Appendix A
Geotechnical Data

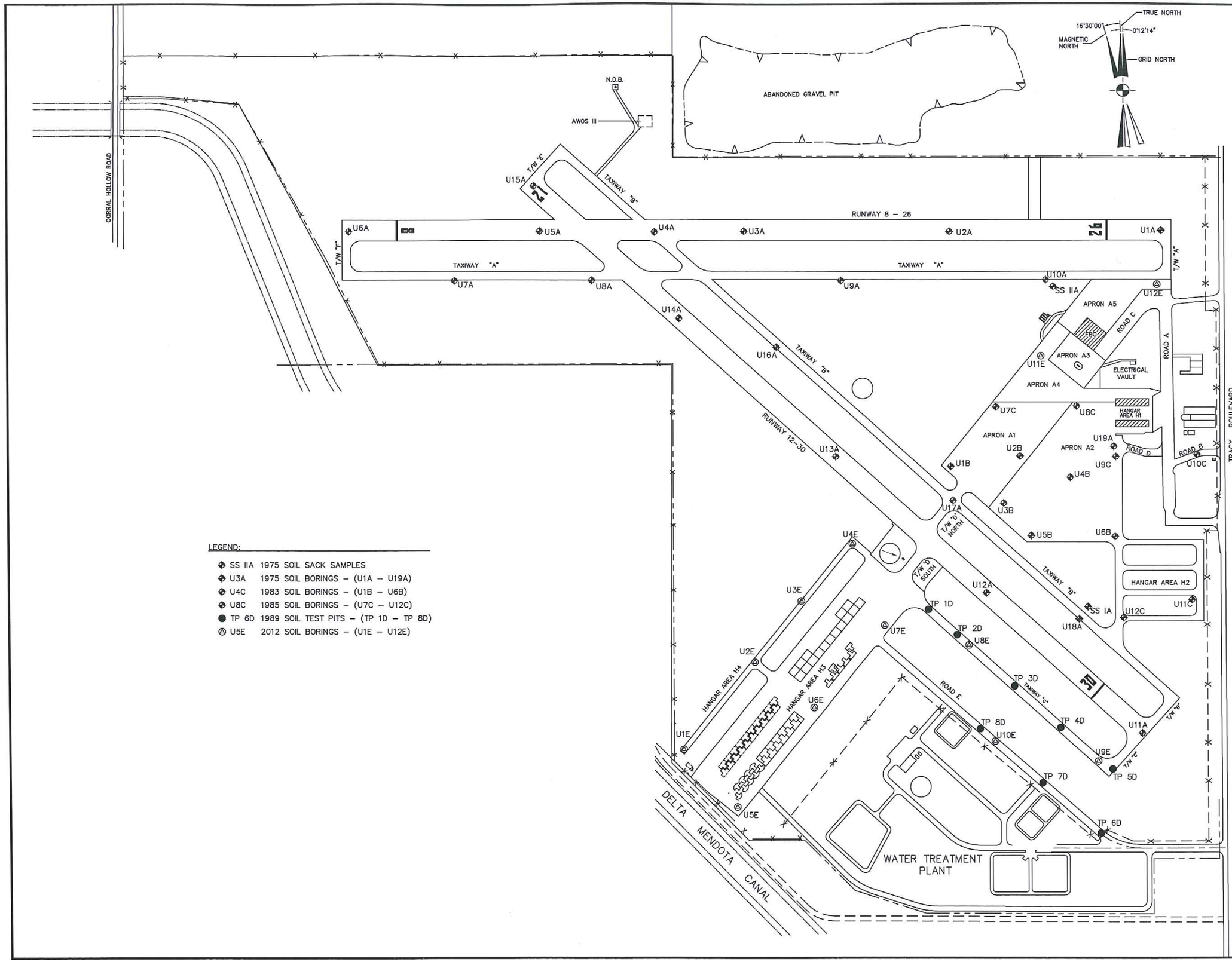
A series of soil (geotechnical) studies were conducted by the office of Reinard W. Brandley, Consulting Airport Engineer in the past as well as in 2012 for the pavement evaluation study for the Tracy Municipal Airport. These studies consisted of drilling a series of exploratory test holes and test pits, obtaining undisturbed soil samples and bulk soil samples from these test holes and test pits, and conducting a series of laboratory tests on the samples obtained. The data obtained from these test borings and test pits have been used in this Pavement Evaluation Study. The results of these studies have been summarized in this Appendix, as follows:

Plates

Plate No. A1	Soil Test Hole Location Map
Plate No. A2	1975 Soil Profiles (U1A – U10A)
Plate No. A3	1975 Soil Profiles (U11A – U19A)
Plate No. A4	1983 Soil Profiles (U1B – U6B)
Plate No. A5	1985 Soil Profiles (U7C – U12C)
Plate No. A6	1989 Soil Profiles (TP 1D – TP 8D)
Plate No. A7	2012 Soil Profiles (U1E – U12E)

Tables

Table No. A1	Summary of Geotechnical Testing – Native Soils
Table No. A2	Grading Analysis – Aggregate Base Course (1975)



LEGEND:

- SS IIA 1975 SOIL SACK SAMPLES
- U3A 1975 SOIL BORINGS – (U1A – U19A)
- U4C 1983 SOIL BORINGS – (U1B – U6B)
- U8C 1985 SOIL BORINGS – (U7C – U12C)
- TP 6D 1989 SOIL TEST PITS – (TP 1D – TP 8D)
- U5E 2012 SOIL BORINGS – (U1E – U12E)

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

Reinerd W. Brandley
CONSULTING AIRPORT ENGINEER
6125 King Road, Suite 201 • Loomis, California 95650–8004 • (916) 652–4725

REGISTERED PROFESSIONAL ENGINEER R. BRANDLEY No. C 60338 Exp. 6-30-2014 CIVIL STATE OF CALIFORNIA

ENGINEER OF RECORD

NO.	REVISIONS	BY	APR	DATE

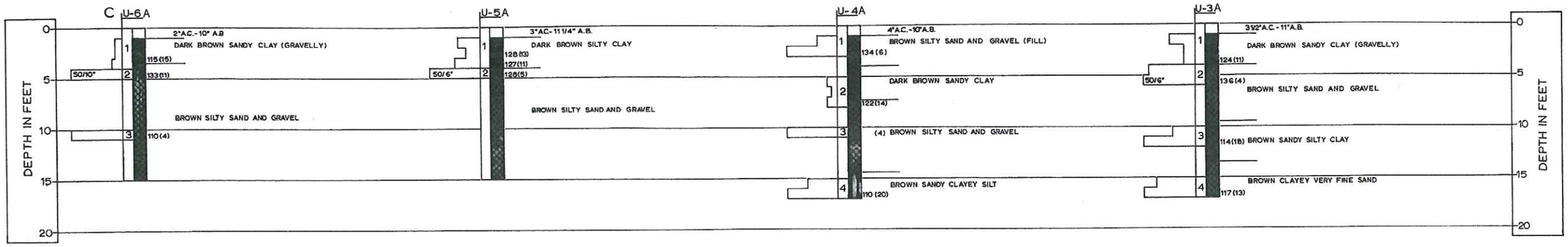
TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

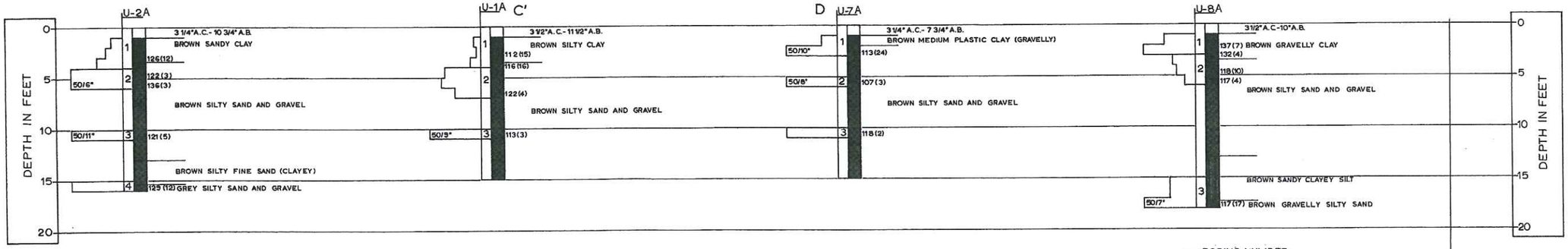
PAVEMENT EVALUATION

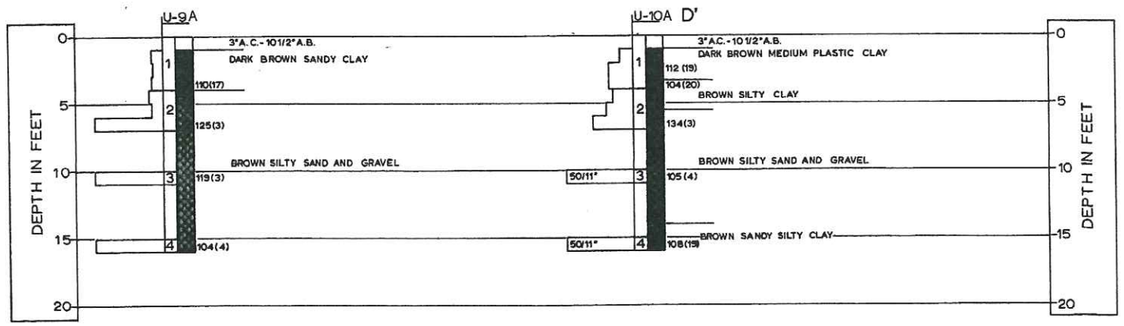
SOIL TEST HOLE LOCATION MAP

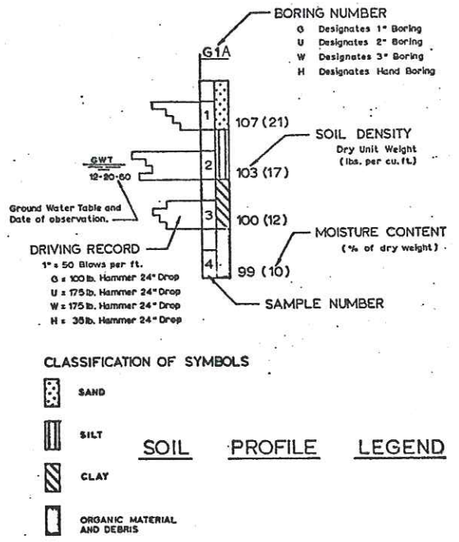
DESIGN BY:	DB
DRAWN BY:	DB
CHK'D BY:	RWB
DATE:	MARCH 11, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	1"=200'

SHEET NUMBER
PLATE No. A1









NO.	REVISIONS	BY	APP.	DATE

DESIGNED — DATE
DRAWN T.E. MEANEY — DATE
CHECKED — DATE
TRACED — DATE

CONTRACT NO. 5104 A 2
DRAWING NO. 5104 A2-3

SCALE
HOR. 1" = 50 BLOWS
VERT. 1" = 5'

REGISTERED CE 8044

COUNTY OF SAN JOAQUIN
STATE OF CALIFORNIA

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

SOIL PROFILE SHEET NO. 2

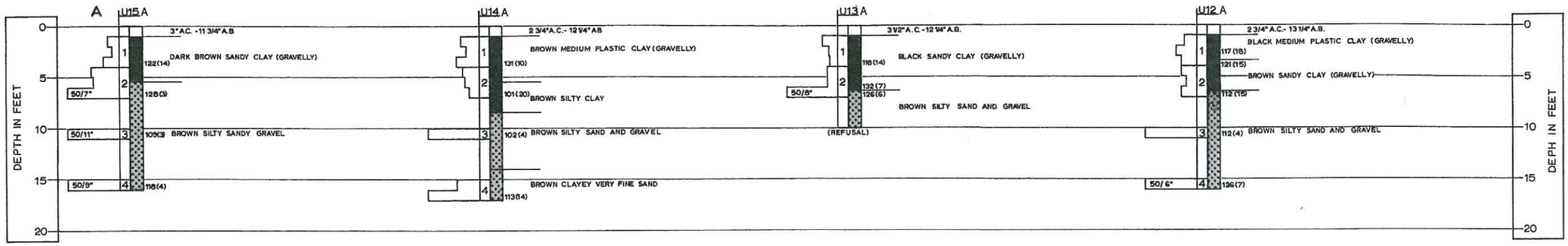
1975 SOIL BORINGS - (U1A - U10A)

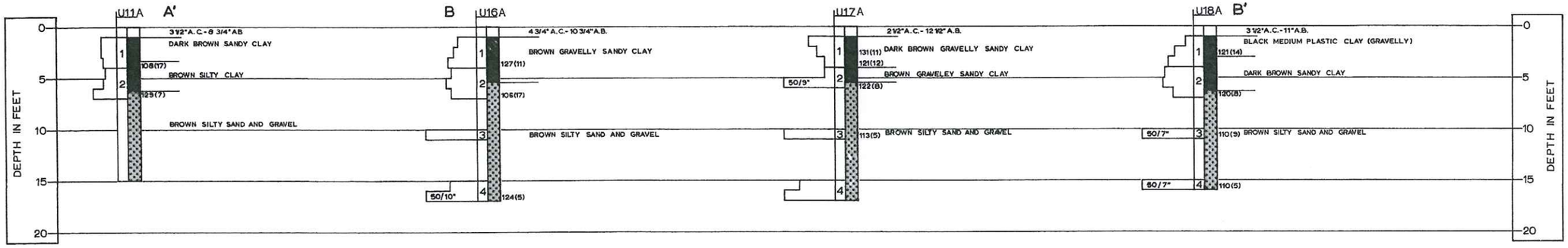
REINARD W. BRANDLEY CONSULTING CIVIL ENGINEER
HOWE AVENUE PROFESSIONAL CENTER TELEPHONE 922-4725
6251 HOWE AVENUE SACRAMENTO, CALIFORNIA 95825

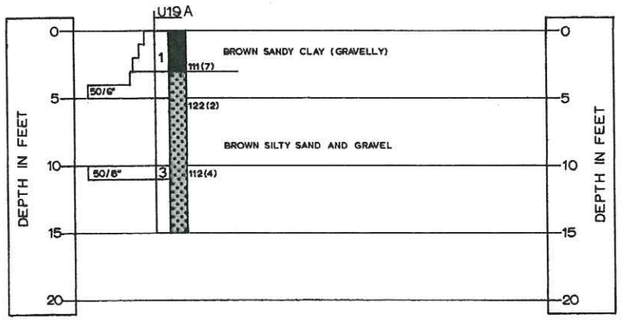
DATE SEPT. 3, 1975

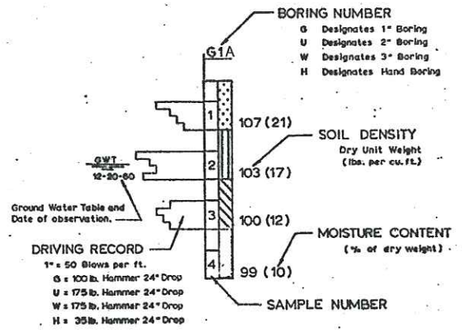
SHEET 12 OF NUMBER SHEETS

PLATE No. A2









CLASSIFICATION OF SYMBOLS

- SAND
- SILT
- CLAY
- ORGANIC MATERIAL AND DEBRIS

SOIL PROFILE LEGEND

NO.	REVISIONS	BY	APP.	DATE

DESIGNED A.L. FARMER DATE
DRAWN DATE
CHECKED DATE
CONTRACT NO. 51.04 A2
DRAWING NO. 5104 A2-2
REGISTERED CE. 8044
SCALE 1"=50 BLOWS HORIZONTAL, 1" = 5' VERTICAL

COUNTY OF SAN JOAQUIN
STATE OF CALIFORNIA

TRACY MUNICIPAL AIRPORT

CALIFORNIA

TRACY,

SOIL PROFILE SHEET NO. 1

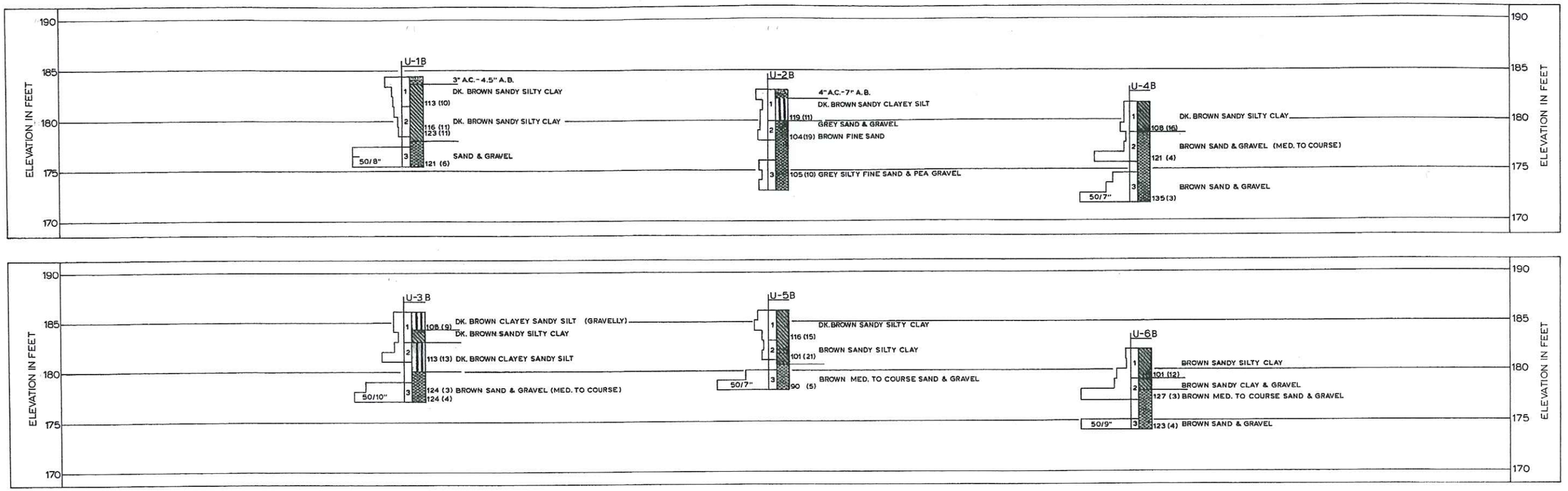
1975 SOIL BORINGS - (U11A - U19A)

REINARD W. BRANDLEY CONSULTING CIVIL ENGINEER
HOWE AVENUE PROFESSIONAL CENTER TELEPHONE 922-4725
5261 HOWE AVENUE SACRAMENTO, CALIFORNIA 95825

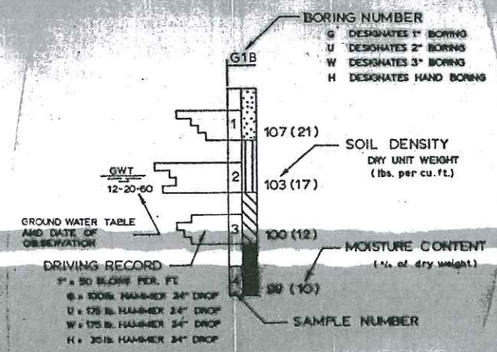
DATE SEPT. 3, 1975

SHEET 11 OF NUMBER SHEETS

PLATE No. A3



SOIL PROFILE LEGEND



CLASSIFICATION OF SYMBOLS

- SAND
- SILT
- CLAY
- ORGANIC MATERIAL AND DEBRIS
- PAVEMENT

NOTE: DATE OF ALL BORINGS 4-14-83

IT IS UNDERSTOOD AND AGREED THAT THIS SUBSURFACE INFORMATION WAS OBTAINED AND WAS INTENDED FOR OWNER'S DESIGN AND ESTIMATING PURPOSES ONLY. IT IS FURTHER UNDERSTOOD AND AGREED THAT EACH BIDDER IS SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS OR CONCLUSIONS WHICH MAY BE MADE OR OBTAINED FROM EXAMINATION OF THE BORING LOGS AND OTHER RECORDS OF SUBSURFACE INVESTIGATIONS AND TESTS THAT ARE FURNISHED BY THE OWNER.

GRAPHIC SCALES

BLOWS PER FOOT: 0 10 20 30 40 50

VERTICAL: 0 5 10 15

NO.	REVISIONS	BY	APP.	DATE

DESIGNED — DATE
DRAWN F.W.K. — DATE
CHECKED — DATE
TRACED — DATE
CONTRACT NO. — DRAWING NO. 51.06A
REGISTERED C.E. 8044

SCALE AS SHOWN

COUNTY OF SAN JOAQUIN
STATE OF CALIFORNIA

TRACY MUNICIPAL AIRPORT

TRACY, CALIFORNIA

SOIL PROFILE SHEET Nº 1

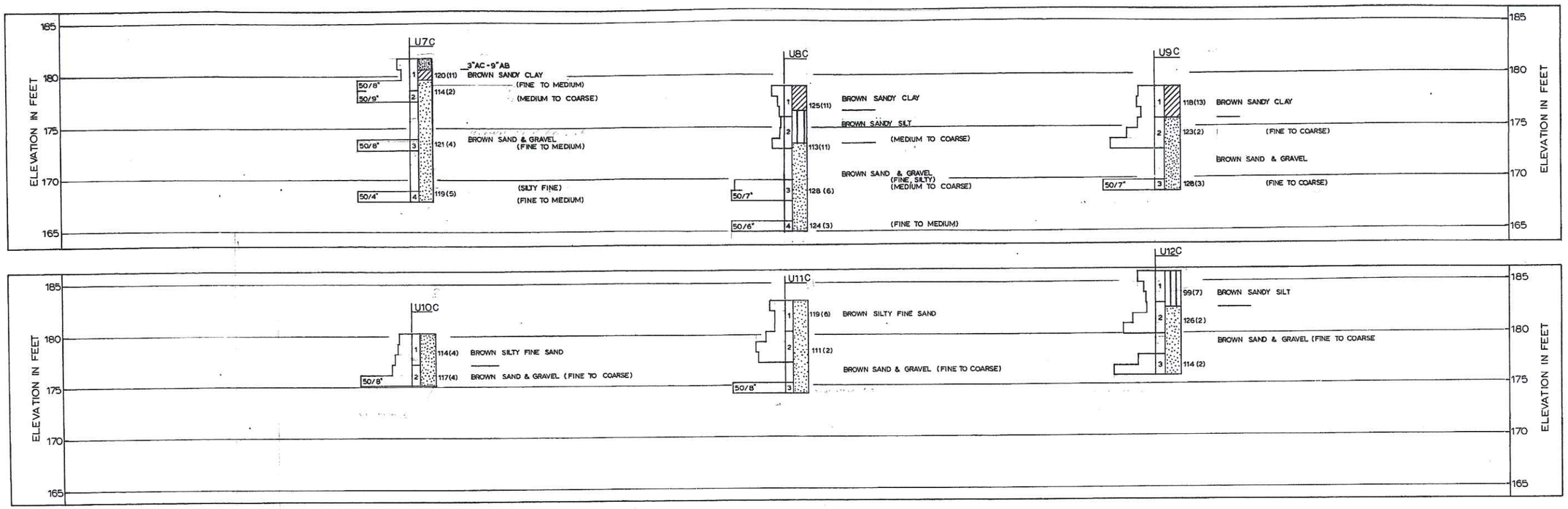
1983 SOIL BORINGS - (U1B - U6B)

Richard W. Brindley
CONSULTING SOILS ENGINEER
2041 Hallmark Drive, Sacramento, California 95822 422-4726

DATE 4/15/83

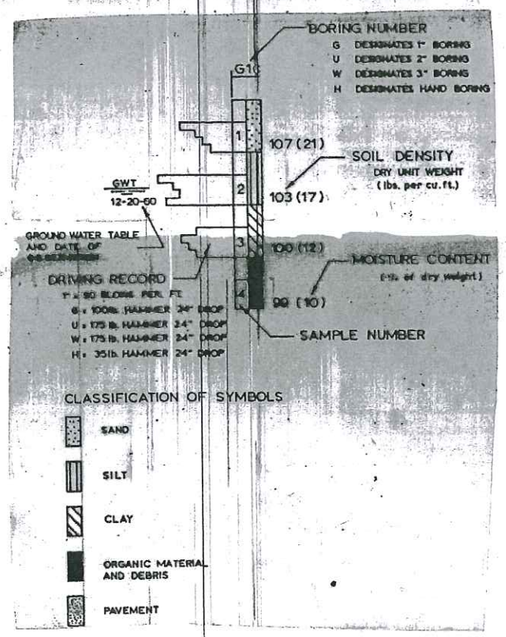
SHEET 20 OF 20 SHEETS

PLATE No. A4



50 blows per ft

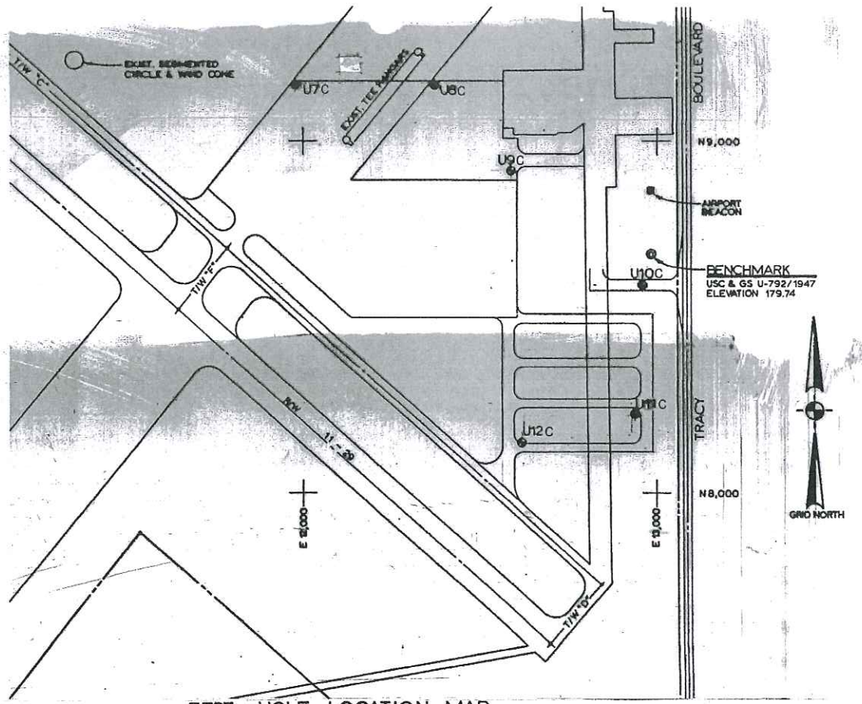
SOIL PROFILE LEGEND



NOTE:
IT IS UNDERSTOOD AND AGREED THAT THIS SUBSURFACE INFORMATION WAS OBTAINED AND WAS INTENDED FOR OWNER'S DESIGN AND ESTIMATING PURPOSES ONLY. IT IS FURTHER UNDERSTOOD AND AGREED THAT EACH BIDDER IS SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS OR CONCLUSIONS WHICH MAY BE MADE OR OBTAINED FROM EXAMINATION OF THE BORING LOGS AND OTHER RECORDS OF SUBSURFACE INVESTIGATIONS AND TESTS THAT ARE FURNISHED BY THE OWNER.

DATE OF BORINGS 5-28-85

LEGEND
Legend
U7 TEST PIT & DESIGNATION NO.



TEST HOLE LOCATION MAP
SCALE: 1" = 200'

AS BUILT

NO.	REVISIONS	BY	APR	DATE
*	AS BUILT	TAS	GAA	8/18/87

DESIGNED DATE
TRACED DATE
DRAWN TORR
CHECKED DATE
CONTRACT NO.
DRAWING NO. 5107
SCALE
REGISTERED CE 8044

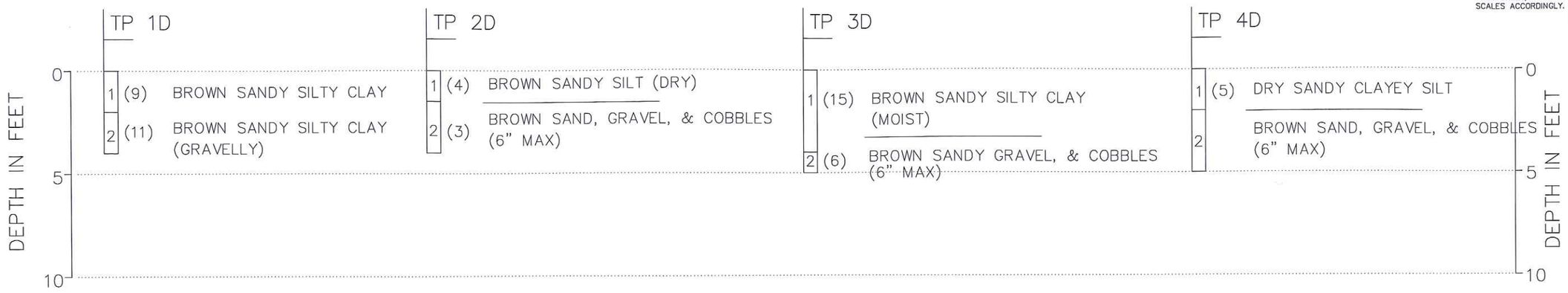
COUNTY OF SAN JOAQUIN
STATE OF CALIFORNIA
TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA
SOIL PROFILES
1985 SOIL BORINGS - (U7C - U12C)

DATE DECEMBER 27, 1985
SHEET NUMBER
31 OF 31 SHEETS

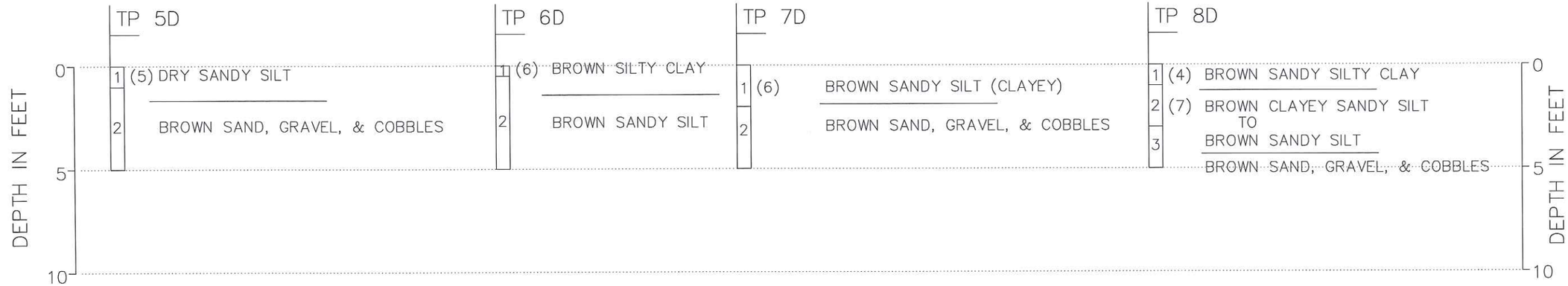
PLATE 2
PLATE No. A5

VERIFY SCALES

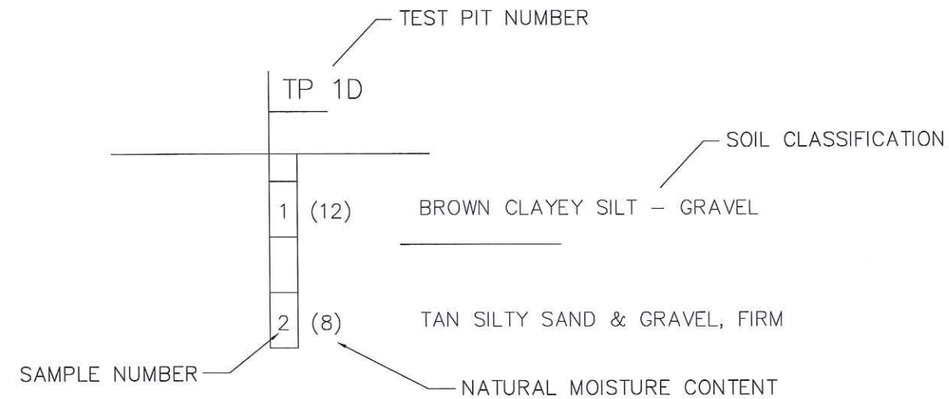
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.



