FOR CONTRACT NO.: 02-3E750**4**

INFORMATION HANDOUT

MATERIALS INFORMATION

LONG LIFE PAVEMENT CONSIDERATIONS
SUMMARY OF CORING DATA

ROUTE: 02-SIS-5-R19.0/R25.3

Long Life Pavement Considerations

At the outset it is important to recognize that for long life pavements significant changes are required in the overall conduct of the execution of a contract by the contractor. These changes include the following: more rigourous material requirements; a different approach for mix design; performance-related laboratory testing of the hot mix asphalt; and more rigourous controls during production and placement of the mix. In addition, timely QA test results are required.

1. Materials and mix design:

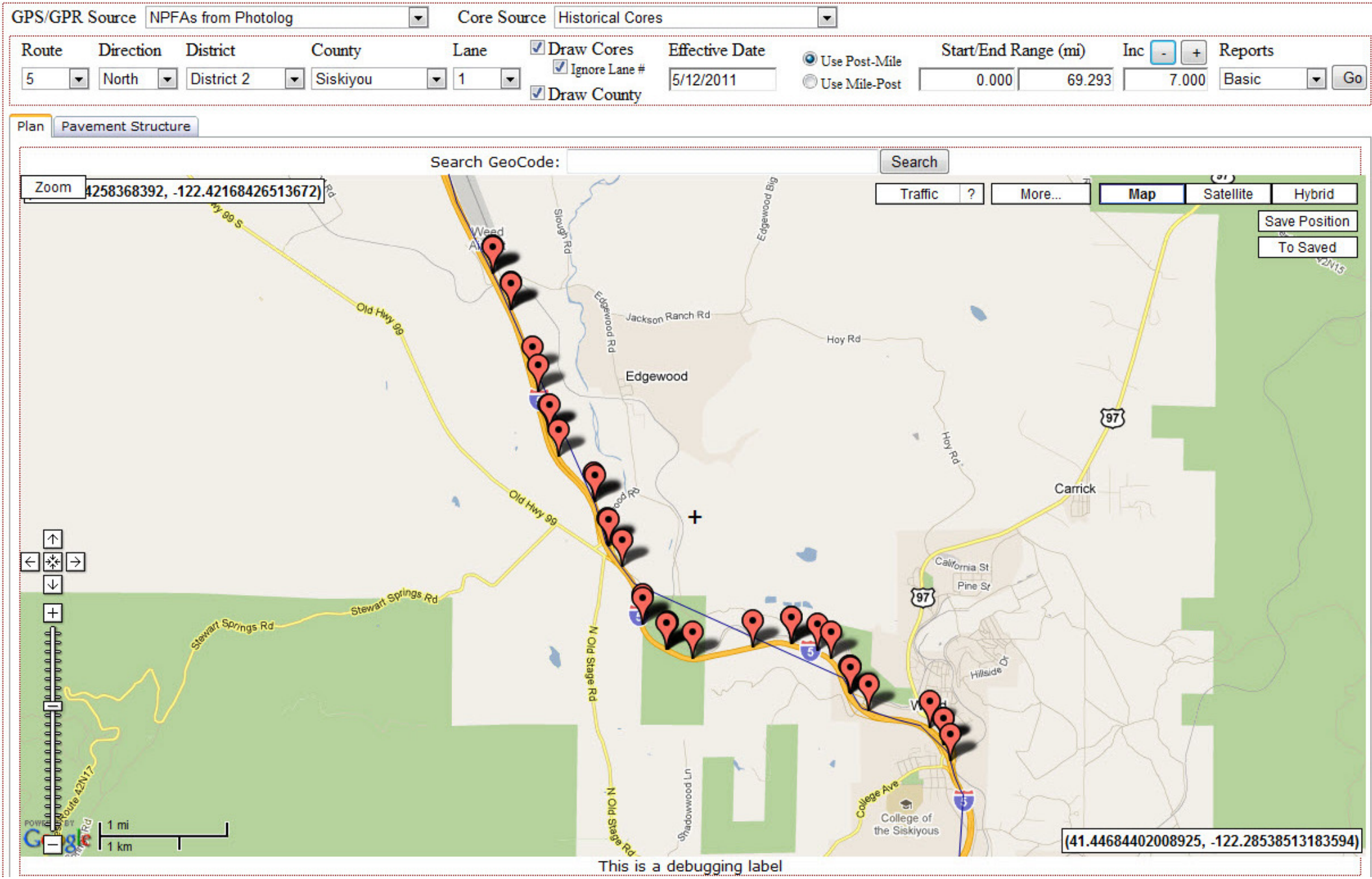
- The requirements for the aggregate have been established to recognize the impacts of traffic and environment for a design period of forty years with periodic resurfacing to improve the pavement surface characteristics.
- Mix design for each mix is based on the shear test requirements listed in the Hot Mix Asphalt (HMA) Performance Requirements table in "Hot Mix Asphalt (Long Life)" of the special provisions for the project. The laboratory specimen preparation and test procedures are included in the document Lab Procedure – LLP-AC1 Sample Preparation and Testing for Long-Life Asphalt Concrete Pavements for Caltrans and Materials Tests (CTMs) may be found at the following website: http://www.dot.ca.gov/hq/esc/Translab/ofpm/fpmlab.htm
- The Stabilometer is only used as a **guideline** for selecting the range in binder contents for the shear testing.
- After the shear testing has been completed and the design binder content (target value [TV]) has been selected, test specimens are prepared at the design binder content and beam fatigue and stiffness testing are conducted in accordance with LLP-AC1. Specifications for the fatigue tests are listed in the aforementioned HMA Performance Requirements Table in "Hot Mix Asphalt (Long Life)" of the special provisions.
- Following the test procedure in LLP-AC1, the mix must also satisfy the performance requirements for the Hamburg Wheel Tracking Test (HWTT) in this same HMA Performance Requirements Table.
- If the mix does not meet ALL the performance requirements of the HMA Performance Requirements Table, adjustments in materials and mix proportions may be necessary to accomplish this.
- Separate mix designs meeting the performance requirements must be prepared for both mixes. The use of RAP must to be considered in the mix designs. The time required to prepare specimens and to complete performance testing for a mix is on the order of 3-4 weeks, and may require additional time if the mix does not meet the requirements. It is recommended that contractors obtain information regarding the time and costs of the mix designs when preparing their bid.

2. Target Values for Quality Control

- The Stabilometer value obtained at the design binder content obtained from the final mix design for each mix that meets all of the requirements in the specification in the aforementioned HMA Performance Requirements Table is the TV used for Quality Control.
- The volumetric properties of the mix that meets shear and fatigue will be measured and then used as Target Values for Quality Control. The required Stabilometer and volumetric properties of the mixes are shown in the HMA Mix Quality Requirements Table in "Hot Mix Asphalt (Long Life)" of the special provisions.

3. Construction

- Mix uniformity is extremely important in the production process as is uniform compaction to ensure long term performance.
- The requirements and schedule for Quality Control (QC) and Quality Assurance (QA) testing are listed in tables in "Hot Mix Asphalt (Long Life)" of the special provisions. Timely QC and QA test results are extremely important.
- Specification limits for Percent of Theoretical Maximum Density requirements for HMA compaction shown in the table in "Hot Mix Asphalt (Long Life)" of the special provisions require more rigourous compaction control. It is recommended that the combined effects of the RAP contents in the mixes and the more rigorous compaction requirements be considered when preparing plans for compaction.
- Per the Standard Specifications, tack coats are required between each lift for the HMA construction.


