

All of the work to be done shall be in accordance with "Specifications To Accompany Job Order No. 281", and the details shown on the drawings authorized in the Specifications.

The total Cost of the Work to be done shall not exceed \$27,500.00.

(Signed) Theodore Wynnan, Jr.,  
THEODORE WYNNAN, JR.,  
Lt. Col., Corps of Engineers,  
District Engineer.

*Reconciliation of estimated cost*

1. Total cost of work:

(a) Direct Cost:

Total Cost to Contractor.....	182,800.00
Contingencies—10% .....	5,280.00

Total Direct Cost.....	188,080.00
------------------------	------------

(b) Indirect Cost:

Survey, Inspection, Engineering (8% of Total Cost to Contractor).....	\$6,624.00
Total Indirect Cost.....	6,624.00

Total Field Cost.....	194,704.00
-----------------------	------------

General Office Overhead 8%.....	6,624.00
---------------------------------	----------

Estimated Total Cost to the Government.....	201,328.00
---	------------

This estimate is prepared for use in the District only, and is not for distribution to the Contractor.

(Signed) Theodore Wynnan, Jr.,  
THEODORE WYNNAN, JR.,  
Lt. Col., Corps of Engineers,  
District Engineer.

ARMY PEARL HARBOR BOARD EXHIBIT No. 4B

*Summary*

WAR DEPARTMENT

UNITED STATES ENGINEER OFFICE

Honolulu, T. H.

Contract W414-eng-602

Haleakala (Maui, T. H.).

Job Order #41.0 June 14, 1941 (Revised) December 11, 1941.

Construct. A. W. S. road on Haleakala together with A. W. S. camp and fixed station.

Est. Cost: \$105,086.00+Add #1, 2, 3.

Est. Cost (Rev.): \$121,160.90.

Commencement date: June 25, 1941.

Est. date for completion: Sept. 25, 1941.

Revised date for completion: Nov. 30, 1941.

Supervision by Area Engr. 6th Field Area.

Addendum #1 Oct. 10, 1941 Est. cost \$14,081.57.

Construct Radio Shelter bldg. and garage.

Addendum #2 Feb. 5, 1942 No est. cost given.

Construct bombproof shelter for Radio Communication with necessary appurtenances.

Addendum #3 Aug. 29, 1942 No est. cost given:

Construct underground telephone line from A. W. S. at Haleakala and base station.

WAR DEPARTMENT,  
UNITED STATES ENGINEER OFFICE,  
Honolulu, T. H., December 11, 1941.

JOB ORDER NO. 41.0 (Revised—Orig. June 14th.

Contract W-414-eng-602.

To: Hawaiian Constructors, Honolulu, T. H.

You are hereby directed to proceed with the following work:

1. PROJECT TITLE: A. W. S. Road, Camp, and Fixed Station.
2. LOCATION: Haleakala, Maui, T. H.
3. OFFICE FILE REFERENCES: ND 676.3 Haleakala.
4. WORK TO BE DONE: Construct and complete A. W. S. road on Haleakala, together with construction of base camp and fixed station.
5. WORK REQUESTED BY: Commanding General—Hawaiian Department.
6. DRAWINGS AND REFERENCES: As enumerated in the Specifications to accompany Job Order No. 41.0.
7. APPROPRIATION CHARGEABLE: SC 1450 (\$111,369.85) Eng. 993 (\$9,791.05).
8. ESTIMATED COST: \$121,160.90.
9. COMMENCEMENT DATE: June 25, 1941.
10. ESTIMATED DATE FOR COMPLETION: November 30, 1941.
11. ESTIMATED LABOR AT SITE: See detailed estimate attached.
12. PLANT REQUIRED: See detailed estimate attached.
13. MATERIALS: See detailed estimate attached.
14. SUPERVISION BY: The Area Engineer—Sixth Field Area.

/s/ THEODORE WYMAN, Jr.,  
Lt. Col., Corps of Engineers,  
District Engineer.

OCT. 10, 1941.

ADDENDUM NO. 1

To Accompany Job Order No. 41.0

Contract W-414-eng-602

WORK TO BE DONE: Construct One (1) Utility Truck Shelter and One (1) Radio Shelter Building.

DISTRICT: Honolulu District, T. H.

The work to be done, as provided for herein, is located at A. W. S. Camp, on the Island of Maui, T. H., and is limited to the following specific items:

1. Furnish all labor and equipment and perform all work necessary to construct and complete one (1) Utility Truck Shelter. All of the work to be done shall be in accordance with the details shown on the drawing, "Fixed Station Kauai and Maui, Utility Truck Shelter", Sheets No. 1 and No. 2, File Numbers, F-24/58, and F-24/59.

