AWM4

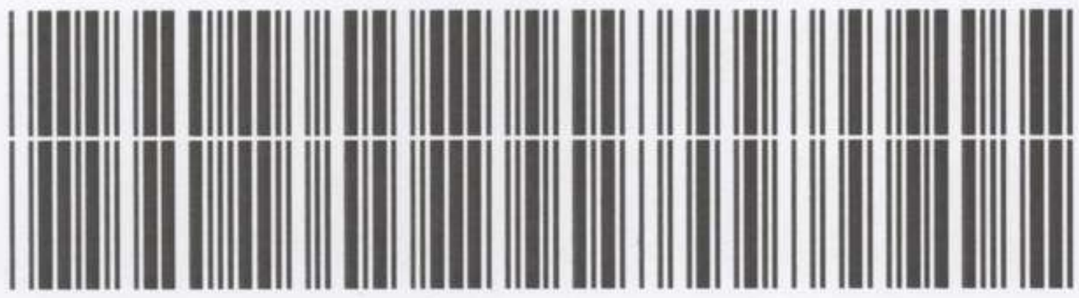
Australian Imperial Force unit war diaries, 1914-18 War

Engineers

Item number: 14/8/16

Title: Headquarters 2nd Australian Divisional Engineers

January 1918



AWM4-14/8/16

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CONFIDENTIAL.

ORIGINAL.
~~DUPLICATE.~~
~~TRIPLICATE.~~

Australian Imperial Force.

WAR DIARY

OF

Headquarters, Divisional Engineers,
SECOND AUSTRALIAN DIVISION.

FOR

JANUARY 1918

Signature of Officer compiling J. McCrostie Lt. Col., C.R.E. 2nd Aust. Division.

Signature of Officer Commanding J. McCrostie Lt. Col., C.R.E. 2nd Aust. Division.

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Sheet 1.

Army Form C. 2118

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WAR DIARY
or
INTELLIGENCE SUMMARY

(Erase heading not required.)

January 1918.

Headqrs.

DIVISIONAL ENGINEERS
2nd Australian Division

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
RAVELSBERG	1st		Made inspection of left section of Corps Zone defences (being constructed by 6th Field Company) in company with Major Harris. Went along the DOUVE and Divisional Northern boundary, walked across to ULTIMO AVENUE at the CRATER then over to ASH CRATER and back to HYDE PARK CORNER. A great deal of wiring has been done. Much still remains to be done for accommodation of garrisons, trenches and Communication trenches. Fairly clear day. Little shelling. Still freezing weather.	Jmcc
	2nd		Went out with Lt. Col. ANNAND and Capt. NEVINE, 2nd Pioneer Battalion, inspected forward roads, viz. GUNNER ROAD and PLOEGSTEERT-LE GHEER ROADS which are only ones on which much work is being done at present. Surface is frozen so rather hard to tell real condition; both seem fairly good and fit for horse transport. A lot of drainage and clearing still remains to be done, but this is difficult owing to the frozen state of the ground.	Jmcc
	3rd		Discussed the subject of concrete shelters, required for accommodation of Machine gun crews for Corps Line, with G.O.C., and with him visited Brig. Gen. PATON, 6th Brigade, who is responsible for carrying out the work. Pointed out that each shelter with internal measurements about 6 ft. x 6 ft. x 5 ft. with front walls and top 4 ft., side walls 3 ft. 6 ins thick would require about 80 tons of concrete and several tons of steel.	Jmcc
	4th		Went out with Lt.Col. DURRANT, A.Q. and Captain WADDELL, D.A.Q.M.G. to inspect work in progress at STEENWERCK Laundry. Alterations to big drying room complete except for glazing. Great improvement in drying effected. Small room still in hand, probably in operation tomorrow. Have given orders for second small drying room to be similarly altered.	Jmcc
		p.m.	Went out to HYDE PARK CORNER to see what work had been done towards constructing baths there. 1 KEYS hut erected so far.	Jmcc
	5th	a.m.	Had weekly conference this morning of Field Company Commanders and C.O. Pioneers. Also present Lt. Col. CLOGSTOUN and Capt. WAGSTAFF. Discussion of work in hand generally.	
	6th		Paid a visit to Chief Engineer's office chiefly with a view to try and get proposals of concrete works, required for Corps Defence Line, put on a better basis than is at present the case. I am not responsible for the work as Lt. Col. CLOGSTOUN is in charge, but there seems to be at present no serious attempt to put the work on a good systematic working basis. I have seen no proper scheme drawn up and no decision given as to what works are essential and what are only desirable. No standard design of structure adopted; no standardisation of materials and no signs that the question of supply of necessary material, labour and transport has been properly worked out. At present it is proposed to build 24 reinforced concrete shelters to accommodate M.G. crews and Company headquarters each of which will require 80 or 90 tons of concrete and 5 tons steel. Got no real satisfaction from C.E., who was just back from leave, and knew very little about the scheme.	Jmcc

1875 Wt. W593/826 1,000,000 4/15 J.B.C. & A. A.D.S.S./Forms/C. 2118.

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Sheet 2

Army Form C. 2118

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WAR DIARY
or
INTELLIGENCE SUMMARY
(Erase heading not required.)

Headquarters DIVISIONAL ENGINEERS 2nd Australian Division

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
RAVELSBERG	7th		Left H.Q. at 7 a.m., had breakfast at 5th Field Company, ROMARIN, and then went through a good deal of 5th Brigade trenches with Major REID. These are at present in fair condition in most parts and are being improved elsewhere; the ground being frozen it is not easy to see what the condition would be when a thaw comes on.	
	8th		Snowed heavily in the morning, cleared in afternoon.	
	9th		Visited STEENWERCK laundry with Capt . Waddell. Great improvement already secured by the provision of a definite system of in-draught and out-draught. Snowed heavily in afternoon but snow melting in the evening.	
	10th		Brigade relief to take place on 12th, 6th Brigade taking overw from 7th Brigade. Not yet settled whether Field Companies will also change. From a works point of view it will be better not. There have been no casualties this month to date.	
	11th		Field Companies will not change when Brigade relief takes place, i.e. 5th and 7th Coys remain in, 6th Coy. remain on Corps Defence Line. With Major HARRIS saw the G.O.C. (Gen. SMYTH) with regard to the shell-proof shelters required for the M.G. crews and Company H.Qrs. in Corps Defence Line. Decision arrived at as to what shelters are required to be proceeded with at once, which were to be concrete and which mined dugouts, and also an order of priority. This clears the way for commencement of work, ~~and~~ although the supply of materials, especially steel, is not yet good. Raining. Thaw which commenced night before last continuing.	
	12th		Capt. STEELE 5th Company returned from Engineer Training Depot, unexpectedly. It was understood when he went across at the beginning of October last that he would spend 6 months with the Depot. No explanation has been received as to why he has returned earlier than expected. Have written asking if a mistake has been made.	
	13th		Went to STEENWERCK laundry with Col. DURRANT, Capt WADDELL and Lt. HARRIS. There is a considerable improvement, but the scheme is not yet completely installed.	
	14th		Four inches of snow on the ground.	
	15th		Wet day - raining heavily and persistently in the afternoon. Conference of ~~C.R.Es.~~ C.R.Es. at C.E's. office on the subject of concrete works required. A certain number of concrete O.Ps. are required for Field Artillery in addition to shelters required in Corps Defence Line. Present programme which comprises about 24 shelters and 2 or 3 O.Ps. will keep all available labour busy, and at present difficulty is experienced in obtaining the necessary steel.	
	16th		Went up with Lt. Col. JESS and Capt . STEELE to PLOEGSTEERT to have a look at PLOEGSTEERT - LE GHEER Road. From ROMARIN to PLOEGSTEERT road is under water about 1 foot or more deep. In many other places roads were flooded as a result of heavy rain and melting snow; partly due to road drains being blocked and also, I think, to the rising of River LYS.	

1875 Wt. W593/826 1,000,000 4/15 J.B.C. & A. A.D.S.S /Forms/C. 2118.

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WAR DIARY
or
INTELLIGENCE SUMMARY
(Erase heading not required.)

Sheet 3.

Headquarters

Army Form C. 2118

DIVISIONAL ENGINEERS
2nd Australian Division

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
RAVELSBERG	16th		PLOEGSTEERT-LE GHEER ROAD is clear of water, in good condition and drains are running well. From LE GHEER went across to ST YVES, walked back along ULTIMO AVENUE; this C.T. is in a very bad state as a result of thaw and rain combined. A lot of earth has slid into the trench blocking it, and trench is now flooded with mud up to 18 inches deep. Have ordered Pioneers to put extra men on to try and clear ULTIMO, taking the necessary number off roads.	
		p.m.	Visited STEENWERCK laundry. Alterations now complete to my specification, working well, and already effected a great improvement.	
	18th		Went up Left Brigade area front line with Major WEBB, leaving my H.Q. at 7 a.m., and met Major WEBB at Advanced Estaminet. Went along DOUVE duckwalk to EGMONT trench. EGMONT Trench and others are knee-deep in mud; too soft to dig, too stiff to flow. Walked a considerable distance along the trenches which are in the same condition. Men are in great discomfort. It will entail great labour to clear the trenches, and it is hard to see how this mud can be readily got rid of. In some parts where there has been a drain and a good grade, it is being pushed out of the trench and down the drain; in other places scoops will have to be used to lift the mud out of the trench, and the parapet of the trench will have to be shovelled back to prevent more earth falling in. Weather misty and later snowing; visibility bad and we were able therefore to go overland a good deal. Walked along part of Support Line then back to terminus of WARNETON Tramline, inspected Heavy Trench Mortar emplacement built by Pioneers, walked back along tramline to FUSE*Cottage and then along it again to ULTIMO Avenue, and back along ULTIMO Avenue, chiefly overland, to near ST YVES. Ultimo is flooded with mud in many places. Came back via SPUR Tramline , laid for communication to O.P. through PLOEGSTEERT WOOD to RACINE Dump. Visited CATACOMBS, then back and picked up car at 12-45 p.m.	* FUSE
			Captain BURNELL reported back from visit to French Field Company today, and will submit a report on his visit. Capt. COGHLAN returned from Field Company Officers' School, BLENDECQUES, this afternoon.	
	19th		Weekly conference this morning. Discussed works generally.	
	20th		Dull with a little rain.	
	21st		Major WILLIAMS, Acting C.R.E. 3rd Aust. Div. came to see me regarding taking over on or about 30th instant.	
	24th		With Major HARRIS made an inspection of the southern half of Corps Defence Zone. Started from PLOEGSTEERT and finished at LE BIZET where a car should have picked us up, but after waiting three-quarters of an hour walked on to 5th Field Company camp. Very heavy going across country. Heavy shelling of batteries over our heads while waiting at LE BIZET.	
	26th		Arrangements made for Major HARRIS, 6th Field Company, to go on one month's leave starting from February 4th.	

1875 Wt. W593/826 1,000,000 4/15 J.B.C. & A. A.D.S.S./Forms/C. 2118.

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WAR DIARY
or
INTELLIGENCE SUMMARY
(Erase heading not required.)

Sheet 4.

Headquarters

Army Form C. 2118 80

DIVISIONAL ENGINEERS
2nd Australian Division

Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
RAVELSBERG	26th		Usual weekly conference this morning, chief subject of discussion was arrangement for inter-company competitions while in back area. The three field companies will be billeted fairly close together in one area, i.e. in the villages of COLEMBERT, LONGUEVILLE and BAINGHEM le Comte. COLEMBERT is about 12 miles from BOULOGNE on the BOULOGNE- ST OMER Road. This is almost the first time on record that Field Companies have been billeted in the same area. Usually they are billeted in their brigade areas with their respective brigades, and so it was very difficult to arrange any combined training.	
	27th		Heavy fog all day.	
	28th		Fine clear day.	
	29th		Second Aust. Division relieved by 3rd Aust. Div. at 10 a.m.. Handed over to C.R.E. 3rd Aust. Div., and at 11 a.m. left for our new quarters at COLEMBERT; went through by car with Major HARRIS and Lt. HARRIS. Bright sunny day. D.H.Q. moved to MERRIS, due to open at NIELLES lez Blequin, about 10 miles from ~~BOULOGNE~~, on 31st.	
COLEMBERT			Here our x headquarters are in the chateau, a very large place, owned by the Marquise D'Ivry, where we are very comfortably placed. A number of 7th Company officers are also billeted here and we have a combined Officers' mess of D.E.H.Q. and 7th Field Coy. Personnel of 7th Company arrived here at midnight. Beautifully fine weather, frosty nights.	
	31st		Still fine weather. Went over and saw the Area Commandant at HENNEVEUX in the afternoon; Have been looking out for suitable places for rifle ranges and training grounds, but have not yet settled. Major HARRIS leaves tomorrow morning for ROUEN and HAVRE preliminary to his leave.	

The total casualties of Divisional Engineers during their tour in the line from November 16th to January 29th, have been :- 5 other ranks wounded, one of which remained at duty.
A map shewing trenches etc., while the Division was in the line, will be sent on at some future date. It is not considered advisable to allow it to leave this office until it is al least three months old.

x here i.e. Colembert.

J. McCloughlin

Lt. Colonel,
C.R.E. Second Australian Division.

1875 Wt. W593/826 1,000,000 4/15 J.B.C. & A. A.D.S.S./Forms/C. 2118.

18,000-12/17-872

WAR DIARY

OF

Headquarters, Divisional Engineers,
SECOND AUSTRALIAN DIVISION.

FOR

JANUARY 1918

LIST OF APPENDICES.

No.	Subject.
1. (1/84)	Programme of Inter-company competition & training. (original only.)
2.	Table showing periods of duty etc. of Companies.
3. (18/25)	Divisional Engineer Order No. 30. Relief by 3rd Aust. Div.
4.	Handing over notes to 3rd Aust. Div.
5.	Notes by Engineer Clerk on work of H.Q.D.E.
6.	Notes by W.O. on supply of R.E. stores. (Map in original only)
7.	Daily works reports of Coys and Pioneers for 25/1/18. (original only)
8.	Weekly works reports of Coys. and Pioneers.
9.	Medical war diary by Regtl. Medical officer.
* 10. (23/50)	Report by Captn. Burnell M.C., on visit to French Field Company.

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Original Only.

War Diary

APPENDIX 1

HDQRS., DIVISIONAL ENGINEERS
No. 1/84.
2nd AUSTRALIAN DIVISION

"G"
2nd Aust. Division.

Attached provisional programmes of inter-company competition are forwarded.

This training will be supplemented by the ordinary training of which programmes will be forwarded.

Completion of the proposed programme of competition depends on suitable ground being available.

Lt. Colonel,
C.R.E. Second Australian Division.

30/1/18.

Appendix 1

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APPENDIX /

P R O G R A M M E.

For Inter-Company Competition.

(1). Inter-Section Competition -

4 Sections of each Company to be trained
C.R.E. to nominate one Section from each Company at random- three days prior to Event.
Sections to turn out in full marching order, with transport - vehicles to be loaded according to Field Service Manual corrected to latest Mobilization Table.

Points for -

1. Drill turn out and smartness of equipment of officer and men. Turnout of vehicles and harness and animals.

2. Surprise scheme.

3. Cross examination of officer as regards Section organisation and disposition of its equipment.

(2). Driving Competition :-

Company to try out teams and nominate - 1 G.S.Limber (empty) 1 toolcart (loaded), 1 pontoon waggon (empty).
Driving between pegs and as directed by judges.

Points to count - Turnout of waggons, harness and horses ; Seat, aids, leads time, trotting, guiding, starting and pulling up, mounting and dismounting.

(3). Regimental Guard.

Each company to nominate two squads - each to consist of one N.C.O. (Corporal) and twelve men and each squad to be under an Orderly Officer.

Guard to be properly inspected by Orderly Officer -
March to Guard Room and four sentries posted, with duties.
Training of Guard to cover every duty - Guard Report.
Completed relief of guard - to be tried out in various compliments, etc.

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APPENDIX 1.

(2)

Programme Continued

(4) Musketry Competition -

Each Company in turn to have free use of range for two days.
Each Company to nominate three teams of eight.

Team 1. Target practice.
2. (a) Fire orders at landscape.
(b) Fire control
3. Advancing and firing in open order.

(5) Officers' revolver

(6) Sports to include mounted events.

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APPENDIX 1.

Preliminary notice

MUSKETRY COMPETITION

Two teams of eight to be selected from each company.

First team to shoot -

(1)	Grouping practice	5 rounds
(2)	Application range	10 "
(3)	Rapid firing, time forty seconds	10 "
(4)	Snap shooting at various disappearing targets five seconds exposure	
(5)	Greatest number of shots on a target at 100 to 200 yards range, in one minute with unlimited ammunition	

(2) (3) and (4) shooting to be done from a trench.

Order in which teams shoot to be decided by a drawing.

Second Team - Fire orders and fire control

(1) Firing at a landscape target. The Captain of the team (selected from one of the eight) giving fire order for any given spot selected by judge.
Three shoots per team.
Time allowed three minutes - for giving fire-order, adjusting sights, loading, firing and unloading.
Targets to be fixed at a range of about 15 yards.
Anyone of the team may be called out by the judge to say which point was the target aimed at.

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APPENDIX 2

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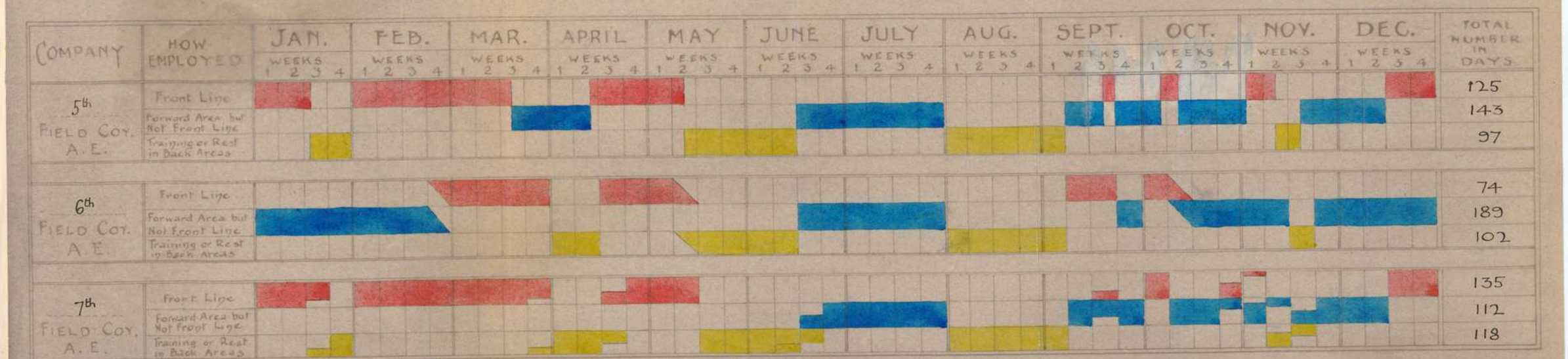
·DIAGRAM·SHEWING·PERIODS·OF·DUTY·

(1) IN FRONT LINE, (2) IN FORWARD AREA BUT NOT FRONT LINE, (3) IN TRAINING & REST IN BACK AREAS

FROM 1st JANUARY 1917 TO 31st DECEMBER 1917.

..... DIVISION



LEGEND: (1) Front Line = RED : (2) Forward Areas = BLUE : (3) Training & Rest = YELLOW :

app. 2

Original

War Diary

Appendix 2

APPENDIX 2.

APPENDIX 2.

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SECRET

Original only

APPENDIX 3

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HDQRS., DIVISIONAL ENGINEERS
No. 10/25
Copy No. 7
2nd AUSTRALIAN DIVISION

SECOND AUSTRALIAN DIVISION.

Order
Divisional Engineer No. 30.

Reference Maps:- MAZEBROUCK 5A and CALAIS 1A. 1/100,000.

1. The Field Companies of the 3rd Australian Division will relieve the Field Companies of the Second Australian Division between 27th and 28th January 1918.

2. 7th Field Company will be relieved by 10th Field Company, relief to be complete by 1 p.m. on 27th instant.
8th Field Company will be relieved by 9th Field Company, relief to be complete by 2 p.m. on 27th instant.
5th Field Company will be relieved by 11th Field Company, relief to be complete by 2 p.m. on 28th instant.

3. When relieved the 5th, 8th and 7th Field Companies will move in Brigade groups to the new area.
Billeting parties to be sent by 7th A.I.Brigade lorry on 27th instant; arrangements to be made with 7th A.I.Brigade.

7th Field Co. will be at	COLEMBERT	and will entrain	29/1/18.
8th " " " " "	LONGUEVILLE	" "	30/1/18.
5th " " " " "	BAINGHEM	" "	31/1/18.

4. Handing over receipts, in duplicate, will be forwarded to this office on completion of move, together with certificates that all camps have been left in a sanitary condition.

5. Completion of reliefs and of moves to new area will be notified to this office by wire.

6. D.E.H.Q. will close at HAVELSSEEN at 10 am. on 29th instant and reopen at the same hour and date at ~~[illegible]~~ CHATEAU, COLEMBERT

AGKNOWLEDGE.

H B Hare Lt. & Adjt.
for C.R.E. Second Australian Division.

Copy No. 1. 5th Field Coy.
" " 2. 6th " "
" " 3. 7th " "
" " 4. C.R.E. 3rd Aust. Div.
" " 5-7 War diary.
" " 8 File.

Appendix 3

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Original Appendix 4

APPENDIX 4 12

HANDING OVER NOTES

C.R.E. 2nd Australian Division to C.R.E. 3rd Australian Division

As the 3rd Australian Division is familiar with the area it is unnecessary to go into details describing the area, location of dumps, tramways etc. A plan is attached showing approximate condition of the trenches as they were up to the time of recent thaw and heavy rain. The latter caused the condition of trenches to become much worse than they were previously and much work still requires to be done to clear out mud and re-establish drainage.

Map shows in red the new wire put in by this division. That shown for front line is not complete as it is done on the initiative and under control of infantry in line and so accurate reports are not furnished to C.R.E.

Defensive systems consist of forward zone and Second or Corps Zone.

In Forward Zone front line and support line have been developed and wired. On the left Brigade Sector a third line of localities has also been wired but a complete reserve line has not yet been completed. As such a line is bound to more or less merge into the front line of the Corps Zone no very great further development will probably be required.

For Forward Zone one Field Company is allotted for work in each Brigade area.

The layout and design of the Corps Zone is under control of Lt. Colonel CLOGSTOUN R.E., G.O.C. Support brigade being responsible for construction. One Field Company has been more or less completely allotted to supervise the construction of the work.

Supplies for Corps Zone are furnished on indents by this Field Company on C.R.E.

A large programme which is incorporated in C.E's Instruction No. 75, of reinforced concrete shelters for accommodation in the Corps Zone has been drawn up and three of these have been commenced viz. at C.7.b.7.4., C.1.d.5.5., C.3.a.3.5.

184 Tunnelling Company of which one half is at disposal of C.R.E. have in hand -

(a) Construction if practicable of a deep dugout for 2 platoons at Ash crater for Corps Zone garrison. Trial shaft now in progress.

(b) Construction of shell proof extension 20' x 8' for battalion Headquarters near GREY farm at U.9.b.6.3.

(c) Completion of some M.G. positions at ST YVES.

(d) Completion of improvement of accommodation for telephonists at SURREY farm Field Arty. O.P.

O.P's for Field Artillery. Nos. 5 and 6 detailed in C.E. Instruction No. 75 though allotted to Lt. Colonel CLOGSTOUN have been taken in hand.

No. 6 at U.15.b.15.00. near ST YVES is under way, tramway has been extended to site and concreting begun.

No. 5 at U.13.b.2.2. has not been commenced pending reply by C.E. to query as to action to be taken. Papers attached. C.R.A. should also be consulted.

O.P. at le BIZET - no action taken.

Roads. Bulk of Pioneers employed on roads were taken off and put on to retrieve ULTIMO AVENUE C.T. after thaw and will probably be more urgently required there still. Cleaning, metalling and draining still requires attention.

Tramways. WARNETON and VANCOUVER tracks have been joined and spur carried to near EGMONT Avenue as shown on map. A good deal of ~~xxxxxxxxxx~~ duckboarding has also been done. Improving still required on these lines also additional loops.

Brigade Battle Control Station has been established at U. 14.c.1.4. P.T.O.

appendix 7

28/1/18.

Lt. Colonel,
C.R.E. Second Australian Division

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APPENDIX 4

List of files handed over from C.R.E. 2nd Aust Div to C.R.E. 3rd Aust. Div.

24/12	Defence Scheme
19a/72	Notes on cellars Frelinghem, 4 copies and 4 appendices.
	1 copy each Deulemont and Warneton.
	4 copies report on River Lys.
3a/27	Hand pontoons for 5th Brigade area.
15/41	Petrol tins for pontoon bridges.
4/22	Electric light at A.D.S. Underhill Farm 28 T.18.d.5.3.
~~27/22~~	
8/55	Position calls
8/57	" "
15/38	Estimate road screening material.
16/20	Reconnaissance STILBECQUE.
16/21	Reconnaissance HELLEBEKE
16/24	Report on land drainage.
16/27	Catacombs water supply.
19/58	Keys hut S.17.b.2.2.
19a/83	Accommodation at C.9.d.30.35.
19a/75	Battalion Headquarters U.9.b.7.4.
19a/79	Reconnaissance dugouts 7th Brigade area.
22/	Re proposed control of tram trollies.
E.W.319	Requirements reinforcing material.
	List of Divisional tramway trollies.
6/	184 T.Coy report on possibility of enemy mining opposite Warneton.
	Companies hand over reports
	Pioneer " " "
	Companies and Pioneers daily works reports (26th & 27th)
	3rd Australian Division Defence scheme.

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APPENDIX 4

List of maps handed over from C.R.E. 2nd Aust. Div. to C.R.E. 3rd Aust.Div.

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1 Handover works map
3 S.29 defense map
1 Reconnaissance of dugouts
1 Plan of drainage
1 Pipe line map
4 Railway maps
1 Enemy tracks
1 Passchendale Ridge
1 Secret trench map
5 Zandvoorde
5 Houthem
5 Warneton
5 Deulemont
1 Plan of dugouts
2 Plan 68
2 Plan 68a
1 Area map
1 Road map (tracing)
1 Zone map
1 Combined sheet 28 SW 36 NW
2 Drainage map
1 Bas Warneton (sheet)
2 Le Toquet Pont Rouge sectors
1 Tracing 68a
1 Right Divisional Sector
1 Blue Print 68a
1 Sheet 68
1 St Yves tunnel system
1 Dugout plan 68a
xx
1 Trenches 68a

FOLDER MAPS 1/10,000

2 Wytschaete
1 Comines
1 Wervicq
2 Houplines
5 Bas-Warneton
1 Kemmel
1 Zillebek
1 Steenwerck
1 Fleurbaix
1 Armentieres
1 Bailleul

Headquarters, Divisional Engineers,
Second Australian Division.
January 31st 1918.

The following is a brief account of the work which passes through the office of the C.R.E., given under the headings into which the correspondence is divided for the purpose of registration and filing:-

TRAINING, SCHOOLS etc. When the Field Companies are out of the forward area their principal occupation becomes that of training. Each Company submits a programme for the ensuing week, tabulated into morning and afternoon of each day; these are consolidated and a copy is sent to Chief Engineer and one to General Staff of the Division. A great deal of attention is being paid at present to drill including anti-gas drill, the regular inspection of anti-gas appliances and musketry. Inter-company competitions are also arranged covering various of these subjects as well as the smart turnout of transport and animals. At a parade held a few months ago, the Brigadier General, commanding the Engineers of 1st Anzac Corps expressed himself as quite satisfied with the bearing and general turnout of the Companies of this division.

