

ABSTRACT OF PROPOSALS FOR MATERIAL AND LABOR  
FOR THE ENGINEER DEPARTMENT, 1916

LETTER FROM  
THE SECRETARY OF WAR

TRANSMITTING

A LETTER FROM THE CHIEF OF ENGINEERS, SUBMITTING  
ABSTRACTS OF PROPOSALS RECEIVED DURING THE  
FISCAL YEAR ENDING JUNE 30, 1916, FOR  
MATERIAL AND LABOR IN CONNEC-  
TION WITH WORKS UNDER THE  
ENGINEER DEPARTMENT



JANUARY 11, 1917.—Referred to the Committee on Expenditures in the War Department  
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1917



## LETTER OF TRANSMITTAL.

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WAR DEPARTMENT,  
*Washington, January 10, 1917.*

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

SIR: In accordance with the requirement of section 230 of the Revised Statutes I have the honor to transmit herewith a letter from the Chief of Engineers, United States Army, of yesterday's date, submitting abstracts of proposals received during the fiscal year ended June 30, 1916, for material and labor in connection with works under the Engineer Department.

Very respectfully,

NEWTON D. BAKER,  
*Secretary of War.*

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## LETTER OF SUBMITTAL.

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WAR DEPARTMENT,  
OFFICE OF THE CHIEF OF ENGINEERS,  
*Washington, January 9, 1917.*

From: The Chief of Engineers, United States Army.

To: The Secretary of War.

Subject: Abstract of proposals.

1. Section 230 of the Revised Statutes provides—

Whenever the Secretary of War invites proposals for any works, or for any materials or labor, he shall report to Congress, at its next session, all bids therefor, with the names of the bidders.

2. In pursuance thereof, I have to submit herewith abstracts of proposals received during the fiscal year ending June 30, 1916, for material and labor in connection with works under the Engineer Department.

W. M. BLACK,  
*Chief of Engineers, United States Army.*



# ABSTRACT OF PROPOSALS FOR MATERIAL AND LABOR FOR ENGINEER DEPARTMENT, 1916.

## OFFICE CHIEF OF ENGINEERS.

[Officer: Lieut. Col. E. Eveleth Winslow, Corps of Engineers.]

### FORTIFICATIONS.

*Abstract of proposals for furnishing eight projectile tables (date of advertisement, Aug. 23, 1915; date of opening, Sept. 2, 1915).*

[Appropriation: "Fortifications in insular possessions."]

1. Concord Construction Co., 476 Seneca Avenue, Brooklyn, N. Y.....	\$1,000.00
2. Ellicott Machine Corporation, Baltimore, Md. (for ordinary commercial material, \$856.15)....	1,011.62

Award made to No. 1, the Concord Construction Co.

*Abstract of proposals for furnishing 12-inch projectile hoists (date of opening, Oct. 23, 1915).*

[Appropriation: "Gun and mortar batteries."]

Bidder.	For one hoist with 6 carriers.	For each hoist with 4 carriers.
1. Thos. Carlin's Sons Co., Pittsburgh, Pa.....	\$1,130	\$1,010
2. Otis Elevator Co., Washington, D. C.....	1,595	1,595
3. Ellicott Machine Corporation, Baltimore, Md.....	1,775	1,685

All bids rejected.

## PORTLAND (ME.) DISTRICT.

[Officer: Maj. F. A. Pope, Corps of Engineers.]

### RIVERS AND HARBORS.

*Abstract of proposals for dredging in St. Croix River, Me., Aug. 16, 1915.*

Bidder.	Price per cubic yard.
1. Eastern Dredging Co., 172 Condor Street, East Boston, Mass. <sup>1</sup> .....	Cents. 53.83
2. Coastwise Dredging Co., Norfolk, Va.....	54.25
3. John H. Gerrish, 101 Tremont Street, Boston, Mass.....	54.7
4. J. S. Packard Dredging Co., Turks Head Building, Providence, R. I.....	66.9
5. Bay State Dredging Co. (Ltd.), 247 Atlantic Avenue, Boston, Mass.....	59

<sup>1</sup> Contract made with Eastern Dredging Co.

## NEWPORT (R. I.) DISTRICT.

[Officer: Col. John Millis, Corps of Engineers.]

## FORTIFICATIONS.

*Abstract of proposals for dredging at Fort Rodman, Mass., opened Sept. 30, 1915.*

Name and address of bidder.	Price bid for dredging 8,500 cubic yards (per cubic yard, scow measurement).	Total.
1. John R. Burke, 78 Devonshire Street, Boston, Mass.	23.4	\$1,989.00
2. Bay State Dredging & Contracting Co., 247 Atlantic Avenue, Boston, Mass.	21.8	1,853.00
3. J. S. Packard Dredging Co., 1004 Turks Head Building, Providence, R. I.	23.5	1,997.50
4. Eastern Dredging Co., 172 Candor Street, East Boston, Mass.	24.9	2,116.50

Contract (emergency) awarded to the Bay State Dredging &amp; Contracting Co.

## RIVERS AND HARBORS.

*Abstract of proposals for repairing Point Judith Breakwater, R. I., opened Mar. 15, 1916.*

Name and address of bidder.	Price per ton of 2,000 pounds (20,000 tons).	Total.
1. Estate of John Beattie, Leetes Island, Conn.	\$4.10	\$82,000
2. E. S. Belden & Sons, Hartford, Conn.	3.73	74,600
3. Bay State Dredging & Contracting Co., Boston, Mass.	3.49	69,800
4. Coast & Lakes Contracting Corporation, New York, N. Y.	2.48	49,600

Contract awarded to Coast &amp; Lakes Contracting Corporation.

*Abstract of proposals for rock removal and dredging in New Bedford Harbor, Mass., opened Mar. 16, 1916.*

Name and address of bidder.	Area B.—Dredging 173,000 cubic yards scow measurement.		Area A.—Rock removal, 4,887.5 cubic yards place measurement.		Grand total.
	Per cubic yard.	Total.	Per cubic yard.	Total.	
1. John R. Burke, Boston, Mass.	24.9	\$43,077.00	8.80	\$43,010.00	\$86,087.00
2. Charles W. Johnston, Lewes, Del.	16 $\frac{1}{2}$	28,112.50	3.90	19,061.25	47,173.75
3. J. P. O'Riorden, Boston, Mass.	17	29,410.00	21.17	103,468.37 $\frac{1}{2}$	132,878.37 $\frac{1}{2}$
4. Coastwise Dredging Co., Norfolk, Va.	14 $\frac{1}{2}$	25,085.00	4.00	19,550.00	44,635.00
5. P. Sanford Ross (Inc.), Jersey City, N. J.	33	57,090.00	7.67	37,487.12 $\frac{1}{2}$	94,577.12 $\frac{1}{2}$
6. Eugene Breymann, East Boston, Mass.	13	22,490.00	5.00	24,437.50	46,927.50
7. J. S. Packard Dredging Co., Providence, R. I.	14.3	24,739.00	3.85	18,816.87 $\frac{1}{2}$	43,555.87 $\frac{1}{2}$
8. Maryland Dredging & Contracting Co., Baltimore, Md.	12 $\frac{1}{2}$	21,625.00	7.10	34,701.25	56,326.25
9. Bay State Dredging & Contracting Co., Boston, Mass.	14.9	25,777.00	3.25	15,884.37 $\frac{1}{2}$	41,661.37 $\frac{1}{2}$

Contract awarded to Bay State Dredging &amp; Contracting Co.

*Abstract of proposals for dredging in Providence Harbor, R. I., opened Apr. 15, 1916.*

Name and address of bidder.	Rate per cubic yard, scow measurement.	Total.
1. J. S. Packard Dredging Co., Providence, R. I.....	<i>Cents.</i> 14.9	\$3,725
2. Bay State Dredging & Contracting Co., Boston, Mass.....	18.5	4,625

Contract (emergency) awarded to J. S. Packard Dredging Co.

*Abstract of proposals for dredging in Providence Harbor, R. I., opened June 12, 1916.*

Name and address of bidder.	Prices bid per cubic yard.						Grand total.
	Subdi- vision A.	Total.	Subdi- vision B.	Total.	Subdi- vision C.	Total.	
1. Maryland Dredging & Contracting Co., Baltimore, Md.....	<i>Cents.</i> 17	\$68,000	<i>Cents.</i> 31	\$27,900	<i>Cents.</i> 15	\$30,000	\$125,900
2. Bay State Dredging & Contracting Co., Boston, Mass.....	18	72,000	30	27,000	16	32,000	131,000
3. J. S. Packard Dredging Co., Providence, R. I.....	16.5	66,000	28	25,200	13	26,000	117,200
4. Bowers Southern Dredging Co., Galves- ton, Tex.....	19.1	76,400	19.1	17,190	19.1	38,200	131,790
5. P. Sanford Ross (Inc.), Jersey City, N. J.	18	72,000	18	16,200	18	36,000	124,200

All bids rejected.

#### NEW LONDON (CONN.) DISTRICT.

[Officer: Lieut. Col. C. H. McKinstry, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of proposals for repair of breakwaters at Duck Island Harbor and at the mouth of the Housatonic River, Conn., opened Aug. 10, 1915.*

Bidders.	Breakwater at Duck Island Harbor, Conn., 1,700 long tons.		Breakwater at Housatonic River, Conn., 300 long tons.		Aggre- gate.	Quarry.	Remarks.
	Unit.	Total.	Unit.	Total.			
1. Estate of John Beattie, Leete Island, Conn.	\$1.02	\$1,734	\$1.21	\$363	\$2,097	Leete Island, Conn.	Can furnish meals on plant.
2. E. S. Belden & Sons, Hartford, Conn.	1.17	1,989	1.33	399	2,388	Masons Island and Millstone, Conn.	Do.

No. 1 accepted.

*Abstract of proposals for maintenance dredging in the Connecticut River below Hartford, Conn., opened Mar. 6, 1916.*

Bidders.	Price bid (estimated quantity, 100,000 cubic yards).		Remarks.
	Unit.	Total.	
1. The Hartford & New York Transportation Co., Hartford, Conn.	Cents. 14	\$14,000	Copy of authority of vice president to sign proposal not furnished; waived.
2. Bay State Dredging & Contracting Co., Boston, Mass.	28	28,000	Copy of authority of treasurer to sign proposal not furnished; waived.

No. 1 accepted.

*Abstract of proposals for maintenance dredging in Bridgeport Harbor, Conn., opened May 15, 1916.*

Bidders.	Price bid (estimated quantity, 38,300 cubic yards).	
	Unit.	Total.
1. J. P. Randerson, 35 State Street, Albany, N. Y.	Cents. 28	\$10,724.00
2. Maritime Dredging Co., New York, N. Y.	14.5	5,553.50

No. 2 accepted.

### NEW YORK (N. Y.), FIRST DISTRICT.

[Officer: Maj. M. J. McDonough, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of proposals for hire of a gasoline driven motor boat received in response to public notice of the United States Engineer office, Albany, N. Y., dated May 26, 1916, and publicly opened June 5, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works; for Hudson River, N.Y.]

Name and address of bidder.	Name of launch.	Rate per day.	Length.	Beam.	Draft.	
					Light.	Loaded.
1. Godfrey W. Smith, Albany, N. Y. ....	Cetacean.	\$10	Feet. 31 40	Feet. 8 10 $\frac{1}{2}$	Feet. 2 4	Feet. 3 $4\frac{1}{2}$
2. Harry H. Baldwin, Albany, N. Y. ....	Bilkee B..	8				

Name and address of bidder.	Name of launch.	Speed per hour.	Capacity.		Number of crew.	Gasoline used per hour.
			Cabin.	Deck.		
1. Godfrey W. Smith, Albany, N. Y. ....	Cetacean.	Miles. 10	25	.....	1	Gallons. $3\frac{1}{2}$
2. Harry H. Baldwin, Albany, N. Y. ....	Bilkee B..	8-9	25	25	1	$1\frac{1}{2}$

No. 2 accepted.

*Abstract of proposals for dredging in Tarrytown Harbor, N. Y., received in response to advertisement dated May 2, 1916, and opened at the United States Engineer office, first district, New York City, N. Y., June 1, 1916.*

Name and address.	Price per cubic yard, scow measurement, for all materials except broken rock and boulders one-half cubic yard in size or larger and ledge rock.
	Cents.
1. J. P. Randerson, Albany, N. Y.	39.8

The foregoing bid was considered excessive, and recommendation made that it be rejected.

*Abstract of proposals for towing service on the upper Hudson River received in response to public notice of the United States Engineer office, Albany, N. Y., dated Apr. 26, 1916, and publicly opened May 6, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works; for Hudson River, N. Y.]

Name and address of bidder.	Name of tug.	Dimension of—		Rate of hire.		
		Hull (feet).	Engines (inches).	Per day, if hired for one week or longer.	Per day, if hired for less than one week.	Per hour.
1. Geo. D. Cooley, Troy, N. Y.	{ Betty.....	50	11 by 12	1 \$25	1 \$27	1 \$3
2. Charles N. Lodge, Watervliet, N. Y.	{ P. Leroux..... Jas. A. Morris..	72 57	15 by 17 14 by 14	1 32 28	1 35 30	1 4 3

1 Accepted.

*Abstract of proposals for dredging and rock removal in Coenties Reef, East River, N. Y., received in response to advertisement dated March 15, 1916, and opened at the United States Engineer office, first district, New York City, N. Y., Apr. 14, 1916.*

Name and address.	Total price.
1. Morris & Cumings Dredging Co., New York City.....	\$399,643.00
2. Great Lakes Dredge & Dock Co., Boston, Mass <sup>1</sup> .....	196,900.00
3. Eugene Breymann, Boston, Mass.....	377,777.00
4. Timotny J. Dady, Brooklyn, N. Y.....	389,822.00
5. Bowers Southern Dredging Co., Galveston, Tex.....	238,434.25
6. James Stewart & Co. (Inc.), New York City.....	344,717.00

<sup>1</sup> Award recommended to Great Lakes Dredge & Dock Co., the lowest bidder.

*Abstract of proposals for the hire of a gasoline-driven motor boat, received in response to notice from the United States Engineer Office, Albany, N. Y., dated Feb. 29, 1916, and publicly opened Mar. 10, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works: for examinations, surveys, and contingencies, etc. (For survey of Hudson River from Hudson to Troy with a view to securing a depth of 27 feet with a suitable width.)]

Name and address of bidder.	Name of launch.	Rate per day.	Over-time per hour.	Length.	Beam.
1. Harry H. Baldwin, Albany, N. Y.....	Billee B.....	\$7.75	\$1.00	35	10
2. Bartel Van Der Wal, Island Creek, Albany, N. Y.....	Jennie Van.....	10.00	1.50	36	9
3. D. O. Makean, Green Island, N. Y. <sup>1</sup> .....	Frisbie 30.....	<sup>1</sup> 10.00	<sup>1</sup> 1.00	49	10

Name and address of bidder.	Draft.		Speed.	Capacity.		Number of crew.	Gasoline used per hour.
	Light.	Loaded.		Cabin.	Deck.		
1. Harry H. Baldwin, Albany, N. Y.....	Feet. 3	Feet. 4	Miles. 9	40	20	1	Gallons. 1½-3
2. Bartel Van Der Wal, Island Creek, Albany, N. Y.....	2½	3	8	40	.....	2	2
3. D. O. Makean, Green Island, N. Y. ....	3	3½	10	30	30	2	3½

<sup>1</sup>Accepted, and contract entered into Apr. 1, 1916.

*Abstract of proposals for furnishing one vertical shaft water turbine and fittings for use in connection with the operation of the Troy Lock, Hudson River, Troy, N. Y., invited Jan. 6, 1916, and opened at the United States Engineer Office, Albany, N. Y., Jan. 15, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works; for Hudson River, N. Y.]

Name and address of bidder.	With oil bath bearing on gear frame.	Spare parts.	Alternative bid.	
			With lig-num-vite bearing on crown plate.	Spare parts.
1. S. Morgan Smith Co.....	<sup>1</sup> \$2,400	<sup>1</sup> \$150	\$2,275	.....

<sup>1</sup>Accepted as modified by letter at \$2,305 for turbine and \$122 for spare parts and contract entered into Mar. 18, 1916.

## MATERIAL AND LABOR FOR ENGINEER DEPARTMENT, 1916. 11

*Abstract of proposals for furnishing two air compressors and fittings for the Troy Lock, Hudson River, Troy, N. Y., dated Dec. 29, 1915, and publicly opened at Albany, N. Y., Jan. 14, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works; for Hudson River, N. Y.]

Name and address of bidder.	For 2 tandem 2-stage air compressors, including fittings.	Spare parts for same as listed in paragraph 34.	Alternative bid.		One-fourth brake horsepower per square inch, 100 cubic feet per minute at—
			For 2 cross compound 2-stage type air compressors, including all fittings.	Spare parts for same as listed in paragraph 34.	
1. Sullivan Machinery Co., New York, N. Y. ....	\$1,807.50	\$82.75			100 lbs. 22 50 lbs. 16.8
2. Chicago Pneumatic Tool Co., New York City. ....	2,411.00	78.00			19.32 13.45
3. Chicago Pneumatic Tool Co., New York City. ....	2,411.00	78.00	\$2,785.00	\$78.00	19.32 13.45
4. International Steam Pump Co., New York City. ....	2,680.00	119.12	3,200.00	95.70	24.20 { 16.7
Do. ....			1 2,340.00	1 134.07	24 14.3
5. Bury Compressor Co., Erie, Pa. ....	2,034.00	152.04			20.5 16.7
Do. ....	1,860.00	152.04			22 16
6. Ingersoll-Rand Co., New York City. ....	3,040.00	135.00			21.2 14.5
Do. ....	2,640.00	135.00			21.2 14.5

<sup>1</sup> Accepted, and contract entered into Mar. 31, 1916.

*Abstract of proposals for furnishing one standard vertical type gasoline or oil-burning engine for the Troy Lock, Hudson River, Troy, N. Y., invited Dec. 31, 1915, and opened in the United States Engineer Office, Albany, N. Y., Jan. 12, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works; for Hudson River, N. Y.]

Name and address of bidder.	One gasoline engine, including all fittings.	Spare parts as listed in paragraph 29.	One vertical type oil-burning engine, including all fittings.	Spare parts as listed in paragraph 30.	Revolutions.	
					Maximum.	Minimum.
1. National Meter Co., New York City. ....	\$4,474.00	\$100.00			200	180
2. Fairbanks-Morse & Co., New York City			\$2,839.00	\$80.00	300	235
3. Reeves-Cubberly Engine Co., Trenton, N. J. ....	2,350.00	275.00			325	200
4. The John Lauson Manufacturing Co., New Holstein, Wis. ....	3,500.00		3,500.00			
5. Hope Engineering & Supply Co., Mount Vernon, Ohio. ....	3,274.30	75.70			275	250
6. Hope Engineering & Supply Co., Mount Vernon, Ohio. ....	3,325.00	75.70			200	165

All bids rejected.

*Abstract of proposals for dredging in Port Chester Harbor, N. Y., received in response to advertisement under specifications dated June 30, 1915, by Col. W. M. Black, Corps of Engineers, and opened at Room 710, Army Building, United States Engineer Office, First District, New York City, N. Y., July 30, 1915.*

Names and addresses of bidders.	For all materials except broken rock and boulders one-half cubic yard in size or larger, and ledge rock, per cubic yard, scow measurement (estimate, 41,000 cubic yards).	Prices fixed by paragraph 21 of specifications.		Total.
		Broken rock and boulders one-half to 3 cubic yards in size, solid measurement (no estimate).	Broken rock and boulders over 3 cubic yards in size, solid measurement (no estimate).	
1. Coastwise Dredging Co., Norfolk, Va.....	\$0.35	\$6.00	\$10.00	\$14,350.00
2. John A. Seely, New York.....	.33	.....	.....	13,530.00
3. Maritime Dredging Co., New York.....	.18	.....	.....	7,380.00
4. Eastern Dredging Co., East Boston, Mass. <sup>1</sup> .....	.17 $\frac{3}{4}$	.....	.....	7,277.50
5. John H. Gerrish, New York.....	.21 $\frac{9}{10}$	.....	.....	8,979.00

<sup>1</sup> Award made to Eastern Dredging Co.

### NEW YORK (N. Y.), SECOND DISTRICT.

[Officer: Col. F. V. Abbot, Corps of Engineers.]

#### FORTIFICATIONS.

*Abstract of proposals for one cage mast for Fort Drum, Manila, P. I., received in response to circular proposal, and opened Dec. 3, 1915, by Col. Frederic V. Abbot, Corps of Engineers.*

Name and address of bidder.	Amount of bid.	Fabricated at—	Delivered at—
1. Ellicott Machine Corporation, Baltimore, Md.....	\$8,784	Baltimore, Md..	Baltimore, Md.

*Abstract of proposals for construction and erection of a Strauss searchlight tower at Fort Hancock, N. J., received in response to circular proposal, and opened Dec. 23, 1915, by Col. Frederic V. Abbot, Corps of Engineers.*

Name and address of bidder.	Amount of bid.	
	Equipped for hand and electrical operation.	Equipped for hand operation only.
1. North-Eastern Construction Co., New York, N. Y.....	\$8,976	\$8,500
2. Ellicott Machine Corporation, Baltimore, Md.....	8,600	7,300
3. Chicago Bridge & Iron Co., Chicago, Ill.....	7,100	5,800
4. Penn Bridge Co., Beaver Falls, Pa.....	1 4,345	13,945
5. The Van Dorn Iron Works Co., Cleveland, Ohio.....	8,200	7,900

<sup>1</sup> Lowest bid.

*Abstract of proposals for construction and erection of a type C disappearing searchlight tower at Fort Hancock, N. J., received in response to circular proposal, and opened Dec. 28, 1915, by Col. Frederic V. Abbot, Corps of Engineers.*

Name and address of bidder.	Amount of bid.
1. North-Eastern Construction Co., New York, N. Y.....	\$8,444
2. Ellicott Machine Corporation, Baltimore, Md.....	6,994
3. Chicago Bridge & Iron Co., Chicago, Ill.....	5,900
4. Penn Bridge Co., Beaver Falls, Pa.....	1 5,150
5. The Van Dorn Iron Works Co., Cleveland, Ohio.....	6,700

<sup>1</sup> Lowest bid.

#### RIVERS AND HARBORS.

*Abstract of proposals for dredging in Gowanus Creek, N. Y., received in response to circular proposal, and opened Apr. 4, 1916, by Col. Frederic V. Abbot, Corps of Engineers.*

[Emergency contract dated Apr. 20, 1916.]

Name and address of bidder.	Price per cubic yard (scow measurement).	Disposal of material.
1. P. Sanford Ross (Inc.), Jersey City, N. J.....	\$0.39	Tow material to legal dumping ground.
2. Morris & Cumings Dredging Co., New York, N. Y.	<sup>1</sup> 28	Material to be disposed of at sea.

<sup>1</sup> Lowest bid.

*Abstract of bids for jetty and sand spit construction in Great South Bay, N. Y., and dredging in Browns Creek, N. Y., received in response to advertisement, and opened Apr. 10, 1916, by Col. Frederic V. Abbot, Corps of Engineers.*

Name and address of bidder.	Great South Bay.				Browns Creek, dredging.		Total amount of bid.	
	Jetty construction.		Sand-spit construction.		Per cubic yard, place measurement.	Cost, approximate quantity 12,550 cubic yards. <sup>1</sup>		
	Stone, per ton of 2,000 pounds.	Cost, approximate quantity 2,400 tons.	Per cubic yard, place measurement, in the fill.	Cost, approximate quantity 55,000 cubic yards.				
1. Tuttle & Raynor, Eastport, Long Island, N. Y.....	\$3.80	\$9,120.00	\$0.16	\$8,800.00	\$0.17	\$2,133.50	\$20,053.50	

<sup>1</sup> Exclusive of allowable overdepths, paragraph 27 of specifications.

*Abstract of proposals for furnishing power boat for use on inspections of fish traps in the waters of and adjacent to Eastern Long Island, from Riverhead to Plum Gut and Montauk Point, in the waters of Great South Bay, and in the ocean off Fire Island Beach, received in response to circular proposal, and opened Apr. 3, 1916, by Col. Frederic V. Abbot Corps of Engineers.*

Name and address of bidder.	Rate per month.	Description of boat.
1. F. Ronik, Greenport, N. Y.....	\$290.00	30 feet long; 7½ feet beam; 34 inches draft; 8 horsepower; speed, 8 miles per hour.
2. Queens Boat Co., Brooklyn, N. Y.....	1 270.00	30 feet long; 7 feet beam; 30 inches draft; 9 to 12 horsepower; speed, 10 miles per hour.
Do.....	2 225.00	Do.
3. A. P. Ganzkow, Jersey City, N. J.....	450.00	29½ feet long; 5 feet beam; 28 inches draft; 12 horsepower; speed, 12 miles.
4. H. P. Percy, Tompkinsville, N. Y.....	1,500.00	45 feet long; 25 horsepower; speed, 10 miles per hour.
5. Capt. Max' Zwickl, Hoboken, N. J.....	1,200.00	85 feet long; 12 feet beam; 6 feet draft; 150 horsepower; speed, 15 miles.
6. Mons Stenson, Brooklyn, N. Y.....	286.00	32 feet long; 10 feet beam; 30 inches draft; 15 horsepower; speed, 10 knots per hour.
7. J. P. Grady, Greenport, Long Island, N. Y.....	330.00	25 feet long; 10 horsepower; speed, 7 miles per hour.
8. Arthur P. White, Greenport, Long Island, N. Y.....	573.00	34½ feet long; 12½ feet beam; 3 feet draft; 32 horsepower; speed, 8 miles per hour.
9. Albert Conklin, Greenport, N. Y.....	400.00	30 feet long; 7½ feet beam; 34 inches draft; 8 horsepower; speed, 8 miles per hour.
10. Edward C. Rouse, Greenport, Suffolk County, N. Y.....	390.00	30 feet long; 10 feet beam; 8 horsepower; speed, 6 knots per hour.
11. Le Roy S. Reeve, Mattituck, N. Y.....	400.00	31½ feet long; 9½ feet beam; 27 inches draft; 10 to 14 horsepower; speed, 8 miles.
12. Jas. P. McAllister, New York, N. Y.....	3 185.00	32 feet long; 8 feet beam; 12 horsepower; speed, 8 miles per hour.
13. Isaac D. Swezey, Greenport, Suffolk County, N. Y.....	300.00	32½ feet long; 30 horsepower; speed, 10 to 12 miles per hour.
14. Ernest Rudolph, Brooklyn, N. Y.....	665.50	36 feet long; 12 feet beam; 3 feet draft; 25 horsepower; speed, 12 miles per hour.
Do.....	2 540.00	Do.
15. Montauk Fish Supply Co., Montauk, Long Island, N. Y.....	300.00	26 feet long; 18 horsepower; speed, 8 miles per hour.

