIALIZATION FORM

MAT 6 - 92A/11

PRIME CONSULTANT:	CONTACT NAME:	PHONE No.:	Email:	
DATE SUBMITTED:	APPEAL TYPE:	APPEAL CONSULTANT:		
LOT NO.	APPEAL NO.:	PROJECT IDENTIFIER:		

APPEAL TYPES
Asphalt Content
ACP Gradation
ACP Density
GBC Gradation
GBC Fractures
L.A. Abrasion
Detrimental Matter
HIR MTD

CORRECTION FACTOR INFORMATION (Fill this area out only for asphalt content appeals)									
DESIGN or VIRGIN	(if RAP) GRADATION	DESIGN or TARGET AGGREGATE PROPO	ORTIONS %						
SIEVE SIZE (µm)	PERCENT PASSING (%)	COARSE AGGREGATE (12.5mm)							
25 000		NATURAL FINES							
20 000		NATURAL FINES							
16 000		MANUFACTURED FINES							
12 500		WANDFACTURED FINES							
10 000		BLEND SAND							
5 000		BLEND SAND							
1250		COARSE AGGREGATE							
630		(20mm)							
315		COARSE AGGREGATE							
160		(25mm)							
80		OTHER							
		OTHER							
ASPHALT CEMENT GRADE AND SUPPLIER		% PASSING 5000μm SIEVE IN COARSE							

SHADED AREAS - COMPLETED BY PRIME CONSULTANT - HEADER INFORMATION COMPLETED FOR ALL APPEALS

CORRECTION FACTOR INFORMATION NEEDED FOR ASPHALT CONTENT APPEALS ONLY

COPY SUBMITTED WITH SAMPLES AND SENT TO AN APROVED APPEAL CONSULTANT (AS SPECIFIED IN ATT-68)

For procedures and test methods used for the appeal of acceptance test results see ATT-68 APPEAL TESTING

SEND COMPLETED COPIES OF THIS FORM TO: 1. THE SURFACE ENGINEERING AND AGGREGATES SECTION (email to trans.constructqa@gov.ab.ca)

2. PROJECT SPONSOR

REMARKS: The Project Identifier in the header is useful in the case where more than one appeal is sent in by the same consultant for different jobs.

For asphalt content appeals, the Contractor supplies a minimum of 15 kg of representative aggregate for each split, and a 4ℓ sample of project asphalt cement for the appealed Lot. The materials and the design gradation are shipped to the Appeal Testing Consultant.

For core asphalt content or gradation appeals, sufficient cores are taken at the same location to provide the Appeal Testing Lab with a minimum 2000 g extraction sample.

NOTE: Contract specific information is **NOT** to be included on this form.



APPEAL INITIALIZATION FORM

MAT 6 - 92A/11

PRIME CONSULTANT:		CONTACT NAME:		PHONE No.:		Email:		
DATE SUBMITTED:	1-Jan-2013	APPEAL TYPE:		AF	PPEAL CONSULTANT:			
LOT NO.		APPEAL NO.:		PROJECT IDENTIFIER:		X	ХХ	

APPEAL TYPES
Asphalt Content
ACP Gradation
ACP Density
GBC Gradation
GBC Fractures
L.A. Abrasion
Detrimental Matter
HIR MTD

CORRECTION FACTOR INFORMATION (Fill this area out only for asphalt content appeals)									
DESIGN or VIRGIN (i	if RAP) GRADATION	DESIGN or TARGET AGGREGA	DESIGN or TARGET AGGREGATE PROPORTIONS %						
SIEVE SIZE (µm)	PERCENT PASSING (%)	COARSE AGGREGATE (12.5mm)	75						
25 000		NATURAL FINES	10						
20 000		NATURAL FINES	10						
16 000	100	MANUFACTURED FINES							
12 500	100	WANOFACTORED FINES							
10 000	97	BLEND SAND	15						
5 000	71	BLEIND SAIND	13						
1250	43	COARSE AGGREGATE							
630	32	(20mm)							
315	19	COARSE AGGREGATE							
160	11.6	(25mm)							
80	7.5	OTHER							
		OTHER	_						
ASPHALT CEMENT GRADE AND SUPPLIER	PG 52-34 HUSKY	% PASSING 5000μm SIEVE IN Co	OARSE 45						

SHADED AREAS - COMPLETED BY PRIME CONSULTANT - HEADER INFORMATION COMPLETED FOR ALL APPEALS

CORRECTION FACTOR INFORMATION NEEDED FOR ASPHALT CONTENT APPEALS ONLY

COPY SUBMITTED WITH SAMPLES AND SENT TO AN APROVED APPEAL CONSULTANT (AS SPECIFIED IN ATT-68)

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2. PROJECT SPONSOR

REMARKS: The Project Identifier in the header is useful in the case where more than one appeal is sent in by the same consultant for different jobs.

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For core asphalt content or gradation appeals, sufficient cores are taken at the same location to provide the Appeal Testing Lab with a minimum 2000 g extraction sample.

NOTE: Contract specific information is **NOT** to be included on this form.