From time to time vacancies are allotted for courses at various Army, Corps and Divisional schools,e.g. courses in Infantry training, heavy bridging, gas, cookery, bombing, veterinary work. Allotments are made to Divisional Engineers and are distributed in turn to the field companies. The periods vary according to the subject - Infantry course usually lasts about 6 weeks; Bridging and Cookery about 15 days each; veterinary courses 10 days and bombing and gas courses 1 week each.

TRANSFERS, A.F.C. APPLICATIONS etc. Transfers within Divisional Engineers and Pioneers, when they are recommended by Os.C., are arranged without reference to Divisional Headquarters, but other transfers requested, and which concern other units of the division or other divisions have to be submitted to the D.A.A.G. of division. Transfers from Infantry and Machine Gun Companies to other branches are not usually approved.

When applications were invited some time ago for admission as Flying Officers, Observers and Mechanics in the Australian Flying Corps, a good number of applications were received and several of the applicants, in fact all those who were interviewed by an officer of the R.F.C., have been accepted in the new formation.

WORKS REPORTS. Works reports are rendered daily by field companies to these headquarters when in the forward area, information contained in these is utilised to consolidate a works map. The daily reports are sometimes consolidated and forwarded to Chief Engineer and Divisional General Staff, or a weekly report is furnished according to requirements.

When the division is relieved in the line,a hand-over report shewing all works completed and in progress together with a map is supplied to the incoming C.R.E.

COMPANIES' EQUIPMENT & STORES. Companies deal direct with Ordnance in regard to the replacement of clothing and equipment, without reference to this office, when it is rendered unserviceable through ordinary wear and tear. When, however, any item of stores is lost or damaged to such an extent as to be rendered unserviceable, a board of enquiry has to be convened, consisting of not less than three officers (One president and two members) which takes all evidence and records its opinion as to whether the items are recommended to be replaced at the public expense, in which case the proceedings after having been concurred with by the C.R.E. are submitted for the approval of D.A.Q.M.G.

LEAVE. The allotment of leave fluctuates according to the number allotted to the Division, and is given out in proportion to the number of men in units who have been the longest periods in France without it. The allotment to Divisional Engineers is distributed equally to field companies, and warrants are issued from this office as the vacancies occur. Each Company keeps its leave roster which

LEAVE. (continued)

which is made up in order of precedence according to length of period without leave. The average period elapsing between arrival in France and first leave, and between subsequent leave is from nine to twelve months; in the case of officers, from three to five months. During the past few months, however, leave for officers has been granted from special allotments and not from unit allotments. The foregoing applies to English leave, which is now supplemented by leave to Paris to the extent of eight days, and this latter has been taken advantage of by a very fair percentage of Divisional Engineers; there being, apparently, no restriction in point of number, or at least the number of applications received and submitted have not been in excess of the allotment.

STRENGTH - PERSONNEL & ANIMALS. Up to within a few weeks a Field Return (B.213), strength return, remount demand, surplus and deficient horse transport return were rendered separately to Divisional Hdqrs. on various days. At present only two of these are rendered, viz. Field Return and Strength return, the former of these gives all the information included previously in remount demand and transport return, and D.H.Q. utilises this return for the purpose of demanding replacements of horses or mules and horse transport.

The B.213 also contains a tabulated statement shewing the composition by trades of the Field Companies, the establishment by trades and the numbers required to complete or the number in excess. These figures serve as a guide to the Base when sending forward reinforcements. The return also shews the ration strength of the unit, and is used to check the ration indents submitted to the A.S.C.

ROUTINE MOVEMENTS, RELIEFS. Generally, D.E.H.Q. are encamped with Divisional Headquarters, although administered by the C.R.E. as a distinct unit; this also applies when a movement takes place, the C.R.E. making the necessary arrangements for same. According to establishment this unit is allowed 1 G.S. limbered wagon for rations with an additional limber when on the move for baggage, and a maltese cart for the equipment of the R.M.O. This transport can scarcely be called adequate at present, as for several recent moves a motor lorry has been requisitioned and although this has permitted of the horse transport being less heavily laden, the lorry is always well laden, and the dismounted personnel manage either to find a seat on the top of the load or on the tail-board.

E. Hopkins Capt
H.D.E.

2/2/18.

SYSTEM OF SUPPLYING ENGINEER STORES TO THE 2nd AUSTRALIAN DIVISION WHILE HOLDING THE LINE IN THE PLOEGSTEERT SECTOR FROM DECEMBER 17th 1917 to JANUARY 26th 1918.

Original Appendix 6.

ETHOD OF REQUISITIONING.

The Field Companies submit their indents to the C.R.E. by 10 a.m. on the day previous to which the stores are required to be delivered.

If these indents are approved by the Adjutant he consolidates them and wires requirements to the Stores Officer (Captain GREENLEES) attached to Chief Engineer at Australian Corps Headquarters. The Stores Officer then notifies the Adjutant if they are available at the Corps R.E.Park situated at STEENWERCK Railway Station ; he also arranges with the C.L.R. for sufficient trucks to be placed at STEENWERCK Park by 7-30 a.m. next day for their transport to various small dumps in the forward area.

ETHOD OF FORWARDING STORES BY LIGHT RAILWAY.

ENGINEER PERSONNEL EMPLOYED.

W.O.	WOOLLARD A.F.	2nd. D.E.H.Q.	i/c Forwarding
Cpl.	STONEHOUSE J.J.	6th Field Coy. A.E.	i/c Loading
Spr.	HARTLEY L.	do.	Clerk
"	WACHSMUTH H.	do.	i/c Unloading
"	ALLEN H.	do.	do

OADING.

The trucks having been placed at STEENWERCK Park the loading party of 19 men under Sergeants SMITH J. and SMITH V. all of "B" Company, 23rd. Battalion will commence at 8 a.m. to load under the direction of Cpl. STONEHOUSE and Spr. HARTLEY who have the indents approved by Corps showing exactly what has to be loaded and where it has to be consigned to.

It is about 11 a.m. the trucks are now loaded, labelled and have been consigned accordingly at the consigning office. The C.S.M. of Light Railway has a steam engine in the yard which he ordered to be sent down from CONNAUGHT Marshalling yard and the guard is marshalling our trucks together with those of the 1st Division and other units.

The unloading party of 19 men and 2 N.C.O's also of 23rd Battalion has been warned and when the engine blows three blasts on the whistle the party will mount the train with their N.C.O's and Sapper WACHSMUTH and Sapper ALLEN who are responsible for the off loading. After waiting for the Heavy Artillery to finish loading some trucks, the train is now ready, we are all on board and in fifteen minutes will be at CONNAUGHT Marshalling yard where after a deal of shunting the various small trains will be made up for each Divisional and Brigade sector.

This is our first day and everything is yet quite new to us and we only have five trucks, three for ROMARIN Siding, one for INGERSOLL Dump and one for RACINE Dump. Sapper ALLEN is going i/c of the RACINE train and Sapper WACHSMUTH is going with the trucks for INGERSOLL which will be drawn by a petrol tractor. The unloading party has been allotted proportionately.

It is now 3-15 p.m. I have been up to RACINE and all stores have been delivered safely but I will not know if the truck for INGERSOLL arrived in order until Sapper HARTLEY rings up on the telephone from STEENWERCK Park this evening after Sapper WACHSMUTH reports back with his party. As I am leaving the train which is returning to CONNAUGHT with the empty trucks at ROMARIN Stone Siding, and will ride the bicycle which I have on the train back to the C.R.E.'s Headquarters at RAVELSBERG near BAILLEUL where I shall report to the Adjutant what stores have been delivered for the day.

AP

A map showing the railway system and the various R.E.Dumps is being forwarded with the diary. It will be observed that the Corps R.E.Park is supplied from Base by the broad gauge and that the stores for the Divisional area are taken as far forward as possible on the decauville and thence to the trenches by push trucks on the tramway.

LIMATE

This is the month of December and horse and lorry transport is difficult owing to the heavy falls of snow and the severe frosts which make it practically impossible for horses to travel on the frozen roads even with frost cogs.

APPENDIX 6

19

ADVANTAGE OF LIGHT RAILWAYS.

By this light railway system a great many motor lorries and a large quantity of horse drawn transport is kept off the roads which are not in the best order during these winter months, and as one light railway truck holds as much as three lorries more materials can be taken further forward, with less movement, which is observed by the enemy, and often draws fire; with less risk of losses.

CHANGE OF WORKING PARTIES

Since I last wrote the loading and unloading parties have changed over on account of the 6th Brigade on 12/1/18 relieving the 7th Brigade in the line. Our parties are now from "D" Company 26th Battalion. The loading party is 19 men strong and 2 N.C.O's namely Sergeant HALL C.H. and Corporal SMITH C.A. 18 men from the unloading party under Sergeant WOOD G.A. and Corporal PHILP S.

A TYPICAL DAY. January 24th 1918.

Time 12-45 p.m. STEENWERCK R.E.PARK.

After working from 8 a.m. 13 trucks are now loaded and ready to go out -

Number of trucks -	9	RACINE
	1	TOR SIDING
	2	INGERSOLL DUMP
	1	DELENELLE FARM
TOTAL.	13	

12-50 p.m. Unloading party and the two sappers are on board and we are leaving for CONNAUGHT.

1-10 p.m. Arrived CONNAUGHT.

Today there are a lot of trucks so there is a good deal of shunting.

1-30 p.m. The train of 9 trucks for RACINE is ready. The normal train is 7 trucks and as there are two extra a big steam loco is going to run to RACINE, as this track is well screened from view by PLOEGSTEERT WOOD. Sapper AALEN is in charge of the train and has a Sergeant and 9 men part of the unloading party. The train is away.

1-37 p.m. Our second train consisting of 1 truck for TOR SIDING, two for INGERSOLL and 1 for DELENELLE is now ready. The remainder of the unloading party is aboard and Sapper WACHSMUTH and myself already for the round trip returning via DORCHESTER joining the main line at KINGSTON junction.

The train is away and we are nearing ROMARIN which is only a few minutes run, the signalman is showing the green flag at KINGSTON junction where there is a branch line to the right brigade sector but today we are going straight on because we have a truck for TOR which the RACINE train could not take. The green flag gives line clear so we push on, we are now arriving at DUNDAS junction where there is another circuit line to the right in case the line through PLOEGSTEERT WOOD is blown out. DUNDAS says line clear so we keep going with our small steam loco, we are now passing WOODSTOCK which was used as a siding for ammunition, but is now obsolete. A little further on we pass some heavy batteries well camouflaged on our left, Hill 63 is also on our left.

2-0 p.m. We are nearing BEACHVILLE siding, the red flag is up so we must stop in the siding until a train which is coming down from RACINE has passed. Line Clear again so we push on. We are just on the edge of PLOEGSTEERT WOOD and there is another Howitzer battery on our right.

2-5 p.m. We are at REPTILE junction, the engine is slowing down, the guard has jumped off to set the points to throw us into TOR siding. We are now pushing up TOR Siding and will leave the truck right at the terminus to be unloaded so as horse transport can load from the road. This is also known as HYDE PARK CORNER. This truck was in front of the engine so it has been uncoupled and we are moving back on to the main line, two men out of the seven have been left behind to unload the duckboards.

2-10 p.m. We are back again on the main line which runs to RACINE but in two minutes we take the branch line to the right at HYDE PARK STATION for INGERSOLL.

2-12 p.m. We leave HYDE PARK and are passing through the wood about 100 yards past HYDE PARK, we notice the large shell holes and where the line had been blown out just 24 hours ago when we had observed the shelling on our way to RACINE. The CANADIAN railway Construction Engineers have wasted no time in repairing the line after the shelling ceased.

2-15 p.m. The train is pulling into INGERSOLL just off the PLOEGSTEERT -LE GHEER road above PLOEGSTEERT village on the right and just on the edge of PLOEGSTEERT WOOD.

The engine is waiting until the two trucks are unloaded, in the meantime, the fireman is filling the boiler with water from the shell holes.

2-35 p.m. The two trucks containing trenchboards and "A" frames have been unloaded, the materials properly stacked and camouflaged as this is rather an exposed site, and we are off again for DELENELLE.

2-47 p.m. At DELENELLE.

We have only one truck today for this dump and it contains 30 barrels of cement and 68-¾" round iron reinforcing bars which are required by the 6th Field Company A.E. in building a pill box about half a mile away.

These materials will be pushed by tram very close to the site as soon as it gets dark because the pill box is being built in an old house just in front of a battery and our Artillery comrades are very anxious not to be located by the enemy.

3-10 p.m. The cement which you will remember is very heavy, has been unloaded on to a platform made with trenchboards and it has been covered on top and sides with corrugated iron in case of rain and is now being camouflaged as this is a very exposed dump and materials have to be cleared through the night. Of course it is now midwinter and the days are very dull so observation is difficult.

3-15 p.m. I take my horse here from one of the unloading party who has ridden him up, he takes the train.

A train has just gone past with troops on but the enemy is shelling DORCHESTER Junction so we are waiting to see if it gets through alright, our train is following just a minute behind. Both trains appear to have gone past alright. I ride back now through PLOEGSTEERT and around HYDE PARK CORNER to see if the trucks of trenchboards has been cleared and picked up by the engine returning with the empty trucks from RACINE, this gives me a good idea that everything has been delivered safely so I return via ROMARIN to the C.R.E's Headquarters at RAVELSBERG and report what has been delivered to the Adjutant.

6-30 p.m. Sapper HARTLEY speaking on the telephone from STEENWERCK R.E.Park says Sappers and unloading parties returned by 5 p.m. and report all correct and incidentally that one of the men on that front train which left DELENELLE at 3-15 p.m. was killed on the train as it passed DORCHESTER. This man belonged to the 2nd Pioneer Battalion and had travelled on our train from INGERSOLL to DELENELLE where he boarded the other train.

DUMPS :- RIGHT BRIGADE.

ROMARIN SIDING - Materials are dumped here for 5th Field Company which is camped ¼ mile away. They are loaded on to their pontoon waggons in daylight and taken forward to LE GHEER dump at night. These are the only reasons why the 5th Field Company have materials dumped so far back . After the pontoon wagons have dumped their 1st load at LE GHEER corner they return to INGERSOLL and load all other materials required and take them to LE GHEER or as near as possible to the places at which work is going on in the right brigade sector. INGERSOLL is also a stone dump for forward roads and is under the direction of the 2nd Pioneer Battalion.

DELENELLE FARM. Materials can be taken from here to the right battalion by push trucks on the tramway as will be seen from the accompanying map, and they are often dumped at MOTOR CAR CORNER which is very central for the right battalion area. Stores may also be taken forward by a motor tractor on a dull day to a dump which we established at POMPADOUR, thanks to the Light Railways. This is the furthest forward I have yet known the Light Railways to operate in FRANCE. DELENELLE is also a stone dump for 2nd Pioneer Battalion.

TOR SIDING. LEFT BRIGADE.

This is a large dump which is shared by many branches of the service. It is a dump for Engineer Stores, Tunnelling stores, metal for roads, ammunition and salvage of all different kinds. Apart from being on the railway system it is right at HYDE PARK CORNER and is easily accessible to horse transport.

RACINE. The best dump in the Divisional Area. It is situated well forward in PLOEGSTEERT WOOD near the terminus of the Light Railway and

and /
has a very large stock of all kinds which we are not afraid to dump there, because so far it apparently has not been located by the enemy as it has not been shelled. From a dump standpoint the only essential which is missing is that it has no roads leading from it, but these are not found wanting because it feeds right forward with two very good tram tracks, one for the right and the other to the left battalion.

The 2nd Pioneer Battalion have just completed the track which joins these and now forms a circuit.

It is organized by the 7th Field Company A.E. and is the only forward dump with men living in it. Lance Cpl. H.E.DUNN is in charge and is assisted by Sapper G.I.HENRY the clerk, six infantry are attached from 21st Battalion to keep the dump in order.

This dump has a tram system of its own. It has about 30 flat push trucks each about 5' x 3' and when any N.C.O. comes in for stores he has to sign for so much stores and so many trucks, this receipt is filed and is returned to the N.C.O. when he brings the trucks back, by this method there is always a sufficient supply of trucks for transport and they are the only means of taking materials forward other than man carrying which it will be observed has been reduced to an absolute minimum right throughout the Divisional sector.

Materials are dumped as required along the circuit tramway and the supply of stores in this brigade area is excellent.

MATERIALS.

The strictest economy is exercised by all ranks in the use of materials and demands have been cut down to a minimum.

The main shortage is timber and it has been found necessary to cut down trees in the vicinity of NEUVE EGLISE, these are taken on pontoon trailers drawn by motor lorries to STEENWERCK R.E.Park where they are converted into the various sizes suitable for making trench boards, "A" frames, reveting panels and such like trench stores which are of first importance. The logs are only about 10" in diameter and I should say at a glance are spruce pine which is quite suitable for the purposes for which it is used. The sawyers are the only objectors and they do not like cutting through the occasional pieces of shrapnel. High wire entanglements screw pickets, especially the short ones, are very scarce and it has been necessary for the C.R.E. to issue an order that no screw pickets will be used behind the front line system but that angle iron pickets will be used in place thereof.

Barbed wire of which great quantities have been used lately in this area of the Corps Defence system is also becoming very scarce and the C.R.E. has been advised that only very limited supplies will be arriving.

STORES USED.

A list is attached showing the quantities of stores used from 17/12/17 until 26/1/18.

356 trucks with a capacity of 9½ tons each were used in transporting these stores.

Map attached to original only.

STORES FORWARDED per DECAUVILLE for C.R.E. 2nd AUSTRALIAN DIVISION.
from 17-12-17 until 26-1-18.

STORE.			NUMBER.
Barbed wire		coils	16,805
Screw pickets		long	12,900
		medium	12,700
		short	3,100
Angle iron pickets		long	19,900
		short	6,000
"A" frames		long	337
		medium	2,875
		short	3,483
Revetting panels			3,955
Duckboards			8,130
Sandbags			115,000
Corrugated iron		sheets	8,285
Light Mule tracks			470
Wood pickets		5' long	6,300
		3' "	2,700
Timber	1" boarding 4" x 8" wide		18,800 ft.
	6" x ½"		300
	3" x 2"		7,800
	4" x 2"		200
	6" x 2"		300
	5" x 3"		300
	10" x 3"		200
Camouflage		rolls	115
Timber	Rough slabs 10' x 12" x 2"		20
Rough timber suitable for bunks		pieces	250
"C" Type large English shelters		sheets	333
"B" " " " "		"	535
Elephant Iron shelters (French)		"	20
Nails	1"	cwts.	1
	2"	"	4¼
	3"	"	6¾
	4"	"	10¾
	6"	"	5
Staples	1½"	"	10¼
Clouts		lbs.	25
Tinmans rivets		"	28
Bolts small cupola		cwt.	4
	6" x 5/8th."	bolts	12
	7½" x ½"	lbs.	12
	10½" x ¾"	"	12
Eye bolts	3½" x ½"		12
Shovels G.S.			1,480
R.E.			80
Picks			800
Helves			970
Mud scoops			212
Road scrapers			12
X.P.M. Sheets		cases (cont.20 shts)	13
Mauls (complete)			12
Pitprops	8' x 6"		24
	9' x 6"		180
	10' x 3" to 6"		500
Split pitprops	6' - 8' long		910
Sleepers	8' x 8" x 5"		346
Steel rails	20' x 4"		16
Concrete bursters			200
L & F pump			14
Trench pumps			24
Suction hose		lengths	47
Delivery hose canvas		"	17
" " armoured		"	19
Cyclone wire netting		yards	14,000
Wire netting		rolls	78
Malthoid		"	7
Gravel		cubic yards	94
Sand		" "	37
		cwt	2

STORES		NUMBER
Cement	casks	70
Tracing tape	yards	6,000
Hessian	rolls	13
Decauville track lengths 5 metre 9 lb		15
" " " 3 "		4
Latrine 3 seater		1
Wire 14 guage	coils	2
Blank notice boards		40
Nissen huts complete		2
Oiled Linen	yards	5
Boiled oil	gallons	2
Paint white	lbs.	28
Sash tools		3
Reinforcing bars 3/4" 9' long		94
15' "		47
6' "		42
3' "		20
3' "		30

Number of trucks :- 356.

A.G.F. Woollard. W.O.

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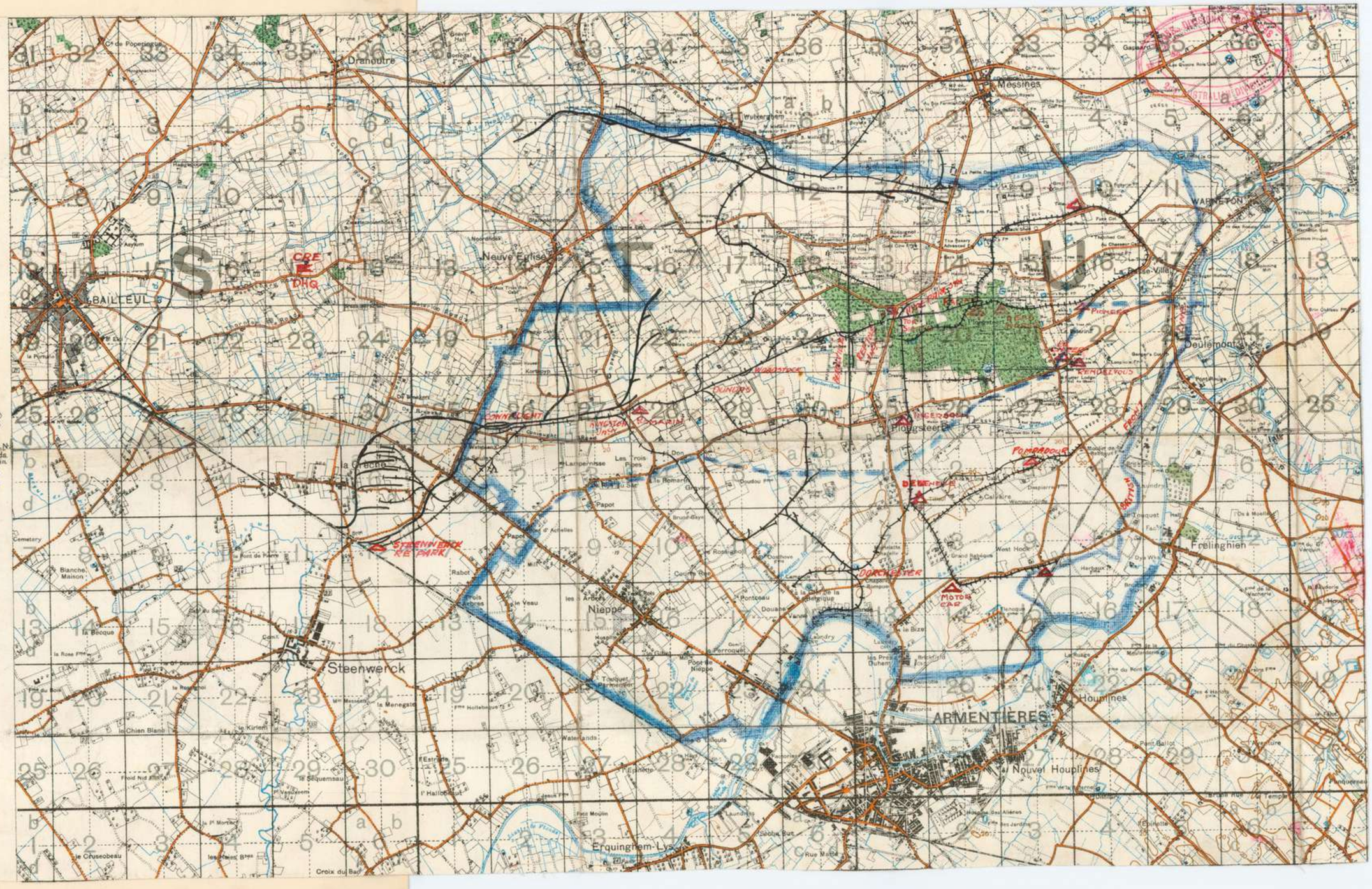


app. 6

APPENDIX 6

Nacelle - -	Ferry.
Orme - -	Elm.
Orphelinat	Orphanage.
Oseraies - -	Osier-beds.
Ouvrage - -	Fort.
Ouvrages hydrauliques	Water works.
Papeterie -	Paper-mill.
Parc - - -	Park, yard.
„ aérostatique-	Aviation ground.
„ à charbon -	Coal yard.
„ à pétrole -	Petrol store.
Passage à niveau P.N.	Level-crossing.
Passerelle Pas^lle	Foot-bridge.
Pepinière - -	Nursery-garden.
Peuplier - -	Poplar tree.
Phare - -	Light-house.
Pilier, Pil^r - -	Post.
Plaine d'exercice-	Drill ground.
Pompe - -	Pump.
Ponceau - -	Culvert.
Pont - -	Bridge.
„ levis - -	Drawbridge.
Poste / Station de garde- côte	Coast-guard station.
Poteau P^au -	Post.
Poterie -	Pottery.
Poudrière, Poud^re / Magasin à poudre	Powder magazine.
Prise d'eau	Water supply.
Puits	Pit-head, Shaft, Well.
„ artésien -	Artesian well.
„ d'aérage / „ ventilateur	Ventilating shaft.
„ de sondage -	Boring.
Quai - -	Quay, Platform.
„ aux bestiaux -	Cattle platform.
„ aux / „ des marchandises	Goods platform.
Raccordement -	Junction.
Raffinerie - -	Refinery.
„ de sucre	Sugar refinery
Râperie - -	Beet-root factory.

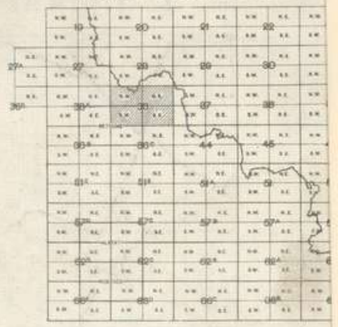
Remblai - -	Embankment.
Remise des / aux Machines -	Engine-shed.
Réservoir, Rés^r -	Reservoir.
Route cavalière -	Bridle road.
Rubanerie - -	Ribbon Factory.
Ruine / Ruines / En ruine / Ruiné - e -	Ruin.
Sablière - -	Sand-pit.
Sablonnière, Sablon^re	„
Sapin - - -	Fir tree.
Saule - -	Willow tree.
Saunerie - -	Salt-works.
Scierie, Sc^ie -	Saw-mill.
Sondage - -	Boring.
Source - -	Spring.
Sucrerie, Suc^ie -	Sugar factory.
Tannerie - -	Tannery.
Tir à la cible -	Rifle range.
Tissage - -	Weaving mill.
Tôlerie - -	Rolling mill
Tombeau - -	Tomb.
Tour - - -	Tower.
Tourbière -	Peat-bog, Peat-bed.
Tourelle - -	Small tower.
Tuilerie - -	Tile works.
Usine à gaz - -	Gas works.
„ électrique / „ d'électricité	Electricity works.
„ métallurgique	Metal works.
„ à agglomérés -	Briquette factory.
Verrerie, Verr^ie -	Glass works.
Viaduc - -	Viaduct
Vivier - -	Fish Pond.
Voie de chargement - / „ „ déchargement / „ „ d'évitement - / „ „ formation - / „ „ manœuvre -	Siding.
Zinguerie - -	Zinc works.

