

APPENDIX E: SHEET PILE DRIVING SUMMARY

The results of the sheet pile driving inspections that were performed by the Quality Assurance Engineer are contained in tabular form in this Appendix. This table documents the following information:

- Pile Identification Number;
- Installation Date;
- Pile Length;
- Length Driven;
- X-axis Alignment;
- Y-axis Alignment, and
- Comments.

SHEET PILE DRIVING SUMMARY
Bay Shore, Long Island, New York
Waterloo Barrier System

Pile ID	Date Driven	Pile Length (ft)	Length Driven (ft)	Plumbness		COMMENTS
				X-Axis	Y-Axis	
5	23-May-07	82.50	86.0	88.8 N	88.9 W	
6	23-May-07	82.50	86.0	89.0 N	89.2 W	
7	23-May-07	82.50	86.0	89.1 N	89.0 W	
8	23-May-07	82.00	86.0	89.3 N	88.7 W	
9	23-May-07	82.00	86.0	89.3 N	88.7 W	
10	23-May-07	80.00	84.0	89.1 N	88.9 W	
11	23-May-07	80.00	84.0	89.4 N	88.6 W	
12	22-May-07	80.00	84.0	89.8 N	89.0 W	
13	22-May-07	80.00	84.0	90.0	89.3 W	
14	23-May-07	80.00	84.0	89.3 N	89.1 W	
15	23-May-07	80.00	84.0	89.3 N	88.9 W	
16	21-May-07	80.00	82.0	88.9 N	89.0 W	
17	21-May-07	80.00	82.0	89.0 N	88.6 W	
18	23-May-07	80.00	81.0	89.2 N	88.8 W	
19	23-May-07	80.00	81.0	89.7 N	89.0 W	
20	23-May-07	80.00	81.0	89.1 N	89.8 W	
21	23-May-07	80.00	80.0	89.9 N	89.2 W	
22	23-May-07	80.00	80.0	89.6 N	89.1 W	
23	21-May-07	80.00	80.0	89.3 N	89.0 W	
24	21-May-07	80.00	79.0	88.9 N	88.7 W	
25	21-May-07	80.00	79.0	89.7 N	88.9 W	
26	21-May-07	80.00	79.0	89.0 N	88.6 W	
27	14-May-07	80.00	79.0	89.4 N	89.0 W	
28	14-May-07	80.00	79.0	89.1 N	89.3 W	
29	14-May-07	80.00	79.0	89.6 N	89.0 W	
30	14-May-07	80.00	80.0	89.0 N	88.8 W	
31	14-May-07	80.00	80.0	89.4 N	89.1 W	
32	14-May-07	80.00	80.0	89.1 N	89.8 W	
33	14-May-07	80.00	80.0	88.9 N	89.4 W	
34	14-May-07	80.00	80.0	89.1 N	89.3 W	
35	14-May-07	80.00	80.0	89.4 N	89.1 W	
36	14-May-07	80.00	80.0	89.8 N	88.9 W	
37	14-May-07	80.00	80.0	89.0 N	88.2 W	
38	14-May-07	80.00	80.0	89.4 N	88.1 W	
39	11-May-07	80.00	79.0	88.9 S	87.6 W	
40	11-May-07	80.00	78.0	89.7 S	88.9 W	
41	11-May-07	80.00	78.0	88.7 S	88.6 W	
42	11-May-07	80.00	78.0	89.0 S	88.5 W	
43	11-May-07	80.00	78.0	88.9 S	88.6 W	
44	11-May-07	80.00	78.0	89.2 S	88.8 W	
45	11-May-07	80.00	78.0	88.6 S	88.9 W	
46	11-May-07	80.00	78.0	89.0 S	88.6 W	
47	11-May-07	80.00	78.0	88.8 S	89.7 W	
48	11-May-07	80.00	78.0	89.0 S	89.6 W	
49	10-May-07	80.00	78.0	89.9 S	89.9 W	
50	10-May-07	80.00	78.0	89.0 S	89.6 W	

SHEET PILE DRIVING SUMMARY
Bay Shore, Long Island, New York
Waterloo Barrier System

