5th Ind.

HEAD-QUARTEDS HAWAMAN DEPARTMENT. Fr. SHAFTER, T. M., July 24, 1947,

To: Commanding General, Hawalian Separate Coust Artillery Brigado, Fi. DeRussev, T. H.

1. To note and return to this headquarters.

The Department Engineer will be directed to include this project in the next revision of the Hawaiian Defense Project and to prepare plans for the execution of this work when funds are received.

By command of Lieutenaut General Short:

O. M. McDotx, Major, A. G. G. Assistant Adjustant General,

A frue super:

Febuarii yon Geldern

ROWARD VON GELDEPY. 2nd Lin F. A.

(Basic: Lar., IIHD, Engr. 000.91, 27 February 1941, subject: "Camouflage of Deferre Invitallations.") fiels lust. 660.91

HQ. H. S. C. A. RRIGADE, Pt. DeRassy, T. H., July 29, 1941-To CG Haw, Dept. Noted.

FULRON Q. C. GARDNER,

Mapor General, U. S. Army. Communiting.

A True Copy: Edward you Geldern, EDWARD YON GELDERN, 2nd Lt., F. A.

[Exhibit 1A]

[SECRET]

HEADQUARTERS HAWAIIAN DEPARTMENT, OFFICE OF THE DEPARTMENT COMMANDER, Fort Shafter, T. H., 19 February, 1941.

Engr. 611

[1]

Subject: Military Roads and Trails Program, Hawaiian Department.

To: The Adjutant General, Washington, D. C.

1. Reference is made to letter, Engr. 611, this headquarters, 8 November 1940, covering the recommendations for the revision of the military Roads and Trails Program. As indicated in paragraphs 5 and 8 of that letter, the revised program was not complete and additional roads and trails were under consideration.

2. A detailed study made by this headquarters indicates that the following additional improvements are necessary:

a. Wiliwilinui road and trail improvement, estimated cost \$33,550.00. Construction covering improvement of the existing 15,000 lineal feet of road at Wiliwilinui Ridge, eliminating sharp curves and providing adequate turnouts. It also covers construction of a 6-foot pack trail extending from the end of the existing road to the main crest of Koolaupoko Ridge area.

b. Improvement of Pupukea-Kahuku trail estimated at \$12,720.00. This project consists of the general widening of the existing trail from 3 to 6 feet along its 13,000-foot alignment. This improvement will provide desirable communication between the northeasterly section of the Island and northern end of Wahiawa-Pupukea trail.

 \hat{c} . Coincidental with the improvement of the Koolau Ridge trail, feeder trails to the ridge should be developed and improved. As a part of its reforestation program, the CCC has constructed several trails from forest reserve boundaries to the main ridge of the Koolaua along the lateral ridges. These trails, shown in the following list, should be partially relocated and improved as 6-foot pack trails:

(1)	Poamono trail, 22,800 feet, estimated cost	\$35, 100. 00
(2)	Kawailoa trail, 24,000 feet	22, 750, 00
(3)	Schofield-Waikane, 33,000 feet	45, 750.00
(4)	Waiawa trail, 30,000 feet	28, 650. 00

2540 CONGRESSIONAL INVESTIGATION PEARL HARBOR ATTACK

d. A road to Fuu Palailai. This project ———(copy illegible) ——— of a 10' class "B" supply road extending from the main government road to Fuu Falailai. This road is desired to improve access to a group of fire control stations manned by a detail of from 50 to 100 men. The approximate length of this road is 8,700 feet and estimated cost \$10,000.00.

e. Iunia-Palehua road. This project will connect an existing plantation road with the Palehua spur via the Mauna Kapu and the Honouliuli trails. The need for an alternate route to the Manauahua Defense Area is extremely important, particularly in view of the exposed condition of the Falehua road to hostile observation. This project calls for the construction of 24,000 lineal feet of a 10-foot class "B" road at an estimated cost of \$136,500.00.

f. Radial Ridge roads, Manauahua area. This project calls for the construction of three roads along the ridges, south and west of Fuu Nanauahua as shown on the attached map. These roads serve vital defense areas which must be made accessible to truck transportation. The total length of these ten-foot roads is approximately 20,000 feet and the estimated cost of construction is \$84,900.00.