GPS/GPR Source
NPFAs from Photolog
Core Source
Historical Cores
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Direction
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Draw Cores
Ignore Lane #
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Effective Date
5/12/2011
Use Post-Mile
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Edgewood
Carrick
Old Hwy 99
Jackson Ranch Rd
Hoy Rd
Edgewood Rd
Slough Rd
Edgewood Big
Stewart Springs Rd
N Old Stage Rd
Shadowwood Ln
College Ave
College of the Siskiyous
California St
Pine St
Hillside Dr
97
5
1 mi
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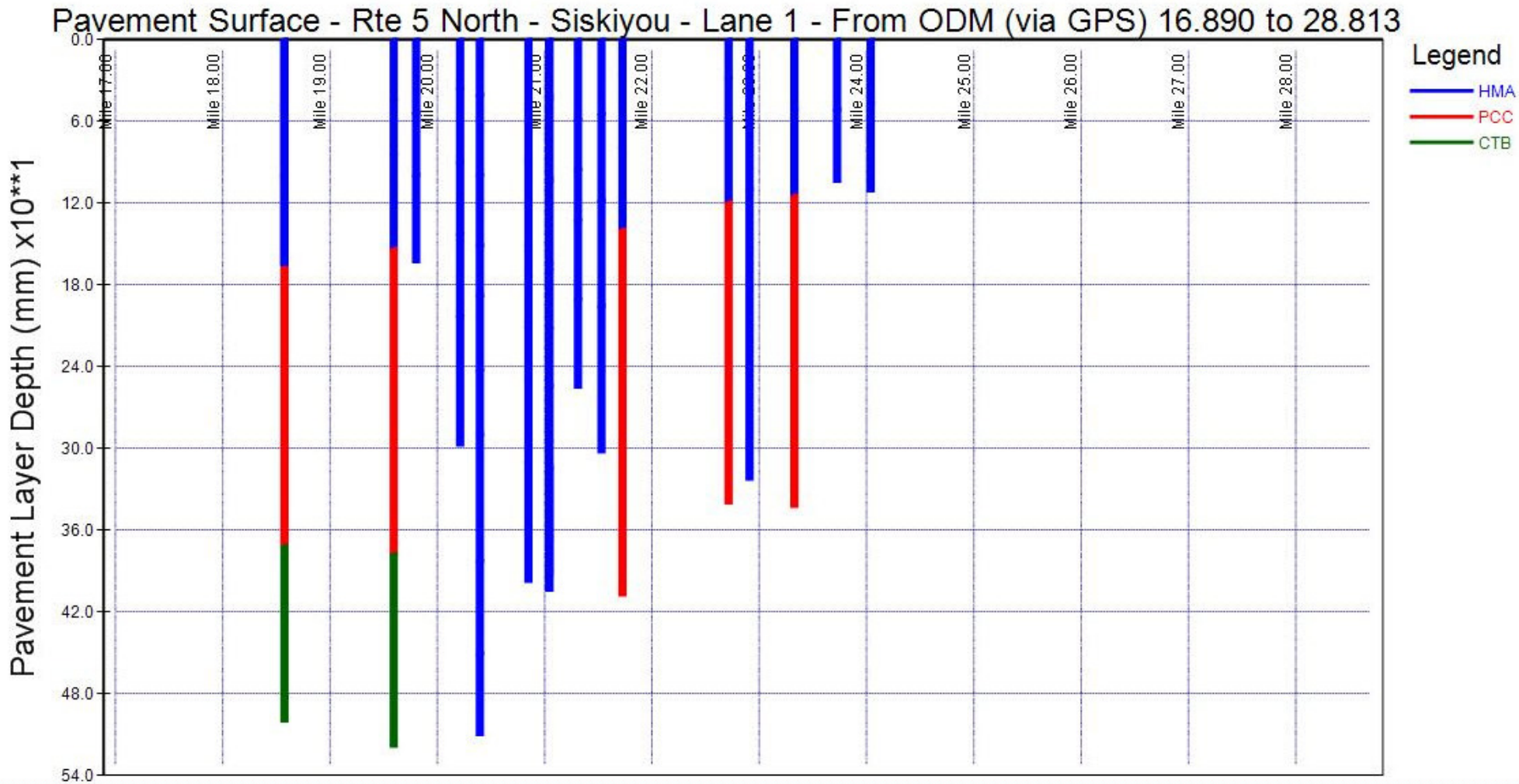
GPS/GPR Source: NPFAs from Photolog | Core Source: Historical Cores

Route	Direction	District	County	Lane	Draw Cores / Ignore Lane # / Draw County	Effective Date	Use Post-Mile / Use Mile-Post	Start/End Range (mi)	Inc	Reports
5	North	District 2	Siskiyou	1	☑ Draw Cores ☑ Ignore Lane # ☑ Draw County	5/12/2011	Use Post-Mile	17.000 – 29.000	7.000	Basic

Plan | Pavement Structure

☐ Bridges/OH ☐ Connectors ☐ Ramps ☐ Lanes ☐ Route Boundaries ☐ Misc ☐ File Markers ☐ General



