AIRPORT ROAD – SCOTT STREET TO PIONEER TRAIL ROAD

RECOMMENDATIONS

Pavement Maintenance Options (Short-Term)

These options are not available for this street because of structural deficiencies and/or pavement cracking condition.

Pavement Rehabilitation Options (Long-Term)

Overlay Options

For option 1, we recommend 4 inch digouts for base failures, placing a 1/2 inch HMA leveling course, pavement fabric and a 1-3/4 inch HMA overlay.

Estimated Cost: $67,000 Estimated Life Expectancy: 10-12 Years

For option 2, we recommend 4 inch digouts for base failures, placing a 1/2 inch HMA leveling course and a 1-3/4 inch RHMA overlay.

Estimated Cost: $67,000 Estimated Life Expectancy: 10-12 Years

Recycle and Mill and Replace Options

These options are not available for this street because of the structural deficiencies and thin pavement layer.

Reconstruction Options

For option 1, we recommend removing the pavement to a depth of 12 inches and placing 12 inches of new HMA. The HMA should be placed in 5 lifts.

Estimated Cost: $330,000 Estimated Life Expectancy: 20 Years

For option 2, we recommend removing 6 inches of the existing structure, lime treating the native soil to a depth of 16 inches and placing 6 inches of new HMA in 3 lifts.

Estimated Cost: $194,000 Estimated Life Expectancy: 20 Years

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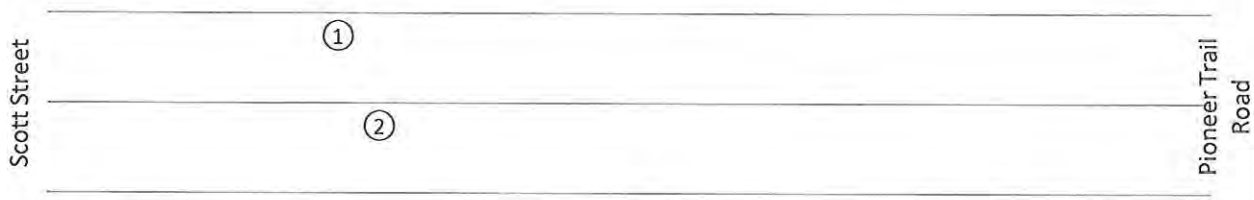

NOTES:
- NTS
- ACTUAL ROAD MAY NOT BE STRAIGHT
- NOT ALL ROADS CONNECTING TO THIS STREET ARE SHOWN
- WIDTH OF ROAD MAY VARY WITHIN THE BOUNDARY SECTION
- ALL LOCATIONS SHOWN ARE APPROXIMATED

Airport Road

[Section of Road ≈ 700ft]

TRAFFIC LAYOUT:
- 2-WAY STREET
- 1 LANE EACH WAY

VISUAL DESCRIPTION FOR THIS SECTION OF ROAD

The pavement exhibits severe weathering and raveling and longitudinal cracking and the joints. The longitudinal cracks have been filled with cold patch. The road is divided with a planted median. The median is constructed with AC curbs.

CORING LOG

Symbol	Location	Core Data		R-value
1	South of Scott Street 175ft	AC AB	2.25" 10.75"	6
2	South of Scott Street 200ft	AC AB	2.50" 11.50"	-

DEFLECTION ANALYSIS

Lane	Tolerable	TI	80th Percentile	Percent Reduction	HMA Overlay
North Bound	25	8.0	26.14	4.37	1.44 - inches
South Bound	25	8.0	20.18	0.00	0.00 - inches
				Overlay Required by Reflective Cracking	1.25 - inches

