

AWM4
Australian Imperial Force unit war diaries,
1914-18 War

Engineers

Item number: 14/11/13

Title: Headquarters 5th Australian
Divisional Engineers

June 1917



AWM4-14/11/13

WAR DIARY

Army Form C. 2118.

Instructions regarding War Diaries and Intelligence Summaries are contained in F. S. Regs., Part II. and the Staff Manual respectively. Title pages will be prepared in manuscript.

INTELLIGENCE SUMMARY.

(Erase heading not required.)

Sheet 1.

| Place | Date | Hour | Summary of Events and Information | Remarks and references to Appendices |
|--|------------------|---|--|--------------------------------------|
| BANCOURT H.35.c.5.5 Sheet 57c France 1/40,000. | June | | | |
| | 1st. (Sunday) | | Strength of Divisional Engineers 21 Officers 673 O.R. Lt-Col. Carey still at 1st. Anzac Corps H.Qrs. as Acting Chief Engineer. Major H. Bachtold M.C., 14th. Field Coy. Acting C.R.E. Location of Field Cos. is as follows;- 8th.F.Co. H.36.a.0.9.; 14th.F.Co. H.30.b.5.5.; 15th. F.Co. H.16.central. In compliance with 5th.Aus.Div.E.S. Memo. 146, Cos. are carrying out ^{work} on CORPS SECOND LINE (VILLERS AU FLOS - BANCOURT - BIEFVILLERS) as follows;- 8th. Field Coy. Strong Points H.35.a. & H.35.b. on BANCOURT, Bapaume SWITCH and SUPPORTING POINT in H.29.c. with wire and also supervision work for 8th. INFTY. BDE. in CENTRE SECTOR H.36.a.9.9. to H.22.c.6.0. 14th. Field Coy. MACHINE GUN POSITIONS in 0.2.c., completion of POST No.8, I.31.d.8.0., construction of SUPPORTING POINT H.36.d.Central and supervision work for 14th. INFTY. BDE. in RIGHT SECTOR 0.15.a.1.5. to I.31.a.3.2. 15th. F.Coy. Defences of BIEFVILLERS AND SUPPORTING POINT in H.21.c. also supervision work for 15th. INFTY.Bde. in LEF SECTOR H.22.c.6.0. to H.13. central. This work constitutes portion of the training programme which is being carried out by all Units under Divisional Orders and laid down in Divl. Training Memo.93. * of May 28th. 1917. Men are working 4 hours a day either on DEFENCE LINE or ROUTE MARCHES the remainder of the day being taken up with short lectures on MARCH DISCIPLINE and DISCIPLINE generally and inter-company football & cricket matches. | * App.1. |
| | 2nd. | | Reports received from FIELD COS. on "WORK DONE ON CORPS SECOND LINE FOR PERIOD 30/5/17 TO 2/6/17" Full report compiled from these and forwarded to DIVISIONAL HEADQUARTERS.* A.I.F. Orders received with Lists 179 & 181. Lieut. J.P. Caddy to be Captain vice REID transferred dated May.6th.1917. List 179. Lieut.S.R. MALLARKY is placed on Supernumary List dated May. 9th. 1917, List 179. 2/Lts.E.O.K.GREEN & G.H.TURNER to be LIEUTS. dated May 14th. 9*97 1917. List 181. | * App.2. |
| 3rd. (Sunday) | | No work done on CORPS SECOND LINE During day. Corkscrew pickets & barbed wire for erection of entanglements of this line are being salved from along BAPAUME - ALBERT Rd. | | |

J. Marshall

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~~INTELLIGENCE~~ SUMMARY.

Sheet 2.

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| Place | Date | Hour | Summary of Events and Information | Remarks and references to Appendices |
|--|-------------|------|---|--------------------------------------|
| <p>BANCOURT H.35.c.5.5. Sheet 57c 1/40,000</p> | | | <p>and brought forward by decauville to HARVEY SIDING H.29.b.5.3. where it is within easy reach of parties working on the DEFENCE LINE. LIGHT RAILWAYS are providing four large well wagons daily for this purpose; loading & unloading party of 20 men has been obtained from 8th. Infty. Bde. and these are working under an N.C.O. of 8th. Field Coy. The following Officers arrived from Cadet Battalion ; - 2/Lieuts. F.DOBLO, G.BURROWS, and A.T.EWART and were posted by C.R.E. to 8th., 14th. & 15th. Field Cos. respectively. Received notification from D.H.Q. that authority has been given by Q.M.G. for the retention of 1 blanket per man during the summer months *</p> | <p>* App.3.</p> |
| | <p>4th.</p> | | <p>Work continued by Units on CORPS SECOND LINE. 1 Officer, (Lt.NANGLE, 8th.F.Co.) and 9 O.R. left at Midday for 10 days leave to U.K.</p> | |
| | <p>5th.</p> | | <p>Work during morning as follows; - 8th. Field Co. Route march with transport, leaving Bancourt, route as follows ; - To BAPAUME thence along main road to LE TRANSLOY to VILLERS AU FLOS and back to BANCOURT - distance 7 miles. 14th. Field Co. DEFENCE works in H.36.d. Central. 15th. Field Coy. - route march with transport - leaving camp FAVREUIL 9.30 a/m, proceeding to H.27.d.5.8. thence along earth track to BANCOURT ROAD, passing through BANCOURT thence across CAMBRAI ROAD, thence across Railway Line in H.23.a., thence back to camp H.16.central. KING'S BIRTHDAY HONOURS. published in "THE TIMES" of June 4th. Amongst COMPANIONS OF DISTINGUISHED SERVICE ORDER were Lt-Col.A.B. Carey and Major H.Greenway. Return forwarded to D.H.Q. shewing Officers & O.R. who have not been granted leave to ENGLAND and who have had the following periods of service in FRANCE or EGYPT, 18 months or over, 12 months & less than 18 months, 6 months & less than 12 months. Under authority of WAR OFFICE Letter 79/9775 dated 9/5/17 the number of "MEKOMETERS" to be held by FIELD COS. has been reduced from 4 to 1 per Coy. Up to date the Cos. have found no use for these instruments in the Field. Under same authority "LEVELS POCKET Mk.4" have been increased from 1 to 4 per Field Coy. Lt-Col. CAREY returned from 1st.ANZAC CORPS H.QRS. during afternoon, and has ceased</p> | <p>** App.4</p> |

J. Mansfield

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INTELLIGENCE SUMMARY.

Sheet 3.

(Erase heading not required.)

