OBSTRUCTION DATA SHEET

ODS 180
GREENVILLE DOWNTOWN AIRPORT
GREENVILLE, SOUTH CAROLINA

DIGITIZED FROM

OC 180
SURVEYED DECEMBER 1991
10TH EDITION

PREPARED AND DISTRIBUTED BY
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OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)

2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).

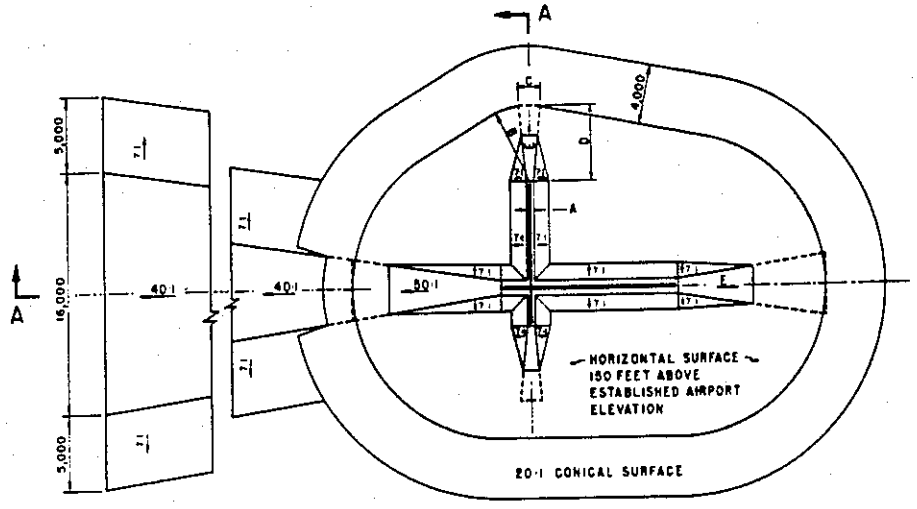
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

A(V) ..... Utility runway - visual approach only
A(NP) .... Utility runway - nonprecision instrument approach
B(V) ..... Nonutility runway - visual approach only
C ..... Nonutility runway - nonprecision instrument approach with visibility minimums greater than 3/4 mile
D ..... Nonutility runway - nonprecision instrument approach with visibility minimums as low as 3/4 mile
PIR ..... Precision instrument runway
SUPLC ... Supplemental C underlying a B(V)

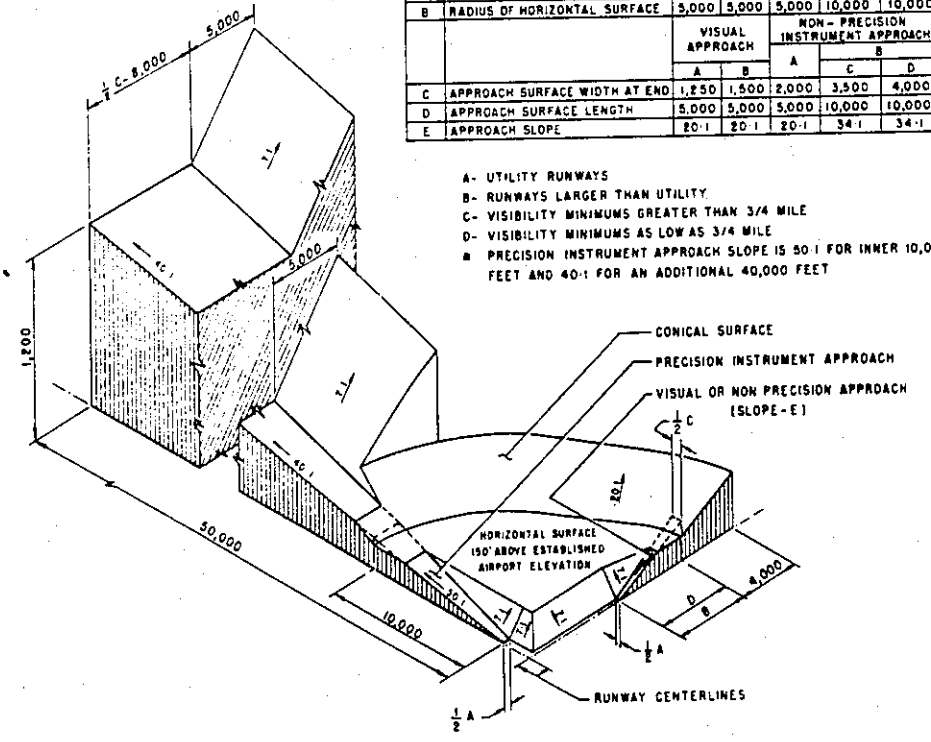
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B C	B D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	B C	B D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