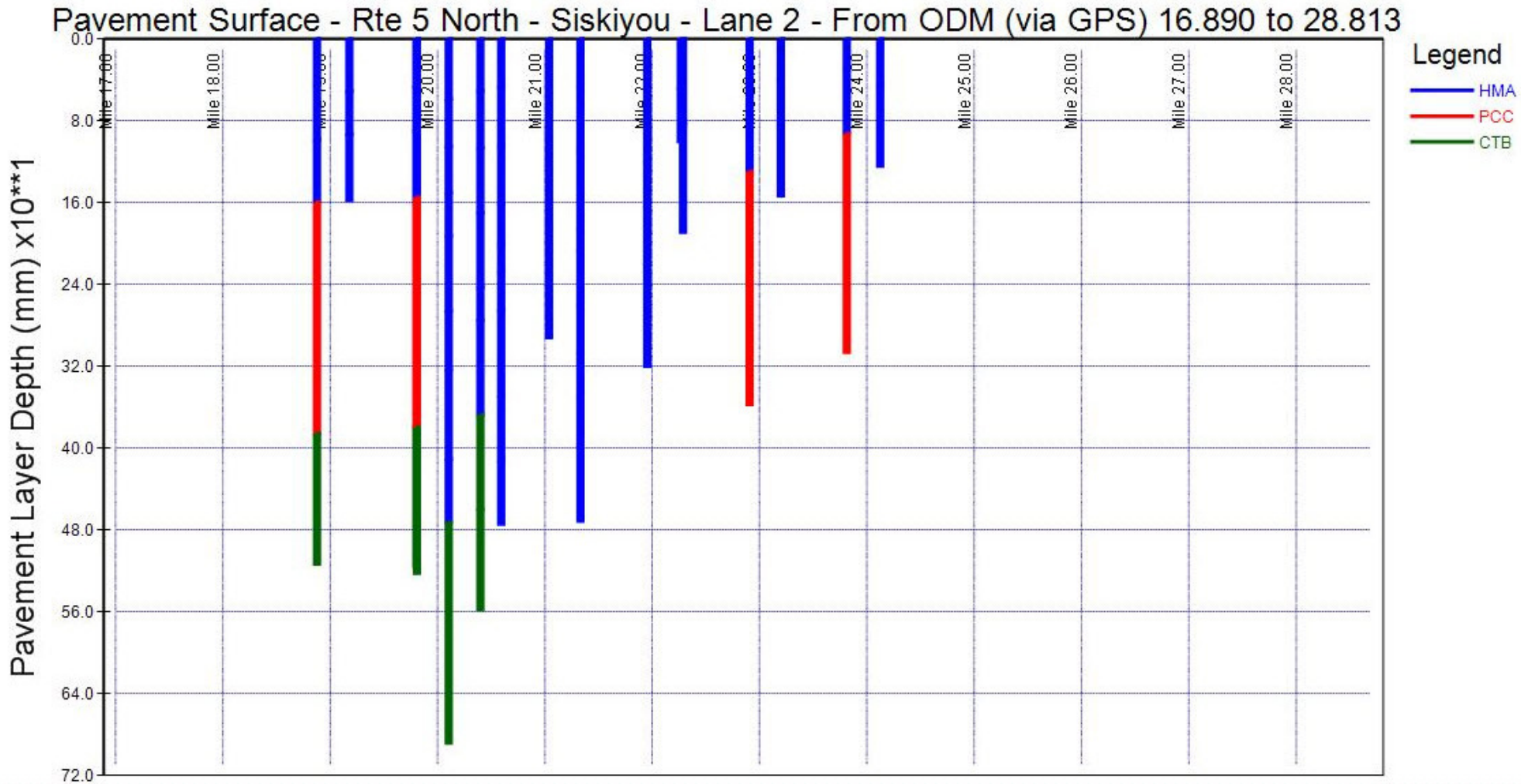
GPS/GPR Source: NPFAs from Photolog

Core Source: Historical Cores

Route	Direction	District	County	Lane	Draw Cores / Ignore Lane # / Draw County	Effective Date	Use Post-Mile / Use Mile-Post	Start/End Range (mi)	Inc	Reports
5	North	District 2	Siskiyou	2	☑ Draw Cores, ☑ Ignore Lane #, ☑ Draw County	5/12/2011	Use Post-Mile	17.000 – 29.000	7.000	Basic

Plan | Pavement Structure

☐ Bridges/OH ☐ Connectors ☐ Ramps ☐ Lanes ☐ Route Boundaries ☐ Misc ☐ File Markers ☐ General



GPS/GPR Source: NPFAs from Photolog

Core Source: Historical Cores

Route	Direction	District	County	Lane	Draw Cores	Ignore Lane #	Draw County	Effective Date	Use Post-Mile	Use Mile-Post	Start/End Range (mi)		Inc	Reports	
5	South	District 2	Siskiyou	1	☑	☑	☑	5/12/2011	◉	○	69.293	0.000	-7.000	Basic	Go

Plan | Pavement Structure

Search GeoCode: Search

Zoom

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Traffic ? More... Map Satellite Hybrid

Save Position

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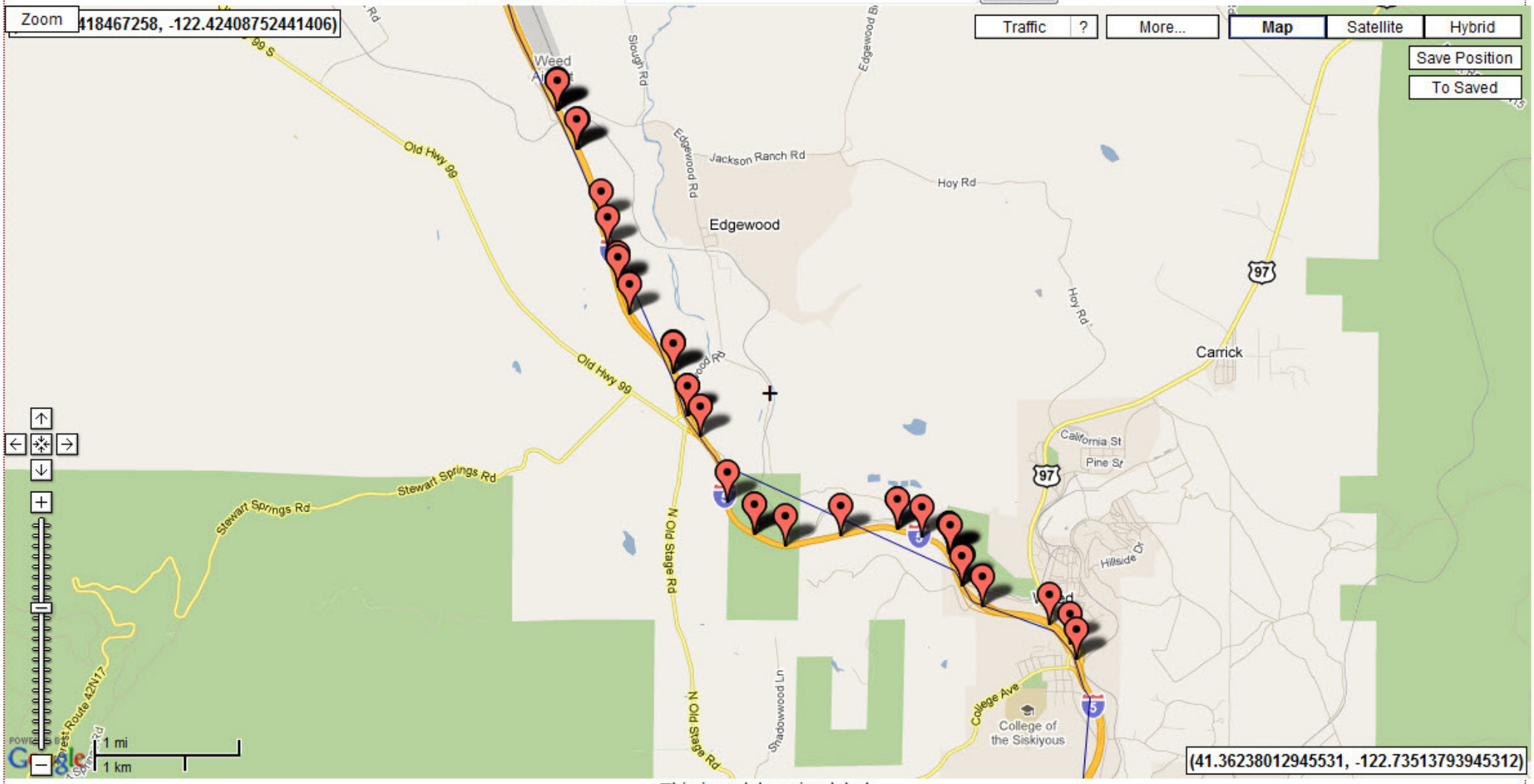