Pile ID	Date	Pile Length (ft)	Pile Driven (ft)	Plumbness		COMMENTS
				X-Axis	Y-Axis	
51	10-May-07	80.00	78.0	88.6 S	89.4 W	
52	10-May-07	80.00	78.0	89.2 S	89.2 W	
53	10-May-07	80.00	78.0	89.1 S	89.7 W	
54	10-May-07	80.00	78.0	89.2 S	89.2 W	
55	10-May-07	80.00	78.0	89.6 S	89.6 W	
56	10-May-07	80.00	78.0	89.1 S	89.5 W	
57	10-May-07	80.00	78.0	89.5 S	89.1 W	
58	10-May-07	80.00	78.0	89.3 S	88.9 W	
59	10-May-07	80.00	78.0	89.1 S	89.2 W	
60	10-May-07	80.00	78.0	89.0 S	89.3 W	
61	16-May-07	80.00	79.0	89.0 S	88.6 W	
62	16-May-07	80.00	79.0	89.1 S	88.6 W	Corner Sheet joining Segments 1 & 2
63	16-May-07	80.00	79.0	89.5 S	88.8 W	
64	16-May-07	80.00	79.0	89.0 S	88.8 W	
65	16-May-07	80.00	79.0	89.0 S	88.8 W	
66	16-May-07	80.00	79.0	89.5 S	89.0 W	
67	16-May-07	80.00	79.0	89.7 S	88.7 W	
68	21-May-07	80.00	79.0	89.4 S	88.9 W	
69	21-May-07	80.00	79.0	89.4 S	88.4 W	
70	09-May-07	80.00	79.0	89.9 S	88.7 W	
71	09-May-07	80.00	79.0	89.1 S	89.2 W	
72	09-May-07	80.00	79.0	89.0 S	89.0 W	
73	09-May-07	80.00	79.0	89.5 S	88.9 W	
74	09-May-07	80.00	79.0	89.5 S	89.0 W	
75	09-May-07	80.00	79.0	89.0 S	88.6 W	
76	09-May-07	80.00	79.0	89.3 S	88.8 W	
77	09-May-07	80.00	79.0	89.0 S	89.1 W	
78	09-May-07	80.00	79.0	89.6 S	88.8 W	
79	09-May-07	80.00	79.0	89.2 S	88.6 W	
80	09-May-07	80.00	79.0	89.4 S	89.2 W	
81	09-May-07	80.00	79.0	89.2 S	89.3 W	
82	09-May-07	80.00	79.0	90.0	89.0 W	
83	09-May-07	80.00	79.0	89.5 S	89.6 W	
84	09-May-07	80.00	79.0	89.3 S	89.4 W	
85	08-May-07	80.00	79.0	89.7 S	89.2 W	
86	08-May-07	80.00	79.0	89.8 S	89.5 W	
87	08-May-07	80.00	79.0	90.0	90.0	
88	08-May-07	80.00	79.0	90.0	89.4 W	
89	08-May-07	80.00	79.0	89.6 S	89.6 W	
90	08-May-07	80.00	79.0	89.9 S	89.9 W	
91	08-May-07	80.00	79.0	89.8 S	89.4 W	
92	08-May-07	80.00	79.0	89.7 S	89.8 W	
93	08-May-07	80.00	79.0	89.7 S	89.3 W	
94	08-May-07	80.00	79.0	89.7 S	89.6 W	
95	08-May-07	80.00	79.0	89.6 S	89.5 W	
96	08-May-07	80.00	79.0	89.7 S	89.9 W	

SHEET PILE DRIVING SUMMARY
Bay Shore, Long Island, New York
Waterloo Barrier System

