AWM4

Australian Imperial Force unit war diaries, 1914-18 War

Engineers

Item number: 14/10/37 Part 2

Title: Headquarters 4th Australian Divisional Engineers

15 - 21 - February 1919

AWM4-14/10/37PART2

[14/10/37, Part 2]

HQ 4th Aust Div Engrs

Feb 1919

Appendix 15

Headquarters,
4th Aust. Div. Engrs.
7th February, 1919.

Appendix No 15

C. E. AUSTRALIAN CORPS.

Reference your No.262/303 of 8th ult.
Report on reconnaissances in the sub-areas of FLORENNES, WAULSORT, DINANT and ROSEE, relative to Woods and Forests, Water Supply, Quarries, Factories, and Tramways, is forwarded herewith.

I. P. S. Muldoon
Lieut. & Adjt.
for C.R.E. 4th AUSTRALIAN DIVISION.

WD

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Headquarters,
4th Aust. Div. Engrs.
6th February, 1919.

Headquarters,
4th AUSTRALIAN DIVISION.

Reference your Q.31/394 of 22nd January. Herewith reports on reconnaissances in the sub-areas of FLORENNES, WAULSORT, DINANT and ROSEE, relative to Water Supply, Woods and Forests, Factories, Quarries, and Tramways.

Lieut. & Adjt.
for C.R.E. 4th AUSTRALIAN DIVISION.

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REPORT ON RECONNAISSANCES IN SUB-AREAS of :-

FLORENNES.
WAULSORT.
DINANT.
ROSEE.

6th February, 1919.

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WATER RECONNAISSANCE.

FLORENNES SUB-AREA.

Water supply of various villages.

Troops there or not.	Village.	Mark.
Yes.	MORIALME.	W.S. 1.
Yes (1 Bn.)	St. AUBIN.	W.S. 2.
Yes (2 Bns)	FLORENNES.	W.S. 3.
Yes (F.Coy)	CHAUNMONT.	W.S. 4.
No.	FRANCHIMONT.	W.S. 5.
No.	VILLERS le GAMBON.	W.S. 6.
No.	VORDECEE.	W.S. 7.
No.	SAMARAT.	W.S. 8.
Yes (1 Bn.)	PHILIPPVILLE.	W.S. 9.
No.	HEMPTINNE.	W.S.10.
No.	JAMAIGNE.	W.S.11.

No steps have been taken in any case to supplement the water supply which has been found sufficient for all these villages.

W A T E R R E C O N N A I S S A N C E.

FLORENNES SUB-AREA.

HEMPTINNE. Reference Mark on attached plan W.S.10.

There are no public wells.
There are numerous private wells all fitted with pumps.
Supply of water said to be plentiful at all times of year.
(population about 150).

JAMAIGNE. Reference Mark on attached plan W.S.11.

There are no public wells.
There are numerous private wells all fitted with pumps.
Supply of water said to be good at all times of the year.
(population about 150).

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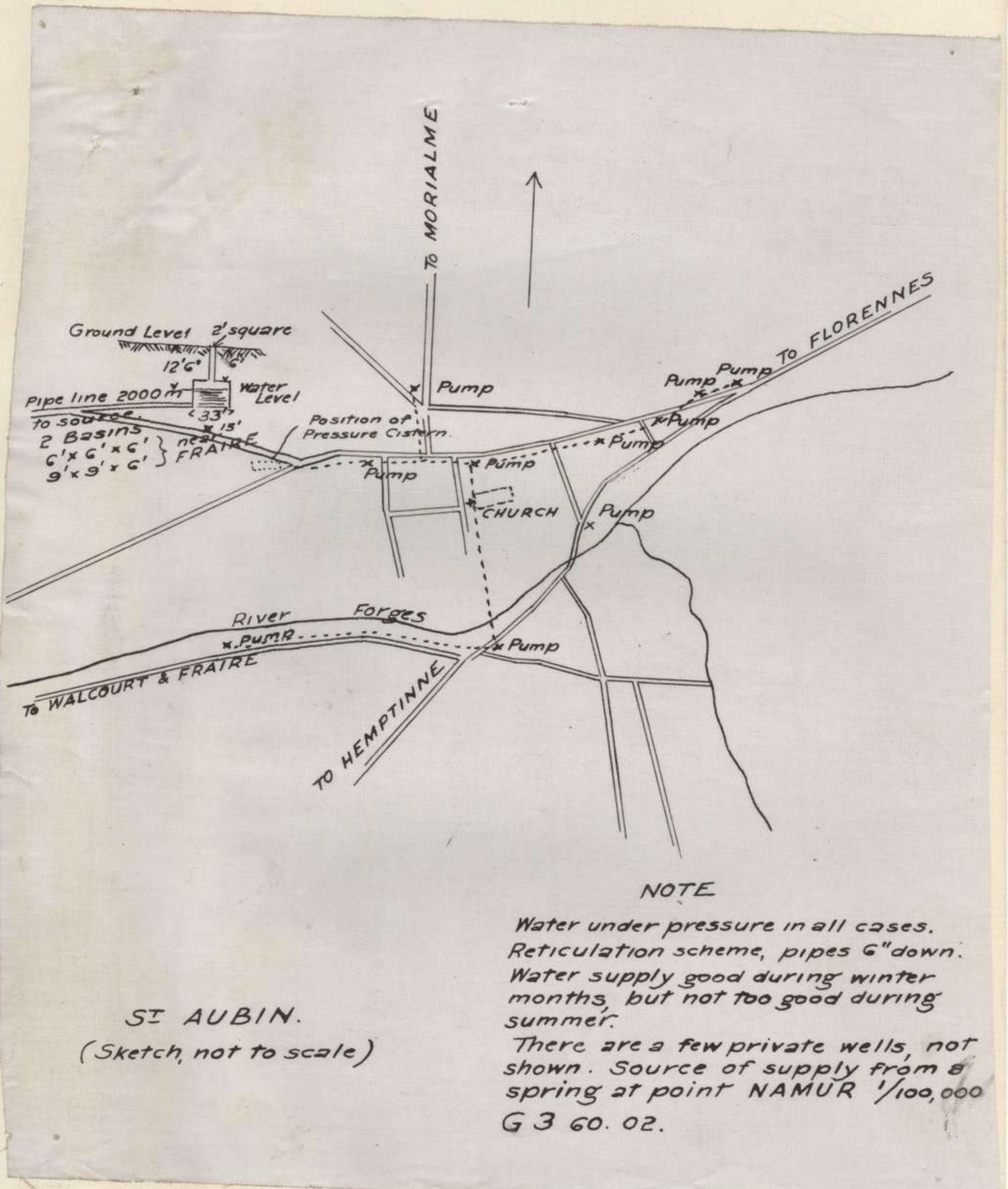

St AUBIN.

(Sketch, not to scale)

NOTE

Water under pressure in all cases.
Reticulation scheme, pipes 6" down.
Water supply good during winter months, but not too good during summer.
There are a few private wells, not shown. Source of supply from a spring at point NAMUR 1/100,000 G 3 60. 02.

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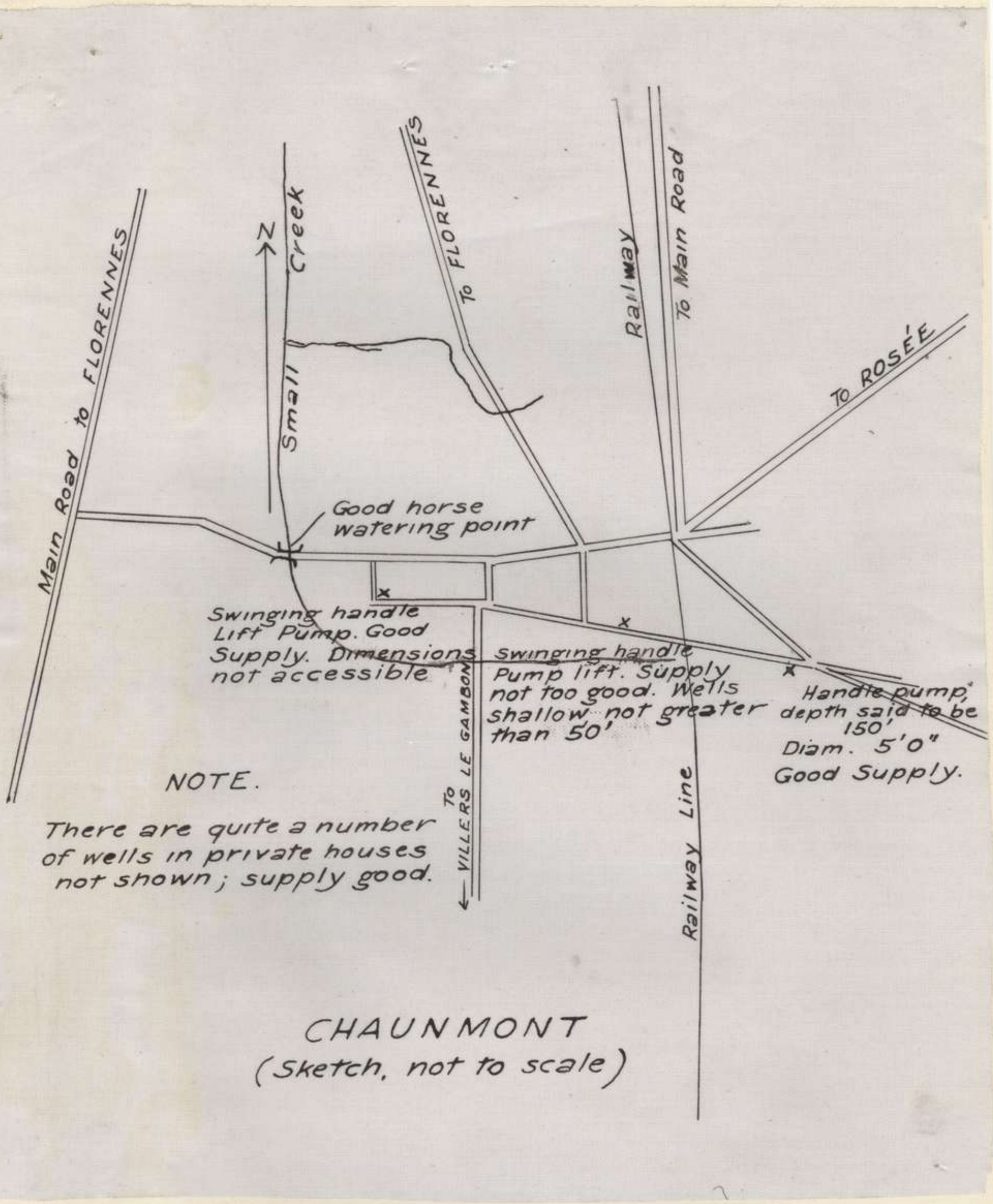
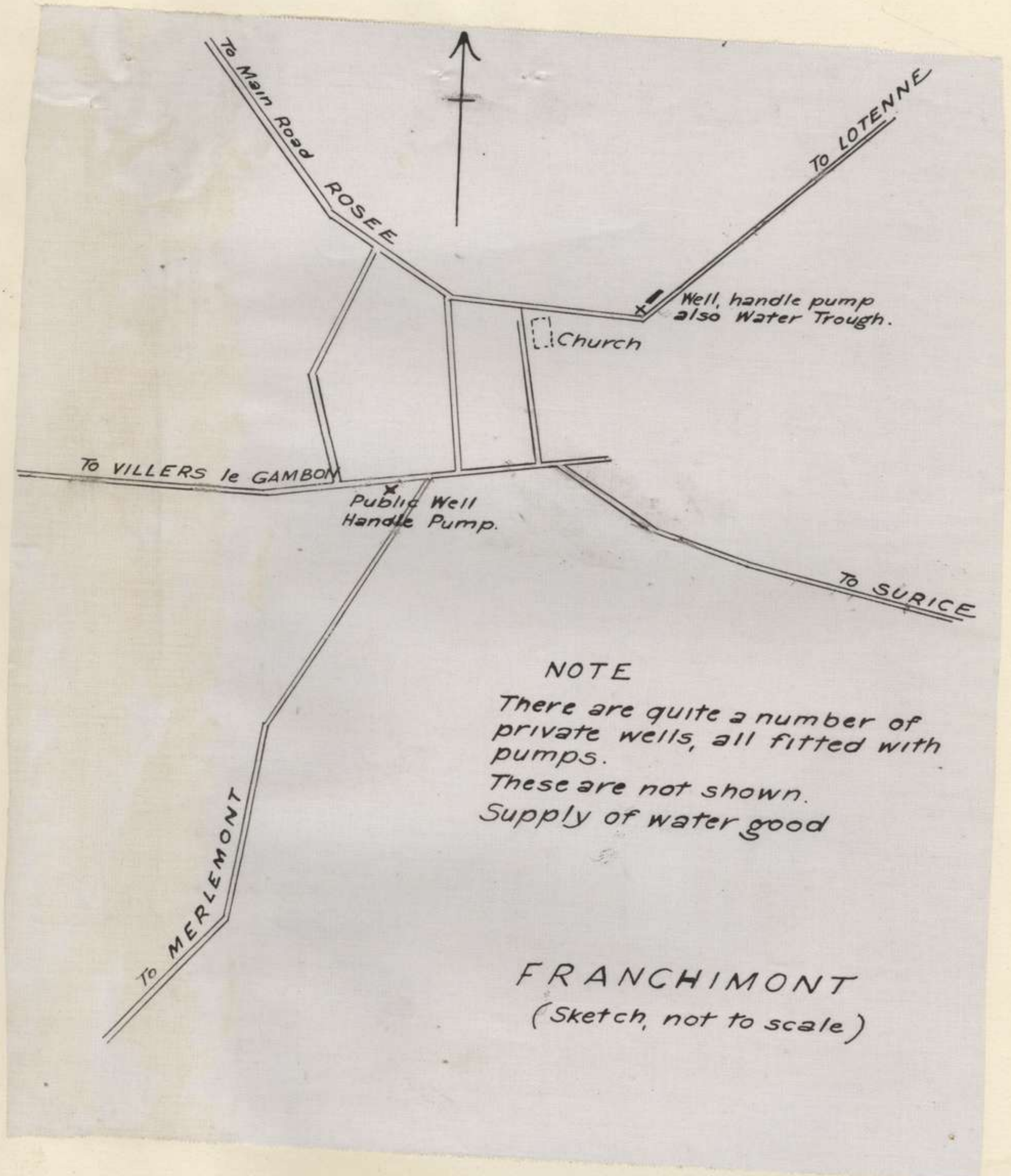


CHAUNMONT
(Sketch, not to scale)

193



NOTE

There are quite a number of private wells, all fitted with pumps.
These are not shown.
Supply of water good

FRANCHIMONT
(Sketch, not to scale)

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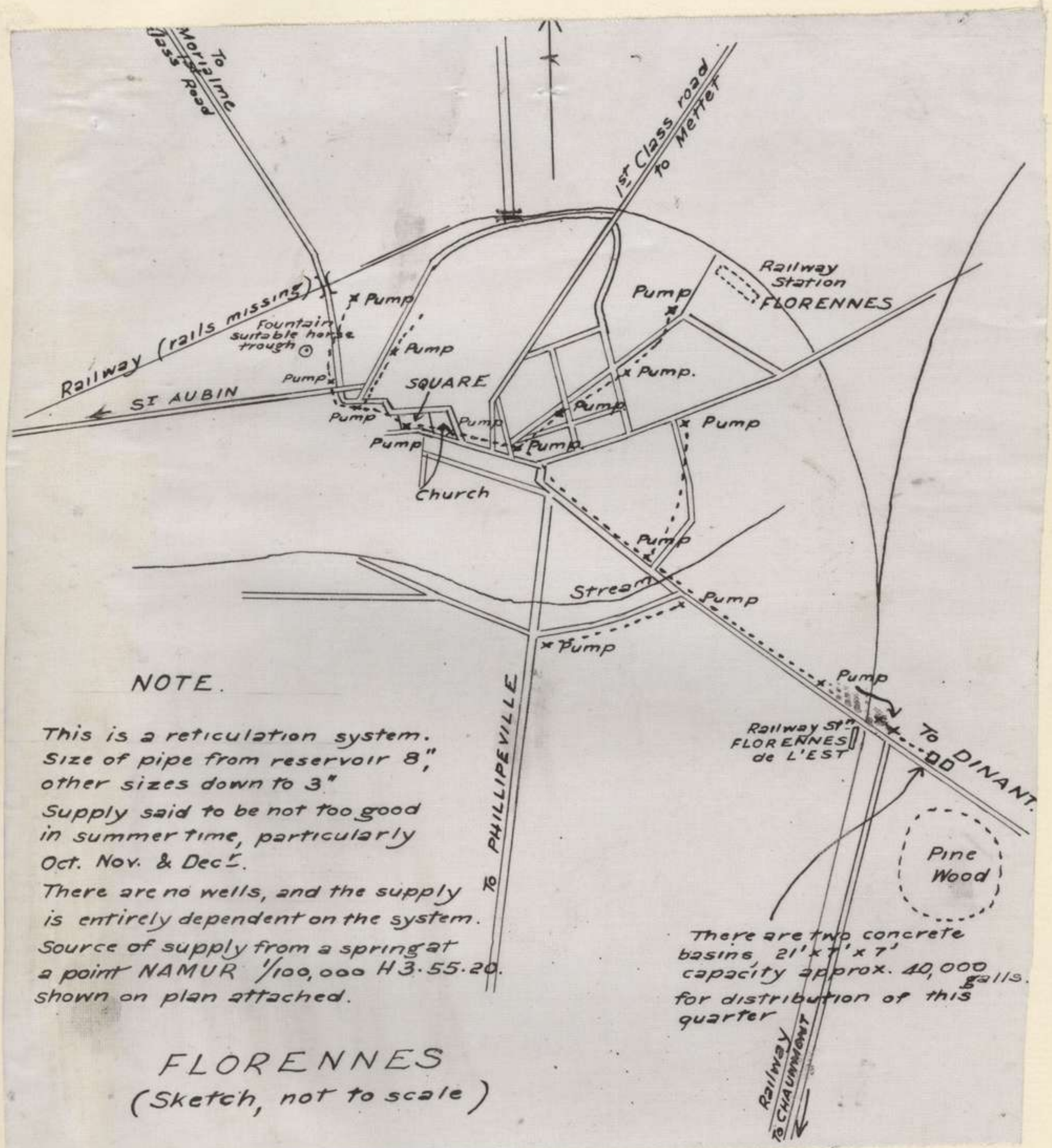

NOTE.

