

Maine Department of Transportation
Highway Program

GEOTECHNICAL SERIES 100 REPORT

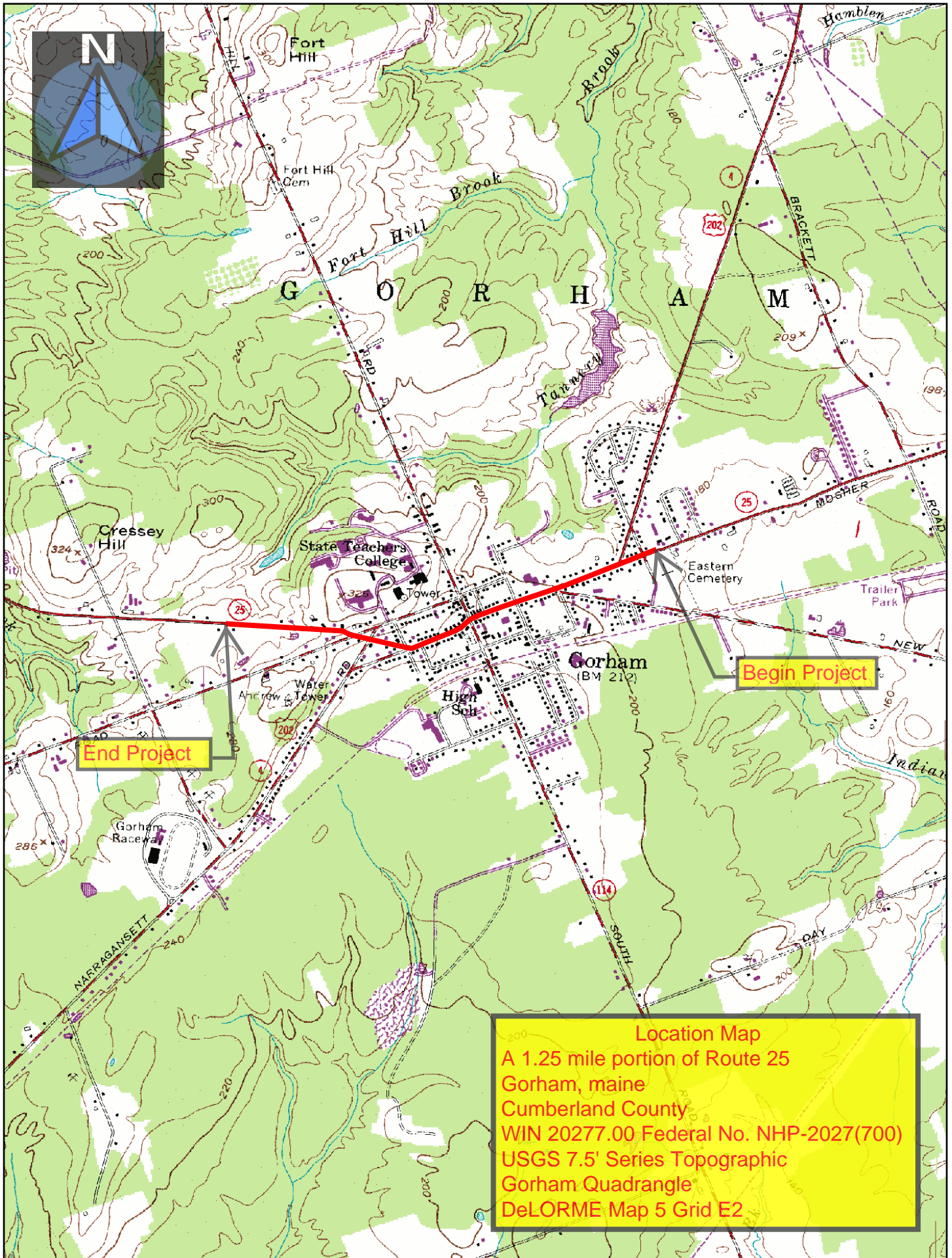
Route 25
Gorham, Maine

Prepared by:
Scott A. Hayden, C.G.
Soils Research Scientist

Cumberland County

WIN 020277.00
Fed Project #: NHP-2027(700)
June 30, 2014

Soils Report No. 2014-132
TEDOCS # 1380135



Map Scale 1:24000

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Highway Program

Brad Foley, Program Manager

Memorandum

DATE: June 30, 2014

TO: Denis Lovely

DEPT: Region 1, Highway

FROM: Scott A. Hayden

DEPT: Highway Program

SUBJECT: Gorham, Route 25, WIN 020277.00
Geotechnical Pavement Assessment Report No. 2014-132

Project Information

A geotechnical pavement assessment investigation has been completed for the preservation of a 1.25 mile portion of Route 25 in the town of Gorham. The project begins 0.09 miles north of the intersection of Johnson Road and extends north on Route 25 for 1.25 miles to 0.49 miles north of the intersection of College Avenue, Flaggy Meadow Road and State Street. A start station of 10+00 (RLM 10.03) was provided in the field by Region 1 personnel. All references to stationing in this report are based on stationing determined using a vehicle mounted distance measuring instrument (DMI).