File ID	Date	Driven Length (ft)	Pile Length (ft)	Plumbness		COMMENTS
				X-Axis	Y-Axis	
97	08-May-07	80.00	79.0	89.5 S	89.3 W	
98	08-May-07	80.00	79.0	89.6 S	89.6 W	
99	08-May-07	80.00	79.0	89.8 S	88.1 W	
100	08-May-07	80.00	79.0	89.9 S	88.0 W	
101	08-May-07	80.00	79.0	89.7 S	88.3 W	
102	08-May-07	80.00	79.0	89.0 S	87.8 W	Sewer Penetration
103	08-May-07	80.00	79.0	89.7 S	88.2 W	Sewer Penetration
104	07-May-07	80.00	77.0	90.0	87.7 W	
105	07-May-07	80.00	77.0	89.8 S	89.3 W	
106	07-May-07	80.00	77.0	89.6 N	88.0 W	
107	07-May-07	80.00	77.0	89.9 S	88.0 W	
108	07-May-07	80.00	77.0	89.6 N	87.4 W	
109	07-May-07	80.00	77.0	90.0	87.8 W	
110	07-May-07	80.00	77.0	89.2 N	87.0 W	
111	07-May-07	80.00	77.0	89.3 S	86.7 W	
112	07-May-07	80.00	77.0	89.8 S	87.4 W	
113	07-May-07	80.00	77.0	89.4 S	87.8 W	
114	07-May-07	80.00	77.0	89.5 S	87.6 W	
115	07-May-07	80.00	77.0	89.6 S	87.3 W	
116	07-May-07	80.00	77.0	89.5 S	87.8 W	
117	07-May-07	80.00	77.0	89.5 S	88.1 W	
118	05-May-07	80.00	77.0	89.5 S	88.5 W	
119	05-May-07	80.00	80.0	89.9 S	88.6 W	
120	05-May-07	80.00	80.0	89.4 N	88.0 W	
121	05-May-07	80.00	82.0	89.1 S	87.9 W	Verizon Cables
122	05-May-07	80.00	82.0	90.0	88.0 W	Verizon Cables
123	05-May-07	80.00	82.0	89.3 S	88.5 W	Verizon Cables
124	05-May-07	80.00	82.0	89.9 S	88.5 W	Verizon Cables
125	04-May-07	80.00	77.0	89.2 S	89.0 W	
126	04-May-07	80.00	77.0	89.8 S	88.8 W	
127	06-May-07	80.00	77.0	89.2 S	88.9 W	
128	06-May-07	80.00	77.0	89.5 S	89.2 W	
129	06-May-07	80.00	77.0	89.3 S	88.9 W	
130	06-May-07	80.00	77.0	88.7 S	88.0 W	
131	06-May-07	80.00	79.0	89.0 S	87.5 W	
132	11-Jun-07	80.00	77.0	88.8 S	87.7 W	
133	13-Jun-07	80.00	79.0	89.8 S	88.1 W	Male - Male Starting Sheet, Joining Segments 1 & 3
134	23-Apr-08	75.00	74.0	89.1 W	88.7 S	
140	24-Apr-08	74.00	74.0	87.0 W	86.3 S	Window Sheet
141	23-Apr-08	75.00	74.0	87.0 W	86.1 S	Window Sheet
142	23-Apr-08	74.00	74.0	86.7 W	86.4 S	Window Sheet
143	21-Apr-08	74.00	74.0	87.0 W	86.4 S	Window Sheet
144	21-Apr-08	74.00	74.0	87.0 W	86.0 S	Window Sheet
145	30-Aug-07	74.00	74.0	86.7 W	86.4 S	Window Sheet
146	30-Aug-07	74.00	72.0	87.2 W	86.0 S	Window Sheet
147	30-Aug-07	74.00	74.0	86.4 W	86.9 S	Window Sheet

SHEET PILE DRIVING SUMMARY
Bay Shore, Long Island, New York
Waterloo Barrier System

