
Annexe 1 de Volume 2

Nombre de structures permanentes touchées par options

Source: Google, Digital Globe, photo prise le 6 mars 2018



9520300.000000

9520400.000000

9520500.000000

9520600.000000

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536040.000000

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536160.000000

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9520300.000000

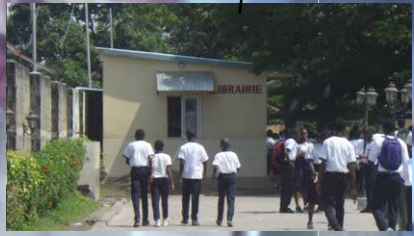
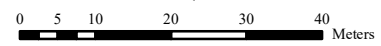
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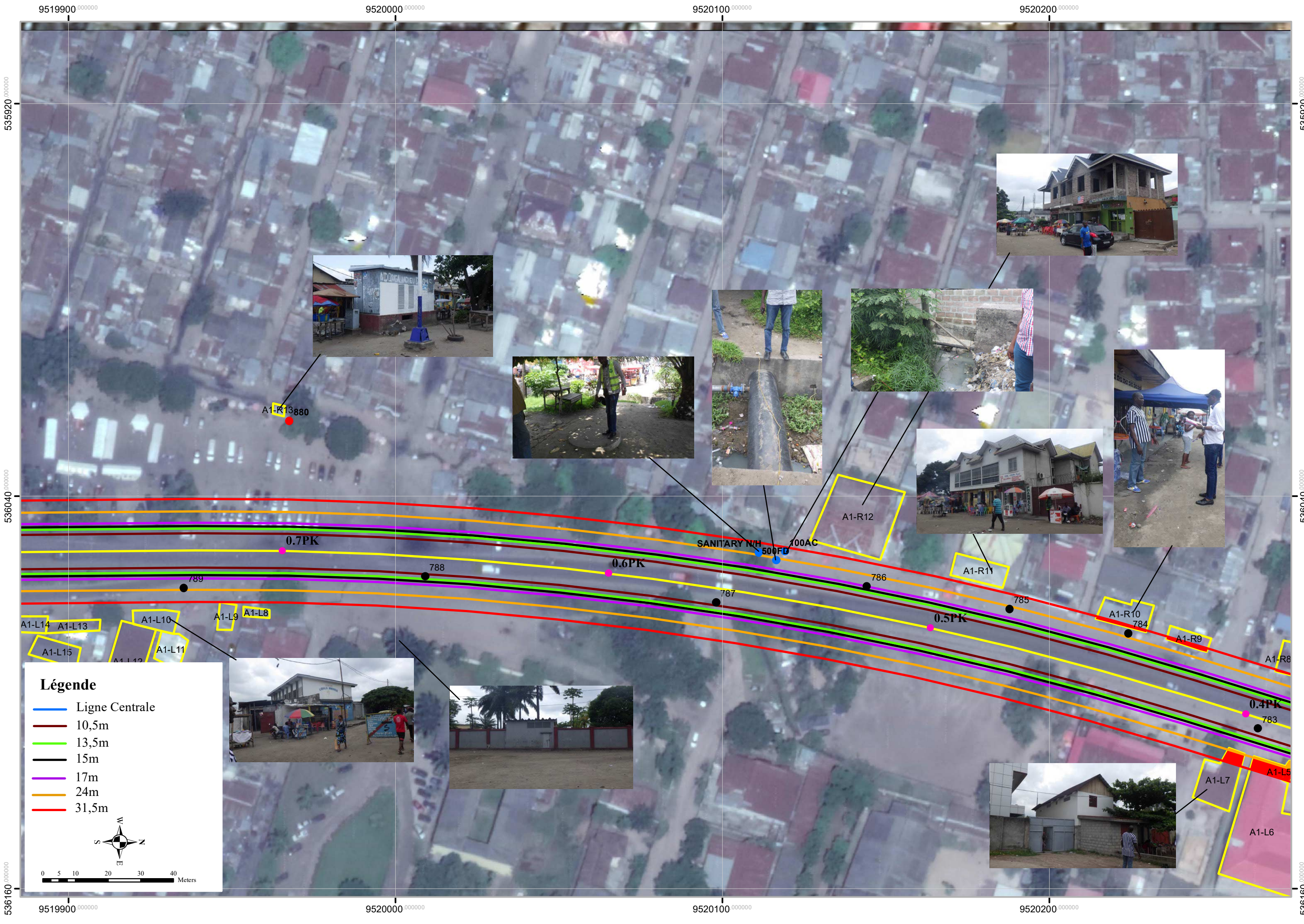
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Légende

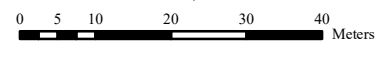
- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m





Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m



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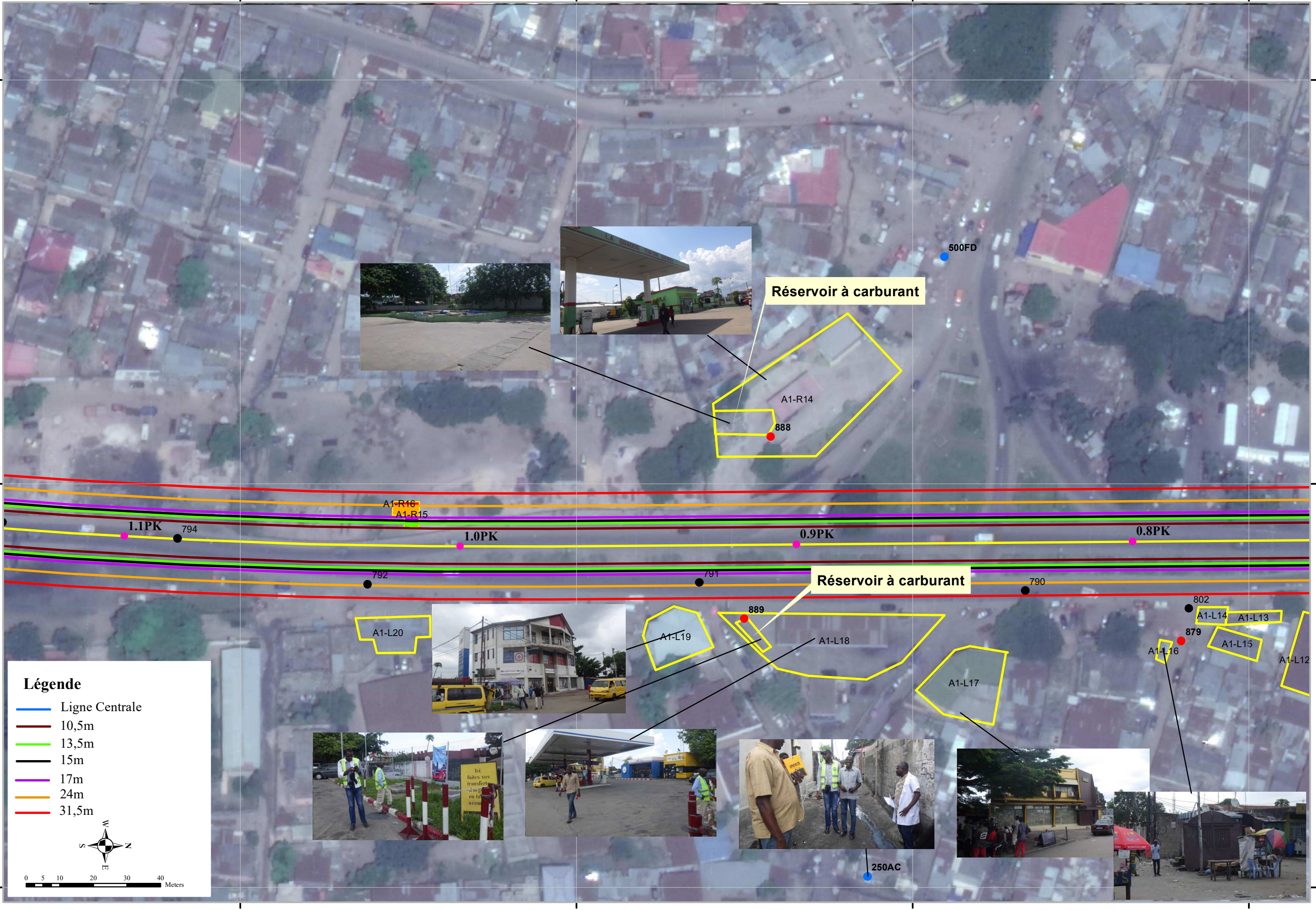
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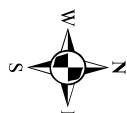
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536160000000



Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m



0 5 10 20 30 40 Meters

Réservoir à carburant

Réservoir à carburant

A1-R14

888

500FD

A1-R16

A1-R15

1.1PK

794

1.0PK

792

791

0.9PK

0.8PK

790

A1-L20

A1-L19

889

A1-L18

A1-L17

802

A1-L14

A1-L13

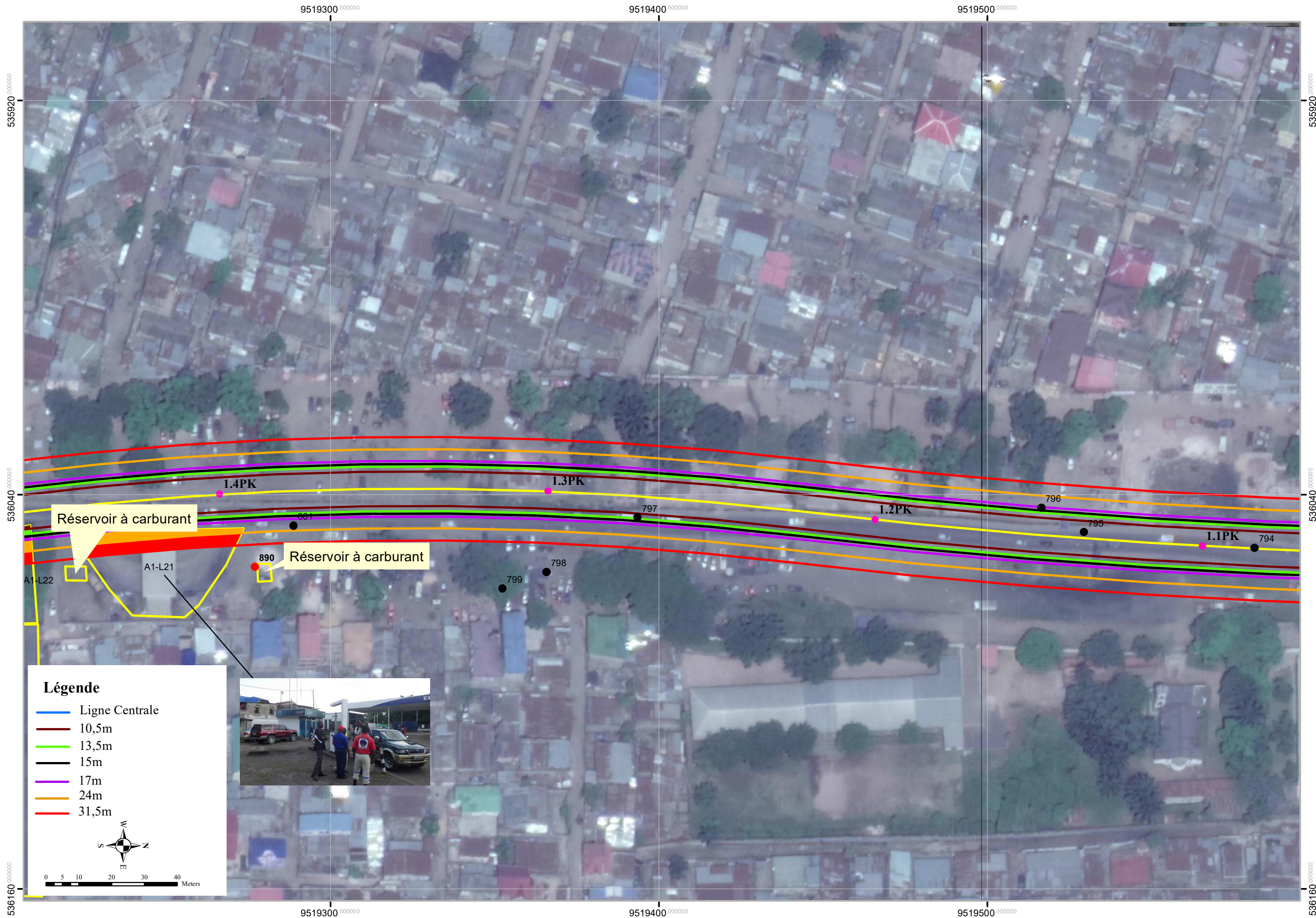
879

A1-L16

A1-L15

A1-L12

250AC



535920.000000

536040.000000

536160.000000

9519300.000000

9519400.000000

9519500.000000

535920.000000

536040.000000

536160.000000

Réservoir à carburant

Réservoir à carburant

1.4PK

1.3PK

1.2PK

1.1PK

881

797

796

795

794

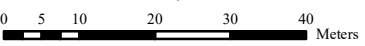
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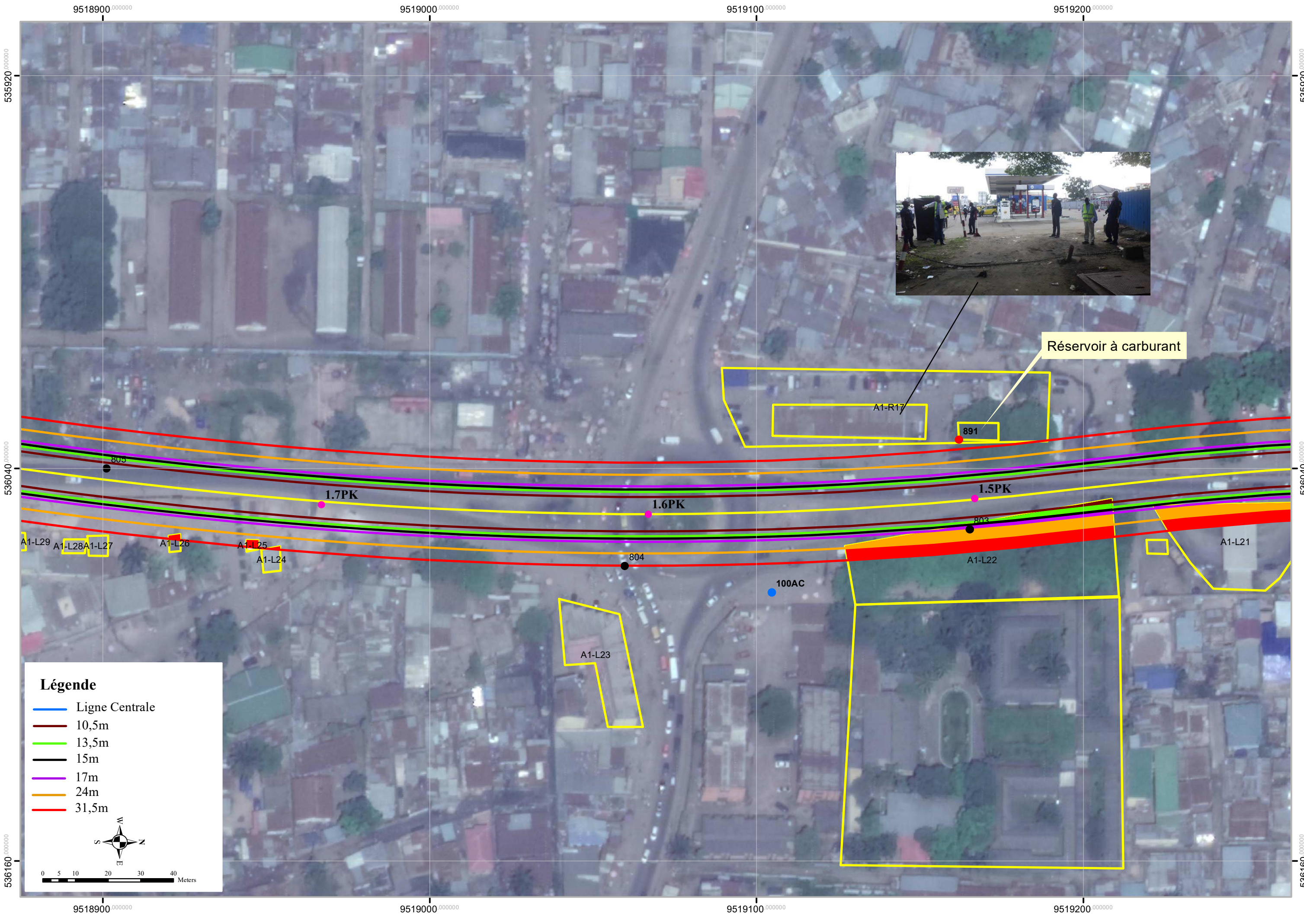
799

798

Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m





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9519000.000000

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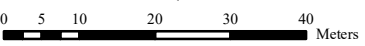
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9519100.000000