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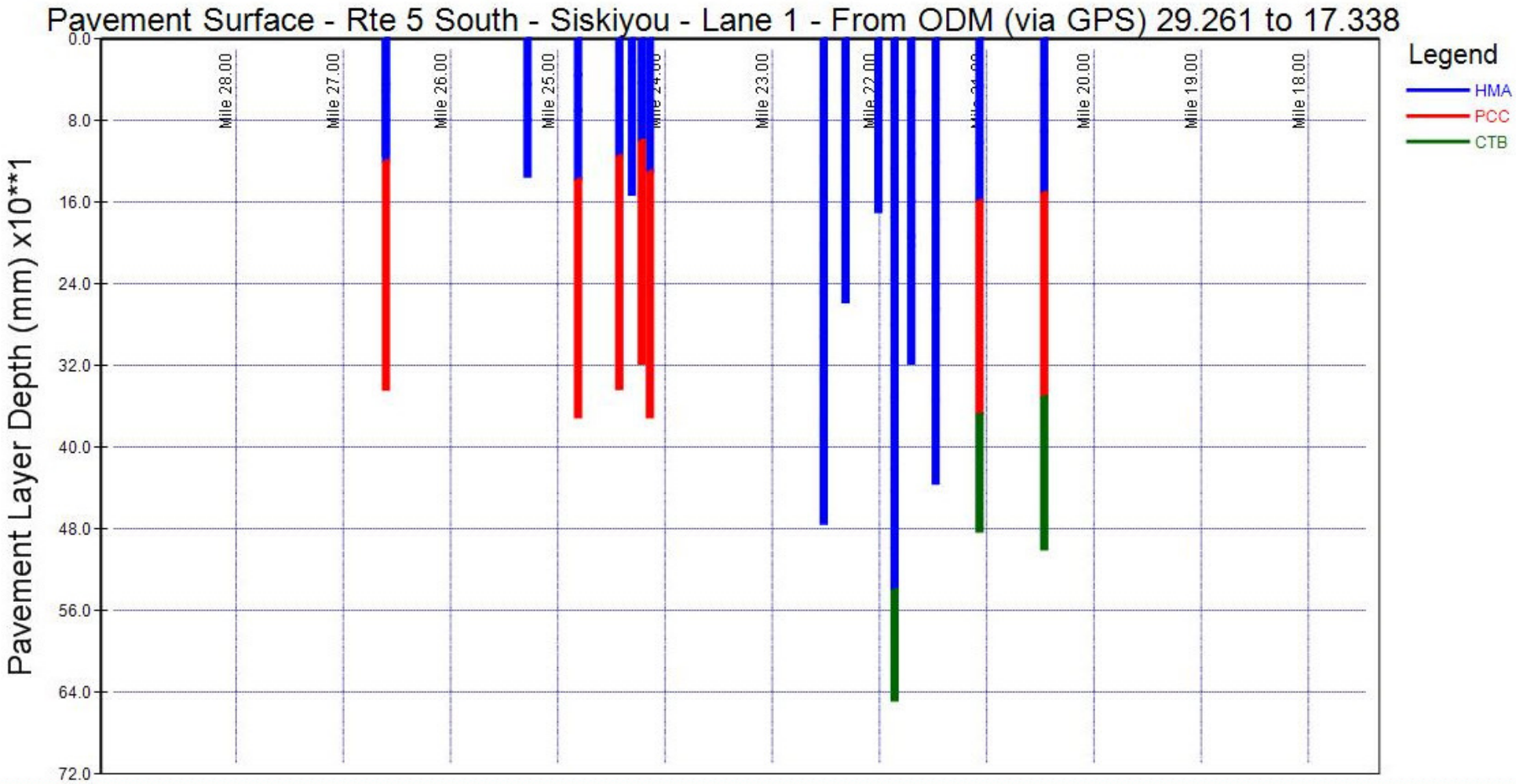
GPS/GPR Source: NPFAs from Photolog | Core Source: Historical Cores

Route	Direction	District	County	Lane	Draw Cores / Ignore Lane # / Draw County	Effective Date	Use Post-Mile / Use Mile-Post	Start/End Range (mi)		Inc	Reports	
5	South	District 2	Siskiyou	1	☑ ☑ ☑	5/12/2011	◉ ○	29.000	17.000	-7.000	Basic	Go

Plan | Pavement Structure

☐ Bridges/OH ☐ Connectors ☐ Ramps ☐ Lanes ☐ Route Boundaries ☐ Misc ☐ File Markers ☐ General

