

CONGRESS OF THE PHILIPPINES  
THIRTEENTH CONGRESS  
*Second Regular Session*

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## HOUSE OF REPRESENTATIVES

H. No. 4862

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BY REPRESENTATIVES GULLAS, CUENCO, BANAAG, ANDAYA, MALANYAON,  
VILLAFUERTE, FIGUEROA, REMULLA (G.), REMULLA (J.C.), DEFENSOR  
(M.) AND SUSANO, PER COMMITTEE REPORT NO. 1168

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AN ACT DECLARING THE BUHISAN WATERSHED FOREST RESERVE, THE MANANGA WATERSHED FOREST RESERVE, THE SUDLON NATIONAL PARK, THE CENTRAL CEBU NATIONAL PARK AND THE KOTKOT-LUSARAN WATERSHED FOREST RESERVE IN THE PROVINCE OF CEBU INTO ONE PROTECTED AREA TO BE KNOWN AS THE CENTRAL CEBU PROTECTED LANDSCAPE AND FOR OTHER PURPOSES

*Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:*

ARTICLE I

TITLES, POLICIES AND OBJECTIVES

SECTION 1. *Title.* — This Act shall be known as the "Central Cebu Protected Landscape Act of 2005".

SEC. 2. *Declaration of Policy.* — The critical importance of protecting, conserving, maintaining and rehabilitating the natural physical attributes and processes of the watershed and its complementary biological diversities, as well as the aesthetic, historical, cultural and economic significance of the

1 Central Cebu Protected Landscape to the continued existence, survival,  
2 sustenance, growth and development of present and future inhabitants of the  
3 Island of Cebu cannot be overemphasized. It is hereby declared the policy of  
4 the State to secure the protection, conservation, rehabilitation and sustainable  
5 development of the Central Cebu Protected Landscape, particularly its role as  
6 a watershed for water generation and supply purposes; its associated biological  
7 diversity, other natural, ecological and physical processes and values; its  
8 communities, their culture and way of life insofar as these are in harmony with  
9 nature and the biophysical and ecological systems of the area.

10 Pursuant to the provisions of Republic Act No. 7586 or the National  
11 Integrated Protected Areas System (NIPAS) Act of 1992, the State shall  
12 ensure the mobilization of resources for the operationalization of institutional  
13 mechanisms established herein, the implementation of appropriate measures  
14 and the provision of support necessary for the protection, conservation,  
15 maintenance, rehabilitation and sustainable development of the Central Cebu  
16 Protected Landscape, especially its crucial role and significance as a  
17 watershed for water generation and supply purposes, its associated biological  
18 diversity and its integrity as an ecosystem.

19 SEC. 3. *Declaration and Scope.* – Pursuant to and in accordance with  
20 the NIPAS Act, the Buhisan Watershed Forest Reserve, the Mananga  
21 Watershed Forest Reserve, the Sudlon National Park, the Central Cebu  
22 National Park and the Kotkot-Lusaran Watershed Forest Reserve located in  
23 the Province of Cebu are hereby declared into one protected area and a  
24 permanent component of the NIPAS under the category of a protected  
25 landscape: *Provided, however,* That special uses, management and  
26 restrictions per component area shall be consistent with its previous  
27 classification, either as a national park or as a watershed forest reserve. These  
28 areas collectively shall be referred to as the Central Cebu Protected Landscape  
29 (CCPL) whose boundaries are defined and contained in the respective

1 executive orders and presidential proclamations creating them, including their  
 2 amendments incorporating results of actual ground survey. The CCPL  
 3 consists of Parcel "A" and Parcel "B", and covers a consolidated area of  
 4 twenty-nine thousand sixty-two (29,062) hectares, more or less, subject to  
 5 actual ground survey, more particularly described as follows:

6           PARCEL "A"

7 (All corner points were derived using GIS and UTM Coordinate of Corner No.  
 8 1 is 1160802.63N and 597191.56E)

	<u>Lines</u>	<u>Bearing</u>	<u>Distance</u>
10	TP - 1	S 62° 49' 37" E	3,613.96 m.
11	1 - 2	S 83° 12' 18" E	14.79 m.
12	2 - 3	S 84° 12' 46" E	37.19 m.
13	3 - 4	S 56° 11' 38" E	36.18 m.
14	4 - 5	DUE EAST	105.19 m.
15	5 - 6	N 82° 25' 27" E	75.85 m.
16	6 - 7	N 56° 11' 35" E	36.18 m.
17	7 - 8	N 39° 16' 03" E	71.20 m.
18	8 - 9	N 24° 26' 47" E	60.56 m.
19	9 - 10	N 40° 36' 42" E	92.37 m.
20	10 - 11	N 09° 52' 31" E	116.98 m.
21	11 - 12	N 22° 36' 10" E	130.25 m.
22	12 - 13	N 37° 34' 57" E	82.19 m.
23	13 - 14	N 08° 59' 55" E	96.31 m.
24	14 - 15	N 26° 29' 27" E	44.84 m.
25	15 - 16	N 39° 49' 11" E	78.27 m.
26	16 - 17	N 17° 07' 13" E	68.15 m.
27	17 - 18	N 45° 00' 08" E	92.10 m.
28	18 - 19	N 58° 21' 31" E	76.50 m.
29	19 - 20	N 56° 19' 39" E	126.47 m.

1	20 – 21	N 56° 19' 39" E	47.29 m.
2	21 – 22	N 66° 50' 18" E	76.27 m.
3	22 – 23	S 34° 17' 34" E	133.45 m.
4	23 – 24	S 30° 59' 01" E	116.79 m.
5	24 – 25	S 53° 27' 22" E	84.17 m.
6	25 – 26	S 34° 21' 41" E	115.39 m.
7	26 – 27	S 41° 21' 20" E	166.86 m.
8	27 – 28	S 49° 14' 27" E	191.84 m.
9	28 – 29	S 67° 35' 22" E	92.15 m.
10	29 – 30	S 78° 42' 39" E	102.16 m.
11	30 – 31	S 85° 36' 35" E	130.63 m.
12	31 – 32	S 79° 14' 27" E	107.13 m.
13	32 – 33	-S 56° 14' 27" E	54.20 m.
14	33 – 34	S 81° 53' 20" E	106.31 m.
15	34 – 35	N 11° 53' 00" E	18.52 m.
16	35 – 36	N 78° 26' 52" E	105.51 m.
17	36 – 37	N 45° 00' 00" E	134.00 m.
18	37 – 38	N 59° 01' 45" E	138.20 m.
19	38 – 39	N 49° 53' 47" E	196.19 m.
20	39 – 40	N 42° 31' 02" E	128.55 m.
21	40 – 41	N 68° 56' 54" E	109.96 m.
22	41 – 42	N 45° 00' 00" E	111.72 m.
23	42 – 43	N 18° 26' 06" E	124.91 m.
24	43 – 44	N 74° 05' 51" E	114.96 m.
25	44 – 45	N 58° 34' 37" E	166.62 m.
26	45 – 46	N 53° 36' 05" E	186.43 m.
27	46 – 47	S 38° 37' 36" E	101.12 m.
28	47 – 48	S 45° 02' 04" E	67.05 m.
29	48 – 49	S 78° 42' 59" E	80.49 m.

1	49 – 50	S 62° 05' 53" E	151.98 m.
2	50 – 51	S 80° 33' 44" E	96.05 m.
3	51 – 52	S 44° 59' 54" E	122.86 m.
4	52 – 53	S 53° 27' 53" E	132.70 m.
5	53 – 54	S 74° 44' 60" E	180.09 m.
6	54 – 55	S 61° 11' 07" E	180.26 m.
7	55 – 56	DUE EAST	55.31 m.
8	56 – 57	N 51° 20' 25" E	151.67 m.
9	57 – 58	N 64° 31' 60" E	183.73 m.
10	58 – 59	S 53° 07' 09" E	197.45 m.
11	59 – 60	S 75° 57' 50" E	162.86 m.
12	60 – 61	N 87° 87' 08" E	189.66 m.
13	61 – 62	N 86° 38' 48" E	134.54 m.
14	62 – 63	N 85° 44' 28" E	213.84 m.
15	63 – 64	S 77° 27' 12" E	145.60 m.
16	64 – 65	S 49° 06' 28" E	156.76 m.
17	65 – 66	S 44° 55' 58" E	78.23 m.
18	66 – 67	DUE EAST	158.00 m.
19	67 – 68	S 82° 40' 05" E	246.83 m.
20	68 – 69	S 41° 58' 21" E	106.26 m.
21	69 – 70	S 35° 33' 44" E	67.92 m.
22	70 – 71	S 61° 39' 57" E	116.66 m.
23	71 – 72	N 76° 58' 39" E	105.40 m.
24	72 – 73	S 71° 33' 21" E	124.85 m.
25	73 – 74	S 40° 34' 43" E	145.66 m.
26	74 – 75	S 25° 12' 19" E	148.38 m.
27	75 – 76	S 56° 20' 48" E	113.90 m.
28	76 – 77	S 86° 49' 38" E	142.34 m.
29	77 – 78	S 69° 42' 58" E	273.66 m.

1	78 – 79	N 83° 37' 53" E	143.07 m.
2	79 – 80	N 69° 29' 46" E	67.46 m.
3	80 – 81	S 85° 55' 33" E	221.69 m.
4	81 – 82	N 56° 19' 17" E	170.86 m.
5	82 – 83	N 36° 31' 28" E	265.37 m.
6	83 – 84	N 22° 23' 31" E	145.20 m.
7	84 – 85	N 49° 10' 23" E	229.62 m.
8	85 – 86	S 57° 16' 08" E	262.86 m.
9	86 – 87	N 23° 36' 55" E	137.92 m.
10	87 – 88	N 26° 31' 43" W	88.30 m.
11	88 – 89	N 07° 10' 00" W	63.63 m.
12	89 – 90	N 42° 17' 01" E	117.42 m.
13	90 – 91	N 85° 14' 45" E	95.08 m.
14	91 – 92	S 35° 33' 44" E	67.92 m.
15	92 – 93	S 16° 42' 10" E	164.83 m.
16	93 – 94	S 34° 30' 26" E	153.35 m.
17	94 – 95	S 61° 21' 44" E	197.97 m.
18	95 – 96	S 52° 18' 29" E	219.57 m.
19	96 – 97	S 05° 10' 47" W	87.23 m.
20	97 – 98	S 29° 44' 15" W	63.63 m.
21	98 – 99	S 37° 24' 45" W	169.02 m.
22	99 – 100	S 36° 50' 01" W	79.03 m.
23	100 – 101	S 08° 45' 31" W	100.84 m.
24	101 – 102	S 32° 02' 17" W	74.46 m.
25	102 – 103	S 60° 12' 34" W	63.66 m.
26	103 – 104	S 09° 28' 07" W	192.24 m.
27	104 – 105	S 32° 02' 02" W	74.47 m.
28	105 – 106	S 37° 24' 45" W	169.02 m.
29	106 – 107	S 32° 42' 60" W	131.48 m.

1	107 – 108	S 22° 37' 50" W	102.65 m.
2	108 – 109	S 27° 45' 21" W	169.50 m.
3	109 – 110	S 10° 53' 12" W	209.14 m.
4	110 – 111	S 26° 33' 54" W	176.65 m.
5	111 – 112	S 24° 59' 49" W	130.75 m.
6	112 – 113	S 05° 42' 38" W	238.05 m.
7	113 – 114	S 04° 39' 45" E	388.28 m.
8	114 – 115	S 03° 05' 50" E	292.68 m.
9	115 – 116	S 36° 52' 34" E	197.37 m.
10	116 – 117	S 37° 52' 38" E	270.17 m.
11	117 – 118	S 30° 15' 12" E	438.89 m.
12	118 – 119	S 21° 47' 50" W	170.17 m.
13	119 – 120	DUE SOUTH	102.63 m.
14	120 – 121	S 02° 12' 48" E	205.52 m.
15	121 – 122	S 25° 33' 44" E	201.34 m.
16	122 – 123	S 18° 27' 27" W	99.89 m.
17	123 – 124	S 44° 58' 57" W	145.27 m.
18	124 – 125	S 39° 46' 45" W	61.64 m.
19	125 – 126	S 03° 00' 19" E	150.21 m.
20	126 – 127	S 07° 07' 53" W	127.37 m.
21	127 – 128	S 03° 01' 35" E	150.33 m.
22	128 – 129	S 84° 09' 38" E	154.80 m.
23	129 – 130	N 68° 57' 16" E	219.99 m.
24	130 – 131	N 57° 05' 39" E	159.90 m.
25	131 – 132	N 46° 29' 16" E	217.86 m.
26	132 – 133	N 44° 58' 57" E	145.27 m.
27	133 – 134	N 19° 57' 60" E	184.86 m.
28	134 – 135	N 58° 01' 43" E	148.97 m.
29	135 – 136	N 59° 42' 56" E	109.80 m.

1	136 – 137	N 84° 49' 02" E	87.23 m.
2	137 – 138	S 25° 52' 05" E	289.65 m.
3	138 – 139	S 36° 22' 17" E	186.44 m.
4	139 – 140	S 26° 33' 54" E	211.87 m.
5	140 – 141	S 38° 08' 30" E	140.66 m.
6	141 – 142	S 33° 43' 09" E	142.31 m.
7	142 – 143	S 36° 49' 57" E	118.54 m.
8	143 – 144	S 75° 06' 49" E	122.62 m.
9	144 – 145	N 79° 43' 27" E	88.29 m.
10	145 – 146	S 87° 30' 57" E	181.80 m.
11	146 – 147	S 65° 14' 01" E	226.18 m.
12	147 – 148	S 11° 52' 57" E	153.28 m.
13	148 – 149	N 71° 34' 41" W	174.83 m.
14	149 – 150	DUE WEST	126.31 m.
15	150 – 151	S 44° 59' 54" W	122.86 m.
16	151 – 152	S 37° 38' 55" W	13.10 m.
17	152 – 153	S 38° 09' 26" W	4.45 m.
18	153 – 154	S 42° 56' 46" E	252.91 m.
19	154 – 155	S 52° 42' 17" E	184.63 m.
20	155 – 156	S 50° 41' 17" E	99.44 m.
21	156 – 157	S 52° 05' 52" W	79.76 m.
22	157 – 158	S 28° 38' 53" E	87.60 m.
23	158 – 159	DUE EAST	41.94 m.
24	159 – 160	S 50° 11' 40" E	54.67 m.
25	160 – 161	S 29° 21' 42" E	128.36 m.
26	161 – 162	S 02° 36' 09" E	154.16 m.
27	162 – 163	S 71° 33' 24" E	132.76 m.
28	163 – 164	S 40° 40' 15" E	64.45 m.
29	164 – 165	S 12° 57' 25" E	93.38 m.

1	165 – 166	S 08° 08' 27" E	98.87 m.
2	166 – 167	S 10° 26' 31" E	270.36 m.
3	167 – 168	S 16° 09' 07" W	276.80 m.
4	168 – 169	N 79° 41' 13" W	78.20 m.
5	169 – 170	S 44° 58' 29" W	98.95 m.
6	170 – 171	S 03° 22' 11" E	119.09 m.
7	171 – 172	S 51° 01' 39" W	189.00 m.
8	172 – 173	S 18° 01' 50" W	632.83 m.
9	173 – 174	S 78° 43' 12" E	178.32 m.
10	174 – 175	N 86° 25' 18" W	112.16 m.
11	175 – 176	S 45° 00' 00" W	69.30 m.
12	176 – 177	S 11° 18' 36" E	107.08 m.
13	177 – 178	S 14° 03' 26" W	86.46 m.
14	178 – 179	S 84° 48' 05" W	77.25 m.
15	179 – 180	S 66° 00' 60" W	68.89 m.
16	180 – 181	S 45° 00' 00" W	59.40 m.
17	181 – 182	S 51° 20' 25" W	44.82 m.
18	182 – 183	N 58° 45' 39" W	269.95 m.
19	183 – 184	S 49° 25' 29" W	128.94 m.
20	184 – 185	S 59° 03' 50" W	163.15 m.
21	185 – 186	S 41° 57' 33" W	94.13 m.
22	186 – 187	N 78° 41' 24" W	71.39 m.
23	187 – 188	N 57° 10' 50" W	258.07 m.
24	188 – 189	N 26° 32' 40" W	156.50 m.
25	189 – 190	N 17° 39' 47" W	161.49 m.
26	190 – 191	N 76° 59' 48" W	186.66 m.
27	191 – 192	S 87° 47' 45" W	182.01 m.
28	192 – 193	S 62° 20' 39" W	165.89 m.
29	193 – 194	S 75° 03' 36" W	217.22 m.

1	194 – 195	DUE WEST	139.88 m.
2	195 – 196	N 73° 18' 03" W	73.08 m.
3	196 – 197	N 75° 56' 55" W	57.66 m.
4	197 – 198	N 20° 33' 22" W	59.81 m.
5	198 – 199	DUE NORTH	139.87 m.
6	199 – 200	N 60° 37' 43" W	128.45 m.
7	200 – 201	N 24° 26' 38" W	84.58 m.
8	201 – 202	N 17° 44' 14" W	183.61 m.
9	202 – 203	N 07° 46' 18" E	155.30 m.
10	203 – 204	N 24° 44' 33" E	100.20 m.
11	204 – 205	N 57° 17' 53" E	116.39 m.
12	205 – 206	N 49° 14' 44" E	182.67 m.
13	206 – 207	N 55° 36' 04" W	170.58 m.
14	207 – 208	N 51° 20' 41" W	202.33 m.
15	208 – 209	N 33° 40' 33" W	56.96 m.
16	209 – 210	N 69° 26' 53" W	134.96 m.
17	210 – 211	N 60° 13' 38" W	127.38 m.
18	211 – 212	N 87° 08' 50" W	158.13 m.
19	212 – 213	N 60° 16' 26" W	127.32 m.
20	213 – 214	N 21° 01' 41" W	110.08 m.
21	214 – 215	N 04° 23' 17" E	205.85 m.
22	215 – 216	N 38° 16' 19" W	191.22 m.
23	216 – 217	N 69° 59' 39" W	92.45 m.
24	217 – 218	N 45° 00' 11" W	66.99 m.
25	218 – 219	N 35° 33' 44" W	135.84 m.
26	219 – 220	N 40° 48' 58" W	229.58 m.
27	220 – 221	N 44° 58' 23" W	100.55 m.
28	221 – 222	N 79° 21' 23" E	128.59 m.
29	222 – 223	N 77° 30' 11" W	72.79 m.

1	223 – 224	N 34° 17' 46" W	105.15 m.
2	224 – 225	N 39° 49' 03" W	61.69 m.
3	225 – 226	S 48° 22' 59" W	95.05 m.
4	226 – 227	S 57° 59' 22" W	149.04 m.
5	227 – 228	S 79° 58' 04" W	136.33 m.
6	228 – 229	S 64° 26' 46" W	201.39 m.
7	229 – 230	N 49° 38' 06" W	207.29 m.
8	230 – 231	N 79° 41' 09" W	176.60 m.
9	231 – 232	N 79° 41' 43" W	102.99 m.
10	232 – 233	DUE WEST	7.88 m.
11	233 – 234	S 10° 36' 58" W	128.58 m.
12	234 – 235	S 35° 00' 18" W	192.74 m.
13	235 – 236	N 64° 49' 44" W	148.41 m.
14	236 – 237	N 36° 52' 11" W	118.44 m.
15	237 – 238	N 49° 03' 25" W	156.80 m.
16	238 – 239	N 48° 22' 06" W	190.23 m.
17	239 – 240	N 26° 33' 54" W	105.93 m.
18	240 – 241	S 72° 19' 16" W	182.36 m.
19	241 – 242	N 71° 33' 54" W	124.91 m.
20	242 – 243	S 84° 18' 19" W	158.72 m.
21	243 – 244	S 60° 16' 40" W	127.31 m.
22	244 – 245	DUE WEST	47.38 m.
23	245 – 246	S 51° 19' 05" W	101.20 m.
24	246 – 247	S 65° 13' 53" W	113.09 m.
25	247 – 248	S 45° 00' 11" W	66.99 m.
26	248 – 249	S 86° 59' 39" W	150.27 m.
27	249 – 250	DUE WEST	102.69 m.
28	250 – 251	S 66° 20' 23" W	137.97 m.
29	251 – 252	S 71° 36' 37" W	99.85 m.

1	252 - 253	S 54° 28' 06" W	67.97 m.
2	253 - 254	S 68° 11' 33" W	212.66 m.
3	254 - 255	S 75° 15' 10" W	155.17 m.
4	255 - 256	S 63° 27' 21" W	141.27 m.
5	256 - 257	S 57° 29' 19" W	103.02 m.
6	257 - 258	S 74° 05' 51" W	114.96 m.
7	258 - 259	DUE WEST	94.75 m.
8	259 - 260	S 80° 29' 31" W	96.13 m.
9	260 - 261	N 34° 58' 59" W	192.84 m.
10	261 - 262	N 28° 26' 16" W	107.75 m.
11	262 - 263	S 22° 49' 37" W	162.88 m.
12	263 - 264	S 47° 43' 05" W	117.42 m.
13	264 - 265	S 33° 41' 21" W	170.82 m.
14	265 - 266	S 47° 00' 03" W	162.03 m.
15	266 - 267	S 41° 37' 11" W	95.13 m.
16	267 - 268	S 33° 41' 56" W	113.89 m.
17	268 - 269	S 23° 55' 41" W	77.82 m.
18	269 - 270	S 47° 30' 12" W	128.59 m.
19	270 - 271	S 39° 04' 40" W	162.80 m.
20	271 - 272	S 67° 22' 58" W	102.71 m.
21	272 - 273	S 69° 59' 60" W	92.45 m.
22	273 - 274	S 36° 51' 35" W	157.95 m.
23	274 - 275	S 57° 17' 34" W	131.40 m.
24	275 - 276	S 59° 03' 08" W	92.11 m.
25	276 - 277	S 42° 31' 02" W	128.55 m.
26	277 - 278	S 39° 44' 46" W	61.78 m.
27	278 - 279	S 11° 18' 18" W	161.00 m.
28	279 - 280	S 23° 12' 25" W	60.11 m.
29	280 - 281	S 53° 42' 53" W	147.01 m.

