

COMPLETION      REPORT.

OF

CAMP      WADSWORTH.

SPARTANBURG, S. C.

\* \* \* \* \*

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Constructing Quartermaster.

CAMP WADSWORTH.

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**Office of  
CONSTRUCTING QUARTERMASTER  
CAMP WADSWORTH**

Spartanburg, S. C., Dec. 20, 1917.

**From:** Constructing Quartermaster,  
**To:** Officer in Charge of Cantonment Construction, Washington, D.C.  
**Subject:** Completion Report.

1. Replying to your letter of November 2nd, 1917, file No. 600.914 CR-G (General)

2. **GENERAL:** The Constructing Quartermaster of this Camp arrived in Spartanburg at noon, July 15th. Major George E. Cole, U. S. Army, and Captain Charles W. Stark, U. S. Army, designated as Assistants, arrived at noon July 15th, and we were met by representatives of the Chamber of Commerce, and were taken over the proposed campsite. 1st Lieutenant R. E. Hurston, Engineers Reserve Corps, reported for duty July 29th, 1917.

Due to orders from Major General Leonard Wood, given on June 23rd to the Chamber of Commerce, a local firm of Engineers had been put to work on that date to make a topographic survey with five foot contours. This contour work was accurately done and proved of inestimable value.

The Contractors - The Fiske-Garter Construction Company of Worcester, Mass., but with an office in Greenville, S. C., had been notified through unofficial sources that they were to be the Contractors and came over from Greenville on July 15th. Rooms were engaged at a hotel and we immediately proceeded to lay out a scheme for the location of the various units.

Being familiar with the personnel of the New York National Guard, having laid out a Brigade Camp for them in 1915, and a Division Encampment in 1916, I was able to proceed with some certainty as to just what was to be provided for.

In laying out the locations of the various regiments, my first consideration was that of drainage, bearing in mind also that a very necessary part of a training camp is that of convenient drill grounds for close order drill and the school of the company.

Due to the fact that the land leased by the City of Spartanburg for the Encampment had a very irregular boundary, there being several pieces of property which jutted into the main tract, this caused a little delay in reaching the ultimate solution of the problem.

This was accomplished after advising the Chamber of Commerce that it would be necessary to occupy these several tracts of land. Having an accurate survey, and by using bits of tracing cloth, cut to scale and conforming to the size of the various units, these were placed in tentative positions, and the contour lines being visible through the tracing paper, it was a simple matter at a glance to see whether the terrain allotted was available for the location of the mess buildings and tents. This first layout, which took two days to make was never changed and was the final solution.

There was one advantage connected with the ground chosen for this Encampment, in that it lent itself to a logical scheme of the entire camp. I believe, in laying out a camp that the functions of the

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various units comprising a division require that they should occupy certain positions in reference to drill grounds, base hospital, the Artillery, and, above all, the service of supply from the storehouse.

The most important of these is the service of supply - particularly in the southeastern part of the United States. The summer and autumn are generally fair with little rainfall. In the winter, however, the temperature is never so low for a long period of time that the frost settles into the ground more than 6 or 7 inches. A cold snap will be followed by a thaw, and there being little snow, but a great deal of rain, it is imperative that the roads at the storehouses and landing, at least, to the middle of the camp, be given prime consideration. At Camp Underhill, it was possible to have a drill field 1000 feet wide and over a mile long between the legs of the Y forming the thirteen Infantry units. A level drillground is not imperative for artillery, but ample space for them to drill was found in the rear of the artillery company.

It was not thought advisable to improve a farm road which lead direct from the storehouses in a southerly direction towards the center of the Infantry camp, as this crossed the only available maneuver ground. There was, however, an old country road on the west boundary of the property which was to become the main artery of travel. After the location of the storehouses was determined, it was decided to lay a permanent concrete driveway between the tracks and the storehouses and continued up a grade to the Field Bakery, and a macadam road was decided upon to start at the end of the concrete road, and the Blackstock road, above referred to, was widened to 30 feet - the extra width being taken from the Government reservation. This Blackstock road was macadamized from a point 300 feet north of the Railroad and continued to the Greenville road, and then carried south past Division Headquarters. A characteristic of this camp will be noted in the sequence of the units from the storehouses toward the middle of the camp. The camp quartermaster's camp and office buildings are at the end of the storehouse courtyard. The Ordnance buildings are on a siding just north of these, and the Ordnance camp is convenient. Going west to the Blackstock road will be noted that we pass the Motor Truck Company, the Headquarters Train, the Supply Train, the Ammunition Train, and then the Artillery. - In other words, the various loads to be hauled of forage, etc., are hauled the shortest distances - the Infantry, requiring nothing but fire wood and subsistence are the furthest from the storehouses. An auxiliary top soil road was built from Blackstock road to and in front of the new buildings of the Trains and Artillery, connecting with the Greenville Road.

Another road was built from the Greenville road past the Post Office to the Hospital, then east through the Hospital and past the Engineers to Unit No. 8, then north to Unit No. 7, and the road branched opposite Unit No. 6, and was laid west past Unit No. 14, and then south to Post Office. These roads pass every new building in the camp.

2. ARRIVAL OF COMBATANTS, MATERIAL AND LABOR RESOURCES: As above stated, the Combatants, although not officially notified of their appointments, were on the ground July 16th, and proceeded immediately to gather their organization and placed orders for the first material required.

It was possible in Spartanburg to obtain sufficient lumber, which

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formally broken in the afternoon of the 19th, and construction of the first mess building in Unit No. 2 began with a force of 25 or 30 carpenters and laborers. In the meantime, the Constructors being well known throughout this section, on account of the numerous cotton mills and other buildings which they had directed, had sent out notices to the various Foremen, and on the next morning, several hundred men had gathered.

In this section of the country, a gang system prevails, in that a Foreman or even a neighboring town would report that he could bring in twenty carpenters. He was immediately put to work with his own gang. There is a great advantage in this system, in that the men know the Foreman. We found this disadvantage, however, in that occasionally a Foreman would be unsatisfactory and would be laid off with the result that his crew or gang would almost invariably follow him. We had some difficulty in obtaining labor, in that three other camps were under construction within 100 miles; those at Columbia, Charlotte and Greenville - the latter being only 25 miles distant and Charlotte 76, both on the making of the Southern Railway.