This is a reticulation system.
Size of pipe from reservoir 8",
other sizes down to 3"
Supply said to be not too good
in summer time, particularly
Oct. Nov. & Decr.
There are no wells, and the supply
is entirely dependent on the system.
Source of supply from a spring at
a point NAMUR 1/100,000 H3.55.20.
shown on plan attached.

There are two concrete
basins 21'x7'x7'
capacity approx. 40,000 gallons.
for distribution of this
quarter

FLORENNES
(Sketch, not to scale)

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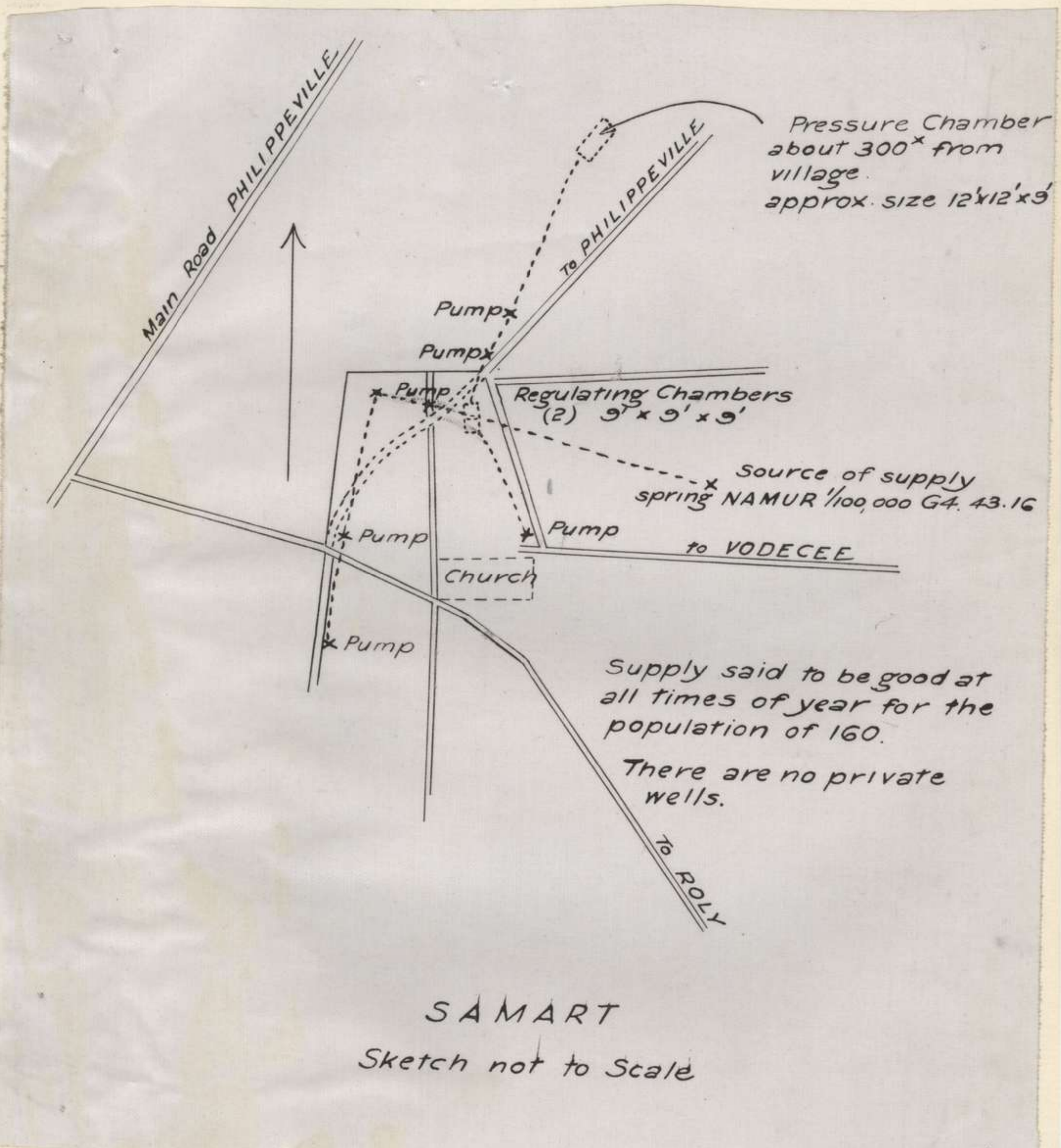
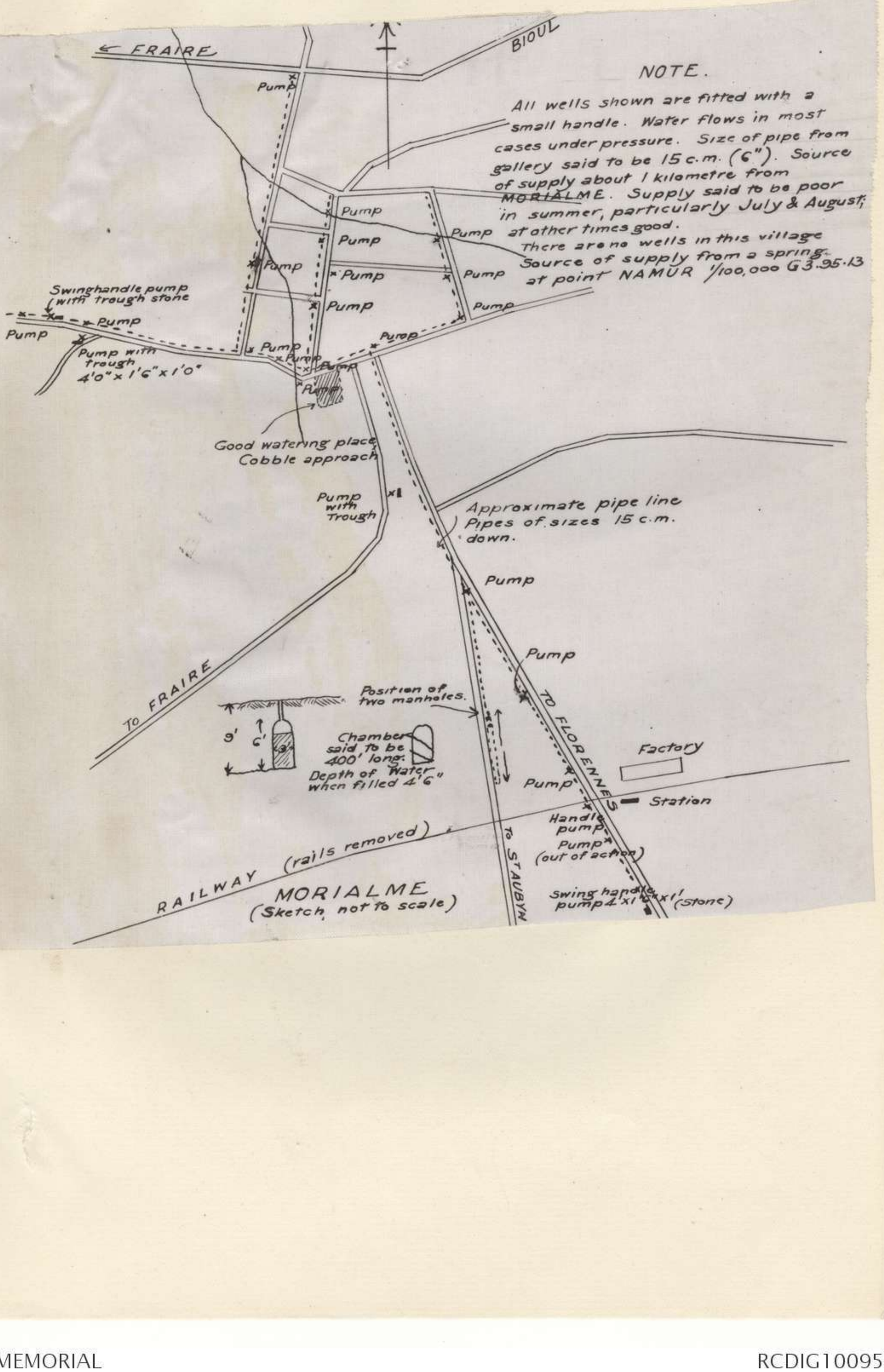


SAMART

Sketch not to Scale

193



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To Florennes

Detail of Chamber (approx.) Contains about 6000 galls filled.

Surface

Pressure Chamber Length 17'

5'

9'12'

7'

Steel Pipe

Pump

Pump & Stone Trough 4'x1'6"x1'

Pump

Pump

Church

Franchmont

Pump

Source of supply from a spring at a point NAMUR 1/100,000 H4 2.5.

Supply not plentiful and just about meets demand of population of about 200

There appears to be reason to anticipate plenty of water for wells of 50' or more.

TO PHILLIPEVILLE

Stream

TO GIVET

Pump

VODECEE

Not to scale.

Swing handle pump. Trough Stone 4'x1'6"x1' plentiful supply water

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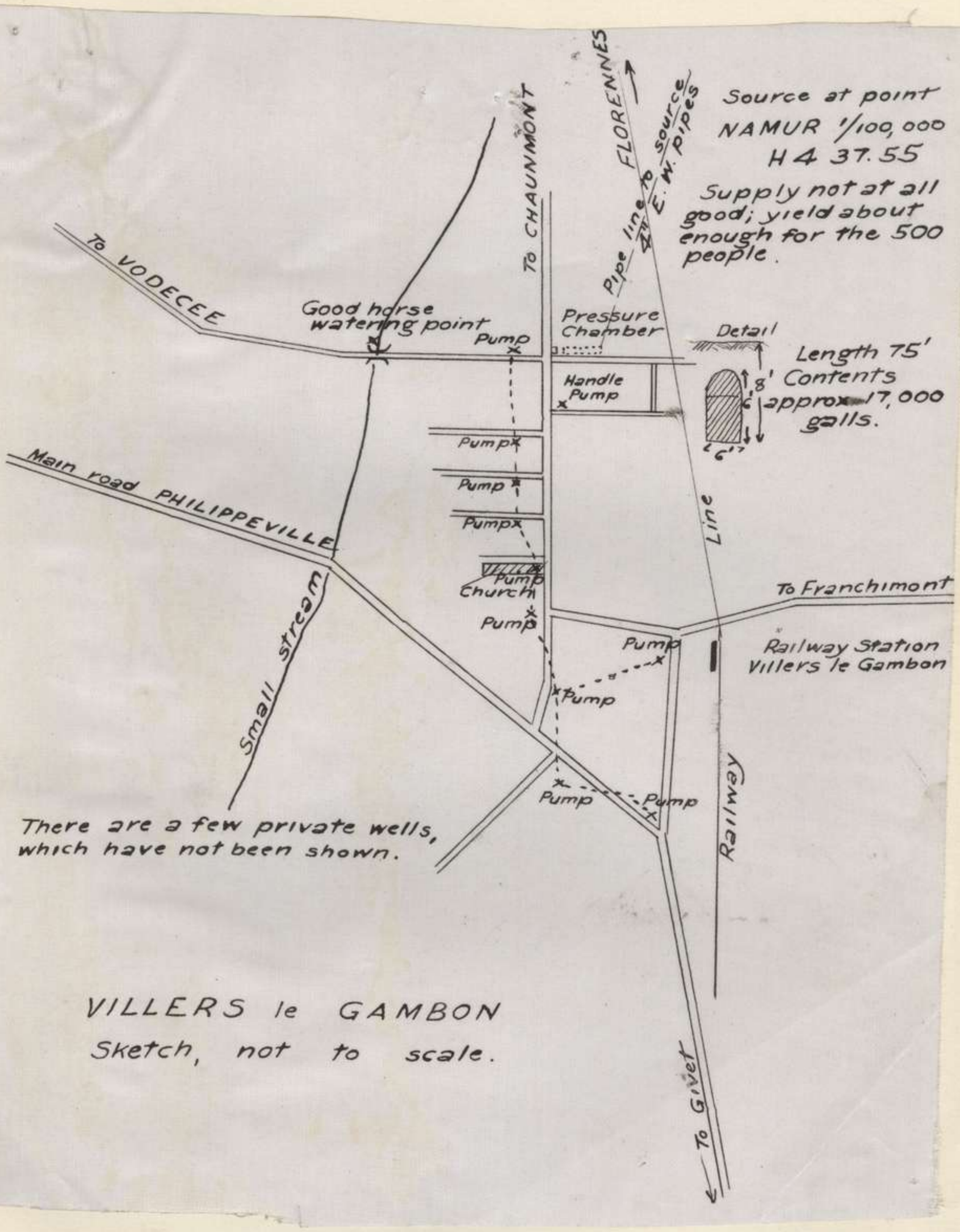
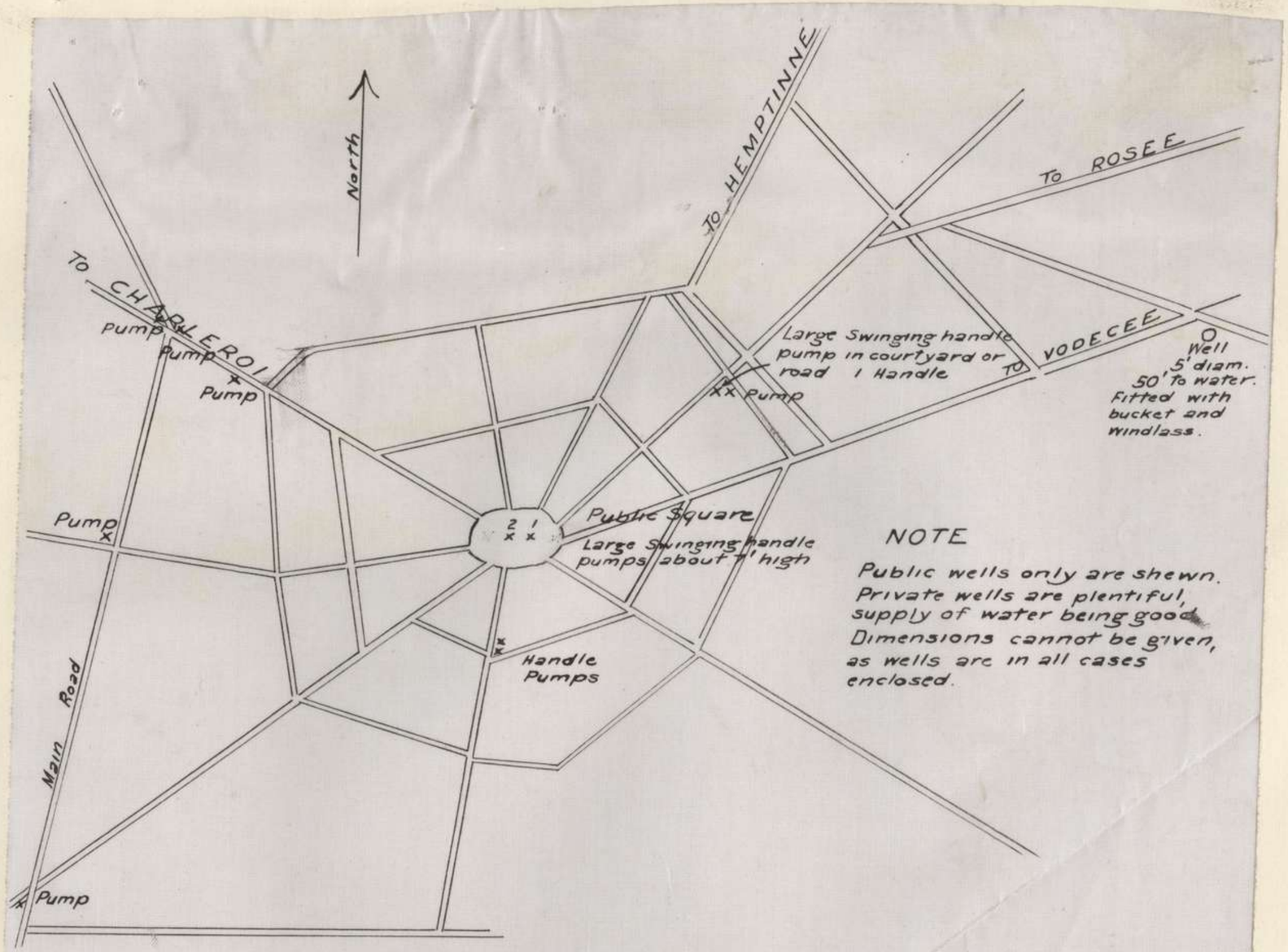


VILLERS le GAMBON
Sketch, not to scale.



NOTE

Public wells only are shewn. Private wells are plentiful, supply of water being good. Dimensions cannot be given, as wells are in all cases enclosed.

PHILIPPEVILLE

(Sketch not to scale)

WATER RECONNAISSANCE.

FLORENNES SUB-AREA.

Source of Supply. Location	Description.	Existing facilities for drawing water.	Use recommended	Remarks (including recommendations)
NAMUR 1/100,000.				
H. 4. 32. 79.	Enclosed	Large swinging handle pump	Drinking suitable)	Diam said to be 5 feet, depth 30 ft.
H. 4. 33. 78.	do	do.	do)	Supply good at all times for needs
			)	of pupulation of 300.
H. 4. 35. 78.	do	do.	do	CHAUNMONT.
H. 4. 40. 77.	do	Handle pump.	do	Diam said to be 5 ft, depth 150 ft. Supply of water good at all times.
H. 4. 53. 83.	do	Weighted handle pump erected by Germans.	do	Well adjacent to lake, possibly unlimited supply.
H. 4. 67. 28.	do	Handle pump.	do	Supply said to be good at all times.
H. 4. 68. 30.	do	Handle pump (permanent flow)	do	do do do do do
G. 4. 62. 40	5 ft. diam. 50' to W. Level. Bucket and Windlass.-At	Bucket and Windlass	At present for animals	Good supply at all times.
G. 4. 57. 38.	Enclosed.	Swing handle pump.	Drinking	do do do
G. 4. 57. 38.	do	Handle pump.	do	do do do
G. 4. 53. 37.	do	Swing handle pump.	do	do do do
G. 4. 53. 37.	do	do.	do	do do do
G. 4. 47. 33.	do	Handle pump.	do	do do do
G. 4. 55. 35.	do	do	do	do do do
G. 4. 55. 35.	do	do	do	do do do
G. 4. 45. 33.	do	do	do	do do do
G. 4. 45. 38.	do	do	do	do do do
G. 4. 45. 38.	do	do	do	do do do
G. 4. 45. 38.	do	do	do	do do do
H. 4. 32. 35	do	do	do	do do do
H. 4. 1. 5.	do	do	do	do do do
G. 4. 90. 39.	do	do	do	do do do
H. 4. 10. 52.	6 ft. diam. 60' to W. Level.	Windlass and bucket.	do	Good supply. Only put down about three months.
H. 4. 11. 34.	Enclosed	Swinging handle pump.	do	Supply said to be good at all times.

