FORMAL PROJECT APPROVAL

Name of Project: **Auke Lake Way Corridor Improvements & Reconstruction**

Location of Project: **UAS Juneau Campus**

Project Number: **2006-28**

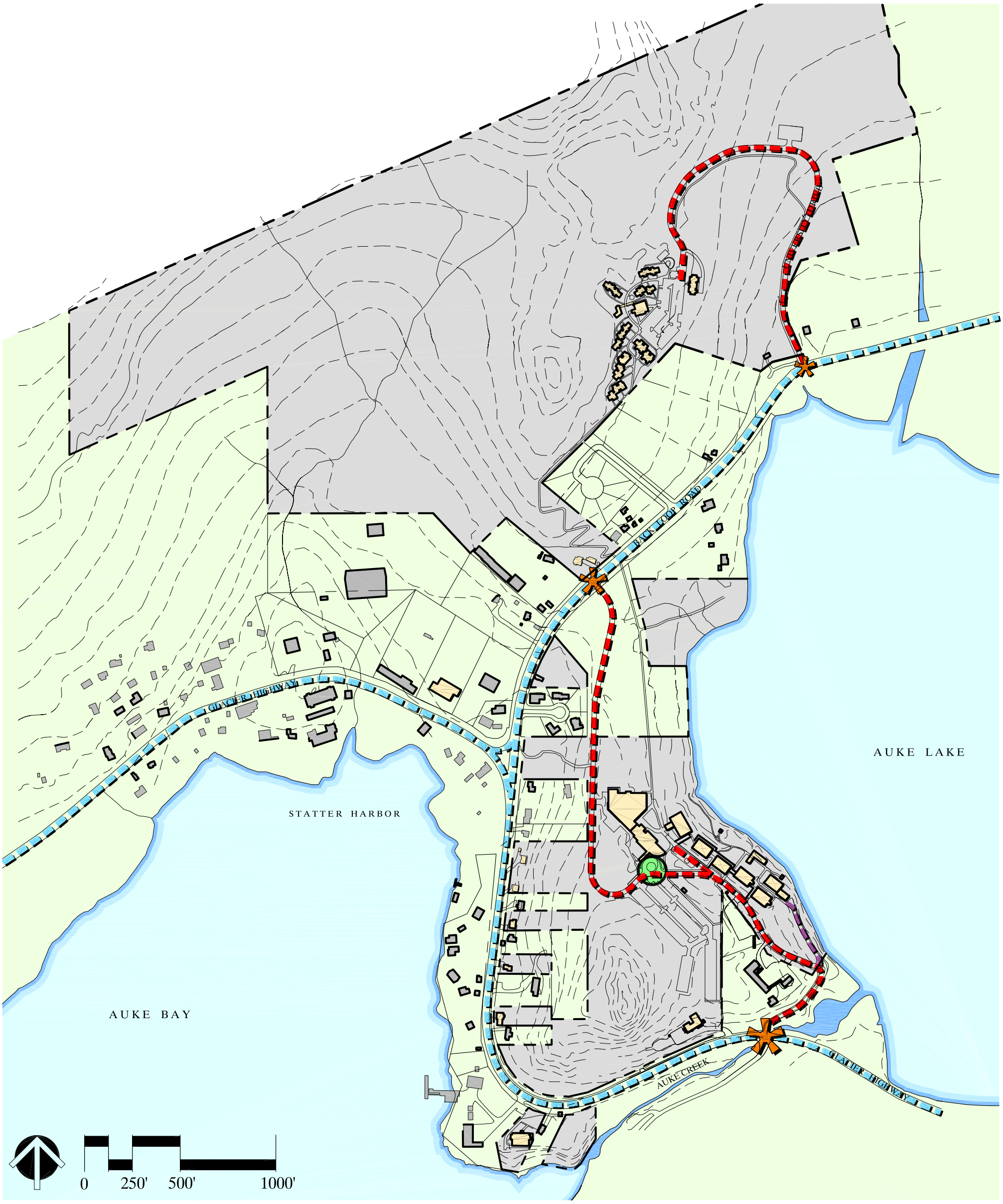
Date of Request: **December 2010**

Total Project Cost:	**$ 4,300,000**
Approval Required:	**Formal Project Approval**