The reputation of the Constructors was such, however, that I cannot say with justice that we were seriously hampered by unsatisfactory labor. On numerous occasions, of course, it would have been possible to have used two or three hundred more carpenters, but it would have meant offering increased wages, and, I felt, in addition to the element of time, very important consideration should be given to the matter of cost. It was not necessary for us to advertise for labor or to offer any inducements whatever to gather men from any distance. The labor - both white and black - was entirely local and almost exclusively pure American - the class of farmers and housepeople in the neighborhood being of pure American stock for generations, and the Constructing Quartermaster in daily trips about the grounds, impressed upon them the fact that they were also soldiers and that they were working for the Government. This had its effect apparently and practically no trouble was had with them. They were very reasonable and agreed to do their best. It would be unjust to say that everyone on the job worked every minute of the time, but there was no deliberate laying down on the part of any great number. I would notice men apparently idle, and would stand upon investigation almost invariably that they were waiting the arrival of some special material which was on the way, or that the Foreman was getting instructions about some special point, or little matters of that kind, but there was no wide-spread or constant desire shown by the workmen to slack their labor. It was more ignorance than laziness.

No labor was housed on the Camp, and no mess buildings of any kind erected. The Camp being only 2 1/2 miles from Spartanburg, and the majority of the men living in or about the City, it was quickly decided to carry the men back and forth on the Salisbury Railway passing through the Camp. A rate of 10 cents per man, each way, was made with the Railway, and they carried through their part of the contract in furnishing a sufficient number of cars of the capacity to transport the total number without serious difficulty.

After experimenting with different methods of handling the fare question, we decided on a method of collecting fares which met this difficulty, in that a representative of the Auditor's office would go through the train morning and night, while under way, with the Railway Conductor, counting each workman with a hand tally machine. The Conductor made his

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own count, which had to check with the Government's count, and a certificate was then given to the Conductor as to the number of workmen actually carried and payments were made by the Contractors upon this basis.

The Railway Company was agreeable to this arrangement, also, as it prevented the Conductors "knocking down" fares.

Two stops were made by the train on the campsite and the men were able to be on the job at 7 o'clock in the morning.

A 10 hour work day was instituted immediately for all classes of labor and 11 hours pay was given for 10 hours work - in other words, 8 hours a day with time and a half for overtime.

Only occasional difficulty was met in getting the men in and out, and only one accident occurred, and that was a rear-end collision between a soldier train and a work train, resulting in the death of one of our Surveyors. This accident took place near the City limits and off the Reservation. There being no arrangement between the Government and the Railway Company, damage suits resulting were, of course, brought against the Railway.

Another arrangement was made with teamsters and workmen who came with their wagons, that camping places were provided for them in the woods. They would take their covered wagon bodies off the wagon frame and sleep in them, and make their fires and subsisted themselves. This arrangement continued until long after the troops began to arrive, and we had no trouble with them.

The Army Sanitary Officer detailed as my Assistant made daily inspections and kept sanitary conditions in first class shape.

The maximum number employed at any one time was during one week in August when 3806 men were employed of all kinds on the work.

The only labor difficulty that I had during the entire camp was amusing rather than otherwise and concerned a gang of several hundred negroes employed in laying the 12 inch water mains, in that they worked three days of one week with the City of Spartanburg, two and a half days with Fortner & Boyd, Road Contractors and a half-day for the Fiske-Garter Construction Co., and the first receipt that they had, showed only for Fiske-Garter and covered a half day. They immediately jumped to the conclusion that this was all the pay coming to them, and decided they would quit. It was necessary for me to mount a pile of dirt and explain to them that we were at war and that they would get their pay, and after 10 minutes of eloquence, they decided to go back to work.

The only men that apparently were members of unions were the electrical workers and pipe fitters. There were no carpenters unions here in this neighborhood and almost all of the men employed were countrymen and city dwellers, who were accustomed to doing that class of work in connection with other means of livelihood.

The rates of pay for each trade and each class of labor were as follows:

<u>Class of Labor</u>	<u>Initial Rate</u> <u>as of Aug. 1st</u>	<u>Increased Rate</u>	<u>Date</u> <u>Increase</u>
Bricklayer	45¢ per hour	50¢ per hour	10/15
" Foreman	60¢ " "		
" Helper	25¢ " "		
Carpenter	30¢ " "	35¢ " "	"
" Foreman	40¢ " "	45¢ " "	"
Cement Finisher	50¢ " "		
" Mixer	17¢ " "	20¢ " "	10/4
Chauffeurs	\$3.00 " day		



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<u>Class of Labor:</u>	<u>Initial Rate</u> <u>as of Aug. 1st</u>	<u>Increased Rate</u> <u>40¢ per hour</u>	<u>Date</u> <u>Increase-</u>
Electrician	35¢ per hour	40¢ per hour	10/25
" Foreman	40¢ " "	45¢ " "	" "
Electrical Helper	25¢ " "	27½¢ " "	" "
Electrical Laborer	17½¢ " "	20¢ " "	10/4
" Lineman	45¢ " "	50¢ " "	10/25
Engineer Steam Roller	50¢ " "	" " "	" "
Laborer General	17½¢ " "	20¢ " "	10/4
" Foreman	20¢ " "	" " "	10/25
Pipe Layer	27½¢ " "	" " "	" "
Plumber	27½¢ " "	" " "	" "
" Foreman	52½¢ " "	" " "	" "
" Helper	20¢ " "	" " "	" "
Waterboys	17½¢ " "	" " "	" "

The various increases shown above were decided upon by me due to the fact that the cotton crop was beginning to be gathered and there was a temptation on the part of these men to go home and gather same. Some trouble was also caused by an advertisement which appeared in one of the Spartanburg papers from a firm building the Encampment at Newpartons which showed to the people that vastly increased rates were being paid at other places. I stopped these advertisements, however, on my own responsibility and took the matter up with your office, but some damage was done, and it was then necessary to increase slightly the rates in order to hold the men.