APPEAL TEST RESULTS

Trans	portation		APPEAL '	TYPE & NO:				
	MAT 6 - 92 / 11							
PROJECT:			CONTRACT:		DATE LAID:		DATE CORED:	
FROM:			LOT NO.:		CONTRACTOR:		PRIME CONSULTANT	
TO:			PROJECT I	MANAGER:			APPEAL CONSULTANT	
		1		1	1		1	
SEGMENT OR SA	MPLE NUMBER	1	2	3	4	5		
STATION OF SEGME	NT TEST SITE							
LOCATION FROM CE	NTERLINE							
			DENSITY					
A LOT AVERAG	GE MARSHALL DI	RY DENSITY					B TOTAL	AVERAGE
CORE DRY DEN	ISITY (kg/m³)							

ASPHALT CONTENT									
EXTRACTION CORRECTION FACTOR C TOTAL AV						AVERAGE			
CORRECTED EXTRACTION ASPHALT CONTENT (%)									

GRADATION OF EX	GRADATION OF EXTRACTED CORES or GRANULAR BASE COURSE SAMPLES										
SIEVE SIZE (µm)		PER	CENT PASSING	6 (%)		AVERAGE	JOB MIX FORMULA				
40 000											
25 000											
20 000											
16 000											
12 500											
10 000											
5 000											
1 250											
630											
315											
160											
80											
% FRACTURES - GBC											

LOT ASPHALT CONTENT or DENSITY CALCULATIONS								
the single high and single low test results from the original Lot will be rejected	Е	F						
THREE REMAINING DENSITY TESTS								
THREE REMAINING LOT ASPHALT CONTENT TESTS								
G ¹ . FINAL LOT DENSITY RESULTS	(D + E + F + B) / 8	kg /m³						
G ² . FINAL LOT ASPHALT CONTENT RESULTS	(D + E + F + C) / 8	%						
H. LOT TARGET ASPHALT CONTENT		%						
I. DEVIATION FROM TARGET ASPHALT CONTENT	H - G	%						
J. FINAL LOT % COMPACTION	(100 G / A)	%						
K. LOT UNIT PRICE ADJUSTMENT FOR DENSITY or ASPHALT CONTENT	(TABLE 3.50 A OR B)	\$ / t						
L. LOT TONNES OF MIX		t						
M. APPEAL LOT ADJUSTMENT	KxL	\$						

SHADED AREAS - COMPLET	SHADED AREAS - COMPLETED BY THE PRIME CONSULTANT AFTER RECEIVING THE RESULTS FROM THE APPEAL CONSULTANT									
SEND COMPLETED COPIES	OF THIS FORM TO:	THE SURFACE ENGINEERING AND AGGREGATES SECTION	tructqa@gov.ab.ca)	2. PROJECT SPONSOR						
REMARKS:										
					MAT 6 - 92 /11					
			_							
PROJECT MAI	NAGER	CONTRACTOR	-	APPEAL CONSULTANT						



APPEAL TEST RESULTS

APPEAL TYPE & NO: ACP Density No. 2

MAT 6 - 92 / 11

PROJECT:	HWY XX:xx	CONTRACT:	XXXXXX	DATE LAID:	1-Jan-2013	DATE CORED:	5-Jan-2013
FROM:		LOT NO.:		CONTRACTOR:		PRIME CONSULTANT	
TO:		PROJECT MANAGER:				APPEAL CONSULTANT	

SEGMENT OR SAMPLE NUMBER	1	2	3	4	5
STATION OF SEGMENT TEST SITE	12+100	12+650	13+002	13+122	13+450
LOCATION FROM CENTERLINE	2.0 m Rt	2.3 m Rt	0.5 m Rt	4.1 m Rt	3.1 m Rt

DENSITY								
A LOT AVERAGE MARSHALL DRY DENSITY 2383 B TOTAL AVERAGE							AVERAGE	
CORE DRY DENSITY (kg/m³)	2282	2241	2256	2291	2289	11359	2272	

ASPHALT CONTENT								
EXTRACTION CORRECTION FACTOR C TOTAL AVERAGE						AVERAGE		
CORRECTED EXTRACTION ASPHALT CONTENT (%)								

GRADATION OF EX	GRADATION OF EXTRACTED CORES or GRANULAR BASE COURSE SAMPLES									
SIEVE SIZE (μm)		PER	CENT PASSING	6 (%)		AVERAGE	JOB MIX FORMULA			
40 000					1					
25 000										
20 000										
16 000										
12 500										
10 000										
5 000										
1 250										
630										
315										
160										
80										
% FRACTURES - GBC							_			

LOT ASPHALT CONTENT or DENSITY CALCULATIONS								
the single high and single low test results from the original Lot will be rejected	D	Е	F					
THREE REMAINING DENSITY TESTS	2280	2291	2333					
¹ . FINAL LOT DENSITY RESULTS (D+E+F+B)/8 kg/m³								
G ² . FINAL LOT ASPHALT CONTENT RESULTS	(D + E + F + C) / 8	%						
H. LOT TARGET ASPHALT CONTENT		%						
I. DEVIATION FROM TARGET ASPHALT CONTENT	H-G	%						
J. FINAL LOT % COMPACTION	(100 G / A)	%	95.8					
K. LOT UNIT PRICE ADJUSTMENT FOR DENSITY or ASPHALT CONTENT	(TABLE 3.50 A OR B)	\$ / t	(\$2.40)					
L. LOT TONNES OF MIX		t	3140.2					
M. APPEAL LOT ADJUSTMENT	KxL	\$	(\$7,536.48)					