Pile ID	Date Driven	Pile Length (ft)	Length Driven (ft)	Plumbness		COMMENTS
				X-Axis	Y-Axis	
148	30-Aug-07	74.00	74.0	86.5 W	87.5 S	Window Sheet
149	29-Aug-07	74.00	74.0	86.2 W	88.4 S	Window Sheet
150	29-Aug-07	74.00	73.0	86.5 W	87.0 S	Window Sheet
151	27-Aug-07	74.00	73.0	86.4 W	87.8 S	Window Sheet
152	27-Aug-07	74.00	74.0	86.2 W	86.2 S	Window Sheet
153	27-Aug-07	74.00	74.0	86.3 W	87.8 S	Window Sheet
154	27-Aug-07	74.00	74.0	86.7 W	87.6 S	Window Sheet
155	27-Aug-07	74.00	74.0	86.4 W	88.0 S	Window Sheet
156	27-Aug-07	74.00	74.0	86.8 W	87.3 S	Window Sheet
157	27-Aug-07	74.00	74.0	86.4 W	87.5 S	Window Sheet
158	24-Aug-07	74.00	74.0	86.6 W	87.2 S	Window Sheet
159	24-Aug-07	74.00	74.0	86.5 W	88.8 S	Window Sheet
160	24-Aug-07	74.00	74.0	86.9 W	87.2 S	Window Sheet
161	24-Aug-07	74.00	74.0	86.3 W	89.1 S	Window Sheet
162	24-Aug-07	74.00	74.0	87.2 W	87.8 S	Window Sheet
163	24-Aug-07	74.00	74.0	86.3 W	86.3 S	Window Sheet
164	24-Aug-07	74.00	74.0	86.6 W	85.9 S	Window Sheet
165	23-Aug-07	74.00	74.0	86.5 W	85.7 S	Window Sheet
166	23-Aug-07	74.00	74.0	86.9 W	86.5 S	Window Sheet
167	23-Aug-07	74.00	74.0	86.0 W	87.4 S	Window Sheet
168	23-Aug-07	74.00	74.0	87.0 W	86.2 S	Window Sheet
169	23-Aug-07	74.00	74.0	87.0 W	85.6 S	Window Sheet
170	23-Aug-07	74.00	74.0	86.7 W	87.5 S	Window Sheet
171	23-Aug-07	74.00	74.0	87.3 W	86.0 S	Window Sheet
172	23-Aug-07	74.00	74.0	87.0 W	86.5 S	Window Sheet
173	22-Aug-07	74.00	74.0	86.6 W	87.4 S	Window Sheet
174	22-Aug-07	74.00	74.0	86.9 W	86.6 S	Window Sheet
175	22-Aug-07	74.00	73.0	86.5 W	87.6 S	Window Sheet
176	20-Aug-07	74.00	74.0	86.8 W	87.5 S	Window Sheet
177	20-Aug-07	74.00	73.0	86.9 W	88.2 S	Window Sheet
178	20-Aug-07	74.00	74.0	86.8 W	87.8 S	Window Sheet
179	20-Aug-07	74.00	74.0	86.7 W	88.2 S	Window Sheet
180	20-Aug-07	74.00	74.0	86.9 W	88.0 S	Window Sheet
181	20-Aug-07	74.00	74.0	86.3 W	88.8 S	Window Sheet
182	17-Aug-07	74.00	74.0	86.9 W	88.2 S	Window Sheet
183	17-Aug-07	74.00	74.0	86.6 W	89.0 S	Window Sheet
184	17-Aug-07	74.00	74.0	87.4 W	88.2 S	Window Sheet
185	17-Aug-07	74.00	74.0	87.7 W	88.5 S	Window Sheet
186	17-Aug-07	74.00	74.0	87.0 W	88.0 S	Window Sheet
187	17-Aug-07	75.00	75.0	86.5 W	88.5 S	Window Sheet
188	17-Aug-07	75.00	75.0	86.4 W	87.7 S	Window Sheet
189	17-Aug-07	75.00	75.0	87.4 W	88.7 S	Window Sheet
190	17-Aug-07	75.00	75.0	86.5 W	87.9 S	Window Sheet
191	17-Aug-07	75.00	75.0	86.9 W	87.3 S	Window Sheet
192	17-Aug-07	75.00	75.0	87.6 W	85.7 S	Window Sheet
193	17-Aug-07	75.00	75.0	87.0 W	88.0 S	Window Sheet

