



# Final Survey Report Appendix

**GA\_Statewide\_2018\_B18**

Task Order Number: 140G0218F0420

Contract Number G16PC00042

Atlantic Project Number 18066



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## Section 1. Appendix

### 1.1 LiDAR Survey Point Summary

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
PIED_FULTON_CP10	1063443.543	1266070.001	263.344	Control
BLUE_MURRAY_CP1	1024455.173	1384448.877	336.675	Control
WAYNE_CP49	1346350.888	1034492.857	19.714	Control
LCP504	1257026.172	1065308.017	77.709	Control
COFFEE_CP77	1239901.535	1014865.182	68.244	Control
LCP505	1326471.897	1000529.945	19.925	Control
SEPL_IRWIN_CP67	1208953.467	1021867.486	88.976	Control
WARE_CP26	1273775.153	1020018.064	50.689	Control
WAYNE_BR6	1327343.853	1018163.322	18.866	Control
WAYNE_CP108	1337064.191	1044309.95	15.8	Control
SWAPP_CHATTOOGA_CP19	976045.9821	1322256.575	218.771	Control
SWAPP_FLOYD_CP13	973731.4975	1299154.738	182.374	Control
SWAPP_FLOYD_CP17	992742.1394	1298995.603	188.645	Control
SWAPP_POLK_CP10	997249.9142	1271465.265	255.598	Control
SWAPP_CHATTOOGA_CP14	959219.9051	1322155.445	236.043	Control
SWAPP_WHITFIELD_CP21	991755.99	1360071.253	279.525	Control
SWAPP_WALKER_CP22	960888.9413	1358936.789	272.642	Control
PIED_BARTOW_CP9	1006399.156	1283007.795	221.956	Control
SWAPP_FLOYD_CP23	990319.5311	1314169.18	182.644	Control
SWAPP_FLOYD_CP29	983183.7312	1303131.595	195.23	Control
SWAPP_FLOYD_CP12	973984.6594	1281989.645	207.348	Control
SWAPP_POLK_CP30	984387.3118	1276877.612	264.452	Control
SWAPP_CHATTOOGA_CP24	961449.2186	1307017.791	191.554	Control
PIED_HARALSON_CP57	984195.8752	1239792.107	343.496	Control
SWAPP_DADE_CP1	945456.4774	1375636.344	484.591	Control
SWAPP_POLK_CP11	974307.8288	1263708.069	278.019	Control
SWAPP_WALKER_CP20	973061.1071	1342147.161	279.057	Control
SWAPP_CATOOSA_CP2	975327.0807	1374198.556	217.062	Control
SWAPP_DADE_CP15	949264.5886	1348185.481	245.099	Control
PIED_BARTOW_CP7	1027715.342	1314445.677	261.321	Control
SWAPP_MURRAY_CP4	1016738.27	1360920.524	229.405	Control
PIED_BARTOW_CP8	1023172.395	1292609.959	218.797	Control
PIED_FULTON_CP9	1065772.029	1250643.362	296.695	Control
BLUE_CHERO_CP20	1027789.577	1298196.117	281.658	Control
PIED_PAULD_FO10	1017593.52	1277460.085	269.561	Control
BLUE_CHERO_CP26	1039300.851	1309853.725	307.303	Control
BLUE_GORDON_UA7	1028583.983	1324619.824	283.364	Control
BLUE_MURRAY_OT1	1031832.439	1365778.096	502.215	Control
BLUE_CHERO_CP21	1053323.13	1310709.102	308.414	Control
SWAPP_MURRAY_CP25_1	1003205.175	1368599.622	221.588	Control
PIED_COBB_CP6	1049488.331	1281196.502	293.079	Control
PIED_FULTON_CP11	1068354.79	1288889.522	332.747	Control
PIED_LUMP_CP22	1089940.729	1346037.122	419.404	Control
BLUE_TOWNS_CP15b	1099933.502	1393950.874	590.238	Control
PIED_FORSY_CP15	1079912.142	1298510.876	376.385	Control
BLUE_UNION_CP11	1081266.263	1387539.402	568.114	Control
PIED_HALL_CP18	1110631.531	1318883.406	384.993	Control
BLUE_FANNIN_CP8	1045776.02	1382816.368	527.509	Control

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
PIED_BARROW_CP32	1115701.048	1286994.486	322.002	Control
BLUE_UNION_CP10	1085581.908	1360914.784	860.079	Control
PIED_WHITE_CP23	1111252.992	1348813.34	437.233	Control
BLUE_TOWNS_CP15	1099299.665	1394159.065	614.259	Control
PEID_LUMPKN_F029	1088707.116	1338486.324	422.422	Control
PIED_LUMP_CP21	1093506.374	1336725.175	338.607	Control
PEID_FORSYT_CP60	1073517.028	1304753.184	347.066	Control
DEKALB_CP12	1079491.433	1259235.297	278.616	Control
PIED_HALL_CP19	1109775.381	1331776.633	347.037	Control
PIED_HALL_F026	1098745.096	1300865.742	349.32	Control
BLUE_UNION_CP12	1096972.89	1374027.177	611.383	Control
PIED_JACKSON_CP30	1117605.931	1299309.064	275.217	Control
PIED_DAWSON_CP20	1081401.363	1329466.215	419.408	Control
PIED_ROCK_CP14	1101677.343	1246691.336	273.119	Control
PIED_DEKALB_CP13	1089253.162	1252523.033	277.962	Control
PIED_FORSY_CP16	1085640.258	1313402.158	367.184	Control
BLUE_FANNIN_CP9	1070039.435	1380246.57	559.137	Control
BLUE_UNION_CP24	1084092.346	1379791.401	576.431	Control
PIED_CHEROK_CP54	1061319.821	1308145.754	367.678	Control
BLUE_GILMER_CP7	1059151.456	1356281.048	564.931	Control
PEID_FORTH_F024	1081455.2	1292334.368	347.176	Control
BLUE_WHITE_CP13	1111661.91	1368740.32	521.495	Control
BLUE_DAWSON_CP6	1066870.245	1338724.124	450.919	Control
RABUN_CP14	1123008.818	1380786.629	569.56	Control
RABUN_CP16	1139070.162	1399784.713	644.523	Control
RABUN_CP17	1150565.08	1393100.035	524.532	Control
RABUN_CP18	1141083.66	1374952.312	504.034	Control
RABUN_CP23b	1128630.546	1389240.549	603.538	Control
BANKS_CP28	1142471.156	1319380.814	223.304	Control
BANKS_CT27	1130973.62	1328135.595	289.998	Control
BARROW_CP33	1128865.952	1285776.858	273.597	Control
CLARKE_CP34	1143752.136	1283722.418	242.342	Control
CLARKE_CP35	1157815.558	1291584.44	231.7	Control
HABER_CP25	1130634.514	1357877.14	408.468	Control
HABERS_CP26	1129855.084	1344016.399	430.78	Control
JACKS_CP29	1131967.095	1309630.267	279.581	Control
JACKS_CP31	1143877.684	1298066.227	236.893	Control
JACKSON_CP39	1131957.754	1309635.631	279.734	Control
WHITE_CP24	1113255.792	1364822.889	437.784	Control
WHITE_CP25	1117334.332	1368349.738	437.126	Control
ELBERT_CP36	1182447.508	1318785.174	237.972	Control
ELBERT_CP37	1203818.566	1325463.765	205.562	Control
ELBERT_CP38	1202027.774	1308566.264	200.51	Control
ELBERT_CP62	1191285.217	1312444.846	205.373	Control
ELBERT_CP63	1221272.023	1302089.661	115.877	Control
LCP501	1194332.538	1323420.862	226.337	Control
LINCOLN_CP39	1227860.475	1289740.394	116.82	Control
LINCOLN_CP40	1240592.123	1279845.64	143.411	Control
WILKES_CP47	1218876.062	1269587.846	186.637	Control
WILKES_CP48	1213741.861	1286377.697	179.217	Control
WILKES_CP49	1199773.874	1273548.794	210.444	Control

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
WILKES_CP64	1219254.302	1282181.842	173.953	Control
COLUM_CP41	1257254.54	1256066.621	121.601	Control
COLUM_CP42	1284749.752	1256298.159	62.26	Control
COLUM_CP66	1259346.826	1266846.555	104.708	Control
COLUM_CP67	1259654.596	1242630.927	137.399	Control
COLUM_CP90	1274842.119	1251671.855	137.233	Control
GLASC_CP30	1239378.813	1217646.704	121.395	Control
GLASC_CP31	1227434.741	1213982.7	162.779	Control
GREENE_CP51	1187849.159	1252504.905	199.25	Control
GREENE_CP52	1162417.724	1259136.027	184.34	Control
GREENE_CP53	1174191.125	1233021.844	163.037	Control
GREENE_CP71	1170003.762	1245177.645	138.899	Control
JEFF_CP32	1257719.886	1216207.211	118.643	Control
JEFF_CP33	1241253.621	1201928.059	100.097	Control
JEFF_CP34	1259054.912	1194472.493	100.342	Control
JEFF_CP35	1253880.586	1179192.78	73.934	Control
LINC_CP65	1239785.378	1267075.533	138.501	Control
MCDUF_CP28	1249618.409	1239474.596	167.895	Control
MCDUF_CP44	1240938.043	1258776.097	145.037	Control
RICHM_CP26	1287417.939	1244913.87	44.272	Control
RICHM_CP27	1275023.161	1233462.665	137.408	Control
TALIAF_CP50	1199510.131	1245459.033	180.662	Control
TALIAF_CP70	1214113.652	1253034.159	175.036	Control
WARREN_CP29	1237527.4	1228696.089	159.035	Control
WARREN_CP45	1224754.045	1229382.028	170.05	Control
WARREN_CP46	1222110.857	1244301.365	181.036	Control
WARREN_CP69	1228759.502	1236002.108	159.307	Control
WASH_CP36	1220150.769	1200102.58	143.853	Control
WASH_CP37	1235590.918	1192856.812	116.232	Control
WASH_CP85	1203357.957	1182433.558	135.447	Control
EMANL_CP21	1277046.43	1129084.517	63.51	Control
EMANL_CP22	1257578.604	1143504.255	70.258	Control
EMANUEL_CP23	1271334.495	1151156.22	95.528	Control
EMANUEL_CP25	1263337.443	1164886.667	119.489	Control
JOHNSON_CP43	1234957.558	1160376.558	87.464	Control
JOHNSON_CP44	1241839.867	1146156.208	77.271	Control
JOHNSON_CP86	1253015.719	1158095.266	77.417	Control
LAUREN_CP45	1203658.313	1133622.592	97.622	Control
LAUREN_CP46	1222344.42	1147373.672	67.181	Control
LAUREN_CP47	1229033.744	1129023.52	52.139	Control
LAUREN_CP48	1213692.73	1117901.866	92.609	Control
LAUREN_CP49	1223761.51	1104526.785	93.987	Control
LAUREN_CP83	1230199.317	1118660.894	59.566	Control
LAUREN_CP84	1217370.544	1129681.183	81.374	Control
LCP503	1204725.885	1133883.335	92.691	Control
MONT_CP50	1258873.808	1113397.209	92.344	Control
MONT_CP81	1253927.754	1099854.31	61.776	Control
TOOMBS_CP19	1277543.035	1111549.322	66.694	Control
TOOMBS_CP20	1275457.799	1095078.064	75.689	Control
TRTLN_CP52	1253047.686	1124345.138	103.039	Control
WA_CP38	1210165.412	1172386.338	116.561	Control

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
WA_CP39	1226088.603	1172572.416	134.106	Control
WA_CP41	1199128.402	1165317.693	70.871	Control
WHEELER_CP53	1236875.058	1094287.598	70.202	Control
WHEELER_CP82	1246323.403	1102237.439	43.477	Control
WILKINSON_CP40	1173736.733	1166004.758	158.015	Control
WILKINSON_CP42	1190329.137	1150149.305	146.183	Control
TATTN_CP16	1296329.746	1099556.183	61.809	Control
BRYAN_CP74	1343728.667	1107602.911	25.789	Control
EFFIN_CP84	1375470.375	1140771.472	19.686	Control
EVANS_CP12	1312260.973	1110950.264	34.704	Control
BRYAN_CP75	1355917.204	1117750.106	23.659	Control
SCREV_CP5	1329503.785	1157837.17	50.096	Control
EFFIN_CP106	1363541.448	1129510.324	24.635	Control
SCREV_CP85	1352006.579	1172765.963	14.453	Control
JASPER_CP83	1377089.9	1165304.456	19.943	Control
EVANS_CP71	1312522.803	1105680.914	57.729	Control
SCREV_CP88	1316939.193	1164318.548	40.206	Control
CAND_CP87	1289612.056	1143962.857	84.602	Control
EFFIN_CP102	1354135.63	1142283.76	32.923	Control
HAMPT_CP103	1369815.027	1179207.043	35.985	Control
BULL_CP80	1347559.683	1130516.128	30.073	Control
EFFIN_CP79	1356291.114	1151165.844	39.641	Control
SCREV_CP4	1331888.91	1173960.516	56.059	Control
EVANS_CP13	1325439.846	1102472.694	53.236	Control
BULL_CP8	1320791.81	1134256.608	60.724	Control
BULL_CP101	1334554.339	1120501.814	36.261	Control
BULL_CP6	1334545.685	1145896.08	63.771	Control
BULL_CP7	1308600.326	1149951.291	90.707	Control
TATTN_CP17	1298513.022	1113635.816	68.494	Control
CAND_CP10	1304412.862	1140118.742	76.213	Control
BULL_CP9	1320778.968	1123201.118	50.987	Control
SCREV_CP3	1338741.367	1182827.577	40.314	Control
ALLEN_CP86	1356097.718	1187449.041	32.52	Control
SCREV_CP1	1338694.931	1199957.985	31.226	Control
EMANL_CP24	1292108.716	1158855.126	84.314	Control
EFFIN_CP107	1370680.457	1156735.984	27.775	Control
SCREV_CP2	1324058.377	1193078.659	60.955	Control
CAND_CP11	1290539.689	1127326.415	76.501	Control
APPL_CP55	1291844.578	1045886.704	52.886	Control
APPL_CP56	1276749.194	1061076.088	64.467	Control
APPL_CP57	1297751.603	1055488.132	56.847	Control
APPLI_CP56	1297205.703	1071147.392	48.7	Control
APPLI_CP57	1279497.316	1075935.044	44.723	Control
APPLI_CP80	1283010.685	1063716.632	58.683	Control
COFF_CP38	1252684.477	1040587.447	74.792	Control
COFFEE_CP60	1229353.527	1044182.608	94.484	Control
COFFEE_FO36	1231702.11	1040475.033	90.826	Control
JEFF_CP58_b	1260569.772	1048128.356	75.84	Control
JEFF_CP58	1262019.104	1069931.738	53.904	Control
JEFF_CP59	1243894.769	1055677.566	86.84	Control
JEFF_CP59_b	1262055.218	1059973.342	74.41	Control

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
JEFF_CP96	1249493.209	1056776.124	75.718	Control
LIBER_CP68	1356979.232	1077544.496	5.608	Control
LONG_CP65	1342227.467	1064204.016	18.634	Control
LONG_CP66	1327788.16	1069135.776	23.916	Control
LONG_CP99	1326826.778	1080479.627	44.893	Control
MONT_CP51	1263433.496	1085539.708	66.081	Control
SEPL_BENHILL_CP_1	1214550.76	1049809.226	78.477	Control
SEPL_BENHILL_CP_2	1184302.104	1052049.698	115.433	Control
SEPL_BENHILL_CP	1200942.012	1038809.017	98.718	Control
SEPL_IRWIN_CP66	1187616.54	1033251.367	97.252	Control
TATT_CP100	1311630.864	1097703.517	58.19	Control
TATT_CP70	1310140.048	1088800.926	54.678	Control
TATTN_CP14	1318739.528	1079840.971	50.655	Control
TATTN_CP15	1303266.665	1078466.779	27.64	Control
TATTN_CP73	1299525.014	1087018.836	31.825	Control
TATTN_CP89	1319450.18	1092587.934	55.398	Control
TOOM_CP18	1286334.479	1082624.275	58.582	Control
WAYNE_CP52	1323887.379	1049103.899	46.095	Control
WAYNE_CP53	1314379.271	1059331.373	47.637	Control
WAYNE_CP55	1318914.848	1060066.256	32.07	Control
WHEEL_CP54	1249036.467	1083454.066	73.245	Control
APPLI_CP54	1305221.645	1036078.519	41.779	Control
ATKIN_CP30	1229725.626	988191.341	67.998	Control
ATKIN_CP31	1234200.097	1009714.346	73.255	Control
ATKIN_CP32	1250678.201	1006665.008	50.147	Control
ATKIN_CP63	1233731.683	1005402.66	63.068	Control
ATKIN_CP94	1242842.36	996517.834	60.013	Control
BACON_CP39	1270210.816	1031186.811	60.475	Control
BACON_CP40	1290549.227	1029593.855	52.693	Control
BACON_CP95	1275389.543	1038035.272	63.414	Control
BRANT_58	1327469.494	1013288.279	16.355	Control
BRANT_CP34	1327148.162	1008031.288	19.919	Control
BRANT_CP35	1343640.035	1018787.711	21.678	Control
BRANT_CP90	1314294.996	1001842.435	31.044	Control
COFF_BR4	1245091.229	1011487.037	66.972	Control
COFF_CP36	1257590.256	1014551.886	48.36	Control
COFF_CP97	1251960.997	1024901.667	63.423	Control
COFFEE_CP61	1243772.171	1026880.716	73.491	Control
COFFEE_CP62	1222274.694	1016185.611	83.09	Control
COFFEE_WE16	1232003.914	1016898.583	68.388	Control
LONG_UA30	1352197.749	1051497.582	12.968	Control
PIER_CP42	1299527.285	1007357.907	37.111	Control
PIER_CP43	1311050.086	1021599.545	31.962	Control
PIER_FO21	1308497.764	1027491.811	41.151	Control
SECP_BERRIEN_CP_A	1208960.912	983077.362	72.293	Control
SECP_BERRIEN_CP_B	1212861.649	999684.634	78.996	Control
SECP_BERRIEN_TG	1218364.975	994892.539	75.017	Control
SEPL_BERRIEN_CP_A	1195867.835	1006351.265	87.323	Control
SEPL_BERRIEN_CP_B	1207270.116	985470.831	66.492	Control
SEPL_BERRIEN_CP_C	1210031.382	1005105.425	71.033	Control
SEPL_BERRIEN_FO	1202622.195	1001306.758	87.617	Control