BELGIUM & FRANC

SHEET 36.

EDITION 6.

INDEX TO ADJOINING SHEETS.



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APPENDIX 7

DAILY WORKS REPORT.

5th FIELD COMPANY
AUSTRALIAN ENGINEERS.

For 24 hrs ending 5 p.m. 25/1/18.

Nature of work	Location	Employed Engrs	Employed Infy	Remarks as to Progress etc.
Front Line				
U.29.c.1.7.	Front Line	1	3	15 yds d/boarded.
U 28 d 7 2	"	1	2	16 " D/board raisedand trench cleared.
U 29 c 1 3	"	2	6	30 yds cleared,deepened and d/boards raised.
U 29 a 5 7 to U 23 c 6 1	"	1	30	Raising and thickening parapet.
U 29 a 5 6	"	2	4	Repairing trench
U 23 d 1 8		2	3	20 yds d/boards raised.
Una Trench	C 4 b 3 1 to C 4 b 6 7	5	29	Clearing drains, 2 yds trench cleared and revetted.
do	U 28 c 70 15	2	-	Clearing blockages.
do	U 28 c 6 5	1	4	20 yds trench deepened and d/boarded.
Cedilla Reserve	C.10.b.8.9.	1	11	50 yds drain cleared.
Careless Avenue	C.10.b.8.9.	2	3	Drains cleared and clearing trench.
View Lane	C.10.b.6.7.	2	20	75 yds parapet built up.
Kiwi St	C.4.d.4.8.	3	6	25 yds of old box drain cleared. General draining.
Cecil Reserve	C.4.b.2.7.	1	2	Draining and clearing trench.
Flax Alley	U.28.c.5.3.	1	2	20 yds trench cleared and drained. 10 yds d/boarded.
Umpire Avenue	U.28.a.4.7. to U.28.a.60.95.	2	16	200 yds d/boards raised and relaid.
do	U.22.d.6.8.	4	27	6 yds cleared, 6 yds revetted. 2 splinter proofs 80% complete.
Wiring	C.15.c.8.9.	3	5	60 yds double apron fence with single fence on outer pickets. 50 yds single apron fence up against hedge at right end of Long Ave.
Carrying	Le Gheer to Una Alley, Umpire Support & Front Line	2	50	Carried.- 20 d/boards, 6 shts iron to Una Alley. 6 d/boards, 10 Revetting panels to Umpire Support. 35 5' pickets to Front Line.

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DAILY WORKS REPORT. Continued. APPENDIX 4

5th FIELD COMPANY
AUSTRALIAN ENGINEERS.

For 24 hrs ending 5 p.m. 25/1/18.

Nature of Work	Location	Employed. Engrs	Infy	Remarks as to progress etc.
Carrying	M.C.C. to Station Dump, Reserve Fm & Surrey Fm	1	8	20 3' A Frames, 15 4'6" A Frames, 8 d/bds to Station Dump. 25 d/bds, 15 Revetting panels, 750 sandbags, 30 shts iron, 20 angle iron pickets, 20 windles to Reserve Fm. 40 3' A Frames to Surrey Fm.
Drainage.				
Warmave River & drains	Left Sector	8	25	Drainage.
Rebeques River & drains	Right Sector	10	20	"

Material Salvaged and carried to Forward Dumps

36 picks, 67 shovels, 2 coils wire netting, 1 length camouflage, 148 coils barbed wire, 54 L.S. pickets, 26 l.s. pickets, 300 A.I. S.pickets, 7 tracing tapes.

Loading and Transporting R.E. materials.	To Forward dumps	4	-	130 d/bds, 35 A Frames, 500 Sandbags, 4 rolls camouflage.

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R S Lee Major.

O.C. 5th Field Coy. A.E.

6th FIELD Co. AUSTRALIAN ENGINEERS.

WORK REPORT for 24 hours ending/ 6P.M. 25/1/18.

Location (Map ref.)	Name	Person i/c work	No. of men employed Eng	Inf.	Work	Accom.n	% of work done	Remarks.
C.3 a.40.85 to U.27 c.7.3.	SPITLOCKING.	Lt DAVIES.	3	22	200 yds trench spitlocked.			
C.3 a.4.8 to C.2 d.8.9.	"	"	3	18	500 yds Spitlocked trench, widened & parapet straightened			
C.2 d.7.3 to C.2 d.65.10	"	"	1	11	100 yds trench spitlocked.			
C.8 b.7.7 to C.8 b.5.6	Wiring.	"	2	10	120 yds Wire Entanglement erected			
C.3 c.86 to C.3 c.90.65	"NICHOLSON AV"	"	2	8	80 yds Duckboards raised			
C.7 b.9.4.	No. 1 PILL BOX	2/Lt GILLESPIE	4	10	Continued on concrete walls			
C.8 a.3.5	No. 3. "	"	-	15	Excavation of Pill Box 50% complete			
U.15 c.95.50 to U.15 d.3.5	"ST YVES AV"	Lt RENSHAW.	10	100	170 yds trench improved			
U.14 c.70.45 to U.14 a.7.0.	"ONLY WAY"	"	8	24	Clearing & Revetting bad portions of trench			
U.14 a.6.5 to U.14 a.7.8	"ONLY WAY"	"	2	26	Clearing, Draining & Berming.			
U.14 c.8.5.	"HASTED HOUSE" POST	"	1	25	Pulling down old shelters etc			
U.8 c.4.8.	"DONNINGTON HALL" POST	"	1	20	Repairs.		100%	
U.14 a.7.7.	"BAKERY" POST	"	1	15	Repairs.		100%	
U.9 c.5.2 to U.9 d.8.7.	OVERLAND TRACKS	Lt SEXTON.	8	-	all gaps bridged		100%	
U.14 d.3.3 to U.9 c.5.2	"	"	12	-	" " "		100%	
T.10 a.5.9. (6th F Co RE Camp)	Various.	CSM BROWNLEE	4	-	Making two "STOKES" Gun Beds for 6th Bde		100%	
			1	-	Making, painting & writing 50 Fire Notice Boards 12"x9"		85%.	
	SOLDER KILN. for 7th Bde.	L/Cpl DAWSON.	2	6	Construction		50%	
CAESTRE 2nd Aust Div Reinf Camp.		L/Cpl HAMMOND	2	?	General improvements			

J. Logman Capt.
6TH FIELD COMPANY ENGINEERS A.I.F.

APPENDIX 7. 27

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7th Field Company Australian Engineers.

DAILY WORKS REPORT to noon 25th January 1918.

SERVICE. Job. Particulars.	No. of men employed. Engrs.	Inf.	PROGRESS OF WORKS.	% of whole work now complete.
Day Party.				
SUPPORT Line.	2	6	22nd. Firestepping and revetting berm. 50 yds completed.	
ULTIMO AV from IRON GATE forward.	2	35	22nd. 20 yds revetment completed. 54 yds cleared ready for revetting.	
Duckwalk track from VANCOUVER Tramline to New R.A.P.	1	4	22nd. Completed 50 yad duckwalking. Quantity of duckwalks and bearers salvaged ready for use.	
Salvaging Party.		2	22nd. Salvaged 40 picks and 50 shovels. Parked at junction of tramline and ULTIMO AVENUE.	
Night Party.				
UNTIDY TRENCH. U.16.b.2.4.	2	100	22nd. 200 yds berm cut.	
ULTIMO AV from IRON GATE forward.	2	25	22nd. 90 yds berming both sides cleared.	
Drain from junction of ULTIMO AV and SUPPORT Line.	3	5	22nd. Cleaning trench and forming boxing. 8 yds boxed.	
SUPPORT Line.	2	2	Anchored back 30 yds berming revetment.	
New Drain from SUPPORT at U.17.a.3.8.	3	10	22nd. 10 yds drain deepened, widened and boxed. 50 yds parapet bevelled off.	
No.2 Cellar behind No.4 Post at U.17.b.8.3.	3	6	22nd. Bunking for 20 men completed. Material trucked from RACINE Dump.	
			Lieut CHRISTIAN i/c whole above works.	
Drain at junction of USEFUL LANE & SUPPORT at U.11.a.2.5.	1	15	24th. Drain cleaned out.	
EGMONT AVENUE at U.11.a.5.3.	1	8	23rd, Mud cleaned out from under duckwalks.	
WARNETON Track at U.11.c.2.8.	2		Laid 80 yds duckwalks.	
EGMONT AVENUE at U.11.a.5.3.	2	10	24th. Revetted 10 yds trench and repaired 6 yds.	
RACINE Dump.	1	4	23rd. Bolting up shelters.	
New SUPPORT at U.11.c.4.8.	3	16	23rd. 4 shelters erected.	
New SUPPORT at U.11.c.4.8.	1	20	24th. Trucked and carried 4 shelters to job.	
Old SUPPORT at U.11.a.2.5.	3	40	24th. Cut berm on 200 yds trench.	
USEFUL LANE at U.11.b.8.6.	2	42	24th. Cut berm on 190 yds trench.	

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APPENDIX 7

DAILY WORKS REPORT 25/1/18. (2).

SERVICE. Job. Particulars.	No. of men employed. Engrs.	Inf.	PROGRESS OF WORKS.	% of whole work now complete.
WARNETON Track. at U.11.c.2.8.	1	20	24th. Trucked to job and laid 200 yds duckwalks. Lieut KERNAGHAN i/c whole above works.	
O.P. at U.15.d.5.7.	6	4	Foundation completed. Base for reinforcement constructed.	
	2	2	Packing tramline.	
Soup Kitchen at RACINE Dump.	1	2	Completed.	

Rwdebb major

O.C. 7th Field Company Australian Engineers.

Daily Works Report for 24 hours ending 6.p.m 25-1-1918

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Service		No employed		Persons i/c.	Progress of work	% of whole work completed	Remarks
work.	Particulars	Engrs	Arty.	work.			
10th Q 14 b. 75. 80.	drainage	1	1	Sap Smith.			
11th Q d a 18.35	Arty Screen	1	1	Sap Williams	———	100%.	Corp Rankin i/c Left Group.
12th Q. 7. c 4.4.	Gun pit & drains	1	2	Sap. Nichols	Sap Williams on this job after completing Screen.		
13th Battery reinforcing position.	gun pit	1	10	Sap Neish.	No 1 pit 80% complete.		
104th O.P.	alterations	1	1	Sap Peacock	completed.		
15th Q 13 c 90.30.	tracks	1	4	Sap Rea			
Right Group							
C. 7. c 8.5	Command post	1	1	Lcp Baillie	telephone room 65% comp.		Lcp Baillie i/c Right Group

D. Wagstaff Captain
att 3rd Div Arty

APPENDIX 7

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SECOND AUSTRALIAN PIONEER BATTALION.

DAILY WORKS REPORT, FOR 24 HOURS ENDING 6 P.M. Jan 25th 1918.

Service. Work:	Particulars:	No. Empld.	Officer I/c.	Progress of work.	Remarks.
ULTIMO AVNU.	Carrying	78	Capt Donnelly	Carried from RAGINE Dump 30 A frames 40 Sheets iron and distributed between U16 B.5.4 to U17 a 0.5.	
ULTIMO LANE	"		"	Carried from Dump 30 A frames 60 Sheets iron 40 revetting panels to U17. a 4.5.	
ULTIMO AVNU	Improvements & Repairs		"	20 yards berm cut where the trench was falling in	
				6 " revetting completed 14 yards partially completed	
		51	"	at U16 C.0.9 to U16 a 7.9. material used 1 A frame 8 sheets iron 6 revetting panels 12 angle irons 4 Wyrtles	Total of 51. includes 9 O.R. on Brave Tr. Patrol
"	"		"	Revetting drain between U.15 d 8.9 and U16 b 8.4 material used 15 No frames 12 A frames 53 Sheets iron	
UMPIRE ROAD	Improvements	31	Capt Ashton	Revetment, draining, and repairing duckwalks 100 yds. U22 c 5.4.	
UNA SUPPORT	"	23	"	Cleaning out, partly renewing box drain, repairing and revetment U28 b 0.2.	
CECIL LANE	"	28	"	Cleaning out draining and relaying duckwalks 45 yds raising duckwalks, 10 yds U28 d 1.1 20 duckwalks and 7 Revetment frames carried from JELENELLE FARM.	
Toy Dump	Loading	3	Capt Revoir	Loading party	
ST IVES TRENCH	Improvements	28	"	Lateral drain dug and revetted at U15 C 4.3. 7 yds duckwalks lifted & drain cleaned out U15 C.4.3 to U15.C 5.7.	
		32	"	On Camouflage.	

C. B. Patterson
Capt & Adjt
25/1/18

APPENDIX 7 31

SECOND AUSTRALIAN PIONEER BATTALION.

DAILY WORKS REPORT, FOR 24 HOURS ENDING 6 P.M. Jany 25th 1918.

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ROADS AND TRAMWAYS.

Service. Work.	Particulars.	No. Empld.	Officer I/c.	Progress of work.	Remarks.
WARNETON	Construction	98	Capt. Needham	160 yds of duckwalks wired from U10d 3.3 to Fuse Cy T. (U10d 6.2) 200 yds line cleaned up from U10C 1.4 to U10.C 5.5.	
VANCOUVER	"		"	150 yds of duckwalks laid from U16b 8.9 to U10d 70.05 160 " " " wired from U16d 3.3 to U16d 7.6 100 " of line cleaned up at a 21 b 9.8 150 duckwalks and 320 yds wire trucked from RACINE DUMP to FUSE Co T.	
PLOEGSTERT WARNETON Rd	Metalling	28	Capt Nevein	47 loads of metal carted and spread at U25d 4.6 to U26 a 3.1.	
GUNNER RD	Maintenance	12	"	Maintaining and clearing road Cy b 5.2 to C3d 5.8.	
ASH AVNU	Construction	21	"	Box culvert put in at U14 b 7.7. cleaning road and spreading metal. 8 loads of metal from U14 b 5.6 to U14 b 7.7	
PLOEGSTERT WARNETON Rd	Maintenance	10	"	General maintenance and clearing off road U25 C 8.6. to U26 a 3.1	
C 14 a	Patrol	1	"	Road Patrol.	

G P Patterson
Capt & Adjt
25/1/18

APPENDIX 7

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5th Fuetta Coy – R. bde area

APPENDIX 8

WEEKLY WORKS REPORT.

For week ending Friday 4/1/18.

Nature of Work	Location	Progress.				
Rabecque Drain	C.13.b.5.5. to C.4.d.9.5.	Patrols have kept drain clear.				
Drain- Smythe Avenue to Rabecque River	C.9.b.7.3.	do	do	do	do	do
Warnave River	C.1.a.1.0. to U.29.a.5.0.	do	do	do	do	do
Srain - Loophole Farm - Front line	U.22.d.1.1. to U.23.b.1.6.	do	do	do	do	do
Drain - Le Gheer to Warnave River	U.28.a.9.1. to U.22.a.1.1.	do	do	do	do	do
Ayr Street to Warnave	U.27.a.3.1. to U.28.c.2.8.	do	do	do	do	do
Drain - Monmouth Av. to Monmouth River	C.4.a.0.3. to U.27.d.10.8.	do	do	do	do	do
Drain off Station Avenue) Drains - Harnians - Suffolk Avenue)		do	do	do	do	do
Drain - Rabeque River Suffolk Avenue	C.4.c.3.3. to C.3.b.9.1.	do	do	do	do	do
Drain - Long Avenue - River Lys	C.9.d.8.8. to C.9.c.8.3. to C.15.d.7.8.	do	do	do	do	do
Drain - Umpire Row to Railway	U.22.d.2.4. to U.23.b.2.7.	do	do	do	do	do

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Trench Works

Front Line - Tje work of clearing and revetting the front line has been carried out by day and night parties at the following locations:-

~~U.28.d.9.5-to~~ U.23.b.8.2. to U.23.d. 2.8.	Parapet built up 270 yds.
U.23.a.3.7. ~~to~~	2 dugouts completed for Machine-gunners - 8' x 8' x 5'
U.29.c.0.6. to U.29.a.4.3.	Placed in 198 revetting panels; Renewed 7 broken ones; 110 yds parapet raised.

Carrying - Material from Le Fheer dump carried to Front Line at night by party of 2 Sappers and 70 Infantry.

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View Lane	C.10.b.3.7. to C.10.b.6.7.	Trench deepened & widened - length 64 yds; 18 yds parapet built up; 31 yds revetted; 20 yds ready for revetment; laid 19 d/bds; 1 dug-out removed to clear trench.
Napoo Avenue	C.10.b.1.6.	22 yds trench revetted; 38 yds deepened & widened; 45 yds parapet and 13 yds parados built up; laid 12 d/boards.
Smyth Avenue		8 yds trench revetted.
Long Avenue	C.10.a.2.5. to C.4.c.8.5.	16 yds cleared, revetted and sandbagge 95 yds fire-step completed.

Weekly Works Report continued - (2)

ature of Work	Location	Progress
tation Redoubt	C.9.d.9.8.	150 yds cleared; 55 yds trench built up.
onmouth Avenue	C.4.c.3.9. to C.4.a.1.3.	14 yds trench cleared; 73 yds parapet built up; duck-boards in T -heads dug up & relaid on bearers.
uffolk Avenue	U.28.c.2.9.	30 yds fire-step completed.
ew Support	U.28.c.3.4. to U.28.c.7.9.	159 yds revetted; 180 yds parapet built up; 145 yds drain cleared; 55 yds trench cleared; 25 yds trench widened 1'; completed 140 yds fire-step.
ıa Avenue	C.4.b.4.5.	30 yds fire-step erected; 15 yds trench cleared.
npire Support	U.23.a.1.7. to U.22.d.4.6.	161 yds revetted; 338 yds widened & deepened; 297 yds cleared; 109 yds duckboarded; 30 yds parapet raised.
"	U.28.b.1.3.	150 yds new wire erected and 100 yds old wire repaired.
"	C.4.a.1.6. to U.28.b.0.5.	2 rows of 800 yds double apron wire fence ereceted & 300 yds old strengthened & repaired.
npire Reserve	U.22.c.7.9.	Accomodation for 70 men completed
"	U.28/a.1.6.	8 frames for dugouts completed.
npire Drive South		30 yds parapet built up.
npire Row	U.22.c.6.5.	45 yds trench cleared and widened.
reless Avenue	C.10.b.5.8.	6 yds trench cleared.

rrying Parties - 118 o.R's carrying & transporting R.E. Material ~~te~~ from Motor Car Corner & Le Gheer Dumps to Support Line

ansporting R?E. Material from De Seule and Le Romarin Metal Siding to Motor Car Corner and Le Gheer R.E. Dumps.

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R S Reid. Major
O.C. 5th Field Company, A.E.

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6th FIELD Coy AUST. ENGRS.

APPENDIX 8

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WORK REPORT for week ending 5.12.17.

Location of work	Particulars	WORK	Accom.n	% of work done	Remarks.
14 a 55.60	Accommodation	Salving + Bunking Dug Out.	10	100%	
14 a 70.75	"	Salving + Bunking Dug Out Improving shelters + Draining + Revetting Trench	8 9	100% 90%	
J 8 c 5.8	"	Draining + Revetting Trench + Sandbagging shelters	15	100%	
J 8 c 50.85	"	Erecting shelters + Drainage	15	100%	
J 7 d 55.75	"	Bunking, Draining + Roofing IRISH FARM Dug Out	22	100%	
J 15 b 8 0	"	Salving + Bunking Pill Box + erecting weather shelter in rear.	4	100%	
J 15 b 8 1	"	" " " " " "	4	35%	
J 6 c 14	"	Erecting Counter Battery Plotting Huts.	7	100%	Duckwalks & bomb protectors yet to be done
J 9 d 9.7	"	Erecting shelters in GRAY TRENCH Extending bunks & shelters on shelters	28	100% 60%	
J 9 c 3.7	"	Mens accommodation at AVENUE FARM ~~C H G at AVENUE FARM~~	24 ~~4~~	70% ~~70%~~	
J 9 c 7 6	"	Erecting Fire steps + shelters in AVENUE TRENCH	33	100%	
J 15 a	"	Erecting shelters in ASHCRATER	24	90%	
19 c 9 4 25 b 1 4 29 b 2 5		Constructing 3 M.G Positions		100%	
14 a 20.85		Camouflage erected on site of proposed pill box			
14 c 40.45		Pumping shaft for MG use			water now down 9'
26 b 0.2 to 26 b 3 4	Defences	300 yds Breastwork demolished			
26 b 7.7 to 27 a 1.8	"	200 yds material salved from Breastwork			
INTER. AV.	"	Breastwork practically demolished			
16 a 15.00 to 16 a 1.3	"	Firestepping of trench + New Fire Bay complete		100%	
26 c 8 2	"	150 yds Fire step set + 40 Brackets made			
16 c 1 9	"	Cleaning Trench for Emergency position		75%	
14 b 4.4 to 9 d 4.2	"	1. 10' Firebay complete with Fire steps			
8 b 9 1	"	4. Fire bays complete		100%	
2 d 4.0 to 8 d 9.6	"	5 Fire bays 40% complete		40%	
15 a 6 8 to 14 b 5 1	"	1 Fire bay Complete 2 " " 50% Comp		100% 50%	
9 d 4.2 to 15 a 6.8	"	2 7' Fire steps Comp 3 7' " " 70% Comp		100% 70%	
2 d 4 1 to 8 a 9 8	"	250 yds trench prepared for fire area			
2 d 3.5 + 2 b 1.0	"	2 Fire areas for 2 platoons complete		100%	
2 a 7 9 to 2 d 4 1	"	1100 yds 23rd St cleared + maintained.			
15 d 8 5	"	Digging, Repairing + Draining C.T to ULTIMO CRATER Bunking Pill Box.		100% 100%	
"	"	Revetting C.T.		45%	
	Salvage	480 Long angle Iron Pickets salved 1200 short " " " " 500 " Screw " " " 500 medium " " " " 1050 long " 220 coils wire salved			
		Chevaux de frise Barricades made for roads			
	Wiring	19,500 yds of wire entanglement erected			(For disposition see map)
2 a 5.9. (F Co Camp)	Various	Table made for 6th Bde YMCA 3 tables 6'x3' made for 22nd Batt.n 9. Notice Boards 15"x12" made (6 written + erected) 56. Lin Notice Boards 12"x9" for 6th Bde cut out (24 cut, wired + painted, 32 cut)		100% 100% 90%	
ESTRE Cav Reinf Camp.		Splinter proof revetments.		?	

Nettarino Major

6TH FIELD COMPANY ENGINEERS A.I.F.

7th Field Company Australian Engineers.

APPENDIX 8

WEEKLY WORKS REPORT Saturday 5th January 1918.

Support Line.	170 yards of revetting with "A" frames. 730 yards of trench cleaned out and 135 yards prepared ready for revetment. 60 yards of parapets thickened . 110 yards duckwalk laid. 45 yards old revetment taken out. 200 yards of 18" berm cut. Several "blow outs" repaired. 160 yards of firestepping completed.
New Support Line.	98 yards of revetting completed. 25 yards duckwalking. 280 yards of parapet battered back 210 yards of trench ,deepened and widened ready for revetment. 28 yards of firebay cut to template. 145 yards firestepping completed.
Shelters.	22 shelters completed in support line & new support line. 3 shelters completed for LTM.B. 3 ammunition shelters erected in support line.
R.A.P. U.16.a.6.3.	17 yards of trench dug and cleaned out ready for revetting, 8 yards ~~being~~ revetted Cupola erected and covered with earth. (approx 13ft x 9ft)
Overland Track.	Track sited and ~~150~~ 638 pickets prepared for marking same.
Defensive Zones.	6 shelters completed 850 yards protective wire put out. M.G.posn at U.10.d.4.3. practically complete M.G.posn at U.10.d.4.4. completed L.G. posn. at U.10.d.45.45 completed. 50 yards of C.T. dug. Old dugouts pumped out and improvements carried out to accommodation trench.
Baths RED LODGE.	Keys hut erected and foundation laid for outer buildings . Levelling ground and salvaging material.

R W Webb Major.

O.C. 7th Field Coy A.E.

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APPENDIX 8 37.

2ND AUSTRALIAN PIONEER BATTALION.
No. 1139
Date 5.1.18

SECOND AUSTRALIAN PIONEER BATTALION.

Battalion Headquarters,
Jan. 5th 1018.

To:-
C. R. E.,
2nd Aust.Division.

PROGRESS REPORT, WEEK ENDING 5:1:18 -- ROADS AND TRAMWAYS.

ROADS. PLOEGSTEERT - WARNETON ROAD - U.25.c.8.6. to U.27.b.8.9.
Further improved to LE GHEER. 120 tons of metal spread. 90 yds of Drains revetted. Lateral Drains cut as far as LE GHEER. Side Drains re-dug and cleaned for 1,000 yards. 27 loads of bricks used for filling. Culvert repaired at U.26.b.2.3.

GUNNER ROAD ;- C.7.b.5.2. to C.3.d.5.8.
Improved as far as SUFFOLK AVENUE C.3.d.5.8. but most of work done to C.2.d.3.4. 70 tons of metal laid. 2 large culverts erected. Lateral Drains dug as far as C.3.d.5.8. and small box drains put in under Tramway.
LE BIZET-MOTOR CAR CORNER ROAD.:- C.14.a. patrolled.

Average number of men employed 130.

DRAINS. Drains in U.20. patrolled and kept clear.

TRAMWAYS. VANCOUVER TRACK:-
384 yards of formation completed. 184 yards track laid. Large shell holes filled in and bridged at various points. Ramp through Communication Trench commenced.

WARNETON TRACK:-
200 yards of formation completed. 180 yards of track completed. Large shell holes filled in and bridged. Trench bridged. All breaks repaired where line blown up.

WARNETON LINE:-
Now complete to U.16.b.8.8. and VANCOUVER LINE to U.17.a.4.5. Formation practically completed throughout.
Line from WARNETON LINE to TRENCH MORTAR BATTERY complete to U.11.c.3.8.

Average number of men employed.:- 77

J.W. Glennie
Lieut-Colonel.
C.O., 2nd Australian Pioneer Battalion.

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APPENDIX 8

SECOND AUSTRALIAN PIONEER BATTALION.

Battalion Headquarters,
Jan. 5th 1918.

o/-
C. R. E.,
2nd Australian Division.

PROGRESS REPORT FOR WEEK ENDING 5:1:18.

RENCHES. ULTIMO LANE. from U.17.a.5.5. to U.17.d.3.9.
182 yards of parapet filled in and heightened. 83 yards revetted. 55 yards revettedone side of trench. 86 yards of Fire-Steps constructed and improved. 30 yards drained and cleaned.

ULTIMO AVENUE.- from U.15.c.4.3. to U.16.b.4.4.
610 yards of netting laid on duckwalks. 27 yards revetted. 20 yards repaired and improved.

CRATER TRENCH. U.15.d.9.7.
20 yards repaired and revetted.

LOOK SLIPPY TRACK. - U.15.c.
275 yards Double Duckwalks and 100 yards single duckwalks wired.
DOUVE TRACK :- U.10.a.
80 yards of Duckwalks netted.