The scope of this geotechnical investigation was limited to the collection of Ground Penetrating Radar (GPR) data and the cutting of pavement cores.

As-Built Information

As- built plans for this section of Route 25 were located in the Maine DOT archives indicating construction in 1930 (Fed Aid Project No 135A) and 1933 (Fed Aid Project No 135B). The roadway was constructed with 10-foot travel lanes and 3-foot gravel shoulders. A typical section of the pavement structure for these projects indicates a 20-foot wide by 7-inch thick concrete pavement underlain by an 8 - 12 inch variable depth gravel base. Typical indicate that in areas the pavement structure consist of 7-inches concrete pavement, underlain by 6-inches gravel, underlain by 8-12-inches stone base, underlain by 4-inches gravel.

Existing HMA Conditions

Pavement distress is generally considered moderate. Pavement distress consists primarily of cracking (reflective, fatigue, block, transverse, longitudinal) and rutting. It is anticipated that pavement distress is due to frost effects, traffic loading, and fatigue. A concrete pavement layer directly underlies the existing asphalt pavement layer.

ARAN Data Summary

A summary of the 2012 - 2013 ARAN data is presented in Table 1 on the following page. A complete listing of the ARAN data is presented on the Pavement Performance Assessment Summary (PPAS) located later in this report.

Table 1: Summary of 2011 ARAN Pavement Data

ARAN Pavement Data	Range	Average
Pavement Condition Rating (PCR)	2.88 – 3.99	3.24
International Roughness Index (IRI)	100 - 176	150
Rut Depth (left)	0.1” – 0.2”	0.12”
Rut Depth (right)	0.3 ” – 0.7”	0.48”

Pavement Condition Rating (PCR)

PCR is defined as the composite condition of the pavement on a roadway. The PCR is compiled from the severity and extent of pavement distresses such as cracking, rutting, and ride quality. The rating system uses a scale of 5.00 (perfect) to 0.00 (fully deteriorated). The PCR is the condition of the pavement only, not necessarily a reflection of the condition of the roadway base structure. A description PCR rating follows:

Scale Value	Scale Rating	Description
5	Excellent	New or nearly new pavements. Free of cracks, patches or rutting.
4	Good	Pavements exhibit little to no visible signs of surface deterioration. Evidence of initial cracking or rutting.
3	Fair	Visible defects including moderate cracking, distortion and rutting. Some patching may now be present.
2	Poor	Pavement deterioration consisting of advanced cracking and severe distortion. Extensive patching and rutting also present.
1	Very Poor	Extremely deteriorated pavements. Defects include severe cracking, distortion, rutting and typically very extensive patching.

The PCR rating for this project ranges from 2.88 – 3.99 with an average PCR of 3.24. The PCR rating is low (<3.5) between stations 51+50 and 71+00. The lowest value (3.03) was encountered between stations 68+00 and 71+00.

International Roughness Index (IRI)

Ride quality is expressed in terms of International Roughness Index (IRI) and is measured in inches per mile. IRI is a measurement of the inches of vertical displacement experienced by a vehicle in a mile of roadway. The lower the IRI, the smoother the ride will be. A description IRI scale follows:

IRI Value (In./mile)	Ride Rating
< 100	Good Ride
100 - 170	Fair Ride
> 170	Poor Ride

The IRI value for this project ranged between 100 - 176 in/mile with an average IRI value of 150 in/mile. The IRI ride rating is marginal (≥ 150) between stations 51+50 and 71+00. The poorest ride rating (176) was encountered between stations 68+00 and 71+00.

Wheel Path Rutting

Wheel path rutting is present along the project site. Rutting is more prominent in the outside wheel path. The greatest rutting (0.5" – 0.7") was encountered between stations 51+50 and 71+00.

Existing HMA Thickness

Existing pavement thickness estimates have been provided based on pavement coring and ground penetrating radar data. The existing HMA has been laid directly on top of the original concrete pavement wearing surface.