4. METHOD OF CONSTRUCTION: In view of the fact that a definite layout was decided upon before any work was started and because this layout was continuous from one end to the other in that there were no isolated units, it was possible to start at several places with construction and proceed until the units were completed. One gang planned the posts for the foundations, another gang followed with floor beams and rafters, another gang followed with side and roof framing, another gang laid the floors, and then followed gangs putting sides and roof boards, and then roofing material. These were followed by others whose duty it was to place wire screens, gang doors and put in tables and kitchen shelves. By following this procedure, the work went ahead very rapidly.

On account of the difficulty in obtaining teams, no excavation was made on the high end of mess buildings, - in other words, the mess buildings were constructed with one corner at the ground level and the other end was carried on posts, if necessary. In some cases these posts were 6 to 8 feet in height and various organizations, at their own expense, purchased lumber and cased in these cellars, providing space for storage purposes, etc.

Every team that we could get in the country was required for hauling material and it must be realized that the Electric Railway passing through the middle of the Camp had absolutely no equipment whereby lumber could be delivered on the ground, as they had no sleds or locomotives, and until the main lead track of the Southern Railway was constructed over to the Piedmont & Northern Railway, and the side tracks constructed for the latter Railroad, all the material for this Camp had to be brought either from Spartanburg or from Fair Forest station on the Southern Railway, a distance of 2 1/2 to 3 miles from the Camp.

500 teams were employed at one time on this work and 20 trucks from the Motor Truck Company. The work was greatly facilitated by good

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prevented troops being sent here until the Camp was almost completed. A difficulty that I have had to encounter was caused by troops coming into the Camp before the work was finished. It has been absolutely impossible to prevent theft of lumber on the part of the soldiers. No tent floors being provided, and piles of lumber being distributed all over the Camp, the temptation to steal the same was impossible to resist. Guards were placed upon it, but it was impossible to place enough of them and to get co-operation from them, to prevent thousands of feet of lumber from being made away with.

I also had serious difficulty with troops when it came to the destruction of standing timber. Insufficient fire wood being provided by the Camp Quartermaster, acting under orders, and the very cold weather setting in early in October, almost forced the soldiers to take what they could find in order to keep warm, and even to cook their meals.

**5. TENT FLOORS:** I made the ruling when tent floors were authorized that they would only be provided for the tents not already having them, and in order to prevent great waste in the use of this material, we constructed the tent floors ourselves and issued them complete with sides. In this way the large amount of lumber stolen by the soldiers was accounted for, and there was no duplication, and the ultimate loss to the Government was reduced to a minimum.

The drill schedule has been such in this Camp also that if lumber had been provided for the troops to make their own tent floors, they would not have been able to have done so conveniently.

**6. WATER SUPPLY:** No temporary water system had been installed on the campsite when we started work, but on authority from the Southern Department, the Chamber of Commerce had connected up a spring and were contemplating this when we arrived. For about two weeks, however, it was necessary to furnish drinking water to the workmen by carrying it in cante. A sufficient supply was obtained from the spring, which was piped to an elevation upon which a tank was erected, and this, also, furnished enough for the workmen and for the Battalion of North Carolina troops, which were sent here for guard duty.

The original arrangement with the City of Spartanburg called for them to furnish a supply of water at mere pressure at the nearest corner of the campsite. In the latter part of June this was changed by the Southern Department by advising them to carry the pipe line through the campsite to the highest point in the Southwest corner. They ordered wood pipe for this purpose, but your office advised them on July 26th that all wood pipe had been commandeered by the Government, and that they would have to use 12 inch cast iron pipe, which had been released for that purpose.

Without any further authority they entered into the spirit of the proposition, and pushed this pipe line at 42,000 feet, total length, with all possible speed. The cast iron pipe, of course, cost much more than they had originally figured upon by using the wood pipe, above referred to. I made a suggestion to your office, which was approved through Mr. Henry, and the settlement for this extra work is now being made, the City having signed the proposed contract drawn up in your office by Major Shelby. Delivery of cast iron pipe was slow, but the pipe line was carried to the campsite by the City, and was taken up by the Placer-Carter Construction Company and carried to the site for the elevated tanks by August 15th. Through some arrangement in your office, however,



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the two elevated tanks of 200,000 gallons capacity, which had been ordered from California on July 25th, were delayed in arriving, and one of them did not arrive in Spartenburg until about August 25th. The foundation was ready when it arrived and it was quickly erected. As soon as this was done, the City commenced pumping water, and we were ready for troops about September 1st. It would have been much better had a 50,000 gallon tank, even, been purchased in the Eastern States. This would have been ample for a great number of troops and would have served about two weeks in the time in which troops could have been sent here. In looking back over the proposition, however, I consider that the non-arrival of troops was a great advantage to us, in that we were enabled to complete a great deal more of the camp than would otherwise have been possible had we been hampered by the presence of the soldiers. In the meantime, 6 inch laterals pipes had all been laid, together with the small pipe connections to the main shafts, so that by September 5th, about 80% of the necessary units in the Camp were completed far enough to allow of occupancy; that is, main shafts, laterals and downers were connected, but electrical work was behind.

I had almost no operation from the Commanding General of the New York Division in that I kept him posted as to what units were ready for occupancy and received advice from him also as to those units that he wished to be on the ground first.

The Engineers, Supply Train, Field Hospital, Military Police, Field Bakery, etc., were the first units to arrive and we were ready for them when they appeared.

There is no pumping plant of any kind on the property and no wooden pipe was used.

7. **SEWAGE DISPOSAL:** Would state that there was no sewage disposal system authorized for this Camp and none constructed.

