

Request for Proposals Clarifications Issued for: **RFP #1076-23 Public Safety Radio Testing Services** December 14, 2023

County clarifications to the RFP:

A. The following change has been made to Attachment A - Section 1.7:
1.7 To satisfy grant requirements, all work associated with the testing of Allegan Area ESA schools must be completed and invoiced to the County by June 30 May 30, 2024.

County answers provided to contractor questions received about the RFP

- 1 Q: Can the square feet and number of floors be provided for each school listed?
 - A: No, this information has not been compiled and is not readily available. It is suggested that bidders review available aerial imagery from Google or Bing to get an idea of each school's size and the number of floors.
- 2 Q: If there are multiple buildings on the campus are we to assume those are included? (Maintenance buildings etc.)A: Only the main school building used primarily for instructional purposes needs to be tested. Testing of other maintenance buildings, athletic outbuildings and facilities and garages on school property are not included in the scope of work.
- 3 Q: Can you provide drawing for each location
 - A: Floorplans will not be available during the open bid process, but schools are locating and collecting them and are expected to provide them available in a digital format for contractor's use shortly after contract award.
- 4 Q: I see that your county is covered by Michigan's Public Safety Communications System (MPSCS) are there any other frequencies that we may need to verify during testing?
 - A: No, there are no other frequencies to verify.
- 5 Q: Does the attached sample report and map showing pass/fail areas meet the deliverable requirements of this project?
 - A: Yes, something comparable to the attached sample report, in particular the map (page 3) and corresponding table with pass/fail data (page 6), would be considered acceptable.
- 6 Q: Can you furnish the square footage of each school?
 - A: No, this information has not been compiled and is not readily available. It is suggested that bidders review available aerial imagery from Google or Bing to get an idea of each school's size.

Emergency Responder Radio System Coverage Report Test Results

Date Prepared:	Nov 2, 2023			
Test File:	real 2022_20221003_180130			
Test Location:	Metal 2022			
Technician:				
FCC#:				

Building: Metal 2022 Result: Pass

Channel/	Freq (MHz)	Technology	Band	Result	Area Points	Critical Points
Ch Group					passed (%)	passed (%)
	854.86250	P25		Pass	36/36 (100%)	0/0 (0%)
2022: 1, 2,	854.89875				. ,	
3, 4, 5, 6, 7,	855.21250					
8, 9, 10, 11,	855.71250					
12, 13, 14,	855.98750					
15, 16, 17	856.68750					
	856.96250					
	856.98750					
	857.96250					
	857.98750					
	858.96250					
	858.98750					
	859.58750					
	859.96250					
	859.98750					
	860.96250					
	860.98750					

Test Report Summary

		Test Details	
Number of Floors Tested:	1	Result Calculation:	By area per floor
Number of Areas Tested:	36	Area Pass Criteria:	95%
Number of Critical Points Tested:	0	Critical Points Pass Criteria:	99%
		Apply Adjacent Area Rule:	No

Equipment Configuration

Vendor	Application	Device	Calibration	Antenna info				
			Expires					
PCTEL	SeeHawk Touch rel 4.1.0.1	SeeGull IBflex Device rel 3.8.1.0 SN: 082201010	1-10-2024					

Threshold Settings

Measurement	DL Area Point	DL Critical Point	DL Use for grading	UL Area Point	UL Critical Point	UL Use for grading
P25 Power (RSSI)	-95.0 dBm	-95.0 dBm	Yes	-95.0 dBm	-95.0 dBm	Yes
P25 S/N (SINR)	20.0 dB	22.0 dB	Yes	20.0 dB	22.0 dB	Yes
P25 FBER	2.0 %	1.5 %	Yes	2.0 %	1.5 %	Yes
DAQ	3.0		Yes			

Floors Result

Floor Plan	2022
DAS Testing Floor Plan (1)	Pass

Group:

Floor: DAS Testing Floor Plan (1) 2022 Channels: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17

Result: Pass

Freq (MHz)	Tech	Band	Ant Gain	Cable Loss	Ph.	Туре	Mod	NAC	Area Points passed (%)	Critical Points passed (%)
854.86250	P25		0.00	0.00	_	CC			36/36	0/0 (0%)
854.89875					_	CC			(100%)	
855.21250					1	CC	CQPSK			
855.71250					1	CC	CQPSK			
855.98750					_	CC				
856.68750					1	CC	CQPSK			
856.96250					1	CC	CQPSK			
856.98750					_	CC				
857.96250					1	CC	CQPSK			
857.98750					1	CC	CQPSK			
858.96250					_	CC				
858.98750					_	CC				
859.58750					_	CC				
859.96250					_	CC				
859.98750					1	CC	CQPSK			
860.96250					_	CC				
860.98750					_	CC				



Grid	# of Areas	Area Size (sq. ft)	Area Width (ft)	Area Height (ft)	lgnore Area Color	Comments
1	36	524.58	23.25	22.56	Black	

Group:

Floor: DAS Testing Floor Plan (1) 2022 Channels: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17