1989 SOIL TEST PITS



1989 SOIL TEST PITS



SOIL PROFILE LEGEND

Reinard W. Brandley
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6125 King Road, Suite 201 • Loomis, California 95650-8204 • (916) 652-4725

REGISTERED PROFESSIONAL ENGINEER * REINARD W. BRANDLEY * No. C 65536 Exp. 6-30-2014 CIVIL * STATE OF CALIFORNIA *

ENGINEER OF RECORD

NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT EVALUATION

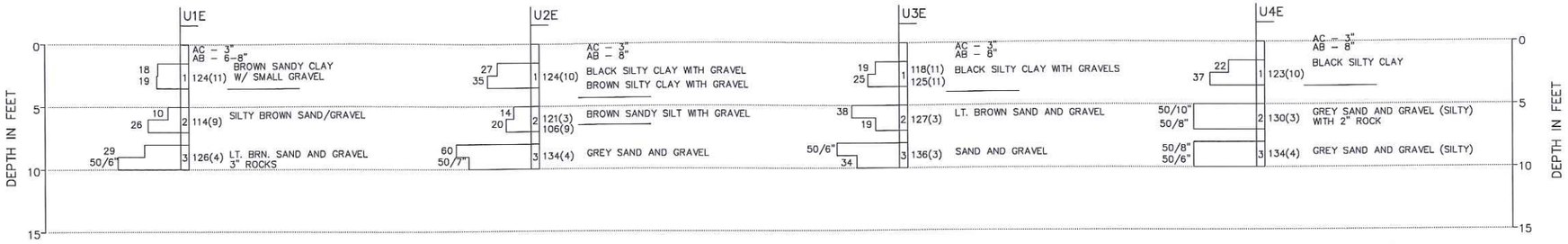
1989 SOIL PROFILES (TP 1D - TP 8D)

DESIGN BY:	DB
DRAWN BY:	DB
CHK'D BY:	RWB
DATE:	MARCH 11, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	AS SHOWN

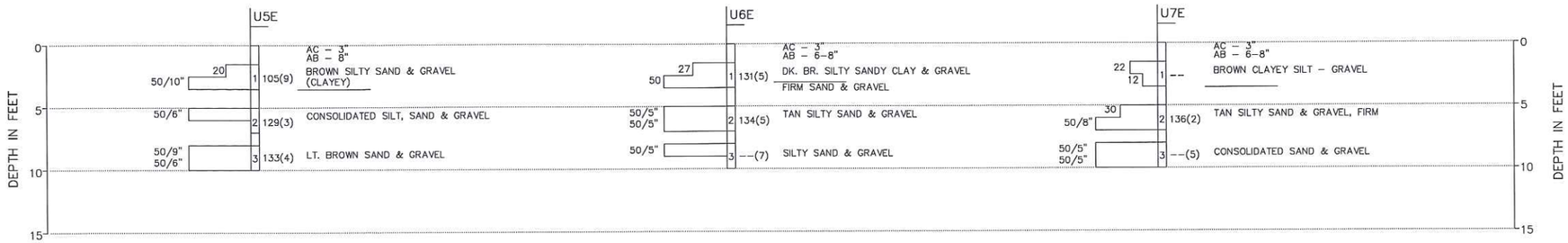
SHEET NUMBER
PLATE No. A6

VERIFY SCALES

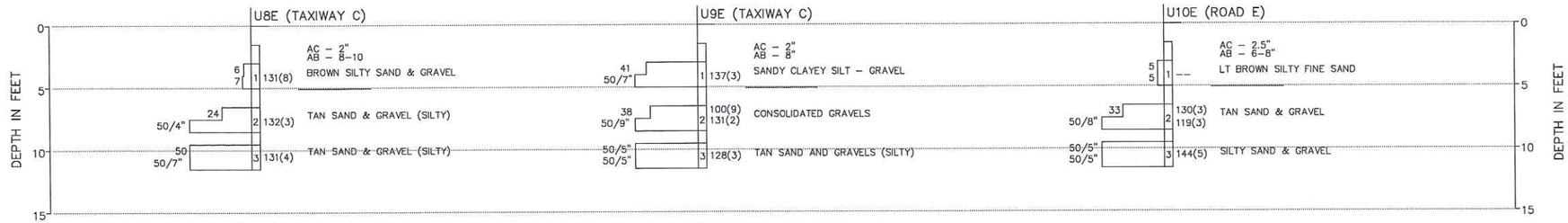
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.



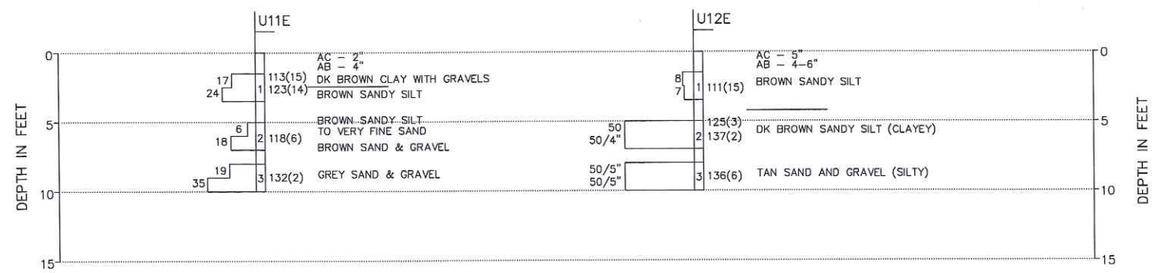
2012 SOIL PROFILES – HANGAR AREA H4



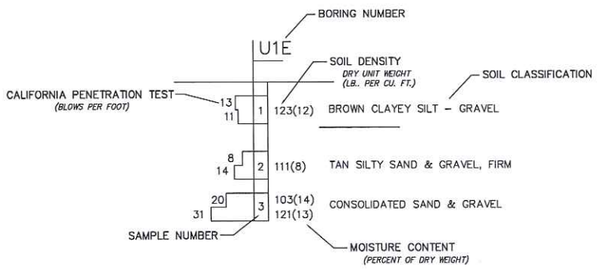
2012 SOIL PROFILES – HANGAR AREA H3



2012 SOIL PROFILES – TAXIWAY C AND ROAD E



2012 SOIL PROFILES – NORTH APRON DEVELOPMENT



SOIL PROFILE LEGEND

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
6125 King Road, Suite 201 • Loomis, California 95650-9304 • (916) 652-4725

REGISTERED PROFESSIONAL ENGINEER R. DUANE BRADLEY No. C 65538 Exp. 6-30-2014 CIVIL STATE OF CALIFORNIA

ENGINEER OF RECORD

NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT EVALUATION

2012 SOIL PROFILES (U1E - U12E)

DESIGN BY:	DB
DRAWN BY:	DB
CHK'D BY:	RWB
DATE:	MARCH 11, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	.
DRAWING SCALE:	AS SHOWN

SHEET NUMBER
PLATE No. A7

APPENDIX A
TABLE NO. A1

GEOTECHNICAL TESTING
REINARD W. BRANDLEY * CONSULTING AIRPORT ENGINEER

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT MANAGEMENT AND MAINTENANCE PLAN

SUMMARY OF GEOTECHNICAL TESTING - NATIVE SOILS

Date of Sample	Sample Identification	Depth Below Surface (ft.)	Soil Classification	Liquid Limit	Plasticity Index	Maximum Dry Density (pcf)	Optimum Moisture (%)	CBR @ 0.1" Penetration			
								100% Compaction (%)	95% Compaction (%)	90% Compaction (%)	Swell at 100% Compaction (%)
1975	SS IA	0	Brown Silty Clay	29	16	121.8	11.8	11	7	3.5	-
1975	SS IIA	0	Brown Silty Clay	32	16	126.5	10.6	8.3	6	4.8	-
1975	U1A	3	Brown Silty Clay	31	17	-	-	-	-	-	-
1975	U5A	3	Dark Brown Silty Clay	23	8	-	-	-	-	-	-
1975	U9A	3.5	Dark Brown Sandy Clay	30	14	-	-	-	-	-	-
1975	U11A	3	Dark Brown Sandy Clay	38	20	-	-	-	-	-	-
1975	U12A	3	Black Med. Plastic Clay (Gravelly)	27	12	-	-	-	-	-	-
1975	U14A	3	Dark Brown Med. Plastic Clay	29	16	-	-	-	-	-	-
1975	U14A	6.5	Brown Silty Clay	32	14	-	-	-	-	-	-
1975	U18A	3	Black Med. Plastic Clay (Gravelly)	31	16	-	-	-	-	-	-
						-	-	-	-	-	-
1983	U1B	1.5	Dark Brown Sandy Silty Clay	33	12	-	-	-	-	-	-
1983	U2B	1.5	Dark Brown Sandy Clayey Silt	28	8	-	-	-	-	-	-
1983	U4B	1	Dark Brown Sandy Silty Clay	32	12	-	-	-	-	-	-
1983	U5B	2.2	Brown Sandy Silty Clay	31	11	-	-	-	-	-	-
1985	U7C	1.5	Brown Sandy Clay	28	8	-	-	-	-	-	-
1985	U8C	1	Brown Sandy Silt	34	12	-	-	-	-	-	-
1985	U9C	1	Brown Sandy Clay	32	11	-	-	-	-	-	-
1989	TP 3D	1	Brown Sandy Silty Clay	32	18	123.4	12	6	4.5	-	2.8
1989	TP 6D	1	Brown Sandy Silt	27	10	125	11.3	16	9.5	-	1.3
1989	TP 7D	1	Brown Sandy Silt (Clayey)	27	13	-	-	-	-	-	-
2012	U2E	2.5	Brown Silty Clay	31	15	-	-	-	-	-	-
2012	U11E	6.5	Brown Sandy Silt	26	5	-	-	-	-	-	-

APPENDIX A
TABLE NO. A2

GEOTECHNICAL TESTING
REINARD W. BRANDLEY * CONSULTING AIRPORT ENGINEER

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT MANAGEMENT AND MAINTENANCE PLAN

GRADING ANALYSIS - AGGREGATE BASE COURSE (1975)

Sieve Size	Sample	Grading Analysis (% Passing)			
		U2A	U7A	U8A	U12A
2"		-	100	-	100
1.5"		100	92	100	97
1"		95	84	95	90
3/4"		86	79	90	79
1/2"		74	60	80	66
3/8"		66	59	72	60
#4		49	35	53	43
#10		38	25	38	31
#20		30	18	28	24
#40		24	14	21	18
#80		16	9.1	13	12
#200		11	6.3	9	8.2
Sand Equivalent		28	35	29	25
Percent Crushed (1 face)		72	82	74	71

Appendix B
Falling Weight Deflectometer Test Data

Falling Weight Deflectometer (FWD) tests were conducted on all pavements on the airport. On each runway two rows of FWD tests were conducted, one on each side of the runway centerline, at a distance of approximately 10 feet from the centerline. These tests were located at a spacing of approximately 200 feet, which provided general longitudinal spacing of 100 feet between tests. FWD tests were also conducted on all taxiways and taxilanes at a distance of 10 feet from centerline and at longitudinal spacing of approximately 200 feet. On all aprons FWD tests were conducted on an approximate 100 by 100 foot grid. On all hangar taxilanes FWD tests were conducted in the wheel path of the taxilane at a spacing of approximately 100 feet.

The Falling Weight Deflectometer tests are generally conducted at two different loadings and the applied load is measured by load cells. As a result of variations in resistance, the applied load varies somewhat from the anticipated load. In order to provide comparable test results, all data were normalized to standard loads of 10, 14, and/or 17 kips.

The location of the test, starting point of the test, and location of Station 0+00 for each row of tests are shown on Plates B1 through B3. The FWD data for the center deflections under applied load are indicated on these drawings for each test location. The location of Station 0+00 at the start of each row of tests and the direction of test are reflected in the plots as Station 0+00 in Plates No. B4 through B38.

For each row of FWD tests on each segment of pavement a graph showing the center plate deflection at each station has been prepared and is shown on Plates B4 through B38. These data show the uniformity of strength as reflected by deflection of the pavement sections and identify the hard spots and the soft spots. For calculation purposes in order to back calculate Modulus of Elasticity, critical values of deflection for each fairly uniform section has been indicated by horizontal lines.

A camera was mounted on the FWD equipment and a photograph of the surface of the pavement was taken at the location of each FWD test. These photographs are useful historical documents since they show the condition of the existing pavement at the time and location of each FWD test. An electronic copy of these photographs are enclosed with this report

The results of these studies have been included in this Appendix, as follows:

Appendix B
Falling Weight Deflectometer Test Data

Plates

Plates No. B1-B3 Falling Weight Deflectometer Test Data Summary - Half Size (A full size copy of Plates No. B1-B3 is included in the pocket in the back cover of this report.)

Plates B4 through B38 – FWD Deflection Data Profiles

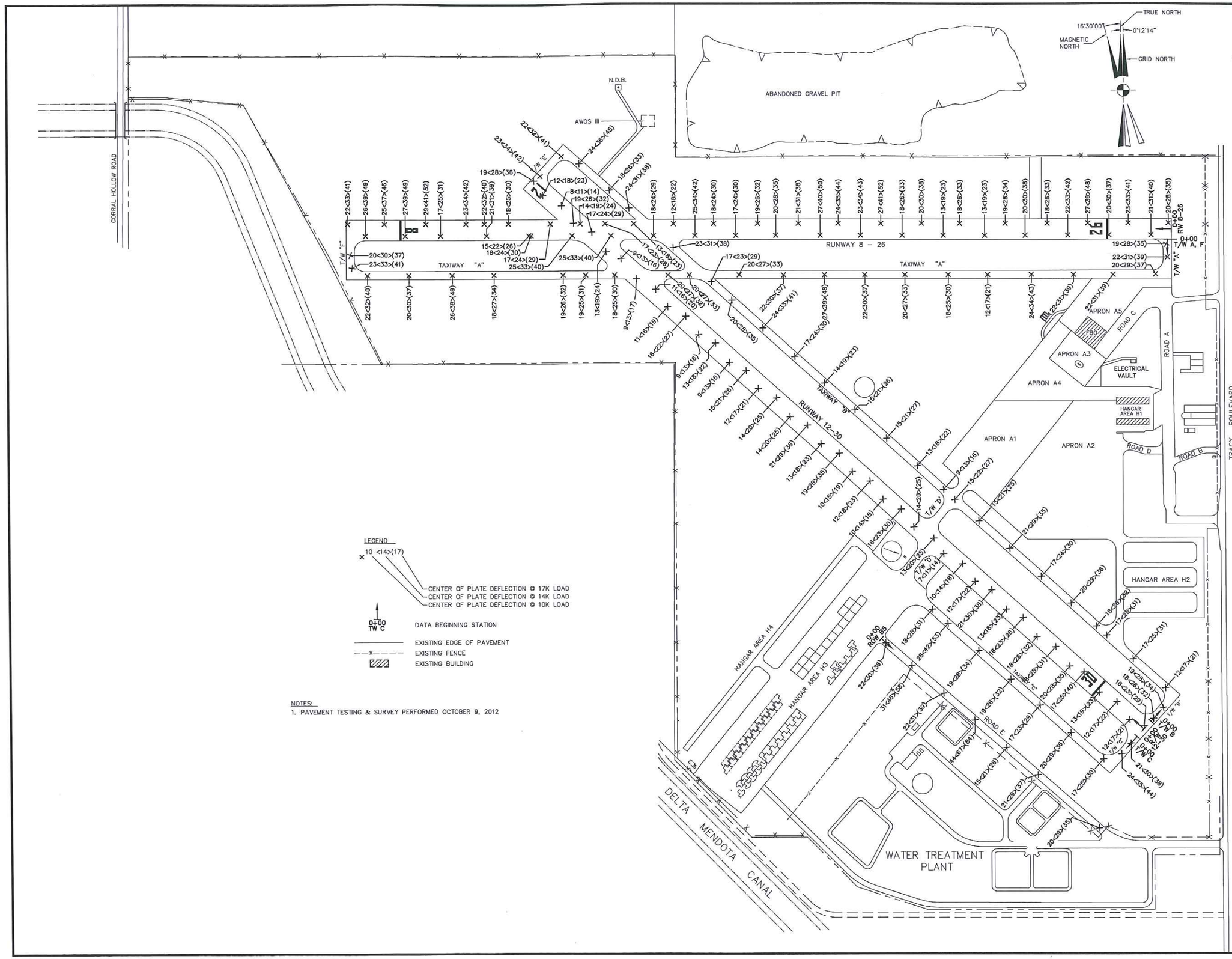
Plate No. B4	Runway 12-30
Plate No. B5	Taxiways B and E
Plate No. B6	Runway 8-26
Plate No. B5	Taxiways A and F
Plate No. B6	Taxiway D (North) – Aprons A1, A3, and A4
Plate No. B9	Taxiway D (South)
Plate No. B10	Taxiway C
Plate No. B11	Apron Row A1 – (Apron A2 and Hangar Area H2)
Plate No. B12	Apron Row A2 – (Apron A1 and A2)
Plate No. B13	Apron Row A3 – (Apron A2)
Plate No. B14	Apron Row A4 – (Apron A1 and A2)
Plate No. B15	Apron Row A5 – (Apron A1 and A2)
Plate No. B16	Apron Row A6 – (Apron A1 and A2)
Plate No. B17	Apron Row A7 – (Apron A2)
Plate No. B18	Apron Row A8 – (Apron A2)
Plate No. B19	Apron Row A9 – (Apron A1, A4 and A3)
Plate No. B20	Apron Row A10 – (Apron A1, A4 and A5)
Plate No. B21	North Hangar Row H1 – (Hangar Area H1)
Plate No. B22	North Hangar Row H2 – (Hangar Area H1)
Plate No. B23	North Hangar Row H3 – (Hangar Area H1)

Appendix B
Falling Weight Deflectometer Test Data

Plates (continued)

Plates B4 through B38 – FWD Deflection Data Profiles

Plate No. B24	North Hangar Row H4 – (Hangar Area H2)
Plate No. B25	North Hangar Row H5 – (Hangar Area H2)
Plate No. B26	North Hangar Row H6 – (Hangar Area H2)
Plate No. B27	North Hangar Row H7 – (Hangar Area H2)
Plate No. B28	North Hangar Row H8 – (Hangar Area H2)
Plate No. B29	Taxiway D (South) – (Hangar Area H3)
Plate No. B30	South Hangar Row B1 – (Hangar Area H3)
Plate No. B31	South Hangar Row B2 – (Hangar Area H3)
Plate No. B32	South Hangar Row B3 – (Hangar Area H4)
Plate No. B33	South Hangar Row B4 – (Hangar Area H3 and H4)
Plate No. B34	Road A – Airport Access Road
Plate No. B35	Road B – Airport Second Access Road
Plate No. B36	Road C – FBO Parking Lot
Plate No. B37	Road D – North Apron Access Road (Apron Row A6)
Plate No. B38	Road E – South Hangar Access Road (S. Hangar Row B5)



VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LEGEND

10 <14>(17)
- CENTER OF PLATE DEFLECTION @ 17K LOAD
- CENTER OF PLATE DEFLECTION @ 14K LOAD
- CENTER OF PLATE DEFLECTION @ 10K LOAD

0+00 TW C — DATA BEGINNING STATION

EXISTING EDGE OF PAVEMENT

EXISTING FENCE

EXISTING BUILDING

NOTES:
1. PAVEMENT TESTING & SURVEY PERFORMED OCTOBER 9, 2012

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
6125 King Road, Suite 201 • Loomis, California 95650–8004 • (916) 652–4725

ENGINEER OF RECORD

REINHARD W. BRANDLEY — No. C 63338 — Exp. 6-30-2014 — CIVIL — STATE OF CALIFORNIA

NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT EVALUATION
FALLING WEIGHT DEFLECTOMETER TEST DATA SUMMARY
SHEET No. 1

DESIGN BY:	DB
DRAWN BY:	DMB
CHK'D BY:	RWB
DATE:	MARCH 18, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	1"=200'

SHEET NUMBER
PLATE No. B1

NOTES:
1. PAVEMENT TESTING & SURVEY PERFORMED OCTOBER 9, 2012

LEGEND

10 <14>(17)
- CENTER OF PLATE DEFLECTION @ 17K LOAD
- CENTER OF PLATE DEFLECTION @ 14K LOAD
- CENTER OF PLATE DEFLECTION @ 10K LOAD

0+00 TW C — DATA BEGINNING STATION

EXISTING EDGE OF PAVEMENT

EXISTING FENCE

EXISTING BUILDING

GRID NORTH

HANGAR AREA H4

HANGAR AREA H3

RUNWAY 12-30

TAXIWAY "B"

T/W 'D'

0+00 ROW B4
0+00 ROW B3
0+00 ROW B2
0+00 ROW B1
0+00 T/W D SOUTH
0+00 T/W D NORTH

23<33>(41)
22<30>(36)
25<34>(41)
21<28>(34)
24<33>(41)
28<35>(43)
28<39>(48)
17<24>(29)
23<31>(37)
34<50>(63)
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32<45>(55)
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17<23>(29)
34<48>(56)
37<52>(65)
24<33>(41)
23<32>(40)
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21<29>(35)
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29<40>(49)
27<38>(47)
33<43>(53)
24<33>(41)
31<45>(56)
29<42>(53)
26<38>(47)
33<47>(60)
21<30>(37)
16<24>(30)
28<40>(50)
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31<44>(55)
21<28>(33)
24<31>(36)
24<33>(41)
33<48>(61)

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
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ENGINEER OF RECORD
REGISTERED PROFESSIONAL ENGINEER * REINARD W. BRANDLEY * No. C 60338 Exp. 6-30-2014 * CIVIL * STATE OF CALIFORNIA

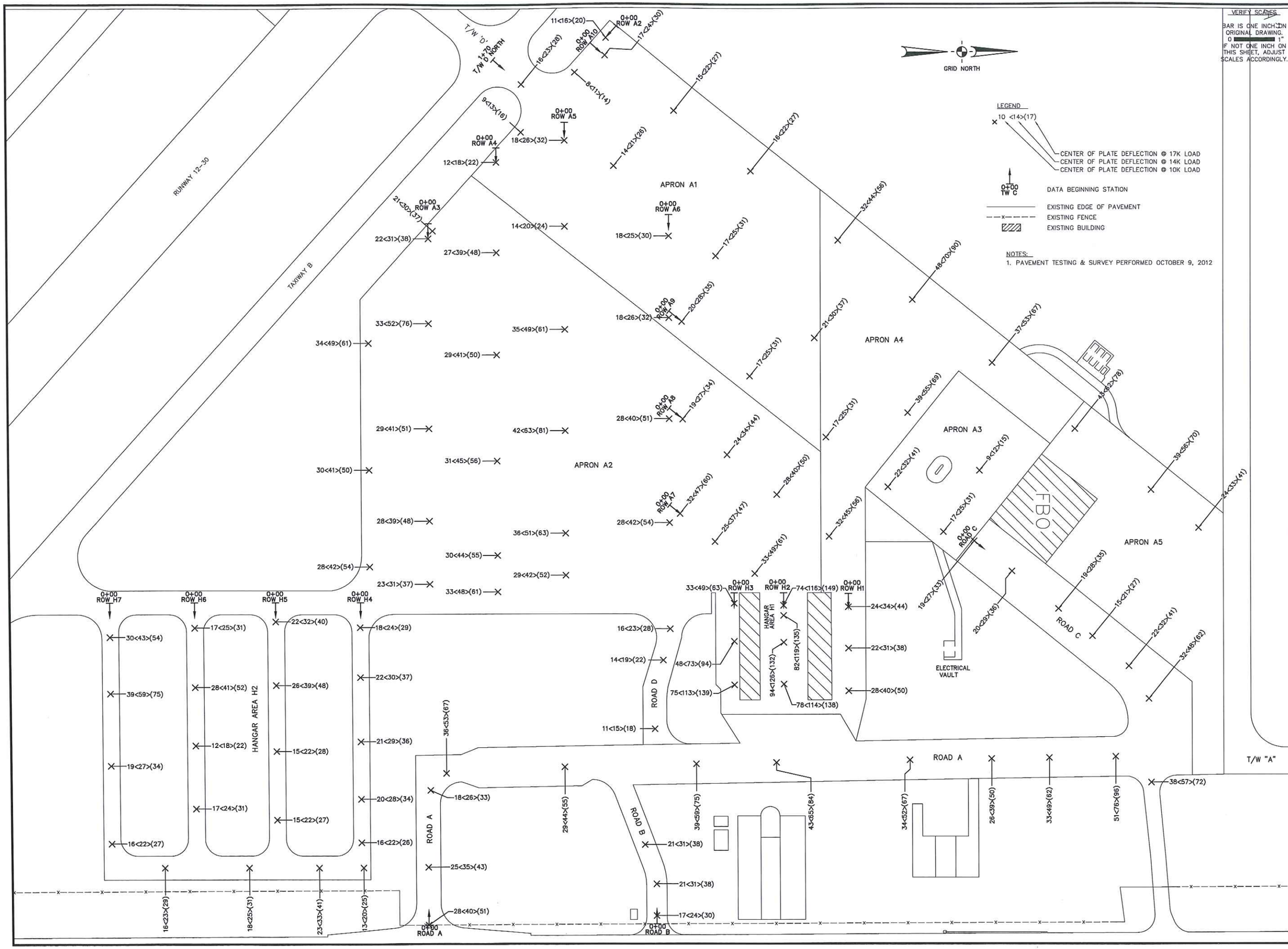
NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT EVALUATION
FALLING WEIGHT DEFLECTOMETER TEST DATA SUMMARY
SHEET No. 2

DESIGN BY:	DB
DRAWN BY:	DMB
CHK'D BY:	RWB
DATE:	MARCH 18, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	1"=60'

SHEET NUMBER
PLATE No. B2



Reinard W. Brandley
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8125 King Road, Suite 201 • Loomis, California 95650-8004 • (916) 652-4725

ENGINEER OF RECORD

REGISTERED PROFESSIONAL ENGINEER * REINARD W. BRANDLEY * No. C 60339 Exp. 6-30-2014 * CIVIL * STATE OF CALIFORNIA

NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT EVALUATION
FALLING WEIGHT DEFLECTOMETER TEST DATA SUMMARY
SHEET No. 3

DESIGN BY:	DB
DRAWN BY:	DMB
CHK'D BY:	RWB
DATE:	MARCH 18, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	1"=60'

SHEET NUMBER
PLATE No. B3

Tracy Municipal Airport - FWD Deflection Data
Runway 12-30
(Station 0+00 at R/W 30 End)

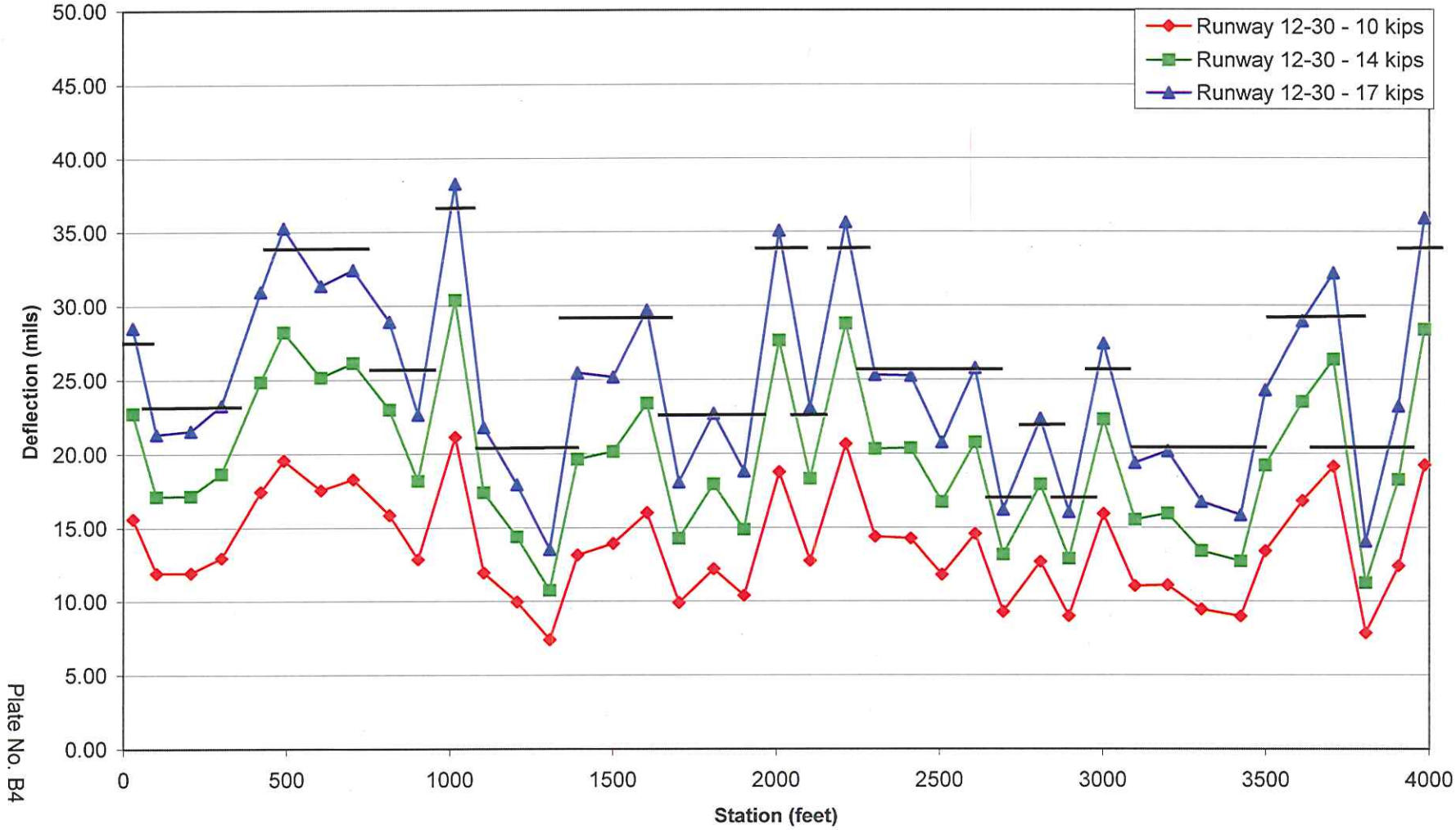


Plate No. B4

Tracy Municipal Airport - FWD Deflection Data
Taxiways B and E
(Station 0+00 at R/W 30)