| Place | Date June | Hour | Summary of Events and Information | Remarks and references to Appendices |
|--|--------------|------|--|--------------------------------------|
| Bancourt H.35.c.5.5. Sheet 57c France 1/40,000 | 5 | | duties at Corps as Acting Chief Engineer. Major H. Bachtold M.C. returned to 14th. Field Coy. from Acting C.R.E. | |
| | 6 | | Field Cos. at work on Corps 2nd. DEFENCE LINE during each morning. The afternoon being taken up with lectures and sports. | |
| | 6 to 10 | | Saturday 9th. 5th. Divl. Engineer Sports held at BANCOURT in the afternoon, programme lasting from 3 p/m until 8 p/m. | |
| | 11 | | On 10th. all work under construction on DEFENCE LINE was finished and any new work spitlocked, the intention being for all units to give more time to training. | |
| | | | Works Report on state of CORPS SECOND DEFENCE LINE compiled for D.H.Q. from report sent in by Brigades, Field Cos. and Pioneer Battalion. | |
| | | | 1 Officer (Lieut. Oliver, 15th. Field Co.) and 8 O.R. left for 10 days leave to England | |
| | | | Cos. wired that arrangements should be completed to enable them to move at a moments notice. | |
| | 12 | | C.R.E. memo 14/69/8 issued to Field Cos. and Pioneer Battalion with reference to construction of Fire Bays and Wire Entanglements in DEFENCE LINES * | * App 5 |
| | | | During morning Cos. occupied as follows;- 8th. Field Coy. Company & Section Drill. 14th. Field Coy. Route March. 15th. Field Coy. BIEFVILLERS DEFENCES. | |
| | | | Received warning order from Division that Divl. Engineers and 5th. Pioneer Bn. will move into SENLIS AREA on 17th. inst. C.R.E. arranging for Field Cos. to be billeted at DAOURS, CORBIE or BRAY with view to Bridging and Pontoon Training on the SOMME during the period that the Division is in that Area* | * App 6 |
| | 13 | 3 pm | Received 5th. Aus. Div. Order 152 with reference to relief by 2nd. Aus. Division, and move to SENLIS Area. Para 4 ; - "C.R.E. will arrange relief of Field Cos. & Pioneers on work direct with C.R.E., 2nd. Aus. Div." | |
| | | | ENGINEER ORDER NO.6a. issued by C.R.E. Cos. to move on 15th., 16th. & 17th. June. * Dismounted Personnel by Rail from BAPAUME TO VARENNES and Transport by Road. | * App 7. |
| | | | Instructions received from D.H.Q. that all work under construction on VILLERS AU FLOS-BANCOURT - BIEFVILLERS Defence Line should be completed today and all new work to be marked out and spitlocked. Remainder of time in this area to be taken up with training. | |
| | 14 | | Cos. carrying out company and section drill in morning and inter Coy. Sports during afternoon | |

J. H. M. H.
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INTELLIGENCE SUMMARY.

Sheet 4

(Erase heading not required.)

| Place | Date | Hour | Summary of Events and Information | Remarks and references to Appendices |
|---------------------------------|------|------|--|--------------------------------------|
| Bancourt | 15 | | 8th. & 15th. Field Cos. Training. 14th. Field Coy. moving to MILLENCOURT. Transport by BAPAUME ALBERT road with 14th. Infty. Bde. Dismounted personnel by rail from BAPAUME | |
| | 16 | | 8th. Field Co. Moved to SENLIS and to be billeted there with 8th. Brigade GROUP. | |
| RUBEMPRE | 17 | | C.R.E. Hdqrs. moved to RUBEMPRE in morning relieving C.R.E., 2nd. Aus. Div. | |
| T.13. | | | 15th. Field Co. moved to BOUZINCOURT with 15th. Infty. Bde. Group. | |
| Sheet 57d France 1/40,000 | 18 | | C.R.E. obtained sanction of C.E. 1st. ANZAC to move Divl. Engineers to CORBIE for training and Pontooning and Bridging Work. Engineer Order No.7 issued to Field Cos.* | * App 8. |
| | | | Lieut-Col. Carey left for G.H.Q. during afternoon to attend bridging conference on morning of 19th. taking with him design of "DECKING FOR PILE OR TRESTLE BRIDGE TO TAKE LORRY TRAFFIC"* | * App 9. |
| | 19 | | Advanced Parties of 1 Officer and 5 O.R. from Each Coy. were sent to CORBIE to arrange details as regards billeting. Area allotted by TOWN MAJOR is western end of town all billets being just on Northern side of RUE QUATRE SEPTEMBRE. No other troops at present billeted in the town and room allowed is ample. | |
| | 20 | | Lieut-Col. Carey returned from conference at G.H.Q. Hdqrs. & Field Cos. of Divl. Engineers moved to CORBIE during morning and all troops placed in billets by noon. TRANSPORT LINES for 3 Cos. together on RUE GAMBETTA at Eastern edge of town. During afternoon companies selecting sites on river SOMME for carrying out Pontooning. 8th. & 14th. Field Cos. to work up stream from LOCK and 15th. Fd.Co. down stream. 15th. Fd.Co. sent party under an officer to take over 10 pontoons and superstructure from 1st. Aus. Div. at BRAY in morning. These were brought down by river arriving at CORBIE during evening. | |
| | 21 | | 20 Pontoons delivered at CORBIE by 8th. Pontoon Park R.E. and these were taken over by 8th. & 14th. Field Cos. All Cos. training during day, pontoon bridges being put across river and detachments rowing in lagoons at side of river. C.R.E. Headquarters moved from No.46 Rue 4 Septembre to more suitable place at No.16 LA PLACE. | |
| | 22 | to | Held Cos. working 8 hours daily on river; bridges being put across river both by method of "Forming Up" and "rafting" and all men being put through course of rowing | |

J. Maxwell

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| Place | Date | Hour | Summary of Events and Information | Remarks and references to Appendices |
|-----------------|------|------|--|--------------------------------------|
| CORBIE SOMME | 26 | | C.R.E. arranging to build "wharf" for unloading river barges at site on down stream side of lock. ENGINEER IN CHIEF asked to supply pile driving gear and permission obtained from local authorities to cut trees near site for piles. Engineer Order No.8 issued with regard to Inspection by G.O.C. Division tomorrow, 27th. | **App. 10 inst. |
| | 27 | | Inspection by G.O.C. Division at 10 a/m. Companies complete with transport drawn up at Bridging Site, 1100 yds. down stream from On completion of inspection of personnel and transport by G.O.C., four Pontoon Bridges were constructed by Field Cos., two across Lagoon - one each by 8th. & 14th. Field C ^{os} . and two across canal by 15th. Field Coy. 8th. Field Coy. bridge consisting of one WELDON TRESTLE and 8 PONTOONS completed in 16 minutes. 14th. Field Coy. Bridge consisting of 10 Pontoons completed in 15 minutes. 15th. Field Coy. Bridge of 5 Pontoons across canal, 1 completed in 6 minutes and one consisting of two WELDON TRESTLES and 3 PONTOONS in 11½ minutes. Canal Companies Personnel and transport marched across bridges over both lagoon and canal according to tactical scheme drawn up by C.R.E. * | * App 11 |
| | 28 | | Continuation of Bridging Training by Field Cos. Pile Driving Frame, monkey and winch arrived by rail from HAVRE, for use on construction of wharf on canal. This taken over by 15th. Field Coy. Design of frame and monkey not considered altogether satisfactory by C.R.E. and memo forwarded to C.E. 3rd. Army and C.E. 1st. Anzac pointing out what were considered defects. * | * AP 12 |
| | 29. | | FIELD COS. continuing Pontoon Work on Canal. 5 more monkeys received by lorry from HAVRE and have same defects as one received by rail yesterday. Lieuts. OLIVER and CLARK, 15th. Field Coy. getting out new design of Pile Driver. | |
| | 30. | | Received portion of material for Lorry type PONTOON BRIDGE from R.E. WORKSHOPS, MEAULTE. Report forwarded to 5th.D.H.Q. on "SCREENS". * | * AP 13. |
| | | | Field Companies at work on PONTOON BRIDGING across CANAL. Report received by C.R.E. from Lieuts. OLIVER and CLARK 15th. Field Co. on "HEAVY PONTOON BRIDGE".* Strength of DIVISIONAL ENGINEERS :- (21 Officers. 673. O.R. 1/6/17. (23 Officers. 692. O.R. 30/6/17. | * App 14. |