	Area Points							ts					
Grid	Area	DL Power (dBm)	DL S/N (dB)	DL FBER (%)	DL DAQ	UL Power (dBm)	UL S/N (dB)	UL FBER (%)	UL DAQ	UL Tested	Result	DL Loss (dB)	Comment
1	1	-74 60	35 11	0.00		(abiii)	(48)	(78)			Pass	(48)	
1	2	-63 45	32.57	0.00							Pass		
1	3	-71 18	33.83	0.00							Pass		
1	4	-63.95	32.94	0.00							Pass		
1	5	-56.78	33.48	0.00							Pass		
1	6	-67.34	33.72	0.00							Pass		
1	7	-72.39	31.96	0.00							Pass		
1	8	-71.19	33.29	0.00							Pass		
1	9	-78.59	33.20	0.00		-					Pass		
1	10	-61.70	35.49	0.00							Pass		
1	11	-68.48	32.71	0.00							Pass		
1	12	-65.95	32.77	0.00							Pass		
1	13	-53.72	33.73	0.00							Pass		
1	14	-66.26	32.19	0.00							Pass		
1	15	-58.15	33.80	0.00							Pass		
1	16	-57.66	34.44	0.00							Pass		
1	17	-59.56	33.18	0.00							Pass		
1	18	-81.87	32.81	0.00							Pass		
1	19	-65.44	32.57	0.00							Pass		
1	20	-65.43	32.42	0.00							Pass		
1	21	-59.31	35.31	0.00							Pass		
1	22	-67.21	32.68	0.00							Pass		
1	23	-57.84	34.22	0.00							Pass		
1	24	-56.52	33.91	0.00							Pass		
1	25	-59.93	33.28	0.00							Pass		
1	26	-62.18	32.83	0.00							Pass		
1	27	-71.11	33.06	0.00							Pass		
1	28	-67.55	32.67	0.00							Pass		
1	29	-64.25	34.65	0.00							Pass		
1	30	-56.40	34.31	0.00							Pass		
1	31	-71.86	33.08	0.00							Pass		
1	32	-66.51	33.96	0.00							Pass		
1	33	-51.00	33.99	0.00							Pass		
1	34	-54.94	35.32	0.00							Pass		
1	35	-68.76	37.00	0.00							Pass		
1	36	-67.95	34.21	0.00							Pass		

BDA Information

1. BDA Installing Company

Company Name		
Company Address		
Company Phone Number		
Technician Name		
Technician Email		
Responsible Party FCC License #		
Responsible Party		
Responsible Party Name		
Responsible Party Title		
Responsible Party email		
Responsible Party Phone Number		
Are you the same contractor who had done the Original BDA install?	□ Yes	□ No

2. DAS Property Information

Building Name	
Property Owner	
Property Address	
City, State, Zip	
Property County	
Phone Number	
Email Address	

3. BDA Information

BDA Inspection date	
BDA Location Description	
BDA Latitude	

BDA Longitude		
BDA Manufacturer		
BDA Serial #		
BDA Model #		
BDA Type	□A	□B
Frequency bands		
BDA firmware		
FCC Booster ID		
FCC Call Sign		
Date Submitted to FCC		
Passive or Active	□ Passive	□ Active
Hybrid (with other systems)	□ Yes	□ No
Uplink Gain Settings (dB)		
Downlink Gain Setting (dB)		

4. BDA Measurements

Does the Coverage test meet the AHJ Specification?	□ Yes	□ No
If No, Explain		
Talk group and radio model		
BDA Tests Complete and BDA functional Y/N	□ Yes	🗆 No
If No, Explain		
Max ERP form Donor Antenna		
Measure Max UL Input to BDA		
Measure Min UL Input to BDA		
Measure Max UL Output of BDA		
Measure Min UL Output of BDA		
UL squelch		
Confirm UL noise meets FCC 90.219.d.6.ii requirement	□ Yes	🗆 No

Expected noise RX at donor site	
Expected noise TX at donor site	

5. Donor Site and Donor Antenna Information

Site Name	
Antenna Model	
Antenna Gain (dBi or dBd)	
Antenna Location	
Antenna Azimuth	
RX noise floor value with DAS off	
BDA on/off test to verify no noise rise	
Max UL receive	
Min UL receive	

6. Fire Code Documentation

DAS Vendor Company	
DAS Vendor Contact Name	
DAS Vendor Phone No.	
Contractor GROL #	
DAS Permit Code Cycle	

BACK-UP POWER TEST:

Is the UPS still functional?	□ Yes	□ No
If No, Explain		
Perform Battery 1-hour drop test?	□ Yes	□ No
Do UPS Batteries(s) need to be replaced?	□ Yes	□ No

ANTENNA SYSTEM:

Is condition of Donor (outside) antenna satisfactory?	□ Yes	🗆 No
Is the Donor (outside) antenna clear from obstruction?	□ Yes	🗆 No
Is condition of inside antenna(s)/coax satisfactory?	□ Yes	🗆 No
If No, Explain		

REMARKS AND RECOMMENDATION:

Additional Info