Reference Materials:

One page budget
Vehicle circulation map
Concept site plan

UNIVERSITY OF ALASKA			
Project Name:	Auke Lake Way Reconstruction & Improvements		
MAU:	UAS		
Building:		Date:	5/1/2010
Campus: Juneau		Prepared By:	Gerken
Project Title:	Auke Lake Way Reconstruction	Account No.:	
Total GSF Affected by Project:			
PROJECT BUDGET			Original
A. Professional Services			
Consultant Basic Services		12.0%	382,000
Construction Phase Services		3.0%	96,000
Site Survey			15,000
Plan Review / Permits			25,000
Professional Services Subtotal			**518,000**
B. Construction			
General Contractor			3,186,000
Construction Contingency	10.0%		319,000
Art	1.0%		35,000
Construction Subtotal			**3,540,000**
Construction Cost per GSF			N/A
C. Equipment and Furnishings			
Other Furnishings			
Make Ready/Move In			
Equipment and Furnishings Subtotal			-
D. Administrative Costs			
Temporary relocation costs			
Project Management	6.0%		243,000
Administrative Costs Subtotal			**243,000**
E. Total Project Cost			**4,301,000**



KEY

- CAMPUS CIRCULATION
- NON-CAMPUS CIRCULATION
- CAMPUS SERVICE CIRCULATION
- ARRIVAL AREA
- CAMPUS ENTRY

VEHICULAR CIRCULATION

University of Alaska
southeast Juneau

FACILITIES MASTER PLAN

FEBRUARY 2002

Cuningham Group
Cuningham Hamilton Quiter, PA

THE SARATOGA ASSOCIATES
LANDSCAPE ARCHITECTS, ARCHITECTS, ENGINEERS AND PLANNERS, P.C.
SARATOGA SPRINGS ▪ NEW YORK CITY ▪ BOSTON

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UAS UNIVERSITY OF ALASKA SOUTHEAST
learn · engage · change

Greenway Concept Refinement

2010 Concept

R&M ENGINEERING, INC.

ENGINEERS
GEOLOGISTS
SURVEYORS

6205 GLACIER HWY. ▪ JUNEAU, ALASKA 99801
PHONE: 907-780-6060 ▪ FAX: 907-780-4611
E-MAIL: rmengineering@rmjuneau.com

January 6, 2010

University of Alaska Southeast
Facilities Services, Planning and Construction
1120 Glacier Highway
Juneau, Alaska 99801

Sent Via Email

Attn: Ke Mell, AIA
UAS Project Manager

Re: UAS Campus Greenway Asphalt Pavement Inspection
R&M Project No. 091414.1

Dear Ke,

Per R&M Engineering, Inc. (R&M) contractual agreement with UAS, we are pleased to present our findings of our visual asphalt pavement inspection and pavement coring for the UAS Campus Greenway project.

Asphalt Pavement Inspection

On December 18, 2009, R&M conducted a visual inspection on the existing asphalt paved access road that travels through the UAS Campus corridor. The visual inspection was started from the second entrance (northern most) to the Chapel by the Lake and ended at the existing gate posts leading to the UAS Egan Court Yard area. This distance is approximately 730 feet. The weather at the time of the inspection was 34°F and overcast skies. The surface of the asphalt pavement was mostly visible, with light snow fall later in the day. The asphalt pavement surfaces inspected were reported to be placed in the mid 1980's.

The following is a summary table of the asphalt pavement inspection. Selected photos are attached to depict the failure types observed. Please refer to the attached map for stationing and legend number references.

Asphalt Pavement-Surface Failure Type Summary

Station	Failure Type, Severity	Remarks
0+00 to 0+224	Polished Aggregate at surface, no cracking, low severity	Location: across road width
0+224	Transverse cracking, ½" to ¾-inch in width, low to moderate severity.	Location: at construction joint
0+230 to 0+350	Longitudinal Cracking, subbase failure, poor drainage, moderate severity	Location: Left side
0+323 to 0+425	Potholes, Patches, and Transverse Cracking, moderate severity	Location: right and left side
0+425 to 0+440	Asphalt depression, subbase settlement, low severity	Location: Hump
0+425 to 0+528	Potholes, raveling, depression, reflection cracking, transverse cracking, low to moderate severity	Location: spread across the road
0+528 to 0+535	Depression, low severity	Location: Hump
0+535 to 0+580	Depression, settlement low to moderate severity	Location: within center of the road
0+580 to 0+730	Longitudinal, transverse, alligator cracking, low to moderate severity	Location: within center of the road

Asphalt Pavement Coring

Pavement core sampling was conducted on December 31, 2009, with temperatures of 22° F. A total of five asphalt core samples, 4-inch in diameter, were taken at random locations along the project alignment. Pavement coring was accomplished using an electric powered portable coring machine with detachable bit.