1. The Div. may possibly be out of the line for some time. In this period all ranks must get into hard condition and fit for a period of mobile warfare - possibly a pursuit in a force of all arms. To get the men fit for this work marches will be undertaken at once. Practice is needed in loading up 1st. Line Transport and "Falling in" Units not more than 5 minutes before moving down to the starting point. Marches at first will be undertaken by Battalions with all their first line transport. When and if Div. moves into a back area, marches will be carried out by Brigades with affiliated Field Cos., Field Ambs. & Cos. of the Div. Train. March discipline must be enforced throughout this training. Columns must learn to "Fall in" rapidly after a halt, and move off again without delay. Transport Drivers must dismount rapidly and loosen girths. The Notes on "March Discipline" issued with Training Memo. No. 79 are republished. Every officer will study these notes and then lecture to his men. During the whole period of training every Battalion and Field Coy. will carry out two marches a week of not less than 5 miles in the first week, and increasing gradually to 10 mile marches.
2. Training in Field Work and open warfare will be progressive. It will commence where left off before vide Training Memo No. 85.
3. BRIGADE SCHOOLS. In each Brigade a School of Instruction will be started for training the following:-
 - Rifle Grenadiers and Bombers.
 - Lewis Gunners.
 - Trench Mortar Personnel.
 - Signallers.
4. SPECIALIST OFFICERS.
 - (a) The Divisional Bomb Officer is available to assist in Brigade Schools on the following days:-

| | |
|------------------|---------------------------|
| 8th. Infty. Bde. | Mondays and Tuesdays. |
| 14th. do | Wednesdays and Thursdays, |
| 15th. do | Fridays and Saturdays. |
 - (b) O.C. Divisional Signal Coy. will directly supervise the training of Signallers in Brigade Schools.
 - (c) The D.T.M.O. will be available to assist in the training of L.T.M. Personnel as soon as the Divisional Arty. is relieved in the line.
5. GAS SCHOOL. A Divisional Gas School will be started at BECOURT camp. Each course will last 3 days. Brigades and Divisional Units will forward tomorrow 29th. inst. a nominal roll of Officers and Other ranks they wish to send to each course. The dates of the courses will be as follows:-

| | | | |
|--------------|-------------------|-------|-------------|
| 1st. COURSE. | Assemble BEACOURT | 6 p/m | 30th. May. |
| | Return morning | | 3/6/17. |
| 2nd. Course | Assemble BECOURT | 6 p/m | 3rd. June. |
| | Return morning | | 7th. June. |
| 3rd. Course | Assemble BECOURT | 6 p/m | 7th. June. |
| | Return morning | | 11th. June. |

GENERAL TABLE OF WORK.

| SECTOR | W O R K | Unit to carry out | Estimated Party required daily. | Remarks. |
|----------|---|--|--|--------------------|
| Right | Cover for supports, & Supporting points about 0.8.b.5.0. | 14th. Inf. Bde. | Battn. | |
| | Tactical wiring across present gaps | do | do | |
| | Defence Northern Side VILLERS AU FLOS Including Wire | do | do | |
| | Machine Guns in 0.2.c. Completion of Post No.8 Supporting Point H.36.d.central Defences of REINCOURT | 14th. Field Coy. 1 Coy. Pioneers | | |
| BANCOURT | Completion of all round defences; internal communications. | 2 Cos. Pioneers | | |
| Centre | Strong Points H.35.a. & b. on BANCOURT Bapaume Switch Supporting Point in H.29.c. with wire | 8th. Field Co. | | |
| | Completion of Front Line. Cover for Supports | 8th. Inf. Bde. do | 1 Battalion. Battalion. | |
| | Left. | *** Extension of Posts Completion of wiring Defences of BIEFVILLERS Supporting Point in H.21.c. | 15th. Inf. Bde. do 15th. Field Co. | 1 Battalion. B. |

Table "A"

APPENDIX No. 1

88

6. Pigeoneers. O.C. Divisional Signal Coy. has arranged for the training of PIGEONEERS at the following lofts;-

- (1) MONUMENT, (2) AVESNES les BAPAUME

Each loft can accommodate a train 6 men for each 4 day course. Classes will be attached to, and rationed by, the 20th. Divl. Signal Coy., Under arrangements made by O.C., 5th. Div. Sig. Coy.

Vacancies are allotted as follows.

| | |
|------------------|------------------------|
| 1st. Course | 3th. May. - 2nd, June. |
| 8th. Infty. Bde. | 12 vacancies. |

| | |
|-------------------|------------------------|
| 2nd. Course | 3rd. June - 6th. June. |
| 14th. Infty. Bde. | 12 vacancies. |

| | |
|-------------------|------------------------|
| 3rd. Course. | 7th. June - 10th, June |
| 15th. Infty. Bde. | 12 vacancies. |

Classes will report to the N.C.O. in charge of the Loft by 7 p/m on the day prior to the commencement of the course.

7. TRANSPORT SCHOOL. The Divl. Transport School will be commenced on Wednesday May. 30th. The personnel detailed to attend this course in Training Memo, No.89 of 7th. May will report to the A.D.V.S. at Divl. H.Q. at 9.15 a/m on May 30th. The Syllabus will be the same as before. The course terminating on Wednesday June 6th.

In addition, the Divisional Commander wishes Brigade Commanders to inspect all their 1st. Line transport once a week.

8. ASSAULT AT ARMS. A Divisional Assault at Arms, will be held in about 3 or 4 weeks time. A detailed programme will be published shortly.

9. PROGRAMMES. Each Brigade and Divisional Unit will forward by 6 p/m on Sundays and Wednesdays a programme showing the training work to be carried out for the next three days. Work exclusive of lectures will be limited to 4 hours a day. As far as possible organized games, sports, and competitions will be held in the afternoons. Programme should not go into details but must be specific as to time, place, and nature of work so that Divisional Commander can visit units.

In the case of marches, the time, starting point, and route will be given.

10. ENGINEER TRAINING.

Attention is directed to G.S. Memo No.146. One and a 1/2 Battalions in each Brigade will be detailed to work on the Corps Second Line until defensive system is completed.

Sgd. C.M. Wagstaff, Lt-Col.
G.S., 5th. Aus. Division.

28/5/17.


Map 57.c.N.W. & S.W. combined 1/20,000

1. Wire.

- (a) 0.8.a.2.3. to 0.8.a.9.5.0 Two double apron fences erected 40' centres.
Total length double apron fence 400 yds.
- (b) Defences North Side of VILLERS AU FLOS.
0.8.a.0.5. to 0.8.a.1.3. Two double apron fences erected 40' centres.
Total length of double apron fence 900 yds.
- (c) 0.2.c.8.5. to 0.2.a.6.2. Two double apron fences erected 40' centres, with old Bosche wire incorporated.
- (d) Strong Point 0.2.a.4.2.. Single double apron fence erected completely around strong point.
- (e) BANCOURT. Double apron fence being erected from H.35.b.8.5. to H.36.a.9.9.
- (f) H.22.c.7.3. to H.22.c.2.5. One row Bosche birdcage wire erected 240 yds.
- (g) H.20.b.1.8. to H.14.c.6.1. Two rows Bosche birdcage wire erected, 300 yds.
- (h) H.14.c.4.4. to H.14.c.0.7. One row single & one row double apron fence erected. 200 yds.
- (i) H.14.c.0.7. to H.13.c.9.6. One row single and 1 row double apron fence erected, 600 yds.