W A T E R R E C O N N A I S S A N C E. (continued).

WAULSORT SUB-AREA.

Town.	Streams or pipe line supply.	WELLS. No. and type.	WELLS. Size and drawing facilities.	Facilities for animals.
HASTIERE-LAVAUX.	River Meuse close at hand, also good streams from springs run through town. Nine (9) water points on a public pipe system. Tested drinkable.	6 wells, built over. Tested drinkable.	Size unobtainable. Water drawn by pumps.	Ample facilities for watering animals at streams.
HASTIERE-par-dela.	River Meuse close at hand.	2 public wells covered in. 4 small private wells all covered in. All untested.	Size unobtainable. Water drawn by pumps.	Animals watered at river.
WAULSORT.	River Meuse close at hand.	5 wells covered in. Tested drinkable	Size unobtainable. Water drawn by pumps.	Animals watered at river.
LENNE.	- - -	1 well covered Untested	Size unobtainable. Wa	No special facilities.
ANSEREMME.	River Meuse close at hand, also La Lesse River runs through town.	4 covered in wells. All tested drinkable.	Size unobtainable. Water drawn by pumps.	Ample facilities at river.
DREHANCE.	- - -	3 wells covered in. Untested.	Size unobtainable. Water drawn by pumps.	No facilities.
FALMIGNOUL.	Fair stream running through town. Pipe supply system drawing from stream.	9 covered in wells. Untested.	Size unobtainable. Water drawn by pumps.	Animals watered at stream.
FALMAGNE.	-) - -	5 wells covered in. Un-	Size unobtainable. Water drawn by pumps.	Stream at no great distance.
MESNIL-ST.BLAISE.	Spring and dam S.W. of town.	No public wells.	-	Animals watered at dam.
BLAIMONT	Public pipe supply system, drawn from springs. Seven (7) watering points.	-	-	Animals can be watered at ponds fed by springs.

W A T E R R E C O N N A I S S A N C E. (continued).

WAULSORT SUB-AREA.

Town.	Streams or pipe line supply.	WELLS. No. and type.	WELLS. Size and drawing facilities.	Facilities for animals.
HERMETON.	River Meuse close at hand Public pipe supply system drawn from springs. Five watering points, tested drinkable. Large stream through town.	10 covered wells Untested.	Size unobtainable. Water drawn by pumps.	Animals watered at stream and river.

NOTE: No steps have been taken to supplement supply in any of the towns in WAULSORT Sub-area.

DINANT SUB-AREA.

Towns of DINANT and ANSEREMME. - Water supply piped from CINEY and supplied for house use. Sewerage stand pipes in the streets. Approximate quantity used is 150,000 gallons per day.

Town of BOUVIGNES. - Water supply piped from springs to houses and street stand pipes. Approximate quantity used per day, 12,000 gallons. In addition there are two pumps pumping river water from wells.

Village of SOMMIERE. - Spring water piped to four stand pipes in the streets. Approximate amount used, 5,000 gallons per day.

Village of FALAEN. - Spring water piped to three street stand pipes. Approximate amount used, 6,000 gallons per day. In addition there are two well pumps yielding 1,000 gallons per day, and several house wells of small capacity.

Village of WEILLEN. - Spring water laid on to three street stand pipes yielding 4,000 gallons per day, and in addition several house wells of small capacity.

Village of ONHAYE. - Spring water laid on to three street stand pipes yielding 5,000 gallons per day and in addition there are a number of house wells of small capacity.

K. 4. 10. 00. off WEILLEN road. - Pond,(120' x 100'.) depth about 4 feet. Shelving bank. Suitable for watering horses.

W A T E R R E C O N N A I S S A N C E. (continued).

DINANT SUB-AREA.

J. 3. 80. 20. - R. de FLAVION, clear stream 9' wide x 2' deep, current 3 miles per hour. Banks could be cut down to ramps for horses watering point at many convenient points.

J. 3. 80. 40. - Pond, 60' x 40' x 3' average depth. Shelving bank. In use for watering horses.

DINANT - LEFFE. - R. Ford LEFFE divided among several races and used on overshot water wheels. Capacity approximately 16 cubic feet per sec. Watering places for horses could be prepared at many places by grading down the banks.

Ref. Map. NAMUR. 1/100,000.

Water supply facilities.

ANTHEE. 4. J.15.89. - Local water supply system laid to six public supply taps at various points in the village. Approximate yield from each tap is 10 gallons per minute.
One concrete watering trough for horses at 4. J. 14. 88. Size of tank 10' inside diameter by 18" deep. Supply pipe with automatic valve is laid on to Tank.

OSTEMEREE. 4. J. 20. 99. - Local water supply laid on to two public supply taps in the village. Approximate yield of each tap, 10 gallons per minute.
One water pond 150' x 50' x avg. 10' deep at side of stream with running water inlet and outlet. Pond has low grassy banks all round, suitable for watering horses.
Stream flowing past this village and through SERVILLE is 12' wide, 15" deep with current at the rate of 2 feet per second. Banks of stream at this village are steep and unsuitable for watering horses. Stream has gravel bottom.

SERVILLE. 3. J. 35. 02. - Water supply is obtained from stream previously referred to. Banks of stream East of this village are low and grassy, suitable for watering horses.

GERIN. 4. J. 80.96. - Local water supply system laid to ten public supply taps at various points in the village. Yield, 10 gallons per minute per tap. At high level in village there are three hand pumps with $3\frac{1}{2}$" delivery drawing water from concrete tanks underground. Underground tanks are said to be fed from village supply system.
At 4. J. 78.92. there is one pond, 100' x 40' x 3' deep with low grassy banks all around.
At 4. J. 81.92. there is one pond, 50' x 20' x 2' deep with similar banks.
At.4. J. 80. 94.there is one stone watering trough 10' x 1' 6" inside with supply pipe and ball valve.

WATER RECONNAISSANCE. (continued)

DINANT SUB-AREA.

FTER. 3. J.23. 15. - Local water supply system laid from spring reservoir at 3. J. 18. 11 to two supply taps at the farm. Yield approximately 10 gallons per minute per tap.

LA MOTTE.
3. I. 93. 37. - There are four hand pumps in the village farm yards, each drawing their supply from underground tanks. This water is marked as unfit for drinking but is used as such by the civilians.
At 3. I. 90. 50. there is a spring reservoir 15' x 12' which is said to supply the village of MAREDRET. The overflow from this reservoir is a small stream yielding about 200 gallons per minute.
At 3. I. 96. 45. there is a hand pump in the courtyard of the Chateau drawing water from underground tank which is fed by supply pipe from reservoir at 3. I. 90. 50.
One pond in the village 25' diam and approximately 2' deep has grassy banks suitable for watering horses.

CHERTIN
3. J. 29. 40. - Village water supply is drawn from a spring yielding approximately 400 gallons per minute. Water is collected at a timbered well 4' square and 10' deep.

MAREDRET.
3. J. 03. 60. - Water supply system laid on from reservoir at 3. I. 90. 50 to ten public supply taps in the village.
There is a stream 8' wide, 1' deep running through this village with current at the rate of 2½ feet per second. Stream has gravel bottom. Outside the village at several points the banks of the stream are low and grassy, suitable for watering horses.

Area West of road from ANTHEE to Furnaux and extending to Western limit of Divisional area. - There are numerous streams flowing through the area which provide an ample supply for all the villages. The villages are ROSEE, CORENNE, FLAVION, STAVE, BIESMEREE, FURNAUX, ERMETON-sur-Biert, and these all derive their water supply by means of pipe head dams on local streams. It is distributed by means of stand pipes in the streets.

ROSEE SUB-AREA.

Source of supply.	Location.	Description.	Existing facilities for drawing water	Use recommended	Remarks.
Natural spring and reservoir FALAEN.	3.J. 54.34.	In use for human consumption	Stand Pipe from 3" Main.	Human consumption	Permanent supply.

W A T E R R E C O N N A I S S A N C E. (continued)

ROSEE SUB-AREA.

Source of supply.	Location.	Description.	Existing facilities for drawing water.	Use recommended	Remarks.
DAM, FALAEN.	In Chateau Yard.	Used for horses	G.S.Pump to 6 troughs	Human consumption	
Natural Spring and reservoir) ERMETON-Sur-BIERT)	3.I. 65.58.	Used for human consumption	6 Stand pipes from 3" Main.	do	Permanent supply.
Stream.	Opposite Chateau & at X Roads 3.I. 70.62.	Used for horses	G.S. Pumps to troughs	do	
Natural spring and reservoir FURNAUX.	3.I. 47.70.	Human consumption	10 stand pipes from 3" Main.	do	do
do do do do	Grand Farm	Used for horses.	Stand pipes to troughs.		
Natural spring and reservoir BIESMEREE.	3.I. 20.52.	Human consumption.	12 stand pipes from 3" Main.	do	do
Stream " " "	Both sides BIESMEREE & FURNAUX Rd.	Used for Horses			
Natural spring and reservoir STAVE	3.H. 92.39	Human consumption	8 Stand Pipes from 3" Main.	do	do
Stream " " "	Opposite Chateau.	Used for horses	No troughs		
Natural spring and reservoir in B.de SAVETTE, CORENNE. 3.H. 93.10.	3.I. 14.03.	Human consumption	12 stand pipes from 3" Main.	do	do
Natural spring and reservoir in wood N.E. of FLAVION 3.I. 65. 13. FLAVION.	3.I. 57.02	Human consumption	12 stand pipes from 3" Main.	do	do

WATER RECONNAISSANCE. (continued)

ROSEE SUB-AREA.

Source of supply.	Location.	Description.	Existing facilities for drawing water	Use recommended	Remarks.
Natural spring and reservoir S.E. Corner of SERVILLE	3.J.39.01.	Human consumption	Stand pipes from 3" Main	Human consumption	Never dry.
Natural spring and reservoir ANTHEE	4.J.17.87.	do	Stand pipes from 3" Main.	do	do
Sub-artesian bore 4. I. 94. 68. MORVILLE	4.I.95.81.	do	do	do	do
6 Concrete troughs 8' x 15" x 15"	do	Used for horses	Stand pipes to fill troughs		
Artesian Bore at rear of Chateau N.W. of ANTHEE	3.J.20.00	Human consumption		do	2,000 gals per hour.
Natural spring and reservoir 4. I. 03. 83. ROSEE	4.I.27.79.	do	Stand pipes from 3" Main.	do	Never dry.
6 Concrete troughs 8' x 15" x 15"	do	Used for horses	do		
Natural spring and reservoir OMEZEE. in the river running through the village.	4.I.40.33	Human consumption.	Shallow emplacement in stream 3 Concrete troughs supplied by hand pumps. Hand pumps supply this village water.	do	Permanent supply.
Natural spring in the river running through the village SURICE	4.I.40.19.	do	Pump, natural access to stream where it has been widened and deepened for watering purposes	do	do

W A T E R R E C O N N A I S S A N C E. (continued)

ROSEE SUB-AREA.

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Source of supply.	Location	Description.	Existing facilities for drawing water	Use recommended	Remarks.
Natural spring and reservoir 4.I.67.67 SOULME. ~~Riv~~	~~4.I.67.67~~. 4.I.85.26.	Human consumption	Stand pipes from 3" Main	Human consumption	R -
River Meuse AGIMONT	5.J.52.98.	do	do	do	Water pumped from River.
" " "	5.J.53.92) 5.J.55.96) 5.J.52.99) 5.J.50.90) 5.J.54.95)	Used for horses	Stand pipes and troughs	Horses	
Stream running north of GOCHENEE	4.J.13.20.	Human consumption.	Several stand pipes from 3" Main in each street	Human consumption.	Water, machine-pumped from River
GOCHENNE (Grand Eau) Stream " ") and stand pipe and trough		Used for horses		Horses	
Well and spring	200 yds S.W. of G. in GOCHENNE.	Human consumption	Bucket and rope		15' deep, 20" sq.
Well and trough on road to GODELEE.	W.S.W. of G. in GOCHENNE	Human and horse consumption	do	Human consumption	Stone lined 16' square
Well and spring	50 yds S. of O. in GOCHENNE	Human consumption	do	do	Stone lined 6' diameter.
Well and spring.	South of C. in GOCHENNE	do	do	do	Depth unknown 5' square, stone lined.
Well + spring.	100 yds East of G. in Gachenee.	do.	do.	do.	do.

R E C O N N A I S S A N C E O F W O O D S A N D F O R E S T S.

FLORENNES SUB-AREA.

Only trees over 5" diameter considered.

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BOIS de TILFORD. Shewn in centre of the area. Extent 120 acres. Remainder belongs to Albert GILLEAUX, extent 500 acres. Trees of 6" - 18" diameter and about 30 feet high. Three-quarters of trees, Oak, one-quarter of trees, birch. Yield about 1,000 cubic feet per acre.

BOIS de Arthur GILLEAUX, CHATELET. Extent 400 acres, three-quarters of trees Oak, one-quarter of trees, birch. Diameter 6" - 18" and 30 feet high. Yield about 1,000 cubic feet per acre.

BOIS Communale de VILLERS le GAMBON. Extent approximately 260 acres. Many large trees of oak and birch. Three-quarters of trees, Oak, one-quarter of trees, birch. Diameter 6" - 18" about 30 feet high. Yield 1,500 cubic feet per acre.

BOIS de L'ETAT. Extent 1,640 acres as indicated within limits on attached plan. Germans have cut out 300 acres. Trees 6" - 18" diameter. Oak and birch. Three-quarters of trees Oak, one-quarter of trees birch. Yield approximately 1,000 cubic feet per acre.

Communal BOIS de FRAIRE. Extent 50 acres. Saplings only.

BOIS de MINIERES. State wood. Extent 360 acres. Lot of big timber, large oaks, birch and ash. Yield about 1,000 cubic feet per acre.

BOIS de M. le COMPTE de BRIAS. Extent 120 acres. Very many large trees, oaks, birch and ash. Yield quite 1,000 cubic feet per acre.

BOIS de M. LOMBAN a FLORENNES. Extent 30 acres. All Pines 6" - 10" diameter.

Small Wood. Extent 2 acres. All Pines 5" - 10" diameter. Yield 1,000 cubic feet per acre, approximately.

BOIS de CORROY. Communal wood of METTET. Extent 300 acres, three-quarters Oaks, one-quarter birch. height about 30 ft. Trees 6" - 18" diameter. Yield 1,000 cubic feet per acre, approximately.

BOIS de M. VANDELFT. Extent 80 acres. All oaks. Trees 4" - 12" diameter. Yield about 1,000 cubic feet per acre.

BOIS de M. DEMARET. Extent 300 acres. Chiefly oak, about 150 acres cut out by Germans. Trees 6" - 15" diameter and 30 feet high. Approximate yield 1,000 cubic feet per acre.

RECONNAISSANCE OF WOODS AND FORESTS. (continued)

FLORENNES SUB-AREA.

BOIS de L'OUCHENEE (part) Extent 400 acres. Germans have cut out quite 160 acres. Three-quarters Oak, one-quarter birch. Trees 4" - 12" diameter and approximately 30' high. Yield 1,000 cubic feet per acre.

BOIS de MADAME BARONNE de BLOCKHAUSEN, STAVE. Extent 120 acres. Trees all Pines 6" - 15" diameter and 30 feet high. Yield about 1,000 cubic feet per acre.

NOTE: The areas given are approximate only.

Timber on ground at PAVILLONS Station. Map Reference NAMUR 1/100,000. H.4.38.24. :-

1/30' x 24" diam.	91/32' x 14" diam.	36/33' x 10" diam.	This timber is all in rough felled state and measurements shewn are approximate to bring them into groups. All Pine timber.
1/27' x 24" "	84/30' x 14" "	210/7' x 10" "	
2/24' x 24" "	95/27' x 14" "	12/4' x 6" "	
83/27' x 18" "	3/24') 14" "	8/20' x 6" "	
21/34' x 18" "	6/27' x 12" "	18/14' x 4" "	
49/30' x 16" "	39/6' x 12" "		

Timber at FLORENNES East Station. Map Reference NAMUR 1/100,000. H. 4. 42. 96. :-

Round.	Round.	Squared.	
15/30' x 36" diam.	260/24' x 24" diam.	18/18' x 10" x 8"	All this timber is comparatively heavy OAK.
27/24' x 36" "	150/18' x 24" "	7/16' x 8" x 8"	
9/18' x 36" "	240/24' x 18" "	44/20' x 6" x 6"	
50/28' x 30" "	22/14' x 18" "	60/18' x 6" x 6"	
30/30' x 30" "	100/12' x 18" "	200/12' x 6" x 6"	
160/24' x 30" "	150/28' x 12" "	16/20' x 4" x 4"	
18/21' x 30" "	500/30' x 6" "	160/20' x 6" x 3"	
12/15' x 30" "	72/28' x 6" "		
20/30' x 24" "	300/26' x 6" "		
130/28' x 24" "	408/22' x 6" "		
	300/26' x 6" "		

Timber at Lake near CHAUNMONT. Map Reference NAMUR 1/100,000. H. 4. 60. 83. :-

43/13' x 10" x 6" Sawn.	21/17' x 9" diam. round.	2/27' x 8" dia.round	This timber is all Pine and is quite close to the road.
10/15' x 15" dia.round.	100/16' x 9" "	1/20' x 8" " "	
129/26' x 12" " "	28/10' x 9" " "	10/21' x 8" " "	

RECONNAISSANCE OF WOODS AND FORESTS. (continued)

WAULSORT SUB-AREA.