A- UTILITY RUNWAYS
B- RUNWAYS LARGER THAN UTILITY
C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

X^{1}	X^{2} XXXX/XXXX^{3}	XXXXXX.XXX^{4}	XXXXXXX.XXX^{4}	XXXXXXX^{5}	XXXX/XXXX^{6}	XXXXXX.XXX^{7}	XXXXXXX.XXX^{7}						
OBJECT		LAT	LONG	A^{8}	ELEV^{9}	AGL^{10}	HAR^{11}	HAT^{11}	HAA^{11}	DEND^{12}	DTHR^{12}	DCLN^{12}	PNTR^{13}
XXXXXXXXXX		XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXX		XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

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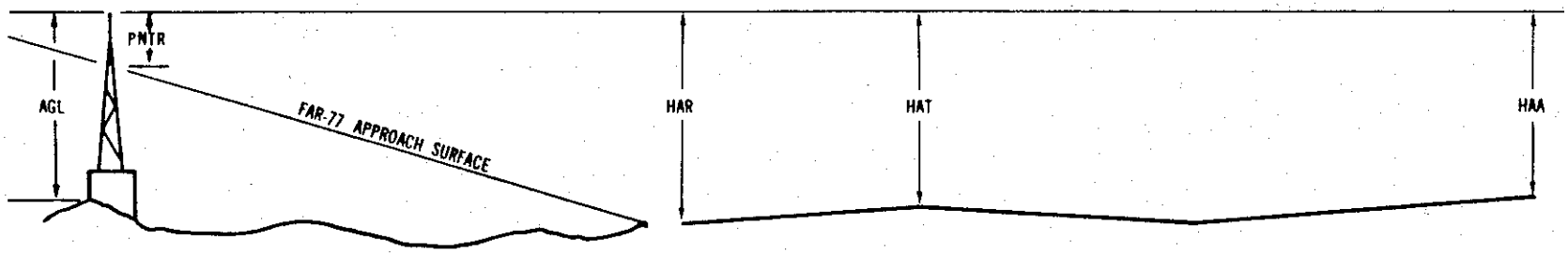