3. These additional roads and trails have been combined with the 19 items listed in paragraph 7 of letter, this headquarters, file Engr. 611, 8 November 1940, and are shown in the table below in order of their relative priority. The location of each item is shown on the map, scale 1/125,000, Inclosure No. 1 hereto.

1. Fort Weaver 155-mm position Road, 10' Class B	\$8,900
2. Fort Roger Roads, 10' Class B	4,000
3. Barbors Point East 3L Pos. Trail, 3L Trail.	1,000
4. Maili Marker 3L Position Trail. 3L Trail	6,000
5. Mailiilii 3L Position Trail, 3L Trail	1,400
6. Eaena Point 3L Position Trail. 3L Trail	1,000
7. Wailoa Point 3L Position Trail, 3L Trail	1,000
S. Completion of Barbors Point Road Net, Class A.	133,000
9. North Shore RR Connection, R. R.	250,000
10. Improvement Wakiaua Pupukea Road, 10' Class A & B	216,000
1. Walmoa-Pupukea Road, 10 Class B	35,000
	70,000
12. Alternate RR Schofield-Wahiuau Bypass, R. R. 13. Connection-Leilohua Spur to Oahu Sugar Co. tracks (rail only) R. R.	
13. Connection-Demonia Spar to Galu Sugar Co. tracks (rail only) K. K.	48,600
14. Ordnance Magazine Area, Schofield 25' Class A	33,000
15. Feeder Roads Wahiaua Pupukea Road, Improvement	111,800
16. Eahuku 155-mm Position Road, 10' Class B	9,500
17. Rabuku CP Trail, CP Trail	2,100
18. Kepuhi CP Trail, CP Trail	8,000
19. Koolau Ridge Trail, 6' Pack Trail	20,000
20. Wiliwilimoa Road, Improvement	17,900
21. Wiliwilimi Trail, 6' Pack Trail	15,650
22. Poamoho Trail, 6' Pack Trail	35, 100
23. Pupukoa-Mahuhu Trail, 6' Pack Trail	12,720
24. Hawaiian Trail, 6' Pack Trail	22,750
25. Schofield-Wahiwan Trail, 6' Pack Trail	45,750
26. Waiwan Trail, 6' Pack Trail	28,650
27. Pau Palailai CP Road, 10' Class B	10,000
28. Eunia-Palahua Road, 10' Class B	135, 500
29. Ridge Roads, Mamamam Area, 10' Class B	34,900
to the state of th	

1,370,020

4. It is recommended that the roads and trails program shown in the table above be approved in lieu of the present program approved in 4th Indorsement (AG 611 Hawaii) (3-31-38) (Misc.) (N) dated 23 May 1939, on War Department letter (AG 611 Hawaii (3-28-38)) (Misc. WPD) dated 31 March 1938, subject: "Military Priority Highways in the Hawaiian Department". It is further recommended that the sum of \$1,370,020.00 be allotted to this department as soon as possible to permit early completion of this program.

WALTER C. SHORT, Lieutenant General, Commanding.

1 Incl: Map A True Copy: Edward Von Geldern EDWARD Von Geldern, 2nd Lt., F. A. Subject: Military Roads and Trails Program, Hawaiian Department. AG 611 Hawaii (2-19-41) M 1st Ind.

WAR DEPARTMENT, A. G. O.,

February 27, 1941.

To: Chief of Engineers and Chief of Coast Artillery, IN TURN. For remark and recommendation, reference being made to files C. of E. 611 (Haw) 10 and OCGA 611/45 A 7.

By order of the Secretary of War:

Adjutant General.