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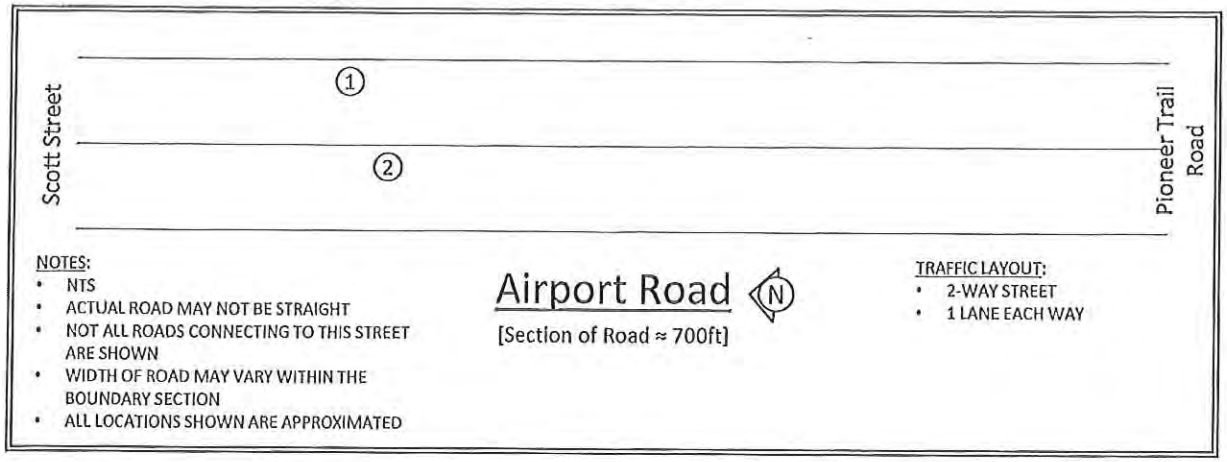

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TRAFFIC LAYOUT:
- 2-WAY STREET
- 1 LANE EACH WAY

VISUAL DESCRIPTION FOR THIS SECTION OF ROAD

CORING LOG

Symbol	Location	Core Data		R-value
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2	South of Scott Street 200ft	AC AB	2.50" 11.50"	-

PHOTO LOG

Symbol	Location	Comments
A	_____ of _____ _____ft	
B	_____ of _____ _____ft	
C	_____ of _____ _____ft	

DEFLECTION ANALYSIS

Lane	Tolerable	TI	80th Percentile	Percent Reduction	HMA Overlay
North Bound	25	8.0	26.14	4.37	1.44 - Inches
South Bound	25	8.0	20.18	0.00	0.00 - Inches
				Overlay Required by Reflective Cracking	1.25 - Inches

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03/27/13

City of Paso Robles

Road: Airport
From: Pioneer Trail
To: Scott
Lane/Line: NB

Survey Date: 03/13/13
Thickness: 0.21
Traffic Index: 8.00
Project Number: 130065

Deflection Data Analysis

Deflection Readings (Equivalent Deflectometer Units)

No. of Tests	Low	Mean	High	Std. Dev.
10	14.93	22.41	28.99	4.44

Road Surface

Thickness	Traffic Index
0.21	8.00

Structural Design

Tolerable	80th Percentile	90th Percentile	% Reduction	GE Deficient
25.00	26.14	28.09	4.37	0.01