8. **TRANSPORTATION:** The mainline of the Southern Railway at the Fairforest station is approximately three-quarters of a mile from the nearest point of the original camp boundary. - That is, before the Remount Station was established. As referred to in a former paragraph, the Piedmont & Northern Railway, an electric road, passes through the northern part of the Camp. It was necessary to have the Railroad construct a physical connection between the Southern and the P. & N. R. The entire railroad layout was made by Captain Smith and myself, and after mature consideration, was accepted in its entirety by both Railroads, and they started with the construction of the main line and the sidings alongside the P. & N. Railway. Before this could be accomplished, which had for its ultimate object, of course, the service of supply of the camp, but essentially a shortening of the haul for construction purposes, it was necessary to haul everything from Fairforest station. They hauled for us the Camp was started and the main part completed in between crops, - that is, the farmers working teams had finished their plowing and cultivating of the corn and cotton by the middle of July, and it was possible to draw in from the surrounding country the teams necessary for our purposes. We were able to get all of the transportation that we should have had, nor did we have a surplus of labor. This resulted in occasional temporary changes, but I consider these remarkably small under the circumstances. No motor trucks were available other than those owned by No. 17, which, under the able and efficient leadership of Captain John H. Gage, U.S.A., rendered invaluable service to us. The result, however, that we found here, under the very heavy

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be moved. This was very frequently the case during August, but during and after the storm, the mule teams of the farmers were always available and able to move about.

The attitude of the people in Spartanburg county, and, also, in the city adjacent has been friendly in the extreme. As I stated in the first part of this report, they were almost entirely pure Americans of English descent. I had several opportunities in the early part of the week to appear in public before various groups of the citizens, and to explain to them the nature of the work that we were carrying on, and to stated full co-operation on the part of the citizens to do their bit to help make the Camp for the New York troops which were coming down here to train and to be put in shape to go abroad and fight their battles for them. In this connection, I want to remark that I think that better results could have been obtained in other camps had the Constructing Quartermasters impressed upon the workmen that they were getting Government money directly, and that the Contractors were only acting as Agents for the Government. In that the profit that they were making was in the form of a fee paid them by the Government as compensation for their time, their experience, their organization and their knowledge of local conditions. I impressed this upon the workmen at every opportunity, and showed them that the receipts that they signed for their pay were my vouchers to the United States Treasurer, and I must say that I have absolutely no complaint to make of any parties or groups of persons in this vicinity. The work has been carried on with very little friction, the Chamber of Commerce of Spartanburg complied with all the terms of its agreement with the Government, and there has been the greatest amount of co-operation throughout.

9. ROAD CONSTRUCTION: As I have mentioned in the preamble of this report, the ultimate service of supply was given prime consideration in the layout. In addition to the concrete road at the storehouses, and the macadamized surface of the Blackstock road leading to the middle of Camp, which has been under construction for some time, and is now about completed, I started immediately the Road Contractors building the secondary roads in front of the proposed locations of the mess sheds. The layout of this Camp made it possible for these roads to be of great service in the construction, as I built these roads so that they were laid immediately in front of every mess shack.

These secondary roads lying in front of every mess shack in the Camp are of the type common in this part of the country, and, if well made, will stand up a surprisingly long time. There is on the top of the underlying clay, a layer of sandy top soil, varying from 12 to 16 inches in thickness. In constructing a road all that is necessary is to have the road scrapers scoop out a gutter, depositing the surplus top soil in the middle of the road, and after the road scrapers have done their work, have a road grader wet the top soil, then by liberal use of a disc harrow, mix the clay and sandy soil thoroughly. If a road roller is convenient, this may be used to pack the surface, but, under ordinary circumstances, the usual passage of teams and automobiles will quickly pack down the surface. All that is necessary is to have the road scrapers run time to time across the road. After these roads are put in this condition, little trouble was had after storms. The secret of roadmaking is to have an ample top surface of sand, because if the clay is predominant, the roads are impassable after a storm.

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10. **CONTRACTORS EQUIPMENT:** No ditching machines, machine tools, etc., were used on road work other than the ordinary road scrapers and rollers above referred to. Of course, in the construction of the railroad sidings and the main land tracks, the excavation was so heavy that steam shovels were used to great advantage.

11. **DESCRIPTION OF THE LAND:** The land upon which the Camp is located was three-quarters cotton and corn land, and the balance small areas of wooded lands, consisting of pines and oak trees. There were a few farm buildings occupied upon our arrival, but the tenants moved out when convenient, and inasmuch as the original layout took into consideration the drainage, apparently, there was no necessity of any particular amount of work to put it in condition so that troops could occupy it, except in three of the infantry units and one of the artillery units, it was necessary to do some grading to install some open drainage ditches. In the rear of the Engineer Regiment (Plot 16) there was a swamp, about two acres in extent, which had to be drained and afterwards filled into the depth of 16 inches by means of wheel scrapers and drag-pans. No clearing in of woods was done by me except where the trees occupied the sites of the buildings originally. As the troops were about to arrive, a gang of laborers were sent in to clear a width back of the mess buildings sufficient for the location of tents. Of course, when the troops arrived, they proceeded to clear out the underbrush and small trees in the Company streets, leaving, as far as possible, the trees from 4 inches and upwards, standing. In this connection, I would say that orders from the Southeastern Department covering the lease of this land stated explicitly that the Constructing Quartermaster was not to cut down any trees other than those actually in the way of construction, and proceeding under these instructions, I have done my best to prevent wanton destruction of standing timber. The attention of the Camp Commandant has been continually, in fact, almost daily, called to this destruction, and numerous arrests of enlisted men have been made and punishment inflicted, but due to the very cold weather that we have had and the shortage of fire wood available for issue, it has been absolutely impossible to prevent troops from cutting trees for fire wood, and I will say, in justice to the Commanding Officer, that I have had cordial co-operation from them and the destruction has not been as great as would be expected with the great number of troops in this Camp, and the temptation constantly before them to obtain wood for heating their tents.