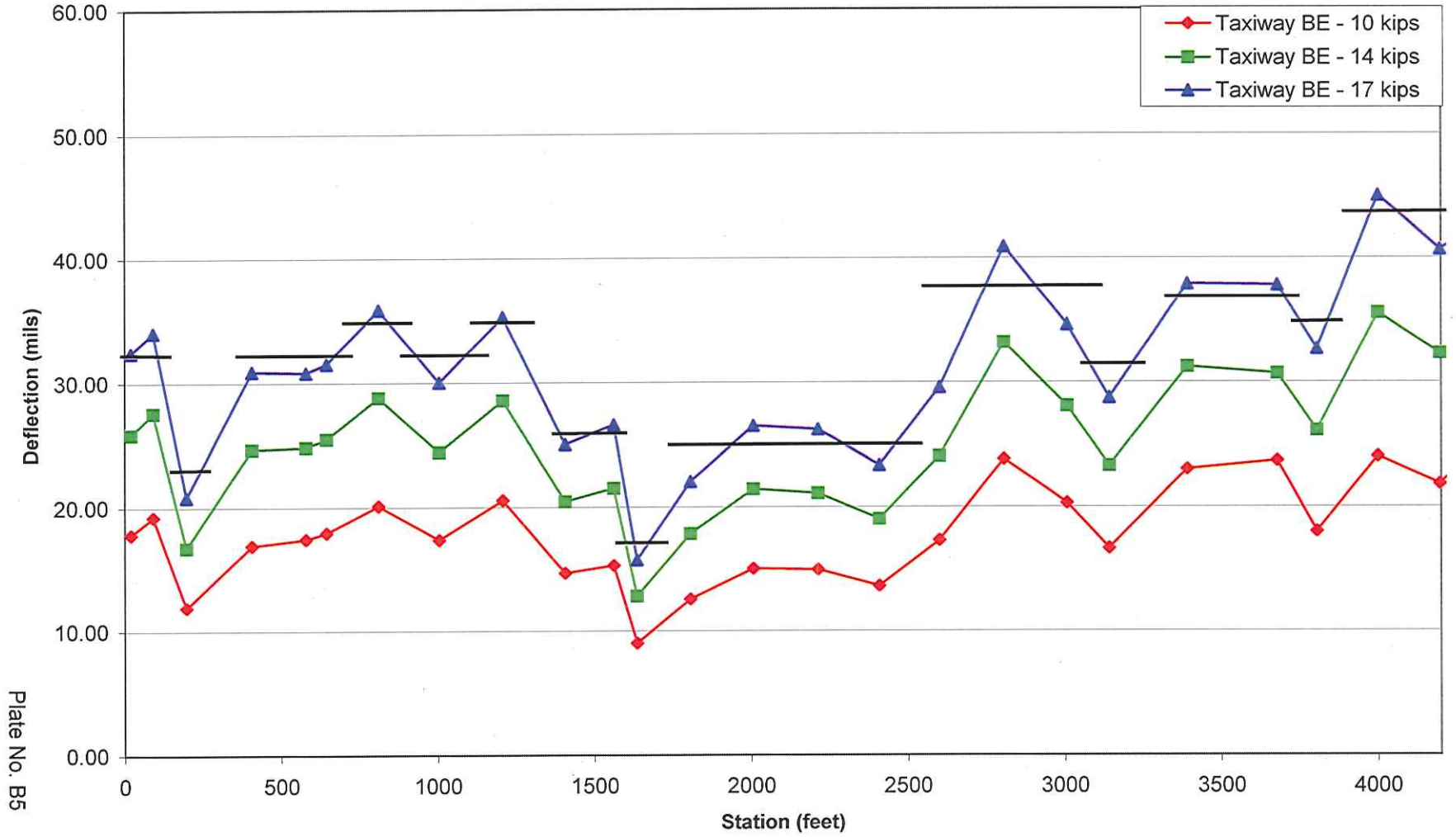


Plate No. B5

Tracy Municipal Airport - FWD Deflection Data
Runway 8-26
(Station 0+00 at R/W 26 End)

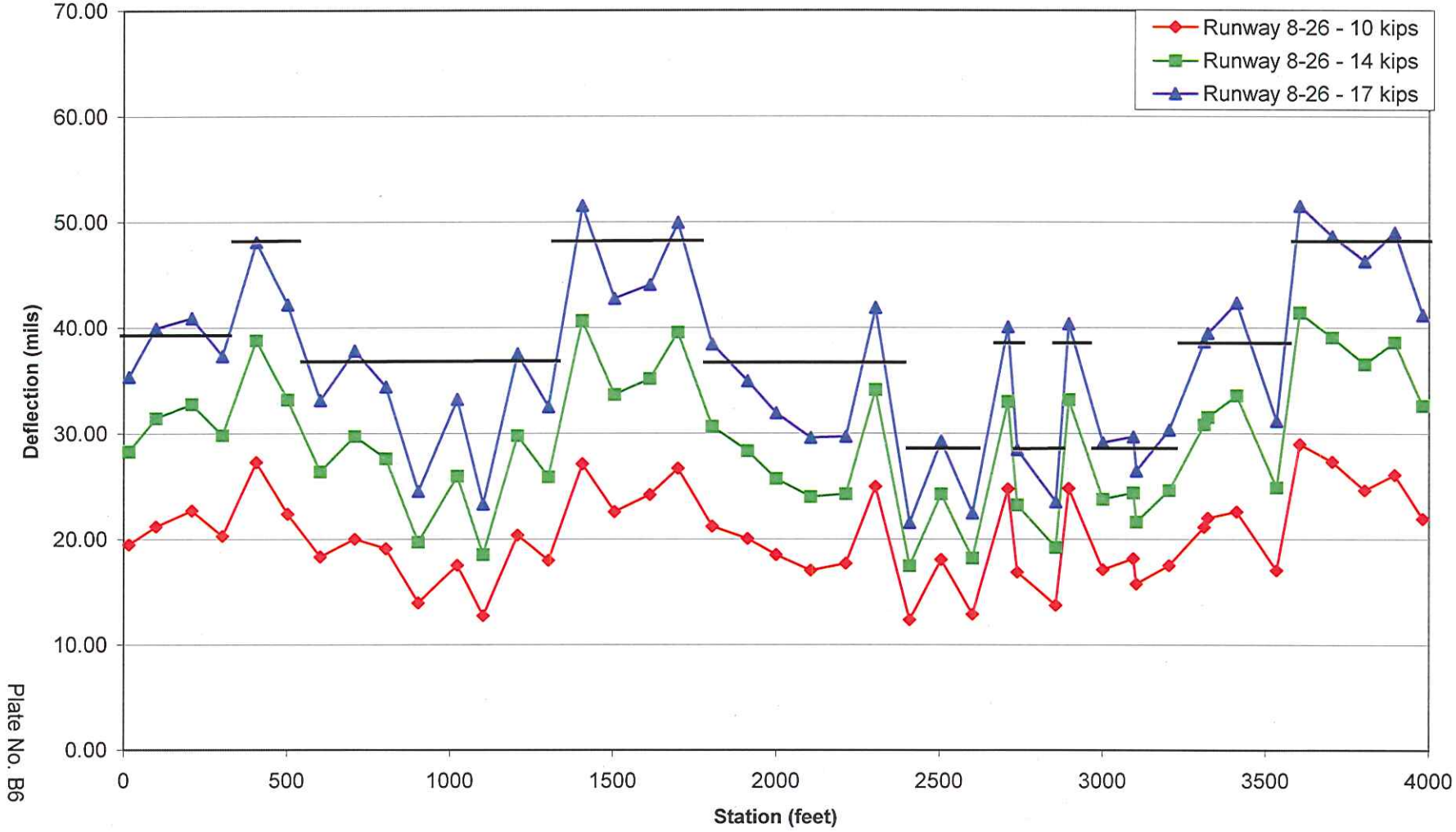


Plate No. B6

Tracy Municipal Airport - FWD Deflection Data
Taxiways A and F
(Station 0+00 at R/W 26)

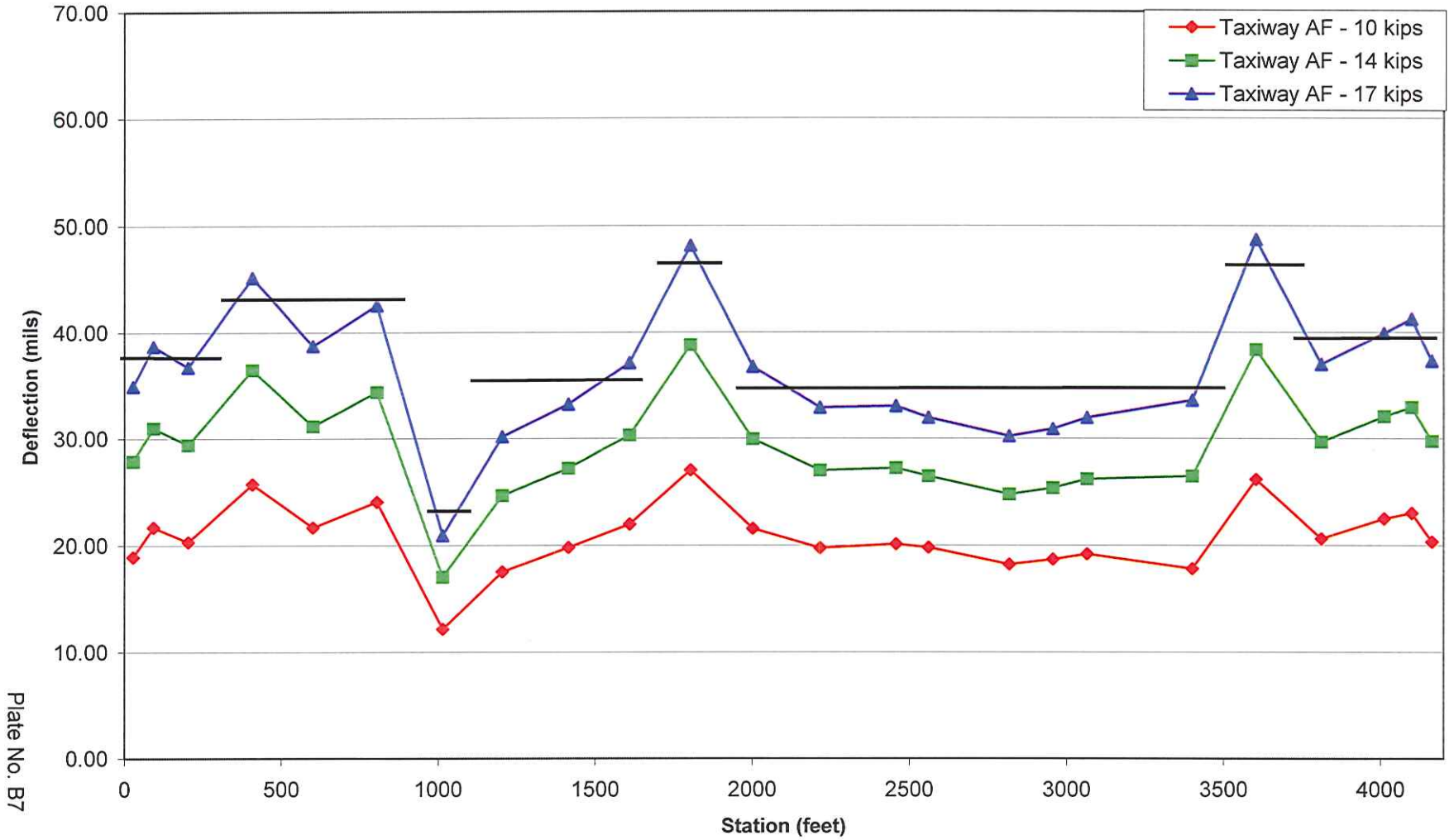


Plate No. B7

Tracy Municipal Airport - FWD Deflection Data
Taxiway D (North), Aprons A1, A3, A4
(Station 0+00 at R/W 12-30)

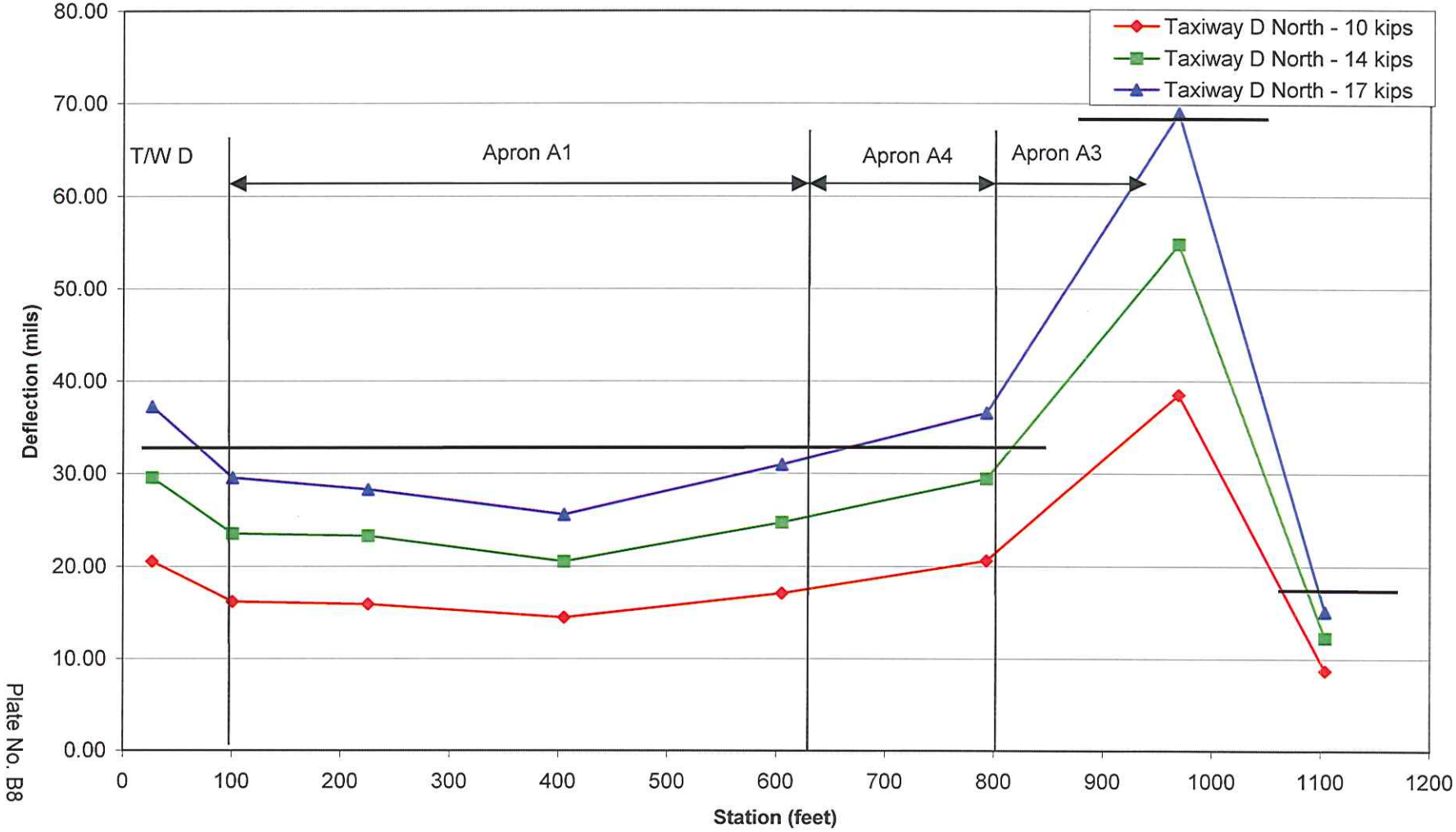


Plate No. B8

Tracy Municipal Airport - FWD Deflection Data
Taxiway D (South)
(Station 0+00 at R/W 12-30)

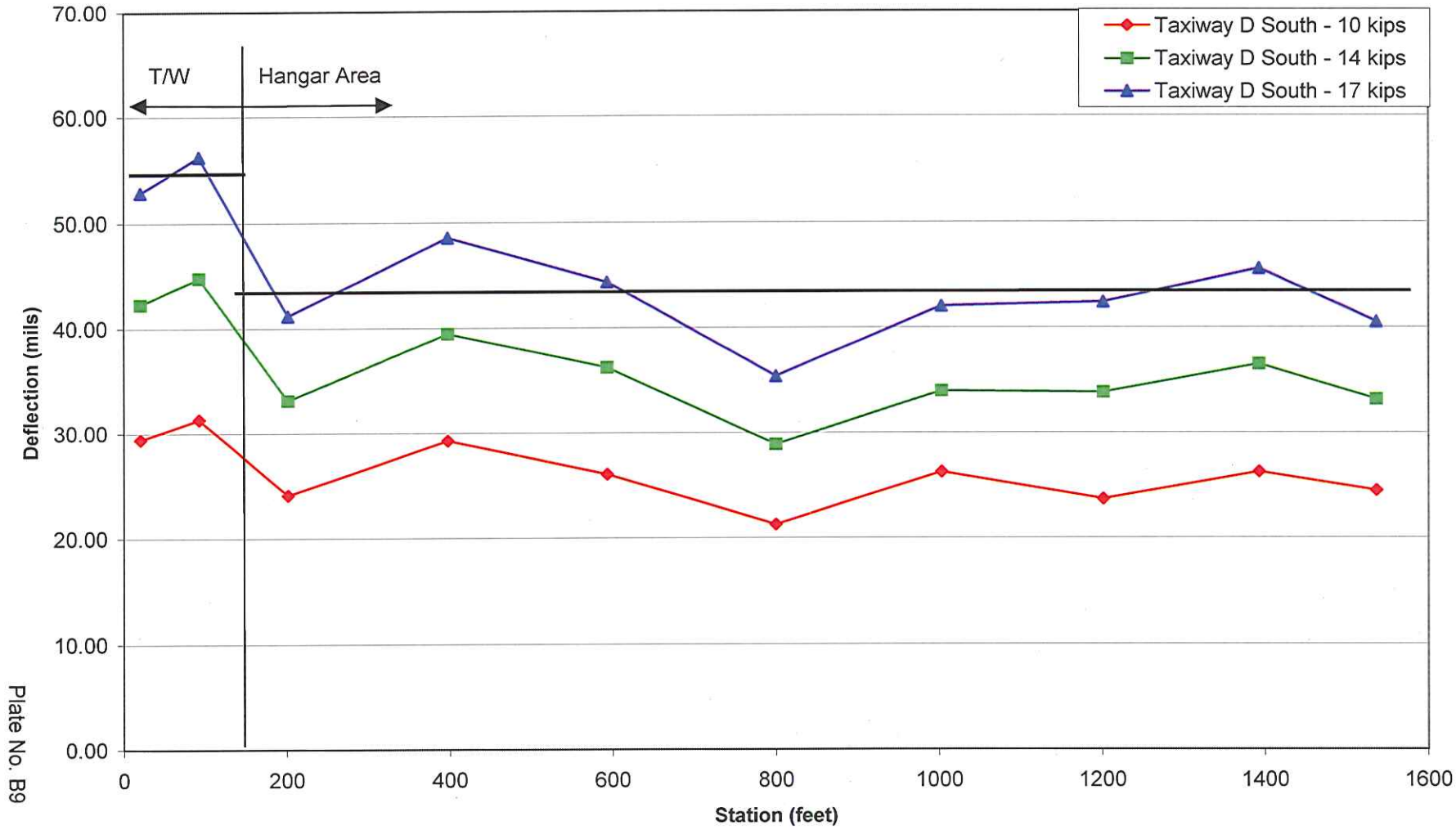


Plate No. B9

Tracy Municipal Airport - FWD Deflection Data
Taxiway C
(Station 0+00 at R/W 12-30)

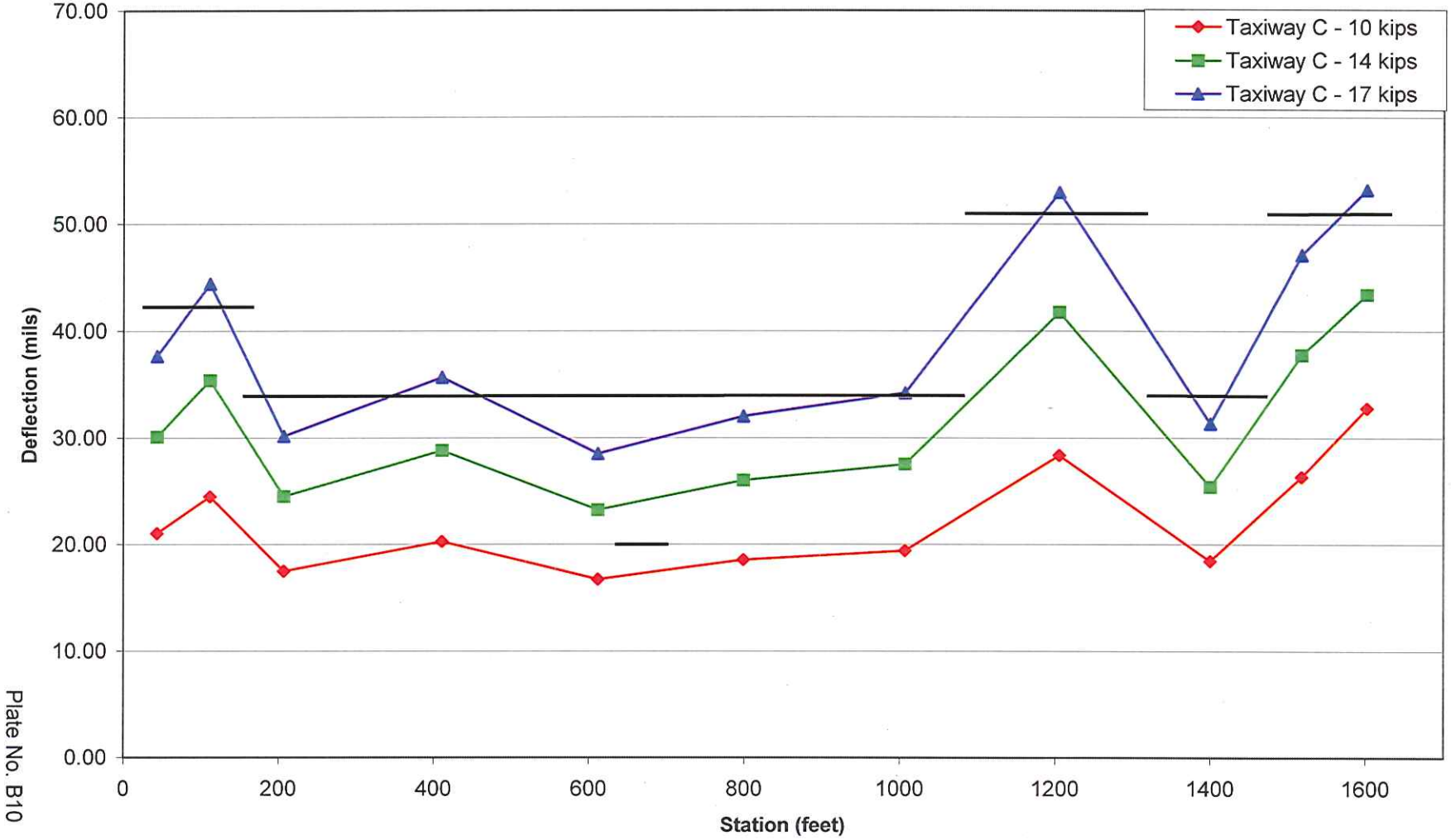


Plate No. B10

Tracy Municipal Airport - FWD Deflection Data
Apron Row A1 - (Apron A2 and Hangar Area H2)
(Station 0+00 at T/W B)

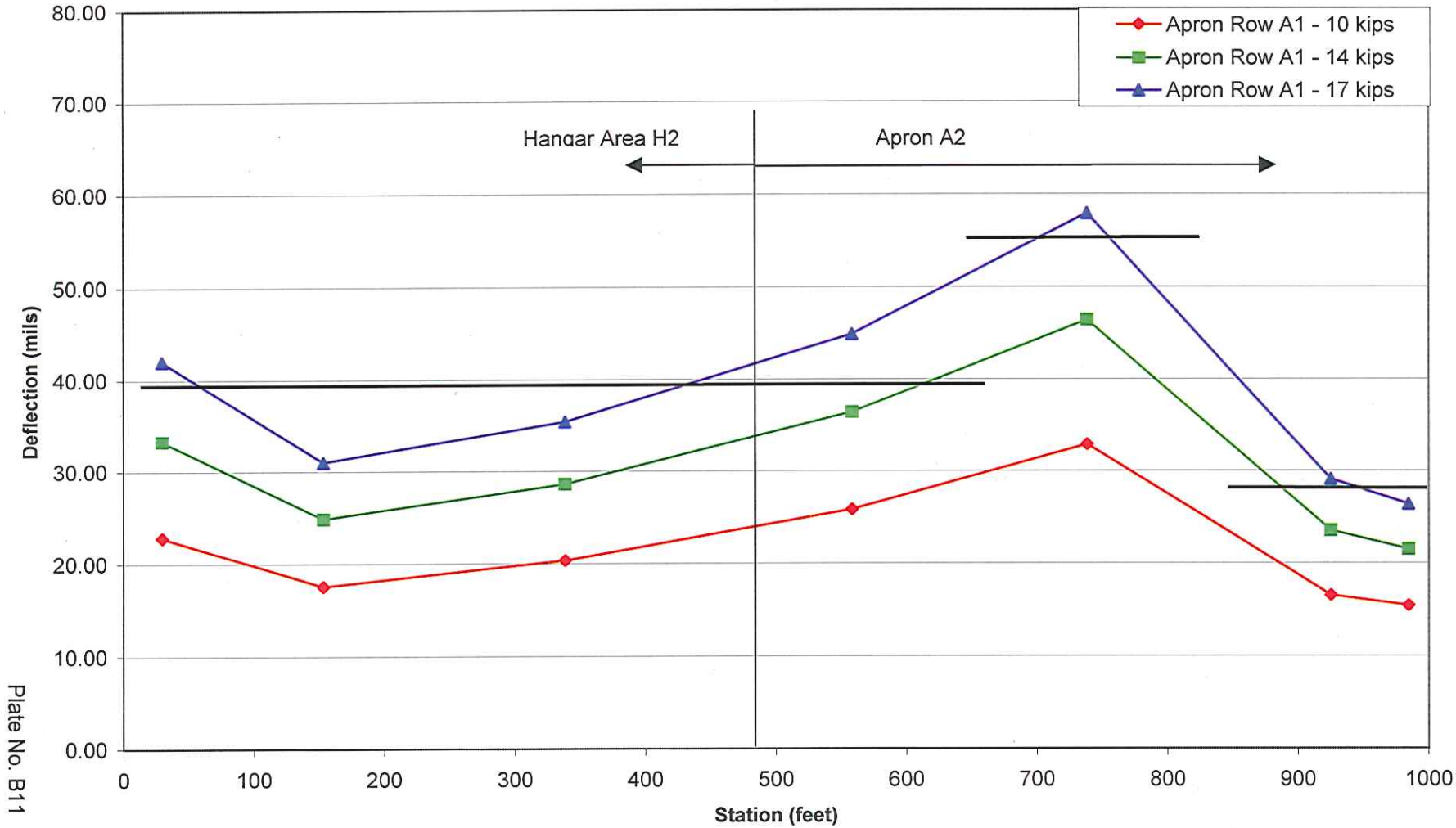


Plate No. B11

Tracy Municipal Airport - FWD Deflection Data
Apron Row A2 - (Apron A1 and A2)
(Station 0+00 at North-West Edge)

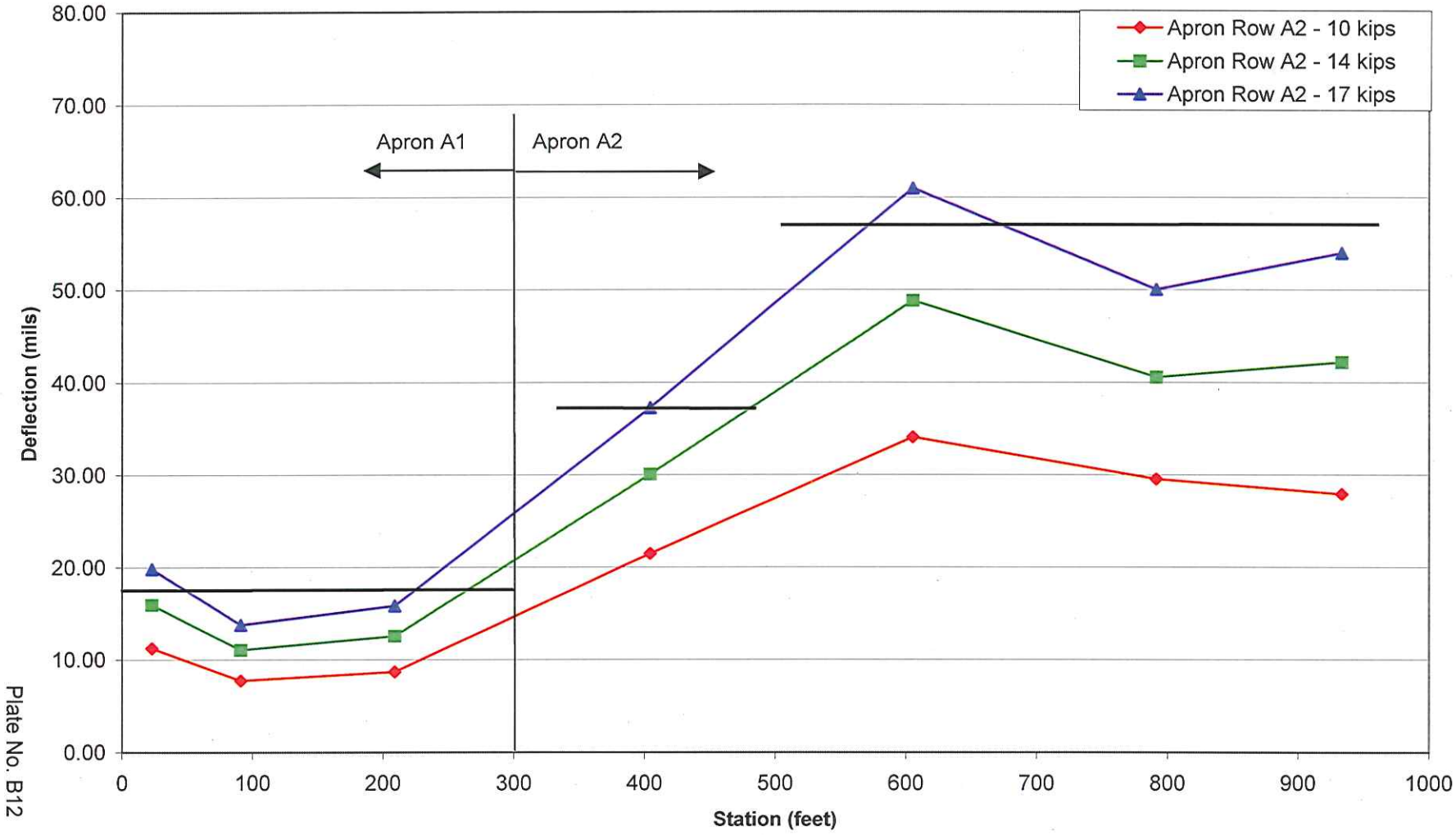


Plate No. B12

Tracy Municipal Airport - FWD Deflection Data
Apron Row A3 - (Apron A2)
(Station 0+00 at West Edge)