1 Incl. a/c

C. of E., March 12, 1941.— To: The Chief of Coast Artillery.

1. Items 1 to 19, inclusive, in this program were approved for inclusion in the Hawaiian Defense Project in 3rd Indorsement dated February 18, 1941, AG 611 Hawaiian Department (11-8-40)M-WPD; OCGA 611/45 Å 7; C. of E. 611 (Hawaii) 10. It was further directed that the Commanding General confer with Mr. Moskowitz, the representative of the Commissioner of Public Roads in Hawaii, with a view to securing the maximum aid permissible from the Public Roads Administration for the accomplishment of the construction authorized Federal Highway Act of 1940. It was also directed that a revised estimate be submitted covering Items 9, 12 and 13. The above action was not available to the Commanding General at the time of preparation of basic paper.

2. Items 20 to 29, inclusive, are new items of work. The estimated cost ap-

2. Items 20 to 29, inclusive, are new items of work. The estimated cost appears reasonable, and their inclusion in the program is recommended. 3. Attention is invited to letter from the Commanding General Hawaiian Department dated February 19, 1941, subject: "Construction of North Shore Railroad Connection" file Engr. 611; AG 112.05 (2-19-41) M; C. of E. 611 (Hawaii) 11 in which it was recommended that funds in the amount of \$230,000 be allotted as soon as possible to initiate construction. The item referred to is included in this paper as item 9.

For the Chief of Engineers:

[S]George Mayo, GEORGE MAYO, Lt. Col. Corps of Engineers, Chief, Fortification Section.

1 Inclosure n/c.

611/45A-10

3rd Ind.

5.

WAR DEPARTMENT, OFFICE, CHIEF OF COAST ARTILLERY, March 15, 1941.

To: The Adjutant General.

1. The remarks and recommendations of the Chief of Engineers appearing in the 2nd Indorsement are concurred in.

2. In addition to the funds referred to in paragraph 1, 2nd Indorsement, \$300,000 is included in current Seacoast Defense estimates for application on items Nos. 9, 12 and 13 (railroad construction projects). For the Chief of Coast Artillery:

[S] E. T. BLOOD, Colonel, C. A. C., Executive.

1 Incl. n/c

A True Copy: Edward Von Geldern, EDWARD VON GELDERN, 2nd Lt. F. A.

Subject: Military Roads and Trails Program, Hawaiian Department. AG 611 Hawaii (2-19-41) M-WPD 4th Ind.

ESA

WAR DEPARTMENT, A.G.C., April 1. 1941.

To: Commanding General, Hawaiian Department.

 Attention is invited to the preceding 2d and 3d Indorsements.
The program for road, trail and railroad construction contained in paragraph 3, basic communication, is approved for inclusion in the Hawaiian Defense Project in place of the road, trail and railroad program approved by 3d Indorse-

AGW/ric

2542 CONGRESSIONAL INVESTIGATION PEARL HARBOR ATTACK

ment, February 18, 1941, to the letter, subject: "Military Road and Trail Program, Hawaiian Department", AG 611 Haw. Dept. (11-8-40) H-WPD. 3. It is desired that you submit a breakdown of the items contained in the road and trail program approved herein to show the expenditures contemplated for augmentation and for maintenance. In this connection, attention is invited to your 1st Indorsement, January 16, 1941, to the letter, subject: "Maintenance and repairs of Fortifications, Estimate of Funds for FY 1943" (Engr. 121.2, Forts), in which you request funds for the maintenance of roads. The break-down requested is necessary to insure that no duplication will be encountered in the defense of estimates to be submitted for the completion of this program. the defense of estimates to be submitted for the completion of this program.

By order of the Secretary of War:

Major General, The Adjutant General.

Incl. w/d A True Copy: Edward Von Geldern. Edward Von Geldern, 2nd Lt. F. A.