All the woods indicated on the NAMUR 1/100,000 Map within the WAULSORT Sub-area consist actually of very small timber and brushwood, useless for milling, with the following exceptions :-

4. K. 40. 25. -	Approximately 15 acres very thickly timbered with straight Pine 15 ft. x 8 ins. diameter.
4. K. 10. 25. -	Approximately 10 acres straight Pine 10 ft. x 6 ins. diameter.
4. J. 80. 30. to 4. J. 70. 00. -	BOIS du PRINCE and BOIS WAGME sparsely timbered, about 20 Pine trees to the acre averaging 15 ft. x 8 ins. diameter.
4. J. 86. 50. to 4. J. 92. 30. -	Sparsely timbered with brushwood, approximately 20 trees (Pine) to the acre, averaging 15 ft.x 6 ins. diameter.
South Bank of River Meuse at WAULSORT and Valley at 4. K. 30. 30.	Thickly timbered with elm, averaging 15 ft. x 9 ins. diameter. Also approximately 60 acres of Pine averaging 15 ft. x 7 ins. diameter.
4. K. 15. 15.	20 trees to the acre averaging 15 ft. x 6.ins. diameter. (Pine).
La LESSE River Valley.	Very sparsely timbered with Pine up to 8 inches in diameter.

DINANT SUB-AREA.

K. 3. 40. 10. -	Small wood 500' x 100'. Elm and ash. Average heavy timber 9" diameter. Undergrowth.
K. 3. 20. 05. -	BOIS HAUTE CORNAE. 1,000' x 500', elm and ash varying from 6" to 15".
K. 3. 00. 20. -	Small wood 500' x 200'. Chiefly ash with a little elm. Average 9" diameter.
J. 3. 90. 20. -	BOIS FAYAT 1,200' x 600' chiefly ash and elm up to 14" diameter, with a little pine 8" diameter. Along the FALAEN-SOMMIERE road is a fine avenue of 12" pines.
J. 3. 60. 30. -	Chateau Grounds 300' x 100'. Elm, 15" diameter but much knotted.
K. 3. 70. 20. -	Chateau Grounds, scattered elm, ash and Pine, 12" diameter.
K. 4. 15. 90. -	Above quarry, small wood but no timber larger than 6".
K. 3. 95. 25. -	Young pine wood, small timber only.
L. 3. 00. 13. -	Scattered elm, ash and pine along cliff edge, average 9" diameter.

Woods in Western end of DINANT Sub-area. Mainly young pine trees which are of no value as yet for engineering purposes. No large area of timber exists.

Sub-area of SERVILLE. Small isolated clumps of trees likely to supply good timber occur in area around 3. J. 03. 40. but otherwise all trees in area are too light and short.

RECONNAISSANCE OF WOODS AND FORESTS. (continued)

ROSEE SUB-AREA.

BOIS de DAVE. - 850 acres approximately. Watered by the river D'OMERIS running continually and fed by many natural springs.
Timber for the most part consists of high undergrowth less than 6" diameter, a great quantity of which appears to be dead. About 400 acres of this wood in the vicinity of the ROSEE-GOCHENEE road has approximately 70 trees to the acre fit for milling purposes 6" to 11" diameter and average height 20 feet. Timber consists of Oak, birch, Ash and Elm mixed. The immature timber is fit for pit props.

BOIS du ROI. - 1,200 acres. Watered by the river de FREON, a small stream of average width 3 feet.
Timber for a great part consists of high undergrowth less than 6" diameter. About 300 acres north of the river and about 600 acres south of the river have 100 trees to the acre fit for milling, diameter 6" - 12", average height 20 feet. In the vicinity of the MORVILLE-SOULME road, about 30 acres have been cleared of all timber but birch. This wood is not so extensive as shown by Green on the map NAMUR '8'. The unmatured timber is suitable for pit props.

BOIS BARRUTTE. - 200 acres. Watered at its southern extremity by river d'FERON which is never dry and forms an abundant supply to the village of MAURENNE through which it flows.
Timber, Oak, Birch, Ash and Elm. For the most part consists of high undergrowth less than 6" diameter. About 100 acres with 50 trees per acre are fit for milling purposes; diam 6" - 12", height 30 feet. The unmatured timber is suitable for pit props.

BOIS des ONCHES and part of BOIS WAGNE - 750 acres. Watered by river SOMIE and tributaries.
Timber, Elm, Beach and a few Pines. Approximately 4,000 cubic feet per acre in trees over 8" diameter; high undergrowth under 6" diameter.

Woods around SOULMIE, SURICE and OZMEE are practically of no milling value; they consist of scattered patches of unmatured timbers of various kinds with thick undergrowth. Approx. 300 acres.

BOIS de LORAINE. - This wood is not nearly so extensive as shown on NAMUR Map '8'. It has an approximate area of 600 acres. Patches exist generally and consist of varying density of undergrowth. About 60% of the area consists of unmatured timbers with high undergrowth and 40% would be available for milling purposes at about 70-80 trees per acre. Average diameter of timber about 6", height about 20 feet. Ash, birch, elm and pine trees.

BOIS de FLORENNES (part of) - 200 acres approximately. Consists largely of high undergrowth under 6" diameter, 100 acres of which would yield 70-80 trees per acre over 8" diameter suitable for milling purposes. Birch, elm, and ash.

RECONNAISSANCE OF WOODS AND FORESTS. (continued)

ROSEE SUB-AREA.

BOIS de ROSEE	-	400 acres approximately. Consists largely of high undergrowth and small timber up to 6" diameter on the average 30 trees to the acre are suitable for milling purposes, diameter 10" to 12", elm, ash, oak and birch.
BOIS de DAMES	-	350 acres approximately. Similar to BOIS de ROSEE.
BOIS de SAYETTE	-	250 acres approximately, elm, fir and ash; high undergrowth of no milling value. 35 trees to the acre, average diameter 14" and height 30 feet.
BOIS de CORENNE	-	180 acres approximately. Half of the timber would be suitable for pit props. 40 trees to the acre fit for milling purposes. Average diameter 15", height 30 feet, elm, ash and fir.
Woods around SERVILLE.	-	200 acres approximately, fir trees and elms. 50 acres of timber available for milling purposes 12" - 15" diameter, height 25 feet, about 30 trees to the acre.
BOIS de VAUX	-	100 acres approximately. Elm and light Pine. 3,000 cubic feet milling timber per acre. Average diameter 8", height 20 feet.
Woods around EMERTON and FURNAUX	-	250 acres approximately with 20 trees of elm, ash and pine to the acre fit for milling. average diameter 9", height 20 feet.

RECONNAISSANCE OF FACTORIES.

FLORENNES SUB-AREA.

Location. NAMUR 1/100,000.	Reference on Map	Title of Company or proprietor	Articles manufactured	Approximate area of works (Buildings)	If working or not.	Condition of works and General Remarks.
G. 3. 90.25.	F1.	Societe Generale de Produits refractaires et Ceramiques a Morialme.	Tiles, firebricks and Earthenware Pipes	300' x 480'	Not.	Machinery incomplete owing to theft of minor parts, bearings &c. In a neglected state but being put into order now. Buildings of brick quite substantial but needing numerous repairs.
H. 3. 15.30.	F2.	Alex. Charlier (Morialme Minieres).	Earthenware Pipes	250' x 90'	Not.	Machinery left is one semi-portable engine (steam) Building in a bad state.
H. 3. 13.	F3.	Verrerie & Flacon-	All types of Glass bottles & larger kinds of Chemical containers.	150' x 320'	Not.	Interior of factory in a very bad state. Machinery smashed & has mostly been removed. Brick building in bad repair.
H. 4. 40.95.	F4.	Societe Anomyne de Produits Refractairs de Florennes	Firebricks	300' x 225'	Not.	Brick building with tile roof in fair repair. Machinery very incomplete and what remains is in a neglected state.
H. 4. 42.97.	F5.	Constructed by Germans during occupation	Sawmill.	130' x 170'	Not.	Building of timber, ruberoid covered roof contains 2 good semi-portable steam engines with quantity of shafting, pulleys, miscellaneous saws and saw benches.
H. 3. 45. 27.	F6.	Societe Anomyme Faiencerie de Pavillon Florennes.	High class decorative Tiles	330' x 250'	Not.	This factory very substantial and in good order. Anticipate recommencing about 15/2/19.
H. 4. 36.29.	F7.	Societe Anyme des Anciens Etabliss'ts Paquets a Villers le Gambon,Belgium.	DOLOMIE. Manf. steel	210' x 240'	Not.	Steel & brick bldg. good order 1 Horzl.Eng. practically intact. 2 lge.steel retorts,elevators &c. Parts (brasses,belting &c)removed.

RECONNAISSANCE OF FACTORIES. (continued)

WAULSORT SUB-AREA.

Town.	Nature of Factory.	Size.	Source of power.	Condition.
HASTIERE-LAVAUX.	Woollen spinning	3 buildings covering an approx. area of 3,000 square yds.	Steam plant and water wheel.	All machinery complete, but not working.
do	Flour Mill.	Small.	Water wheel.	In working order and in use.
HERMETON.	Flour Mill.	5 floors, 20' x 20'	Water wheel.	In use.
FALMIGNOUL.	Brewery.	Approx. 1,000 sq. yds. floor.	Water wheel.	In use.
ANSEREMME.	2 Electric Light Plants	Supply two towns	1 Hydraulic. 1 steam power.	In use.

DINANT SUB-AREA.

K. 3. 93.20. - LEFFE. DINANT.
Large wollen factory complete. 800 horse power compound condensing engine, rope drive.
Fitting shop. 3 lathes, 1 shaping machine, 1 hand punching machine, 1 hand drilling machine, 2 forges, 1 bench with 6 vices.

K. 3. 80.30. - BOUVIGNES.
Large woollen factory complete except as regards fitting shop, 500 h.p. engine.
Fitting shop. 1 power drilling machine only.

do. -
Smaller woollen factory, 80 h.p. engine. Part of machinery removed.
Fitting shop. 1 old lathe only.

K. 3. 80.20. - BOUVIGNES. Billet No.77.
Fitting shop. Power supplied by Producer Gas engine, 15 h.p. 1 large forge, 1 10" lathe, 3 drilling machines, 1 shearing and punching machine, 1 cropping machine (hand), 1 circular metal saw, 1 bar bending machine (hand), 1 drill sharpener and emery wheel. 1 Fitter's bench with two vices.

L. 3. 01.25.
Saw Mill. 3 storey building,- ground Floor,- 1 large room 35' x 45' containing 1 band saw 8 feet centres, 1 circular saw 18" (can take 24"), 1 planing machine, 1 morticing machine, 2 emery wheels, 1 band saw sharpening machine.
First floor. 1 large store room for timber, 35' x 45', 1 carpenters shop 30' x 15' with two benches.
Second floor. Similar to first.
Power supplied by water wheel, 20' diameter by 6' wide. 3 h.p.m. which drives all the above machines

RECONNAISSANCE OF FACTORIES. (continued).

DINANT SUB-AREA.

L. 3. 01.25. - and a small dynamo, 140 V. x 10 A which, with storage battery on ground floor, supplies lighting for building.

L. 4. 10.95. on road to ANSEREMME. - Sawmill shed 80' x 40' containing 1 band saw 8 feet centres with good bench, 1 circular saw 18" with short bench, 1 emery wheel.

There were two other large factories in DINANT which were completely burnt out by the Germans and all machinery removed. Some of the walls are still standing.

Particulars of number of employees in DINANT factories prior to the war.

(1) At LEFFE. Societe Anomyne, Manufacture de Tissus. - Number of employees 600 to 700.
(2) At BOUVIGNES. Same Company as above. - Number of employees 50 to 60.
(3) At BOUVIGNES. Societe Anomyne, Filature de Merinos - Number of employees 110.
Of the above number of employees, about half were men and the remainder women and boys.

ROSEE SUB-AREA.

4. I. 67.96. - 1 Flour Mill - 1 storey. Power generated by water. Floor space 80 square metres.

4. I. 40.19. - Village of SURICE. 1 Chicorie factory. Machinery destroyed or removed. Floor space 90' x 90'. 2-storey building.

QUARRIES RECONNAISSANCES.

FLORENNES SUB-AREA.

Location. NAMUR 1/100,000.	Reference on Map attached.	Title of Company or Proprietor	Material quarried	Approximate area of works	If working or not	Remarks re' Buildings, machinery conditions &c
H.4. 65.22. near FRANCHIMONT	Q1.	M. PREYON.	Marble	3 acres	Not.	No buildings on site. Great quantity of stone available for road metal.
H.4. 27.27. near VILLERS le GAMBON.	Q2.	Societe Anonyme, Carrieres de Villers le Gambon, St.Aubyn et extensions.	Marble (black slices and shaped pieces)	10 acres	Yes.	Buildings (1) 300' x 60' (2) 250' x 60'. machinery, etc.
H.4. 08.23.	Q3.	"Marquettes" St.Marmor a Gougnies	Marble	5 acres	Not.	1 Stone building 75' x 40' machinery in disrepair.
G.4. 95.22.	Q4.	"Grand Fond" Puissant Freres a Merbes le Chateau.	Marble	3 acres	Not.	Brick building 90' x 40' containing 1 Honz engine. Machinery in disrepair & parts missing. Stopped working 2 years. Stone Bureau 20' x 30' (building).
G.4. 92.	Q5.	"Bergnonry" Mme. Luc. (for information, referred to Henri Pieriard at Saoutour).	Marble	4 acres	Not.	1 building 60' x 56' Machinery in disrepair & parts missing.
G.4. 72.18.	Q6.	"Cienne a l'Gattes" Puissant Freres a Merbes le Chateau.	Marble	3 acres	Not.	1 stone building 20' x 15'. 1 do do 15' x 10'. No machinery.
G.4. 62.15.	Q7.	"Corroy".St.Marbriere de l'Entre Sambre et Meuse a Yves Gomezee	Marble	3 acres	Not.	No machinery or buildings.
G.4. 55.25.	Q8.	Disused quarry (owner not known)	Marble	1 acre.	Not.	No buildings or machinery. Large quantities of stone available close to road.
H.4. 30.45.	Q9.	Private land. Road Metal quarry.	Blue metal.	½ acre.	-	Good surface deposit available here. Depth of available metal 2 feet. Can be quarried without explosives.

QUARRIES RECONNAISSANCES (continued)

FLORENNES SUB-AREA.

Location. NAMUR 1/100,000.	Reference on Map attached.	Title of Company or Proprietor	Material quarried	Approximate area of works	If working or not	Remarks re' Buildings, machinery conditions etc.
H.4. 60.85.	Q10.	Commune of Florennes	Road metal	1 acre	-	Excellent metal available here in large quantities. Requires blasting. Tramline built by Bosche runs by same to Florennes East Station.
H.4. 20.85.	Q11.	Private property.	Sand.	3 acres	Not.	Pit average depth 50 feet.
H.3. 15.00.	Q12.	Commune of Florennes	Road metal and Pave blocks	1 acre	Yes.	Excellent road metal available. Requires blasting.
G.4. 90.30. The position as shown on NAMUR 1/100,000 is incorrect.	Q13.	"Croisettes". Lecab & Bastin a Cousobre, France.	Marble.	5 acres	Not.	1 stone building 75' x 45' 1 do do 30' x 15' Machinery in disrepair. Has stopped since 1914. Approx. 200 cut stones available. Great quantity of stone available for road metal.
G.4. 80.95.	Q14.	Commune of Florennes	Road Blue metal.	¼ acre	Yes.	Large quantity of metal available., requires blasting.
H.4. 25.85.	Q15.	Private land.	Road Blue metal.	¼ acre	Not.	Close to main road Florennes - Phillipville. Good stone available but requires blasting.
H.4. 31.99.	Q16.	Commune of Florennes (In town of Florennes)	Road Blue metal	¼ acre	Yes.	Good stone available., requires to be blasted.

NOTE: At all Marble quarries there are great quantities of stone available and suitable for road metal.

QUARRIES RECONNAISSANCES. (continued)

WAULSORT SUB-AREA.

Town or Location.	Nature of stone.	Remarks.
Ref. NAMUR. 1/100,000.		
4. J. 68. 69.	Limestone.	Face approx. 100 sq. yards. Stone suitable for roads or ballast.
4. K. 05. 83.	Limestone.	Face approx. 100 sq. yards. In use.
4. K. 20. 45.	Clay Pits.	Has been used for brick making.
4. K. 40. 60.	Gravel Pits.	Not in use.
4. K. 66. 80.	Limestone.	Recently worked for road metal. Face 400 sq. yards.
4. K. 70. 82.	Limestone and grit.	In use for road metal. Face 300 sq. yards.
4. L. 05. 82.	Limestone.	Road metal. Not in use. Face 150 sq. yards.
4. J. 85. 45.	Limestone.	Only access by barges. Face 40 sq. yards.

DINANT SUB-AREA.

L. 4. 10. 90. - Anseremme Road. Metal quarry, 200 feet above road level. Working face 70' high by 200' long. Rock highly contorted slate with rotten bands in between hard beds, suitable for road metal, pave blocks and short kerbing.
Plant. 50 h.p. Producer Gas Engine driving a two-drill air compressor, a Blake type rock crusher 27" x 14" and a 20' sizing trammel. A rope drive also drives a pump in the creek below for the circulating water and a small 4" air hoist transfers trucks from the lower to the higher bench - the lower bench being used solely for mullock dump. A three rail self-acting tramline leads from the quarry floor to the road below and a single line runs from there to the metal yard and a small loading wharf. The track is 21½" gauge and there are six side tipping iron trucks for use in the face and 18 wooden side discharge trucks for use on the incline. The capacity of the rock crusher is 200 tons per day. In the metal yard there are loading stations for lorries and on the wharf, chutes into barges.
The property belongs to M. F.C. Spinette-Jaspar of HUY but was worked by the Germans during their occupation of DINANT. New cheek plates (liners) are required for the crusher and fresh metal for the bearing, both of which should be available in a week's time.

L. 3. 10. 19. - Dimension stone quarry for pave sets and kerb stones etc. Two faces have been worked - that farthest in is 150 feet long and consists of a cut 50' wide and 50' deep. Rock in thick beds at an angle of 60 degrees to the horizontal. The foot wall is shattered by a slide, but in the hanging wall there

is some

QUARRIES RECONNAISSANCES (continued)

DINANT SUB-AREA.

L. 3. 10. 19. - is some very good quality stone. There is a capstan and wire rope in good condition and formerly a truck line led to this face. The outer face is an open cut 35' high and 150' long. The uppen ten feet is badly weathered but the lower 25' is in good condition and is in thin layers nearly vertical. An old capstan and rope stand a little way off the face and there is a short length of 21½" truck line with one side tipping iron truck and one platform timber truck.