SUPPORT LINE. U.17.a.
14 yards repaired and revetted.

UNA AVENUE. U.28.b.
214 yards revetted.
UNA SUPPORT. U.22.d.
150 yards revetted.

UMPIRE AVENUE. U.28.a.
Trench repaired where blown in.

Average number of men employed :- 200

RENCH MORTAR POSITIONS. LEFT SECTOR.
Ammunition Pit dug, revetted, floored and covered. Communition Trench dug from Gun Pit to Ammunition Pit, revetted and duckboarded.
2 sides of Gun Pit revetted. Trench leading to same revetted and duckboarded. Back wall of pit strengthened.

RIGHT SECTOR.
Ammunition Pit duckboarded, revetted, sandbagged and covered. Trench from Gun Pit to Ammunition Pit revetted, duckboarded and covered. Sump and drain revetted. Gun Pit partially revetted and sandbagged.

Average Number of men employed 25.

Lieut-Colonel.
C.O., 2nd Australian Pioneer Battalion.

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APPENDIX 8

Steenw K. Laundry

Half furnace between two small drying rooms pulled down & rebuilt inside.

Two flue pipes run inside

Reception flue chamber & main flue built

Lining boards taken off rafters and re-erected on collar ties

Fresh air flue built

Main furnace in large drying room concreted on outside

Racks Completed

C L Deering Lt
Asst Ag

To each Member of the A.I.F.

The Australian Government has decided to commemorate Australia's share in the present war by the formation, after the war, of Museums, in which will be collections of war trophies, photographs, sketches, trench papers, &c. The task of collecting these is now in progress, and is being carried out by the Australian War Records Section, which already has received a large number of fine trophies.

It is desired to make these Museums at least as fine as any in the world, and thus a memorial worthy of the A.I.F. This can be done, but only with the co-operation of all ranks, and I now ask that each member of the A.I.F. should contribute at least one trophy to his unit's collection in the Museums. This would provide sufficient material for splendid Museums.

Some units are already taking steps to have this done. Unless the other units wish their collections to be overshadowed by these, it will be necessary for each member to do his bit to make his own unit's collection the best possible, and I am confident this will be done.

Trophies for the War Museums should be handed to C.O.s, who will arrange to send them to the Museums Collecting Depôt.

W. T. Bridwood.

14 December, 1917.

app. 8.

APPENDIX 8

SECOND AUSTRALIAN DIVISION.

30th December 1917.

FORWARD ROADS REPORT.

Unit.	Av. No. employed daily.	Roads worked on.	Metal laid.	
2nd Aust. Pioneer Battalion.	92 men	Circuit Rd LA GHEER to GUNNER Rd. PLOEGSTEERT-WARNETON		Fit single traffic to U.27.d.9.9. Being widened to 16 ft. revetted & drained.
		RAILWAY CROSSING at U.25.d.5.8.	40 tons.	Made good.
		GUNNER ROAD		Made good to C.3.b.7.3. & being improved.
		LE BIZET-MOTOR CAR CORNER Road.		Patrolled and maintained.

Approximately 40 tons of metal laid, also a large quantity of brick has been used to bed the metal.

Lt. & Adjt.
for C.R.E. Second Australian Division.

APPENDIX 8

SECOND AUSTRALIAN PIONEER BATTALION.

CONSTRUCTION AND MAINTENANCE REPORT.

For week ending;- 5/1/18.

U10d76.00. to U16b.8.8.

1. New Lines completed. Warneton Line 180 yds From ~~U.16.d.8.8 to U.16.B.8.8~~
Vancouver " 184 " From U17.A.3.3 to U17A3.5
Spur line from Warneton track to T.M.B. U.11.C.3.8

2. New Sidings. Nil

3. Lines relaid. Wherever broken by shell fire, most work was needed necessary at U.10.d.6.3 and from there to U.10.d.7.0

4. Track Repairs. Patrol parties on both Warneton + Vancouver tracks repaired numerous breaks, caused by shell fire every night the largest of these were at Fuse Cot U10d6.3 on two occasions

5. Track ballasted. Nil

6. Material indented for 150 sets of qlts. Decauville frame track
500 1/2 full props

7. Material received. 36 sleepers 9 ft long

8. No of trucks repaired. Nil

9. No of new trucks received. Nil

REMARKS.

Ramp commenced through communication trench on Vancouver line
350 yds of formation completed on Vancouver track
Material for job carted from Racing Track
length of rail cut for cross over points
Points set in at Fuse Cot.
Old trench bridged with steel rails 24 ft wide at 11.C.3.8

Also one Offrin + 25 men on TMB

Meurham Capt
O.C. D. Coy

Note:
1. Here insert length of line completed and state betweenwhat points, shewing map reference.
2. Describe siding shewing length and position.
3. Shew position and length relaid.
4. Describe nature of repairs and position.
5. Here state position of track ballasted.
6. Here state detail of material indented for

P.T.O.

app. 8.

Note; (contd)

7. Here state detail of material received.
8. Here state nature of repairs.

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APPENDIX 8

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SECOND AUSTRALIAN DIVISIONAL ENGINEERS.

Report on works from 30th December to 5th January 1917 inclusive.

5th Field Company, A.E. (36.B.4.a.5.2.) Right Brigade sector.

DRAINS. Patrolled and kept clear.
TRENCHES. Revetting, deepening and widening. Building up and thickening parapets. Duckboarding.

6th Field Company, A.E. (28.T.10.a.5.9.) Reserve Brigade Sector.

HUTTING. Erecting splinter-proof walls round huts at 2nd Divl. Reinforcement Camp, CAESTRE.
ACCOMMODATION. Salving and bunking pill-boxes and dugouts. Erecting shelters & accommodation for men in trenches. Bunking.
WIRING. 19,500 yards of entanglement erected.
SALVAGE. 480 long Angle pickets. 1,200 short angle iron pickets. 500 short screw pickets. 500 medium screw pickets. 1050 long screw pickets. 220 coils wire.

7th Field Company, A.E. (28.T.10.c.7.0.) Left Brigade sector.

TRENCHES. Revetting, duckboarding trenches and widening parapets. Firestepping completed and fire-bay cut in new support line.
SHELTERS. 22 shelters completed in Support line and new support line. 3 shelters completed for L.T.M.B. 3 Ammunition shelters erected in support line.
R. A. P. U.16.a.7.3. 17 yards of trench dug and cleaned out, ready for revetting. 8 yards revetted. Cupola erected and covered with earth.
OVERLAND TRACK. Track sites - 640 pickets prepared for ~~marking~~ same.
DEFENSIVE ZONES. 6 shelters erected. 850 yds. protective wire set up. M.G. position at U.10.d.4.3. practically completed. M.G. position at U.10.d.4.4. completed. L.G. position at U.10.d.45.45. completed. 50 yds. C.T. dug. Old dugouts pumped and improvements carried out to accommodation trench.
BATHS. Keys hut erected and foundations laid for outer buildings. Levelling ground and salvaging material.

2nd Pioneer Battalion. (36.B.16.c.4.9.) NIEPPE.

TRENCHES. Duckwalking, revetting and parapets heightened.
DRAINS. Drains in U.20. patrolled and kept clear.
T.M.psns. Two being constructed at U.11.c.5.9.

Lt. & Adjt.
for C.R.E. Second Australian Division.

6/1/18.

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app. 8.

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APPENDIX 8

SECOND AUSTRALIAN DIVISION.

FORWARD ROADS REPORT. 6th January 1918.

Unit.	Av. No. employed daily.	Roads worked on	Metal laid.	
2nd Aust. Pioneer Bn.	130	PLOEGSTEERT-WARNETON	120 tons	Cleaning & revetting drains. Side drains re-dug and cleaned for 1,000 yards.
		GUNNER ROAD	70 tons	2 large culverts erected. Improved as far as SUFFOLK AVENUE C.3.d.5.8.
		LE BIZET-MOTOR CAR CORNER ROAD.	C.14.a.	Patrolled.

Lt. & Adjt.
for C.R.E. Second Australian Division.

app. 8.

APPENDIX 8

SECOND AUSTRALIAN DIVISION.

FORWARD ROADS REPORT. 12th January 1918.

Unit.	Av. No. employed daily.	Roads worked on	Metal laid.	
2nd Aust. Pioneer Battn.	100	ASH AVENUE	8 tons.	Large culvert erected at U.14.a.6.4.
		PLOEGSTEERT-WARNETON	200 tons.	Formed & metalled to LE GHEER. Side drains re-dug. 84 yds shell holes revetted. Culvert erected at U.26.b.6.3.
		GUNNER ROAD	92 tons.	Good for single traffic to C.3.d.5.9. Side drains cleaned small drains (box) put under tramway (10) between C.7.b.5.2. and C.3.d.5.8.
		C.8.a.2.5. to C.14.a.8.9.		Side drains cleared & culvert repaired at C.8.c.4.8.

Lt. & Adjt.
for C.R.E. Second Australian Division.

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APPENDIX 8

SECOND AUSTRALIAN DIVISIONAL ENGINEERS.

Report on works from 6th January to 12th January 1918 inclusive.

5th Field Company, A.E. (36.B.4.a.5.2.) Right Brigade sector.

DRAINS. Patrolled and kept clear.
TRENCHES. Revetting, duckboarding, deepening and widening. Building up and thickening parapet. Fitting gas-proof door frames.
228 Dugouts gas-proofed.
WIRING. 2 rows of 750 yards double apron wire fence erected and 2 rows of 150 yards old wire repaired and strengthened.
Erected 290 yards double apron wire fence; 200 yards repaired and thickened.

6th Field Company, A.E. (28.T.10.a.5.9.) Reserve Brigade sector.

ACCOMMODATION. Sandbagging and revetting shelters. Erecting shelters and bursters on shelters. 2 Nissen huts erected T.27.d.8.9.
TRENCHES. Construction and fire-stepping of DONNINGTON HALL POST.
" of HASTED HOUSE POST.
Revetting, fire-stepping and duckboarding, constructing fire bays.
WIRE. Gaps cut in wire every 100 yards from C.8.b.5.9. to C.3.c.7.4.
6,500 yards wire entanglement erected.

7th Field Company, A.E. (28.T.10.c.7.0.) Left Brigade sector.

TRENCHES. Revetting and duckboarding trenches; widening parapets
WIRE. Cutting gaps - and placing 800 yds spirals between 2 lines of double apron fence. 150 yds protective wire U.17.a.2.6.
OVERLAND-TRACK. Alternative route. 3,600 yds marked out & 85% wired.
R. A. P. U.16.a.7.3. 85% complete.
SHELTERS.

6	shelters completed at	U.11.c.5.8.
8		U.16.c.6.4.
3		Left support
5		U.17.c.8.8.
4		U.16.b.2.4. (accommodation trench)
26.		

Cable testing dugouts at U.11.b.8.5. completed.
DEFENSIVE ZONES. 2 M.G. positions completed. 25 yards fire-step.
U.17.a.2.6.. 80 yds trench dug; 4 shelters put in.

Baths at Red Lodge Completed.

2nd Pioneer Battalion. (36.B.16.c.4.9.) NIEPPE.

TRENCHES. Cleaning out, duckwalking and revetting.
DRAINS. Drains in U.20 patrolled and kept clean.
T.M.psns. U.11.c.5.9. completed.

Steamers Laundry Improvements to Drying Room

Lt. & Adjt.
13/1/18. for C.R.E. Second Australian Division.

app. 8.

"A" Form.

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

MESSAGES AND SIGNALS.

APPENDIX 8

No. of Message 6

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

HQ. 2nd Aust Div. ENGINEERS. 2nd AUSTRALIAN DIVISION

TO { G 2nd Aust Div

Sender's Number.	Day of Month.	In reply to Number.	AAA
*	13		

Herewith please find weekly reports of Field Coys and Pioneers for your information and return please

G.O.C. Arms

C.R.E.

Returned

14/1/18.

Lt Col R.E.
2nd Aust Div

From
Place CRE 2nd Aust Div
Time

The above may be forwarded as now corrected.

Censor.

(Z) H R Harris Lt-Col

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

* This line should be erased if not required.

(3796.) Wt. W 492/M1647. 650,000 Pads. 5/17. H.W. & V., Ld. (E. 1187.)

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5th Fusiliers Coy. (Right Redoubt)

WEEKLY WORKS REPORT

For week ending 11th January 1918 48

APPENDIX 8.

Nature of work	Location	Remarks as to progress, etc.
Drainage-		
Rabeques drain	C.13.b.5.5. to C.4.d.9.5.	Patrols have kept drains clear.
Drain - Smythe Avenue to Rabeques River	C.9.b.7.3.	
Warnave River	C.1.a.1.0. to U.29.a.5.0.	
Drain - Loophole Farm to Front line	U/22.d.1.1. to U.23.b.1.6.	
Drain - Le Gheer to Warnave River	U.28.a.9.1. to U.22.a.1.1.	
Ayr Street to Warnave	U.27.a.3.1. to U.28.c.2.8.	
Drain - Monmouth Avenue to the Monmouth River	C.4.a.0.3. to U.27.d.10.8.	
Drain off Station Av.) Drains ; Harnians -) Suffolk Avenue)		
Drain - Rabeques River Suffolk Avenue	C.4.c.3.3. to C.3.b.9.1.	
Drain - Long Avenue to River Lys.	C.9.d.8.8. to C.9.c.8.3. to C;L5.d.7.8.	
Drain - Umpire Row to Railway	U.22.d.2.4. to U.23.b.2.7.	

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Trench Works :

Front Line - The work of clearing and revetting the front line has been carried out by day and night parties at the following locations:-

Careless Avenue	C.10.b.6.8.	Laid 11 duckboards.
Barkenham Avenue -	C.10.c.2.6.	45 yds firestep erected.
O.G.T. - off View Lane	C.10.b.4.6.	15 yds cleared.
New Trench -	C.9.d.7.3.	Trench deepened & widened - length 86 yds; 50 yds parapet built up.

Support Line

Widow's House	C.9.d.5.4.	6 gas-proof door frames fitted.
Smyth Avenue -		2 yds trench cleared.
Long Avenue -	U.15.a.8.1. to C.9.d.8.8.	34 yds cleared; 12 yds revetted; 81 yds fire-step completed; 12 feet trench widened; 17 d/bds laid; built up 5 yds earth around strong-point; 32 yds excavated for new strong-point.
Station Redoubt -	C.9.d.8.8. to C.10.c.0.7.	80 yds cleared; 36 yds parapet built up & thickened; 6 d/bds laid.
Screen Avenue		6 yds cleared.
Subsidiary Line -	C;15.a.4.9.	5 dugouts gas-proofed.

P.T.O.

APPENDIX 8

Weekly Works Report -11th Jany.'18 - continued.

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Nature of work	Location	Remarks as to progress
Monmouth Avenue -	C.4.c.7.4. to C.4.a.1.3.	330 yds trench cleared; 198 yds parapet built up; 39 d/bds dug up and relaid on bearers. 70 yds fire-step erected; T-heads fire-stepping complete.
New Support -	U.28.c.3.4. to U.28.a.7.0.	56 yds trench revetted; 346 yds parapet built up; 65 yds trench cleared; completed 150 yds fire-step; 192 yds parapet raised & thickened.
Una Avenue -	C.4.b.4.5.	14 dug-outs gas-proofed; 60 yds widened & deepened.
Umpire Support -	U.23.a.1.7. to U.22.d.4.6.	457 yds trench revetted; 228 yds widened & deepened; 868 yds cleared.
"	U.22.b.7.0.	280 yds parapet raised; 50 yds traverses revetted; 2 traverses revetted & duckboarded; 2 traverses widened & deepened for revetment; erected 2 steel shel
"	U.22.d.8.8. to C.10.a.1.2.	2 rows of 750 yds double apron wire fence erected and 2 rows of 150 yds old wire repaired and strengthened. erected 290 yds double apron wire fence; 200 yds repaired and thickened.
Umpire Drive South	U.22.d.4.6.	20 yds cleared; 26 yds revetted; 3 dug-outs gas-proofed.

Carrying parties - Carrying and transporting R.E. material from Motor Car Corner and Le Gheer dumps to Support line.

Transporting R.E.material from De Seule and Le Romarin Metal Siding dump to Motor Car Corner and Le Gheer R.E.dumps.

J. F. Gray Lieut. for Major

O.C. 5th Field Company, A.E.

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APPENDIX 8

6th FIELD Co AUST ENGRS.

WORK REPORT for week-ending 12.1.18.

Location of Work	Particulars	Work	Accom.ns	% of work done	Remarks.
45.70.75	Accommodation	Sandbagging & Revetting near shelters	9	100%	
15d89.	"	Erecting & Bunking shelter behind Pill Box	8	100%	
9d97	"	Extension of Curtains on shelters in GRAY TRENCH	28	100%	
9c37	"	AVENUE FARM dug out.	26	100%	
15a.88.	"	Erecting shelters in ASH CRATER & constructing Fire Bays.	24	100%	
6.c.1.4	"	Splinter Proof revetment around huts		80%	
27d.8.9	"	Erecting 2 "Nissen" Huts	60	50%	
8.c 4.8.	Defences.	Construction of DOMMINGTON HALL POST Firestepping " " " "		100% 75%	
4.c.8.5	"	Construction of HASTED HOUSE POST			
15d.96	"	Revetting, Firestepping & Duckboarding Trench at ULTIMO CRATER			
8.a.8.8 to 8a46.	"	5 Fire Bays Completed		100%	
5a78 to 9d42	"	16 " " "		100%	
4b5.1 to 5a78	"	17 " " "		100%	
1d40 to 3c74	"	18 " " "		100%	
2d40 to 8d87	"	13 " " "		100%	
8a24 to 8a77	"	13 " " "		100%	
3a23 to 2d40.	"	2 " " "		100%	
2b59 to 3c74	"	Gaps cut in wire every 100 yds		100%	
27c83	"	Constructing Post.		100%	
27c4510	"	" "		100%	
3.a.0575	"	" "		100%	
3c0585	"	" "		100%	
2d8535	"	" "		100%	
16c29	"	Emergency Fire Bays		100%	
14.c.40.25 to 14c8.5	"	Cleaning out & Repairing "ONLY WAY"		50%	
14c4045	"	Pumping out Shaft for STRUTERS NEST. M.G. position			
TEENWERCK PUMP	"	Preparing material for construction of Pill Box 4000 bags of Gravel filled & stacked 1500 " " Sand " " " Gauge Box & Screen made			
	"	55. Barbed Wire Concertinas erected in gaps in Wire			
	"	60 Coils Barbed Wire salved for Concertinas 116 Barbed Wire Concertinas made			
	VARIOUS	9 Hardwood sliding Target Frames made for 6th Bde MG Co.		100%	
		1 Stove & piping made & installed		100%	
		75 Tin Notice Boards 12"×9" made painted & written		100%.	
		Making & Painting Tin Notice Boards 3"×3" 200 completed & second 200 = 80% complete			
	Wiring.	6500 yds wire entanglement erected			(For disposition see map)

H.C. Renshaw Lt.

6TH FIELD COMPANY ENGINEERS A.I.F.

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APPENDIX 8 51

7th Field Company Australian Engineers.

WEEKLY WORKS REPORT Saturday 12th Jany 1918.

New Support Linex	80 yds cleared and deepened. 70 yds revetted.
Right Support U.17.c.7.7.	60 yds extended. 50 yds trench deepened & widened. 75 yds trench revetted "A" frames & Corr iron.
Left Support. U.11.c.4.0.	132 yds revetting "A" frames and corr iron. 40 yds trench cleared. 70 yds berm cut on trench. 200 yds duckwalks laid. Maintaining duckwalks.
Accommodation trench U.16.b.2.4.	125 yards deepened. 50 yds cleaned and widened. 36 yds revetted.
Wire	Cutting gaps - and placing 800 yds spirals between 2 lines of double apron.
Shelters.	6 shelters completed at U.11.c.5.8. 8. U.16.c.6.4. 3 Left Support. 5 U.17.c.8.8. 4. U.16.b.2.4. (accommodation trench) 26.
R.A.P. U.16.a.7.3.	Communication trench covered- Cupola erected and covered with bursters and earth. Flooring completed. 3 bunks put in. 85 % complete.
Warn Lane. About U.11.c.60.65.	40 yds of trench deepened. 274 yds " cleaned and widened. 104 yds revetted with "A" frames and corr iron.
EGMONT AVENUE.	60 yds extension from U.11.c.80.75, 4 ft deep 3 ft at top 18 inches at bottom. Deepened and widened.
Cable testing dugout. U.11.b.8.5.	Completed.
Defensive Zones. J.17.a.2.6.	80 yds trench dug. 4 shelters put in . 150 yds protective wire. 2 M.G. Posns completed 25 yds firestep. Pumping out pill box.
Alternative Route.	3600 yds marked out & 85% wired.
Baths Red Lodge.	Bathroom, 2 clothes rooms, shelves, seats, ~~xxxxxx~~ showers - Coal sheds & drainage completed.
Miscellaneous.	Making barbed wire coils, latrines seats rifle racks etc at RACINE DUMP. Salvage and carrying parties. Survey of dugouts of forward areas. Repairs to pumps at CATACOMBS .

E Webb
Major.
O.C. 7th Field Coy Australian Engineers.

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APPENDIX 8 52

SECOND AUSTRALIAN PIONEER BATTALION.

Battalion Headquarters,
Jan. 12th 1918.

2ND AUSTRALIAN PIONEER BATTALION. No. 1335 Date 12/1/18

To/-
C. R. E.,
2nd Aust. Pioneer Battalion.

WEEKLY PROGRESS REPORT - FOR WEEK ENDING 12 : 1 : 18.

Date? — Where is it?

TRENCHES. ULTIMO ~~LANE~~.

50yds at U.17.a.4.4. — 75 yards of fire step completed at U.17.c.9.9.
20 yards ditto at U.17.d.2.9.
75 yards revetted at U.17.a.8.0.
40 yards revetted at U.17.c.9.9.
20 yards of trench repaired at U.17.a.5.3.
25 yards of trench repaired at U.17.a.7.1.
32 yards of trench repaired at U.17.d.2.9.

ULTIMO AVENUE.
117 yards of Duckwalks wired in vicinity U.16.a.9.4.
165 -ditto- U.16.b.5.4.
140 yards wired and 35 yards of duckwalks laid in vicinity U.16.b.8.4.
130 yards of Duckwalks wired at U.16.b.7.4.
40 yards revetted at U.16.b.8.4.

CRATER TRENCH.- U.15.d.9.7.
5 yards of trench revetted, 10 'A' Frames fixed, and Trench repaired where blown in.

ST IVES AVENUE - U.15.d.5.5.
35 yards of duckwalks wire-netted. Trench repaired where blown in.

DOUVE DUCKWALK TRACK.
280 yards wire-netted from U.8.c.8.6. to U.8.d.3.8.

UNA AVENUE.
98 yards revetted, 105 yards cleaned out and duckwalks laid at ~~U.22.d.3.2.~~ U.28.b.8.1. and U.28.d.2.9.
Trench repaired where blown in.

UNA SUPPORT.
87 yards revetted and 100 yards cleaned out and repaired at U.22.d.3.2. and U.28.c.6.2.

NOTE:- Flex Alley ends at U.28.c.7.1. and not as shewn on map.

UMPIRE DRIVE SOUTH.
53 yards revetted at U.23.c.5.8. and U.23.c.2.8.

Average number of men employed 187.

ROADS. ASH AVENUE.
Large culvert erected at U.14.a.6.4. 8 tons of metal laid.

PLOEGSTEERT-WARNETON ROAD.
Road now formed and metalled to LE GHEER. Side drains re-dug. 84 yards of shell holes revetted. Culvert erected at U.26.b.6.3. ~~500~~ 200 tons of metal used.

GUNNER ROAD.
Now good for single traffic to C.3.d.5.9. Side drains cleaned, small box drains put under tramway (10) between C.7.b.5.2. to C.3.d.5.8. 92 ~~250~~ tons of metal laid.

ROAD - C.8.a.2.5. to C.14.a.8.9.
Side drains cleared and culvert repaired at C.8.c.4.8.

DRAINS. Drains in U.20. patrolled and kept clean.

Average number of men employed 100.

RAMWAYS. WARNETON-VANCOUVER CIRCUIT.

Connected up and fit for urgent traffic. Requires improvement in ballasting. 378 yards laid from U.16.b.8.8. to U.17.a.4.5.

300 yards of Duckwalks wired from U.14.d.7.5. to U.14.b.9.2.

Material carried up for extension of Warneton Line past Trench Mortar Batteries.

Tracks patrolled and several large shell holes repaired.

Average number of men employed. 74

TENWERCK ---- LAUNDRY.

Drying Room ceiling boarded. New brick furnace built. Hood for Air Inlet Pipe made. Old furnace taken down and bricks cleaned. Air Inlet Pipe and flue pipes erected. Malthoid laid on ceiling,roof repaired and frame fixed over furnace.

Number ofmen employed 7.

One Platoon on Camouflage work.
Trench Mortar Battery positions completed.

PAPOT BATHS.

Latrine repaired. Ironing tables being constructed. Two men employed.

TH FIELD AMBULANCE.

Heating apparatus and stand for storage tank erected. Work completed. Four men employed.

G. B. Pattison
Capt. & Adj.
2nd Australian Pioneer Battalion.

SECOND AUSTRALIAN PIONEER BATTALION.

CONSTRUCTION AND MAINTENANCE REPORT.

APPENDIX 8 54

For week ending; 11th Jan 1918

1. New Lines completed.	Vancouver & Warneton Line circuit has been connected up fit for urgent traffic but it will require some improvement in ballasting as this work was done in the dark. VANCOUVER WARNETON 278 yds from V.16 b.8.8. to V17.a.00.65. 100 yds V.17.a.1.5 to V17.a.00.65
New Sidings.	NIL
Lines relaid.	NIL
Track Repairs.	Several large shell holes through direct hits on various lines were successfully bridged with old German rails & made secure for traffic.
Track ballasted.	Increase in ballasting was made from WAVERLEY JUNCTION to 25th BATTERY, also on CALEDONIAN LINE were required
Material indented for	300 Duckwalks 40 lbs 4 in nails 20 lbs Axle Grease 12 lbs 8 in by ½ in bolts 1 doz Wheels 12 " 9 in by 5/8 in "
Material received.	1000 yds rail Fat props
No of trucks repaired.	10 (Gen)
No of new trucks received.	NIL

REMARKS.

Now that the Warneton - Vancouver Circuit is complete we will be able to put more men on to the extension of Warneton track on left of NB. We intend with remainder of available men to make an extension of mule duckwalks on Warneton & Vancouver lines. The material for these works has already been indented for.

J. Meethan Capt
OC P Coy

Note:
1. Here insert length of line completed and state betweenwhat points, shewing map reference.
2. Describe siding shewing length and position.
3. Shew position and length relaid.
4. Describe nature of repairs and position.
5. Here state position of track ballasted.
6. Here state detail of material indented for

P.T.O.

Note; (contd) app. 8.

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7. Here state detail of material received.
8. Here state nature of repairs.

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APPENDIX 56

SECOND AUSTRALIAN DIVISIONAL ENGINEERS.

Report on works from 13th January to 19th January 1918 inclusive.

5th Field Coy. (36.B.4.a.5.2.) Right brigade sector.

DRAINS. Patrolled and kept clear.
TRENCHES. Clearing and revetting Front line and Supports.
DUGOUTS. Gasproofing. Fitting gas-proof doors and frames in dugouts and shelters.