2. Trenches and Strong Points.

Cross section of trench when completed

- 
- (a) Supporting Point. 0.8.c.7.9. to 0.8.a.6.3.
All fire bays completed. No traverses yet dug.
- (b) Cover for Supports. 0.8.c.6.5. to 0.8.a.1.3.
All fire bays completed. Traverses under construction.
- (c) DEFENCES NORTH SIDE OF VILLERS AU FLOS.
0.8.a.0.5. to 0.7.b.0.6.. All fire bays completed.
215 yds. of traverses completed.
- (d) Strong Point, I.31.d.8.0. 45 yds. of trench deepened from 2'6" to 3' and 160 yds. of new trench dug to depth of 1'0".
- (r) H.20.b.4.5. to H.20.b.15.70. 160 yds. trench completed.
- (s) H.20.b.0.5.75 to H.14.c.60.05. 150 yds. front trench completed
200 yds. traffic trench completed.
5 C.Ts. Completed.
- (t) H.14.c.5.11 to H.14.c.35.20. 100 yds. Trench dug.
- (u) H.14.c.3.3. to H.13.d.9.5. 100 yds. front trench dug.
180 yds. traffic trench dug. 3 C.Ts. Dug.
- (v) H.13.d.85.55. to H.13.d.25.30. 200 yds. trench dug.
- (w) H.30.c.9.4. to H.13.c.35.80 250 yds. trench dug.
- (x) DEFENCES OF BIEFVILLERS. H.19.b.2.6. to H.19.a.00.55
750 yds. trench dug to 9" deep.
H.19.b.25.40 to H.19.b.5.2. 65 yds. C.T. dug to 3' deep.

3. DUGOUTS. NIL4. M.G. POSITIONS. :-

- (a) 0.2.c.45.30, 10 yds. Trench completed, nest commenced.
0.2.c.30.35 " " " " " "
0.2.c.2.6. " " " " " "
H.36.b.65.75 completed.
H.36.b.50.65 " "
H.36.b.45.80 " "

Richard

Appendix 3.

1st. Anzac. Routine Order dated 1/6/17.

No.288.

BLANKETS.

Units may retain one blanket per man during the summer months.

Headquarters,
5th. Aus. Div.

The following return is submitted in reply to your A56/670 of 31/5/17

UNIT Officers, N.C.Os. and Men who have not been granted leave to England and who have had the following periods of service in France or Egypt.

| UNIT | 18 months or over. | | 12 months or over. | | 6 months or over | | TOTAL. |
|-------------|--------------------|------|--------------------|------|------------------|------|--------|
| | Officers | O.R. | Off. | O.R. | Off. | O.R. | |
| H.Q.D.E. | 1 | 2 | - | - | - | 1 | 4 |
| 8th. Fd.Co. | - | 49** | - | 49 | - | 9 | 107** |
| 14th. do | - | 41 | - | 60 | 1 | 20 | 122 |
| 25th. do | - | - | - | 80 | - | 30 | 111 |
| ----- | | | | | | | |
| Total | 1 | 92 | - | 189 | 1 | 60 | 344 |
| ===== | | | | | | | |

** Includes 20 O.R. with over two years service including GALLIPOLI service.

C.R.E
6/126/25
4/6/17

Sgd. S.E. Evans for Major,
Acting C.R.E., 5th.Aus.Div.

Appendix No 4

Headquarters, 5th. Australian Divisional Engineers.

8th. Field Coy.
 14th. do
 15th. do
 5th. Pioneer Bn.
 "G" 5th. Aus. Div.
 ✓ War Diary.
 C.R.E.
 File.

| | |
|------|---------|
| No. | 14/69/2 |
| Date | |

Reference this office memo 14/69/2
 of 28/5/17 - Fire Trenches.

The order about 30' Fire Bays and
 18' traverses must be regarded as a general order only,
 and not to be adhered to under all conditions.

Where the fire trench is part of a
 continuous line, and is not liable to enfilade, 30'
 fire bays are satisfactory, but portions of the trench
 on the sides of salients, or which are sloping down hill
 towards the enemy, are very much weakened if the bays
 are as long as 30'. This disadvantage of the 30' bay
 becomes very much accentuated in the case of all round
 defences of a village or small area, and it is sometimes
 necessary to reduce the bays down to even 12'; and
 possibly to reduce the traverses to 12' also in order
 to obtain sufficient fire power.

A very good instance of the unsuit-
 ability of long fire bays is exemplified by the Bosche
 trench for the defence of Bancourt immediately S.E. of
 the Bapaume Bancourt Road. This corner might be taken
 as an example of how not to do it.

BARBED WIRE. A 40 yds. gap should
 be left every 4 or 500 yds. in continuous lines of barbed
 wire to admit of passage of counter attacking forces.
 Such large gaps as this need not be left in the case of
 villages or small defended localities, for which 10 yd.
 gaps on the roads will probably suffice.

It has been noticed that 40 yd. gaps
 in the spaces between villages have sometimes been wired
 in. Field Cos. should endeavour to make sure that all
 ranks understand the reason of the gap and know of the
 order.

12/6/17.

Sgd. A.B. Carey, Lt-Col.
 C.R.E. 5th. Aus. Division.

Copy.

Appendix 6.

Chief Engineer, 1st. Anzac.
G. 5th. Aus. Div,
Q. 5th. Aus. Div.

G.U. 49.

12/6/17.

As a result of reconnaissance of river SOMME strongly recommend 5th. Div. Engrs. be billeted at DAOURS and VECQUEMONT or if this not permissible camped at AUBIGNY or immediately south of VECQUEMONT thus being close to junction of HALLUE and SOMME Rivers and below ANCRE junction AAA Billeting at CORBIE second best proposition AAA PRAY third best AAA could utilise whole pontoon park with advantage AAA Addressed C.E. 1st. Anzac repeated "G" & "Q" 5th. Aus. Div.

C.R.E.
5th. Aus. Div .

SECRET.

Headquarters 5th. Australian Divisional Engineers.

ENGINEER ORDER No. 6.^{A.}

1. The 5th. Australian Division (Less Artillery and Headquarters Company of Train) will be relieved by the 2nd. Australian Division (Less Artillery and Headquarters Company of Train) now in the SENLIS Area, between 14th. and 17th. June.

2. Dismounted personnel of 8th. Field Co. will move with 8th. Infantry Brigade and take over billets vacated by 6th. Field Co. at SENLIS on 16th. inst.

Dismounted personnel of 14th. Field Co. will move with 14th. Inf. Bde. and take over billets vacated by 5th. Field Co. at MILLENCOURT on 15th. inst.

Dismounted personnel of 15th. Field Co. will move with dismounted personnel of 5th. Pioneer Battalion and take over billets vacated by 7th. Field Co. at BOUZINCOURT on 17th. inst. (See attached table of moves "A".

3. Moves of dismounted personnel will be made by train from BAPAUME to PUGHEVILLERS for RUBEMPRE, and VARENNES for other destinations.

4. Transport will move by road as follows :-

14th. Field Co. transport will move with 14th. Inf. Bde. Transport and take over 5th. Field Co. transport lines at MILLENCOURT on 15th. inst.

8th. Field Co. transport will move with 8th. Bde. Transport and take over 6th. Field Co. transport lines at SENLIS. on 16th. inst.

15th. Field Co. Transport will move with 5th. Pioneer transport and take over 7th. Field Co. transport lines at BOUZINCOURT on 17th. inst.

(See attached table of moves "B".

5. All maps, orders and plans in connection with Defence Work being carried out, will be handed over on relief.

6. Headquarters 5th. Aus. Div. will be established at RUBEMPRE at 12 noon on the 17th. inst.

7. BAPAUME - ALBERT ROAD is open for traffic between BAPAUME and POZIERES only between the hours of 9 a.m. to 12 noon and 3 p.m. to 5 p.m.. Interval of 500 yards will be maintained between Transport of Units.

8. CERTIFICATES will be obtained from all relieving units that camps are handed over in a clean and sanitary condition and forwarded to C.R.E. Office by 10 a.m. 18th. inst..

9. ACKNOWLEDGE.



Lt. & Adjt.,
Divisional Engineers,
5th. Australian Division.

13/6/17.

War Diary

(2).