Coring Data

Eight pavement cores were obtained using a stand mounted, Milwaukee electric coring drill, utilizing a 4" thin wall core bit. Pavement cores were drilled at stations 15+00, 25+00, 37+00, 40+00, 62+00 and 72+00.

Station (Feet)	Offset (Feet)	Pavement Depth (Inches)	Unbound Pavement	PC-Number	Saved Core	Comments / Date 6/18/2014
15+00	9.0 Lt.	5.0		1	yes	to top of concrete
25+00	9.0 Lt.	5.3		2	yes	to top of concrete
25+00	9.0 Rt.	6.3		3	yes	to top of concrete
37+00	9.0 Rt.	10.3		4	yes	to top of gravel (no concrete)
40+00	9.0 Rt.	6.0		5	yes	to top of concrete
40+00	9.0 Lt.	7.0		6	yes	to top of concrete
62+00	9.0 Lt.	7.0		7	yes	to top of concrete
72+00	9.0 Rt.	7.5		8	yes	to top of concrete

The pavement cores have been transported to the Bangor Lab where they were photographed and stored. Photographs of the cores are included at the back of this report as part of the GPR documentation. A summary/comparison of the existing pavement thickness derived from coring data verses the GPR data is shown on the following page in Table 2.

Longitudinal GPR Data

Ground Penetrating Radar data was collected longitudinally using an air launch antenna to provide HMA thickness estimates. The GPR data was collected along each wheel path of both the West and East bound lanes. Where more than two lanes existed, data was collected as close to the painted center line as possible.

GPR data was collected at 1 foot intervals. Pavement thickness estimates were developed using Geophysical Survey Systems Inc. (GSSI) RADAN GPR Data Processing Software. Where available, pavement core thicknesses were used to ground truth the GPR data.

The estimated GPR pavement thickness data is presented on the attached GPR Estimated Pavement Thickness summary sheets as an average pavement thickness every 50' for each travel lane. A spread sheet containing the GPR data at 1 foot intervals is also available at Y:\20277\00\GEOTECH\MSTA\GPR Data.

The GPR data confidence level is “fair” for this project. GPR reflection layers are described as moderately strong over some of the project and layer depths correlate fairly well with known pavement depths obtained from pavement cores. A clear, defined layer was present for much of the project.

However, in several areas this layer was much less defined and it wasn’t definitive if the GPR data was collected over the existing concrete. See attached GPR notes.

A summary/comparison of the existing pavement thickness derived from coring data verses longitudinal GPR data is shown below in Table 2.

Table 2: Pavement Thickness Summary/Comparison

	East Bound (Left)	West Bound (Right)
Pavement Core Data		
Range of Thickness	5.0” – 7.0”	6.0” – 10.25”
Average Thickness	6.1”	7.5”
Ground Penetrating Radar Data		
Range of Thickness	1.9” – 12.6”	1.6” – 11.3”
Average Thickness	6.5”	6.3”

Concrete Pavement Surface

As indicated in the as-built section of this report a concrete pavement surface is generally present throughout the entire length of this project. Based on GPR data and Pavement Coring data it is anticipated that the 20-foot wide concrete pavement is present between stations 10+00 and 82+50.

Lateral Limits of the Concrete Pavement Surface

To determine the lateral limits (left edge of concrete, right edge of concrete) of the concrete pavement surface, GPR data was collected transversely every 100 feet using a ground coupled antenna.

Since there was no established project centerline in the field, all measurements in determining the lateral limits of the concrete were referenced from the existing left white edge line painted in the road. The lateral limits of the concrete are shown on the following page(s).

Lateral Limits of the Concrete Pavement Surface Using Ground Penetrating Radar (GPR)

Note:

All Concrete Locations are referenced from the left, white edge line with the exception of station 34+00