<sup>1</sup> Price includes oil and gasoline. Accepted.

<sup>2</sup> Price if gasoline and oil are furnished by the United States.

<sup>3</sup> Boat offered not suitable.

#### WRECKS.

*Abstract of proposals for removal of wreck of motor fishing boat "Andromeda" from Gravesend Bay, N. Y., received in response to circular proposal, and opened May 11, 1916, by Col. Frederic V. Abbot, Corps of Engineers.*

[Emergency contract dated May 15, 1916.]

Name and address of bidder.	Amount of bid.	Proposed method of removal.	Proposed manner and place of final disposal.
1. Baxter Wrecking Co., New York, N. Y.	\$949, less \$2 for wreck.	Lifting wreck bodily and carrying to place of disposal.	Up ashore at headquarters, Weehawken, N. J.
2. Merritt & Chapman Derrick & Wrecking Co., New York, N. Y.	<sup>1</sup> \$487, less \$1 for wreck.	Slinging and raising with wrecking derrick.	On private property or taking to sea and dumping.

<sup>1</sup> Lowest bid.

Abstract of proposals for removal of wreck of schooner "Arlington" from East Rockaway (Debs) Inlet, N. Y., received in response to circular proposal, and opened May 24, 1916, by Col. Frederic V. Abbot, Corps of Engineers.

[Emergency contract June 5, 1916.]

Name and address of bidder.	Amount of bid.	Proposed method of removal.	Proposed manner of disposal.
1. Both & Weston, Lawrence, L. I., N. Y.	\$850.....	Pump wreck down, leaving 15 feet of water over it at low tide.	
Do.....	<sup>1</sup> \$1,275, less \$25 for wreck.	Remove wreck, taking it entirely away.	Not given.
2. Merritt & Chapman Derrick & Wrecking Co., New York, N. Y.	\$4,874, less \$1 for wreck.	Remove intact, if found practicable, otherwise blast and remove in pieces.	On private property or take to sea and dump in deep water.

<sup>1</sup> Accepted.

Abstract of proposals for removal of wreck of barge "Abbie" from Gowanus Bay, N. Y., received in response to circular proposal, and opened Mar. 20, 1916, by Col. Frederic V. Abbot, Corps of Engineers.

[Emergency contract Mar. 22, 1916.]

Name and address of bidder.	Amount of bid.	Time to complete removal.	Proposed method of removal.
1. Baxter Wrecking Co., New York, N. Y....	\$3,796, less \$2 for wreck.	Days. 35	Lifting out bodily.
2. Merritt & Chapman Derrick & Wrecking Co., New York, N. Y.	<sup>1</sup> \$2,889, less \$1 for wreck.	30	Lifting out bodily, if practicable.
3. Charles W. Johnston, Lewes, Del.....	\$8,400, less \$1 for wreck.	52	Breaking up.

<sup>1</sup> Lowest bid.

#### COAL.

Abstract of proposals for furnishing and trimming bituminous coal required by United States dredges in New York Harbor received in response to advertisement and opened Sept. 24, 1915, by Col. Frederic V. Abbot, Corps of Engineers.

Name and address of bidder.	Name of coal.	Figures from proposal.			
		Price per ton.	Per cent ash.	Per cent moisture.	British thermal units.
1. Commercial Coal Co. (Inc.), New York, N. Y.	Commercial admiralty <sup>1</sup> .....	\$3.39	8.5	3	14,400
	Commercial bituminous No. 1.	3.69	7.5	3	14,500
	Commercial bituminous No. 2.	3.39	10	3	13,750
2. Geo. D. Harris & Co. (Inc.), New York, N. Y.	Vinton.....	3.55	5	1 <sup>3</sup> <sub>4</sub>	14,600
	Indian River.....	3.45	7	1 <sup>3</sup> <sub>4</sub>	14,300
3. Willard Bros., New York, N. Y.	Ajax.....	3.45	10.5	3	14,000
	Empire.....	3.55	8.5	3	14,200
	El Mora.....	3.70	7	3	14,500
4. W. P. W. Haff, New York, N. Y.	Rockwood.....	3.39	8.96	1.78	14,100
	Victoria smokeless.....	3.49	8.12	1.44	14,250
5. Alden Coal Mining Co. (Inc.), New York, N. Y.	Vulcan smokeless.....	3.53	8.30	1.26	14,400
6. Hite & Rafetto, New York, N. Y.	South Fork district.....	3.53	7.5	3	14,450
	Bird Quemahoning.....	3.53	8.5	3	14,200

<sup>1</sup> Lowest bid for the most suitable coal; recommended for acceptance.

*Abstract of proposals for furnishing and trimming bituminous coal required by United States dredges in New York Harbor received in response to advertisement and opened Sept. 24, 1915, by Col. Frederic V. Abbot, Corps of Engineers—Continued.*

Adjusted prices.				Price per 1,000,000 British thermal units.			Total cost for estimated 17,000 tons.	
For ash.		For moisture.		Last adjusted price X by 1,000,000 2,240 X B. t. u.	Per cent sulphur.	Per cent volatile.		
Deduct (cents).	Adjusted price.	By per cent.	Adjusted price.					
1. ....	4	\$3.350	97	\$3.454	\$0.10708	2	20	\$57,630
	6	3.630	97	3.742	.11521	1 $\frac{1}{2}$	20	62,730
	1	3.380	97	3.485	.11315	1 $\frac{3}{4}$	20	57,630
2. ....	11	3.440	98 $\frac{1}{4}$	3.501	.10705	1 $\frac{1}{4}$	18	60,350
	7	3.380	98 $\frac{1}{4}$	3.440	.10739	1	20	58,650
	0	3.450	97	3.557	.11342	1 $\frac{1}{2}$	17	58,650
3. ....	4	3.510	97	3.619	.11377	1 $\frac{1}{2}$	26	60,350
	7	3.630	97	3.742	.11521	1 $\frac{1}{2}$	21	62,900
	3.1	3.359	98.22	3.420	.10828	2	18.7	57,630
4. ....	4.8	3.442	98.56	3.492	.10940	2	17.96	59,330
	4.4	3.486	98.74	3.530	.10943	2	17.77	60,010
5. ....	6	3.470	97	3.577	.11051	1 $\frac{1}{2}$	20	60,010
6. ....	4	3.49	97	3.598	.11312	1 $\frac{1}{2}$	18	60,010

## NEW YORK (N. Y.): THIRD DISTRICT.

[Officer: Lieut. Col. C. H. McKinstry, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of bids for dredging in Keyport Harbor and Shrewsbury River, N. J., received in response to advertisement and opened in room 802, Army Building, New York City, Feb. 24, 1916, by Lieut. Col. C. H. McKinstry, Corps of Engineers.*

Name and address of bidder.	Prices bid per cubic yard, scow measure- ment.	
Keyport Harbor.	Shrews- bury River.	
1. P. Sanford Ross (Inc.), Jersey City, N. J. ....	\$0.32	
2. John & Joseph McSpirit, Jersey City, N. J. ....	.30	\$0.55

Awarded to No. 2 for Keyport Harbor work; bid No. 2 rejected for Shrewsbury River work.

*Abstract of bids for dredging and removal of rock and boulders in Staten Island Sound, N. Y. and N. J., received in response to advertisement and opened in room 802, Army Building, New York City, Mar. 7, 1916, by Lieut. Col. C. H. McKinstry, Corps of Engineers.*

Name and address of bidder.	Price bid per cubic yard, place measure- ment.	Name and address of bidder.	Price bid per cubic yard, place measure- ment.
1. Leland H. Ross, Jersey City, N. J. ....	\$1.48	5. Standard American Dredging Co.; Oakland, Cal. ....	\$1.088
2. Bowers Southern Dredging Co., Gal- veston, Tex. ....	1.71	6. Eugene Breymann, Boston, Mass. ....	.49 $\frac{1}{4}$
3. Great Lakes Dredge & Dock Co., Boston, Mass. ....	1.59	7. Timothy J. Dady, Brooklyn, N. Y. ....	3.35
4. Atlantic, Gulf & Pacific Co., Park Row Building, New York, N. Y. ....	1.24	8. Coastwise Dredging Co., Norfolk, Va. 9. Morris & Cumings Dredging Co., New York, N. Y. ....	1.29 1.69

Awarded to No. 6.

*Abstract of bids for dredging in Newark Bay and Passaic River, N. J., received in response to advertisement and opened in room 802, Army Building, New York City, Feb. 29, 1916, by Lieut. Col. C. H. McKinstry, Corps of Engineers.*

Name and address of bidder.	Price bid per cubic yard.	
	Scow measurement.	Place measurement.
1. Bowers Southern Dredging Co., Galveston, Tex.	\$0.14 $\frac{1}{2}$	\$0.167
2. L. T. Gaylord, New York, N. Y.	.133	.....

Awarded to No. 2.

*Abstract of bids for dredging in Raritan River, South River, and Raritan Bay, N. J., received in response to advertisement, and opened in room 802, Army Building, New York City, Feb. 10, 1916, by Lieut. Col. C. H. McKinstry, Corps of Engineers.*

Name and address of bidder.	Price bid per cubic yard, scow measurement.		
	Raritan River.	South River.	Raritan Bay.
1. Morris & Cumings Dredging Co., New York, N. Y.	.....	.....	\$0.165
2. Coastwise Dredging Co., Norfolk, Va.	.....	.....	.19
3. P. Sanford Ross (Inc.), Jersey City, N. J.	.....	.....	.27

Awarded to No. 1.

*Abstract of bids for dredging in Newark Bay and Passaic River, N. J., received in response to advertisement, and opened in room 802, Army Building, New York City, Dec. 14, 1915, by Lieut. Col. C. H. McKinstry, Corps of Engineers.*

Name and address of bidder.	Price bid per cubic yard.	
	Scow measurement.	Place measurement.
1. L. T. Gaylord, New York, N. Y.	\$0.1357	\$0.1835
2. Standard Engineering Co., New York, N. Y.	.1489	.....
3. Morris & Cumings Dredging Co., New York, N. Y.	.28	.29
4. Seely Engineering Co. (Inc.), New York, N. Y.	.179	.....
5. Maryland Dredging & Contracting Co., Baltimore, Md.	.16	.....
6. P. Sanford Ross (Inc.), Jersey City, N. J.	.....	.....

All bids rejected.

*Abstract of bids for dredging in Shrewsbury River and for building embankment at Sandy Hook, N. J., received in response to circular, and public notice, dated Apr. 12, 1916, and opened in room 802, Army Building, Apr. 22, 1916, by Lieut. Col. C. H. McKinstry, Corps of Engineers.*

Name and address of bidder.	Prices bid.		
	Dredging.	For building embankment.	For dredging and building embankment.
1. P. Sanford Ross (Inc.), Jersey City.....			1 \$0.25
2. Standard Engineering Co., New York.....	\$0.363	\$0.1735	
3. Atlas Dredging Co., New York City.....			.149
4. Atlantic Gulf & Pacific Co., New York City.....	.28	.14	.14

<sup>1</sup> Place measurement.

None of above bids accepted.

*Abstract of bids for dredging in Hackensack River, N. J., and channel north of Shooters Island, N. Y. and N. J., received in response to advertisement, and opened in room 802, Army Building, New York City, July 15, 1915, by H. B. Gorham, assistant engineer, in absence of Col. Frederic V. Abbot, Corps of Engineers.*

Name and address of bidder.	Price bid per cubic yard, scow measurement.	
	Hackensack River.	Channel north of Shooters Island.
1. Coastwise Dredging Co., Norfolk, Va.....	\$0.1447	1 \$0.1165
2. John A. Seely, New York, N. Y.....	.26	
3. John & Joseph McSpirit, Jersey City, N. J.....	.22	
4. Wm. Beard & Co., New York, N. Y.....	.1425	.1425
5. Morris & Cumings Dredging Co., New York, N. Y.....	.25	.175
6. Timothy J. Dady, 350 Fulton Street, Brooklyn, N. Y.....	.18	.18
7. R. G. Packard Co., Bayonne, N. J.....	.21	.168
8. P. Sanford Ross (Inc.), Jersey City, N. J.....	.156	.176
9. John H. Gerrish, New York, N. Y.....		
10. Maryland Dredging & Contracting Co., Baltimore, Md.....	1 .1245	.151
11. Bowers Southern Dredging Co., Galveston, Tex.....	.135	.162

<sup>1</sup> Awarded.

*Abstract of bids for dredging in Staten Island Sound, N. Y. and N. J., received in response to advertisement and opened in room 802, Army Building, 39 Whitehall Street, New York City, May 4, 1916, by Lieut. Col. C. H. McKinstry, Corps of Engineers.*

Name and address of bidder.	Price bid per cubic yard, scow measurement.	Name and address of bidder.	Price bid per cubic yard, scow measurement.
1. Maryland Dredging & Contracting Co., Baltimore, Md.....	\$0.18	7. Coastwise Dredging Co., Norfolk, Va.....	\$0.139
2. L. T. Gaylord, New York, N. Y.....	.1347	8. Great Lakes Dredge & Dock Co., Boston, Mass.....	.21
3. Bowers Southern Dredging Co., Galveston, Tex.....	.1434	9. Atlas Dredging Co., New York, N. Y.....	.15 $\frac{1}{2}$
4. Duluth-Superior Dredging Co., Duluth, Minn.....	.14 $\frac{1}{2}$	10. Standard American Dredging Co., Oakland, Cal.....	.154
5. Eugene Breymann, Boston, Mass.....	.14 $\frac{1}{2}$	11. Morris & Cumings Dredging Co., New York City, N. Y.....	.16
6. P. Sanford Ross (Inc.), Jersey City, N. J.....	.1245	12. MacArthur Bros. Co., New York, N. Y.....	.15 $\frac{1}{2}$

Awarded to No. 6.

## WRECKS.

Abstract of bid for removal of the sunken and abandoned schooner "M. V. B. Chase," lying about three-fourths of a mile off the shore line of Sandy Hook, N. J., on the northerly shoal of the locality known as the "Oil Spot," Atlantic Ocean, received in response to public notice dated Aug. 28, 1915, and opened Sept. 7, 1915, in room 802, Army Building, New York City, by Lieut. Col. C. H. McKinstry, Corps of Engineers.

Name and address of bidder.	Price bid.
1. Merritt & Chapman Derrick & Wrecking Co., New York City, N. Y.	\$9,744 17,949

<sup>1</sup> By use of dynamite only.

Neither bid accepted.

Abstract of bids for removal of two sunken and abandoned canal boats lying in Overpeck Creek, N. J., about 400 feet west of the Bergen Turnpike Bridge at Ridgefield, received in response to public notice dated Oct. 28, and opened in room 802, Army Building, New York City, Nov. 8, 1915, by Lieut. Col. C. H. McKinstry, Corps of Engineers.

Name and address of bidder.	Price bid.	Name and address of bidder.	Price bid.
1. State Engineering Corporation, New York City, N. Y.	\$1,940	4. Baxter Wrecking Co., New York, N. Y.	\$1,344
2. Hudson River Lighterage Co., New York, N. Y.	1,600	5. Seely Engineering Co. (Inc.), New York, N. Y.	1,800
3. Merritt & Chapman Derrick & Wrecking Co., New York, N. Y.	1,489		

None of above bids accepted.

Abstract of bids for removal of wreck of a sunken and abandoned canal boat, unnamed, in the Elizabeth River near the new Baltic Street Bridge, at Elizabeth, N. J., received in response to public notice dated Aug. 12, 1915, and opened Aug. 16, 1915, in room 802, Army Building, New York City.

Name and address of bidder.	Price bid.	Name and address of bidder.	Price bid.
1. Merritt & Chapman Derrick & Wrecking Co., New York, N. Y.	\$747	3. Hudson River Lighterage Co., New York, N. Y.	\$215
2. New York Submarine Contracting Co. (Inc.), New York, N. Y.	620	4. Baxter Wrecking Co., New York, N. Y.	650

Awarded to No. 3.

## PHILADELPHIA, PA., DISTRICT.

(Officer: Col. Geo. A. Zinn, Corps of Engineers.)

## RIVERS AND HARBORS.

Abstract of proposals for furnishing and placing riprap in Delaware River at Artificial Island, received in response to advertisement of June 18, 1915, and opened on July 8, 1915, by Col. Geo. A. Zinn, Corps of Engineers.

[Appropriation: "Maintenance and improvement of existing river and harbor works" (Delaware River from Philadelphia, Pa., to the sea).]

Name and address of bidder.	Approximate quantity of riprap stone; 12,000 tons of 2,000 pounds.	
	Unit price.	Amount.
1. C. R. Simpson, New York, N. Y.	\$1.72	\$20,640
2. Ellis D. Thompson, Philadelphia, Pa.	1.89	22,680
3. Coast & Lakes Contracting Corporation, New York, N. Y.	1.39	16,680
4. Edmund S. Sickles, New Baltimore, N. Y.	2.18	26,160

<sup>1</sup> Accepted.

*Abstract of proposals for dredging in Delaware River on Bellevue and Cherry Island light-house ranges, opened Aug. 9, 1915, by Col. Geo. A. Zinn, Corps of Engineers.*

[Appropriation: "Maintenance and improvement of existing river and harbor works" (Delaware River from Philadelphia, Pa., to the sea).]

Name and address of bidder.	Section F, approximate quantity of material; 1,555,000 cubic yards, scow measurement.		Section G, approximate quantity of material; 1,875,000 cubic yards, scow measurement.		Section H, approximate quantity of material; 1,830,000 cubic yards, scow measurement.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
1. Atlantic, Gulf & Pacific Co., New York, N. Y.....	\$0.114	\$177,270.00	\$0.114	\$213,750.00	.....	.....
2. Home Dredging Co., Mobile, Ala.....	.12	186,600.00	.12	225,000.00	.....	.....
3. Eastern Dredging Co., Boston, Mass.....	.126	195,930.00	.126	236,250.00	\$0.126	\$230,580.00
4. Bowers Southern Dredging Co., Galveston, Tex.....	.117	181,935.00	.....	.....	.....	.....
5. American Dredging Co., Philadelphia, Pa.....	.0925	143,837.50	.1045	195,937.50	.0995	182,085.00
6. P. Sanford Ross (Inc.), Jersey City, N. J.....	.....	.....	.124	232,500.00	.....	.....
7. Maryland Dredging & Contracting Co., Baltimore, Md.....	.....	.....	.104	195,000.00	.....	.....

#### ALTERNATE PROPOSALS.

Name and address of bidder.	Sections F and H, approximate quantity of material, 3,385,000 cubic yards, scow measurement.		Sections G and H, approximate quantity of material, 3,705,000 cubic yards, scow measurement.		Sections F, G, and H, approximate quantity of material, 5,260,000 cubic yards, scow measurement.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
1. Atlantic, Gulf & Pacific Co., New York, N. Y.....	\$0.113	\$382,505.00	\$0.113	\$418,665.00	\$0.11	\$578,600.00

All bids rejected.

*Abstract of proposals for furnishing and placing riprap in Delaware River at Mifflin Bar Dike, opened on Oct. 14, 1915, by Col. Geo. A. Zinn, Corps of Engineers.*

[Appropriation: "Maintenance and improvement of existing river and harbor works" (Delaware River from Philadelphia, Pa., to the sea).]

Name and address of bidder.	Approximate quantity of riprap stone, 30,000 tons of 2,000 pounds.	
	Unit price.	Amount.
1. Coast & Lakes Contracting Corporation, New York, N. Y.....	\$1.36	\$40,800
2. C. R. Simpson, New York, N. Y.....	2.21	66,300
3. Peoples Bros. (Inc.), Philadelphia, Pa.....	1.74	52,200
4. Manwaring & Cummins, Philadelphia, Pa.....	2.25	67,500

<sup>1</sup> Accepted.

*Abstract of proposals for dredging in Delaware River on Bellevue, Cherry Island, and Deep Water Point lighthouse ranges, opened on Nov. 22, 1915, by Col. Geo. A. Zinn, Corps of Engineers.*

[Appropriation: "Maintenance and improvement of existing river and harbor works" (Delaware River from Philadelphia, Pa., to the sea).]

Name and address of bidder.	Section F, approximate quantity of material, 800,000 cubic yards, scow measurement.		Section H, approximate quantity of material, 1,360,000 cubic yards, scow measurement.		Section J, approximate quantity of material, 1,420,000 cubic yards, scow measurement.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
1. Bowers Southern Dredging Co., Galveston, Tex.			\$0.1045	\$142,120		
2. Coastwise Dredging Co., Norfolk, Va.	\$0.0935	\$74,800	.0935	127,160	\$0.0935	\$132,770
3. Home Dredging Co., Mobile, Ala.						
4. American Dredging Co., Philadelphia, Pa.	.089	71,200	.0945	128,520	.093	132,060
5. Atlantic, Gulf & Pacific Co., New York, N. Y.	.118	94,400	.113	153,680	.113	160,460

#### ALTERNATE PROPOSALS.

Name and address of bidder.	Sections F and J, approximate quantity of material, 2,220,000 cubic yards, scow measurement.		Sections H and J, approximate quantity of material, 2,780,000 cubic yards, scow measurement.		Sections F, H, and J, approximate quantity of material, 3,580,000 cubic yards, scow measurement.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
1. Bowers Southern Dredging Co., Galveston, Tex.	\$0.1030	\$228,660	\$0.10	\$278,000		
2. Coastwise Dredging Co., Norfolk, Va.						
3. Home Dredging Co., Mobile, Ala.			.088	246,725		
4. American Dredging Co., Philadelphia, Pa.					1 \$0.092	\$329,360
5. Atlantic, Gulf & Pacific Co.	.115	255,300	.108	300,240	.11	393,800

<sup>1</sup> Accepted.

#### COAL.

*Abstract of proposals for furnishing and delivering bituminous coal to the floating plant employed in the Philadelphia (Pa.) engineer district, opened on May 29, 1916, by Col. Geo. A. Zinn, Corps of Engineers.*

[Appropriation: "Maintenance and improvement of existing river and harbor works" (Delaware River from Philadelphia, Pa., to the sea).]

Name and address of bidder.	Coal for vessels of class 1—approximate quantity, 20,000 tons.			Coal for vessels of class 2—approximate quantity, 3,000 tons.			Coal for vessels of class 3—approximate quantity, 2,000 tons.			Total for classes 1, 2, and 3.
	Unit price.	Amount.	Cost of 1,000,000 British thermal units.	Unit price.	Amount.	Cost of 1,000,000 British thermal units.	Unit price.	Amount.	Cost of 1,000,000 British thermal units.	
1. B. Nicoll & Co., Philadelphia, Pa.	\$3.57	\$71,400	\$0.1125	\$3.05	\$9,150	\$0.0961	\$3.20	\$6,400	\$0.1009	\$86,950
2. Sterling Coal Co., Philadelphia, Pa.	3.52	170,400	.1096	3.08	19,240	.0959	3.23	16,460	.1005	186,100

<sup>1</sup> Accepted.

## WRECKS.

*Abstract of proposals for removing wrecks of schooners Carrie Haley and Ethel, lying sunken in Delaware Bay, near Ship John Light, received in response to circular letter and specifications issued on Apr. 3, 1916, and opened on Apr. 24, 1916, by Col. Geo. A. Zinn, Corps of Engineers.*

Name and address of bidder.	For breaking up the wrecks with explosives.	For raising and removing the wrecks as a whole.	Time of completion.
1. Jesse A. Gray, Camden, N. J.....	\$1,884	\$2,242	Within 3 months after date of contract.
2. Charles W. Johnston, Lewes, Del.....	975	Do.	
3. Eugene Boehm, Atlantic City, N. J.....	<sup>1</sup> 772	Do.	
4. N. B. Register, Lewes, Del.....	1,385	5,000	Do.
5. J. Frank Owens, Wilmington, Del.....	1,500	Do.	

<sup>1</sup> Accepted.

## WILMINGTON (DEL.) DISTRICT.

[Officer: Maj. E. N. Johnston, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for repairs to jetties at mouth of Mispillion River, Del., received at United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened Aug. 5, 1915.*

[Allotment from appropriation for maintenance of Mispillion River, Del.]

Name and address of bidder.	3 pine piles, about 80 linear feet, at per linear foot.		1,200 cubic yards of stone, at per cubic yard, in place.		1,800 linear feet of round timber, at per linear foot, in place.	
	Unit price.	Total.	Unit price.	Total.	Unit price.	Total.
1. Ralph M. Brown, New York City.....	\$0.55	\$44.00	\$3.35	\$4,020.00	\$0.55	\$990.00
2. Jones Construction Co., Wilmington, Del.....	.50	40.00	5.00	6,000.00	.20	360.00
3. C. R. Simpson, New York City <sup>1</sup> .....	1.30	104.00	4.20	5,040.00	.39	702.00
4. Coast & Lakes Contracting Corporation, New York City.....	1.62	129.60	3.30	3,960.00	.58	1,044.00
5. Richard Parrott, Newburgh, N. Y.....	.50	40.00	5.00	6,000.00	.50	900.00

Name and address of bidder.	1,000 pounds of iron, at per pounds, in place.		Treating 5,800 tops of piles for the sum of—	Grand total.	Time of commencement.	Time of completion.
	Unit price.	Total.				
1. Ralph M. Brown, New York City.....	\$0.08	\$80.00	\$1,624.00	\$6,758.00	30 days..	3 months.
2. Jones Construction Co., Wilmington, Del.....	.10	100.00	1,740.00	8,240.00	...do....	Do.
3. C. R. Simpson, New York City <sup>1</sup> .....	.05 <sup>1</sup> <sub>2</sub>	55.00	348.00	6,249.00	...do....	Do.
4. Coast & Lakes Contracting Corporation, New York City.....	.38	380.00	1,043.00	6,556.60	...do....	Do.
5. Richard Parrott, Newburgh, N. Y.....	.10	100.00	2,842.00	9,882.00	...do....	Do.

<sup>1</sup> Lowest; accepted.

*Abstract of proposals for dredging Murderkill and Mispillion Rivers, Del., received at United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened Sept. 7, 1915.*

[Allotments from appropriation for maintenance and improvement of Murderkill and Mispillion Rivers.]