2. Time Table .

UP.

| Train No. | D E P A R T. | | Date. | Arrive Bapaume. |
|-----------|---------------|----------|-------------|--------------------|
| | Puchevillers. | Varenes. | | |
| 1. | 8-56 | - | 14th. June. | 11-15 |
| 2. | 10-56 | - | " " | 13-15 |
| 3. | 15-56 | - | " " | 18-15 |
| 4. | - | 9-00 | 15th. June. | 10-36 |
| 5. | - | 11-00 | " " | 12-41 |
| 6. | - | 13-30 | " " | 15-20 |
| 7. | 8- | 9-00 | 16th. June. | 10-36 |
| 8. | - | 11-00 | " " | 12-41 |
| 9. | - | 13-30 | " " | 15-20 |
| 10. | - | 11-36 | 17th. June. | 14-00 |

DOWN.

| Train No. | D e p a r t | | A r r i v e. | |
|-----------|-------------|-------------|--------------|---------------|
| | Bapaume. | Date. | Varenes. | Puchevillers. |
| 1. | 12-00 | 14th. June. | - | 14-46 |
| 2. | 14-00 | " " | - | 16-46 |
| 3. | 19-00 | " " | - | 22-46 |
| 4. | 11-20 | 15th. June. | 13-00 | - |
| 5. | 13-30 | " " | 15-20 | - |
| 6. | 16-00 | " " | 17-40 | - |
| 7. | 11-20 | 16th. June. | 13-00 | - |
| 8. | 13-30 | " " | 15-20 | - |
| 9. | 16-00 | " " | 17-40 | - |
| 10. | 15-00 | 17th. June. | 17-45 | - |

ALBERT,
12th. June, 1917.

(Sgd). C. HEAD, Major,
D.A.D.R.T.(V)

TABLE OF MOVES, DISMOUNTED PERSONNEL BY TRAIN. TO ACCOMPANY 5th AUSTRALIAN DIVISION ORDER No. 152. TABLE "A".

| Date | Unit | From | To | Relieved by | Remarks |
|------------|----------------------------------|---------------|---|---------------------------------|---|
| 14th June. | 15th Inf. Bde | "M" Area | Bde H.Q. & 2 battalions) 2 battalions) M.G.Co. & L.T.M. Batt.) RUBEMPRE CONTAY | 5th Inf. Bde | |
| 15th June. | 14th Inf. Bde 14th Field Co. | "M" Area | Bde H.Q. & 2 battalions) M.G.Co, L.T.M. Batt.) 1 battalion) 14th Field Co.) 1 battalion) WARLOY MILLENCOURT BOUZINCOURT | 6th Inf. Bde | 14th Field Co. takes over billets occupied by 5th Field Co. |
| 16th June. | 8th Inf. Bde 8th Field Co. | "M" Area | Bde H.Q. & 3 battalions) M.G.Co., L.T.M. Batt) 8th Field Co.) 1 battalion. NORTHUMBERLAND AVENUE, (BOUZINCOURT) | 7th Inf. Bde | 8th Field Co. takes over billets occupied by 6th Field Co. |
| 17th June. | 5th Pioneer Bn 15th Field Co. | "M" Area | BOUZINCOURT (Midland Camp) BOUZINCOURT | Similar units of 2nd Aust. Div. | |
| 17th June | Divisional Headquarters | H. 35. c. 5.5 | RUBEMPRE | H.Q. 2nd Aust. Div. | |

Appendix No: 7 16

MARCH TABLE OF TRANSPORT TO ACCOMPANY 5th AUSTRALIAN DIVISION ORDER No. 152.

Table 10.

98

| Date | Transport Unit | From | To | Route | Remarks |
|------------|--|--------------------------------|--|--|---------|
| June 13th. | 15th Inf. Bde. | BIEFVILLERS | SPRING GARDENS Camp | BAPAUME-ALBERT Road. | |
| June 14th. | 15th Inf. Bde. | SPRING GARDENS Camp | RUBEMPRE CONTAY | AVELUY - BOUZINCOURT - SENLIS - WARLOY - VADENCOURT. | |
| June 15th. | 14th Inf Bde and 14th Field Co. | BEAULENCOURT | WARLOY MILLENCOURT BOUZINCOURT | ALBERT - MILLENCOURT (less troops for BOUZINCOURT). | |
| June 16th | 8th Inf. Bde and 8th Field Co. Divisional Headquarters | BAPAUME SH. 35.c. | SENLIS, BOUZINCOURT SPRING GARDENS | ALBERT - BAPAUME Road ALBERT - BAPAUME Road | |
| June 17th. | 5th Pioneer Bn. and 15th Field Co. Divisional Headquarters | "M" Area SPRING GARDENS | BOUZINCOURT RUBEMPRE | AVELUY - BOUZINCOURT SENLIS-WARLOY-VADENCOURT | |

1. Horsed transport is only allowed to pass on the main BAPAUME-ALBERT Road, between POZIERES and BAPAUME, between 9 a.m. and 12 noon, and 3 p.m. and 5 p.m.
2. SPRING GARDENS Camp may be used for midday halt each day as required.
3. 500 yards interval will be maintained between the transport of any two units.

Appendix No. 7

17

98
SECRET

5th. Aus. Div. Engineers Order No. 7.

By Brevet Lt-Col. A.E. Carey, C.M.G., D.S.O., A.E.
C.R.E., 5th. Australian Division.

France 18th. June 1917.

- (1) C.R.E. Adgre., 5th. Field Coy., 14th. Field Coy. and 15th. Field Coy. A.E. will move to CORBIE on June 20th. under own arrangements as regards time and route.
- (2) Each Company will send an advance party of one officers and five other ranks to make detailed arrangements for billets with Town Major, Corbie on June 19th.
- (3) Each Coy. will detail one N.C.O. and 5 men to be attached to their Brigade Headquarters for supervision of water supply, bathing and drainage work. N.C.O. to be mounted.
- (4) On and after 20th. inst. all rations will be drawn from 14th. Brigade Supply Depot at MILLENCOURT at 10.45 a/m. One motor lorry per company is allotted for this purpose.
- (5) S.G.Div. Engrs. will be attached to 8th. Field Coy. for rations.
- (6) Supplies will not be drawn on 19th. inst. Two days to be drawn on 20th. inst.
- (7) 15th. Field Coy. to detail party under an officer to take over 10 pontoons from 1st. Div. at BRAX and take same to CORBIE by river.