9519200.000000

- Légende**
- Ligne Centrale
 - 10,5m
 - 13,5m
 - 15m
 - 17m
 - 24m
 - 31,5m



Réservoir à carburant

A1-R17

891

1.7PK

1.6PK

1.5PK

A1-L29

A1-L28

A1-L27

A1-L26

A1-L25

A1-L24

804

100AC

803

A1-L22

A1-L21

A1-L23

9518600 000000

9518700 000000

9518800 000000

9518900 000000

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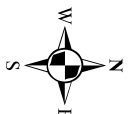
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Légende

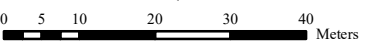
- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m



0 5 10 20 30 40 Meters



- Légende**
- Ligne Centrale
 - 10,5m
 - 13,5m
 - 15m
 - 17m
 - 24m
 - 31,5m





Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m

0 5 10 20 30 40 Meters

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E

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951790 000000

951800 000000

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951790 000000

951800 000000

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535680 000000

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535680 000000

2.9PK

828

827

826

2.8PK

2.7PK

825

824

2.6PK

823

822

A1-L44

A1-L43

A1-L42

A1-R22

2.5PK

100W/P

951750 000000 951760 000000 951770 000000 951780 000000

535680 000000

535680 000000

535800 000000

535800 000000

951750 000000 951760 000000 951770 000000 951780 000000



Réservoir à carburant



Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m

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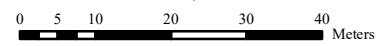
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Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m



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Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m

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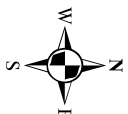
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Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m



0 5 10 20 30 40 Meters

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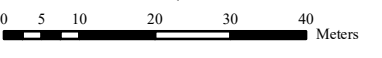
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- Légende**
- Ligne Centrale
 - 10,5m
 - 13,5m
 - 15m
 - 17m
 - 24m
 - 31,5m



883

850

849

848

847

846

4,5KP

4,4KP

4,3KP

4,2KP

A2-R75
A2-R74
A2-R73
A2-R72
A2-R71
A2-R70
A2-R68
A2-R69
A2-R67
A2-R66
A2-R65
A2-R64
A2-R63
A2-R62
A2-R61
A2-R60
A2-R59
A2-R58
A2-R57
A2-R56
A2-R55
A2-R54
A2-R53
A2-R52
A2-R51
A2-R50
A2-R49
A2-R48
A2-R47
A2-R46
A2-R45
A2-R44
A2-R43
A2-R42
A2-R41
A2-L99
A2-L98
A2-L95
A2-L94
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A2-L97
A2-L96
A2-L92
A2-L91
A2-L90
A2-L89
A2-L88
A2-L87
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A2-L76

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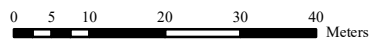
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Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m



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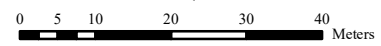
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Légende

-  Ligne Centrale
-  10,5m
-  13,5m
-  15m
-  17m
-  24m
-  31,5m



9515400,000000

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9515700,000000

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534960,000000

535080,000000

535080,000000



Légende

- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m



0 5 10 20 30 40 Meters

9515400,000000

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9515700,000000



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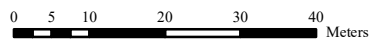
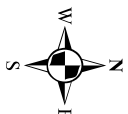
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Légende

-  Ligne Centrale
-  10,5m
-  13,5m
-  15m
-  17m
-  24m
-  31,5m



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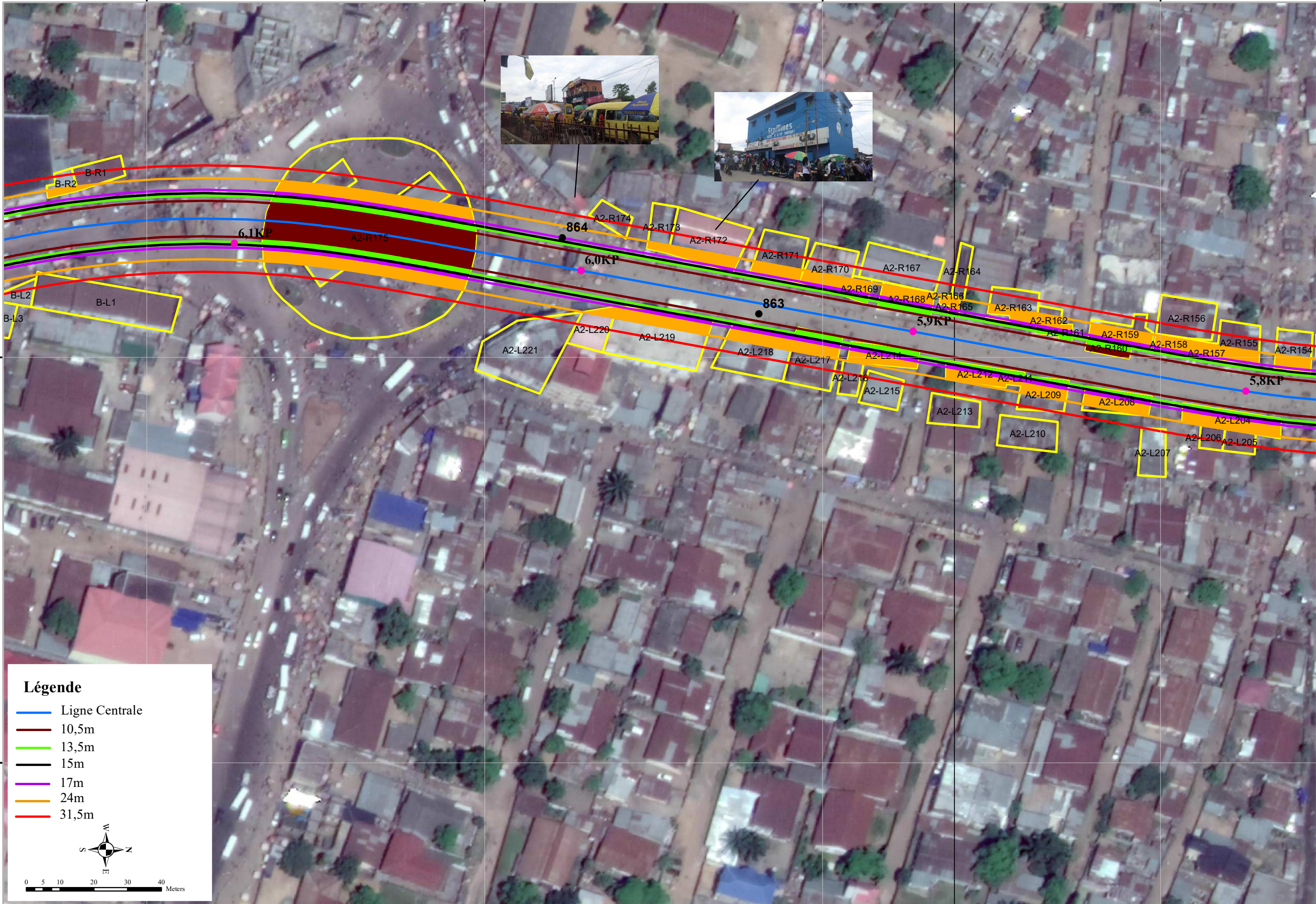
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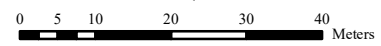
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Légende