SHADED AREAS - COMPL	ETED BY THE PRIME CO	DNSULTANT AFTER RECEIVING THE RESULTS FROM THE AP	PEAL CONSULTANT			
SEND COMPLETED COPIE	ES OF THIS FORM TO:	THE SURFACE ENGINEERING AND AGGREGATES SECTION				
REMARKS:						
					MAT 6 - 92 /11	
PROJECT M	ANAGER	CONTRACTOR	_	APPEAL CONSULTANT		



APPEAL TEST RESULTS

APPEAL TYPE & NO: Asphalt Content No. 1

MAT 6 - 92 / 11

PROJECT:	HWY	XX:xx	CONTRACT:	XXXXXX	DATE LAID:	1-Jan-2013	DATE CORED:	5-Jan-2013
FROM:			LOT NO.:		CONTRACTOR:		PRIME CONSULTANT	
TO:			PROJECT MANAGER:				APPEAL CONSULTANT	

SEGMENT OR SAMPLE NUMBER	1	2	3	4	5
STATION OF SEGMENT TEST SITE	12+100	12+650	13+002	13+122	13+450
LOCATION FROM CENTERLINE	2.0 m Rt	2.3 m Rt	0.5 m Rt	4.1 m Rt	3.1 m Rt

DENSITY								
A LOT AVERAGE MARSHALL DI					B TOTAL	AVERAGE		
CORE DRY DENSITY (kg/m³)								

	ASPI	HALT CONTENT	1				
EXTRACTION CORRECTION	FACTOR	0.02%				C TOTAL	AVERAGE
CORRECTED EXTRACTION ASPHALT CONTENT (%)	5.71	5.58	5.42	5.52	5.33	27.56	5.51

GRADATION OF EX	(TRACTED COR	ES or GRANUL	AR BASE COUR	RSE SAMPLES								
SIEVE SIZE (µm)		PERCENT PASSING (%) AVERAGE JOB MIX FORMULA										
40 000					1		100					
25 000							100					
20 000							100					
16 000	100	100	100	100	100	100	98					
12 500	90	89	90	91	90	90	88					
10 000	79	81	80	79	80	80	80					
5 000	65	65	60	63	62	63	61					
1 250	39	37	35	36	32	36	37					
630	27	29	28	27	27	28	28					
315	17	18	17	18	17	17	17					
160	9.9	10.7	10.2	10.1	10.2	10.2	9.8					
80	6.4	6.8	6.5	6.4	6.4	6.5	6.4					
% FRACTURES - GBC	62	61	60	60	62	61						

LOT ASPHALT CONTENT or DENSITY C	ALCULATIONS		
the single high and single low test results from the original Lot will be rejected	D	E	F
THREE REMAINING LOT ASPHALT CONTENT TESTS	4.98	5.35	5.37
G ¹ . FINAL LOT DENSITY RESULTS	(D + E + F + B) / 8	kg /m³	
G ² . FINAL LOT ASPHALT CONTENT RESULTS	(D + E + F + C) / 8	%	5.41
H. LOT TARGET ASPHALT CONTENT		%	5.80
I. DEVIATION FROM TARGET ASPHALT CONTENT	H-G	%	0.39
J. FINAL LOT % COMPACTION	(100 G / A)	%	
K. LOT UNIT PRICE ADJUSTMENT FOR DENSITY or ASPHALT CONTENT	(TABLE 3.50 A OR B)	\$/t	(\$2.00)
L. LOT TONNES OF MIX		t	3140.2
M. APPEAL LOT ADJUSTMENT	KxL	\$	(\$6,280.40)

SHADED AREAS - COMPLETED BY THE PRIME CO	NSULTANT AFTER RECEIVING THE RESULTS FROM THE APPEAL CONS	ULTANT	
SEND COMPLETED COPIES OF THIS FORM TO:	THE SURFACE ENGINEERING AND AGGREGATES SECTION (email to)	trans.constructqa@gov.ab.ca)	2. PROJECT SPONSOR
	tries to capture all appeals for illustration; asphalt content, gradas, all tests from the old Lot will be retained and averaged with the		
PROJECT MANAGER	CONTRACTOR	APPE/	MAT 6 - 92 /11 AL CONSULTANT

Transportation

SEGREGATION WORKSHEET CONTRACT NO. PROJECT NO. CONTRACTOR CONSULTANT PROJECT FROM PROJECT TO INSPECTIONS BY THE CONSULTANT MAT 6 - 95/12 SEGREGATED AREAS DATE Center of Paver OBVIOUS STATION LOCATION LANE MAT COMMENTS **INSPECTED** SLIGHT MODERATE Length (m) DEFECT SEVERE **OBVIOUS DEFECT CODES** INSPECTED BY: RECEIVED BY: SG Segregation(<0.1 m²) RM Roller Mark EA Excess Asphalt
SL Sample Location *** Contractor's Representative TM Tire Mark TR Roller Tears MJ Imp. Matching Joint DATE RECEIVED HC Hairline Cracking TIME AP Approach Seg. CR Cracking

*** Signature indicates receipt of data on the date and time indicated

CP Centre-of-Paver Streaks

less than 1 m in length

CH Imp. Rep. Core Holes OH Other____



MAT 6 - 95/12

SEGREGATION WORKSHEET

_						SHEET_	_1 of	2
	CONTRACT NO.	PROJECT N	10.	CONTRACTOR		CONSULTANT		
~	999908	Hw 9	9:99	Good Road Builde	r	Ве	etter Rater	
	PROJECT F	ROM		PROJECT TO	INSP	ECTIONS BY THE	CONSUL	.TANT
	Lido Cre	ek		Pedicot Junction		1. During Con	struction	