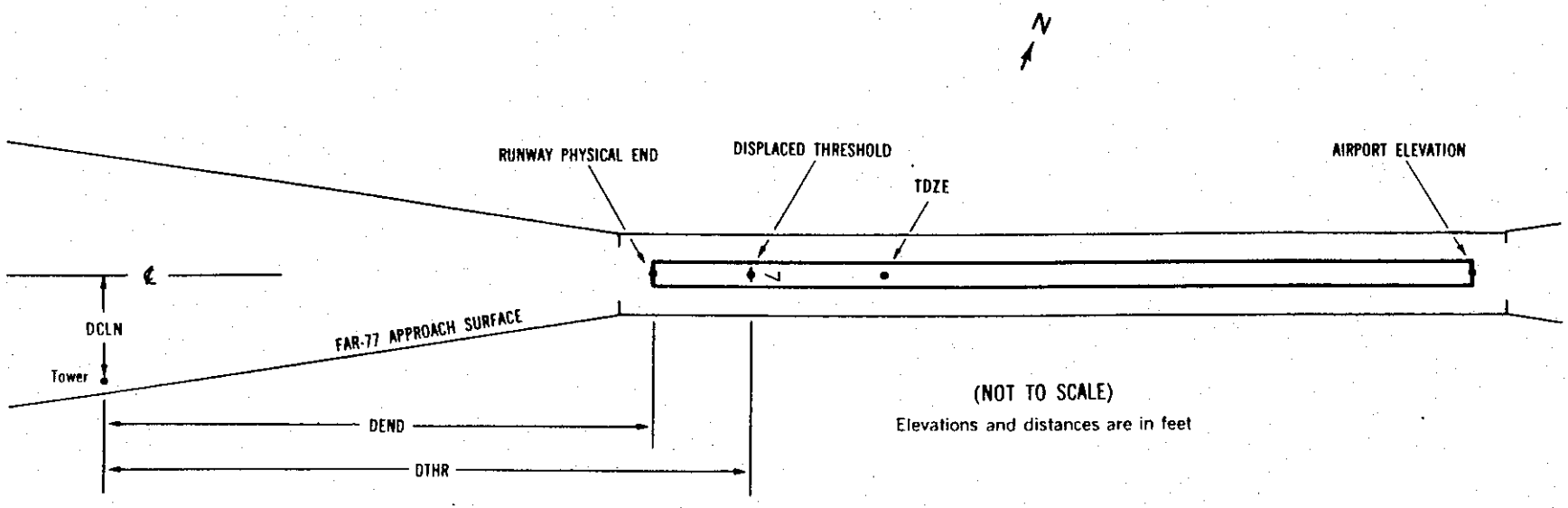

(NOT TO SCALE)

Elevations and distances are in feet

EXPLANATION OF FOOTNOTES

1 Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary area of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.

2 For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)

3 Reference runway approach physical end elevation/touchdown zone elevation

4 Latitude and longitude of reference runway approach physical end

5 Reference runway geodetic azimuth reckoned clockwise from south

6 Reference runway displaced threshold elevation/touchdown zone elevation

7 Latitude and longitude of reference runway displaced threshold

8 Accuracy Code:

Horizontal	Vertical
1 = 20	A = 2
2 = 40	B = 5
	C = 20

9 Mean Sea Level (MSL) elevation at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.

10 Height above ground level (AGL). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is ±10 feet.

11 HAA - Height above airport
HAR - Height above reference runway approach physical end
HAT - Height above reference runway touchdown zone elevation

12 DEND - Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end
DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway threshold
DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft.

A negative value for DEND or DTHR indicates object is in primary area on roll-out side of zero distance point.

13 PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

0C0180

AIRPORT ELEVATION 1048

9 A(V) 994/ 345052.688N 0822132.293W 2712019 993/1013 345052.650N 0822130.316W

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	345054.46	0822144.70	1A	1032		38	19	-16	1038	1203	155L	-4
OL ON STACK	345049.26	0822207.11	1A	1064		70	51	16	2893	3058	414R	-65

27 A(V) 1015/ 345051.761N 0822044.345W 0912047 1014/1014 345051.803N 0822046.501W

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	345053.27	0822039.17	1A	1030		15	16	-18	428	607	163R	4

36 PIR 989/1016 345025.377N 0822055.488W 1811157

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	345120.64	0822049.31	1A	1087		98	71	39	-5596		398R	39
TREE	345117.22	0822049.21	1A	1104		115	88	56	-5252		413R	58
FENCE	345116.62	0822058.43	1A	1047		58	31	-1	-5174		353L	2
FENCE POST	345115.99	0822049.69	1A	1062		73	46	14	-5126		376R	18
OL ON LIGHTED WINDSOCK	345056.42	0822100.04	1A	1043		54	27	-5	-3130		445L	26
TREE	345034.48	0822100.43	1A	1025		36	9	-23	-912		431L	27
LIGHT POLE	345021.01	0822049.27	1A	1003		14	-13	-45	431		527R	9
LIGHT POLE	345019.17	0822049.25	1A	998		9	-18	-50	617		533R	1
WINDVANE ON CHURCH	344959.85	0822058.74	1A	1035		46	19	-13	2586		217L	-2
TREE	344956.85	0822107.06	1A	1070		81	54	22	2904		904L	27
LIGHT POLE	344953.77	0822103.69	1A	1049		60	33	1	3209		617L	-1
LIGHT POLE	344952.61	0822101.51	1A	1052		63	36	4	3322		433L	1
TREE	344950.08	0822106.83	1A	1075		86	59	27	3587		871L	18
ANTENNA	344925.50	0822041.69	1A	1132		143	116	84	6028		1277R	26