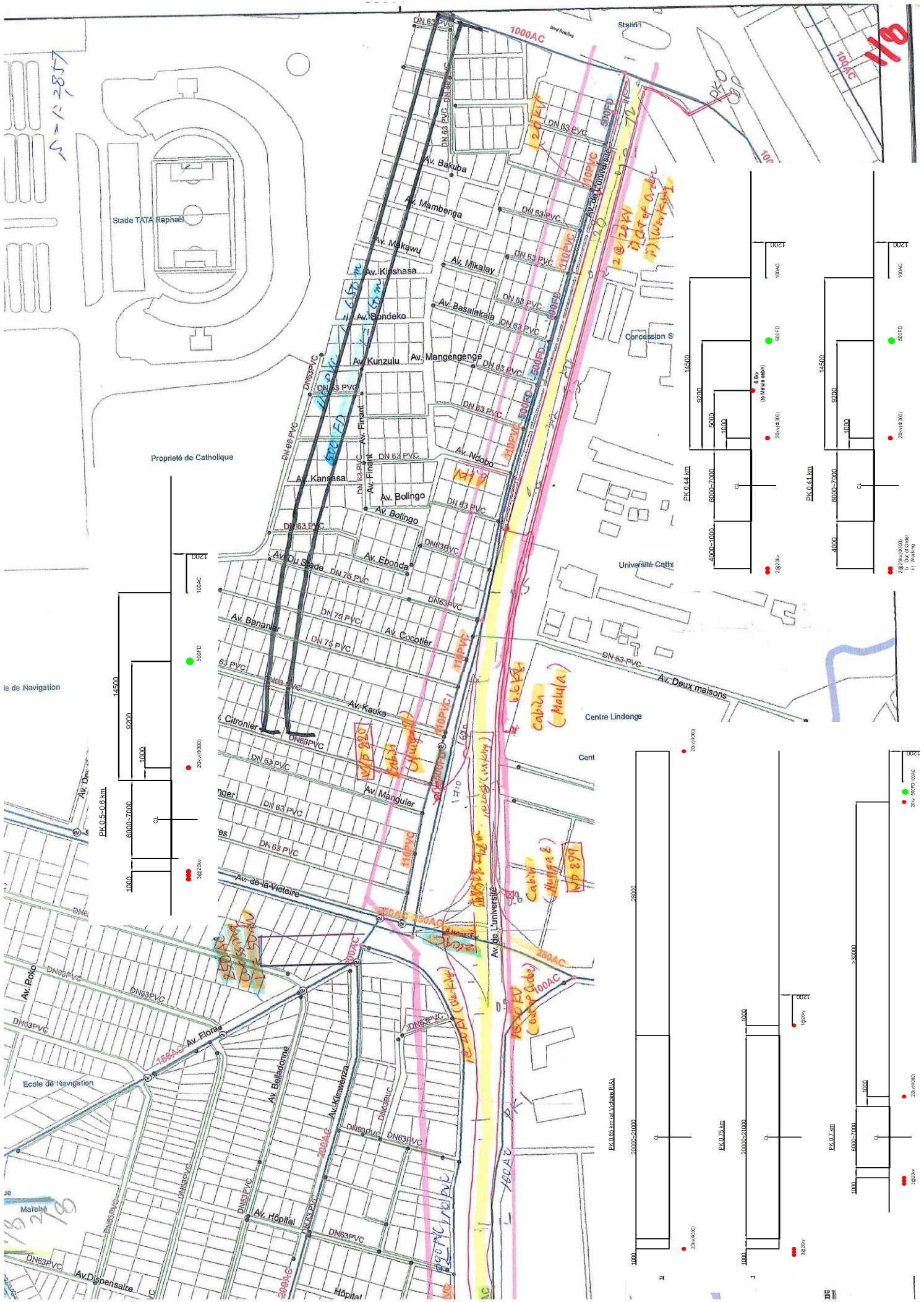
- Ligne Centrale
- 10,5m
- 13,5m
- 15m
- 17m
- 24m
- 31,5m