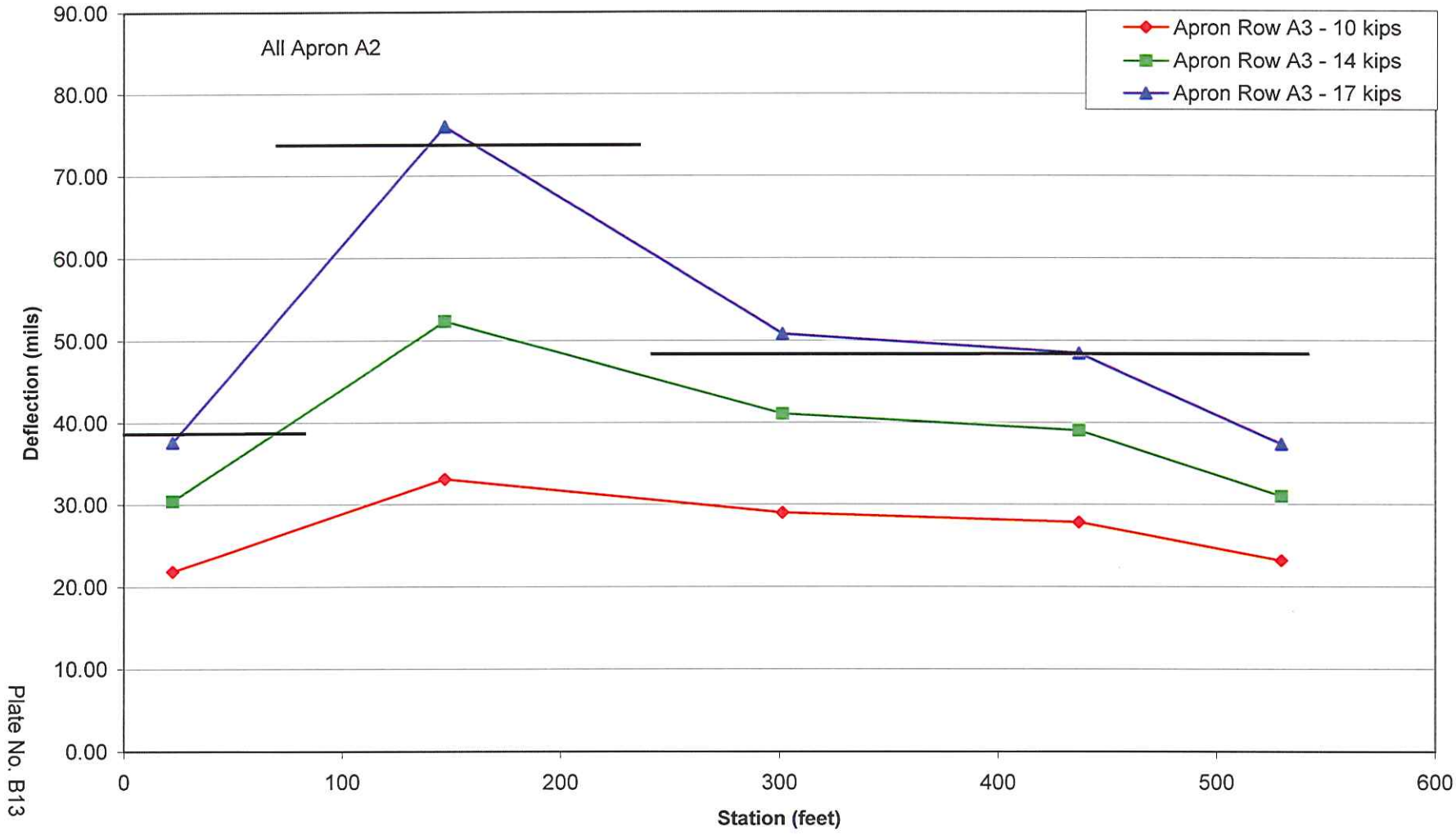


Plate No. B13

Tracy Municipal Airport - FWD Deflection Data
Apron Row A4 - (Apron A1 and A2)
(Station 0+00 at West Edge)

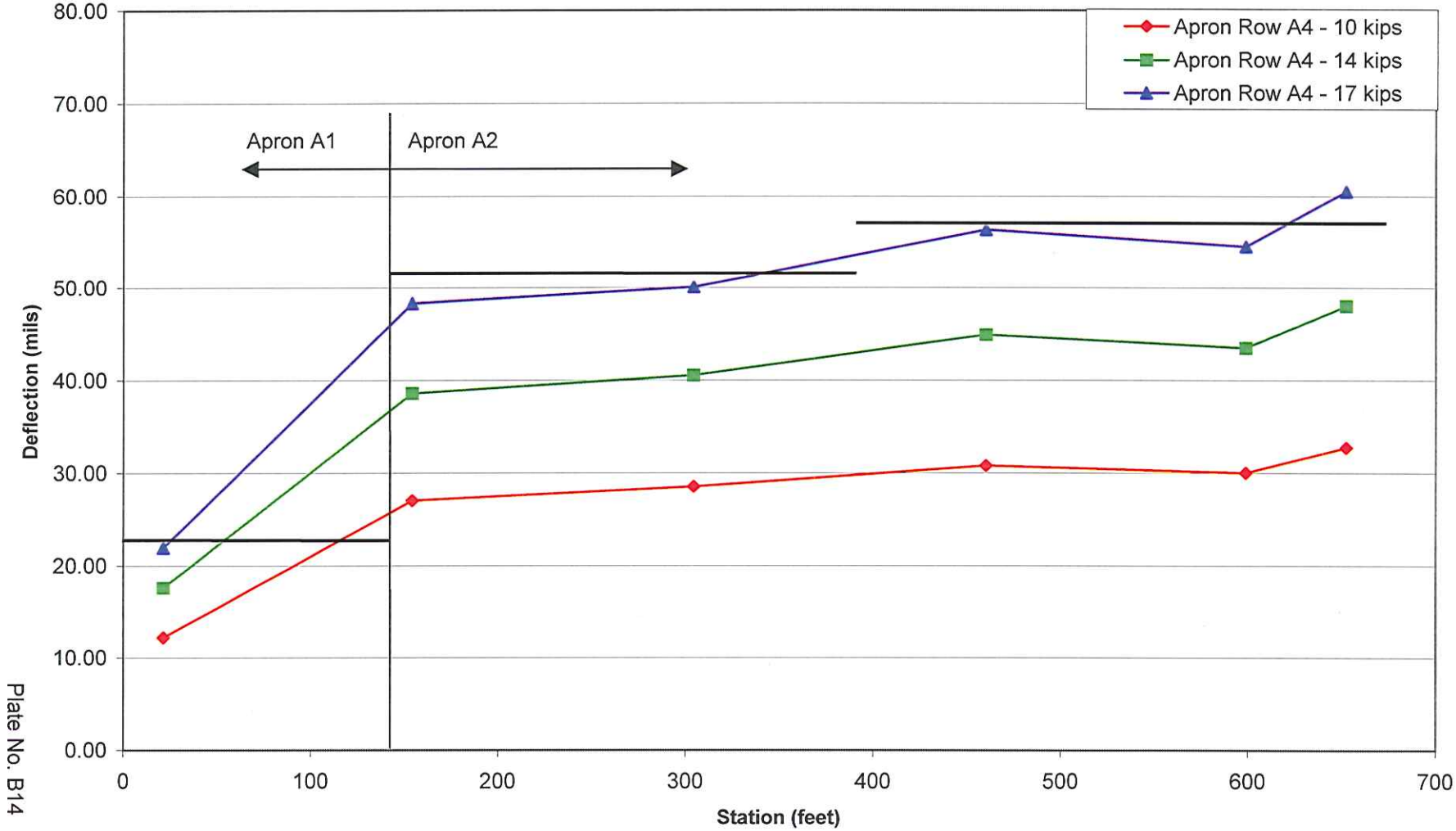


Plate No. B14

Tracy Municipal Airport - FWD Deflection Data
Apron Row A5 - (Apron A1 and A2)
(Station 0+00 at T/W D North)

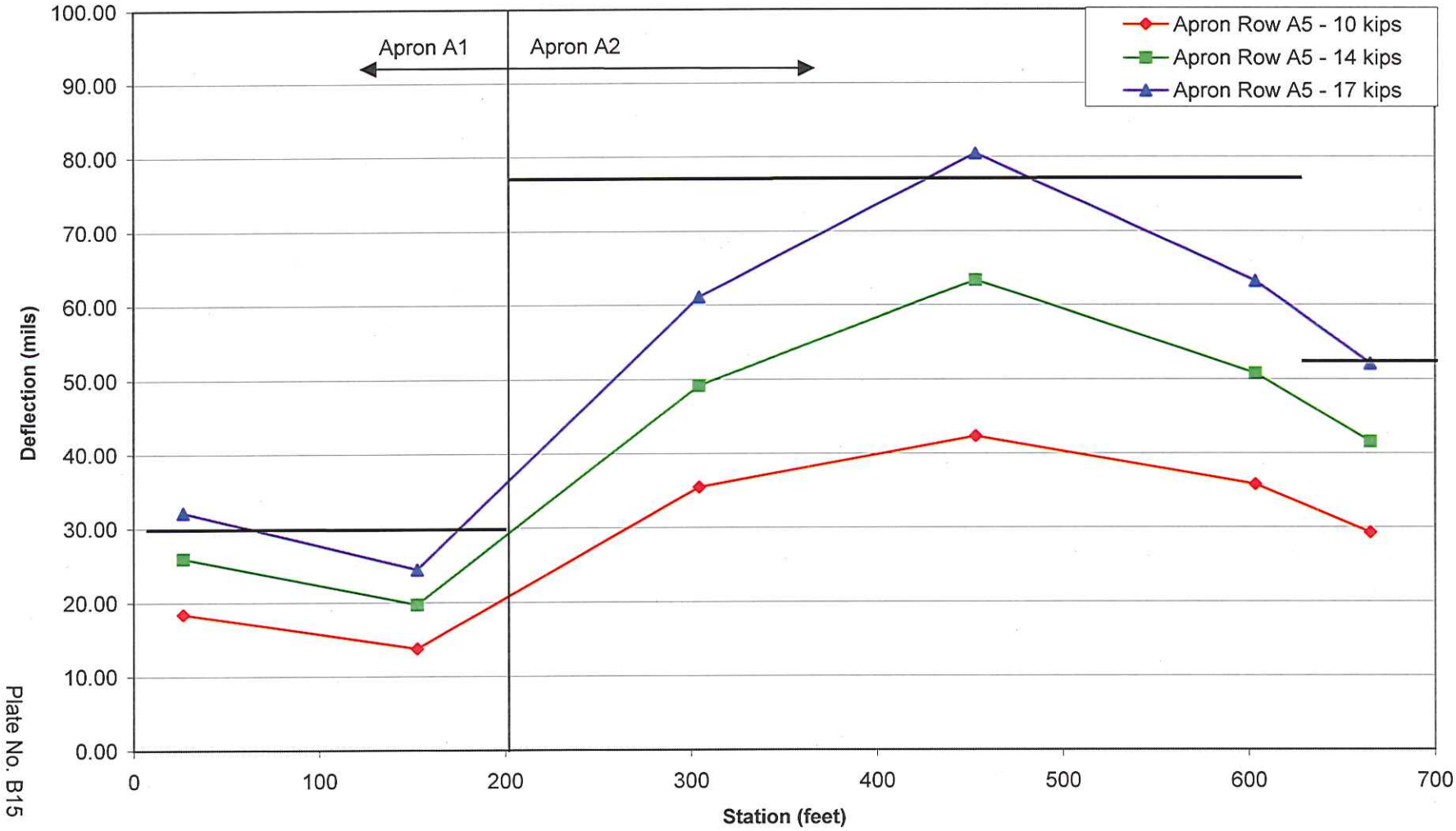


Plate No. B15

Tracy Municipal Airport - FWD Deflection Data
Apron Row A6 - (Apron A1 and A2)
(Station 0+00 at T/W D North)

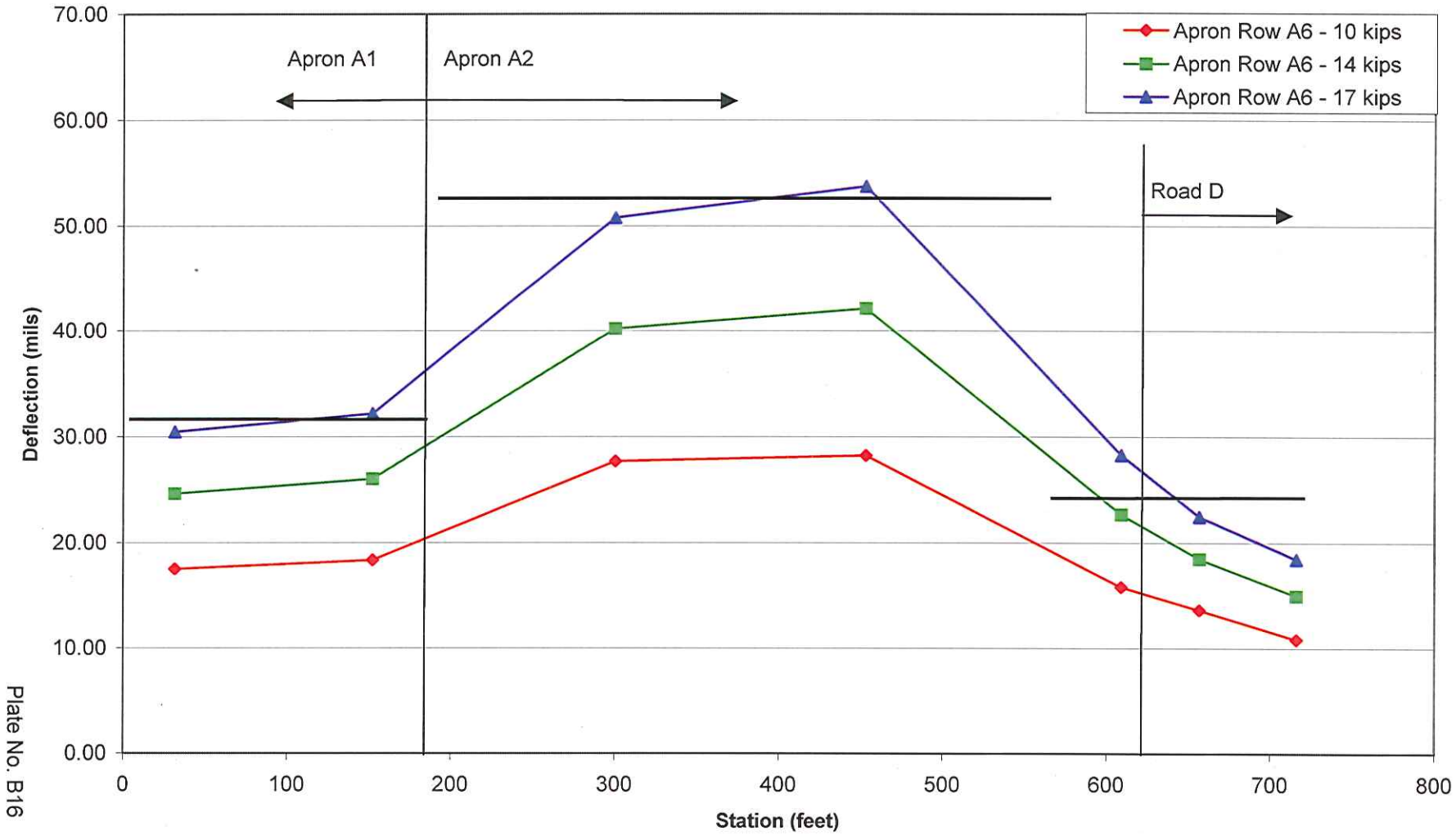


Plate No. B16

Tracy Municipal Airport - FWD Deflection Data
Apron Row A7 - (Apron A2)
(Station 0+00 at Apron Row A6)

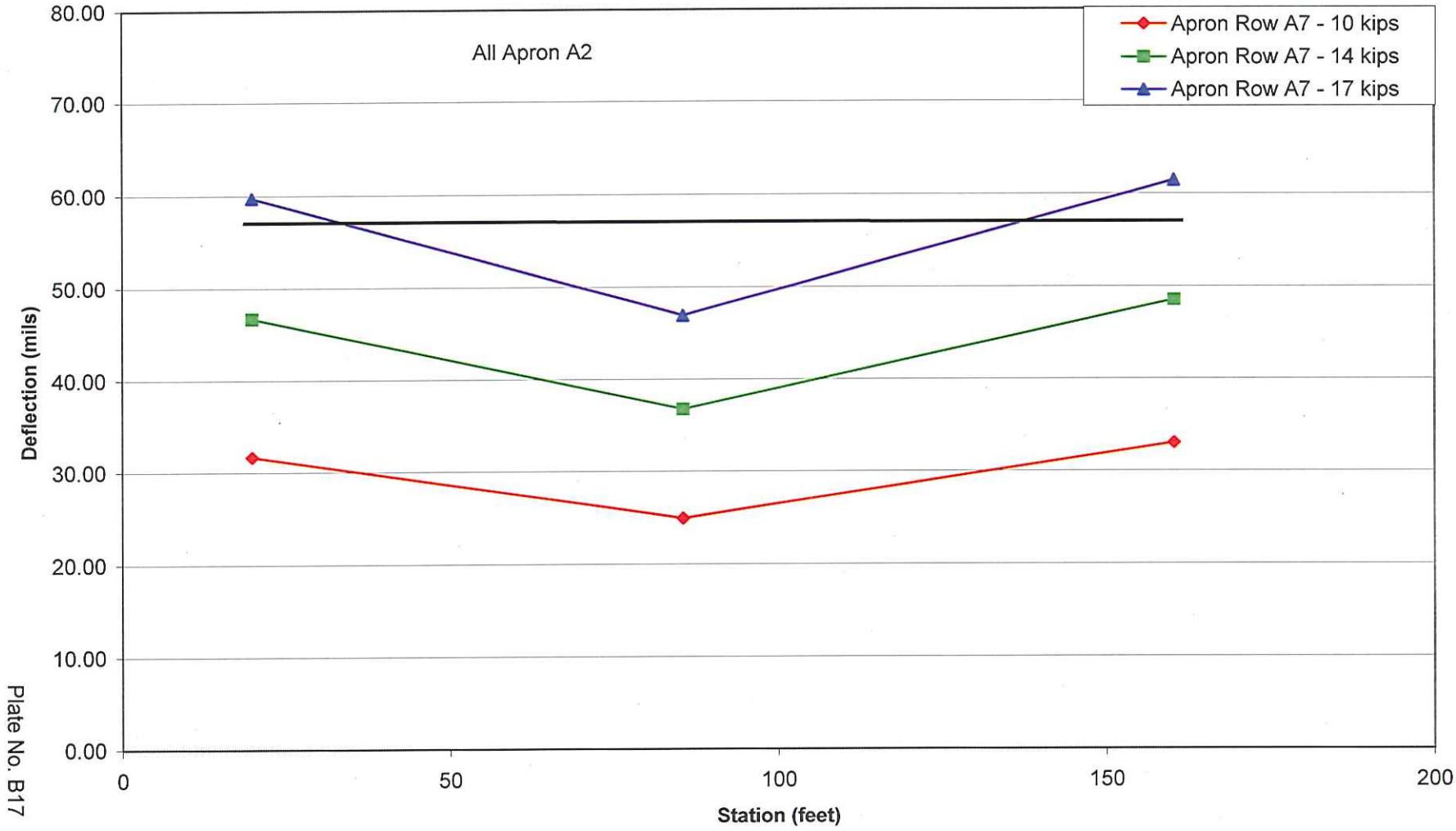


Plate No. B17

Tracy Municipal Airport - FWD Deflection Data
Apron Row A8 - (Apron A2)
(Station 0+00 at Apron Row A6)

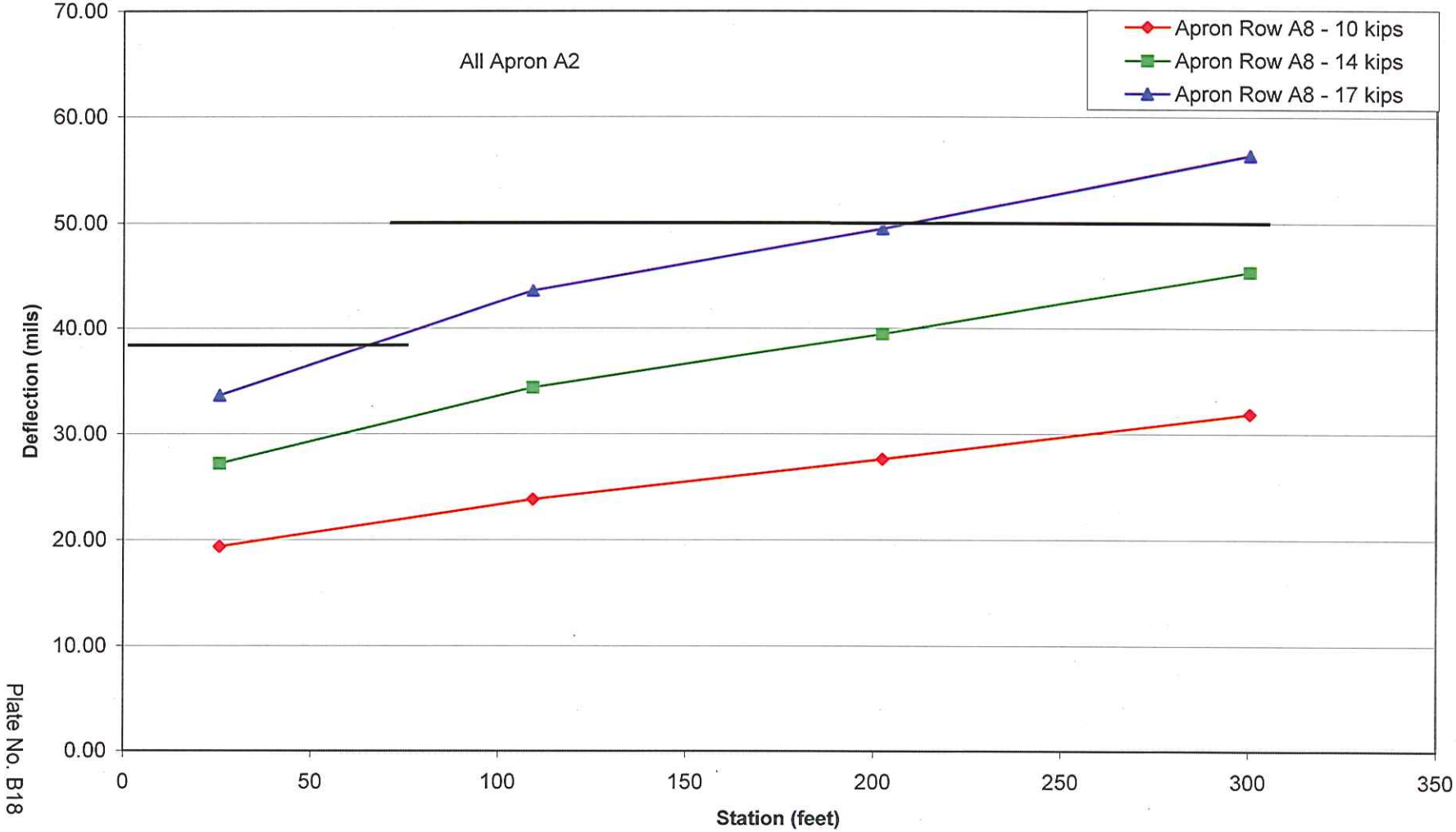


Plate No. B18

Tracy Municipal Airport - FWD Deflection Data
Apron Row A9 - (Apron A1, A4, and A3)
(Station 0+00 at Apron Row A6)

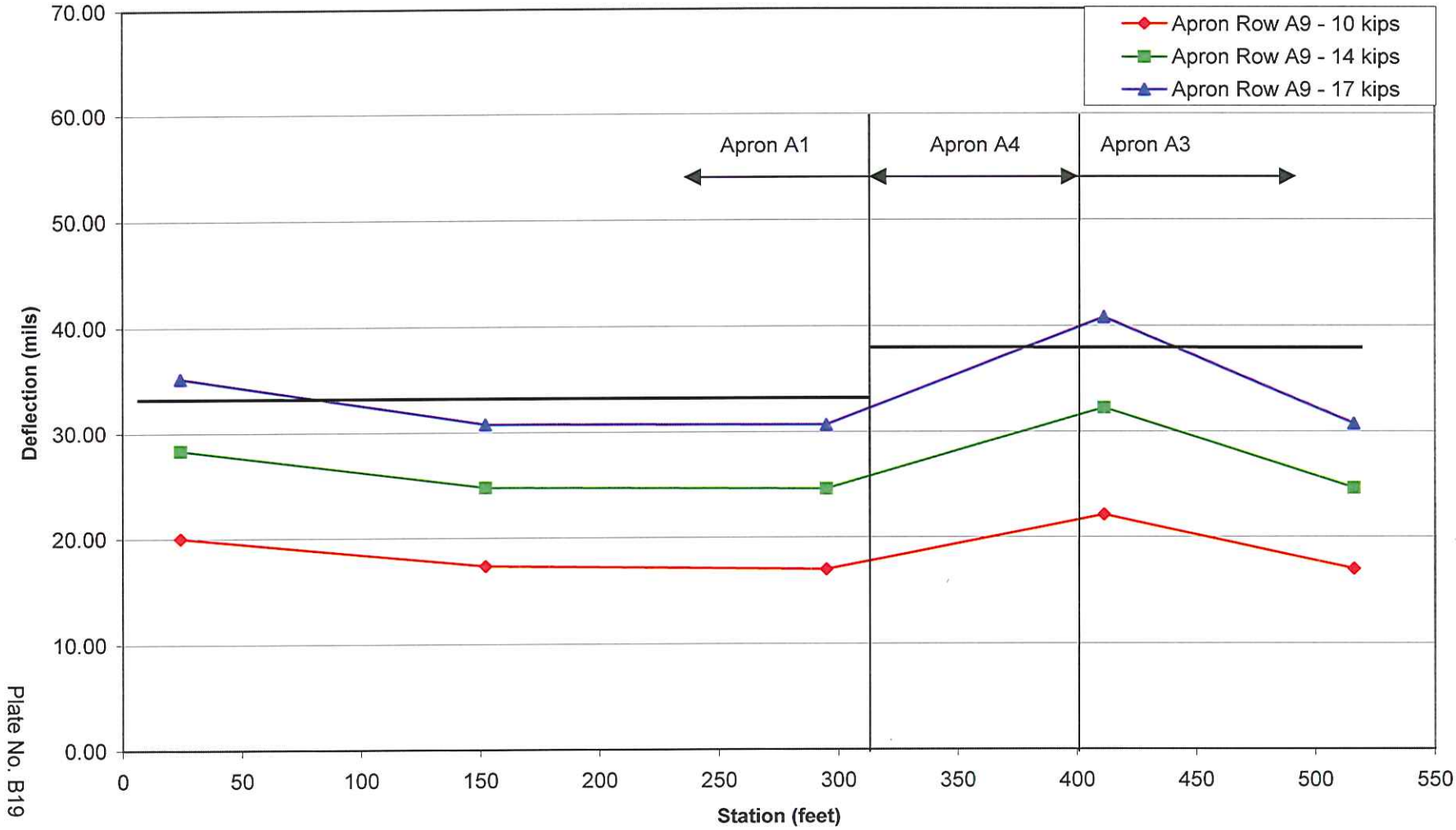


Plate No. B19

Tracy Municipal Airport - FWD Deflection Data
Apron Row A10 - (Apron A1, A4, and A5)
(Station 0+00 at South-West end)

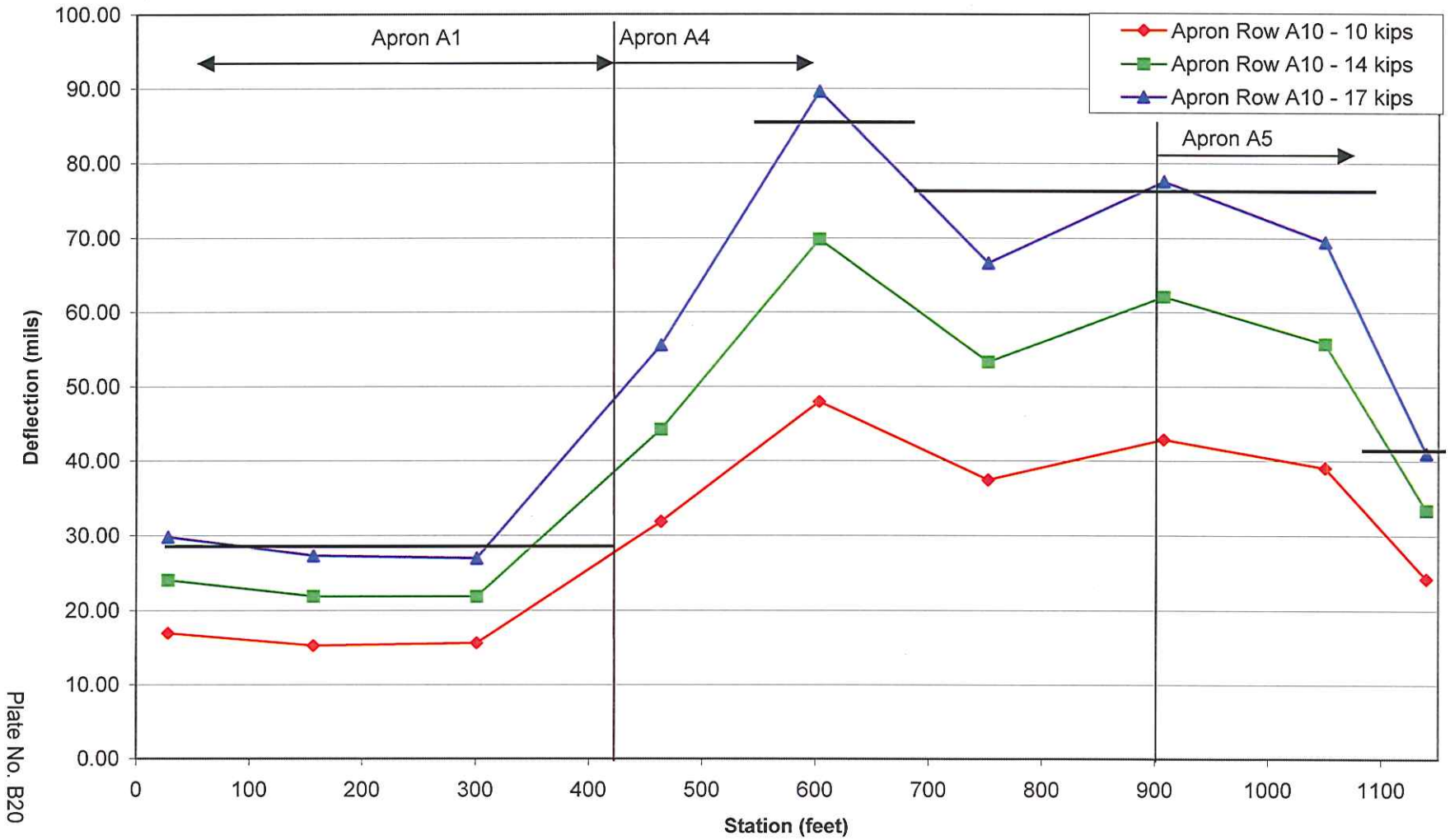


Plate No. B20

Tracy Municipal Airport - FWD Deflection Data
North Hangar Row H1 - (Hangar Area H1)
(Station 0+00 at Apron)