Name and address of bidder.	Dredging Murderkill River, Del., at per cubic yard, place measurement; estimated quantity 28,000 cubic yards.		Dredging Mispillion River, Del., at per cubic yard, place measurement; estimated quantity, 14,000 cubic yards.		Time of beginning work.	Time of completion.	Originally estimated cost, place measurement.	
	Total.	Total.	Grand total.	Total.			Murderkill River.	Mispillion River.
1. The Richards Dredging Co., Philadelphia, Pa.	\$0.158	\$4.424	\$0.119	\$1.066	\$6.090	30 days..	6 months..	13 cents per cubic yard. ...do.....
2. River & Harbor Improvement Co., Philadelphia, Pa.	.137	3.836	.158	2.213	16.048	...do.....	...do.....	15 cents per cubic yard. ...do.....

<sup>1</sup> Lowest; Accepted.

*Abstract of proposals for furnishing and placing stone for repairs to jetties, Cold Spring Inlet, N. J., received at United States Engineer office, Wilmington, Del., and opened Aug. 30, 1915.*

Name and address of bidder.	9,000 tons of 2,000 pounds, in place (per ton).	Total.	Time of beginning work.	Time of completion.
1. The estate of John Beattie, Leete Island, Conn.....	\$4.80	\$43,200.00	30 days..	6 months.
2. Coast & Lakes Contracting Co., New York City.....	3.38	<sup>1</sup> 29,520.00	...do.....	Do.
3. C. R. Simpson, New York City.....	3.44	30,960.00	...do.....	Do.

<sup>1</sup> Lowest; accepted.

Lowest. Acceptance recommended, contingent upon transfer or allotment requested Sept. 17, 1915, Remainder of amount required for the work will be covered by balance of available funds on hand.

The originally estimated cost is \$3.35 per ton of 2,000 pounds.

*Abstract of proposals for dredging Smyrna River, Del., received by Col. John Biddle, Corps of Engineers, in response to printed notice and opened Apr. 26, 1916, at United States Engineer office, Wilmington, Del.*

[Appropriation for improving Smyrna River, Del.]

Name and address of bidder.	Price for dredging.		Time of beginning work.	Time of completion.	Originally estimated cost, place measurement.
	Unit price per cubic yard, place measurement.	Total estimated cost 115,000 cubic yards, place measurement.			
1. The Rickards Dredging Co., Philadelphia, Pa.	\$0.143	\$16,445	.....	.....	.....
2. The Maryland Dredging & Contracting Co., Baltimore, Md.	.17	19,550	30 days..	8 months..	15 cents per cubic yard.
3. River & Harbor Improvement Co., Philadelphia, Pa.	.89	<sup>1</sup> 10,235	.....	.....	.....

<sup>1</sup> Lowest. Accepted.

*Abstract of proposals for dredging Raccoon Creek, N. J., received by Col. John Biddle, Corps of Engineers, in response to printed notice and opened May 8, 1916, at United States Engineer office, Wilmington, Del.*

[Allotment from appropriation for maintenance and improvement of Raccoon Creek, N. J.]

Name and address of bidder.	Price for dredging.		Time of beginning work.	Time of completion.	Originally estimated cost, place measurement.
	Unit price per cubic yard, place measurement.	Total estimated cost 21,000 cubic yards, place measurement.			
1. River & Harbor Improvement Co., Philadelphia, Pa.	\$0.17 $\frac{3}{4}$	1 \$3,727.50	30 days..	4 months..	17 cents per cubic yard.
2. The Rickards Dredging Co., Philadelphia, Pa.	.23	4,830.00	-----	-----	-----

<sup>1</sup> Lowest. Accepted.

*Abstract of proposals for furnishing and placing stone for repairs to jetty at mouth of Broadkill River, Del., received at United States Engineer office, Wilmington, Del., and opened May 26, 1916.*

Name and address of bidder.	2,400 cubic yards of stone in place at per cubic yard.	Total.	Time of beginning work.	Time of completion.	Remarks.
1. C. R. Simpson, New York City.....	\$5.72	1 \$13,728.00	30 days..	3 months..	Or \$4.90 per ton of 2,000 pounds.
2. Coast & Lakes Contracting Corporation, New York City.	7.00	16,800.00	-----	-----	

<sup>1</sup> Accepted.

*Abstract of proposals for purchase of condemned property received at United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened June 30, 1916.*

Name and address of bidder.	10 $\frac{1}{2}$ yards carpet, for the lot.	4 mattresses, for the lot.	3 pillows, for the lot.	1 stove, for the lot.	1 vise, pipe, for the lot.	Total.
1. Harry Townsend, Wilmington, Del.....	\$0.05	\$0.02	\$0.02	\$0.02	\$0.05	\$0.16

Accepted.

Abstract of proposals for furnishing and delivering printed specifications required during period beginning July 1, 1916, and ending June 30, 1917, received at United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened June 20, 1916.

[Expenditures chargeable to the several works of improvement on account of which the job printing is from time to time required.]

Name and address of bidder.	Time of delivery after receipt of manuscript.	For the composition per 1,000 ems, at per 1,000.	Press work per token, 4 pages to each token, at per token for 150 copies or less.	Press work per token, 4 pages to each token, at per token for between 150 and 200 copies.	Paper, which must include binding, etc., at per ream.
1. Mercantile Printing Co., Wilmington, Del.	Days. 3	\$0.75	\$1.50	\$1.75	\$5.60
2. Government Printing Office, Washington, D. C. <sup>1</sup>	(2)	.61	1.50	1.50	1.41

<sup>1</sup> Accepted.

<sup>2</sup> 6 days after receipt of order (excluding number of days proof may be out of office.)

Abstract of proposals for installation of drag engine control on United States dredge Minquso, received at United States Engineer Office, Wilmington, Del., by Col. John Biddle, Corps of Engineers, and opened Mar. 24, 1916, in response to circular letter and poster.

[Allotment from appropriation for Wilmington Harbor, Del.]

Name and address of bidder.	Time of delivery.	To furnish the materials and labor required and install the drag engine control for the sum of—	Remarks.
1. Spedden Shipbuilding Co., Baltimore, Md.	Days. 105	\$1,145.00	
2. Ellicott Machine Corporation, Baltimore, Md.	90	1,985.00	
3. Walker & Elliott, Wilmington, Del.			No bid.
4. Remington Machine Co., Wilmington, Del.			Do.

<sup>1</sup> Accepted.

Abstracts of proposals for dredging Tuckerton Creek and Absecon Creek, N. J., received at United States Engineer Office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened July 24, 1915.

[Appropriation for improving Tuckerton Creek, N. J., and for improving Absecon Creek, N. J.]

Name and address of bidder.	Dredging Tuckerton Creek, N. J., at per cubic yard place measurement; estimated quantity, 25,000 cubic yards.		Dredging Absecon Creek, N. J., at per cubic yard place measurement; estimated quantity, 30,000 cubic yards.	Time of beginning work.	Time of completion.	Originally estimated cost, place measurement.	
	Total.	Grand total.				Tuckerton Creek, N. J.	Absecon Creek, N. J.
1. The Rickards Dredging Co., Philadelphia, Pa.	\$0.20	\$5,000.00	\$0.18	\$5,400	\$10,400.00	30 days..	11 months.
2. Hill Dredging Co., Atlantic City, N. J.	.1975	4,937.50	.139	4,170	19,107.50	...do.....	...do.....

<sup>1</sup> Lowest, accepted.

Abstract of proposal for furnishing and delivering 16-inch steel discharge pipe for United States dredge "Minquas," received at United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened July 26, 1915.

[Appropriation for improving Wilmington Harbor, Wilmington, Del.]

Item.	No. 1. Spedden Ship-building Co., Baltimore, Md.; delivery after 70 days.		No. 2. Ellicott Machine Corporation, Baltimore, Md.; delivery after 75 days.		No. 3. <sup>1</sup> American Spiral Pipe Works, Chicago, Ill.; delivery after 65 days.		No. 4. <sup>2</sup> Lancaster Iron Works, Lancaster, Pa.; delivery after 30 days.	
	Unit price.	Total price.	Unit price.	Total price.	Unit price.	Total price.	Unit price.	Total price.
1. 1,600 feet (100 lengths) lap-welded steel pipe, 16 inches diameter, No. 10 gauge, as per specifications.....	\$2.09	\$3,344.00	\$2.12	\$3,392.00	\$1.80	\$2,880.00	\$1.05	\$1,680.00
2, 3, 4, 5, 60 feet (4 lengths) lap-welded steel pipe, 16 inches diameter, $\frac{1}{8}$ -inch thick, as per specifications.....	2.92	175.20	3.02	181.20	2.50	150.00	1.55	93.00
6. 16-foot lap-welded steel pipe, $45^\circ$ bend, 26 inches diameter, $\frac{1}{8}$ inch thick, as per specifications.....	6.38	102.08	6.46	103.36	5.50	88.00	3.00	48.00
7. 1 ball joint, cast steel, $16\frac{1}{2}$ inches diameter, with $20^\circ$ swing, complete, as per drawing and specifications.....	244.00	244.00	234.00	234.00	258.00	258.00	250.00	250.00
8. 5 wrought-iron clamp bends, 3 inches by $\frac{3}{4}$ inch, to fit 16-inch pipe, as per specifications.....	5.50	27.50	5.70	28.50	4.50	22.50	2.50	12.50
9. 8 wrought-iron screw-clamp bands, standard size, to fit over rubber dredging sleeves (about 20-inch C. D. sleeves).....	4.40	35.20	4.60	36.80	3.85	30.80	1.90	15.20
10. 225 adjustable double-screw clamps to attach to lugs on 16-inch pipe for holding pipes together.....	1.76	396.00	1.78	400.50	1.50	337.50	2.00	450.00
11. 4 rubber dredging sleeves, $17\frac{1}{2}$ inches inside diameter, 36 inches long, as per specifications.....	71.00	284.00	74.00	296.00	43.00	172.00	70.00	280.00
Grand total.....		4,607.98		4,672.36		3,938.80		2,828.70

<sup>1</sup> Lowest bid for lap-welded pipe. Accepted except for item 7 (1 ball joint). Time reduced later to 40 days.

<sup>2</sup> This bid is for riveted and not for lap-welded pipe.

## COAL.

Abstract of proposals for furnishing and delivering 3,000 tons of bituminous coal to the dredge "Minquas," at Wilmington, Del., received at United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened June 19, 1916.

[Appropriations or allotments made for improving harbor at Wilmington, Del.]

Name and address of bidder.	Price bid per ton of 2,240 pounds.	Commercial name of coal.	Moisture in coal.	Ash in dry coal.	Volatile matter in dry coal.	Sulphur in dry coal.	British thermal units in dry coal.
1. Charles Warner Co., Wilmington, Del. <sup>1</sup>	<sup>2</sup> \$4.25	Warner No. 5.	Per ct. 1.6	Per ct. 10	Per cent. 16	Per cent. 1.8	13,400
2. Burtner Coal Co. (Inc.), Philadelphia, Pa.	<sup>3</sup> 3.35	Burtner...	2.35	8.9	25	1.6	14,019

<sup>1</sup> Lowest. Accepted.

<sup>2</sup> In accordance with the specifications. Delivery to be made into bunkers of dredge at dock of engineer depot by teams or motor trucks direct from railroad cars, or from coal stored at engineer depot; 48 hours notice required before each coaling.

<sup>3</sup> Not in accordance with specifications f. o. b. Wilmington, Del.

The originally estimated cost is \$4.50 per ton.

Abstract of proposals for furnishing and delivering 3,000 tons of bituminous coal to the dredge "Absecon," at Atlantic City, N. J., received at the United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened June 19, 1916.

[Appropriations or allotments made for improving harbor at Absecon Inlet, N. J.]

Name and address of bidder.	Price bid per ton of 2,240 pounds.	Commercial name of coal.	Moisture in coal.	Ash in dry coal.	Volatile matter in dry coal.	Sulphur in dry coal.	Adjusted prices.			
							British thermal units in dry coal.	For moisture.	For ash.	Cost of 1,000,000 British thermal units.
1. Hetherington & Co., Philadelphia, Pa.	\$5.10	Chester <sup>1</sup> ...	P. ct. 3	P. ct. 8.25	P. ct. 20	P. ct. 1.5	14,250	\$5.258	\$5.258	\$0.1647
2. McAllister Coal Co., Atlantic City, N. J.	<sup>2</sup> 4.85	Portage <sup>1</sup> ...	3	8.5	20	1.75	14,150	5.000	5.006	.1579
3. Burtner Coal Co. (Inc.), Philadelphia, Pa.	3.70	Burtner <sup>3</sup> ...	2.35	8.9	25	1.6	14,019	.....	.....	.....

<sup>1</sup> Delivery to be made into bunkers of dredge at dock of Engineer depot.

<sup>2</sup> Lowest. Accepted.

<sup>3</sup> Delivery not in accordance with specifications, but f. o. b. cars Atlantic City, N. J. No guaranty.

The originally estimated cost is \$4.50 per ton.

*Abstract of proposals for furnishing and delivering 3,000 tons of bituminous coal to the dredge "Minquas," at Wilmington, Del., received at United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened Sept. 8, 1915.*

[Allotment for Wilmington Harbor, Del., from appropriation for maintenance and improvement.]

Name and address of bidder.	Price per ton of 2,240 pounds.	Commercial name of coal.	Moisture in coal.		Volatile matter in dry coal.		Sulphur in dry coal.		British thermal units in dry coal.		Adjusted prices.	
			P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	For ash.	For moisture.
1. Charles Warner Co., Wilmington, Del. <sup>1</sup>	[\$3.95 2.75 3.05 3.95 4.35]	Warner No. 5.... Lloydell (south fork).	1.6 3	9.5 6.5	16 18	1.8 1	14,000 14,500	(\$3.95 2.75 3.05 3.95 4.29)	\$4.014 2.795 3.009 4.014 4.423	\$0.1279 .0891 .0988 .1279 .1361		
2. Dexter & Carpenter (Inc.), Philadelphia, Pa.												

<sup>1</sup> Lowest. Accepted.

The prices are for delivery at different places.  
The originally estimated cost is \$3.50 per ton.

*Abstract of proposals for furnishing and delivering 3,000 tons of bituminous coal, received at the United States Engineer office, Wilmington, Del., by Maj. E. N. Johnston, Corps of Engineers, and opened July 12, 1915.*

[Appropriation for the improvement of Absecon Inlet, N. J.]

Name and address of bidder.	Price per ton of 2,240 pounds.	Commercial name of coal.	Moisture in coal.		Volatile matter in dry coal.		Sulphur in dry coal.		British thermal units in dry coal.		Adjusted prices.	
			Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	For ash.	For moisture.
1. Wm. Lewis Co., Atlantic City, N. J.	\$4.50	Harrison - Que-mahoning.	2	8	18	1.35	14,300	\$4.48	\$4.572	\$0.1427		
2. Hetherington & Co., <sup>2</sup> Philadelphia, Pa.	4.23	Moshannon.....	2.5	6	21.5	1.25	14,400	4.17	4.277	.1326		
3. Maryland Coal & Coke Co., Philadelphia, Pa.	4.45	Imperial.....	2	5	21	.8	14,700	4.37	4.459	.1354		
Maryland Coal & Coke Co.—Al- ternate bid.	4.35	Bernice.....	2	7.5	22	1.5	14,300	4.32	4.408	.1371		
4. McAllister Coal Co., Atlantic City, N. J.	4.55	Monitor.....	2	{ 8.5 to 9.5. Av. 9.	{ 17.5 to 18. Av. 17.51.	1.5	13,800	4.55	4.643	.1502		

<sup>1</sup> Certified check for \$3,000 accompanying.

<sup>2</sup> Lowest. Accepted.

The originally estimated cost is \$4.50 per ton.

## BALTIMORE (MD.) DISTRICT.

[Officer: Lieut. Col. C. A. F. Flagler, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for dredging rivers and harbors on east shore of Chesapeake Bay, opened Sept. 15, 1915, by Maj. H. W. Stickle, Corps of Engineers, under advertisement.*

Appropriation: Maintenance and improvement of existing river and harbor works (for Queenstown and Claiborne Harbors, Chester, Choptank, Warwick, La Trappe, Wicomico, and Manokin Rivers, Tyaskin Creek, Elk and Little Elk, and Corsica Rivers, Md.)

Works.	Name and address of bidder.								Originally estimated cost per cubic yard.	
	Approximate quantities, scow measurement.	No. 1, Maryland Dredging & Contracting Co., Fidelity Building, Baltimore, Md. <sup>1</sup>		No. 2, Dorsey & Miller Co., 205 Corcoran Building, Washington, D.C.		No. 3, River and Harbor Improvement Co., Mariner & Merchants Building, Philadelphia, Pa.		No. 4, Norfolk Dredging Co., 303 Water Street, Norfolk, Va.		
		Price per cubic yard.	Total.	Price per cubic yard.	Total.	Price per cubic yard.	Total.	Price per cubic yard.		
For the whole work	<i>Cubic yds.</i>	<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>		
Queenstown Harbor	158,250	26 $\frac{1}{2}$	\$41,936.25	27 $\frac{3}{4}$	\$43,914.38	27	\$42,727.50	29	\$45,892.50	
Claiborne Harbor	10,000	.....	.....	.....	.....	.....	.....	.....	20	
Chester River	6,750	.....	.....	.....	.....	.....	.....	.....	20	
Choptank River	16,000	.....	.....	.....	.....	.....	.....	.....	20	
Warwick River	15,000	.....	.....	.....	.....	.....	.....	.....	20	
La Trappe River	10,000	.....	.....	.....	.....	.....	.....	.....	20	
Wicomico River	8,500	.....	.....	.....	.....	.....	.....	.....	20	
Manokin River	20,000	.....	.....	.....	.....	.....	.....	.....	20	
Tyaskin Creek	17,000	.....	.....	.....	.....	.....	.....	.....	20	
Elk and Little Elk Rivers	20,000	.....	.....	.....	.....	.....	.....	.....	20	
Corsica River	17,000	.....	.....	.....	.....	.....	.....	.....	20	
	18,000	.....	.....	.....	.....	.....	.....	.....	20	

<sup>1</sup>Lowest.

Will complete in — (par. 15 of specifications).  
Contract awarded to Maryland Dredging & Contracting Co.

*Abstract of proposals for groceries and provisions for U. S. S. Sentinel for the calendar year 1916, opened Dec. 15, 1915, by Col. John Biddle, Corps of Engineers, under advertisement dated Nov. 15, 1915.*

[Appropriations: All pertaining to the district.]

	Name and address of bidder.	Total of bid.
1. Aug. Kuenne, Baltimore, Md.....		\$2,492.28

Contract awarded to Aug. Kuenne.

*Abstract of proposals for dredging in Patapsco River, Md., June 15, 1916, by Col. John Biddle, Corps of Engineers, under advertisement.*

[Appropriation: Improving Patapsco River, Md.]

Name and address of bidder.	Price per cubic yard.	Total for the work.
1. Coastwise Dredging Co., Norfolk, Va.	11.9	\$35,700
2. Sanford & Brooks Co., Baltimore, Md.	15	45,000
3. Maryland Dredging & Contracting Co., Baltimore, Md. <sup>1</sup>	8 $\frac{3}{4}$	26,250

<sup>1</sup> Lowest.

Approximate quantity, scow measurement, 300,000 cubic yards.  
Originally estimated cost per cubic yard, 10 cents.

Contract awarded to Maryland Dredging & Contracting Co.

*Abstract of proposals for dredging in Elk and Little Elk Rivers, Md., June 30, 1916, by Col. John Biddle, Corps of Engineers, under advertisement.*

[Appropriation: Maintenance and improvement of existing river and harbor works (for Elk and Little Elk Rivers, Md.)]

Name and address of bidder.	Price per cubic yard.	Total for the work.
1. River & Harbor Improvement Co., Philadelphia, Pa.	32	\$5,536
2. Maryland Dredging & Contracting Co., Baltimore, Md.	27	4,671

<sup>1</sup> Lowest.

Approximate quantity, scow measurement, 17,300 cubic yards.  
Originally estimated cost per cubic yard, 20 cents.

Contract awarded Maryland Dredging & Contracting Co.

## WASHINGTON (D. C.) DISTRICT.

[Officer: Lieut. Col. C. A. F. Flagler, Corps of Engineers.]

### RIVERS AND HARBORS.

*Abstract of proposals for dredging in Anacostia River, D. C., received in response to advertisement opened at the United States Engineer Office, Washington, D. C., Dec. 18, 1915, by Lieut. Col. C. A. F. Flagler, Corps of Engineers.*

[Reclamation of Anacostia River Flats, D. C.]

Name and address of bidder.	Per cubic yard (sec. 1).	Total, 500,000 cubic yards (sec. 1).	Per cubic yard (sec. 2).	Total, 300,000 cubic yards (sec. 2).	Total, 800,000 cubic yards (secs. 1 and 2).
1. Bowers Southern Dredging Co., Galveston, Tex.	8	\$40,000	5	\$15,000	\$55,000
2. Sanford & Brooks Co., Baltimore, Md.	6.45	32,250	4.95	14,850	47,100
3. Atlantic, Gulf & Pacific Co., New York.	6.9	34,500	6.9	20,700	55,200
4. Coastwise Dredging Co., Norfolk, Va.	6.7	33,500	6.7	20,100	53,600
5. Maryland Dredging & Contracting Co., Baltimore, Md.	5.5	27,500	5.5	16,500	44,000

*Abstract of proposals for steel derrick boat received in response to advertisement, and opened at the United States Engineer Office, Washington, D. C., Aug. 23, 1915, by Lieut. Col. C. A. F. Flagler, Corps of Engineers.*

[Reclamation of Anacostia River Flats, D. C.]

Data.	No. 1, Spedden Shipbuilding Co., Baltimore, Md.	No. 2, the Dravo Contracting Co., Pittsburgh, Pa.	No. 3, Elliott Machine Corporation, Baltimore, Md.	No. 4, the Valk & Murdoch Co., Charleston, S. C.
<i>Proposal A.</i>				
Steel derrick boat, complete, as specified .....	\$43,770.00	1 \$23,750.00	\$34,742.00	\$34,650.00
<i>Proposal B.</i>				
Furnishing dry back Scotch boiler, instead of wet back boiler specified, deduct from price stated in Proposal A .....	200.00	100.00	600.00	150.00
<i>Proposal C.</i>				
Adding 2 feet to length of hull forward of derrick and widening beam 2 feet, add to price stated in Proposal A .....	625.00	550.00	600.00	400.00

<sup>1</sup> Recommended for acceptance.  
Spedden Shipbuilding Co. submitted no evidence to show authority of H. M. Addison to sign for corporation.

Valk & Murdoch Co. submitted a certified check for \$3,000 in lieu of written guaranty.

The Dravo Contracting Co. submitted with bid alternative design for derrick rig for which they offered to deduct \$500 from prices bid.

*Abstract of proposals for construction of motor launch "Averill," received in response to advertisement and opened at United States Engineer Office, Washington, D. C., June 12, 1916, by Lieut. Col. C. A. F. Flagler, Corps of Engineers.*

[Reclamation of Anacostia River Flats, D. C.]

Name and address of bidder.	Cost of construction.
1. Camden Anchor-Rockland Machine Co., Camden, Me.....	\$3,200.00
2. The Matthews Co., Fort Clinton, Ohio.....	5,640.00
3. Murray & Tregurtha Co., South Boston, Mass.....	5,541.00
4. Rice Bros. Co., East Boothbay, Me.....	4,600.00
5. Racine Boat Co., Racine, Wis.....	3,350.00
6. Chance Marine Construction Co., Annapolis, Md.....	2,472.00
7. Jacob F. Friend and Alonso L. Arnold, Bay City, Mich.....	2,940.00
8. John Baxter, Wilmington, Del.....	3,493.60
9. Burger Boat Co., Manitowoc, Wis.....	2,960.00

*Abstract of proposals for riprap and building stone, received in response to advertisement and opened at the United States Engineer Office, Washington, D. C., May 15, 1916, by Lieut. Col. C. A. F. Flagler, Corps of Engineers.*

[Reclamation of Anacostia River Flats, D. C.]

Name of bidder.	Riprap, 50,000 cubic yards.		Building stone, 4,000 cubic yards.		Total.
	Per cubic yard.	Total.	Per cubic yard.	Total.	
1. Columbia Granite & Dredging Co., Washington, D. C.....	\$1.74	\$87,000.00	\$2.25	\$9,000.00	\$96,000.00

Recommended for acceptance.

## WASHINGTON AQUEDUCT, D. C.

Abstract of proposals for sulphate of alumina received in response to advertisement opened at the United States Engineer office, Washington, D. C., Mar. 6, 1916, by Lieut. Col. C. A. F. Flagler, Corps of Engineers.

Name and address of bidder.	Price per ton (bags).	Off for bags.	Ship first carload within—	Complete shipment in—
1. Universal Trading Co., New York City.....	\$98.49	\$0.06	10 days.	1 carload every 30 days.

REMARKS: Did not bid on specifications; bid as follows:

"We note specifications defining the quality of sulphate of alumina, and wish to take exception to the following wording: 'At least 6 per cent of its weight is in excess of the amount theoretically required to combine with the sulphuric acid present.' The sulphate of alumina we offer contains not less than 17 per cent available alumina, strongly basic, no free acid, less than 1 per cent iron, less than two-tenths insoluble. On account of market fluctuations our bid is subject to immediate acceptance. The quantity specified of 400 tons is subject to increase or decrease of 25 per cent only, and must be ordered in approximately equal monthly installments."

## COAL.

Abstract of proposals for coal received in response to advertisement and opened at the United States Engineer office, Washington, D. C., Apr. 20, 1916, by Lieut. Col. C. A. F. Flagler, Corps of Engineers.

Name of bidder.	Base price per ton, 2,000 pounds.	Commercial name of coal.	Data to establish basis for payment and consideration in awarding contract.	Moisture in delivered coal.		Ash in dry coal.		Volatile matter.		Sulphur.	
				P. ct.	British thermal units in dry coal.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
1. W. W. Griffith, Washington, D. C.	\$3.33	Jenner.....	0.1211	2.50	14,100	8.50	17.25	1.50			
2. John P. Agnew & Co. (Inc.), Washington, D. C.	3.68	Georges Creek.....	.1321	2.50	14,250	8	19.50	1.10			
3. Quemahoning Coal Co., Ralphpton, Pa. <sup>1</sup>	3.27	Jenner.....	.1189	2.50	14,100	8.50	17.25	1.50			
4. W. H. Marlow, Washington, D. C. <sup>2</sup>	3.23	Ralphton, Navy standard.	.1149	2	14,300	8	17	1			
5. J. Maury Dove Co. (Inc.), Washington, D. C. <sup>3</sup>	3.28	Jenner.....	.1193	2.50	14,100	8.50	17.25	1.50			
6. Commercial Coal Co., Washington, D. C.	3.195	do.....	.1162	2.50	14,100	8.50	17.25	1.50			
	43.125	New River.....	.1082	3	14,600	5.5	21	1			
	3.215	Gaultier.....	.1143	2.25	14,300	7.5	18.50	1.50			

<sup>1</sup> Authority of signer not given. Place of business of guarantor not given.