1	281 - 282	S 53° 11' 24" W	39.42 m.
2	282 - 283	S 71° 32' 05" W	74.99 m.
3	283 - 284	S 71° 36' 25" W	74.89 m.
4	284 - 285	S 05° 11' 59" W	174.47 m.
5	285 - 286	S 38° 08' 39" W	140.66 m.
6	286 - 287	S 79° 24' 32" W	128.57 m.
7	287 - 288	DUE WEST	134.25 m.
8	288 - 289	DUE WEST	78.94 m.
9	289 - 290	N 74° 06' 21" W	57.51 m.
10	290 - 291	S 34° 59' 54" W	96.44 m.
11	291 - 292	S 73° 22' 26" W	276.11 m.
12	292 - 293	S 79° 02' 56" W	249.35 m.
13	293 - 294	S 68° 57' 37" W	220.05 m.
14	294 - 295	S 63° 27' 18" W	158.87 m.
15	295 - 296	S 66° 47' 22" W	180.48 m.
16	296 - 297	S 41° 49' 43" W	201.30 m.
17	297 - 298	S 35° 30' 12" W	68.02 m.
18	298 - 299	DUE SOUTH	173.75 m.
19	299 - 300	S 08° 45' 31" W	103.84 m.
20	300 - 301	S 36° 52' 12" W	118.44 m.
21	301 - 302	S 46° 23' 34" W	229.08 m.
22	302 - 303	S 49° 24' 14" W	145.61 m.
23	303 - 304	S 57° 59' 22" W	149.04 m.
24	304 - 305	N 76° 58' 39" W	105.40 m.
25	305 - 306	S 75° 57' 55" W	195.33 m.
26	306 - 307	N 80° 01' 34" W	136.37 m.
27	307 - 308	S 54° 27' 12" W	135.89 m.
28	308 - 309	S 25° 41' 56" W	236.66 m.
29	309 - 310	S 05° 21' 15" E	253.86 m.

1	310 - 311	S 30° 16' 32" W	109.71 m.
2	311 - 312	S 21° 48' 49" W	170.05 m.
3	312 - 313	S 15° 42' 14" W	262.55 m.
4	313 - 314	S 09° 14' 03" W	320.15 m.
5	314 - 315	S 21° 50' 14" E	127.53 m.
6	315 - 316	S 42° 28' 52" W	128.64 m.
7	316 - 317	S 43° 06' 13" W	335.22 m.
8	317 - 318	DUE WEST	157.94 m.
9	318 - 319	DUE WEST	94.81 m.
10	319 - 320	S 63° 25' 57" W	105.94 m.
11	320 - 321	S 27° 45' 19" W	169.64 m.
12	321 - 322	S 40° 14' 51" W	134.46 m.
13	322 - 323	S 57° 05' 39" W	159.90 m.
14	323 - 324	S 75° 03' 18" W	122.65 m.
15	324 - 325	S 72° 38' 05" W	132.34 m.
16	325 - 326	S 45° 00' 00" W	167.58 m.
17	326 - 327	S 47° 23' 22" W	268.27 m.
18	327 - 328	S 50° 44' 31" W	112.20 m.
19	328 - 329	S 36° 32' 52" W	262.81 m.
20	329 - 330	S 36° 52' 13" E	94.06 m.
21	330 - 331	S 34° 18' 03" E	125.43 m.
22	331 - 332	S 11° 19' 28" E	96.12 m.
23	332 - 333	DUE SOUTH	113.13 m.
24	333 - 334	S 08° 49' 27" E	276.64 m.
25	334 - 335	S 08° 52' 33" E	152.71 m.
26	335 - 336	S 21° 32' 09" W	192.56 m.
27	336 - 337	S 33° 42' 11" W	152.96 m.
28	337 - 338	S 12° 31' 41" W	43.54 m.
29	338 - 339	S 25° 02' 35" E	75.96 m.

1	339 - 340	S 11° 17' 16" W	96.11 m.
2	340 - 341	S 00° 00' 00" E	99.00 m.
3	341 - 342	S 19° 58' 27" E	165.58 m.
4	342 - 343	S 48° 25' 20" W	85.14 m.
5	343 - 344	S 62° 07' 28" W	90.64 m.
6	344 - 345	S 42° 27' 42" W	76.75 m.
7	345 - 346	S 24° 00' 25" W	46.39 m.
8	346 - 347	S 34° 48' 35" W	132.15 m.
9	347 - 348	S 26° 33' 54" W	105.37 m.
10	348 - 349	S 20° 43' 55" E	186.44 m.
11	349 - 350	S 19° 26' 28" E	169.94 m.
12	350 - 351	S 25° 27' 18" E	109.64 m.
13	351 - 352	S 23° 45' 06" E	257.43 m.
14	352 - 353	S 53° 07' 18" W	141.42 m.
15	353 - 354	S 42° 30' 23" W	153.46 m.
16	354 - 355	S 05° 33' 36" W	194.16 m.
17	355 - 356	S 33° 40' 39" E	237.93 m.
18	356 - 357	S 45° 02' 45" E	59.97 m.
19	357 - 358	S 35° 31' 39" W	81.10 m.
20	358 - 359	S 77° 22' 55" W	43.49 m.
21	359 - 360	N 61° 47' 53" W	149.71 m.
22	360 - 361	S 85° 11' 59" W	56.76 m.
23	361 - 362	S 43° 51' 09" W	163.29 m.
24	362 - 363	S 41° 09' 33" W	100.28 m.
25	363 - 364	S 18° 10' 41" W	158.67 m.
26	364 - 365	S 59° 44' 23" W	130.97 m.
27	365 - 366	S 59° 02' 10" W	192.42 m.
28	366 - 367	S 81° 33' 38" W	128.64 m.
29	367 - 368	N 74° 26' 32" W	88.10 m.

1	368 - 369	S $70^{\circ} 47' 43''$ W	114.76 m.
2	369 - 370	S $66^{\circ} 35' 05''$ W	154.13 m.
3	370 - 371	S $69^{\circ} 46' 24''$ W	95.45 m.
4	371 - 372	S $09^{\circ} 59' 50''$ W	81.37 m.
5	372 - 373	S $03^{\circ} 34' 45''$ W	151.16 m.
6	373 - 374	S $48^{\circ} 02' 05''$ W	63.38 m.
7	374 - 375	S $40^{\circ} 53' 01''$ W	93.58 m.
8	375 - 376	S $57^{\circ} 03' 20''$ E	103.89 m.
9	376 - 377	S $53^{\circ} 57' 22''$ E	64.16 m.
10	377 - 378	S $51^{\circ} 18' 21''$ E	90.57 m.
11	378 - 379	S $43^{\circ} 32' 20''$ E	180.02 m.
12	379 - 380	S $35^{\circ} 44' 04''$ E	145.22 m.
13	380 - 381	S $04^{\circ} 00' 19''$ E	203.12 m.
14	381 - 382	S $45^{\circ} 01' 55''$ E	79.95 m.
15	382 - 383	S $85^{\circ} 23' 23''$ E	118.19 m.
16	383 - 384	N $74^{\circ} 02' 39''$ E	68.64 m.
17	384 - 385	S $35^{\circ} 00' 18''$ E	57.53 m.
18	385 - 386	S $38^{\circ} 40' 25''$ W	120.72 m.
19	386 - 387	S $03^{\circ} 33' 11''$ W	75.65 m.
20	387 - 388	S $26^{\circ} 35' 09''$ W	147.47 m.
21	388 - 389	S $46^{\circ} 42' 08''$ W	110.09 m.
22	389 - 390	S $59^{\circ} 32' 28''$ W	92.95 m.
23	390 - 391	S $49^{\circ} 23' 28''$ W	130.41 m.
24	391 - 392	S $65^{\circ} 57' 25''$ W	289.01 m.
25	392 - 393	S $65^{\circ} 41' 34''$ W	160.34 m.
26	393 - 394	S $79^{\circ} 41' 10''$ W	210.84 m.
27	394 - 395	S $68^{\circ} 12' 57''$ W	76.12 m.
28	395 - 396	S $82^{\circ} 52' 05''$ W	151.99 m.
29	396 - 397	S $40^{\circ} 31' 46''$ W	192.26 m.

1	397 - 398	S 46° 57' 52" W	96.71 m.
2	398 - 399	S 51° 21' 53" W	90.49 m.
3	399 - 400	S 21° 21' 44" W	116.50 m.
4	400 - 401	S 32° 11' 50" W	150.37 m.
5	401 - 402	S 28° 05' 13" W	80.05 m.
6	402 - 403	DUE SOUTH	66.00 m.
7	403 - 404	S 56° 19' 50" W	85.01 m.
8	404 - 405	S 67° 20' 07" W	61.30 m.
9	405 - 406	S 31° 36' 14" W	71.92 m.
10	406 - 407	S 27° 27' 22" W	132.84 m.
11	407 - 408	S 31° 38' 48" W	71.95 m.
12	408 - 409	S 26° 34' 00" W	94.89 m.
13	409 - 410	S 14° 01' 33" W	174.84 m.
14	410 - 411	N 83° 19' 23" W	80.67 m.
15	411 - 412	S 32° 02' 46" W	88.93 m.
16	412 - 413	S 10° 57' 05" E	148.84 m.
17	413 - 414	S 61° 53' 45" W	80.14 m.
18	414 - 415	S 23° 38' 35" W	82.29 m.
19	415 - 416	S 03° 53' 38" E	103.99 m.
20	416 - 417	S 48° 26' 38" E	66.99 m.
21	417 - 418	S 65° 29' 01" E	56.95 m.
22	418 - 419	S 23° 56' 38" W	92.86 m.
23	419 - 420	S 15° 32' 15" W	87.97 m.
24	420 - 421	S 17° 38' 40" W	108.87 m.
25	421 - 422	S 69° 28' 11" W	80.55 m.
26	422 - 423	S 66° 00' 59" W	46.45 m.
27	423 - 424	S 04° 58' 38" E	108.78 m.
28	424 - 425	S 08° 59' 40" E	90.75 m.
29	425 - 426	S 26° 36' 16" W	84.30 m.

1	426 - 427	S 09° 27' 40" W	57.41 m.
2	427 - 428	S 02° 42' 40" W	99.11 m.
3	428 - 429	S 36° 54' 36" W	70.66 m.
4	429 - 430	S 34° 43' 00" W	74.52 m.
5	430 - 431	S 18° 22' 45" W	59.66 m.
6	431 - 432	S 14° 03' 03" W	116.62 m.
7	432 - 433	S 45° 00' 00" W	86.62 m.
8	433 - 434	S 78° 40' 09" W	120.22 m.
9	434 - 435	S 55° 19' 12" W	74.48 m.
10	435 - 436	S 45° 00' 00" W	86.62 m.
11	436 - 437	S 15° 57' 35" W	68.65 m.
12	437 - 438	S 16° 43' 14" E	98.41 m.
13	438 - 439	S 19° 56' 04" E	55.18 m.
14	439 - 440	S 08° 58' 07" E	90.61 m.
15	440 - 441	DUE SOUTH	70.75 m.
16	441 - 442	S 15° 38' 22" E	122.41 m.
17	442 - 443	S 33° 45' 08" E	50.96 m.
18	443 - 444	S 14° 32' 18" E	131.46 m.
19	444 - 445	S 21° 25' 51" E	141.80 m.
20	445 - 446	S 41° 47' 43" E	120.22 m.
21	446 - 447	S 41° 23' 00" E	156.94 m.
22	447 - 448	S 33° 40' 00" E	85.01 m.
23	448 - 449	S 84° 18' 19" W	158.72 m.
24	449 - 450	S 07° 07' 01" E	114.01 m.
25	450 - 451	S 06° 06' 28" W	132.75 m.
26	451 - 452	S 39° 49' 51" W	110.36 m.
27	452 - 453	S 65° 13' 53" W	153.93 m.
28	453 - 454	S 50° 31' 17" W	103.81 m.
29	454 - 455	S 13° 28' 40" W	121.21 m.

1	455 – 456	S 03° 16' 26" E	165.27 m.
2	456 – 457	S 16° 52' 51" W	162.50 m.
3	457 – 458	S 33° 38' 58" W	101.97 m.
4	458 – 459	S 15° 41' 19" E	156.71 m.
5	459 – 460	S 30° 23' 20" E	158.39 m.
6	460 – 461	S 48° 33' 20" E	106.89 m.
7	461 – 462	S 14° 57' 03" E	146.32 m.
8	462 – 463	S 30° 22' 01" E	158.49 m.
9	463 – 464	S 52° 36' 17" E	100.85 m.
10	464 – 465	S 85° 03' 12" E	108.78 m.
11	465 – 466	S 53° 06' 36" E	94.32 m.
12	466 – 467	S 41° 11' 21" E	150.33 m.
13	467 – 468	S 26° 33' 54" E	136.96 m.
14	468 – 469	S 26° 33' 54" E	179.16 m.
15	469 – 470	S 54° 11' 02" E	104.67 m.
16	470 – 471	S 58° 34' 10" W	99.47 m.
17	471 – 472	S 04° 22' 18" W	122.99 m.
18	472 – 473	S 16° 52' 51" W	162.50 m.
19	473 – 474	S 32° 53' 24" W	95.41 m.
20	474 – 475	S 14° 32' 18" W	131.46 m.
21	475 – 476	S 05° 11' 52" W	104.18 m.
22	476 – 477	S 14° 32' 18" W	131.46 m.
23	477 – 478	S 27° 21' 19" W	153.83 m.
24	478 – 479	S 38° 15' 53" W	114.14 m.
25	479 – 480	S 84° 24' 47" W	147.70 m.
26	480 – 481	N 69° 27' 34" W	188.82 m.
27	481 – 482	N 44° 57' 35" W	62.54 m.
28	482 – 483	N 18° 25' 06" W	69.83 m.
29	483 – 484	N 23° 11' 37" W	112.20 m.

1	484 - 485	N 63° 23' 09" W	32.93 m.
2	485 - 486	N 74° 02' 11" W	214.52 m.
3	486 - 487	N 82° 23' 34" W	111.42 m.
4	487 - 488	N 25° 19' 58" W	138.42 m.
5	488 - 489	N 36° 53' 22" W	147.23 m.
6	489 - 490	N 09° 08' 54" W	176.11 m.
7	490 - 491	N 26° 36' 14" W	78.99 m.
8	491 - 492	N 63° 25' 05" W	79.04 m.
9	492 - 493	N 33° 43' 16" W	63.72 m.
10	493 - 494	N 19° 38' 14" W	175.19 m.
11	494 - 495	N 21° 44' 35" W	206.85 m.
12	495 - 496	N 43° 32' 20" W	130.02 m.
13	496 - 497	N 71° 33' 03" W	59.63 m.
14	497 - 498	N 52° 36' 17" W	127.31 m.
15	498 - 499	N 15° 57' 32" W	34.32 m.
16	499 - 500	N 25° 11' 21" W	88.55 m.
17	500 - 501	N 36° 48' 59" W	23.57 m.
18	501 - 502	N 59° 44' 22" W	65.48 m.
19	502 - 503	N 68° 12' 58" W	76.12 m.
20	503 - 504	N 73° 44' 15" W	117.84 m.
21	504 - 505	N 50° 55' 32" W	97.17 m.
22	505 - 506	N 39° 42' 06" W	36.89 m.
23	506 - 507	N 60° 23' 44" W	37.95 m.
24	507 - 508	N 59° 37' 23" W	158.44 m.
25	508 - 509	N 52° 07' 52" W	53.76 m.
26	509 - 510	N 63° 26' 06" W	73.79 m.
27	510 - 511	N 35° 31' 38" W	121.65 m.
28	511 - 512	N 29° 35' 05" W	200.52 m.
29	512 - 513	N 30° 56' 16" W	164.97 m.

1	513 - 514	N 50° 31' 17" W	103.81 m.
2	514 - 515	N 61° 42' 34" W	69.63 m.
3	515 - 516	S 60° 46' 47" W	69.51 m.
4	516 - 517	N 40° 01' 29" W	153.94 m.
5	517 - 518	N 04° 05' 23" W	132.34 m.
6	518 - 519	N 00° 55' 52" E	146.14 m.
7	519 - 520	N 11° 17' 26" W	72.15 m.
8	520 - 521	N 06° 21' 16" E	85.27 m.
9	521 - 522	N 10° 37' 41" W	153.51 m.
10	522 - 523	N 20° 33' 05" W	161.12 m.
11	523 - 524	DUE NORTH	80.13 m.
12	524 - 525	N 09° 09' 38" W	148.01 m.
13	525 - 526	N 24° 14' 24" W	103.36 m.
14	526 - 527	N 25° 11' 21" W	88.55 m.
15	527 - 528	N 68° 10' 39" W	50.76 m.
16	528 - 529	N 63° 26' 06" W	73.79 m.
17	529 - 530	N 42° 00' 02" W	63.42 m.
18	530 - 531	N 02° 44' 49" E	99.11 m.
19	531 - 532	N 01° 53' 56" E	141.45 m.
20	532 - 533	N 02° 28' 35" W	108.48 m.
21	533 - 534	N 25° 13' 42" W	88.57 m.
22	534 - 535	N 30° 15' 54" W	163.69 m.
23	535 - 536	N 56° 11' 52" W	51.00 m.
24	536 - 537	N 48° 26' 11" W	56.72 m.
25	537 - 538	S 67° 52' 10" W	137.37 m.
26	538 - 539	S 60° 00' 14" W	141.52 m.
27	539 - 540	N 82° 48' 60" W	37.99 m.
28	540 - 541	S 85° 06' 19" W	165.60 m.
29	541 - 542	S 87° 51' 44" W	127.34 m.

1	542 – 543	N 77° 39' 44" W	101.20 m.
2	543 – 544	S 73° 18' 53" W	154.44 m.
3	544 – 545	N 77° 13' 48" W	106.32 m.
4	545 – 546	N 61° 42' 36" W	69.63 m.
5	546 – 547	S 53° 31' 30" W	134.78 m.
6	547 – 548	S 40° 15' 45" W	80.27 m.
7	548 – 549	S 14° 01' 15" W	116.60 m.
8	549 – 550	S 53° 06' 34" W	94.32 m.
9	550 – 551	S 25° 22' 08" W	99.05 m.
10	551 – 552	S 86° 57' 51" W	89.69 m.
11	552 – 553	S 78° 15' 52" W	115.54 m.
12	553 – 554	S 71° 32' 30" W	59.63 m.
13	554 – 555	S 35° 18' 38" W	138.62 m.
14	555 – 556	DUE WEST	106.00 m.
15	556 – 557	S 87° 07' 00" W	94.43 m.
16	557 – 558	N 58° 43' 54" W	154.36 m.
17	558 – 559	N 10° 39' 32" W	76.70 m.
18	559 – 560	N 19° 27' 43" E	84.98 m.
19	560 – 561	N 31° 18' 43" W	127.00 m.
20	561 – 562	N 64° 50' 36" W	88.52 m.
21	562 – 563	N 44° 59' 12" W	193.35 m.
22	563 – 564	N 13° 05' 35" E	208.03 m.
23	564 – 565	N 18° 25' 32" E	134.26 m.
24	565 – 566	N 31° 10' 10" E	236.80 m.
25	566 – 567	N 38° 39' 02" E	120.68 m.
26	567 – 568	N 38° 39' 02" W	120.68 m.
27	568 – 569	N 02° 19' 03" E	174.64 m.
28	569 – 570	N 30° 56' 19" E	54.95 m.
29	570 – 571	N 45° 02' 45" E	59.97 m.

1	571 - 572	N 51° 49' 50" E	83.95 m.
2	572 - 573	N 43° 15' 08" E	110.00 m.
3	573 - 574	N 54° 28' 11" E	81.10 m.
4	574 - 575	N 30° 23' 27" E	158.38 m.
5	575 - 576	N 07° 07' 29" E	76.09 m.
6	576 - 577	N 42° 53' 30" E	90.08 m.
7	577 - 578	N 49° 48' 20" E	80.18 m.
8	578 - 579	N 17° 14' 26" E	143.18 m.
9	579 - 580	N 16° 41' 01" E	49.20 m.
10	580 - 581	N 71° 34' 40" E	89.39 m.
11	581 - 582	N 58° 59' 05" E	55.06 m.
12	582 - 583	N 31° 16' 52" W	154.31 m.
13	583 - 584	N 23° 28' 37" W	118.29 m.
14	584 - 585	N 22° 23' 09" W	86.65 m.
15	585 - 586	N 26° 34' 48" W	210.78 m.
16	586 - 587	N 36° 51' 17" W	106.08 m.
17	587 - 588	N 41° 58' 59" W	126.79 m.
18	588 - 589	N 25° 34' 47" W	120.15 m.
19	589 - 590	N 36° 14' 58" W	193.46 m.
20	590 - 591	N 36° 14' 58" W	87.73 m.
21	591 - 592	N 43° 39' 29" W	143.41 m.
22	592 - 593	N 83° 14' 18" W	80.69 m.
23	593 - 594	S 76° 44' 28" W	82.32 m.
24	594 - 595	N 29° 02' 30" W	97.08 m.
25	595 - 596	N 25° 11' 19" W	88.55 m.
26	596 - 597	N 03° 41' 44" W	146.42 m.
27	597 - 598	N 01° 46' 52" E	150.82 m.
28	598 - 599	N 22° 12' 55" W	56.04 m.
29	599 - 600	N 55° 41' 34" E	125.53 m.