2. Furnish all labor and equipment and perform all work necessary to construct one (1) Radio Shelter Building. (Radio Shelter Building replaces Garage Building No. 1 shown on General Plan, F-4/86).

Addendum No. 1 to Job Order No. 41.0 is additional work.

Total cost of the work to be done shall not exceed \$14,081.57.

Charge \$4290.52 to SC 1450. Charge \$9791.05 to Eng. 993.

(Sgd.) Theodore Wyman, Jr.  
THEODORE WYMAN, Jr.,  
Lt. Col., Corps of Engineers,  
District Engineer.

FEBRUARY 5, 1942.

ADDENDUM NO. 2

To Accompany Job Order No. 41.0 (Revised)

Contract W-414-Eng-602

DISTRICT: Honolulu District, Honolulu, T. H.

Addendum No. 2 to Accompanying Job Order No. 41.0 (Revised) (A. W. S. Road and Camp, Haleakala, Maui, T. H.) authorizes the construction of a bombproof

shelter for Radio Communication with necessary appurtenances, in connection with A. W. S. Station at Haleakala, Maui, T. H.

/s/ Theodore Wyman, Jr.  
THEODORE WYMAN, JR.,  
Colonel, Corps of Engineers,  
District Engineer.

AUGUST 29, 1942.

ADDENDUM NO. 3

To Accompany Job Order No. 41.0 (Revised)

Contract W-414-Eng-602

Office of the Department Engineer, Honolulu, T. H.

Addendum No. 3 to accompany Job Order No. 41.0 (Revised) (A. W. S. Road, Camp and Fixed Station, Haleakala, Maui) authorizes the construction of Underground Telephone Line between Base Camp and the A. W. S. Station at Haleakala.

Work has been completed.

For the Department Engineer:

(s) JOSEPH MATSON, JR.,  
Major, Corps of Engineers,  
Assistant Department Engineer.

WAR DEPARTMENT,  
UNITED STATES ENGINEER OFFICE,  
Honolulu, T. H., June 17, 1941.

JOB ORDER NO. 41.0.  
Contract W-414-eng-602.

To: Hawaiian Constructors, Honolulu, T. H.

You are hereby directed to proceed with the following work:

1. PROJECT TITLE: A. W. S. Road and Camp.
2. LOCATION: Haleakala, Maui, T. H.
3. OFFICE FILE REFERENCE: 2014.
4. WORK TO BE DONE: Construct and Complete A. W. S. road on Haleakala, together with A. W. S. Camp.
5. WORK REQUESTED BY: Commanding General—Hawaiian Department.
6. DRAWINGS AND REFERENCES: To be furnished later.
7. APPROPRIATION CHARGEABLE: SSA 1940-41 SC1450 P23-A0695-01.
8. ESTIMATED COST: \$105,086.00.
9. COMMENCEMENT DATE: June 25, 1941.
10. ESTIMATED DATE FOR COMPLETION: September 25, 1941.
11. ESTIMATED LABOR AT SITE: Detailed estimate to be furnished later.
12. PLANT REQUIRED: Detailed estimate to be furnished later.
13. MATERIALS: Detailed estimate to be furnished later.
14. SUPERVISION BY: The Area Engineer, Sixth Field Area.

(Signed) Theodore Wyman, Jr.,  
THEODORE WYMAN, JR.,  
Lt. Col., Corps of Engineers,  
District Engineer.

ESTIMATE OF COST

To Accompany Job Order No. 41.0

Contract No. W-414-eng-602

WORK TO BE DONE: Construct and Complete A. W. S. Road on Haleakala, together with A. W. S. Camp.

DISTRICT: Honolulu District, Honolulu, T. H.

The work to be done, as provided for herein, is located at Haleakala, on the Island of Maui, T. H., and is limited to the following specific item:

1. Furnish all necessary labor and equipment and perform all work necessary to Construct and Complete an A. W. S. Road together with an A. W. S. Camp, in

accordance with the "Specifications to Accompany Job Order No. 41.0", and the details shown on the drawings, enumerated in the Specifications.

The Total Cost of the Work Shall not exceed \$105,086.00.

(Signed) Theodore Wyman, Jr.,  
 THEODORE WYMAN, JR.,  
 Lt. Col., Corps of Engineers,  
 District Engineer.