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
SEPL_IRWIN_OT63	1205670.127	1014435.438	96.256	Control
WARE_CP92	1273452.196	992787.611	49.496	Control
WARE_FO15	1286416.916	1005871.446	27.861	Control
WARE_OT8	1287324.513	997567.458	41.585	Control
WAYNE_CP50	1327922.012	1031865.846	17.277	Control
WAYNE_CP51	1329787.163	1040922.922	28.92	Control
WAYNE_FO20	1333893.685	1027120.715	17.131	Control
LCP506	1316107.744	976780.399	44.731	Control
SECP_BERRIEN_11	1215125.279	972535.639	65.67	Control
SECP_CHARLTON_C_A	1318668.742	910740.664	31.944	Control
SECP_CHARLTON_C_B	1334131.813	922001.379	24.112	Control
SECP_CHARLTON_C_C	1324755.213	956745.6	16.466	Control
SECP_CHARLTON_C_D	1317212.958	974587.152	43.42	Control
SECP_CHARLTON_C_E	1296921.889	954677.435	35.568	Control
SECP_CHARLTON_C_F	1321739.8	938307.313	39.996	Control
SECP_CHARLTON_C_G	1318959.582	923445.692	36.304	Control
SECP_CLINCH_CP1	1237821.665	976223.018	60.904	Control
SECP_CLINCH_CP5	1281096.397	935044.117	34.375	Control
SECP_CLINCH_CP6	1283858.718	944991.968	35.87	Control
SECP_CLINCH_CP7	1253329.036	947946.787	47.993	Control
SECP_CLINCH_CP8_A	1246424.806	965638.957	55.277	Control
SECP_CLINCH_CP8_B	1253052.294	959706.273	51.281	Control
SECP_CLINCH_CP9_A	1267419.642	971001.65	48.179	Control
SECP_CLINCH_CP9_B	1247543.412	980905.699	58.136	Control
SECP_ECHOLS_CP1	1232426.76	927312.642	41.648	Control
SECP_ECHOLS_CP2	1235684.027	945797.015	42.811	Control
SECP_ECHOLS_CP3	1246165.273	932962.059	47.229	Control
SECP_ECHOLS_CP4	1270670.426	928381.776	34.842	Control
SECP_LANIER_CP2	1225838.4	964791.499	61.237	Control
SECP_WARE_128	1291341.63	948586.343	36.92	Control
SECP_WARE_CP21	1308848.76	927655.325	35.801	Control
SECP_WARE_CP22	1283431.081	982122.185	42.36	Control
SECP_WARE_CP23	1268628.751	984149.394	51.093	Control
SECP_WARE_CP24	1297499.734	992424.252	42.646	Control
SEPL_BERRIEN_CP	1209893.907	976360.225	70.456	Control
SEPL_ECHOLS_CP7_A	1228576.699	927001.304	43.889	Control
SEPL_ECHOLS_CP7_B	1226016.753	934608.189	47.75	Control
SEPL_LANIER_CP7	1217690.132	969080.355	72.961	Control
MCINT_CP60	1373266.171	1029835.855	8.38	Control
JASPER_CP81	1398771.717	1121300.927	5.931	Control
LIBERTY_CP69	1387358.016	1067401.265	4.645	Control
CAMDEN_CP89	1340464.223	985931.9739	23.323	Control
MCINT_CP62	1374340.017	1057188.541	5.127	Control
CAMDEN_CP17	1360557.446	965775.6224	4.433	Control
JASPER_CP82	1389686.233	1137936.913	6.403	Control
GLYNN_CP91	1384827.961	1014033.644	5.322	Control
BRYAN_CP74_b	1374879.791	1089529.711	5.301	Control
LONG_CP64	1356667.47	1049635.797	7.027	Control
GLYNN_CP63	1382628.26	991017.1958	4.146	Control
LIBERTY_CP98	1365029.125	1065020.496	5.087	Control
GLYNN_CP44	1385203.021	1004616.975	2.502	Control



POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
CAMDEN_CP18	1354646.61	978934.9533	3.924	Control
LIBER_CP67	1375524.314	1073804.662	5.935	Control
MCINT_CP61	1364227.456	1045143.449	5.305	Control
CAMDEN_CP46	1364742.392	995226.8451	6.847	Control
CAMDEN_CP16	1372149.289	957624.4218	5.42	Control
BRYAN_CP72	1389468.184	1076843.645	2.806	Control
CHATHAM_CP105	1373219.479	1108497.775	5.788	Control
CHATHAM_CP77	1389332.834	1109209.86	5.048	Control
JASPER_CP104	1384798.916	1154962.628	17.712	Control
CAMDEN_CP19	1343504.504	996100.6884	15.495	Control
GLYNN_CP109	1361346.035	1012227.785	2.03	Control
GLYNN_CP48	1364216.508	1019919.984	5.167	Control
CHATHAM_CP76	1418947.269	1107536.374	2.595	Control
PIED_BARTOW_CP56	1034657.103	1285956.599	272.165	Control
BLUE_GILMER_CP22	1038748.5	1356285.039	393.33	Control
BLUE_PICKENS_UA3	1037971.637	1331433.03	348.256	NVA
PIED_COBB_UA9	1050452.444	1273228.518	339.936	NVA
SEPL_BERRIEN_OT_A	1210045.973	1005116.903	70.155	NVA
WAYNE_UA117	1327603.099	1023455.804	17.938	NVA
SWAPP_WALKER_OT24	973320.6257	1364039.8	239.091	NVA
SWAPP_POLK_OT1	981367.8842	1271671.022	237.021	NVA
SWAPP_FLOYD_OT3	984788.443	1290305.288	215.142	NVA
SWAPP_CHATTOOGA_UA14	964627.9512	1314459.327	192.609	NVA
SWAPP_CATOOSA_UA16	979287.6536	1365318.255	295.515	NVA
SWAPP_FLOYD_OT4	965586.1071	1298132.76	187.533	NVA
SWAPP_WALKER_OT22	987375.1463	1346950.826	274.352	NVA
SWAPP_FLOYD_OT5	982196.5603	1302615.188	203.251	NVA
SWAPP_CHATTOOGA_UA10	971109.8124	1327780.647	214.394	NVA
SWAPP_FLOYD_UA4	986338.8434	1300211.65	178.406	NVA
SWAPP_CATOOSA_OT20	988206.6491	1371343.524	244.375	NVA
SWAPP_FLOYD_OT6	986513.0773	1314432.273	193.913	NVA
SWAPP_FLOYD_BE1	999216.0677	1314052.098	222.38	NVA
SWAPP_FLOYD_UA22	974478.9491	1281894.06	193.662	NVA
SWAPP_CATOOSA_OT21	970319.3026	1377508.827	232.543	NVA
SWAPP_CHATTOOGA_OT12	965305.619	1315246.285	199.247	NVA
SWAPP_POLK_OT2	1003294.061	1273969.373	236.562	NVA
SWAPP_FLOYD_UA5	985822.406	1313014.424	189.79	NVA
SWAPP_WALKER_UA13	971693.027	1348712.602	245.916	NVA
SWAPP_WALKER_OT23	972113.7613	1353117.638	269.794	NVA
SWAPP_CHATTOOGA_BE2	967944.3393	1308475.926	210.326	NVA
SWAPP_DADE_OT25	949568.7048	1363827.112	218.338	NVA
SWAPP_CATOOSA_OT20_1	988217.2955	1371309.426	244.247	NVA
SWAPP_CHATTOOGA_OT13	972652.2831	1330854.792	208.746	NVA
SWAPP_POLK_UA1	982675.3563	1272345.278	236.923	NVA
SWAPP_WALKER_OT26	980645.4976	1341279.573	259.152	NVA
SWAPP_WALKER_UA11	961491.3998	1378084.416	552.39	NVA
SWAPP_DADE_UA12	948868.6721	1364124.596	231.292	NVA
SWAPP_DADE_UA3	947440.8731	1353213.355	246.99	NVA
SWAPP_POLK_UA2	1002216.383	1274061.365	232.826	NVA
SWAPP_FLOYD_OT27	989630.6889	1327117.716	202.692	NVA
PIED_FULTON_FO17	1064631.601	1265219.822	248.818	NVA

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
BLUE_FANNIN_FO9	1040711.009	1380522.287	567.084	NVA
BLUE_CHERO_FO26	1040525.226	1315617.601	335.312	NVA
BLUE_MURRAY_OT10	1020097.093	1375157.754	266.356	NVA
BLUE_PICKENS_FO4	1039870.31	1334816.337	344.57	NVA
PIED_COBB_FO13	1050838.287	1257649.884	321.385	NVA
PIED_CHEROK_CP55	1049283.645	1298318.856	353.564	NVA
PIED_COBB_FO11	1035122.767	1269737.833	333.496	NVA
SWAPP_MURRAY_OT14	1013314.214	1348760.08	221.12	NVA
PIED_BARTOW_UA21	1022910.028	1297929.601	239.578	NVA
SWAPP_MURRAY_OT15	1016579.046	1363622.206	229.728	NVA
SWAPP_WHITFIELD_OT19_1	999501.2199	1374375.326	236.304	NVA
BLUE_BARTOW_UA25	1030342.67	1305392.765	320.728	NVA
BLUE_GORDON_CP2	1030309.473	1326873.559	291.319	NVA
SWAPP_WHITFIELD_UA17_1	999458.7215	1373336.11	236.249	NVA
PIED_COBB_FO22	1055132.588	1283427.909	362.663	NVA
BLUE_GILMER_OT4	1043479.227	1353837.262	378.046	NVA
PIED_CHEROKEE_FO64	1045351.767	1290908.178	281.898	NVA
SWAPP_GORDON_FO11	1003110.09	1326134.532	214.878	NVA
SWAPP_WHITFIELD_OT17	1000695.823	1353011.923	223.594	NVA
SWAPP_GORDON_CP18	1003374.391	1329545.239	195.782	NVA
BLUE_MURRAY_UA4	1024672.644	1360365.527	775.637	NVA
PIED_FULTON_UA12	1055531.101	1251498.506	268.446	NVA
SWAPP_GORDON_BE6b	1027981.363	1324712.802	230.104	NVA
PIED_BARTOW_UA6	1020365.538	1291867.72	211.677	NVA
PIED_PAULD_FO3	1025035.001	1264801.65	333.039	NVA
SWAPP_GORD_BE13	1017623.312	1325236.144	216.707	NVA
SWAPP_GORD_BE12	1017686.265	1340375.898	196.572	NVA
BLUE_GILMER_CP4	1041281.409	1349288.047	464.447	NVA
BLUE_PICKENS_CP3	1052394.446	1326678.56	409.185	NVA
SWAPP_WHITFIELD_OT18	993653.6041	1362363.623	231.183	NVA
SWAPP_BART_FO8	1009973.612	1316011.788	237.811	NVA
BLUE_CHERO_OT17	1045902.925	1311857.249	333.05	NVA
BLUE_PICKENS_CP25	1043406.867	1337166.839	367.973	NVA
BLUE_MURRAY_CP19	1026191.178	1343464.418	204.369	NVA
SWAPP_CATOO_FO21	990309.4627	1380844.098	267.914	NVA
SWAPP_WHIFIELD_UA18	1002412.3	1358368.609	230.719	NVA
BLUE_PICKENS_OT2	1049737.414	1330754.543	438.325	NVA
SWAPP_BART_FO7	1017550.034	1298893.547	230.537	NVA
BLUE_GORDON_FO3	1029328.742	1330360.953	263.955	NVA
PIED_DAWSON_BE2	1087964.871	1322777.977	363.798	NVA
NVA501	1225884.152	1291243.45	142.108	NVA
JEFF_BE3	1256064.14	1227860.509	93.873	NVA
NVA502	1178071.372	1247835.096	192.465	NVA
LAUREN_BE4	1213381.075	1134603.417	91.212	NVA
NVA503	1232429.1	1159558.383	107.658	NVA
TOOMBS_BE2	1268360.807	1103764.106	79.098	NVA
BULL_BE1	1320556.182	1151642.072	75.357	NVA
LIBER_BE3	1354190.32	1077540.343	5.072	NVA
BACON_BE2	1276630.845	1031464.971	58.29	NVA
SEPL_IRWIN_OT62	1191277.245	1023962.474	108.706	NVA
SECP_ECHOLS_BE1	1236208.762	932182.371	44.694	NVA

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CHATHAM_BE5	1403421.566	1106490.537	3.64	NVA
GLYNN_BE6	1366191.046	1012351.753	4.407	NVA
CAMDEN_BE7	1371843.347	959055.0178	6.359	NVA
SEPL_BERRIEN_CP_D	1196556.475	993216.35	85.212	NVA
SWAPP_WALKER_OT22b	987375.1463	1346950.826	274.352	NVA
WILKES_BE3	1217054.714	1269848.616	182.799	NVA
WILKES_OT49	1223098.396	1280456.017	143.581	NVA
EVANS_OT11	1312719.56	1098675.808	56.761	NVA
GLYNN_UA36	1371864.688	1011435.491	4.559	NVA
PIED_BARTOW_OT7	1009967.055	1290216.445	212.04	NVA
PIED_BARTOW_OT28	1025805.243	1307377.446	260.789	NVA
BLUE_GILMER_OT3	1034261.717	1340423.07	320.377	NVA
PIED_WHITE_OT19	1110085.337	1353878.648	467.972	NVA
PIED_FORSY_OT15	1092639.989	1316778.084	380.292	NVA
BLUE_WHITE_OT12	1102663.308	1366899.007	1009.327	NVA
BLUE_DAWSON_OT7	1067261.233	1344872.217	792.762	NVA
PIED_DEKALB_OT12	1071640.93	1269253.18	317.408	NVA
PIED_HALL_OT25	1101388.421	1327338.179	393.912	NVA
PIED_LUMP_OT18	1095502.646	1353627.045	504.073	NVA
BLUE_FANNIN_OT8	1075420.166	1365300.169	627.244	NVA
PIED_DAWSON_OT16	1073154.159	1334792.633	456.046	NVA
BLUE_FANNIN_OT9	1068461.115	1375686.863	602.181	NVA
PIED_DEKALB_OT12b	1071640.953	1269253.171	317.413	NVA
BLUE_GILMER_OT6	1053830.378	1380876.232	473.337	NVA
BLUE_CHERO_OT16	1062923.046	1314629.072	336.637	NVA
PIED_HALL_OT27	1110038.911	1304720.127	323.594	NVA
PIED_BARROW_OT30	1121114.167	1281076.647	282.792	NVA
PIED_HALL_OT33	1111240.957	1339578.442	430.551	NVA
BLUE_UNION_OT11	1089834.104	1380431.662	575.726	NVA
PIED_FORSY_OT14	1072631.66	1308106	367.707	NVA
PIED_ROCK_OT11	1099772.224	1235866.494	239.171	NVA
BLUE_GILMER_OT5	1050711.421	1374428.951	570.148	NVA
RABUN_OT14	1126437.118	1386037.947	587.815	NVA
RABUN_OT14b	1126437.128	1386037.959	587.807	NVA
RABUN_OT15	1139343.028	1389058.468	575.907	NVA
TOWNS_OT13	1109344.322	1388239.123	611.345	NVA
TOWNS_OT13b	1109414.82	1388187.066	607.546	NVA
BANKS_OT24	1138338.233	1335391.609	306.134	NVA
BANKS_OT34	1125938.557	1336017.463	397.863	NVA
CLARKE_OT31	1161450.965	1280577.162	212.749	NVA
CLARKE_OT36	1148831.653	1290150.933	237.119	NVA
HABER_OT21	1123269.245	1373911.178	533.706	NVA
HABER_OT22	1139509.977	1367800.451	486.754	NVA
HABERS_OT23	1132025.782	1348909.381	446.567	NVA
HALL_OT26	1122645.545	1323404.438	322.776	NVA
JACKS_OT28	1145463.574	1311288.253	282.667	NVA
JACKS_OT29	1131266.827	1299000.737	233.91	NVA
ELBERT_OT37	1198357.893	1315273.367	179.222	NVA
ELBERT_OT38	1199270.264	1299608.835	167.836	NVA
ELBERT_OT39	1224474.256	1304039.225	112.638	NVA
LINCOLN_OT40	1254877.902	1276399.167	136.078	NVA

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WILKES_OT50	1203317.037	1285400.781	182.674	NVA
COLUM_OT42	1248679.183	1263483.213	144.386	NVA
COLUM_OT44	1271544.399	1258308.741	97.606	NVA
GLASC_OT29	1233310.996	1210336.465	142.31	NVA
GREENE_OT56	1188669.981	1243612.531	213.83	NVA
GREENE_OT57	1182732.638	1228041.914	160.228	NVA
GREENE_OT58	1168810.066	1246905.539	153.854	NVA
JEFF_OT28	1256316.71	1204699.22	116.487	NVA
JEFF_OT30	1256734.282	1192664.565	69.719	NVA
JEFF_OT32	1261464.416	1178009.04	68.34	NVA
MCDUF_OT31	1255343.834	1235340.001	125.941	NVA
MCDUF_OT46	1240739.804	1250198.241	151.154	NVA
RICHM_OT25	1294691.649	1230658.816	95.522	NVA
RICHM_OT26	1277684.917	1239416.875	96.559	NVA
TALIAF_OT52	1200158.101	1257015.52	160.309	NVA
WARREN_OT27	1248770.654	1228147.205	143.808	NVA
WARREN_OT47	1227581.46	1254836.81	145.175	NVA
WARREN_OT54	1214310.548	1243179.954	193.645	NVA
WARREN_OT55	1227864.277	1234962.307	147.945	NVA
WASH_OT33	1203318.698	1196626.715	108.019	NVA
WASH_OT34	1235977.489	1179636.76	127.5	NVA
EMANL_OT20	1266813.009	1151972.696	90.484	NVA
EMANL_OT21	1276027.094	1138577.206	77.818	NVA
JOHNSON_OT38	1247440.74	1166343.796	83.605	NVA
JOHNSON_OT39	1232906.095	1156664.426	106.682	NVA
LAUREN_OT41	1209204.128	1142043.038	98.223	NVA
LAUREN_OT42	1233517.621	1140066.43	84.573	NVA
LAUREN_OT43	1206705.46	1122537.295	85.411	NVA
LAUREN_OT44	1230158.82	1118713.927	58.395	NVA
LAUREN_OT45	1214572.98	1096191.354	92.368	NVA
MONT_OT48	1260767.985	1115632.885	64.934	NVA
TOOMBS_OT24	1276592.147	1106342.167	72.106	NVA
TRTLN_OT40	1248399.265	1128557.204	92.701	NVA
WA_OT35	1214498.918	1165501.085	107.584	NVA
WHEELER_OT46	1246346.46	1099783.515	60.397	NVA
WILKINSON_OT36	1187622.755	1175069.698	81.971	NVA
WILKINSON_OT37	1194288.008	1153764.278	119.905	NVA
EVANS_OT10	1317186.798	1115289.678	61.093	NVA
SCREV_OT3	1326110.168	1184737.357	54.355	NVA
SCREV_OT1	1345997.356	1186219.142	24.305	NVA
BULL_OT9	1318574.425	1123594.711	52.32	NVA
CAND_OT17	1294505.635	1129452.749	56.227	NVA
BULL_OT8	1327999.137	1135568.764	66.495	NVA
HAMPT_OT18	1365594.564	1173966.02	25.248	NVA
TATTN_OT15	1304556.21	1109227.792	51.462	NVA
TOOM_OT23	1288744.389	1097927.907	62.957	NVA
CAND_OT16	1310726.135	1126227.926	57.891	NVA
BULL_OT6	1328484.833	1152564.167	48.926	NVA
SCREV_OT5	1344800.423	1153206.243	33.336	NVA
EMANL_OT19	1299209.11	1149175.728	79.703	NVA
EFFIN_OT17	1352949.965	1146920.016	40.109	NVA