Annexe 2 de Volume 2

Position des utilités souterraines

Source: Résultat de l'enquête par interview avec la SNEL et la RESIDESO, 2018



118

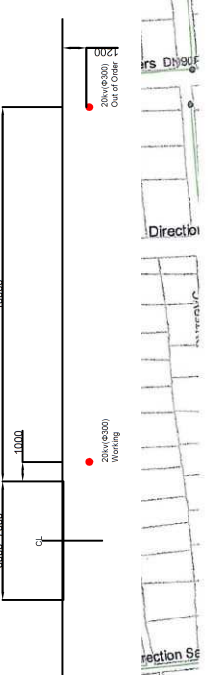
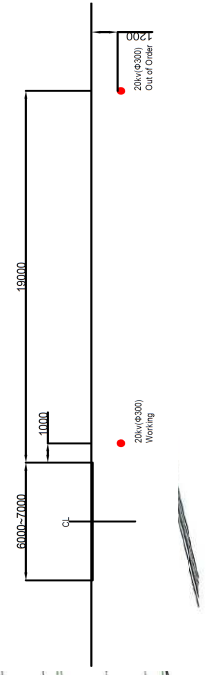
1587

le de Navigation

1587



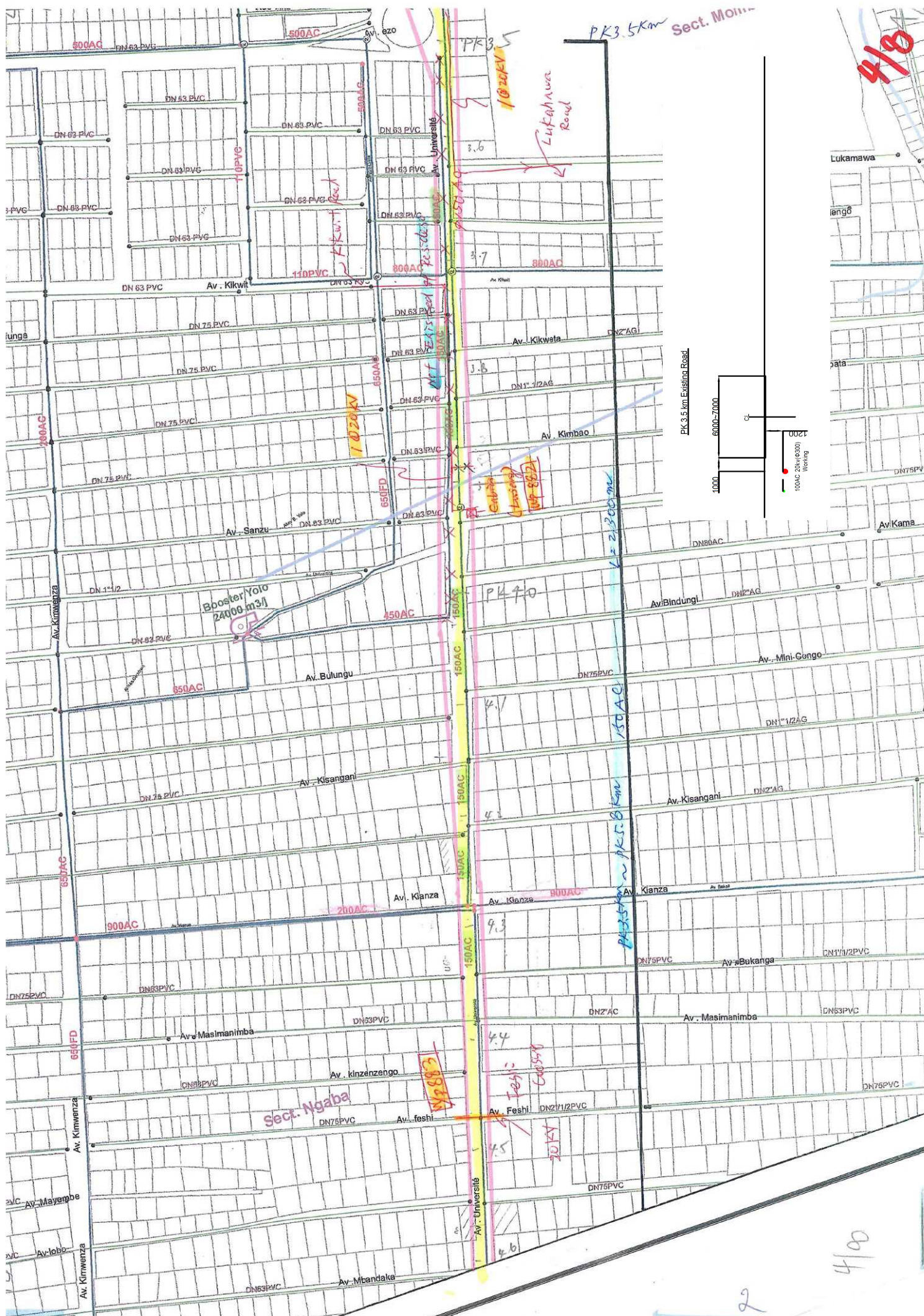
3/8



PK 3.2 km Existing Road.

PK 2.3 km Existing Road.