Station	Edge of Concrete Left (Feet)	Edge of Concrete Right (Feet)	Comments
10+00	1.3	21.3	
11+00	2	22	
12+00	2.6	22.6	
13+00	2.2	22.2	
14+00	0.5	20.5	GPR data inconclusive at this location
15+00	2.7	22.7	
16+00	3.4	23.4	
17+00	4.8	24.8	
18+00	6.8	26.8	
19+00	7.6	27.6	
20+00	11.2	28.8	Possible trench at left edge of concrete
21+00	10.4	30.4	
22+00	9.4	29.4	
23+00	8.8	28.8	
24+00	9.3	29.3	
25+00	8.5	28.5	
26+00	7.3	27.3	
27+00	8.4	19.9	Possible trench at right edge of concrete
28+00	8	28	
29+00	8.7	28.7	
30+00	9	29	
31+00	9.3	29.3	
32+00	8	28	
32+97	4.4	24.4	Concrete crosswalk at 33+00
34+00	31.1	11.1	
35+09	1.5	21.5	Vehicle parked at right edge of roadway at 35+00
36+00	17	37	
37+00	-	-	GPR data inconclusive at this location
38+00	8.6	28.6	
39+00	-	-	GPR data inconclusive at this location
40+00	6.1	26.1	
41+00	5.7	25.7	
42+00	7.1	27.1	
43+00	7.2	28.4	Concrete appears wider than the standard 20 feet at this location
44+00	14.6	24.6	
45+00	14.8	24.8	
46+00	8	31	Concrete appears wider than the standard 20 feet at this location Definitive Left edge
47+00	4.7	24.7	
48+00	3	23	
49+00	2.2	22.2	
50+00	4.2	24.2	
51+00			GPR data inconclusive at this location
52+00	2.7	11.7	Possible trench at right edge of concrete
53+00	2.1	22.1	
54+00	2.3	11.4	Possible trench at right edge of concrete
55+00	2.9	12	Possible trench at right edge of concrete
56+00	2.6	22.6	
57+00	2	22	
58+00	1.8	21.8	
59+00	3	23	
60+00	2.3	22.3	
61+00	1.8	21.8	
62+00	2.1	22.1	
63+00	2.2	22.2	
64+00	3	23	
65+00	2.6	22.6	
66+00	1.5	21.5	
67+00	3.2	23.2	

Lateral Limits of the Concrete Pavement Surface Using Ground Penetrating Radar (GPR)

Note:

All Concrete Locations are referenced from the left, white edge line with the exception of station 34+00

Station	Edge of Concrete	Edge of Concrete	Comments
	Left (Feet)	Right (Feet)	
68+00	2.6	22.6	
69+00	2.9	22.9	
70+00	2.7	22.7	
71+00	2.2	22.2	
72+00	2.9	22.9	
73+00	2.8	22.8	
74+00	2.2	22.2	
75+00	2.7	22.7	
76+00	2.2	22.2	Right edge of concrete suspect at this location
77+00	2	22	
78+00	2	22	
79+00	1.3	21.3	
80+00	1.7	21.7	
81+00	1.2	21.2	
82+00	2.2	22.2	
83+00			No Concrete present
84+00			No Concrete present
85+00			No Concrete present
86+00			No Concrete present
87+00			No Concrete present

Pavement Performance Assessment Summary Explanation/Criteria

The PPAS is a relative pavement performance assessment tool produced utilizing data obtained from FWD and ARAN testing. The purpose of the PPAS is to identify relative differences in the existing roadway conditions/performance based on six potential performance criteria (See PPAS on the following pages).

Segments of a project performing relatively better (less # of deficiencies identified on the PPAS) may be at lower risk of existing/future pavement failure and may require less substantial rehabilitation needs. Segments of a project performing relatively worse (greater # of deficiencies identified on the PPAS) may be at higher risk of existing/future pavement failure and may require more substantial rehabilitation needs. If substantial segments of a project can be identified as having considerable performance differences, distinct rehabilitation measures could be considered in these areas. Such considerations may better meet the specific rehabilitation needs of a project and could possibly result in a reduction of project costs.

Performance Criteria Description: A total of six performance criteria are used to provide a relative pavement performance assessment. If performance criteria are not met it is shaded on the PPAS to identify the criteria as being deficient. The number of performance deficiencies (0 to 6) for each Station is totaled than listed in the Performance Deficiency column box. If the total number of deficiencies is 3 or greater the box is shaded. Stations having a greater number of deficiencies may indicate areas of reduced performance. Greater rehabilitation measures may be necessary in these reduced performing areas. The performance criteria are described below:

1. Existing Structural Number (SN) is less than the Future Structural Number (FWD Data) - If the existing SN is less than the future SN at any station along the project an X will be placed in the corresponding column and the box is shaded to identify the criteria as being deficient.

NOT APPLICABLE FOR THIS PROJECT

2. Increased FWD Deflections (FWD Data) – If the pavement deflection (1st sensor) is greater than 15 mils an X is placed in this column and the box is shaded to identify the criteria as being deficient.

NOT APPLICABLE FOR THIS PROJECT

3. PCR \leq 3.5 (ARAN Data) – ARAN PCR values are listed on the PPAS in the PCR column. If the PCR is less than or equal to 3.5 the box is shaded to identify the criteria as being deficient.

4. IRI \geq 150 (ARAN Data) – ARAN IRI values are listed on the PPAS in the IRI column. If the IRI value is greater than or equal to 150 the box is shaded to identify the criteria as being deficient.

