# Radio Frequency Safety Survey Report

The

Prepared For: Fairfax County Public Schools

Fairfax County PUBLIC SCHOOLS ENGAGE • INSPIRE • THRIVE

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Site Name: Site ID: Address:

County: Latitude: Longitude: Herndon High School N/A 700 Bennett Street Herndon, VA 20170 Fairfax N38-59-10.20 W77-22-29.40

Site Structure Type: Report Writer: Generation Date: Monopole John Lee June 27, 2023

## **Compliance Statement**

Based on the information provided by the client, measured radiofrequency power density values during the time of the survey at ground and within adjacent buildings were found to be below the FCC limits set forth at 47 C.F.R. §1.1310.







## **Table of Contents**

1	General Summary	3		
2	Site Survey Information	3		
3	Site Photographs	5		
4	Emission Measurements and Discussion			
5	Recommendations for Compliance			
6	Reviewer Certification			
7	Appendix A: Technical Framework	125		
8	Appendix B: Qualifications of Waterford Consultants, LLC	128		
9	Appendix C: RoofMaster™	129		
10Appendix D: Statement of Limiting Conditions				



# WATERFORD

#### 1 General Summary

Fairfax County Public Schools has contracted Waterford Consultants, LLC to conduct a Radiofrequency (RF) Electromagnetic Compliance assessment of the Herndon High School site located at 700 Bennett Street, Herndon, VA 20170. The compliance framework is derived from the FCC Rules and Regulations for preventing human exposure in excess of the applicable MPE (Maximum Permissible Exposure) limits. An overview of the applicable FCC Rules and analysis guidelines is presented in Appendix A. The subsequent sections contain information regarding the radio telecommunications equipment installed at this site and the surrounding environment with regard to RF Hazard compliance.

#### 2 Site Survey Information

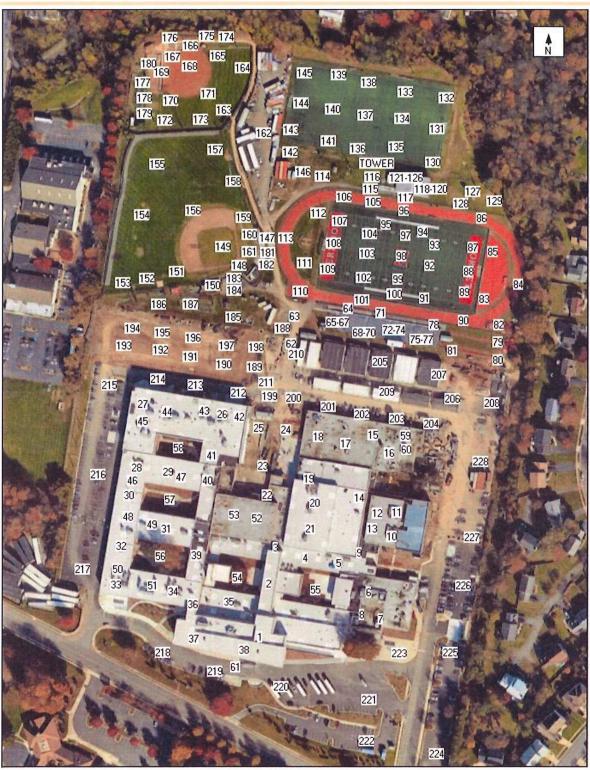
Access Restriction:

Access Control:

Survey Technician: Site Survey Date: Meter Model/Serial: Calibration Date: Probe Model/Serial: Calibration Date: Locked fence gate. Coordinate access with FCPS. Check in at the main office. John Lee June 21, 2023 Wave Control - SMP2Dual Field Meter / SN21-SN1517 May 12, 2023 Wave Control - WSN0001 / SN21-WP220008 May 12, 2023







The above site map shows the measurement locations.

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# Measurement Readings are Spatial Average as MPE % of the General Population Limits