6th Field Coy. (28.T.10.a.5.9.) 2nd (Corps) Defence zone.

ACCOMMODATION. Erecting 2 Nissen huts & 1 lean-to. Splinterproofing revetments, bunking etc.
TRENCHES. Construction of posts, fire-bays and fire-steps. Revetting and clearing, widening and extending.
OVERLAND TRACKS. 1,100 yards levelled & repaired from DOUVE duckwalks to BROWSE POINT TRACK. 500 yards levelled near AVENUE FM. also 500 yards near PROWSE Point.
PILL-BOX. C.7.b.9.4. Excavation complete. Foundation commenced.
WIRE. 3,000 yards entanglement erected. 94 concertinas placed in gaps.
New wire belts in 2nd zone marked out. Siting posts & tactical wire on ST IVES - WULVERGHEM Switch line.
340 yards hedges trimmed.

7th Field Coy. (28.T.10.c.7.0.) Left brigade sector.

TRENCHES. Revetting, firestepping & duckboarding; widening parapets.
WIRE. 200 yds festoon wire placed in Defensive zone.
R. A. P. U.10.a.35.60. Completed 4 shelters & excavated others.
SHELTERS. Renovating and erecting shelters in front and support lines.
O.P. U.15.d. 300 yds track excavated. 200 yds laid 70% camouflaged.
Base reinforcements complete. All reinforcements salvaged on site.
BATHS. Extensions and alterations to RED LODGE baths complete.

2nd Pioneer Battalion. (36.B.16.c.4.9.) NIEPPE.

TRENCHES. Clearing, revetting, duckwalking and draining.
DRAINS. Drains in U.20. and U.26. patrolled and kept clear.
STEENWERCK LAUNDRY. Improvements completed.

Lt. & Adjt.
20/1/18. for C.R.E. Second Australian Division.

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app. 8. 57

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APPENDIX 8.

HDQRS. DIVISIONAL ENGINEERS No. ..... 2ND AUSTRALIAN DIVISION

SECOND AUSTRALIAN DIVISION.

FORWARD ROADS REPORT. 19th January 1918.

Unit.	Av. No. employed daily.	Roads worked on	Metal laid.	
2nd Aust. Pioneer Battn.	90	ASH AVENUE	100 tons	Road improved and culvert erected at U.14.b.7.8.
		PLOEGSTEERT-WARNETON.	60 tons	Drains improved. Metal laid U.15.c.8.5. to U.21.d.7.0.
		GUNNER ROAD	Nil.	Drains improved. Shell holes filled. Large culvert erected at C.8.a.3.6.
		LE BIZET-MOTOR CAR CORNER ROAD.	)	Patrolled.

Drains in U.20. and U.26. patrolled and kept clear.

Lt. & Adjt.
for C.R.E. Second Australian Division.

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appendix 8.

"A" Form.

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

MESSAGES AND SIGNALS.

No. of Message.....

APPENDIX 8

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

TO { G Div Arst Gro

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

Herewith please send field
Coys weekly reports for
your information & return

HQ/R.E., DIVISIONAL ENGINEERS
No. 6
2nd AUSTRALIAN DIVISION

Sgt
Inf

From
Place
Time

The above may be forwarded as now corrected.

..... Censor.

(Z) H Harris Capt

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

* This line should be erased if not required.

(3796.) Wt. W 492/M1647. 650,000 Pads. 5/17. H.W. & V., Ld. (E. 1187.)

APPENDIX 8

WEEKLY WORKS REPORT

5th Field Company, A.E. --------- For week ending 18th Jany.'18

Nature of work	Location	Remarks as to Progress.
Drainage -		
Rabeque Drain	C.13.b.5.5. to C.4.d.9.5.	
Drain - Smyth Avenue to Rabeque River	C.9.b.7.3.	
Warnave River -	C.1.a.1.0. to U.29.a.5.0.	
Drain - Loophole Farm to Front Line	U.22.d.1.1. to U.23.b.1.6.	
Drain - Le Gheer to Warnave River	U.28.a.9.1. to U.22.a.1.1.	
Ayr Street to Warnave	U.27.a.3.1. to U.28.c.2.8.	Drains have kept drains clear
Drain - Monmouth Av. to Monmouth River	C.4.a.0.3. to U.27.d.10.8.	
Drain - off Station Avenue -		
Drains - Harnians - Suffolk Avenue		
Drain - Rabeque River - Suffolk Avenue	C.4.c.3.3. to C.3.b.9.1.	
Drain - Long Avenue to River Lys	C.9.d.8.8. to C.9.c.8.3. to C.15.d.7.8	
Drain Umpire Row to Railway	U.22.d.2.4. to U.23.b.2.7.	

Trench Works - The work of clearing and revetting the front line and Supports has been carried out by day and night parties at the following locations:-

Front Line -	Advanced Post- C.4.b.7.3. to C.4.b.9.4.	Excavations for 3 dugouts complete; 3 yds cleared; 12 yds widened & deepened; 2 dugouts dismantled and 1 rebuilt.
Ida Post	U.29.c.1.2.	Draining & repairing cupolas.
Kitty Post	U.29.a.3.3.	" " " "
Patrol -		Patrolling line and pumping dugouts.
O.G.T. - off View Lane	C.10.b.4.5.	~~30 yds widened &~~ 20 yds new drain excavated; 30 yds old drain cleared; 27 yds trench cleared.
View Lane -	C.10.b.3.6. to C.10.b.5.6.	20 yds widened & deepened; 30 yds old drain widened & deepened; 20 yds new drain excavated.
Support Line -		
Harekau Avenue -	C.10.a.3.2.	20 d/boards laid on bearers; 14 d/boards raised & trench cleared; 6 additional yds trench cleared; salved picks & shovels and made small dumps at various points.
Butchers Shop -	C.10.c.5.9. to C.10.c.7.2.	New trench dug will allow passage of traffic.
New Trench off Barkenham Av.	C.9.d.7.4.	153 yds widened & deepened; 54 yds parapet built up; 60 yds duckboarded; 34 "A" frames fitted in; 44 yds revetted.
" "	C.9.d.6.2.	22 yds trench widened & deepened; 110 yds parapet raised & thickened
Carters Switch	C.10.a.8.6.	Excavated dugout 9' x 6' x 5½' for new Right Coy. H.Q.

P.T.O.

Weekly Works Report continued - (2)

Nature of work	Location	Remarks as to progress, etc
~~Barkenham~~		
Support Line -		
Barkenham Avenue	C.9.d.7.4.	10 yds duckboarded; raised d/boa and cut away floor of trench which drained 150 yds of floode trench.
Long Avenue -	C.4.c.8.3.	Cleared 9 yds trench.
"	C.15.c.8.9.	Carried earth & built up parapet for strong point; 6 yds duckboarded.
"	C.15.b.1.4.	1 side of new T -head trench revetted & d/boarded; 4 yds of trench widened; 8 yds revetted & duckboarded; 9 yds parapet thickened & levelled.
"	C.15.b.2.8.	12 yds parapet raised & thickene 4 yds d/boarded.
Una Support -	U.28.b.2.6.	4 yds widened, deepened & revett
"	Nos 6 & 8 Posts	19 yds revetted; 4 yds cleared; 6 yds widened.
"	U.28.b.0.3.	Constructed temporary bridge across Warnave River; repaired & raised 38 yds of duckboards.
"	U.28.central	30 yds of duckboards raised, repaired & relaid.
Umpire Support -	U.22.b.7.0.	136 yds cleared and ~~ex~~ 168 yds revetted; excavated for 10 steel shelters and 9 ~~sh~~ of which completed; 109 yds parapet raise and thickened; partly cleared ground for shelters.
"	U.23.a.1.7.	120 yds parapet raised & thickene
"	U.22.c.8.1.	Completed revetting repairs.

General - Owing to the wet weather it has been found necessary to carry out general drainage to the front and support lines.
This work has been carried out by day and night parties.

Carrying Parties - Carrying & transporting R.E.Material from Motor Car Corner and LeGheer dumps to Support line.

Transporting R.E.Material from De Seule and Romarin Metal Siding dumps to Motor Car Corner & Le Gheer R.E.Dumps

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Gasproofing dugouts and shelters -

Convent Lane -	4 dugouts fitted with gasproof door frames and sandbagged.
Widows House -	4 gasproof frames fitted to dugouts; 2 dugouts gasproofed and sandbagged; 42 blanket doors completed.
Umpire Reserve R.A.P. -	2 blanket gasproof doors erected.
Convent Lane -	7 shelters fitted with curtain and rendered gasproof; 2 blanket doors and 2 windows fitte
Widow's House and Subsidiary Line	13 gasproof doors and 19 windows fitted in dugouts.
Signal dugout -	1 blanket door fitted.

R.S.Reid
Major

O.C. 5th Field Company, A.E.

APPENDIX 8

6th. FIELD Co AUST. ENGRS.

WORK REPORT for week ending:- 19.1.18.

Location of Work	Particulars	Work	Accom^n	% of work done	Remarks.
6 C 1.4	HUTTING.	Splinter-proof revetment around huts.		100%	
27 d 8 9	"	Erecting 2 "Nissen" Huts " Lean-to.	60.	100% 100%	
14 C 1.5	BATTLE HQ.	Construction Bunking.	4. Off 8. O/r's	90% 50%	
21 b.6 5.	E.F. TEST POINT	Erecting shelter for test point.		95%	
7 d. 95.90	X.H TEST POINT	" " " " "		95%	
C 37	AVENUE FARM	Building sandbag wall.		95%.	
8 C 4.8	DOMMINGTON HALL POST	Construction of Post completed		100%	
14 C 8.5	HASTED HOUSE POST	Construction of Post		75%.	
14 C U. to 14 B 7.3.	"ONLY WAY"	160 yds revetted 1350 yds cleared & drained			
8 a 2.3 to 8 a 1.1.	Fire Bays.	3 Bays completed		100%	
CHOLSON. AV	Fire Steps.	Fire steps repaired.		100%	
3 a 3.7.	POST	25 yds length of Post demolished.		100%	
13 d 4.1 to 14 a 0.2	CATACOMBS. Tch.	300 yds trench cleaned, widened & extended			
	OVERLAND TRACKS.	1100 yds levelled & repaired from DOUVE Duckwalks to PROWSE POINT TRACK. 500 yds levelled near AVENUE FARM 600 " " " PROWSE POINT			
7 b 9.4	CONCRETE PILL BOX	Excavation complete Foundation commenced		20%	
	MAKING BARBED WIRE CONCERTINAS	209 Concertinas made.			
	Wiring	3000 yds Barbed wire Entanglement erected 94 Concertinas placed in gaps.			For disposition see map.
	HEDGES	340 yds Hedges thinned.			
	SURVEY.	New Wire Belts in second zone marked out. Siting Posts & Tactical Wire on STYVES-WULVERGHEM Switch line		100% 100%	
	VARIOUS.	6 sign boards written 60' Stovepiping 43 Elbows made for Div Artillery. Making printing frame for 7th A.I. Brigade.		100% 100% 85%	

J. Coghlan Capt.
for OC 6th F. Coy.

APPENDIX 62

7th Field Company Australian Engineers.

7TH FIELD COY. ENGINEERS, A.I.F. No. 19/1/18

WEEKLY WORKS REPORT

Support Line.	855 yards of 2ft berm cut on trenches. 235 yds of firestepping completed. 75 yds parapet thickened. 30 yds revetting completed. 40 yds cleared ready for revetting. 215 yds of parapet battered back. Clearing trenches and communication trenches and opening drains. Clearing trenches of water.
WARN LANE. U.11.c.6.6 to U.11.c.1.6.	90 yds of berm cut, 44 yds revetting completed and 30 yds duckwalk complete. Drainage.
RIVER LANE. U.11.c.6.6. to U.11.c.7.8.	40 yds trench cleared, 50 yds revetted and 50 yds duckwalked.
Accommodation Trench U.16.b.1.4.	80 yds of berm cut, 25 yds cleared and revetted. 130 yds cleared: 25 yds firestepping. Drains cleared.
Defensive Zone. U.17.a.2.6.	70 yds revetting, 20 yds firestep, 60 yds of trench deepened. 30 yds berm cut. - 200 yds festoon wire placed . 4 shelters completed.
Alternative track.	Completely pegged out from U.11.c.1.6. to U.14.d.3.3. All pegs driven in afresh after thaw.
R.A.P. U.10.a.35.60.	Completed 4 shelters and excavated for others.
SHELTERS.	Renovated 4 in Support Line. U.17.a.4.6. Putting in shelters in front line. 10 shelters completed in Support Line.
O.P. U.15.d.	300 yds track excavated- 200 yds laid and 70% camouflaged. Base reinforcements complete and all reinforcements(salvaged) on site. Mixing boards and measures completed . Material on site.
BATHS RED LODGE.	Carried out extensions and ~~alterations~~ alterations and repairs. Completed.
Racine Dump.	Supervising issue of Engineers Stores . 115 coils of barbed wire made up into spirals. Cutting pickets for Overland route. Fitting tools.

Fred H Christian Lieut ~~Captain~~

for O.C. 7th Field Coy Australian Engrs.

80 APPENDIX 8 63

SECOND AUSTRALIAN PIONEER BATTALION.

Battalion Headquarters,
Jan. 19th 1918.

2ND AUSTRALIAN PIONEER BATTALION.
No. 1/333
Date

To/-
C. R. E.,
2nd Aust. Division.

WEEKLY PROGRESS REPORT -- FOR WEEK ENDING 19:1:18.

Trenches. UNA SUPPORT.

47 yards revetted from U.22.d.3.2. to U.22.d.3.3.
Digging and revetting Five Bays at U.22.d.2.2.
12 yards cleaned and drained at U.22.d.2.2.
90 yards cleaned, duckboards relaid, revetted where necessary approx. U.28.b.0.2.
60 yards cleaned and drained, and revetted where necessary between U.28.d.2.9. and U.28.c.7.1.
Trench cleaned and blocks removed in various places.

UMPIRE DRIVE SOUTH.

47 yards revetted approx. U.23.c.2.8.
50 yards deepened and widened for 'A' Frames.
260 yards drained. Box Drains, Duckboards and Revetment repaired approx. U.23.c.4.9.

FLAX ALLEY.

Revetting repaired, Blocks cleared, Duckwalks relaid and Drains deepened in various places from U.28.c.7.1. to U.28.c.4.2.

NICHOLSON'S AVENUE.

12 yards repaired.
60 yards cleaned and drained, approx. C.3.d.0.6.

UNA AVENUE.

Blockages cleared, Revetment repaired and Duckwalks relaid, approx. U.28.b.8.1.

UMPIRE AVENUE.

Trench drained and cleaned, blockages removed at approx. U.22.d.0.2.

UMPIRE ROW.

Drained and cleaned, 2 shell holes repaired, U.22.d.3.3. to U.22.d.0.3.

CRATER TRENCH.

20 yards revetted U.15.d.8.8.
40 yards repaired.
70 yards of duckwalk relaid.

ULTIMO LANE.

58 yards revetted U.17.a.6.2. to U.17.a.7.1.
Trench repaired where blown in.
Fire steps completed and levelled U.17.a.8.0.

ULTIMO AVENUE

Repairing, cleaning and draining trench where necessary.

ST IVES AVENUE.

Revetting, repairing, draining and cleaning U.15.c.5.4. to U.15.d.5.5.

Average number of men employed -- 227.

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APPENDIX 8

DOUVE DUCKWALK TRACK.

440 yards of duckwalk wire-netted from U.8.d.0.7. to U.8.d.9.9.

TRAMWAYS. WARNETON LINE.

400 yards of track formed and lines linked up from U.11.c.1.6. to U.11.a.5.2.

400 yards of Duckwalks laid from U.10.c.8.4. to U.10.d.6.2..

Track cleared and cuttings battered from U.10.d.6.2. to U.10.d.9.5.

1,700 yards Duckwalks wire-netted from U.15.a.0.6. to U.10.d.1.4.

VANCOUVER TRACK

840 yards of Duckwalks laid from U.22.a.3.5. to U.16.d.9.6.

300 yards of track improved from U.16.d.7.5. to U.17.c.3.9.

240 yards of duckwalks wire-netted from U.16.d.4.4. to U.16,d.8.6.

PIONEER DUMP LINE.

50 yards of formation improved. U.22.a.5.1.

Average No. of men employed 98.

ROADS. ASH AVENUE.

Road improved and Culvert erected at U.14.b.7.8.

100 tons of metal laid. U.14.a.6.3. to U.15.a.4.9.

PLOEGSTEERT-WARNETON ROAD.

Drains improved. 60 tons of metal laid, U.15.c.8.5. to U.21.d.7.0.

GUNNER ROAD.

Drains improved. Shell holes filled in. Large Culvert erected at C.8.a.3.6. No metal laid C.7.b.5.1. to C.3.d.5.9.

LE BIZET-MOTOR CAR CORNER ROAD patrolled.

DRAINS. Drains in U.20. and U.26. patrolled and kept clear.

Average No. of men employed:- 90.

BEENWERCK LAUNDRY. Work completed.

E. B. Patterson Capt. & Adj.
2nd Aust. Pioneer Battalion.

SECOND AUSTRALIAN PIONEER BATTALION.

CONSTRUCTION AND MAINTENANCE REPORT

APPENDIX 8

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For week ending :- 18/1/18

New lines completed.	400 yards - from U.11.C.1.6 to U.11.a.5.2
New Sidings.	NIL
Lines relaid.	110 yards at many & various places on CALEDONIAN TRACK and LA TOUQUET TRACK
Track~~s~~ Repairs.	Lines repaired where broken at different places on all tracks ~~where~~ at connections
. Track ballasted	110 yards at many & various places on CALEDONIAN TRACK and LA TOUQUET TRACK
. Material indented for	~~400~~ 600 yards Decauville rails 500 - 4ft. sleepers
. Material received	165 - 9ft. sleepers 10 lbs. axle grease 12 " 8" bolts + 12 lbs. 9" bolts - 12 sets wheels
. No of Trucks repaired.	5 -
9. No. of new trucks received.	NIL

REMARKS:- Sleepers sent were ~~4~~ 10"x4" (approx.) & are too heavy for the job but are being used - 9ft. sleepers have to be sawn into 3 lengths.
Owing to heavy rain after frost the old banks on WARNETON TRACK and WARNETON EXTENSION are slipping on to rails in many places - this entails constant & heavy work getting blurry out & working ~~banks back from lines~~ battering banks and

Note:-

1. Here insert length of line completed and states between what points, shewing MAP REFERENCE.
2. Describe siding shewing length and position.
3. Shew position and length relaid.
4. Describe nature of repairs and position.
5. Here state position of track ballasted.
6. Here state detail of material indented for.
7. Here state detail of material received.
8. Here state nature of repairs.

18/1/18.

Ivan Dwan Capt
for OC D Coy.

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APPENDIX 8 66

WEEKLY WORKS REPORT

For week ending ~~Saturday~~ Friday 21/12/16

Nature of Work	Location	Employed Sprs	Employed Infy	Progress
Rabecque Drain	C.13.b.5.5. to C.4.d.9.5.			Patrols have kept drain clear
Drain - Smyth Avenue to Rabecque	C.9.b.7.3.			do do do
Warnave River	C.1.a.1.0. to U.29.a.5.0.			do do do
Drain, Loophole Farm Front Line	U.22.d.1.1. to U.23.b.1.6.			do do do
Le Gheer - Warnave River Drain	U.28.a.9.1. to U.22.a.1.0.			do do do
Ayr Street - Warnave River	U.28.a.9.1. to U.22.a.1.0.			A batter is being put on the side of this drain
Monmouth Avenue Drain - Warnave River	C.4.a.0.3. to U.27.d.10.8.			Drains have been kept clear
Drain off Station Avenue				Patrols have kept drains clear
Drain Harnians - Suffolk Avenue				
Drain Rabecque River - Suffolk Avenue	C.4.c.3.3. to C.3.b.9.1.			do do do

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Trench Works

Front Line - Work of clearing & revetting the Front Line has been carried out by day and night parties at the following locations:-

Front Line	U.28.d.9.5. to U.29.c.1.7.	Cleared & excavated 127 yds; revetted 75 yds.
"	U.29.c.2.8. to U.29.a.3.0.	Excavated 15 yds; Cleaned out 130; revetted 84.
"	U.23.c.6.2. to U.23.c.7.4.	Widened & deepened 15 yds; revetted 6 yds.
"	U.23.c.6.2 to U.23.b.2.6. (b.2.6.)	Excavated 23 yds; widened & deepened 45 yds; revetted 55 yds; built up parapet 350 yds.
"	U.23.d.15.90.	Digging New trench; - excavated 64 yds, revetted 22 yds.
~~Support Line~~	Between U.22.d.0.7 & U.22.c.0.5.	Built up 150 yds parapet.

Carrying party - Material carried from Le Gheer Dump to Front Line at night by two parties - To Right - 2 sappers 40 infantry.
To Left - 2 sappers 25 infantry.

View Lane -	Fr. C.10.b.3.6 to C.10.b.4.6.	Cleared out 35 yds; revetted 29 yds; built up parapet 230 yds.
New Support	U.28.c.3.5 to U.28.c.4.5.	Widened & cleared 64 yds; excavated 18 yds; revetted 55.
Digging New Support	C.28.c.6.8.	Excavated 160 yds.
Monmouth Avenue	~~Revetted~~ C.4.c.6.4.	Revetted 44 yds;
Long Avenue	C.10.a.4.8.	Excavated 7 yds; revetted 12; repairing dug-outs.

80 WEEKLY WORKS Report for week ending 21st December 1917 (2) APPENDIX 867

Nature of work	Location	Progress
Umpire Reserve	Between U.22. c.4.4. to U.22.c.6.9.	Draing & clearing out old dug-out - accomodation available for 60 men.
Umpire support	U.22.d.6.5.	Building up parapet & draining trench.
Wiring.	Fr. post 5 at C;10.b.8.9 to Pont House, thence to C.10.d.6.8.	Erected 180 coils wire.
Building Rifle Range for 5th A.I.Brigade	B.11.c.2.1.	

Carrying parties. 44 O.R's carrying & transporting R.E. Material from M.C.Corner to Support Line - View Lane and Monmouth Avenue.

Transporting R.E. Material from De Seule and Metal Siding to M.C.Corner and Le Gheer R.E.Dumps

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C. E. Plant Lt
for Major
O.C. 5th Field Company, A.E.

6th Field Coy

Artillery work. 15th Battery — Improving accommodation ~~New emplt. 1st of emplt~~ ~~Engineer~~ new emplt. etc

29th Battery — Improvements to emplt. erecting flooring etc

10½th Battery — Improvements to emplt. Constructing dugouts

26th Battery — Improvements to emplt. Ventilation preserve ammunition

28 Battery — Waterproofing dugouts. Repairs to dugouts ~~etc~~

Drainage of Pheasant & Le Cateau Rd — Clearing drain. Laying culverts

2nd Aust Inf Reinforcement Camp — Renetting Constructing ~~Bank~~ Shelter proof enclosures round tents & huts

Constructing Plotting Office — Completing Office erecting 2 emplt shelters. at T 6 C.O.S.

Company Camp T10 a.5.9 — Repairs to hutts stables etc

~~Removal of Company on~~ Corps Intermediary Defence Line — Wiring. Clearing out Pill boxes salvage of wiring ~~etc~~ materials

Corps Intermediary Defence Line.

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APPENDIX 8 69

6th Field Coy. Aust. Eng TS

Weekly Works Report. (Supplementary) for week ending 12 noon 22.12.17

Location of Work.	Particulars of Work.	Job No.	Work	Accommodation	% of work done	Remarks.
1.b.15.00.	18pdr Battery.	1	Concrete Control Post.		80%.	
1.d.6.6.	18pdr. Battery	1.	Splinter-proof cover over dug-out		100%.	
		2.	Door for Officers mess.		100%.	
11.c.8.7	O.P.	1	Weather proof.		100%	
14.b.85.75.	18pdr. Battery	1	Dug Out floored and made waterproof		100%.	
		2.	do do do do do.			
		3	New Gun-pit.		55%	
		4.	Strutting-up Dug-out cellar.		10%.	
13.c.8.2.	18pdr Battery	1	Constructing Splinter-proof cover over ammunition.		100%	
		2	New Gun-pit.		20%.	
14.c.2.1	How. Battery	1	Constructing two bomb-proof shelters.		100%	
		2	Constructing two ammunition shelters.		100%.	
9.c. and 10.d.		1	4 Concrete Pill Boxes cleared and Drained.	14 men.	60%	
		2.	2. do. do. do. do.	8 men	40%	
9.c.3.8		1.	3. Cellars combined, drained and entrance cleared.	40 men	56%.	
26.c.2.2.		1	400 yds Trench cleared.	40 men	100%.	
		2	400 yds Wire repaired.			
27.b.2.3.		1	450 yds. Trench cleared.	26 men	100%	
		2	150 yds Wire repaired.			
5.c.8.6. to 26.a.2.1.	Drainage of PLOEGSTEERT-LEGHEER. Road.	1.	Drain opened up and cleared, Water lowered 8"			
		2.	Box Culvert completed and put in across road near Light Railway crossing.			
	Salvage.		Wining Stores Salved.			
			Artillery work to South of PLOEGSTEERT WOOD not yet located.			

J. Cooman Capt.
for OC 6th Field Coy RE

APPENDIX 8

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7th Field Company Australian Engineers.

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Works report for Week ending 9 am. 22nd ~~October~~ Dec 1917.

New Support Trench. U.11.a.20.15. to U.11.c.6.6.	Trench completed through. 170 yards cleaned and firestepped. 90 yds revetted with "A" frames and corr. iron.
Support Line.	Trench prepared for revetting and 350 yds deepened to 6 ft with 18inch berm cut 3 ft 6" high from U.17.a.70.05 to U.17.d.1.9.,parapet and parados battered back. 160 yds deepened and widened ready to receive "A" frames. 116 yds revetted and berm cleared. 4 shelters commenced - 10 % completed.
Warn Lane.	45 yds revetted.
Ultimo Drive.	Parapet thickened from U.17.a.40.35 to U.17.d.15.90.
New Sap Connecting Ultimo to Support Lane at U.17.a.35 to U.17.a.3.6.	Dug 6 ft deep by 6 ft wide at top and 2 ft 6 at bottom and deepened to 7 ft and 3ft 6" wide at bottom. Completely revetted and duckwalked.
Defensive Zone U.10.a.9.5.	Post sited and 120 yds trench excavated in strong point. M .G. posn 50% complete. 100 pickets ready for wire.
Wire.	2700 yards of double apron wire erected from U.11.a.3.7. to U.11.c.6.6. to U.17.a.45.30 around trees to U.17.a.8.3. 150 yds double apron erected between right post and left post 5th.Bde.
Left Bn H.Qrs.	One dugout completed. one 75% .
Salvage.	2000 medium pickets,300 long pickets, 370 sheets cupola iron, 50 angle iron pickets, and 50 coils of french wire salvaged for Racine Dump. 950 pickets cut from long to medium and short pickets.
28th Bn Orderly Room.	80 % completed.
Improvements to Horse Lines.	Smiths shop erected, harness makers shop completed and workshop for wheelwright under construction. Other general improvements to huts.
Improvemnts to Coy Camp,	Bootmakers shop erected, cookhouses improved, incinerator installed, and one shelter erected.
Ablution Bemches for Catacombs.	Under construction.
Signs.	Signboards made and painted as required. Stock of blank boards on hand.