HMA Overlay
0.01

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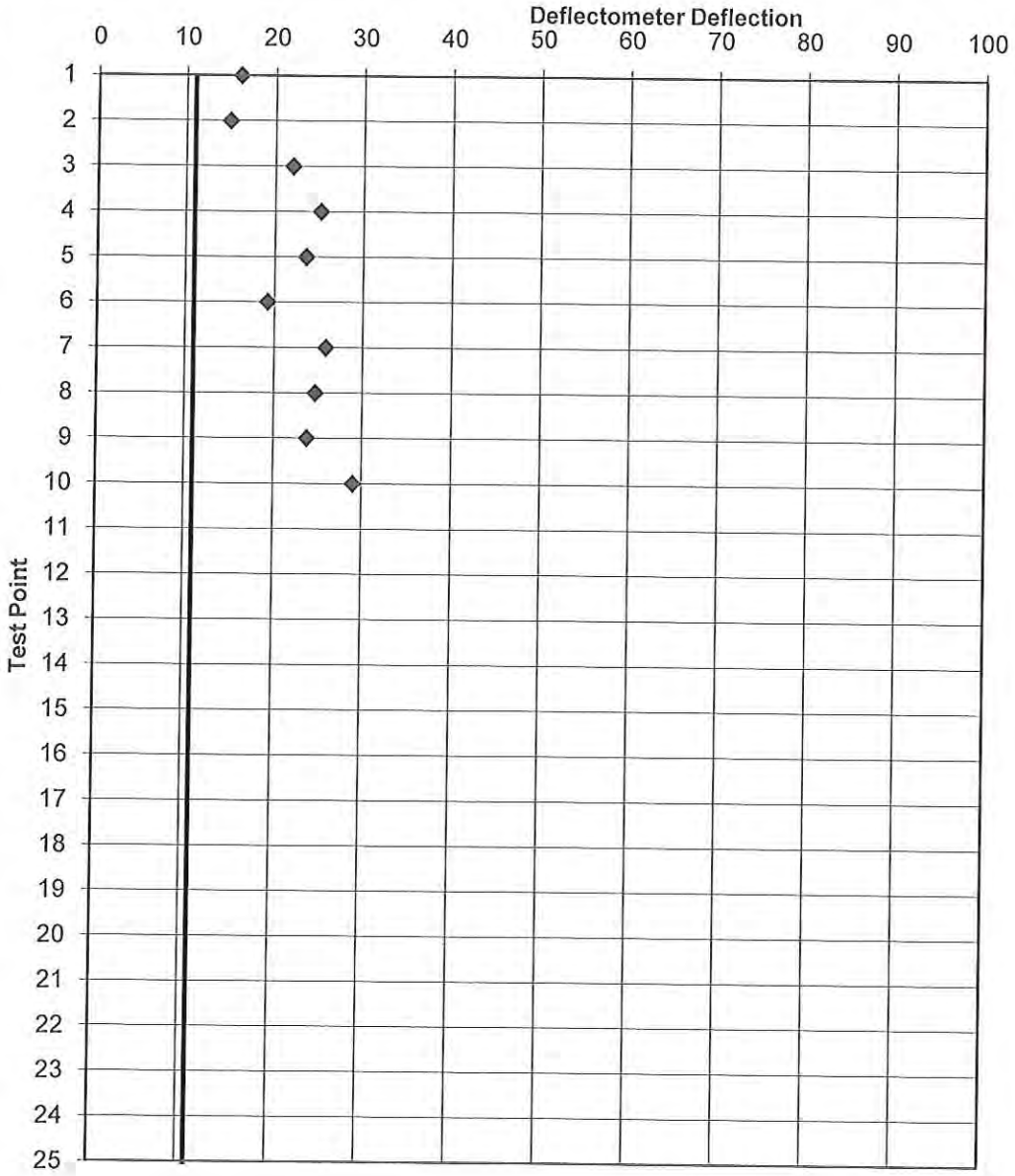

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Date: 3/27/2013

Client: City of Paso Robles
Road: Airport
From: Pioneer Trail
To: Scott
Lane/Line: NB

Interval: 70
Survey Date: 3/13/13
Thickness: 0.21
Traffic Index: 8.00
Project Number: 130065

Test Points	Dynaflect	Conditions	Comments	Deflection	Exclude
1	0.73			16.061	
2	0.68		Before (COP)	14.927	
3	0.99			21.960	
4	1.13			25.136	
5	1.06			23.548	
6	0.87			19.237	
7	1.16			25.816	
8	1.11			24.682	
9	1.07			23.775	
10	1.30			28.993	

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03/27/13

City of Paso Robles

Road: Airport
From: Scott
To: Pioneer Trail
Lane/Line: SB

Survey Date: 03/13/13
Thickness: 0.21
Traffic Index: 8.00
Project Number: 130065

Deflection Data Analysis

Deflection Readings (Equivalent Deflectometer Units)

No. of Tests	Low	Mean	High	Std. Dev.
10	14.70	17.94	23.55	2.66

Road Surface

Thickness	Traffic Index
0.21	8.00

Structural Design

Tolerable	80th Percentile	90th Percentile	% Reduction	GE Deficient
25.00	20.18	21.35	0.00	0.00