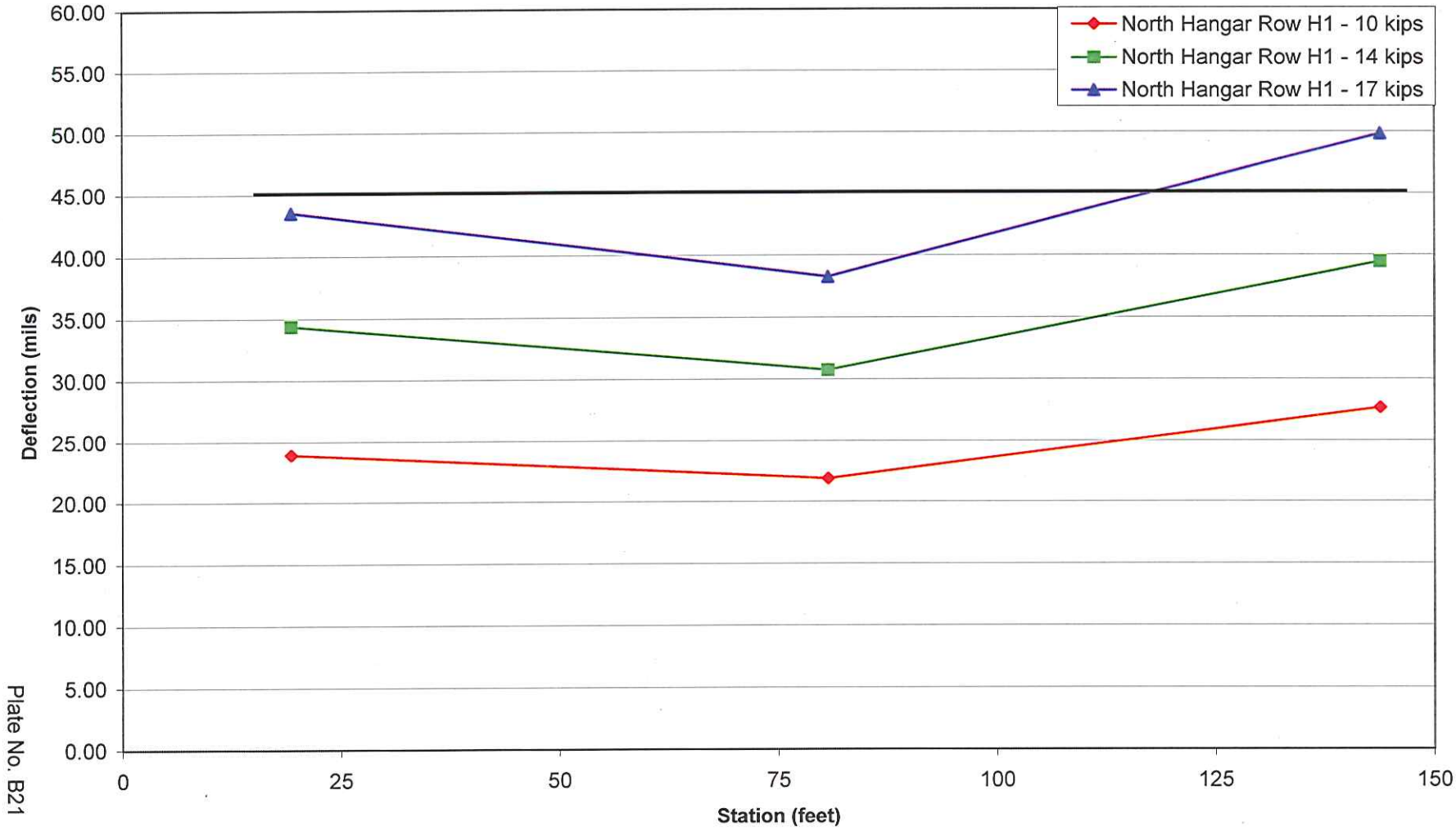


Plate No. B21

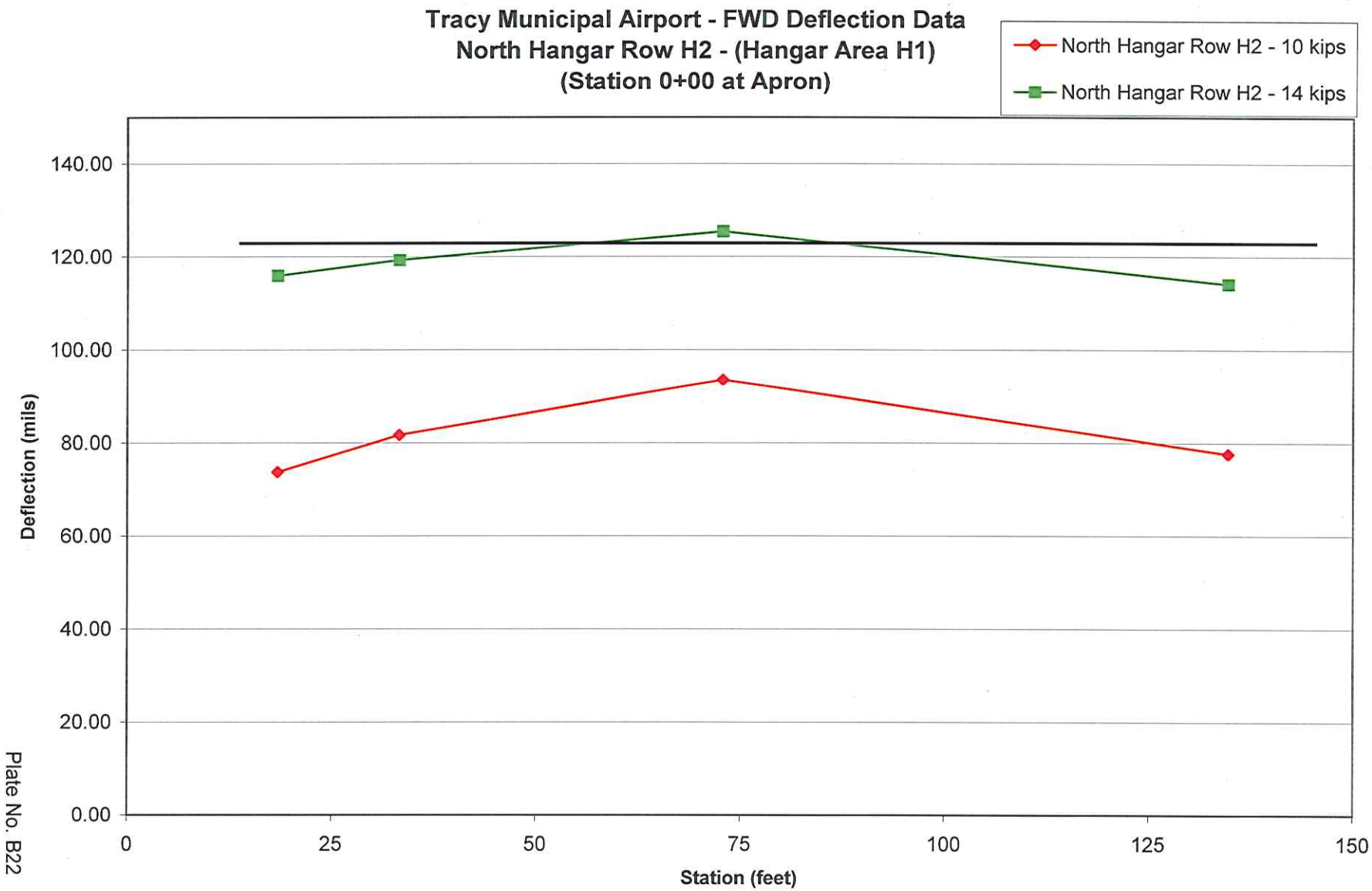

Tracy Municipal Airport - FWD Deflection Data
North Hangar Row H2 - (Hangar Area H1)
(Station 0+00 at Apron)
North Hangar Row H2 - 10 kips
North Hangar Row H2 - 14 kips
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Deflection (mils)
0
25
50
75
100
125
150
Station (feet)

Plate No. B22

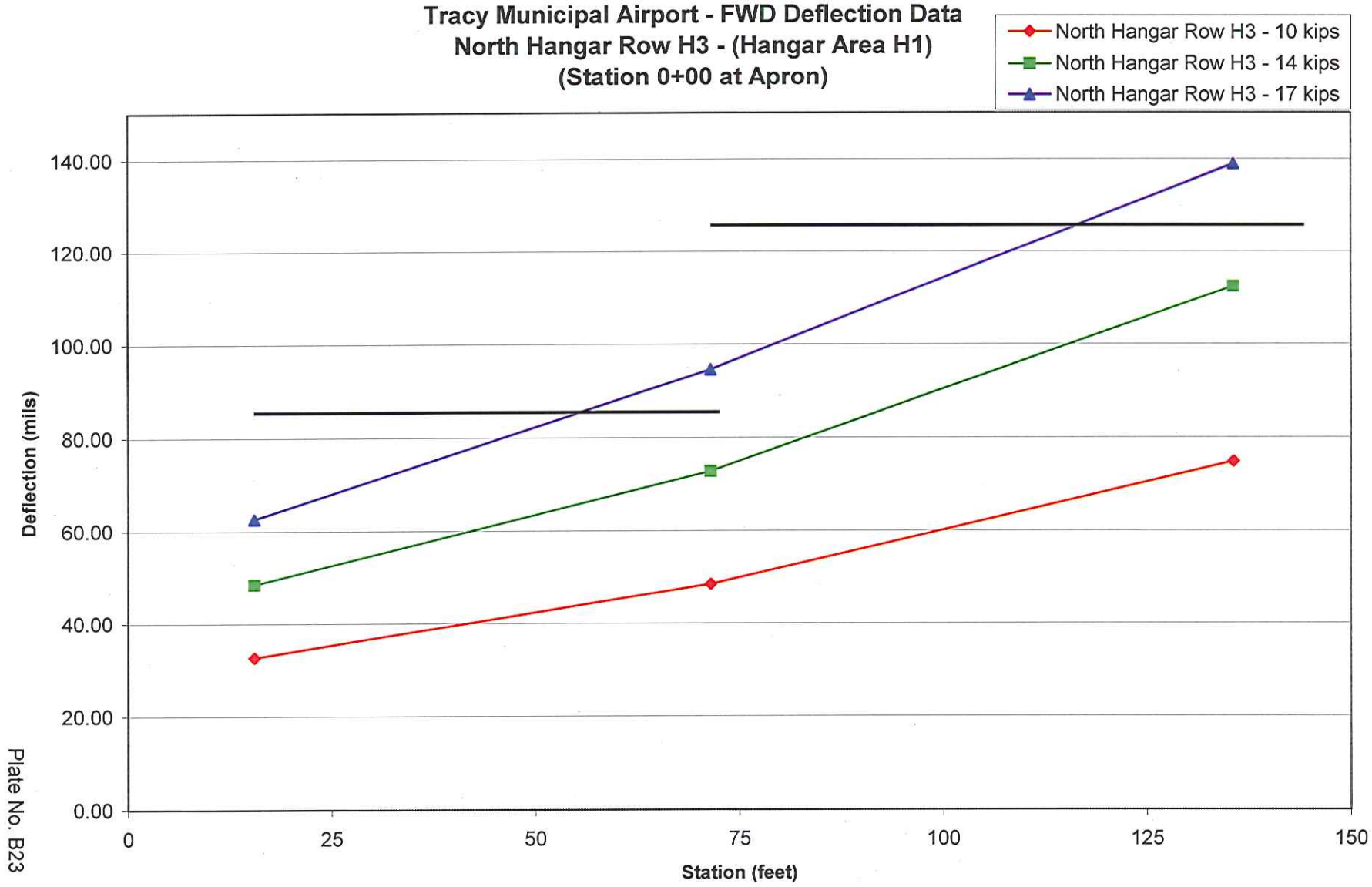

Tracy Municipal Airport - FWD Deflection Data
North Hangar Row H3 - (Hangar Area H1)
(Station 0+00 at Apron)
North Hangar Row H3 - 10 kips
North Hangar Row H3 - 14 kips
North Hangar Row H3 - 17 kips
Deflection (mils)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0
25
50
75
100
125
150
Station (feet)

Plate No. B23

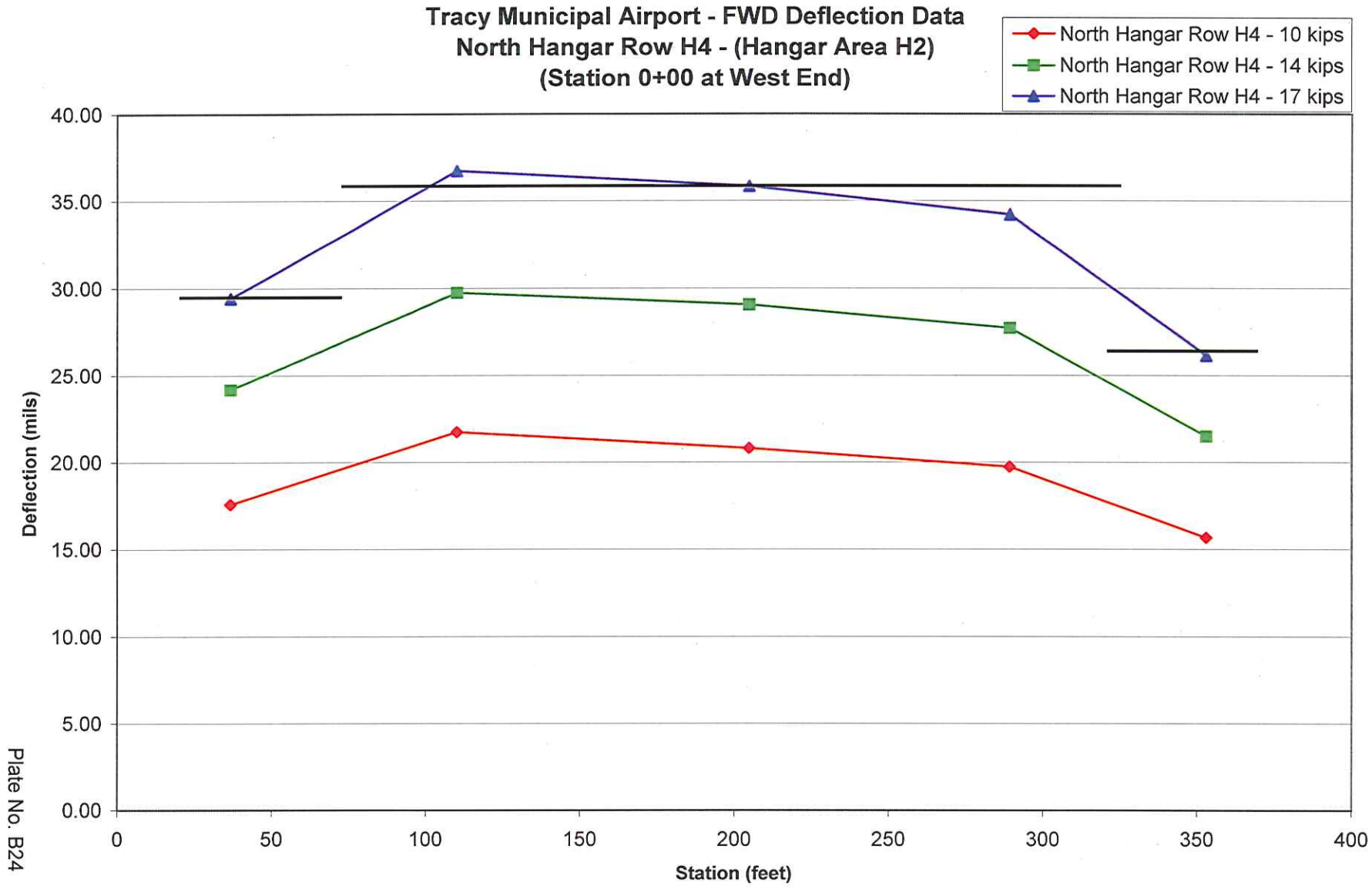

Tracy Municipal Airport - FWD Deflection Data
North Hangar Row H4 - (Hangar Area H2)
(Station 0+00 at West End)
North Hangar Row H4 - 10 kips
North Hangar Row H4 - 14 kips
North Hangar Row H4 - 17 kips
Deflection (mils)
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0
50
100
150
200
250
300
350
400
Station (feet)

Plate No. B24

Tracy Municipal Airport - FWD Deflection Data
North Hangar Row H5 - (Hangar Area H2)
(Station 0+00 at West End)

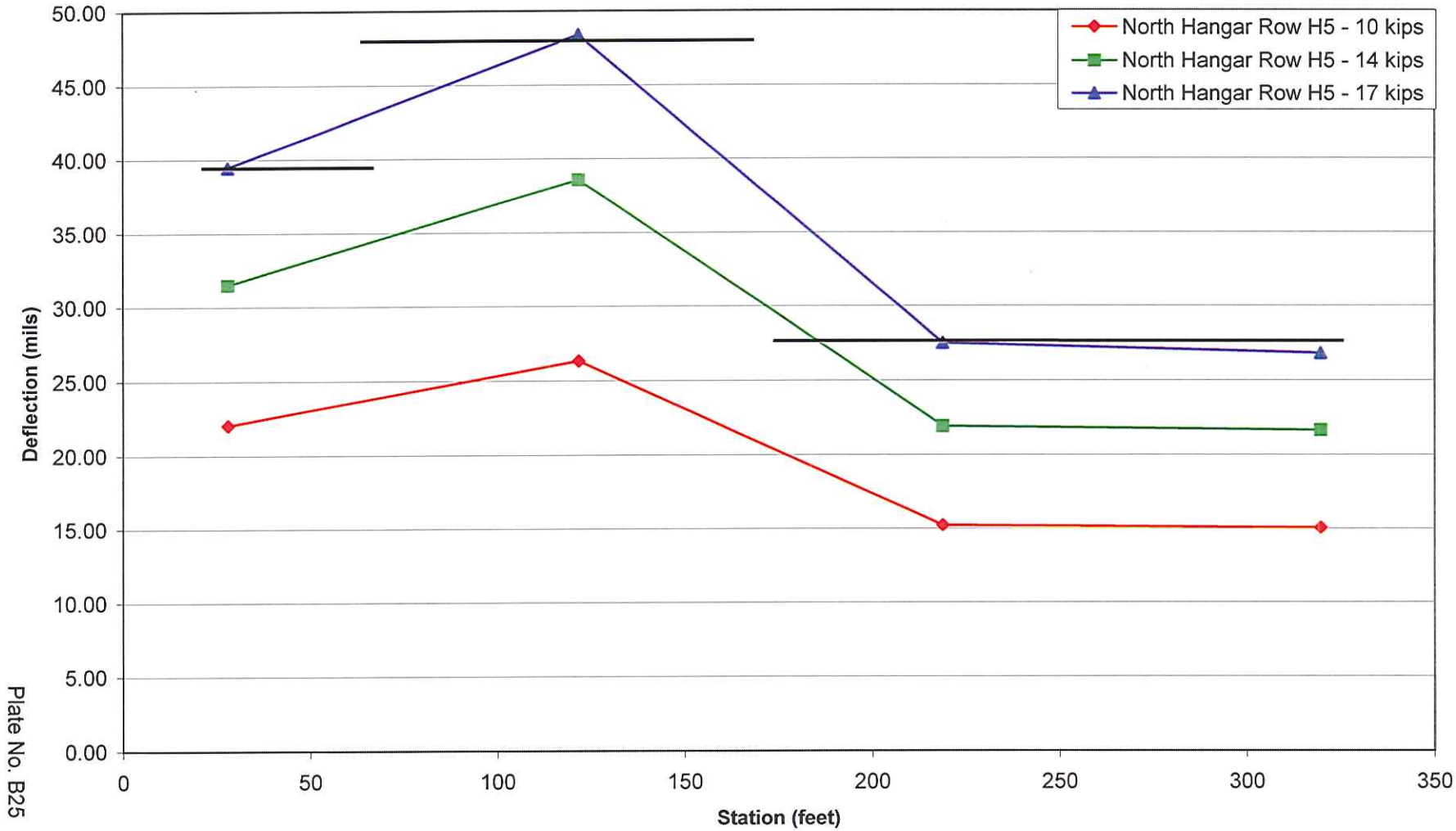
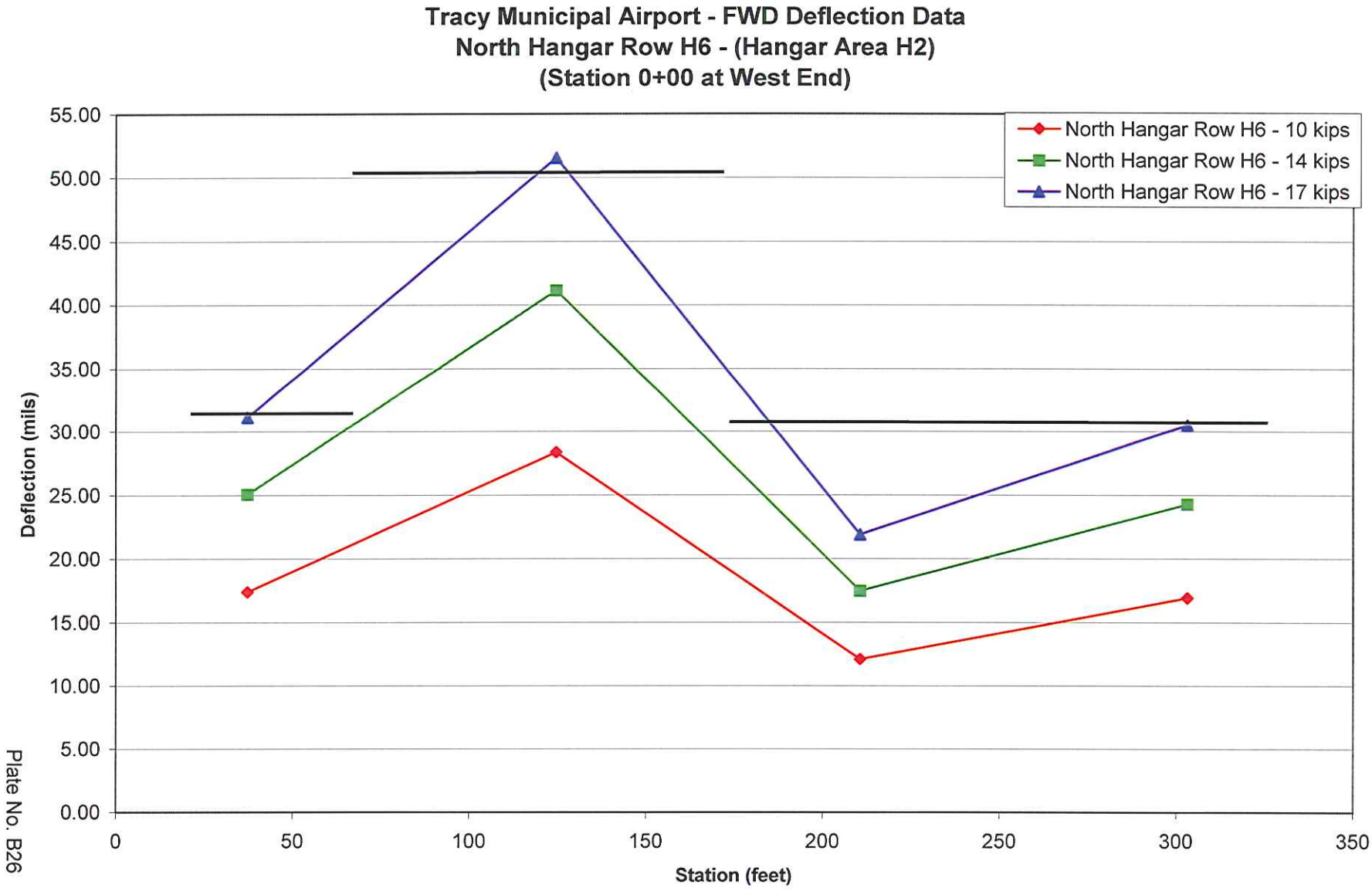


Plate No. B25


Tracy Municipal Airport - FWD Deflection Data
North Hangar Row H6 - (Hangar Area H2)
(Station 0+00 at West End)
North Hangar Row H6 - 10 kips
North Hangar Row H6 - 14 kips
North Hangar Row H6 - 17 kips
Deflection (mils)
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0
50
100
150
200
250
300
350
Station (feet)
Plate No. B26

Tracy Municipal Airport - FWD Deflection Data
North Hangar Row H7 - (Hangar Area H2)
(Station 0+00 at West End)

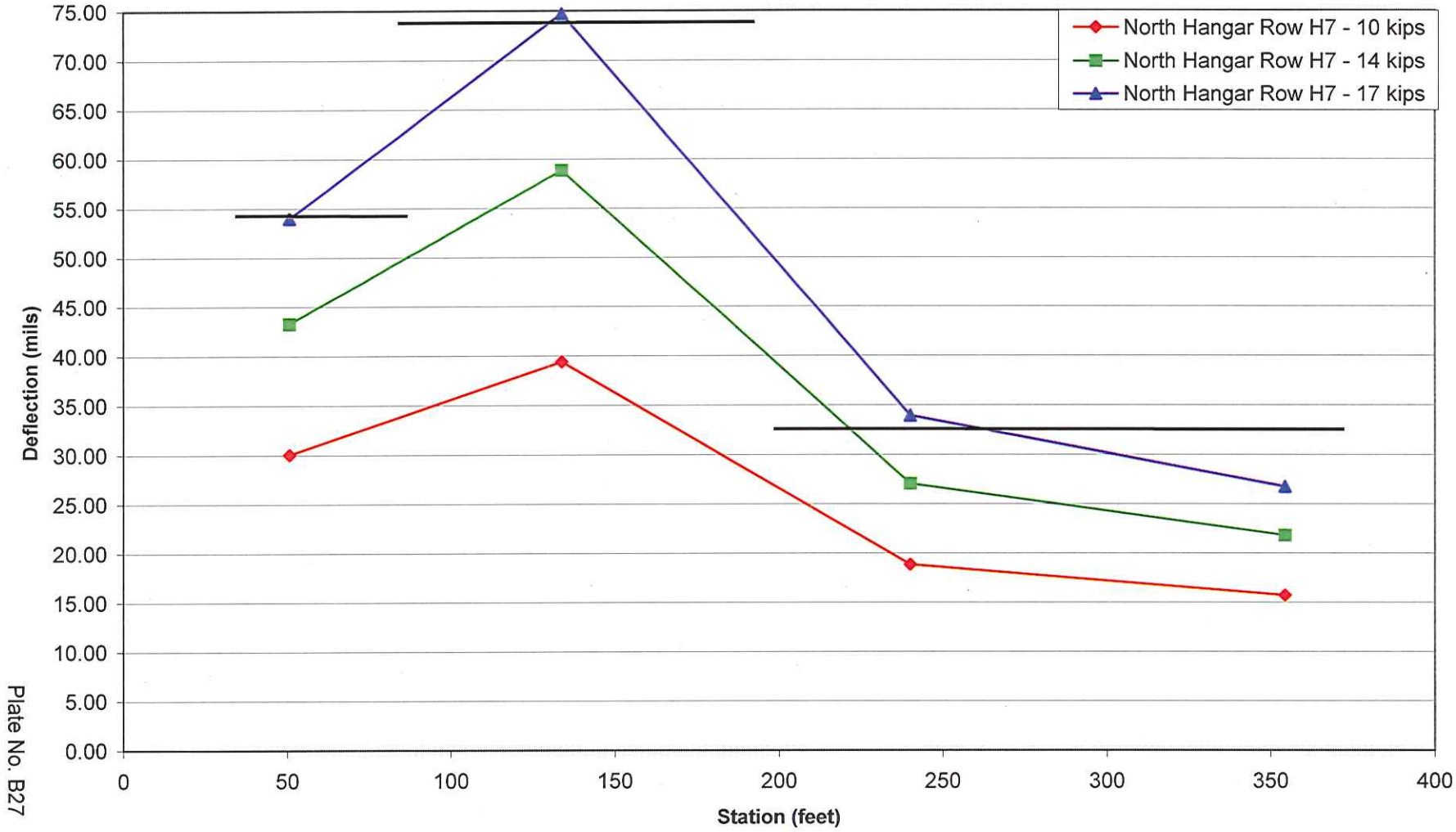


Plate No. B27

Tracy Municipal Airport - FWD Deflection Data
North Hangar Row H8 - (Hangar Area H2)
(Station 0+00 at North End)

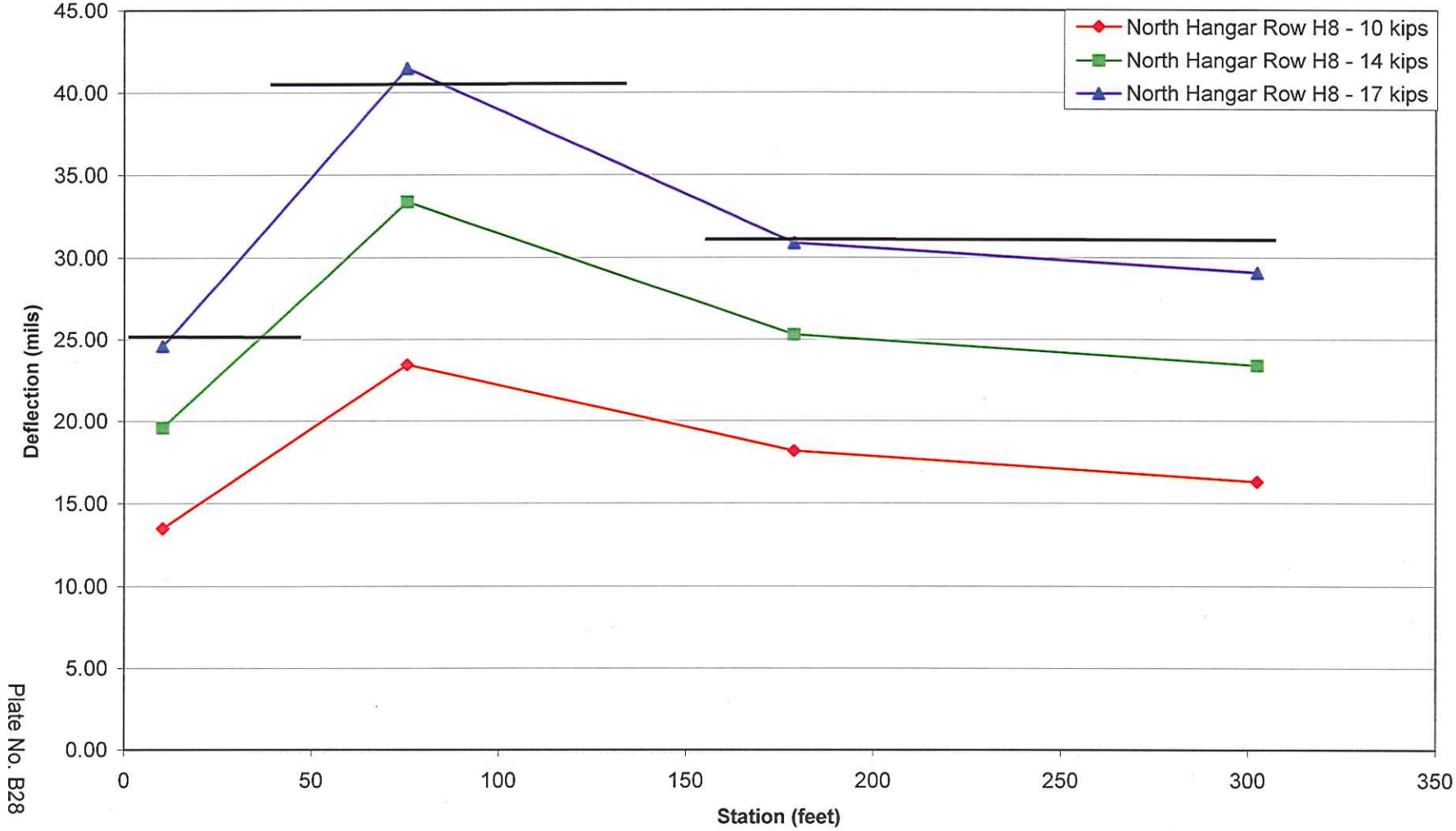


Plate No. B28

Tracy Municipal Airport - FWD Deflection Data
Taxiway D (South)- (Hangar Area H3)
(Station 0+00 at R/W 12-30)