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BRYAN_OT15	1357459.516	1109757.995	24.18	NVA
EMANL_OT18	1284135.938	1169759.973	77.878	NVA
BULL_OT7	1314874.668	1141073.218	76.617	NVA
SCREV_OT4	1329547.672	1164475.254	67.082	NVA
SCREV_OT2	1338078.655	1201401.65	36.512	NVA
APPLI_OT51	1287316.712	1065889.463	60.485	NVA
COFFEE_OT54	1228551.713	1049815.96	56.452	NVA
JEFF_OT52	1265399.032	1065496.894	76.192	NVA
JEFF_OT53	1247448.011	1062761.326	60.308	NVA
LONG_OT13	1335788.018	1071161.084	26.616	NVA
MONT_OT49	1259649.096	1091986.845	87.377	NVA
SEPL_BENHILL_OT	1199718.365	1050244.24	75.975	NVA
SEPL_BENHILL_OT_b	1205849.849	1037867.946	106.385	NVA
SEPL_IRWIN_OT60	1184243.476	1037020.654	109.461	NVA
TATTN_OT12	1319665.021	1085158.51	42.203	NVA
TATTN_OT13	1311232.03	1080378.361	46.605	NVA
TATTN_OT14	1298830.527	1095717.205	63.984	NVA
TOOM_OT22	1271933.504	1084401.148	46.169	NVA
WAYNE_OT12	1331069.062	1051814.32	30.285	NVA
WAYNE_OT50	1316180.342	1062711.101	48.417	NVA
WHEEL_OT47	1235027.718	1083694.02	43.719	NVA
ATKIN_OT5	1225127.18	1001824.394	72.794	NVA
ATKIN_OT58	1237858.06	1009074.545	67.028	NVA
BRANT_OT6	1338939.994	1005087.086	20.54	NVA
COFF_OT9	1260113.341	1027182.208	57.208	NVA
COFF_UA105	1231969.458	1011237.863	75.391	NVA
COFF_UA77	1254719.919	1035491.461	68.83	NVA
COFFEE_CP78	1228139.828	1027845.645	89.88	NVA
PIER_CP41	1296119.225	1019033.307	46.006	NVA
SEPL_BERRIEN_OT_B	1204315.132	983275.419	67.777	NVA
SEPL_BERRIEN_TG	1207410.537	995077.909	76.886	NVA
SEPL_BERRIEN_UA_A	1207025.079	1004401.596	88.748	NVA
SEPL_IRWIN_TG25	1198207.541	1020194.231	88.424	NVA
SEPL_IRWIN_UA72	1201511.64	1027876.628	105.834	NVA
WARE_CP25	1276583.929	1004215.438	45.159	NVA
WARE_UA126	1279200.497	999732.681	43.775	NVA
SECP_BRANTLEY_C	1326155.631	988808.453	19.975	NVA
SECP_CHARLTON_O_A	1325776.739	923844.092	53.164	NVA
SECP_CHARLTON_O_B	1329307.542	963206.523	26.775	NVA
SECP_ECHOLS_OT1	1252178.331	931219.598	42.995	NVA
SECP_LANIER_OT4	1230366.558	969855.126	55.746	NVA
SEPL_BERRIEN_OT	1214329.96	970389.465	60.629	NVA
SEPL_ECHOLS_OT6	1226076.149	930567.644	37.861	NVA
CAMDEN_OT7	1358698.98	976592.2707	8.497	NVA
GLYNN_OT10	1384111.558	1016690.441	2.731	NVA
CHATHAM_OT14	1395972.556	1097543.861	6.678	NVA
MCINT_OT11	1372134.006	1044488.919	3.562	NVA
JASPER_OT16	1394165.23	1125947.406	5.768	NVA
BLUE_CHERO_UA28	1049025.736	1305597.356	265.517	NVA
BLUE_GILMER_UA6	1043856.158	1351745.154	429.502	NVA
BLUE_PICKENS_UA2	1050061.133	1329884.981	445.135	NVA

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COFFEE_UA70	1241159.686	1021480.087	75.273	NVA
COFF_UA78	1260013.873	1028474.63	54.915	NVA
COFFEE_UA69	1223699.764	1030433.135	96.689	NVA
PIER_UA121	1288692.518	1018781.223	42.165	NVA
SECP_BERRIEN_UA_C	1212219.151	1000535.301	80.215	NVA
SEPL_BERRIEN_OT_C	1193734.968	998243.338	89.086	NVA
SEPL_BERRIEN_UA_C	1189149.89	998442.169	95.027	NVA
SEPL_IRWIN_UA73	1215089.965	1015594.615	93.432	NVA
WARE_UA71	1291693.722	997562.171	37.902	NVA
WAYNE_UA118	1328607.574	1038372.815	27.047	NVA
BLUE_TOWNS_UA16_1	1105880.005	1392347.721	601.85	NVA
BLUE_FANNIN_UA21	1075613.927	1365417.299	612.999	NVA
PIED_FORSY_UA19	1079383.489	1299586.569	376.352	NVA
BLUE_CHERO_UA26	1057898.981	1317264.362	338.818	NVA
BLUE_LUMP_UA11	1096733.529	1358683.809	472.488	NVA
PIED_HALL_UA28	1111312.483	1321523.366	358.564	NVA
PIED_DEKALB_UA16	1076566.487	1249171.24	266.61	NVA
PIED_ROCK_UA18	1102685.538	1249387.886	243.129	NVA
PIED_WHITE_UA31	1107892.669	1351933.94	480.908	NVA
PIED_BARROW_UA71	1124116.266	1281213.938	261.603	NVA
PIED_DEKALB_UA14	1071176.84	1268142.991	303.482	NVA
PIED_DAWSON_UA23	1069526.577	1338514.473	475.091	NVA
BLUE_UNION_UA15	1082888.411	1386914.258	602.608	NVA
BLUE_UNION_UA14	1086066.548	1377006.243	572.787	NVA
PIED_FULTON_UA13	1070620.323	1286869.538	316.357	NVA
PIED_LUMP_UA25	1092512.698	1347436.215	431.717	NVA
PIED_BARROW_UA42	1117715.215	1285304.334	315.107	NVA
PIED_FORSY_UA20	1086931.146	1312024.699	373.158	NVA
BLUE_GILMER_UA5	1056062.884	1348392.695	515.656	NVA
PIED_DEKALB_UA15	1082517.292	1258381.389	303.068	NVA
BLUE_TOWNS_UA16	1105850.587	1392309.495	601.069	NVA
PIED_FORSY_UA21	1076807.941	1314593.205	343.951	NVA
BLUE_FANNIN_UA8	1053449.426	1379533.988	520.524	NVA
PIED_HALL_UA27	1099540.853	1301269.792	361.051	NVA
PIED_LUMP_UA24	1093729.018	1337046.627	356.513	NVA
BLUE_DAWSON_UA10	1066482.68	1342615.482	513.537	NVA
PIED_ROCK_UA17	1095476.765	1240986.328	239.196	NVA
PIED_HALL_UA29	1106082.346	1332793.555	393.995	NVA
BLUE_FANNIN_UA9	1066586.491	1375653.925	589.201	NVA
BLUE_PICKENS_UA1	1066032.369	1326977.005	445.671	NVA
BLUE_GILMER_UA22	1052257.272	1369158.225	481.366	NVA
PIED_DAWSON_UA26	1076816.334	1345300.188	531.915	NVA
HABER_UA13	1120303.963	1374629.317	509.438	NVA
HABER_UA20	1137437.527	1368273.034	488.711	NVA
RABUN_UA17	1149702.86	1392640.204	521.73	NVA
RABUN_UA18	1130020.817	1391943.396	616.912	NVA
RABUN_UA18b	1130027.776	1391934.006	617.244	NVA
RABUN_UA19	1137865.113	1382358.748	591.821	NVA
RABUN_UA27	1139067.065	1389526.141	583.77	NVA
TOWNS_UA24	1110324.718	1382565.797	634.679	NVA
TOWNS_UA24b	1110336.463	1382574.48	635.012	NVA

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WHITE_UA12	1112356.142	1368434.671	505.306	NVA
BANKS_UA36	1145953.945	1321113.2	222.558	NVA
BANKS_UA37	1135135.618	1339564.907	273.938	NVA
BANKS_UA38	1138025.483	1327040.381	257.521	NVA
BARROW_UA43	1134107.982	1286459.09	269.363	NVA
CLARKE_UA44	1150960.114	1288310.005	219.213	NVA
CLARKE_UA45	1158255.655	1282971.989	226.258	NVA
CLARKE_UA70	1145627.153	1283778.011	239.396	NVA
HABER_UA33	1123230.915	1358757.526	424.361	NVA
HABER_UA34	1133854.959	1357906.73	432.478	NVA
HABERS_UA35	1131067.891	1349705.267	441.536	NVA
JACKS_UA39	1143190.859	1294981.342	261.281	NVA
JACKS_UA41	1127022.217	1297901.112	273.076	NVA
JACKSON_UA40	1141584.976	1313476.9	276.292	NVA
WHITE_UA30	1117546.379	1347500.633	417.38	NVA
WHITE_UA32	1115210.231	1360736.263	458.284	NVA
ELBERT_UA46	1188783.014	1313414.997	215.255	NVA
ELBERT_UA47	1207842.626	1300822.264	156.889	NVA
ELBERT_UA48	1207908.077	1319841.705	149.328	NVA
LINCOLN_UA58	1232111.029	1290317.376	141.802	NVA
LINCOLN_UA59	1247696.633	1276418.702	136.467	NVA
LINCOLN_UA60	1238915.062	1279616.149	153.721	NVA
WILKES_UA55	1208327.458	1276131.946	201.265	NVA
WILKES_UA56	1218421.207	1269746.362	186.961	NVA
WILKES_UA57	1213312.402	1284649.195	177.815	NVA
COLUM_UA30	1269401.005	1246647.025	141	NVA
COLUM_UA67	1274634.029	1257299.048	117.143	NVA
COLUM_UA68	1255688.353	1261960.927	148.138	NVA
COLUM_UA69	1257399.639	1249626.876	112.203	NVA
GLASC_UA37	1236596.914	1216984.802	104.037	NVA
GLASC_UA38	1226194.701	1210858.527	121.677	NVA
GLASC_UA39	1236114.806	1206425.185	145.527	NVA
GREENE_UA49	1164418.399	1251018.053	192.677	NVA
GREENE_UA50	1184018.708	1232136.764	163.857	NVA
GREENE_UA51	1187382.788	1252739.893	199.67	NVA
JEFF_UA40	1243562.397	1205922.561	120.472	NVA
JEFF_UA41	1255649.672	1216703.336	122.423	NVA
JEFF_UA42	1257938.641	1196223.423	104.221	NVA
JEFF_UA43	1260375.211	1178283.026	70.539	NVA
MCDUF_UA33	1244254.633	1243148.888	171.862	NVA
MCDUF_UA34	1253846.948	1239227.67	143.685	NVA
MCDUF_UA64	1240984.178	1258835.627	146.845	NVA
MCDUF_UA65	1241303.209	1248343.116	150.93	NVA
RICHM_UA26	1272489.441	1230399.679	141.574	NVA
RICHM_UA29	1290387.939	1251326.726	40.886	NVA
RICHM_UA31	1294729.243	1233794.133	56.511	NVA
TALIAF_UA52	1204625.6	1248756.75	184.562	NVA
TALIAF_UA53	1213749.247	1250283.106	183.267	NVA
TALIAF_UA54	1203640.406	1245759.259	168.49	NVA
WARREN_UA35	1234144.629	1232240.863	166.454	NVA
WARREN_UA36	1225676.869	1221908.541	159.07	NVA

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
WARREN_UA61	1230938.99	1245529.24	155.796	NVA
WARREN_UA62	1227850.3	1234977.066	147.391	NVA
WARREN_UA63	1213987.796	1243204.044	191.191	NVA
WASH_UA44	1214750.257	1200208.769	141.433	NVA
WASH_UA45	1200482.956	1182661.596	90.496	NVA
WASH_UA46	1222732.123	1186853.599	133.056	NVA
WASH_UA47	1240026.198	1188975.277	108.916	NVA
EMANL_UA24	1249589.418	1141602.521	71.451	NVA
EMANL_UA27	1259196.871	1158173.241	85.478	NVA
EMANUEL_UA25	1272610.411	1148700.275	91.9	NVA
EMANUEL_UA28	1274555.233	1166981.633	83.642	NVA
JOHNSON_UA51	1233466.713	1159472.457	104.041	NVA
JOHNSON_UA52	1253142.541	1158078.11	75.388	NVA
JOHNSON_UA53	1241300.252	1140275.43	109.821	NVA
LAUREN_UA54	1209741.813	1112342.568	111.814	NVA
LAUREN_UA55	1219170.138	1135644.201	66.248	NVA
LAUREN_UA56	1195879.371	1135156.255	116.74	NVA
MONT_UA61	1253719.923	1100200.316	68.966	NVA
TOOMBS_UA19	1269834.871	1107972.72	83.362	NVA
TRTLN_UA57	1250154.64	1121643.627	80.545	NVA
TRTLN_UA58	1258348.555	1129625.385	74.456	NVA
WA_UA48	1231520.865	1170056.199	124.74	NVA
WHEELER_UA60	1236795.374	1095387.091	79.081	NVA
WILKINSON_UA49	1188185.007	1166165.329	94.255	NVA
WILKINSON_UA50	1174615.312	1168721.862	108.2	NVA
HAMPT_UA4	1365948.281	1173951.353	25.004	NVA
TATT_UA27	1307368.839	1105961.621	64.017	NVA
ALLEN_UA1	1358061.362	1191603.818	41.365	NVA
HAMPT_UA156	1375714.247	1174792.505	33.744	NVA
JASPER_UA5	1381389.18	1158956.483	20.635	NVA
CAND_UA20	1303536.879	1120374.112	64.64	NVA
SCREV_UA2	1341483.459	1167037.328	64.95	NVA
CAND_UA21	1299268.157	1131579.925	67.709	NVA
HAMPT_UA157	1358033.048	1179913.598	18.678	NVA
TATTN_UA16	1298684.085	1107023.305	71.301	NVA
BULL_UA8	1318762.26	1129948.622	44.789	NVA
SCREV_UA3	1332318.433	1176364.172	63.057	NVA
EFFIN_UA12	1362701.645	1133523.227	25.529	NVA
BULL_UA16	1338565.144	1120543.145	33.178	NVA
EFFIN_UA151	1352881.448	1146856.914	40.286	NVA
BULL_UA9	1331062.539	1122193.615	46.405	NVA
EVANS_UA12	1316249.911	1107267.177	56.464	NVA
HAMPT_UA3	1371717.403	1166124.45	22.72	NVA
ALLEN_UA2	1361225.361	1185720.166	44.711	NVA
EMANL_UA23	1284740.248	1134296.968	86.185	NVA
BRYAN_UA21	1359286.051	1116380.144	25.375	NVA
BULL_UA6	1312668.138	1154020.539	67.395	NVA
CAND_UA22	1294704.997	1141759.982	77.742	NVA
SCREV_UA14	1348588.082	1172847.668	43.022	NVA
BRYAN_UA20	1344476.617	1108822.001	28.609	NVA
BULL_UA150	1352023.05	1122292.729	23.104	NVA



POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
SCREV_UA15	1347602.105	1160114.525	44.615	NVA
SCREV_UA4	1318731.857	1178610.543	91.053	NVA
BULL_UA7	1324325.221	1140564.125	74.233	NVA
BULL_UA149	1337471.68	1134434.59	44.18	NVA
SCREV_UA5	1316937.585	1164938.471	43.454	NVA
BULL_UA17	1348863.436	1130514.881	31.017	NVA
SCREV_UA1	1340801.237	1198730.768	26.003	NVA
EVANS_UA19	1328595.742	1108027.718	26.459	NVA
EVANS_UA11	1326122.163	1107868.661	42.72	NVA
EFFIN_UA155	1366788.583	1121505.26	15.529	NVA
EMANL_UA26	1287958.436	1150687.252	94.535	NVA
EVANS_UA10	1324543.027	1114637.042	33.139	NVA
APPL_UA114	1278807.271	1048114.365	60.023	NVA
APPL_UA115	1297830.551	1055594.043	56.263	NVA
APPL_UA42	1287286.943	1045172.561	54.652	NVA
APPL_UA43	1280673.68	1056733.634	60.353	NVA
APPL_UA44	1271581.821	1062315.078	70.989	NVA
APPLI_UA63	1304799.7	1070128.4	53.361	NVA
APPLI_UA64	1282544.506	1062318.395	61.783	NVA
BACON_UA49	1273131.283	1043335.289	62.465	NVA
COFF_UA76	1244208.108	1038881.037	83.761	NVA
EVANS_UA18	1319255.119	1097664.304	56.754	NVA
JEFF_UA112	1243133.626	1046642.446	87.635	NVA
JEFF_UA113	1251106.811	1048471.218	80.305	NVA
JEFF_UA45	1261609.248	1045907.73	74.343	NVA
JEFF_UA46	1245665.158	1052286.18	85.053	NVA
JEFF_UA46_b	1245949.555	1052311.11	85.59	NVA
JEFF_UA47	1261800.32	1057407.607	69.664	NVA
JEFF_UA48	1257680.378	1065122.987	76.937	NVA
JEFF_UA65	1258555.802	1065902.389	77.559	NVA
LIBER_UA145	1354075.969	1080020.674	7.323	NVA
LIBER_UA22	1339905.559	1077000.157	25.142	NVA
LIBER_UA23	1358625.822	1073913.683	7.032	NVA
LONG_UA143	1328863.635	1068765.672	25.134	NVA
LONG_UA144	1345217.986	1070215.257	27.761	NVA
LONG_UA28	1329651.927	1077752.33	30.162	NVA
LONG_UA29	1340433.165	1060744.657	20.112	NVA
MONT_UA62	1264497.13	1086562.299	65.642	NVA
NVA504	1355155.795	1079108.341	5.972	NVA
SEPL_BENHILL_UA	1177754.836	1049307.515	94.466	NVA
SEPL_BENHILL_UA_b	1199575.906	1040708.791	107.247	NVA
SEPL_IRWIN_UA71	1188222.995	1031560.788	100.857	NVA
TATT_UA25	1322705.657	1093547.614	54.902	NVA
TATT_UA26	1309073.277	1086841.318	55.497	NVA
TATTN_UA13	1319460.744	1090750.806	47.848	NVA
TATTN_UA14	1321200.496	1077533.998	31.01	NVA
TATTN_UA15	1296547.044	1086502.282	54.846	NVA
TOOM_UA17	1279159.942	1080232.812	33.958	NVA
TOOM_UA18	1282748.1	1091647.785	66.358	NVA
WAYNE_UA119	1314464.317	1051325.839	46.59	NVA
WAYNE_UA39	1314083.528	1062121.817	51.105	NVA