HMA Overlay
0.00

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03/27/13

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Road: Airport
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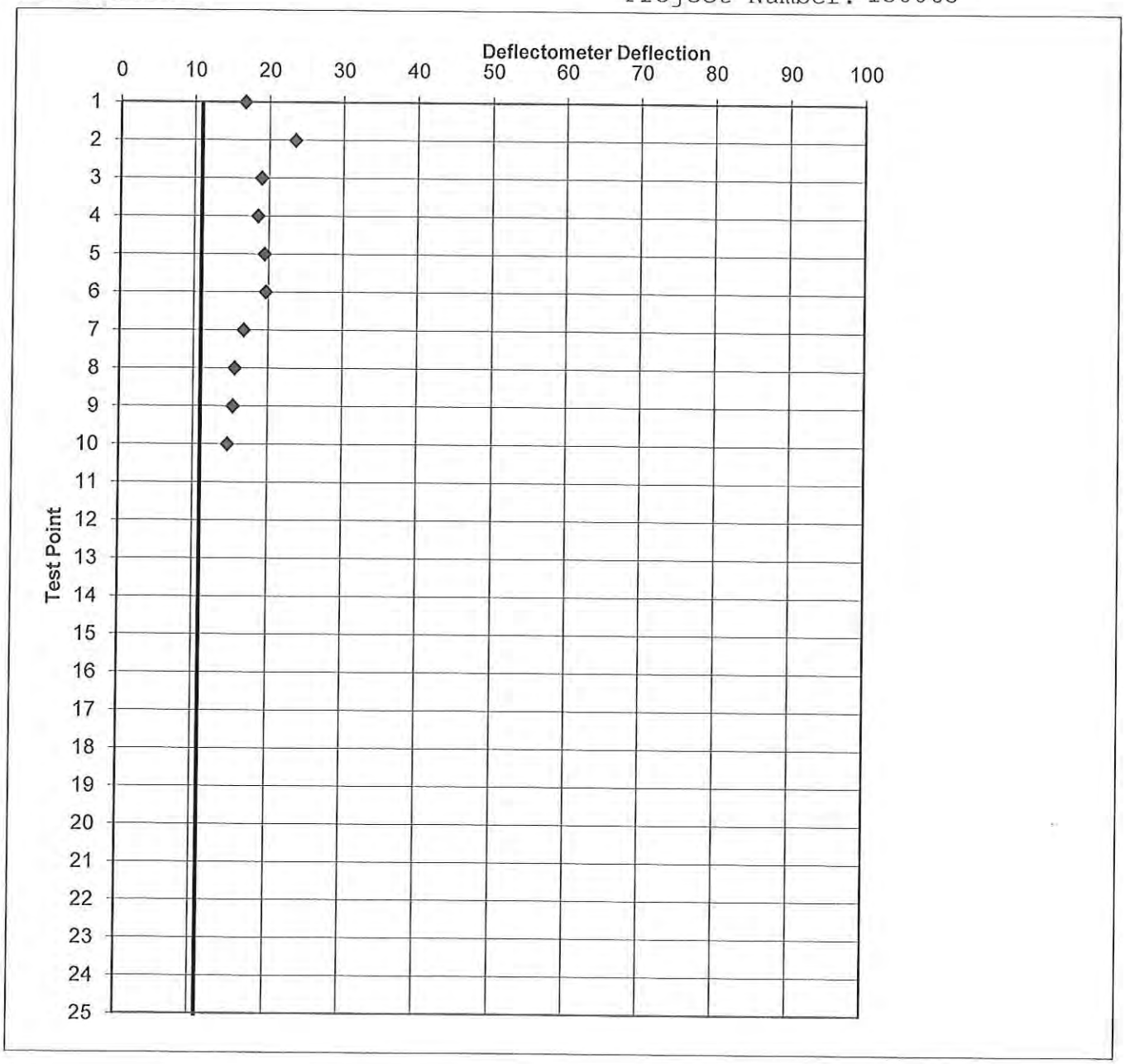

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Date: 3/27/2013

Client: City of Paso Robles
Road: Airport
From: Scott
To: Pioneer Trail
Lane/Line: SB

Interval: 70
Survey Date: 3/13/13
Thickness: 0.21
Traffic Index: 8.00
Project Number: 130065

Test Points	Dynaflect	Conditions	Comments	Deflection	Exclude
1	0.76			16.742	
2	1.06			23.548	
3	0.86			19.010	
4	0.84			18.557	
5	0.88			19.464	
6	0.89			19.691	
7	0.76			16.742	
8	0.71			15.608	
9	0.70		Before (COP)	15.381	
10	0.67			14.700	