SHEET PILE DRIVING SUMMARY

Bay Shore, Long Island, New York
Waterloo Barrier System

Pile ID	Date	Pile Length (ft)	Pile Driven (ft)	Plumbness		COMMENTS
				X-Axis	Y-Axis	
194	17-Aug-07	75.00	75.00	87.5 W	85.9 S	Window Sheet
195	15-Aug-07	75.00	75.00	87.0 W	86.6 S	Window Sheet
196	15-Aug-07	75.00	75.00	87.7 W	85.1 S	Window Sheet
197	15-Aug-07	75.00	75.00	87.5 W	86.5 S	Window Sheet
198	15-Aug-07	75.00	75.00	86.7 W	86.6 S	Window Sheet
199	14-Aug-07	75.00	75.00	87.5 W	86.6 S	Window Sheet
200	14-Aug-07	75.00	75.00	87.3 W	85.8 S	Window Sheet
201	14-Aug-07	75.00	75.00	87.1 W	87.6 S	Window Sheet
202	14-Aug-07	75.00	75.00	87.1 W	85.7 S	Window Sheet
203	14-Aug-07	75.00	75.00	87.4 W	87.4 S	Window Sheet
204	14-Aug-07	75.00	75.00	87.7 W	86.0 S	Window Sheet
205	14-Aug-07	75.00	75.00	87.0 W	86.6 S	Window Sheet
206	14-Aug-07	75.00	75.00	87.7 W	87.4 S	Window Sheet
207	14-Aug-07	75.00	75.00	87.1 W	88.1 S	Window Sheet
208	13-Aug-07	75.00	75.00	87.5 W	87.5 S	Window Sheet
209	13-Aug-07	75.00	75.00	87.5 W	86.9 S	Window Sheet
210	13-Aug-07	75.00	75.00	87.6 W	86.7 S	Window Sheet
211	13-Aug-07	75.00	75.00	87.7 W	87.6 S	Window Sheet
212	13-Aug-07	75.00	75.00	87.4 W	87.1 S	Window Sheet
213	09-Aug-07	75.00	75.00	87.5 W	88.2 S	Window Sheet
214	09-Aug-07	75.00	75.00	87.8 W	88.1 S	Window Sheet
215	09-Aug-07	75.00	75.00	87.6 W	88.6 S	Window Sheet
216	09-Aug-07	75.00	75.00	87.9 W	88.0 S	Window Sheet
217	09-Aug-07	75.00	75.00	87.6 W	88.2 S	Window Sheet
218	09-Aug-07	75.00	75.00	87.6 W	88.3 S	Window Sheet
219	08-Aug-07	75.00	75.00	87.5 W	88.2 S	Window Sheet
220	08-Aug-07	75.00	75.00	87.6 W	88.8 S	Window Sheet
221	08-Aug-07	75.00	75.00	87.2 W	88.9 S	Window Sheet
222	08-Aug-07	75.00	75.00	88.0 W	88.2 S	Window Sheet
223	09-Aug-07	75.00	75.00	89.0 W	89.1 S	Male - Male Starting Sheet
224	09-Aug-07	75.00	79.00	88.5 W	89.8 S	Corner Sheet Joining Segments 3 & 4
225	09-Aug-07	74.00	78.00	90.0 W	87.8 W	
226	09-Aug-07	74.00	78.00	89.9 S	87.3 W	
227	09-Aug-07	74.00	78.00	88.9 S	88.0 W	
228	11-Jul-07	74.00	78.00	89.1 S	88.5 W	
229	11-Jul-07	74.00	78.00	89.2 S	88.0 W	
230	11-Jul-07	74.00	78.00	89.1 S	88.7 W	
231	11-Jul-07	74.00	78.00	89.6 S	88.2 W	
232	11-Jul-07	74.00	78.00	89.2 S	89.9 W	
233	11-Jul-07	74.00	78.00	89.0 S	87.6 W	
234	11-Jul-07	74.00	78.00	88.8 S	89.7 W	
235	11-Jul-07	74.00	78.00	88.6 S	87.0 W	
236	12-Jul-07	74.00	78.00	89.2 S	86.9 W	
237	12-Jul-07	74.00	78.00	88.8 S	87.0 W	
238	12-Jul-07	74.00	78.00	89.4 S	87.5 W	
239	12-Jul-07	74.00	78.00	89.5 S	88.0 W	

SHEET PILE DRIVING SUMMARY
Bay Shore, Long Island, New York
Waterloo Barrier System