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
WHEEL_UA59	1227035.674	1086783.553	50.468	NVA
APPLI_UA116	1299133.544	1040772.314	41.556	NVA
APPLI_UA41	1300133.729	1035189.541	48	NVA
ATKIN_UA74	1243721.836	1006976.216	57.054	NVA
ATKIN_UA81	1224579	1001848.054	74.074	NVA
ATKIN_UA82	1254618.035	998960.367	53.473	NVA
ATKIN_UA83	1229509.417	992303.506	68.131	NVA
ATKIN_UA84	1243268.902	999687.377	61.687	NVA
ATKIN_UA85	1249996.202	994505.055	57.292	NVA
BACON_UA50	1280497.798	1020771.872	45.053	NVA
BACON_UA51	1278119.577	1031963.988	53.374	NVA
BACON_UA52	1268848.177	1031091.028	61.627	NVA
BACON_UA53	1288388.383	1037916.997	57.128	NVA
BRANT_UA141	1338918.21	1018546.324	22.279	NVA
BRANT_UA60	1326539.961	1001363.101	19.736	NVA
COFF_UA79	1253553.601	1014234.849	58.195	NVA
COFF_UA80	1250775.371	1008258.24	57.317	NVA
COFFEE_UT37	1222748.567	1023619.051	92.165	NVA
COFFEE_OT55	1229464.381	1032710.856	79.645	NVA
COFFEE_OT56	1225910.328	1024657.707	88.844	NVA
COFFEE_OT57	1246930.376	1016304.185	68.098	NVA
COFFEE_OT23	1235988.877	1019930.675	62.553	NVA
NVA505	1329623.22	1047568.19	29.047	NVA
PIER_UA122	1299452.073	1019295.323	43.494	NVA
PIER_UA123	1316503.058	1009343.941	18.547	NVA
PIER_UA124	1290529.724	1006929.972	40.724	NVA
PIER_UA125	1302875.751	1011413.893	39.127	NVA
PIER_UA54	1300736.099	1025037.89	44.552	NVA
PIER_UA55	1295760.718	1012334.855	35.355	NVA
PIER_UA56	1311683.059	1018026.252	31.385	NVA
PIER_UA57	1299256.377	1002079.252	36.5	NVA
PIER_WE34	1312268.086	1023116.998	28.432	NVA
SECP_BERRIEN_UA_A	1223173.194	991992.509	69.63	NVA
SECP_BERRIEN_UA_B	1211705.154	985615.561	70.187	NVA
SECP_BERRIEN_WE	1218070.552	989533.549	69.363	NVA
SEPL_BERRIEN_UA_B	1207067.527	984472.81	71.674	NVA
SEPL_BERRIEN_WE	1195222.362	1010403.202	96.132	NVA
SEPL_IRWIN_BE5	1211209.187	1028803.898	99.504	NVA
WARE_UA72	1269114.666	1015585.992	50.104	NVA
WARE_UA73	1261935.232	998947.074	45.153	NVA
WARE_UA22	1274788.462	993218.477	47.468	NVA
WARE_UA23	1267247.206	1014935.412	42.702	NVA
WAYNE_UA120	1318651.444	1031702.972	37.584	NVA
WAYNE_UA142	1334078.485	1028269.682	19.294	NVA
WAYNE_UA38	1326353.083	1045273.282	32.306	NVA
WAYNE_UA40	1309568.649	1038459.852	38.171	NVA
WAYNEUAE29	1333338.22	1023224.749	19.975	NVA
WAYNE_UA30	1316080.448	1028834.793	20.661	NVA
NVA506	1226126.747	968383.584	59.715	NVA
SECP_BERRIEN_UA	1220537.602	982615.088	63.538	NVA
SECP_BRANTLEY_U_A	1314789.092	987838.148	39.423	NVA

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SECP_BRANTLEY_U_B	1325992.248	991521.842	16.876	NVA
SECP_CHARLTON_U_A	1325703.197	951584.099	20.39	NVA
SECP_CHARLTON_U_B	1317529.488	944539.343	37.4	NVA
SECP_CHARLTON_U_C	1314686.535	922426.686	35.106	NVA
SECP_CHARLTON_U_D	1332413.508	925359.154	23.435	NVA
SECP_CHARLTON_U_E	1326476.943	910288.605	38.486	NVA
SECP_CHARLTON_U_F	1329497.936	935509.308	22.821	NVA
SECP_CHARLTON_U_G	1319148.404	970612.968	34.476	NVA
SECP_CHARLTON_U_H	1330409.109	960011.65	25.441	NVA
SECP_CHARLTON_U_I	1325700.23	983461.053	20.194	NVA
SECP_CLINCH_UA8_A	1235891.279	978449.829	64.581	NVA
SECP_CLINCH_UA8_B	1258170.722	986885.72	56.045	NVA
SECP_CLINCH_UA8_C	1258023.713	972843.694	52.701	NVA
SECP_CLINCH_UA8_D	1245020.617	964794.461	54.821	NVA
SECP_CLINCH_UA9_A	1266590.029	963143.373	47.99	NVA
SECP_CLINCH_UA9_B	1269662.05	950572.947	41.475	NVA
SECP_CLINCH_UA9_C	1279956.691	936151.715	35.145	NVA
SECP_ECHOLS_UA9_A	1235690.617	945834.287	43.843	NVA
SECP_ECHOLS_UA9_B	1232529.497	936597.478	42.286	NVA
SECP_ECHOLS_UA9_C	1245598.693	933117.546	47.214	NVA
SECP_ECHOLS_UA9_D	1265843.5	933463.262	40.505	NVA
SECP_ECHOLS_UA9_E	1236347.132	928824.708	46.771	NVA
SECP_LANIER_UA1_A	1230303.787	971453.11	56.952	NVA
SECP_LANIER_UA1_B	1223642.315	968526.223	60.873	NVA
SECP_LANIER_UA1_C	1232326.615	966651.887	54.017	NVA
SECP_LANIER_UA1_D	1222884.953	958565.047	60.454	NVA
SECP_LANIER_UA1_E	1234420.324	954595.733	54.06	NVA
SECP_LANIER_UA9_A	1230043.872	981500.282	66.714	NVA
SECP_LANIER_UA9_B	1221032.319	977591.893	64.593	NVA
SECP_WARE_UA127	1293512.877	986043.125	40.167	NVA
SECP_WARE_UA74	1271823.589	981779.701	48.456	NVA
SECP_WARE_UA75	1281428.668	976006.367	42.808	NVA
SEPL_BERRIEN_UA	1213839.251	970732.467	57.234	NVA
SEPL_ECHOLS_UA8	1227442.296	931561.076	46.008	NVA
SEPL_LANIER_UA7	1214936.597	965323.495	75.857	NVA
LIBERTY_UA146	1387213.933	1067612.014	5.39	NVA
CHAT_UA153	1383075.461	1121429.982	5.193	NVA
CHAT_UA154	1380424.486	1103043.678	4.774	NVA
CAMDEN_UA134	1340116.652	979747.8562	19.749	NVA
BRYAN_UA22	1376439.442	1092248.782	4.382	NVA
BRYAN_UA147	1382885.586	1084645.304	5.297	NVA
CHATHAM_UA8	1394527.105	1112241.838	8.568	NVA
BRYAN_UA148	1385699.701	1075212.369	5.729	NVA
MAC_UA32	1363948.929	1044806.851	6.578	NVA
JASPER_UA7	1394395.265	1125116.889	5.103	NVA
MAC_UA33	1372260.111	1031353.593	7.202	NVA
BRANT_UA59	1346760.53	1007299.636	18.034	NVA
GLYNN_UA136	1382912.422	992735.5256	4.464	NVA
MCINT_UA31	1373991.459	1054649.063	6.565	NVA
EFFINGH_UA11	1379050.304	1129656.965	18.617	NVA
LIBER_UA24	1374526.258	1073101.036	6.691	NVA

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
CHATHAM_UA9	1393554.429	1101363.578	5.788	NVA
JASPER_UA6	1387229.085	1140598.007	6.32	NVA
GLYNN_UA34	1352460.071	1014930.018	6.955	NVA
CAMDEN_UA63	1369064.049	970148.0765	3.883	NVA
GLYNN_UA138	1362300.664	1018973.634	5.699	NVA
JASPER_UA158	1389094.555	1152506.136	16.857	NVA
CAMDEN_UA65	1375214.02	954142.1087	1.784	NVA
WAYNE_UA37	1351054.332	1030827.554	16.798	NVA
CHATHAM_UA132	1418830.45	1107538.756	2.77	NVA
CHATHAM_UA10	1378235.002	1112310.072	5.716	NVA
SECP_BRANTLEY_W	1339306.865	995437.986	19.236	NVA
SECP_CHARLTON_F_A	1324944.163	909973.162	23.935	NVA
SECP_CHARLTON_F_B	1326214.184	960074.993	24.35	NVA
SECP_CHARLTON_W_A	1331366.817	919078.933	22.717	NVA
SECP_CHARLTON_W_B	1319102.22	947774.229	36.839	NVA
SECP_CHARLTON_W_C	1296411.021	953179.32	35.529	NVA
SECP_CHARLTON_W_D	1316610.144	976770.616	43.982	NVA
TR13	1228793.734	1044829.112	93.677	VVA
TR14	1256998.995	1065306.912	77.7	VVA
TR15	1318323.61	1083253.02	53.705	VVA
TR16	1355167.61	1079121.095	5.928	VVA
TR25	1200237.28	1040809.023	108.179	VVA
TR26	1187809.585	1031422.786	99.594	VVA
TR19	1300761.417	1008912.529	31.574	VVA
TR20	1329632.788	1047563.936	29.132	VVA
VVA505	1308680.729	1019239.478	32.497	VVA
COFF_WE35	1258362.212	1033630.321	61.987	VVA
TR17	1224286.274	1001941.145	74.348	VVA
TR18	1276527.871	1031799.42	58.05	VVA
SWAPP_POLK_TG1	992197.1921	1274176.655	287.777	VVA
SWAPP_CHATTOOGA_BR2	970158.4802	1326620.269	205.515	VVA
SWAPP_DADE_TG3	948472.1364	1374795.392	283.507	VVA
PIED_HARALSON_TG1	991038.4648	1248921.957	379.272	VVA
SWAPP_MURRAY_BR1	1015418.119	1360274.485	232.401	VVA
SWAPP_WHITFIELD_BR3_1	1001444.687	1376514.67	225.557	VVA
PIED_PAULD_WE2	1016056.219	1275280.213	240.137	VVA
BLUE_MURRAY_FO1	1023527.325	1383084.013	318.397	VVA
PIED_FULTON_FO15	1033747.552	1223279.724	249.378	VVA
SWAPP_MURR_FO25	1012173.224	1350213.812	204.218	VVA
SWAPP_WHIT_FO22	1000791.937	1373456.479	231.546	VVA
BLUE_GILMER_FO7	1041416.351	1355802.522	484.407	VVA
SWAPP_WHIT_FO27	1002704.585	1344225.284	217.746	VVA
PIED_FULTON_FO14	1058684.629	1248067.819	304.839	VVA
PIED_COBB_FO12	1035905.643	1259057.074	309.653	VVA
PIED_FULTON_FO16	1051044.857	1238084.666	278.925	VVA
SWAPP_MURR_FO26	1013270.822	1370308.203	234.32	VVA
BLUE_GILMER_FO8	1038652.376	1367053.002	539.569	VVA
PIED_COBB_FO8	1033031.152	1281869.251	274.823	VVA
BLUE_MURRAY_FO2	1027335.084	1351703.072	420.65	VVA
BLUE_UNION_BR1	1086609.155	1382721.027	559.23	VVA
PEID_FORSYTH_BR2	1083486.392	1294018.972	355.675	VVA

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PIED_CHEROK_BR4	1059946.495	1303060.889	309.939	VVA
PIED_BARROW_WE1	1121945.431	1284981.639	251.478	VVA
DEKALB_BR3	1081482	1258279.569	312.257	VVA
HABER_FO21	1139440.132	1367777.976	487.2	VVA
RABUN_FO22	1129544.654	1377410.925	536.667	VVA
RABUN_FO23	1139102.811	1399767.812	645.618	VVA
RABUN_FO24	1156452.67	1402590.174	736.971	VVA
RABUN_FO25	1147192.18	1382908.591	444.322	VVA
TOWNS_FO19	1110040.641	1384051.314	627.673	VVA
TOWNS_FO19b	1110393.294	1382572.459	637.619	VVA
TOWNS_FO20	1113499.506	1392483.785	647.102	VVA
TOWNS_FO20b	1113528.434	1392343.832	643.612	VVA
BANKS_FO37	1131222.035	1333165.919	306.212	VVA
BANKS_FO38	1146110.668	1322190.858	237.607	VVA
BARROW_FO42	1132399.414	1285941.18	284.053	VVA
CLARKE_FO43	1156790.503	1289797.932	199.137	VVA
HABER_FO35	1137772.436	1362640.934	464.311	VVA
HABERS_FO36	1130295.882	1346736.723	427.472	VVA
JACKS_FO39	1126704.514	1312035.827	299.359	VVA
JACKS_FO40	1136378.661	1297668.833	267.114	VVA
WHITE_FO34	1117285.966	1368378.358	436.036	VVA
BR01	1189963.163	1315795.596	221.362	VVA
BR02	1198280.608	1315401.646	181.519	VVA
BR03	1210367.252	1307621.147	167.522	VVA
BR04	1215615.983	1270322.455	179.51	VVA
ELBERT_BR4	1197276.194	1312752.732	199.161	VVA
VVA501	1203854.176	1325318.385	202.705	VVA
BR05	1188526.736	1252398.776	200.159	VVA
BR06	1242095.593	1244942.067	159.678	VVA
COLUM_WE3	1269586.88	1260058.452	67.055	VVA
JEFF_BR8	1259311.857	1180276.829	84.151	VVA
RICHM_BR6	1291157.84	1227267.534	88.538	VVA
RICHM_WE8	1276727.568	1245409.468	83.051	VVA
WARREN_BR7	1234125.68	1232199.226	164.163	VVA
WASH_WE9	1225052.923	1193176.42	111.527	VVA
BR09	1189509.173	1162784.814	89.286	VVA
BR10	1219613.688	1135836.494	62.484	VVA
BR11	1253502.834	1157965.323	74.012	VVA
BR12	1256800.86	1101196.562	84.325	VVA
EMANL_BR5	1271145.787	1143388.37	72.984	VVA
EMANL_WE7	1271452.02	1145478.712	69.178	VVA
JOHNSON_WE10	1235086.719	1153321.609	77.353	VVA
LAUREN_BR10	1211568.259	1127345.744	70.278	VVA
LAUREN_WE12	1211641.565	1130719.922	61.502	VVA
LAUREN_WE13	1220287.754	1094774.168	59.396	VVA
TOOMBS_BR2	1282971.972	1099556.679	76.524	VVA
TRTLN_BR11	1242480.587	1120788.786	74.987	VVA
TRTLN_WE15	1250854.67	1119934.106	67.866	VVA
VVA503	1256822.676	1101190.137	83.368	VVA
WILKINSON_BR9	1189015.129	1164324.52	106.101	VVA
WILKINSON_WE11	1187936.662	1161818.47	81.985	VVA

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TATTN_FO10	1300491.853	1102929.492	66.529	VVA
TOOM_FO11	1289201.559	1101133.189	47.583	VVA
HAMPT_WE57	1371474.267	1163813.757	18.337	VVA
HAMPT_FO35	1371522.37	1166484.545	22.506	VVA
EFFIN_BR13	1356864.413	1158314.459	38.583	VVA
BULL_FO5	1320228.488	1137931.172	64.201	VVA
EFFIN_BR14	1362460.347	1135240.459	29.829	VVA
BULL_FO6	1329226.457	1119309.132	58.529	VVA
BULL_FO4	1304872.33	1154091.186	89.186	VVA
CAND_FO13	1310634.02	1126237.526	54.886	VVA
CAND_FO14	1298271.128	1146530.574	63.976	VVA
ALLEN_WE59	1357878.604	1191120.279	41.074	VVA
SCREV_FO2	1323728.886	1175207.755	84.121	VVA
BULL_FO33	1350045.036	1127274.836	29.798	VVA
SCREV_FO1	1340043.983	1198410.101	26.436	VVA
BRYAN_WE45	1354880.136	1111662.307	14.173	VVA
EVANS_FO7	1316672.945	1107492.45	53.203	VVA
EVANS_BR1	1318260.756	1109031.891	36.227	VVA
SCREV_FO3	1338847.243	1166222.224	47.216	VVA
CAND_WE6	1294492.55	1146273.67	59.576	VVA
EFFIN_FO34	1368202.138	1143340.494	25.912	VVA
BULL_WE51	1346781.883	1136154.128	26.172	VVA
EFFIN_WE54	1359257.79	1155353.479	26.97	VVA
EFFIN_FO52	1369488.96	1116180.142	13.291	VVA
BULL_BR4	1322507.509	1143844.428	65.986	VVA
SCREV_BR3	1334626.278	1174591.706	58.103	VVA
BULL_WE50	1334987.88	1113203.6	35.203	VVA
BRYAN_BR12	1362451.57	1109217.53	19.472	VVA
EFFIN_WE53	1368856.148	1138703.79	12.581	VVA
SCREV_WE1	1330797.235	1196431.728	42.066	VVA
EVANS_WE3	1324728.129	1110531.917	23.355	VVA
BULL_WE2	1328884.148	1154532.085	28.404	VVA
HAMPT_WE58	1361058.128	1175357.129	25.18	VVA
TATT_WE47	1308876.262	1102592.196	50.946	VVA
APPL_BR7	1278374.879	1046858.848	57.674	VVA
BR13	1230176.794	1043153.803	94.14	VVA
BR14	1261112.71	1070708.009	41.96	VVA
BR15	1299937.871	1096220.565	62.907	VVA
BR16	1349866.28	1068936.969	28.033	VVA
BR25	1197176.54	1046717.81	85.181	VVA
BR26	1191306.205	1031490.617	106.121	VVA
LIBER_BR10	1360854.547	1074927.161	7.524	VVA
LONG_BR9	1334222.534	1055629.02	13.378	VVA
SEPL_IRWIN_BR13	1194960.898	1032199.968	112.183	VVA
TATT_BR15	1324322.643	1094767.907	54.169	VVA
WHEEL_BR12	1251625.934	1074422.967	47.516	VVA
BR17	1243655.589	999696.485	60.462	VVA
BR18	1279097.396	1009414.243	47.37	VVA
BR19	1308688.174	1019236.97	32.446	VVA
BR20	1326474.896	1000541.933	20.079	VVA
COFFEE_BR14	1232479.302	1027066.103	80.234	VVA