All the core holes were patched with hot asphalt mix after completion of pavement coring work. The following is a summary table of the asphalt core samples:

Asphalt Pavement Core Sample Summary

Core ID	Location (Approximate Stationing)	Average Pavement Thickness (inches)	Remarks
CS-1	0+245 (right)	2.0	Two layers: Top=3/4"; Bottom=1-1/4"
CS-2	0+334.5 (left)	1.5	One layer
CS-3	0+478 (right)	2.75	Two layers: Top = 1-¼ -inch Bottom=1-½-inch
CS-4	0+564 (near center)	1.3	One layer
CS-5	0+670.5 (near center)	1.4	One layer

CONCLUSION

The visible pavement inspection revealed areas of pavement failure and potential subbase failure due to poor roadside drainage (0+230 to 0+350). Construction over the top of existing pavement surfaces that have shown low to moderate severity areas of failure, in our opinion, would lead to premature service life of new surface materials placed over the top of existing materials. The existing asphalt pavement surfaces are over 20 years old and nearly at the end of their useful service life. Existing failed pavement areas (cracking, settlement, potholes, etc.) should be removed and replaced. UAS Campus Greenway Improvements should include improvements to the base, subbase and roadside drainage prior to new materials being placed over the existing pavement surfaces.

Should you have questions concerning this correspondence, please do not hesitate to contact me at your convenience.

Sincerely,

R&M Engineering, Inc.

J Mark Pusich

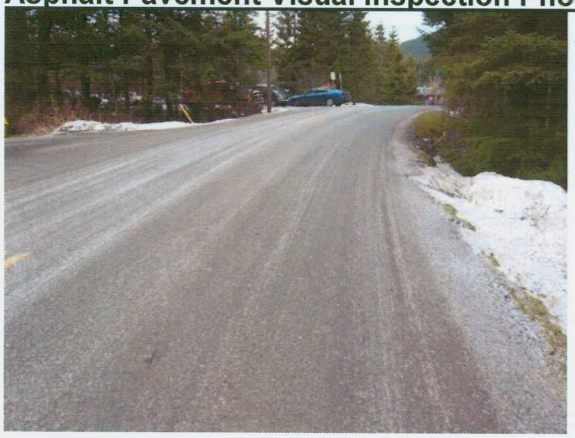
Mark J. Pusich, P.E.
Civil Engineer

Attachments: Site Plan and Photographs

Cc: Rob Southerland, Saragtoga Associates

I:2009/091414.1/100106 UAS Asphalt Inspection Report.doc

Asphalt Pavement Visual Inspection Photos:




Sta. 0+00 to Sta. 0+224: Low severity polished aggregate distress type.


Sta. 0+224: Low to moderate severity transverse cracking at construction joint.

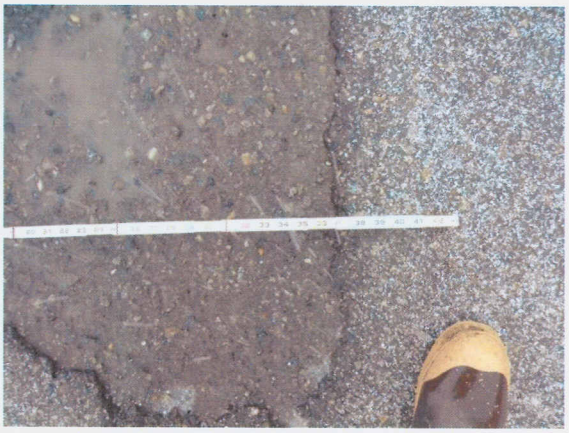

Sta. 0+230 to 0+350: Moderate severity longitudinal cracking, most likely due to subbase failure and lack of drainage on uphill side of the road.