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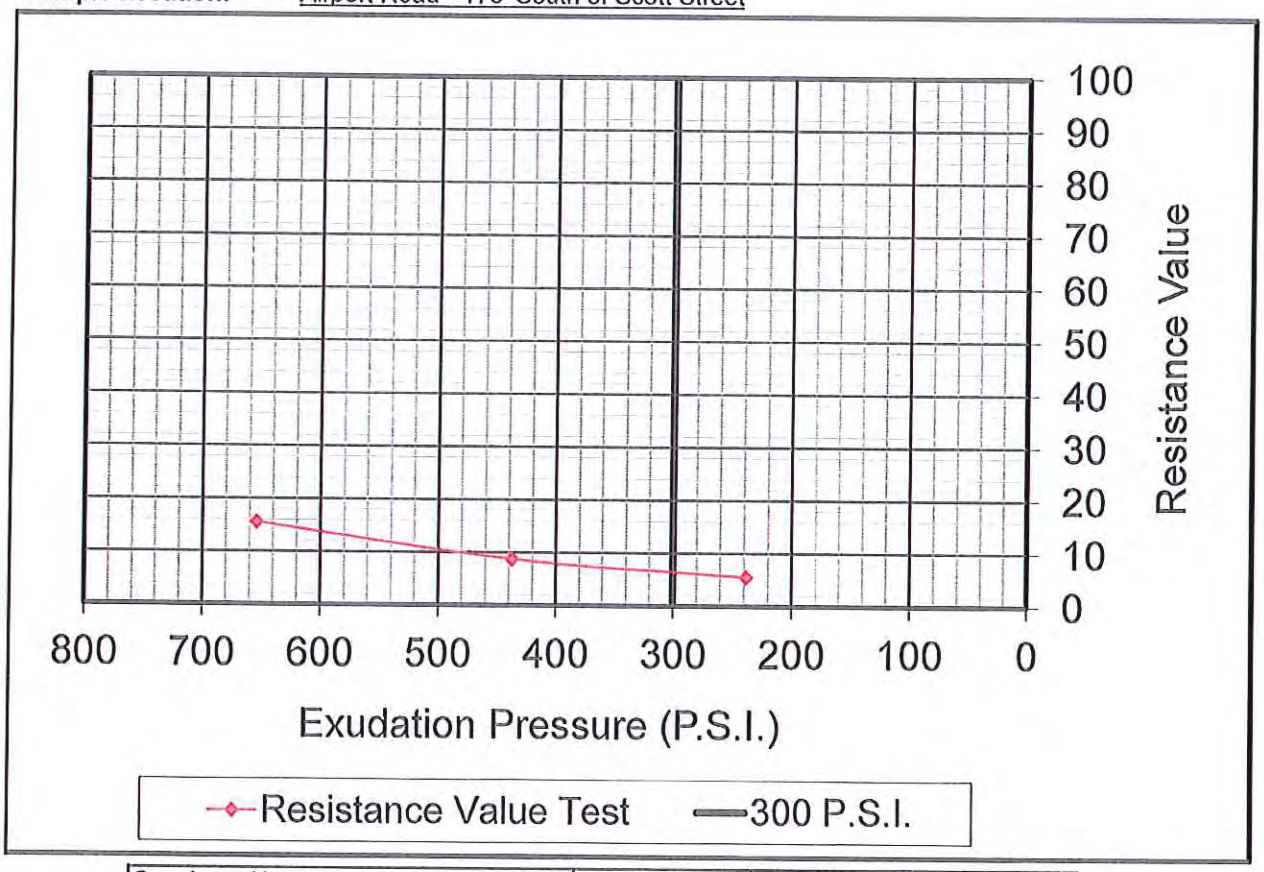
RESISTANCE (R) VALUE TEST
ASTM D 2844

Laboratory No.: L130083AW
Project No.: 130065
Sample Date: March 15, 2013
Report Date: April 11, 2013
Client: City of Paso Robles
Project Name: City of Paso Robles 2013 Pavement Analysis
Sample Description: Light Brown Clay with Sand
Sample Location: Airport Road - 175' South of Scott Street



Specimen No.	1	2	3
Moisture Content (%)	16.2	17.4	15.2
Dry Density (PCF)	117.3	113.6	119.8
Resistance Value (R)	9	6	16
Exudation Pressure (PSI)	438	239	655
Expansion Pressure	35	13	56

RESISTANCE VALUE AT 300 P.S.I. 6

AASHTO R18

Reviewed By: Craig Long
Craig W. Long
Laboratory Operations Manager

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AIRPORT ROAD – SCOTT STREET TO PIONEER TRAIL ROAD
Scott Street looking Southbound

AIRPORT ROAD – SCOTT STREET TO PIONEER TRAIL ROAD
Pioneer Trail Road looking Northbound (NB Lanes)

AIRPORT ROAD – SCOTT STREET TO PIONEER TRAIL ROAD
Pioneer Trail Road looking Northbound (SB Lanes)