L		eading	4 4		eading
Loc#	Avg Max	Loc#	Avg	Max	
1 (Inside)	0.0277%	0.0324%	2 (Inside)	0.0282%	0.0531%
3 (Inside)	0.0263%	0.0373%	4 (Inside)	0.0332%	0.0639%
5 (Inside)	0.0312%	0.0487%	6 (Inside)	0.0229%	0.0326%
7 (Inside)	0.0334%	0.0471%	8 (Inside)	0.0248%	0.0353%
9 (Inside)	0.0257%	0.0386%	10 (Inside)	0.0322%	0.0427%
11 (Inside)	0.0274%	0.0414%	12 (Inside)	0.0293%	0.0399%
13 (Inside)	0.0189%	0.0238%	14 (Inside)	0.0504%	0.0949%
15 (Inside)	0.0265%	0.0389%	16 (Inside)	0.0195%	0.0244%
17 (Inside)	0.0176%	0.0328%	18 (Inside)	0.0346%	0.0845%
19 (Inside)	0.0215%	0.0615%	20 (Inside)	0.0195%	0.0316%
21 (Inside)	0.0412%	0.0765%	22 (Inside)	0.0139%	0.0413%
23 (Inside)	0.0196%	0.0452%	24 (Inside)	0.0202%	0.0532%
25 (Inside)	0.0151%	0.0240%	26 (Inside)	0.0196%	0.0369%
27 (Inside)	0.0519%	0.0723%	28 (Inside)	0.0771%	0.2166%
29 (Inside)	0.0594%	0.1071%	30 (Inside)	0.0242%	0.0500%
31 (Inside)	0.0315%	0.0683%	32 (Inside)	0.0456%	0.1359%
33 (Inside)	0.0437%	0.1103%	34 (Inside)	0.0406%	0.0681%
35 (Inside)	0.0502%	0.1322%	36 (Inside)	0.0144%	0.0187%
37 (Inside)	0.0221%	0.0483%	38 (Inside)	0.0362%	0.1186%
39 (Inside)	0.0129%	0.0191%	40 (Inside)	0.0153%	0.0194%
41 (Inside)	0.0391%	0.1164%	42 (Inside)	0.0281%	0.0546%
43 (Inside)	0.0262%	0.0397%	44 (Inside)	0.0429%	0.0665%
45 (Inside)	0.0535%	0.1122%	46 (Inside)	0.0345%	0.1094%
47 (Inside)	0.0350%	0.0834%	48 (Inside)	0.0326%	0.0571%
49 (Inside)	0.0323%	0.0930%	50 (Inside)	0.0235%	0.0520%
51 (Inside)	0.0233%	0.0382%	52 (Inside)	0.0094%	0.0223%
53 (Inside)	0.0276%	0.0476%	54 (Inside)	0.0053%	0.0077%
55 (Inside)	0.0078%	0.0123%	56 (Inside)	0.0095%	0.0140%
57 (Inside)	0.0134%	0.0224%	58 (Inside)	0.0102%	0.0157%
59 (Inside)	0.0122%	0.0184%	60 (Inside)	0.0136%	0.0172%
61	0.0144%	0.0171%	62	0.0252%	0.0330%
63	0.0192%	0.0250%	64	0.0257%	0.0466%
65	0.0310%	0.0595%	66	0.0290%	0.0562%
67	0.0290%	0.0527%	68	0.0419%	0.0911%
69	0.0317%	0.0790%	70	0.0219%	0.0316%
71	0.0295%	0.0645%	72	0.0280%	0.0481%
73	0.0366%	0.0740%	74	0.0467%	0.1074%
75	0.2124%	0.5807%	76	0.1438%	0.4074%
77	0.0361%	0.0620%	78	0.0241%	0.0375%
79	0.0327%	0.0499%	80	0.0583%	0.1824%
81	0.0414%	0.1561%	82	0.0319%	0.0922%
83	0.0173%	0.0274%	84	0.0147%	0.0239%
85	0.0204%	0.0357%	86	0.0137%	0.0241%
87	0.0185%	0.0362%	88	0.0155%	0.0241%
89	0.0115%	0.0162%	90	0.0388%	0.1359%
91	0.0270%	0.0739%	92	0.0280%	0.0856%
93	0.0338%	0.0684%	94	0.0334%	0.1264%
95	0.0231%	0.0493%	96	0.0157%	0.0230%
97	0.0291%	0.0606%	98	0.0296%	0.0230 %
99	0.0197%	0.0280%	100	0.0296%	0.0323%
101	0.0197%	0.0432%	100	0.0178%	0.0323%
101	0.0285%	0.0398%	102	0.0167%	0.0214%
103	0.0285%	0.0582%	104	0.0421%	0.0348%
107	0.0174%	0.0246%	108	0.0210%	0.0313%
109	0.0253%	0.0783%	110 112	0.0236%	0.0393%