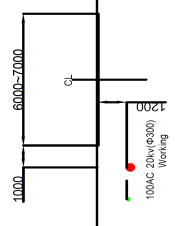
Ecole Agricole



4/8



PK 3.5 km Existing Road



4/9

2

Annexe 3 de Volume 2

Données pluviométriques

Source: METELSAT, 2019

STATION DE KINSHASA - NDJILI

Longitude : 15° 26' E

Latitude : 04° 23' S

Altitude : 311 m

Indicatif : 64210

ELEMENT: Quantité totale des pluies en mm

Années	J	F	M	A	M	J	J	A	S	O	N	D
1993	223.0	197.1	251.2	206.8	155.8	1.6	0.0	0.0	35.2	199.1	295.3	209.7
1994	43.0	78.0	258.5	98.8	246.8	0.0	0.0	62.2	43.9	238.7	316.0	196.4
1995	153.0	59.0	88.6	335.5	185.9	2.4	0.0	59.8	53.2	116.0	303.2	157.1
1996	233.8	155.8	248.3	209.9	248.8	0.0	0.0	0.0	79.0	44.0	131.1	95.0
1997	229.5	105.1	312.6	255.7	37.3	4.0	0.0	8.6	1.6	291.8	352.5	365.4
1998	292.6	141.0	198.2	411.8	45.0	40.0	0.0	2.4	47.2	114.6	182.8	107.6
1999	245.5	95.4	120.2	168.4	238.2	44.0	5.6	4.4	58.0	55.0	350.6	292.2
2000	152.3	118.4	75.8	256.2	207.2	0.0	0.0	0.0	29.9	107.8	169.6	170.6
2001	91.0	255.6	302.4	199.8	313.4	4.6	0.0	0.0	0.0	194.2	143.6	124.1
2002	174.0	208.4	88.8	138.9	142.0	30.0	0.2	0.0	105.2	139.3	198.1	433.0
2003	174.0	242.2	130.2	258.0	121.9	12.0	4.6	0.0	24.0	112.0	285.6	125.7
2004	120.0	139.4	337.5	131.2	2.4	3.6	3.0	5.5	20.2	208.3	199.5	208.6
2005	111.3	50.0	216.1	74.5	68.5	16.8	0.3	0.0	16.6	190.4	233.0	336.0
2006	226.6	86.8	278.3	284.4	119.2	2.0	0.0	2.8	15.2	169.0	523.4	202.5
2007	140.8	237.2	163.1	221.0	144.2	0.8	0.0	32.6	35.1	262.3	167.8	132.8
2008	113.9	30.6	162.0	178.7	262.7	0.0	0.0	0.2	24.5	226.1	162.4	125.0
2009	59.9	160.5	154.2	97.9	137.6	10.0	0.0		28.6	93.7	132.5	315.2
2010	94.6	75.4	275.3	257.1	46.0	3.9	0.0	0.0	33.3	212.2	228.2	209.8
2011	13.0	60.9	87.6	236.0	230.6	0.0	0.0	0	66.8	102.2	406.9	168.2
2012	50.6	105.3	270.9	141.3	136.6	0.0	0.0	6.1	55.4	121.1	299.7	175.0
2013	114.5	250.3	225.1	254.7	172.8	0.0	0.0	0.0	22.2	188.6	330.8	367.4
2014	224.6	12.8	252.3	125.1	134.0	0.0	3.6	0.4	22.9	112.2	244.3	80.2
2015	115.4	241.0	211.6	117.8	147.1		0.0	0.0	21.2	45.9		289.9
2016	98.9	169.2	258.7	375.2	78.0	19.1	0.0	60.8	26.7	159.8	504.9	354.4
2017	282.5	251.7	160.4	329.5	341.6	3.3	0.0	0.0	72.5	177.2	490.6	344.1
2018	405.7	343.6										
Average	160.9	148.9	205.1	214.6	158.5	8.3	0.7	10.2	37.5	155.3	277.2	223.4
Deviation Standard	90.4	85.3	77.6	89.5	87.4	12.8	1.6	20.7	24.8	66.5	117.1	101.8

Source: Metelsat

STATION DE KINSHASA - BINZA

Longitude : 15° 15' E

Latitude : 04° 22' S

Altitude : 445 m

Indicatif : 64220

ELEMENT: Quantité totale des pluies en mm

Années	J	F	M	A	M	J	J	A	S	O	N	D
1993	295.2	127.6	199.2	152.4	137.6	0.5	0.0	0.0	15.3	241.9	162.2	132.4
1994	14.1	61.9	202.9	190.8	116.3	0.0	0.0	39.0	16.8	236.8	345.0	280.5
1995	145.7	131.5	210.8	119.3	269.7	0.0	0.0	56.2	73.8	120.7	268.7	182.0
1996	154.7	74.8	248.6	179.8	264.9	0.2	0.0	0.0	20.0	69.4	118.8	115.6
1997	220.8	88.3	243.5	220.3	108.1	0.0	0.0	2.8	4.3	275.4	273.1	252.8
1998	330.4	168.8	388.1	435.9	75.8	19.8	0.0	0.0	61.7	129.9	206.0	203.9
1999	182.8	126.3	229.0	133.1	146.0	21.6	1.4	1.1	54.2	98.9	325.6	282.4
2000	234.8	298.8	61.9	222.4	94.7	0.0	0.0	0.0	81.2	137.4	271.4	222.5
2001	103.1	130.8	332.4	156.6	543.3	2.6	1.1	0.0	28.8	73.2	162.4	112.4
2002	209.0	257.8	74.3	225.1	215.4	44.4	4.7	0.8	73.4	117.4	311.8	298.1
2003	318.5	201.8	112.7	188.7	21.8	3.0	1.0	0.0	33.6	129.0	202.2	108.9
2004	172.2	205.8	242.4	152.0	1.4	0.4	0.1	8.4	10.2	143.3	145.1	188.7
2005	92.4	57.2	144.4	171.4	86.0	2.7	0.0	0.0	25.4	126.9	257.8	248.2
2006	110.5	137.1	239.2	260.8	107.1	3.2	0.0	10.6	19.1	353.2	334.2	283.8
2007	159.9	125.3	245.0	271.7	102.2	0.0	0.0	56.4	29.2	371.7	220.9	102.2
2008	101.5	207.9	164.0	139.8	150.8	0.0	0.0	1.6	15.0	255.8	375.4	171.2
2009	203.3	204.0	108.7	266.9	199.7	0.0	0.0	2.6	17.4	92.5	235.8	280.2
2010	85.2	72.4	260.3	250.8	45.3	0.0	0.0	0.0	15.8	103.0	225.1	232.8
2011	286.4	98.0	31.1	380.9	187.1	0.0	0.0	0.0	73.9	318.1	535.1	227.4
2012	9.6	114.2	101.7	119.4	184.0	0.0	0.0	4.2	54.6	229.1	274.0	292.8
2013	204.1	212.0	216.7	385.5	249.2	0.0	0.0	0.0	25.8	180.7	262.4	339.0
2014	197.8	33.8	182.4	196.8	214.6	0.0	1.2	6.8	20.9	172.8	245.4	118.4
2015	48.8	87.0	189.9	192.7	97.7	0.0	0.0	0.0	13.2	74.4	389.3	351.1
2016	100.2	251.6	419.0	198.1	204.6	2.8	0.0	63.6	15.8	107.4	311.6	220.1
2017	153.2	237.5	55.7	167.0	226.8	21.2	0.0	0.0	56.4	103.4	148.5	382.8
2018	259.1	180.3	79.0	180.0	191.7	5.9	0.0	0.0				
Average	169.0	149.7	191.7	213.8	163.1	4.9	0.4	9.8	34.2	170.5	264.3	225.2
Deviation Standard	87.9	70.6	98.6	81.4	106.5	10.4	1.0	19.7	23.9	89.6	91.9	81.1