1	600 - 601	N 60° 17' 11" E	113.99 m.
2	601 - 602	N 53° 43' 44" E	87.68 m.
3	602 - 603	N 33° 40' 44" E	102.00 m.
4	603 - 604	N 29° 43' 37" E	76.00 m.
5	604 - 605	DUE NORTH	89.50 m.
6	605 - 606	N 30° 57' 04" W	137.44 m.
7	606 - 607	N 17° 43' 47" W	123.76 m.
8	607 - 608	N 05° 12' 14" W	104.05 m.
9	608 - 609	N 12° 15' 50" W	111.03 m.
10	609 - 610	N 08° 09' 07" W	66.55 m.
11	610 - 611	N 31° 33' 14" E	72.02 m.
12	611 - 612	N 50° 14' 02" E	110.42 m.
13	612 - 613	N 07° 07' 31" E	76.09 m.
14	613 - 614	N 02° 59' 52" E	89.62 m.
15	614 - 615	DUE NORTH	108.37 m.
16	615 - 616	N 42° 51' 44" E	90.04 m.
17	616 - 617	N 19° 17' 49" E	99.86 m.
18	617 - 618	N 08° 48' 03" E	49.84 m.
19	618 - 619	S 81° 05' 52" W	33.09 m.
20	619 - 620	S 34° 12' 18" W	140.87 m.
21	620 - 621	S 53° 56' 26" W	319.61 m.
22	621 - 622	N 87° 39' 22" W	110.03 m.
23	622 - 623	N 35° 05' 48" W	99.46 m.
24	623 - 624	N 67° 26' 55" W	450.10 m.
25	624 - 625	N 01° 12' 51" W	259.56 m.
26	625 - 626	N 14° 54' 58" E	209.30 m.
27	626 - 627	N 32° 58' 18" E	780.01 m.
28	627 - 628	N 85° 49' 23" E	120.13 m.
29	628 - 629	N 17° 17' 05" E	143.93 m.

1	629 - 630	N 10° 06' 30" W	400.97 m.
2	630 - 631	N 76° 12' 46" W	300.02 m.
3	631 - 632	N 68° 56' 07" W	370.04 m.
4	632 - 633	N 06° 00' 33" E	179.10 m.
5	633 - 634	S 79° 04' 04" E	290.01 m.
6	634 - 635	N 17° 52' 18" E	279.62 m.
7	635 - 636	N 10° 59' 42" E	599.37 m.
8	636 - 637	DUE NORTH	470.63 m.
9	637 - 638	N 67° 06' 20" E	252.86 m.
10	638 - 639	N 01° 58' 30" E	7.25 m.
11	639 - 640	N 47° 20' 22" E	83.38 m.
12	640 - 641	N 87° 00' 08" E	31.17 m.
13	641 - 642	N 30° 54' 01" E	278.09 m.
14	642 - 643	S 61° 05' 28" E	250.03 m.
15	643 - 644	S 21° 56' 24" W	100.53 m.
16	644 - 645	S 78° 34' 44" E	12.63 m.
17	645 - 646	N 86° 04' 00" E	123.92 m.
18	646 - 647	N 53° 00' 11" E	90.15 m.
19	647 - 648	S 85° 58' 14" E	49.81 m.
20	648 - 649	N 66° 02' 15" E	4.92 m.
21	649 - 650	N 40° 50' 18" E	136.96 m.
22	650 - 651	N 28° 27' 21" E	128.68 m.
23	651 - 652	N 54° 46' 21" E	147.13 m.
24	652 - 653	N 85° 23' 23" E	118.19 m.
25	653 - 654	DUE EAST	103.69 m.
26	654 - 655	S 75° 03' 12" E	73.16 m.
27	655 - 656	S 87° 22' 43" E	103.86 m.
28	656 - 657	N 72° 36' 03" E	78.99 m.
29	657 - 658	N 33° 43' 10" E	101.89 m.

1	658 - 659	N 69° 07' 39" E	105.95 m.
2	659 - 660	N 49° 54' 51" E	117.06 m.
3	660 - 661	N 23° 36' 34" E	82.40 m.
4	661 - 662	N 03° 20' 55" E	80.26 m.
5	662 - 663	N 06° 21' 42" E	128.04 m.
6	663 - 664	N 26° 33' 54" E	105.37 m.
7	664 - 665	N 57° 23' 16" E	139.86 m.
8	665 - 666	N 52° 40' 12" E	124.50 m.
9	666 - 667	N 31° 15' 29" W	154.42 m.
10	667 - 668	N 53° 10' 04" E	94.25 m.
11	668 - 669	N 32° 11' 50" E	150.37 m.
12	669 - 670	N 09° 59' 54" E	81.36 m.
13	670 - 671	N 31° 55' 30" E	11.35 m.
14	671 - 672	S 73° 45' 34" W	73.30 m.
15	672 - 673	S 73° 08' 49" W	182.40 m.
16	673 - 674	S 63° 05' 14" W	266.49 m.
17	674 - 675	S 71° 59' 23" W	252.69 m.
18	675 - 676	S 83° 53' 24" W	70.46 m.
19	676 - 677	DUE WEST	78.63 m.
20	677 - 678	N 70° 34' 16" W	82.31 m.
21	678 - 679	N 52° 36' 22" W	48.77 m.
22	679 - 680	N 79° 49' 39" W	58.04 m.
23	680 - 681	S 69° 39' 18" W	78.72 m.
24	681 - 682	S 54° 24' 57" W	86.15 m.
25	682 - 683	S 10° 00' 22" W	65.11 m.
26	683 - 684	S 24° 12' 24" E	81.55 m.
27	684 - 685	S 30° 03' 23" E	94.59 m.
28	685 - 686	S 03° 22' 11" W	73.58 m.
29	686 - 687	S 36° 18' 06" W	48.24 m.

1	687 – 688	S 26° 33' 54" W	4.75 m.
2	688 – 689	S 45° 55' 05" W	93.79 m.
3	689 – 690	S 48° 49' 43" W	211.15 m.
4	690 – 691	S 56° 35' 00" W	87.16 m.
5	691 – 692	S 44° 05' 54" W	165.70 m.
6	692 – 693	S 48° 37' 39" W	77.54 m.
7	693 – 694	N 55° 31' 40" W	335.24 m.
8	694 – 695	S 68° 47' 37" W	67.04 m.
9	695 – 696	S 78° 55' 06" W	81.27 m.
10	696 – 697	S 60° 11' 43" W	78.22 m.
11	697 – 698	S 73° 48' 36" W	71.26 m.
12	698 – 699	N 41° 18' 51" W	230.99 m.
13	699 – 700	N 00° 19' 06" W	292.50 m.
14	700 – 701	N 20° 05' 43" W	21.83 m.
15	701 – 702	N 01° 18' 37" W	1107.04 m.
16	702 – 703	N 01° 53' 34" W	522.28 m.
17	703 – 704	N 03° 25' 23" W	189.46 m.
18	704 – 705	N 01° 32' 08" W	221.58 m.
19	705 – 706	N 02° 11' 18" W	268.45 m.
20	706 – 707	N 06° 05' 40" W	96.55 m.
21	707 – 708	N 02° 27' 37" W	361.08 m.
22	708 – 709	N 81° 24' 01" W	42.67 m.
23	709 – 710	N 42° 31' 06" W	81.57 m.
24	710 – 711	N 23° 37' 59" W	87.47 m.
25	711 – 712	N 13° 59' 45" W	41.35 m.
26	712 – 713	N 20° 33' 52" E	85.58 m.
27	713 – 714	DUE NORTH	115.25 m.
28	714 – 715	N 10° 12' 43" W	127.27 m.
29	715 – 716	N 42° 39' 33" W	88.73 m.

1	716 - 717	N 18° 27' 14" W	63.38 m.
2	717 - 718	N 07° 09' 26" E	80.76 m.
3	718 - 719	N 11° 17' 32" E	76.60 m.
4	719 - 720	N 37° 50' 41" E	57.15 m.
5	720 - 721	N 61° 54' 56" E	85.22 m.
6	721 - 722	N 53° 43' 38" E	93.18 m.
7	722 - 723	N 49° 55' 05" E	31.45 m.
8	723 - 724	N 02° 27' 27" W	3288.52 m.
9	724 - 725	N 02° 31' 54" W	462.70 m.
10	725 - 726	N 02° 33' 20" W	339.21 m.
11	726 - 727	N 06° 57' 11" E	30.98 m.
12	727 - 728	N 03° 43' 53" E	17.29 m.
13	728 - 729	N 20° 58' 33" E	12.05 m.
14	729 - 730	N 08° 47' 37" E	45.79 m.
15	730 - 731	N 17° 54' 04" E	19.32 m.
16	731 - 732	N 48° 59' 39" E	5.72 m.
17	732 - 733	N 11° 20' 26" E	21.93 m.
18	733 - 734	N 00° 53' 56" E	31.87 m.
19	734 - 735	N 14° 11' 15" E	46.16 m.
20	735 - 736	N 06° 38' 28" W	9.19 m.
21	736 - 737	N 03° 57' 11" E	30.82 m.
22	737 - 738	N 16° 53' 12" W	7.32 m.
23	738 - 739	N 02° 28' 24" W	37.66 m.
24	739 - 740	N 14° 02' 10" E	6.70 m.
25	740 - 741	DUE NORTH	5.88 m.
26	741 - 742	N 13° 32' 09" E	13.89 m.
27	742 - 743	N 20° 19' 42" E	29.33 m.
28	743 - 744	N 56° 52' 60" E	3.88 m.
29	744 - 745	DUE NORTH	2.75 m.

1	745 - 746	N 42° 13' 38" E	45.75 m.
2	746 - 747	N 17° 46' 59" W	5.11 m.
3	747 - 748	N 56° 45' 35" E	3.89 m.
4	748 - 749	N 34° 19' 49" E	12.41 m.
5	749 - 750	N 13° 40' 18" E	4.50 m.
6	750 - 751	N 51° 01' 09" E	4.18 m.
7	751 - 752	N 17° 35' 33" E	10.75 m.
8	752 - 753	N 29° 58' 54" E	7.50 m.
9	753 - 754	N 07° 23' 38" E	46.13 m.
10	754 - 755	N 17° 39' 35" E	40.79 m.
11	755 - 756	N 42° 45' 49" E	8.01 m.
12	756 - 757	N 30° 33' 50" E	20.03 m.
13	757 - 758	N 55° 25' 27" E	1.97 m.
14	758 - 759	N 25° 25' 50" E	45.27 m.
15	759 - 760	N 45° 04' 03" E	3.00 m.
16	760 - 761	DUE NORTH	3.25 m.
17	761 - 762	N 35° 42' 13" E	7.39 m.
18	762 - 763	N 08° 38' 05" E	7.08 m.
19	763 - 764	N 37° 20' 25" E	2.68 m.
20	764 - 765	N 13° 32' 09" E	13.89 m.
21	765 - 766	N 28° 28' 14" E	13.50 m.
22	766 - 767	DUE NORTH	5.38 m.
23	767 - 768	N 31° 21' 26" E	9.37 m.
24	768 - 769	N 12° 18' 47" E	4.98 m.
25	769 - 770	N 25° 34' 11" E	16.22 m.
26	770 - 771	N 38° 45' 35" E	12.98 m.
27	771 - 772	N 27° 49' 54" E	53.01 m.
28	772 - 773	N 21° 41' 04" E	5.92 m.
29	773 - 774	DUE NORTH	2.62 m.

1	774 - 775	N 24° 07' 32" E	17.13 m.
2	775 - 776	N 30° 07' 33" E	34.25 m.
3	776 - 777	N 20° 01' 36" E	6.39 m.
4	777 - 778	N 64° 47' 56" E	2.35 m.
5	778 - 779	N 34° 51' 33" E	32.15 m.
6	779 - 780	N 55° 30' 28" E	12.36 m.
7	780 - 781	N 26° 33' 54" E	2.52 m.
8	781 - 782	N 36° 22' 57" E	2.63 m.
9	782 - 783	N 56° 18' 36" E	36.96 m.
10	783 - 784	N 70° 16' 00" E	6.31 m.
11	784 - 785	N 40° 21' 36" E	4.92 m.
12	785 - 786	N 64° 47' 33" E	19.07 m.
13	786 - 787	N 45° 00' 00" E	4.60 m.
14	787 - 788	N 65° 07' 11" E	19.01 m.
15	788 - 789	N 53° 20' 44" E	10.05 m.
16	789 - 790	DUE EAST	2.19 m.
17	790 - 791	N 45° 25' 18" E	6.06 m.
18	791 - 792	N 68° 50' 01" E	12.13 m.
19	792 - 793	N 33° 16' 18" E	1.94 m.
20	793 - 794	N 63° 24' 49" E	12.02 m.
21	794 - 795	N 47° 54' 56" E	8.76 m.
22	795 - 796	N 66° 39' 27" E	16.40 m.
23	796 - 797	N 51° 01' 09" E	4.18 m.
24	797 - 798	N 73° 22' 15" E	3.91 m.
25	798 - 799	N 52° 43' 12" E	45.40 m.
26	799 - 800	N 60° 11' 26" E	17.36 m.
27	800 - 801	N 47° 49' 19" E	7.25 m.
28	801 - 802	DUE EAST	1.63 m.
29	802 - 803	N 45° 25' 54" E	6.05 m.

1	803 - 804	N 56° 48' 30" E	35.40 m.
2	804 - 805	N 80° 45' 52" E	3.86 m.
3	805 - 806	N 56° 37' 50" E	11.60 m.
4	806 - 807	N 73° 10' 43" E	11.23 m.
5	807 - 808	N 53° 29' 01" E	2.72 m.
6	808 - 809	N 75° 18' 55" E	4.46 m.
7	809 - 810	N 55° 04' 54" E	11.13 m.
8	810 - 811	DUE EAST	2.69 m.
9	811 - 812	N 70° 32' 48" E	60.05 m.
10	812 - 813	N 52° 27' 19" E	8.83 m.
11	813 - 814	N 73° 09' 02" E	7.31 m.
12	814 - 815	N 63° 21' 52" E	22.86 m.
13	815 - 816	N 57° 39' 31" E	19.16 m.
14	816 - 817	DUE EAST	5.38 m.
15	817 - 818	N 65° 08' 48" E	6.54 m.
16	818 - 819	N 83° 03' 30" E	44.51 m.
17	819 - 820	S 79° 18' 11" E	23.60 m.
18	820 - 821	S 61° 49' 17" E	7.94 m.
19	821 - 822	S 80° 16' 44" E	12.56 m.
20	822 - 823	S 72° 44' 21" E	38.35 m.
21	823 - 824	S 81° 04' 31" E	13.67 m.
22	824 - 825	N 81° 24' 15" E	21.74 m.
23	825 - 826	DUE EAST	12.44 m.
24	826 - 827	N 60° 31' 09" E	4.31 m.
25	827 - 828	N 79° 38' 01" E	20.84 m.
26	828 - 829	N 44° 26' 21" E	4.55 m.
27	830 - 831	N 33° 39' 47" E	5.86 m.
28	831 - 832	N 51° 37' 55" E	19.93 m.
29	832 - 833	N 38° 55' 00" E	14.63 m.

1	833 - 834	N 31° 45' 15" E	26.60 m.
2	834 - 835	N 16° 53' 12" E	7.32 m.
3	835 - 836	N 31° 04' 14" E	15.62 m.
4	836 - 837	N 43° 18' 01" E	13.40 m.
5	837 - 838	N 49° 39' 11" E	19.11 m.
6	838 - 839	DUE EAST	1.63 m.
7	839 - 840	N 38° 43' 06" E	6.90 m.
8	840 - 841	N 70° 38' 14" E	3.38 m.
9	841 - 842	N 50° 04' 08" E	34.48 m.
10	842 - 843	S 15° 18' 27" E	4.02 m.
11	843 - 844	N 37° 43' 06" E	15.02 m.
12	844 - 845	N 13° 39' 33" E	4.50 m.
13	845 - 846	N 45° 16' 52" E	8.36 m.
14	846 - 847	DUE NORTH	5.37 m.
15	847 - 848	N 61° 59' 51" E	2.41 m.
16	848 - 849	N 22° 03' 53" E	2.83 m.
17	849 - 850	N 55° 18' 17" E	3.95 m.
18	850 - 851	N 25° 37' 28" E	3.73 m.
19	851 - 852	N 49° 05' 08" E	4.96 m.
20	852 - 853	N 33° 43' 02" E	5.85 m.
21	853 - 854	N 43° 10' 27" E	36.17 m.
22	854 - 855	DUE EAST	1.63 m.
23	855 - 856	N 43° 13' 57" E	22.81 m.
24	856 - 857	N 61° 00' 04" E	8.00 m.
25	857 - 858	N 50° 26' 39" E	20.99 m.
26	858 - 859	DUE EAST	2.19 m.
27	859 - 860	N 56° 40' 25" E	10.92 m.
28	860 - 861	N 26° 30' 02" E	2.38 m.
29	861 - 862	N 55° 20' 09" E	44.61 m.

1	862 - 863	N 62° 11' 03" E	33.50 m.
2	863 - 864	S 62° 26' 40" E	4.86 m.
3	864 - 865	N 16° 53' 12" E	7.32 m.
4	865 - 866	N 28° 25' 15" E	29.42 m.
5	866 - 867	N 34° 06' 58" E	18.28 m.
6	867 - 868	N 22° 59' 02" E	15.21 m.
7	868 - 869	N 07° 13' 40" E	34.27 m.
8	869 - 870	N 31° 37' 59" W	8.22 m.
9	870 - 871	DUE NORTH	3.12 m.
10	871 - 872	N 53° 35' 12" W	7.38 m.
11	872 - 873	N 02° 03' 53" W	2.83 m.
12	873 - 874	N 53° 13' 22" W	15.45 m.
13	874 - 875	N 75° 18' 16" W	3.94 m.
14	875 - 876	N 25° 16' 02" W	2.49 m.
15	876 - 877	N 59° 47' 12" W	6.22 m.
16	877 - 878	N 41° 46' 30" W	27.49 m.
17	878 - 879	N 31° 20' 18" W	11.42 m.
18	879 - 880	N 42° 24' 46" W	8.80 m.
19	880 - 881	DUE NORTH	2.12 m.
20	881 - 882	N 39° 43' 51" W	37.06 m.
21	882 - 883	N 19° 21' 32" W	9.80 m.
22	883 - 884	N 07° 33' 42" E	8.07 m.
23	884 - 885	N 26° 08' 49" E	30.63 m.
24	885 - 886	N 39° 27' 39" E	39.83 m.
25	886 - 887	N 05° 23' 52" E	11.30 m.
26	887 - 888	N 04° 14' 42" E	28.71 m.
27	888 - 889	N 34° 22' 49" E	5.76 m.
28	889 - 890	N 00° 00' 00" E	4.37 m.
29	890 - 891	N 37° 41' 39" E	3.48 m.

1	891 - 892	DUE NORTH	3.13 m.
2	892 - 893	N 35° 22' 37" E	6.59 m.
3	893 - 894	N 21° 06' 56" E	2.95 m.
4	894 - 895	N 13° 06' 08" E	9.37 m.
5	895 - 896	N 25° 38' 33" E	13.72 m.
6	896 - 897	N 07° 59' 42" W	15.28 m.
7	897 - 898	N 42° 24' 46" W	8.80 m.
8	898 - 899	N 20° 05' 43" W	10.91 m.
9	899 - 900	N 72° 53' 50" W	3.40 m.
10	900 - 901	N 15° 20' 43" W	4.01 m.
11	901 - 902	N 63° 43' 02" W	4.81 m.
12	902 - 903	N 16° 50' 10" W	5.61 m.
13	903 - 904	N 41° 27' 50" W	6.51 m.
14	904 - 905	N 61° 18' 26" W	6.77 m.
15	905 - 906	N 35° 17' 55" W	1.84 m.
16	906 - 907	N 62° 26' 60" W	4.86 m.
17	907 - 908	N 46° 53' 16" W	36.21 m.
18	908 - 909	N 78° 13' 46" W	5.49 m.
19	909 - 910	N 54° 57' 24" W	4.58 m.
20	910 - 911	N 26° 35' 47" W	4.89 m.
21	911 - 912	N 51° 02' 39" W	7.56 m. m.
22	912 - 913	N 17° 35' 33" W	10.75 m.
23	913 - 914	N 62° 40' 30" W	2.46 m.
24	914 - 915	DUE NORTH	3.25 m.
25	915 - 916	N 39° 35' 36" W	4.22 m.
26	916 - 917	DUE NORTH	1.62 m.
27	917 - 918	N 45° 24' 54" W	6.05 m.
28	918 - 919	N 18° 06' 42" W	3.42 m.
29	919 - 920	N 53° 44' 46" W	4.65 m.