K. 3. 40. 07. - Small clay pit not in use.

K. 4. 20. 97. - Clay pit not been used for years.

J. 3. 70. 30. - Clay pit. Face 70' by 12' high. Entrance fallen in. Formerly light truck line into face. Rails now stacked at face. Pit been in use until fairly recently. Fair quality clay.

The stone to be obtained from the three following quarries is only suitable for road metal :-

One quarry 50 ft. wide, 10 ft. deep face at 3. J. 03. 61. (no plant) Sub-area of MAREDRET.

One quarry 150 ft. diam. 50 ft. deep face at 3. J. 44. 39.(no plant) Sub-area of FALAEN.

One quarry 30 ft. wide, 8 ft. deep face at 3. J. 37. 31. (no plant) Sub-area of FALAEN.

There is a small quarry on the main road from ROSEE to ANTHEE and about 1 kilo from ANTHEE. It is only small and suitable for local road repairing supplies.

Another quarry exists at BIESMEREE on the north side of railway adjoining the road from BIESMEREE to FURNAUX. It has not been used for some time but trolley tracks still exist in addition to a good deal of quarry stone of all sizes. There is every indication that the quarry could be developed on a large scale.

ROSEE SUB-AREA.

3. I. 04. 65. - 1 Stone quarry, face 80' x 70' No power or drills used. Stone fit for building purposes.

4. J. 23. 01. - Quarry is above road surface. 3 faces, 40' to 50' square. No water difficulty. Marble (red) used for decorative purposes. Machinery dismantled and quarry has not been worked recently.

R E C O N N A I S S A N C E O F T R A M L I N E S.

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FLORENNES SUB-AREA.

Private Tram Lines.

From Pits at NAMUR (3. H. 67. 57) to STAVE. - Single track, Gauge 2 feet, rails 20 lbs per square yard. Condition fair.

From FLORENNES East Station along 2nd class road to Lake East of CHANMONT and cuts BOIS de RENONCEAU to point H. 4. 75. 85. Single track, gauge 2 feet, rails 20 lbs per square yard. Condition fair.

WAULSORT SUB-AREA.

NIL Report.

DINANT SUB-AREA.

There has formerly been a Tramway Line from FLORENNES to DINANT. All the rails have been removed but the formation is in a good condition.

ROSEE SUB-AREA.

There are no private Tramway Lines in this area.

SUB-AREA of FLORENNES

shewing Water Supply Systems
Position of Quarries Factories Tram Lines Forests Streams.

193

Hanzinelle
TAILLE DU HENT
Oret
Private Tram Line To STAVELOT
Corroy
Bois de Corroy 300ac
10
Source of WS MORIALME
Saplings only
Le Foret
Croix Mouvaux
WS1 MORIALME
Saplings only
11 80acres
Mineral st
F2
Bois de M. Compte de BRAS 7 120ac
F1
F3
9 2acres
Saplings only
F6
12
Pavillons stat.
Source of WS for FLORENNES
6 Bois de Minieres
Saplings only
13 300ac Bois de L'Ouchenée 400ac 80 cut out
old glass factory. machinery removed & Bording bad state
old clay Pits
5 50ac
Communal Wood of FRAIRE
360 ac
Le Malodrerie
FLORENNES Florennes
WS3
Source of WS for ST AUBIN
WS2
Q. 12
Q. 16
14 120 ac
FLORENNES EST Railway Station
Florennes East Station
included with 14.
14 Q
ST. AUBIN
F5
8
Bois de M. LAMBAN
old Quarries & Kilns
Sand Pit
11
15
Q. 10
Lavaleite
Tramline built by Germans
10
Lake
HEMPTINNE
WS10
Chaumont
CHAUMONT
WS4
Bois de Bonsaint
State Wood Belgian Govt
4 1640 acres
WS11
Jamaigne
JAMAIGNE
Bois de Albert Gilleaux excluding Bois Tilford area 500 acres
Arthur Gilleaux 400ac
I
Bois Tilford 60 120 Acres
2
Communal Wood of VILLERS LE GAMBON
3
400 acres 260
over area shaded ¾ Oak ¼ Birch yielding approx 1000 feet per acre.
Well
Well
Source of WS for YODECEE
Source of WS for VILLERS LE GAMBON
Q 9
Well
Les Banques
Well
Quarry
Vodecee
PHILIPPEVILLE
WS9
13
WS7
YODECEE
Well
WS6
Villers Le Gambon
F7
Q2
WS5
FRANCHIMONT
Q1
8 Quarry
COMMUNAL WOOD of VODECEE (Saplings only)
Q4
Q5
Q3
6
7
Source of WS for SAMART
Communal Wood of SAMART (saplings only)
WS8
SAMART

Note Wells not noted in Reports only shown on Plan.

Scale = 1:40000

[14/10/37, Part 2]

HQ 4th Aust Div Engrs

Feb 1916

Appendix 16

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MESSAGE FORM. Series No. of Message 38

In CALL v / Out v	Recd. At 1130 By [illegible] / Sent At ____ By ____	Army Form C 2130 (pads of 100)
PREAMBLE		Date Stamp: AYD 19.11.19 TELEGRAPH
M.M. Offices: Delivery v / Origin		
PREFIX	Words 16	

TO: C.R.E. 4th Aust Div

FROM & Place: C.E. Aust Corps

Originator's Number	Day of Month	In reply to Number
No 10	19	

Addressed for acknowledgment

216/316 of 9th (also 3911)

HDQRS 4TH AUS. DIVN. ENGRS. No. D E/767 DATE 19.2.19

TWD

TIME OF ORIGIN 1615

TIME OF HANDING IN (For Signal use only)

Originator's Signature (Not Telegraphed)

(19545.) Wt. W 5622—G 1276 58,000. 10/18. D & S. (E. 1256.)

FOURTH Australian Divisional Engineers

Appendix No 16

Headquarters
20th. February 1919.

C.E Aust. Corps,

Herewith Property Distribution Return as asked for in your 216/316 of 9th. instant.

I. S. Braidon
Lieut. and Adjutant
for C.R.E. 4th Australian Divn.

HDQRS 4TH AUS. DIVN. ENGRS. No. D E/767 DATE 20.2.19

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Chief Engineer,
Australian Corps,
No. 262/316.

12/2/19

C.R.E. 1st Aust. Divn.
C.R.E 2nd Aust. Divn.
C.R.E 4th Aust. Divn.
C.R.E 5th Aust. Divn.
O.C. 1st A. T. Company.

Reference our 216/316 of 9th inst., only machinery which is installed and working should be recorded.

HDQRS 4th DIVN. ENGRS.
No. D.E.4767.
DATE 13.2.19.

Copies to Corps.

B2 1/2

Lieut. A.E.
A/Staff Officer,
to C.E. Australian Corps.

Headquarters,
4th Aust. Div. Engrs.
13th February, 1919.

O's.C. 4th, 12th & 13th Fld Coy's A.E.

Reference this Office L.E.4767 of 11th instant., only machinery which is installed and working should be recorded.

for C.E. 4th AUSTRALIAN DIVISION.

Lieut. & Adjt.

HDQRS 4TH AUS. DIVN. ENGRS. No. 4767 DATE 13.2.19

29Eu767

Headquarters,
4th Aust. Div. Engrs.
11th February, 1919.

O's. C. 4th, 12th & 13th Field Coy's A.E.
C.O. 4th Aust. Pioneer Battalion.

Please submit a Return as per pro-forma attached of all Workshop Machinery in the following areas :-

4th Field Coy. A.E. - FLORENNES Area.
12th Field Coy. A.E. - WAULSORT Area.
13th Field Coy. A.E. - DINANT Area.
4th Pion. Bn. - ROSEE. Area.

Returns to reach this Office by 18th instant.

L.R.J. Donaldson
Lieut. & Adjt.
for C.R.E. 4th AUSTRALIAN DIVISION.

B 218
2

Chief Engineer,
Australian Corps,
No. 216/316,
9th February 1919.

C.R.E. 1st Aus. Div. ("B"Area)
C.R.E. 2nd Aus. Div. ("C"Area)
C.R.E. 4th Aus. Div. ("A"Area)
C.R.E. 5th Aus. Div. ("F"Area)
O.C. 1st A. T. Coy. ("D"Area)

Will you please submit on A.F.W. Form 3711 (attached), a return for all Workshop Machinery in your area.

Lieut. A.E.
for A/Staff Officer,
to C.E. Aust. Corps.

AUSTRAL IAN

4 th. AUSTRALIAN

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NAMUR 8 - 1/100,000

Dynamo driven by 8 h.p. Gas engine using producer gas.	3.I.56.01	On main road - 200 yards East of Church	Used for lighting Village of FLAVION.
Dynamo driven by Petrol Engine	3.I.65.59	Chateau	Used for lighting Chateau at ERMETON-sur-BIERT
Dynamo driven by Water turbine	3.I.83.62	Sawmill on Main Road	Used for Saw mill
Dynamo driven by water turbine	4.J.21.96.	Mill where River crosses Road South of Chateau	Used for lighting Chateau and Village of SERVILLE.
=do- -do-	4.I.96.93.	Where River crosses Road South of Chateau	Used for lghting Chateau S.E. of ANTHEE
Dynamo driven by gas engine using producer gas.	4.I.38.31	Main Road 200 yds. S of Church	Used for lighting Village at OMEZEE
Dynamo driven by petrol engine	4.J.20.73	Chateau	Used for lighting Chateau

Belgium Sheet 53 - 1/40,000

2 Portable Steam Engines - 20 Nóml. H.P.	N.31.b.3.9.	FLORENNES EAST Mill near FLORENNES EAST Railway Stn.	
1 Swing Saw	"	"	
2 60' lengths 3½" steel shafting with journals and couplings complete	"	"	

AUSTRALIAN

4th AUSTRALIAN

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BELGIUM Sheet 53 1/40,000

1 60' length of 3" steel shafting with journals and couplings complete	N.31.b.3.9.	FLORENNES East Mill near FLORENNES East Railway Station
1. 11" lathe	-do-	-do-
1 drilling machine with counter shafting etc complete	-do-	-do-
1 large centrifugal pump	-do-	-do-
20 pulleys (assorted, mostly split) of large size.	-do-	-do-
23 chains of Decauville Track laid in yard with points and turntables.	-do-	-do-
17 chains decauville not laid	-do-	-do-
1 12,000 gll. G.T.Tank on stand.(for boiler feed) with power pump.	-do-	-do-

AUSTRALIAN

4th. Australian

Sheet BELGIUM 53 1/40,000

	1 Light, 8ton 4 coupled Loco	N.3N.b.3.9.	FLORENNES East Mill near	
			" " Railway Station.	
	10 Steel Frame (Bolster) Trucks with hand brakes	-do-	-do-	
	10 Steel Frame (Bolster) Trucks without brakes	-do-	-do-	
	1 box truck with 2 bogies	-do-	-do-	
	3 light ballast tips	-do-	-do-	
	100 chains laid 22lb. track with points	-do-	-do-	

Sheet NAMUR 1/100,000

"A"	1, 8" centre screw cutting lathe with 2 chucks but only 6 change wheels and 1 centre also counter shaft. (From German Train near LEFFE. Repaired by 13th.F.Co.)	K.3.90.25.	Woolen Factory LEFFE (Manufacture de Leffe) and in Factory Fitting Shop.	This lathe was found incomplete and has been put in working order by 16th. Field Co. A.E.
"H"	3, Fitters Benches, timber fitted with damaged ~~le~~ lockers and 2 fitters vices	-do-	-do-	From German Train at LEFFE, DINANT.

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4th. AUSTRALIAN PIONEER BATTALION.

P.A.133/1/2.

HEADQUARTERS,
19th February 1919.

C.R.E.
4th Australian Division.

Reference D.E.4767 of 11th instant.

Return forwarded herewith, please.

Lieut.& Act.Adjutant.
For C.O. 4th.AUSTRALIAN PIONEER BATTALION.

IST. ANZAC CORPS. PROPERTY DISTRIBUTION RETURN ....4th AUSTRALIAN DIVISION.

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NOTE For details showing the Letter under which stores are to be classed, see overleaf.

Class	Description and origin	LOCATION - Reference should be made to the 1/40,000 map. For areas not covered by the 1/40000 map refer to the 1/80,000 map.	Particulars of Exact Location	Remarks
	Dynamo driven by 8 H.P. Gas Engine using Producer Gas.	3 I 56.01 NAMUR. 8. 1/100.000	On main road 200° E. of Church.	Used for lighting village of Flavion.
	Dynamo driven by petrol engine	3 I 61.59	Chateau	Used for lighting Chateau at ERMETON-SUR-BIERT
	Dynamo driven by water turbine	3 I 82.62	Sawmill on main road	used for saw mill.
	Dynamo driven by water turbine	4 J 21.96	Mill, where river crosses road S. of Chateau	used for lighting Chateau + village of Serville
	Dynamo driven by water turbine	A I 96.93	Where river crosses road S. of Chateau	used for lighting chateau S.E of ANTHÉE
	Dynamo driven by gas engine using producer gas	4 I 38.31	Main road 200° S. of church.	used for lighting village at OMEZEE.
	Dynamo driven by petrol engine	4 J. 20.73	Chateau	used for lighting chateau.
	The following villages have no machinery in working order.		FALAEN. FURNAUX. BIESMEREE. STAVE SOULME. SURICE. Gochenee	AGIMONT.

17-2-19.

W. A. Chester
Lieut.
4th Aus. Pioneer Battn.

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"A"	Government Property	Fixed Machinery.
"E"	" "	Mobile Machinery (Steam Rollers, road brushes, etc.
"C"	Hired Machinery.	
"I"	Government Property	Water Supply Systems.
"T"	" "	Tramway Systems.
"B"	" "	Hutting and buildings generally.
"G"	" "	Position of all Dumps, Parks and Stores.
"E"	" "	Any Government property not included in above.

NOTE: For each separate numbered square such as E.36., Q. 16, B. 5., etc., in which machinery is situated there should be a separate return.

NOTE:- In the event of machinery, property, etc., being handed over from one Formation to another a dictribution return in duplicate showing the articles should be delivered to the Chief Engineer of the Corps concerned.

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12TH FIELD COMPANY. A.E.
Date 17/2/19

To C R E
4th Aust Div

Herewith Return
as per your DE 4767 of
11th Feby 1919.

J. Moss Major
O.C. 12th Field Co., A.E.

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PROPERTY DISTRIBUTION RETURN.

CORPS. DIVISION.

NOTE :—For details showing the Letter under which stores are to be classed, see overleaf.

Class.	Description and Origin.	LOCATION.—Reference should be made to the 1/40,000 map. For areas not covered by the 1/40,000 map refer to the 1/80,000 map.	Particulars of Exact Location.	Remarks.
	There is no Workshops Machinery installed and working within the Wanlsort Sub-area.			

Lt.
12th Field Co, A.E.

1st Printing Co., R.E. G.H.Q. 2152

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"A"	Government Property.	Fixed Machinery.
"B"	" "	Mobile Machinery (Steam rollers, road brushes, etc.).
"C"	Hired Machinery.	
"D"	Government Property.	Water Supply Systems.
"E"	" "	Tramway Systems.
"F"	" "	Hutting and Buildings generally.
"G"	" "	Position of all Dumps, Parks and Stores.
"H"	" "	Any Government Property not included in above.

NOTE.—For each separate numbered square, such as H. 26, Q. 16, B. 5, etc., in which machinery is situated, there should be a separate return.

NOTE.—In the event of machinery property, etc., being handed over from one Formation to another, a distribution return in duplicate showing the articles should be delivered to the Chief Engineer of the Corps concerned.

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Headquarters,
4th Aust. Div. Engrs.
11th February, 1919.

O's. C. 4th, 12th & 13th Field Coy's A.E.
C.O. 4th Aust. Pioneer Battalion.

Please submit a Return ~~as per pro~~-forms attached of all Workshop Machinery in the following areas :-

4th Field Coy. A.E. - FLORENNES Area.
12th Field Coy. A.E. - WAULSORT Area.
13th Field Coy. A.E. - DINANT Area.
4th Pion. Bn. - ROSEE. Area.

Returns to reach this Office by 18th instant.

L. D. Davidson
Lieut. & Adjt.
for C.R.E. 4th AUSTRALIAN DIVISION.

Headquarters,
4th Aust. Div. Engrs.
13th February, 1919.

O's. C. 4th, 12th & 13th Field Coy's A.E.

Reference this Office D.E.4767 of 11th instant., only machinery which is installed and working should be recorded.

I. D. Donaldson
Lieut. & Adjt.
for C.R.E. 4th AUSTRALIAN DIVISION.

C.R.E.
4th Aust Div

Herewith report - attached.

18-2-19.

O.C. 4th Field Coy.

PROPERTY DISTRIBUTION RETURN.

..... CORPS. 4th Field Coy. 4th Aust. DIVISION. 193

NOTE :—For details showing the Letter under which stores are to be classed, see overleaf.

Class.	Description and Origin.	LOCATION.—Reference should be made to the 1/40,000 map. For areas not covered by the 1/40,000 map refer to the 1/80,000 map.	Particulars of Exact Location.	Remarks.
	2 Portable Steam engines, (20 nom. HP.)	Belg. Sh. 53 N 31 b 3.9	Flobecques East Mill near Flobecques East Rly Stn	
	1 Swing Saw	"	"	
	2/60' lengths 3½" steel shafting, with journals & couplings complete.	"	"	
	1/60' length of 3" steel shafting, with journals & couplings complete.	"	"	
	1/11" Lathe	"	"	
	1/Drilling Machine (with countershafting etc., complete.)	"	"	

1st Printing Co., R.E. G.H.Q. 2452

"A"	Government Property.
"B"	" "
"C"	Hired Machinery.
"D"	Government Property.
"E"	" "
"F"	" "
"G"	" "
"H"	" "

Fixed Machinery.

Mobile Machinery (Steam rollers, road brushes, etc.).

Water Supply Systems.

Tramway Systems.

Hutting and Buildings generally.

Position of all Dumps, Parks and Stores.

Any Government Property not included in above.

NOTE.—For each separate numbered square, such as H. 26, Q. 16, B. 5, etc., in which machinery is situated, there should be a separate return.

NOTE.—In the event of machinery property, etc., being handed over from one Formation to another, a distribution return in duplicate showing the articles should be delivered to the Chief Engineer of the Corps concerned.