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BR21	1227923.65	959215.311	52.663	VVA
BR22	1236242.93	945605.123	51.137	VVA
BR23	1272678.4	982101.296	47.078	VVA
BR24	1330124.618	958894.955	23.208	VVA
SECP_BRANTLEY_BR	1312173.819	990100.007	31.059	VVA
SECP_CLINCH_BR1	1252923.167	970312.475	55.99	VVA
CHATHAM_WE49	1373744.373	1104482.895	3.808	VVA
MCINT_WE40	1367264.86	1054785.328	2.505	VVA
LIBERTY_WE42	1383463.47	1066881.364	1.5	VVA
JASPER_WE55	1396926.008	1119082.251	2.892	VVA
GLYNN_WE26	1373832.006	997180.1831	1.439	VVA
CHATHAM_BR13	1399546.895	1109585.243	4.638	VVA
MCINT_WE39	1384256.097	1057321.86	3.197	VVA
JASPER_WE56	1389074.266	1143663.436	8.029	VVA
MCINT_BR8	1377162.903	1031760.221	6.242	VVA
LIBERTY_WE43	1366427.572	1081914.784	3.021	VVA
BRYAN_WE44	1383587.548	1088670.19	0.815	VVA
CAMDEN_BR5	1364709.156	995205.7943	6.143	VVA
CAMDEN_WE7	1366918.852	964161.1423	1.691	VVA
CAMDEN_WE8	1355607.87	978796.9852	1.786	VVA
CHATHAM_WE48	1414789.908	1106328.774	1.157	VVA
BRYAN_BR11	1384032.901	1080547.834	4.496	VVA
JASPER_BR16	1386610.877	1152824.076	16.511	VVA
CAMDEN_BR2	1354661.378	961170.3024	3.709	VVA
GLYNN_WE28	1374116.531	1020817.019	1.928	VVA
MCINT_WE38	1362801.602	1036223.72	2.921	VVA
HG20	1326751.942	1016124.45	16.508	VVA
PIED_DAWSON_TG4	1088417.193	1324978.088	381.253	VVA
PIED_FULTON_TG3	1077097.4	1284230.137	331.916	VVA
PIED_DEKALB_TG2	1092061.948	1242662.833	207.823	VVA
ELBERT_TG3	1201617.97	1316054.248	209.717	VVA
HG01	1196673.065	1311069.878	204.143	VVA
HG02	1194356.562	1323418.47	226.228	VVA
HG03	1225864.467	1291238.627	141.258	VVA
HG04	1238340.354	1278826.139	154.349	VVA
COLUM_TG7	1261193.009	1254795.362	124.456	VVA
GLASC_TG12	1231256.847	1212958.923	153.274	VVA
GREENE_TG8	1178939.159	1247031.782	172.9	VVA
HG05	1188064.235	1245043.814	210.241	VVA
HG06	1258169.209	1240733.74	164.584	VVA
HG07	1236849.367	1217115.744	100.088	VVA
JEFF_TG10	1261793.292	1192598.63	89.671	VVA
JEFF_TG11	1248475.078	1208915.368	107.019	VVA
RICHM_TG9	1290360.076	1238779.215	77.237	VVA
WASH_TG13	1217699.016	1184910.642	121.698	VVA
EMANL_TG3	1281765.553	1120195.637	57.716	VVA
EMANUEL_TG5	1263723.607	1166680.467	103.155	VVA
HG09	1177963.962	1171817.355	104.63	VVA
HG10	1228787.529	1135420.328	77.351	VVA
HG11	1271504.629	1149767.437	95.755	VVA
HG12	1272659.227	1106670.739	86.182	VVA

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JOHNSON_TG15	1244460.867	1157216.772	85.006	VVA
LAUREN_TG16	1222501.973	1140775.251	65.162	VVA
LAUREN_TG17	1221167.484	1112003.186	105.843	VVA
MONT_TG19	1258976.452	1102351.735	86.549	VVA
TRTLN_TG18	1253909.946	1117839.42	85.484	VVA
WHEELER_TG20	1236858.16	1090991.956	66.739	VVA
WILKINSON_TG14	1191292.045	1158858.576	77.292	VVA
CAND_TG7	1294641.646	1141761.945	77.061	VVA
EFFIN_TG14	1359438.703	1158025.978	25.653	VVA
BRYAN_TG12	1352646.391	1110589.214	19.044	VVA
BULL_TG4	1331238.878	1127600.584	45.543	VVA
SCREV_TG6	1334368.67	1190672.782	28.633	VVA
APPL_FO25	1296754.824	1046697.26	44.68	VVA
APPL_WE37	1292584.501	1057018.03	56.134	VVA
APPLI_TG21	1291631.424	1071306.965	51.019	VVA
COFFEE_TG22	1224593.914	1050575.586	44.878	VVA
EVANS_WE46	1323619.183	1096752.387	45.334	VVA
HG13	1233950.492	1036192.146	84.975	VVA
HG14	1267398.33	1063385.177	72.825	VVA
HG15	1314337.684	1088737.72	54.128	VVA
HG16	1331779.094	1053833.853	30.232	VVA
HG25	1192395.818	1052627.166	77.258	VVA
HG26	1196458.541	1037723.676	106.985	VVA
JEFF_FO24	1246824.988	1051754.841	83.446	VVA
JEFF_FO32	1264351.233	1076175.873	28.362	VVA
JEFF_FO33	1243579.461	1061429.93	64.141	VVA
JEFF_TG8	1248916.947	1049640.635	70.535	VVA
JEFF_WE14	1266759.623	1068035.123	50.166	VVA
JEFF_WE36	1254119.776	1059889.267	73.914	VVA
LONG_FO27	1333509.752	1064408.368	15.569	VVA
LONG_TG9	1338571.33	1059131.912	11.44	VVA
LONG_WE41	1346833.318	1066206.866	23.467	VVA
SEPL_BENHILL_FO	1205660.309	1049012.837	78.132	VVA
SEPL_BENHILL_TG	1194158.834	1043100.261	111.32	VVA
SEPL_BENHILL_WE	1195606.503	1038991.353	97.89	VVA
SEPL_IRWIN_FO35	1185036.083	1028951.559	88.197	VVA
TATT_FO29	1312157.803	1087451.441	53.493	VVA
TATTN_FO8	1320780.98	1073100.282	21.082	VVA
TATTN_FO9	1293194.873	1080509.567	36.245	VVA
TATTN_TG2	1319603.117	1089488.517	53.169	VVA
TATTN_TG8	1297879.926	1090046.81	38.57	VVA
TATTN_WE4	1297152.949	1087516.402	24.225	VVA
TOOM_TG1	1277599.449	1083464.278	54.316	VVA
TOOM_WE5	1271131.519	1082553.975	34.676	VVA
VVA504	1331764.922	1053834.562	30.215	VVA
WAYNE_FO26	1322826.107	1051896.278	33.658	VVA
WAYNE_WE32	1324590.377	1054920.706	26.46	VVA
WHEEL_FO31	1228840.167	1086220.042	55.429	VVA
ATKIN_FO14	1232903.085	993720.239	64.987	VVA
ATKIN_WE19	1254002.659	994436.723	54.801	VVA
BACON_FO22	1273407.309	1026842.099	51.279	VVA



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BACON_WE33	1275661.303	1035046.392	45.556	VVA
BRANT_FO16	1326244.671	999169.061	20.525	VVA
BRANT_FO17	1343821.951	1011566.972	20.743	VVA
BRANT_WE25	1320564.629	999195.96	19.356	VVA
COFF_FO23	1250797.662	1018950.138	58.146	VVA
HG17	1240817.647	1019365.332	76.895	VVA
HG18	1292933.745	996422.014	40.59	VVA
HG19	1322281.924	1041404.024	42.584	VVA
SECP_BERRIEN_117	1213438.382	992221.723	74.069	VVA
SEPL_BERRIEN_BR	1202315.211	997462.069	81.616	VVA
WARE_TG7	1270113.934	998968.076	46.606	VVA
WAYNE_WE31	1344142.223	1041357.308	19.874	VVA
CHARLTON_FO12	1290301.93	970678.293	38.032	VVA
HG21	1234858.55	958330.986	57.703	VVA
HG22	1245244.588	970470.551	55.961	VVA
HG23	1279947.044	936006.119	35.215	VVA
HG24	1316090.52	976782.657	43.987	VVA
SECP_CLINCH_FO1	1260064.161	979169.674	54.425	VVA
SECP_CLINCH_FO3	1269167.749	951571.73	40.661	VVA
SECP_CLINCH_FO4	1287653.676	927638.235	38.856	VVA
SECP_CLINCH_FO5	1240359.846	961241.629	56.367	VVA
SECP_CLINCH_FO7	1287723.448	949672.531	36.745	VVA
SECP_CLINCH_TG3	1271723.032	967132.26	44.707	VVA
SECP_CLINCH_WE1_A	1267082.729	957413.476	43.566	VVA
SECP_CLINCH_WE1_B	1251459.791	960895.627	51.141	VVA
SECP_CLINCH_WE1_C	1261502.932	975014.823	49.431	VVA
SECP_CLINCH_WE9	1283833.857	932548.342	33.311	VVA
SECP_ECHOLS_FO2	1245546.386	937602.127	45.894	VVA
SECP_ECHOLS_TG2	1246057.917	946972.691	49.229	VVA
SECP_ECHOLS_WE1_A	1268642.929	933438.755	37.743	VVA
SECP_ECHOLS_WE1_B	1243529.429	932556.233	46.965	VVA
SECP_LANIER_FO6	1223185.55	958886.609	60.966	VVA
SECP_LANIER_WE1_A	1235916.11	954859.114	50.68	VVA
SECP_LANIER_WE1_B	1224634.5	975888.676	57.778	VVA
SECP_WARE_WE20	1282792.982	970465.162	40.082	VVA
SECP_WARE_WE21	1300925.214	985826.78	38.876	VVA
SEPL_BERRIEN_FO_1	1208188.963	966247.807	68.6	VVA
SEPL_BERRIEN_TG_1	1207433.223	970314.191	66.001	VVA
SEPL_BERRIEN_WE_1	1206384.347	970985.121	61.235	VVA
SEPL_ECHOLS_FO4	1226227.176	936731.024	44.107	VVA
MCINT_TG11	1374891.529	1038619.942	6.036	VVA
CHATHAM_TG13	1392162.76	1095571.813	2.752	VVA
LIBERTY_TG10	1361265.465	1067738.238	4.738	VVA
CAMDEN_TG5	1354253.779	988381.6195	4.991	VVA
SWAPP_FLOYD_FO5	987056.5471	1323326.958	206.019	VVA
SWAPP_FLOYD_FO24	991332.4058	1290291.785	241.694	VVA
SWAPP_FLOYD_FO4	984888.649	1302374.035	187.589	VVA
SWAPP_CATOO_FO28	977179.4543	1374989.055	229.137	VVA
SWAPP_WHIT_FO23	989827.1075	1357642.386	289.863	VVA
SWAPP_POLK_FO2	998267.7804	1273142.286	257.283	VVA
SWAPP_DADE_FO19	947500.0806	1371288.499	455.257	VVA

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
PIED_PAULDING_F07	1011239.929	1258636.728	380.813	VVA
SWAPP_CHATTOOGA_F010	983214.0867	1334109.558	234.393	VVA
SWAPP_WALKER_F015	966253.9502	1371367.725	292.626	VVA
SWAPP_WALKER_F017	954718.4158	1346206.46	643.928	VVA
SWAPP_CATOO_F020	982515.3417	1366362.551	242.655	VVA
PIED_HAROL_F03	989280.5862	1245624.045	332.908	VVA
SWAPP_FLOYD_F03	975006.3615	1282858.951	220.14	VVA
PIED_POLK_F06	999525.5214	1265011.906	378.765	VVA
SWAPP_CHATTOOGA_F09	968680.7664	1317812.815	211.706	VVA
PIED_HAROL_F04	1000845.043	1242581.503	416.377	VVA
PIED_HAROL_F02	976795.7589	1254468.939	391.077	VVA
SWAPP_POLK_F01	983149.2712	1266200.835	259.484	VVA
SWAPP_WALKER_F016	985738.388	1340612.483	256.381	VVA
SWAPP_CHATTOOGA_F014	956499.3952	1327112.528	503.76	VVA
SWAPP_DADE_F018	948486.0498	1349837.984	242.179	VVA
PIED_HAROL_F05	999437.0178	1259997.945	350.122	VVA
PIED_HAROL_F01	981396.9327	1234144.862	353.012	VVA
PIED_WHITE_F033	1111875.856	1353284.661	501.764	VVA
PIED_DEKALB_F019	1089620.272	1247247.625	265.754	VVA
PIED_DAWSON_F027	1081315.514	1324715.156	352.675	VVA
BLUE_WHITE_F018	1109177.487	1372546.15	550.969	VVA
PIED_DEKALB_F018	1085317.108	1258220.812	293.962	VVA
PIED_HALL_F031	1112082.764	1311345.222	348.174	VVA
PIED_ROCK_F021	1103807.748	1256289.504	274.672	VVA
BLUE_GILMER_F06	1051286.374	1354307.896	501.446	VVA
PIED_LUMP_F032	1100386.164	1343245.812	434.558	VVA
BLUE_FANNIN_F011	1070971.905	1367850.917	600.486	VVA
BLUE_CHERO_F027	1066851.287	1320077.918	400.41	VVA
BLUE_UNION_F016	1082028.562	1379859.92	623.313	VVA
BLUE_WHITE_F018_1	1109526.894	1372902.794	567.415	VVA
PIED_FORSY_F025	1082691.246	1311720.485	360.473	VVA
BLUE_FANNIN_F010	1065951.833	1390759.085	532.006	VVA
PIED_HALL_F032	1107241.451	1338913.205	418.493	VVA
PIED_FULTON_F023	1062913.385	1290732.319	342.9	VVA
BLUE_LUMPKN_F014	1095047.331	1363663.805	611.714	VVA
BLUE_UNION_F015	1098851.075	1376196.65	606.442	VVA
BLUE_UNION_F017	1092388.331	1385138.649	629.319	VVA
BLUE_PICKENS_F05	1058001.256	1331515.41	443.558	VVA
PIED_CHEROK_F063	1063439.795	1303945.537	356.858	VVA
PIED_DAWSON_F028	1075472.301	1332877.357	457.006	VVA
BLUE_LUMPKN_F013	1076779.223	1345350.2	527.464	VVA
PIED_ROCK_F020	1097542.542	1238820.673	206.744	VVA
BLUE_DAWSON_F012	1063756.373	1339997.448	523.615	VVA
PIED_BARROW_F041	1112316.135	1291846.964	250.257	VVA
RABUN_TG1	1138572.641	1385642.863	572.719	VVA
CLARKE_TG6	1152184.101	1290631.322	192.631	VVA
HABER_TG5	1134308.381	1355099.428	428.701	VVA
ELBERT_F044	1182385.211	1314301.36	207.898	VVA
ELBERT_F045	1198898.767	1304932.509	189.459	VVA
ELBERT_F046	1206733.532	1319408.313	176.761	VVA
LINCOLN_F047	1228631.345	1289926.988	133.967	VVA

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
LINCOLN_F048	1252757.491	1272130.12	101.175	VVA
TR01	1183062.385	1318554.355	230.488	VVA
TR02	1200472.084	1309435.527	206.564	VVA
TR03	1203872.849	1325294.016	202.307	VVA
TR04	1200693.049	1274320.768	205.538	VVA
WILKES_F055	1221406.662	1266977.54	165.331	VVA
COLUM_F019	1260587.768	1238035.204	156.857	VVA
COLUM_F049	1252828.536	1256494.776	126.508	VVA
COLUM_F050	1262331.32	1244163.624	150.416	VVA
GLASC_F021	1236483.975	1212902.806	132.506	VVA
GREENE_F060	1175933.406	1231896.845	178.497	VVA
GREENE_F061	1187040.841	1252762.399	192.685	VVA
GREENE_F062	1166112.928	1261132.389	173.849	VVA
JEFF_F022	1265801.635	1205963.377	119.863	VVA
MCDUF_F020	1246729.347	1250133.603	156.926	VVA
MCDUF_F051	1237066.681	1244132.134	145.426	VVA
MCDUF_F052	1240907.99	1258834.296	140.998	VVA
RICHM_F018	1287094.999	1227036.559	100.652	VVA
TALIAF_F058	1200112.242	1257006.404	159.118	VVA
TALIAF_F059	1203609.739	1245567.742	163.045	VVA
TR05	1178076.246	1247847.953	192.639	VVA
TR06	1228590.456	1234317.848	148.229	VVA
WARREN_F056	1220666.305	1242005.699	189.965	VVA
WARREN_F057	1223149.909	1231664.7	171.485	VVA
WASH_F023	1225873.754	1195158.391	131.216	VVA
EMANL_F015	1264427.401	1144660.78	90.709	VVA
EMANUEL_F016	1276065.307	1155424.852	70.782	VVA
EMANUEL_F017	1268586.356	1173198.299	79.561	VVA
JOHNSON_F029	1247903.085	1148419.081	76.589	VVA
LAUREN_F026	1209592.025	1142812.506	100.525	VVA
LAUREN_F028	1235387.064	1108662.293	62.503	VVA
LRNS_F027	1238245.654	1125499.504	75.03	VVA
MONT_F030	1266025.561	1098753.677	76.2	VVA
TOOMBS_F012	1268901.371	1118129.366	52.82	VVA
TR09	1173419.798	1168445.781	110.698	VVA
TR10	1204726.846	1133868.239	92.661	VVA
TR11	1232435.677	1159573.803	107.527	VVA
TR12	1237031.13	1095132.143	76.795	VVA
WA_F024	1238902.673	1175236.181	117.927	VVA
WA_F025	1196474.103	1170681.198	140.797	VVA
WA_F041	1213498.629	1161049.07	113.42	VVA
SECP_BRANTLEY_TR	1320521.105	994699.3	17.51	VVA
SECP_CHARLTON_TR	1331001.959	930556.543	13.033	VVA
TR21	1226120.843	968388.931	59.724	VVA
TR22	1235869.372	931873.003	42.717	VVA
TR23	1256421.032	972085.062	53.19	VVA
VVA506	1272704.487	982135.363	46.789	VVA
CHARLTON_F09	1338395.603	974067.2369	5.062	VVA
BRYAN_F030	1370813.317	1089633.016	4.828	VVA
CAMDEN_F010	1364231.975	960966.5508	6.394	VVA
CHATHAM_F031	1402719.059	1097791.8	2.852	VVA