1	920 - 921	N 23° 03' 28" W	11.01 m.
2	921 - 922	N 15° 07' 20" W	35.22 m.
3	922 - 923	N 25° 18' 18" W	10.09 m.
4	923 - 924	N 25° 12' 48" W	21.42 m.
5	924 - 925	N 40° 58' 37" W	32.12 m.
6	925 - 926	N 30° 41' 18" W	6.24 m.
7	926 - 927	N 48° 43' 54" W	10.81 m.
8	927 - 928	N 31° 44' 59" W	29.69 m.
9	928 - 929	N 13° 06' 58" W	9.36 m.
10	929 - 930	N 27° 24' 27" W	15.21 m.
11	930 - 931	N 10° 02' 48" W	6.09 m.
12	931 - 932	N 41° 53' 25" W	5.71 m.
13	932 - 933	N 29° 56' 20" W	16.16 m.
14	933 - 934	N 45° 00' 00" W	9.19 m.
15	934 - 935	N 32° 45' 38" W	10.86 m.
16	935 - 936	N 45° 09' 17" W	17.54 m.
17	936 - 937	DUE NORTH	1.63 m.
18	937 - 938	N 62° 12' 29" W	2.40 m.
19	938 - 939	DUE NORTH	3.25 m.
20	939 - 940	N 38° 17' 25" W	6.05 m.
21	940 - 941	DUE NORTH	2.25 m.
22	941 - 942	N 65° 26' 16" W	2.41 m.
23	942 - 943	N 09° 41' 20" W	41.59 m.
24	943 - 944	N 10° 14' 51" E	5.98 m.
25	944 - 945	N 45° 17' 43" E	12.31 m.
26	945 - 946	N 09° 11' 01" E	16.84 m.
27	946 - 947	N 01° 36' 35" W	20.01 m.
28	947 - 948	N 64° 47' 56" W	2.35 m.
29	948 - 949	N 06° 56' 04" W	9.32 m.

1	949 – 950	N 24° 25' 48" W	19.50 m.
2	950 – 951	N 65° 25' 40" W	2.40 m.
3	951 – 952	N 24° 31' 29" W	21.98 m.
4	952 – 953	DUE NORTH	7.50 m.
5	953 – 954	N 38° 30' 25" W	3.51 m.
6	954 – 955	N 10° 01' 22" E	2.57 m.
7	955 – 956	N 45° 04' 03" E	3.00 m.
8	956 – 957	N 06° 56' 04" E	9.32 m.
9	957 – 958	N 02° 15' 38" W	8.52 m.
10	958 – 959	N 16° 18' 03" W	19.15 m.
11	959 – 960	N 21° 35' 49" W	16.13 m.
12	960 – 961	N 07° 01' 25" W	8.69 m.
13	961 – 962	N 36° 08' 37" W	10.07 m.
14	962 – 963	DUE NORTH	2.12 m.
15	963 – 964	N 36° 11' 36" W	12.70 m.
16	964 – 965	N 66° 50' 55" W	4.15 m.
17	965 – 966	N 41° 28' 48" W	12.17 m.
18	966 – 967	N 55° 42' 26" W	20.20 m.
19	967 – 968	N 45° 26' 39" W	11.40 m.
20	968 – 969	DUE WEST	3.19 m.
21	969 – 970	N 51° 26' 09" W	13.83 m.
22	970 – 971	N 46° 41' 32" W	11.85 m.
23	971 – 972	N 55° 30' 28" W	12.36 m.
24	972 – 973	N 32° 59' 59" W	7.00 m.
25	973 – 974	N 70° 49' 40" W	3.44 m.
26	974 – 975	N 37° 52' 13" W	24.54 m.
27	975 – 976	DUE NORTH	4.38 m.
28	976 – 977	N 29° 32' 20" W	4.31 m.
29	977 – 978	N 11° 45' 13" W	15.95 m.

1	978 – 979	N 03° 08' 20" E	38.81 m.
2	979 – 980	N 15° 17' 60" E	12.32 m.
3	980 – 981	N 41° 52' 22" E	13.77 m.
4	981 – 982	DUE NORTH	2.12 m.
5	982 – 983	N 44° 59' 18" E	17.50 m.
6	983 – 984	N 59° 02' 10" E	4.37 m.
7	984 – 985	N 39° 51' 10" E	3.41 m.
8	985 – 986	N 55° 58' 14" E	5.81 m.
9	986 – 987	DUE NORTH	2.13 m.
10	987 – 988	N 31° 16' 59" E	17.69 m.
11	988 – 989	N 46° 41' 54" E	13.31 m.
12	989 – 990	N 03° 31' 35" E	9.14 m.
13	990 – 991	N 26° 07' 34" E	7.24 m.
14	991 – 992	N 04° 22' 06" E	28.71 m.
15	992 – 993	N 02° 59' 04" W	20.40 m.
16	993 – 994	N 21° 33' 47" W	25.00 m.
17	994 – 995	N 47° 49' 04" W	8.01 m.
18	995 – 996	N 41° 28' 28" W	18.69 m.
19	996 – 997	N 26° 33' 54" W	4.75 m.
20	997 – 998	N 62° 53' 34" W	2.46 m.
21	998 – 999	N 36° 16' 00" W	42.79 m.
22	999 – 1000	N 24° 54' 17" W	7.72 m.
23	1000 – 1001	N 48° 33' 17" W	6.42 m.
24	1001 – 1002	N 36° 18' 52" W	15.51 m.
25	1002 – 1003	N 63° 21' 52" W	3.64 m.
26	1003 – 1004	N 18° 48' 51" W	3.30 m.
27	1004 – 1005	N 57° 57' 55" W	8.26 m.
28	1005 – 1006	N 41° 28' 28" W	18.69 m.
29	1006 – 1007	N 49° 33' 00" W	5.01 m.

1	1007 - 1008	DUE NORTH	2.12 m.
2	1008 - 1009	N 47° 47' 49" W	7.26 m.
3	1009 - 1010	N 16° 30' 28" W	24.64 m.
4	1010 - 1011	N 07° 13' 32" E	17.39 m.
5	1011 - 1012	N 32° 49' 25" E	14.87 m.
6	1012 - 1013	N 66° 06' 27" E	14.87 m.
7	1013 - 1014	S 83° 40' 15" E	10.25 m.
8	1014 - 1015	N 62° 40' 30" E	2.46 m.
9	1015 - 1016	S 78° 34' 16" E	8.23 m.
10	1016 - 1017	N 69° 04' 48" E	19.60 m.
11	1017 - 1018	N 40° 54' 52" E	4.96 m.
12	1018 - 1019	N 67° 11' 56" E	2.92 m.
13	1019 - 1020	N 52° 59' 39" E	5.40 m.
14	1020 - 1021	N 40° 45' 49" E	10.72 m.
15	1021 - 1022	N 20° 21' 60" E	26.40 m.
16	1022 - 1023	N 47° 45' 49" E	7.26 m.
17	1023 - 1024	N 33° 11' 08" E	29.57 m.
18	1024 - 1025	N 50° 01' 04" E	9.14 m.
19	1025 - 1026	N 73° 18' 03" E	7.83 m.
20	1026 - 1027	N 52° 25' 53" E	6.15 m.
21	1027 - 1028	N 83° 44' 22" E	29.80 m.
22	1028 - 1029	S 70° 31' 13" E	9.75 m.
23	1029 - 1030	N 40° 38' 12" E	15.64 m.
24	1030 - 1031	DUE EAST	2.19 m.
25	1031 - 1032	S 44° 55' 58" E	3.01 m.
26	1033 - 1034	S 54° 46' 41" E	3.90 m.
27	1034 - 1035	S 16° 33' 54" E	15.13 m.
28	1035 - 1036	S 09° 30' 14" E	29.53 m.
29	1036 - 1037	DUE SOUTH	15.63 m.

1	1037 - 1038	S 15° 29' 41" W	26.20 m.
2	1038 - 1039	S 44° 11' 59" W	3.14 m.
3	1039 - 1040	DUE SOUTH	8.00 m.
4	1040 - 1041	S 17° 07' 20" W	16.34 m.
5	1041 - 1042	S 06° .15' 49" W	10.31 m.
6	1042 - 1043	S 07° 52' 42" E	8.21 m.
7	1043 - 1044	S 31° 53' 27" E	13.25 m.
8	1044 - 1045	S 73° 44' 05" E	2.21 m.
9	1045 - 1046	S 12° 09' 25" E	23.15 m.
10	1046 - 1047	S 45° 04' 03" E	3.00 m.
11	1047 - 1048	S 11° 23' 31" E	16.45 m.
12	1048 - 1049	S 36° 52' 08" E	21.56 m.
13	1049 - 1050	S 80° 35' 32" E	26.73 m.
14	1050 - 1051	S 83° 03' 00" E	9.26 m.
15	1051 - 1052	S 87° 09' 58" E	22.65 m.
16	1052 - 1053	S 07° 37' 40" E	19.84 m.
17	1053 - 1054	S 59° 39' 24" E	11.88 m.
18	1054 - 1055	S 80° 26' 21" E	6.02 m.
19	1055 - 1056	S 52° 30' 26" E	11.50 m.
20	1056 - 1057	S 22° 49' 13" E	11.12 m.
21	1057 - 1058	S 45° 45' 23" E	3.05 m.
22	1058 - 1059	S 25° 17' 17" E	2.49 m.
23	1059 - 1060	S 11° 29' 58" E	10.97 m.
24	1060 - 1061	S 07° 01' 56" W	9.19 m.
25	1061 - 1062	S 20° 20' 21" W	15.46 m.
26	1062 - 1063	S 49° 05' 08" W	4.96 m.
27	1063 - 1064	DUE WEST	2.19 m.
28	1064 - 1065	S 49° 23' 55" W	9.22 m.
29	1065 - 1066	S 74° 02' 27" W	19.57 m.

1	1066 – 1067	S 84° 08' 38" W	4.90 m.
2	1067 – 1068	S 26° 36' 30" W	2.37 m.
3	1068 – 1069	S 75° 43' 08" W	28.38 m.
4	1069 – 1070	S 60° 24' 45" W	15.45 m.
5	1070 – 1071	DUE SOUTH	2.12 m.
6	1071 – 1072	S 43° 35' 49" W	16.40 m.
7	1072 – 1073	S 25° 29' 01" W	8.86 m.
8	1073 – 1074	S 09° 38' 53" W	12.68 m.
9	1074 – 1075	S 04° 11' 34" E	14.54 m.
10	1075 – 1076	S 15° 57' 07" E	11.83 m.
11	1076 – 1077	S 45° 00' 00" E	5.30 m.
12	1077 – 1078	S 14° 01' 48" E	4.38 m.
13	1078 – 1079	S 85° 51' 49" E	15.67 m.
14	1079 – 1080	N 61° 56' 15" E	18.34 m.
15	1080 – 1081	N 45° 45' 23" E	30.10 m.
16	1081 – 1082	N 61° 32' 35" E	9.17 m.
17	1082 – 1083	N 26° 30' 02" E	2.38 m.
18	1083 – 1084	N 59° 55' 41" E	23.69 m.
19	1084 – 1085	N 63° 31' 51" E	16.83 m.
20	1085 – 1086	DUE WEST	12.44 m.
21	1086 – 1087	S 87° 02' 44" E	19.40 m.
22	1087 – 1088	S 64° 56' 41" E	5.31 m.
23	1088 – 1089	S 13° 29' 06" E	9.38 m.
24	1089 – 1090	DUE EAST	2.13 m.
25	1090 – 1091	S 02° 10' 28" E	29.65 m.
26	1091 – 1092	S 12° 18' 47" E	4.98 m.
27	1092 – 1093	S 39° 34' 58" E	4.22 m.
28	1093 – 1094	S 19° 35' 39" E	9.69 m.
29	1094 – 1095	S 75° 26' 35" E	4.46 m.

1	1095 - 1096	S 32° 18' 09" E	5.03 m.
2	1096 - 1097	S 73° 07' 47" E	5.62 m.
3	1097 - 1098	S 78° 25' 37" E	37.39 m.
4	1098 - 1099	S 73° 20' 49" E	13.50 m.
5	1099 - 1100	S 88° 27' 35" E	37.20 m.
6	1100 - 1101	N 74° 01' 17" E	21.32 m.
7	1101 - 1102	N 61° 38' 34" E	17.12 m.
8	1102 - 1103	N 36° 32' 02" E	59.74 m.
9	1103 - 1104	S 14° 51' 48" W	14.62 m.
10	1104 - 1105	N 27° 29' 21" E	10.43 m.
11	1105 - 1106	N 08° 37' 36" E	7.08 m.
12	1106 - 1107	N 53° 00' 02" E	5.40 m.
13	1107 - 1108	N 11° 28' 55" E	8.16 m.
14	1108 - 1109	N 26° 33' 21" E	16.91 m.
15	1109 - 1110	N 51° 44' 15" E	3.42 m.
16	1110 - 1111	N 13° 37' 45" E	4.51 m.
17	1111 - 1112	N 48° 49' 39" E	5.72 m.
18	1112 - 1113	N 23° 25' 43" E	8.17 m.
19	1113 - 1114	N 49° 17' 21" E	14.18 m.
20	1114 - 1115	DUE NORTH	2.12 m.
21	1115 - 1116	N 56° 24' 19" E	6.60 m.
22	1116 - 1117	DUE NORTH	2.13 m.
23	1117 - 1118	N 56° 22' 35" E	3.83 m.
24	1118 - 1119	N 36° 09' 29" E	20.13 m.
25	1119 - 1120	N 51° 39' 60" E	6.85 m.
26	1120 - 1121	N 21° 06' 56" E	2.95 m.
27	1121 - 1122	N 47° 39' 11" E	9.47 m.
28	1122 - 1123	N 38° 19' 12" E	29.63 m.
29	1123 - 1124	N 53° 00' 02" E	5.40 m.

1	1124 – 1125	N 17° 46' 59" E	5.11 m.
2	1125 – 1126	N 41° 07' 47" E	39.34 m.
3	1126 – 1127	DUE NORTH	2.12 m.
4	1127 – 1128	N 35° 37' 47" E	13.84 m.
5	1128 – 1129	N 23° 29' 20" E	17.72 m.
6	1129 – 1130	N 29° 04' 37" E	16.59 m.
7	1130 – 1131	N 12° 16' 39" E	4.99 m.
8	1131 – 1132	N 07° 13' 44" E	17.39 m.
9	1132 – 1133	N 45° 04' 03" E	3.00 m.
10	1133 – 1134	N 04° 49' 49" E	25.97 m.
11	1134 – 1135	N 15° 29' 41" E	26.20 m.
12	1135 – 1136	N 13° 18' 04" E	11.68 m.
13	1136 – 1137	N 16° 53' 12" E	7.32 m.
14	1137 – 1138	N 62° 40' 30" E	2.46 m.
15	1138 – 1139	N 26° 37' 48" E	2.37 m.
16	1139 – 1140	DUE NORTH	1.63 m.
17	1140 – 1141	N 43° 01' 30" E	10.26 m.
18	1141 – 1142	N 75° 26' 23" E	4.46 m.
19	1142 – 1143	N 24° 34' 02" E	6.47 m.
20	1143 – 1144	DUE EAST	21.56 m.
21	1144 – 1145	N 41° 31' 44" E	6.51 m.
22	1145 – 1146	N 58° 20' 57" E	16.45 m.
23	1146 – 1147	N 23° 34' 32" E	36.41 m.
24	1147 – 1148	N 06° 38' 28" E	9.19 m.
25	1148 – 1149	N 02° 58' 06" W	20.53 m.
26	1149 – 1150	N 02° 18' 30" E	26.39 m.
27	1150 – 1151	N 12° 49' 28" E	31.54 m.
28	1151 – 1152	N 18° 12' 56" E	46.58 m.
29	1152 – 1153	N 05° 33' 13" E	49.73 m.

1	1153 – 1154	N 13° 49' 59" W	8.89 m.
2	1154 – 1155	N 24° 47' 19" W	8.94 m.
3	1155 – 1156	N 47° 12' 50" W	10.31 m.
4	1156 – 1157	N 18° 05' 45" W	3.42 m.
5	1157 – 1158	N 51° 29' 33" W	20.69 m.
6	1158 – 1159	N 34° 55' 39" W	6.55 m.
7	1159 – 1160	N 50° 30' 22" W	16.12 m.
8	1160 – 1161	N 40° 36' 56" W	15.65 m.
9	1161 – 1162	N 22° 29' 47" W	26.79 m.
10	1162 – 1163	DUE EAST	16.25 m.
11	1163 – 1164	N 11° 51' 31" E	10.34 m.
12	1164 – 1165	N 24° 07' 32" E	17.13 m.
13	1165 – 1166	N 69° 24' 48" E	4.61 m.
14	1166 – 1167	N 14° 24' 18" E	4.52 m.
15	1167 – 1168	N 55° 45' 50" E	18.22 m.
16	1168 – 1169	DUE EAST	3.25 m.
17	1169 – 1170	N 37° 28' 14" E	2.67 m.
18	1170 – 1171	N 79° 13' 21" E	8.72 m.
19	1171 – 1172	N 56° 03' 06" E	22.15 m.
20	1172 – 1173	N 73° 13' 51" E	3.92 m.
21	1173 – 1174	N 43° 23' 11" E	25.11 m.
22	1174 – 1175	DUE EAST	2.13 m.
23	1175 – 1176	N 47° 30' 04" E	18.31 m.
24	1176 – 1177	N 65° 04' 25" E	16.61 m.
25	1177 – 1178	S 81° 43' 03" E	14.72 m.
26	1178 – 1179	S 59° 43' 24" E	25.55 m.
27	1179 – 1180	S 80° 59' 29" E	20.76 m.
28	1180 – 1181	N 69° 38' 59" E	55.73 m.
29	1181 – 1182	N 56° 32' 18" E	9.74 m.

1	1182 – 1183	N 43° 22' 43" E	26.66 m.
2	1183 – 1184	N 32° 09' 49" E	34.40 m.
3	1184 – 1185	N 17° 21' 40" E	48.59 m.
4	1185 – 1186	N 10° 50' 58" E	5.98 m.
5	1186 – 1187	N 55° 11' 09" E	1.98 m.
6	1187 – 1188	N 30° 30' 37" E	48.75 m.
7	1188 – 1189	N 57° 28' 41" E	5.12 m.
8	1189 – 1190	N 05° 58' 28" E	5.40 m.
9	1190 – 1191	N 30° 52' 37" E	28.25 m.
10	1191 – 1192	N 17° 07' 08" W	27.60 m.
11	1192 – 1193	N 15° 46' 05" W	14.03 m.
12	1193 – 1194	N 03° 41' 56" E	32.94 m.
13	1194 – 1195	N 10° 09' 21" E	15.24 m.
14	1195 – 1196	N 32° 09' 49" E	34.40 m.
15	1196 – 1197	N 73° 09' 02" E	7.31 m.
16	1197 – 1198	N 59° 28' 49" E	38.16 m.
17	1198 – 1199	N 48° 38' 39" E	24.40 m.
18	1199 – 1200	N 30° 04' 56" E	23.69 m.
19	1200 – 1201	N 61° 59' 51" E	2.41 m.
20	1201 – 1202	DUE NORTH	3.25 m.
21	1202 – 1203	N 44° 04' 15" E	16.35 m.
22	1203 – 1204	N 22° 40' 50" E	18.15 m.
23	1204 – 1205	N 13° 06' 58" E	9.36 m.
24	1205 – 1206	N 39° 57' 02" E	5.06 m.
25	1206 – 1207	N 13° 25' 59" E	11.57 m.
26	1207 – 1208	N 33° 33' 57" E	7.80 m.
27	1208 – 1209	N 22° 40' 02" E	13.95 m.
28	1209 – 1210	N 13° 44' 21" E	29.47 m.
29	1210 – 1211	N 02° 08' 03" E	28.52 m.

1	1211 - 1212	N 15° 53' 05" W	23.52 m.
2	1212 - 1213	N 40° 34' 08" W	5.77 m.
3	1213 - 1214	N 24° 58' 52" W	24.27 m.
4	1214 - 1215	N 44° 56' 03" W	35.13 m.
5	1215 - 1216	N 61° 20' 29" W	5.48 m.
6	1216 - 1217	N 47° 33' 09" W	24.82 m.
7	1217 - 1218	N 23° 14' 17" W	2.85 m.
8	1218 - 1219	N 61° 59' 51" W	2.41 m.
9	1219 - 1220	N 33° 16' 24" W	18.68 m.
10	1220 - 1221	N 45° 16' 35" W	8.36 m.
11	1221 - 1222	DUE NORTH	2.25 m.
12	1222 - 1223	N 41° 11' 09" W	10.63 m.
13	1223 - 1224	N 13° 40' 18" W	4.50 m.
14	1224 - 1225	N 33° 53' 46" W	9.64 m.
15	1225 - 1226	N 19° 02' 06" W	14.95 m.
16	1226 - 1227	N 10° 44' 56" W	17.43 m.
17	1227 - 1228	N 22° 40' 12" W	8.27 m.
18	1228 - 1229	DUE WEST	1.63 m.
19	1229 - 1230	DUE NORTH	2.62 m.
20	1230 - 1231	N 33° 15' 23" W	18.69 m.
21	1231 - 1232	N 62° 12' 29" W	2.40 m.
22	1232 - 1233	N 04° 15' 09" W	15.17 m.
23	1233 - 1234	N 22° 06' 34" E	8.63 m.
24	1234 - 1235	N 50° 19' 36" E	11.94 m.
25	1235 - 1236	DUE EAST	3.75 m.
26	1236 - 1237	N 55° 50' 25" E	8.46 m.
27	1237 - 1238	N 76° 24' 14" E	13.83 m.
28	1238 - 1239	S 82° 01' 16" E	15.27 m.
29	1239 - 1240	N 80° 16' 44" E	12.56 m.