B Hoad. Captain

for O.C. 7th Fld Company Australian Engrs.

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APPENDIX 8

2ND AUSTRALIAN PIONEER BATTALION
No. 12/605
Date

SECOND AUSTRALIAN PIONEER BATTALION.

Battalion Headquarters,
Dec. 22nd 1917.

To/-
C. R. E.,
2nd Australian Division.

Herewith Progress Report for week ending Yesterday, 21st inst., due at your office to-day.

The report refers to map attached, which shews work done for week by Battalion, exclusive of detached jobs.

Would you please return map after taking the particulars you require from it.

Capt. & Adj.
2nd Australian Pioneer Battalion.

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SECOND AUSTRALIAN PIONEER BATTALION.

APPENDIX 8

REPORT ON WORK DONE DURING WEEK ENDING 21ST DECEMBER 1917.

TRENCHES.

EGMONT AVENUE, USEFUL LANE, ULTIMO (TRENCH) AVENUE, partly regraded, revetted and generally repaired. Still to be completed.

CRATER TRENCH partly regraded and revetted.

DOUVE DUCK WALK TRACK patrolled and maintained.

UMPIRE AVENUE, UNA SUPPORT, UNA AVENUE, UMPIRE DRIVE SOUTH, and KIWI STREET, partially deepened, drained and revetted. Still to be completed.

TRENCH TRAMWAYS.

400 yards of new line built on WARNETON LINE from U.10.c.8.5. to U.11.c.1.7.

500 yards WARNETON LINE redrained from U.14.b.9.5. to U.9.c.5.0.

700 yards 25th BATTERY LINE ballasted from U.25.b.9.7. to U.26.b.2.7.

ROADS.

PLOEGSTEERT - LE GHEER, GUNNER ROAD, and LE BIZET-MOTOR CAR CORNER Roads repaired and made serviceable as follows:-

PLOEGSTEERT-LE GHEER throughout.

GUNNER ROAD to C.2.d.3.3.

LE BIZET-MOTOR CAR CORNER throughout.

All forward Roads have been surveyed and their state is as shewn on map.

DRAINAGE.

The main drainage system has been surveyed and drains cleaned as shewn on map.

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SECOND AUSTRALIAN PIONEER BATTALION. APPENDIX 8 73

Battalion Headquarters,
Dec. 23rd 1917.

To/-
C. R. E.,
2nd Australian Division.

2nd AUSTRALIAN DIVISION HQRS. DIVISIONAL ENGINEERS No. 15/37

2ND AUSTRALIAN PIONEER BATTALION No. 15/655 Date 23.12.17

Attached is:-

(1) Copy of our Road Officer's report.
(2) Copy of report of detailed reconnaissance of Roads.

Lt. & Asst-Adj.
2nd Aust. Pioneer Battalion.

COPY.

REFERENCE REPAIR OF EXISTING ROADS.

Road from PLOEGSTEERT to LA BASSEVILLE via LA GHEER will only require metal all through, also GASOMETER or GUNNER RD and LE BIZET to WEST HOOK ROAD.

Cross Road C.4.a.3.8. to LA GHEER can also be remetalled, but road forward of LE GHEER to ASH AVENUE must be remade, and I would suggest a plank road apart fromthe old road line.

ASH AVENUE will require planks for crossing the old barrage and mined area, but forward can be easily repaired with metal.

(Signed) A.Nevein, Capt.,
O/C., B Coy.

COPY.

RECONNAISSANCE OF ROAD CONNECTING PLOEGSTEERT-WARNETON ROAD WITH ASH AVENUE.

Where Road leaves PLOEGSTEERT-WARNETON RD, about 30yds is very muddy and requires attention.

The next 300 yds is in good order, except for a few small shell holes.

150 yds to point where road turns to the right is covered by an old trench and breastwork.

The small bend in road is in fair condition, and only requires a few shell holes mending..

Where road turns to left again is an"unexploded mine area" having a radius of 200 yds.

Our Subsidiary Line then runs along the road, and the road is completely obliterated for about 3/400 yds.

After leaving Subsidiary Line there is a stretch of over 300 yds in very fair condition, but the remainder, to where road joins Ash Avenue, is in very bad condition.

(Sgd) Sgt. Ward.

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SECOND AUSTRALIAN PIONEER BATTALION.

CONSTRUCTION AND MAINTENANCE REPORT

For week ending :- 25th Jan 1918

New lines completed.	WARNETON 282 yds track sleepered from U11.a.5.2 to U11.c 10.60. 250 " duckwalks wired from U.10 d 1.4. to U10 d 6.2. VANCOUVER 1000 yds duckwalks laid from U16.d.7.5. to U.10 d.70.05. 200 " " wired " U16 d.7.6 to U 16 d 95.70.
New Sidings.	NIL
Lines relaid.	114 yds at many and various points on CALEDONIAN and LETOUQUET Tracks using 120 sleepers.
Track Repairs.	42 yds line repaired on CALEDONIAN and LETOUQUET } at various 50 yds " " on WARNETON + VANCOUVER Lines } places
Track ballasted	114 yds at various places on CALEDONIAN + LETOUQUET Lines
Material indented for	500 yds of cyclone wire 300 duckwalks
Material received	500 yds of cyclone wire 300 duckwalks
No of Trucks repaired.	6 + greased 53
No. of new trucks received.	NIL

REMARKS:- The lines generally were repaired + strengthened at various points as owing to the thaw, this was necessary to keep the tracks in good repair and running order.
Trucked from RACINE DUMP on to job 540 duckwalks + 320 yds of cyclone wire.
Cut 400 sleepers at RACINE DUMP and trucked to between U11 a.5.2. + U11.c 10.60.

J Murdoch Capt OC D Coy.

Note:-
1. Here insert length of line completed and states between what points, shewing MAP REFERENCE.
2. Describe siding shewing length and position.
3. Shew position and length relaid.
4. Describe nature of repairs and position.
5. Here state position of track ballasted.
6. Here state detail of material indented for.
7. Here state detail of material received.
8. Here state nature of repairs.

2ND AUSTRALIAN PIONEER BATTALION.
No. 1725
Date 27/1/18

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Appendix 8

APPENDIX

SECOND AUSTRALIAN DIVISIONAL ENGINEERS.

Report on works from 20th to 26th January 1918 inclusive.

5th Field Coy. (36.B.4.a.5.2.) Right brigade sector.

DRAINS. Have been patrolled and kept clear.
TRENCHES. Clearing, revetting and draining front and support lines.
WIRING. C.15.c.8.9. 200 yards double apron fence erected with single fence on outer line of pickets. 50 yds single apron fence alongside hedge at right end of Long Avenue.
VARIOUS. Various materials salvaged. Gas proof doors fitted to dugouts.

6th Field Coy. (28.T.10.a.5.9.) 2nd (Corps) Defence zone.

ACCOMMODATION. Erecting 2 Nissen huts. Foundations, bagging materials and excavating for 3 Pill-boxes.
POSTS. Construction of 6 Dummy posts.
TRENCHES. Clearing, duckboarding and maintenance.
WIRING. 5,000 yards entanglement erected.
VARIOUS. Salvaging and stacking 2,100 yds Decauville track.
2 Stokes gun beds made for 5th Brigade.

Concrete shelter?

7th Field Company. (28.T.10.c.7.0.) Left Brigade sector.

TRENCHES. Revetting, clearing and fire-stepping.
DRAINS. Digging and clearing.
VARIOUS. Salvaging picks and shovels.
8 shelters erected complete U.11.c.4.9.
54 slush buckets completed at RACINE dump.
O. P. U.15.d.5.7. Reinforcement complete for concrete filling.

2nd Pioneer Bn. (36.B&16.c.4.9.) NIEPPE.

TRENCHES. Clearing, draining and repairing duckwalks.
CAMOUFLAGE. One platoon employed on camouflage.

Lt. & A djt.
27/1/18. for C.R.E. Second Australian Division.

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APPENDIX 8

SECOND AUSTRALIAN DIVISION.

FORWARD ROADS REPORT. 26th January 1918.

Unit.	Av. No. employed daily	Roads worked on	Metal laid.	
2nd Aust. Pnr. Bn.	50	ASH AVENUE U.14.a.6.3.-U.14.b.7.8.	80 yards.	Improved. Culvert erected at U.14.b.7.8.
		PLOEGSTEERT-WARNETON U.25.c.8.5.-U.27.b.3.9.	42 loads.	Drains cleaned. Road patrolled and repaired.
		GUNNER ROAD C.7.b.4.1.-C.3.d.5.9.	36 loads.	Road maintained and shell holes filled.
		MOTOR CAR CORNER		Patrolled and kept clean.

Drains in U.20 and U.26. patrolled and maintained.

Lt. & Adjt.
for C.R.E. Second Australian Division.

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5TH. ENGINEERS
A.I.F.

APPENDIX 8

WEEKLY WORK REPORT.

January 1918.

For week ending 25th ~~inst~~

Nature of Work	Location	Remarks as to progress etc.
Rabecques Drain	C.13.b.5.4. to C.4.d.9.5.	
Drain- Smith Ave to Rabecques	C.4.b.7.3.	
Warnave River	C.1.a.10 to U.29.a.5.0.	
Drain- Loophole Fm to Front Line	U.22.d.1.1. to U.23.b.1.6.	
Drain- Le Gheer- Warnave River	U.28.a.9.1. to U.22.a.1.1.	
Ayr St- Warnave	U.27.a.3;1; to U.28.c.2.8.	
Drain - Monmouth Ave to Monmouth River	U.27.d.10.8.	
Drain off Station Ave) Drains Harnians- Suffolk Ave)		Drains have been kept clear.
Drain- Rabecques River to Suffolk Ave	C.4.c.3.3. to C.3.b.9.1.	
Drain- River Lys from Long Ave	C.9.d.8.8 to C.9.c.8.3.to C.15.d.7.8.	
Drain from Umpire Row to Railway	U.22.d.2.4. to U.23.b.2.7.	

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TRENCH WORKS. FRONT LINE.

The work of clearing, revetting and draining the Front Line has been carried out by day and night parties at the following locations.

U.23.c.7.5.	30 yds parapet raised.
U.23.c.6.3.	50 yds parapet built up.
U.23.c.9.6.	50 yds parapet built up.
U.23.d.1.8.	20 yds d/boards raised.
U.28.c.9.4.	80 yds parapet built up.
U.28.d.9.3.	30 yds d/boards laid on bearers.
U.28.d.7.2.	16 yds d/boards raised and trench cleared.
U.29.a.3.3.	40 yds revetted.
U.29.c.1.3.	15 yds d/boarded.
U.29.c.0;7.	25 yds d/boards raised.
U.29.c.1.7.	15 yds d/boarded.
U.29.c.1.3.	30 yds cleared,deepened and d/boards raised.
U.29.a.4.2.	Clearing drains.
U.29.a.4.4.	Clearing trench.
View Lane	40 yds new drain widened and deepened.

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APPENDIX 8

WEEKLY WORKS REPORT. continued.

5TH. ENGINEERS

Location	Remarks as to progress etc.
Una Trench	18 d/boards raised and cleared mud from beneath. 2 yds cleared and revetted, 20 yds deepened and d/boarded.
Cedilla Reserve	50 yds drain cleared.
Careless Ave.	40 yds drain widened and deepened.
View Lane.	40 yds new drain widened and deepened, 50 yds trench cleared, 40 yds new drain excavated, 115 yds parapet built up.
Kiwi St.	55 yds drain cleared.

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SUPPORT LINE.

The work of clearing, revetting and draining the Support Line has been carried out by day and night parties at the following locations.

Long Avenue	Repairing parapet.
Flax Alley	20 yds cleared and drained, 10 yds d/boarded.
Una Support.	18 d/boards raised and repaired.
Una Alley	Cleared trench and raised d/boards.
Umpire Support	9 shelters erected, 30 yds trench cleared, 26 yds revetted, 6 firebays cleared and revetted.
Umpire Avenue	210 yds trench cleared and d/boarded, 200 yds d/boards raised and relaid, 6 yds cleared, 6 yds revetted, 2 splinter proofs 80% complete.
Wiring. C.15.c.8.9.	200 yds double apron fence erected with single fence on outer line of pickets. 50 yds single apron fence alongside hedge at right end of Long Avenue.
Salvaging and carrying material to forward dumps.	170 shovels; 189 picks; 1 length suction hose; 1 pump; 10 l.s. pickets; 10 m.s.pickets; 2 coils wire netting; 1 length camouflage; 142 coils barbed wire; 54 l.s. pickets; 26 s.s.pickets; 300 a.i; pickets; 7 tracing tapes.
Gas-proofing	~~Monmouth Trene~~
Monmouth Trench	16 gasproof door frames fitted and 4 dugouts sandbagged.
Long and Monmouth Av.	18 gasproof windows and 1 frame fitted.
Una Support	15 blanket doors fitted.
Umpire Drive South	1 blanket door fitted.
B.H.Q. - Ayr Street	2 window frames fitted and 7 blanketed; 7 blanket doors put in.
R.A.P. - Umpire Reserve	1 blanket door fitted.
Convent Lane	6 blanket doors fitted.
Lancashire Farm	1 blanket door fitted.

P.T.O.

Weekly Works Report continued. appendix 8

General -

Owing to the recent wet weather it has been found necessary to carry out general drainage to the front and support lines.

Carrying parties -

Carrying and transporting R.E.Material from Motor Car Corner and Le Gheer dumps to front and support lines

Transporting R.E. Material from De Seule and Le Romarin Metal Siding to Motor Car Corner and Le Gheer R.E. Dumps.

Company Workshops -

Constructed flap bridge. Prepared 35 blankets and made 12 ~~panels~~ framesfor gas-proof ~~deers~~ dugouts. Made 40 yds camouflage.

R.D. Perri Major
O.C. 5th Field Company, A.E.

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6th FIELD Co AUST. ENGRS.

APPENDIX 8 / 80

WORK REPORT for week ending :- 26/1/18.

Location	Name	Work	Accom^n	% of work done	Remarks.
A12 b.7.6.	Huffing.	Erecting 2 "Nissen" Huts	60	100%	
T21 b.6.5.	E.E. Test Point	Windows & Door, completed		100%	
C.7.b.7.4.	PILL BOX No. 1.	Foundation Complete Walls commenced			
C.1.d.5.5	PILL BOX No 2	Bagging of materials, complete			
O.8.a.3.5	PILL BOX No. 3.	Excavation 50% Complete			
C.3.a.75.90.	DUMMY POST	Construction of		100%.	
C.3.a.75.65	"	" "		"	
C.3.a.45.60	"	" "		"	
C.3.a.10.35	"	" "		"	
C.2.d.8.8	"	" "		"	
C.2.d.7.3	"	" "		"	
U.15.c.5.4 to U.15.d.2.5.	ST YVES AV. (Improving)	420 yds excavation, complete			
	SPITLOCKING.	1680 yds complete.			
C.2.d.40 to C.3.d.90.65	"NICHOLSON AV"	720 yds trench cleared 80 yds Duckboards raised			
U.9 LANE to BARRICADE AV	OVERLAND TRACK	Duckboards laid			
U.9 HOUSE Pt. to ZAM BUK Trench	" "	" "			
U.14.d.33 to U.9.c.5.2	" "	" "			
U.9.c.52 to U.9.d.8.7	" "	" "			
U.5.a.80 to U.15.b.7.2	" "	" "			
U.8.d.5.2 to U.14.d.3.3	" "	Clearing Levelling + Duckboarding			
U.9.c.68 to U.9.d.8.2	" "	Levelling.			
	"ONLY WAY"	Reclaiming			
U.14.c.2.5	BATTLE. HQ	Strengthening, Improving + Bunking	4 officers & 40 O.R.'s	100%.	
U.14.c.8.5	"HASTED HOUSE" Post	Making Strong Post		100%	
U.14.a.7.7.	"BAKERY" Post	Maintenance + Repairs		100%.	
U.8.c.4.8.	"DONNINGTON HALL" POST	Repairs		100%.	
	Wiring	5000 yds Wire entanglement erected			For disposition see map
BULFORD CAMP.	SOLDER KILN for 7th BRIGADE.	Construction		50%.	
T. 10.	Salving. 9lb Decauville Track	2100 yds Track, salved & stacked at C.10.d.35.20.			
	Various	Printing Frame, made for 7th Brigade		100%	
		Making painting + writing 50 Notice Boards 12"×9"		85%	
		Tin lined box 3'×2'4"×4" made for 7th Brigade.		100%	
		2 "Stokes" Gun beds made for 5th Brigade.		100%	

A. Shelle Capt

6TH FIELD COMPANY ENGINEERS A.I.F.

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7th Field Company Australian Engineers.

WEEKLY WORKS REPORT. Week ending 26th Jany 1918.

SUPPORT LINE.	196 yds firestepping complete. 50 yds cleared for revetment. 540 yds berm cut. 72 yds berm revetted. 30 yds berm revetment anchored back. 200 yds berm cleared.
ULTIMO AVENUE. U.16.a. & b.	100 yds trench revetted. 330 yds trench cleared. 260 yds berm cut. 90 yds berm cleared.
UNTIDY TRENCH. U.16.b.1.5. to U.16.b.6.6.	150 yds cleared. 200 yds berm cut.
EGMONT AVENUE, U.11.a.	16 yds trench revetted. 270 yds berm cut. 150 yds berm cleared.
USEFUL LANE. U.10.b.	310 yds berm cut.

D R A I N S.

Drain at R.A.P. at U.16.a.7.3. from SUPPORT.	70 yds dug and cleared.
ULTIMO AVENUE.	80 yds drain dug. 140 yds cleared. 8 yds boxed.
SUPPORT LINE.	100 yds drain dug and cleared. 10 yds boxed and 10 yds parapet of drain cut.
ULTIMO DRIVE.	80 yds drain cleared.
UNTIDY TRENCH.	50 yds drain cleared.

S A L V A G E.

Right Sector.	50 shovels and 40 picks salvaged.
Left Sector.	260 shovels salvaged.

S H E L T E R S.

New SUPPORT at U.11.c.4.9.	8 shelters erected and complete.

EGMONT SWITCH at U.11.a.3.1.	Dugout for footwash complete.
RACINE Dump.	54 slush buckets completed. 200 pickets cut.
Soup Kitchen at RACINE Dump.	Completed.
VANCOUVER Tramway SWITCH to G.P.	Completed.
G.P. at U.15.d.5.7.	Reinforcements practically complete for concrete filling.
VANCOUVER Track.	170 yds duckwalks laid. Track complete from RACINE Dump to crossing at ULTIMO AVENUE.
No.2 Cellar behind No.4 Post.	Bunking for 20 men complete.
Wameron Track	280 yds duckwalks laid

Lt Col. Commdg. 7th Fld Coy. Engrs., A.I.F.

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SECOND AUSTRALIAN PIONEER BATTALION.

Battalion Headquarters,
Jan. 26th 1918.

o/-
C. R. E.,
2nd Aust. Division.

PROGRESS REPORT -- FOR WEEK ENDING 25 : 1 : 18.

RENCHES. ULTIMO AVENUE. U.15.d.8.9. to U.16.b.8.4.
Deepening and revetting existing drains.
New drains cut where necessary.
General repairs to trench where fallen in or damaged by shell fire in numerous places.
60 yards drained at AN CHAUSSEUR CAB. U.17.a.0.5.

ULTIMO LANE.
Draining and repairing at U.17.a.6.2.

DOUVE TRACK.
180 yards wire-netted U.10.a.

UNA SUPPORT.
General repairs. Draining, cleaning, revetting and relaying duckwalks where necessary between U.28.c.8.3. and U.22.d.3.3.

UMPIRE ROW.
General repairs. Cleaning, draining, revetting repairing and relaying duckwalks between U.22.c.0.3. and U.22.c.3.3.

FLAX ALLEY.
Trench revetted and duckwalks repaired at U.28.c.3.2. and U.28.c.7.1.

UNA AVENUE.
Trench cleaned and drained at U.28.b.8.1.
Duckwalks raised and trench cleaned at U.29.a.0.1. and U.29.a.2.2.

UMPIRE AVENUE.
25 yards of trench cleaned and drained at U.22.c.7.0.
95 yards drained, cleaned and duckwalks repaired, revetting repaired between U.23.c.2.8. and U.23.c.5.8.

PILL BOX cleaned out and fitted with bunks at U.22.d.7.7.

CECIL LANE. C.4.a.8.9. to U.28.d.1.1.
Cleaning, deepening and preparing for 'A' frames.
Cleaning drains and repairing duckwalks.

ST YVES AVENUE.
Duckwalks taken up and drains cleaned between U.15.c.4.3. and U.15.d.5.3.
Lateral drains cut and revetted at U.15.c.4.3. - U.15.d.2.3. - U.15.d.5.3.
General repairs.

LOOK SLIPPY TRACK.
Duckwalks repaired at U.15.c.4.3.

Average number of men employed :- 222.

APPENDIX

ROADS. ASH AVENUE. U.14.a.6.3. to U.14.b.7.8.
Road improved, culvert erected at U.14.b.7.8.
80 yards of metal spread and shell holes filled in.

PLOEGSTEERT - WARNETON ROAD.- U.25.c.8.5. to U.26.b.3.9.
Drains cleaned out.
Road patrolled and repaired.
42 loads of metal spread

GUNNER ROAD - C.7.b.4.1. to C.3.d.5.9.
Road maintained and shell holes filled in.
36 loads of metal spread.

MOTOR CAR CORNER ROAD.
Patrolled and kept clean.

Average number of men employed :- 50.

TRAMWAYS. WARNETON LINE.
282 yards sleepered from U.11.a.5.2. to U.11.c.2.8.
250 yards of duckwalks wire-netted from U.10.d.1.4. to U.10.d.5.2.
Mud and slush cleared from track, banks and cuttings cut back and battered, and track drained from U.15.a.2.8. to U.10.c.5.4. also from U.10.d.5.2. to U.11.c.0.6.

VANCOUVER LINE.
1,000 yards duckwalks laid from U.16.d.7.5. to U.10.d.7.0.
200 yards of duckwalks wire-netted from U.16.d.8.6. to U.17.c.0.7.
300 yards of track improved from U.16.d.7.5. to U.17.c.2.8.
100 yards of track cleaned at U.21.b.9.8.

CALEDONIAN TRACK AND LE TOQUET TRACK - maintained.

Average number of men employed :- 97

DRAINS. Drains in U.20 and U.26. patrolled and maintained.

CAMOUFLAGE. On e platoon employed on Camouflage.

C. B. Pattinson Capt. & Adj.
2nd Aust. Pioneer Battalion.

5th Field Company, Australian Engineers.

WORKS REPORT

Work completed to 28th December, inclusive.

Nature of work	Location	In charge	% complete	Progress - Remarks
Rabeque Drain	C.13.b.5.5. to C.4.d.9.5.	Lt. Gray		Patrols have kept drains clear.
Drain - Smyth Av. to Rabeque	C.4.b.7.3.	"		do do do
Warnave River	C.1.a.1.0. to U.29.a.5.0.	"		Patrols have kept drains clear; a good deal of clearing work has been done.
Drain - Loophole Farm to Front Line	U.22.d.1.1. to U.23.b.1.6.	"		Patrols have kept drain clear.
Drain - Le Gheer - Warnave River	U.28.a.9.1. to U.22.a.1.1.	"		do do do
Ayr Street - Warnave	U.27.a.3.1. to U.28.c.2.8.	"		A batter is being put on the side of this drain
Drain - Monmouth Av. to Monmouth River	C.4.a.0.3. to U.27.d.10.8.	"		Drains have been kept clear
Drain off Station Avenue) Drains : Harnians -Suffolk Av.)				do do do
Drain - Rabeque River - Suffolk Avenue	C.4.c.3.3. to C.3.b.9.1.	"		do do do
Drain/ River Lys fr. Long Av.	C.9.d.8.8. to C.9.c.8.3. to C.15.d.7.8.	"		This drain has neen re-opened & lowered to water-level in Long Av.
Drain : Fr. Umpire Row to Railway	U.22.d.2.4. to U.23.b.2.7.	"		Reclaimed.

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Trench Works

Front Line - The work of clearing & revetting the Front Line has been carried out by day & night parties at the following locations:-

U.28.d.9.5. to U.29.c.2.7. (Una Trench)	Lt Croker	Revetted 87yds; deepened & widened 30 yds; built up 135 yds parapet.
U.29.c.2.7. to U.29.a.3.0.	"	Revetted 69 yds.
U.23.c.6.2. to U.23.c.7.4.	"	Building up parapet; widened & deepened 27 yds
U.23.c.7.4. to U.23.b.2.6.	"	Built up 280 yds parapet.
U.23.d.15.90. to U.23.d.15.70	"	Revetted 32 yds; cleared 2 blockages.
U.22.d.0.4. to U.22.c.0.5.	"	Built up 150 yds parapet.
Posts 13 & 14	"	Erecting fire-stepping.
C.4.b.2.0. (Una Trench)	"	Erected 60 yds fire-stepping.

Carrying party - Material from Le Gheer dump carried to Front Line at night by two parties - To Right: 2 sprs, 40 infantry
To Left : 2 sprs, 25 infantry

.....

Barkenham & Harekau Avenues	C.10.c.7.6.	Lt Engel	Cleared blockages; built up 24 yds parapet & parados.

APPENDIX 8

8 Works Report - Work completed to 28th December, inclusive (continued)

Nature of work	Location	In charge	% complete	Progress -Remarks
View Lane	C.10.b.3.6. to C.10.b.4.6.	Lt. Engel		Revetted 17 yds; built up 30 yds parapet & parados
New Support	U.28.c.6.8. to U.28.c.4.4.	"		Revetted 96 yds; deepened & widened 80 yds.
"	U.28.c.3.4. to U.28.c.2.7.	"		Excavated 120 yds. of drain.
"	U.28.a.7.1. to U.28.a.7.2.	"		Excavated 83 yds of ~~tre~~ drain
Monmouth Avenue	C.4.c.7.5. to C.4.c.8.4.	"		Revetted 5 yds; built up 31 yds of parapet.
Long Avenue	C.10.a.4.8.	"		Clearing blockage in trench; revetted and sandbagged 13 yds.
Umpire Support	U.22.d.6.5. to U.22.d.6.8.	"		Revetted 68 yds; excavated 75 yds.
"	U.22.c.9.4. to U.22.c.6.9.	"		Building New dug-outs to accomodate 20 men and reclaiming old ones.
Wiring	C.11.a.0.2. to C.10.b.90.75.	Lt.Parkinson		Thickening & picketing wire entanglements.
Marking out overland track	Fr. C.3.b.0.0. to U.27.central & Fr C.3.b.0.0. ~~to~~ to C.3.a.0.0.			
	Fr. C.8.a.2.4. to C.3.a.5.5.			Marking out overland track; placing bridges over drains & ~~ele~~ clearing wire from tracks.
	Fr C. central ~~to~~ to C.3.b.0.0.			
	Fr C.1.b.0.0. to C.3.a.0.0.			
	Fr. C.1.b.0.0. to C.3.a.0.0.			
Building Rifle range for 5th A.I.Brigade	B.11.c.2.1.			

Carrying parties - 44 O.R's carrying & transporting R.E.Material from Motor Car Corner to Support Line - View Lane & Monmouth Avenues.