Sheet. II

PROPERTY DISTRIBUTION RETURN. (Cont)

..... CORPS. 4th Field Company Engrs 4th Aus. DIVISION. 193

NOTE :—For details showing the Letter under which stores are to be classed, see overleaf.

Class.	Description and Origin.	LOCATION.—Reference should be made to the 1/40,000 map. For areas not covered by the 1/40,000 map refer to the 1/80,000 map.	Particulars of Exact Location.	Remarks.
	1/Large Centrifugal Pump.	Belg. Sh. 53 N. 31 b 3.9	Flobecques East Mill near Flobecques East Rly Stn.	
	20 Pulleys (assorted, mostly split) of large size.	do	do	
	23 chains of Decauville track, laid in yard with points & turntables.	do	do	
	17 chains, ditto, not laid.	do	do	
	1/1200 gal. G.I Tank, on stand (for boiler feed) with power-pump.	do	do	

1st Printing Co., R.E. G.H.Q. 2452

"A"	Government Property.	Fixed Machinery.
"B"	" "	Mobile Machinery (Steam rollers, road brushes, etc.).
"C"	Hired Machinery.	
"D"	Government Property.	Water Supply Systems.
"E"	" "	Tramway Systems.
"F"	" "	Hutting and Buildings generally.
"G"	" "	Position of all Dumps, Parks and Stores.
"H"	" "	Any Government Property not included in above.

NOTE.—For each separate numbered square, such as H. 26, Q. 16, B. 5, etc., in which machinery is situated, there should be a separate return.

NOTE.—In the event of machinery property, etc., being handed over from one Formation to another, a distribution return in duplicate showing the articles should be delivered to the Chief Engineer of the Corps concerned.

Sheet III

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PROPERTY DISTRIBUTION RETURN. (Contd)

..... CORPS. 4th Field Coy Engrs 4th Aus. DIVISION.

NOTE :—For details showing the Letter under which stores are to be classed, see overleaf.

Class.	Description and Origin.	LOCATION.—Reference should be made to the 1/40,000 map. For areas not covered by the 1/40,000 map refer to the 1/80,000 map.	Particulars of Exact Location.	Remarks.
	1, Light (8 ton) 4 coupled Locos.	Bely. Sh. 53 N. 31 b. 3.9	Flobecques East Mill near Flobecques East Rly Stn.	
	10, Steel frame (Bolster) trucks with hand brakes	"	"	
	10. Steel frame (Bolster) trucks without brakes	"	"	
	1 Box. truck, with 2 bogies	"	"	
	3 Light Ballast tips	"	"	
	100 chain of laid 22 lb. track, with points.	"	"	

1st Printing Co., R.E. G.H.Q. 2452

"A"	Government Property.	Fixed Machinery.
"B"	" "	Mobile Machinery (Steam rollers, road brushes, etc.).
"C"	Hired Machinery.	
"D"	Government Property.	Water Supply Systems.
"E"	" "	Tramway Systems.
"F"	" "	Hutting and Buildings generally.
"G"	" "	Position of all Dumps, Parks and Stores.
"H"	" "	Any Government Property not included in above.

NOTE.—For each separate numbered square, such as H. 26, Q. 16, B. 5, etc., in which machinery is situated, there should be a separate return.

NOTE.—In the event of machinery property, etc., being handed over from one Formation to another, a distribution return in duplicate showing the articles should be delivered to the Chief Engineer of the Corps concerned.

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C R E
4th Aust Div.

Reference your D.E. 4/61 of 11/2/19.

Attached please find return of machinery as asked for in above memo

R R Carr Major,
O.C. 13th Field Coy. A.E.

13th FIELD COMPANY AUSTRALIAN ENGINEERS No..... Date.....

Australian CORPS. **PROPERTY DISTRIBUTION RETURN.** 4th Aust Div DIVISION. 1918

NOTE :—For details showing the Letter under which stores are to be classed, see overleaf.

Class.	Description and Origin.	LOCATION.—Reference should be made to the 1/40,000 map. For areas not covered by the 1/40,000 map refer to the 1/80,000 map.	Particulars of Exact Location.	Remarks.
"A." (1)	8" centre screw cutting lathe with two chucks but only 6 change wheels + 1 centre also countershaft repaired by this Unit. (From German train near Heffe)	Hamm 1/100000 K.3.90.25	Woollen Factory LEFFE. (manufacture de Laffe) + in Factory Fitting Shop	This lathe was found incomplete + had been put in working order by this Unit.
"H."	3. Fitters benches timber fitted with lockers. (damaged) + two fitters vises. (From German train at Heffe. Dinant)	do.	do.	

R K Barr Major,
O.C. 13th Field Coy. A.E.

1st Printing Co., R.E. G.H.Q. 2452

"A"	Government Property.	Fixed Machinery.
"B"	" "	Mobile Machinery (Steam rollers, road brushes, etc.).
"C"	Hired Machinery.	
"D"	Government Property.	Water Supply Systems.
"E"	" "	Tramway Systems.
"F"	" "	Hutting and Buildings generally.
"G"	" "	Position of all Dumps, Parks and Stores.
"H"	" "	Any Government Property not included in above.

NOTE.—For each separate numbered square, such as H. 26, Q. 16, B. 5, etc., in which machinery is situated, there should be a separate return.

NOTE.—In the event of machinery property, etc., being handed over from one Formation to another, a distribution return in duplicate showing the articles should be delivered to the Chief Engineer of the Corps concerned.

[14/10/37, Part 2]

HQ 4th Aust Div Engrs

Feb 1919

Appendix 17

Appendix N° 17

19

REPORT ON CONDITION OF MAIN LORRY ROUTES IN 4th AUSTRALIAN DIVISIONAL AREA.

Road from FLORENNES through ROSEE to ANTHEE. At present in very bad state of repair owing to heavy traffic and recent thaw. The sector near the junction of the CORENNE road at 4 H.7.9. and thence through to ROSEE is especially bad, there being only a screen of metal which has been churned up. There is also much water on the surface of the road, but this could be lessened if the side drains were dug and in places cleaned out. As the country is of the undulating type there is no reason for the accumulation of water and the said drains would probably take away some of the moisture now in the foundation of the road. The road really wants a good foundation of large pitchers and some inches of screening material throughout, but as there is a shortage of labour, transport and material, our attention should be concentrated on the bad patches in the sector of the road from 4.H.6.9. through ROSEE.

There is a fair amount of metal suitable for top dressing to be had in the ballast of the tram track which is adjacent to the road, but it is of little use spreading this unless there is an efficient system of draining, the bad patches cleaned out, and a foundation of stone pitchers placed in position. There is an accumulation of pitchers suitable for the job at a civilian quarry in FLORENNES, on the right of the road as it leaves the town. This quarry is at present being worked. There is also a small quarry at CORENNE on the FLAVION side which is not being worked, but stone pitchers are heaped there.

It does not seem possible to divert traffic while repairs are being effected for the road from FLORENNES down to the PHILIPPVILLE - ROSEE road and thence to ANTHEE, though in a slightly better condition, is far from satisfactory, and there is the extra mileage.

There is also a second class road branching off the FLORENNES-ROSEE road at location 4.H.7.9., and passing through CORENNE and FLAVION to ANTHEE. However, this is only suitable for one way lorry traffic, would soon be churned up, and may well be left for horse transport.

At present the 4th A.I. Brigade supply a working party up to 100 men. At the FLORENNES end nearer to ROSEE it is looked after by 103rd Labour Coy.R.E. who have about 25 men working, thence on to ANTHEE there is a civilian working party. There is a dearth of working tools and transport throughout; besides getting material on the job, limbers and barrows would help considerably.

Road from DINANT through ONHAYE to ANTHEE is in bad state of repair. The whole length of this road requires remetalling and draining. This is now being carried out by civilian, P.O.W. and Military labour.

Roads from HASTIRRE to ONHAYE and ANTHEE are in good order.

Road from DINANT to HASTIERE is in fair condition and but requires cleaning and a few pot holes filled with metal.

Roads on East side of Meuse are in good order.

Roads DINANT - ANHAYE are in good condition

Road HASTIERE - ANTHEE in good condition.

R.R.Barr Major.
Acting C.R.E. 4th AUST. DIVISION.

27th February, 1919.

Copies to DHQ
C.E.
File

W.D.

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"A" Form

MESSAGES AND SIGNALS.

Army Form C. 2121
(In pads of 100.)

No. of Message.....

Prefix..... Code..... m.	Words	Charge.	This message is on a/c of :	Recd. at.....m.
Office of Origin and Service Instructions				
.....	Sent			Date.....
.....	At .....m.		.....Service.	
.....	To			From .....
.....	By		(Signature of "Franking Officer")	By.....

TO				

Sender's Number.	Day of Month.	In reply to Number.	AAA
ED 892	25		

Relief
not
complete
Div.
what

arrived
in billets
area
area
reported

by
order
AA THEE
Am
necessary

274
Field
Coy
E.
Sap
1

BAR 27/2.

From
Place
Time

The above may be forwarded as now corrected.	(Z)
..... Censor.	..... Signature of Addressor or person authorised to telegraph in his name

* This line should be erased if not required.

Order No. 1625 Wt. W3253/ P 511. 27/2 H. & K., Ltd. (E. 2634).

Lieut. & Adjt.
4th. Aust. Div. Engrs.

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"A" Form.

MESSAGES AND SIGNALS.

Army Form C. 2121.
(In pads of 100.)

No. of Message.....

Prefix..... Code..... m.	Words.	Charge.	This message is on a/c of:	Recd. at..... m.
Office of Origin and Service Instructions.				
.....	Sent			Date.....
.....	At..... m.		..... Service.	
.....	To.....			From.....
..... DR	By.....		(Signature of "Franking Officer.")	By.....

TO { 13th. | P. Co. | Engrs | }

Sender's Number.	Day of Month.	In reply to Number.	AAA
* ED 892	25		

Report required by 27th
must condition roads more
long routes as far
west as ARTHEE in
Divisional area can
be what repairs
necessary

From .....
Place 4th Aust Div.
Time .....

The above may be forwarded as now corrected. (Z)

Censor. Signature of Addressor or person authorised to telegraph in his name.

* This line, except AAA, should be erased if not required.

Wt. W 3253/P511. 500,000 Pads. 1/18. B. & S. Ltd. (E2389.)

4th. Aust. Div. Engrs.

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To C.R.E
4th Aust Div

26-2-18

Herewith report by Lt Turner on roads between FLORENNES and ANTHEE. as called for in above.

I am arranging for Sapper supervision of the working Party supplied by 4th Brigade & am commencing drainage of the worst patches. It is impossible to do very much more until Transport & Stone is made available.

In view of the distances that we are situated from the work. It is impossible to supply working party from this Unit unless a motor lorry is made available for taking themen to & from the job. This could also be used for cartage of Stone.

HQORS 4TH AUS. DIV. ENGRS.
No. 26/911
DATE 27.2.19

S. A. Rose
OC. 4/12th Field Co., A.E. Major

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REPORT on the ROADS between FLORENNES and ANTHEE

Ref. Map Namur. Sheet 8. Scale 1/100,000.

In accordance with instructions, I have made a reconnaissance of roads suitable for motor lorries between FLORENNES and ANTHEE.

"The main road runs from FLORENNES, through ROSEE, to ANTHEE. at present this is in a very bad state of repair owing to the heavy traffic and the after effects of the recent thaw. "The Sector near the junction of the CORENNE road at 4. H. 7.9. and thence through to ROSEE is especially bad, there being only a screen of metal which has been churned up; there is also much water on the surface of the road, but this could be lessened if the side drains were dug and in places cleaned out. As the country is of the undulating type there is no reason for the accumulation of waters and the said drains would probably take away some of the moisture, now in the foundation of the road.

"The road really wants a good foundation of large pitchers, and some inches of screening material throughout, but as there is a

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shortage of labour, transport, and material. I would suggest that our attention be concentrated on the bad patches in the sector of the road from 4.H.6.9. through to ROSEE

There is a fair amount of small metal suitable for top dressing, to be had in the ballast of the tram track which is adjacent to the road, but it is of little use spreading this, unless there is an effecdnt system of drainage, the bad patches cleaned out and a foundation of stone pitchers placed in positions. There is an accumulation of pitchers suitable for the job at a civilian quarry in FLORENNES, on the right of the road as it leaves the town, this quarry is at preocint being worked. There is also a small quarry at CORENNE on the FLAVION side, the quarry is not being worked, but some pitchers are heaped there.

It does not seem possible to divert traffic while repairs are being effected for the road from FLORENNES, down to the PHILIPPEVILLE - ROSEE road, and thence to ANTHEE, though ion a slightly better condition is far from satisfactory and there is the extra mileage.

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There is also a second class road branching off the FLORENNES – ROSEE road, at location 4.H.7.9., and passing through CORENNE and FLAVION to ANTHEE. However this is only suitable for one way lorry traffic would soon be churned up, and may well be left for horse transport.

At present the 4th A.I. Bde. supply a Working Party up to a hundred men at the FLORENNES end nearer to ROSEE is looked after by the 103rd Labour Coy R.E. who have about twenty five men working, thence on to ANTHEE there is a civilian repairing party. There is a dearth of working tools and transport throughout; besides getting material on the job limbers and barrows would help considerably.

R.W. Turner. 2Lt.
4/12th Fld. Coy A.E.

CHANMONT.
26.2.1919.

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"A" Form.

MESSAGES AND SIGNALS.

Army Form C. 2...
(In pads of 100.)

No. of Message.....

Prefix..... Code ..... m.	Words	Charge.	This message is on a/c of:	Recd. at..... m.
Office of Origin and Service Instructions.	Sent			Date.....
W.M. D-12	At..... m.		..... Service.	From.....
	To.....			
	By.....		(Signature of "Franking Officer.")	By.....

TO { 13th P. Co. Engrs

Sender's Number.	Day of Month.	In reply to Number.	AAA
* ED 892	25		

Report required by 27th
must condition roads main
bony routes as far
west is ARTHEE li
Divisional area aas
Say what repairs
necessary

From CRE 4th Aust Div.
Place
Time

The above may be forwarded as now corrected. (Z)

Censor. Signature of Addressor or person authorised to telegraph in his name.

4th. Aust. Div. Engrs.

*This line, except A A A, should be erased if not required.

Wt. W 8253/P511. 500,000 Pads. 1/18. B. & S. Ltd. (E2389.)

Reconnaissance report of Roads in Divisional Area.

Road from HASTIERE to ANTHEE is in good condition having recently been repaired, it is suitable for Motor transport traffic.

Road from DINANT – HASTIERE to ONHAYE, excepting for a short length being made of cobble stones in the village of WAULSORT, this road is metalled throughout. It is in a good condition, suitable for motor transport traffic

Main Road from DINANT to ANTHEE.

From Dinant to Onhaye the condition of the road is fair, with the exception of patches about a mile out from Dinant, which have been metalled & now requires rolling. In Onhaye the road is bad, but this is being repaired by the 4th Div. Sappers. From Onhaye the road is good with the exception of a couple of hundred yards which is being repaired by the civilians.

For about 300 yards out from Dinant the road is cobbles.

The road throughout is suitable for motor transport traffic.

Onhaye to Anthee via Weillen & Serville 2nd class road.

Through Weillens & for the next two miles the road is steep & in bad condition, entirely unsuitable for motor transport traffic. The metalled road from Serville to Onhaye is in good repair, but is unsuitable for motor transport as there is no bridge over the river, the depth of water being 2'-6" in centre of ford.

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Road from Dinant via. Bouvignes, Sommere, Falean, Heillen, Chestrumin to Dinant.

First class cobbled road from Dinant to Bouvignes, thence on to Sommere it is a second class one, metalled & in good repair. From Sommere. Falean, Heillen, Chestrumin & back to Dinant is second class throughout & in a fair condition.

There is a bridge between Sommere & Falean constructed from stone, capable of carrying motor transport, but the route generally is hilly & is not recommended for motor transport traffic.

R R Bourne Major,
O.C. 13th Field Coy. A.E.

[14/10/37, Part 2]

HQ 4th Aust Div Engrs

Feb 1919

Appendix 18

Headquarters,
4th. Aust. Div. Engrs.
18/2/1919

F. No. 4778
Appendix A 1918

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Headquarters,
4th. Aust. Div.

Reference G. No. 16/3148 of 10/2/1919, Engineer Consolidated Report herewith.

Map references refer to NAMUR (8) 1/100,000

Relief.

The area between BOUVIGNES on the north and AGIMONT on the south in general is a series of rises or undulating country, for the most part cultivated and open. The valley of the MEUSE River has a winding course running approximately north and south, breaking up the coutour of the country with its steep rocky sides of limestone strata. The ground further eastward and in close proximity is of higher level and advantageous for observation. With the exception of the deep cut river valley the ground permits of easy digging for trenches and other earthworks.

Between FALAEN and FRANCHIMONT there is a ridge forming a watershed for streams north and south of the main DINANT-FLORENNES road, which runs from ANTHEE J4 2,9. through MORVELLE south of ROSEE towards I 4 90.65. From this ridge the general slope is in a direction E. and S.E. towards the MEUSE River. The area south of ANTHEE-HASTIERE Road consists of rounded knolls with deep stream valleys between, the lower parts of the banks being very steep and generally wooded.
Between STAVE and PHILLIPVILLE the whole sector might be described as fairly open, undulating country tending to sharper relief in the south and west.

Streams.

The main obstacle is the MEUSE River and its deep cut valley. The river which is subject to flodds, has an average depth of 10 feet and flows at the rate of 3 miles per hours It is screened from observation on account of its deep valley. At present it may be crossed at DINANT, ANSEREME and HASTIERE. The bridge at ANSEREMME has been built for a single track railway crossing and footpath, and in case of emergency would permit of the passage of troops and pack animals. Vehicles and guns could be ferried across, but the speed of the river and its liability to flood does not lend itself to pontoon and similar bridges. Weirs and locks exist at HERMETON, WAULSORT and LEFFE and these could be utilised in construction of infantry crossings. With the exception of the last there are no tracks on the right bank of the river suitable for horse transport. The site of the ferry at HEER-AGIMONT, at ANSEREMME and at BOUVIGNES are suitable for a pile bridges, timber for same available in the vicinity. There is no crossing in the area that would carry tanks.
There are several minor streams in the area but they offer no serious obstacles to troops on account of the depth of water, except after a spell of very wet weather, though in some places the banks are too steep for transport.