1	1240 - 1241	S 85° 06' 59" E	24.90 m.
2	1241 - 1242	DUE EAST	19.38 m.
3	1242 - 1243	N 81° 59' 19" E	15.21 m.
4	1243 - 1244	N 59° 16' 52" E	20.07 m.
5	1244 - 1245	DUE EAST	3.25 m.
6	1245 - 1246	N 62° 01' 24" E	10.40 m.
7	1246 - 1247	N 80° 28' 40" E	19.65 m.
8	1247 - 1248	S 83° 42' 32" E	10.31 m.
9	1248 - 1249	S 61° 19' 58" E	25.79 m.
10	1249 - 1250	S 81° 45' 15" E	63.66 m.
11	1250 - 1251	S 76° 04' 31" E	15.58 m.
12	1251 - 1252	S 80° 07' 52" E	6.53 m.
13	1252 - 1253	DUE EAST	2.19 m.
14	1253 - 1254	S 47° 07' 16" E	9.55 m.
15	1254 - 1255	S 71° 10' 38" E	18.22 m.
16	1255 - 1256	S 62° 08' 43" E	31.03 m.
17	1256 - 1257	S 84° 33' 05" E	6.53 m.
18	1257 - 1258	DUE SOUTH	2.13 m.
19	1258 - 1259	S 62° 07' 11" E	21.92 m.
20	1259 - 1260	S 70° 31' 06" E	9.74 m.
21	1260 - 1261	S 84° 23' 39" E	10.24 m.
22	1261 - 1262	S 75° 43' 46" E	11.16 m.
23	1262 - 1263	S 45° 04' 03" E	3.00 m.
24	1263 - 1264	S 88° 17' 08" E	37.77 m.
25	1264 - 1265	S 75° 16' 43" E	21.13 m.
26	1265 - 1266	S 62° 32' 04" E	12.75 m.
27	1266 - 1267	S 24° 50' 33" E	16.66 m.
28	1267 - 1268	DUE EAST	3.25 m.
29	1268 - 1269	S 26° 31' 19" E	2.38 m.

1	1269 - 1270	S 60° 55' 12" E	4.36 m.
2	1270 - 1271	DUE SOUTH	18.38 m.
3	1271 - 1272	S 06° 23' 50" W	34.21 m.
4	1272 - 1273	S 33° 52' 04" W	5.72 m.
5	1273 - 1274	S 62° 52' 56" W	2.46 m.
6	1274 - 1275	DUE SOUTH	2.13 m.
7	1275 - 1276	S 32° 41' 54" W	10.99 m.
8	1276 - 1277	S 62° 01' 24" E	10.40 m.
9	1277 - 1278	S 44° 35' 53" W	6.85 m.
10	1278 - 1279	S 14° 02' 33" W	4.38 m.
11	1279 - 1280	DUE WEST	2.19 m.
12	1280 - 1281	S 41° 41' 12" W	25.94 m.
13	1281 - 1282	S 22° 58' 49" E	15.21 m.
14	1282 - 1283	S 53° 00' 02" E	5.40 m.
15	1283 - 1284	S 18° 25' 02" E	5.14 m.
16	1284 - 1285	N 82° 43' 54" E	21.74 m.
17	1285 - 1286	S 86° 54' 25" E	67.45 m.
18	1286 - 1287	S 85° 54' 25" E	29.70 m.
19	1287 - 1288	S 45° 45' 23" E	3.05 m.
20	1288 - 1289	S 08° 38' 05" E	7.08 m.
21	1289 - 1290	S 44° 11' 11" E	3.14 m.
22	1290 - 1291	S 02° 41' 48" E	34.54 m.
23	1291 - 1292	S 45° 04' 03" E	3.00 m.
24	1292 - 1293	DUE SOUTH	12.38 m.
25	1293 - 1294	S 13° 55' 45" W	15.58 m.
26	1294 - 1295	S 35° 32' 48" W	25.05 m.
27	1295 - 1296	S 28° 36' 27" E	59.65 m.
28	1296 - 1297	S 17° 15' 26" E	49.09 m.
29	1297 - 1298	S 12° 36' 10" E	4.87 m.

1	1298 - 1299	S 24° 54' 17" W	7.72 m.
2	1299 - 1300	S 70° 59' 07" W	3.44 m.
3	1300 - 1301	DUE SOUTH	2.13 m.
4	1301 - 1302	S 31° 35' 11" W	5.13 m.
5	1302 - 1303	S 76° 56' 46" W	4.43 m.
6	1303 - 1304	S 48° 59' 15" W	5.71 m.
7	1304 - 1305	S 57° 57' 55" W	8.26 m.
8	1305 - 1306	S 40° 22' 08" W	4.92 m.
9	1306 - 1307	DUE WEST	1.63 m.
10	1307 - 1308	S 33° 56' 15" W	3.92 m.
11	1308 - 1309	S 55° 57' 43" W	22.10 m.
12	1309 - 1310	S 47° 12' 37" W	10.30 m.
13	1310 - 1311	S 61° 02' 56" W	6.71 m.
14	1311 - 1312	S 74° 39' 01" W	6.16 m.
15	1312 - 1313	S 53° 16' 37" W	14.25 m.
16	1313 - 1314	DUE SOUTH	2.25 m.
17	1314 - 1315	S 73° 09' 02" W	7.31 m.
18	1315 - 1316	S 22° 00' 28" W	2.84 m.
19	1316 - 1317	S 03° 18' 53" E	64.86 m.
20	1317 - 1318	S 19° 54' 03" W	6.24 m.
21	1318 - 1319	S 01° 34' 13" W	20.51 m.
22	1319 - 1320	S 21° 45' 31" W	17.37 m.
23	1320 - 1321	S 13° 20' 22" W	34.94 m.
24	1321 - 1322	DUE SOUTH	7.00 m.
25	1322 - 1323	S 18° 31' 37" W	13.57 m.
26	1323 - 1324	S 32° 07' 22" W	5.17 m.
27	1324 - 1325	S 21° 43' 16" W	8.61 m.
28	1325 - 1326	S 36° 36' 13" W	15.41 m.
29	1326 - 1327	S 44° 42' 44" W	17.59 m.

1	1327 – 1328	S 24° 44' 50" W	14.18 m.
2	1328 – 1329	S 14° 43' 15" W	12.79 m.
3	1329 – 1330	S 31° 37' 59" E	8.22 m.
4	1330 – 1331	S 51° 36' 23" E	3.43 m.
5	1331 – 1332	S 28° 53' 24" E	23.41 m.
6	1332 – 1333	S 42° 02' 04" E	15.31 m.
7	1333 – 1334	S 33° 30' 10" E	26.38 m.
8	1334 – 1335	S 09° 12' 07" E	13.68 m.
9	1335 – 1336	S 31° 32' 15" E	5.14 m.
10	1336 – 1337	DUE SOUTH	1.62 m.
11	1337 – 1338	S 44° 58' 24" E	7.60 m.
12	1338 – 1339	DUE WEST	2.12 m.
13	1339 – 1340	S 79° 46' 41" E	12.00 m.
14	1340 – 1341	N 70° 31' 13" E	9.75 m.
15	1341 – 1342	N 45° 15' 17" E	9.06 m.
16	1342 – 1343	DUE EAST	2.19 m.
17	1343 – 1344	N 49° 42' 25" E	18.35 m.
18	1344 – 1345	DUE EAST	2.19 m.
19	1345 – 1346	N 38° 44' 20" E	21.47 m.
20	1346 – 1347	N 61° 39' 13" E	5.54 m.
21	1347 – 1348	N 25° 55' 56" E	4.86 m.
22	1348 – 1349	N 46° 42' 38" E	25.16 m.
23	1349 – 1350	N 28° 06' 01" E	10.35 m.
24	1350 – 1351	N 62° 12' 29" E	2.40 m.
25	1351 – 1352	DUE NORTH	2.13 m.
26	1352 – 1353	N 40° 54' 52" E	4.96 m.
27	1353 – 1354	N 66° 54' 34" E	11.14 m.
28	1354 – 1355	DUE EAST	3.25 m.
29	1355 – 1356	S 34° 47' 11" E	2.74 m.

1	1356 – 1357	DUE SOUTH	22.62 m.
2	1357 – 1358	S $35^{\circ} 26' 55''$ E	11.21 m.
3	1358 – 1359	S $13^{\circ} 55' 45''$ E	15.58 m.
4	1359 – 1360	S $36^{\circ} 34' 43''$ E	15.42 m.
5	1360 – 1361	N $54^{\circ} 20' 08''$ E	44.39 m.
6	1361 – 1362	N $44^{\circ} 24' 34''$ E	68.59 m.
7	1362 – 1363	S $46^{\circ} 05' 21''$ E	20.91 m.
8	1363 – 1364	S $19^{\circ} 41' 53''$ E	30.41 m.
9	1364 – 1365	S $45^{\circ} 04' 03''$ E	3.00 m.
10	1365 – 1366	DUE SOUTH	2.63 m.
11	1366 – 1367	S $19^{\circ} 25' 50''$ E	8.08 m.
12	1367 – 1368	S $65^{\circ} 25' 40''$ E	2.40 m.
13	1368 – 1369	S $15^{\circ} 49' 35''$ E	3.90 m.
14	1369 – 1370	S $36^{\circ} 39' 60''$ E	42.39 m.
15	1370 – 1371	S $70^{\circ} 01' 05''$ E	8.05 m.
16	1371 – 1372	DUE SOUTH	2.13 m.
17	1372 – 1373	S $67^{\circ} 28' 46''$ E	11.10 m.
18	1373 – 1374	S $83^{\circ} 45' 51''$ E	10.31 m.
19	1374 – 1375	S $73^{\circ} 09' 44''$ E	16.85 m.
20	1375 – 1376	S $27^{\circ} 53' 11''$ E	21.91 m.
21	1376 – 1377	S $49^{\circ} 05' 08''$ E	4.96 m.
22	1377 – 1378	S $31^{\circ} 37' 59''$ E	8.22 m.
23	1378 – 1379	DUE SOUTH	10.25 m.
24	1379 – 1380	S $21^{\circ} 06' 53''$ W	25.33 m.
25	1380 – 1381	S $08^{\circ} 37' 36''$ W	7.08 m.
26	1381 – 1382	S $05^{\circ} 20' 10''$ E	11.42 m.
27	1382 – 1383	S $22^{\circ} 49' 13''$ E	11.42 m.
28	1383 – 1384	S $29^{\circ} 00' 23''$ E	28.87 m.
29	1384 – 1385	S $22^{\circ} 48' 56''$ E	11.12 m.

1	1385 - 1386	S 06° 33' 20" E	9.31 m.
2	1386 - 1387	S 05° 23' 52" W	11.30 m.
3	1387 - 1388	S 62° 40' 30" W	2.46 m.
4	1388 - 1389	DUE SOUTH	2.12 m.
5	1389 - 1390	S 34° 08' 26" W	22.05 m.
6	1390 - 1391	S 11° 31' 54" W	18.76 m.
7	1391 - 1392	S 15° 28' 26" E	6.09 m.
8	1392 - 1393	DUE EAST	20.44 m.
9	1393 - 1394	N 64° 21' 02" E	7.21 m.
10	1394 - 1395	N 79° 06' 46" E	5.98 m.
11	1395 - 1396	N 65° 09' 01" E	6.54 m.
12	1396 - 1397	N 45° 05' 56" E	17.44 m.
13	1397 - 1398	N 39° 47' 52" E	20.99 m.
14	1398 - 1399	N 08° 10' 34" E	22.85 m.
15	1399 - 1400	N 08° 34' 01" W	28.95 m.
16	1400 - 1401	N 22° 06' 34" W	8.63 m.
17	1401 - 1402	DUE NORTH	19.62 m.
18	1402 - 1403	N 15° 03' 47" E	8.42 m.
19	1403 - 1404	N 11° 49' 56" W	5.49 m.
20	1404 - 1405	N 17° 21' 01" E	7.33 m.
21	1405 - 1406	N 11° 09' 59" E	5.48 m.
22	1406 - 1407	N 33° 43' 02" W	5.85 m.
23	1407 - 1408	N 03° 08' 38" W	10.27 m.
24	1408 - 1409	N 31° 12' 29" W	14.47 m.
25	1409 - 1410	DUE NORTH	11.37 m.
26	1410 - 1411	N 13° 54' 08" E	13.27 m.
27	1411 - 1412	N 21° 30' 34" E	13.30 m.
28	1412 - 1413	N 29° 36' 16" E	31.63 m.
29	1413 - 1414	0	2.13 m.

1	1414 - 1415	N 62° 12' 29" E	2.40 m.
2	1415 - 1416	DUE NORTH	3.25 m.
3	1416 - 1417	N 45° 44' 39" E	6.81 m.
4	1417 - 1418	N 30° 50' 42" E	15.72 m.
5	1418 - 1419	DUE NORTH	3.75 m.
6	1419 - 1420	N 26° 32' 39" E	4.90 m.
7	1420 - 1421	DUE NORTH	7.00 m.
8	1421 - 1422	N 36° 58' 38" W	26.91 m.
9	1422 - 1423	N 78° 13' 46" W	5.49 m.
10	1423 - 1424	DUE NORTH	1.63 m.
11	1424 - 1425	N 41° 25' 25" W	5.67 m.
12	1425 - 1426	N 08° 38' 05" E	5.67 m.
13	1426 - 1427	N 24° 47' 19" E	7.08 m.
14	1427 - 1428	DUE NORTH	4.38 m.
15	1428 - 1429	N 48° 02' 51" E	22.44 m.
16	1429 - 1430	N 51° 55' 26" E	25.33 m.
17	1430 - 1431	N 63° 05' 56" E	38.13 m.
18	1431 - 1432	N 26° 30' 02" E	2.38 m.
19	1432 - 1433	N 76° 08' 55" E	9.40 m.
20	1433 - 1434	N 34° 46' 40" E	1.97 m.
21	1434 - 1435	N 68° 11' 21" E	27.26 m.
22	1435 - 1436	N 44° 26' 21" E	4.55 m.
23	1436 - 1437	N 66° 54' 21" E	130.66 m.
24	1437 - 1438	N 61° 20' 31" E	19.02 m.
25	1438 - 1439	DUE EAST	3.81 m.
26	1439 - 1440	N 65° 28' 36" E	33.73 m.
27	1440 - 1441	N 26° 31' 19" E	2.38 m.
28	1441 - 1442	N 62° 10' 43" E	26.78 m.
29	1442 - 1443	N 73° 54' 18" E	11.25 m.

1	1443 – 1444	N 65° 46' 45" E	9.46 m.
2	1444 – 1445	DUE EAST	2.69 m.
3	1445 – 1446	N 26° 37' 48" E	2.37 m.
4	1446 – 1147	N 70° 48' 21" E	37.66 m.
5	1447 – 1448	N 38° 30' 25" E	3.51 m.
6	1448 – 1449	N 56° 33' 55" E	7.71 m.
7	1449 – 1450	N 78° 38' 52" E	16.51 m.
8	1450 – 1451	N 51° 40' 47" E	2.67 m.
9	1451 – 1452	N 82° 30' 13" E	16.33 m.
10	1452 – 1453	N 70° 22' 43" E	15.99 m.
11	1453 – 1454	N 51° 34' 12" E	9.65 m.
12	1454 – 1455	N 00° 57' 60" E	63.01 m.
13	1455 – 1456	N 52° 04' 36" E	43.74 m.
14	1456 – 1457	N 40° 03' 39" E	35.93 m.
15	1457 – 1458	N 08° 20' 25" W	55.59 m.
16	1458 – 1459	N 28° 13' 53" E	50.08 m.
17	1459 – 1460	N 82° 38' 03" E	38.06 m.
18	1460 – 1461	S 58° 52' 13" E	33.37 m.
19	1461 – 1462	S 54° 49' 36" E	33.64 m.
20	1462 – 1463	S 79° 07' 01" E	54.29 m.
21	1463 – 1464	N 65° 36' 49" E	36.64 m.
22	1464 – 1465	N 45° 58' 21" E	44.24 m.
23	1465 – 1466	N 84° 23' 55" E	31.97 m.
24	1466 – 1467	S 69° 18' 13" E	80.64 m.
25	1467 – 1468	S 63° 48' 09" E	100.23 m.
26	1468 – 1469	S 45° 01' 41" E	89.14 m.
27	1469 – 1470	S 33° 39' 35" E	60.22 m.
28	1470 – 1471	S 33° 44' 58" E	50.51 m.
29	1471 – 1472	N 54° 08' 56" E	47.81 m.

1	1472 ~ 1473	N 59° 14' 15" E	65.24 m.
2	1473 ~ 1474	N 43° 31' 56" E	74.32 m.
3	1474 ~ 1475	N 48° 49' 30" E	62.28 m.
4	1475 ~ 1476	S 82° 31' 13" E	28.81 m.
5	1476 ~ 1477	S 40° 11' 03" E	72.65 m.
6	1477 ~ 1478	S 85° 29' 42" E	62.13 m.
7	1478 ~ 1479	N 88° 16' 29" E	124.56 m.
8	1479 ~ 1480	N 81° 32' 10" E	113.80 m.
9	1480 ~ 1481	N 56° 24' 29" E	80.88 m.
10	1481 ~ 1482	N 49° 37' 50" E	113.86 m.
11	1482 ~ 1483	N 00° 52' 57" E	69.01 m.
12	1483 ~ 1484	N 35° 08' 55" E	59.93 m.
13	1484 ~ 1485	S 80° 02' 36" E	40.48 m.
14	1485 ~ 1486	S 62° 14' 11" E	68.16 m.
15	1486 ~ 1487	S 54° 53' 48" E	42.17 m.
16	1487 ~ 1488	N 65° 24' 22" E	41.45 m.
17	1488 ~ 1489	N 75° 17' 58" E	71.92 m.
18	1489 ~ 1490	S 74° 21' 46" E	83.92 m.
19	1490 ~ 1491	S 27° 28' 49" E	59.46 m.
20	1491 ~ 1492	S 41° 03' 05" E	50.06 m.
21	1492 ~ 1493	N 65° 50' 44" E	212.00 m.
22	1493 ~ 1494	N 21° 31' 36" E	186.51 m.
23	1494 ~ 1495	N 60° 26' 16" W	97.29 m.
24	1495 ~ 1496	N 45° 00' 00" W	44.90 m.
25	1496 ~ 1497	N 16° 48' 02" E	102.49 m.
26	1497 ~ 1498	N 41° 20' 52" W	41.63 m.
27	1498 ~ 1499	N 29° 04' 04" W	66.51 m.
28	1499 ~ 1500	N 27° 23' 08" E	117.13 m.
29	1500 ~ 1501	N 60° 53' 30" E	58.59 m.

1	1501 ~ 1502	N 33° 07' 11" E	79.84 m.
2	1502 ~ 1503	N 27° 18' 34" W	90.32 m.
3	1503 ~ 1504	N 31° 34' 50" W	121.49 m.
4	1504 ~ 1505	N 13° 32' 28" W	59.79 m.
5	1505 ~ 1506	S 67° 45' 16" E	83.87 m.
6	1506 ~ 1507	N 28° 08' 07" E	114.25 m.
7	1507 ~ 1508	N 85° 34' 35" E	55.10 m.
8	1508 ~ 1509	N 08° 55' 39" E	66.05 m.
9	1509 ~ 1510	N 59° 13' 17" E	46.41 m.
10	1510 ~ 1511	S 48° 51' 36" E	39.34 m.
11	1511 ~ 1512	S 30° 40' 05" E	60.16 m.
12	1512 ~ 1513	S 72° 48' 41" E	49.07 m.
13	1513 ~ 1514	S 88° 05' 22" E	82.48 m.
14	1514 ~ 1515	S 38° 38' 28" E	78.57 m.
15	1515 ~ 1516	S 70° 38' 27" E	45.64 m.
16	1516 ~ 1517	N 76° 15' 36" E	41.05 m.
17	1517 ~ 1518	N 19° 00' 54" W	87.66 m.
18	1518 ~ 1519	N 22° 06' 50" W	100.11 m.
19	1519 ~ 1520	S 86° 46' 14" W	9.94 m.
20	1520 ~ 1521	N 50° 11' 27" W	70.86 m.
21	1521 ~ 1522	N 43° 53' 42" W	98.71 m.
22	1522 ~ 1523	N 46° 06' 15" W	57.50 m.
23	1523 ~ 1524	N 27° 05' 00" W	142.08 m.
24	1524 ~ 1525	N 89° 10' 57" W	79.20 m.
25	1525 ~ 1526	N 13° 22' 01" W	23.25 m.
26	1526 ~ 1527	N 37° 14' 12" W	70.34 m.
27	1527 ~ 1528	N 08° 17' 26" W	78.45 m.
28	1528 ~ 1529	N 11° 27' 47" E	59.44 m.
29	1529 ~ 1530	N 42° 55' 57" W	62.49 m.