<sup>2</sup> Signature of guarantor not attested.

<sup>3</sup> Election of president not shown.

<sup>4</sup> Recommended for acceptance.

Estimated amount 4,000 tons, more or less.

## NORFOLK (VA.), DISTRICT.

[Officer: Lieut. Col. J. P. Jersey, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals received in response to advertisement dated July 5, 1915, and under specifications of the same date, opened Aug. 4, 1915, at Engineer office, Norfolk, Va., for dredging Inland Waterway from Norfolk, Va., to Beaufort Inlet, N. C.*

Name and address of bidder.	Approximate quantity, place measurement.	Price bid per cubic yard, place measurement.	Total cost at price bid.	Estimated cost.
1. Norfolk Dredging Co., Norfolk, Va.....	850,000	\$0.1965	\$167,025	\$175,000
2. Day & Zimmerman, Philadelphia, Pa.....	850,000	.20	170,000	175,000
3. Atlantic, Gulf & Pacific Co., New York, N. Y.....	850,000	.219	181,150	175,000
4. Maryland Dredging & Contracting Co., Baltimore, Md.....	850,000	.23 $\frac{1}{2}$	199,750	175,000
5. P. Sanford Ross (Inc.), Jersey City, N. J.....	850,000	.14	119,000	175,000
6. Coastwise Dredging Co., Norfolk, Va.....	850,000	.15 $\frac{1}{2}$	129,625	175,000
7. Central Dredging Co., Cleveland, Ohio.....	850,000	.17 $\frac{1}{2}$	148,750	175,000
8. Bowers Southern Dredging Co., Galveston, Tex.....	850,000	.16	138,000	175,000

<sup>1</sup> Acceptance recommended.

*Abstract of proposals received in response to written notice No. 1702, dated Aug. 5, 1915, and opened Aug. 11, 1915, at Engineer office, Norfolk, Va., for dredging near Torpedo Wharf, Fort Monroe, Va.*

Name and address of bidder.	Number of cubic yards, scow measurement.	Price bid per cubic yard, scow measurement.	Estimated cost per cubic yard, scow measurement.
1. Norfolk Dredging Co., Norfolk, Va.....	1,000	<sup>1</sup> \$0.59	\$0.50

<sup>1</sup> Emergency contract entered into Aug. 16, 1915.

*Abstract of proposals received in response to written notice No. 1719, dated Sept. 3, 1915, and opened Sept. 14, 1915, at Engineer office, Norfolk, Va., for repairing the United States dredge "Currituck."*

[NOTE: There was only one bidder.]

	Price.	Estimated cost.
F. O. Smith Shipbuilding & Dry Dock Co. (Inc.), Norfolk, Va.:		
<i>Lot No. 1.</i>		
For furnishing all labor, materials, appliances, etc., and doing the work required in items (a) to (i), inclusive, for the sum of.....	\$2,286.98	\$2,100.00
Under item (b) an additional charge per rivet will be made for each rivet over the estimated quantity of 200 rivets of.....	.65	.....
Under item (b) a deduction will be made per rivet, less than the estimated quantity of 200 rivets of.....	.65	.....
<i>Lot No. 2.</i>		
For furnishing all labor, materials, appliances, and doing the work required in items (j) to (p), inclusive, for the sum of.....	1,559.88	1,900.00
Under item (k) additional bearings will be rebabbitted in outer shaft, at each.....	85.50	.....
Under item (m) bearings will be rebabbitted in hauling and swinging shafting, at each.....	49.00	.....
Under item (o) sheaves will be rebushed for each.....	8.00	.....
Under item (o) pins will be renewed, at each.....	4.00	.....
<i>Lot No. 3.</i>		
For furnishing and delivering items (q), (r), and (s) the sum of.....	320.95	400.00

Emergency contract entered into with F. O. Smith Shipbuilding & Dry Dock Co. (Inc.) under date of Sept. 20, 1915.

*Abstract of proposals received in response to advertisement and under specifications, opened Sept. 23, 1915, at Engineer office, Norfolk, Va., for dredging and rock excavation, James River, Va.*

Name and address of bidder.	Earth excavation.			Hard rock excavation.			Estimated cost for entire work.
	Estimated yardage.	For earth excavation, including its carriage and deposit between points of excavation and lower end of Varina Reach, at per cubic yard, displacement measurement.	Total.	Estimated yardage.	For hard rock excavation, including its carriage and deposit between points of excavation and lower end of Varina Reach, at per cubic yard, displacement measurement.	Total.	
1. Norfolk Dredging Co., Norfolk, Va.....	15,000	\$0.70	\$10,500	2,800	\$11.50	\$32,200	\$39,000
2. A. V. Wills & Sons, St. Louis, Mo.....	15,000	1.05	15,750	2,800	9.50	26,600	39,000
3. Maryland Dredging & Contracting Co., Baltimore, Md.....	15,000	1.57	8,550	2,800	9.30	26,040	39,000
4. P. Sanford Ross (Inc.), Jersey City, N. J.....	15,000	.69	10,350	2,800	10.28	28,874	39,000

<sup>1</sup> Acceptance recommended.

*Abstract of proposals received in response to advertisement and under specifications, opened May 22, 1916, at Engineer office, Norfolk, Va., for construction of a derrick boat.*

Name and address of bidder.	Estimated cost.	For furnishing labor and material and constructing and delivering a derrick boat.	Remarks.	
1. Old Dominion Marine Railway Corporation, Norfolk, Va.	\$15,000.00	\$18,379.00		
2. W. E. Thomas & Co., Norfolk, Va...	15,000.00	<sup>1</sup> 17,077.90		
3. F. O. Smith Shipbuilding & Dry Dock Co., Norfolk, Va.	15,000.00	19,779.04	No guaranty submitted.	
4. Valk & Murdoch Co., Charleston, S. C.	15,000.00	21,000.00		
5. Parker-Hensel Engineering Co., Brunswick, Ga.	15,000.00	24,245.00	Informal guaranty signed by bidder. Bid not on regular printed form. Deduct \$200 if S. Flory & Co. hoister and slewing engine are used. Deduct \$320 if Richard Roberts & Sons hoister and slewing engine are used. Add \$241 if heavy standard bucket is used. Add \$50 if boiler and pipe covering is desired.	
6. Sam'l. T. Williams, Baltimore, Md...	15,000.00	20,900.00	Informal; bids on machinery only.	
7. J. S. Mundy Hoisting Engine Co., Newark, N. J.	15,000.00	.....		

<sup>1</sup> Acceptance recommended.

## COAL.

*Abstract of proposals received in response to advertisement and under specifications, opened June 12, 1916, at United States Engineer office, Norfolk, Va., for furnishing and delivering 3,000 tons of bituminous coal f. o. b. Norfolk, Va.*

	Name and address of bidder.	3,000 tons run of mine bituminous coal, at, per ton of 2,000 pounds—		British thermal units per pound dry coal.	Ash in dry coal.	Sulphur in dry coal.	Volatile matter in dry coal.	Moisture in dry coal as received.	Estimated cost per ton.	Price adjusted for moisture content.	Price adjusted for ash content.	Price of 1,000,000 British thermal units.
		P. ct.	P. ct.									
1. Johns Bros. (Inc.), Norfolk, Va....		\$2.53	14,800	P. ct. 6	P. ct. 0.75	P. ct. 18	P. ct. 2½	\$3.00	\$2.595	\$2.608	\$0.088108	
2. Crozier Pocahontas Co., Philadelphia, Pa.....		2.53	14,750	5½	.60	17½	2	3.00	2.582	2.588	.087729	
3. Castner, Curran & Bullitt (Inc.), Norfolk, Va.....		2.53	14,850	5	.60	18	2½	3.00	2.595	2.595	.087374	
4. The Nottingham & Wrenn Co., Norfolk, Va.....		2.53	14,850	5	.75	17.84	1½	3.00	2.569	2.569	.086498	
5. The C. G. Blake Co., Norfolk, Va.		2.53	14,950	5	.65	18	2	3.00	2.582	2.582	.086355	

Award recommended to the Nottingham & Wrenn Co., the second lowest bidder on the basis of award provided, as the lowest bidder proposes to deliver at Sewalls Point, Va., instead of at Norfolk, Va., as required in the specifications.

*Abstract of proposals received in response to advertisement and under specifications, opened Dec. 20, 1915, at United States Engineer office, Norfolk, Va., for furnishing and delivering 3,000 tons of bituminous coal f. o. b. Norfolk, Va.*

	Name and address of bidder.	3,000 tons run of mine bituminous coal, at, per ton of 2,000 pounds—		British thermal units per pound dry coal.	Ash in dry coal.	Sulphur in dry coal.	Volatile matter in dry coal.	Moisture in dry coal as received.	Estimated cost per ton.	Price adjusted for ash content.	Price adjusted for ash and moisture content.	Price of 1,000,000 British thermal units.
		P. ct.	P. ct.									
1. Crozier Pocahontas Co., Philadelphia, Pa.....		\$2.53	14,750	P. ct. 5.50	P. ct. 0.60	P. ct. 17.50	P. ct. 2.00	\$3.00	\$2.51	\$2.561	\$0.0868	
2. Chesapeake & Ohio Coal & Coke Co., New York, N. Y.....		2.50	14,900	5.00	.75	19.00	2.00	3.00	2.47	2.52	.0846	
3. Nottingham & Wrenn Co., Norfolk, Va.....		2.50	14,850	5.00	.75	17.84	1.50	3.00	2.47	2.508	.0844	
4. C. G. Blake Co., Norfolk, Va.....		2.53	14,900	5.00	.75	18.00	2.00	3.00	2.50	2.551	.0856	
5. Johns Bros. (Inc.), Norfolk, Va.....		2.48	14,800	5.00	.75	20.00	2.00	3.00	2.45	2.500	.0845	
6. Pocahontas Fuel Co., New York, N. Y.....		2.575	14,850	6.50	.75	18.50	3.50	3.00	2.575	2.668	.0898	
7. Flat Top Fuel Co., Norfolk, Va.....		2.53	14,400	6.00	.80	19.00	3.50	3.00	2.52	2.611	.0907	
8. Castner, Curran & Bullitt (Inc.), Norfolk, Va.....		12.39	14,750	5.75	.60	18.00	2.75	3.00	2.375	2.442	.0828	

<sup>1</sup> Acceptance recommended.

## WRECK.

*Abstract of proposals received in response to written notice and under specifications, opened May 31, 1916, at United States Engineer office, Norfolk, Va., for disposing of the wreck of the steamer Washingtonian, sunk in the Atlantic Ocean near Fenwick Island Shoal Lightship.*

Name and address of bidder.	For disposal of wreck of steamer Washingtonian, by removing bodily.	For disposing of wreck of steamer Washingtonian, by the use of explosives and removing the pieces.	For disposing of wreck of steamer Washingtonian, by removing bodily, will pay the United States for this privilege the sum of—
1. King & Wotherspoon (Inc.), New York, N. Y.	\$1.00	\$38,900.00	
2. Wells Engineering Corporation, New York, N. Y.			<sup>1</sup> \$101.00

<sup>1</sup> Acceptance recommended.

## WILMINGTON, N. C., DISTRICT.

[Officer: C. S. Ridley, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for furnishing lock gates, opened at Wilmington, N. C., July 19, 1915, by Capt. C. S. Ridley, Corps of Engineers.*

[Appropriation for maintenance and improvement of existing river and harbor works, for Cape Fear River, N. C., above Wilmington. (Locks and dams.)].

Name.	Address.	Amount.
1. Lawrence D. Weaning.....	Cleveland, Ohio.....	\$10,800.00
2. Independent Bridge Co.....	Pittsburgh, Pa.....	11,054.00
3. Riter-Conley Manufacturing Co.....	do.....	9,460.00
4. Penn Bridge Co.....	Beaver Falls, Pa.....	10,300.00
5. Steacy-Schmidt Manufacturing Co.....	York, Pa.....	9,500.00
6. Chicago Bridge & Iron Co.....	Chicago, Ill.....	11,200.00
7. The Whitehead & Kales Iron Works.....	Detroit, Mich.....	10,732.00
8. Wilmington Iron Works.....	Wilmington, N. C.....	14,977.77
9. The McMyler Interstate Co.....	Bedford, Ohio.....	21,370.00

*Abstract of proposals for riprap and capstones, received in response to the annexed advertisement, and publicly opened at this office Apr. 29, 1916, by Capt. C. S. Ridley, Corps of Engineers.*

[Appropriation for maintenance and improvement of existing river and harbor works, Cape Fear River, N. C., above Wilmington. (Locks and Dams.)].

Name.	Address.	Price per ton.		Total amount.
		Lot A, riprap.	Lot B, capstones.	
1. Raleigh Granite Co.....	Citizens Bank Bldg., Raleigh, N. C.	\$1.78	\$1.78	\$28,124.00
2. Carolina Portland Cement Co.....	Charleston, S. C.....	2.20	2.20	34,760.00
3. Winnsboro Granite Corporation.....	Rion, S. C.....	2.30	3.30	37,840.00
4. North Carolina Granite Corporation.....	Mount Airy, N. C.....	1.98	3.15	33,039.00
5. Weston & Brooker Co.....	Columbina, S. C.....	1.97	2.80	32,371.00
6. Paul & Cornell Co. (Inc.).....	Newsom, N. C.....	19.80	-----	25,740.00
7. Harris Granite Quarries Co.....	Salisbury, N. C.....	1.89 $\frac{1}{2}$	-----	27,098.50
8. Harris Granite Quarries Co.....	do.....	-----	3.32 $\frac{1}{2}$	4,987.50

## SAVANNAH (GA.) DISTRICT.

[Officer: W. C. Langfitt, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of bids for repairing shore protection dikes in Savannah River, near Augusta, Ga., received in response to circular, and opened at the United States Engineer Office, Savannah, Ga., Nov. 2, 1915.*

Appropriation: Maintenance and improvement of existing river and harbor works, Savannah River below Augusta, Ga., 1914 and 1915.]

Name and address of bidder.	210 piles, 35 feet long, per pile.		80 piles, 30 feet long, per pile.		53 piles, 25 feet long, per pile.		Brush fascines in place, per cubic yard.	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
1. Simons - Mayrant Co., Charleston, S. C. ....	\$8.00	\$1,680	\$7.50	\$600	\$7.00	\$371.00	\$1.00	\$4,800
2. Dunbar Bros., R. F. D. No. 3, Augusta, Ga. ....	7.50	1,575	7.00	560	6.50	344.50	.95	4,560
3. A. J. Twiggs & Son, Augusta, Ga. ....	7.50	1,575	7.25	580	7.00	371.00	.85	4,080

Name and address of bidder.	600 cubic yards stone in place, per cubic yard.		Removal of old piling, per pile.		Day laborers, per man.	Total.	Remarks.
	Price.	Amount.	Price.	Amount.			
1. Simons - Mayrant Co., Charleston, S. C. ....	\$3.10	\$1,860	\$2.25	\$247.50	\$2.00	\$9,858.50	
2. Dunbar Bros., R. F. D. No. 3, Augusta, Ga. ....	3.00	1,800	1.50	165.00	1.50	9,004.50	Certified check.
3. A. J. Twiggs & Son, Augusta, Ga. ....	2.80	1,680	2.50	275.00	1.75	8,561.00	Lowest.

*Abstract of bids for dredging harbor at Brunswick, Ga., received in response to circular and opened at the United States engineer office, Savannah, Ga., Nov. 12, 1915.*

Appropriation: Maintenance and improvement of existing river and harbor works, Brunswick Harbor, Ga., 1914.]

Name and address of bidder.	For dredging 40,000 cubic yards.	
	Price.	Amount.
1. Globe Dredging Co., Savannah, Ga. ....	\$0.19	\$7,600.00
2. Ely Dredging & Construction Co., Savannah, Ga. ....	.157	6,280.00
3. Simons-Mayrant Co., Charleston, S. C. ....	.22	8,800.00
4. Home dredging Co., Savannah, Ga. ....	.15	6,000.00
5. J. W. Fitzgerald, Savannah, Ga. ....	.125	5,000.00

## COAL.

*Abstract of bids for furnishing and delivering bituminous coal to United States dredges, etc., received in response to circular letter and opened in the United States engineer office, Savannah, Ga., Mar. 7, 1916.*

[Appropriations: Improving waterway between Savannah, Ga., and Fernandina, Fla.; maintenance and improvement of existing river and harbor works, for Savannah Harbor, Ga. (26 and 21 foot channel).]

Name and address of bidder.	Price per ton.	Brand.	Remarks.
1. Herman Coal & Wood Co., Savannah, Ga.	\$4.75	Pocahontas.....	Authority of member of firm to sign not shown.
2. Taggart Coal Co., Savannah, Ga.....	3.64	Taggarts navigation.....	
3. Taggart Coal Co., Savannah, Ga.....	3.62	.....do.....	Government to pay freight at \$1.55 per ton; lowest. Plus 25 cents for loading at night.
4. South Atlantic Coal Co., Savannah, Ga.	4.18	Clinchfield.....	Authority for president to sign not shown.
5. Standard Fuel Supply Co., Savannah, Ga.	3.99	Stonega.....	

## JACKSONVILLE (FLA.) DISTRICT.

[Officer: Maj. W. B. Ladue, Corps of Engineers.]

## FORTIFICATIONS.

*Abstract of proposals for furnishing cement, hardware, etc., received in response to advertisement dated Sept. 7, 1915, and opened at the United States Engineer office, Jacksonville, Fla., Sept. 22, 1915.*

## CASEMATES, GALLERIES, ETC., FOR SUBMARINE MINES.

Name and address of bidder.	Cement, 490 barrels.	Lime, 20 barrels.	Broken stone, 250 cubic yards.	Sand, 130 cu- bic yards.	Hair, 75 pounds.	Galvan- ized iron (lot).	Sewer pipe, 130 feet.	Metal lath (lot).
1. I. W. Phillips & Co., Tampa, Fla.	\$1.975	\$0.95	\$4.65	\$2.20	\$0.12	.....	\$7.74	\$143.40
2. Atlas Portland Cement Co., New York, N. Y.....	1.95	.....	.....	.....	.....	.....	.....	.....
3. Carolina Portland Cement Co., Jacksonville, Fla.....	1.90	1.00	3.70	3.50	.10	.....	11.70	95.90
4. W. R. Fuller, Tampa, Fla.....	1.95	.90	2.50	1.50	.....	.....	8.45	.....
5. Tampa Sand & Shell Co., Tampa, Fla.....	.....	.....	.....	1.40	.....	.....	.....	.....
6. Cameron & Barkley Co., Jacksonville, Fla.....	.....	.....	.....	.....	.....	\$191.09	.....	.....

<sup>1</sup> Accepted. Contract awarded this bidder on sacks at \$1.94.

*Abstract of proposals for furnishing lumber, etc., received in response to advertisement dated Aug. 30, 1915, and opened at the United States Engineer office, Sept. 8, 1915 (for 38,721 feet b. m. of lumber and 14 pairs of window shades).*

## CASEMATES, GALLERIES, ETC., FOR SUBMARINE MINES.

Name and address of bidder.	Tampa.			Fort Dade.		
	Lumber.	Sashes.	Total.	Lumber.	Sashes.	Total.
1. Hillsboro Lumber Co., Ybor City, Fla.	\$24 per M. \$923.52	\$1.80 \$25.14	\$948.66	\$28.50 per M. \$1,103.02	\$2.00 \$28.00	\$1,131.52

<sup>1</sup> Delivery in 21 days after date of receipt of notification.

NOTE.—All bids rejected.

*Abstract of proposals for furnishing paints, glass, hardware, etc., at Tampa and Key West, Fla., received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Oct. 4, 1915.*

## CASEMATES, GALLERIES, ETC., FOR SUBMARINE MINES.

Name and address of bidder.	Class—						
	A.	C.	E.	F.	G.	H.	I.
1. Flexible Compound Co., Philadelphia, Pa.		<sup>1</sup> \$25.00					
2. Geo. E. Chase Co., Jacksonville, Fla.	\$214.85		<sup>1</sup> \$42.00	\$77.95	<sup>2</sup> \$229.30		\$25.00
3. Knight & Wall Co., Tampa, Fla.	188.86		48.75	78.35			\$19.00
4. C. W. Greene Co., Tampa, Fla.	<sup>1</sup> 184.87		48.04	<sup>1</sup> 74.80			
5. Dozier & Gay Paint Co., Jacksonville, Fla.	197.88		51.05		216.38		32.92
6. Wm. Curry Sons Co., Key West, Fla.					<sup>1</sup> 208.36	31.00	20.32

Name and address of bidder.	Class—						
	J.	K.	L.	M.	N.	O.	P.
1. Flexible Compound Co., Philadelphia, Pa.							
2. Geo. E. Chase Co., Jacksonville, Fla.		\$68.54	\$5.40	\$8.75			
3. Knight & Wall Co., Tampa, Fla.							
4. C. W. Greene Co., Tampa, Fla.				4.92			
5. Dozier & Gay Paint Co., Jacksonville, Fla.	<sup>1</sup> \$8.60	<sup>1</sup> 57.41	<sup>1</sup> 2.76	<sup>1</sup> 6.50	<sup>1</sup> \$7.00	<sup>1</sup> \$18.50	<sup>1</sup> \$17.50
6. Wm. Curry Sons Co., Key West, Fla.							

<sup>1</sup> Accepted bids.<sup>2</sup> Drums to be returned to Standard Oil Co.

NOTE.—No bids received on classes B and D.

*Abstract of proposals for furnishing creosoted piles, received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Oct. 27, 1915.*

## CASEMATES, GALLERIES, ETC., FOR SUBMARINE MINES.

Name and address of bidder.	Delivery.			Remarks.
	Tampa.	Fort Dade.	Time.	
			<i>Days.</i>	
1. Norfolk Creosoting Works, Norfolk, Va.	\$2,238.60		40	
2. American Creosoting Works, New Orleans, La.	2,367.75		45	
3. Southern Creosoting Co., Slidell, La.	2,421.56		30	Price based upon quotation of 56 $\frac{1}{2}$ cents per linear foot.
4. Eppinger & Russell Co., Jacksonville, Fla.	2,152.50	\$2,453.85	30	

NOTE.—All bids rejected and order placed with Engineer office, New Orleans, La., \$2,145.92.

*Abstract of proposals for furnishing one traveling crane, received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Oct. 27, 1915.*

## CASEMATES, GALLERIES, ETC., FOR SUBMARINE MINES.

Name and address of bidder.	Delivery.		
	Tampa.	Fort Dade.	Time.
1. Pawling & Harnischfeger Co., Milwaukee, Wis.....	\$725.00	\$750.00	90
2. Tampa Foundry & Machine Co., Tampa, Fla.....	290.00	.....	30
3. New Jersey Foundry & Machine Co., New York, N. Y.....	1 300.00	310.00	50
4. Pennsylvania Bridge Co., Beaver Falls, Pa.....	495.00	474.00	40
5. Gulf Iron Works, Tampa, Fla.....	305.00	.....	30
6. Roeper Crane & Hoist Works, Reading, Pa.....	325.00	325.00	60
7. Cameron & Barkley Co., Jacksonville, Fla.....	379.73	.....	20

<sup>1</sup> Accepted.

*Abstract of proposals for repairing breakwater at Fort Taylor, Fla. (Key West Harbor), received in response to advertisement and specifications and opened at the United States Engineer office, Jacksonville, Fla., Dec. 31, 1915.*

## SEA WALLS AND EMBANKMENTS.

Name and address of bidder.	1,275 tons stone, price per ton.	Total.
1. R. S. Sallas, Savannah, Ga.....	\$6.25	\$7,968.75
2. Roderick G. Ross, Jacksonville, Fla.....	<sup>1</sup> 6.17	7,866.75

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing and delivering deformed steel bars and wire for concrete reinforcement at Tampa or Fort Dade, Fla., received in response to circular letter dated Aug. 26, 1915, and opened at the United States Engineer office, Jacksonville, Fla., Sept. 8, 1915.*

## CASEMATES, GALLERIES, ETC., FOR SUBMARINE MINES.

Name and address of bidder.	Delivery at Tampa.	Time.
1. Corrugated Bar Co., Atlanta, Ga.....	<sup>1</sup> \$776.06	21
2. Concrete Steel Co., New York, N. Y.....	961.30	7
3. Cameron & Barkley Co., Jacksonville, Fla.....	905.49	.....

<sup>1</sup> Accepted as corrected.

*Abstract of proposals for furnishing platform cars received in response to circular letter and opened at the United States Engineer office, Jacksonville, Fla., Apr. 7, 1916.*

CASEMATES, GALLERIES, ETC., FOR SUBMARINE MINES.

Name and address of bidder.	Eight platform cars.				Time.	
	Delivery f. o. b. Tampa, Fla.		Delivery f. o. b. Fort Dade, Fla.			
	Unit price.	Total.	Unit price.	Total.		
1. Thos. Carlins's Sons Co., Pittsburgh, Pa.....	\$182.50	\$1,460.00			70	
2. Easton Car & Construction Co., Easton, Pa.....	200.00	1,600.00	\$200.00	\$1,600.00	(1)	
3. Orenstein-Arthur Koppel Co., Pittsburgh, Pa.....	124.35	994.80	124.85	998.80	90 to 120	
4. Merrill-Stevens Co., Jacksonville, Fla.....	155.00	1,240.00			45	

<sup>1</sup> Not stated.

NOTE.—All bids rejected as being excessive. Cars to be built by hired labor.

*Abstract of proposals for furnishing and delivering flexible steel conduit at Key West, Fla., received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Apr. 16, 1916.*

GUN AND MORTAR BATTERIES.

Name and address of bidder.	Amount.
1. Manhattan Electric Co., New York, N. Y.....	\$46.50
2. Florida Electric Supply Co., Jacksonville, Fla.....	1 29.85
3. Western Electric Co., Atlanta, Ga.....	42.00
4. Sibley-Putnam Electric Corporation, New York, N. Y.....	42.00

<sup>1</sup> Accepted.

*Abstract of proposals for conduit received in response to circular letter dated June 3, 1916, and opened at the United States Engineer office, Jacksonville, Fla., June 12, 1916.*

GUN AND MORTAR BATTERIES.