# 12. DATE OF ARRIVAL OF TROOPS:

UNIT	Date of Arr.	Present				Absent			
		Off.	Att.	Det.	Att.	Off.	Att.	Det.	Att.
Co. D. 2nd Regt.	8-3	4		125					
Div. H.Q.	9-1	22	1	108		3		8	
Regt. less Co. D	9-2	25	3	895	24		1	22	1
Bakery Co. 101									
(N.Y.F.D.Co. #1)	9-3	1	1	105					
2nd N.Y. F.Hosp.	9-3	4		69	2	2		11	
4th N.Y. F.Hosp.	9-3	5		71		1		9	
1st N.Y. F.Hosp.	9-3	5		71		2		9	
H.Q. San. Train	9-3	3		10		1			
Military Police	9-3	4	1	281	6	4	1	22	
Hq. Det., Tr. M.P.	9-3	1		3					
Ammunition Train	9-3	10	1	680	35			6	

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UNIT	Date of Arr.	Present				Absent.			
		Off.	Att.	Enl.	Att.	Off.	Att.	Enl.	Att.
Supply Train	9-9	7		342				39	
1st N.Y. Amb. Co.	9-9	2		143		2		7	
4th N.Y. Amb. Co.	9-10	3		116		2		3	
3rd N.Y. Amb. Co.	9-10	3	2	111		2		6	
2nd N.Y. Amb. Co.	9-10	4		143		1		7	
7th N.Y. Infantry	9-13	49	6	1684	32	1		62	3
Engineer Train	9-14	4	1	143	14			1	
Signal Bn.	9-14	13	2	234	4			2	2
Hq., N.Y. F. A. Bn.	9-16	1		14					
Hq., 1st NY Inf. Bn.	9-16	3		15					
12th NY Infantry	9-16	49	6	1644	119	2		72	
Hq., 2nd NY Inf. Bn.	9-16	3		14				1	
Det., 1st NY Cav.	9-16	19	5	479	10	2		78	
2nd Bn., 2nd NY RA	9-17	16	8	561	42	1		19	3
2nd NY Infantry	9-17	46	4	1372	38	2		67	
3rd NY Infantry	9-17	46	6	1356	69	3		56	3
3rd NY RA	9-18	25	6	1119	22	3	1	137	1
1st NY Infantry	9-18	25	6	1312	33	1		22	
Hq., 2nd NY RA	9-20	7		67	8	5		60	
(FAS Hq. Co. Sup Co)									
1st NY Infantry	10-1	44	4	1753	34	3		59	2
23rd NY Infantry	10-2	42	5	2254	47	4		60	1
Hq., 3rd NY Inf. Bn.	2	4		15					
74th NY Infantry	2	47	6	1741	36	2		41	2
14th NY Infantry	3	45	6	1689	62			31	1
1st Bn., 2nd NY RA	10	16	3	512	47	1	3	48	4
Det., 1st NY Cav.	11	31	4	872	23		3	35	10
Squad, 1st NY Cav.	11	16		453	9	2	1	44	
Det., 47th NY Inf.	12	22	3	551	21			32	
(15th NY Infantry less 1st Bn.)	12	31	4	1220	78	1		62	9
10th NY Infantry	13	21	5	741	20	4	2	12	12
1st NY RA	15	38	6	1134	21	2	1	97	
Co. C&D, 10th NY Inf.	26	7		202				8	
Co. A, 10th NY Inf.	26	3		111				12	
Co. F, 10th NY Inf.	27	3		144	2			4	
1st Bn., 47th NY Inf.	28	12	1	506		2		17	
Co. H, 10th NY Inf.	29	2		144				5	
Co. J, 10th NY Inf.	29	9	1	362	4	1		14	
3rd Bn., 47th NY Inf.	11 -1	13	1	504		1		45	

15. PROGRESS OF THE WORK: As above stated, this work was started actually on July 23rd. Local lumber was purchased and until the carload and trainload shipments of lumber began rolling in from southern points. In accordance with instructions from your office, the first work undertaken was the construction of the infantry units. This was followed by the Engineers, Sanitary Train, the Signal Battalion, Trains and Field Bakery. The construction of the storehouses was started as soon as the plans were definitely accepted by the Railroads. On account of the co-operation on the part of the Commanding General of the New York Division and his prompt advice to me as to the departure of the New York units for the Camp, I was enabled to have every unit completed, or, at least, sufficiently completed, for these units to occupy them when they arrived. By completion - I mean that the mess sheds were finished, including tables and benches. Shower baths were built and the latrines



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were ready. Officers equipment and buildings were also ready. The roads were also completed in front of every mess shack; the water supply ready in every case.

In connection with the latrine problem, I am attaching, with the other plans, a blue print showing the latrine box which we designed, and which is in use in this Camp, and which I submit for your consideration, inasmuch as the Sanitary Officers attached to this Camp, and those Inspectors sent here by the Surgeon General, have been most kind in their remarks upon the same.

No progress charts were kept of the work, as it was a case of completing the buildings as fast as possible, but I will state that at one time during August we were completing a building every 18 minutes. Inasmuch as the arrival of the various troops did not exactly coincide with the plans that I had made for the completion of various parts of the Camp, some confusion resulted in the hasty transfer of working forces from one part of the Camp to another. This resulted in some loss of time and caused expense in the shifting of lumber, etc., but inasmuch as this Camp was to be built for troops, and it was necessary to provide for them on arrival, I deemed it my duty to concur in the plans with the War Department regarding these units and I made it my business to see that the Camps were ready for occupancy when the different types of units arrived.

14. FIRE PROTECTION: Every possible precaution was taken to prevent fire, and the suggestions, as per your circular letter of August 4th, were carried out to the letter. The result has been that up to date, there has only been one fire and that on the night of November 29th, when a temporary cement shed was ~~completely~~ destroyed. A Battalion of the 2nd North Carolina Infantry, under Major Simkins, which was ordered here in July, were of great assistance in this connection and performed their duty as far as fire prevention and theft of material in a soldierly manner, but the Camp very quickly, however, was so large that their men were on guard duty every other day, and on Aug. 5th a Company of New York Engineers arrived here, and as soon as there was temporary water supply available for them, they helped out on guard duty. All corn, cotton and other crops were removed, or recovered by their owners in advance of the construction, so that this dried up material would not be a menace. Arrangements were made with the City of Spartanburg to respond with their apparatus in case of fire. In addition to the troops, above mentioned, there was a staff of special watchmen on duty until a sufficient number of soldiers arrived to take over this work. Rubbish and waste material was removed daily from inside and outside of all buildings under construction. No smoking was allowed in or around the buildings by anyone until the permanent water supply system was installed and the hose reels and hose arrived. All buildings containing gasoline were placed at proper distances from wooden buildings under construction. All underbrush was removed to a safe distance from buildings and was not burned until troops arrived when these brush fires were guarded.