Transporting R.E. Material from De Seule and from Metal Sidind to Motor Car Corner and Le Gheer R.E.dumps.

John G. Burnell Capt for Major
O.C.5th Field Company, A.E.

80 WAR

6th FIELD Coy AUST. ENGrs

APPENDIX 8

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WEEKLY WORKS REPORT for week ending 29.12.17

Location of Work	Particulars	Work	Accomn	% of work done	Remarks
.C.1.4.	Counter Battery Plotting Huts.	Erecting huts.	6	70%	
16 b.1.7.	13th Battery.	Sandbagging Dug Out.		100%	
"	"	Building Ammunition Pits.			2 comp. 3rd commenced
2.c.3.9.	14th Battery.	Building 2 ammunition Pits.		100%	
"	"	Repairs to S.O.S pit.		90%	
7 d.1.1.	105th Battery	Battery Commanders Dug Out.		25%	
		Improving Officers & Mens Accomn		100%	
.b.8.4	"	Improving Gunpits.		100%	
13.c 8.2.	10th Battery	New Gun Pit.		50%	
.1 b.15.00	11th Battery	Concrete Control Post.		85%	
14b.85 75	15th Battery	New Gun Pit.		100%	
14.c.1.2.	104th Battery	2 New Ammunition Shelters.		100%	
14.a 55.60	Accommodation	Bunking & Cleaning Dugout.	10	95%	Now ready for Occupation
19 c 3.8.	"	Bunking Dugout at AVENUE Farm.	40	35%	
19 a.	"	Salving 4 pill boxes.	16	50%	
14 a 5.6	"	Bunking cellar at BAKERY			
8 c 5.8	"	Erecting Cupola shelters.	15	90%	
U.27 c 18	"	2 Shelters for MG crew.		100%	
U.26 b 91.	"	accomn for MG crew		50%	
U.27 c 09	"	accomn for MG crew.		80%	
U 9 d 97	"	Shelters erected	28.	50%	
U 15 a 77	"	accomn at ASH CRATER.	30.	50%	
U 9 d 79	"	Erecting 13 Cupola shelters.	26	70%	
U 15 a 6.8	"	Salved pill box.	4		
U 14 a 70 75	"	Salving Dugout & clearing & draining shelters.	12	15%	
U.8.c 5085	"	Erecting 3 Cupola shelters.	15	50%	
U.7 d 5575	"	Cleaning Dugout at IRISH FARM.	22	25%	
U 9 c 30 85	"	Erecting shelters.	10.	35%	
U.9 c 7.7	"	Clearing trench & excavating for shelters.	30	80%	
U 26 c 59. to U 26 c 8 3.	"	" " "	50	100%	
U.28 a.	"	" " "	30	100%	
U 27 a 8.7 to U 27 b 3.1	"	" " "	40	100%	
U 27 a 9 9 to U 26 b 8 2	"	" " "	65	100%	
U 26 c 8 3 to U 26 b 1 1	"	" " "		100%	
~~U 9 c 7 8~~	"	" " "	~~[illegible]~~		
~~U 26 c 8 8 to U 26 c 7 4.~~	"	" " "	~~[illegible]~~	~~[illegible]~~	
U 27 a 9 7 to U 27 b 30.	"	" " "	65	100%	
C 2 a 7 9 to C 2 d 2 6.	"	" " "		100%	
T 10 8 5 9. (6th Fd Camp	Various	5 Stoves & piping completely installed 4 Notice Boards made, written & erected for Craters 10 tables made for Div Gas School 2 Map Boards made for 6th Bde. 1 Printing frame " " "			
2nd Div Reinf Camp CAESTRE.	Erecting splinter-proof revetments.	No reports to hand.			
	Wiring.	13500 yards of barbed entanglement erected.			(For disposition of wire see map).

Fred G. Thorpe Lt

for OC 6TH FIELD COMPANY ENGINEERS A.I.F.

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APPENDIX 8 87

WEEKLY WORK REPORT to 9am 29th DECEMBER 1917.

Left Bde Sector

New Support Line U.11.c.65.60 to U.11.c.30.75.	270 yards of trench deepened and cleared and widened ready to receive revetment. 150 yards revetted. 50 yards duckwalked.
New Support Line (Right of Ultimo Lane) U.17.a.7.1. to U.17.c.60.65.	Trench dug ~~xx~~ 250 yards , 4ft 6" deep, 4ft at top and 2 ' at bottom from Ultimo Lane to U.17.c.60.65. and deepened to 5'.6". Trench widened to take "A" frames and ready for revetting (100 yards- 36 yds revetted.
Support Line.	115 yds deepened ,140 yds revetted ,115yds duckwalks. 600 yds of 18" berm cut and parapets cleared. 50 yds drain deepened U.11.c.4.0. and berm of 18" cut and cleaned.
U.11.c.4.2. to U.11.c.65.55	220 yds deepened and cleared and widened ready for revetment.
Defensive Zone.	Sited fresh strong points- 60 yds trench deepened to 4ft6". 1500 yds wiring completed double apron,U.10.b.2.8 to U.17.a.3.6. 100 yds double apron from U.10.d.75.60 to U.10.d.65.45. 100 yds double apron from U.10.d.55.25 to U.10.d.75.15. 200 yds double apron low wire thickened. L.G. posi. 6 two men shelters completed at U.10.a.5.8. 2 others excavated, Whole scheme - 50% complete.
Wiring,	3950 yards double apron wiring completed and 1250 yds cross wiring between two belts of double apron. Two belts double apron from U.23.a.2.9. to U.17.a.7.2 One " " " " U.17.a.7.2. to U.11.c.25.75 " " " " " " " " U.17.a.35.20 to U.17.c.25.80 to U.17.c.55.65.
R.AP. U.16.a.7.3.	6 yds trench dug and site cleared for English cupola. Material carried to site.
Rocket Firing frames.	4 completed.
Shelters.	25 completed. 6 at U.11.c.50.75 19 at U.17.a.30.55 to U.11.c.4.0.
Sign boards	23 completed.
Salvage.	184 cupolas, 69 sheets corr. iron, 78 coils of French wire, 340 long pickets, 230 medium, and 20 short pickets. 12 sheets expanded metal. 300 short pickets cut from long.
Miscellaneous.	Improvements carried out to company camp, horse lines and repairs effected to pontoons . Supervising erection of stage at Concert Hall. Supervising issue of R.E. stores at RACINE Dump.

L Moed. Captain

for O.C. 7th Field Company Australian Engineers.

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APPENDIX 8 88

SECOND AUSTRALIAN PIONEER BATTALION.

Battalion Headquarters,
Dec. 295h 1917.

To/-
C. R. E.,
2nd Australian Division.

REPORT ON WORK DONE DURING WEEK ENDING 28TH DECEMBER, 1917.

TRENCHES. EGMONT AVENUE. U.11.a.5.0.
58 yds revetted, 20 yds repaired.

USEFUL LANE. U.10.b.9.6.
13 yards revetted. Trench generally repaired and improved.

ULTIMO AVENUE. U.16.a. to U.16.b.
183 yards revetted. 38 yds drained and cleaned.
620 yards of Duckwalks wired and repaired from U.16.a. to U.16.b.

CRATER TRENCH. U.15.d.7.9.
29 yds revetted. 70 yds Duckwalks wired and repaired.
Deepening and regrading trench.
Duckwalks repaired and wired between RACINE DUMP U.14.d.9.8. and Hyde Park Corner U.19.b.4.7. and Look Slippy Track U.14.d.7.3. to U.15.c.3.4.

UNA AVENUE. U.28.b.
178 yards revetted. 55 yds deepened. 120 yds drained and cleaned.

KIWI STREET. C.4.d.
12 yds revetted. Trench repaired where blown in.

UMPIRE DRIVE SOUTH. U.23.c.
60 yds revetted. 120 yds deepened to 5'6".

UNA SUPPORT. U.22.d.
Trench repaired where blown in.

NICHOLSON AVENUE.
Trench repaired where blown in.

AVERAGE NUMBER OF MEN EMPLOYED 190

TRENCH TRAMWAYS.

WARNETON LINE.- Extended 180 yds from U.10.d.6.3. to U.10.d.8.5. 210 yds drained.

VANCOUVER LINE - 210 yds of formation completed from U.17.c.3.8.

25TH BATTERY LINE - 460 yds ballasted, from U.26.b.2.7. tp U.26.b.9.5.

Remainder of lines patrolled and maintained. 12 places where line blown out repaired.

AVERAGE NUMBER OF MEN EMPLOYED 85.

ROADS. Circuit Road LA GHEER to GUNNER ROAD fit for single traffic to U.27.a.9.9.

Road PLOEGSTEERT - WARNETON being widened to 16ft. revetted where necessary and drained.

Railway Crossing made good at U.25.d.5.8.

[redacted] made good to C.3.b.7.3. and being improved.

GUNNER ROAD

LE BIZET - MOTOR CAR CORNER Road patrolled and maintained.

Approximately 40 tons of metal laid and large quantity of brick has been used to bed the metal.

AVERAGE NUMBER OF MEN EMPLOYED:-

Ploegsteert - Warneton Road	62.
Gunner Road	30.

DRAINS. All main drains in Ploegsteert Wood are now free and require maintenance only.

Drains along Ploegsteert-Warneton Road and Gunner Road being cleaned. Box drain 22ft long made at C.8.a.4.9. to clear Gunner Road Drains.

NUMBER OF MEN EMPLOYED 30.

TRENCH MORTAR POSITIONS. Two being constructed at U.11.c.5.9.

NISSEN HUTS. Two erected at Divisional Gas School.

Lieut-Colonel.
C.O., 2nd Australian Pioneer Battalion.

CHAPEKLE ROMPUS.
HYDE PARK CORNER. — Providing accommodation for Aust. Comforts Fund.

STEENWERCK LAUNDRY. Brick furnace in Drying Room repaired.
Woodwork taken down over furnace and replaced by corrugated Iron. Air ventilator fixed.
Work on ceiling in course of construction.

STEENWERCK DUMP. Preparing timber for construction of Foot-Baths.

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SECOND AUSTRALIAN DIVISIONAL ENGINEERS.

Report on works from 23rd to 29th December 1917 inclusive.

5th Field Company, A.E. (36.B.4.a.5.2.) Right Brigade Sector.

DRAINS.	Clearing, improving and re-opening.
TRENCHES.	Revetting, deepening and widening. Improving and thickening parapets.
MARKING OUT OVERLAND TK.	Marking out overland track; placing bridges over drains and clearing wire from tracks.

6th Field Company, A.E. (28.T.10.a.5.9.) Reserve Brigade Sector.

HUTTING.	Erecting counter-battery plotting huts at T.6.c.1.4. - 70% completed.
ARTILLERY Positions.	Repairs & improvements to Gunpits. Construction of new gunpits. Battery control posts and Ammunition shelters. Work being carried out for 10th, 11th, 13th, 14th, 15th, 104th and 105th Btys.
ACCOMMODATION.	Salving pill-boxes and dugouts. Erecting shelters & accommodation for M.G. crews. Erecting bunks.
CAMP WORKS.	Erecting splinter-proof walls aroung huts at Second Div. Reinforcement Camp, CAESTRE.
WIRING.	13,500 yards of entanglement erected.

7th Field Company, A.E. (28.T.10.c.7.0.) Left Brigade Sector.

TRENCHES.	Digging, clearing, widening and revetting. Clearing and thickening parapets.
WIRING.	3,950 yards double apron wiring completed and 1,250 yards cross wiring bwtween two belts of double apron.
R. A. P.	U.16.a.7.3. 6 yds. trench dug and site cleared for English cupola.
SALVAGE.	184 cupolas, 69 sheets corr. iron, 78 coils French wire, 340 long pickets, 230 medium, 20 short. 12 sheets XPM. 300 short pickets cut from long.
MISCELLANEOUS.	Improvements carried out to Company camp, horse lines and repairs effected to Pontoons.

2nd Aust. Pioneer Bn. (36.B.16.c.4.9. - NIEPPE)

TRENCHES.	Deepening and regrading, draining, clearing, revetting and duckboarding.
DRAINS.	All main drains in PLOEGSTEERT WOOD are now free and require maintenance only. Drains along PLOEGSTEERT-WARNETON Road and GUNNER Road being cleared.
T.M.POSITIONS.	Two being constructed at U.11.c.5.9.
HUTTING.	Two Nissen huts being erected at Div. Gas School. Effecting repairs to Laundry buildings at STEENWERCK.

Lt. & Adjt.
for C.R.E. Second Australian Division.

30/12/17.

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APPENDIX 9

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MEDICAL WAR DIARY - Second Aust. Divisional Engineers.
for the month of January 1918.

* * * * * * * * * * * *

The first week in January showed a decline in the weekly number of diarrhoea cases, which illness had been manifesting itself as a mild epidemic throughout the division during the previous 4 weeks. This was largely due, in our case, to unsatisfactory water points, which later were changed.

The sanitation of all the field companies was excellent; however there were a few cases from the CATACOMBS where the men were somewhat crowded, still, few of these cases were definite enough to justify a suspicion of dysentry.

The following week I inspected the quarters at the CATACOMBS and found that the cook-houses and latrines were certainly not likely to be sources of disemination. However, little could be done to prevent the somewhat cramped conditions in the CATACOMBS themselves as no other accommodation could be made available, and for a forward area they were much better than what is usually expected.

During the second week a slight epidemic of diarrhoea, with one case of dysentry, broke out in the 5th Company. Here, by gaining more accommodation, changing the site of the cook-house and having the cooks examined for dysentry the epidemic was easily controlled, with the loss of one man evacuated as " ? Dysentry".

Most complaints were colds, blistered heels and other minor ailments.

In spite of the cold weather and long marches in and out of the line the sappers were none the worse for their fatigues. No definite cases of frost-bite or trench feet reported, due mainly to the fact that foot massage and baths were diligently carried out in all companies on men returning from the line.

A few men were evacuated "P.U.O. & probably trench fever". Most of these returned after a fortnight. I always made a point of carefully examining the hearts of these men and found in a number of cases evidence of Myocardial weakness, and have always considered that many of these cases are prematurely discharged from the Divisional or Corps Rest stations. However, these men are given"no duty" until one is satisfied as to their condition.

During the last of our tour in this sector nothing worthy of note occurred, except that several days before leaving, on the 25th I rejected a man for the Flying Corps on account of Heart Block. He had been able to perform his duties as an infantryman for two years, later as a signaller, with no apparent discomfort to himself. He admitted, however, having fainted several times in Egypt after strenuous exertion.

On the 27th January, part of the transport left, leaving the men to follow several days later. During this trek, perhaps through men drinking water from unchlorinated French wells, there were several cases of diarrhoea which I had to treat on arrival in the new area.

At present, the disposition of the companies is approximately three and a half miles from each and in the form of a triangle. The Signal Company is about ten miles distant, so it is impossible to see their sick.

Billets are satisfactory, as billets go, certainly a great improvement on those we had on the Somme in 1916 - 1917.

Arrangements in this area are that I make a visitation to all companies in the morning - 6th at 10-30 a.m.; 5th at 11-30 a.m. The 7th Coy., which are in the same village as C.R.E's. Headquarters, of course, I see before leaving, at 9 a.m.

Up till the 31st January I had under my treatment three civilians.

The health of our men ~~are~~ is quite good, though there is more sickness than we had in the forward area. Most cases reporting are of minor matters and several who are not above reporting sick on absurdly trivial matters to avoid parades.

Capt.

3/2/18. R.M.O. Second Australian Divisional Engineers.

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5th AUSTRALIAN FIELD ENGINEERS.
A.E. 2/12.
23/1/18

APPENDIX 10.

In the Field

23rd January 1918

SECRET

HDQRS., DIVISIONAL ENGINEERS
No. 23/50
2nd AUSTRALIAN DIVISION

From O.C. 5th Field Company, A.E.

To C.R.E., 2nd Australian Division

Attached copies of Report of Captain J. G. Burnell M.C. forwarded as per instructions.

Appendix 10

R S Reid Major

O.C. 5th Field Company, A.E.

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APPENDIX 10

SECRET

Notes on a Ten Days Stay with a French Field Company, January 4th - 14th 1918, by Captain J. G. BURNELL, 5th Field Company, Engineers, A.I.F.

In the Field

21st January 1918

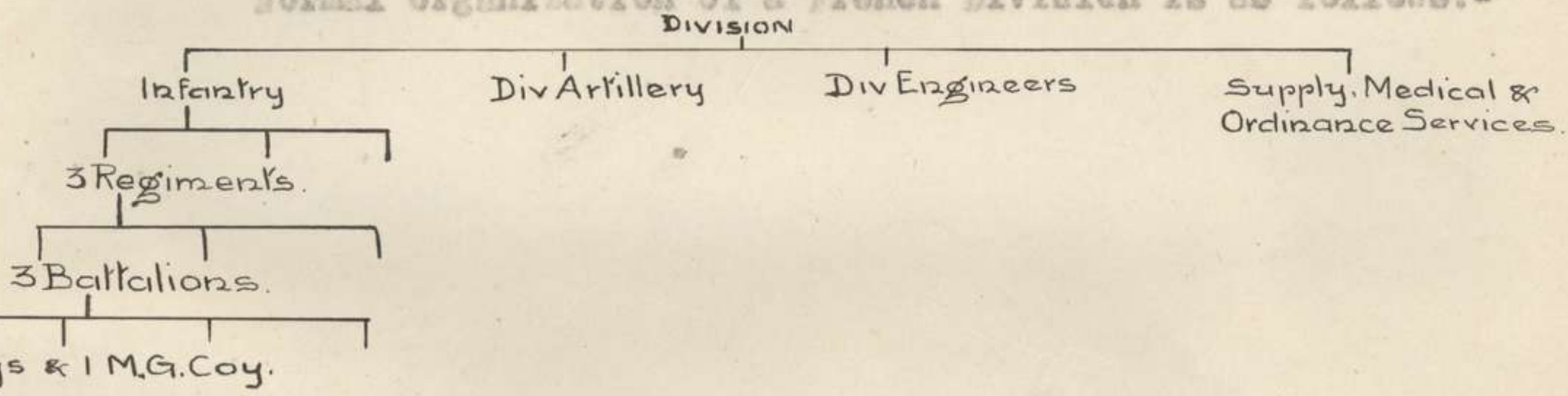
Type 2 more copies
Circulate, each by ✓6+7
, CRE's
different units to accompany same
JGB

APPENDIX 10
(1)

In accordance with instructions, I proceeded to EPERNAY on the 4th instant, meeting en route Captain HALLEY of the 61st Field Company, R.E. and an interpreter. We were met by a car which took us first to CHALONS-SUR-MARNE, and then some fifteen kilometres forward to a hutted camp near SUIPPES, where we found the headquarters of the Field Company, with whom we stayed the next ten days.

We messed with the O.C., and generally accompanied him around the work his Company was doing - the construction of a strong second line of defences some seven kilometres in rear of the present front line. Three visits were made to the front line trenches in and near AUBERIVE, and the various Engineer dumps in the sector were inspected.

Normal organisation of a French Division is as follows:-



Divisional Engineers consist of:-

Headquarters with Division.
2 Field Companies
1 Park Company.

There are no Pioneers.

Divisional Engineers are commanded by a Major (Commandant du Genie de Division), who corresponds to our C.R.E. With him is a lieutenant and about four draughtsmen and clerks.

The main Divisional Dump is run by the Park Company (Compagnie de Parc de Division), which generally supplies one or two sappers or N.C.O's to look after any advanced Divisional dumps.

<u>Establishment of a Park Company is as follows:-</u>

Lieteneant of the Reserve. O.C.
Two Detachments - (1) W.O. Accountant & 13 sappers
(2) 32 drivers.
Eight large four-wheel waggons.
Forty-eight horses.

The waggons carry a reserve of Engineer tools, cordage, bridging and explosive stores when on the march.
When in a Park, those suitable are employed carting stores.

Establishment of a Field Company - 4 officers, 218 O.Rs as follows :-

1 Captain - mounted
3 Lieutenants - mounted) Each commanding
1 Adjudant (1st class S.O.)) a Section.

The Company is divided into 4 Sections. Each Section consists of 1 officer and 48 O.Rs, including 1 stretcher-bearer per section, and is divided into two half-sections, each commanded by a sergeant. Each half-section is in turn divided into two squads, each commanded by a corporal. In addition, there are 3 or 4 maitre-ouvriers per section, men equivalent in rank to a Lance-corporal, but selected principally for their skill as tradesmen. A third sergeant per section, without definite command, is available for special work with Infantry, etc.

In addition the Company has -

1 Sergeant Fourrier, responsible for all Company stores.
1 Sergeant Provisionnement, responsible for the rationing of the Company.
2 Buglers
1 Dispenser
1 Bootmaker
1 Tailor
1 Cyclist

Drivers - 2 mounted corporals
14 drivers - 2 as mounted orderlies.

Horses - 7 saddle horses { 4 for officers, 2 for mounted corporals, 1 for orderlies
22 draught horses.

Vehicles - 10, including
4 section tool-carts
1 for cordage & bridging gear
1 for miners tools & explosives
1 luggage & ration waggon
1 travelling kitchen
2 - four-wheeled waggons for baggage, rations and officers' gear.

Each Company manages usually to secure in addition a water-cart and one or two additional light vehicles. The 8 four-wheeled vehicles are arranged for two horses each always. The other vehicles are provided with shafts, so that one horse can draw them on good roads and easy gradients. A second horse can be attached when required. All the vehicles are of comparatively light construction and driven from the seat.

app. 10.

APPENDIX. 10

Tools carried are fewer than with us, and of the rougher kind:- shovels, picks, mattocks, saws, axes, billhooks, hammers, levels, squares, rules and augers. No exploders, grindstones or pumps or hosing are carried.

Total weight of melanite carried - 836 lbs, including 88 lbs in each section tool-cart.

Each Company carries 10 waterproof covers, capable of each supporting four men in the water, when filled with straw.

On the march each sapper carries one tool in addition to his equipment. Tools so carried are as follows:-

52 picks	8 hammers
52 shovels	8 wirecutters
32 axes	8 saws
16 sickles	

In the Company organisation compared with our own, one remarks the absence of pontoons and water supply stores, and the fewer tools carried. This results in a greatly reduced number of drivers and a corresponding increase in the number of available sappers per Section. The number of N.C.Os in a French Section is greater than is the case with us - an arrangement much in their favour, I think, especially when the sappers are employed with infantry. More definitely than with us, too, is each corporal allotted to a given squad, with which he always works and lives.

Sappers are armed with a light rifle, considerably shorter than the French Infantry rifle.

A Section actually goes out on to the works from 28 - 30 strong.

The Work of a Field Company.

A Divisional Field Company in the line works under the administration and orders of the Commander of the Divisional Engineers, and in constant close touch with the Colonel commanding the regiment holding the sector, very much as a British Field Company works with a Brigade under the orders of the C.R.E. Infantry working parties are normally obtained from the support battalion, and work in small parties with sappers constructing shelters, revetting, draining, etc. - and farther back erecting hutting or stabling, etc.

The French organisation providing no special Tunnelling Companies, the Field Companies carry on any mining operations that are necessary, drawing labor as necessary from the Infantry to evacuate the spoil, etc.

In view of the French having no Pioneer Battalions, and only two Field Companies per Division, the work of Engineers is naturally restricted to technical work which cannot be done by other labour. For such work as entrenching and wiring, sappers are only put with the infantry as instructors for a few days if required. The French Infantryman is usually well trained in digging and wiring and in the construction of rough shelters.

Trenches being generally in good chalk stand, as a rule, unrevetted. Breaches are generally repaired with gabions of pine. Occassionally wire netting of 1" sq. mesh is used behind wooden pickets tied back. Trenches very generally duckboarded. Drainage to depressions or soak pits sunk close alongside trenches.

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APPENDIX 10

(4)

General.

Beyond the digging of a shelter trench near huts, no special provision against enemy aircraft bombs could be seen anywhere, nor could I learn of any proposals for same.

Interesting figures were given as regards the comparative weights of material for concrete shell-proof shelters and timbered and lagged dugouts in chalk for the same accommodation- 600 tons as against 20 tons.

The standard French hut accommodates about 100 men. A great trouble is experienced in warming so large a hut in cold weather.

Very general use is made of Chaine Hélice pumps about camps for raising drinking water from wells. They possess the great advantage of not being affected by heavy frosts, in addition to being very easily installed and requiring little maintenance.

Engineers Stores.

All arms draw on the approval of the Commander of Divisional Engineers. Divisional dumps keep a good stock of tools and hardware in addition to trench stores, and frequently have a couple of saws, a blacksmith and tinsmith shop, carpenters and paint shop.

The great bulk of stores are distributed by light railways, which are generally very good on the French front.

In the sector we visited, the divisional dump- in charge of the Divisional Park Company- normally forwards by light railway and small locomotive by day, to an Advanced Divisional Dump. The same trucks are then forwarded at nightfall by horse traction to battalion dumps. A Sergeant of the divisional park company is in charge of this advanced divisional dump. He controls the forwarding of stores to battalions and has under his charge at the dump the drivers and horses required for this purpose. From battalion dumps the stores may be further forwarded by 40 c.m. or 60 c.m. line on man pushed trucks.

Distances of dumps from front line were -

Advanced small dumps	1 to 1·5 kilometres.
Forward divisional dump	4 kilometres.
Main divisional dump	9 do

The supply of stores to divisions by Corps, Army and Base is so similar to our own system as not to warrant detailing here.

Organisation of the Engineers -

Engineer Services as will be seen are almost all in the hands of Army.

Broad gauge railway operation and construction is administered from General Headquarters.

60 c.m. light railways are built and operated by an organisation under the G.O.C. Artillery - a curious arrangement.

DIVISION - Major -Commanding
Lieutenant
About 4 clerks and draughtsmen

2 Field Companies
1 Park Company.

ARMY CORPS - Colonel or Lieut-Colonel -Commanding
1 Captain " S.O., R.E.
1 Administrative Officer,
1 Stores Officer

2 Field Companies - almost invariably loaned to C.R.Es Divisions
1 Company of Bridge and Pontooning Stores - transport only

ARMY - Brigadier-General Commanding

(a) 3 or 4 Companies of Territorial Engineers - usually put at the disposition of Corps.
(b) 1 Electrical Company - for all large installations.
(c) 1 Water Supply Company.
(d) Bridge equipment Companies - drivers only.
(e) 1 Company of Bridge-Builders.
(f) 1 Army Park Company.
(g) A number of concreting Squads.

Officers Commanding (b) and (c) are usually Civil Engineers in the Public Works Department, called up on mobilisation.

Army Roads Department -

Commanded by Lieut-Colonel, called up on mobilisation, from the Department of Roads and Bridges.

(a) Certain Battalions of Territorial Infantry.
(b) 2 - 3 Companies of Road Menders (Cantonniers)
(c) 2 - 3 Companies of Lines of Communication Engineers.
(d) Certain Companies of Carters, Drivers of motor transport and steam-rollers.

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(6) APPENDIX 10.

Organisation of the work of constructing a Strong Second Line of Defence.

On the front visited we found the French constructing a strong second line of defence some seven kilometres in rear of the front line. The design of the works, and particularly the organisation of the labour for constructing them, impressed us as excellent.