POINT_ID	EASTING	NORTHING	ELEVATION	POINT_TYPE
CHATHAM_FO32	1382041.492	1117993.273	4.31	VVA
LIBERTY_FO28	1369282.896	1068225.211	3.673	VVA
MCINT_FO19	1379116.122	1043588.743	9.017	VVA
GLYNN_FO18	1384965.942	1018983.708	2.902	VVA

## 1.2 RTN-RTK Control Comparison

SET501	360271.432	3708488.777	149.154	OPUS	E	N	ELV
SET501_CHK501	360271.447	3708488.79	149.138	CHK	-0.02	-0.01	0.02
SET501_CHK502	360271.458	3708488.8	149.128	CHK	-0.03	-0.02	0.03
SET501_CHK503	360271.451	3708488.796	149.166	CHK	-0.02	-0.02	-0.01
<i>SET501 Checks</i>				Averages	-0.020	-0.018	0.010

SET502	318494.045	3596248.334	82.204	OPUS	E	N	ELV
SET502_CHK501	318494.058	3596248.368	82.22	CHK	-0.01	-0.03	-0.02
SET502_CHK502	318494.05	3596248.344	82.266	CHK	-0.01	-0.01	-0.06
<i>SET502 Checks</i>				Averages	-0.009	-0.022	-0.039

SET503	324179.63	3484715.45	78.237	OPUS	E	N	ELV
SET503_CHK501	324179.636	3484715.434	78.291	CHK	-0.01	0.02	-0.05
SET503_CHK502	324179.642	3484715.453	78.213	CHK	-0.01	0.00	0.02
SET503_CHK503	324179.648	3484715.444	78.283	CHK	-0.02	0.01	-0.05
SET503_CHK504	324179.64	3484715.455	78.266	CHK	-0.01	0.00	-0.03
SET503_CHK505	324179.636	3484715.453	78.281	CHK	-0.01	0.00	-0.04
SET503_CHK506	324179.654	3484715.455	78.266	CHK	-0.02	0.00	-0.03
<i>SET503 Checks</i>				Averages	-0.013	0.001	-0.030

SET504	372723.456	3453192.178	41.064	OPUS	E	N	ELV
SET504_CHK501	372723.461	3453192.199	40.984	CHK	-0.01	-0.02	0.08
SET504_CHK502	372723.472	3453192.198	40.968	CHK	-0.02	-0.02	0.10
SET504_CHK503	372723.47	3453192.191	40.959	CHK	-0.01	-0.01	0.10
<i>SET504 Checks</i>				Averages	-0.012	-0.018	0.094

## 1.3 RTN-RTK TRIMBLE R8/R10 GNSS QAQC REPORTS

Vector ID	Point ID	Solution Type	PDOP	H. Precision	V. Precision	Satellites	Epochs	Antenna Height (m)
V1	HG25	RTK	1.438	0.019	0.041	15	31	2
V2	BR25	RTK	1.36	0.02	0.044	16	31	2

Vector ID	Point ID	Solution Type	PDOP	H. Precision	V. Precision	Satellites	Epochs	Antenna Height (m)
V3	TR25	RTK	1.839	0.03	0.059	15	31	2
V4	HG26	RTK	1.368	0.022	0.048	15	31	2
V5	BR26	RTK	1.597	0.026	0.057	13	31	2
V6	TR26	RTK	1.903	0.022	0.055	12	31	2
V7	SET504_CHK502	RTK	1.505	0.019	0.042	13	180	2
V8	TR24	RTK	1.464	0.042	0.063	14	31	2
V9	BR24	RTK	1.477	0.009	0.018	15	31	2
V10	HG24	RTK	1.619	0.022	0.049	14	31	2
V11	LCP506	RTK	1.466	0.025	0.057	15	22	2
V12	BR23	RTK	1.31	0.029	0.065	15	31	2
V13	VVA506	RTK	1.327	0.017	0.035	15	31	2
V14	TR23	RTK	3.262	0.03	0.064	9	31	2
V15	HG23	RTK	1.358	0.021	0.043	16	31	2
V16	TR22	RTK	1.293	0.025	0.039	15	31	2
V17	BR22	RTK	1.44	0.024	0.038	14	31	2
V18	HG21	RTK	1.534	0.026	0.048	14	31	2
V19	BR21	RTK	1.894	0.023	0.052	11	31	2
V20	TR21	RTK	2.81	0.021	0.05	11	31	2
V21	NVA506	RTK	2.566	0.023	0.057	11	31	2
V22	HG22	RTK	1.824	0.025	0.077	12	31	2
V23	SET504_CHK503	RTK	1.513	0.015	0.031	15	180	2
V24	SET503_CHK506	RTK	2.161	0.021	0.038	12	180	2
V25	HG17	RTK	2.19	0.026	0.063	13	31	2
V26	TR17	RTK	2.058	0.029	0.057	11	31	2
V27	BR17	RTK	1.606	0.024	0.059	13	31	2
V28	BR18	RTK	1.721	0.029	0.067	13	31	2
V29	TR18	RTK	1.623	0.023	0.048	14	31	2
V30	HG19	RTK	1.942	0.022	0.039	9	31	2
V31	TR20	RTK	1.955	0.023	0.05	10	30	2
V32	NVA505	RTK	1.954	0.024	0.077	11	30	2
V33	HG20	RTK	1.53	0.02	0.042	13	31	2
V34	BR20	RTK	1.608	0.019	0.046	12	31	2
V35	LCP505	RTK	2.083	0.024	0.06	11	30	2
V36	TR19	RTK	2.172	0.026	0.062	14	31	2
V37	BR19	RTK	1.7	0.023	0.055	12	31	2
V38	VVA505	RTK	1.589	0.016	0.037	13	31	2
V39	HG18	RTK	1.536	0.017	0.043	15	31	2
V40	SET504_CHK501	RTK	1.427	0.014	0.031	15	180	2
V41	SET503_CHK502	RTK	1.817	0.018	0.05	11	180	2
V42	HG13	RTK	1.755	0.022	0.043	12	31	2
V43	BR13	RTK	1.691	0.027	0.052	13	31	2
V44	TR13	RTK	1.607	0.032	0.06	13	31	2

Vector ID	Point ID	Solution Type	PDOP	H. Precision	V. Precision	Satellites	Epochs	Antenna Height (m)
V45	TR14	RTK	1.799	0.023	0.05	11	31	2
V46	LCP504	RTK	1.756	0.017	0.043	12	31	2
V47	BR14	RTK	2.154	0.023	0.054	11	31	2
V48	HG14	RTK	1.816	0.022	0.06	12	31	2
V49	HG16	RTK	2.476	0.026	0.053	9	31	2
V50	VVA504	RTK	2.16	0.032	0.063	10	31	2
V51	BR16	RTK	1.684	0.027	0.054	13	31	2
V52	TR16	RTK	1.314	0.023	0.041	14	31	2
V53	NVA504	RTK	1.213	0.026	0.041	15	31	2
V54	TR15	RTK	1.536	0.022	0.058	14	31	2
V55	BR15	RTK	1.403	0.021	0.05	15	31	2
V56	HG15	RTK	1.393	0.024	0.044	15	31	2
V57	SET503_CHK503	RTK	1.48	0.015	0.034	14	180	2
V58	SET503_CHK504	RTK	1.502	0.016	0.036	14	180	2
V59	SET503_CHK505	RTK	1.514	0.013	0.029	14	180	2
V60	SET502_CHK502	RTK	3.138	0.018	0.034	13	120	2
V61	TR10	RTK	1.442	0.023	0.038	16	31	2
V62	LCP503	RTK	1.427	0.017	0.03	16	31	2
V63	BR09	RTK	2.016	0.026	0.048	13	31	2
V64	HG09	RTK	1.935	0.021	0.046	13	31	2
V65	TR09	RTK	1.898	0.024	0.049	13	31	2
V66	BR10	RTK	1.58	0.02	0.043	13	31	2
V67	HG10	RTK	1.519	0.02	0.044	14	31	2
V68	TR11	RTK	1.937	0.02	0.036	11	31	2
V69	NVA503	RTK	1.926	0.013	0.023	12	31	2
V70	BR11	RTK	1.593	0.024	0.039	11	31	2
V71	HG11	RTK	1.934	0.024	0.054	11	31	2
V72	HG12	RTK	1.419	0.019	0.04	14	31	2
V73	BR12	RTK	1.928	0.022	0.051	13	31	2
V74	VVA503	RTK	1.992	0.017	0.04	13	31	2
V75	TR12	RTK	1.469	0.024	0.065	15	31	2
V76	SET503_CHK501	RTK	1.415	0.015	0.028	13	180	2
V77	SET501_CHK503	RTK	1.779	0.013	0.035	13	180	2
V78	HG05	RTK	1.406	0.016	0.025	16	31	2
V79	TR05	RTK	1.449	0.009	0.021	14	31	2
V80	NVA502	RTK	1.398	0.011	0.021	15	31	2
V81	BR05	RTK	2.318	0.019	0.034	13	31	2
V82	TR06	RTK	1.736	0.012	0.022	14	31	2
V83	BR06	RTK	1.764	0.018	0.04	14	31	2
V84	HG06	RTK	1.55	0.02	0.041	14	31	2
V85	BR07	RTK	1.785	0.024	0.048	14	31	2
V86	HG07	RTK	1.277	0.021	0.041	14	31	2

Vector ID	Point ID	Solution Type	PDOP	H. Precision	V. Precision	Satellites	Epochs	Antenna Height (m)
V87	TR07	RTK	1.408	0.023	0.054	12	31	2
V88	LCP502	RTK	1.542	0.025	0.06	13	31	2
V89	HG08	RTK	1.687	0.026	0.046	13	31	2
V90	BR08	RTK	1.673	0.018	0.035	13	31	2
V91	TR08	RTK	3.123	0.032	0.08	11	30	2
V92	VVA502	RTK	3.222	0.023	0.057	11	31	2
V93	SET502_CHK501	RTK	1.408	0.015	0.027	13	180	2
V94	SET501_CHK501	RTK	2.069	0.014	0.039	13	180	2
V95	BR04	RTK	2.089	0.019	0.055	14	31	2
V96	TR04	RTK	1.387	0.021	0.033	15	31	2
V97	HG04	RTK	1.313	0.028	0.054	16	31	2
V98	HG03	RTK	1.47	0.019	0.029	15	31	2
V99	NVA501	RTK	1.451	0.016	0.027	15	31	2
V100	BR03	RTK	1.843	0.027	0.055	13	31	2
V101	TR02	RTK	1.699	0.022	0.045	15	31	2
V102	HG01	RTK	1.82	0.025	0.048	10	31	2
V103	BR01	RTK	2.238	0.026	0.044	10	30	2
V104	TR01	RTK	3.213	0.025	0.055	9	31	2
V105	HG02	RTK	2.085	0.024	0.046	11	31	2
V106	LCP501	RTK	2.039	0.023	0.047	11	31	2
V107	BR02	RTK	2.157	0.029	0.069	9	31	2
V108	TR03	RTK	1.496	0.034	0.053	11	30	2
V109	VVA501	RTK	1.5	0.032	0.055	10	30	2
V110	SET501_CHK502	RTK	1.802	0.014	0.027	12	180	2

## 1.4 Online Positioning User Service (OPUS) REPORT

### NGS POINT: SET501

#### NGS OPUS-RS SOLUTION REPORT

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All computed coordinate accuracies are listed as 1-sigma RMS values.  
For additional information: <https://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: dane.messex@atlantic.tech  
RINEX FILE: set5118v.21o

DATE: April 29, 2021  
TIME: 13:08:21 UTC

SOFTWARE: rsgps 1.38 RS91.prl 1.99.3      START: 2021/04/28 21:51:00  
EPHEMERIS: igu21553.eph [ultra-rapid]      STOP: 2021/04/28 22:55:30  
NAV FILE: brdc1180.21n      OBS USED: 5805 / 6345 : 91%  
ANT NAME: TRMR12      NONE      QUALITY IND. 11.93/ 41.72  
ARP HEIGHT: 2.05      NORMALIZED RMS: 0.364

REF FRAME: NAD\_83(2011)(EPOCH:2010.0000) ITRF2014 (EPOCH:2021.32310)

X: 694487.242(m) 0.004(m) 694486.360(m) 0.004(m)  
Y: -5278259.378(m) 0.025(m) -5278257.889(m) 0.025(m)  
Z: 3501031.959(m) 0.018(m) 3501031.836(m) 0.018(m)

LAT: 33 30 24.57328 0.005(m) 33 30 24.59848 0.005(m)  
E LON: 277 29 44.29730 0.002(m) 277 29 44.27095 0.002(m)  
W LON: 82 30 15.70270 0.002(m) 82 30 15.72905 0.002(m)  
EL HGT: 120.233(m) 0.031(m) 118.838(m) 0.031(m)  
ORTHO HGT: 149.154(m) 0.040(m) [NAVD88 (Computed using GEOID18)]

UTM COORDINATES STATE PLANE COORDINATES  
UTM (Zone 17) SPC (1001 GA E)  
Northing (Y) [meters] 3708488.777 388858.344  
Easting (X) [meters] 360271.432 168626.033  
Convergence [degrees] -0.83059722 -0.18642222  
Point Scale 0.99984071 0.99991213  
Combined Factor 0.99982184 0.99989326

US NATIONAL GRID DESIGNATOR: 17SLT6027108488(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
AH6714	COLA COLUMBIA CORS ARP	N340451.557	W0810718.015	143007.5
DH8997	SCWT WALTERBORO CORS ARP	N325412.353	W0804006.273	183785.6
DL2076	GATF TIFTON CORS ARP	N312706.865	W0833032.830	246661.4
DM7831	GABN EGPS BRASELTON CORS ARP	N340807.082	W0834638.499	136925.1
DK7758	SCUN UNION CORS ARP	N344558.605	W0813855.699	160449.2
DP8346	GASA SAVANNAH STATE U CORS ARP	N320125.492	W0810336.761	212969.9
DG4257	FRKN FRANKLIN CORS ARP	N351130.686	W0832341.746	204089.3
DM6192	P779 PARI OBS NC 2008 CORS ARP	N351206.964	W0825220.902	191070.6
DH3755	SCGP GREER CPW CORS ARP	N345615.688	W0821357.268	160685.0

NEAREST NGS PUBLISHED CONTROL POINT

DF1860 BV 094 203 N333042.400 W0823008.417 580.5

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.

NGS POINT: SET502

NGS OPUS-RS SOLUTION REPORT

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All computed coordinate accuracies are listed as 1-sigma RMS values.  
For additional information: <https://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: dane.messex@atlantic.tech DATE: May 03, 2021  
RINEX FILE: set5121n.21o TIME: 15:51:10 UTC



SOFTWARE: rsgps 1.38 RS73.prl 1.99.3      START: 2021/05/01 13:41:45  
EPHEMERIS: igr21556.eph [rapid]      STOP: 2021/05/01 14:44:30  
NAV FILE: brdc1210.21n      OBS USED: 4768 / 5136 : 93%  
ANT NAME: TRMR12      NONE      QUALITY IND. 46.25/ 30.57  
ARP HEIGHT: 2.05      NORMALIZED RMS: 0.325

REF FRAME: NAD\_83(2011)(EPOCH:2010.0000)      ITRF2014 (EPOCH:2021.33039)

X: 662654.688(m) 0.004(m)      662653.814(m) 0.004(m)  
Y: -5344265.857(m) 0.018(m)      -5344264.357(m) 0.018(m)  
Z: 3406293.518(m) 0.012(m)      3406293.384(m) 0.012(m)

LAT: 32 29 19.25304 0.004(m)      32 29 19.27720 0.004(m)  
E LON: 277 4 5.63948 0.002(m)      277 4 5.61331 0.002(m)  
W LON: 82 55 54.36052 0.002(m)      82 55 54.38669 0.002(m)  
EL HGT: 54.038(m) 0.021(m)      52.620(m) 0.021(m)  
ORTHO HGT: 82.204(m) 0.031(m) [NAVD88 (Computed using GEOID18)]

UTM COORDINATES      STATE PLANE COORDINATES  
UTM (Zone 17)      SPC (0101 AL E)  
Northing (Y) [meters]      3596248.334      224203.871  
Easting (X) [meters]      318494.045      472752.745  
Convergence [degrees]      -1.03790000      1.55948889  
Point Scale      1.00000626      1.00087715  
Combined Factor      0.99999778      1.00086866

US NATIONAL GRID DESIGNATOR: 17SLR1849496248(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DN7486	GAAE AUGUSTA ENG CORS ARP	N332538.051	W0820404.043	131755.2
DP8346	GASA SAVANNAH STATE U CORS ARP	N320125.492	W0810336.761	183728.4
DL2076	GATF TIFTON CORS ARP	N312706.865	W0833032.830	127258.3
DO2372	P804 THEROCKDDBGA2012 CORS ARP	N325747.812	W0841332.694	132225.1
DO8857	GAAU AUGUSTA UTILITIES CORS ARP	N332817.117	W0820201.783	137561.1
DE6352	ZJX1 JACKSONVILLE 1 CORS ARP	N304155.872	W0815429.445	220943.1
DQ4190	GAAY ALBANY GA CORS ARP	N313940.898	W0841629.626	156512.5
DE9144	ZTL4 ATLANTA WAAS 4 CORS ARP	N332246.855	W0841748.189	161427.5

NEAREST NGS PUBLISHED CONTROL POINT  
CL0435      A 106      N323120.000 W0825608.000      3736.5

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.