- 5 & 6. Left Rut Depth / Right Rut Depth (ARAN Data) – ARAN wheel path rut depth values (right and left) are listed on the PPAS in the rut depth columns. If the rut depth is 0.5” or greater the box is shaded to identify the criteria as being deficient.

Deficiency Column - The total number of deficient performance criteria (0 to 6) are totaled and placed in the deficient column (Def) for each station. If the total number of deficiencies is 3 or greater the box is shaded. Stations having a greater number of deficiencies may indicate areas of reduced performance. Greater rehabilitation measures may be necessary in these reduced performing areas.

Pavement Performance Assessment Summary

(PPAS)

Gorham
Route 25
020277.00

LOCATION		DEFICIENCIES	PERFORMANCE MEASUREMENTS							GENERAL PAVEMENT INFORMATION					
Station	RLM		# of Performance Deficiencies (0 - 6)	GPR	FWD Data		ARAN Performance Data			ARAN Supplemental Data					
		Pave Thck (in.)			Existing SN < Future SN	Increased FWD Pavement Deflections	PCR ≤ 3.5	IRI ≥ 150	Wheel Path Rutting ≥ 0.5"		Shoulder Type and Width		Inv Yr	Yr. Resurf.	
							Left (in.)	Right (in.)	Left	ft	Right	ft			
10+00	10.03	0	9	na	na	3.76	138	0.1	0.3	Curb	6	Curb	8	2012	1985
10+53	10.04	0	9	na	na	3.76	138	0.1	0.3	Curb	6	Curb	8	2012	1985
11+06	10.05	0	7	na	na	3.76	138	0.1	0.3	Curb	6	Curb	8	2012	1985
11+58	10.06	0	9	na	na	3.76	138	0.1	0.3	Curb	6	Curb	8	2012	1985
12+11	10.07	0	8	na	na	3.76	138	0.1	0.3	Curb	6	Curb	8	2012	1985
12+64	10.08	0	9	na	na	3.76	138	0.1	0.3	Curb	6	Curb	8	2012	1985
13+17	10.09	0	5	na	na	3.76	138	0.1	0.3	Curb	6	Curb	8	2012	1985
13+70	10.1	0	6	na	na	3.76	138	0.1	0.3	Curb	6	Curb	8	2012	1985
51+71	10.82	3	6	na	na	3.05	154	0.1	0.5	Curb	4	Curb	4	2013	2002
53+30	10.85	3	6	na	na	3.05	154	0.1	0.5	Curb	4	Paved	4	2013	2002
53+82	10.86	3	8	na	na	3.05	154	0.1	0.5	Curb	4	Paved	4	2013	2002
54+35	10.87	3	8	na	na	3.05	154	0.1	0.5	Curb	6	Paved	8	2013	2002
55+94	10.9	3	9	na	na	3.05	154	0.1	0.5	Curb	6	Paved	8	2013	2002
56+46	10.91	3	8	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
56+99	10.92	3	7	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
60+16	10.98	3	7	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
60+69	10.99	3	6	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
61+22	11	3	7	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
61+74	11.01	3	6	na	na	3.05	154	0.1	0.5	Paved	8	Paved	4	2013	2002
62+27	11.02	3	6	na	na	3.05	154	0.1	0.5	Paved	8	Paved	4	2013	2002
62+80	11.03	3	7	na	na	3.05	154	0.1	0.5	Paved	8	Paved	4	2013	1985
63+33	11.04	3	6	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	1985
63+86	11.05	3	6	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	1985
64+38	11.06	3	6	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	1985
64+91	11.07	3	6	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
65+44	11.08	3	6	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
65+97	11.09	3	7	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
66+50	11.1	3	7	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
67+02	11.11	3	6	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
67+55	11.12	3	6	na	na	3.05	154	0.1	0.5	Paved	4	Paved	4	2013	2002
68+08	11.13	3	6	na	na	2.88	176	0.2	0.7	Paved	4	Paved	4	2013	2002
68+61	11.14	3	6	na	na	2.88	176	0.2	0.7	Paved	4	Paved	4	2013	2002
69+14	11.15	3	7	na	na	2.88	176	0.2	0.7	Paved	4	Paved	4	2013	2002
69+66	11.16	3	7	na	na	2.88	176	0.2	0.7	Paved	6	Paved	6	2013	2002
70+19	11.17	3	6	na	na	2.88	176	0.2	0.7	Paved	6	Paved	6	2013	2002
70+72	11.18	3	8	na	na	2.88	176	0.2	0.7	Paved	6	Paved	6	2013	2002
71+25	11.19	0	7	na	na	3.99	100	0.1	0.4	Paved	6	Paved	6	2013	2002
71+78	11.2	0	6	na	na	3.99	100	0.1	0.4	Paved	6	Paved	6	2013	2002
76+00	11.28	0	7	na	na	3.99	100	0.1	0.4	Paved	6	Paved	6	2013	2002

Note: Dates provided for "Year Resurfaced" are provided from ARAN data and have not been verified.
GPR pavement thickness taken from outside wheel path, rounded to the nearest inch.