Name and address of bidder.	225-foot conduit.	
	Rate.	Total.
1. Manhattan Electric Supply Co., New York, N. Y.....	\$0.125	\$28.13
2. Sibley & Putnam Co., New York, N. Y.....	.125	28.13
3. Florida Electric Supply Co., Jacksonville, Fla.....		35.57

<sup>1</sup> Accepted.

*Abstract of proposals for conduit received in response to circular letter dated June 3, 1916, and opened at the United States Engineer office, Jacksonville, Fla., June 12, 1916.*

GUN AND MORTAR BATTERIES.

Name and address of bidder.	226	Two	26	One	Grand
	feet.	ways.	feet.	way.	
Rate.	Total.	Rate.	Total.		
1. Western Electric Co., Atlanta, Ga.....	\$0.368	\$83.17	\$0.184	\$4.78	\$87.95

Shipment in 2 days after receipt of order; delivery in 14 days.  
NOTE.—All bids rejected as being excessive.

## RIVERS AND HARBORS.

*Abstract of proposals for furnishing and delivering 18-inch diameter spiral riveted discharge pipe for the dredge Major J. C. Mallery, received in response to circular letter dated June 22, 1915, and opened at the United States Engineer office, Jacksonville, Fla., July 6, 1915.*

[Improving St. Johns River, Fla. (General improvement).]

Name and address of bidder.	512 linear feet.		Maker.
	Price per foot.	Total price.	
1. Cameron & Barkley Co., Jacksonville, Fla.	\$2.30	\$1,177.60	American Spiral Pipe Works, Chicago, Ill.
2. M. W. Kellogg Co., New York, N. Y.	2.65	1,356.80	Do.
3. Abendroth & Root Manufacturing Co., New York, N. Y.	1.85	1,947.20	Not stated.
4. Crane Co., Birmingham, Ala.	2.37	1,213.44	American Spiral Pipe Works, Chicago, Ill.
5. American Spiral Pipe Works, Chicago, Ill.	2.30	1,177.60	Do.

<sup>1</sup> Accepted

*Abstract of proposals for dredging and rock removal in the St. Johns River, Fla., received in response to advertisement and opened in the United States Engineer Office, Jacksonville, Fla., July 24, 1915.*

[St. Johns River, Fla. (Jacksonville to the ocean).]

Name and address of bidder.	179,928 cubic yards original material.		25,800 cubic yards filled material.		Total.
	Per yard.	Total.	Per yard.	Total.	
1. P. Sanford Ross (Inc.), Jersey City, N. J.	\$1.45	\$260,895.60	\$0.25	\$6,450.00	\$267,345.60
2. Standard American Dredging Co., Oakland, Cal.	.978	175,969.58	.12	3,096.00	<sup>1</sup> 179,055.58
3. Coastwise Dredging Co., Norfolk, Va.	1.08	194,322.24	.30	7,740.00	202,062.24
4. Home Dredging Co., Mobile, Ala.	1.35	242,902.80	.25	6,450.00	249,352.80
5. Timothy J. Dady, Brooklyn, N. Y.	1.28	230,307.84	.30	7,740.00	238,047.84
6. Bowers Southern Dredging Co., Galveston, Tex.	1.18	212,315.04	.20	5,160.00	217,475.04

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing materials and constructing work boat for the dredge "Major J. C. Mallery," received in response to advertisement dated Sept. 4, 1915, and opened at the United States Engineer Office, Jacksonville, Fla., Sept. 20, 1915.*

[St. Johns River, Fla. (general improvement).]

Name and address of bidder.	Amount.	Remarks.
1. Merrill-Stevens Co., Jacksonville, Fla.	\$210.60	Received after hour set for opening of bids.

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing material and constructing hyacinth elevator received in response to advertisement dated Sept. 9, 1915, and opened at the United States Engineer Office, Jacksonville, Fla., Sept. 27, 1915.*

[Withlacoochee River, Fla.]

Name and address of bidder.	Amount of bid.	For delivery in—	Remarks.
1. A. R. Hall, South Jacksonville, Fla.....	\$2,434.38	40 days...	
2. O. P. Woodcock, 403 Main Street, Jacksonville, Fla.....	3,900.00	10 weeks..	Lowest bidder.

NOTE.—All bids rejected as being excessive.

*Abstract of proposals for furnishing and delivering spiral riveted pipe for dredge "Florida," received in response to advertisement and opened at the United States Engineer Office, Jacksonville, Fla., Oct. 22, 1915.*

[St. Johns River, Fla. (Jacksonville to Palatka).]

Name and address of bidder.	Amount of bid.	Remarks.
1. Abendroth & Root Manufacturing Co., New York, N. Y.....	{ \$323.00 1 298.00	
2. M. W. Kellogg Co., New York, N. Y.....	324.00	Pipe to be manufactured by American Spiral Pipe Works.
3. Georgia Supply Co., Jacksonville, Fla.....	262.50	Do.
4. Standard Spiral Pipe Works, Chicago, Ill.....	306.00	Pipe not riveted. To be manufactured by bidder.
5. Merrill-Stevens Co., Jacksonville, Fla.....	353.00	Pipe to be manufactured by American Spiral Pipe Works.
6. J. G. Christopher Co., Jacksonville, Fla.....	271.25	Do.
7. American Spiral Pipe Works, Chicago, Ill.....	3 250.00	Do.
8. Cameron & Barkley Co., Jacksonville, Fla....	258.50	Do.

<sup>1</sup> Informal optional bid. Pipe to be manufactured by bidder.

<sup>2</sup> Accepted.

<sup>3</sup> Informal bid.

*Abstract of proposals for furnishing and delivering rope at Tampa, Fla., received in response to advertisement and opened at the United States engineer office, Jacksonville, Fla., October 29, 1915.*

[Hillsboro Bay, Fla.]

Name and address of bidders.	1-inch.	1 $\frac{1}{2}$ -inch.	1 $\frac{1}{2}$ -inch.	Total.	Time.	Remarks.
					Days.	
1. The Cameron & Barkley Co., Jacksonville, Fla.	\$11.94	\$74.29	\$44.22	\$130.45	2	American Manufacturing Co.
2. St. Louis Cordage Mills, St. Louis, Mo.	10.94	68.04	40.50	119.48	1	Own make.
3. Geo. E. Chase & Co., Jacksonville, Fla.	11.34	70.56	42.00	123.90	15	Plymouth Brand.
4. Fielder & Mitchell, Tampa, Fla.....	12.15	73.08	45.00	130.23	1	
5. Knight & Wall Co., Tampa, Fla.....	11.75	73.08	43.50	128.33	1	Fitler's best grade.
6. Georgia Supply Co., Savannah, Ga.....	11.66	72.58	43.20	127.44	15	
7. C. W. Greene Co., Tampa, Fla.....	12.35	76.86	45.75	134.96	2	

<sup>1</sup> Accepted.

<sup>2</sup> As corrected.

*Abstract of proposals for furnishing material for the construction of Hyacinth elevator, received in response to advertisement dated Nov. 20, 1915, and opened at the United States engineer office, Jacksonville, Fla., Nov. 30, 1915.*

[Removing water hyacinths.]

Name and address of bidders.	Lot No.—						
	1	2	3	4	5	6	7
1. Geo. E. Chase & Co., Jacksonville, Fla.			\$42.90	<sup>1</sup> \$215.21	\$16.80		<sup>1</sup> <sup>2</sup> \$144.80
2. McNair Lumber Co., Jacksonville, Fla.	\$544.89						
3. Florida Hardware Co., Jacksonville, Fla.			1 42.00			\$30.43	222.10
4. Gibbs Gas Engine Co., Jacksonville, Fla.		\$174.85				39.63	<sup>3</sup> 180.70
5. Knight & Wall Co., Tampa, Fla.							
6. Gross Manufacturing Co., Jacksonville, Fla.	1 514.05						
7. Gulf Iron Works, Tampa, Fla.		1 139.08					
8. Perry Paint & Glass Co., Tampa, Fla.							202.30

<sup>1</sup> Accepted.

<sup>2</sup> Substitutes Barrett's Grade 1 creosote oil for that called for.

<sup>3</sup> Substitutes wood preservative other than called for.

*Abstract of proposals for furnishing dredging sleeves to the United States dredges in the Jacksonville, Fla., district during the calendar year 1916, received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Jan. 20, 1916.*

[Hillsboro Bay, Fla., and St. Johns River, Fla.]

Name and address of bidders.	12-ply, $23\frac{1}{2}$ by 26 inches.	12-ply, $18\frac{1}{2}$ by 26 inches.	10-ply, $19\frac{1}{2}$ by 24 inches.	10-ply, $18\frac{1}{2}$ by 24 inches.	6-ply, $13$ by $18$ inches.	6-ply, $11\frac{1}{2}$ by 18 inches.	Remarks.
1. Gutta Percha Rubber Manufacturing Co., New York, N. Y.	\$74.00	\$61.00	\$47.50	\$47.00	\$21.00	\$19.50	
2. The Manhattan Rubber Manufacturing Co., Passaic, N. J.	1 51.73	1 41.62	32.60	32.20	12.23	10.70	Accepted.
3. Peerless Rubber Manufacturing Co., New York, N. Y.	52.34	43.24	<sup>1</sup> 30.88	<sup>1</sup> 30.88	19.51	18.78	Failed to meet tests.
4. New York Rubber Co., New York, N. Y.	59.33	47.86	35.83	35.56	13.57	12.00	
5. New York Belting & Packing Co., New York, N. Y.	56.00	48.50	36.40	35.20	15.20	13.40	
6. New Jersey Car Spring & Rubber Co., Jersey City, N. J.	68.85	56.50	41.80	41.00	18.45	16.65	
7. Revere Rubber Co., New York, N. Y.	68.25	55.00	42.60	42.00	16.50	14.60	
8. J. G. Christopher Co., Jacksonville, Fla.	56.50	43.00	35.25	35.00	14.25	13.30	
9. Joseph Edwards & Co., New York, N. Y.	102.20	72.50	63.75	60.45	23.95	21.25	

<sup>1</sup> Lowest bid on each size.

*Abstract of proposals for hauling out and repairing the dredge "Barnard," received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Dec. 13, 1915.*

[Hillsboro Bay, Fla.]

Name and address of bidder.	Lot No. 1.	Lot No. 2.	Total.	Remarks.
1. T. Murphy Iron Works, Jacksonville, Fla.			\$2,017.50	
2. Gibbs Gas Engine Co., Jacksonville, Fla.		1,856.50		
3. Merrill-Stevens Co., Jacksonville, Fla.	\$4,619.65	1,846.00	\$6,465.65	
4. Valk & Murdoch Co., Charleston, S. C.	13,228.05	1,734.00	4,962.05	Accepted.
5. Oliner & Bruce Dry Dock Co., Mobile, Ala.	5,047.15	12,005.50	7,052.65	
6. Home Industry Iron Works, Mobile, Ala.		2,158.25		
7. United States navy yard, New Orleans, La.	23,706.05	1,962.50		

<sup>1</sup> As corrected.

<sup>2</sup> Prices estimated; actual cost to control.

*Abstract of proposals for furnishing anchors, received in response to circular letter and opened at the United States Engineer office, Jacksonville, Fla., Jan. 26, 1916.*

[St. Johns River, Fla. (general improvement).]

Name and address of bidder.	6 anchors, approximately 7,200 pounds.	
	Per pound.	Total.
1. Merrill-Stevens Co., Jacksonville, Fla.		
2. Cameron & Barkley Co., Jacksonville, Fla.	\$0.0663 .10	1 \$477.36 720.00

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing 18-inch riveted iron pipe, received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Feb. 4, 1916.*

[St. Johns River, Fla. (general improvement).]

Name and address of bidder.	480 linear feet.		Remarks.
	Per foot.	Total.	
1. New Bern Iron Works & Supply Co., New Bern, N. C.	\$2.75	<sup>1</sup> \$1,320.00	Construction by bidder.
2. Lancaster Iron Works (Inc.), Lancaster, Pa.	2.80	<sup>2</sup> 1,344.00	Do.
3. M. W. Kellogg Co., New York, N. Y.	3.28	<sup>3</sup> 1,574.40	Construction by Lancaster Iron Works (Inc.).

<sup>1</sup> Accepted.

<sup>2</sup> Quotation void after Feb. 12, 1916.

<sup>3</sup> Quotation void after Feb. 15, 1916.

*Abstract of proposals for furnishing cast-iron extension pipe connection for suction pipe for the dredge "Key West," opened at the United States Engineer Office, Jacksonville, Fla., Feb. 23, 1916.*

[St. Johns River, Fla. (general improvement).]

Name and address of bidder.	Amount.	Remarks.
1. M. W. Kellogg Co., New York, N. Y.	\$760.00	
2. Tampa Foundry & Machine Co., Tampa, Fla.	500.00	Bid not in duplicate.
3. Wilmington Iron Works, Wilmington, N. C.	477.77	
4. Mains Foundry Co., Jacksonville, Fla.	404.75	
5. Ellicott Machine Corporation, Baltimore, Md.	473.27	Do.
6. T. Murphy Iron Works, Jacksonville, Fla.	357.51	
7. Valk & Murdoch Co., Charleston, S. C.	<sup>1</sup> 205.00	

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing riveted iron pipe for the dredge "Barnard" (alternative, steel pipe), received in response to circular letter and opened at the United States Engineer Office, Jacksonville, Fla., Mar. 16, 1916.*

[Hillsboro Bay, Fla.]

Name and address of bidder.	Iron pipe, 597 Linear feet.		Steel pipe.		Remarks.
	Per foot.	Total.	Per foot.	Total.	
1. Gulf Iron Works, Tampa, Fla...	\$2.87	\$1,713.39	\$2.91	\$1,737.27	Iron, 10 weeks; steel, 16 weeks.
2. Cape Fear Machine Works, Wil- mington, N. C.	1 2.16	1,289.52	2.14	1,277.58	Iron, 120 days; steel, 90 days.
3. Valk & Murdoch Co., Charles- ton, S. C.	3.70	2,208.90	.....	.....	Iron, 100 working days.
4. Lancaster Iron Works (Inc.), Lancaster, Pa.	3.10	1,850.70	2.80	1,671.60	Iron, 120 days; steel, 60 days.
5. Tampa Foundry & Machine Co., Tampa, Fla.	3.50	2,089.50	3.00	1,791.00	Iron, 30 days; steel, 45 days.
6. Merrill-Stevens Co., Jackson- ville, Fla.	.....	.....	4.35	2,596.95	Steel, 75 days.
7. Newbern Iron Works & Supply Co., Newbern, N. C.	2.85	1,701.45	.....	.....	Iron, 80 days.

<sup>1</sup> Accepted.

Time of delivery, from notice of acceptance of bid.

*Abstract of proposals for furnishing iron and steel discharge pipe for the dredge "Major J. C. Mallery," received in response to advertisement and opened at the United States Engineer Office, Jacksonville, Fla., Apr. 3, 1916.*

[St. Johns River, Fla. (general improvement).]

Name and address of bidder.	Iron pipe.				Steel pipe.			
	Per foot.	Total.	Deliv- ery.	Made by.	Per foot.	Total.	Deliv- ery.	Made by.
1. Wilmington Iron Works, Wilmington, N. C.	\$2.30	\$1,166.10	Days. 120	American Rolling Mill Co.	\$2.10	\$1,064.70	Days. 80	Bidder.
2. Gulf Iron Works, Tampa, Fla.	2.84	1,439.88	120	...do.....	2.84	1,439.88	120	Do.
3. Valk & Murdoch Co., Charleston, S. C.	1.75	887.25	90	...do. <sup>1</sup> .....	.....	.....	.....	.....
4. Gulf City Boiler Works, Mo- bile, Ala.	.....	.....	.....	.....	2.20	1,115.40	40	Do.
5. Newbern Iron Works & Sup- ply Co., Newbern, N. C.	3.00	1,521.00	90	American Rolling Mill Co.	.....	.....	.....	.....
6. Cape Fear Machine Works, Wilmington, N. C.	1.97	<sup>2</sup> 998.79	120	...do.....	.....	.....	.....	.....

<sup>1</sup> Accepted.

<sup>2</sup> Blue annealed plate.

*Abstract of proposals for furnishing and delivering at Tampa, Fla., 22-inch riveted iron shore discharge-pipe elbows, received in response to circular letter and opened at the United States Engineer office, Jacksonville, Fla., Apr. 10, 1916.*

[Hillsboro Bay, Fla.]

Name and address of bidder.	Iron.		Steel.		Total iron elbows.	Total steel elbows.	Remarks.
	1 45° elbow.	1 60° elbow.	1 45° elbow.	1 60° elbow.			
1. Gulf City Boiler Works, Mobile, Ala.			\$48.00	\$49.00		\$97.00	Delivery in 30 days.
2. John F. Riley, Charleston, S. C.	\$89.31	\$89.31	78.81	78.81	\$178.62	157.62	Only bid on iron.
3. Merrill-Stevens Co., Jacksonville, Fla.			105.00	112.00		217.00	Delivery in 15 days.

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing wire rope, received in response to circular letter and opened at the United States Engineer office, Jacksonville, Fla., Apr. 15, 1916.*

[Hillsboro Bay, Fla.]

Name and address of bidder.	Price for 2 reels.	Time of delivery.
1. Georgia Supply Co., Jacksonville, Fla.	\$344.76	Days.
2. McCombe & Whyte Rope Co., Chicago, Ill.	1 236.50	1
3. Hazard Manufacturing Co., New York, N. Y.	344.75	1
4. A. Leschen's & Sons Rope Co., St. Louis, Mo.	329.00	2

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing 18-inch diameter riveted iron shore pipe elbow for the dredge Major J. C. Mallery, received in response to circular letter and opened at the United States Engineer office, Jacksonville, Fla., Apr. 15, 1916.*

[St. Johns River, Fla. (general improvement).]

Name and address of bidder.	Elbow.		Time of delivery.	Constructed by—	Remarks.
	Iron.	Steel.			
1. Gulf City Boiler Works, Mobile, Ala.		\$37.00	15 days.....	Bidder..	Lowest bid for steel elbow.
2. John F. Riley, Charleston, S. C.	\$79.81	70.81	5 days <sup>2</sup> .....	do.....	
3. Lancaster Iron Works (Inc.), Lancaster, Pa.		60.00	3 weeks.....	do.....	
4. Florida Metal Products Co., Jacksonville, Fla.	77.00	69.20	40 days (iron).....	do.....	Not in regular form. Time of delivery for steel elbow not stated.
5. Merrill-Stevens Co., Jacksonville, Fla.		75.00	Not stated.....	do.....	
6. Wilmington Iron Works, Wilmington, N. C.	50.00	50.00	90 days (iron).....	do.....	Lowest bidder for iron elbow. Time of delivery for steel elbow not stated.

<sup>1</sup> Accepted.

<sup>2</sup> After receipt of material.

*Abstract of proposals for furnishing wire rope, received in response to circular letter and opened at the United States Engineer office, Jacksonville, Fla., Apr. 24, 1916.*

[Hillsboro Bay, Fla.]

Name and address of bidder.	2 reels, 800feet each.	1 reel, 600feet.	Total.	Time of deliv- ery. <sup>1</sup>	Brand.	Remarks.
1. Hazard Manufacturing Co., New York, N. Y.	\$436.00	\$163.50	\$599.50	Days. 1	Hazard...	Submitted through Geo. E. Chase & Co., at Jackson- ville, Fla.
2. A. Leschen's & Sons Rope Co., St. Louis, Mo.	403.20	151.40	554.60	3	Leschen's.	
3. McCombre & Whyte Rope Co., Chicago, Ill.	1371.73	1139.40	1511.13	21	Bidders'...	Lowest bid.
4. C. W. Greene Co., Tampa, Fla.	532.00	199.50	731.50	30	Robbins's.	Quotation void after Apr. 30, 1916.
5. J. G. Christopher Co., Jack- sonville, Fla.	403.20	151.20	554.40	3	Leschen's.	Received late.

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing 16-inch diameter wrought-iron pipe, received in response to circular letter and opened at the United States Engineer office, Jacksonville, Fla., June 15, 1916 (2 pieces of special dimensions).*

[St. Johns River, Fla. (general improvement).]

Name and address of bidder.	Amount.	Delivery.	Remarks.
1. Kehoes Iron Works, Savannah, Ga.....	\$168	28 days.....	Bid not in duplicate.
2. J. G. Christopher Co., Jacksonville, Fla.....	200	60 days.....	
3. Cameron & Barkley Co., Jacksonville, Fla.....	1 150	3 or 4 weeks...	Lowest bid.
4. M. W. Kellogg Co., New York, N. Y.....	314	60 days.....	
5. Standard Spiral Pipe Works, Chicago, Ill.....	60	6 days.....	Substitute offered.

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing spud timbers, received in response to circular proposal and opened at the United States Engineer office, Jacksonville, Fla., June 26, 1916.*

[Hillsboro Bay, Fla.]

Name and address of bidder.	Quan- tity.	Unit price.	Total.	Remarks.
1. W. S. Partin, Mobile, Ala.....	4	\$75	\$300	Bid in error; misinterpretation of specifications.
2. R. D. Miller, Escatawpa, Miss.....	4	425	1,700	Freight, additional, \$138.
3. J. A. Marques, Jr., Mobile, Ala.....	4	700		Freight paid to Tampa, Fla., for total of \$814.
4. Dan Fairley, Hattiesburg, Miss.....	4	165	660	

NOTE.—All bids rejected as being excessive.

*Abstract of proposals for constructing and delivering steel hull 3½ and 7 yard dipper dredge, or for leasing such machine subject to purchase, received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Nov. 8, 1915.*

[Harbor at Miami, Fla., and St. Lucie Inlet, Fla.]

Name and address of bidder.	Dredge delivered at—		Additional charge steel gantry. (e)	Deductions allowed for—		
	Own yard (a)	Miami. (b)		H. & B. engine. (d)	Wooden spuds. (f)	Machine tools. (g)
1. Dubuque Boat & Boiler Works, Dubuque, Iowa.....	\$157,125	\$162,825	\$2,400	\$3,500	\$450	\$3,290
2. Tampa Foundry & Machine Co., Tampa, Fla. <sup>1</sup> .....	158,000	165,500	3,000	2,000	1,000	2,000
3. Bucyrus Co., South Milwaukee, Wis.....		237,500	1,450	4,150		3,240
4. United States navy yard, Charleston, S. C.....	159,817			4,250		1,726

Name and address of bidder.	Deductions allowed for—Continued.						
	Air plant. (h)	Evap- orating plant. (i)	Refriger- ating plant. (j)	Launch and davits. (k)	Port-land cement. (l)	Caps- tans. (m)	Pat- terns. (n)
1. Dubuque Boat and Boiler Works, Dubuque, Iowa.....	\$425	\$1,450	\$3,400	\$700	\$700	\$1,700	.....
2. Tampa Foundry & Machine Co., Tampa, Fla. <sup>1</sup> .....	200	600	1,200	400	250	300	100
3. Bucyrus Co., South Milwaukee, Wis.....	490	2,170	1,760	570	700	3,750	.....
4. United States navy yard, Charleston, S. C.....	500	3,504	3,838	.....	.....	200	.....

<sup>1</sup> Certified check for \$35,000 furnished in lieu of guaranty.

NOTE.—No bids were received for item (e) covering dredge of own design.

#### RENTAL ALTERNATIVE.

Name and address of bidder.	Rental of dredge and plant.			
	Trial period. <sup>1</sup> (a)	Per month. <sup>2</sup> (b)	Delivery. (c)	Demur- rage. <sup>3</sup> (d)
1. Maryland Dredging & Contracting Co., Baltimore, Md.....	\$10,000	\$8,500	\$5,000	\$325

Name of address and bidder.	Sale of dredge and attendant plant. (e)				
	Dredge complete.	1 dump scow.	1 dump scow.	1 barge.	1 tug boat.
1. Maryland Dredging & Contracting Co., Baltimore, Md.....	\$40,000	\$10,000	\$10,000	\$5,000	\$15,000

<sup>1</sup> Trial period of 30 days.

<sup>2</sup> For period of not less than 12 months.

<sup>3</sup> Per diem covering period between delivery and commencement of trial period.

NOTE.—All bids rejected.

Abstract of proposals for dredging and rock removal at Miami Harbor, Fla. (110,000 cubic yards rock and 60,000 cubic yards sand), and St. Lucie Inlet, Fla. (73,000 cubic yards rock and 112,000 cubic yards sand), received in response to advertisement and opened at the United States Engineer office, Jacksonville, Fla., Nov. 8, 1916.

[Harbor at Miami, Fla., and St. Lucie Inlet, Fla.]

Name and address of bidder.	Miami Harbor.		
	Rock.	Sand.	Total.
1. Timothy J. Dady, Brooklyn, N. Y.	\$110,000	\$13,200	\$123,200
2. Bowers Southern Dredging Co., Galveston, Tex.	77,000	11,850	88,850
4. P. Sanford Ross (Inc.), Jersey City, N. J.	217,800	10,800	228,600
5. Standard American Dredging Co., Oakland, Cal.	60,225	32,850	93,075

  

Name and address of bidder.	St. Lucie Inlet.			Both works.		
	Rock.	Sand.	Total.	Rock.	Sand.	Total.
3. Coastwise Dredging Co., Baltimore, Md.				\$305,610	\$37,840	\$343,450
4. P. Sanford Ross (Inc.), Jersey City, N. J.	\$88,330	\$22,400	\$110,730	.....	.....	339,380
Informal alternate bid.	83,220	22,400	105,620	.....	.....	.....
5. Standard American Dredging Co., Oakland, Cal.	61,320	22,400	83,720	.....	.....	176,795

NOTE.—Informal offer of Standard American Dredging Co. to make cut at St. Lucie Inlet not less than 12 feet deep by 125 feet wide accepted. Miami bids rejected.

#### COAL.

Abstract of proposals for furnishing 5,000 short tons coal for United States dredges at Tampa, Fla., received in response to advertisement and specifications and opened June 30, 1916, in the United States Engineer office, Jacksonville, Fla., by Maj. W. B. Ladue, Corps of Engineers, United States Army.