**NGS POINT: SET503**

NGS OPUS-RS SOLUTION REPORT  
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All computed coordinate accuracies are listed as 1-sigma RMS values.  
For additional information: <https://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: dane.messex@atlantic.tech      DATE: May 05, 2021  
RINEX FILE: set5123o.21o      TIME: 15:01:28 UTC

SOFTWARE: rsgps 1.38 RS96.prl 1.99.3      START: 2021/05/03 14:08:30  
EPHEMERIS: igr21561.eph [rapid]      STOP: 2021/05/03 15:09:45

NAV FILE: brdc1230.21n                   OBS USED: 6147 / 6480 : 95%  
ANT NAME: TRMR12           NONE            QUALITY IND. 12.38/ 40.01  
ARP HEIGHT: 2.05                    NORMALIZED RMS:    0.407

REF FRAME: NAD\_83(2011)(EPOCH:2010.0000)           ITRF2014 (EPOCH:2021.33592)

X: 677534.869(m) 0.003(m)           677534.002(m) 0.003(m)  
Y: -5401883.901(m) 0.013(m)       -5401882.388(m) 0.013(m)  
Z: 3311791.174(m) 0.010(m)       3311791.033(m) 0.010(m)

LAT: 31 29 2.03014 0.007(m)       31 29 2.05354 0.007(m)  
E LON: 277 8 56.50282 0.004(m)     277 8 56.47736 0.004(m)  
W LON: 82 51 3.49718 0.004(m)     82 51 3.52264 0.004(m)  
EL HGT: 50.979(m) 0.015(m)       49.534(m) 0.015(m)  
ORTHO HGT: 78.237(m) 0.032(m) [NAVD88 (Computed using GEOID18)]

UTM COORDINATES   STATE PLANE COORDINATES  
          UTM (Zone 17)    SPC (1001 GA E)  
Northing (Y) [meters] 3484715.450   164698.698  
Easting (X) [meters] 324179.630    134984.113  
Convergence [degrees] -0.96693333   -0.35739722  
Point Scale           0.99998129    0.99995212  
Combined Factor       0.99997329    0.99994412

US NATIONAL GRID DESIGNATOR: 17RLQ2417984715(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DP8346	GASA SAVANNAH STATE U CORS ARP	N320125.492	W0810336.761	179906.5
DE6352	ZJX1 JACKSONVILLE 1 CORS ARP	N304155.872	W0815429.445	125167.4
DL2076	GATF TIFTON CORS ARP	N312706.865	W0833032.830	62647.9
DH4140	GACR COCHRAN CORS ARP	N322251.435	W0832046.405	109943.5
DN7486	GAAE AUGUSTA ENG CORS ARP	N332538.051	W0820404.043	227728.2
DE6012	PLTK PALATKA CORS ARP	N293948.148	W0814115.861	230602.7
DQ9776	FL75 FL75 JENNINGS CORS ARP	N303645.091	W0830848.052	100647.9
DQ4190	GAAY ALBANY GA CORS ARP	N313940.898	W0841629.626	136593.7
DO8857	GAAU AUGUSTA UTILITIES CORS ARP	N332817.117	W0820201.783	233394.9

**NGS POINT: SET504**

NGS OPUS-RS SOLUTION REPORT

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All computed coordinate accuracies are listed as 1-sigma RMS values.  
For additional information: <https://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: ray.huey@atlantic.tech           DATE: April 21, 2022  
RINEX FILE: set5124x.21o            TIME: 14:38:02 UTC

SOFTWARE: rsgps 1.38 RS294.prl 1.99.3           START: 2021/05/04 23:04:30  
EPHEMERIS: igs21562.eph [precise]            STOP: 2021/05/05 00:06:30  
NAV FILE: brdc1240.21n                   OBS USED: 3480 / 4230 : 82%  
ANT NAME: TRMR12           NONE            QUALITY IND. 0.15/ 0.61  
ARP HEIGHT: 2.050                    NORMALIZED RMS:    0.657

REF FRAME: NAD\_83(2011)(EPOCH:2010.0000)           ITRF2014 (EPOCH:2021.33968)

X: 728189.181(m) 0.091(m)           728188.315(m) 0.091(m)  
Y: -5411433.940(m) 0.137(m)       -5411432.421(m) 0.137(m)

Z: 3285448.528(m) 0.116(m) 3285448.387(m) 0.116(m)

LAT: 31 12 21.30671 0.030(m) 31 12 21.33007 0.030(m)

E LON: 277 39 50.27170 0.074(m) 277 39 50.24693 0.074(m)

W LON: 82 20 9.72830 0.074(m) 82 20 9.75307 0.074(m)

EL HGT: 12.884(m) 0.185(m) 11.424(m) 0.185(m)

ORTHO HGT: 41.064(m) 0.186(m) [NAVD88 (Computed using GEOID18)]

	UTM COORDINATES	STATE PLANE COORDINATES
	UTM (Zone 17)	SPC (1001 GA E)
Northing (Y) [meters]	3453192.178	133690.357
Easting (X) [meters]	372723.456	183861.007
Convergence [degrees]	-0.69231389	-0.08775278
Point Scale	0.99979981	0.99990321
Combined Factor	0.99979779	0.99990119

US NATIONAL GRID DESIGNATOR: 17RLQ7272353192(NAD 83)

		BASE STATIONS USED		
PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DE6352	ZJX1 JACKSONVILLE 1 CORS ARP	N304155.872	W0815429.445	69510.6
DQ9776	FL75 FL75 JENNINGS CORS ARP	N303645.091	W0830848.052	101651.4
DL2076	GATF TIFTON CORS ARP	N312706.865	W0833032.830	114930.0
DE6005	GNVL GAINESVILLE CORS ARP	N294111.557	W0821636.735	168529.3
DG4685	XCTY CROSS CITY CORS ARP	N293751.612	W0830629.337	189692.0

		NEAREST NGS PUBLISHED CONTROL POINT		
BS0057	K 318	N311210.000	W0821955.000	522.8

OPUS-RS Extended Output, Level 2  
FINAL COORDINATES (ITRF at epoch of observations)

zjx1	772646.279	-5434461.835	3237231.525
fl75	655588.431	-5454755.646	3229009.284
gatf	615653.886	-5411187.680	3308789.936
gnvl	745247.040	-5495263.137	3140246.657
xcty	665804.763	-5508488.711	3134878.108
set5	728188.315	-5411432.421	3285448.387

Covariance matrix of the stations:

1	8.0760E-07	-1.4960E-06	5.9060E-07	-1.7900E-07	3.7740E-07	-1.0230E-07	-2.6130E-07	5.0880E-07	-4.6120E-08	-3.4560E-08	2.9590E-07	-2.2800E-07	-1.3250E-07	3.1390E-07	-2.1440E-07	2.5010E-08	3.5200E-07	-1.2060E-07
2	-1.4960E-06	1.2550E-05	-7.2830E-06	3.7640E-07	-3.0630E-06	1.7960E-06	3.9140E-07	-3.0290E-06	1.7380E-06	3.5940E-07	-3.1670E-06	1.8980E-06	3.6720E-07	-3.0920E-06	1.8510E-06	7.4560E-08	-2.8170E-07	1.2350E-07
3	5.9060E-07	-7.2830E-06	5.2430E-06	-1.5480E-07	1.8390E-06	-1.2610E-06	-1.7400E-07	1.9110E-06	-1.2780E-06	-1.2100E-07	1.7740E-06	-1.2600E-06	1.4020E-07	1.7600E-06	-1.2450E-06	-4.8330E-08	2.4210E-07	-5.5390E-08
4	-1.7900E-07	3.7640E-07	-1.5480E-07	6.7370E-07	-1.0820E-06	3.0520E-07	-1.6750E-08	2.9580E-08	-4.0890E-08	-1.7670E-07	4.0670E-07	-8.7200E-08	1.0130E-07	2.6950E-07	-2.2220E-08	4.7930E-08	-1.8740E-07	5.9930E-08
5	3.7740E-07	-3.0630E-06	1.8390E-06	-1.0820E-06	1.1850E-05	-6.8920E-06	9.2550E-08	-2.5240E-06	1.6840E-06	3.7270E-07	-3.1350E-06	1.7320E-06	2.3990E-07	-2.9260E-06	1.6370E-06	-4.0970E-08	2.2970E-07	-4.3700E-08
6	-1.0230E-07	1.7960E-06	-1.2610E-06	3.0520E-07	-6.8920E-06	5.0430E-06	-4.4300E-08	1.7070E-06	-1.2420E-06	-9.2850E-08	1.7250E-06	-1.1870E-06	6.5870E-08	1.6630E-06	-1.1540E-06	2.2220E-08	3.0320E-08	2.1350E-08
7	-2.6130E-07	3.9140E-07	-1.7400E-07	-1.6750E-08	9.2550E-08	-4.4300E-08	8.2590E-07	-1.2150E-06	1.5980E-07	-2.5880E-07	4.7560E-07	-1.6900E-08	8.9300E-08	2.5470E-07	7.5510E-08	5.4860E-08	-4.6200E-07	1.4530E-07
8	5.0880E-07	-3.0290E-06	1.9110E-06	2.9580E-06	-2.5240E-06	1.7070E-06	-1.2150E-06	1.1820E-05	-6.7100E-06	5.0460E-07	-3.2280E-06	1.6220E-06	1.7180E-07	-2.8430E-06	1.4690E-06	-1.0020E-07	8.9360E-07	-2.0410E-07
9	-4.6120E-08	1.7380E-06	-1.2780E-06	-4.0890E-08	1.6840E-06	-1.2420E-06	1.5980E-07	-6.7100E-06	5.1620E-06	-3.7500E-08	1.6630E-06	-1.2340E-06	3.5310E-08	1.6250E-06	-1.2090E-06	5.4580E-08	5.0060E-08	-2.3540E-08
10	-3.4560E-08	3.5940E-07	-1.2100E-07	-1.7670E-07	3.7270E-07	-9.2850E-08	-2.5880E-07	5.0460E-07	-3.7500E-08	8.0030E-07	-1.5440E-06	4.5460E-07	1.3010E-07	3.0760E-07	-2.0340E-07	2.7890E-08	3.3490E-07	-1.0330E-07

11 2.9590E-07 -3.1670E-06 1.7740E-06 4.0670E-07 -3.1350E-06 1.7250E-06 4.7560E-07 -3.2280E-06 1.6630E-06 -1.5440E-06 1.2820E-05 -6.9880E-06  
3.6590E-07 -3.0860E-06 1.8260E-06 7.4130E-08 -5.1550E-07 1.2460E-07  
12 -2.2800E-07 1.8980E-06 -1.2600E-06 -8.7200E-08 1.7320E-06 -1.1870E-06 -1.6900E-08 1.6220E-06 -1.2340E-06 4.5460E-07 -6.9880E-06 4.9450E-06 -  
1.2250E-07 1.7360E-06 -1.0640E-06 -3.7790E-08 -8.2950E-08 1.0130E-07  
13 -1.3250E-07 3.6720E-07 -1.4020E-07 -1.0130E-07 2.3990E-07 -6.5870E-08 -8.9300E-08 1.7180E-07 -3.5310E-08 -1.3010E-07 3.6590E-07 -1.2250E-07  
6.5310E-07 -1.1450E-06 3.6400E-07 4.4490E-08 -3.9180E-08 1.9710E-08  
14 3.1390E-07 -3.0920E-06 1.7600E-06 2.6950E-07 -2.9260E-06 1.6630E-06 2.5470E-07 -2.8430E-06 1.6250E-06 3.0760E-07 -3.0860E-06 1.7360E-06 -  
1.1450E-06 1.2150E-05 -6.7830E-06 -7.3290E-09 -1.2630E-07 3.8770E-10  
15 -2.1440E-07 1.8510E-06 -1.2450E-06 -2.2220E-08 1.6370E-06 -1.1540E-06 7.5510E-08 1.4690E-06 -1.2090E-06 -2.0340E-07 1.8260E-06 -1.0640E-06  
3.6400E-07 -6.7830E-06 4.8710E-06 9.1500E-09 -2.4080E-07 1.5680E-07  
16 2.5010E-08 7.4560E-08 -4.8330E-08 4.7930E-08 -4.0970E-08 2.2220E-08 5.4860E-08 -1.0020E-07 5.4580E-08 2.7890E-08 7.4130E-08 -3.7790E-08  
4.4490E-08 -7.3290E-09 9.1500E-09 1.1260E-06 -3.3450E-06 1.6290E-06  
17 3.5200E-07 -2.8170E-07 2.4210E-07 -1.8740E-07 2.2970E-07 3.0320E-08 -4.6200E-07 8.9360E-07 5.0060E-08 3.3490E-07 -5.1550E-07 -8.2950E-08 -  
3.9180E-08 -1.2630E-07 -2.4080E-07 -3.3450E-06 3.5110E-05 -2.1700E-05  
18 -1.2060E-07 1.2350E-07 -5.5390E-08 5.9930E-08 -4.3700E-08 2.1350E-08 1.4530E-07 -2.0410E-07 -2.3540E-08 -1.0330E-07 1.2460E-07 1.0130E-07  
1.9710E-08 3.8770E-10 1.5680E-07 1.6290E-06 -2.1700E-05 1.5080E-05

Covariance Matrix for the xyz OPUS Rover Position (meters^2).

0.0000011260 -0.0000033450 0.0000016290  
-0.0000033450 0.0000351100 -0.0000217000  
0.0000016290 -0.0000217000 0.0000150800

Covariance Matrix for the enu OPUS Position (meters^2).

0.0000008462 -0.0000004438 -0.0000017442  
-0.0000004438 0.0000012853 0.0000012025  
-0.0000017442 0.0000012025 0.0000491845

Horizontal network accuracy = 0.00261 meters.

Vertical network accuracy = 0.01375 meters.

		Vectors		
	To From	X	Y	Z
zjx1	set5	44457.964	-23029.414	-48216.862
fl75	set5	-72599.884	-43323.225	-56439.104
gatf	set5	-112534.428	244.741	23341.548
gnvl	set5	17058.726	-83830.716	-145201.730
xcty	set5	-62383.551	-97056.289	-150570.279

Covariance matrix of the 5 vectors

1 1.8836E-06 -5.2676E-06 2.3885E-06 8.7406E-07 -3.2786E-06 1.6251E-06 7.8483E-07 -3.0880E-06 1.6489E-06 1.0385E-06 -3.4752E-06 1.5594E-06  
9.2400E-07 -3.3758E-06 1.5260E-06  
2 -5.2676E-06 4.8223E-05 -2.9349E-05 -2.8558E-06 3.2099E-05 -2.0058E-05 -2.5662E-06 3.1469E-05 -2.0136E-05 -3.3951E-06 3.2740E-05 -1.9843E-05 -  
3.0132E-06 3.2426E-05 -1.9732E-05  
3 2.3885E-06 -2.9349E-05 2.0434E-05 1.4626E-06 -2.0059E-05 1.3853E-05 1.3580E-06 -1.9827E-05 1.3881E-05 1.6596E-06 -2.0293E-05 1.3774E-05  
1.5174E-06 -2.0182E-05 1.3734E-05  
4 8.7406E-07 -2.8558E-06 1.4626E-06 1.7038E-06 -4.1986E-06 1.8520E-06 1.0065E-06 -3.0278E-06 1.4736E-06 8.7348E-07 -2.8250E-06 1.5197E-06  
9.3228E-07 -2.8808E-06 1.5377E-06  
5 -3.2786E-06 3.2099E-05 -2.0059E-05 -4.1986E-06 4.6501E-05 -2.8579E-05 -2.7495E-06 3.1463E-05 -2.0022E-05 -3.2662E-06 3.2261E-05 -1.9841E-05 -  
3.0250E-06 3.2081E-05 -1.9779E-05  
6 1.6251E-06 -2.0058E-05 1.3853E-05 1.8520E-06 -2.8579E-05 2.0080E-05 1.4172E-06 -1.9819E-05 1.3840E-05 1.6172E-06 -2.0130E-05 1.3770E-05  
1.5212E-06 -2.0068E-05 1.3748E-05  
7 7.8483E-07 -2.5662E-06 1.3580E-06 1.0065E-06 -2.7495E-06 1.4172E-06 1.8422E-06 -3.9978E-06 1.5889E-06 7.8445E-07 -2.4815E-06 1.5046E-06  
9.3735E-07 -2.6210E-06 1.5501E-06  
8 -3.0880E-06 3.1469E-05 -1.9827E-05 -3.0278E-06 3.1463E-05 -1.9819E-05 -3.9978E-06 4.5143E-05 -2.8256E-05 -3.0751E-06 3.1504E-05 -1.9791E-05 -  
3.0338E-06 3.1500E-05 -1.9786E-05  
9 1.6489E-06 -2.0136E-05 1.3881E-05 1.4736E-06 -2.0022E-05 1.3840E-05 1.5889E-06 -2.8256E-05 2.0289E-05 1.6402E-06 -2.0212E-05 1.3768E-05  
1.5194E-06 -2.0125E-05 1.3738E-05  
10 1.0385E-06 -3.3951E-06 1.6596E-06 8.7348E-07 -3.2662E-06 1.6172E-06 7.8445E-07 -3.0751E-06 1.6402E-06 1.8705E-06 -5.2980E-06 2.2247E-06  
9.2352E-07 -3.3650E-06 1.5197E-06  
11 -3.4752E-06 3.2740E-05 -2.0293E-05 -2.8250E-06 3.2261E-05 -2.0130E-05 -2.4815E-06 3.1504E-05 -2.0212E-05 -5.2980E-06 4.8961E-05 -2.8730E-05 -  
3.0140E-06 3.2666E-05 -1.9758E-05

12 1.5594E-06 -1.9843E-05 1.3774E-05 1.5197E-06 -1.9841E-05 1.3770E-05 1.5046E-06 -1.9791E-05 1.3768E-05 2.2247E-06 -2.8730E-05 1.9822E-05  
1.5246E-06 -1.9881E-05 1.3758E-05  
13 9.2400E-07 -3.0132E-06 1.5174E-06 9.3228E-07 -3.0250E-06 1.5212E-06 9.3735E-07 -3.0338E-06 1.5194E-06 9.2352E-07 -3.0140E-06 1.5246E-06  
1.6901E-06 -4.4435E-06 1.9641E-06  
14 -3.3758E-06 3.2426E-05 -2.0182E-05 -2.8808E-06 3.2081E-05 -2.0068E-05 -2.6210E-06 3.1500E-05 -2.0125E-05 -3.3650E-06 3.2666E-05 -1.9881E-05 -  
4.4435E-06 4.7513E-05 -2.8243E-05  
15 1.5260E-06 -1.9732E-05 1.3734E-05 1.5377E-06 -1.9779E-05 1.3748E-05 1.5501E-06 -1.9786E-05 1.3738E-05 1.5197E-06 -1.9758E-05 1.3758E-05  
1.9641E-06 -2.8243E-05 1.9637E-05