1	1530 – 1531	N 02° 03' 19" W	29.64 m.
2	1531 – 1532	N 22° 13' 24" E	121.13 m.
3	1532 – 1533	N 06° 50' 34" E	52.95 m.
4	1533 – 1534	N 47° 04' 34" E	53.77 m.
5	1534 – 1535	N 42° 49' 01" E	69.70 m.
6	1535 – 1536	N 41° 31' 58" E	50.43 m.
7	1536 – 1537	S 83° 36' 34" E	62.89 m.
8	1537 – 1538	N 79° 37' 40" E	56.93 m.
9	1538 – 1539	N 79° 20' 25" E	64.17 m.
10	1539 – 1540	N 67° 26' 07" E	70.05 m.
11	1540 – 1541	N 34° 16' 19" E	71.70 m.
12	1541 – 1542	N 66° 26' 34" E	63.48 m.
13	1542 – 1543	N 75° 09' 55" E	59.09 m.
14	1543 – 1544	N 09° 55' 45" E	65.60 m.
15	1544 – 1545	N 04° 54' 59" W	81.68 m.
16	1545 – 1546	N 11° 38' 56" W	56.02 m.
17	1546 – 1547	N 83° 07' 14" W	54.27 m.
18	1547 – 1548	S 87° 47' 10" W	181.20 m.
19	1548 – 1549	S 84° 59' 31" W	48.69 m.
20	1549 – 1550	S 10° 25' 25" E	26.94 m.
21	1550 – 1551	S 21° 48' 05" W	37.70 m.
22	1551 – 1552	S 59° 49' 48" W	41.79 m.
23	1552 – 1553	S 36° 07' 32" W	34.67 m.
24	1553 – 1554	S 59° 11' 40" W	55.88 m.
25	1554 – 1555	N 59° 01' 44" W	48.33 m.
26	1555 – 1556	N 81° 18' 19" W	52.92 m.
27	1556 – 1557	N 16° 31' 41" W	32.08 m.
28	1557 – 1558	N 01° 23' 40" E	43.64 m.
29	1558 – 1559	N 88° 56' 10" W	60.32 m.

1	1559 – 1560	S $67^{\circ} 57' 45''$ W	88.94 m.
2	1560 – 1561	N $82^{\circ} 49' 42''$ W	38.05 m.
3	1561 – 1562	N $63^{\circ} 42' 16''$ W	143.61 m.
4	1562 – 1563	N $57^{\circ} 44' 28''$ W	41.46 m.
5	1563 – 1564	N $01^{\circ} 03' 58''$ W	26.87 m.
6	1564 – 1565	N $12^{\circ} 07' 38''$ W	30.94 m.
7	1565 – 1566	N $59^{\circ} 47' 28''$ W	33.05 m.
8	1566 – 1567	N $19^{\circ} 42' 16''$ E	30.40 m.
9	1567 – 1568	N $35^{\circ} 43' 39''$ E	35.11 m.
10	1568 – 1569	N $07^{\circ} 56' 31''$ E	34.83 m.
11	1569 – 1570	N $03^{\circ} 04' 52''$ E	60.47 m.
12	1570 – 1571	N $70^{\circ} 55' 32''$ W	27.91 m.
13	1571 – 1572	N $47^{\circ} 10' 09''$ W	19.86 m.
14	1572 – 1573	N $15^{\circ} 54' 08''$ E	33.53 m.
15	1573 – 1574	N $37^{\circ} 37' 10''$ E	68.81 m.
16	1574 – 1575	N $22^{\circ} 21' 35''$ E	29.74 m.
17	1575 – 1576	S $83^{\circ} 57' 17''$ E	30.86 m.
18	1576 – 1577	N $83^{\circ} 30' 52''$ E	80.83 m.
19	1577 – 1578	N $73^{\circ} 23' 17''$ E	47.22 m.
20	1578 – 1579	N $30^{\circ} 30' 52''$ E	51.94 m.
21	1579 – 1580	N $28^{\circ} 55' 32''$ E	31.27 m.
22	1580 – 1581	N $81^{\circ} 30' 54''$ E	36.46 m.
23	1581 – 1582	N $39^{\circ} 19' 20''$ E	246.58 m.
24	1582 – 1583	N $33^{\circ} 48' 54''$ E	72.66 m.
25	1583 – 1584	N $13^{\circ} 15' 43''$ E	49.32 m.
26	1584 – 1585	N $43^{\circ} 22' 57''$ E	65.88 m.
27	1585 – 1586	N $61^{\circ} 53' 03''$ E	116.71 m.
28	1586 – 1587	N $52^{\circ} 27' 10''$ E	93.73 m.
29	1587 – 1588	N $00^{\circ} 33' 25''$ W	109.39 m.

1	1588 – 1589	N 29° 37' 59" E	50.18 m.
2	1589 – 1590	N 06° 22' 21" W	73.20 m.
3	1590 – 1591	N 64° 39' 34" W	75.65 m.
4	1591 – 1592	N 57° 33' 15" W	86.21 m.
5	1592 – 1593	N 76° 06' 36" W	101.02 m.
6	1593 – 1594	N 70° 38' 10" W	76.52 m.
7	1594 – 1595	S 80° 50' 18" W	94.96 m.
8	1595 – 1596	N 54° 35' 10" W	39.04 m.
9	1596 – 1597	N 58° 50' 20" E	57.26 m.
10	1597 – 1598	N 80° 59' 31" E	130.93 m.
11	1598 – 1599	N 71° 28' 55" E	40.93 m.
12	1599 – 1600	S 69° 46' 49" E	36.17 m.
13	1600 – 1601	N 87° 54' 35" E	147.22 m.
14	1601 – 1602	N 83° 12' 46" E	128.02 m.
15	1602 – 1603	S 87° 59' 18" E	74.92 m.
16	1603 – 1604	S 71° 38' 18" E	61.90 m.
17	1604 – 1605	S 86° 49' 53" E	97.15 m.
18	1605 – 1606	S 88° 19' 04" E	27.74 m.
19	1606 – 1607	N 64° 39' 04" E	56.64 m.
20	1607 – 1608	N 86° 06' 05" E	64.27 m.
21	1608 – 1609	S 81° 19' 47" E	96.98 m.
22	1609 – 1610	S 63° 12' 42" E	58.53 m.
23	1610 – 1611	S 23° 57' 50" E	84.94 m.
24	1611 – 1612	S 04° 12' 09" E	117.70 m.
25	1612 – 1613	S 24° 05' 31" E	67.37 m.
26	1613 – 1614	S 83° 15' 44" E	59.66 m.
27	1614 – 1615	N 45° 25' 06" E	48.44 m.
28	1615 – 1616	N 70° 48' 09" E	63.86 m.
29	1616 – 1617	S 52° 03' 28" E	28.05 m.

1	1617 – 1618	S 15° 34' 38" E	72.15 m.
2	1618 – 1619	S 41° 09' 59" E	68.74 m.
3	1619 – 1620	S 68° 31' 07" E	95.58 m.
4	1620 – 1621	S 83° 51' 23" E	75.87 m.
5	1621 – 1622	N 84° 08' 43" E	79.60 m.
6	1622 – 1623	N 47° 02' 15" E	63.29 m.
7	1623 – 1624	N 02° 17' 01" E	54.91 m.
8	1624 – 1625	N 06° 16' 22" W	93.81 m.
9	1625 – 1626	N 32° 11' 49" W	58.65 m.
10	1626 – 1627	N 80° 43' 32" E	82.96 m.
11	1627 – 1628	S 85° 04' 01" E	93.03 m.
12	1628 – 1629	S 76° 23' 41" E	139.73 m.
13	1629 – 1630	S 83° 44' 34" E	128.45 m.
14	1630 – 1631	N 71° 11' 53" E	138.85 m.
15	1631 – 1632	N 83° 04' 58" E	129.69 m.
16	1632 – 1633	N 89° 32' 45" E	63.06 m.
17	1633 – 1634	N 56° 25' 03" E	55.59 m.
18	1634 – 1635	N 70° 47' 34" E	145.54 m.
19	1635 – 1636	N 43° 16' 49" E	126.54 m.
20	1636 – 1637	N 18° 01' 56" E	73.09 m.
21	1637 – 1638	N 16° 37' 04" E	75.40 m.
22	1638 – 1639	N 34° 12' 40" E	115.94 m.
23	1639 – 1640	N 79° 41' 22" E	63.53 m.
24	1640 – 1641	S 43° 41' 15" E	36.35 m.
25	1641 – 1642	S 25° 00' 39" E	70.07 m.
26	1642 – 1643	S 06° 07' 24" W	65.62 m.
27	1643 – 1644	S 04° 22' 29" E	91.77 m.
28	1644 – 1645	S 54° 12' 48" E	42.53 m.
29	1645 – 1646	S 87° 30' 53" E	74.95 m.

1	1646 – 1647	S 72° 57' 14" E	78.90 m.
2	1647 – 1648	S 42° 56' 39" E	75.13 m.
3	1648 – 1649	S 19° 39' 14" E	81.76 m.
4	1649 – 1650	S 07° 50' 32" E	66.88 m.
5	1650 – 1651	S 32° 48' 17" E	88.48 m.
6	1651 – 1652	S 45° 31' 32" E	81.55 m.
7	1652 – 1653	S 64° 17' 38" E	63.40 m.
8	1653 – 1654	N 83° 36' 03" E	33.65 m.
9	1654 – 1655	N 56° 07' 54" E	66.84 m.
10	1655 – 1656	N 36° 58' 13" E	57.26 m.
11	1656 – 1657	N 42° 25' 23" E	67.91 m.
12	1657 – 1658	S 77° 29' 04" E	37.52 m.
13	1658 – 1659	S 42° 01' 39" E	44.25 m.
14	1659 – 1660	S 23° 01' 10" E	49.71 m.
15	1660 – 1661	S 31° 26' 11" E	45.42 m.
16	1661 – 1662	S 83° 44' 22" E	59.61 m.
17	1662 – 1663	N 77° 42' 48" E	91.02 m.
18	1663 – 1664	N 87° 47' 56" E	84.62 m.
19	1664 – 1665	S 31° 44' 33" E	83.04 m.
20	1665 – 1666	S 01° 39' 44" E	56.02 m.
21	1666 – 1667	S 60° 15' 19" W	50.89 m.
22	1667 – 1668	S 75° 18' 31" W	76.89 m.
23	1668 – 1669	DUE WEST	64.63 m.
24	1669 – 1670	S 64° 20' 17" W	49.65 m.
25	1670 – 1671	S 52° 19' 50" W	56.46 m.
26	1671 – 1672	S 20° 26' 58" W	78.71 m.
27	1672 – 1673	S 05° 04' 47" E	79.06 m.
28	1673 – 1674	S 26° 17' 18" E	46.29 m.
29	1674 – 1675	S 78° 27' 10" E	45.61 m.

1	1675 – 1676	N $81^{\circ} 10' 22''$ E	77.42 m.
2	1676 – 1677	S $74^{\circ} 48' 33''$ E	39.12 m.
3	1677 – 1678	S $11^{\circ} 12' 03''$ E	58.24 m.
4	1678 – 1679	S $22^{\circ} 51' 37''$ W	59.69 m.
5	1679 – 1680	S $41^{\circ} 27' 05''$ W	109.90 m.
6	1680 – 1681	S $44^{\circ} 33' 30''$ W	97.54 m.
7	1681 – 1682	S $83^{\circ} 08' 07''$ W	45.01 m.
8	1682 – 1683	S $87^{\circ} 18' 28''$ W	79.84 m.
9	1683 – 1684	S $71^{\circ} 41' 10''$ W	123.70 m.
10	1684 – 1685	S $51^{\circ} 53' 28''$ W	82.85 m.
11	1685 – 1686	S $24^{\circ} 53' 54''$ W	73.04 m.
12	1686 – 1687	S $06^{\circ} 30' 52''$ W	109.07 m.
13	1687 – 1688	S $07^{\circ} 52' 45''$ E	149.54 m.
14	1688 – 1689	S $44^{\circ} 42' 35''$ E	87.24 m.
15	1689 – 1690	S $65^{\circ} 12' 54''$ E	73.04 m.
16	1690 – 1691	N $73^{\circ} 26' 24''$ E	64.03 m.
17	1691 – 1692	N $37^{\circ} 49' 41''$ E	76.43 m.
18	1692 – 1693	N $37^{\circ} 26' 03''$ E	103.75 m.
19	1693 – 1694	- N $70^{\circ} 08' 19''$ E	90.51 m.
20	1694 – 1695	S $89^{\circ} 10' 17''$ E	78.13 m.
21	1695 – 1696	S $65^{\circ} 13' 16''$ E	62.92 m.
22	1696 – 1697	S $45^{\circ} 47' 04''$ E	112.75 m.
23	1697 – 1698	S $32^{\circ} 28' 51''$ E	140.47 m.
24	1698 – 1699	S $16^{\circ} 31' 39''$ E	87.22 m.
25	1699 – 1700	S $34^{\circ} 20' 03''$ E	148.04 m.
26	1700 – 1701	S $35^{\circ} 37' 35''$ E	154.40 m.
27	1701 – 1702	S $40^{\circ} 03' 02''$ E	71.20 m.
28	1702 – 1703	S $04^{\circ} 55' 16''$ E	131.87 m.
29	1703 – 1704	S $02^{\circ} 52' 13''$ E	139.80 m.

1	1704 – 1705	S 36° 36' 25" E	49.68 m.
2	1705 – 1706	S 51° 48' 05" E	67.92 m.
3	1706 – 1707	S 70° 48' 47" E	75.31 m.
4	1707 – 1708	N 62° 46' 35" E	58.76 m.
5	1708 – 1709	N 30° 20' 41" E	66.19 m.
6	1709 – 1710	N 15° 17' 21" E	34.60 m.
7	1710 – 1711	N 38° 31' 40" E	58.00 m.
8	1711 – 1712	N 44° 03' 46" E	70.46 m.
9	1712 – 1713	S 87° 45' 03" E	41.53 m.
10	1713 – 1714	S 83° 57' 38" E	61.78 m.
11	1714 – 1715	N 84° 46' 42" E	71.42 m.
12	1715 – 1716	N 50° 52' 31" E	67.35 m.
13	1716 – 1717	N 23° 29' 16" E	63.51 m.
14	1717 – 1718	N 10° 28' 38" W	59.12 m.
15	1718 – 1719	N 42° 09' 48" W	78.59 m.
16	1719 – 1720	N 86° 30' 56" E	53.47 m.
17	1720 – 1721	S 55° 49' 10" E	36.49 m.
18	1721 – 1722	S 25° 48' 02" E	54.43 m.
19	1722 – 1723	S 43° 55' 57" E	42.70 m.
20	1723 – 1724	N 85° 20' 59" E	52.42 m.
21	1724 – 1725	N 60° 06' 23" E	59.69 m.
22	1725 – 1726	N 59° 56' 28" E	109.54 m.
23	1726 – 1727	N 53° 10' 34" E	88.23 m.
24	1727 – 1728	N 42° 34' 15" E	54.14 m.
25	1728 – 1729	N 78° 19' 10" E	50.04 m.
26	1729 – 1730	S 76° 47' 35" E	49.24 m.
27	1730 – 1731	S 33° 18' 57" E	45.17 m.
28	1731 – 1732	S 16° 55' 31" E	51.74 m.
29	1732 – 1733	S 27° 17' 12" E	57.67 m.

1	1733 – 1734	S 34° 35' 06" E	84.13 m.
2	1734 – 1735	S 46° 51' 38" E	59.79 m.
3	1735 – 1736	S 69° 45' 20" E	98.26 m.
4	1736 – 1737	S 89° 05' 18" E	101.82 m.
5	1737 – 1738	N 65° 49' 59" E	44.87 m.
6	1738 – 1739	N 88° 21' 34" E	74.41 m.
7	1739 – 1740	N 89° 39' 56" E	85.63 m.
8	1740 – 1741	S 60° 15' 18" E	69.54 m.
9	1741 – 1742	S 47° 14' 39" E	48.43 m.
10	1742 – 1743	S 09° 40' 41" W	54.65 m.
11	1743 – 1744	S 36° 52' 12" W	78.13 m.
12	1744 – 1745	S 43° 14' 35" W	86.48 m.
13	1745 – 1746	S 39° 24' 02" W	54.35 m.
14	1746 – 1747	S 26° 09' 31" E	31.90 m.
15	1747 – 1748	S 27° 30' 03" W	47.91 m.
16	1748 – 1749	S 06° 13' 05" E	54.82 m.
17	1749 – 1750	S 32° 55' 29" E	54.50 m.
18	1750 – 1751	S 73° 11' 46" E	95.12 m.
19	1751 – 1752	S 84° 52' 24" E	114.71 m.
20	1752 – 1753	S 88° 15' 48" E	107.24 m.
21	1753 – 1754	S 70° 12' 04" E	77.85 m.
22	1754 – 1755	S 49° 33' 13" E	135.26 m.
23	1755 – 1756	S 31° 25' 06" E	71.34 m.
24	1756 – 1757	S 11° 18' 36" W	52.26 m.
25	1757 – 1758	S 67° 40' 29" W	35.54 m.
26	1758 – 1759	N 76° 41' 03" W	54.27 m.
27	1759 – 1760	N 69° 25' 59" W	64.42 m.
28	1760 – 1761	S 60° 20' 38" W	60.13 m.
29	1761 – 1762	S 20° 55' 51" W	51.26 m.

1	1762 – 1763	S 22° 35' 53" W	121.99 m.
2	1763 – 1764	S 00° 54' 22" W	71.14 m.
3	1764 – 1765	S 17° 54' 42" E	56.09 m.
4	1765 – 1766	S 02° 38' 25" W	128.89 m.
5	1766 – 1767	S 33° 52' 29" E	47.43 m.
6	1767 – 1768	S 50° 40' 13" E	50.10 m.
7	1768 – 1769	S 55° 56' 54" E	38.40 m.
8	1769 – 1770	N 84° 43' 03" E	58.44 m.
9	1770 – 1771	N 76° 18' 16" E	54.36 m.
10	1771 – 1772	S 77° 46' 54" E	58.45 m.
11	1772 – 1773	S 53° 13' 12" E	61.18 m.
12	1773 – 1774	S 57° 10' 35" E	75.64 m.
13	1774 – 1775	S 42° 55' 31" E	60.94 m.
14	1775 – 1776	S 06° 08' 40" E	60.73 m.
15	1776 – 1777	S 33° 15' 24" W	41.26 m.
16	1777 – 1778	S 79° 51' 14" W	76.64 m.
17	1778 – 1779	N 73° 41' 52" W	105.56 m.
18	1779 – 1780	N 50° 21' 24" W	81.90 m.
19	1780 – 1781	N 47° 06' 09" W	60.23 m.
20	1781 – 1782	DUE WEST	48.50 m.
21	1782 – 1783	S 35° 19' 47" W	56.85 m.
22	1783 – 1784	S 02° 12' 09" E	84.56 m.
23	1784 – 1785	S 20° 56' 19" E	96.36 m.
24	1785 – 1786	S 69° 39' 37" E	72.99 m.
25	1786 – 1787	N 81° 41' 01" E	85.52 m.
26	1787 – 1788	N 87° 37' 50" E	54.42 m.
27	1788 – 1789	S 84° 29' 34" E	96.38 m.
28	1789 – 1790	S 59° 16' 04" E	55.77 m.
29	1790 – 1791	S 80° 32' 51" E	89.02 m.

1	1791 – 1792	N 68° 57' 29" E	54.31 m.
2	1792 – 1793	N 68° 59' 46" E	76.72 m.
3	1793 – 1794	S 75° 40' 31" E	61.15 m.
4	1794 – 1795	S 45° 00' 10" E	70.88 m.
5	1795 – 1796	S 07° 02' 28" E	74.95 m.
6	1796 – 1797	S 18° 44' 13" E	60.32 m.
7	1797 – 1798	S 08° 23' 23" E	140.50 m.
8	1798 – 1799	S 13° 51' 23" E	96.56 m.
9	1799 – 1800	S 26° 00' 29" W	74.97 m.
10	1800 – 1801	S 03° 06' 27" E	10.39 m.
11	1801 – 1802	N 50° 21' 24" W	81.90 m.
12	1802 – 1803	N 47° 06' 09" W	60.23 m.
13	1803 – 1804	DUE WEST	48.50 m.
14	1804 – 1805	S 35° 19' 47" W	56.85 m.
15	1805 – 1806	S 02° 12' 09" E	84.56 m.
16	1806 – 1807	S 20° 56' 19" E	96.36 m.
17	1807 – 1808	S 69° 39' 37" E	72.99 m.
18	1808 – 1809	N 81° 41' 01" E	85.52 m.
19	1809 – 1810	N 87° 37' 50" E	54.42 m.
20	1810 – 1811	S 84° 29' 34" E	96.38 m.
21	1811 – 1812	S 59° 16' 04" E	55.77 m.
22	1812 – 1813	S 80° 32' 51" E	89.02 m.
23	1813 – 1814	N 68° 57' 29" E	54.31 m.
24	1814 – 1815	N 68° 59' 46" E	76.72 m.
25	1815 – 1816	S 75° 40' 31" E	61.15 m.
26	1816 – 1817	S 45° 00' 10" E	70.88 m.
27	1817 – 1818	S 07° 02' 28" E	74.95 m.
28	1818 – 1819	S 18° 44' 13" E	60.32 m.
29	1819 – 1820	S 08° 23' 23" E	140.50 m.

1           1820 – 1821       S 13° 51' 23" E           96.56 m.<sup>3</sup>  
 2           1821 – 1822       S 26° 00' 29" W           74.97 m.  
 3           1822 – 1         S 03° 06' 27" E           10.39 m.; the  
 4           point of beginning, containing an area of twenty-eight thousand four hundred  
 5           fifty-two (28,452) hectares.