15. SANITARY METHODS: The Camp sanitation was in charge of Captain, now Major, W. H. Allen, U. S. Army, who reported as Sanitary Officer, and who is now Commandant of the Base Hospital. He was most efficient and careful in this work and was ably assisted by his own staff until the situation was taken over by the Division Sanitary Officer.

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**15. RECOMMENDATIONS FOR FUTURE WORK:** The original orders covering accounting specified that an accurate cost account should be kept of the different types of buildings, separating labor and materials. We started to do this, but subsequent orders changed this arrangement so that only the costs were kept according to the different appropriations, such as Barracks and Quarters, etc. While the cost keeping would have entailed extra expense and required the services of, perhaps, ten clerks, I really feel that it would have been of great assistance to us all, - that is, the Contractors and the Auditors if we had continued, because we could have seen at a glance whether one unit was costing more than another and we could have diagnosed the cause and instituted changes, either in method of handling material, or in the foremen. We could have also found out which was the best gang of workmen and other obvious advantages would have been obtained.

One advantage that I had on this job was, first an efficient and patriotic contracting firm, and an able and pains-taking Field Auditor, Mr. T. W. Glase, who was detailed for this duty by Mr. Charles Neville, the Division Auditor. I instituted a practice at the beginning of the work, which has proven of great value and that was a copy of every telegram and order received which concerned construction, prices of material, or in which the Contractor was interested, was immediately given to the Contractor and another copy was given to the Field Auditor, so that no time was lost by the Contractor in making arrangements for the purchase of material for the buildings or changes authorized, and the Auditor was advised so that he could authorize the payment. Copies of telegrams concerning financial statements, funds, etc., were, of course, only given to the Auditor, and in some cases where the Auditor was obviously not interested, copies were only given to the Contractor. Frequent consultations were held between Mr. Fiske, Mr. Glase and myself, in which I assumed authority and interpreted orders, etc., copies of these decisions were made in each case so that all were governed accordingly.

In general, I am of the opinion, that this form of contract in so far as it pertained to Camp Wadsworth was for the best interest of the Government, particularly as the methods followed here seemed to lead to sincere co-operation of all concerned in striving to accomplish one end, and that - the building of the prescribed work in the quickest time, and at the smallest possible expense.

Another feature of the work in this part of South Carolina is the strict observance of the Sabbath day on the part of the population - both white and black. We found about the middle of August that it was almost impossible to have more than 20 per cent of the weekly force at work on Sunday. This meant a big overhead on the part of foremen working with a greatly depleted gang, and we cut out Sunday work altogether, except in connection with the necessary work of connecting up the water supply, and building the tanks, etc., which was the big thing that was holding back the arrival of troops, and I thoroughly believe that as much work can be done in six days as in seven, particularly on long drawn out jobs, such as this. This also had its effect on the people at large for while they were intensely patriotic, and thoroughly sympathetic with the needs of the Army, still there was an innate prejudice against working on Sunday, and I know that when we cut out the Sunday work, every one worked harder on Monday after the day of rest.

Details of construction - I believe that the tar paper sides of the mess sheds, afterwards authorized, should have been specified in the original construction, as it was impossible, due to the cracks between the boards, to keep the flies out when the troops arrived, and once in, there was no way to get out, because the windows and doors were all covered but the flies were not.



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I believe that any paper roofing should be laid in vertical strips instead of horizontal, which results in a much better appearance of the building and there is not so much chance for the roofing to be torn off by the high winds, and if properly put on, there will not be any more leaks than in the horizontal laying.

For the secondary pipe lines, 6 inch steel screw pipe was released, and this pipe was laid in 18 inches deep trenches, and according to all weather records from those qualified to judge, the frost does not strike down in this country more than 9 inches. Some of our wrought iron lines, however, were considerably over a mile in length and laid in a straight line, and during the autumn with the wide fluctuation between the heat of mid-day and before sun-up in the morning, resulted in contraction and expansion of the line, breaking a great many cast iron tees and couplings. I had to put in welding joints in the lines with elbows and or tees of 6 feet long pieces of pipe so that the expansion could be taken up. These are placed about every 2000 feet, and resembled some of the trouble.

No breakage has occurred on the 6 inch cast iron lines due to the ductility of the lead joints. I have the opinion that we would not have had this trouble or breakage had wrought iron pipe been used instead of steel, but the state of the iron market at that time, and the impossibility of getting wrought iron pipe, coupled with the extra cost, of course, put the wrought iron pipe out of the question. This, however, opens up the question of the relative merits of steel and wrought iron pipe, about which so much space and time has been devoted of recent years that I do not care to go into the matter more fully at this time.

The tables in the mess sheds, as originally specified, having tops of tongue and groove board, having been severely criticized by Sanitary Inspectors from the War Department, and by those attached to the Camp, I believe it would have been better had the tables been made with the top three boards wide, with the center board removable, allowing them to be easily kept clean. The 135 foot mess sheds were amply long enough to take care of the 250 men companies. I accomplished this with the staple expedient of cutting the tables in 8 foot lengths, and putting them cross-wise, and there was ample space between the tables in some of the mess buildings and some companies arranged the tables in subsequently so as to give ample space for the three stoves and have a space in the center of the mess shack which is available for entertainments, schools, etc., that is, the center space is available for the instructor, entertainer, etc.

I believe that hereafter Regimental storehouses should have their floors designed to withstand a heavier load than those specified. While we have had no failures in the Regimental Storehouses, yet, I believe, that the floors could be strengthened to advantage.

Ridge Ventilators. I only put these in over the kitchens, as that was my interpretation of the order. We occupied the mess buildings during the latter part of July and August, and experienced no discomfort with the open sides and doors, and I felt that the open ridge ventilators throughout the entire length of the mess buildings would make them untenable in this climate in the winter and late fall.

I believe it would be advisable to provide concrete floors not over two inches thick in the kitchens, as the dirt floors make it almost impossible for the cooks to keep their kitchens and food clean. There was a great amount of criticism regarding the building of the Base Hospital when they were first occupied on account of the cold weather and the impossibility of keeping them warm, but after closing up the roof walls by nailing bar paper on the outside, they have been fairly comfortable.