Priority			7	Esti- mated	
Old	Rec.		Present	Rec.	cost by troop constr.
25 28 23 32 20 21	1a b c d f	Schofield-Walkana Kunia-Palchua Pupukea-Black Junction Poanoho Trail. Wiliwilinui Road. Wiliwilinui Trail.	Pack Trail Motor Trail Pack Trail Foot Trail Dirt Road Foot Trail None	Motor Trail 10' WB Macadam Improve 10' Class B Pack Trail 10' Class B.	\$170,000 75,000 12,720 10,000 17,900 10,000
1 2 3 4 5 8 10 6 7 17 11 None	2a b d e b c d e 4a 4	Fort Weaver-155mm Gun Posi- tions. Fort Rugor Roads	None None None Coral Roads Motor Trail None None None Foot Trail Raised Ford	10' Class B. 10' Class B. SL Trail. SL Trail. OL Trail. Paved Motor Roads. 10' Class A & B. SL Trail. SL Trail. OP Trail. 10' Class B. Bridge.	
14 20	5a	Ordnance Magazine Area, Scho- field Barracks. Mananahua Ridge Route	Motor Trail	22' Class A Water Bound Macad-	33, 000 74, 900
$\begin{array}{c} 19 \\ 24 \\ 26 \\ 15a \\ 15b \\ 15c \\ \end{array}$	c d 6a b	Koolau Ridge Trail. Kaiwailon Trail. Waiawa Route. Haleiwa-Opacula Approach Road. Fawalloe-Anahulu """ Ashlev Station """	Foot Trail Foot Trail Foot Trail Dirt Road Dirt Road Dirt Road	am. Improve Improve Improve Improve Improve	} 111,800
18 18 16 27	d 7a b	Kopuh OP Route Kabuku-155mm Gun Positions Fua Palailai OP Route Total	Foot Trail Foot Trail Foot Trail	Improve 10' Class A 10' Class B	9, 300 10, 000 \$901, 020

Proposed program, tactical items

A True Copy: Edward von Geldern, EDWARD VON GELDERN, 2nd Lt. F. A.

[7] Engr. 511 5th Ind.

HEADQUARTERS, HAWAIIAN DEPARTMENT, Fort Shafter, T. H., 26 May 1941.

To: The Adjutant General, Washington, D. C.

1. Reference is made to the following correspondence:

a. AG 611, Haw. Dept. (11-8-40) M-WPD; Military Road and Trail Program, Hawaiin Department.

b. AG 660 (4-19-41) M; Expenditure Program, Seacoast Defense Fund, Fiscal Year 1942.

c. Eng. 121.2 (Forts); Maintenance and Repair of Fortifications, Estimate of Funds for Fiscal Year 1943, (cited in Paragraph 3, 3rd Indorsement above).

2. a. Road, trail and railroad program submitted in reference a was approved by War Department 3rd Indorsement, February 18, 1941, subject to the following:

(1) That Mr. Moskowitz be contacted to secure a maximum of the unobligated portion of \$446,000.00, previously allotted the PRA for Hawaii, for the construction of the road and trail items in the approved program.

(2) That revised estimates be submitted for the railroad items in the approved program.

b. 4th Indorsement, this headquarters, April 4, 1941, submitted the following:

(1) Recommendation that \$446,000.00 available to the PRA be not diverted from the purpose for which originally allotted, namely, construction of the Wahiama cut-off and the Kolokolo-Waiamoa Road.

(2) Revised estimates for the railroad items and reduced estimates for the road and trails portions of the program by the \$70,400.00 made available on December 7, 1940.

(3) Cross-referenced the originally approved program, items 1-19 inclusive, with the additional items, 20-29 inclusive, approved herein and submitted revised estimates in the amount of \$951,020.00 for the road and trail items and \$298,000.00 for the railroad items. The total cost, \$1,249,620.00 supersedes estimate of \$1,370,020.00 reported in basic letter herewith.

[8] 3. Reference b informed this headquarters that regular estimates for Seacoast Defense funds, FY 1942 include \$300,000.00 for the construction of the railroad items and \$50,000.00 for road and trail items. Release of these funds will cover the construction of the railroads \$298,600.00 and will reduce the required funds for the completion of the roads and trails to \$901,020.00.