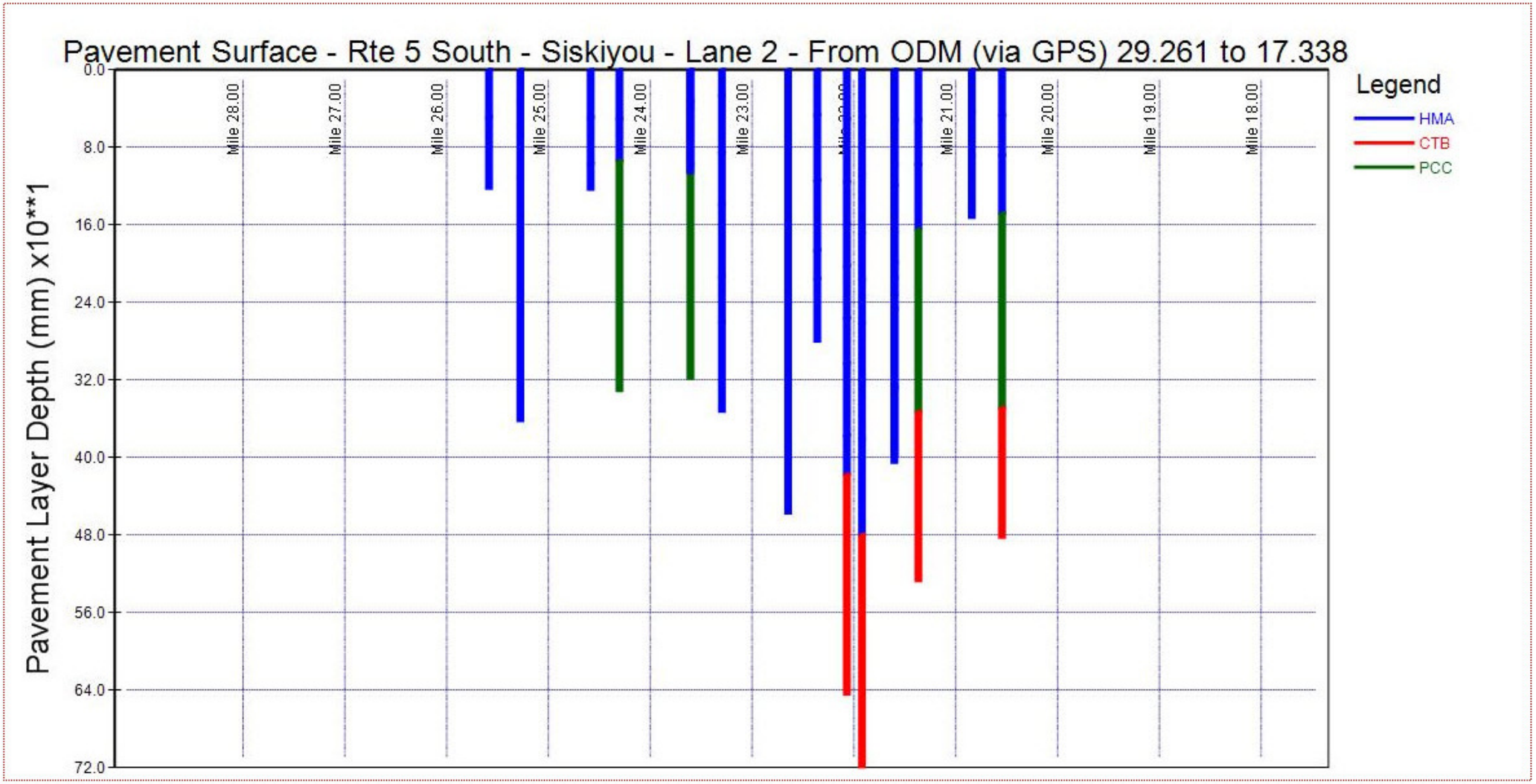


GPS/GPR Source: NPFAs from Photolog | Core Source: Historical Cores

Route	Direction	District	County	Lane	Draw Cores / Ignore Lane # / Draw County	Effective Date	Use Post-Mile / Use Mile-Post	Start/End Range (mi)		Inc	Reports	
5	South	District 2	Siskiyou	2	☑ ☑ ☑	5/12/2011	◉ ○	29.000	17.000	-7.000	Basic	Go

Plan | Pavement Structure

☐ Bridges/OH ☐ Connectors ☐ Ramps ☐ Lanes ☐ Route Boundaries ☐ Misc ☐ File Markers ☐ General