6           PARCEL "B"

7           Note : Coordinate of Corner 1 is (UTM) 1143252.00 N and 592478.75 E

	<u>Lines</u>	<u>Bearing</u>	<u>Distance</u>
9	1 – 2	S 62° 56' 49" W	75.02 m.
10	2 – 3	S 31° 40' 54" W	511.47 m.
11	3 – 4	S 32° 52' 11" W	353.77 m.
12	4 – 5	S 34° 04' 02" W	550.62 m.
13	5 – 6	S 05° 09' 53" E	308.25 m.
14	6 – 7	S 33° 00' 47" E	447.50 m.
15	7 – 8	S 08° 38' 35" W	639.64 m.
16	8 – 9	S 13° 07' 22" W	819.52 m.
17	9 – 10	S 02° 17' 47" W	336.90 m.
18	10 – 11	S 47° 41' 37" E	170.29 m.
19	11 – 12	S 77° 58' 18" E	353.32 m.
20	12 – 13	N 68° 05' 49" E	277.80 m.
21	13 – 14	N 57° 57' 50" E	252.37 m.
22	14 – 15	N 50° 51' 42" E	1047.62 m.
23	15 – 16	N 34° 12' 14" E	1099.70 m.
24	16 – 17	N 16° 13' 37" W	513.07 m.
25	17 – 18	N 56° 24' 10" W	152.02 m.
26	18 – 19	N 64° 43' 28" W	193.53 m.
27	19 – 20	N 16° 10' 56" E	305.21 m.
28	20 – 21	N 49° 35' 46" E	384.36 m.
29	21 – 22	N 02° 59' 27" E	164.09 m.

1	22 – 23	N 57° 39' 40" W	423.20 m.
2	23 – 24	N 85° 56' 08" W	493.80 m.
3	24 – 25	N 50° 10' 23" W	387.22 m.
4	25 – 1	N 60° 04' 41" W	355.08 m., the

5 point of beginning, containing an area of six hundred ten (610) hectares.

6 All existing land use and resource use permits within the CCPL shall be  
 7 reviewed and shall not be renewed upon their expiration unless consistent with  
 8 the management plan, as provided herein, and upon approval by the Protected  
 9 Area Management Board (PAMB). Moreover, areas determined as wildlife  
 10 habitats and potable water sources and reservoirs shall be delineated as strict  
 11 protected and special use zones, respectively, and their management and uses  
 12 shall be consistent with the provisions of the respective previous executive  
 13 orders, presidential proclamations and amendments establishing them.

14 SEC. 4. *Definition of Terms.* – For purposes of this Act:

15 (a) “Biodiversity” shall refer to the variety and variability among all  
 16 living organisms and the ecological complexities in which they occur.

17 (b) “Component area” shall refer to any or all of the areas previously  
 18 ordered or proclaimed as the Buhisan Watershed Forest Reserve, the Sudlon  
 19 National Park, the Central Cebu National Park, the Mananga Watershed Forest  
 20 Reserve and the Kotkot-Lusaran Rivers Watershed Forest Reserve, and now  
 21 comprising and collectively referred to as the Central Cebu Protected  
 22 Landscape (CCPL).

23 (c) “Consultation” shall refer to the meeting or dialogue with  
 24 concerned or affected individuals and groups within and outside the CCPL  
 25 designed to identify and resolve issues and problems affecting them in relation  
 26 to the protection, conservation and sustainable development of the CCPL.

27 (d) “Critical watershed” shall refer to any or all of the watersheds of  
 28 Mananga, Kotkot, Lusaran and Buhisan where present or planned water supply  
 29 is or will be sourced or generated from; where public sector infrastructure

1 projects are operational or will be constructed; or where there is severe  
2 environmental degradation.

3 (e) "Department" shall refer to the Department of Environment and  
4 Natural Resources (DENR).

5 (f) "Derivatives" shall refer to anything extracted from wild species  
6 such as, but not limited to, blood, oil, saliva, musk, resin, gum, seed, spore,  
7 pollen and the like.

8 (g) "Dublin principles" shall refer to the four general principles,  
9 approaches and guidelines relevant to the Integrated Water Resources  
10 Management which was formulated during the International Conference on  
11 Water and the Environment at Dublin, Ireland in 1992.

12 (h) "Endangered species" shall refer to species or subspecies which  
13 populations are in danger of extinction and the survival of which is unlikely if  
14 casual factors continue operating.

15 (i) "Endemic species" shall refer to species or subspecies which have  
16 limited distribution often within the geographical limits of the State or specific  
17 biogeographic regions.

18 (j) "Exotic species" shall refer to species or subspecies of flora and  
19 fauna which do not naturally occur within the CCPL at present or in historical  
20 time.

21 (k) "Exploration" shall refer to searching or prospecting for mineral  
22 resources, as defined by law, by geological, geochemical or geophysical  
23 surveys, remote sensing, test pitting, trenching, drilling, shaft sinking,  
24 tunneling or any other means for the purpose of determining the existence,  
25 extent, quantity and quality thereof and the feasibility of mining them for  
26 profit.

27 (l) "Exploitation" shall refer to any mode of use, extraction,  
28 development, utilization or disposition of resources, for whatever purpose,  
29 whether commercial or otherwise.

1                   (m) "Habitat" shall refer to an area inhabited by wildlife in the natural  
2 state.

3                   (n) "Indigenous species" shall refer to native Philippine species or  
4 subspecies of flora and fauna found within the CCPL.

5                   (o) "Integrated Water Resources Management (IWRM)" shall refer to  
6 the concept promoted by the Global Water Partnership (GWP) that aims to  
7 ensure the coordinated development and management of water, land and  
8 related resources by maximizing economic and social welfare without  
9 compromising the sustainability of vital environmental systems. GWP is an  
10 international network established in 1996 open to all organizations involved in  
11 water resources management; developed and developing country government  
12 institutions, agencies of the United Nations, bilateral and multilateral  
13 development banks, professional associations, research institutions,  
14 nongovernment organizations and the private sector.

15                  (p) "Kaingin" shall refer to the slash and burn of vegetation to clear  
16 land for agricultural purposes.

17                  (q) "Large-scale infrastructure projects" shall refer to major highways,  
18 edifices, major dams, residential or commercial subdivisions, golf courses and  
19 the like.

20                  (r) "Multiple-use zones" shall refer to areas where low density  
21 settlement, traditional or sustainable land use, including agriculture, agro-  
22 forestry, extraction activities and other income generating or livelihood  
23 activities may be allowed to the extent prescribed in the management plan.

24                  (s) "National park" shall refer to a forest reservation essentially of  
25 natural wilderness character which has been withdrawn from settlement,  
26 occupancy or any form of exploitation except in conformity with the approved  
27 management plan and set aside as such exclusively to conserve the area or  
28 preserve the scenery, the natural and historic objects, wild animals and plants  
29 therein and to provide enjoyment of these features in such areas.

1                   (t) "NIPAS Act" shall refer to the National Integrated Protected Areas  
2 System Act of 1992 or Republic Act No. 7586, and its pertinent rules and  
3 regulations.

4                   (u) "Nongovernment organization (NGO)" shall refer to any social  
5 development, conservation, or philanthropic, nonstock, nonprofit organization,  
6 duly registered, with its own constitution and bylaws and a democratically-  
7 elected representation.

8                   (v) "Nonrenewable resources" shall refer to those resources within the  
9 CCPL, the natural replenishment rate of which is not known.

10                  (w) "PASu" shall refer to the Protected Area Superintendent.

11                  (x) "PAMB" shall refer to the Protected Area Management Board.

12                  (y) "People's organization (PO)" shall refer to any organized group of  
13 people residing within the CCPL formed to advance the interests of the sector  
14 it represents.

15                  (z) "Protected landscape" shall refer to areas of national significance  
16 which are characterized by the harmonious interaction of man and land while  
17 providing opportunities for public enjoyment through recreation and tourism  
18 within the normal lifestyle and economic activity of these areas; and unless the  
19 context otherwise provides, shall herein refer to the CCPL.

20                  (aa) "Protected area (PA)" shall refer to identified portions of land and  
21 water set aside by reason of their unique physical and biological significance  
22 manage to enhance biological diversity and natural ecological and physical  
23 functions and processes, and protected against destructive human exploitation  
24 and utilization; and unless the context otherwise provides, shall herein refer to  
25 the CCPL or its component areas, namely: the Buhisan Watershed Forest  
26 Reserve, the Sudlon National Park, the Central Cebu National Park, the  
27 Mananga Watershed Forest Reserve and the Kotkot-Lusaran Rivers Watershed  
28 Forest Reserve.

1                   (bb) "Quarrying" shall refer to the process of extracting, removing and  
2 disposing quarry resources, as defined by law, found on or underneath the  
3 surface of private and public land.

4                   (cc) "Recreation zones" shall refer to areas of high recreational,  
5 tourism, educational, or environment awareness values where sustainable  
6 ecotourism, recreational, conservation, education or public awareness  
7 activities may be allowed as prescribed in the management plan.

8                   (dd) "Special use zones" shall refer to areas containing existing or  
9 planned installations of national and local significance, such as  
10 telecommunication facilities, irrigation canals, water supply infrastructure, or  
11 electric power lines.

12                  (ee) "Sustainable" shall refer to the use of components of biological  
13 diversity and physical attributes and functions in a way and at a rate that does  
14 not lead to the decline of the species used and the diminution of functions; and  
15 not causing permanent or long-term diminishment or qualitative degradation of  
16 biological species, other resources extracted or disturbed, or of ecological  
17 functions, thereby maintaining its potential to meet the needs and aspirations  
18 of the present and future Filipino generations.

19                  (ff) "Strict protection zones" shall refer to areas with high biodiversity  
20 value which shall be closed to all human activity except for scientific studies  
21 and ceremonial or religious use.

22                  (gg) "Tenured migrants" shall refer to individuals and households  
23 within the CCPL who have actually and continuously occupied such areas for  
24 five years prior to June 1, 1992 and are substantially dependent therein for  
25 subsistence.

26                  (hh) "Traditional techniques" shall refer to the extraction process  
27 consistent with historically customary techniques of production which does not  
28 use any power machinery.

1                   (ii) "Watershed forest reserve" shall refer to areas such as the Buhisan  
2 Watershed Forest Reserve, the Mananga Watershed Forest Reserve and the  
3 Kotkot-Lusaran Rivers Watershed Forest Reserve proclaimed as such by the  
4 issuance of an executive order or a presidential proclamation for purposes of  
5 protecting, maintaining or improving the water yield and providing restraining  
6 mechanisms for inappropriate forest exploitation and disruptive land use.

7                   (jj) "Wildlife" shall refer to wild forms and varieties of flora and  
8 fauna, including captive-bred fauna or propagated parts, derivatives and by-  
9 products of these species.

10                  (kk) "Zones" shall refer to the divisions within the CCPL consisting of  
11 levels of protection and permitted use of natural resources such as strict  
12 protection zone, sustainable use zone, restoration zone and special use zone, as  
13 provided under existing rules and regulations of the NIPAS.

## ARTICLE II

### MANAGEMENT, MANAGEMENT PLAN AND ZONING

15                  SEC. 5. *Concept and Guiding Principles.* — The management of the  
16 CCPL shall adopt the concept of the IWRM, which is a process that aims to  
17 ensure the coordinated development and management of water, land and  
18 related resources by maximizing economic and social welfare without  
19 compromising the sustainability of vital environmental systems. As guiding  
20 principles, the management of the CCPL shall foster the Four Dublin  
21 Principles, enumerated below:

23                  (a) Fresh water is a finite and vulnerable resource essential to sustain  
24 life and develop the natural environment;

25                  (b) Water development and management should be based on a  
26 participatory approach involving users, planners and policy-makers at all  
27 levels;

28                  (c) Women play a central part in the provision, management and  
29 safeguarding of water; and

1                   (d) Water has an economic value in all its essential uses and should be  
2 recognized as an economic good.

3                 SEC. 6. *Management of the CCPL.* – The management of the CCPL  
4 shall be vested in the PAMB as herein provided, to be called as the CCPL-  
5 PAMB, and which shall be the highest policy-making body for the CCPL.

6                 SEC. 7. *Management Structure.* – The management structure for the  
7 CCPL shall promote partnership, participation, cooperation and coordination  
8 with civil society organizations engaged in development activities within the  
9 CCPL such as those that have active memoranda of agreement or existing  
10 working arrangements with the Department of Environment and Natural  
11 Resources (DENR), pursuant to Department Administrative Order (DAO)  
12 2001-16 dated May 7, 2001.

13                 SEC. 8. *Central Cebu Protected Landscape-Protected Area  
14 Management Board (CCPL-PAMB).* – In addition to the duties and functions  
15 enumerated in the implementing rules and regulations of the NIPAS Act, the  
16 CCPL-PAMB, which shall decide by consensus or majority vote, shall have  
17 the following duties and functions:

18                   (a) Decide matters relating to planning, resource protection and  
19 general administration of the area in accordance with the approved general  
20 management plan or the watershed management plan;

21                   (b) Approve proposals, work plans and guidelines for management of  
22 the CCPL in accordance with the approved general management plan or the  
23 watershed management plan;

24                   (c) Delineate and demarcate the CCPL boundaries and management  
25 zones on the ground;

26                   (d) Promulgate rules and regulations to promote development  
27 programs and project on biodiversity conservation, watershed management  
28 and sustainable development consistent with the general management plan or  
29 the watershed management plan of the PA;

1                   (e) Control and regulate the construction, operation and maintenance  
2 of all facilities, roads, trails, waterworks, sewerage, fire protection and  
3 sanitation system, utilities and other land uses or activities within the PA;

4                   (f) Monitor and evaluate the performance and activities of PA  
5 personnel in accordance with their code of conduct and performance  
6 standards;

7                   (g) Monitor and evaluate the activities and projects of NGOs, POs,  
8 national government agencies (NGAs), local government units (LGUs), the  
9 communities and other groups in providing for biodiversity conservation,  
10 sociocultural and economic development and report their assessment to the  
11 DENR;

12                  (h) Approve fees and charges in accordance with DAO 51, Series of  
13 2000 and raise funds for the PA;

14                  (i) Manage the allocation of the Central Cebu Protected Area Fund,  
15 established in Section 25 herein and other funds for the PA, ensure their  
16 proper administration and render accounting;

17                  (j) Recommend appropriate policy changes to the DENR and other  
18 government authorities;

19                  (k) Ratify all policies, procedures, guidelines and reports formulated  
20 and implemented by the executive committee created under Section 10 hereof;

21                  (l) Affirm all decisions made by the executive committee; and

22                  (m) Reorganize the executive committee and the composition of  
23 committees in the interest of the CCPL.

24                  The CCPL-PAMB *en banc* shall hold regular meetings at least once  
25 every quarter. In addition to actual and necessary travel and subsistence  
26 expenses incurred in the performance of their duties, the CCPL-PAMB  
27 members and area council members shall be entitled to term insurance  
28 coverage in attending the CCPL-PAMB meetings and other PAMB activities.  
29 These expenses shall be included in the budget for the CCPL.

1       The DENR, through the Regional Executive Director (RED), shall  
2 ensure that the CCPL-PAMB acts within the scope of its powers and  
3 functions. In case of conflict between administrative orders issued by the  
4 DENR pursuant to the NIPAS Act and the resolutions issued by the CCPL-  
5 PAMB, the DENR Secretary shall decide whether to apply the rule or  
6 withdraw its application from the CCPL.

7           SEC. 9. *Composition.* – The members of the CCPL-PAMB are as  
8 follows.

9           (a) Regional Executive Director of the DENR-Region VII, as  
10 chairman;

11           (b) Provincial planning and development officer of Cebu;

12           (c) Congressional district representatives;

13           (d) The local chief executives of the cities and municipalities with  
14 territory within the CCPL;

15           (e) Representatives of barangays with territory within the CCPL;

16           (f) Representatives of at least three local NGOs with stakes in the PA;

17           (g) Representatives of at least three POs based in the PA,

18           (h) Representative of NGAs;

19           (i) Representative of the Metro Cebu Water District (MCWD) and  
20 two representatives from organized water service providers operating within  
21 the PA; and

22           (j) Representatives of three business and industry organizations who  
23 have an interest in the sustainable management of the PA.

24       The members of the CCPL-PAMB shall be appointed by the Secretary  
25 of the DENR in conformity with the provisions of the NIPAS Act. As a  
26 transitory provision, the initial members of the CCPL-PAMB shall be  
27 nominated from the current members of the interim PAMBs of the five  
28 component areas of the CCPL. Their nominations shall be conducted in a  
29 joint meeting of the current members of the interim PAMBs duly called for the

1 purpose: *Provided, further,* That the members shall include a number of  
2 women.

3 SEC. 10. *The Executive Committee (ExeCom).* – In view of the large  
4 size of the CCPL-PAMB, an executive committee is hereby created composed  
5 of the following:

- 6 (a) The DENR regional technical director for Protected Areas,  
7 Wildlife, Coastal and Marine Zone Management Service (PAWCMZMS), as  
8 chairperson,
- 9 (b) Cebu City and Balamban mayors as co-chairs;
- 10 (c) Cebu provincial planning and development officer; and
- 11 (d) The respective chairperson and co-chairs of the different  
12 permanent committees that may be created by the CCPL-PAMB.

13 SEC. 11. *Duties and Functions of the Executive Committee.* – The  
14 CCPL-PAMB shall authorize the ExeCom to perform the following:

- 15 (a) Approve policies and guidelines formulated and recommended by  
16 the committees based on the approved CCPL general management plan or the  
17 watershed management plan which shall be ratified by the Board in a general  
18 assembly,
- 19 (b) Act on proposals or projects recommended by the concerned  
20 committees;
- 21 (c) Act on requests to conduct research or studies within the CCPL;
- 22 (d) Recommend to the DENR or other concerned agencies the issuance  
23 of permits, leases, contracts, memoranda of agreements (MOA), tenurial  
24 instruments and other agreements within the CCPL,
- 25 (e) Determine or cite violations and recommend sanctions against  
26 violators of prohibited acts within the CCPL;
- 27 (f) Review and recommend for approval the CCPL  
28 Fee System as formulated by the Ways and Means Committee;

1                         (g) Generate funds and other resources needed for the administration  
2 and development of the CCPL;

3                         (h) Conduct periodic review of the CCPL general management plan or  
4 the watershed management plan; and

5                         (i) Perform other functions as may be delegated by the Board.

6                         The ExeCom shall meet on a more frequent and periodic basis to  
7 discuss regular day-to-day affairs and other matters delegated by the CCPL-  
8 PAMB.

9                         SEC. 12. *Term of Office.* – Except for government officials who shall  
10 serve *ex officio*, every CCPL-PAMB member shall serve for a term of five  
11 years: *Provided*, That the member remains connected with the sector or  
12 organization he or she represents. Whenever a vacancy occurs during the term  
13 of a nongovernment member, a new member shall be chosen in the same  
14 manner as the original selection process: *Provided, further*, That the new  
15 member shall only serve the remaining portion of the term.

16                         SEC. 13. *Removal from the Office.* – A PAMB member may be  
17 removed, for cause and upon majority vote, on the following grounds:

18                         (a) More than three consecutive unexcused absences in regular PAMB  
19 *en banc* meetings;

20                         (b) Commission of any of the prohibited acts as provided in this Act,  
21 the NIPAS Act, or other rules and regulations governing PAs and protected  
22 species;

23                         (c) Conviction for graft and corruption; and

24                         (d) Conviction of any criminal offense.

25                         SEC. 14. *The Central Cebu Protected Landscape Management Office*  
26 -- The Central Cebu Protected Landscape Management Office (CCPLMO) is  
27 hereby created within the DENR regional office to be headed by the PASu  
28 who shall serve as the chief operating DENR officer of the entire CCPL. The  
29 PASu shall report directly to the RED of the DENR-Region VII and shall be

1 accountable to the PAMB. The PASu and the PASu staff shall reside within  
2 the PA and establish an office and sub-offices within the CCPL in order to  
3 implement this Act.

4 The PASu shall have full responsibility for the protection of land,  
5 water, wildlife and other natural physical and biological resources within the  
6 CCPL. As such, the PASu shall have the following duties and responsibilities:

7 (A) Administrative

8 (1) Serve as chief administrative officer of the PA for the purpose of  
9 implementing the management plan as detailed in the annual work program;

10 (2) Establish a productive partnership with the local community,  
11 including groups, in the planning, protection and management of the PA;

12 (3) Ensure the performance and good morale of the staff;

13 (4) Ensure the proper utilization of annual budget allocations and the  
14 proper disposition of fees and other funds generated within the PA;

15 (5) Develop and implement a park information, education and visitor  
16 program;

17 (6) Develop and implement a natural history documentation program  
18 and to oversee research that may be conducted within the area;

19 (7) Integrate the roles of the NGOs and the DENR in the operation of  
20 the area; and

21 (8) Document the processes involved in the establishment and  
22 management of the PA, with particular reference to the development of  
23 relationships with tenured migrants and other stakeholders in establishing  
24 effective protection of the area.