Source: Metelsat

STATION DE KINSHASA - NDOLO

Longitude : 15° 18' E

Latitude : 04° 19' S

Altitude : 279 m

Indicatif : 64211

ELEMENT: Quantité totale des pluies en mm

Années	J	F	M	A	M	J	J	A	S	O	N	D
1962	76.3	101.5	154.2	105.8	94.5	0.5	0.0	0.0	34.1	130.4	203.0	204.0
1963	242.9	307.1		261.9	90.1	4.0	26.6	0.0	18.3	52.0	433.5	224.9
1964	191.7	143.8	209.4	189.6	204.9	2.2	0.0	4.3	18.6		299.4	182.7
1965	129.7	60.4		188.7	92.6	4.1	0.0	3.9	51.7	69.1	121.6	114.9
1966		175.6	335.7	216.7	30.8	40.2	0.0	0.0				
1967					60.7					54.4		26.8
1968	77.8			79.5	102.3	0.0	0.0	0.0	16.3	27.4	541.4	82
1969	3.7				157.8	0.0	0.0	0.0	11.1	106.7		
1970		200.6						0.0	20.6	127.0	320.9	150.6
1971		78.7	138.0		95.7		0.0	0.0	31.2	126.2	194.6	306.3
1972	223.9	18.4	131.9	172.6	71.8	0.0	0.0	7.5	1.0	221.9	165.5	130.3
1973	226.6	71.5	140.0	272.6	315.9	0.0	0.2	0.0	53.8	85.6	452.8	153.1
1974	258.0	165.4	74.1	219.1	24.2	0.0	11.5	0.0	6.0	102.5	95.5	254.4
1975	121.4	134.8	236.2	89.6	113.7	4.5	0.0	0.0	23.2			222.6
1976	87.0	178.8	97.4	174.5	68.5	35.6	0.0	0.0	47.2	199.2	63.3	116.6
1977	136.5	61.9	303.2	140.7	162.3	0.0	0.0	0.0	25.8	45.1		80.9
1978	154.5	96.1	11.9	77.2	98.2	0.0	0.0	0.0	38.2	41.7	332.2	75.2
1979				48.2								
1980				116.1								
1981-83	not available											
1984			146.0	100.7	92.3	9.5	4.4	8.4	33.2			
1985												
1986	182.7	27.8	123.0	353.9	161.8	34.2		0.1	97.3	138.3	226.2	82.2
1987	50.0	168.2	257.6	255.8	56.7		3.3	3.5	35.5			
1988-98	not available											
1999			102.0	70.4	122.1		36.0	2.1	36.2	28.4	453.3	330.3
2000	246.2	170.0	19.7	144.9	141.6	0.0	0.0	0.0	53.7	123.1	195.0	194.6
2001	74.7	143.5	459.9	212.9	259.8	4.8	0.0	0.0				
2002					200.6	23.9	0.0	0.0	113.2		281.0	286.9
2003	171.7				68.2	7.3						
2004			257.1	84.8	6.6	0.8	0.6	1.4		217.8	242.9	
2005												
2006	144.6	132.0	240.7	264.0	103.6	0.4	0.0	3.5	11.5	262.2	231.1	207.7
2007	143.8		168.4	172.2	115.0	0.0	0.0	29.4	14.7	183.0	286	155.9
2008	89.2	101.8	92.9	126.2	161.5	0.0	0.0	3.8	43.3			
2009	214.1	196.0	168.2	371.0	250.3	0.1	0.0		31.1	46.2	197.8	175.7
2010	140.7	27.0	339.4	276.2	21.1	4.5	0.0	0.0	47.5			
2011	242.8	85.5			241.3	0.0	0.0	0.0	0.0	166.6		317.8
2012	28.3	71.4	140.9		24.1	0.0	0.0		46.4		21.1	222
2013				23.8	180.6	0.0	0.0	0.0	25.6		11.5	243.5
2014		62.6	187.7	185.8	119.4				16.5	190.6	199.8	54
2015	80.8	155.5	127.7	140.9	154.4	0.0	0.0				377.4	
2016	143.5	312.6	269.0	259.2	86.3	18.0	0.0	12.2	14.3	109.0	258.2	253.9
2017	134.7	0.0	17.0	172.1	246.5	2.6	0.0	0.0	119.4	117.7	215.4	244
2018	201.5	137.4	38.9	181.4	0.0	215.2	9.7	9.0	9.3	149.6	409.3	450.7
Average	145.5	123.7	172.0	174.2	121.0	12.5	2.7	2.4	35.4	120.1	253.0	191.2
Deviation Standard	69.6	75.9	106.3	84.5	76.4	38.1	7.8	5.6	28.9	65.3	133.9	95.8

Source: Metelsat