02-3E7504 Weed Pavement Rehab Coring Data

Unique Core ID	Core Date	County	Route	Direction	Lane	Core Location: PM	Corrected Latitude	Corrected Longitude	Elevation	Number of Lifts	Lift 1 Type	Thickness (mm) min:max	Lift 2 Type	Thickness (mm) min:max	Lift 3 Type	Thickness (mm) min:max	Lift 4 Type	Thickness (mm) min:max
3.15-NB-SIS5-L1-19	4/26/2011	Siskiyou	5	North	1	19.12	41.41906667	-122.3840167	3534	3	HMA	47:50	HMA	99:100	HMA	164:166	L1 rubberized, L 2 rubberized, L3D, couldn't extract the whole core	
3.15-NB-SIS5-L1-19(Crack)	4/26/2011	Siskiyou	5	North	1	19.12	41.4191	-122.3840333	3535	5	HMA	50:55	HMA	100:102	HMA	163:165	PCC	370:373
3.15-NB-SIS5-L1-19.85	4/26/2011	Siskiyou	5	North	1	19.79	41.42285	-122.3953833	3434	5	HMA	44:45	HMA	84:85	HMA	152:155	PCC	375:380
3.15-NB-SIS5-L1-20	4/26/2011	Siskiyou	5	North	1	20	41.42493333	-122.3982833	3417	3	HMA	52:55	HMA	99:100	HMA	162:164	L1 Rubberized, L2 rubberized, L3D, Couldn’t extract the whole core	
3.15-NB-SIS5-L1-20.79	4/26/2011	Siskiyou	5	North	1	20.78	41.42968333	-122.4031	3399	5	HMA	35:37	HMA	90:90	HMA	140:145	HMA	201:205
3.15-NB-SIS5-L1-21	4/26/2011	Siskiyou	5	North	1	21	41.43048333	-122.4071333	3376	9	HMA	40:41	HMA	99:100	HMA	150:152	HMA	187:189
3.15-NB-SIS5-L1-21.74	4/26/2011	Siskiyou	5	North	1	21.78	41.42881667	-122.4220167	3248	7	HMA	50:52	HMA	85:90	HMA	150:151	HMA	210:211
3.15-NB-SIS5-L1-22	4/26/2011	Siskiyou	5	North	1	22	41.42988333	-122.4259	3243	9	HMA	44:45	HMA	100:103	HMA	164:165	HMA	210:214
3.15-NB-SIS5-L1-22(Crack)	4/26/2011	Siskiyou	5	North	1	22	41.42991667	-122.42585	3209	6	HMA	40:43	HMA	103:105	HMA	168:170	HMA	254:256
3.15-NB-SIS5-L1-22.29	4/26/2011	Siskiyou	5	North	1	22.28	41.43266667	-122.4295	3161	5	HMA	58:60	HMA	95:96	HMA	130:135	HMA	189:192
3.15-NB-SIS5-L1-23	4/26/2011	Siskiyou	5	North	1	22.783	41.43928333	-122.4326167	3063	4	HMA	54:55	HMA	117:119	HMA	195:196	HMA	295:310
3.15-NB-SIS5-L1-23(crack)	4/26/2011	Siskiyou	5	North	1	22.99	41.44158333	-122.4347833	3070	4	HMA	25:27	HMA	78:80	HMA	139:140	PCC	380:435
3.15-NB-SIS5-L1-23.8	4/27/2011	Siskiyou	5	North	1	23.8	41.45168333	-122.4422167	3043	4	HMA	27:30	HMA	55:60	HMA	119:120	PCC	335:345
3.15-NB-SIS5-L1-24	4/27/2011	Siskiyou	5	North	1	24.5	41.4545	-122.44375	3032	3	HMA	50:52	HMA	109:111	HMA	320:325	L3C	
3.15-NB-SIS5-L1-24.5	4/27/2011	Siskiyou	5	North	1	24.5	41.46116667	-122.4461667	2994	3	HMA	50:52	HMA	114:115	PCC	335:350	L3C	
3.15-NB-SIS5-L1-25	4/27/2011	Siskiyou	5	North	1	25	41.46836667	-122.4494667	2971	2	HMA	50:53	HMA	103:105	L1 Rubberized, L2D, Couldn’t extract the whole core			
3.15-NB-SIS5-L1-25.26	4/27/2011	Siskiyou	5	North	1	25.31	41.47241667	-122.4522	2968	2	HMA	45:48	HMA	110:112	L2D, Couldn’t extract the whole core			
3.15-NB-SIS5-L2-19	4/28/2011	Siskiyou	5	North	2	19	41.41718333	-122.38305	3588	5	HMA	44:46	HMA	98:100	HMA	159:160	PCC	380:392
3.15-NB-SIS5-L2-19.3	4/28/2011	Siskiyou	5	North	2	19.3	41.42093333	-122.3862167	3450	3	HMA	50:52	HMA	90:96	HMA	153:163	Couldn't extract the whole core	
3.15-NB-SIS5-L2-20	4/28/2011	Siskiyou	5	North	2	19.999	41.4249	-122.3982167	3414	5	HMA	45:47	HMA	88:90	HMA	160:161	PCC	372:385
3.15-NB-SIS5-L2-20(Crack)	4/28/2011	Siskiyou	5	North	2	20.002	41.42495	-122.3982333	3435	5	HMA	45:50	HMA	90:92	HMA	150:160	PCC	375:385
3.15-NB-SIS5-L2-20.586	4/28/2011	Siskiyou	5	North	2	20.664	41.42883333	-122.4010833	3407	9	HMA	58:60	HMA	104:107	HMA	150:151	HMA	192:193
3.15-NB-SIS5-L2-21	4/28/2011	Siskiyou	5	North	2	21	41.43045	-122.4070833	3389	8	HMA	50:51	HMA	105:108	HMA	170:170	HMA	240:245
3.15-NB-SIS5-L2-21.31	4/28/2011	Siskiyou	5	North	2	21.297	41.43015	-122.4129667	3316	9	HMA	45:47	HMA	104:105	HMA	160:163	HMA	200:201
3.15-NB-SIS5-L2-22	4/28/2011	Siskiyou	5	North	2	22.001	41.42993333	-122.4258167	3217	6	HMA	65:69	HMA	84:87	HMA	122:125	HMA	159:160
3.15-NB-SIS5-L2-22.3	4/28/2011	Siskiyou	5	North	2	22.3	41.43306667	-122.4296167	3170	9	HMA	45:46	HMA	108:110	HMA	184:185	HMA	205:207
3.15-NB-SIS5-L2-23	4/28/2011	Siskiyou	5	North	2	22.997	41.44175	-122.4348167	3065	6	HMA	33:34	HMA	70:75	HMA	119:120	HMA	164:165
3.15-NB-SIS5-L2-23.3	4/28/2011	Siskiyou	5	North	2	23.3	41.44658333	-122.4367833	3045	2	HMA	47:50	HMA	99:102	L2D, Couldn't extract the whole core			
3.15-NB-SIS5-L2-23.5(Crack)	4/28/2011	Siskiyou	5	North	2	23.381	41.44686667	-122.43695	3056	2	HMA	75:90	HMA	135:243	L1C, L1SB, L2C, L2TS			
3.15-NB-SIS5-L2-24	4/28/2011	Siskiyou	5	North	2	23.998	41.4545	-122.4436167	3032	4	HMA	25:30	HMA	54:56	HMA	129:130	PCC	355:360
3.15-NB-SIS5-L2-24.3	4/28/2011	Siskiyou	5	North	2	24.3	41.45908333	-122.4453333	3014	3	HMA	38:40	HMA	82:85	HMA	152:155	L3D, Couldn't extract the whole core	
3.15-NB-SIS5-L2-25	4/28/2011	Siskiyou	5	North	2	25.001	41.46841667	-122.4494167	2992	3	HMA	25:30	HMA	90:95	PCC	295:318	L2D, L2C	
3.15-NB-SIS5-L2-25.3	4/28/2011	Siskiyou	5	North	2	25.3	41.4726	-122.45225	2986	2	HMA	44:46	HMA	124:125	L2D, Couldn't extract the whole core			
3.15-SB-SIS5-L1-19.08	4/27/2011	Siskiyou	5	South	1	19.12	41.41888333	-122.3841667	3527	5	HMA	43:45	HMA	89:91	HMA	149:152	PCC	350:351
3.15-SB-SIS5-L1-19.85	4/27/2011	Siskiyou	5	South	1	19.8	41.42268333	-122.3957	3448	5	HMA	45:47	HMA	100:103	HMA	157:160	PCC	365:370
3.15-SB-SIS5-L1-20	4/27/2011	Siskiyou	5	South	1	20	41.4248	-122.3984	3430	3	HMA	42:45	HMA	99:102	HMA	168:170	L1 rubberized, L2 rubberized, L3D, L3C, Couldn’t extract the whole core	
3.15-SB-SIS5-L1-20.245(crack)	4/27/2011	Siskiyou	5	South	1	20.23	41.42778333	-122.4	3447	7	HMA	59:60	HMA	120:122	HMA	174:180	HMA	235:250
3.15-SB-SIS5-L1-20.82	4/27/2011	Siskiyou	5	South	1	20.82	41.42965	-122.40375	3406	6	HMA	50:54	HMA	112:114	HMA	158:160	HMA	191:195
3.15-SB-SIS5-L1-21	4/27/2011	Siskiyou	5	South	1	21	41.43035	-122.4071167	3381	12	HMA	60:61	HMA	125:127	HMA	173:175	HMA	235:235
3.15-SB-SIS5-L1-21.85	4/27/2011	Siskiyou	5	South	1	21.79	41.42875	-122.422	3263	5	HMA	48:50	HMA	104:106	HMA	125:132	HMA	189:190
3.15-SB-SIS5-L1-22	4/27/2011	Siskiyou	5	South	1	22	41.4299	-122.4260667	3230	9	HMA	58:60	HMA	114:116	HMA	149:152	HMA	200:203
3.15-SB-SIS5-L1-23	4/27/2011	Siskiyou	5	South	1	22.99	41.44168333	-122.4351	3058	3	HMA	21:23	HMA	75:75	HMA	151:153	L3D, Couldn't extract the whole core	
3.15-SB-SIS5-L1-23(crack)	4/27/2011	Siskiyou	5	South	1	22.83	41.43966667	-122.4333	3043	4	HMA	25:26	HMA	60:61	HMA	129:131	PCC	365:375
3.15-SB-SIS5-L1-23.85	4/27/2011	Siskiyou	5	South	1	23.85	41.45185	-122.4428833	3032	3	HMA	40:45	HMA	99:100	PCC	305:330	L2D	
3.15-SB-SIS5-L1-24	4/26/2011	Siskiyou	5	South	1	24.03	41.45498333	-122.4443833	3030	3	HMA	48:50	HMA	110:119	PCC	330:355		
3.15-SB-SIS5-L1-24.5	4/26/2011	Siskiyou	5	South	1	24.5	41.46115	-122.4465333	2992	4	HMA	34:36	HMA	69:71	HMA	135:140	PCC	350:390
3.15-SB-SIS5-L1-25	4/26/2011	Siskiyou	5	South	1	25	41.46831667	-122.44975	2976	3	HMA	44:45	HMA	78:81	HMA	134:135	L3D, Couldn’t extract the whole core	
3.15-SB-SIS5-L1-25.5	4/26/2011	Siskiyou	5	South	1	25.29	41.47225	-122.4524167	2966	2	HMA	48:52	HMA	113:115	Couldn’t extract the whole core			
3.15-SB-SIS5-L1-25.5(crack)	4/26/2011	Siskiyou	5	South	1	25.28	41.47223333	-122.4524	2969	4	HMA	43:45	HMA	78:80	HMA	119:120	PCC	335:351
3.15-SB-SIS5-L2-19	4/29/2011	Siskiyou	5	South	2	18.999	41.41741667	-122.38325	3550	5	HMA	45:49	HMA	87:89	HMA	147:149	PCC	347:350
3.15-SB-SIS5-L2-19.3	4/29/2011	Siskiyou	5	South	2	19.3	41.42083333	-122.3868667	3512	3	HMA	42:45	HMA	88:90	HMA	150:155	L1 rubberized, L2 rubberized, L3D, Couldn't extract the whole core	
3.15-SB-SIS5-L2-20	4/29/2011	Siskiyou	5	South	2	20	41.42476667	-122.39845	3421	5	HMA	50:53	HMA	95:100	HMA	164:165	PCC	340:365
3.15-SB-SIS5-L2-20.245	4/29/2011	Siskiyou	5	South	2	20.243	41.42788333	-122.40025	3422	7	HMA	51:53	HMA	119:120	HMA	198:200	HMA	214:215
3.15-SB-SIS5-L2-20.245(crack)	4/29/2011	Siskiyou	5	South	2	20.244	41.42791667	-122.40025	3429	5	HMA	95:100	HMA	165:170	HMA	230:233	HMA	325:326
3.15-SB-SIS5-L2-21	4/29/2011	Siskiyou	5	South	2	21	41.43035	-122.40715	3373	9	HMA	48:50	HMA	108:110	HMA	168:170	HMA	215:218
3.15-SB-SIS5-L2-21.39	4/29/2011	Siskiyou	5	South	2	21.375	41.42971667	-122.4147167	3314	9	HMA	50:51	HMA	114:117	HMA	159:160	HMA	200:204
3.15-SB-SIS5-L2-22	4/29/2011	Siskiyou	5	South	2	22	41.42988333	-122.4260833	3238	5	HMA	45:48	HMA	113:115	HMA	185:187	HMA	215:216
3.15-SB-SIS5-L2-22.3	4/29/2011	Siskiyou	5	South	2	22.262	41.43308333	-122.4298167	3168	9	HMA	55:58	HMA	115:119	HMA	163:165	HMA	204:205
3.15-SB-SIS5-L2-23	4/29/2011	Siskiyou	5	South	2	22.989	41.44163333	-122.43515	3076	6	HMA	25:28	HMA	85:86	HMA	137:140	HMA	212:214
3.15-SB-SIS5-L2-23.3	4/29/2011	Siskiyou	5	South	2	23.3	41.44601667	-122.4369333	3053	2	HMA	39:41	HMA	105:107	Couldn't extract the whole core			
3.15-SB-SIS5-L2-23.3(CRACK)	4/29/2011	Siskiyou	5	South	2	23.3	41.446	-122.43695	3056	3	HMA	31:35	HMA	95:102	PCC	310:327	L1C, L2C, L2D	
3.15-SB-SIS5-L2-24	4/29/2011	Siskiyou	5	South	2	24	41.4545	-122.4442667	3047	3	HMA	50:51	HMA	90:97	PCC	310:352	L2D	
3.15-SB-SIS5-L2-24.3	4/29/2011	Siskiyou	5	South	2	24.3	41.45858333	-122.4456667	3020	3	HMA	48:50	HMA	95:98	HMA	120:127	L3D, Couldn't extract the whole core	
3.15-SB-SIS5-L2-25	4/29/2011	Siskiyou	5	South	2	25	41.46826667	-122.4498167	2965	4	HMA	30:35	HMA	59:60	HMA	109:111	HMA	350:374
3.15-SB-SIS5-L2-25.3	4/29/2011	Siskiyou	5	South	2	25.3	41.47231667	-122.45235	2950	2	HMA	48:50	HMA	120:125	L2D, Couldn't extract the whole core			