J. Shawell

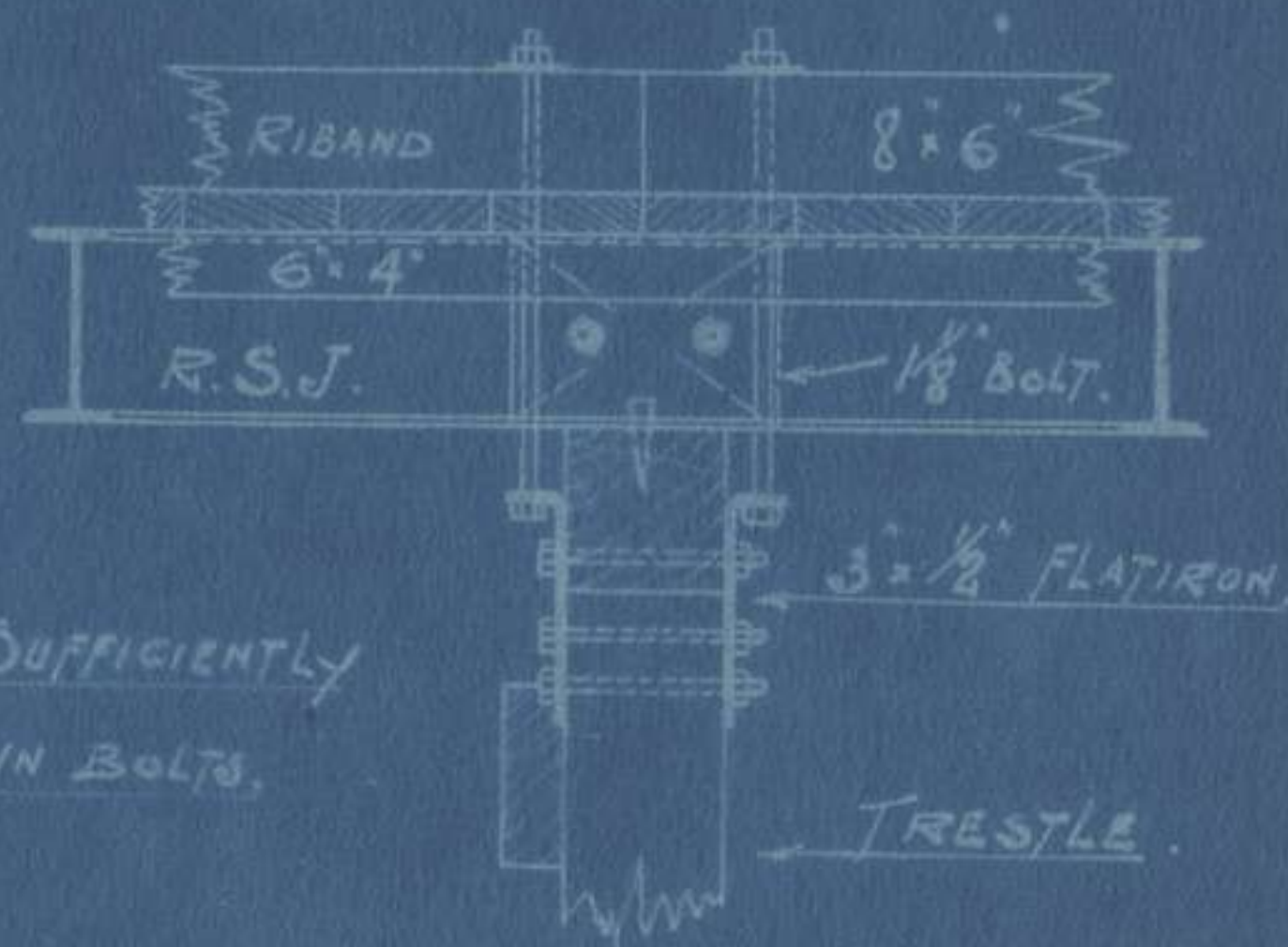
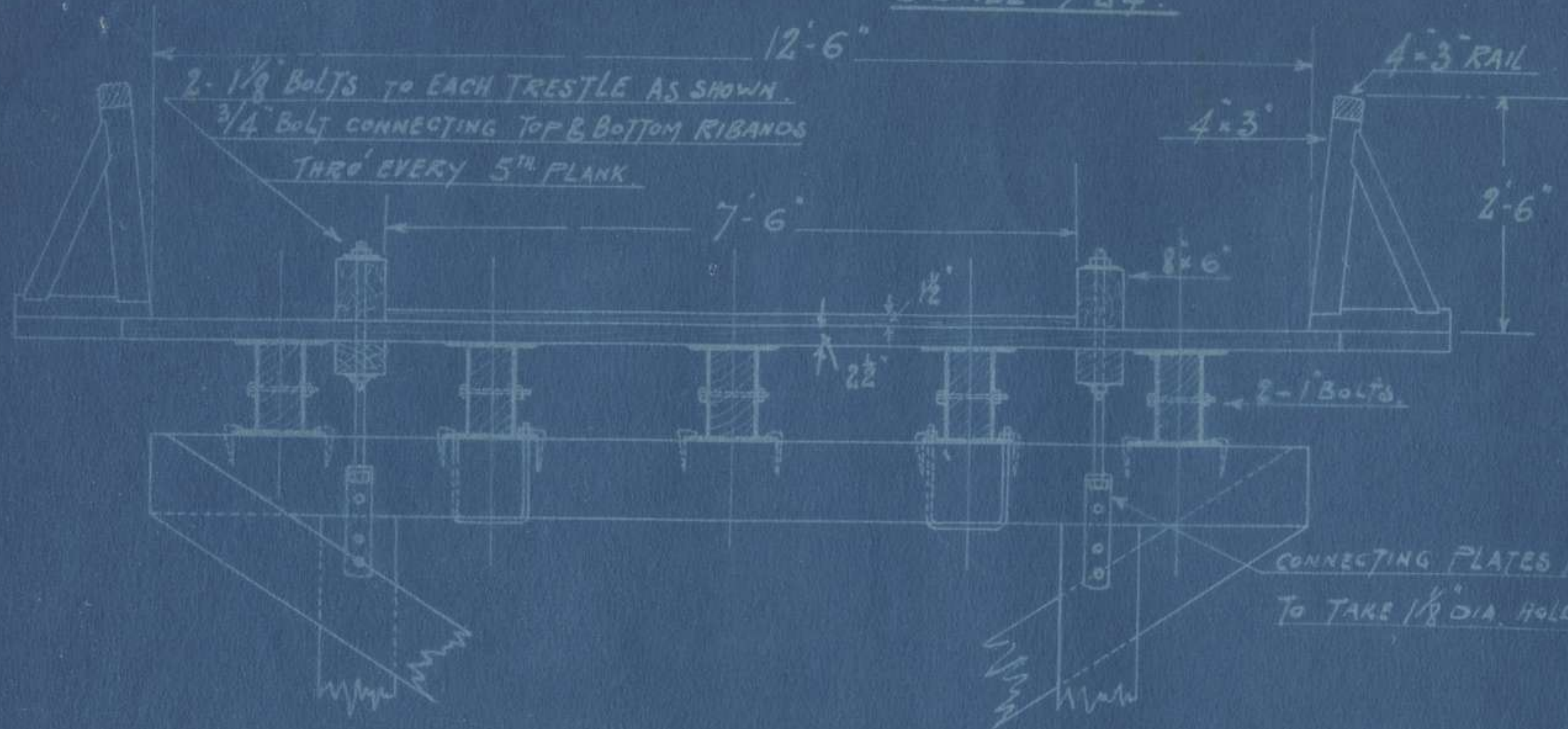
Adjutant,
for C.R.E.,
5th. Aus. Division.

Issued to:-
5th., 14th. & 15th. Field Cos.
S. & Q. 5th. Aus. Div.
5th. Pioneer Bn.
War Diary,
File S. ✓