4. a. Reference c submitted estimates in the amount of \$2\$6,000.00 for the upkeep of military roads and trails during FY 1943. These estimates were based upon the maintenance of these roads and trails already constructed in this department, since at the time of submission, the augmentation program did not have War Department approval. The great increase in FY 1943 estimates over those of previous years has been due primarily first, to the necessity of procuring new plant and equipment as replacements for outworn units and second, to the necessity supplanting WPA employees with hired labor as a result of the increasing non-availability of the former.

b. The breakdown of the \$286,000.00 estimate showed the proportional amounts of the total which would be expended on existing roads and trails. In view of the approval by 4th Indorsement of the revised road, railroad, and trail program, which contains funds for the improvement of certain existing roads, the original breakdown of FY 1943 maintenance estimates is no longer applicable. Specifically, maintenance funds for the Wahiana-Purukea Road and Barbers Point Road net can be reduced considerably; at the same time, however, the construction of new roads and trails during FY 1943 and ensuing years. Attached as inclosure No. 1 is a revised tabulation of maintenance funds required during FY 1943 for all existing roads and trails and those to be constructed under the approved program. This breakdown shows specifically the purposes for which these funds will be expended. Revised estimates decrease the funds originally requested by \$34,000.00.

c. 1st Indorsement, January 16, 1941, which forwarded the estimates cited in paragraph 5a, recommended immediate release of \$100,000.00 of the \$286,000.00. This \$100,000.00 is necessary for the purchase of materials and additional plant and the hiring of labor for the maintenance of long neglected existing roads and trails, funds for the improvement of which have not been included in the approved augmentation program.

[9] 5. As explained in the foregoing paragraphs, there is no duplication in the funds still required for the construction of the approved augmentation program, \$1,249,620.00 or \$901,020.00 if the \$350,000.00 in FY 1942 estimates is made available and the funds, totaling \$252,000.00, required for maintenance: the \$1,249,620.00 construction estimate includes no funds for maintenance and the \$252,000.00 maintenance estimate includes no funds for new construction.

6. It is recommended:

a. That in accordance with the revised estimates cited in paragraphs 3b (3) and 4, above, funds in the amount of \$901,020.00 for the completion of the approved road, trail and railroad program be included in FY 1942 estimates to supplement the \$350,000 expected to be released.

(b) That the revised estimates in the amount of \$252,000.00 be substituted for the \$236,000.00 now included in FY 1943 estimates for the maintenance and repair of military roads and trails and that \$100,000.00 of this amount be released to this department during FY 1942.

WALTER C. SHORT, Lieutenant General, U. S. Army, Commanding.

1 Incl: Revised estimate. A true copy: Edward Von Geldern, EDWARD VON GELDERN, 2nd Lt., F. A.

10] Subject: Military Roads and Trails Program, Hawaiian Department. AG 611 Hawaii (2-19-41) MC 6th Ind. 21-H/agb-1712

WAR DEPARTMENT, A. G. O., June 9, 1941.

To: Chief of Coast Artillery and Chief of Engineers, IN TURN:

For remark and recommendation. By order of the Secretary of War:

1 Incl. n/o

611/45-A-10

7th Ind.

Adjutant General.

WAR DEPARTMENT, Office, Chief of Coast Artillery, June 12, 1941.

To: Chief of Engineers.

1. The records of this office indicate that the necessary action has been taken with a view to accomplishing the recommendations appearing in paragraph 6 a of 5th Indorsement, assuming that that portion of the recommendation reading "FY 1942" was intended to read "Fy 1943".