Unique Core ID	Lift 5 Type	Thickness (mm) min:max	Lift 6 Type	Thickness (mm) min:max	Lift 7 Type	Thickness (mm) min:max	Lift 8 Type	Thickness (mm) min:max	Lift 9 Type	Thickness (mm) min:max
3.15-NB-SIS5-L1-19										
3.15-NB-SIS5-L1-19(Crack)	CTB	485:515	L1C, L2C, L3C, L3D, L4D, L1 Rubberized							
3.15-NB-SIS5-L1-19.85	CTB	500:537	L1 rubberized, L2 rubberized, L3D, L4C							
3.15-NB-SIS5-L1-20										
3.15-NB-SIS5-L1-20.79	HMA	290:305	L3C							
3.15-NB-SIS5-L1-21	HMA	230:255	HMA	285:295	HMA	380:385	HMA	446:455	HMA	500:520
3.15-NB-SIS5-L1-21.74	HMA	245:250	HMA	295:325	HMA	370:425	L3C, L4D, L5D, L6TS, L6SB, L7TS			
3.15-NB-SIS5-L1-22	HMA	252:255	HMA	310:320	HMA	364:366	HMA	400:408	HMA	160:465
3.15-NB-SIS5-L1-22(Crack)	HMA	290:300	HMA	375:411	L1C, L4D, L5C, L5 has tripped material, L6TS, L5D					
3.15-NB-SIS5-L1-22.29	HMA	230:280	T3D, T4D, T5TS, T5SB							
3.15-NB-SIS5-L1-23	L3D									
3.15-NB-SIS5-L1-23(crack)										
3.15-NB-SIS5-L1-23.8	L3D, L4C									
3.15-NB-SIS5-L1-24										
3.15-NB-SIS5-L1-24.5										
3.15-NB-SIS5-L1-25										
3.15-NB-SIS5-L1-25.26										
3.15-NB-SIS5-L2-19	CTB	485:542	L3D, L4C, L4D, L5TS							
3.15-NB-SIS5-L2-19.3										
3.15-NB-SIS5-L2-20	CTB	505:525	L1 rubeberized, L2 rubberized, L3D, L4D							
3.15-NB-SIS5-L2-20(Crack)	CTB	520:525	LL1C, L2C, L3C, L3D, L3SB, L4C, L4D							
3.15-NB-SIS5-L2-20.586	HMA	265:267	HMA	322:325	HMA	410:412	HMA	470:475	CTB	680:697
3.15-NB-SIS5-L2-21	HMA	270:280	HMA	295:440	CTB	380:540	CTB	480:636	L2D, L3D, L5SB, L6TS, L7D, L7SB, THERE IS A GAP BETWEEN L5 AND L6	
3.15-NB-SIS5-L2-21.31	HMA	225:230	HMA	255:275	HMA	347:350	HMA	410:414	HMA	444:505
3.15-NB-SIS5-L2-22	HMA	197:200	HMA	240:344	L5D, L6C, L6TS, core bottom stripped					
3.15-NB-SIS5-L2-22.3	HMA	259:261	HMA	304:308	HMA	349:352	HMA	395:400	HMA	450:493
3.15-NB-SIS5-L2-23	HMA	220:220	HMA	295:345	L4D					
3.15-NB-SIS5-L2-23.3										
3.15-NB-SIS5-L2-23.5(Crack)										
3.15-NB-SIS5-L2-24	L3D, L4C									
3.15-NB-SIS5-L2-24.3										
3.15-NB-SIS5-L2-25										
3.15-NB-SIS5-L2-25.3										
3.15-SB-SIS5-L1-19.08	CTB	480:519	L1 rubberized, L3D, L4D							
3.15-SB-SIS5-L1-19.85	CTB	470:494	L1 rubberized, L2 Rubberized, L3D, L4C, L4D							
3.15-SB-SIS5-L1-20										
3.15-SB-SIS5-L1-20.245(crack)	HMA	265:265	HMA	352:355	HMA	415:455	L1C, L2C, L4D			
3.15-SB-SIS5-L1-20.82	HMA	150:255	HMA	295:340	L3D, Stripped on bottom					
3.15-SB-SIS5-L1-21	HMA	279:281	HMA	310:317	HMA	340:360	HMA	420:423	HMA	440:445
3.15-SB-SIS5-L1-21.85	HMA	240:275	L1D, L3D, L3SB, L5SB, Stripped material on bottom							
3.15-SB-SIS5-L1-22	HMA	247:249	HMA	290:292	HMA	315:348	HMA	379:380	HMA	469:480
3.15-SB-SIS5-L1-23										
3.15-SB-SIS5-L1-23(crack)	L3D, L4C									
3.15-SB-SIS5-L1-23.85										
3.15-SB-SIS5-L1-24										
3.15-SB-SIS5-L1-24.5	L3D									
3.15-SB-SIS5-L1-25										
3.15-SB-SIS5-L1-25.5										
3.15-SB-SIS5-L1-25.5(crack)	L1C, L2C, L3D, L3C, L4C									
3.15-SB-SIS5-L2-19	CTB	470:495	L1 Rubberized, l2 Rubberized, L3D, L4D							
3.15-SB-SIS5-L2-19.3										
3.15-SB-SIS5-L2-20	CTB	490:564	L1 rubberized, L2 rubberized, L5C, stripped material remain in the hole							
3.15-SB-SIS5-L2-20.245	HMA	245:248	HMA	327:330	HMA	395:400	L4D, L5D, L5C			
3.15-SB-SIS5-L2-20.245(crack)	HMA	390:420	L1C, L1D, L4C, L2TS							
3.15-SB-SIS5-L2-21	HMA	260:263	HMA	315:325	HMA	380:380	HMA	479:480	CTB	708:730
3.15-SB-SIS5-L2-21.39	HMA	255:257	HMA	295:310	HMA	375:379	HMA	415:420	CTB	630:658
3.15-SB-SIS5-L2-22	HMA	265:295	L2D							
3.15-SB-SIS5-L2-22.3	HMA	258:260	HMA	270:290	HMA	319:320	HMA	373:375	HMA	440:475
3.15-SB-SIS5-L2-23	HMA	260:261	HMA	330:375	L4D					
3.15-SB-SIS5-L2-23.3										
3.15-SB-SIS5-L2-23.3(CRACK)										
3.15-SB-SIS5-L2-24										
3.15-SB-SIS5-L2-24.3										
3.15-SB-SIS5-L2-25	L4D, L5C									
3.15-SB-SIS5-L2-25.3										