Name and address of bidder.	First method, on barges, 2,000 pounds.	Second method, at mines.	Published through rate, mines to Tampa.	Analysis of coal.				British thermal units.
				Moisture.	Ash.	Sulphur.	Volatile matter.	
1. Warrior Black Creek Coal Co., Warrior, Jefferson County, Ala.				Per ct.	P. ct.	Per ct.	Per ct.	
	\$1.65	1 \$2.90		3.00	4.00	1.00	31.00	14,750
	\$5.50			3.00	5.50	1.75	40.00	14,250
2. Tampa Coal Co., Tampa, Fla.	5.25	1.15	2 3.20	3.00	6.50	1.75	40.00	14,250
				3.00	8.00	1.50	39.00	14,000
3. Alabama Fuel and Iron Co., Birmingham, Ala.		1.40	2 3.00	3.00	8.00	1.50	39.00	14,000
4. Crozier-Pocahontas Co., Philadelphia, Pa.		1.50	1 2.90	3.00	9.50	1.50	34.00	14,000
5. Standard Fuel & Supply Co., Savannah, Ga.	5.13	1.38	1 2.90	3.00	5.00	.75	34.00	14,500
6. Imperial Coal & Coke Co., Birmingham, Ala.		1.25	2 3.75	2.00	6.55	.56	18.01	14,700
7. Pratt Consolidated Coal Co., Birmingham, Ala.		1.60	1 2.90	1.19	6.40	.757	32.74	14,289
		1.30	1 2.90	1.25	9.25	1.50	29.60	14,000

<sup>1</sup> 50 per cent land grant.

<sup>2</sup> Part land grant.

## COAL—Continued.

*Abstract of proposals for furnishing 5,000 short tons coal for United States dredges at Tampa, Fla., received in response to advertisement and specifications and opened June 30, 1916, in the United States Engineer office, Jacksonville, Fla., by Maj. W. B. Ladue, Corps of Engineers, United States Army—Continued.*

Name and address of bidder.	Price adjusted in moisture.	Price adjusted in ash.	Price per 1,000,000 British thermal units.	Freight and handling charges.		Final adjusted price per 1,000,000 British thermal units.	Name of coal.
				Per ton.	Per 1,000,000 British thermal units.		
1. Warrior Black Creek Coal Co., Warrior, Jefferson County, Ala.	\$1.701 5.670 1.186	\$1.701 5.741 1.201	\$0.058 .201 .042	\$1.95 3.20	\$0.066 .112	\$0.124 .201 .154	Black Creek. Southern Star. <sup>3</sup> Pratt Full Mine Run. <sup>3</sup>
2. Tampa Coal Co., Tampa, Fla.	5.412 1.443 1.546	5.520 1.472 1.589	.197 .053 .057	3.10 1.95	.111 .070	.197 .164 .127	Carona. Do. Pratt Full Mine Run. <sup>4</sup>
3. Alabama Fuel & Iron Co., Birmingham, Ala.	1.423	1.430	.049	1.95	.067	.116	Acton Washed steam. <sup>5</sup>
4. Crozzer-Pocahontas Co., Philadelphia, Pa.	1.276	1.292	.044	3.75	.128	.172	Pocahontas.
5. Standard Fuel & Supply Co., Savannah, Ga.	5.192	5.254	.184	-----	-----	.184	Stonega.
6. Imperial Coal & Coke Co., Birmingham, Ala.	1.649	1.649	.055	1.95	.065	.120	Dixiana.
7. Pratt Consolidated Coal Co., Birmingham, Ala.	1.316	1.354	.048	1.95	.070	.118	Old Pratt Mine Run. <sup>4</sup>

<sup>1</sup> Sulphur and volatile matter too high.<sup>2</sup> Ash too high.<sup>3</sup> Lowest bidder.

*Abstract of proposals for furnishing 6,000 short tons coal for United States dredges on St. Johns River and tributary waters, received in response to advertisement and specifications and opened June 30, 1916 in the United States Engineer office, Jacksonville, Fla., by Maj. W. B. Ladue, Corps of Engineers, United States Army.*

Name and address of bidder.	First method.		Second method, at mines.	Published through rate, mines to Jacksonville.	Analysis of coal.			
	On barges, 2,000 pounds.	In bunkers, 2,000 pounds.			Moisture.	Ash.	Sulphur.	Volatile matter.
1. Weller Coal Co., Jacksonville, Fla.	\$4.20	-----	-----	-----	P. ct. 2.00 2.00	P. ct. 6.00 6.00	P. ct. 1.00 1.00	P. ct. 19.00 19.00
2. Warrior Black Creek Coal Co., Warrior, Jefferson County, Ala.	-----	\$4.30	-----	-----	-----	-----	-----	-----
3. Alabama Fuel & Iron Co., Birmingham, Ala.	-----	-----	\$1.65	<sup>1</sup> \$1.90	3.00	4.00	1.00	31.00
4. Crozzer Pocahontas Co., Philadelphia, Pa.	-----	-----	1.38	<sup>1</sup> 1.90	3.00	5.00	.75	34.00
5. Logan Coal & Supply Co., Jacksonville, Fla.	3.98	4.03	-----	2.75	2.00	6.55	.56	18.01
6. McNair Lumber Co., Jacksonville, Fla.	4.40	4.50	-----	1.25	2.00	8.00	1.00	35.00
7. Imperial Coal & Coke Co., Birmingham, Ala.	-----	-----	1.20	<sup>1</sup> 1.90	2.00	6.00	.85	17.00
8. Standard Fuel & Supply Co., Savannah, Ga.	4.15	4.15	-----	1.60	1.19	6.40	.75	32.74
9. Taggart Coal Co., Savannah, Ga.	-----	-----	-----	-----	1.19	6.40	.75	32.74
10. Pratt Consolidated Coal Co., Birmingham, Ala.	3.304	-----	1.30	<sup>1</sup> 1.90	2.00	7.00	1.00	37.00

<sup>1</sup> 50 per cent land grant.

Abstract of proposals for furnishing 6,000 short tons coal for United States dredges on St. Johns River and tributary waters, received in response to advertisement and specifications and opened June 30, 1916, in the United States Engineer office, Jacksonville, Fla., by Maj. W. B. Ladue, Corps of Engineers, United States Army—Continued.

Name and address of bidder.	British thermal units.	Price adjusted in moisture.	Price adjusted in ash.	Price per 1,000,000 British thermal units.	Freight and handling charges.		Final adjusted price per 1,000,000 British thermal units.	Name of coal.
					Per ton.	Per 1,000,000 British thermal units.		
1. Weller Coal Co., Jacksonville, Fla.	14,900	\$4.286	\$4.329	\$0.145	.....	.....	\$0.145	Admiralty.
2. Warrior Black Creek Coal Co., Warrior, Jefferson County, Ala.	14,900	4.388	4.432	.149	.....	.....	.149	Do.
3. Alabama Fuel & Iron Co., Birmingham, Ala.	14,750	1.701	1.701	.058	\$1.45	\$0.049	.107	Black Creek.
4. Crozer Pocahontas Co., Philadelphia, Pa.	14,700	1.276	1.292	.044	3.25	.111	.155	Pocahontas.
5. Logan Coal & Supply Co., Jacksonville, Fla.	14,000	4.061	4.142	.148	.....	.....	.148	Stonega.
6. McNair Lumber Co., Jacksonville, Fla.	14,000	4.112	4.194	.150	.....	.....	.150	Do.
7. Imperial Coal & Coke Co., Birmingham, Ala.	14,750	4.490	4.535	.154	.....	.....	.154	C. C. B. Pocahontas, smokeless.
8. Standard Fuel & Supply Co., Savannah, Ga.	14,289	4.200	4.250	.149	.....	.....	.149	Stonega.
9. Taggart Coal Co., Savannah, Ga.	14,289	4.200	4.250	.149	.....	.....	.149	Do.
10. Pratt Consolidated Coal Co., Birmingham, Ala.	14,250	1.215	1.239	.043	1.45	.051	.094	Old Pratt. <sup>1</sup>
	14,900	1.649	1.649	.055	1.45	.049	.104	Imperial-washed nut and pea.
	14,000	1.316	1.354	.048	1.45	.052	.100	Old Pratt mine run. <sup>2</sup>

<sup>1</sup> Lowest bid.

<sup>2</sup> Alongside wharf at Mayport not according to specifications.

\* Ash too high.

#### WRECKS.

Abstract of proposals for removing portion of wreck of the steamship "Planter" from the Caloosahatchee River, near Fort Myers, Fla., received in response to circular letter and opened at the United States Engineer office, Jacksonville, Fla., July 20, 1915.

[Removing sunken vessels or craft obstructing or endangering navigation; indefinite.]

Name and address of bidder.	Price bid.	Remarks.
1. K. B. Harvey, Fort Myers, Fla.....	\$587	Certified check for \$200 in lieu of bond.
2. Gulf Construction Co., Fort Myers, Fla.....	950	Bond incorrect.

NOTE.—All bids rejected as being excessive. Work to be done by hired labor with United States snag-boat Kissimmee.

*Abstract of proposals for removing wreck "Nellie Grant" from Charlotte Harbor, Fla. (near Boca Grande, Fla.), received in response to circular letter and opened at United States Engineer office, Jacksonville, Fla., Mar. 4, 1916.*

[Removing sunken vessels or craft obstructing or endangering navigation; indefinite.]

Name and address of bidder.	Amount.	Remarks.
1. Tampa Sand & Shell Co., Tampa, Fla.....	\$1,450	Certified check for \$100 in lieu of bond. No revenue stamp.
2. Stackhouse & Co., Boca Grande, Fla.....	1,290	
3. Chas. W. Johnson, Lewes, Del.....	940	
4. C. T. Johnston, Lewes, Del.....	1,293	No guaranty.

NOTE.—All bids rejected as being too high.

### MONTGOMERY (ALA.) DISTRICT.

[Officer: Capt. C. L. Sturdevant, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of proposals for two pairs of steel mitering lock gates for Lock No. 1, Coosa River, Ala., received in response to advertisement dated Aug. 20, 1915, and opened at the U. S. Engineer Office, Montgomery, Ala., on Sept. 20, 1915.*

[Appropriation: Operating and care of canals and other works of navigation; indefinite.]

Name and address of bidder.	Classification and approximate quantities.						Total.
	Class G.—Structural steel; plates, shapes, rivets, rough bolts, etc.; weight, 62,100 pounds.		Class H.—Forged steel; pins, keys, etc.; turned bolts, etc.; railings, fittings, tie-rods, turn buckles; weight, 2,030 pounds.		Class K.—Cast iron; heel castings, etc.; fillers for upper pintles; weight, 2,500 pounds.		
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.	
1. Penn Bridge Co., Beaver Falls, Pa.....	\$0.054	\$3,352.40	\$0.079	\$160.37	\$0.092	\$230.00	\$3,743.77
2. Chicago Bridge & Iron Co., Chicago, Ill.....	.052	3,229.20	.08	162.40	.07	175.00	3,566.60
3. Chas. Hegewald Co., New Albany, Ind.....	.05499	3,414.87	.05499	111.62	.05499	137.69	3,664.18
4. Independent Bridge Co., Pittsburgh, Pa.....	.0495	3,073.95	.106	215.18	.0725	181.25	3,470.38
5. The Whitehead & Kales Iron Works, Detroit, Mich.....	.0452	2,806.92	.128	259.84	.0988	247.00	3,313.76

Bid No. 5, the Whitehead & Kales Iron Works, accepted.

## MOBILE (ALA.) DISTRICT.

[Maj. E. H. Schulz, Corps of Engineers.]

## COAL.

*Abstract of bids received, in response to 30 days' newspaper advertisement, for furnishing approximately 12,000 tons of bituminous coal; opened in United States Engineer Office, Mobile, Ala., on Feb. 23, 1916.*

Proposals.	Name and address of bidder.				
	Sunlight Mining Co. Jasper, Ala	Robt. P. Hyams Coal Co. (Ltd.), New Orleans, La.	Warrior Black Creek Coal Co., Warrior, Ala.	Imperial Coal & Coke Co., Birmingham, Ala.	
Commercial name of coal.	Sunlight Black Creek. \$1.05.....	Palos mine run..... \$1.50.....	Warrior Black Creek. \$1.75.....	Imperial washed pea. \$1.45.	
Price per ton of 2,000 pounds, carload lots.					
Freight rate on Government bill of lading from mine to Mobile:					
Per ton of 2,000 pounds.	\$0.8625.....	\$0.7639.....	\$0.6759.....	\$0.6931.	
Per million British thermal units.	\$0.0299.....	\$0.0273.....	\$0.0225.....	\$0.0239.	
Detailed analysis of coal:					
Per cent ash.....	4.00.....	9.00.....	2.50.....	6.00.	
Per cent moisture.....	2.10.....	2.50.....	1.50.....	3.00.	
Per cent volatile matter.	38.50.....	30.00.....	32.00.....	32.00.	
Per cent sulphur.....	1.25.....	1.00.....	1.05.....	1.00.	
British thermal units per pound.	14,400.....	14,000.....	15,000.....	14,500.	
Price adjusted for ash.	\$0.950.....	\$1.500.....	\$1.620.....	\$1.390.	
Price adjusted for moisture.	\$0.970.....	\$1.538.....	\$1.645.....	\$1.433.	
Price adjusted per million British thermal units.	\$0.0337.....	\$0.0549.....	\$0.0548.....	\$0.0494.	
Price adjusted per million British thermal units on barge at Mobile.	\$0.064.....	\$0.082.....	\$0.077.....	\$0.073.	
Remarks.....	2 to 4 inch nut.....	Palos coal used by you on previous contract.	Lump coal, Black Creek coal beds.	Through $\frac{3}{4}$ -inch over $\frac{1}{8}$ -inch pea, Black Creek.	

Abstract of bids received, in response to 30 days' newspaper advertisement, for furnishing approximately 12,000 tons of bituminous coal; opened in United States Engineer Office, Mobile, Ala., on Feb. 23, 1916—Continued.

Proposals.	Name and address of bidder.			
	Imperial Coal & Coke Co., Birmingham, Ala.	Pratt Consolidated Coal Co., Birmingham, Ala.	Pratt Consolidated Coal Co., Birmingham, Ala.	Pratt Consolidated Coal Co., Birmingham, Ala.
Commercial name of coal.	Imperial washed pea.	Dora.....	Dora.....	Dora.
Price per ton of 2,000 pounds, carload lots.	\$1.65.....	\$2.75.....	\$2.75.....	\$1.40.
Freight rate on Government bill of lading from mine to Mobile:				
Per ton of 2,000 pounds.	\$0.6931.....			\$0.7639.
Per million British thermal units.	\$0.0233.....			\$0.0273.
Detailed analysis of Coal:				
Per cent ash.....	3.00.....	9.00.....	9.00.....	9.00.
Per cent moisture.....	2.00.....	3.00.....	3.00.....	3.00.
Per cent volatile matter.....	32.00.....	30.00.....	30.00.....	30.00.
Per cent sulphur.....	1.00.....	0.70.....	0.70.....	0.70.
British thermal units per pound.	14,900.....	14,000.....	14,000.....	14,000.
Price adjusted for ash.....	\$1.530.....	\$2.750.....	\$2.750.....	\$1.400.
Price adjusted for moisture.....	\$1.561.....	\$2.835.....	\$2.835.....	\$1.443.
Price adjusted per million British thermal units.....	\$0.0524.....	\$0.1013.....	\$0.1013.....	\$0.0515.
Price adjusted per million British thermal units on barge at Mobile.	\$0.076.....	\$0.101.....	\$0.101.....	\$0.079.
Remarks.....	Through 3-inch over $\frac{1}{4}$ -inch nut, Black Creek.	Pea coal, Jagger beds.	Nut coal, Jagger beds.	Pea coal, Jagger beds.

Proposals.	Name and address of bidder.			
	Pratt Consolidated Coal Co., Birmingham, Ala.	De Bardelebon Coal Co. (Inc.), Birmingham, Ala.	De Bardelebon Coal Co. (Inc.), Birmingham, Ala.	De Bardelebon Coal Co. (Inc.), Birmingham, Ala.
Commercial name of coal.	Dora.	Sipsey washed pea and slack.	Sipsey washed nut.	Sipsey washed pea and slack.
Price per ton of 2,000 pounds, carload lots.	\$1.40.....	\$2.19.....	\$2.52.....	\$1.27.
Freight rate on Government bill of lading from mine to Mobile:				
Per ton of 2,000 pounds.	\$0.7639.....			\$0.7639.
Per million British thermal units.	\$0.0273.....			\$0.0265.
Detailed analysis of coal:				
Per cent ash.....	9.00.....	5.00.....	3.50.....	5.00.
Per cent moisture.....	3.00.....	3.00.....	3.00.....	3.00.
Per cent volatile matter.....	30.00.....	33.25.....	35.50.....	33.25.
Per cent sulphur.....	0.70.....	0.88.....	1.08.....	0.88.
British thermal units per pound.	14,000.....	14,400.....	14,700.....	14,400.
Price adjusted for ash.....	\$1.400.....	\$2.110.....	\$2.410.....	\$1.190.
Price adjusted for moisture.....	\$1.443.....	\$2.175.....	\$2.485.....	\$1.227.
Price adjusted per million British thermal units.....	\$0.0515.....	\$0.0755.....	\$0.0845.....	\$0.0426.
Price adjusted per million British thermal units on barge at Mobile.	\$0.079.....	\$0.076.....	\$0.085.....	\$0.069.
Remarks.....	Nut coal, Jagger beds.	Black Creek beds <sup>1</sup> .	Black Creek beds <sup>1</sup> .	Black Creek beds <sup>1</sup> .

<sup>1</sup> Coal after being washed is sized with revolving screen, with 1-inch round perforations, the undersize, 1 by 0 inch, designated "Washed pea and slack," oversize, 3 by 1 inch, designated "Washed nut."

Abstract of bids received, in response to 30 days' newspaper advertisement, for furnishing approximately 12,000 tons of bituminous coal; opened in United States Engineer Office, Mobile, Ala., on Feb. 23, 1916—Continued.

Proposals.	Name and address of bidder.			
	De Bardelebon Coal Co. (Inc.), Birmingham, Ala.	Alabama Fuel & Iron Co., Birmingham, Ala.	Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.	Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.
Commercial name of coal.	Sipsey washed nut.	Acton washed steam coal.	Blue Creek pea coal.	Blue Creek nut coal.
Price per ton of 2,000 pounds, carload lots. Freight rate on Govern- ment bill of lading from mine to Mobile: Per ton of 2,000 pounds.	\$1.60.....	\$1.33.....	\$2.70.....	\$2.70.
Per million British thermal units.	\$0.7639.....	\$0.6884.....	.....	.....
Detailed analysis of coal:				
Per cent ash.....	3.50.....	5.00.....	9.00.....	9.00.
Per cent moisture.....	3.00.....	3.00.....	3.00.....	3.00.
Per cent volatile matter.	35.50.....	34.00.....	25.50.....	25.50.
Per cent sulphur.....	1.08.....	0.75.....	0.85.....	0.85.
British thermal units per pound.	14,700.....	14,500.....	14,250.....	14,250.
Price adjusted for ash.	\$1.490.....	\$1.250.....	\$2.700.....	\$2.700.
Price adjusted for moisture.	\$1.536.....	\$1.289.....	\$2.784.....	\$2.784.
Price adjusted per mil- lion British thermal units.	\$0.0522.....	\$0.0444.....	\$0.0977.....	\$0.0977.
Price adjusted per mil- lion British thermal units on barge at Mobile.	\$0.078.....	\$0.068.....	\$0.098.....	\$0.098.
Remarks.....	Black Creek beds <sup>1</sup> .	Washed nut, pea, and slack, Hel- ena bed.	Blue Creek beds <sup>2</sup> .	Blue Creek beds, <sup>2</sup>

<sup>1</sup> Coal after being washed is sized with revolving screen, with 1-inch round perforations, the undersize, 1 by 0 inch, designated "Washed pea and slack," oversize, 3 by 1 inch, designated "Washed nut."

<sup>2</sup> This coal, both nut and pea, meets your specifications as to size, and otherwise shows 66 per cent to 67 per cent fixed carbon.

Abstract of bids received, in response to 30 days' newspaper advertisement, for furnishing approximately 12,000 tons of bituminous coal; opened in United States Engineer Office, Mobile, Ala., on Feb. 23, 1916—Continued.

Proposals.	Name and address of bidder.				
	Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.				
Commercial name of coal.	Blue Creek pea coal.	Blue Creek nut coal.	Old Pratt lump or nut.	Old Pratt lump or nut.	
Price per ton of 2,000 pounds carload lots. Freight rate on Government bill of lading from mine to Mobile:					
Per ton of 2,000 pounds.	\$1.60.....	\$1.60.....	\$2.85.....	\$1.75.	
Per million British thermal units.	\$0.7102.....	\$0.7102.....		\$0.6876.	
Detailed analysis of coal:					
Per cent ash.....	9.00.....	9.00.....	5.00.....	5.00.	
Per cent moisture.....	3.00.....	3.00.....	2.00.....	2.00.	
Per cent volatile matter.....	25.50.....	25.50.....	29.50.....	29.50.	
Per cent sulphur.....	0.85.....	0.85.....	1.50 to 1.75.....	1.50 to 1.75.	
British thermal units per pound.	14,250.....	14,250.....	14,750.....	14,750.	
Price adjusted for ash.	\$1,600.....	\$1,600.....	\$2,770.....	\$1,670.	
Price adjusted for moisture.	\$1,650.....	\$1,650.....	\$2,827.....	\$1,704.	
Price adjusted per million British thermal units.	\$0.0579.....	\$0.0579.....	\$0.0958.....	\$0.0578.	
Price adjusted per million British thermal units on barge at Mobile.	\$0.083.....	\$0.083.....	\$0.096.....	\$0.081.	
Remarks.....	Blue Creek beds <sup>2</sup> ..	Blue Creek beds <sup>1</sup> ..	( <sup>2</sup> ).....	( <sup>2</sup> ).....	

<sup>1</sup> This coal, both nut and pea, meets your specifications as to size and otherwise shows 66 to 67 per cent fixed carbon.

<sup>2</sup> This coal is slightly larger average size than your specifications for nut coal, but is an ideal size for hand-fired operations, and is being used exclusively by United States War Department engineers at Burrwood, La., as well as by many other important United States Government operations in the South.

All bids rejected and new proposals asked.

### NEW ORLEANS (LA.) DISTRICT.

[Officer: Maj. E. H. Schulz, Corps of Engineers.]

#### RIVERS AND HARBORS.

Abstract of proposals received in response to advertisement by newspaper, for furnishing and placing about 12,000 tons of stone on the jetties at Southwest Pass, Mississippi River, and opened on July 21, 1915, by Maj. Edward H. Schulz, Corps of Engineers, New Orleans, La.

[Improving Southwest Pass, Mississippi River.]

Name and address of bidder.	Date of bid.	(a) Measurement by displacement; wells or pipes (par. 23).		(c) Alternate No. 2. Measurement by car weights (par. 25).	
		Per ton.	Total.	Per ton.	Total.
1. Lester F. Alexander, New Orleans, La..	July 21, 1915	<sup>1</sup> \$3.97	<sup>1</sup> \$47,640.00		
2. A. E. Massey, New Orleans, La.....do.....				\$4.15	<sup>1</sup> \$50,170.00
3. Doullut & Williams, New Orleans, La.....do.....		5.48	65,760.00	5.38	<sup>1</sup> 64,930.00

<sup>1</sup> Accepted, and contract entered into July 29, 1915.

*Abstract of proposals received in response to advertisement by newspaper, for furnishing and delivering cement, sand, and gravel for work at Southwest Pass, Mississippi River, and opened Sept. 22, 1915, by Maj. Edward H. Schulz, Corps of Engineers, New Orleans, La.*

## IMPROVING SOUTHWEST PASS, MISSISSIPPI RIVER.

Name and address of bidder.	Method (a), delivered at Burrwood, La.				Method (b), delivered at New Orleans, La.: Lot 1, cement; 7,300 barrels.			
	Lot 1, cement; 7,300 barrels.		Lot 2, sand; 2,600 cubic yards.		Lot 3, gravel; 5,800 cubic yards.			
	Unit price.	Total.	Unit price.	Total.	Unit price.	Total.	Unit price.	Total.
1. J. Watts Kearny & Sons, New Orleans, La.	1 \$1.35	1 \$9,855					\$1.20	\$8,760
2. Lester F. Alexander, New Orleans, La.	1.55	11,315	2 \$2.15	2 \$5,590	2 \$2.35	2 \$13,630		
3. Carolina Portland Cement Co., New Orleans, La.	1.47	10,731					1.22	8,906
4. The Atlas Portland Cement Co., Chicago, Ill.							1.26	9,198
							1.23	8,979

<sup>1</sup> Accepted and contract entered into Oct. 11, 1915.<sup>3</sup> Alternate bid.<sup>2</sup> Accepted and contract entered into Oct. 15, 1915.

*Abstract of bids for dredge pumps and spare parts for dredge New Orleans, opened Nov. 26, 1915, by Maj. Edward H. Schulz, Corps of Engineers, New Orleans, La. Poster and circular notice dated Nov. 2, 1915.*

## IMPROVING SOUTHWEST PASS, MISSISSIPPI RIVER.

	Ellicott Machine Corporation., Baltimore, Md.	The Johnson Iron Works (Ltd.), New Orleans, La., lump price.		Dibert-Bancroft & Ross Co., New Orleans, La., lump price.
		Lump price.	Alternate bid.	
Lot 1, 2 dredge pumps.		\$6,890.00		
Lot 2:				
1 steel casting sheave.		60.00		\$85.00
4 piston rods, steel.		100.00		112.00
Lot 3, 1 water end for duplex piston pump.		229.63		109.00
Lot 4:				
2 pipe castings.		476.00		402.75
1 double Y piece.		540.00		424.75
1 double offset Y piece.		398.00	2 \$8,239.50	406.00
2 special elbows.		175.00		150.00
4 key blocks.		202.00		42.00
Lot 5, 1 topmast, Oregon pine.		69.00		

<sup>1</sup> Alternate bid.<sup>2</sup> Accepted and contract entered into Jan. 3, 1916. For all lots.

*Abstract of bids for dredge pumps and spare parts for dredge New Orleans, opened Nov. 26 1915, by Maj. Edward H. Schulz, Corps of Engineers, New Orleans, La. Poster and circular notice dated Nov. 2, 1915—Continued.*

## IMPROVING SOUTHWEST PASS, MISSISSIPPI RIVER—Continued.

	The Buoyrus Co., South Milwaukee, Wis., lump price.	United States Naval Station, New Orleans, La., lump price.	United States Cast Iron & Pipe & Foundry Co., Chattanooga, Tenn., lump price.	J. H. Murphy Iron Works, New Orleans, La., lump price.	A. M. Lockett & Co., New Orleans, La., lump price.	L. W. Templeman, New Orleans, La., lump price.
Lot 1, 2 dredge pumps.....		\$8,860.00				
Lot 2:						
1 steel casting sheave.....	\$62.00	98.00		\$78.00		
4 piston rods, steel.....	{ 70.00 71.00 } 78.00			166.00		
Lot 3, 1 water end for duplex piston pump.....		560.00		358.00	{ <sup>1</sup> \$310.00 <sup>1</sup> 205.00 } 515.00	
Lot 4:						
2 pipe castings.....	418.00	199.00	\$391.86			
1 double Y piece.....	388.00	199.00	327.86			
1 double offset Y piece.....	317.00	316.00	394.12			
2 special elbows.....	154.00	138.00	221.11			
4 key blocks.....	257.00	225.00	172.22			
Lot 5, 1 topmast, Oregon pine.....		85.00				\$82.50

<sup>1</sup> Accepted and contract entered into Oct. 11, 1915.