DATE	07.47.01	LOGATION			SEG	REGATED A	REAS	Center of Paver	OBVIOUS	001115170
INSPECTED	STATION	LOCATION	LANE	MAT	SLIGHT	MODERATE	SEVERE	Length (m)	DEFECT	COMMENTS
22-Jul-2008	3+215	2.9m Rt	W	R	✓					
	3+321	3.8m Rt	W	R	✓					
	3+330	2.0m Rt	W	R		✓		216		Requires slurry or hot mix patch
	3+340	3.0m Rt	W	R		✓				Requires slurry or hot mix patch
	3+380	2.7m Rt	W	R		✓				Requires slurry or hot mix patch
	3+720	1.7m Rt	W	R	✓					
	4+123	2.2m Rt	W	R		✓				Requires slurry or hot mix patch
	4+250	cl							MJ	From 4+250 to 4+390
	4+288	2.3m Rt	W	R	✓					
	4+430	3.0m Rt	W	R		✓				Requires slurry or hot mix patch
	4+600	2.9m Rt	W	R		✓				Requires slurry or hot mix patch
	4+621	1.5m Rt	W	R	\					
	4+680	2.9m Rt	W	R		✓				Requires slurry or hot mix patch
	4+721	2.5m Rt	W	R	✓					
	5+181	3.9m Rt	W	R					SL	Requires slurry or hot mix patch
	5+201	3.3m Rt	W	R	✓					
	5+280	2.85m Rt	W	R				592		From 5+280 to 5+872 (Rated as slight, no repair req'd)
	5+320	3.6m Rt	W	R	✓					
	5+402	3.1m Rt	W	R	✓					
	5+872	2.85m Rt	W	R				40		From 5+872 to 5+912 (Rated as moderate, slurry or hot mix patch reg'd)
	6+057	1.8m Rt	W	R	✓					177
	6+100	2.85m Rt	W	R				540		From 6+100 to 6+640 (Rated as slight, no repair req'd)
	6+177	0.6m Rt	W	R					СН	Core holes need topping up
	6+680								AP	Mod. Seg on Approach (not subject to adjustments)

<u>OB'</u>	VIOUS DEFECT CODES	<u>}</u>	INSPECTED BY:	Harry (Cotter, Oranth	el Crusher	
SG	Segregation(<0.1 m ²)	RM Roller Mark	RECEIVED BY:		Bob Roadbulid	ler	
	Excess Asphalt	TM Tire Mark		*** (Contractor's Repres	entative	
MJ	Sample Location Imp. Matching Joint	TR Roller Tears HC Hairline Cracking	DATE RECEIVED	6-Aug-2008	TIME	6:00 PM	
СН	Cracking Imp. Rep. Core Holes	AP Approach Seg. OH Other		·			

CP Centre-of-Paver Streaks less than 1 m in length

^{***} Signature indicates receipt of data on the date and time indicated



SEGREGATION SUMMARY REPORT

CONTRACT NO. PROJECT NO. CONTRACTOR CONSULTANT

PROJECT FROM PROJECT TO PROJECT LANE.KMS

MAT 6 - 95s/12 LANE.KM TOTALS NUMBER SEGREGATION LIMITS SEGREGATED AREAS Length of Centre of Paver Streaks ADJUSTMENTS LENGTH OBVIOUS MAT LANE (+/-\$) FROM SLIGHT MODERATE SEVERE DEFECTS Total(s)

COMMENTS:		
	CERTIFIED CORRECT:	POSITION:

These values used in calc. Pen Bonus Lane kilometres subject to \$500 bonus 0.000 Lane kms Lane kilometres subject to \$1000 bonus 0.000 Lane kms TOTAL \$500 & \$1000 BONUSES \$0.00 (\$) Total Penalty for Segregation and Centre-of-Paver Streaks \$0.00 (-\$) Total Length of Centre-of-Paver Streaks (m) metres TOTAL SEGREGATION ADJUSTMENT \$0.00 (+ or - \$)