Forests.

The general outline of forests indicated on the map is approximately correct. The woods are of oak, beech, pine and spruce, more or less thinned out by the Germans during their occupation, ranging from 6" to 12" in diameter at the butt, passable in most cases to individual infantryn but generally speaking impassable to mounted troops. There is a huge amount of undergrowth totally obscuring the vision at 50 yards.

Marches.

Such marches as exist are small and not extensive enough to warrant special considerations.

Tactical.

Generally speaking the whole area under review is well adapted for defence, the communications are in fairly good condition, with ample material available for repair of roads. Water supply is good, ground suitable for earthworks, concealment excellent. Timber is available in large quantities for all works.

Headquarters,
4th. Aust. Div. Engrs.
18/2/1919

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Headquarters,
4th. Aust. Div.

Reference G. No. 16/3148 of 10/2/1919, Engineer Consolidated Report herewith.

Map references refer to NAMUR (8) 1/100,000

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C.R.E.
4th Aust Div.

Herewith report on 4th Brigade Area.
as requested.

(a) Relief. The whole of the sector could be described as fairly open, undulating country, tending to sharpen relief in the south and west.

(b) Streams (as obstacles) Several minor streams exist but they offer no serious obstacles to the passage of troops.

(c) Forests. The woods in this area have been more or less thinned out by the Germans in their occupation, those in the northern portion are passable to Infantry & Cavalry while those in the south are passable to infantry only.

(d) Marshes. Such marshes as exists are small and not extensive enough to warrant consideration.

(e) Tactical. Generally speaking the sector has no pronounced features, the undulating nature of the ground allows of the selection of all positions between "bold forward" and "reverse slope". The ground is easily excavated while the presence of lights

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(e) continued brushwood in the forests would supply more than sufficient material for revetting.

Dump sites offering concealment and easy accessibility abound.

Roads The sector is well served by 1st class roads while numerous 2nd & 3rd class roads would materially assist movement of transport.

Stores No Engineer stores beyond timber in woods and quarries as shewn in detailed repots previously submitted.

Railways.. The value of railways is well shewn by reference to map of area which is, insofar as it was checked, correct.

Explanatory. In dealing with an area of this size it was impossible to render a really comprehensive repot in the time allowed.

Owing to want of co-operation between various arms this report is of a purely Engineer nature, and no actual defensive lines shown.

For details of Bridges, Forests & Timber, Quarries, Factories, and water supply reference could be made to reports already submitted

17-2-19.

C. Mostyn Lt.
O.C. 1st Field Coy Aborgs.

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Engineer Reconnaisance Report on the 46.48 Batt Sector of the Divisional Area

17.2.19

Ref Map. Namur Sheet 8. Scale 1/100.000

Herewith is my report on the special features of this sector:—

Ground. The area in general is a series of rises or undulating country, and mainly cultivated and open. The valley of the MEUSE River has a winding course running north and south breaking up the contour of the country with its steep and rocky sides. The ground further East and in close proximity is of higher level and therefore allows the enemy good observation over our area. With the exception of the river valley the ground permits of easy digging for trenches, and other surface Earthworks.

Obstacles. The main obstacle is MEUSE River and its valley not observable from ground held by the enemy. The River MEUSE is subject to floods, has an average depth of ten feet and a swift current at about three miles per hour.

At present it can be crossed by bridge (Suitable for traffic both ways) on the town of DINANT. and by the railway bridge at ANSEREMME. which carries a single line of railway also a footway; this bridge permits the passage of Troops and Pack Mules and approaches could be made to allow of its use for wheeled traffic. The Concrete Bridge at the North end of DINANT, has one span of its three, the one adjoining the West bank blown away, but repairs could be effected; however the bridge is on a rather advanced position, carries single traffic and has difficult approaches. Otherwise Troops and Material could be transported across the river on ferries and punts. The speed of the river and its liability to flood does not lend itself to pontoon and similar bridges, but would recommend for cases of emergency that such bridges be stored and ready to span the stream at locations H.L.05.92. and H.K. 73.88. approaches might be prepared beforehand. There are no woods or marshes on the Area likely to interfere with the passage of Troops.

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Road Tracks. The roads throughout the Area are in fair condition and the grades permit of all traffic There are several stone quarries in the district from which road repairing material can be obtained. Leading up from the River MEUSE to the Advanced Areas are many tracks, more or less steep, but suitable for Pack mules.

Railways. A double track follows the course of the River MEUSE from GIVET to NAMUR and there is also a double track ~~from~~ which branches off at ANSEREMME and runs East to HOUYET. There is siding accomodation in the vicinity of DINANT.

Woods. Much timber is available in the Valley of the MEUSE and its local tributaries, also in some scattered woods in the rear Areas Oak, Beech, Pine, Spruce etc; are plentiful and can be had in lengths up to 30 ft and 12 inches in diameter. There is also abundant brushwood in wooded areas

Water There is a good supply of water provided by the MEUSE and its local tributaries, such as the LA.LESSE, especially in the forward areas, otherwise the water is laid on in the town of DINANT, and wells are the main source of supply in the surrounding villages.

Billeting. Good accomodation can be had in buildings and cellars in DINANT and surrounding villages. In many cases the houses have been burnt out, but as the walls remain these can quickly be made weather proof.

Dugouts Dumps Etc; The Area is not suitable to deep dugouts, owing to its rocky formation, but good shelter can be obtained for Dumps, Headquarters etc: owing to the precipitous banks of the MEUSE valley. The railway tunnel (double track approximately 300 yds long) on the DINANT — HOUYET line situated at 4.K. 88.68 provides safe accomodation.

A detailed Engineer Reconnaissance Report has been previously made and forwarded to Division Covering Bridges, Roads, Railways, Water supply, Workshops etc; for the whole Area

WAULSORT
17.2.1919

R.A. Turner. Lt.
12th Fld Coy R.E.

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Engineer Reconnaissance

Waulsort Sub-area

To be attached to Report of 45th Bat'n

Works

In the higher ground selected for suitable lines of resistance (ridge HULSONNIAUX – MESNIL-S'T-BLAISE) the solid rock lies at no great depth from the surface. It is estimated that shallow trenches would in some places have to be supplemented by Breastworks, while Dugouts are not feasable except in a few selected positions.

Strong Points and M.G. Posts suffer from the same disadvantage although these in many places could be sited in woods, where the soil is generally deeper

Water Supply

The whole area is well supplied with water from streams and wells in the villages. Several villages have pipe supply systems tapping nearby streams. (For details see Special report on Water Supply already submitted.)

The only additional works considered necessary are water troughs for animals and tanks close to wells for water-cart and water-bottle filling points.

Communications

Roads All the main roads in the area are in very good repair and quarries lie at convenient points for providing metal for maintenance.

Tramlines No tramlines exist in the area nor are they practicable owing to the steep ascent from the valley of the River MEUSE.

Screens The main roads traverse ridges in many places and it is considered likely that if the enemy could bring baloons at all close it would be necessary to screen the roads at several points, noticeably on the HEER – FALMIGNOUL road from about 39½ Kilos to 37 Kilos; and possibly the HASTIÈRE – MESNIL St BLAISE road from 13 kilos to 14 Kilos.

The ANTHEE – ONHAYE road stands out

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Communications
(Cont'd)

very plainly from the ~~MESNIL~~
HULSONNIAUX — MESNIL-St BLAISE ridge and would probably require screening for the greater part of its length.

Bridges

A detailed report on the bridges of the area has already been submitted.

The only crossing of the River MEUSE for transport within this area is the Steel Bridge at HASTIÈRE, a "B class" bridge, 13 ton axle load.

Access to the area from the North for transport is over an "A class" bridge (17 ton axle load) at 4.K.84.73 over the La LESSE River.

There is no river crossing within the area that would carry tanks.

Bridge sites

The site of the ferry at HEER-AGIMONT is suitable for a pile bridge for horse transport and timber for the work could be obtained from the forest at 4.K.10.25

Abutments and locks exist at HERMETON and WAULSORT and these could be utilised in constructing infantry crossings. There are no tracks suitable for horse transport near these sites on the right bank of the river.

Captain
3. for OC 12th Field Co., A.E.

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(1)

General Reconnaissance of II Divisional Area

Northern half of area allotted to 13th Brigade

Map reference Belgium 1/100,000 Namur.

Water Supply

Running Streams R. de Biesmerée takes its rise to the west of the Bois de Corennes in South undulating country & proceeds northwards taking a sharp bend to the east at Biesmerée. At I3 4560 a small stream comes in from the north through a deep ravine, but the slopes on either side of the R. de Biesmerée remain South until it reaches Mureaux (Halte). The R. de Baud from the south through undulating country junctions at Ermeton sur-Biert. Beyond Halte the R. de Biesmerée is known as the R. de Soeuge & slopes on either side are wooded & precipitous At J3 6550 a small stream junctions after passing through a steep ravine. The R. de Soeuge junctions with the R. de Flavion at J3 8053

Capacity of stream 8ft wide x 1ft 6 in deep, speed 3 miles per hour = 50 c.f.s approx.

R. de Flavion takes its rise in the Bois de Renaceau at H4 9080 & passes easterly through undulating open country as far as I4 9095 after which the slopes on either side become increasing steep. A little South of Warlen it takes a sharp bend to the north & the banks are wooded on both sides. A small stream runs in from the west at J3 8018

Capacity of stream 12ft wide x 1ft. 6 in deep. speed 3 miles per hour = 70 c.f.s. approx.

In addition to the road bridges over these streams there is a ford at J3 7003, where a 3rd class road crosses the stream.

(2)

Reconnaissance of 1st Divisional area (continued)

Water Supply (cont'd)

Running Streams. Two small streams - are the R. de Rosé running in a S.W. direction through Rosé - another at J3 0020 running towards Fter, - take their rise from springs - after running a short distance disappear into the ground.

Drinking Water In addition to wells the following villages have water laid on from neighbouring springs - Caeuen, Biermeree, Ermetas. Haricn. Authié. Talaen, Wallen. The smaller villages have well supplies only, but the supply has always been ample for the need of the inhabitants.

For stock watering purposes in addition to the wells there is one pond at J3 6040 60' x 40' x 3'-0" deep. & at all the villages bordering on running streams there are provisions for watering stock at ramped approaches

Bridges

The road crossings over the streams are chiefly stone bridges - culverts - are all suitable for AA class loads with the exception of a steel bridge at Ermeton, 29 ft span, which will only carry B. class loads

Woods.

Some of the woods shown on the 1/100,000 Namur map have been cut out. The following are the principal woods now standing:-

J3 5305, east of Seriville, a small wood (elm - ash) on both sides of the R. de Haricn. From that point, following along the course of the Haricn, there are almost continuous belts of woods on both sides of the stream,

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(3

Reconnaissance of IV Divisional area (cont°)

Woods (cont°)

these are on western side being only narrow belts. The same state of affairs holds good for the southern bank of the R. de Soaye from Halte to the junction with the R. de Flavian.

At J3 7020, the B. de Lourcant has some good timber on south slopes. Area 800^x x 1500^x. Ash & Elm chiefly. A narrow branch of this forest runs in a N.W direction as far as the Falaise - Flavian road

At I3 9545 there is an elm ash wood 1700^x x 500^x, & a narrow belt extends northwards towards Halté

At I3 9030 a small wood 300^x x 500^x - ash & elm with a few firs.

At I3 2045 Bois de Vaup 1000^x x 500^x - ash & elm principally

At I3 2020 Bois de Corenne 2000^x x 1500^x. Thick ash & elm wood

At I3 9505 Small wood 400^x x 300^x Ash & Elm.

Railways & Tramlines

Before the war a single track railway ran along the R. de Soaye & joined with the Namur-Dinant line; & there was also a tramline from Flavenan to Dinant. In both cases the rails were removed by the germans

Engineering Materials

With the exception of the timber in the woods, & are clay pit at J3 7030, there are no engineering materials available

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(4)

Reconnaissance of IV Division area (cont°).

Observation Points.

At I 3 7515 there is a steel observation tower 13 oft. high with electric leads to the top for a search light.
Good points for observation are also at J 3 6010 & J 3 6540

Tactical Situations.

A line of defence might be taken to the west of the R. de Flavion & the village of Gerin, by placing an outpost line along the western slopes of the stream: commanding all crossing points; & lines of resistance some 500ˣ behind the outpost line taking advantage of the ground & lines of reserve passing to the east of Ermeton through La Motte & crossing the contours for purposes of concealment. mains Rose-Anthée Road at the 25 Kilometre post.
The eastern slopes of the stream are densely wooded for the west part, but the country at the back is open & affords an attack of the same height as that on the western side.

[signature]
13ème Field Coy R.E.

17.2.19
Durand.

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(1)

General Reconnaissance of Country according to
No G 16/3148 HQ Australian Division of 10.2.19.
Southern half 13th Brigade Area
Reference Belgium 1/100.000 NAMUR.

(a) Relief. A Ridge forming a watershed for streams North & South of the main road runs from Anthée J4 2.9 through Morville south of Rosée towards I 4.0065
From this ~~slope~~ ridge the general slope is in a direction E. SE towards the Meuse R.
The area south of the Anthée - Hastière Rd consists of rounded knolls with deep stream valleys between, the lower parts of the banks being very steep. and generally wooded
The strip between the Anthée Hastiere Rd & the main Rd is more open & undulating with North & South folds.

(b) Streams (as obstacles). There are two main streams in the area
(1) R de Fertan ~~rising~~ rising near Morville & flowing towards Hastière
(2) Grande Eau River flowing towards Hermeton with one source at I 4 15.62
Neither would form any obstacle to troops through the amount of water, except possibly for two or three days after heavy rain. but the banks are too steep for any transport and in some places would be difficult for Infantry eg at I 4 65 15 & J4 15 45 to J4 20 40

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(c) Forests The general outline of forests indicated on the map is approximately correct. Forests are of beech with a few pine trees scattered through a total of 500 to 800 trees per acre 6" to 12" diam at butt with undergrowth totally obscuring vision at from 15 to 60 yards.
Forests are passable by individual infantry but impassable for mounted troops

(d) Marshes There are no permanent marshes in the area

(e) There is no line naturally adapted for defence in the area. A possible system in case of need would be an outpost system from J4.6.9 towards J4 4575 by J4 3575 to J4 35 along top of river bank westward to I4 94. to I4 63 through Surice towards I4 0510 Line of Resistance from Authée to Morville along ridge to I4.77. to I466 to I454 through Omezée to I413 to H4.82.
Reserve line from I4 7785 to I447 I416 I4 0350 I404 to H484.

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Roads The types of roads indicated on the map are correct as far as can be judged while they are covered with snow.
The main road is in poor repair between Rosée & Authée but is being repaired Material is taken from tram siding at Rosée
Road Rosée to Agimont appears to be in good condition but has long heavy grade between I 4 95 32 & I 4 84. grade about 1/15 for over 800 yards.
Road mending material is available (1) from ballast of tramway track running alongside main road from Rosée to Onhaye average 8" x 9" 800 yards length has already been used.
(2) Quarries in main road at I 4 70 85
(3) Stone can be readily quarried from cuttings in all the principal roads at various parts.

Water Supply Authée Rosée & Morville are reticulated & supplied from a spring at latter place Total present population about 2,000 say 40,000 galls per day min".
The rest of the villages are supplied by hand lift pumps from shallow wells

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4

Water Supply contd. The streams in the area are not dependable sources as they are almost dry in summer

Eng Materials (1) About 12 ½yard side tip trucks & ½mile of ~~metre~~ Decauville ~~gauge~~ track on main road at I 4 62 85

(2) Timber in woods as stated under Forests

(3) Timber in trees along main road

(a) From Authie to Boundary near Gezaincourt about 300 trees 9" to 18" diam" at butt. x about 18' A useful timber (beech)

(b) Between Rosie & Authie about 100 trees 12" to 24" diam at butt x 18' height.

Rosée is built largely of brick remaining villages partly brick partly stone. Slate roofs.

W Morrison Lt
13th Field Co RE
17. 2. 19

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"A" Form
MESSAGES AND SIGNALS.

Army Form C. 2121
(In pads of 100.)

No. of Message.....

Prefix.....Code.....m.	Words	Charge.	*This message is on a/c of :*	Recd. at.....m.
Office of Origin and Service Instructions				
.....	Sent		.....*Service.*	Date.....
.....	At .....m.			
.....	To		.....	From .....
.....	By		(Signature of "Franking Officer")	By.....

TO { 12th Field Coy Engrs

Sender's Number.	Day of Month.	In reply to Number.	AAA
F.E.S.S.2	11		

Telling officers about reconnaissance please arrange about details for bathing Sent for

From			
Place	Adv 4th Aust Div.		
Time			

The above may be forwarded as now corrected.

.....
Censor.

(Z)

.....Lieut. & Adjt.
for Brigadier.

Signature of Addressor or person authorised to telegraph in his name.

* This line should be erased if not required.

Wedge No. 1895 Wt. W9659/ ... D.511 ... (E.2284)

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COPY. No.G.16/3148.

Headquarters,
4th AUSTRALIAN DIVISION.
10th February, 1919.

4th Aust. Div. Engineers.

Reference attached Map.

1. Information with regard to the following has been asked for by G.H.Q., for tactical purposes. -

(a) Relief, i.e. general lie of ground.
(b) Streams (considered as obstacles).
(c) Forests (whether passable or not and nature of them).
(d) Marshes and other special features.
(e) A clear description to be given of the country from a Military point of view, as affecting strategical and tactical operations, both offensive & defensive e.g., natural lines of defence, obstacles, etc., to be noted.

2. For the purpose of carrying out this reconnaissance, the Divisional area has been divided into three areas, as shown on the attached map. It has been necessary to divide the area as shown in order to give each Infantry Brigade a continuous strip from North to South.

It may be assumed for the purposes of this reconnaissance, that we are facing East.

3. An Artillery and an Engineer (tactical), reconnaissance will be carried out simultaneously with the Infantry reconnaissance. For this purpose Artillery and Engineer Officers will be allotted by the Divisional Artillery and Engineers respectively, to remain attached to, and to work with Infantry reconnoitering parties, until the work has been completed.

Separate consolidated Artillery and Engineer Reports on the whole area will be rendered.