*Recapitulation of estimated cost*

1. Total Cost of Work:

(a) Direct Cost:

Total Cost to the Contractor-----	\$105,086.00
Contingencies—10%-----	10,508.60

Total Direct Cost-----	115,594.60
------------------------	------------

(b) Indirect Cost:

Survey, Inspection, Engineering (8% of Contractor's Cost)-----	\$8,406.88
Total Indirect Cost-----	8,406.88

Total Field Cost-----	124,001.48
General Office Overhead-----	8,406.88

Estimated Total Cost to the Government-----	132,408.36
---	------------

This estimate is prepared for use in the District only and is not for distribution to the Contractor.

(Signed) Theodore Wyman, Jr.,  
 THEODORE WYMAN, JR.,  
 Lt. Col., Corps of Engineers,  
 District Engineer.

Oct. 10, 1941.

ADDENDUM NO. 1

To Accompany Job Order No. 41.0

Contract W-414-eng-602

**WORK TO BE DONE:** Construct One (1) Utility Truck Shelter and One (1) Radio Shelter Building.

**DISTRICT:** Honolulu District, Honolulu, T. H.

The work to be done, as provided for herein, is located at A. W. S. Camp, on the Island of Maui, T. H., and is limited to the following specific items:

1. Furnish all labor and equipment and perform all work necessary to construct and complete one (1) Utility Truck Shelter. All of the work to be done shall be in accordance with the details shown on the drawing, "Fixed Station Kauai and Maui, Utility Truck Shelter", Sheets No. 1 and No. 2, File Numbers, F-24/58, and F-24/59.

2. Furnish all labor and equipment and perform all work necessary to construct one (1) Radio Shelter Building. (Radio Shelter Building replaces Garage Building No. 1 shown on General Plan, F-4/86).

Addendum No. 1 to Job Order No. 41.0 is additional work.

Total cost of the work to be done shall not exceed \$14,081.57.

Charge \$4290.52 to SC 1450. Charge \$9791.05 to Eng 993.

(Sgd.) Theodore Wyman, Jr.  
 THEODORE WYMAN, JR.,  
 Lt. Col., Corps of Engineers,  
 District Engineer.

## COST TO CONTRACTOR

1. *One Utility Truck Shelter:*

Labor.....	\$1, 829. 36
Material.....	1, 875. 83
Plant Rental.....	75. 00
Mobil. & Demobilization.....	378. 02
Contractors Field & Office Overhead.....	132. 31

Total..... \$4, 290. 52

2. *One Radio Shelter Building:*

Labor.....	\$3, 777. 78
Material.....	4, 698. 69
Plant Rental.....	150. 00
Mobil. & Demobilization.....	862. 65
Contractors Field & Office Overhead.....	301. 93

Total..... 9, 791. 05

Total Cost to Contractor..... 14, 081. 57

(Sgd.) Theodore Wyman, Jr.  
THEODORE WYMAN, JR.,  
*Lt. Col., Corps of Engineers,*  
*District Engineer.*

*Recapitulation of estimated cost*1. *Total Cost of Work:*(a) *Direct Cost:*

Total Cost to the Contractor.....	\$14, 081. 57
Contingencies — 10%.....	1, 408. 16

Total Direct Cost..... 15, 489. 73

(b) *Indirect Cost:*

Survey, Inspection, Engineering.....	\$1, 126. 53
--------------------------------------	--------------

Total Indirect Cost..... 1, 126. 53

Total Field Cost.....	16, 616. 26
General Office Overhead.....	1, 126. 53

Estimated Total Cost to the Government..... 17, 742. 79

This estimate is prepared for use in the District only and is not for distribution to the Contractor.

(Sgd.) Theodore Wyman, Jr.,  
THEODORE WYMAN, JR.,  
*Lt. Col., Corps of Engineers,*  
*District Engineer.*

ARMY PEARL HARBOR BOARD EXHIBIT No. 4C

WAR DEPARTMENT

UNITED STATES ENGINEER OFFICE

Honolulu, T. U.

Contract No. W414-eug-00

*Summary*

Mauna Kea (Hawaii, T. H.)

Job Order #469 June 20, 1941

Construct new AWS Road, Buildings, Water System, etc., including improvement of present road.

Est. Cost \$20,390.00

Commencement date: July 1, 1941

Ret. date for completion: Sept. 1, 1941

Work suspended 7-14-41.

Job order cancelled 5-10-42.

Supervision by Area Engr., 7th Field Area.