MAT 6 - 95s/12

SEGREGATION SUMMARY REPORT

SHEET 1 of 1

CONSULTANT CONTRACT NO. PROJECT NO. CONTRACTOR XXXXXX Hwy XX:xx PROJECT LANE.KMS PROJECT FROM PROJECT TO 68.20

WAT 0 - 935/12	LANE.KM	1			1	T	OTALS NUMBER			SEGREGATION
LIN	IITS	1			SI	EGREGATED AREA		Length of Centre		ADJUSTMENTS
FROM	ТО	LANE	MAT	LENGTH (km)	SLIGHT	MODERATE	SEVERE	of Paver Streaks (m)	OBVIOUS DEFECTS	(+/-\$)
3.200	4.000	N	R	0.800	3	3			0	(\$1,600.00)
4.000	5.000	Z	R	1.000	3	4			1	(\$2,000.00)
5.000	6.000	Ν	R	1.000	3			632	0	(\$1,048.00)
6.000	7.000	N	R	1.000	1	1		640	2	(\$1,460.00)
7.000	8.000	N	R	1.000	1	2			0	(\$1,000.00)
8.000	9.000	N	R	1.000	2				3	\$500.00
9.000	10.000	N	R	1.000		1		20	3	(\$530.00)
10.000	11.000	N	R	1.000	1	1	1		3	(\$1,000.00)
11.000	12.000	N	R	1.000		5			3	(\$2,000.00)
12.000	13.000	N	R	1.000	3				3	(\$100.00)
13.000	14.000	N	R	1.000	4	3			3	(\$1,700.00)
14.000	15.000	N	R	1.000	3				3	(\$100.00)
15.000	16.000	N	R	1.000					3	\$1,000.00
16.000	17.000	Ν	R	1.000	1				3	\$500.00
17.000	18.000	N	R	1.000		1			3	(\$500.00)
18.000	19.000	N	R	1.000		1			3	(\$500.00)
19.000	20.000	N	R	1.000	1				3	\$500.00
20.000	21.000	N	R	1.000	2				3	\$500.00
21.000	22.000	N	R	1.000	3				3	(\$100.00)
22.000	23.000	N	R	1.000		1			3	(\$500.00)
23.000	24.000	Ν	R	1.000					3	\$1,000.00
24.000	25.000	Ν	R	1.000					3	\$1,000.00
25.000	26.000	N	R	1.000	3				3	(\$100.00)
26.000	27.000	N	R	1.000		1			3	(\$500.00)
27.000	28.000	N	R	1.000		1			3	(\$500.00)
28.000	29.000	N	R	1.000					3	\$1,000.00
29.000	30.000	N	R	1.000					3	\$1,000.00
30.000	31.000	N	R	1.000	3				3	(\$100.00)
31.000	32.000	N	R	1.000					3	\$1,000.00
32.000	33.000	N	R	1.000	2				3	\$500.00
33.000	34.300	Ν	R	1.300	4				3	(\$130.00)
		-	Total(s)	31.100	43	25	1	1292	81	(\$6,968.00)

COMMENTS:	This summary is for the Northbound lane, right mat.	
	CERTIFIED CORRECT:	POSITION:

These values used in calc. Pen Bonus Lane kilometres subject to \$500 bonus Lane kilometres subject to \$1000 bonus TOTAL \$500 & \$1000 BONUSES Total Penalty for Segregation and Centre-of-Paver Streaks

Total Length of Centre-of-Paver Streaks (m)

TOTAL SEGREGATION ADJUSTMENT

5.000 Lane kms 6.000 Lane kms \$8,500.00 (\$) (\$15,468.00) (-\$) 1292 metres (\$6,968.00) (+ or - \$)

	M	ert						PRO	FILO	GRAPH	INDEX R	EPORT			SHEE	Tof
	4 (L	u n					PRO	JECT					CC	NTRACT	NO.	
	Tra	anspo	rtatio	n			FR	OM					TYPE OI	F CONST	RUCTION	
MAT 6 -							Т	0				_		LIFT		
WAT 6-	13/12				1	YPE :										
	PRO	OFILOGR <i>i</i>	APH		OPERA	TOR:					PROFILO	GRAPH CONSULT	ANT			
	DA	ATE TEST	ED		TOTAL kn		BONUS		% IN BONUS	NUMBER OF		CONTRO	DL SECTIO	•	eters)	
		dd/mm/year			TESTED		SECTION	5 6	SUNUS	SECTIONS	FROM		TO)		
		ı	ı		OLIDI	OTIU	NITO.	001	INITO	PROFILE	DDI ACC	COMENT	DII	MP and/o	- DID	DI IMP/DID
SECT.	RE-TEST	TYPE of CONSTR.	LANE	MAT	FROM	OT LII	TO		JNTS	INDEX	BONUS	PENALTY	Bump	SIZE	Location	BUMP/DIP ASSESSMENT
NO.		(C1, C2, C3)			0+000		0+000	1.IWP	OWP	mm / 0.1 km	\$	(\$)	or Dip	mm	0+000	PENALTY(\$)
1																
2																
3																
4																
5																
6																
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30																
COM	MENTS:									TOTAL(S)	\$ -	\$ -			TOTAL(S)	\$ -
												TOTAL NUMBE	R OF RE	JECTS		
	F	PRI ASSE	SSMEN	Т				BUMP /	DIP AS	SESSMENT		Multi-Lift - #	of Sublots	s (PRI >	10mm)	
# OF S	UBLOTS	WITH 0	mm PRI			Mult	ti-Lift (BU	MPS & C	DIPS):			Single-Lift - #	of Sublo	ts (PRI >	15mm)	
BONUS	SASSES	SMENT F	OR PRI				le-Lift (BL					Curb & Gutter	# of Sub	lots (PRI	> 22mm)	
							TOTAL E			LTIES		DECREASED				

Revised December 2013 Appendix B.19

TOTAL (Bonus Assessment for PRI + Total Bump/Dip Penalties + Decreased Assessment for PRI)

Albertan

MAT 6 - 73/12

PROFILOGRAPH INDEX REPORT

Hwy XX:xx

CONTRACT NO.