Pile ID	Date	Pile Length (ft)	Pile Length (ft)	Plumbness		COMMENTS
				X-Axis	Y-Axis	
240	12-Jul-07	74.00	78.0	89.1 S	87.9 W	
241	12-Jul-07	74.00	78.0	88.8 S	87.7 W	
242	12-Jul-07	74.00	78.0	88.8 S	87.7 W	
243	12-Jul-07	74.00	78.0	88.2 S	87.5 W	
244	12-Jul-07	74.00	78.0	89.5 S	88.8 W	
245	12-Jul-07	74.00	78.0	90.0	86.7 W	
246	12-Jul-07	74.00	78.0	89.5 S	87.3 W	
247	12-Jul-07	74.00	78.0	90.0	87.3 W	
248	12-Jul-07	74.00	78.0	89.1 S	87.6 W	
249	13-Jul-07	74.00	78.0	89.6 S	87.0 W	
250	13-Jul-07	74.00	78.0	89.5 S	87.2 W	
251	13-Jul-07	74.00	78.0	89.1 S	87.0 W	
252	13-Jul-07	74.00	78.0	89.7 S	87.6 W	
253	13-Jul-07	74.00	78.0	89.6 S	87.7 W	
254	13-Jul-07	74.00	78.0	89.0 S	87.8 W	
255	13-Jul-07	74.00	78.0	89.1 S	86.9 W	
256	13-Jul-07	74.00	78.0	88.3 S	87.7 W	
257	17-Jul-07	74.00	78.0	89.0 S	87.9 W	
258	17-Jul-07	74.00	78.0	89.7 S	88.0 W	
259	17-Jul-07	74.00	78.0	89.5 S	87.7 W	
260	17-Jul-07	74.00	78.0	89.3 S	87.3 W	
261	17-Jul-07	74.00	78.0	89.5 S	87.5 W	
262	17-Jul-07	74.00	78.0	89.3 S	87.7 W	
263	17-Jul-07	74.00	78.0	88.7 S	87.0 W	
264	17-Jul-07	74.00	78.0	88.2 S	87.2 W	
265	17-Jul-07	74.00	74.0	88.7 S	86.1 W	
266	17-Jul-07	74.00	74.0	87.9 S	86.7 W	
267	17-Jul-07	74.00	74.0	88.8 S	86.8 W	
268	17-Jul-07	74.00	74.0	88.3 S	87.6 W	
269	17-Jul-07	74.00	74.0	88.5 S	86.9 W	
270	17-Jul-07	74.00	74.0	89.6 S	86.7 W	
271	17-Jul-07	74.00	74.0	88.8 S	85.6 W	
272	19-Jul-07	74.00	74.0	87.8 S	85.6 W	
273	19-Jul-07	74.00	74.0	88.1 S	86.2 W	
274	19-Jul-07	74.00	74.0	83.0 S	86.8 W	
275	19-Jul-07	74.00	74.0	88.6 S	87.3 W	
276	19-Jul-07	74.00	74.0	88.7 S	87.7 W	
277	19-Jul-07	74.00	74.0	88.6 S	87.8 W	
278	19-Jul-07	74.00	74.0	88.3 S	87.9 W	
279	19-Jul-07	74.00	74.0	88.6 S	87.7 W	
280	19-Jul-07	74.00	74.0	88.2 S	88.5 W	
281	19-Jul-07	74.00	74.0	88.1 S	89.1 W	
282	19-Jul-07	74.00	74.0	87.8 S	89.8 W	
283	19-Jul-07	74.00	74.0	87.7 S	90.0	
284	19-Jul-07	74.00	74.0	87.6 S	90.0	
285	19-Jul-07	74.00	74.0	87.4 S	89.4 E	

SHEET PILE DRIVING SUMMARY
Bay Shore, Long Island, New York
Waterloo Barrier System

File	Date	Driven Length (ft)	Length Driven (ft)	Plumbness		COMMENTS
				X-Axis	Y-Axis	
286	19-Jul-07	74.00	74.0	87.6 S	89.4 E	
287	20-Jul-07	74.00	74.0	87.9 S	89.8 W	
288	20-Jul-07	74.00	74.0	87.2 S	89.2 E	
289	20-Jul-07	74.00	72.0	87.7 S	89.3 W	
290	20-Jul-07	74.00	72.0	87.2 S	89.4 W	
291	20-Jul-07	74.00	72.0	87.5 S	89.1 W	
292	20-Jul-07	74.00	72.0	87.3 S	89.5 W	
293	20-Jul-07	74.00	72.0	87.5 S	88.7 W	
294	20-Jul-07	74.00	72.0	87.2 S	88.5 W	
295	20-Jul-07	74.00	72.0	87.6 S	87.3 W	
296	20-Jul-07	74.00	71.0	87.5 S	87.1 W	
297	20-Jul-07	74.00	72.0	87.3 S	85.5 W	
298	20-Jul-07	74.00	72.0	87.6 S	85.2 W	
299	20-Jul-07	74.00	72.0	88.1 S	84.4 W	
300	20-Jul-07	74.00	72.0	87.2 S	84.7 W	
301	20-Jul-07	74.00	68.0	87.4 S	84.4 W	