Unique Core ID	Lift 10 Type	Thickness (mm) min:max	Lift 11 Type	Thickness (mm) min:max	Lift 12 Type	Thickness (mm) min:max	Core Log Note
3.15-NB-SIS5-L1-19							
3.15-NB-SIS5-L1-19(Crack)							
3.15-NB-SIS5-L1-19.85							
3.15-NB-SIS5-L1-20							
3.15-NB-SIS5-L1-20.79							
3.15-NB-SIS5-L1-21	L4D, L5SB, L6TS, L6D, L7TS, L7D, L8TS						
3.15-NB-SIS5-L1-21.74							
3.15-NB-SIS5-L1-22	L6SB, L7TS, L8D, L8SB						
3.15-NB-SIS5-L1-22(Crack)							
3.15-NB-SIS5-L1-22.29							
3.15-NB-SIS5-L1-23							
3.15-NB-SIS5-L1-23(crack)							
3.15-NB-SIS5-L1-23.8							
3.15-NB-SIS5-L1-24							
3.15-NB-SIS5-L1-24.5							
3.15-NB-SIS5-L1-25							
3.15-NB-SIS5-L1-25.26							
3.15-NB-SIS5-L2-19							
3.15-NB-SIS5-L2-19.3							
3.15-NB-SIS5-L2-20							
3.15-NB-SIS5-L2-20(Crack)							
3.15-NB-SIS5-L2-20.586	L6D, L7TS						
3.15-NB-SIS5-L2-21							
3.15-NB-SIS5-L2-21.31	L6SB, L7D, L7TS, Stripping between layers 6 and 7						
3.15-NB-SIS5-L2-22							
3.15-NB-SIS5-L2-22.3	L5D, L6C, L6TS, L6D, L7TS						
3.15-NB-SIS5-L2-23							
3.15-NB-SIS5-L2-23.3							
3.15-NB-SIS5-L2-23.5(Crack)							
3.15-NB-SIS5-L2-24							
3.15-NB-SIS5-L2-24.3							
3.15-NB-SIS5-L2-25							
3.15-NB-SIS5-L2-25.3							
3.15-SB-SIS5-L1-19.08							
3.15-SB-SIS5-L1-19.85							
3.15-SB-SIS5-L1-20							
3.15-SB-SIS5-L1-20.245(crack)							
3.15-SB-SIS5-L1-20.82							
3.15-SB-SIS5-L1-21	HMA	495:500	HMA	537:542	CTB	645:650	L3D, L7SB, L8TS
3.15-SB-SIS5-L1-21.85							
3.15-SB-SIS5-L1-22	L7SB, L8TS						
3.15-SB-SIS5-L1-23							
3.15-SB-SIS5-L1-23(crack)							
3.15-SB-SIS5-L1-23.85							
3.15-SB-SIS5-L1-24							
3.15-SB-SIS5-L1-24.5							
3.15-SB-SIS5-L1-25							
3.15-SB-SIS5-L1-25.5							
3.15-SB-SIS5-L1-25.5(crack)							
3.15-SB-SIS5-L2-19							
3.15-SB-SIS5-L2-19.3							
3.15-SB-SIS5-L2-20							
3.15-SB-SIS5-L2-20.245							
3.15-SB-SIS5-L2-20.245(crack)							
3.15-SB-SIS5-L2-21	L3D, L6SB, L7TS, L8D, L9C						
3.15-SB-SIS5-L2-21.39	L6D, L6SB, L7TS, L8D						
3.15-SB-SIS5-L2-22							
3.15-SB-SIS5-L2-22.3	L6SB, L7TS						
3.15-SB-SIS5-L2-23							
3.15-SB-SIS5-L2-23.3							
3.15-SB-SIS5-L2-23.3(CRACK)							
3.15-SB-SIS5-L2-24							
3.15-SB-SIS5-L2-24.3							
3.15-SB-SIS5-L2-25							
3.15-SB-SIS5-L2-25.3							

Layer Types

HMA	Hot Mix Asphalt, seal coats and other surface treatments less than 30 mm in thickness can be included in an HMA lift.
HMA-O	Open Graded Hot Mix Asphalt
ASURF	Seal coats or other surface treatments greater than 30 mm in thickness
PCC	Portland Cement Concrete
AB	Aggregate Base below the surface.
ASB	Aggregate SubBase below aggregate base (when the AB and ASB cannot be differentiated, identify combined layer as AB.)
ACB	Asphalt Concrete Base, bound layers below the surface layer not continuous from asphalt bound surface
CTB/LCB	Cement Treated Base or Lean Concrete Base, bound layers below the surface layer that are not PCC
SGS	SubGrade, Sand
SGC	SubGrade, Clay
SGT	Subgrade, Treated with lime or other admixtures

Layer Notes

Examples: L2TSB means Lift 2 has stripping on the top and bottom of the lift, and L2SMI means a SAMI exists below Lift 2, between Lifts 2 and 3.

TS, SB, or TSB	Stripping of the bound lifts, on the top (TS), bottom (SB), or both (TSB)
SMI	Stress Absorbing Membrane Interlayer (SAMI) at bottom of lift
SMF	Fabric SAMI
SMR	Rubberized SAMI
D	Debonding at bottom of the lift
C	Cracked lift, or broken core
PP	Possibly Patched lift, generally indicated by extreme thickness with no lifts lines (but may indicate great compaction)
NOS	No soil sample was obtained.