Sta. 0+323 to 0+425: Potholes and patching, moderate severity.

Sta. 0+323 to 0+425: Potholes and transverse cracking, moderate severity.

Sta. 0+425 to 0+440: Low severity depression at speed hump.

Sta. 0+425 to 0+528: Potholes, depression, transverse and reflective cracking, moderate severity.

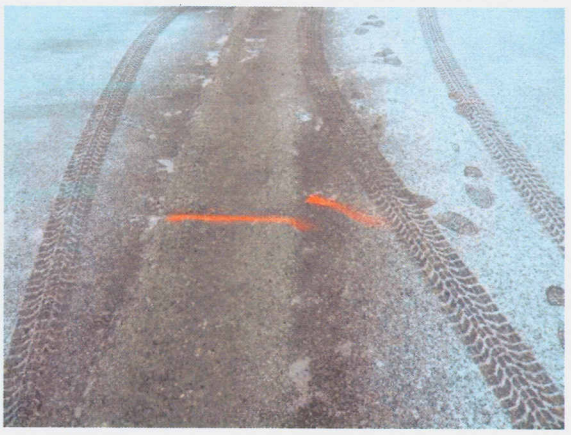


Sta. 0+425 to 0+528: Potholes, surface distortions and subbase settlement.

Sta. 0+425 to 0+528: Low severity transverse cracking at pavement joint.

Sta. 0+535 to 0+580: Depression and settlement, center of road, low and moderate severity.

Sta. 0+580 to 0+730: Low to moderate severity longitudinal and transverse cracking



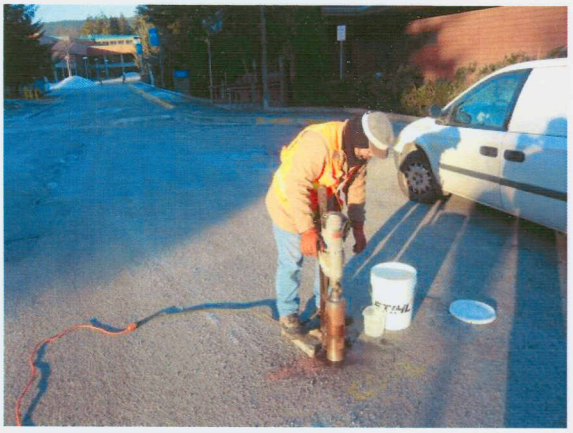
Sta. 0+580 to 0+730: Low to moderate severity longitudinal and transverse cracking

Sta. 0+580 to 0+730: Parking area with concrete valley gutter.

Asphalt Pavement Coring Photographs:

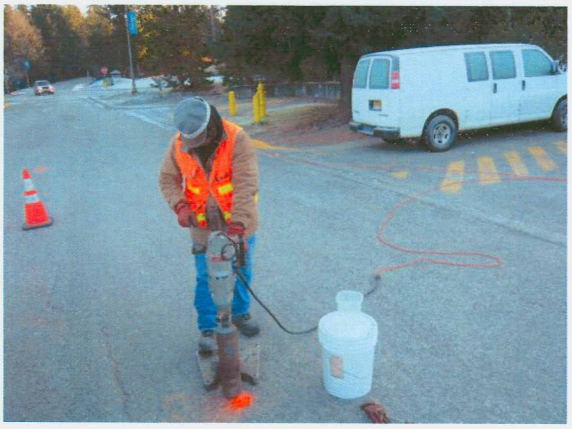
CS-1, Sta. 0+245 (right): Two layers of asphalt pavement with total thickness approximately 2". Top layer thickness is ¾" while bottom layer is about 1-¼".

CS-2, Sta. 0+334.5 (left): Thickness of asphalt pavement is about 1-½".



CS-3, Sta. 0+478 (right): Two layers of asphalt pavement with total thickness of approximately 2.75". Thickness of top layer is about 1-¼ " while bottom layer is about 1-½".

CS-4, Sta. 0+564 (near center): Thickness of asphalt pavement is about 1.3".



CS-5, Sta. 0+670.5 (near center): Thickness of asphalt pavement is about 1.4".