The Higher Command having fixed approximately the position of the second line behind the present front line - a distance of about 7 kilometres where we were - this whole second line is divided into divisional sectors. Each division then prepares its scheme of defence for its own sector. Normally a divisional front will be held by two regiments in the line and one in reserve; each regiment in the line will have two battalions in the front and one battalion in supports. Battalions will hold the line with two companies in the front and support line and one company in close support, the fourth company suitably disposing its machine gunners. Boundaries for regiments, battalions and companies are fixed on the map. By doing this the location of command posts and communication trenches can then be settled on the ground, and the whole defences properly organised. See Fig I.

The defences consist primarily of three lines of trenches A1 all well wired. It is considered that the support trench should not be more than two hundred metres in rear of the front line trench, in order that its garrison may give quick and effective support to the front line. In siting these trenches, the possession of good observation is always the chief consideration.

About one kilometre in rear of the support trench is a third trench.

Each company frontage has two communication trenches connecting the support and front line and each battalion frontage has one communication trench connecting the support and reserve line.

Between the support and reserve lines a series of machine gun positions with good tactical wiring have been constructed.

Usual type of wire formed by four rows of wooden pickets 4'6" long and spaced 2·50 metres, connected together with No 6 guage plain wire and filled in with barbed wire. Low wire, unlikely to be picked out in an aeroplane photograph, is used to protect machine gun positions and strong points.

The works are carried out in the following sequence :-

1. Trenches and communication trenches are dug to a depth of 0·50 metres.
2. Wire entanglements.
3. Construction of shelters.
   (a) For observation posts.
   (b) For machine gunners.
   (c) For command posts and personnel.
4. Excavation of communication trenches to full depth.
5. Excavation of trenches to full depth.

Simultaneously, regimental and divisional headquarters are being constructed in rear, and deep dugouts- usually to accommodate a company each, are being made in rear of the reserve line. See Figs 3 & 4

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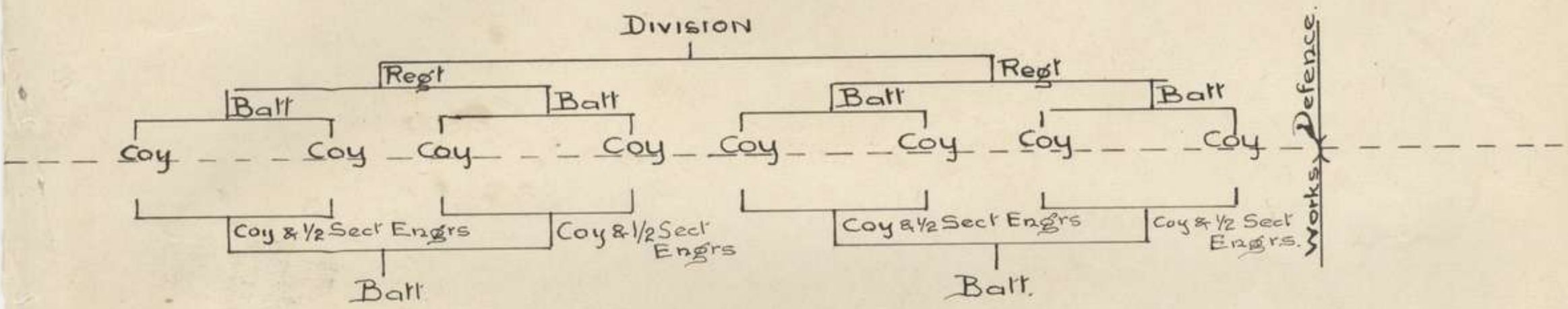
(7) APPENDIX 10.

Observation and Machine-gun emplacements are usually put some twenty to forty yards from a fire trench or communication trench - preferably the latter - and connected thereto by a deep tunnel.

Organisation of the Work.

The diagram following shows, above the dotted line, the personnel allotted as garrison for a Divisional Sector, and below the dotted line, the personnel allotted for the work of constructing the second line of defences to be held by this garrison -



The Officer Commanding each of the four Companies employed, is responsible for the siting of all trenches, wire entanglements, observation posts, machine-gun positions, shelters and command posts. The sappers are responsible for the construction of all O.P's and ~~M.G.positions~~ M.G.emplacements, command posts, and deep shelters, and have some of the personnel of the M.G.Company of the Battalion to assist them in this work. The exact design of these structures is mutually arranged between the Company Commander and the Sapper Officer. For the execution and laying out of all other work, the Company Commander is entirely responsible.

The remaining companies of the two battalions on works were partially employed in the sector we visited assisting Sappers to construct Regimental and Divisional Headquarters in deep dugouts.

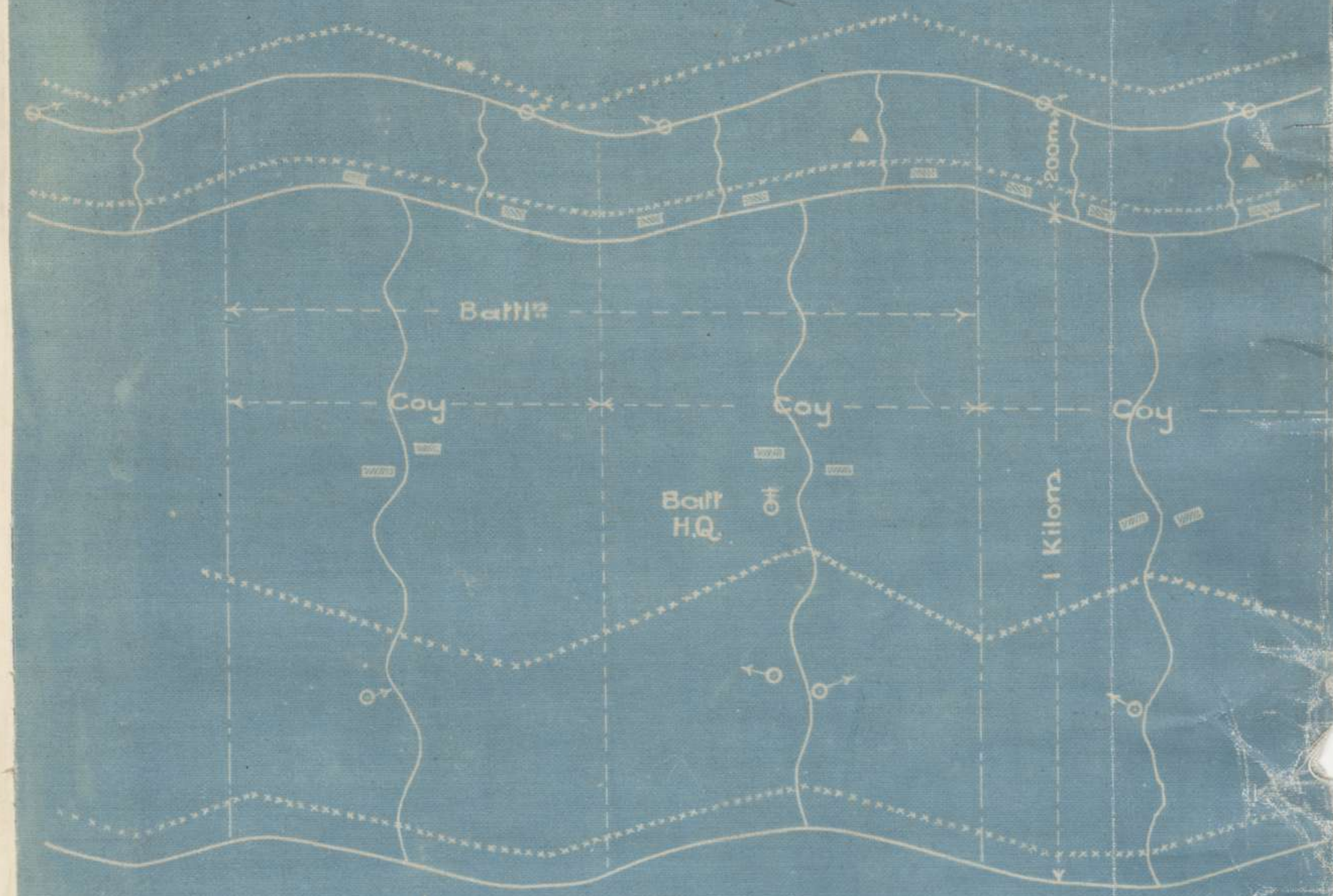
To ensure uniformity and continuity of design and construction, each Company is given a notebook containing full general instructions as to how all work is to be done, sketches of strong points, etc., and order in which work is to be ~~done~~ executed.

In the event of a hand over, this book, which is kept posted up as a works progress record, is handed over too.

Generally speaking it appears that each Company so engaged stays on this work until it is more or less finished. Frequent changes, at any rate, are not made.

From this there results a continuity in policy, and a real responsibility and interest in the work on the part of each Company, and a surprising amount of work is done in a short time.

APPENDIX 10



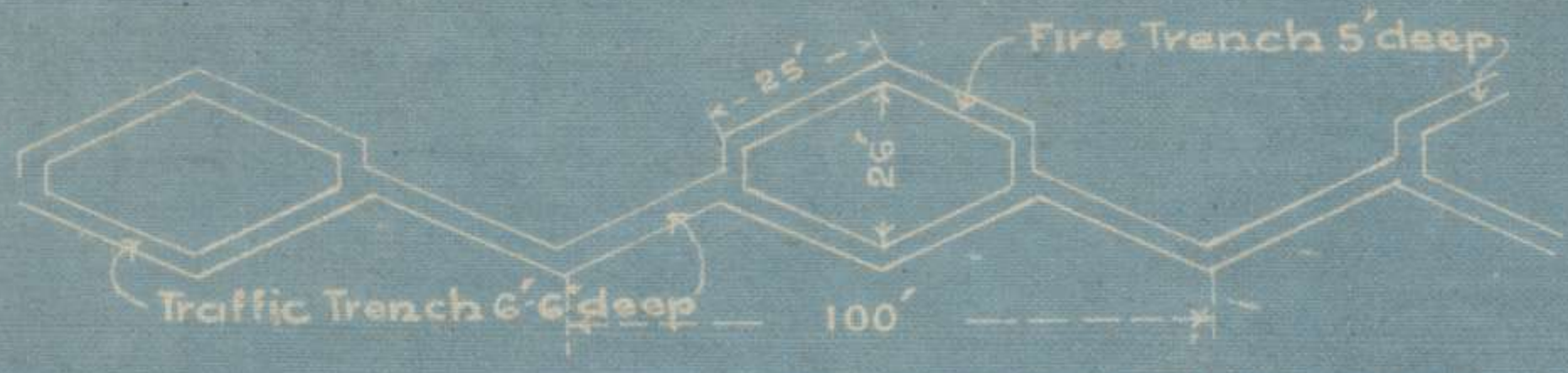
Platoon or ½ Platoon Dugouts.

Machine Guns

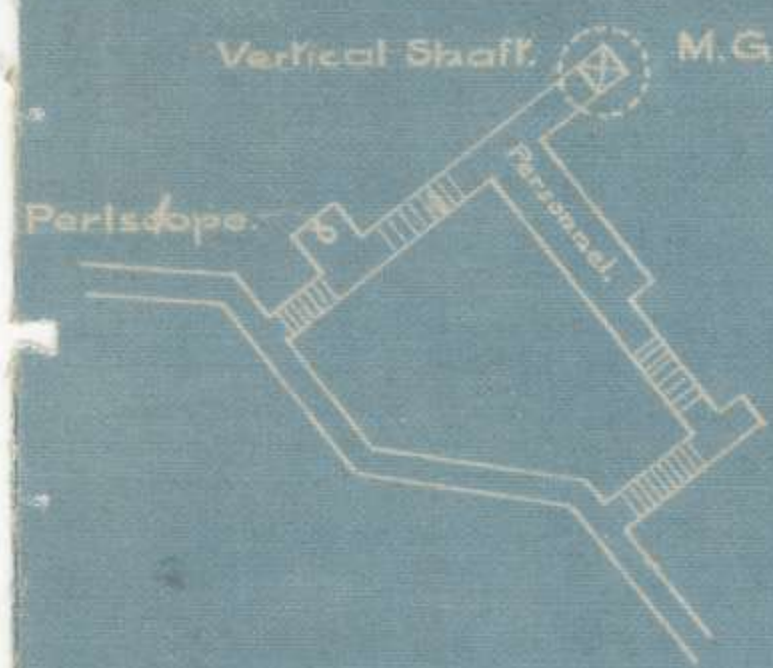
Observation Posts.

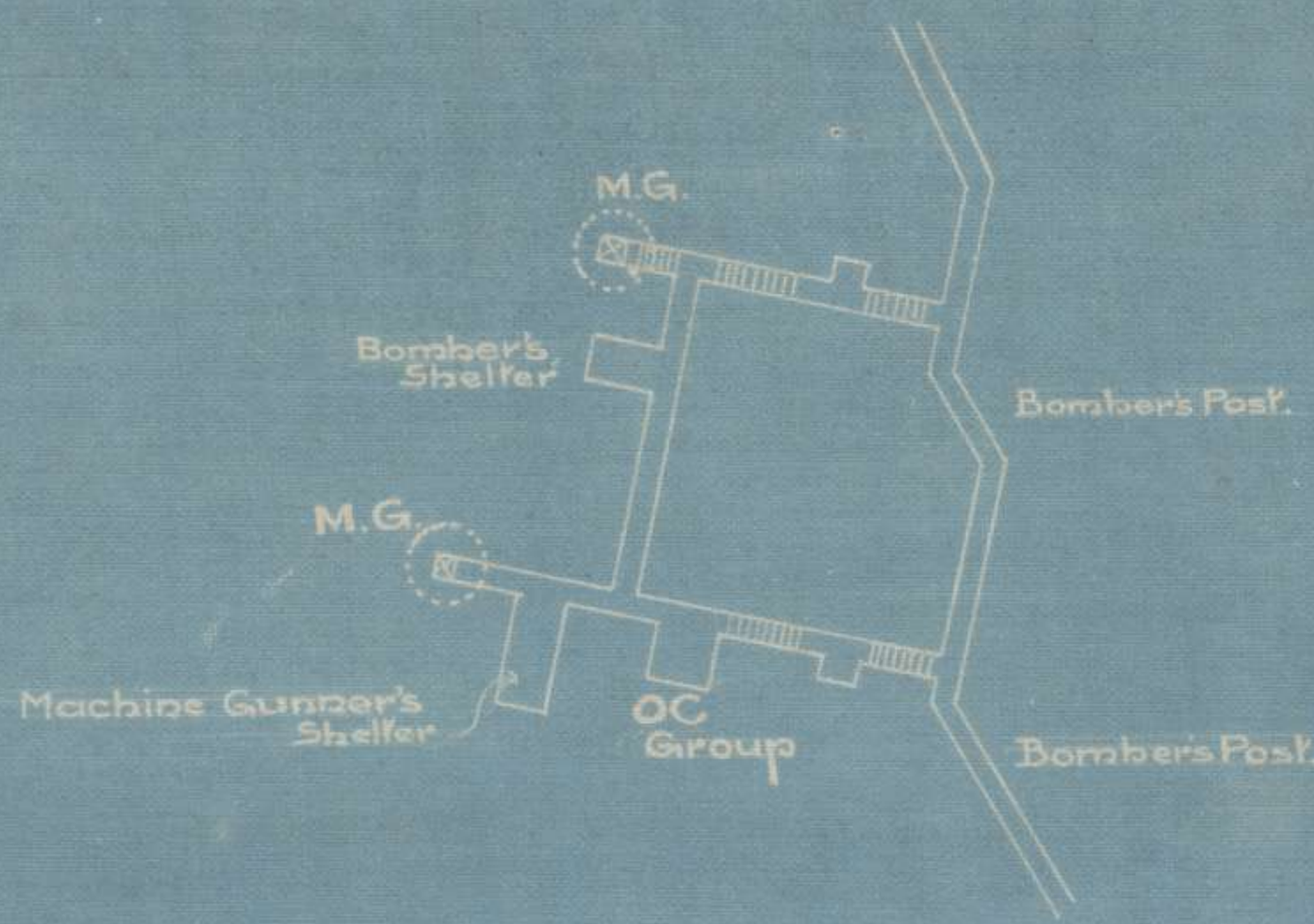
ORGANISATION OF DEFENCE LINE.

FIG. I



TRACE OF TRENCH FOR FIRE OR COMMUNICATIONS.





All shelters minimum head cover of 6·00m in chalk.

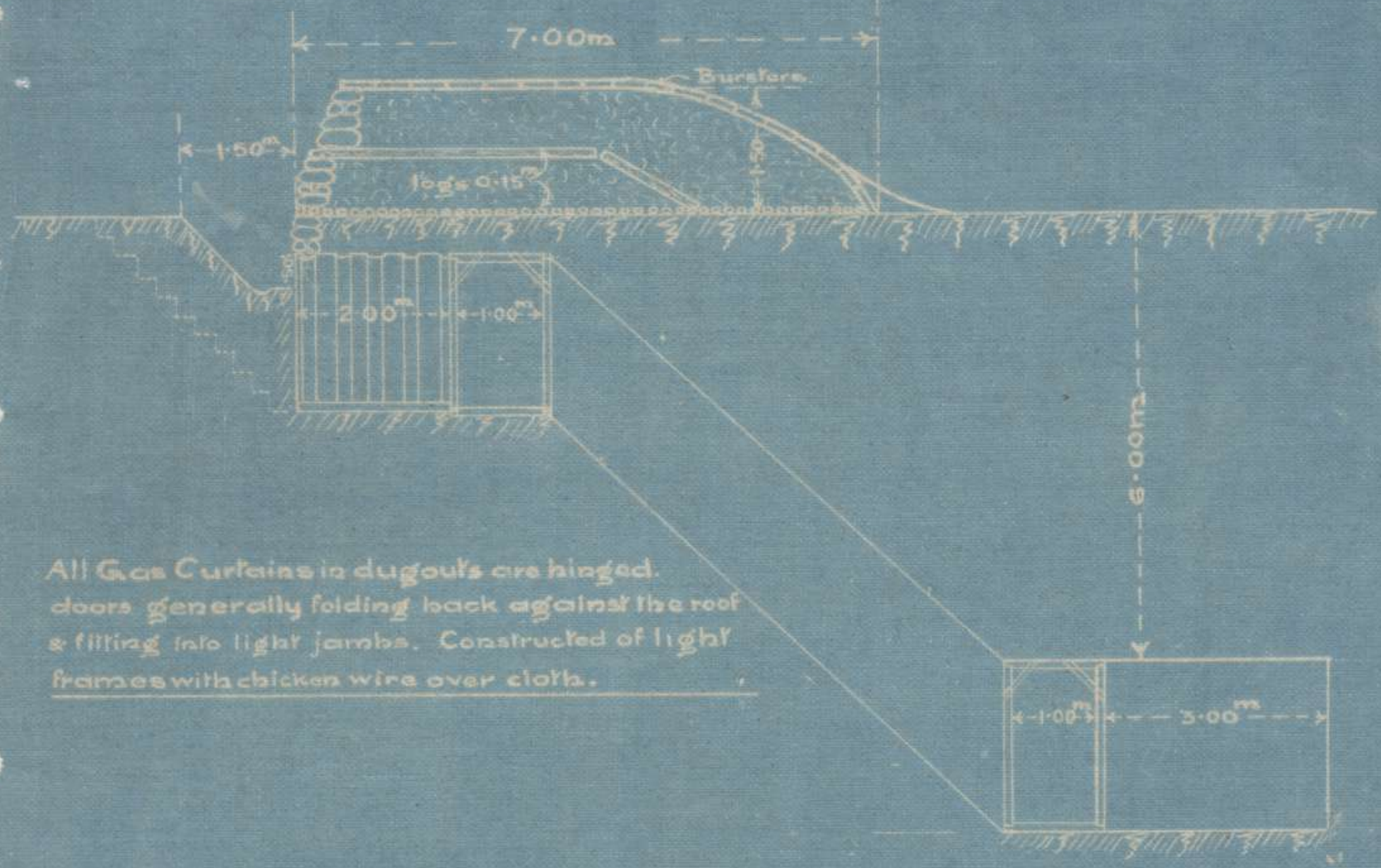
M.G. Shafts 1·04m in the clear

Mouth Camouflaged.

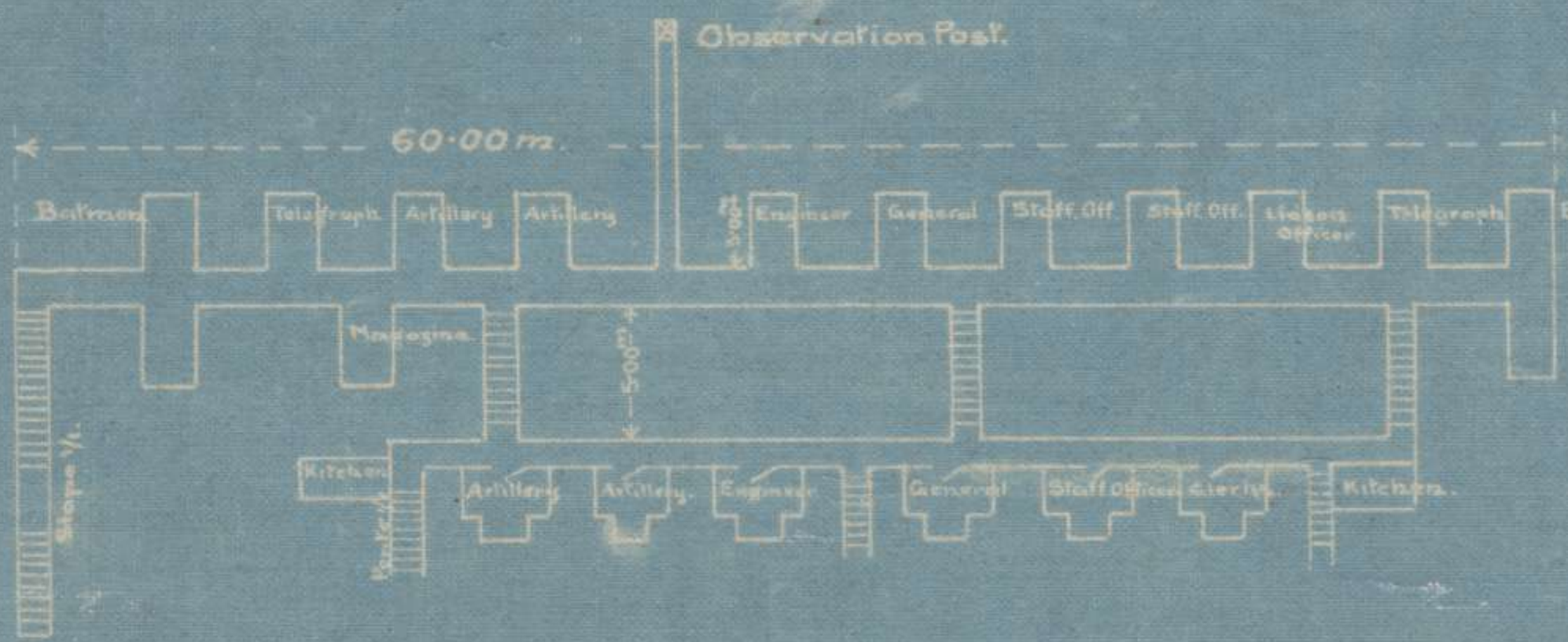
Open Emplacement cut to resemble shell hole.

EXAMPLES OF ORGANIZED POINTS OF RESISTANCE

FIG 2



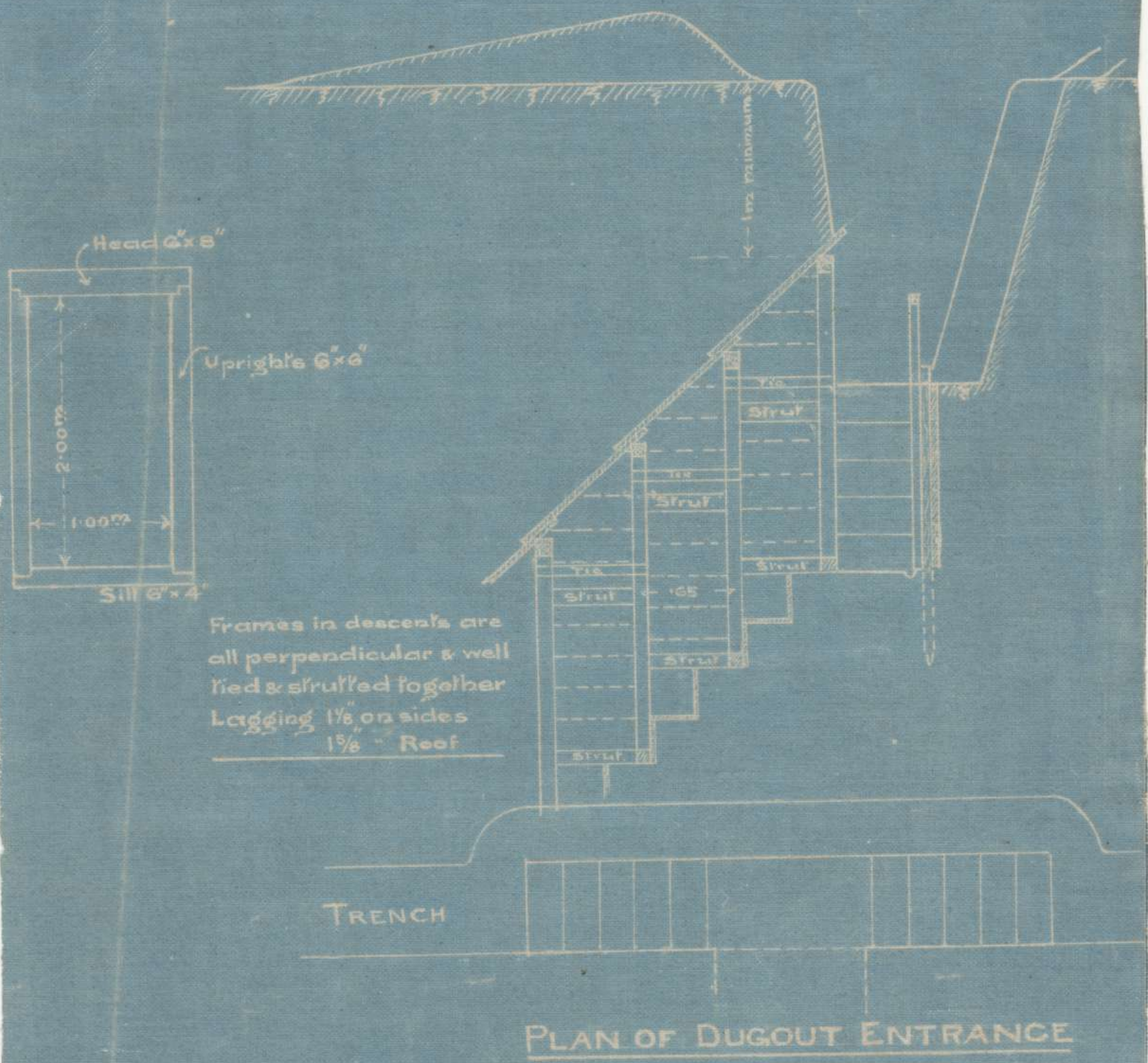
All Gas Curtains in dugouts are hinged doors generally folding back against the roof & fitting into light jambs. Constructed of light frames with chicken wire over cloth.



DIVISIONAL COMMAND POST

FIG. 3

APPENDIX 10



STAIRWAY FOR DEEP DUGOUTS.

FIG. 4.