APPENDIX

20277.00 Gorham – Route 25

Ground Penetrating Radar Notes

Ground Penetrating Radar (GPR) Data was collected utilizing the Departments Air Launched Antenna System on May 29th, 2014. Supporting Pavement Cores were collected on the evening of June 17th.

GPR data was collected in each wheel path of both the West and East bound lanes. Where more than two lanes existed, data was collected as close to the painted center line as possible.

A clear, defined layer was present for much of the project. In several areas this layer was much less defined and it wasn't definitive if the GPR data was collected over the existing concrete. These areas are listed below.

Concrete ended at approximately station 82+20.

West Bound Lane

From Station 27+00 to 39+50 at approximately 3 feet right of the painted center line, the GPR layer is less defined.

From Station 19+00 to 44+00 and station 53+40 to 56+80 at approximately 9 feet right of the painted center line, the GPR layer is less defined.

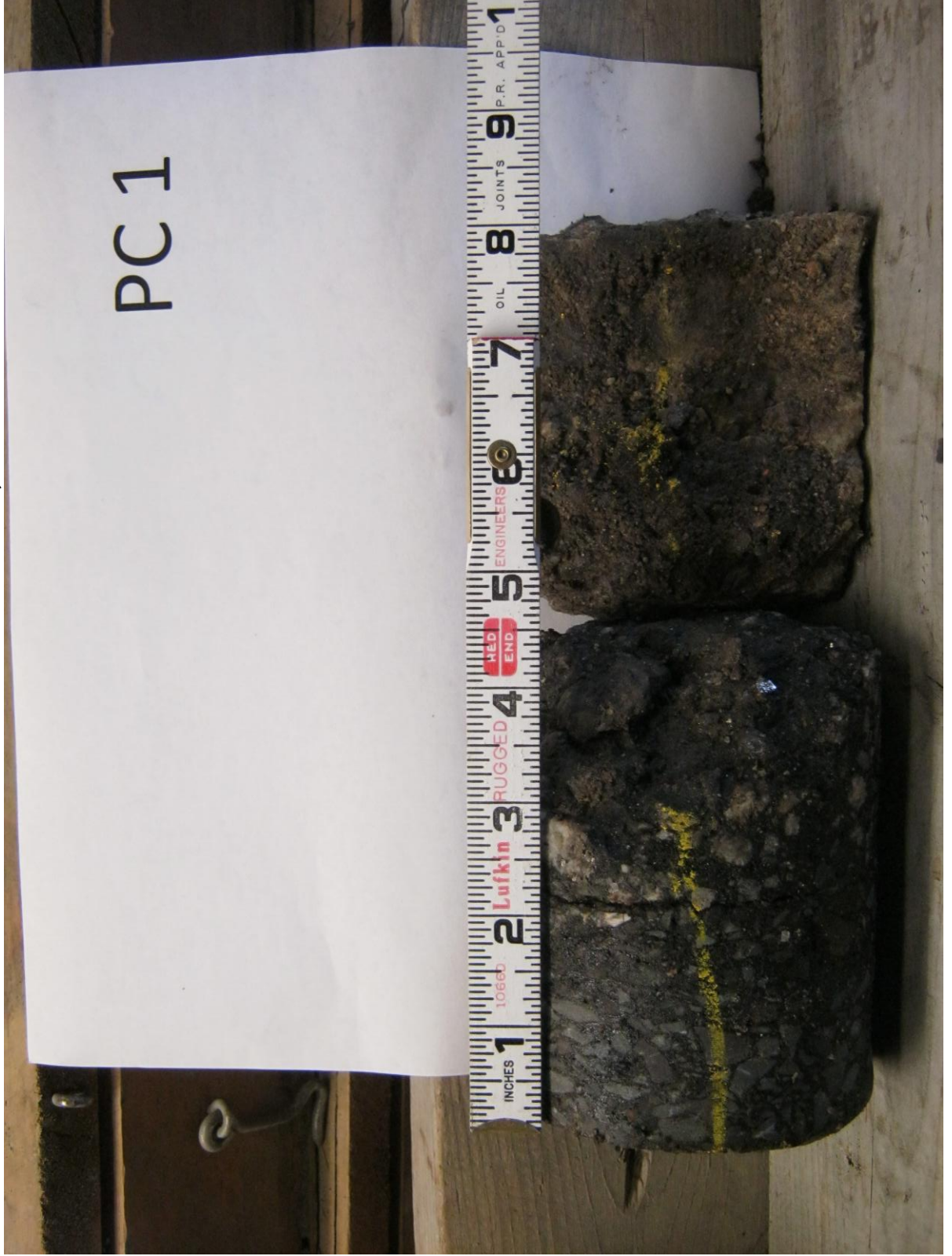
East Bound Lane

At approximately 3 feet left of the painted center line, it appears the GPR data was collected over concrete throughout the project.

From Station 20+00 to 31+75 and 39+50 to 46+50 at approximately 9 feet left of the painted center line, the GPR layer is less defined.