TYPE OF CONSTRUCTION

XXXXXX Multi-Lift

SHEET 1 of 1

Transportation

FROM
TO

PROJECT

LIFT Final

	PRC	DFILOGRA	NPH		OPERATO	R: Very Go	od				PROFILOG	KAP	H CONSULT	ANI		IRIS ENGI	NEEKI	ING
	DA	TE TESTE	-D		TOTAL kms	BONUS		% IN	NUMBER OF				CONTRO	L SECTION	ON (kilor	meters)		
					TESTED	SECTION		BONUS	SECTIONS		FROM		7+200	Т	0		10+00	10
		dd/mm/year 1-Oct-2013	3		16.10	3		11%	28				30+000				30+00	10
		TYPE of			SUBLOT	LIMITS	COL	JNTS	PROFILE		PRI ASS	ESSN	/ENT	BU	MP and	or DIP	BUMP/DIP	
SECT. NO.	RE-TEST	CONSTR. (C1, C2, C3)	LANE	MAT	FROM	ТО	1.IWP	OWP	INDEX		BONUS \$	F	PENALTY	Bump or Dip	SIZE	Location		SESSMEN NALTY(\$)
			10/		0+000 10+000	0+000		0.00	mm / 0.1 km 0	•			(\$)	ог ыр	mm	0+000	FL	INALIT(\$
1		C1	W	L	-	9+900				\$	30.00	•						
2		C1	W	L	9+900	9+800		5.00	5			\$	-					
3		C1	W	L	9+800	9+700		10.00	10			\$	- (40.00)					
4		C1	W	L	9+700	9+600		11.00	11			\$	(40.00)					
5		C1	W	L	9+600	9+500		12.00	12			\$	(70.00)					
6		C1	W	L	9+500	9+400		13.00	13			\$	(100.00)				_	
7		C1	W	L	9+400	9+300		14.00	14			\$	(130.00)	Bump	9	9+330	\$	(300.0
8		C1	W	L	9+300	9+200		15.00	15			\$	(170.00)					
9		C1	W	L	9+200	9+100		16.00	16			\$	(200.00)					
10		C1	W	L	9+100	9+000		17.00	17	L,		\$	(230.00)					
11		C2	Е	R	9+000	8+900		0.00	0	\$	30.00							
12		C2	Е	R	8+900	8+800		10.00	10			\$						
13		C2	Е	R	8+800	8+700		15.00	15			\$	•					
14		C2	Е	R	8+700	8+600		16.00	16			\$	(40.00)					
15		C2	Е	R	8+600	8+500		18.00	18			\$	(120.00)					
16		C2	Е	R	8+500	8+400		20.00	20			\$	(200.00)	Dip	9	8+553	\$	(100.
17		C2	E	R	8+400	8+300		21.00	21			\$	(240.00)					
18		C2	Е	R	8+300	8+200		22.00	22			\$	(280.00)					
19		C2	Е	R	8+200	8+100		23.00	23			\$	(320.00)	Bump	12	8+123	\$	(100.0
20		C2	Е	R	8+100	8+000		24.00	24			F	REJECT					
21		C3	N	RS	8+000	7+900		0.00	0	\$	30.00							
22		C3	N	RS	7+900	7+800		10.00	10			\$	-					
23		C3	N	RS	7+800	7+700		20.00	20			\$	-					
24		C3	N	RS	7+700	7+600		23.00	23			\$	(10.00)					
25		C3	N	RS	7+600	7+500		25.00	25			\$	(70.00)					
26		C3	N	RS	7+500	7+400		27.00	27			\$	(130.00)					
27		C3	N	RS	7+400	7+300		29.00	29			\$	(190.00)		11	7+350	\$	(100.
28		C3	N	RS	7+300	7+200		31.00	31			ı	REJECT					
29																		
30																		

PRI ASSESSMENT		BUMP / DIP ASSESSMENT			Multi-Lift - # of Sublots (PRI > 10mm)	6
# OF SUBLOTS WITH 0 mm PRI 3		Multi-Lift (BUMPS & DIPS):	1	(\$300.00) Single-Lift - # of Sublots (PRI > 15mm)		6
BONUS ASSESSMENT FOR PRI	S ASSESSMENT FOR PRI \$90.00		Single-Lift (BUMPS & DIPS): 3 (\$300.00)		Curb & Gutter - # of Sublots (PRI > 22mm)	4
		TOTAL BUMP/DIP PENALTIES (\$600.00)			DECREASED ASSESSMENT FOR PRI	(\$2,540.00)
		TOTAL (Bonus Assessment f	alties + Decreased Assessment for PRI)	(\$3.050.00)		

TOTAL NUMBER OF REJECTS

2



Excel Program for IRI & ALR Reporting

FAMILIARIZE YOURSELF WITH THE FOLLOWING INSTRUCTIONS PRIOR TO USING THE PROGRAM.

1. Macro and ProVAL

This spreadsheet has a macro to calculate the bonus/penalty adjustments for Ride Quality and ALR.

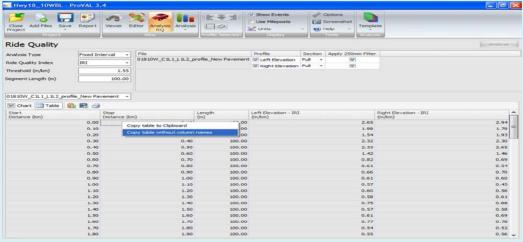
This program is designed to use ProVAL 3.4 version data. If you're using a 3.3 version or lower, it is suggested you update your ProVAL.

It is recommended that under File - Properties you select the Read Only option.