25 (B) Regulatory

26 (1) To act as peace officer for the purpose of maintaining peace and  
27 order within the PA. As peace officer, he shall exercise police supervision  
28 therein and may arrest any person found in any place within the PA who is

1 committing, has committed or is about to commit an offense which is  
2 prohibited in this Act;

3 (2) Enforce rules and regulations established to protect the area and  
4 preserve the area from trespass, damage, injury and illegal occupancy;

5 (3) Require, when necessary, any person entering or passing through  
6 any part of the PA under his jurisdiction to give the following information:  
7 name, address, the proposed duration of stay in the PA and the portion which  
8 he intends to visit or has visited and such other information of similar nature as  
9 may be referred to him;

10 (4) Summarily remove or eject from the area persons who have  
11 rendered themselves obnoxious by disorderly conduct or bad behavior or who  
12 have violated any of the regulations of the PA;

13 (5) Require persons cutting or gathering forest products or hunting or  
14 fishing within the PA to produce, upon demand, authority or permit to do so;

15 (6) Seize and confiscate timber or other forest products, game birds,  
16 animal and fish, including instruments, tools and conveyances used inside the  
17 PA by unlicensed persons, or if licensed, in violation of PA laws, rules and  
18 regulations, and to report them in accordance with the present rules,  
19 regulations and guidelines issued by the Secretary concerning confiscation,  
20 seizure and disposition of illegally cut, gathered and transported forest  
21 products, and other natural resources and confiscated wildlife; and

22 (7) Perform such other powers and duties as may from time to time be  
23 prescribed by higher authorities.

24 The PASu shall be supported by a sufficient number of personnel who  
25 shall be performing day to day management, protection and administration of  
26 the PA.

27 All position titles and items of the DENR employees detailed with the  
28 PA at the time of the effectivity of this Act shall be transferred to form part of  
29 the Protected Area Management Unit of the CCPL.

1           SEC. 15. *Management Plan.* – Within one year from the effectivity of  
2 this Act and in accordance with the General Management Planning Strategy as  
3 provided for in the NIPAS Act, the approved comprehensive management plan  
4 for the CCPL, to be prepared by the CCPLMO in coordination with the local  
5 communities and experts on socioeconomic, environment and natural resource  
6 management experience, shall be adopted. It shall contain, among others:

7           (a) A land use and resource management zoning plan in accordance  
8 with Section 16 hereof;

9           (b) A period of applicability for twenty-five (25) years subject to  
10 periodic review every three years;

11           (c) Goals and objectives of management in support of Section 2  
12 hereof;

13           (d) Key management issues such as, but not limited to, issuance of  
14 tenurial instruments; screening, approval and issuance of all development and  
15 land use activities within the CCPL; adequate protection and restoration of  
16 endangered species and fragile ecosystems;

17           (e) Site management strategy including, but not limited to,  
18 establishment of clear and simplified guidelines on activities, consistent with  
19 the NIPAS Act and this Act, shall be allowed within the zones;

20           (f) Major management activities such as, but not limited to,  
21 enforcement of laws, habitats and wildlife management, sustainable use  
22 management, infrastructure development and maintenance, fire prevention,  
23 and pest and disease control;

24           (g) Mechanisms for the protection of rights of legitimate occupants or  
25 tenured migrants therein;

26           (h) Regulations for sustainable and ecologically-sound use of  
27 nonprotected species of flora and fauna and their habitats; harvesting, hunting  
28 and trapping with respect to the protection of fragile habitats, wild animals  
29 breeding seasons, roosting and feeding sites; and

1                   (i) Sustainable livelihood activities.

2                  The management plan shall not be revised nor modified except by prior  
3                  consultations with the PAMB and in accordance with the procedure herein set  
4                  forth. If any part or section of the management plan is inconsistent with  
5                  existing laws, the Secretary shall certify to the other provisions of the plan that  
6                  are consistent with the laws. Unless the Secretary accepts or adopts such  
7                  inconsistent provisions, he or she shall notify the PAMB of the provisions that  
8                  need modification or revision.

9                  SEC. 16. *Integration of the Management Plan into Local Government*  
10                 *Development and Land Use Plans.* — The concerned LGUs, through their  
11                 representation in the CCPL-PAMB, shall actively participate in the  
12                 management of the CCPL. To ensure that future development of the island  
13                 and the Province of Cebu and Region VII takes place consistent with this Act,  
14                 the provisions herein and that of the approved management plan for the CCPL  
15                 shall be incorporated in the barangay, municipal, city and provincial  
16                 development and land use plans of Cebu Province, respective cities,  
17                 municipalities and the regional development plan of Region VII as an  
18                 important and crucial component of environmental protection and sustainable  
19                 development. The concerned LGUs shall likewise ensure that local ordinances  
20                 and resolutions pertaining to the environment and natural resources, in  
21                 particular, land, water resources and watersheds, are consistent with this Act,  
22                 the NIPAS Act and the approved management plan herein provided.

23                  SEC. 17. *Zoning.* — The land use and resource management zones of  
24                 the approved management plan shall be surveyed or established within the  
25                 CCPL, giving primary consideration to the protection and rehabilitation of its  
26                 watersheds and water resources, conservation and restoration of all endemic  
27                 life forms, at the same time respecting traditional and sustainable uses. The  
28                 appropriate management zoning shall also take into account the tenurial and  
29                 livelihood projects of concerned communities and must ensure the efficient

1 and effective protection of watersheds, habitats, fragile ecosystems and unique  
2 areas.

3 All primary and secondary forests within the CCPL found to possess  
4 high biodiversity value shall be classified as strict protection zones and shall  
5 be free from all forms of logging, cultivation or exploitation. Strict protection  
6 and conservation of biodiversity shall include the survival of rare, endemic  
7 and endangered species.

8 The establishment, delineation, survey, demarcation or monumentation  
9 of management zones must require the involvement of the community  
10 concerned by undertaking such steps as dialogue and consultations, land and  
11 resource-use mapping and community-based resource management activities.

### ARTICLE III

#### TENURED MIGRANTS, UTILIZATION OF RESOURCES

#### AND OPERATION OF FACILITIES

15 SEC. 18. *Tenured Migrants.* — Whenever practicable, tenured migrant  
16 communities of more than five households occupying contiguous lots within  
17 the CCPL shall be provided tenurial rights over their current habitation sites.  
18 However, if these areas are subsequently identified as crucial for conservation,  
19 tenured migrants shall be offered alternative sites within the appropriate zones  
20 with preference over the land resource users who are nontenured migrants:  
21 *Provided,* That provisions for their transfer shall include payment of  
22 compensation or a provision of occupancy instrument to alternative land and  
23 facilities of equivalent standard.

24 In all other cases, the grant of tenurial rights for tenured migrants shall  
25 take into consideration the need to promote clustering and to avoid  
26 unnecessary displacement. Tenured migrants granted tenurial instruments,  
27 where appropriate, shall be located in appropriate management zones  
28 established for the purpose.

1        Tenured migrant status shall not be issued solely on the basis of tax  
2 declaration receipts but must be supported by indisputable evidence of  
3 permanent land use from five years before June 1, 1992, such as:

- 4              (a) Cultivated trees at their fruit-bearing stage;
- 5              (b) Physical structures in the area indicating prolonged occupancy;
- 6              (c) Certification from the barangay captain or any two respected  
7 members of the community attesting to occupancy; and
- 8              (d) Other relevant data that may be accepted by the PAMB.

9        Existing land title instruments shall be reviewed by the CCPL/PLMO  
10 and endorsed by the CCPL-PAMB to the DENR regional office for validation,  
11 reversion or cancellation as the case may be. All persons who fail to qualify as  
12 tenured migrants including transient farmers shall be allowed to gather and  
13 collect whatever they have planted within five years from the effectivity of this  
14 Act. Any transfer of nontenured migrants from the CCPL shall be undertaken  
15 with due humanitarian considerations. A comprehensive relocation program  
16 shall be implemented as a component of the management plan.

17       SEC. 19. *Utilization of Resources.* – Use of resources derived from the  
18 CCPL by tenured migrants for their domestic needs or for their subsistence  
19 shall not be restricted, except for protected species or whenever detrimental to  
20 the ecosystem. Livelihood activities requiring the use of these resources shall  
21 be allowed only when sustainable, consistent with the approved management  
22 plan and after prior CCPL-PAMB approval. In this case, natural resource  
23 products can be used for livelihood purposes from established management  
24 zones where utilization for sustainable development are allowed.

25       The CCPL-PAMB is authorized to impose regulatory measures such as,  
26 but not limited to, infrastructure development and hunting moratoriums and  
27 other restrictions on the use of resources within the CCPL to ensure the  
28 sustainability of species and ecosystems: *Provided*, That these restrictions  
29 shall be made upon due consultation with tenured migrants. Any exploration,

1 exploitation or utilization of nonrenewable resources within the CCPL for  
2 commercial purposes may be subject to environmental impact assessment as  
3 required by law. No extractive activities shall be allowed without the required  
4 Environmental Compliance Certificate to minimize any adverse effects to the  
5 PA.

6 SEC. 20. *Operation of Facilities Within the CCPL.* – Within ninety  
7 (90) days from the effectivity of this Act, all existing commercial facilities  
8 within the CCPL with a total capitalization in excess of Fifty thousand pesos  
9 (P50,000.00) shall submit to the CCPL-PAMB, through the PASu, the  
10 following information:

- 11 (a) Potential for disturbance of the PA as a critical watershed,  
12 protected species and their habitat, reproductive cycle, nesting and feeding  
13 grounds and migratory paths;
- 14 (b) Noise levels at all stages of operation;
- 15 (c) Emissions and effluent at all stages of operation;
- 16 (d) Energy requirements and sources of energy; and
- 17 (e) Requirements for water supply and sources of waters.

18 Based on these submissions, the CCPL-PAMB, with the assistance of  
19 the DENR, shall determine whether the existence of such facilities and its  
20 future plans and operations will be detrimental to the CCPL and institute  
21 appropriate measures accordingly.

22 Failure to submit the required information shall constitute a violation of  
23 this Act. The CCPL-PAMB may prescribe further conditions for the operation  
24 of the facility to ensure that it does not contradict the management objectives  
25 of the CCPL. If any such conditions are violated, a fine of Five thousand  
26 pesos (P5,000.00) per day for every day of violation shall be imposed upon  
27 the owners of the said facility but not to exceed a total of Four hundred fifty  
28 thousand pesos (P450,000.00). The fines imposed shall accrue to the  
29 Integrated Protected Area Fund (IPAF) of the CCPL. At any time whenever

1 necessary, the CCPL-PAMB through the PASu or other government entities  
2 shall cause the cessation and demolition of the facility at the expense of its  
3 owners.

4 Existing facilities, determined by the CCPL-PAMB as non-prejudicial  
5 to the management objectives of the CCPL and allowed to remain within the  
6 CCPL, shall be charged a fee for the use of the land by the CCPL-PAMB,  
7 which shall not be more than three percent (3%) of the assessed value of the  
8 land and one percent (1%) of the project cost as development fee.

9 Energy projects within the CCPL shall be allowed only through an act  
10 of Congress except energy from wind, sun and water sources: *Provided*, That  
11 in all instances, the primary beneficiaries shall be qualified residents of the  
12 CCPL: *Provided, further*, That it shall undergo the Environmental Impact  
13 Assessment (EIA) System as provided by law: *Provided, finally*, That the  
14 CCPL-PAMB has endorsed and approved the project.

#### ARTICLE IV

##### PROHIBITED ACTS AND PENALTIES

17 SEC. 21. *Prohibited Acts.* — The following acts and other acts later  
18 determined by the PAMB through a resolution shall be prohibited within the  
19 CCPL, in addition to the prohibited acts as provided in the NIPAS Act and its  
20 pertinent rules and regulations:

21 (a) Occupation of any portion of land without a permit from the  
22 CCPL-PAMB: *Provided*, That clearing, construction of residence or any  
23 introduction of improvements, particularly after June 1, 1992, shall constitute  
24 *prima facie* evidence of occupancy or settlement;

25 (b) Construction or maintenance of any kind of road, edifice, facility or  
26 any infrastructure project without prior permit from the CCPL-PAMB:  
27 *Provided*, That no CCPL-PAMB permit can be issued unless:

28 (1) The CCPL-PAMB has been fully informed of the project or  
29 undertaking and its environmental consequences;

- 1           (2) All other legal requirements have been complied with;
- 2           (3) The project is consistent with the nature of the CCPL as a protected
- 3       watershed and biodiversity conservation area; and
- 4           (4) The project is in accordance and consistent with the management
- 5       plan;
- 6           (c) Bio-prospecting, without obtaining prior CCPL-PAMB approval in
- 7       accordance with existing guidelines;
- 8           (d) Establishment or introduction of exotic species within the CCPL
- 9       which are detrimental to endemic species or without prior CCPL-PAMB
- 10      approval;
- 11          (e) Hunting, collecting, catching, wounding, killing or destroying
- 12       anywhere within the CCPL any protected species of plant or animal, or their
- 13       by-products or derivatives without prior CCPL-PAMB approval;
- 14          (f) Cutting, gathering, collecting or removal of timber or other forest
- 15       products without prior CCPL-PAMB permit: *Provided*, That any permit issued
- 16       shall be valid for only one year at a time and given only:
  - 17           (1) To tenured migrants for sustainable and multiple-use areas, and
  - 18       monitored and controlled quotas; and
  - 19           (2) For scientific purposes necessary for PA management in
  - 20       accordance with existing guidelines;
  - 21           (g) Exploration, exploitation or extraction, drilling or prospecting for
  - 22       minerals or resources or engaging in quarrying within the CCPL;
  - 23          (h) Possession or use of blasting caps or explosives anywhere within
  - 24       the CCPL;
  - 25           (i) Possession or use of chain saws and band saws without a prior
  - 26       permit from the CCPL-PAMB: *Provided*, That permits may only be issued for
  - 27       multiple use;

1                   (j) Transporting within or outside the CCPL any protected species of  
2 plant or animal or their by-product or derivatives from the CCPL without the  
3 necessary transport permit from the CCPL-PAMB;

4                   (k) Destroying, excavating, vandalizing or, in any manner, damaging  
5 any natural formation on land, religious, spiritual, cultural, historical sites,  
6 artifacts and other objects of natural or scenic value;

7                   (l) Alteration, removal or destruction of boundary marks or signs;

8                   (m) Engaging in *kaingin* or, in any manner, causing forest fires inside  
9 the CCPL;

10                  (n) Introduction, disposal, dumping or causing to be dumped into the  
11 CCPL any waste material including, but not limited to, non-biodegradable,  
12 toxic, nuclear, hazardous and other prohibited substances; and

13                  (o) Violation of any rules and regulations provided in the  
14 management plan or any resolution approved by the CCPL-PAMB in the  
15 exercise of its adjudicative functions.

16                  SEC. 22. *Penalties.* – The penalties, which shall accrue to the IPAF for  
17 the CCPL to be imposed for any violation of Section 20 and Section 21, are  
18 the following:

19                  (a) For any violation of the provisions of Section 20 hereof, a fine of  
20 not less than Five thousand pesos (P5,000.00) but not more than Five hundred  
21 thousand pesos (P500,000.00) and imprisonment of not less than one year but  
22 not more than six years shall be imposed;

23                  (b) Any provision to the contrary notwithstanding, the commission of  
24 any unlawful act as provided under Section 20 and Section 21(a) herein shall  
25 carry the penalty of imprisonment of six years and one day to twelve (12)  
26 years and a minimum fine of Five hundred thousand pesos (P500,000.00) in  
27 addition to accessory penalties provided in the immediately succeeding  
28 paragraph;

1                   (c) The commission of any of the foregoing acts shall likewise carry  
2 the accessory penalties of eviction from the CCPL, payment of damages for  
3 rehabilitation or restoration and the forfeiture of all equipment, devices,  
4 weapons or any other instrument or tool used in the commission of the offense.  
5 Any resource found in the possession of the offender shall also be forfeited.  
6 Pending the outcome of the case, any resource confiscated shall be  
7 immediately turned over to the CCPL-PAMB for proper disposal and the  
8 proceeds thereof deposited in a trust fund. However, in no case shall any  
9 confiscated or rescued protected animal species be sold or in any manner  
10 disposed of but shall be immediately turned over the PASu office for release in  
11 its natural habitat. Valuation of the damage to the CCPL shall take into  
12 account biodiversity and conservation considerations as well as aesthetic,  
13 socioeconomic values and rehabilitation and restoration costs. Failure to  
14 comply with this provision shall constitute an offense under this subsection;

15                   (d) A fine of not less than One hundred thousand pesos (P100,000.00)  
16 but not more than Five hundred thousand pesos (P500,000.00), and  
17 imprisonment of not less than one year but not more than six years shall be  
18 imposed upon any public officer or officer of the law who shall unjustly refuse  
19 or refrain from instituting prosecution or shall tolerate the commission of the  
20 abovementioned offenses. Conviction of this offense shall carry the accessory  
21 penalty of perpetual disqualification from public office; and

22                   (e) A fine of not less than One hundred pesos (P100.00) but not more  
23 than One thousand pesos (P1,000.00) or community service from one day to  
24 one week, or both, shall be imposed on anyone who enters into the strict  
25 protection zone of the CCPL without prior CCPL-PAMB permit.

26                   SEC. 23. *Exemptions.* — Tenured migrants who commit any of the  
27 abovementioned acts pursuant to their traditional customs and practices,  
28 having been inadequately informed of these restrictions, rules and regulations

1 from the CCPL, shall be exempted from the coverage of Sections 21 and 22  
2 herein.

3 Except for protected species and in areas where utilization is not  
4 allowed or restricted, the certified customs and traditional practices of tenured  
5 communities when sustainable and carried out with traditional tools and  
6 equipment are also allowable activities.

7 All activities contained in the approved management plan and such  
8 other measures as are necessary for the protection, conservation, preservation,  
9 rehabilitation, restoration and PA management, as certified by the CCPL-  
10 PAMB and the DENR Secretary and those undertaken by the PASu or those  
11 deputized by the CCPL-PAMB, shall likewise be exempted from the coverage  
12 of Sections 21 and 22.

13 SEC. 24. *Special Prosecutor.* – Within thirty (30) days from the  
14 effectiveness of this Act, the Department of Justice shall designate a special  
15 prosecutor to whom all cases of violations of PA laws, rules and regulations  
16 within the CCPL shall be assigned. The special prosecutor shall coordinate  
17 with the PAMB and the PASu in the performance of his/her duties and assist  
18 in the training of wardens and rangers in arrest and criminal procedure.

19 The CCPL-PAMB may appoint a private prosecutor on a case-to-case  
20 basis to assist the public prosecutor in the enforcement of protected area laws.

## 21 ARTICLE V

### 22 PROCEEDS, FEES AND APPROPRIATIONS

23 SEC. 25. *Central Cebu Protected Area Fund.* – There is hereby  
24 established a trust fund to be known as the Central Cebu Protected Area Fund  
25 for purposes of financing projects of the CCPL. All income generated from  
26 the operation of the CCPL or management of wild flora and fauna in the PA  
27 shall accrue to the fund. These income shall be derived from visitors/tourists  
28 fee, fees from permitted sale and export of flora and fauna and other resources  
29 from the PAs, proceeds from the registration and lease of multiple-use areas,

1 including tourism concessions, contributions from industries and facilities  
2 directly benefiting from the PA, and such other fees and income derived from  
3 the operation of the PA.

4 The fund may be augmented by grants, donations, endowment from  
5 various sources, domestic or foreign for purposes related to their functions:  
6 *Provided*, That the fund shall be deposited as a special account in the National  
7 Treasury and disbursements therefrom shall be made solely for the protection,  
8 maintenance, administration and management of the system, and duly  
9 approved projects endorsed by the CCPL-PAMB in accordance with existing  
10 accounting and budgeting rules and regulations: *Provided, further*, That the  
11 fund shall not be used to cover personal services expenditures.

12 The LGUs shall continue to impose and collect all other fees not  
13 enumerated herein which they have traditionally collected, such as business  
14 permits, property tax, and rentals of LGUs facilities. Furthermore, LGUs may  
15 charge add-ons to fees imposed by the CCPL-PAMB: *Provided*, That such  
16 add-ons shall be determined based on the contribution of the LGUs in the  
17 maintenance and protection of the PA.

18 SEC. 26. *Appropriations*. – The Secretary of the DENR shall  
19 immediately include in the Department's program the implementation of this  
20 Act, the funding of which shall be included in the annual General  
21 Appropriations Act.

## 22 ARTICLE VI

### 23 TRANSITORY AND MISCELLANEOUS PROVISIONS

24 SEC. 27. *Construction*. – The provisions of this Act shall be construed  
25 liberally in favor of the protection and rehabilitation of the critical watersheds  
26 and water resources, and the conservation and restoration of biological  
27 diversity, taking into account the needs and interests of qualified tenured  
28 migrants, for present and future Filipino generations. The NIPAS Act shall  
29 have suppletory effect in the implementation of this Act.

1           SEC. 28. *Transitory Provision.* – In order to ensure the sustainability  
2 and integrity of the watersheds and water resources, the recovery and  
3 restoration of biological diversity and to develop sustainable livelihood  
4 opportunities for tenured migrants, the DENR shall henceforth cease to issue  
5 concessions, licenses, permits, clearances, compliance documents or any other  
6 instrument that allows exploitation and utilization of resources within the  
7 CCPL until the management plan shall have been put into effect.

8           SEC. 29. *Separability Clause.* – If, for any reason, any part or section  
9 of this Act is declared unconstitutional or invalid, such other parts not affected  
10 thereby shall remain in full force and effect.

11          SEC. 30. *Repealing Clause.* – All laws, decrees, proclamations, rules  
12 and regulations inconsistent with the provisions of this Act are hereby repealed  
13 or modified accordingly.

14          SEC. 31. *Effectivity Clause.* – This Act shall take effect fifteen (15)  
15 days after its publication in the *Official Gazette* or in a national newspaper of  
16 general circulation readily available in the PA. It shall be translated in  
17 Filipino and Cebuano and shall be posted in the appropriate language in  
18 conspicuous areas in the provincial, municipal, city and barangay halls within  
19 the CCPL as well as in the markets, public plazas and shopping malls in the  
20 Province of Cebu.

Approved,

O