*Abstract of proposals received in response to advertisement by newspaper for a period of 30 days for furnishing and delivering about 10,000 cubic yards stone, more or less, for South and Southwest Passes, Mississippi River, and opened by Maj. Edward H. Schulz, Corps of Engineers, New Orleans, La., June 20, 1916.*

[Improving Southwest Pass, Mississippi River. Maintenance of South Pass Channel, Mississippi River.]

Name and address of bidder.	Date of bid.	Estimated quantity, 10,000 cubic yards.	
		Unit price.	Total.
1. Lester F. Alexander, New Orleans, La.....	1916.		
2. Oscar F. Barrett, Cincinnati, Ohio.....	June 20	{ <sup>1</sup> \$2,929 <sup>2</sup> 1,289.99 } 2,929.99	\$29,290
3. A. E. Massey, New Orleans, La.....	June 17	3.45	34,500
	June 20	4.67	46,700

<sup>1</sup> Recommended for acceptance.

<sup>2</sup> Memorandum on bid states: "If awarded the entire amount required under this contract, either 10,000 or 15,000 cubic yards in one order, then price to be \$2.899 per cubic yard."

*Abstract of proposal received in response to advertisement by newspaper for a period of 30 days for furnishing about 20,000 cords of willows, more or less, for South and Southwest Passes, Mississippi River, and opened by Maj. Edward H. Schulz, Corps of Engineers, New Orleans, La., June 20, 1916.*

[Improving Southwest Pass, Mississippi River. Maintenance of South Pass Channel, Mississippi River.]

Name and address of bidder.	20,000 cords.		Date of bid.
	Unit price.	Total.	
1. R. M. Murphy Co. (Inc.), New Orleans, La.....	<sup>1</sup> \$1.52	\$30,400	June 20, 1916

<sup>1</sup> Recommended for acceptance.

## COAL.

*Abstract of proposals for furnishing and delivering coal for United States plant for fiscal year 1917, received in response to advertisement by newspaper, and opened June 24, 1916, by Maj. Edward H. Schulz, Corps of Engineers, New Orleans, La.*

[Improving Southwest Pass, Mississippi River. Maintenance of South Pass Channel, Mississippi River. Operating and care of canals and other works of navigation: Indefinite. (For Plaquemine Lock, La.)].

Name and address of bidder.	Per cent of volatile matter.	Per cent of sulphur.	Ash.	Moisture.	British thermal units.
1. Robt. P. Hyams Coal Co., New Orleans, La.....	30.00	1.75	9.20	2.25	13,800
2. Do.....	35.00	1.00	4.30	3.80	14,800
3. W. G. Coyle & Co. (Inc.), New Orleans, La.....	34.00	.96	4.00	3.00	14,750
4. West Kentucky Coal Co., Sturgis, Ky.....	35.00	2.00	9.00	3.00	13,500
5. Crescent City Coal Co. (Inc.), New Orleans, La.....	30.00	1.00	4.00	3.50	15,000
6. The Monongahela River Consolidated Coal & Coke Co., New Orleans, La.....	35.00	1.20	7.70	3.00	14,200
7. Do.....	36.00	1.25	5.76	2.50	14,300
8. Tennessee Coal, Iron & R. R. Co., New Orleans, La.....	29.50	1.33	5.00	2.00	14,800
9. New Orleans Coal Co., New Orleans, La.....	30.00	2.00	4.00	3.00	14,500
10. Do.....	30.00	2.00	8.00	3.00	13,800

Name and address of bidder.	(a)		(b)		(c)		Grand total.	
	Estimated quantity, 15,000 tons.		Estimated quantity, 800 tons.		Estimated quantity, 1,000 tons.			
	Unit price.	Total.	Unit price.	Total.	Unit price.	Total.		
1. Robt. P. Hyams Coal Co., New Orleans, La.....	\$3.15	\$47,250	\$3.05	\$2,440	\$3.75	\$3,750	\$53,440.00	
2. Do.....	3.42	51,300	3.40	2,720	3.90	3,900	57,920.00	
3. W. G. Coyle & Co. (Inc.), New Orleans, La.....	3.45	51,750	3.25	2,600	3.45	3,450	57,800.00	
4. West Kentucky Coal Co., Sturgis, Ky.....					3.40	3,400	13,400.00	
5. Crescent City Coal Co. (Inc.), New Orleans, La.....	3.58	53,700	3.35	3,680	4.08	4,080	60,460.00	
6. The Monongahela River Consolidated Coal & Coke Co., New Orleans, La.....	4.00	60,000	3.60	2,880	2 4.00	2,000	66,630.00	
7. Do.....	3.90	58,500	3.50	2,800	2 3.50	1,750		
					2 3.90	1,950		
8. Tennessee Coal, Iron & R. R. Co., New Orleans, La.....	3.45	51,750			2 3.40	1,700	64,950.00	
9. New Orleans Coal Co., New Orleans, La.....	3.58	53,700	3.30	2,640	3.35	3,350	59,690.00	
10. Do.....	3.30	49,500	3.10	2,480	3.05	2 3,050	55,030.00	

<sup>1</sup> Lot (c) only.<sup>2</sup> 500 tons.<sup>3</sup> Recommended for acceptance.<sup>4</sup> Lot (a) only.

## GALVESTON (TEX.) DISTRICT.

[Officer: Lieut. Col. C. S. Riché, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstracts of proposals for jetty work at Port Aransas, Tex., received in response to advertisement dated May 1, 1916, and opened May 15, 1916, at Galveston, Tex., by H. B. Sinclair, chief clerk.*

[Improving Port Aransas, Tex.]

Quantities.	Name and address of bidder.			
	No. 1. David M. Picton & Co., Port Arthur, Tex.	No. 2. Chas. Clarke & Co., Galveston, Tex.	Unit.	Total.
1,000 tons small riprap from 15 to 200 pounds per piece, properly placed in the core of the work.....	\$4.75	\$4,750.00	\$4.00	\$4,000.00
2,600 tons large riprap from 5 to 10 tons per piece properly placed in the slopes of the work.....	4.80	12,480.00	4.50	11,700.00
600 tons crest stone, not less than 10 tons each, properly placed in the work.....	5.00	3,000.00	6.00	3,600.00
70 crest block and slope stone picked up and rebedded.....	5.00	350.00	7.50	525.00
Total.....		20,580.00		19,825.00

## REMARKS.

No. 1. Intend to furnish stone from Bickman or Granite Mountain Quarry. Will use method and plant for placing material satisfactory to the United States Government. Certified check for \$2,000 accompanied by bid as guaranty to enter into contract.

No. 2. Intend to furnish limestone and granite from Dittlinger and Granite Mountain Quarry. Will use derrick barge and barges for placing material.

Awarded to No. 2.

*Abstract of proposals for constructing wharf at Port Aransas, Tex., received in response to advertisement dated Mar. 18, 1916, and opened Apr. 11, 1916, at Galveston, Tex., by N. T. Blackburn, assistant engineer.*

[Improving Port Aransas, Tex.]

Name and address of bidder.	Total.
1. Blodgett Construction Co., Galveston, Tex.....	\$6,250.00
2. Charles Clarke & Co., Galveston, Tex.....	5,980.00

## REMARKS.

No. 1. No evidence of authority of party signing for company to bind same. Certified check for \$1,550 accompanied bid as guaranty to enter into contract. Experience: Highway drawbridges over intercoastal canal; repairing wharf and dolphins Galveston, quarantine station; railroad company passenger wharves, Freeport, Tex.; Pier 41 foundation, Galveston Wharf Co.; Port Arthur pleasure pier.

No. 2. Experience: Various pile-driver work in connection with sea-wall work for the United States Engineer Department at Galveston and Fort Morgan, Ala., during last 10 years.

Awarded to No. 2.

## WRECK.

*Abstract of proposals for removing wreck of wooden hull schooner "Thomas J. Carroll," sunk in Galveston channel near Pier 37, Galveston, Tex., received in response to advertisement dated Sept. 24, 1915, and opened Oct. 25, 1915, at Galveston, Tex., by H. B. Sinclair, chief clerk.*

[Removing sunken vessel or craft obstructing or endangering navigation, indefinite.]

	Name and address of bidder.	Total.
1. Albert Major, Galveston, Tex.		\$1, 240

## REMARKS.

Plant available (barges, derricks, tugs, etc.): Will use derricks, but in event schooner is too heavily loaded with ballast, will place barge on one side, place timbers on wharf from barge, placing chains under wreck, jacking up until ballast can be removed, then take hold with derrick, then tow wreck to any point designated by Government engineer in charge, so as not to be a menace to navigation.

Experience: Has had 15 years experience in the wrecking business, having raised such plants as the Bowers South Dredging Co.'s dredge No. 6 at Texas City, 1913; same company's dredge No. 7, Sabine Pass, April, 1915; steel hull fire tug *Chas. Clarke*, 1912, at Port Arthur; steel hull tug *Seminole*, Morgan City, La., from 80 feet of water; and other plants and boats too numerous to mention.

Certified check for \$650 accompanied bid as guaranty to enter into contract.

Awarded to No. 1.

## DALLAS, TEX., DISTRICT.

[Officer: Maj. W. J. Barden, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for constructing and delivering at Port Arthur, Tex., one steel barge designated "A," received in response to newspaper advertisement and poster and circular letter, advertisement for 30 days, and opened at United States Engineer Office, Dallas, Tex., Jan. 27, 1916, by Maj. W. J. Barden, Corps of Engineers.*

	Name and address of bidder.	Amount of bid.
1. The Johnson Iron Works (Ltd.), New Orleans, La		\$13, 575
2. Wilmington Iron Works, Wilmington, N. C		17, 000
3. Rock Island Bridge & Iron Works, Rock Island, Ill		14, 000
4. Milwaukee Bridge Co., Milwaukee, Wis		12, 900
5. Dubuque Boat & Boiler Works, Dubuque, Iowa		14, 256
6. Chicago Bridge & Iron Co., Chicago, Ill		13, 600
7. J. J. Kane, Galveston, Tex		9, 960

Contract awarded to J. J. Kane.

*Abstract of bids for repairing East Jetty at Sabine Pass, Tex., received in response to newspaper advertisement and poster and circular letter, advertisement for 30 days, bids opened at United States Engineer office, Dallas, Tex., Feb. 21, 1916, by Maj. W. J. Barden, Corps of Engineers.*

[Estimated quantities: Stone in core, 41,000 tons; stone in slopes and top, 39,000 tons.]

Item.	No. 1. Chas. Clarke & Co., sole owner, Galveston, Tex.	No. 2. Lester F. Alexander, New Orleans, La.	No. 3. The Edward Gil len Dock, Dredge & Construction Co., Racine, Wis.	No. 4. Chas. T. Picton, Rockport, Tex.
1. Core stone properly placed in the work, at per ton of 2,000 pounds	\$2. 91	\$3. 20	\$2. 94	\$2. 65
Amount	\$119, 310. 00	\$131, 200. 00	\$120, 540. 00	\$108, 650. 00
Kind of stone	( <sup>1</sup> )	( <sup>2</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Weight per cubic foot (pounds)	135		135 and 138	<sup>3</sup> 135
2. Slope and top stone properly placed in the work at per ton of 2,000 pounds	\$3. 36	\$3. 38	\$3. 32	\$3. 31
Amount	\$131, 040. 00	\$131, 820. 00	\$130, 480. 00	\$129, 090. 00
Kind of stone	( <sup>4</sup> )	( <sup>2</sup> )	( <sup>5</sup> )	( <sup>4</sup> )
Weight per cubic foot (pounds)	160		160	<sup>3</sup> 160
Total estimated cost	\$250, 350. 00	\$263, 020. 00	\$251, 020. 00	\$237, 740. 00

<sup>1</sup> Sandstone.

<sup>2</sup> To conform to specifications.

<sup>3</sup> Minimum.

<sup>4</sup> Granite or limestone.

<sup>5</sup> Granite.

Contract awarded to Chas. T. Picton.

## ST. LOUIS (MO.) DISTRICT.

[Officer: Maj. Wildurr Willing, Corps of Engineers.]

## COAL.

*Abstract of proposals for furnishing 30,000 tons of coal received in response to newspaper advertisement and opened Dec. 29, 1915, by Maj. Wildurr Willing, Corps of Engineers, St. Louis, Mo.*

Name and address of bidder.	Tons.	1. West Kentucky Coal Co., Sturgis, Ky.		2. The Monongahela River Consolidated Coal & Coke Co., Pittsburgh, Pa.				3. O'Gara Coal Co., Chicago, Ill.	
		Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
At St. Louis, Mo.:									
Car delivery.....	1,000	\$2.10	\$2,100					\$1.75	\$1,750
Steamboat delivery, aboard.....	5,000								
Steamboat delivery, alongside.....	5,000								
Barge delivery, first method.....	15,000								
At Cairo, Ill.:									
Steamboat delivery, aboard.....	4,000			\$3.20	\$12,800	\$2.20	\$8,800		
At Memphis, Tenn.:									
Steamboat delivery, aboard.....	1,500	3.00	4,500	3.50	5,250	2.52	3,780		
Steamboat delivery, alongside.....	1,500	2.80	4,200						
At White River, Ark.:									
Steamboat delivery, aboard.....	500	3.50	1,750						
Steamboat delivery, alongside.....	500	3.25	1,625						
At Rosedale, Miss.:									
Steamboat delivery, aboard.....	500					2.83	1,415		
At Greenville, Miss.:									
Steamboat delivery, aboard.....	1,000	3.50	3,500						
Steamboat delivery, alongside.....	1,000	3.25	3,250						
At Vicksburg, Miss.:									
Steamboat delivery, aboard.....	1,000			4.24	4,240	3.24	3,240		
At Natchez, Miss.:									
Steamboat delivery, aboard.....	500			4.84	2,420	3.84	1,920		

Name and address of bidder.	Tons.	4. Farmers & Merchants' Transportation Co., St. Louis, Mo.		5. Southern Coal, Coke & Mining Co., St. Louis, Mo.				6. Bald Eagle Mining Co., St. Louis, Mo.	
		Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
At St. Louis, Mo.:									
Car delivery.....	1,000	\$1.73	\$1,730	\$1.625	\$1,625	\$1.625	\$1,625	\$1.63	\$1,630
Steamboat delivery, aboard.....	5,000	1.97	9,850	1.70	8,500	1.70	8,500		
Steamboat delivery, alongside.....	5,000	1.83	9,150	1.45	7,250	1.45	7,250		
Barge delivery, first method.....	15,000	1.63	24,450	1.40	21,000	1.40	21,000		

Awards: No. 1, steamboat delivery, Greenville, Miss. No. 2, Cypress Creek coal, steamboat delivery at Cairo, Ill.; Memphis, Tenn.; Rosedale, Miss.; Vicksburg, Miss.; and Natchez, Miss. No. 3, car delivery, St. Louis, Mo., and No. 5, steamboat and barge delivery, St. Louis, Mo., New Baden coal.

Awards made on comparative heating value offered by bidder at point of delivery.

## ROCK ISLAND (ILL.) DISTRICT.

[Officer: Maj. G. M. Hoffman, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals received in response to advertisement for 15 days by poster and circular letter and opened by Maj. G. M. Hoffman, Corps of Engineers, at Rock Island, Ill., Oct. 14, 1915, for stone dwelling at lock at Keokuk, Iowa.*

[Appropriation for "Operating and care of canals and other works of navigation; indefinite."]

Name and address of bidder.	Time (days).	Price of stone dwelling including "German- town hood."	Price of stone dwelling excluding "German- town hood."
1. John W. Young, Keokuk, Iowa.....	160	\$9,562	\$9,351
2. G. E. Lindstrand, Keokuk, Iowa.....	150	11,027	10,796
3. Frank L. Griffey & Son, Keokuk, Iowa.....	180	8,961	8,700
4. C. T. Hultman, Keokuk, Iowa.....	135	8,216	8,010
5. Dillery & Woolley, Keokuk, Iowa.....		11,609	11,284

All proposals were rejected, prices being too high.

*Abstract of proposals, received in response to advertisement for 30 days by poster and circular letter and opened by Maj. G. M. Hoffman, Corps of Engineers, at Rock Island, Ill., at 3 p. m., Dec. 22, 1915, for stone dwelling at lock at Keokuk, Iowa.*

[Appropriation for "Operating and care of canals and other works of navigation; indefinite."]

Name and address of bidder.	
1. Carl T. Hultman, Keokuk, Iowa:	
Prices for stone dwelling as follows—	
(1) According to original plans.....	\$8,362
(2) Plans modified as in sheet A.....	17,922
(3) According to original plans but omitting "Germantown hood".....	8,016
(4) Plans modified as in sheet A and omitting "Germantown hood".....	7,698

<sup>1</sup> Accepted and written (emergency) contract made.

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*Abstract of proposals received in response to advertisement for 30 days and opened by Maj. G. M. Hoffman, Corps of Engineers, United States Army, at Rock Island, Ill., at 3 p. m., July 31, 1915, for construction and repair of dams and shore protections on the upper Mississippi River.*

[Appropriation: River and harbor act of Mar. 4, 1915, for "Maintenance and improvement of existing river and harbor works," for "Mississippi River between mouth of Missouri River and Minneapolis, Minn.—General improvement."]

Name and address of bidder.	Original estimated cost per cubic yard of material in place.		Prices per cubic yard of material in place.			Price per 1,000 b. m. plank mattress in place.	Total cubic yards of material that can be placed under each bid.
	Rock.	Brush.	Rock.	Brush.	Average.		
(1) Buena Vista to Spechts Ferry, Iowa:							
2. Builders Sand & Gravel Co., Davenport, Iowa.....	\$1.55	\$0.65	\$1.57	\$0.70	\$0.99	\$45.00	38,383.8
3. J. W. McMurry Contracting Co., 709-710 Sharp Building, Kansas City, Mo.....			1.60	.68	.98 $\frac{1}{2}$	45.00	38,513.5
4. Kirchner Contracting Co., Dubuque, Iowa <sup>1</sup> .....			1.55	.63	.93 $\frac{1}{2}$	43.00	40,569.4
(2) Montpelier to Fairport, Iowa:							
2. Builders Sand & Gravel Co., Davenport, Iowa <sup>1</sup> .....	1.57	.68	1.55	.68	.92 $\frac{8.57}{1000}$	45.00	40,923.1
3. J. W. McMurry Contracting Co., 709-710 Sharp Building, Kansas City, Mo.....			1.60	.69	.95	45.00	40,000.0
4. Kirchner Contracting Co., Dubuque, Iowa.....			1.57	.71	.95 $\frac{5.7}{100}$	43.00	39,761.4
(3) Quincy, Ill., to Hannibal, Mo.:							
1. T. W. Kinser, 421 North Front Street, East St. Louis, Ill.....	1.65	.58	1.75	.70	1.00	38.00	38,000.0
3. J. W. McMurry Contracting Co., 709-710 Sharp Building, Kansas City, Mo.....			1.65	.65	.93 $\frac{5.7}{1000}$	45.00	40,610.9
5. A. V. Fetter Co., Quincy, Ill <sup>1</sup> .....			1.63	.62	.90 $\frac{8.57}{1000}$	40.00	41,823.9
(4) Cap au Gris, Mo., to Grafton, Ill.:							
1. T. W. Kinser, 421 North Front Street, East St. Louis, Ill.....	1.59	.58	1.75	.70	1.05	38.00	36,190.5
3. J. W. McMurry Contracting Co., 709-710 Sharp Building, Kansas City, Mo <sup>1</sup> .....			1.60	.60	.93 $\frac{1}{2}$	36.00	40,714.3
5. A. V. Fetter Co., Quincy, Ill.....			1.63	.65	.97 $\frac{1}{2}$	40.00	38,907.9

<sup>1</sup> Accepted, and written contracts made.

## KANSAS CITY (MO.) DISTRICT.

[Officer: Lieut. Col. J. F. McIndoe, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposal for annealed wire (Glasgow, Mo.), dated July 15, 1916. Opened July 26, 1915, by Lieut. Col. Herbert Deakyne, Corps of Engineers.*

No. 1. Macomber & Whyte Rope Co., Chicago, Ill. <sup>1</sup>		No. 2. The Pierce Co., Kansas City, Mo. <sup>1</sup>		No. 3. H. Chan-non Co., Chi-cago, Ill. <sup>1</sup>		No. 4. A. Leschen & Sons Rope Co., St. Louis, Mo. <sup>1</sup>		
Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.	
5,000 pounds wire, black annealed, gauge No. 16, hundred-weight.....	\$2.65	\$132.50	\$2.43	\$121.50	\$2.625	\$131.25	\$3.00	\$150.00
		No. 5. Nichols Wire Co., Kansas City, Mo. <sup>1</sup>		No. 6. Broderick & Bascom Rope Co., St. Louis, Mo. <sup>1</sup>		No. 7. Geo. B. Carpenter & Co., Chicago, Ill. <sup>1</sup>		
Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.	
5,000 pounds wire, black annealed, gauge No. 16, hundredweight.....	\$1.85	\$92.50	\$2.63 $\frac{1}{2}$	\$121.83	\$1.99	\$99.50		

<sup>1</sup> F. o. b. destination.

No. 5 accepted.

*Abstract of proposal for lead (Gasconade, Mo.), dated July 20, 1915, opened July 30, 1915, by Lieut. Col. Herbert Deakyne, Corps of Engineers.*

No. 1. Camp-bell Glass & Paint Co., Kan-sas City, Mo. <sup>1</sup>		No. 2. National Lead Co., St. Louis, Mo. <sup>1</sup>		No. 3. National Lead Co., St. Louis, Mo. <sup>1</sup>		
Price.	Amount.	Price. <sup>2</sup>	Amount.	Price. <sup>2</sup>	Amount.	
6,000 pounds lead, red, dry, S/P...hundredweight..	\$7.45	\$447.00	\$7.60	\$456.00	\$7.60	\$456.00
		No. 4. The Lead Products Co., St. Louis, Mo. <sup>1</sup>		No. 5. Vane-Calvert Paint Co., St. Louis, Mo. <sup>1</sup>		
Price.	Amount.	Price.	Amount.	Price.	Amount.	
6,000 pounds lead, red, dry, S/P...hundredweight..	\$7.00	\$420.00	\$7.00	\$420.00	\$7.50	\$450.00

<sup>1</sup> F. o. b. St. Louis.

No. 4 accepted.

<sup>2</sup> 100-pound kegs.

*Abstract of proposal for bolts, etc. (Gasconade, Mo.), dated July 22, 1915, opened Aug. 2, 1915, by Lieut. Col. Herbert Deakyne, Corps of Engineers.*

	No. 1. St. Louis Screw Co., St. Louis, Mo. <sup>1</sup>		No. 2. Jos. T. Ryerson & Son, Chicago, Ill. <sup>2</sup>		No. 3. Beck & Corbitt Iron Co., St. Louis, Mo. <sup>1</sup>		No. 4. The Campbell Iron Co., St. Louis, Mo. <sup>1</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
700 bolts, machine, with nuts, $\frac{7}{8}$ by 20.....	<i>Cwt.</i> \$7.17	\$50.19	<i>Cwt.</i> \$7.48	\$51.36	<i>Cwt.</i> \$7.28	\$50.96	<i>Cwt.</i>	\$51.40
1,400 bolts, machine, with nuts, $\frac{3}{4}$ by 17.....	4.95	69.30	5.19	72.66	4.95	69.30	.....	72.80
1,350 bolts, machine, with nuts, $\frac{3}{4}$ by 19.....	5.38	72.63	5.63	76.01	5.39	72.77	.....	76.40
4,000 bolts, machine, with nuts, $\frac{3}{4}$ by 20.....	5.59	223.60	5.85	234.00	5.61	224.40	.....	235.60
200 pounds washers, plate, $\frac{1}{8}$ -inch hole.....	2.00	4.00	1.75	3.50	1.70	3.40	2.00	4.00
1,400 pounds washers, plate, $\frac{1}{8}$ -inch hole.....	2.10	29.40	1.85	25.90	1.80	25.20	2.10	29.40
Total.....		449.12		463.43		446.03		469.60

	No. 5. The Faeth Iron Co., Kansas City, Mo. <sup>3</sup>		No. 6. Moran Bolt & Nut Manufacturing Co., St. Louis, Mo. <sup>1</sup>		No. 7. Continental Bolt & Iron Works, Kansas City, Mo. <sup>2</sup>		No. 8. The Pierce Co., Kansas City, Mo. <sup>4</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
700 bolts, machine, with nuts, $\frac{7}{8}$ by 20.....	<i>Cwt.</i> \$8.65	\$60.55	<i>Cwt.</i> \$7.50	\$52.50	<i>Cwt.</i> \$6.56	\$45.92	<i>Cwt.</i> \$7.28	\$50.96
1,400 bolts, machine, with nuts, $\frac{3}{4}$ by 17.....	5.88	82.32	5.00	70.00	4.46	62.44	4.95	69.30
1,350 bolts, machine, with nuts, $\frac{3}{4}$ by 19.....	6.40	86.40	5 $\frac{1}{2}$	70.88	4.86	65.61	5.39	72.77
4,000 bolts, machine, with nuts, $\frac{3}{4}$ by 20.....	6.66	266.40	5.60	224.00	5.05	202.00	5.61	224.40
200 pounds washers, plate, $\frac{1}{8}$ -inch hole.....	2.80	5.60	1.75	3.50	1.80	3.60	1.65	3.30
1,400 pounds washers, plate, $\frac{1}{8}$ -inch hole.....	2.90	40.60	1.90	26.60	1.90	26.60	1.75	24.50
Total.....		541.87		447.48		406.17		445.23

<sup>1</sup> F. o. b. St. Louis, Mo.  
<sup>2</sup> F. o. b. Chicago, Ill.

<sup>3</sup> F. o. b. Kansas City, Mo.  
<sup>4</sup> F. o. b. bolts, Cleveland, Ohio; washers, Milwaukee, Wis.

No. 7 accepted.

MATERIAL AND LABOR FOR ENGINEER DEPARTMENT, 1916. 69

Abstract of proposal for explosives, etc. (Gasconade, Mo.), dated Aug. 2, 1915, opened Aug. 12, 1915, by Lieut. Col. Herbert Deakyne, Corps of Engineers.