2. Steps for Ride Quality Reporting

The following provides guidance on how to produce an IRI report.

a) while doing ride quality analysis in ProVAL, as in the screen shot shown below, copy IRI table to the clipboard without column names.

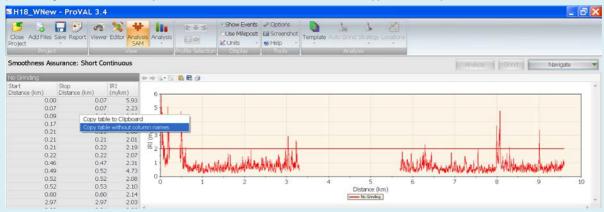


- b) Click cell B11 on worksheet "IRI", and paste data in the clipboard.
- c) Make sure all fields under Excluded Areas(column H) and Construction type (column I) are filled out.
- d) Complete report header information (contract No. etc...). Add comments if needed.
- e) click "Complete and Format Form" button located near the top right corner of the form. Wait for the analysis to complete.
- f) Check form and make sure the information entered is correct and check calculation if you wish.
- g) If for any reason you need to revise information under H "Excluded Area" or I "Type of Construction" you may do so and hit refresh to redo the analysis. if an sublot encompasses two construction types, select the construction type with higher number (e.g. both SI and SII types are in one sublot, chose SII for that sublot).
- h) If you would like to preview the print out of the form, click "Print Preview" button.
- i) If you're only doing IRI reporting, you can exit now and Excel will remind you to save (since this template is read-only).

3. Steps for Areas of Localized Roughness Reporting

The following provides instructions on how to produce ALR report.

a) while doing Smooth Assurance analysis in ProVal 3.4,as in the screen shot shown below, copy table to the clipboard without column names.



- b) Click cell A10 on the ALR worksheet, and paste data in there from the clipboard.
- c) Make sure all fields under column E,F,G and the report header are completed
- d) Check report header information (contract No. etc...). Add comments if needed.
- e) Check form and make sure the information entered is correct and check calculation if you wish.
- f) click "Format and Print Preview" button locates near the top right corner of the form to see a print preview.
- h) This template is read-only. YOU MUST SAVE YOUR WORK AS A SEPARATE FILE PRIOR TO EXIT. You'll be prompted when closing the excel workbook.
- i) You can exit now and Excel will remind you to save (since this template is read-only).

4. Report Submissions

On day of testing submit the unfiltered profile data in .erd or .ppf format. Also submit to the Consultant paper reports for Ride Quality and ALR (short continuous analysis) that are generated by either ProVAL or the software associated with the inertial profiler.

After remedial work, if required, retest and re-submit the profile data and smoothness reports.

Within five days of testing submit the payment adjustment spreadsheet to the Consultant in .xlsx and .pdf formats and paper copies for Ride Quality and ALR as generated by ProVAL (if not already submitted earlier).

The Consultant is to review the spreadsheets for accuracy and is to forward the electronic profile data and EXCEL spreadsheets (.xlsx format) to Technical Standards Branch - trans.constructqa@gov.ab.ca. The spreadsheet (.pdf) is also to be forwarded to the Project Sponsor or Administrator. Note that for interim saves, the spreadsheet can be saved in ".xlsm" format in order to retain the "payment adjustment" Macro functionality.

5. Reporting Problems

This Excel is tested under Windows XP operating system and Microsoft Excel 2010 environment. This program may not function properly on other systems. To report any problem with the template, contact the Construction Standards Specialist at jim.gavin@gov.ab.ca.

Disclaimer: Alberta Transportation does not warrant the functions contained in this Template will meet your requirements or that the operation of the program will be uninterrupted or error-free.

It is the user's sole responsibility to check the correctness and accuracy of the data and contents contained in the report.

In no event will Alberta Transportation or its staff be liable for any loss, expense, damage, of any type or nature arising out of the use of, or liability to use this excel program, including, but not limited to any lost profit, lost of productivity or any other incidental or consequential damage.

Revised on April, 2014

Naming Convention

The following naming rules apply to this EXCEL file and all other files (Erd, Ppf...) submitted to AT.

Report files shall be named in the following standardized format:

CN(_RT)_HwyN_CS1(_CS2)_Lane_TTN

- > CN: contract number for the project as shown on the cover page of the contract document. It shall contain only numbers and no slash;
- > RT: roadway type in abbreviation, use UAR for Urban Approach Roads, PAR for Park Access Roads. The preceding underscore and RT shall be omitted and deleted when testing a Highway.
- ➤ HwyN: highway number on which roughness test was performed. It shall contain a three-digit number (with leading zeros) followed by a letter if required;
- > CS1: control section number where roughness test started, in two digits, include leading zero;
- ➤ CS2: control section number where roughness test ended, in two digits, include leading zero. If IP roughness test starts and ends in the same control section, the CS2 and preceding underscore shall be omitted and deleted:
- ➤ Lane: location details for the lane tested, which indicates right/left location and sequence number in relation to the yellow line.

Left/right is defined as left/right side with respect to the yellow line as viewed up chainage (increasing chainage). The lane immediately left/right to the yellow line is the first lane and for lanes further from the yellowline, the sequence number increases accordingly.

> TTN: roughness test type and test number. Omit this if it's initial test, "R" for re-test and "V" for verification test. Succeed test type abbreviation with a one-digit number to indicate test number of occurrence. Use 1 for 1st time, and increase number accordingly for subsequent tests.