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AIRPORT ELEVATION 1048

18 SUPLC 1048/1048 345118.710N 0822054.134W 0011158

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	345034.48	0822100.43	1A	1025		-23	-23	-23	-4481		431R	27
OL ON LIGHTED WINDSOCK	345056.42	0822100.04	1A	1043		-5	-5	-5	-2264		445R	26
FENCE POST	345115.99	0822049.69	1A	1062		14	14	14	-267		376L	18
FENCE	345116.62	0822058.43	1A	1047		-1	-1	-1	-219		353R	2
TREE	345117.22	0822049.21	1A	1104		56	56	56	-142		413L	58
TREE	345120.64	0822049.31	1A	1087		39	39	39	203		398L	39
POLE	345121.44	0822048.07	1A	1093		45	45	45	286		499L	42
OL ON POLE	345121.56	0822051.89	1A	1058		10	10	10	291		181L	7
LIGHT POLE	345122.67	0822047.98	1A	1083		35	35	35	411		505L	29
TREE	345124.30	0822100.33	1A	1112		64	64	64	554		528R	54
POLE	345125.91	0822047.95	1A	1092		44	44	44	738		500L	28
OL ON LOCALIZER	345126.49	0822053.94	1A	1057		9	9	9	787		0L	-8
POLE	345127.14	0822047.92	1A	1106		58	58	58	863		500L	38
TREE	345128.84	0822058.75	1A	1079		31	31	31	1016		406R	7
TREE	345131.46	0822059.95	1A	1089		41	41	41	1279		512R	9
TREE	345132.40	0822053.75	1A	1105		57	57	57	1384		3L	22
TREE	345133.28	0822045.88	1A	1157		109	109	109	1487		656L	71
TREE	345135.38	0822046.42	1A	1151		103	103	103	1698		607L	59
TREE	345143.58	0822047.55	1A	1139		91	91	91	2525		496L	23
TREE	345158.74	0822049.04	1A	1185		137	137	137	4055		340L	24
TRANSMISSION TOWER	345159.94	0822057.37	1A	1146		98	98	98	4161		357R	-19

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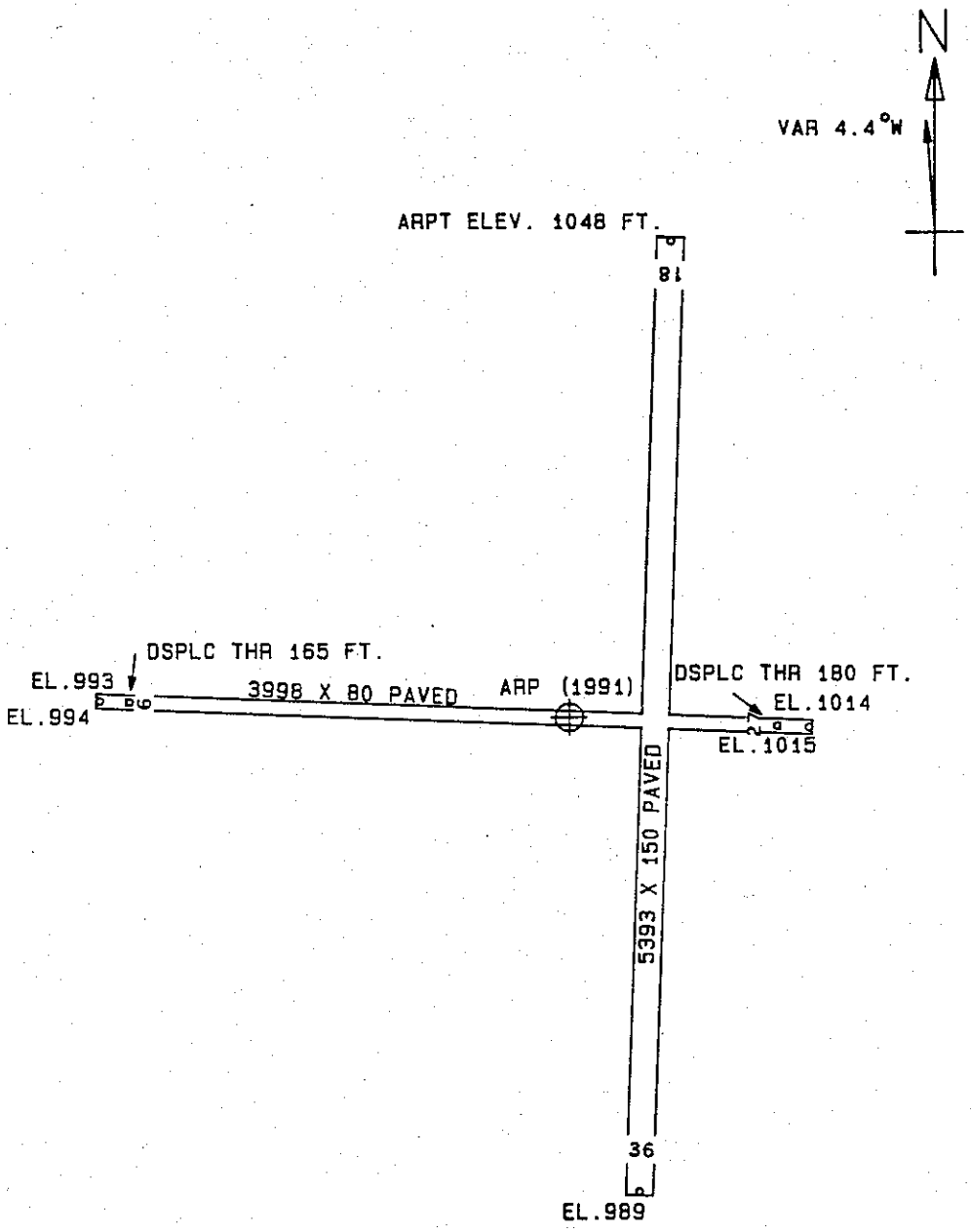
AIRPORT ELEVATION 1048