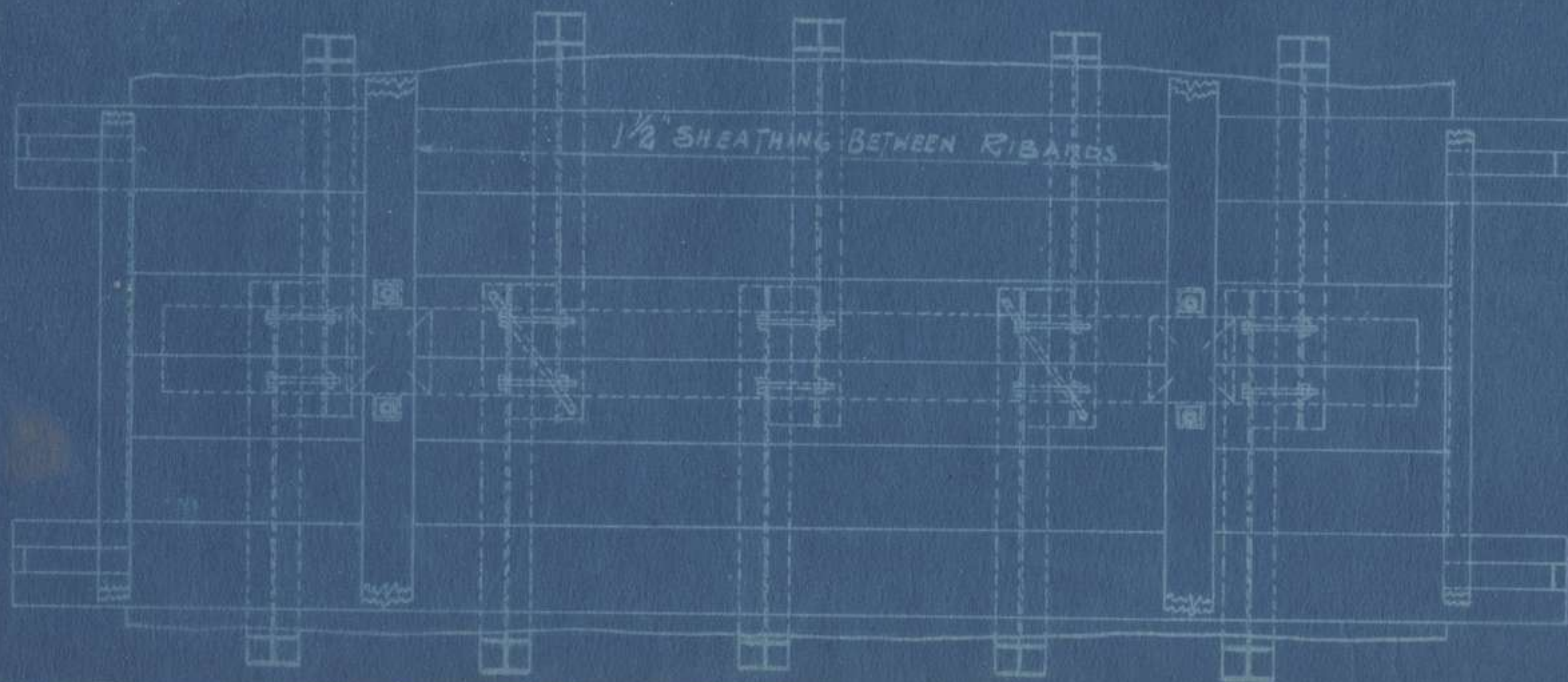
TYPICAL DIAGRAM OF SUGGESTED PILE OR TRESTLE BRIDGE TO TAKE LORRY TRAFFIC.

SCALE 1/24.

Appendix 9.



SECTION SHEWING ARRANGEMENT OF HOLDING DOWN BOLTS.



W.B. Carr
 LIEUT. COL.
 - C.R.E. -
 5TH AUST. DIVISION

Appendix No. 9

17-6-17

98
War diary

ENGINEER ORDER No. 8.

By Bt.Lieut-Col. A.B.Carey, C.M.G., D.S.O., R.E.,
C.R.E., 5th.Australian Division.

France 26th. JUNE 1917.

--*-*-*

1.G.O.C. 5th.Australian Division will inspect Divisional Engineers at 10 a.m. on morning of June 27th. at CORBIE.

2.Field Companies will be formed up in line at bridging site at 9.55 a.m.. Order facing Canal, 8th.Field Co., 15th.Field Co., and 14th.Field Co. from left to right.

DRESS. Officers. Sam Browne Belt, Haversack, Water bottle, Field Glasses and Prismatic Compass.

Other Ranks. Fighting Order. Felt Hats will be worn turned down with badge on left side of crown. Gas helmets will not be ~~worn~~ carried.

3.On completion of G.O.Cs. inspection of personnel and transport 8th. and 14th.Field Cos. will each construct one pontoon bridge across lagoon. 15th.Field Co. bridging detachments will then pass over lagoon by first bridge completed and will immediately construct two bridges across canal.

On completion of bridges across lagoon 8th. and 14th.Field Cos. will move independently across lagoon and then across canal as soon as 15th.Field Co. reports bridges complete.

15th.Field Co. will also move across both lagoon and canal on completion of their bridges.

Companies will remain responsible for their respective bridges until whole of 5th.Divisional Engineers are across, when they will hand over to 8th.Pontoon Park R.E..

4. 14th.Field Co. will provide galley of four sections of pontoons and crew under an Officer to be at Canal bridge 9.40 a.m..

G.O.C. will travel down canal to Bridging Site and return after inspection by means of galley.

S. Shaws

Lt. & Adjt,
Divisional Engineers,
5th.Australian Division .

26/6/17.

APPENDIX II.

GENERAL SITUATION.TACTICAL SCHEME FOR INSPECTION BY G.O.C. DIVISION

The enemy is holding the high ground between the ANCRE and the SOMME, and so far attempts to dislodge him by attacks in the neighbourhood of MERICOURT have failed. The bridge at CORBIE and the main streets of the town are under accurate long range fire.

The French on the South bank of the SOMME have pushed forward some 5 miles East of CORBIE, but are short of bridging equipment.

It has been decided to push a considerable force across the SOMME West of CORBIE and to attack the enemy from the SOUTH.

3 Field Cos. complete with bridging equipment are to be ready to bridge the SOMME in the neighbourhood of SAILLY. The Engineers 5th. Aus. Division are responsible for bridging the SOMME both below CORBIE and again in the SAILLY sector.

Equipment for the bridges below CORBIE has been brought up during the night by the 8th. Pontoon Park thus freeing the equipment of the 5th. Aus. Div. Engineers for pushing forward to the assistance of the French.

28/6/17.

✓
Lieut-Col R.E.
C.R.E.,
5th. Aus. Division.

Headquarters, 5th. Australian Divl. Engineers. *Appendix 12.*

C.E., 1st. Anzac.
Copy to C.E., 3rd. Army.

No. *83/210/A.*
Date

One Pile Driver was received yesterday from R.E. Stores Officer, Le Havre.

It is considered that this Pile Driver is too heavy for use in rapid construction of lorry bridges. It would appear to be essential that Pile Driving for this purpose should therefore be done off a Canti Lever or off a Light Skeleton Staging. This being the case it is *** essential that the Pile Driver shall be extremely portable.

The type of pile driver sent has the following defects:-

Owing to the shape of monkey, steel plate slides have been provided, approximately 18ft. long by 5" by 7/8". These in themselves are a considerable weight, and would not be necessary with a monkey of more normal type.

The bottom of the monkey sent is concave to the extent of several inches, and very roughly cast. It would be impossible to drive with such a base.

The solid platform with wheels is considered unnecessary.

The scantling of the timber framework could also be reduced.

Design has been put in hand and will be forwarded as soon as ready.

The type of monkey preferred would be one having a large lug on the back, sliding between two wood scantlings and held in place by a plate fitting over a pair of bolts cast into the lug so as to be easily detachable.

29/6/17.

Sgd. A.B. Carey, Lt-Col. RE
C.R.E., 5th. Aus. Division

Headquarters, 5th. Australian Divisional Engineers. ^{13.}

Headquarters,
5th. Aus. Div.

SECRET.

Appendix 13

War Diary

Reference 3rd. Army No.G.5/62 of
21/6/17.

A good deal of screening was put up by this Division in the FLEURBAIX sector for the purpose of concealing traffic on roads. The following types were tried;-

1. Wire Netting Screen single thickness.
2. " " " double "
3. Wire netting with canvas strips interwoven.
4. Hessian canvas screen unpainted.
5. " " " stained.
6. Brushwood screens.

No.1 is considered useless.

No.2 was of some slight value.

No.3 is useful but troublesome to make as a large amount of the area has to consist of canvas strips.

No.4 is perfectly satisfactory as regards screening, but is rather conspicuous and requires careful staying to prevent damage by wind.