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A great many people, both in and out of the Camps, failed literally to realize the immensity of the problem confronting your office in Washington. With the widely scattered Camps in every kind of climate and condition to contend with, I believe, honestly, that the design of the buildings and the accommodations provided for the soldiers here furnished superior to anything that has ever been provided for troops in the United States before, and, while, of course, everything was not perfect, still, taking it all and all, I see very little to criticize in the plans, and I have certainly nothing to criticize in the way I was treated by your office in the prompt response with every request that I made, which, if refused, there was always an explanation given why it was not given. Practically every request that I made was granted. The Camp Quartermaster, Major R. H. Grinstead, U. S. Army, has taken over the buildings and construction material in strict conformity to your orders and there has been no friction at all, and he has shown a sincere desire to co-operate, which has made the turnover an easy for all concerned as possible considering its complexity.

17. RAILWAY TRACKS: There were no tracks laid for temporary construction purposes.

12000 feet of Railway track on Government Reservation for permanent use was constructed, and 4015 feet off the Reservation for permanent use was constructed - 3915 feet of which is a troop track parallel to main line of Southern Railway. All track was constructed by the Railway Companies at no expense to the Government.

18. TIMEKEEPING SYSTEMS: All workmen on the job are required to have time checks. When a man makes application for employment, if employed, he is given an order by the foreman or sub-foreman to the time keeping department for a time check. This order specifies his duties, rate and foreman under whom employed. He is given a time check which he retains as long as he is on the job, unless for some reason, the check issued is retired and another check issued in lieu thereof.

At the time of the issuance of the time check, an employment card is made by the timekeeping department, designated as Employment Card #2. This card shows the number of the time check issued to the man, date of employment, his name, class, rate, etc., and the department in which he is employed. If for any reason there is any change made in the number or originally furnished, class or rate, a change card designated as #3 is issued, showing the information. This change card is placed in file with the employment card and held as a permanent record.

If the man should leave the service, either by discharge, or of his own accord, discharge card form #4 is issued showing the information, and this card is placed in file along with #2 and #3 completing the record file of service. After the file is completed, it is drawn from the live file and placed in the dead file for future reference in alphabetical arrangement.

When a man leaves the service, either by discharge or resignation, he is given a pink slip by the timekeeper to the paymaster of the contractor, showing he is leaving the service and his number has been surrendered. This is identification and authority to the paymaster to pay the man for the last time made. A regular discharge ticket, form 120, blank attached, is made at the time the number is surrendered. The discharge ticket shows full information as to the time made, class and rate and amount due; a space being provided for the receipt of the payee. In addition to the above record kept, a weekly time card is also kept showing

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the time made by the employee daily, total hours for the week and total amount due for the week. The weekly time card is kept in the timekeeping department in numerical sequence.

The time checkers in the field report the time daily on form 131, blank attached. You will observe these forms are made up in books, the original sheet being perforated, carrying four time slips to the sheet. The time checker in the field makes these out in duplicate by carbon process, the duplicate being retained by him as a record and the original slips turned in to the time keeping department. These time slips are then arranged in numerical order and turned over to the time keepers in the office for posting to the weekly time cards.

The men are paid off weekly and the payroll week ends on Wednesday night of each week. At the close of the week the time cards are taken out of the file and extended as to total time made and amount due the payee. After the extensions are made on the weekly time card, the payrolls are made therefrom, the payrolls showing only the total time made for the week and the extensions.

After the payrolls are completed they are turned over to the voucher department for verification. The time cards are verified by comparing operators and the totals carried by the time cards checked back against the payrolls, after which the payrolls are put on the adding machines and totals brought down. The payrolls and weekly time cards in support thereof are then turned over to the contractors for payment?

The system of the contractors is to pay off by envelopes and as soon as the payrolls are received by them, they make up envelopes for each individual appearing on the rolls, draw off a change list, draw the money from the bank and put up the money in the envelopes. After this is done and the individual amounts and change list balanced with the total of the payrolls, they are ready for payment.

Saturday afternoon has been designated as the time to pay off at this camp. It has been found preferable to commence paying off as late as time will permit to finish by 6:00 P.M. in order to hold the workmen on the job. The system of the contractors in paying off is to use cards, making the pay of the men to them while working on the job. This is accomplished by having the envelopes arranged in numerical sequence running 1000 to the block. Each card is placed for the numbers it carries, the first card carrying from 1 to 1000, the second from 1000 to 2000, etc. In this way the workmen know by looking at the placards just what card carries his envelope to correspond with his time check and presents himself at this card, presenting his time check as his identification. The workmen then receive the time card and is given his envelope.

After the payments are made on the first day, there are usually a great many stragglers coming in later for their pay. This necessitates the contractors holding the payrolls open in their office for two or three days until these stragglers drift in for their money. About Wednesday of each week, the contractors will close the payrolls, draw off a list of unpaid amounts and make voucher for reimbursement of the actual amount paid out on the rolls. The rolls are then sent over to the field auditor with vouchers attached, together with the list of unpaid amounts and the contractors figures are checked and verified, if found correct, the voucher is approved by the Field Auditor and a check drawn for the total payments signed by the Contracting Quartermaster, and the receipt of the contractors taken therefor.

After the payrolls have been returned to the Field Auditor by the contractors and reimbursement made, should a workman call for his time,

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is found that he failed to draw his pay while the rolls were in the hands of the contractors, a discharge ticket will be issued for the amount due him, showing reference to the payroll and line number on which he appears. This discharge ticket will be taken by the workman to the paymaster of the contractors and on proper identification he will receive his money, giving his receipt on the discharge ticket therefor.

At stated intervals, usually once a week, these discharge tickets are listed by the contractors and voucher made for the total amount paid during the week and sent over to the Field Auditor for verification and payment. If found correct, payment is made as in the handling of the payrolls.

The contractors have no interest or responsibility in the keeping of the time, except that their foremen are required to keep a book record of all the men on the job under their supervision. The time is checked by representatives of the Field Auditor, designated as field time checkers. The time checker visits each foreman twice each day and actually checks each man by his time check. After he has completed his check, he then goes to the foreman and compares his list of men on the job with the book record of the foreman and if any are missing, they are looked up before he leaves and checked.