ARP 345052.121N 0822100.561W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
ANTENNA & APBN ON OL ATCT	345100.99	0822105.30	1A	1094		46	340 38	980
OL ANEMOMETER	345046.08	0822047.70	1A	1032		-16	124 4	1234
TREE	345049.90	0822044.05	1A	1031		-17	103 40	1395
TREE	345048.15	0822043.95	1A	1050		2	110 33	1442
TREE	345035.96	0822102.56	1A	1045		-3	190 13	1642
LIGHT ON POLE	345048.94	0822120.29	1A	1021		-27	263 21	1676
TREE	345055.64	0822035.96	1A	1051		3	84 34	2081
ROD ON OL GLIDE SLOPE	345033.66	0822048.07	1A	1022		-26	155 15	2138
POLE	345055.61	0822125.88	1A	1024		-24	283 53	2140
TREE	345049.52	0822130.55	1A	1027		-21	268 24	2513
TREE	345055.31	0822131.50	1A	1035		-13	281 32	2599
TREE	345023.70	0822102.88	1A	1023		-25	188 14	2879
TREE	345050.32	0822136.73	1A	1014		-34	270 57	3020
TREE	345122.69	0822100.91	1A	1123		75	3 51	3091
POLE	345124.52	0822040.96	1A	1166		118	30 54	3660
TREE	345055.23	0822144.73	1A	1040		-8	279 17	3695
OL ON POST	345129.35	0822044.81	1A	1143		95	23 38	3987
TREE	345130.50	0822043.96	1A	1179		131	24 2	4119
ANTENNA ON OL WATER TANK	345130.09	0822028.06	1B	1286		238	39 36	4698
ANTENNA ON OL BUILDING	345121.83	0822013.91	1B	1217		169	56 43	4913
TREE	345134.49	0822029.46	1B	1247		199	35 35	5007
TREE	345140.47	0822035.28	1B	1241		193	27 43	5323
TREE	345132.62	0822011.66	1B	1253		205	49 16	5777
ANTENNA ON TOWER	345058.90	0821941.51	1B	1173		125	88 27	6625



TOUCHDOWN ZONE RUNWAY	ELEVATION
9	1013
27	1014
36	1016
18	1048

GREENVILLE DOWNTOWN AIRPORT

GREENVILLE, SOUTH CAROLINA

(NOT TO SCALE)