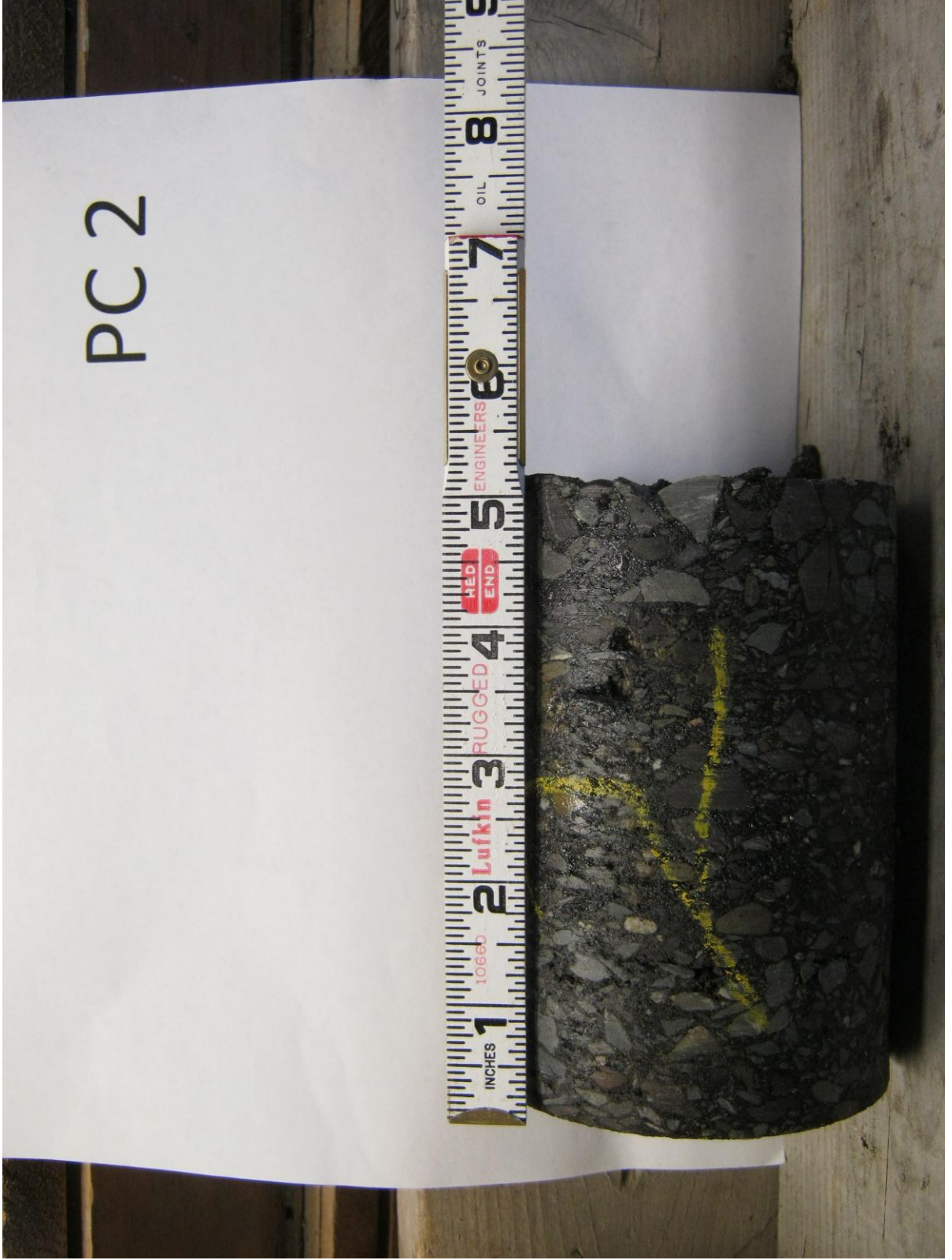


Pavement Cores
020277.00 - Gorham
STATION 15+00, 9' LT





Pavement Cores
020277.00 - Gorham
STATION 25+00, 9' LT





Pavement Cores
020277.00 - Gorham
STATION 40+00, 9' LT





Pavement Cores
020277.00 - Gorham
STATION 62+00, 9' LT





**Ground Penetrating Radar (GPR)
Estimated Pavement Thickness
020277.00 - Gorham**

Explanation of Ground Penetrating (GPR) Data Collection and Analysis:

GPR data was collected at the inner and outer wheel path of the lane at 1 foot intervals along the entire section. Pavement thickness estimates were developed using Geophysical Survey Systems, Inc. (GSSI) RADAN7 GPR data processing software. Where available, pavement thickness values from Geotechnical borings and/or pavement cores collected by MaineDOT personnel were used in developing the estimated GPR pavement thicknesses.

Data Confidence Level:

Fair - Reflection layers appear moderately strong over some of the project. Layer depths correlate fairly well with known pavement depths obtained from pavement cores at most core locations.

GPR pavement thickness averages are to be considered for estimating purposes only. Actual pavement thickness may vary.

Additional Comments									
Project Manager		Reported By		Test Date		Reported Date			
LOVELY, EMORY D		VOSE, RYAN K		5/29/2014		6/25/2014			
Lane Tested		Route		Min. Thickness, in.		Max. Thickness, in.		Analysis Distance, ft.	
WESTBOUND LANE		25		1.57		11.59		50	

