ATTACHMENT 2

PAVEMENT DATA SUMMARY REPORT

MEMORANDUM

State of Alaska

Department of Transportation & Public Facilities Design and Engineering Services – Southeast Region Preconstruction / Materials

TO:	Robert Trousil, P.E. Regional Materials Engineer	Date:	March 6, 2020	
		Telephone No.: Fax No:	(907) 465-4383 (907) 465-3506	
FROM:	Troy Bowthorpe Pavement Management	PROJECT NO:	SFHWY00269	

RE: JNU Glacier Avenue, Ross Way to Egan Dr., SR 1R Recon, Pavement Data Summary

The Alaska Department of Transportation and Public Facilities (AKDOTPF) plans to resurface Glacier Avenue in Juneau, Alaska from Ross Way to Egan Dr., to restore the pavement to a new condition. Pavement field evaluation was completed by AKDOTPF Materials Section on, September 5, 2012 with this update on March 6, 2020; a summary plan sheet of completed field work is shown in the attachments. Supplementary reports, such as the Geology Data Report, Pavement and/or Geotechnical Memorandums will be prepared separately, where appropriate, and should be consulted for additional project information and specific design recommendations.

Existing Conditions

The project area was originally constructed sometime prior to 1959 as a pioneer road, with an unknown as-built pavement section. It was subsequently upgraded in 1994 as shown in Figure 1. The pavement structure as shown in Figure 1, consists of 2" inches (50mm) HMA, 4" inches of Asphalt Treated Base Course, over 14" of "Subbase Grading B". Available construction documents merely indicate what the road was surfaced with prior to 1994, and subsequent 2" pavement Overlay added in 1994. No evidence of major base, subbase or subgrade improvements have been made during or since the 1994 project.

On September 5, 2012 a "Distress Survey" was performed by AKDOT&PF, Materials Section for this road, and again February 5, 2020. These are the findings of that investigation.

Page 2

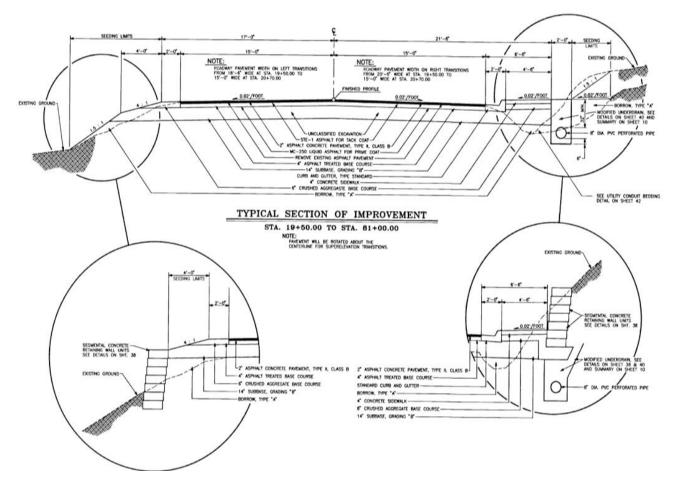


Figure 1: 1994 As-Built construction section

Observed surface distresses included; limited Cracking on shoulders, stress cracking both longitudinal and transverse, raveling, and rutting. Figures 2 and 3 below show the progression of distress from 2012 to 2020 in that specific location.



Figure 2: Observation just South of Ross Way in Sept. 2012



Figure 3: Same location as Figure 2, just South of Ross Way in Feb. 2020 shows significant deterioration including raveling and rutting.



Figure 4: Typical retaining wall showing some leaning out at the top.





Figure 5-split: The continued deterioration of the intersection of Glacier Ave. and Wickersham Dr..



Figure 6: The sidewalk and Curb/Gutter at Sta. 59+00 and 59+75, has deteriorated significantly since 2012. It is possible this was caused from excavation efforts at the broken end of the retaining wall at that location. This location continues to "Weep" water from above.



Figure 7: Continued deterioration and Heavy Cracking at the HDCP Ramp at the Bus stop STA. 61+50.



Figure 8: Continued deterioration and Heavy Cracking at the HDCP Ramp at the Bus stop STA. 62+10.



Figure 9: Continued deterioration and Heavy Cracking in the SB Lane at STA. 76+80.



Figure 10: This Photograph taken 9/5/2012 at intersection of Glacier Ave and Egan Dr.



Figure 11: This is the Typical condition of Channel Vista Dr. from start to finish.



Figure 12: The end of the road and guardrail at Channel Vista Dr.