4. The respective Infantry Brigade reports will be rendered to this Office in a consolidated form.

5. For the purposes of this reconnaissance, it will be probably necessary to billet parties from the 13th Brigade., with Artillery Units, parties from the 12th Brigade., in the 13th Brigade Area, and certain Artillery personnel with all Infantry Brigades.

Arrangements for this will be made direct between formations concerned.

6. Please forward reports to reach this Office on the evening of 18th February.

7. All Map references to be made to 1/100,000 sheets.

(Sgd) J.F.LAVARACK. Lt-Colonel.
General Staff.
4th AUSTRALIAN DIVISION.

Headquarters,
4th Aust. Div. Engrs.
12th February, 1919.

O's. C. 4th, 12th & 13th Field Coy's A.E.

O's.C. Field Companies will arrange to work in conjunction with their respective Brigades, and consolidated reports as per para. 3. will be rendered to reach this Office not later than the evening of 17th instant.

I.F.S. Paulson

Lieut. & Adjt.
for C.R.E. 4th AUSTRALIAN DIVISION.

B7/2

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No.G. 16/3148

Headquarters,
4th AUSTRALIAN DIVISION.
10th FEBRUARY, 1919.

4th Aust.Inf.Bde.
12th " " "
13th " " "
4th " Div.Artillery.
4th " " Engineers.

Reference Attached Map.

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(a) Relief. i.e. general lie of the ground.
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(c) Forests (whether passable or not and nature of them).
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Arrangements for this will be made direct between formations concerned.

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7. All map references to be made to 1/100,000 sheets.

J. Lavarack

Lieut-Colonel,
General Staff.
4th AUSTRALIAN DIVISION.

Copy to:- Aust.Corps.

Rpts re Water Supply Resistance & Subsid Forwarded for info from HQ 2 Aust

[14/10/37, Part 2]

HQ 4th Aust Div Engrs

Feb 1919

Appendix 19

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F.W.D

Appendix No 19

Headquarters,
4th Aust. Div. Engrs.
25th February, 1919.

C.E. AUSTRALIAN CORPS.

Herewith replies to questions set out in your No.276/146 of 13th instant. -

HEADQUARTERS, DIVISIONAL R.E.

1. All transport should be mechanical. C.R.E. should take over Field Companies bridging equipment and F.W.D. Lorries should be provided for drawing same. These lorries to be used for hauling pontoon wagons when on the march and at other times for transporting stores, etc. This would dispense with 54 animals (18 each Field Coy). C.R.E. should have a ~~light~~ car, box car and also motor cycle and side car.

FIELD COMPANY R.E.

1. There is no change necessary in the pattern of bridging equipment except that there should be a light ledger, say 4" x 4" supplied with each Weldon trestle. The addition of this would make the trestle much more rigid and also facilitate launching.

Would a lighter form of equipment altogether be sufficient for a Division to carry? This should provide, say three 75' bridges suitable for infantry in file and possibly pack transport.

2. The brake gear is unsatisfactory. The brakes should be applied to the front of the rear wheels and by means of a hand wheel on the side of the wagon (at the rear end) similar to that on the tool carts.

Should the balance of forecarriage be adjusted by the placing of "spares box" on rear underside of forecarriage (present system tends to undue "drooping" of forecarriage and uneven wear on "king pin cones")?

3

3. The R.E. Limber should be abolished and be replaced by the G.S. Limber.

4. A field cooker would be advantageous when the Company is together, but in the case of detachments it would still be necessary to carry the section cooking utensils as at present. The advantage of a field cooker would be particularly felt during long periods of marching. A field cooker would do away with the wastefulness of separate section cooking.

5. The G.S. Limbers should also be provided with the side wheel brake control. The brakes on the tool carts rarely give trouble, whereas on the limbers and pontoon wagons they are always being repaired.

6. An extra water cart is advisable and a wagon, to carry the extra equipment that it has been found necessary to have in the field, is a necessity. If Company bridging equipment is handed over to C.R.E. this extra wagon should preferably be one with a long wheel base suitable for carrying long lengths of timber etc.

With regard to the five motor cycles, one of these should have side car attached. The establishment of bicycles could be reduced to 9. The two riding horses should be retained as there are times when it is important that all officers should be out on long reconnaissances etc. and when neither motor cycles nor bicycles would be of any use; also as it has been customary for Companies to carry several supernumerary officers.

7. No.

8. No. The 4 pack animals are not necessary. There should be a Div.Dump of pack saddlery carried by the Train and this should be drawn upon as required and the ordinary transport horses used as packs. I would recommend that the panniers be dispensed with and slings substituted.

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9. Yes. Five Lewis Guns as at present authorised. 5,000 rounds of S.A.A. should be sufficient for the five guns.
10. Yes. Three troughs should be carried.
11. One periscope should be carried.
12. Should Weldon Sec A. be amended to read :-

	Breakers, wire	- Nil.
	Covers, canvas, rifle	- 35.

Should Sec 2A be amended to read:-

	Axes, hand. M.11.	- 44.
	Helves, maul, 34½"	- 20.
	Mauls, G.S. heads.	- 20.
	Hooks, bill.	- 18.

Should Sec. 2B be amended to read :-

	Tapes, tracing	- 48.

Should Sec. 5B be cut out.

Should Sec. 6A be amended to read :-

	Saddlery, officers, sets	6.

Should Sec. 7 be amended to read :-

	Hammers, claw	- 40.
	Mallets, carpenters	5.
	do tinmans.	8.
	Planes, smoothing	5.
	Rules, G.S., fourfold	26.
	Rules, smiths	5.
	Saws, crosscut, blades 5'	9.
	do do handles.	16.
	do folding complete	4.
	do hand, 26"	31.
	do ripping	5.
	do tenon	6.
	Shears, tinmans, snip	5.
	do do do curved blade)	5.
	Wrenches, adjustable 9"	10.
	Braces, carpenters ratchet, with bits)	9.
	Brushes, sable writing duck large)	8.
	do do do small	8.
	Saws, ripping.	9.
	~~Shears, tinmans snips~~	~~6.~~
	Saws, hack 12"	5.
	do do blades	60.
	Grindstones, F.S. 14"	4.

Should Sec. 8D be amended to read :-

	Instruments, drawing M.11	2.
	Scales, Marquois M.11. sets	2.
	do mathematical boxwood No.1.)	2.
	Set squares, celluloid 6" 60	2.
	do do do 6" 45	2.
	Tapes, steel measuring 100'	10.

Should Sec. 11 be amended to read:-

	Brushes, sash tool No.4.	10.
	do do do No.8.	10.

Should Sec. 21B. be amended to read:-

	Bicycles	9.

Should Sec.29B. be amended to read:-

	Clinometers, pendant	Nil.

Should Sec. 28C. be amended to read:-

	Dogs, R & S. straight 10"	96.
	(instead of 12" 48).	

Should the whole of Sec. 15B be deleted with the exception of Binoculars.

I suggest that the following be added to the establishment :-

	Wheels, carborundum 6" hand geared)	1.
	Pipe screwing stocks & dies up to 2")	1 set.
	Vice pipe	1.

(cont'd)

Vices, bench, 3" jaws	4.
Cutters, pipe, up to 2"	1 set.
~~Tape, steel band 100 ft.~~	~~1.~~
Lifting jacks, small screw)	
~~Chaffcutter~~ bottle type)	1.
Chaffcutter.	1.
Horse clipping machine.	1.

Note.- Suggested additions to C.R.E. equipment - 1 Dumpy level.

~~12.~~

13. Should Lance Corporals provided for in the establishment receive additional pay?

R.K. Bain Major.
Acting C.R.E. 4th AUST. DIVISION.

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HQRS 4TH AUS. DIVN. ENGRS
No. D.E. 4812
DATE 14.2.19.

Chief Engineer,
Australian Corps,
13th February 1919.

CHIEF ENGINEER,
AUSTRALIAN CORPS.
276/146

C.R.E.1st Australian Division,
C.R.E.2nd Australian Division,
C.R.E.3rd Australian Division,
C.R.E. 4th Australian Division,
C.R.E. 5th Australian Division.

Will you please carefully consider the Mobilisation Store Tables for a Field Company, and Headquarters Divisional Engineers, and state in what respect the equipment can be improved either as to scale of issue or design and whether you consider that some articles should be done away with altogether and others added.

The information is required so that points of reference can be drawn up to be submitted to a Committee being formed by Fourth Army for consideration. The scale must be drawn up on the assump tion that the establishment as regards personnel will remain as at present.

A list of questions which have already been put forward at various times is appended. Any proposed alterations should be in the form of questions as far as possible, and answers to the attached questions and other questions should be briefly answered.

In the case of tools etc., if it is desired to add or subtract from any article enumerated, the question should be submitted as follows :-

Should Section No.7 be amended to read -
Compasses, Wing 10inch. 2pairs
Cutters anvil flat smiths 2" 1 etc.

Replies should be furnished as early as possible.

QUESTIONS.

HEADQUARTERS DIVISIONAL R.E.

1. Do you recommend any alteration in the authorised equipment and transport (including attached transport)?

Field Company R.E.

1. Are any alterations desirable in the pattern of bridging equipment?
2. Is the type of Pontoon and Trestle waggon satisfactory? if not, in what respect does it require improvement; e.g. Is the brake gear satisfactory?
3. Should the R.E. Limber be abolished altogether, and replaced by G. S. Limber?
4. Is a Field Cooker necessary for a Field Company?
5. Are alterations recommended in the case of any of the other vehicles?
6. Are any alterations recommended in the transport?

Note. Recently 5 Motor bicycles have been authorised in lieu of 15 bicycles and 2 Riding Horses for FRANCE. Should this be universal?

7. Do you recommend the substitution of Motor Transport for any of the Horse Transport of a Field Company, or do you recommend the addition of any Motor Transport to the existing Horse Transport.
8. Should the 4 Pack Animals per Field Company be retained? If so, are the wallets more useful than slings.
9. Should Lewis Guns be added to the authorised equipment? if so, how many, and how much ammunition should be carried.
10. Should Canvas Water Troughs be carried?
11. Should Periscopes be included in the Company Equipment?
12. Do you recommend any alterations, additions or omissions in technical equipment (in accordance with the latest revise)? Are any of the present tools of little use?
13. are there any other points in which you think improvements can be made?

Fred Thriston Lt
for Lieut.-Col.,
A/Chief Engineer, Aust. Corps.

Copies to Corps. 15/2/19.

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F. H.D.

Headquarters,
4th Aust. Div. Engrs.
15th February, 1919.

O's. C. 4th, 12th & 13th Field Coy's A.E.

Reference C.E. Aust. Corps No.276/146 attached; please forward your opinions to reach this Office on 22nd instant.

I. F. S. Donaldson
Lieut. & Adjt.
for C.R.E. 4th AUSTRALIAN DIVISION.

COPY.

Chief Engineer.
Australian Corps
No. 276/146.
13th February, 1919.

C.R.E. 4th Australian Division

Will you please carefully consider the Mobilisation Store Tables for a Field Company, and Headquarters, Divisional Engineers, and state in what respect the equipment can be improved either as to scale of issue or design and whether you consider that some articles should be done away with altogether and others added.

The information is required so that points of reference can be drawn up to be submitted to a Committee being formed by Fourth Army, for consideration. The scale must be drawn up on the assumption that the establishment as regards personnel will remain as at present.

A list of questions which have already been put forward at various times is appended. Any proposed alteration should be in the form of questions as far as possible, and answers to the attached questions and other questions should be briefly answered.

In the case of tools etc., if it is desired to add or subtract from any article enumerated, the question should be submitted as follows :-

Should Section No.7 be amended to read -
Compasses, Wing 10 inch. 2 pairs.
Cutters anvil flat smiths 2" 1 etc.

Replies should be furnished as early as possible.

QUESTIONS.

HEADQUARTERS, DIVISIONAL R.E.

1. Do you recommend any alteration in the authorised equipment and transport (including attached transport)?

Field Coy. R.E.

1. Are any alterations desirable in the pattern of bridging equipment?
2. Is the type of pontoon and trestle wagon satisfactory. If not, in what respect does it require improvement; e.g. Is the brake gear satisfactory?
3. Should the R.E. Limber be abolished altogether and replaced by G.S. Limber.
4. Is a field cooker necessary for a field company?
5. Are alterations recommended in the case of any other vehicles?
6. Are any alterations recommended in the transport?

NOTE. Recently 5 Motor bicycles have been authorised in lieu of 15 bicycles and 2 riding horses for FRANCE. Should this be universal?

7. Do you recommend the substitution of motor transport for any of the horse transport of a field company, or do you recommend the addition of any motor transport to the existing horse transport?
8. Should the 4 pack animals per field company be retained. If so, are the wallets more useful than slings?
9. Should Lewis Guns be added to the authorised equipment. If so how many and how much ammunition should be carried.
10. Should canvas water troughs be carried?
11. Should periscopes be included in the Company equipment?
12. Do you recommend any alterations, additions or omissions in technical equipment (in accordance with the latest revise)? Are any of the present tools of little use?
13. Are there any other points in which you think improvements can be made?

(Sgd) F.H. CHRISTIAN Lieut.
for Lieut-Colonel.
A/Chief Engineer Aust.Corps.

[14/10/37, Part 2]

Pt 2

HQ 4th Aust Div Engrs

Feb 1919

Appendix 20

Appendix No 20.

4th Aust. Divl. Engrs

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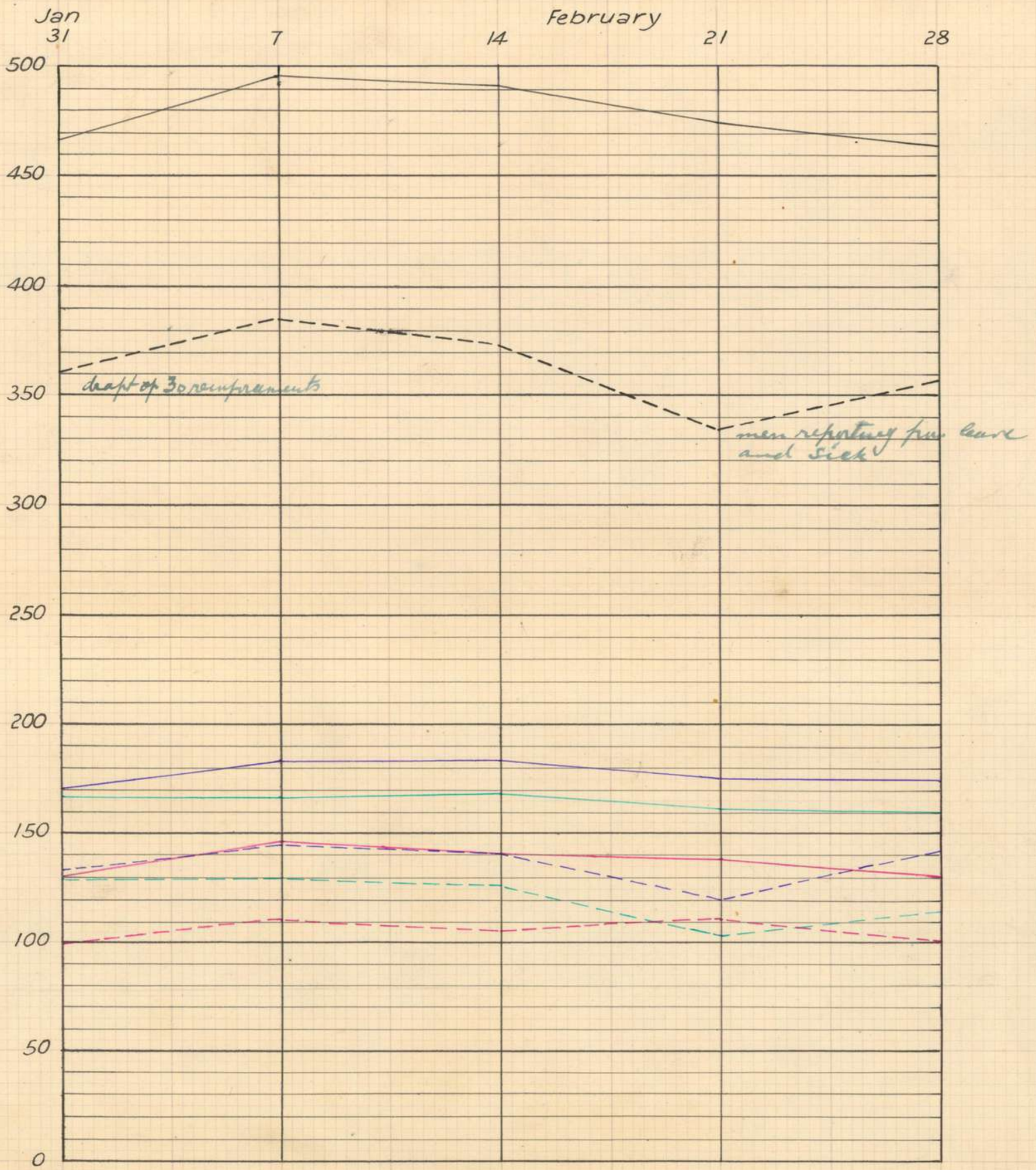
Chart of Strength Returns

February 1919



[14/10/37, Part 2]

HQ 4th Aust Div Engrs

Feb 1919

Appendix 21

Appendix No 21

4th AUSTRALIAN DIVISIONAL ENGINEERS.

LIST OF OFFICERS.

Headquarters.

Major.	R. B. CARR. D.S.O.	
Lieut.	G.F.S. DONALDSON.	

4/12th Field Company.

T/Major.	S. B. COX.	
T/Capt.	J. P. MINTON. M.C.	(75 days U.K. Leave)
Lieut.	R. B. SUTHERLAND.	(Seconded with General Staff, 4th Aust. Div.)
Lieut.	A. R. WIGHT.	
Lieut.	R. A. HUNT. D.S.O.	
Lieut.	A. J. BUCKLER. M.C.	
Lieut.	D. R. WALKER.	
Lieut.	F. H. FOSTER.	
Lieut.	C.R.T. EDMONDS.	
Lieut.	J. BALDWIN.	
2/Lieut.	F. S. DALRYMPLE.	
2/Lieut.	R. G. TURNER.	

13th Field Company.

Lieut.	W. MORRISON.
Lieut.	J. A. HAY.
Lieut.	A. J. DEBENHAM.
Lieut.	C. R. BICKFORD.

[14/10/37, Part 2]

HQ 4th Aust Div Engrs

Feb 1919

Un-numbered appendix (maps)

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12th INF BDE.

Leane