2. With respect to the recommendation appearing in paragraph 6 b of 5th indorsement, preliminary estimates for FY 1943 do not now include a specific item for maintenance and repair of military roads and trails. The total sum now appearing in the preliminary estimates FY 1943 under Project 11—Alteration, maintenance and repair of fortifications—is 225,000. Fy 1942 estimates for Project 11 total 173,710. The portion of these funds to be applied to maintenance of roads and to strictly fortification works appears to be discretionary with the Commanding General, Hawaiian Department. However, the basis for estimating these funds for FY 1941 included specifically 559,000 as applicable to road maintenance.

For the Chief of Coast Artillery:

LEONARD L. DAVIS, Lt. Col., C. A. C., Assistart.

1 Inclosure (Dup. w/d).

A true copy: Edward von Geldern, Edward Von Geldern, 2nd Lt., F. A.

[11] C. of E. 611 (Hawaii). Subject: Military Roads and Trails Program, Hawaiian Department.

Sth Ind.

6-E Office, C. of E., July 1, 1941.

To: The Adjutant General.

1. Reference paragraph 6 a of 5th Indorsement and paragraph 1 of preceding -Indorsement, it is recommended that authority be granted to include the \$901,020 required for the completion of the approved road, trail and railroad program in the supplemental estimates for Fiscal Year 1943 at the first opportunity.

2. The remarks of the Chief of Coast Artillery in paragraph 2 of 7th Indorsement are concurred in.

For the Chief of Engineers:

GEORGE MAYO, Lt. Col., Corps of Engineers, Chief, Fortification Section.

1 Inclosure n/c. CG of OCCA A True Copy: Edward Von Geldern, EDWARD VON GELDERN 2nd Lt., F. A.

[12] Subject: Military Roads and Trails Program, Hawaiian Department. AG 611 (2-10-41) MC-K 9th Ind. EG & WAR DEPARTMENT, A. G. O., July 18, 1941. To: Commanding General, Hawaiian Department. EGA

1. Funds in the amount of \$300,000 for railroads and \$50,000 for roads and trails are now available from FY 1942 appropriations for construction contained in the approved Road, Trail, and Railroad Program. These funds will soon be released to the District Engineer. Additional funds in the amount of \$900,000 have been included in tentative estimates, FY 1943 for the completion of the approved Road and Trail Program. This latter amount will be requested at an

earlier time in the event that further supplemental FY 1942 estimates are prepared. 2. General maintenance funds to the amount of \$173,710 are now available from FY 1942 appropriations and a substantial amount thereof has been released to the District Engineer, Honolulu. The portion of these funds to be applied to the maintenance of roads is discretionary with you. Additional general maintenance funds to the amount of \$223,000 have been included in preliminary estimates, FY 1943.

3. An additional amount of \$140,000 will be included at the first opportunity in estimates to be submitted to provide further funds for maintenance of roads and trails in your department.

By order of the Secretary of War:

Major General, The Adjutant General.

Incl. w/d

A true copy: Edward Von Geldern, EDWARD VON GELDERN, 2nd Lt., F. A.

[Eahdoff 115]

Via "Clippes" KORT, HHB. TP

> COWNANDER. Fort Shafter, T. H., 5 April '41

(EXTRACT)

Subject: Construction at Bollows Field, T. H. To: The Adjotant General, Washington, J). C.

1. Reference is made to be Indoresment, The Adjutant General's effine, file AC 370.5 (2 15 41) M D, dated 5 March 1941 which authorized the permanent assignment of the S6th Observation Squadron and the 58th Benchardment Squadron at Bellews Field.

5. The improvement of the ranways contast is lengthesing the present ranway from about 2800' to 3460' and widening from 150' to 300'. The new running is 5000' long and 309' wide. Cress-connection the existing and the new rannay is a paved taxi strip and parking strip 360° wide and 2309° long with a servicing man-300° x 400° adjutent to the taxi siris. All remease, servicing mats and taxi strips will be appliable concrete. Other installations required are an airdrone control tower and an aqua-gasolicg system of 600,000 gallon copacity. The necessary tanks for this ganalism system are on hund. A complete system of airport lighting and sewer, water, and power utilities will be necessary. Mincellaneous installa-