No.5, if the canvas is dipped in green dye so as to produce splotches of colour shaped somewhat like the tops of local small trees the effect is very good. This type of course requires staying as No.4.

No.6 is very effective as regards concealment of traffic but was a very conspicuous ~~screen~~ screen in the Fleurbaix sector in summer. In winter it is possible that this type of screen would be less conspicuous than No.5. This question would, of course, depend entirely on the type of hedge in the locality. ~~*****~~
The Brushwood screens were ~~considered~~

(2)

constructed on a framework consisting of poles about 2' in the ground and 15' out with diagonal cross bracing of wire between poles and also cross wing stays consisting of windles taken down to pickets. Longitudinal wires were run from pole to pole about 18" to 2ft. apart vertically. Brushwood was interwoven vertically. This type of screen takes longer to make than the dyed canvas ~~***~~ screen, which latter, if properly strengthened against weather conditions would probably be even the most suitable for general use particularly if arrangements were made at the base for dyeing the ~~***~~ canvas to suit different localities.

Roofs of wire netting interwoven with grass were found very useful in concealing gun pits or tracks up to batteries. Wire netting by itself is not of much value.

In the GUEUDECOURT - LES BOUFS sector Coir Matting was used with good results to conceal M.G. Nests and, in some cases, entrances to deep dugouts. The Coir Matting in some cases was laid practically horizontally on light scantlings just above ground level. Coir Matting was also used to defilade Divl. Advanced H.Qrs. at VAULX from aeroplane observation. When stretched over ~~arrow~~ of huts it completely hides the shadows between the huts. It must be made to overhang the front and back edges of the row to prevent any shadow being caught by an aeroplane photographing when not directly over the object, and these long edges should not be straight, but should be broken both by having an uneven edge to the matting and also by allowing it to drop more in some places than others. This can easily be worked in with the arrangements for picketing it down to the ground.

(3)

Effect of shell fire on these screens has been practically ~~##~~ negligible as far as the experience of this Division goes.

Lieut-Col.R.E.,
C. R. E.
5th. Australian Division

30/6/17.

COPY.

29th. June 1917. 14

To G.R.E., 5th. Aus. Div. A.I.F.

From Lieut. Oliver, and

2/Lt. Clark, 15th. Field Co. A.E.

Appendix 14.*War Diary*

Sir,

HEAVY PONTOON BRIDGES.

We have closely examined drawings of above, and have to report as follows.

Bridge B. Three tripartite pontoon with 7 inches freeboard will carry 20 tons. Superstructure ^{are} per bay is nearly 5 tons giving 15 tons as maximum load per bay. (M.E. Pt. 3.b. gives 6" min. freeboard in smooth water, 12" in rough).

The 16 baulks and ribands will transfer about one third of this load to each outer pontoon without exceeding stress caused by "Infantry in Fours, crowded at check" on 'medium bridge'. This stress is, however, rather excessive.

Owing to flexure of baulks, the centre pontoon will sink rather lower than the outer one, but a flexure of 3" will only correspond to centre pontoon taking about 1 ton more load than outers.

Bridge C. Will carry $13\frac{1}{2}$ tons per bay with 7" freeboard, and of this superstructure amounts to $3\frac{1}{2}$ tons.

Bridge D. pontoons also take $13\frac{1}{2}$ tons per bay with 7" freeboard, and superstructure weighing $1\frac{1}{2}$ tons per bay.

The 12 x 5 joists on 21' span will safely take $5\frac{1}{2}$ ton dead load concentrated at centre. Girders in Bridges B & C are ample for pontoon capacity provided they share the load reasonably. But chasses, treble and double respectively, seem light for such heavy traffic.

The 18 baulks and ribands in Bridge D should carry 15 tons distributed or $7\frac{1}{2}$ tons concentrated if all could be relied on to take their share. But owing to the light floor an axle load of 5 tons

(2)

would reach the limit of safety - say a load^d of A.S.C. lorry or 6" howitzer.

We therefore reggrd the limit of Bridges B as 15 tons axle or distributed, and of bridges C & D as 8 tons axle load, though D should carry up to 11 tons per bay if sufficiently distributed.

It is to be noted that spans of B. & C. are 21 ft. and of D, 15 ft.

We suggest that loading on Bridge B would be better distributed if chess layers are alternately transverse and longitudinal, one chess per bay of the 2nd. layer being laid transversely to make up the 21 ft. length of bay.

Numerous minor points call for criticism.

- (1) Saddle 12 x 12 with rounded edges should certainly be metal capped for seating of 12 x 5 joists.
- (2) Saddle is lashed to baulks and ribands but not otherwise secured against shifting. Buttons might be provided on 4 ribands to prevent transverse motion without interfering with use of ribands for ordinary bridging. This provision with 1 lashing at each end of saddle to thwarts of pontoon should make saddle secure.
- (3) The fixing of distance pieces between pairs of 12 x 5 joists on Bridge B looks a very tedious job, owing to small clearance. If claws on distance piece are skewed 2", joists of each pair may be hard up instead of 2" apart, and bolts may be inserted much more easily. Alternatively, claws might be bolted at end of each joist, joggled to bolt to web, and omitted on distance pièces. Claws on 2 joists per bay are almost essential for holding pontoons at proper spacing while assembling, unless special distance timbers are provided.
- (4) Use of 3 x 3 cleat on saddle is not apparent. The 6" spike separators should suffice at ends also.

(3)

- (5) Bars with toggles will be necessary for handling joists which weigh 700 lbs. each.
- (6) Lashing of pontoons together and of ribands & baulks to saddles will be tedious and unsatisfactory. A metal strap would be preferable.
- (7) A four-part saddle on a tripartite pontoon means that joints in saddle are not supported by thwarts. This cannot be avoided without special saddles, which, if provided, might be fitted with straps to hold baulks.
- (8) Bridge D is apparently designed for construction of no materials beyond Pontoon equipment and such timber as can be obtained at any R.E. Dump. The skew nailing of such timbers looks objectionable at first sight; but cut may be made in bridge without interfering with nailed timbers, which have only to be pulled adrift when bridge is totally dismantled as for packing on wagons.
- (9) Shore ramp of Bridge D requires transverse sleeper to protect end chesses.
- (10) "Arrangement of 9 x 3" for Bridge D assumes only short lengths available. If 15' lengths or over can be got, this saddle will be built up of 6 pieces only. If only 12 ft. lens. are available, these should go on outside so that only two 6' lens. will be required instead of the four shown.
- (11) Shore baulks for Bridges B. & C. are marked "R.S.J." but these shapes could not be rolled and must be forgings.
- (12) Waterway. Bridge B pontoons take 15'9" out of 21'. Bridge C, 10'8" out of 21 ft. Bridge D, 10'6" out of 15 ft. It follows that Bridge C alone is servicable if there is much current in stream (M.E. specifies $\frac{1}{2}$ water way to be clear if current is over 4 mph.)
- (13) Service Trestles. The transom of the service trestle is too weak to take half of a 15 ton load in Bridge B. This bridge puts on the pair of trestles a load 4 times as great as

(4)

one trestle carries in medium bridge, so they can hardly be expected to suffice. They should be about heavy enough for C. & D. Bridge, but with small factor of safety.

(14) No tackles are shown on trestles. These will be necessary and at least 1 ton size, or preferably $1\frac{1}{2}$ to raise transom and superstructure.

(15) Old type of lever strap is shown on trestles. There seems no reason why improved type should not be used.

(16) No precaution is taken to keep the feet of the two pairs of trestles from separating. If the 7 x 3 bearers were provided with claws or buttons, instead of being lashed to transoms, the trestles would be held apart at proper distance at this level.

Sgd. Gaalder K. Oliver Lieut.
Edwd. V. Clark, 2/Lt.