19. TRANSFER OF UNITS: The first Unit was transferred to the Camp Quartermaster on November 10th. The respective dates of transfer are:

<u>Unit No.</u>	<u>Date</u>	<u>No. of Buildings.</u>
1	12-7	67
2	11-10	53
3	11-10	53
4	11-22	53
5	12-11	65
6	12-14	65
7	11-20	53
8	12-8	53
9	12-7	53
10	12-10	53
11	11-20	53
12	12-13	65
13	12-14	65
15	12-17	19
16	12-15	44
18	12-21	64
20	12-15	5
21	12-17	36
23	12-19	65
24	12-18	41
25	12-18	20
26	11-15	10
27	11-24	4
28	11-24	10
33	12-19	6
37	12-21	14

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Unit No.	Date	No. of Buildings
	Brought Total.	1078
14	12-27	21
17	12-26	24
19	12-26	24
22	12-28	65
29	12-27	7
30	12-26	7
31	12-28	6
32	12-27	7
34	12-26	60
35	12-26	4
36	12-27	9
40	12-28	4
Night Range		12
		1523

20. SUPPLEMENTARY RECOMMENDATIONS: I would recommend that the following changes be made in plans for future construction of buildings similar to those located at Camp Mather.

Due to the imperious underlying clay in this section of South Carolina, the ligands in the latrine do not penetrate into the soil, with the result that a great number of the latrine buildings at this camp had to be moved.

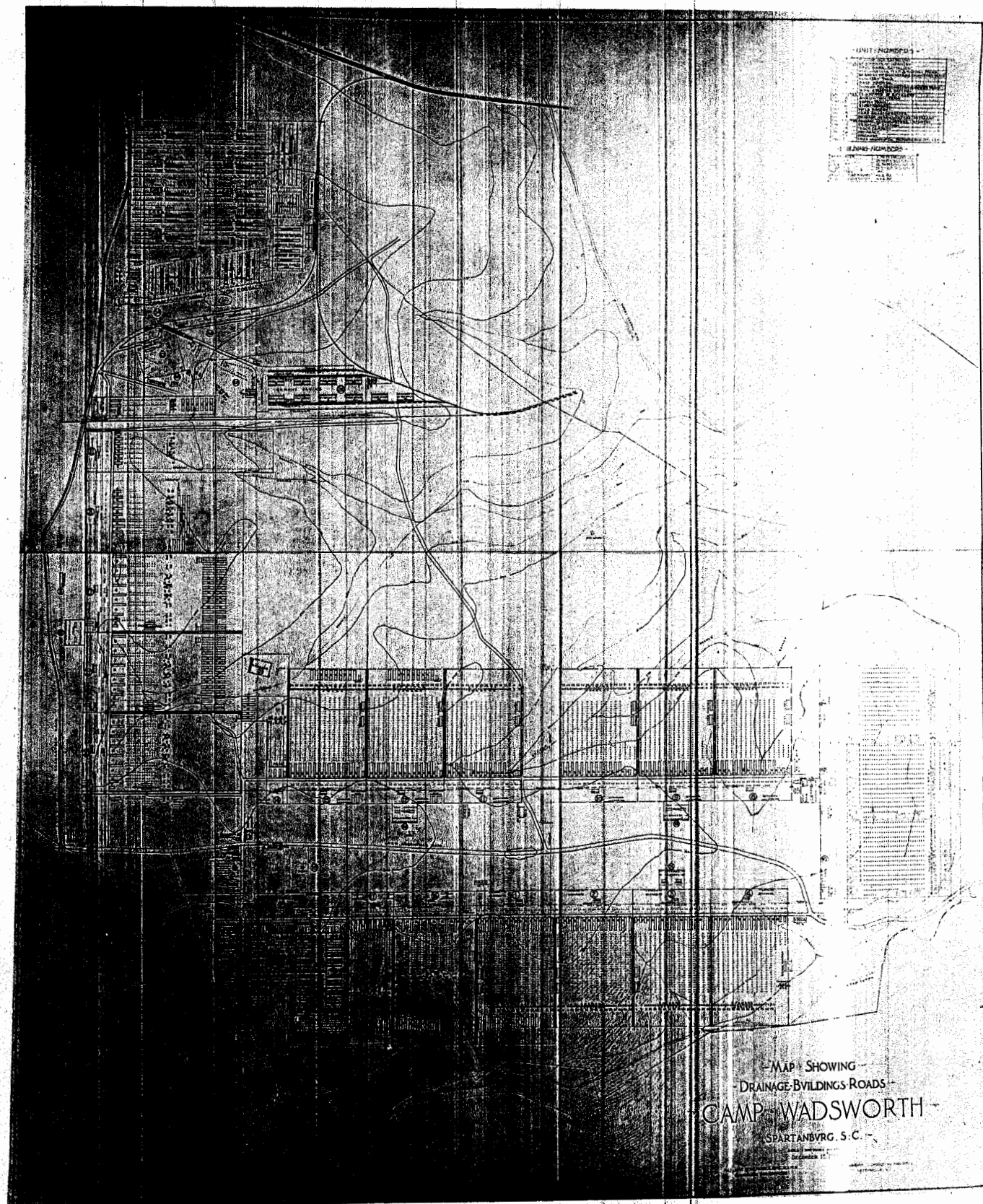
The latrine buildings, constructed as per plans, are so flimsy that in moving a great many have been badly damaged.

I recommend that these buildings be constructed in separate panels, - that is, the long sides in one panel and the four short wings in separate panels, and that these be bolted together at the corners with 3 one-half inch bolts, and that the roof also be bolted in place, so that it can be taken off in one piece. If the buildings are enclosed, there should be a continuous sill under the building, tying the entire structure together so that it may be lifted up and moved without damage. The original design for the mass buildings showed a 1" by 6" tie beam, tying the roof rafters together 5 feet above the plate. After several buildings were constructed with this design, it was found that the walls bulged out. We immediately changed the design and put in a 2" by 4" beam across the building resting on the plate and tying the roof. These were spaced every other rafter. These braces were installed as per plans. We placed the wire screening on the outside of the buildings at the opening and put the sack and shutters inside, which I consider better practice than the reverse method.

JMS/513

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CONSTRUCTING QUARTERMASTER.









16 Jan 2016 NARA IUKT

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