The following provides typical examples of naming ERD files:

1. A verification test was performed on Hwy 18 from Control Section 10 to 12 eastbound driving lane for the construction of Contract 131088. The stationing number increases eastbound. The roughness data from IP shall be named as follows:

131088_018_CS10_CS12_R1_V1.xlsx or erd or ppf

2. A roughness test was performed by the Contractor on Hwy 16 from Control Section 26 to 24 westbound passing lane for the construction of Contract 131099. The stationing number increases eastbound. The roughness data from IP shall be named as follows:

131099 016 CS26 CS24 L1.xlsx or erd or ppf



Contract No:	Type of Test:	
Hwy Number:	Contractor:	
Control Section:	IP Operator:	
Lane:	Test Date: (mm/dd/yyyy)	
Direction:	Comments:	

Ride Quality Bonus/Penalty Summary

Appendix B20	Ride Quality Bonus/Penalty Summary Appendix B20.a							Type of Cons.	Sublot Payment
Sublot	Station	(km)	Length	IRI (m	n/km)	MIRI	Yes or No?	SI,SII,or SIII	Assessment
Number	Start	End	(m)	Left	Right	(m/km)		- 7- 7	(\$)
							no		
							no		
							no		
							no		
							no		
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Areas of Localized Roughness Report



Contract No:	0	Type of Test:	
Hwy Number	0	Contractor:	0
Control Section	0	IP Operator:	0
		Test Date:	
Lane:	0	(mm/dd/yyyy)	1/0/1900
Direction:	0	Comments:	

Appendix B20.b

Areas of Localized Roughness Summary								
Station (k	m)	IRI (m/km)	Length Excluded Area?		Type of Cons.	Penalty		
Start	End	Right	(m)	Yes or No	SI,SII,or SIII	Assessment \$		
paste here				no				



Contract No:	12378	Type of Test:	Acceptance
Hwy Number:	998	Contractor:	XYZ
Control Section:	10	IP Operator:	John Turner
Lane:		Test Date:	
Lane.	R1	(mm/dd/yyyy)	6/6/2014
Direction:	NB		

Ride Quality Bonus/Penalty Summary

Appendix B20.a						Excluded Area?	Type of Cons.	Sublot Payment	
Sublot	Station	(km)	Length	IRI (n	n/km)	MIRI	Yes or No	SI,SII,or SIII	Assessment
Number	Start	End	(m)	Left	Right	(m/km)			(\$)
1	0.000	0.100	100	0.61	0.64	0.63	no	SI	30.00
2	0.100	0.200	100	0.52	0.48	0.50	no	SI	50.00
3	0.200	0.300	100	0.53	0.59	0.56	no	SI	30.00
4	0.300	0.400	100	0.58	0.57	0.57	no	SI	30.00
5	0.400	0.500	100	1.59	1.61	1.60	yes	SI	Excluded Area
5	0.400	0.500	100	1.40	1.33	1.37	no	SI	-273.80
6	0.500	0.600	100	0.59	0.71	0.65	no	SI	30.00
7	0.600	0.700	100	0.57	0.68	0.62	no	SI	30.00
8	0.700	0.800	100	0.73	0.76	0.75	no	SI	0.00
9	0.800	0.900	100	0.59	0.59	0.59	no	SI	30.00
10	0.900	1.000	100	0.54	0.60	0.57	no	SI	30.00
11	1.000	1.100	100	0.63	0.69	0.66	no	SI	30.00
12	1.100	1.200	100	0.64	0.75	0.70	no	SI	30.00
13	1.200	1.300	100	0.68	0.69	0.69	no	SI	30.00
14	1.300	1.400	100	0.68	0.65	0.67	no	SI	30.00
15	1.400	1.500	100	0.66	0.67	0.67	no	SI	30.00
16	1.500	1.600	100	0.67	0.67	0.67	no	SI	30.00
17	1.600	1.700	100	0.59	0.59	0.59	no	SI	30.00
18	1.700	1.746	46	1.23	1.27	1.25	yes	SI	Excluded Area
19	1.746	1.846	100	0.72	0.73	0.73	no	SI	0.00
20	1.846	1.880	34	1.10	1.06	1.08	no	SI	0.00
					Total Asses	sment			196.20

Comments: Sublot number 5 from km 0.400 to km 0.500 was repaired and retested. Sublot 18 from km 1.700 to 1.746 was excluded for railway tracks.



Contract No:	12498	Type of Test:	Acceptance
Hwy Number	877	Contractor:	ABC
Control Section	Control Section 16		John Turner
		Test Date:	
Lane:	R1	(mm/dd/yyyy)	6/6/2014
Direction:	NB		

Appendix B20.b

	Areas of Localized Roughness Summary							
Station (Station (km) IRI (m/km) Length Excluded Area? Type of Cons.					Penalty		
Start	End	Right	(m)	Yes or No	SI,SII,or SIII	Assessment \$		
27.564	27.567	2.71	3	no	SI	-\$120.00		
27.585	27.594	3.64	9	yes	SI	Excluded Area		
27.685	27.692	3.18	7	no	SI	-\$280.00		
	Total Assessment							

Comments: Excluded area beginning at km 27.585 was due to railway tracks. Other Areas of Localized Roughness were judged not to require repair as ride quality was not excessively effected.