

EXHIBIT B - TECHNICAL INFORMATION

Applicant Name: Deere & Company
Applicant FRN: 0018936385

Technical Contact Details

Name of Contact:	Nadeem Riaz
Contact Details:	Technology Architect Deere & Company 1 John Deere Place Moline, IL 61265 Phone: 309-748-9854 Email: riazmnadeem@johndeere.com
Should any interference be reported, the proposed operator will cease transmissions immediately unless and until the interference incident has been resolved. The technical point of contact above has “kill switch” capability for all devices involved in the proposed conventional experimental license application (“License Application”).	

Legal Contact Details

Name of Contact:	Timothy Bransford
Contact Details:	Regulatory Counsel Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue, NW Washington, DC 20004 Phone: 202-373-6140 Email: timothy.bransford@morganlewis.com

Explanation

Deere & Company (“Deere”) seeks the License Application to continue tests of prototype LTE equipment identified herein. Deere was originally granted a Special Temporary Authority (“STA”) authorization on May 24, 2019, pursuant to file number 0643-EX-ST-2019, call sign WO9XOA. Please see **Exhibit A** to the instant application for a complementary narrative explanation of the proposed operations and justification for the License Application. Deere seeks to operate prototype LTE equipment from the six discrete sites identified herein.

Station 1 – 1 John Deere Place, Moline, IL 61265

Radius of Operation	Not to exceed 20 kilometers from geographic centerpoint (Radius applicable to all STA operations)
Geographic Centerpoint (Lat / Long. NAD 83)	41° 28' 35" N
	90° 25' 32" W
Elevation (Meters)	185 (@ centerpoint coordinates)

Station 2 – 2915 W. 3rd Street, Coal Valley, IL 61240

Radius of Operation	Not to exceed 20 kilometers from geographic centerpoint (Radius applicable to all STA operations)
Geographic Centerpoint (Lat / Long. NAD 83)	41° 25' 02" N
	90° 27' 55" W
Elevation (Meters)	221 (@ centerpoint coordinates)

Station 3 – 909 River Drive, Moline, IL 61265

Radius of Operation	Not to exceed 20 kilometers from geographic centerpoint (Radius applicable to all STA operations)
Geographic Centerpoint (Lat / Long. NAD 83)	41° 30' 29" N
	90° 31' 34" W
Elevation (Meters)	182 (@ centerpoint coordinates)

Station 4 – 13th Avenue, East Moline, IL 61244

Radius of Operation	Not to exceed 20 kilometers from geographic centerpoint (Radius applicable to all STA operations)
Geographic Centerpoint (Lat / Long. NAD 83)	41° 31' 36" N
	90° 26' 10" W
Elevation (Meters)	186 (@ centerpoint coordinates)

Station 5 – 11320 NE 64th Street, Bondurant, IA 50035

Radius of Operation	Not to exceed 20 kilometers from geographic centerpoint (Radius applicable to all STA operations)
Geographic Centerpoint (Lat / Long, NAD 83)	41° 45' 50" N
	93° 29' 01" W
Elevation (Meters)	295 (@ centerpoint coordinates)

Station 6 – 1175 E 90th Street, Davenport IA 52807

Radius of Operation	Not to exceed 20 kilometers from geographic centerpoint (Radius applicable to all STA operations)
Geographic Centerpoint (Lat / Long, NAD 83)	41° 36' 08" N
	90° 33' 05" W
Elevation (Meters)	224 (@ centerpoint coordinates)

Stations 1-6 / Transmitter 1 – JD Prototype Small Cell 1

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 3 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	2.0 W	48.55

Antenna Details	[REDACTED]
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Type	[REDACTED]
Quantity	Not to exceed 3
Gain	16 dBi (@midband)
Beam Width at Half-Power Point	90°
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

Stations 1-6 / Transmitter 1(a) – JD Prototype Small Cell 1(a) [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 2 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	500 mW	0.61

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	3 dBi (@midband)
Beam Width at Half-Power Point	NA (Omni antennal)
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

Vertical Plane	
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Stations 1-6 / Transmitter 2 – JD Prototype Small Cell 2 [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 3 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	2.0 W	48.55

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	16 dBi (@midband)
Beam Width at Half-Power Point	90°
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

Stations 1-6 / Transmitter 2(a) – JD Prototype Small Cell 2(a) [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 2 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	500 mW	0.61

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	3 dBi (@midband)
Beam Width at Half-Power Point	NA (Omni antennal)
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

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Stations 1-6 / Transmitter 3 – JD Prototype Small Cell 3 [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 3 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	2.0 W	48.55

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	16 dBi (@midband)
Beam Width at Half-Power Point	90°
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

Stations 1-6 / Transmitter 3(a) – JD Prototype Small Cell 3(a) [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 2 units

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Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	500 mW	0.61

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	3 dBi (@midband)
Beam Width at Half-Power Point	NA (Omni antennal)
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

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Stations 1-6 / Transmitter 4 – JD Prototype CPE 1 [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 2 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range /	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)

Tolerance					
	Digital	W7W	Maximum 20.0	500 mW	0.38

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	1 dBi (@midband)
Beam Width at Half-Power Point	NA (Omni antennal)
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

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Stations 1-6 / Transmitter 5 – JD Prototype CPE 2 [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 2 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	500 mW	0.38

Antenna Details	
Type	[REDACTED]

Quantity	Not to exceed 3
Gain	1 dBi (@midband)
Beam Width at Half-Power Point	NA (Omni antennal)
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

Stations 1-6 / Transmitter 6 – JD Prototype CPE 3 [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 2 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	500 mW	0.38

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	1 dBi (@midband)
Beam Width at Half-Power Point	NA (Omni antennal)
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

Stations 1-6 / Transmitter 7 – JD Prototype CPE 4 [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 2 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (dBW)
	Digital	W7W	Maximum 20.0	500 mW	0.38

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	1 dBi (@midband)
Beam Width at Half-Power Point	NA (Omni antennal)
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA

Stations 1-6 / Transmitter 8 – JD Prototype CPE 5 [REDACTED]

Device Manufacturer & Model:	[REDACTED]
Number of Transmitters:	Not to exceed 2 units

Frequency Range / Tolerance	High (MHz)	Low (MHz)
	3700.0000	3550.0000

Frequency Range / Tolerance	Modulation	Emission Designator	Bandwidth (MHz)	Power Out (Watts)	ERP (Watts)
	Digital	W7W	Maximum 20.0	500 mW	0.38

Antenna Details	
Type	[REDACTED]
Quantity	Not to exceed 3
Gain	1 dBi (@midband)
Beam Width at Half-Power Point	NA (Omni antennal)
Orientation in Horizontal Plane	NA
Orientation in Vertical Plane	NA