Maintenance and Operations

DOT Maintenance and Operations (M&O) has placed several patches within the project limits, in some cases repeated patching over the same area. M&O was consulted and indicated the latest Patching was done Fall of 2019. Please see Notes on Field Summary Plan Sheets for further information regarding detailed deterioration locations.

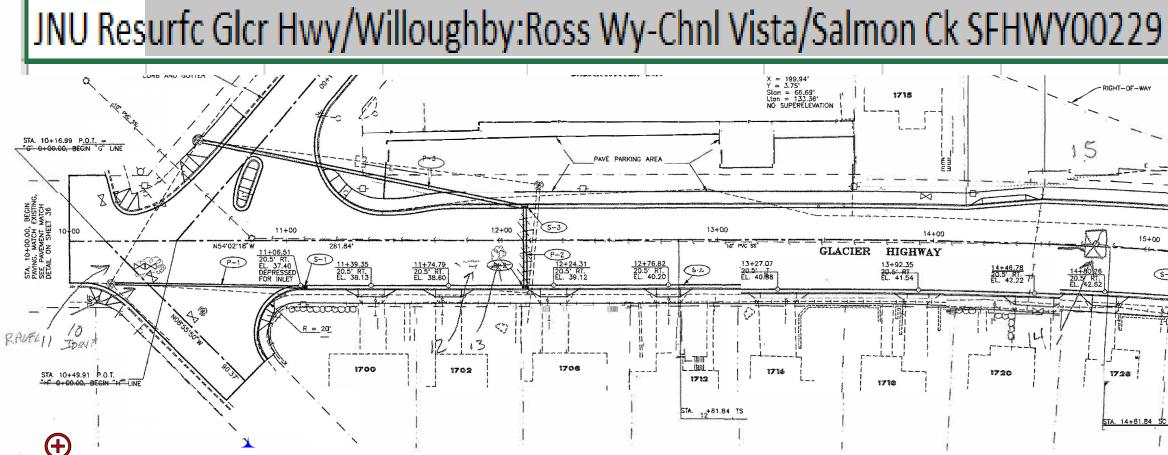
This memo has been prepared for the exclusive use of AKDOTPF Design and Engineering Services for Glacier Avenue from Highland Drive to the end of Channel Vista Drive. If there are significant changes in nature, design or location of these activities, we should be notified so that we may review our conclusions and recommendations in light of the proposed changes and provide written modification or verification of the changes.

As the project proceeds, please feel free to contact me with any questions or concerns.

Troy Bowthorpe Highway Engineering Technician

Attachments:

Field Summary Plan Sheets Photographs from September 5, 2012 and March 5, 2020



Stra 10+49.91 P.O.T.	11+00 N54'02'16'W P-1) 2125 77 DEPRESSED FOR INLET R = 20 R = 20			13400	E 3 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	15+00 15+00 15+28.96 20.5 R/4 15+28.96 20.5 R/4 15+28.96 15+28.96 20.5 R/4 15+28.96 20.5 R/4 15+28.96 20.5 R/4 15+28.96 15	SLOPE LIMITS
DESIGNATION	DEPTH	NOTES		DEPTH	5 (2 × 10) 200 3 2 · · · · · · · · · · · ·	1 1 1	• • • • • • • • • • • • • • • • • • •
DC-001	5.75		7			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
DC-002	6.5		6.8			S: 15+25.	
DC-003	6.75		6.4			i (m) i	
DC-004	6		6.2		0.9892%		
DC-005	6.25	WET BASE	5.8				
DC-006	6.5		5.6				
DC-007	6.6	WET BASE	5.4			E 4 E1 1 E 4 5 24 1 2023 12 13 2	
AVERAGE	6.34		DC-001		AVERAGE		
			2'~	13'~ JUNEAU	4~	15 ~	16 ~ DO NOT SCALE FROM THESE PLANS - U
		CTATE OF A				DESIGNED BY: D.L.M.	PROJECT No.:
		DEPARTMENT OF T	RANSPORTATION	FM-0976(1) 69962 GLACIER HIGHWAY, HIGHLAND DR. TO EGAN DR	ASCC		69062
BY: DATE: DESCRIPT	TION OF CHANGE:		RANSPORTATION	FM-0976(1) 69062 GLACIER HIGHWAY, HIGHLAND DR. TO EGAN DR. PLAN AND PROFILE STA. 10+00.00 TO STA. 16+00.00	ASSCC IN CORPORATED ENGINEERS + ARCINTECTS + SCIENTISTS - SURVEYORS	DRAWN BY: J.E.M.	

 $L = 200.00^{\circ}$ Theto = 03°:3'38" X = 199.94' Y = 3.75' Ston = 66.69' Lton = 133.36' NO SUPERELEVATION