Correlation matrix of the 5 vectors

1 1.0000E+00 -5.5270E-01 3.8500E-01 4.8790E-01 -3.5032E-01 2.6424E-01 4.2133E-01 -3.3488E-01 2.6673E-01 5.5329E-01 -3.6188E-01 2.5520E-01  
5.1787E-01 -3.5684E-01 2.5092E-01  
2 -5.5270E-01 1.0000E+00 -9.3494E-01 -3.1505E-01 6.7785E-01 -6.4457E-01 -2.7226E-01 6.7447E-01 -6.4373E-01 -3.5747E-01 6.7379E-01 -6.4179E-01 -  
3.3376E-01 6.7742E-01 -6.4120E-01  
3 3.8500E-01 -9.3494E-01 1.0000E+00 2.4788E-01 -6.5075E-01 6.8389E-01 2.2134E-01 -6.5281E-01 6.8173E-01 2.6845E-01 -6.4156E-01 6.8440E-01  
2.5821E-01 -6.4773E-01 6.8560E-01  
4 4.8790E-01 -3.1505E-01 2.4788E-01 1.0000E+00 -4.7170E-01 3.1663E-01 5.6809E-01 -3.4524E-01 2.5063E-01 4.8928E-01 -3.0930E-01 2.6149E-01  
5.4938E-01 -3.2018E-01 2.6584E-01  
5 -3.5032E-01 6.7785E-01 -6.5075E-01 -4.7170E-01 1.0000E+00 -9.3525E-01 -2.9707E-01 6.8671E-01 -6.5186E-01 -3.5022E-01 6.7612E-01 -6.5353E-01 -  
3.4122E-01 6.8251E-01 -6.5452E-01  
6 2.6424E-01 -6.4457E-01 6.8389E-01 3.1663E-01 -9.3525E-01 1.0000E+00 2.3301E-01 -6.5827E-01 6.8569E-01 2.6388E-01 -6.4200E-01 6.9021E-01  
2.6112E-01 -6.4969E-01 6.9232E-01  
7 4.2133E-01 -2.7226E-01 2.2134E-01 5.6809E-01 -2.9707E-01 2.3301E-01 1.0000E+00 -4.3839E-01 2.5990E-01 4.2259E-01 -2.6129E-01 2.4899E-01  
5.3122E-01 -2.8015E-01 2.5772E-01  
8 -3.3488E-01 6.7447E-01 -6.5281E-01 -3.4524E-01 6.8671E-01 -6.5827E-01 -4.3839E-01 1.0000E+00 -9.3365E-01 -3.3464E-01 6.7011E-01 -6.6160E-01 -  
3.4733E-01 6.8015E-01 -6.6454E-01  
9 2.6673E-01 -6.4373E-01 6.8173E-01 2.5063E-01 -6.5186E-01 6.8569E-01 2.5990E-01 -9.3365E-01 1.0000E+00 2.6625E-01 -6.4128E-01 6.8655E-01  
2.5947E-01 -6.4820E-01 6.8824E-01  
10 5.5329E-01 -3.5747E-01 2.6845E-01 4.8928E-01 -3.5022E-01 2.6388E-01 4.2259E-01 -3.3464E-01 2.6625E-01 1.0000E+00 -5.5362E-01 3.6535E-01  
5.1941E-01 -3.5694E-01 2.5075E-01  
11 -3.6188E-01 6.7379E-01 -6.4156E-01 -3.0930E-01 6.7612E-01 -6.4200E-01 -2.6129E-01 6.7011E-01 -6.4128E-01 -5.5362E-01 1.0000E+00 -9.2220E-01 -  
3.3133E-01 6.7727E-01 -6.3719E-01  
12 2.5520E-01 -6.4179E-01 6.8440E-01 2.6149E-01 -6.5353E-01 6.9021E-01 2.4899E-01 -6.6160E-01 6.8655E-01 3.6535E-01 -9.2220E-01 1.0000E+00  
2.6340E-01 -6.4784E-01 6.9732E-01  
13 5.1787E-01 -3.3376E-01 2.5821E-01 5.4938E-01 -3.4122E-01 2.6112E-01 5.3122E-01 -3.4733E-01 2.5947E-01 5.1941E-01 -3.3133E-01 2.6340E-01  
1.0000E+00 -4.9586E-01 3.4094E-01  
14 -3.5684E-01 6.7742E-01 -6.4773E-01 -3.2018E-01 6.8251E-01 -6.4969E-01 -2.8015E-01 6.8015E-01 -6.4820E-01 -3.5694E-01 6.7727E-01 -6.4784E-01 -  
4.9586E-01 1.0000E+00 -9.2461E-01  
15 2.5092E-01 -6.4120E-01 6.8560E-01 2.6584E-01 -6.5452E-01 6.9232E-01 2.5772E-01 -6.6454E-01 6.8824E-01 2.5075E-01 -6.3719E-01 6.9732E-01  
3.4094E-01 -9.2461E-01 1.0000E+00

G-FILE for the vectors

Axx2021 5 42021 5 5  
B202105042300202105050000 5 rsgps 1.38IGS  
Ings14.003 NGS

C00060001 444579639 13 -230294137 69 -482168622 45  
C00060002 -725998839 13 -433232251 68 -564391035 44  
C00060003 -1125344282 13 2447413 67 233415484 45  
C00060004 170587258 13 -838307156 69 -1452017304 44  
C00060005 -623835511 13 -970562894 68 -1505702792 44

D 1 2 -5526988 1 3 3850031 1 4 4879044 1 5 -3503249 1 6 2642394 D 1 7 4213252 1 8 -3348813 1 9 2667295 1 10 5532864 1 11 -3618814 D 1 12  
2552023 1 13 5178704 1 14 -3568424 1 15 2509196 2 3 -9349408 D 2 4 -3150492 2 5 6778495 2 6 -6445694 2 7 -2722631 2 8 6744677 D 2 9 -  
6437298 2 10 -3574681 2 11 6737942 2 12 -6417863 2 13 -3337623 D 2 14 6774232 2 15 -6412001 3 4 2478773 3 5 -6507501 3 6 6838890 D 3 7  
2213446 3 8 -6528124 3 9 6817309 3 10 2684452 3 11 -6415645 D 3 12 6844006 3 13 2582097 3 14 -6477328 3 15 6855951 4 5 -4716978 D 4 6  
3166308 4 7 5680886 4 8 -3452402 4 9 2506305 4 10 4892799 D 4 11 -3093025 4 12 2614892 4 13 5493804 4 14 -3201768 4 15 2658368 D 5 6 -  
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2330096 6 8 -6582747 6 9 6856867 6 10 2638794 6 11 -6419952 D 6 12 6902108 6 13 2611213 6 14 -6496931 6 15 6923212 7 8 -4383901 D 7 9  
2598991 7 10 4225888 7 11 -2612933 7 12 2489854 7 13 5312231 D 7 14 -2801507 7 15 2577154 8 9 -9336511 8 10 -3346445 8 11 6701082 D 8 12 -  
6615981 8 13 -3473255 8 14 6801548 8 15 -6645443 9 10 2662500 D 9 11 -6412770 9 12 6865451 9 13 2594670 9 14 -6482014 9 15 6882435 D 10 11 -  
5536153 10 12 3653509 10 13 5194052 10 14 -3569404 10 15 2507546 D 11 12 -9222041 11 13 -3313344 11 14 6772729 11 15 -6371936 12 13 2633985 D 12  
14 -6478362 12 15 6973198 13 14 -4958623 13 15 3409350 14 15 -9246089

ITRF position of set5 as determined by individual baselines

	X	Y	Z
zjx1	728188.329	-5411432.364	3285448.374
fl75	728188.328	-5411432.401	3285448.391
gatf	728188.135	-5411432.159	3285448.156
gnvl	728188.330	-5411432.388	3285448.383
xcty	728188.323	-5411432.379	3285448.380

Residuals of position determined by individual baselines from the final position

	X	Y	Z	East	North	Up
zjx1	0.014	0.057	-0.014	0.022	0.016	-0.054
fl75	0.014	0.020	0.004	0.016	0.013	-0.014
gatf	-0.179	0.262	-0.231	-0.143	-0.052	-0.362
gnvl	0.015	0.033	-0.004	0.019	0.013	-0.028
xcty	0.009	0.042	-0.007	0.014	0.015	-0.038

STATE PLANE COORDINATES - U.S. Survey Foot

SPC (1001 GA E)	
Northing (Y) [feet]	438615.780
Easting (X) [feet]	603217.320
Convergence [degrees]	-0.08775278
Point Scale	0.99990321
Combined Factor	0.99990119

\*\*\*\*\* New Reference Frame Preview \*\*\*\*\*

We are replacing the nation's NAD 83 and NAVD 88 datums, to improve access and accuracy of the National Spatial Reference System. More at <https://geodesy.noaa.gov/datums/newdatums/>

Below are approximate coordinates for this solution in the new frames:

APPROX ORTHO HGT: 40.899 (m) [PROTOTYPE (Computed using xGeoid19B,GRS80,ITRF2014)]

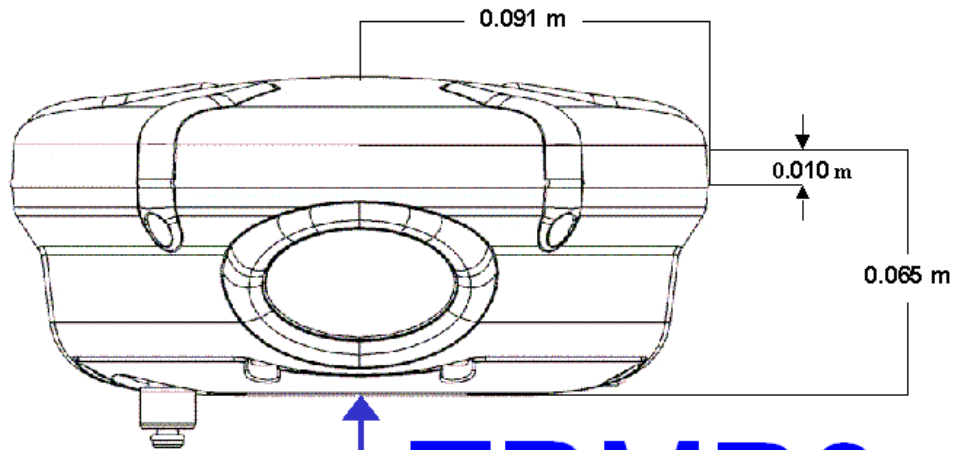
dop from interpolation is	0.340
scatter (mean square distance from rover) is	29246.071
average edop for rover is	0.600
average ndop for rover is	0.790
average hdop for rover is	0.992
average vdop for rover is	1.820
average gdop for rover is	2.350

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.

## 1.5 Photographs

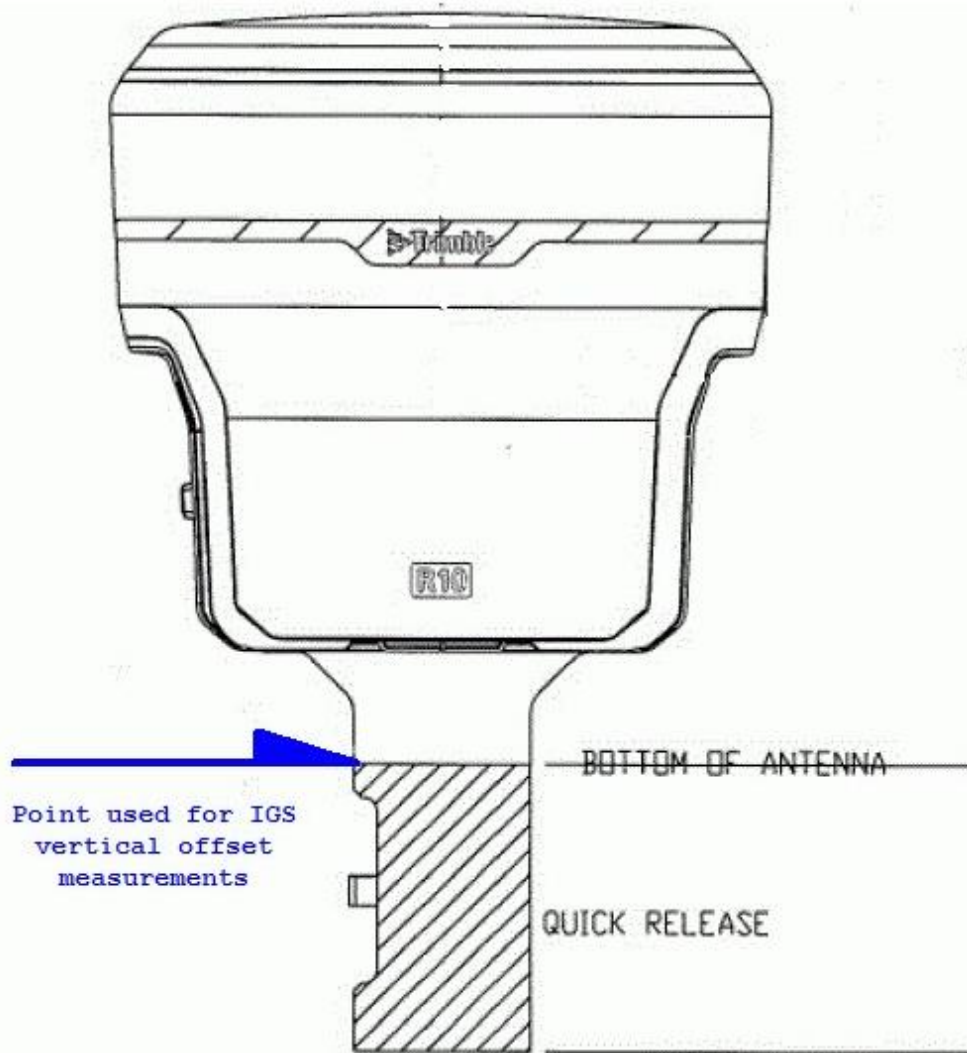
Due to the vast amount of points collected all pictures are submitted in digital PDF format with the final project deliverables organized by Point ID capture.

## 1.6 GNSS Receiver Diagrams



**TRMR8**

Reference Surface For NGS  
Offset Measurements



## 1.7 Sub-Contractor Survey Report

Atlantic's GPSC03 Partner Platinum Geomatics conducted most of the field survey during this task order. Below is the firms submitted survey report.



# Platinum Geomatics

PROJECT NO.1017-006

LIDAR CONTROL SURVEY REPORT OF

GEORGIA 3DEP

MARCH 28, 2019



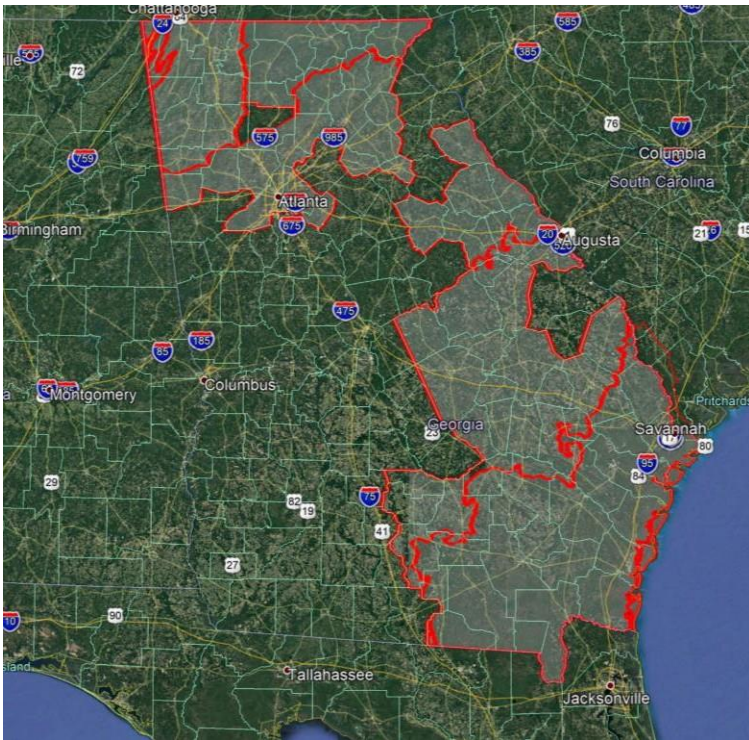
PLATINUM GEOMATICS

Survey For:



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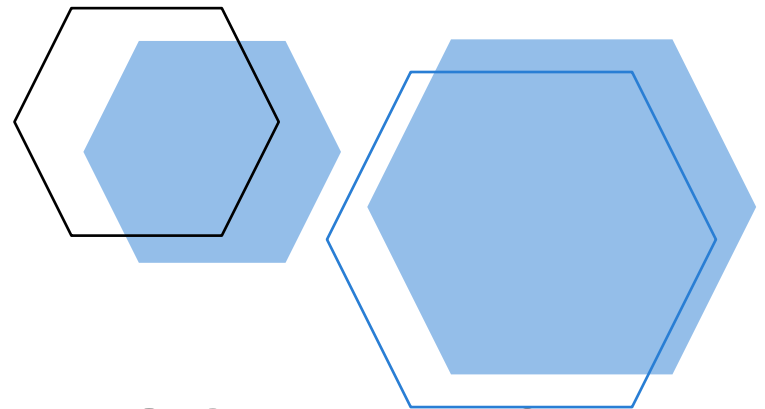
Project Summary.....	2
Procedures Used .....	2
Equipment used .....	3
Project datum .....	3
point Classifications & Quantities .....	4
Accuracy Statement .....	4



# PROJECT SUMMARY

Platinum Geomatics, LLC entered in to a contract with the Atlantic Group on October 12, 2018 to provide the collection of one-thousand two-hundred forty-six (1246) LiDAR Control Points throughout the State of Georgia. This is a report of the methodology used and calculated accuracy of the survey performed by Platinum Geomatics, LLC.

Platinum Geomatics is performing Professional Land Surveying Services in Georgia under Certificate of Authorization Number LSF001238.



# PROCEDURES USED

The Trimble Virtual Reference Station (VRS) network was employed to obtain real-time GNSS corrections for the points. VRS Network observations consisted of a minimum of 180 1 second epochs and point tolerances were set to record within 0.049' horizontal and 0.066' vertical accuracies. When real-time corrections were unable to be achieved, a static session of at least thirty-minute was observed. A static network was then run incorporating CORS monuments in order to ensure accuracy. When GPS observations were unable to be achieved, a Total Station was used.



# EQUIPMENT USED

Trimble R-8 and R-10 dual frequency GNSS receivers were used for GPS observations. A Trimble Robotic Total Station was used for total station observations.



# PROJECT DATUM

Individual point coordinates were reported to NAD83 (2011) Georgia East or Georgia West. Reported elevations are relative to NAVD88 as derived from Geoid Model 12B. Reported units are in US Survey Feet.

GEORGIA STATE PLANE COORDINATE SYSTEM



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# POINT CLASSIFICATIONS & QUANTITIES

A total of 1246 points consisting of 550 non-vegetated (NVA) points, 375 vegetated (VVA) points, and 327 LiDAR calibration (LCP) points.



## ACCURACY STATEMENT

THE CALCULATED AVERAGE 3-DIMENSIONAL ACCURACY FOR THE PROJECT IS 0.079 FOOT AT THE 95% CONFIDENCE LEVEL.

## 1.8 Custody Transference Assurance

A blank page has been intentionally inserted at the end of this report to serve as a page check when custody is transferred. The blank page is marked "This page intentionally left blank" to verify that every page of this document is accounted for.

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