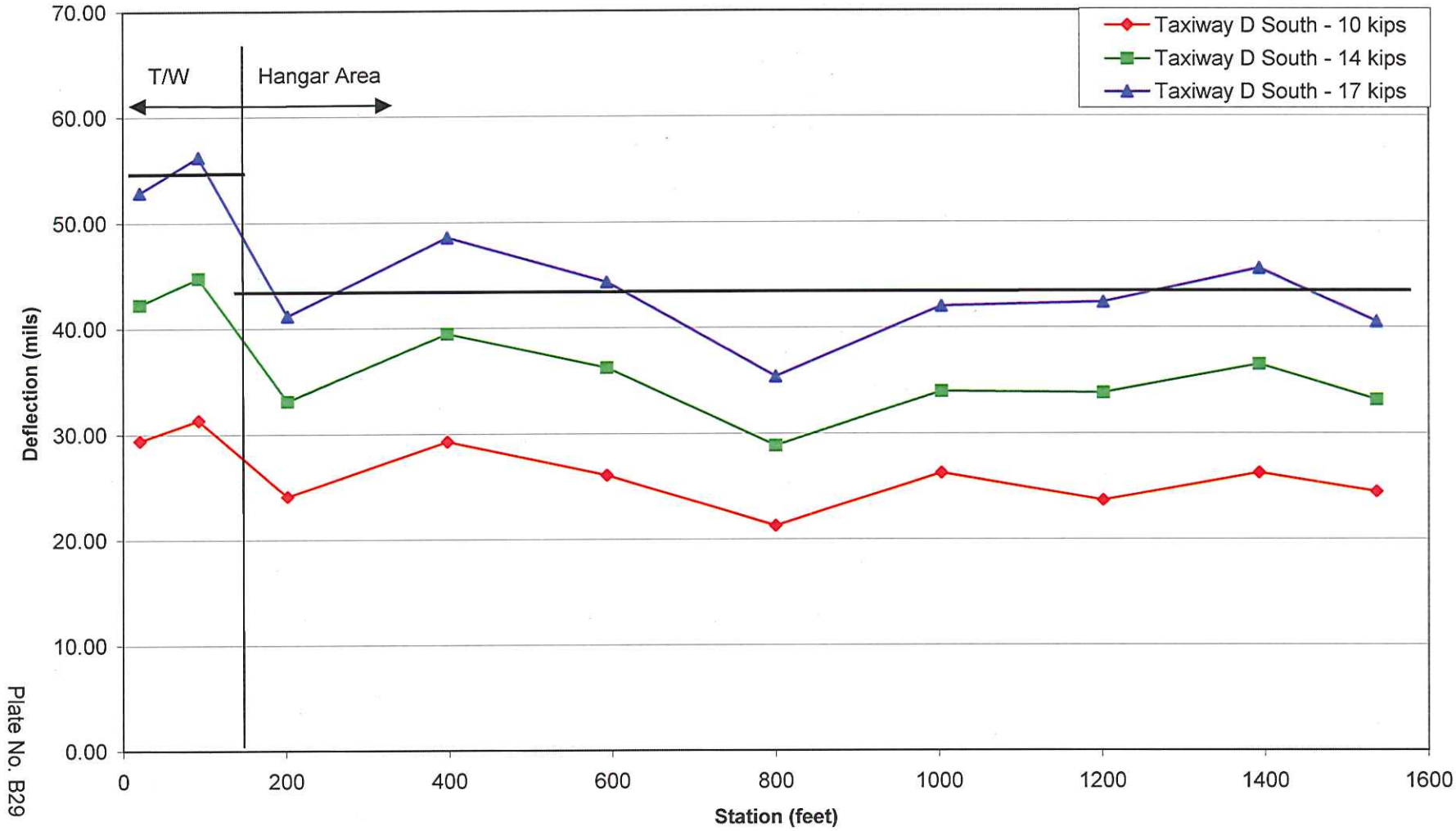
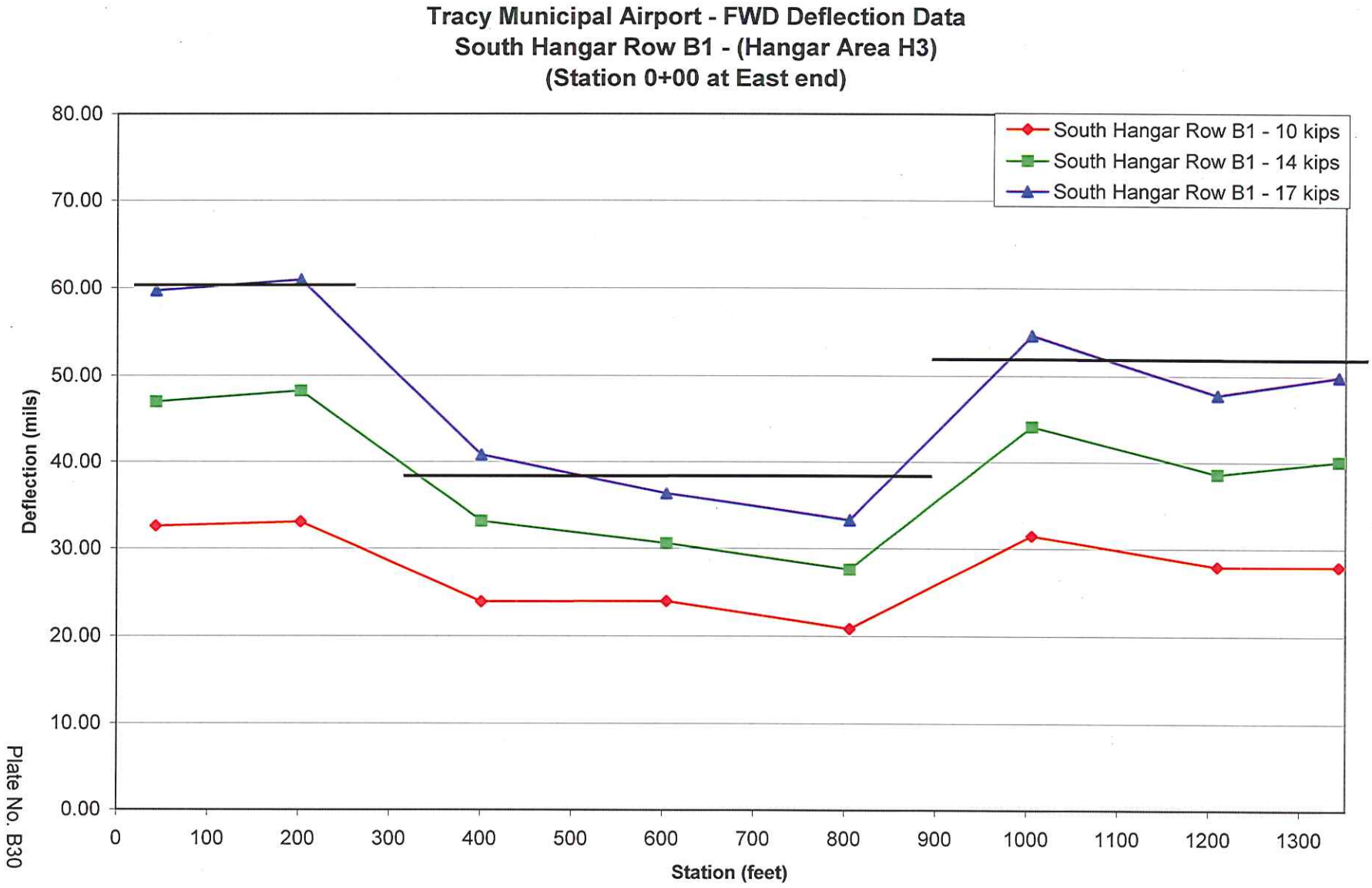
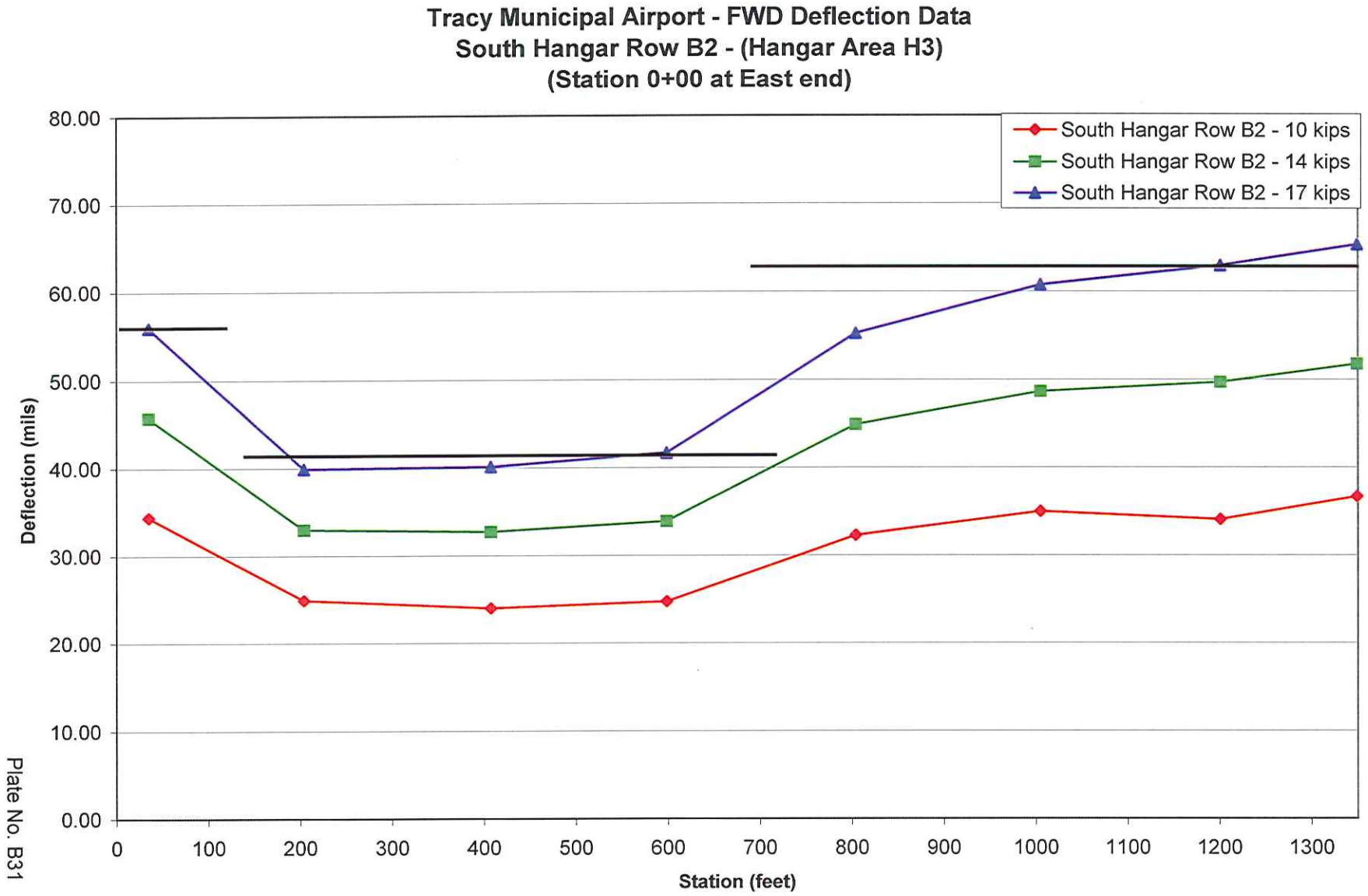


Plate No. B29


Tracy Municipal Airport - FWD Deflection Data
South Hangar Row B1 - (Hangar Area H3)
(Station 0+00 at East end)
South Hangar Row B1 - 10 kips
South Hangar Row B1 - 14 kips
South Hangar Row B1 - 17 kips
Deflection (mils)
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
Station (feet)
Plate No. B30


Tracy Municipal Airport - FWD Deflection Data
South Hangar Row B2 - (Hangar Area H3)
(Station 0+00 at East end)
South Hangar Row B2 - 10 kips
South Hangar Row B2 - 14 kips
South Hangar Row B2 - 17 kips
Deflection (mils)
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
Station (feet)
Plate No. B31

Tracy Municipal Airport - FWD Deflection Data
South Hangar Row B3 - (Hangar Area H4)
(Station 0+00 at West end of Taxiway C)

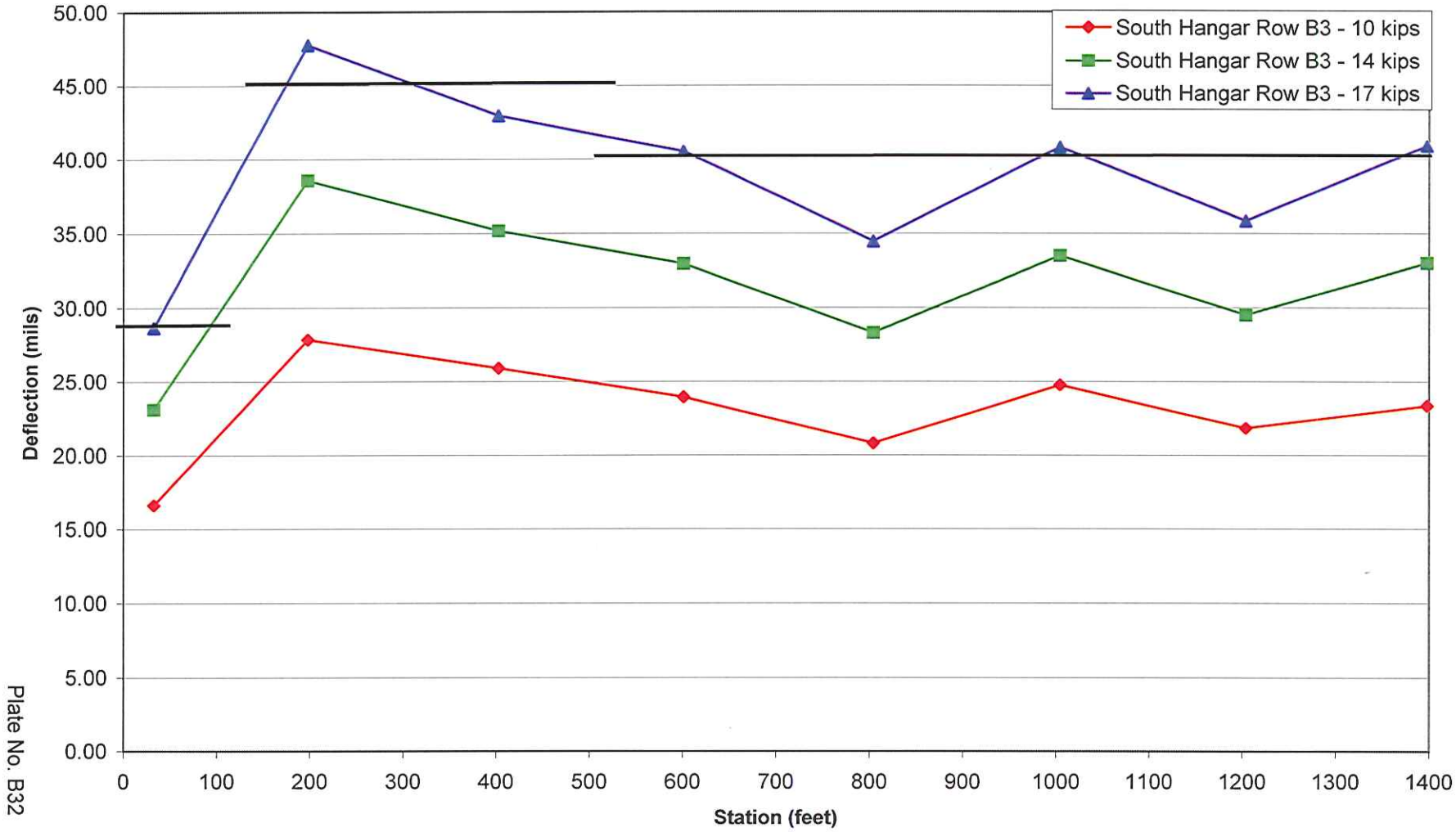


Plate No. B32

Tracy Municipal Airport - FWD Deflection Data
South Hangar Row B4 - (Hangar Area H3 and H4)
(Station 0+00 at Row B3)

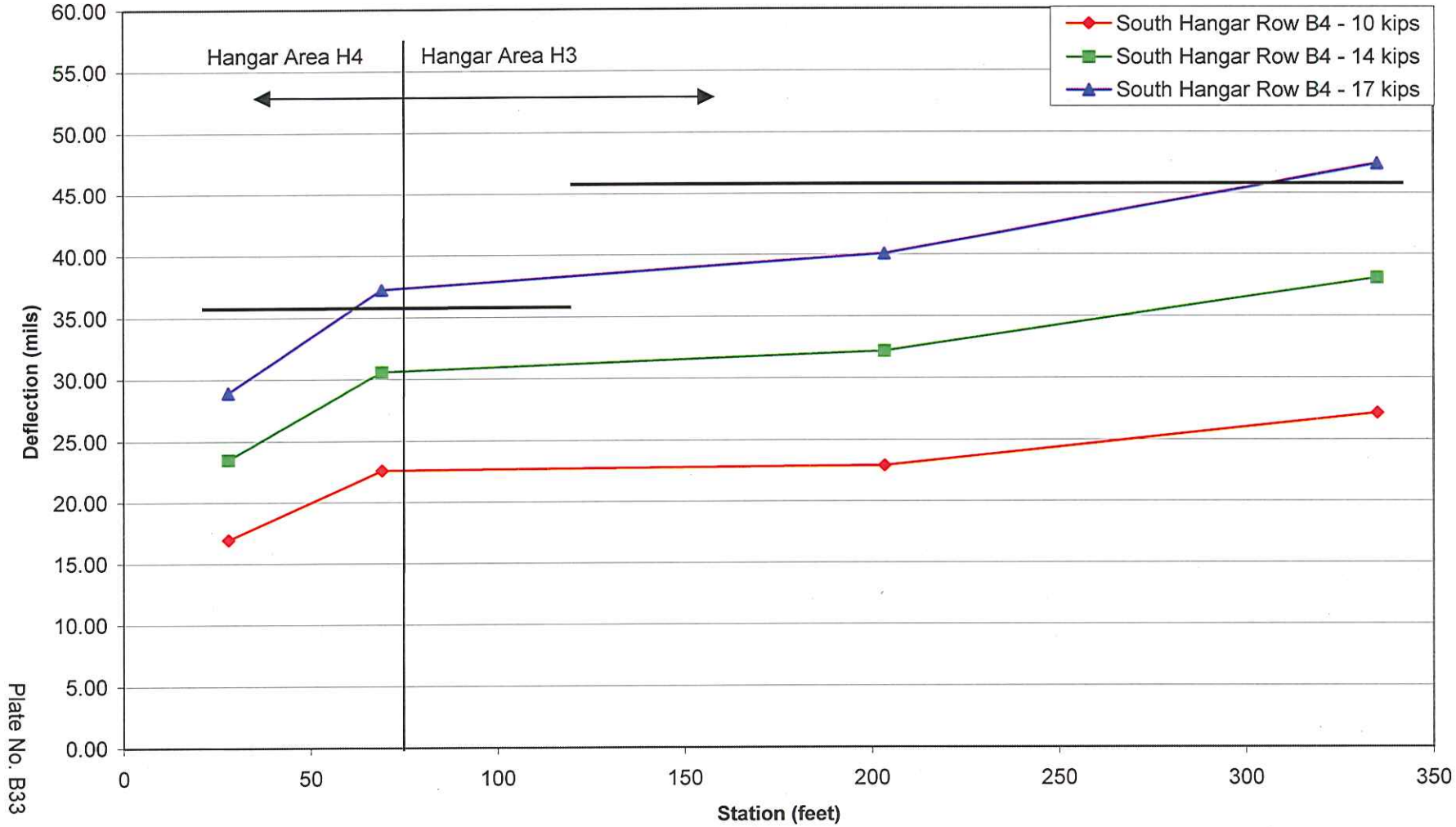


Plate No. B33

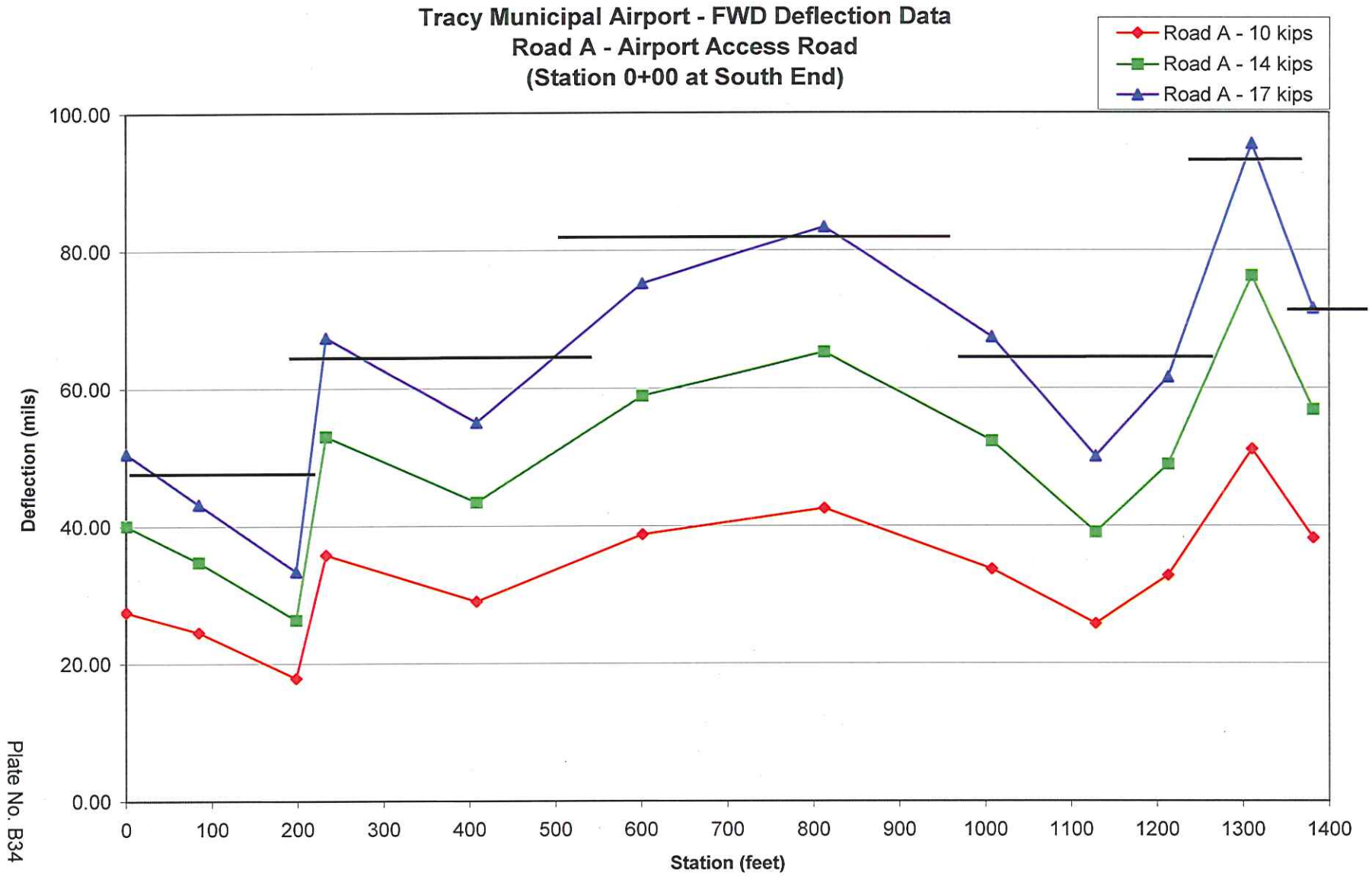

Tracy Municipal Airport - FWD Deflection Data
Road A - Airport Access Road
(Station 0+00 at South End)
Road A - 10 kips
Road A - 14 kips
Road A - 17 kips
Deflection (mils)
100.00
80.00
60.00
40.00
20.00
0.00
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Station (feet)

Plate No. B34

Tracy Municipal Airport - FWD Deflection Data
Road B - Airport Second Access Road
(Station 0+00 at East End)

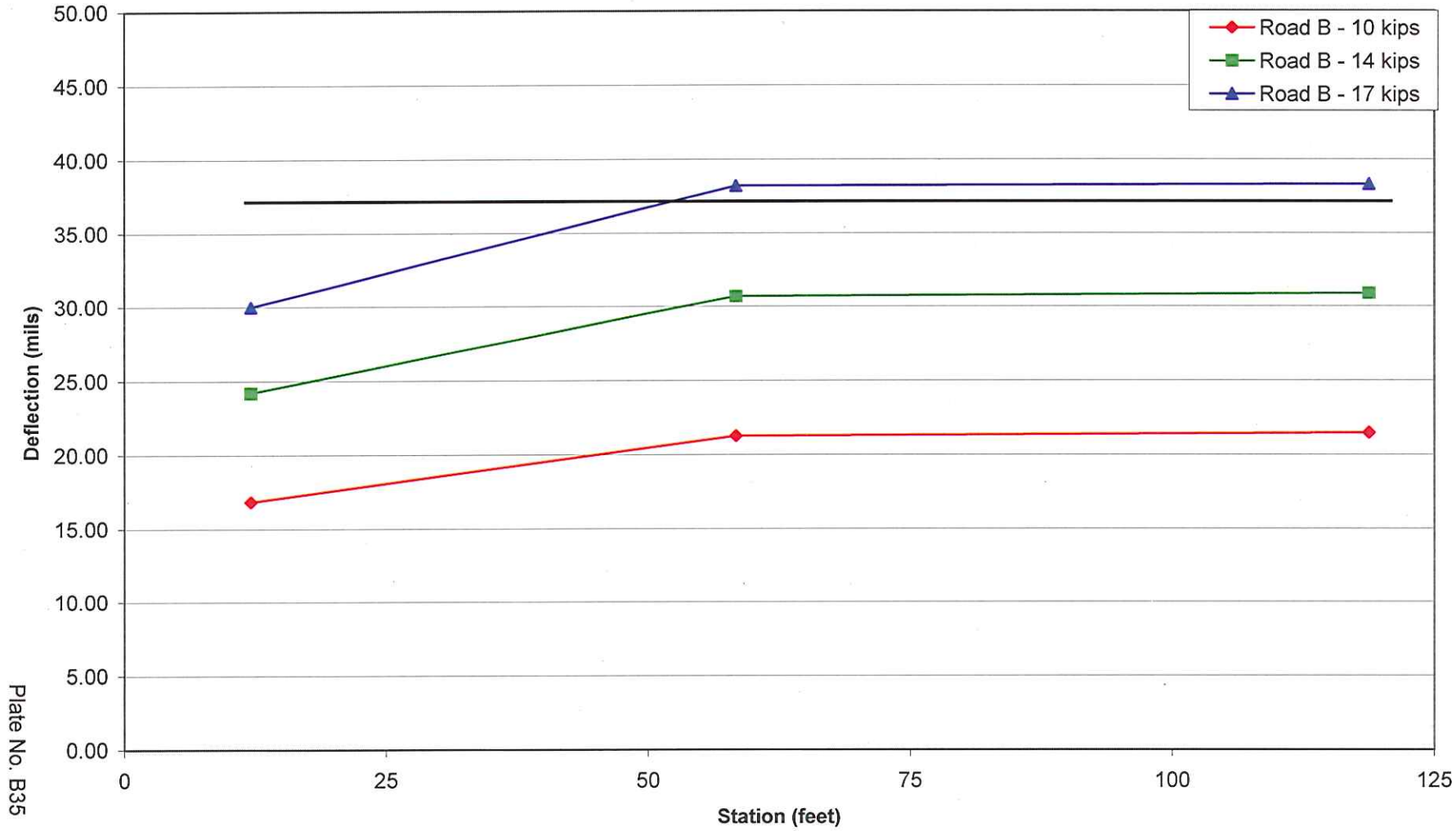


Plate No. B35

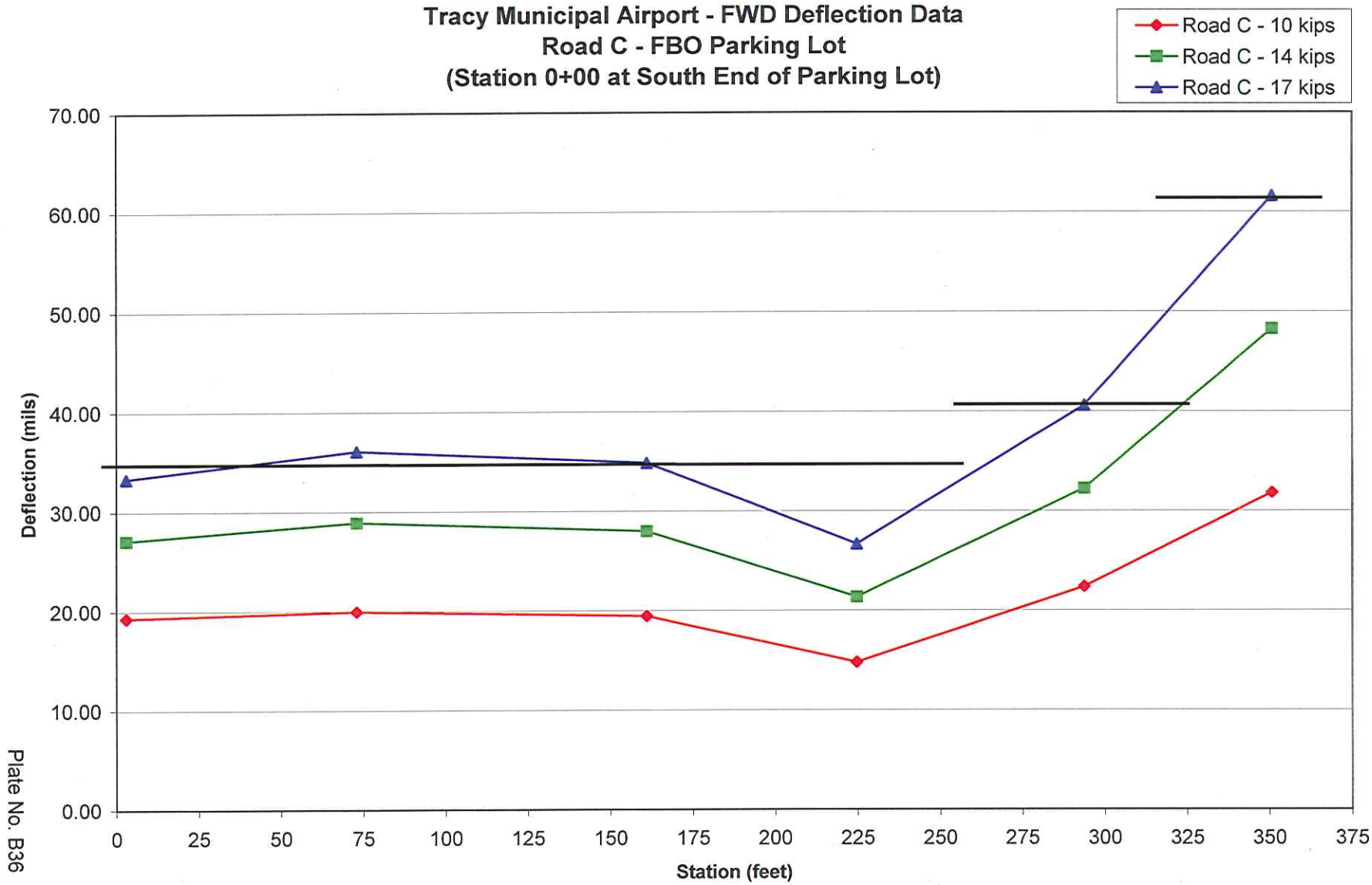

Tracy Municipal Airport - FWD Deflection Data
Road C - FBO Parking Lot
(Station 0+00 at South End of Parking Lot)
Road C - 10 kips
Road C - 14 kips
Road C - 17 kips
Deflection (mils)
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
25
50
75
100
125
150
175
200
225
250
275
300
325
350
375
Station (feet)