***Depth at this location may be impacted by a bridge deck or other pavement anomaly.**

Station	Inner Average Thickness, in.	Outer Average Thickness, in.	Station	Inner Average Thickness, in.	Outer Average Thickness, in.	Station	Inner Average Thickness, in.	Outer Average Thickness, in.	Station	Inner Average Thickness, in.	Outer Average Thickness, in.
10+50	7.4	7.3	11+00	7.2	6.8	11+50	7.9	7.5	12+00	8.4	7.3
12+50	8.6	7.6	13+00	7.0	6.2	13+50	5.5	5.6	14+00	5.6	5.5
14+50	5.6	5.3	15+00	5.4	5.1	15+50	5.8	5.3	16+00	5.6	4.9
16+50	5.7	4.6	17+00	5.8	4.9	17+50	5.6	4.7	18+00	4.8	4.2
18+50	4.1	3.4	19+00	4.0	3.0	19+50	3.6	3.0	20+00	3.0	4.0
20+50	3.4	4.9	21+00	3.4	4.5	21+50	3.6	3.6	22+00*	3.2	2.5
22+50	3.1	2.9	23+00	3.3	4.3	23+50	3.2	4.1	24+00	3.2	3.5
24+50	3.9	3.6	25+00	3.8	3.8	25+50	3.7	4.5	26+00*	4.2	4.7
26+50	4.5	5.1	27+00	5.1	5.1	27+50	4.8	5.5	28+00	5.0	5.0
28+50	4.7	5.9	29+00	5.1	5.2	29+50	5.2	4.3	30+00	6.5	6.2
30+50	6.6	5.6	31+00	5.2	5.0	31+50	3.7	5.1	32+00	4.4	4.7
32+50	4.6	5.4	33+00	3.9	5.3	33+50	5.4	6.1	34+00	5.4	5.2
34+50	4.9	4.8	35+00	4.8	5.3	35+50	5.4	5.7	36+00	5.1	4.8
36+50*	6.0	7.2	37+00	9.6	9.2	37+50	7.5	7.8	38+00	7.0	7.2
38+50	6.8	7.4	39+00	7.9	7.9	39+50	7.0	5.7	40+00	6.8	4.9
40+50	6.4	5.8	41+00	6.3	6.5	41+50	7.7	5.9	42+00	7.1	5.1
42+50	7.4	5.6	43+00*	7.5	6.1	43+50	9.2	8.2	44+00	9.5	9.9

Pavement Cores
020277.00 - Gorham
STATION 25+00, 9' RT





Pavement Cores
020277.00 - Gorham
STATION 37+00, 9' RT



Pavement Cores
020277.00 - Gorham
STATION 40+00, 9' RT





Pavement Cores
020277.00 - Gorham
STATION 72+00, 9' RT