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		eading	Loc#		eading
Loc#	Avg	Max		Avg	Max
113	0.0178%	0.0316%	114	0.0185%	0.0263%
115	0.0157%	0.0196%	116	0.0193%	0.0236%
117	0.0259%	0.0385%	118	0.0542%	0.0812%
119	0.0388%	0.0584%	120	0.0661%	0.0988%
121	0.0708%	0.1203%	122	0.0367%	0.0749%
123	0.0355%	0.0477%	124	0.0197%	0.0459%
125	0.0282%	0.0527%	126	0.0198%	0.0291%
127	0.0133%	0.0207%	128	0.0153%	0.0208%
129	0.0127%	0.0313%	130	0.0282%	0.0698%
131	0.0277%	0.0586%	132	0.0271%	0.1128%
133	0.0230%	0.0481%	134	0.0214%	0.0564%
135	0.0250%	0.0642%	136	0.0546%	0.1303%
137	0.0251%	0.0448%	138	0.0238%	0.1145%
139	0.0297%	0.0402%	140	0.0274%	0.0352%
141	0.0237%	0.0321%	142	0.0284%	0.0391%
143	0.0227%	0.0314%	144	0.0207%	0.0282%
145	0.0198%	0.0289%	147	0.0120%	0.0166%
146	0.0138%	0.0302%	148	0.0149%	0.0230%
149	0.0140%	0.0200%	150	0.0116%	0.0184%
151	0.0169%	0.0219%	152	0.0147%	0.0196%
153	0.0197%	0.0283%	154	0.0237%	0.0577%
155	0.0189%	0.0382%	156	0.0152%	0.0204%
157	0.0148%	0.0191%	158	0.0178%	0.0218%
159	0.0141%	0.0188%	160	0.0171%	0.0220%
161	0.0163%	0.0362%	162	0.0146%	0.0264%
163	0.0173%	0.0270%	164	0.0137%	0.0196%
165	0.0589%	0.1143%	166	0.0195%	0.0378%
167	0.0173%	0.0208%	168	0.0181%	0.0356%
169	0.0172%	0.0252%	170	0.0204%	0.0241%
171	0.0148%	0.0190%	172	0.0167%	0.0241%
173	0.0173%	0.0280%	174	0.0186%	0.0288%
175	0.0162%	0.0191%	176	0.0175%	0.0238%
177	0.0152%	0.0246%	178	0.0205%	0.0346%
179	0.0231%	0.0357%	180	0.0345%	0.0526%
181	0.0135%	0.0203%	182	0.0132%	0.0180%
183	0.0194%	0.0364%	184	0.0184%	0.0247%
185	0.0212%	0.0421%	186	0.0142%	0.0247%
187	0.0239%	0.0353%	188	0.0192%	0.0288%
189	0.0112%	0.0166%	190	0.0133%	0.0194%
191	0.0143%	0.0216%	192	0.0206%	0.0254%
193	0.0176%	0.0230%	194	0.0240%	0.0392%
195	0.0188%	0.0251%	196	0.0227%	0.0392%
197	0.0208%	0.0323%	198	0.0150%	0.0198%
199	0.0175%	0.0221%	200	0.0135%	0.0206%
201	0.0427%	0.0754%	202	0.0438%	0.1368%
203	0.0317%	0.0780%	204	0.0366%	0.1365%
205	0.0309%	0.0423%	206	0.0169%	0.0319%
207	0.0161%	0.0214%	208	0.0177%	0.0227%
209	0.0155%	0.0198%	210	0.0153%	0.0211%
211	0.0151%	0.0230%	212	0.0165%	0.0215%
213	0.0149%	0.0189%	214	0.0138%	0.0173%
215	0.0160%	0.0232%	216	0.0146%	0.0218%
217	0.0155%	0.0216%	218	0.0128%	0.0170%
219	0.0174%	0.0267%	220	0.0214%	0.0298%
221	0.0163%	0.0294%	222	0.0203%	0.0244%
223	0.0150%	0.0213%	224	0.0186%	0.0258%
235	0.0168%	0.0361%	226	0.0237%	0.0314%
227	0.0165%	0.0257%	228	0.0205%	0.0292%



Summary: The maximum spatially averaged power density reading was <u>0.2124%</u> of the FCC General Population limits



#### **5** Recommendations for Compliance

RF power density measurements at interior and ground locations at the site were found to be below Radiofrequency Emissions Maximum Permissible Exposure (MPE) General Population limits.

No actions are required at this time.

#### 6 **Reviewer Certification**

I have reviewed this RF Emissions assessment report and believe it to be both true and accurate to the best of my knowledge.



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David Hamilton Kiser Registered Professional Engineer (Electrical) Commonwealth of Virginia Number 0402048906, 12/31/2023 Date: 2023-June-30