Plate No. B36

Tracy Municipal Airport - FWD Deflection Data
Road D - North Apron Access Road (Apron Row A6)
(Station 0+00 at T/W D North)

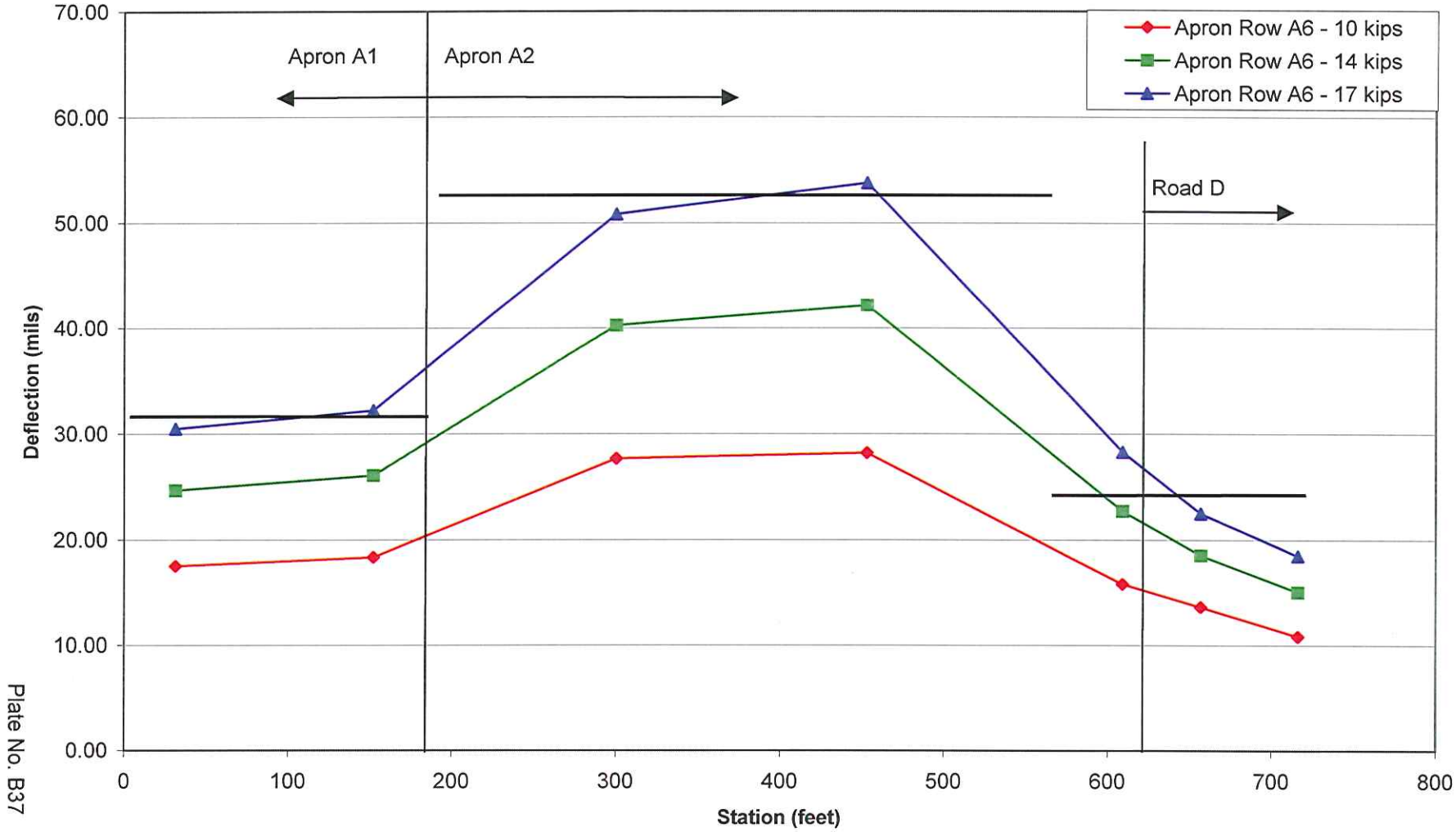


Plate No. B37

Tracy Municipal Airport - FWD Deflection Data
Road E - South Hangar Access Road - Row B5
(Station 0+00 at Hangar End)

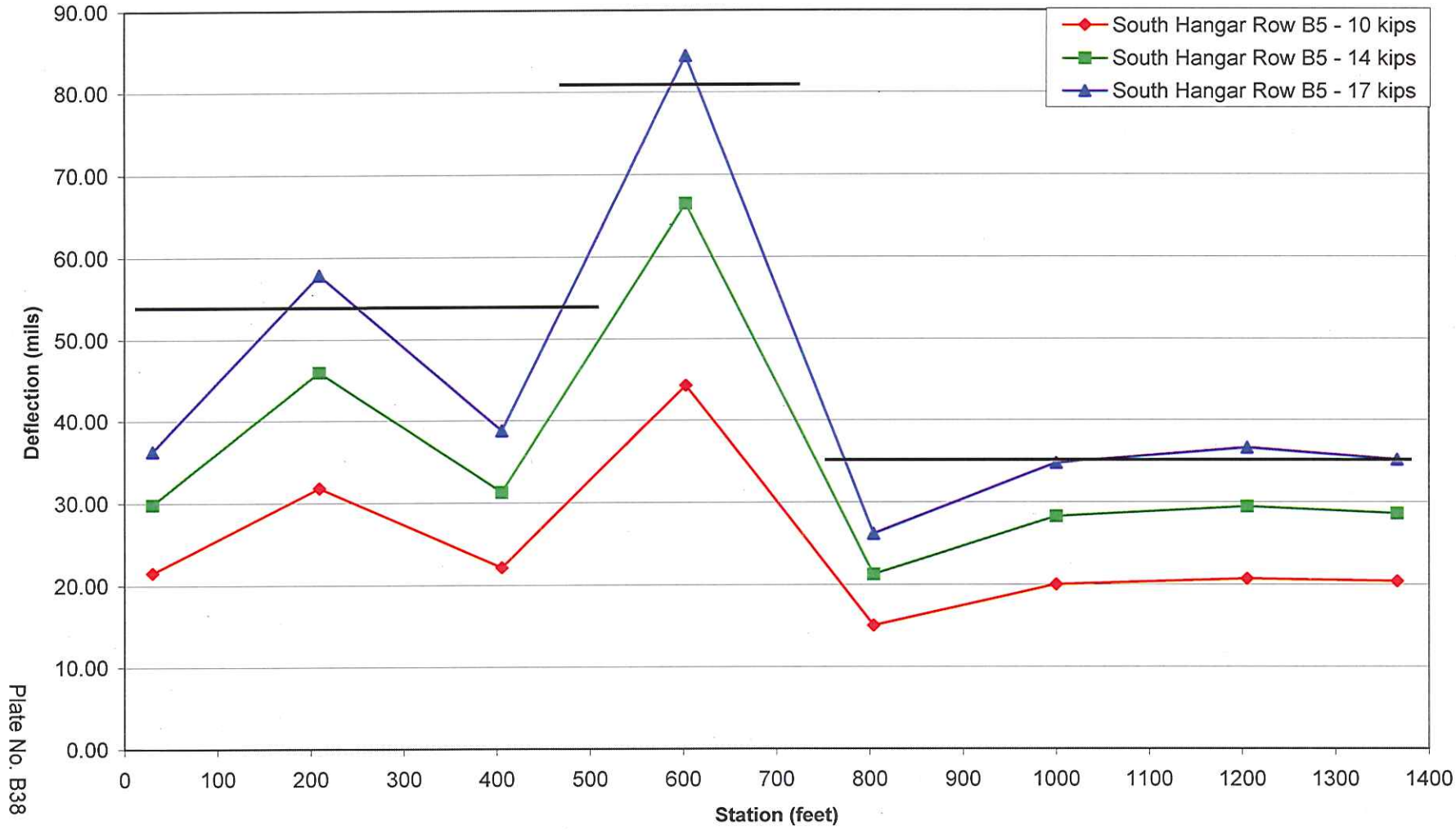


Plate No. B38

Appendix C
Pavement Condition Survey

As an aid in determining the performance to date of the existing pavements and to provide a guide for the test program to be conducted in this study a detailed condition survey of all existing pavements was made. This survey consisted of visually observing all pavements and noting deficiencies in areas of distress. A drawing identifying the pavements surveyed is included in this appendix as Plate No. C1. Plate No. C2 gives the stationing control for all segments of pavement included in this report. A drawing indicating the PCI (Pavement Condition Index) rating of each segment of pavement by color is included as Plate No. C3.

The Pavement Condition Survey and Rehabilitation Schedules shown in Tables C1 through C31 include the following information for each pavement segment evaluated, if available:

- F.A.A. Pavement Strength Survey
- F.A.A. Existing Pavement Section, FAA Form 5335
- Date constructed
- Rehabilitation record
- Pavement condition including Pavement Condition Index (PCI)
- Pavement evaluation
- Traffic Index
- Pavement remaining life analysis
- Recommended rehabilitation.

Routine remarking of the pavements is necessary every 8 to 10 years. The scheduled remarking is not shown in Appendix C or Table 4-3 due to space limitations, but it is included in each of the rehabilitation and maintenance projects.

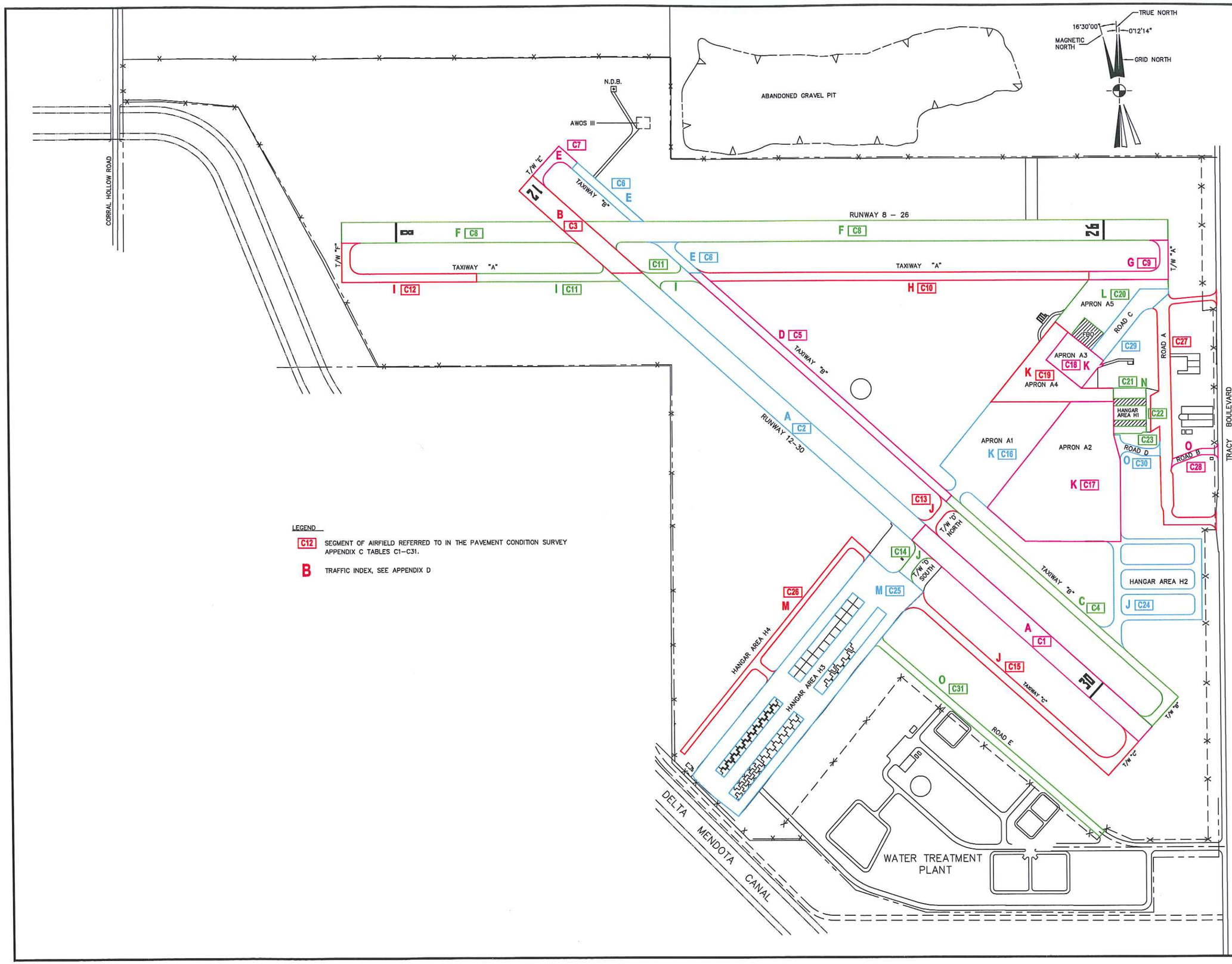
The table of contents of this appendix is shown below:

Plates

Appendix C
Pavement Condition Survey

Tables – Pavement Condition Survey and Rehabilitation Schedule

Tables No. C1 through C3	Runway 12-30
Tables No. C4 through C7	Taxiways B & E
Table No. C8	Runway 8-26
Tables No. C9 through C12	Taxiways A & F
Table No. C13	Taxiway D (North)
Table No. C14	Taxiway D (South)
Table No. C15	Taxiway C
Tables No. C16 through C20	Aprons A1-A5 – North Apron Complex
Tables No. C21 through C23	Hangar Area H1 – North Apron Complex
Table No. C24	Hangar Area H2 – North Apron Complex
Table No. C25	Hangar Area H3 – South Apron Complex
Table No. C26	Hangar Area H4 – South Apron Complex
Table No. C27	Road A – Airport Access Road
Table No. C28	Road A – Airport Secondary Access Road
Table No. C29	Road C – FBO Parking Lot
Table No. C30	Road D – North Apron Access Road
Table No. C31	Road E – South Hangar Access Road



VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LEGEND

C12 SEGMENT OF AIRFIELD REFERRED TO IN THE PAVEMENT CONDITION SURVEY APPENDIX C TABLES C1–C31.

B TRAFFIC INDEX, SEE APPENDIX D

Reinard W. Brandley
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REGISTERED PROFESSIONAL ENGINEER * REINARD W. BRANDLEY * No. C 65338 Exp. 6-30-2014 * STATE OF CALIFORNIA *

ENGINEER OF RECORD

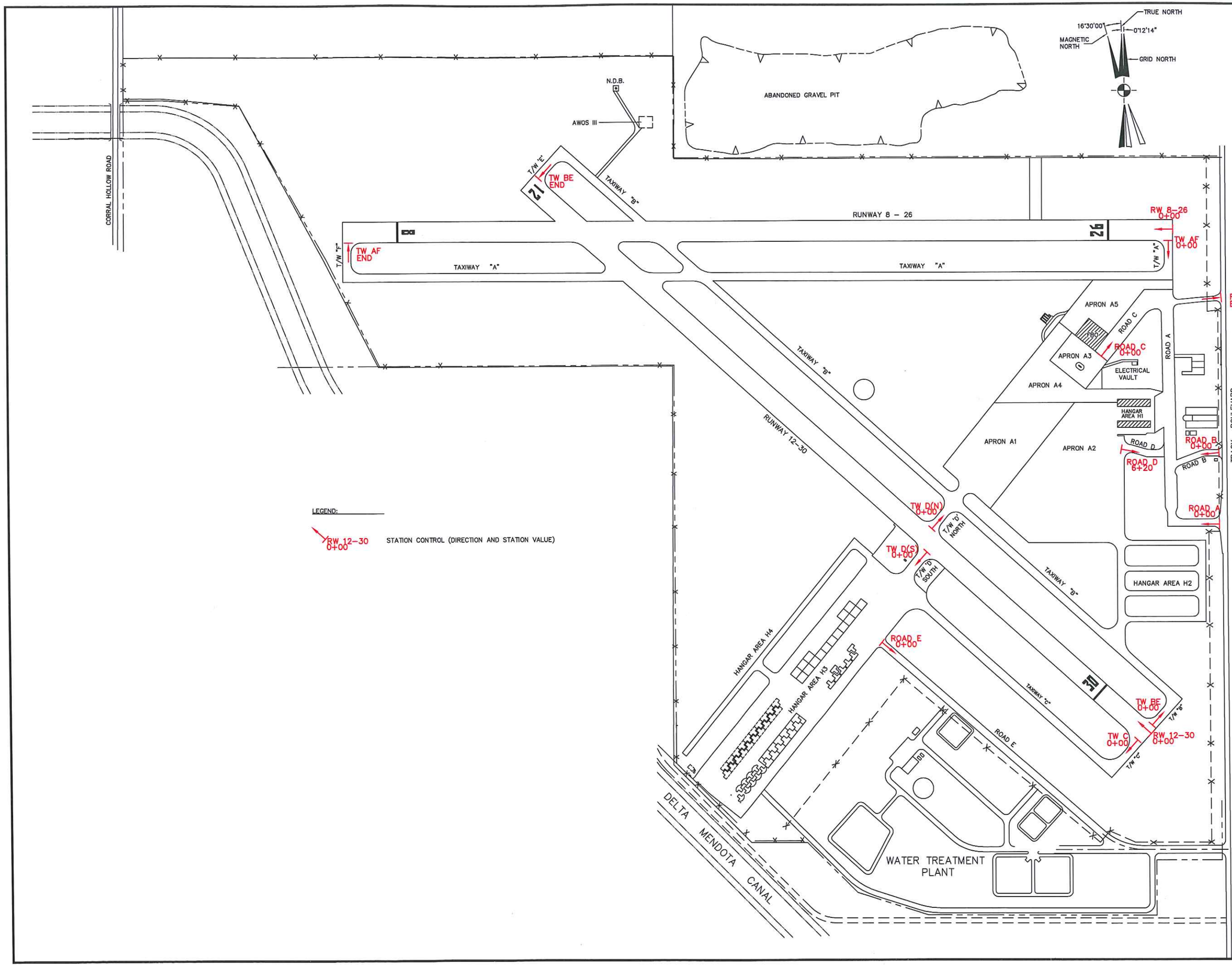
NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT EVALUATION
PAVEMENT SEGMENT IDENTIFICATION

DESIGN BY:	DB
DRAWN BY:	DB
CHK'D BY:	RWB
DATE:	MARCH 11, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	1"=200'

SHEET NUMBER
PLATE No. C1



LEGEND:

RW 12–30 0+00 STATION CONTROL (DIRECTION AND STATION VALUE)

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REGISTERED PROFESSIONAL ENGINEER * REINARD W. BRANDLEY * No. C 65538 Exp. 6-30-2014 * STATE OF CALIFORNIA *

ENGINEER OF RECORD

NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

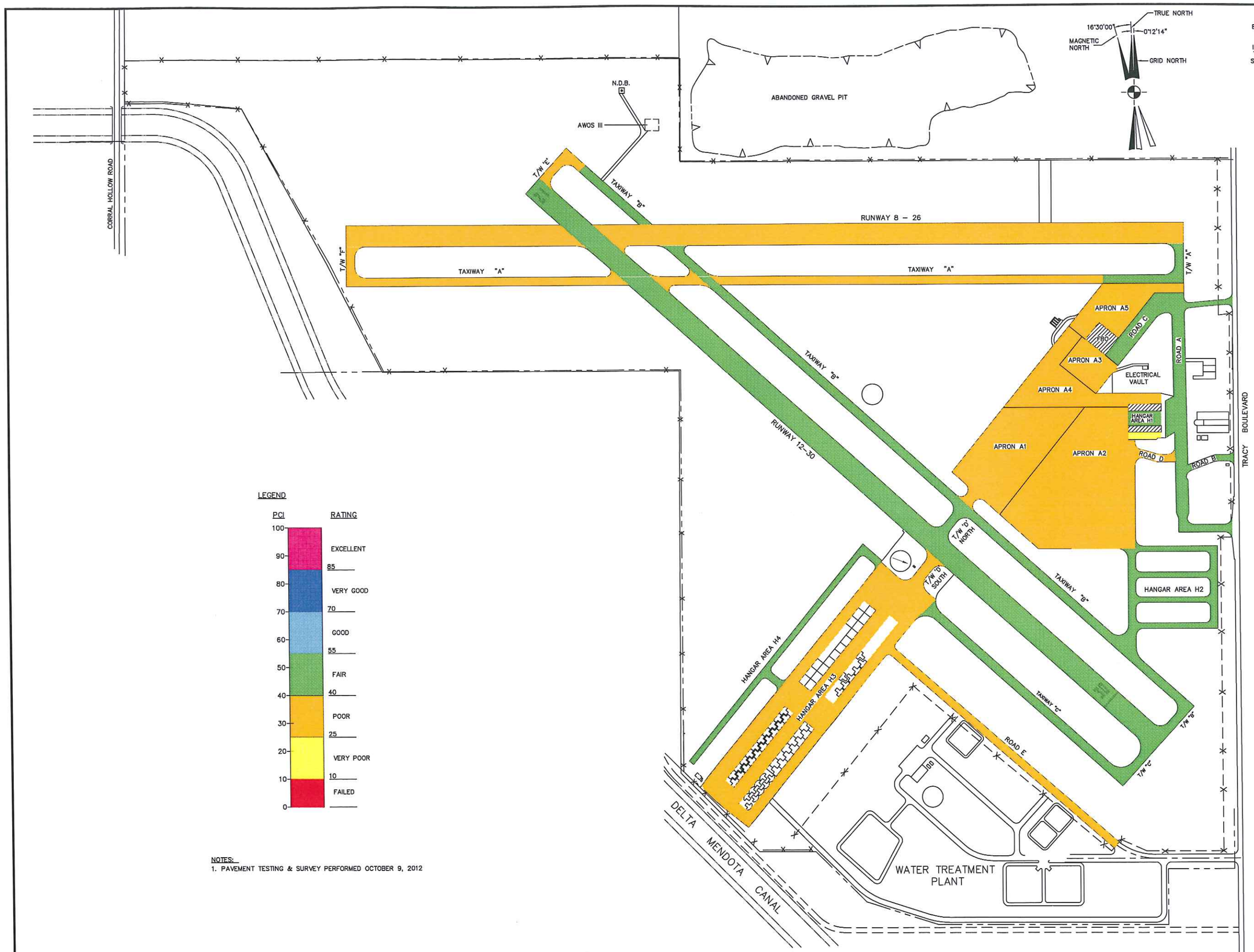
PAVEMENT EVALUATION

STATIONING CONTROL LAYOUT PLAN

DESIGN BY:	DB
DRAWN BY:	DB
CHK'D BY:	RWB
DATE:	MARCH 11, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	1"=200'

SHEET NUMBER

PLATE No. C2



LEGEND

PCI	RATING
100	
	EXCELLENT
85	
	VERY GOOD
70	
	GOOD
55	
	FAIR
40	
	POOR
25	
	VERY POOR
10	
	FAILED
0	

NOTES:
1. PAVEMENT TESTING & SURVEY PERFORMED OCTOBER 9, 2012

Reinard W. Brandley
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ENGINEER OF RECORD
REGISTERED PROFESSIONAL ENGINEER * REINARD W. BRANDLEY * No. C 66338 Exp. 6-30-2014 * CIVIL * STATE OF CALIFORNIA

NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT EVALUATION
SURFACE DISTRESS - PAVEMENT CONDITION INDEX (PCI)

DESIGN BY:	DB
DRAWN BY:	DB
CHK'D BY:	RWB
DATE:	MARCH 11, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	1"=200'

SHEET NUMBER
PLATE No. C3

TABLE No. C1 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Runway 12-30		
Station:	0+00 to 14+50		
Dimensions:	1450' x 100'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	6		150	0.35		
	AB	12		40	0.35		
	ASB						
	Subgrade	48		10	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1980	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)
Moderate Longitudinal Cracks, Some Transverse Cracking
9' Paved Shoulder on North Side with transverse cracking, 3' Paved Shoulder on south side.
Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None
Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	A	A1
FWD Center Plate Deflection - 17 K Load	13-37 (35)	13-37 (35)
Pavement Structure Remaining Life - Years	182	145
	FAA - FAARFIELD	
Traffic Index	A	A1
FWD Center Plate Deflection - 17 K Load	13-37 (35)	13-37 (35)
Pavement Structure Remaining Life - Years	1998	1556

Recommended Rehabilitation:

Date	Rehab. Code	Description
2013	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2028	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south end of Runway 30 proceeding northwest.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C2 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Runway 12-30		
Station:	14+50 to 33+00		
Dimensions:	1850' x 100'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	6		150	0.35		
	AB	12		40	0.35		
	ASB						
	Subgrade	48		10	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1980	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)
Moderate Longitudinal Cracks, Some Transverse Cracking
9' Paved Shoulder on North Side with transverse cracking, 3' Paved Shoulder on south side.
Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None
Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	A	A1
FWD Center Plate Deflection - 17 K Load	17-34 (35)	17-34 (35)
Pavement Structure Remaining Life - Years	182 - 270	145 - 226
	FAA - FAARFIELD	
Traffic Index	A	A1
FWD Center Plate Deflection - 17 K Load	17-34 (35)	17-34 (35)
Pavement Structure Remaining Life - Years	1998	1556

Recommended Rehabilitation:

Date	Rehab. Code	Description
2013	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2028	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south end of Runway 30 proceeding northwest.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C3 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Runway 12-30		
Station:	33+00 to 40+00		
Dimensions:	700' x 100'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	6		150	0.35		
	AB	12		40	0.35		
	ASB						
	Subgrade	48		10	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1980	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)

Moderate Longitudinal Cracks, Some Transverse Cracking

9' Paved Shoulder on North Side with transverse cracking, 3' Paved Shoulder on south side.

Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	B	B1
FWD Center Plate Deflection - 17 K Load	14-36 (35)	14-36 (35)
Pavement Structure Remaining Life - Years	228 - 225	178 - 176
	FAA - FAARFIELD	
Traffic Index	B	B1
FWD Center Plate Deflection - 17 K Load	14-36 (35)	14-36 (35)
Pavement Structure Remaining Life - Years	2211	1722

Recommended Rehabilitation:

Date	Rehab. Code	Description
2013	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2028	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south end of Runway 30 proceeding northwest.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C4 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway BE		
Station:	0+00 to 16+00		
Dimensions:	1600' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	3.5		350	0.35		
	AB	11		50	0.35		
	ASB						
	Subgrade	48		11	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1980	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (minor ravelling)

Longitudinal Cracking - Moderate in wheel paths, Transverse Cracking - Very Few

Weathering - Moderate Ravelling - Minor (seal coat) Rutting - Minor

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	C	C1
FWD Center Plate Deflection - 17 K Load	15-35 (36)	15-35 (36)
Pavement Structure Remaining Life - Years	105	80
	FAA - FAARFIELD	
Traffic Index	C	C1
FWD Center Plate Deflection - 17 K Load	15-35 (36)	15-35 (36)
Pavement Structure Remaining Life - Years	971	754

Recommended Rehabilitation:

Date	Rehab. Code	Description
2013	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2028	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at edge of Runway 30 proceeding northwest.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C5 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway BE		
Station:	16+00 to 32+00		
Dimensions:	1600' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	3.5		350	0.35		
	AB	11		50	0.35		
	ASB						
	Subgrade	48		11	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1980	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (minor ravelling)

Longitudinal Cracking - Moderate in wheel paths, Transverse Cracking - Very Few

Weathering - Moderate Ravelling - Minor (seal coat) Rutting - Minor

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	D	D1
FWD Center Plate Deflection - 17 K Load	17-40 (36)	17-40 (36)
Pavement Structure Remaining Life - Years	106	82
	FAA - FAARFIELD	
Traffic Index	D	D1
FWD Center Plate Deflection - 17 K Load	17-40 (36)	17-40 (36)
Pavement Structure Remaining Life - Years	1030	800

Recommended Rehabilitation:

Date	Rehab. Code	Description
2013	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2028	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at edge of Runway 30 proceeding northwest.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C6 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway BE		
Station:	32+00 to 40+00		
Dimensions:	800' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	3.5		350	0.35		
	AB	11		50	0.35		
	ASB						
	Subgrade	48		11	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1980	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (minor ravelling)

Longitudinal Cracking - Moderate in wheel paths, Transverse Cracking - Very Few

Weathering - Moderate Ravelling - Minor (seal coat) Rutting - Minor

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	E	E1
FWD Center Plate Deflection - 17 K Load	28-37 (36)	28-37 (36)
Pavement Structure Remaining Life - Years	132	101
	FAA - FAARFIELD	
Traffic Index	E	E1
FWD Center Plate Deflection - 17 K Load	28-37 (36)	28-37 (36)
Pavement Structure Remaining Life - Years	1189	928

Recommended Rehabilitation:

Date	Rehab. Code	Description
2013	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2028	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at edge of Runway 30 proceeding northwest.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C7 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway BE		
Station:	40+00 to 43+00		
Dimensions:	300' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	3.5		150	0.35		
	AB	11		40	0.35		
	ASB						
	Subgrade	48		12	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1980	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (minor ravelling)

Longitudinal Cracking - Moderate in wheel paths, Transverse Cracking - Very Few

Weathering - Moderate Ravelling - Minor (seal coat) Rutting - Minor

Pavement Rating = Poor PCI = 35

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	E	E1
FWD Center Plate Deflection - 17 K Load	40-45 (45)	40-45 (45)
Pavement Structure Remaining Life - Years	116	89
	FAA - FAARFIELD	
Traffic Index	E	E1
FWD Center Plate Deflection - 17 K Load	40-45 (45)	40-45 (45)
Pavement Structure Remaining Life - Years	438	340

Recommended Rehabilitation:

Date	**Rehab. Code**	**Description**
2013	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2028	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at edge of Runway 30 proceeding northwest.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C8 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Runway 8-26		
Station:	0+00 to 40+00		
Dimensions:	4000' x 100'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	6		150	0.35		
	AB	11		30	0.35		
	ASB						
	Subgrade	18		5	0.35		
	Sub-soil	S.I.		15	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1977	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat), slurry is cracked on existing airfield marking
Longitudinal Cracking - Moderate, Transverse Cracking - Moderate, Some Block Cracking at edges
5' Paved Shoulder on North Side, 15' Paved Shoulder on south side with block cracking
Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None
Pavement Rating = Poor PCI = 30

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	F	F1
FWD Center Plate Deflection - 17 K Load	21-51 (48)	21-51 (48)
Pavement Structure Remaining Life - Years	338 - 615	269 - 518
	FAA - FAARFIELD	
Traffic Index	F	F1
FWD Center Plate Deflection - 17 K Load	21-51 (48)	21-51 (48)
Pavement Structure Remaining Life - Years	141 - 9670	115 - 8072

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at east end of Runway 26 proceeding west.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C9 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway AF		
Station:	0+00 to 5+00		
Dimensions:	500' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	6		150	0.35		
	AB	10		40	0.35		
	ASB						
	Subgrade	18		12	0.35		
	Sub-soil	S.I.		15	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1977	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)

Longitudinal Cracking - Minor, Transverse Cracking - Minor

Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	G	G1
FWD Center Plate Deflection - 17 K Load	34-44 (38)	34-44 (38)
Pavement Structure Remaining Life - Years	408	327
	FAA - FAARFIELD	
Traffic Index	G	G1
FWD Center Plate Deflection - 17 K Load	34-44 (38)	34-44 (38)
Pavement Structure Remaining Life - Years	5700	4395

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south edge of Runway 26 proceeding west.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C10 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway AF		
Station:	5+00 to 24+00		
Dimensions:	1900' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	6		150	0.35		
	AB	10		40	0.35		
	ASB						
	Subgrade	18		12	0.35		
	Sub-soil	S.I.		15	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1977	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)

Longitudinal Cracking - Minor, Transverse Cracking - Minor

Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None

Pavement Rating = Poor PCI = 35

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	H	H1
FWD Center Plate Deflection - 17 K Load	22-48 (38)	22-48 (38)
Pavement Structure Remaining Life - Years	342	270
	FAA - FAARFIELD	
Traffic Index	H	H1
FWD Center Plate Deflection - 17 K Load	22-48 (38)	22-48 (38)
Pavement Structure Remaining Life - Years	4598	3583

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south edge of Runway 26 proceeding west.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C11 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway AF		
Station:	24+00 to 35+00		
Dimensions:	a' x a'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	6		150	0.35		
	AB	10		40	0.35		
	ASB						
	Subgrade	18		12	0.35		
	Sub-soil	S.I.		15	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1977	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)

Longitudinal Cracking - Minor, Transverse Cracking - Minor

Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None

Pavement Rating = Poor PCI = 35

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	I	I1
FWD Center Plate Deflection - 17 K Load	30-35 (38)	30-35 (38)
Pavement Structure Remaining Life - Years	204	163
	FAA - FAARFIELD	
Traffic Index	I	I1
FWD Center Plate Deflection - 17 K Load	30-35 (38)	30-35 (38)
Pavement Structure Remaining Life - Years	3079	2385

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south edge of Runway 26 proceeding west.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C12 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway AF		
Station:	35+00 to 43+00		
Dimensions:	800' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	6		150	0.35		
	AB	7.5		20	0.35		
	ASB						
	Subgrade	18		9	0.35		
	Sub-soil	S.I.		20	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1977	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)

Longitudinal Cracking - Minor, Transverse Cracking - Minor

Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None

Pavement Rating = Poor PCI = 35

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	I	I1
FWD Center Plate Deflection - 17 K Load	38-49 (47)	38-49 (47)
Pavement Structure Remaining Life - Years	114	88
	FAA - FAARFIELD	
Traffic Index	I	I1
FWD Center Plate Deflection - 17 K Load	38-49 (47)	38-49 (47)
Pavement Structure Remaining Life - Years	99	75

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south edge of Runway 26 proceeding west.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C13 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway D (North)		
Station:	0+00 to 1+50		
Dimensions:	150' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	5.5		250	0.35		
	AB	12.5		40	0.35		
	ASB						
	Subgrade	48		11	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1977	Heater Remix and 2"-3" AC Overlay

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)

Longitudinal Cracking - Moderate, Transverse Cracking - Moderate

Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	J	J1
FWD Center Plate Deflection - 17 K Load	30-37 (32)	30-37 (32)
Pavement Structure Remaining Life - Years	413	381
	FAA - FAARFIELD	
Traffic Index	J	J1
FWD Center Plate Deflection - 17 K Load	30-37 (32)	30-37 (32)
Pavement Structure Remaining Life - Years	Infinite	Infinite

Recommended Rehabilitation:

Date	**Rehab. Code**	**Description**
2013	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2028	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at north edge of Runway 30 proceeding northeast.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C14 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway D (South)		
Station:	0+00 to 1+50		
Dimensions:	150' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	3		250	0.35		
	AB	7		35	0.35		
	ASB						
	Subgrade	48		10	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed: 1989

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)

Longitudinal Cracking - Moderate, Transverse Cracking - Few Moderate

Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None

Pavement Rating = Poor PCI = 39

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	J	J1
FWD Center Plate Deflection - 17 K Load	52+56 (54)	52+56 (54)
Pavement Structure Remaining Life - Years	208	191
	FAA - FAARFIELD	
Traffic Index	J	J1
FWD Center Plate Deflection - 17 K Load	52+56 (54)	52+56 (54)
Pavement Structure Remaining Life - Years	Infinite	Infinite

Recommended Rehabilitation:

Date	Rehab. Code	Description
2016	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2031	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south edge of Runway 30 proceeding southwest.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C15 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Taxiway C		
Station:	0+00 to 14+00		
Dimensions:	1400' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	8		45	0.35		
	ASB						
	Subgrade	48		11	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

No seal coat.

Longitudinal Cracking - Some moderate cracking at edges, crack sealed.

Weathering - Moderate Ravelling - None Rutting - None

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	J	J1
FWD Center Plate Deflection - 17 K Load	28-53 (53)	28-53 (53)
Pavement Structure Remaining Life - Years	232 - 406	214 - 375
	FAA - FAARFIELD	
Traffic Index	J	J1
FWD Center Plate Deflection - 17 K Load	28-53 (53)	28-53 (53)
Pavement Structure Remaining Life - Years	Infinite	Infinite

Recommended Rehabilitation:

Date	Rehab. Code	Description
2016	B	Rehabilitate Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2031	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Station 0+00 located at south edge of Runway 30 proceeding southwest.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C16 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Apron A1		
Station:	83/85 Overlay		
Dimensions:	490' x 305'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	5.5		250	0.35		
	AB	6		50	0.35		
	ASB						
	Subgrade	48		13	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1983/1985	1"-3" AC Overlay

Pavement Condition:

No seal coat.

Longitudinal and Transverse Cracking - Moderate to Severe, Sealed, mostly at paving joints some at edge of apron.

Weathering - Moderate Ravelling - Minor Rutting - None

Pavement Rating = Poor PCI = 35

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	K	K1
FWD Center Plate Deflection - 17 K Load	25-30 (30)	25-30 (30)
Pavement Structure Remaining Life - Years	77 - 163	58 - 126
	FAA - FAARFIELD	
Traffic Index	K	K1
FWD Center Plate Deflection - 17 K Load	25-30 (30)	25-30 (30)
Pavement Structure Remaining Life - Years	361 - 15600	279 - 12185

Recommended Rehabilitation:

Date	Rehab. Code	Description
2014	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2030	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C17 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Apron A2		
Station:	83/85 Reconstruct		
Dimensions:	770' x 500'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	5		35	0.35		
	ASB	4.5		20	0.35		
	Subgrade	48		6	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1983/1985	Pavement Section Reconstruction

Pavement Condition:

No seal coat.

Longitudinal and Transverse Cracking - Moderate to Severe, Sealed, mostly at paving joints some at edge of apron.

Weathering - Moderate Ravelling - Minor Rutting - None

Pavement Rating = Poor PCI = 35

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	K	K1
FWD Center Plate Deflection - 17 K Load	40-78 (78)	40-78 (78)
Pavement Structure Remaining Life - Years	18 - 130	13 - 99
	FAA - FAARFIELD	
Traffic Index	K	K1
FWD Center Plate Deflection - 17 K Load	40-78 (78)	40-78 (78)
Pavement Structure Remaining Life - Years	1 - 2600	0 - 2025

Recommended Rehabilitation:

Date	Rehab. Code	Description
2014	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2030	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C18 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Apron A3		
Station:	1999 Reconstruct		
Dimensions:	170' x 220'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	3		150	0.35		
	AB	5		40	0.35		
	ASB	5		15	0.35		
	Subgrade	48		7	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**
	1999	Pavement Section Reconstruction

Pavement Condition:

No Seal Coat

Cracking - Some moderate block cracking

Weathering - Moderate Ravelling - Minor Rutting - None

Pavement Rating = Poor PCI = 38

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	K	K1
FWD Center Plate Deflection - 17 K Load	30-69 (69)	30-69 (69)
Pavement Structure Remaining Life - Years	16	11
	FAA - FAARFIELD	
Traffic Index	K	K1
FWD Center Plate Deflection - 17 K Load	30-69 (69)	30-69 (69)
Pavement Structure Remaining Life - Years	4	2

Recommended Rehabilitation:

Date	Rehab. Code	Description
2014	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2030	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C19 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Apron A4		
Station:	Old North Apron (South Portion)		
Dimensions:	300' x 350'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	4		60	0.35		
	ASB						
	Subgrade	48		7	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)
Longitudinal and Transverse Cracking - Moderate to Severe, Sealed, mostly at paving joints,
Some moderate block cracking.
Weathering - Moderate Ravelling - Minor Rutting - None
Pavement Rating = Poor PCI = 39

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	K	K1
FWD Center Plate Deflection - 17 K Load	45-85 (80)	45-85 (80)
Pavement Structure Remaining Life - Years	2	2
	FAA - FAARFIELD	
Traffic Index	K	K1
FWD Center Plate Deflection - 17 K Load	45-85 (80)	45-85 (80)
Pavement Structure Remaining Life - Years	0	0

Recommended Rehabilitation:

Date	Rehab. Code	Description
2014	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2030	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C20 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Apron A5		
Station:	Old North Apron (North Portion)		
Dimensions:	300' x 230'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	4		60	0.35		
	ASB						
	Subgrade	48		7	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)
Longitudinal and Transverse Cracking - Moderate to Severe, Sealed,
Some moderate to severe block cracking.
Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None
Pavement Rating = Poor PCI = 39

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	L	L1
FWD Center Plate Deflection - 17 K Load	45-80 (80)	45-80 (80)
Pavement Structure Remaining Life - Years	10	7
	FAA - FAARFIELD	
Traffic Index	L	L1
FWD Center Plate Deflection - 17 K Load	45-80 (80)	45-80 (80)
Pavement Structure Remaining Life - Years	0	0

Recommended Rehabilitation:

Date	Rehab. Code	Description
2014	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2030	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C21 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Hangar Area H1		
Station:	North Hangars Row H1		
Dimensions:	160' x 50'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	4		50	0.35		
	ASB						
	Subgrade	48		20	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed: 1975

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Severe Weathering - No seal coat.

Longitudinal and Transverse Cracking - Moderate to Severe

Weathering - Severe Ravelling - None Rutting - None

Pavement Rating = Poor PCI = 39

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	N	N1
FWD Center Plate Deflection - 10 K Load	22-27 (27)	22-27 (27)
Pavement Structure Remaining Life - Years	321	289
	FAA - FAARFIELD	
Traffic Index	N	N1
FWD Center Plate Deflection - 10 K Load	22-27 (27)	22-27 (27)
Pavement Structure Remaining Life - Years	Infinite	Infinite

Recommended Rehabilitation:

Date	Rehab. Code	Description
2014	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2031	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C22 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Hangar Area H1		
Station:	North Hangars Row H2		
Dimensions:	160' x 70'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		150	0.35		
	AB	4		20	0.35		
	ASB						
	Subgrade	48		5	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed: 1975

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Severe Weathering - No seal coat on Row H3. Row H2 has a seal coat (ravelling)
Longitudinal and Transverse Cracking - Moderate to Severe
Light Block Cracking on Row H2. Large Patched Area on Row H3
Weathering - Severe Ravelling - Moderate Rutting - None
Pavement Rating = Fair PCI = 44

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	N	N1
FWD Center Plate Deflection - 10 K Load	73-90 (80)	73-90 (80)
Pavement Structure Remaining Life - Years	27	24
	FAA - FAARFIELD	
Traffic Index	N	N1
FWD Center Plate Deflection - 10 K Load	73-90 (80)	73-90 (80)
Pavement Structure Remaining Life - Years	93	82

Recommended Rehabilitation:

Date	Rehab. Code	Description
2014	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2031	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C23 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Hangar Area H1		
Station:	North Hangars Row H3		
Dimensions:	160' x 40'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	4		50	0.35		
	ASB						
	Subgrade	48		10	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed: 1975

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Severe Weathering - No seal coat.
Longitudinal and Transverse Cracking - Severe
Large Patched Area
Weathering - Severe Ravelling - Moderate Rutting - None
Pavement Rating = Very Poor PCI = 24

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	N	N1
FWD Center Plate Deflection - 10 K Load	32-45 (40)	32-45 (40)
Pavement Structure Remaining Life - Years	132	117
	FAA - FAARFIELD	
Traffic Index	N	N1
FWD Center Plate Deflection - 10 K Load	32-45 (40)	32-45 (40)
Pavement Structure Remaining Life - Years	Infinite	Infinite

Recommended Rehabilitation:

Date	Rehab. Code	Description
2014	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2031	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C24 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Hangar Area H2		
Station:	North Hangars Future Rows H4 to H8		
Dimensions:	72,000 square feet		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	5		35	0.35		
	ASB	4.5		20	0.35		
	Subgrade	48		6	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed: 1985

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Moderate Weathering - No seal coat.

Longitudinal Cracks - Moderate cracking, mostly along taxiway edges Transverse Cracks - Very Few Cracks are Sealed.

Weathering - Moderate Ravelling - None Rutting - None

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	J	J1
FWD Center Plate Deflection - 17 K Load	26-80 (78)	26-80 (78)
Pavement Structure Remaining Life - Years	138 - 413	127 - 381
	FAA - FAARFIELD	
Traffic Index	J	J1
FWD Center Plate Deflection - 17 K Load	26-80 (78)	26-80 (78)
Pavement Structure Remaining Life - Years	Infinite	Infinite

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	D, E	Crack Repair, Seal Cracks, & Seal Coat
2022	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C25 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Hangar Area H3		
Station:	Taxilanes for Existing South Hangars		
Dimensions:	300,000 square feet		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	3		250	0.35		
	AB	7		25	0.35		
	ASB						
	Subgrade	48		10	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Slurry Sealed (moderate ravelling of seal coat)
Longitudinal Cracks - Moderate, Transverse Cracks - Moderate,
Block Cracking - Moderate in front of hangars, Slight Rutting between hangars.
Weathering - Moderate Ravelling - Moderate (seal coat) Rutting - None
Pavement Rating = Poor PCI = 32

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	M	M1
FWD Center Plate Deflection - 17 K Load	35-65 (61)	35-65 (61)
Pavement Structure Remaining Life - Years	76 - 177	69 - 163
	FAA - FAARFIELD	
Traffic Index	M	M1
FWD Center Plate Deflection - 17 K Load	35-65 (61)	35-65 (61)
Pavement Structure Remaining Life - Years	Infinite	Infinite

Recommended Rehabilitation:

Date	**Rehab. Code**	**Description**
2016	A	Remove and Reconstruct Existing Section
2023	D, E	Crack Repair, Seal Cracks, & Seal Coat
2031	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C26 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Hangar Area H4		
Station:	Taxilane for Future South Development		
Dimensions:	41,000 square feet		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	5		60	0.35		
	ASB	5		35	0.35		
	Subgrade	48		15	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Moderate Weathering - No Seal Coat

Longitudinal Cracks - Light, Few along edge of taxiway, Transverse Cracks - None

Weathering - Moderate Ravelling - None Rutting - None

Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	M	M1
FWD Center Plate Deflection - 17 K Load	34-46 (42)	34-46 (42)
Pavement Structure Remaining Life - Years	194 - 196	178 - 179
	FAA - FAARFIELD	
Traffic Index	M	M1
FWD Center Plate Deflection - 17 K Load	34-46 (42)	34-46 (42)
Pavement Structure Remaining Life - Years	Infinite	Infinite

Recommended Rehabilitation:

Date	**Rehab. Code**	**Description**
2015	D, E	Crack Repair, Seal Cracks, & Seal Coat
2022	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C27 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Road A - Airport Access Road		
Station:	0+00 to 14+00		
Dimensions:	1400' x 60'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	-		-	0.35		
	AB	-		-	0.35		
	ASB	0		0	0.35		
	Subgrade	-		-	0.35		
	Sub-soil	S.I.		-	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Station 0-200 - No Slurry Seal, Station 200-1400 - Slurry Sealed
Longitudinal Cracks - Moderate, Transverse Cracks - Moderate

Weathering - Moderate Ravelling - Light Rutting - None
Pavement Rating = Fair PCI = 40

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	-	-1
FWD Center Plate Deflection - 17 K Load	33-95 (95)	33-95 (95)
Pavement Structure Remaining Life - Years	-	-
	FAA - FAARFIELD	
Traffic Index	-	-1
FWD Center Plate Deflection - 17 K Load	33-95 (95)	33-95 (95)
Pavement Structure Remaining Life - Years	-	-

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	D, E	Crack Repair, Seal Cracks, & Seal Coat
2022	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.
FWD used was mean value for section - See FWD Graphs, Appendix B
For Traffic Index see Appendix D.

TABLE No. C28 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Road B - Airport Secondary Access Road		
Station:	0+00 to 1+20		
Dimensions:	120' x 30'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	5		80	0.35		
	ASB	5		55	0.35		
	Subgrade	48		13	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed: 1985

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Slurry Sealed, Moderate Weathering

No Cracking

Weathering - Moderate Ravelling - Light Rutting - None

Pavement Rating = Fair PCI = 45

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	O	O1
FWD Center Plate Deflection - 17 K Load	30-38 (38)	30-38 (38)
Pavement Structure Remaining Life - Years	39	34
	FAA - FAARFIELD	
Traffic Index	O	O1
FWD Center Plate Deflection - 17 K Load	30-38 (38)	30-38 (38)
Pavement Structure Remaining Life - Years	6256	5708

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	D, E	Crack Repair, Seal Cracks, & Seal Coat
2022	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C29 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Road C - FBO Parking Lot		
Station:	0+00 to 3+70		
Dimensions:	370' x 80'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	-		-	0.35		
	AB	-		-	0.35		
	ASB	0		0	0.35		
	Subgrade	-		-	0.35		
	Sub-soil	S.I.		-	0.35		

Date Constructed:

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Parking Lot. Station 0-290 - No Slurry Seal, Station 290-370 - Slurry Sealed

Longitudinal Cracks - None, Transverse Cracks - None

Weathering - Moderate Ravelling - Light Rutting - None

Pavement Rating = Fair PCI = 45

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	-	-1
FWD Center Plate Deflection - 17 K Load	26-61 (38)	26-61 (38)
Pavement Structure Remaining Life - Years	-	-
	FAA - FAARFIELD	
Traffic Index	-	-1
FWD Center Plate Deflection - 17 K Load	26-61 (38)	26-61 (38)
Pavement Structure Remaining Life - Years	-	-

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	D, E	Crack Repair, Seal Cracks, & Seal Coat
2022	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C30 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Road D - North Apron Access Road		
Station:	6+20 to 7+20		
Dimensions:	100' x 30'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2		250	0.35		
	AB	5		90	0.35		
	ASB	5		60	0.35		
	Subgrade	48		23	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed: 1985

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

No seal coat.

Longitudinal and Transverse Cracking - Moderate to Severe, Sealed

Weathering - Moderate Ravelling - Moderate Rutting - None

Pavement Rating = Poor PCI = 35

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	O	O1
FWD Center Plate Deflection - 17 K Load	18-28 (28)	18-28 (28)
Pavement Structure Remaining Life - Years	65	57
	FAA - FAARFIELD	
Traffic Index	O	O1
FWD Center Plate Deflection - 17 K Load	18-28 (28)	18-28 (28)
Pavement Structure Remaining Life - Years	83000	75000

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	D, E	Crack Repair, Seal Cracks, & Seal Coat
2022	D, E	Crack Repair, Seal Cracks, & Seal Coat
2029	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

TABLE No. C31 - PAVEMENT CONDITION SURVEY AND REHABILITATION SCHEDULE

Airport:	Tracy Municipal Airport	**Date of Survey:**	October 9, 2012
Element:	Road E - South Hangar Access Road		
Station:	0+00 to 14+00		
Dimensions:	1400' x 35'		
FAA Pavement Strength Survey - Element Identification (Form 5335-1):	Not Available		

		T-inch	CBR	E ksi	μ	K pci	Remarks
Existing Pavement Section:	**PFC**						
	PCC						
	AC	2.5		250	0.35		
	AB	6		30	0.35		
	ASB	0		0	0.35		
	Subgrade	48		13	0.35		
	Sub-soil	S.I.		25	0.35		

Date Constructed: 1989

Rehabilitation Record:	**Date**	**Type**

Pavement Condition:

Moderate Weathering - No Seal Coat

Longitudinal Cracks - Moderate 3'-4' from edge of road, Transverse Cracks - Some light cracking

Weathering - Moderate Ravelling - Moderate Rutting - None

Pavement Rating = Poor PCI = 37

Pavement Remaining Life Analysis	Brandley - Fatigue Analysis	
Traffic Index	O	O1
FWD Center Plate Deflection - 17 K Load	26-85 (58)	26-85 (58)
Pavement Structure Remaining Life - Years	3 - 12	2 - 12
	FAA - FAARFIELD	
Traffic Index	O	O1
FWD Center Plate Deflection - 17 K Load	26-85 (58)	26-85 (58)
Pavement Structure Remaining Life - Years	4 - 59	3 - 52

Recommended Rehabilitation:

Date	Rehab. Code	Description
2015	D, E	Crack Repair, Seal Cracks, & Seal Coat
2021	B	Rehabilitate Existing Section
2031	D, E	Crack Repair, Seal Cracks, & Seal Coat

Remarks: Stationing as shown in Appendix B.

FWD used was mean value for section - See FWD Graphs, Appendix B

For Traffic Index see Appendix D.

Appendix D
Traffic Summary

This Appendix summarizes the design characteristics of all the aircraft that are currently utilizing the airport. It also provides existing aircraft operations by type, as well as the number of annual operations currently operating at the airport.

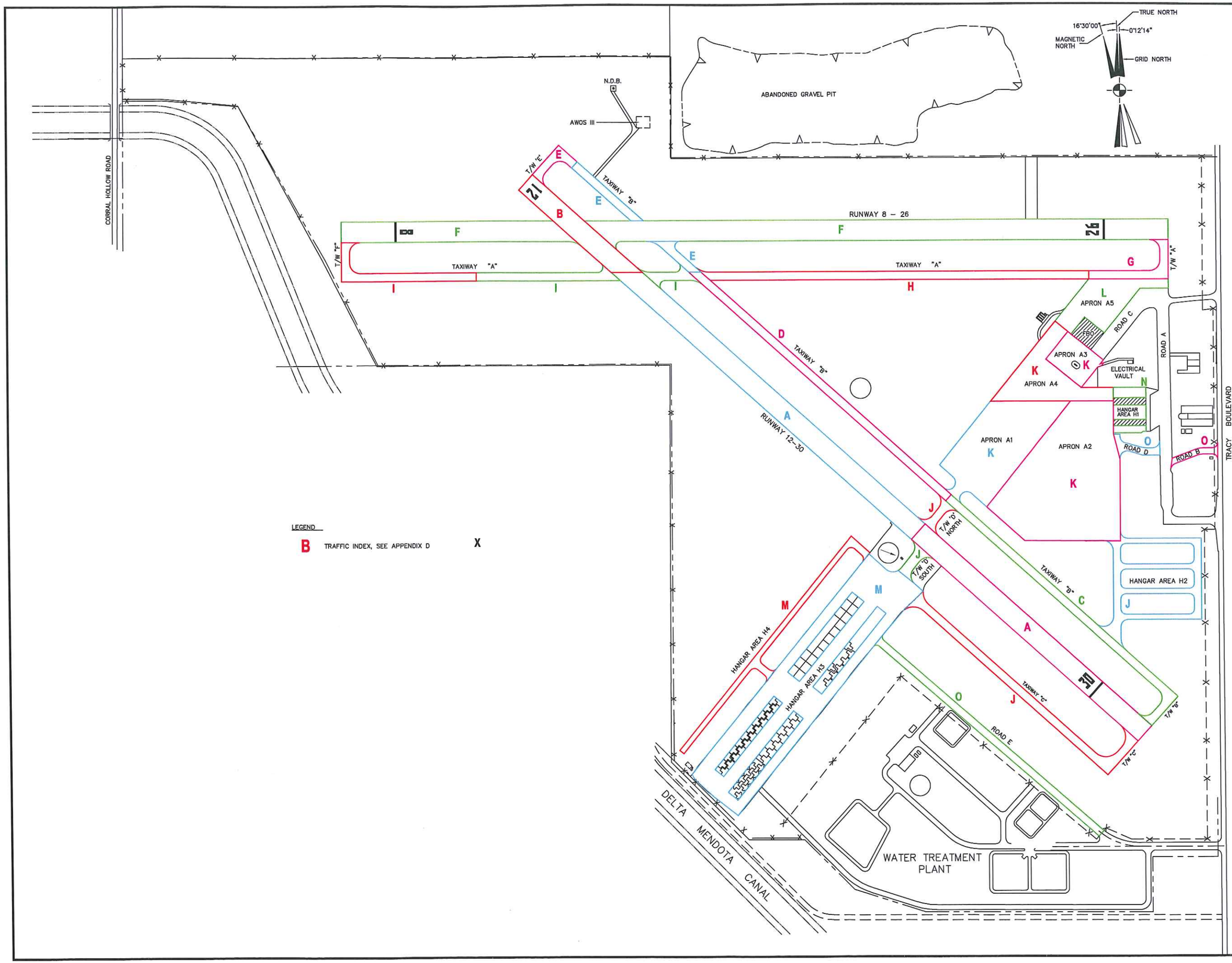
The total annual operations of each aircraft group for each area have been calculated as "Traffic Indexes" and are included in Table No. D2. The traffic for each Traffic Index is the traffic that was used to calculate deep-seated distresses in the pavement sections and to calculate the predicted remaining life of each pavement section.

The Fixed Base Operator (FBO) at the airport feels there is a potential for additional hangar development that he believes will attract an increased amount of general aviation aircraft as well as more jet aircraft to the Tracy Municipal Airport. The traffic indexes used in this analysis were based on existing traffic and likely potential increases in traffic. The FBO has a much more optimistic view of the amount of forecast traffic that his new hangar development could generate. Since the number of operations for the optimistic forecast is significantly different than the likely forecast traffic, some enhanced traffic indexes were created and used for additional analysis. The additional analysis has been provided for use if this future optimistic traffic forecast is realized. In order to evaluate the effects that additional traffic would have, a new set of traffic indexes were prepared and used in the Fatigue Analysis studies. These new enhanced traffic indexes utilize the optimistic forecasts that have higher operations of the single engine aircraft and all jet aircraft. The new enhanced traffic indexes have also been included in Table No. D3. The traffic index designation is the same as with the existing forecasts except that a "1" has been added to the Index. For example, traffic index "A" is the likely forecast of traffic and "A1" is the optimistic forecast of traffic. The Fatigue Analysis and FAARFIELD analysis was conducted using both the forecast traffic indexes and the enhanced traffic indexes.

A table of contents of this appendix is shown below:

Plates:

Tables



LEGEND

B TRAFFIC INDEX, SEE APPENDIX D

X

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
6125 King Road, Suite 201 • Loomis, California 95650-8004 • (916) 652-4725

REGISTERED PROFESSIONAL ENGINEER * REINARD W. BRANDLEY * No. C 65538 Exp. 6-30-2014 * STATE OF CALIFORNIA *

ENGINEER OF RECORD

NO.	REVISIONS	BY	APR	DATE

TRACY MUNICIPAL AIRPORT
TRACY, CALIFORNIA

PAVEMENT EVALUATION
TRAFFIC DISTRIBUTION - TRAFFIC INDEX

DESIGN BY:	DB
DRAWN BY:	DB
CHK'D BY:	RWB
DATE:	MARCH 11, 2013
CONTRACT No.	-
PROJECT NO:	51.04-13
DWG FILE:	-
DRAWING SCALE:	1"=200'

SHEET NUMBER
PLATE No. D1

APPENDIX D - TRAFFIC SUMMARY

TABLE No. D1 - Summary of Traffic Data for Tracy Municipal Airport

Aircraft Group	Aircraft Type	Aircraft MTOW (lbs)	Gear Configuration	2012 Annual Operations	2012 Daily Operations
1	Single Engine	3,000	Single	61,000	167
2	Twin Engine	4,000	Single	5,000	14
3	Jet Aircraft 15k	15,000	Dual	2,400	7
4	Jet Aircraft 30k	30,000	Dual	600	2
5	Automobile	4,000	Single	72,000	197
6	H-20 Truck	18,000/Axle	Dual	730	2
		Total 2012 Aircraft Operations		69,000	189
		Total 2012 Vehicle Operations		72,730	199

TABLE No. D2 - Summary of Traffic Indexes (Likely Forecast)

Aircraft Group	Traffic Index (Aircraft Operations in 2012)														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	48,800	13,664	7,534	28,304	8,479	12,200	6,100	6,009	22,021	29,402	7,412	3,081	48,800	3,000	-
2	4,000	1,480	1,808	2,045	785	1,000	500	218	1,715	620	3,283	528	1,000	-	-
3	2,160	1,771	1,177	1,042	821	240	120	176	379	-	2,219	181	-	-	-
4	540	443	294	262	197	60	30	46	103	-	557	44	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72,000
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	730
Total 2012 Operations	55,500	17,358	10,813	31,653	10,282	13,500	6,750	6,448	24,218	30,022	13,469	3,833			

Aircraft Group	Traffic Index Growth Rates (Calculated Average Annual Growth Rate)														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	-
2	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	-	-
3	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	-	3.50%	3.50%	-	-	-
4	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	-	3.50%	3.50%	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00%
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00%

TABLE No. D3 - Summary of Enhanced Traffic Indexes (Optimistic Forecast)

Aircraft Group	Traffic Index (Aircraft Operations in 2012)														
	A1	B1	C1	D1	E1	F1	G1	H1	I1	J1	K1	L1	M1	N1	O1
1	55,200	15,456	8,522	32,016	9,591	13,800	6,900	6,797	24,909	33,258	8,384	3,485	55,200	3,500	-
2	4,000	1,480	1,808	2,045	785	1,000	500	218	1,715	620	3,283	528	1,000	-	-
3	3,096	2,539	1,687	1,493	1,176	344	172	253	544	-	3,180	260	-	-	-
4	774	635	422	376	283	86	43	66	147	-	798	62	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86,400
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	876
Total 2012 Operations	63,070	20,109	12,438	35,930	11,835	15,230	7,615	7,333	27,315	33,878	15,644	4,334	56,200		

Aircraft Group	Traffic Index Growth Rates (Calculated Average Annual Growth Rate)														
	A1	B1	C1	D1	E1	F1	G1	H1	I1	J1	K1	L1	M1	N1	O1
1	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	1.09%	-
2	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	1.94%	-	-
3	4.01%	4.01%	4.01%	4.01%	4.01%	4.01%	4.01%	4.01%	4.01%	-	4.01%	4.01%	-	-	-
4	4.01%	4.01%	4.01%	4.01%	4.01%	4.01%	4.01%	4.01%	4.01%	-	4.01%	4.01%	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00%
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00%