		No. 1. The Fort Pitt Powder Co., Philadelphia, Pa. <sup>1</sup>		No. 2. Atlas Powder Co., Kansas City, Mo.		No. 3. Aetna Explosives Co., St. Louis, Mo.		No. 4. Hercules Powder Co., Joplin, Mo.	
		Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
400 kegs powder, blasting, F F F									
25-pound kegs.....keg.	\$0.85	\$340.00	4 \$1.02	\$408.00	5 \$1.2005	\$480.20	\$1.08 <sup>1</sup> <sub>2</sub>	\$434.00	
2,000 pounds dynamite, 60 per cent nitro.....hundredweight.	12.60	252.00	6 13.34	266.80	7 14.70	294.00	8 12.00	240.00	
2,000 caps, No. 6, blasting, thousand.....	12.00	18.00	6 8.93	17.86	7 8.82	17.64	9 9.00	18.00	
2,000 linear feet fuse, cotton.....	4.20	7.14	6 3.41	6.82	7 3.09	6.18	9 3.57	7.14	
Total.....		617.14		699.48		798.02		699.14	

		No. 5. Austin Powder Co., St. Louis, Mo. <sup>2</sup>		No. 6. E. I. Du Pont De Nemours Powder Co., St. Louis, Mo. <sup>2</sup>		No. 7. Excelsior Powder Manufacturing Co., Kansas City, Mo. <sup>3</sup>	
		Price.	Amount.	Price.	Amount.	Price.	Amount.
400 kegs powder, blasting F F F 25-pound kegs. keg.		\$1.056	\$422.40	\$1.10	\$440.00	\$1.00	\$400.00
2,000 pounds dynamite, 60 per cent nitro, hundredweight.....		12.25	245.00	13.15	263.00	13.00	260.00
2,000 caps, No. 6, blasting.....thousand.....		8.82	17.64	10.00	20.00	9.10	18.20
2,000 linear feet fuse, cotton.....		3.29	5.58	3.70	7.40	3.47	6.94
Total.....			691.62		730.40		685.14

<sup>1</sup> F. o. b. Fort Pitt and Wyside, Pa.

<sup>2</sup> F. o. b. St. Louis, Mo.

<sup>3</sup> F. o. b. Kansas City, Mo.

<sup>4</sup> St. Louis, Mo.

<sup>5</sup> Goes, Mo.

<sup>6</sup> Kansas City, Mo.

<sup>7</sup> Pacific, Mo.

<sup>8</sup> Carthage, Mo.

<sup>9</sup> Valley Park, Mo.

No. 5 accepted.

Abstract of proposal for clips (Gasconade, Mo.), dated Aug. 5, 1915, opened Aug. 16, 1915, by Lieut. Col. Herbert Deakyne, Corps of Engineers.

		No. 1. The Campbell Iron Co., St. Louis, Mo. <sup>1</sup>		No. 2. The Pierce Co., Kansas City, Mo. <sup>2</sup>		No. 3. St. Louis Screw Co., St. Louis, Mo. <sup>1</sup>	
		Price.	Amount.	Price.	Amount.	Price.	Amount.
20,000 clips, for four parts, $\frac{3}{8}$ -inch strand.....per 100.....		<sup>4</sup> \$780.00	\$2.30	\$460.00	\$2.49	\$498.00	
2,500 clips, for two parts, $\frac{3}{8}$ -inch strand.....do.....		<sup>4</sup> 129.25	1.50	37.50	2.20	55.00	
Total.....		909.25		497.50		553.00	

		No. 4. Moran Bolt & Nut Manufacturing Co., St. Louis, Mo. <sup>1</sup>		No. 5. Broderick & Bascom Rope Co., St. Louis, Mo. <sup>1</sup>		No. 6. Jos. T. Ryerson Co. & Son, Chicago, Ill. <sup>3</sup>	
		Price.	Amount.	Price.	Amount.	Price.	Amount.
20,000 clips, for four parts, $\frac{3}{8}$ -inch strand...per 100.....		\$2.74	\$548.00	\$3.25	\$650.00	\$2.805	\$561.00
2,500 clips, for two parts, $\frac{3}{8}$ -inch strand.....do.....		.....	<sup>4</sup> 40.00	2.25	56.25	1.795	44.88
Total.....			588.00		706.25		605.88

<sup>1</sup> F. o. b. St. Louis, Mo.

<sup>2</sup> F. o. b. Chicago Heights, Ill.

<sup>3</sup> F. o. b. Muncie, Ind.

<sup>4</sup> Lot.

No. 2 accepted.

*Abstract of proposal for steel plates, angles, channels, etc. (Gasconade, Mo.), dated Sept. 3, 1915, opened Sept. 13, 1915, by Lieut. Col. Herbert Deakyne, Corps of Engineers, Kansas City, Mo.*

	No. 1. Illinois Steel Co., St. Louis, Mo. <sup>1</sup>		No. 2. Jones & Laughlin Steel Co., St. Louis, Mo. <sup>2</sup>		No. 3. Cambria Steel Co., St. Louis, Mo. <sup>3</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.
153,437 pounds steel plates, angles, channels, etc., to be used in construction of a tow-boat; tensile strength of 55,000 to 65,000 pounds per square inch, to conform with manufacturers standard specifications," hundredweight.....	\$1.489	\$22,846.77	\$1.35	\$20,714.00	\$1.35	\$20,714.00
5,350 pounds rivets.....			1.75	93.63		
Total.....		22,846.77		20,807.63		20,714.00

<sup>1</sup> F. o. b. Chicago, Ill.; deliveries not stated.

<sup>2</sup> F. o. b. Pittsburgh, Pa.; deliveries 60 days.

<sup>3</sup> F. o. b. Pittsburgh, Pa.; deliveries 90 days.

No. 2 accepted.

*Abstract of proposal for standard revetment (Burlington Bend, Missouri River), opened Sept. 30, 1915, by Lieut. Col. Herbert Deakyne, Corps of Engineers, Kansas City, Mo.*

	No. 1. J. W. McMurry Contracting Co., Kansas City, Mo.		No. 2. Marshall Rust, Bona-venture Hotel, Kansas City, Mo.		No. 3. Kansas City Bridge Co., Kansas City, Mo.		No. 4. De Witt & Shope, Glasgow, Mo.		No. 5. Munn-Reise Construction Co., Kansas City, Kans.	
	Price. <sup>1</sup>	Amount.	Price. <sup>1</sup>	Amount.	Price. <sup>1</sup>	Amount.	Price. <sup>1</sup>	Amount.	Price. <sup>1</sup>	Amount.
13,000 feet standard revetment, per specifications.....	\$9.75	\$126,750	\$8.24	\$107,120	\$8.18	\$106,340	\$8.73	\$113,490	\$8.49	\$110,370

<sup>1</sup> Per linear foot.

No. 3 accepted.

*Abstract of proposal for oakum and calking cotton (Gasconade, Mo.), dated Oct. 21, 1915, opened Nov. 1, 1915, by Lieut. Col. Herbert Deakyne, Corps of Engineers, Kansas City, Mo.*

	No. 1. Broderick & Bascom Rope Co., St. Louis, Mo.		No. 2. H. Channon Co., Chicago, Ill.		No. 3. The Upson-Walton Co., Cleveland, Ohio.		No. 4. A. Leschen & Sons Rope Co., St. Louis, Mo.	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
35 bales oakum, best quality:								
“Navy”.....		per bale.....			\$4.65	\$5.75	\$3.25	\$4.25
U. S. Navy.....		do.....			5.35	6.00	3.75	4.75
Best.....		do.....			5.65		4.00	5.00
100 pounds calking cotton, best grade, spun per pound.....					.11	.12	.12	.15

No. 3 accepted, Best, at \$4.

*Abstract of proposal for lumber (Lupus, Mo.), dated Nov. 26, 1915, opened Dec. 15, 1915,  
by Lieut. Col. Herbert Deakyne, Corps of Engineers, Kansas City, Mo.*

	No. 1, Klenk Lumber Co., Hermann, Mo. <sup>1</sup>		No. 2, A. L. Houghton & Co., Kansas City, Mo. <sup>1</sup>		No. 3, Julius Seidel Lumber Co., St. Louis, Mo. <sup>1</sup>		No. 4, Boeck- eler Lumber Co., St. Louis, Mo. <sup>2</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
230,400 feet yellow-pine lumber:								
300 pieces 6 by 8 by 12, per M feet.....	\$16.75	\$241.20	\$17.00	\$244.80	\$17.00	\$244.80	\$17.00	\$244.80
300 pieces 6 by 8 by 22, per M feet.....	17.75	468.60	18.00	475.20	18.00	475.20	18.00	475.20
600 pieces 4 by 8 by 12, per M feet.....	16.75	321.60	17.00	326.40	17.00	326.40	17.00	326.40
600 pieces 4 by 8 by 22, per M feet.....	18.00	633.60	18.00	633.60	18.00	633.60	18.00	633.60
1,800 pieces 3 by 8 by 22, per M feet.....	18.00	1,425.60	18.00	1,425.60	18.00	1,425.60	18.00	1,425.60
7,000 feet 8 by 12 per M feet.....	18.50	1,036.00	19.00	1,064.00	19.00	1,064.00	18.00	1,098.00
Total.....		4,126.60		4,169.60		4,169.60		4,113.60

	No. 5, Missouri Lumber & Land Exchange Co., Kansas City, Mo. <sup>1</sup>		No. 6, Hogg- Harris, St. Louis, Mo. <sup>3</sup>		No. 7, Western States Lumber Co., Kansas City, Mo. <sup>1</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.
230,400 feet yellow-pine lumber:						
300 pieces 6 by 8 by 12..... per M feet.....	\$17.50	\$252.00	\$17.50	\$252.00	\$18.00	\$259.20
300 pieces 6 by 8 by 22..... do.....	17.50	462.00	19.50	514.80	19.00	501.60
600 pieces 4 by 8 by 12..... do.....	17.00	326.40	17.50	336.00	19.00	364.80
600 pieces 4 by 8 by 22..... do.....	18.50	651.20	19.50	686.40	19.00	668.80
1,800 pieces 3 by 8 by 22..... do.....	18.50	1,465.20	19.50	1,544.40	19.00	1,504.80
7,000 feet 8 by 12..... do.....	19.00	1,064.00	19.50	1,092.00	20.00	1,120.00
Total.....		4,220.80		4,425.60		4,419.20

<sup>1</sup> F. o. b. Louisiana points.<sup>2</sup> F. o. b. Rhinehart, La.<sup>3</sup> F. o. b. Lake Charles, La.

No. 1 accepted.

*Abstract of proposal for rope (Gasconade, Mo.), dated Dec. 27, 1915, opened Jan. 7, 1916,  
by Col. C. McD. Townsend, Corps of Engineers, Kansas City, Mo.*

	No. 1, Broder- ick & Bascom Rope Co., St. Louis, Mo. <sup>1</sup>		No. 2, St. Louis Cordage Mills, St. Louis, Mo. <sup>1</sup>		No. 3, Macomber & Whyte Rope Co., Kenosha, Wis. <sup>2</sup>		No. 4, A. Lesch- en & Sons Rope Co., St. Louis, Mo. <sup>1</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
20,246 pounds pure manila bolt rope, 3-strand, medium lay, in tallow:								
1,200 linear feet, 2-inch diam- eter..... per pound.....	\$0.16	\$3,210.56	\$0.16	\$3,210.56	\$0.16	\$3,239.36	\$0.16	\$3,210.56
1,200 linear feet, 1 $\frac{1}{2}$ -inch diam- eter..... per pound.....								
12,000 linear feet, 1 $\frac{1}{2}$ -inch di- ameter..... per pound.....								
18,000 linear feet, 1 $\frac{1}{4}$ -inch di- ameter..... per pound.....								
6,000 linear feet, 1-inch diam- eter..... per pound.....								
6,000 linear feet, $\frac{5}{8}$ -inch diam- eter..... per pound.....								
2,400 linear feet, $\frac{5}{8}$ -inch diam- eter..... per pound.....								
2,400 linear feet, $\frac{1}{2}$ -inch diam- eter..... per pound.....								
Total.....		3,240.26		3,240.26		3,239.36		3,240.26

<sup>1</sup> F. o. b. St. Louis, Mo.<sup>2</sup> F. o. b. Auburn, N. Y.

*Abstract of proposals for rope (Gasconade, Mo.), dated Dec. 27, 1915, opened Jan. 7, 1916, by Col. C. McD. Townsend, Corps of Engineers, Kansas City, Mo.—Continued.*

	No. 5. The Upson-Walton Co., Cleveland, Ohio. <sup>1</sup>		No. 6. Water- bury Co., 63 Park Row, New York, N. Y. <sup>2</sup>		No. 7. The Hooven & Alli- son Co., Kansas City, Mo. <sup>3</sup>	
	Price	Amount	Price	Amount	Price	Amount
20,246 pounds pure manila bolt rope, 3-strand, medium lay, in tallow:						
1,200 linear feet, 2-inch diameter.....per pound..						
1,200 linear feet, 1 $\frac{1}{2}$ -inch diameter.....do.....						
12,000 linear feet, 1 $\frac{1}{2}$ -inch diameter.....do.....						
18,000 linear feet, 1 $\frac{1}{2}$ -inch diameter.....do.....	\$0.15 $\frac{1}{4}$	\$3,060.07	\$0.15 $\frac{1}{2}$	\$3,110.23	\$0.153	\$3,097.64
6,000 linear feet, 1-inch diameter.....do.....						
6,000 linear feet, $\frac{3}{4}$ -inch diameter.....do.....						
2,400 linear feet, $\frac{1}{2}$ -inch diameter.....do.....						
2,400 linear feet, $\frac{1}{2}$ -inch diameter.....do.....	.15 $\frac{3}{4}$	28.35	.16	28.80	.....	.....
Total.....		3,088.42		3,139.03		3,097.64

<sup>1</sup> F. o. b. Xenia, Ohio.<sup>2</sup> F. o. b. New York, N. Y.

Nos. 1 and 2 accepted (divided equally).

*Abstract of proposal for piles, yellow pine (Gasconade, Mo.), dated Dec. 14, 1915, opened Jan. 5, 1916, by Col. C. McD. Townsend, Corps of Engineers, Kansas City, Mo.*

	No. 1. A. L. Hough- ton & Co., Kan- sas City, Mo. <sup>1</sup>	No. 2. Chas. C. Curry & Co., St. Louis, Mo. <sup>2</sup>	No. 3. Julius Seidel Lumber Co., St. Louis, Mo. <sup>3</sup>	No. 4. Chas. C. Curry & Co., St. Louis, Mo. <sup>3</sup>	No. 5. Gloor- Ortman Lumber Co., St. Louis, Mo. <sup>4</sup>	No. 6. Klenk Lumber Co., Her- mann, Mo. <sup>3</sup>
75 piles 32 feet long.....per linear foot..	\$0.06	\$0.07 $\frac{1}{2}$	\$0.06	\$0.06 $\frac{1}{4}$	\$0.0595	\$0.06
100 piles 34 feet long.....do.....	.06	.07 $\frac{1}{2}$	.06	.06 $\frac{1}{4}$	.0595	.06
100 piles 36 feet long.....do.....	.06	.07 $\frac{1}{2}$	.06	.06 $\frac{1}{4}$	.0595	.06
200 piles 38 feet long.....do.....	.06	.07 $\frac{1}{2}$	.06	.06 $\frac{1}{4}$	.0595	.06
200 piles 40 feet long.....do.....	.06	.07 $\frac{1}{2}$	.06	.06 $\frac{1}{4}$	.0595	.06
150 piles 42 feet long.....do.....	.06	.07 $\frac{1}{2}$	.06	.06 $\frac{1}{4}$	.0595	.06
150 piles 44 feet long.....do.....	.06	.07 $\frac{1}{2}$	.06	.06 $\frac{1}{4}$	.0595	.06
150 piles 46 feet long.....do.....	.06	.08	.06	.06 $\frac{1}{4}$	.0595	.06
150 piles 48 feet long.....do.....	.06	.08	.06	.06 $\frac{1}{4}$	.0595	.06
150 piles 50 feet long.....do.....	.06	.08	.06	.06 $\frac{1}{4}$	.0595	.06
100 piles 52 feet long.....do.....	.06	.08	.06	.06 $\frac{1}{4}$	.0595	.06
100 piles 54 feet long.....do.....	.06	.08	.06	.06 $\frac{1}{4}$	.0595	.06
100 piles 56 feet long.....do.....	.06	.08	.06	.06 $\frac{1}{4}$	.0595	.06
100 piles 58 feet long.....do.....	.06	.09	.06	.06 $\frac{1}{4}$	.0595	.06

	No. 7. Western States Lumber Co., Kan- sas City, Mo. <sup>5</sup>	No. 8. The Long- Bell Lumber Co., Kan- sas City, Mo. <sup>6</sup>	No. 9. Hogg- Bell Lumber Co., Kan- sas City, Mo. <sup>6</sup>	No. 10. A. A. Stewart, Chicago, Ill. <sup>3</sup>	No. 11. H. B. Waite Lumber Co., Min- neapolis, Minn. <sup>7</sup>	No. 12. C. I. Cash, De Quincy, La. <sup>3</sup>
75 piles, 32 feet long.....per linear foot..	\$0.06 $\frac{1}{2}$	\$0.07	\$0.06	\$0.07	\$0.08 $\frac{1}{2}$	\$0.06 $\frac{1}{2}$
100 piles, 34 feet long.....do.....	.06 $\frac{1}{2}$	.07	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
100 piles, 36 feet long.....do.....	.06 $\frac{1}{2}$	.07	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
200 piles, 38 feet long.....do.....	.06 $\frac{1}{2}$	.07	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
200 piles, 40 feet long.....do.....	.06 $\frac{1}{2}$	.07	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
150 piles, 42 feet long.....do.....	.06 $\frac{1}{2}$	.07	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
150 piles, 44 feet long.....do.....	.06 $\frac{1}{2}$	.07	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
150 piles, 46 feet long.....do.....	.06 $\frac{1}{2}$	.07	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
150 piles, 48 feet long.....do.....	.06 $\frac{1}{2}$	.07	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
150 piles, 50 feet long.....do.....	.06 $\frac{1}{2}$	.08	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
100 piles, 52 feet long.....do.....	.06 $\frac{1}{2}$	.08	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
100 piles, 54 feet long.....do.....	.06 $\frac{1}{2}$	.08	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
100 piles, 56 feet long.....do.....	.06 $\frac{1}{2}$	.08	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$
100 piles, 58 feet long.....do.....	.06 $\frac{1}{2}$	.08	.06	.07	.08 $\frac{1}{2}$	.06 $\frac{1}{2}$

<sup>1</sup> F. o. b. Houlton Junction, La.<sup>5</sup> F. o. b. Iron Mountain & Southern Ry.<sup>2</sup> F. o. b. Hammond, La.<sup>6</sup> F. o. b. Camp Curtis, La.<sup>3</sup> F. o. b. Louisiana points.<sup>7</sup> F. o. b. Seattle, Wash.<sup>4</sup> F. o. b. De Quincy, La.

No. 5 accepted.

Abstract of proposal for bolts and washers, etc. (Gasconade, Mo.), dated Jan. 14, 1916; opened Jan. 24, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers, Kansas City, Mo.

	No. 1. H. Chan- non Co., Chicago, Ill. <sup>1</sup>	No. 2. De Witt & Shobe, Glasgow, Mo. <sup>2</sup>		No. 3. Jos. T. Ryverson & Son, Chicago, Ill. <sup>3</sup>	
		Price.	Amount.	Price.	Amount.
1,750 bolts, machine, $\frac{7}{8}$ by 20 inches.....	\$159.25	\$6.50	\$113.75	\$11.09	\$194.08
3,500 bolts, machine, $\frac{3}{4}$ by 17 inches.....	216.56	4.50	157.50	7.65	267.76
12,000 bolts, machine, $\frac{3}{4}$ by 20 inches.....	841.50	5.00	600.00	8.63	1,035.60
1,000 pounds washers, $\frac{15}{16}$ -inch hole.....	18.50	<sup>5</sup> 2.00	2.00	<sup>5</sup> 2.50	25.00
3,500 pounds washers, $\frac{15}{16}$ -inch hole.....	64.75	1.75	51.25	2.60	91.00
2,500 pounds nails, 40d.....				2.40	60.00
2,500 pounds nails, 50d.....				2.40	60.00
1,500 pounds nails, 60d.....	148.85			2.40	36.00
Total.....	1,449.41		924.50		1,769.44

	No. 4. Moran Bolt & Nut Co., St. Louis, Mo. <sup>4</sup>	No. 5. Geo. B. Carpenter & Co., Chicago, Ill. <sup>1</sup>		No. 6. St. Louis Screw Co., St. Louis, Mo. <sup>4</sup>	
		Price.	Amount.	Price.	Amount.
1,750 bolts, machine, $\frac{7}{8}$ by 20 inches.....	\$0.10 $\frac{1}{2}$	\$179.80			
3,500 bolts, machine, $\frac{3}{4}$ by 17 inches.....	.7	245.00		\$9.80	\$171.50
12,000 bolts, machine, $\frac{3}{4}$ by 20 inches.....	$\frac{7}{8}$	870.00	\$1,460.78	6.65	232.75
1,000 pounds washers, $\frac{15}{16}$ -inch hole.....	<sup>5</sup> 2 $\frac{1}{2}$ <sub>0</sub>	21.00	25.00	7.55	906.00
3,500 pounds washers, $\frac{15}{16}$ -inch hole.....	<sup>5</sup> 2 $\frac{1}{2}$ <sub>0</sub>	78.75	91.00	2.65	26.50
2,500 pounds nails, 40d.....	<sup>5</sup> 2 $\frac{1}{2}$ <sub>0</sub>	57.50	60.00		
2,500 pounds nails, 50d.....	<sup>5</sup> 2 $\frac{1}{2}$ <sub>0</sub>	57.50	60.00		
1,500 pounds nails, 60d.....	<sup>5</sup> 2 $\frac{1}{2}$ <sub>0</sub>	34.50	36.00		
Total.....		1,544.05	1,732.78		1,433.00

<sup>1</sup> F. o. b. Chicago, Ill.  
<sup>2</sup> F. o. b. Glasgow, Mo.

<sup>3</sup> F. o. b. Muncie, Ind.  
<sup>4</sup> F. o. b. St. Louis, Mo.

<sup>5</sup> Per thousand.

No. 1 accepted.

Abstract of proposal for mats, wire (Gasconade, Mo.), dated Jan. 24, 1916; opened Feb. 4, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers, Kansas City, Mo.

	No. 1. American Wire Fence Co., Chicago, Ill. <sup>1</sup>	No. 2. American Steel & Wire Co., Kansas City, Mo. <sup>2</sup>		No. 3. W. A. Collings, Kansas City, Mo. <sup>2</sup>		
		Price.	Amount.	Price.	Amount.	
25,000 mats, galvanized wire, reinforcing, square mesh, 22 by 22 inches, of 6 line wires of No. 10 gauge and 6 transverse or stay wires of No. 12 $\frac{1}{2}$ gauge; the ends of the stay wires to be wrapped twice around the outer line wires and to be fas- tened to the balance of the line wires by the use of bent wire clips..... per 100 square feet.....	\$4.25	\$1,062.50	\$4.20	\$1,050.00	\$4.20	\$1,050.00

<sup>1</sup> F. o. b. Chicago, Ill.

<sup>2</sup> F. o. b. Pittsburgh, Pa.

No. 1 accepted.

*Abstract of proposal for strand (Gasconade, Mo.), dated Jan. 24, 1916, opened Feb. 4, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers, Kansas City, Mo.*

	No. 1. American Steel & Wire Co., Kansas City, Mo. <sup>1</sup>	No. 2. Indiana Steel & Wire Co., Muncie, Ind. <sup>2</sup>		No. 3. The Pierce Co., Kansas City, Mo.		No. 4. Broderick & Bascom Rope Co., St. Louis, Mo. <sup>3</sup>		
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
720,000 linear feet strand, galvanized steel, $\frac{3}{8}$ inch, of 7 wires of No. 11 gauge, annealed <sup>4</sup> .....	\$1.173	\$8,435.60	<sup>2</sup> \$13.25	\$9,540.00	<sup>2</sup> \$13.20	\$9,504.00	\$30.00	\$7,200.00

<sup>1</sup> F. o. b. St. Louis, Mo.<sup>2</sup> F. o. b. Muncie, Ind.<sup>3</sup> Per 100 feet.<sup>4</sup> Per 1,000 feet.

No. 4 accepted.

*Abstract of proposal for cement (Gasconade, Mo.), dated Jan. 26, 1916, opened Feb. 7, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers.*

	No. 1. Union Sand & Material Co., St. Louis, Mo. <sup>1</sup>	No. 2. Kansas Cement & Material Co., Kansas City, Mo. <sup>2</sup>		No. 3. Iola Portland Cement Co., Kansas City, Mo. <sup>3</sup>		No. 4. Bonner Portland Cement Co., Kansas City, Mo. <sup>4</sup>		
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
5,000 sacks cement, Portland, per sack.....	\$0.2875	\$1,437.50	\$0.26	\$1,300.00	\$1.00	\$1,250.00	\$0.95	\$1,187.50
	No. 5. Union Sand & Material Co., Kansas City, Mo. <sup>5</sup>	No. 6. The Monarch Cement Co., Humboldt, Kans. <sup>6</sup>		No. 7. Continental Portland Cement Co., St. Louis, Mo. <sup>7</sup>				
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
5,000 sacks cement, Portland..... per sack .....	\$1.15	\$1,437.50	\$1.15	\$1,437.50	\$0.28 <sup>2</sup>	\$1,437.50		

<sup>1</sup> F. o. b. Prospect Hill, Mo.<sup>2</sup> F. o. b. North Altoona, Kans.<sup>3</sup> F. o. b. Iola, Kans.<sup>4</sup> F. o. b. Bonner Springs, Kans.<sup>5</sup> F. o. b. Gasconade, Mo.<sup>6</sup> F. o. b. Humboldt, Kans.<sup>7</sup> F. o. b. Continental, Mo.<sup>8</sup> Per barrel.

*Abstract of proposal for stone (Mait's Spur, material yard), dated Feb. 5, 1916, opened Feb. 15, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers.*

	No. 1. Kansas City Bridge Co., Kansas City, Mo.	No. 2. De Witt & Shobe, Glasgow, Mo.		No. 3. S. J. White, Blackwater, Mo.		No. 4. J. J. McCully, Jefferson City, Mo.		
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
7,000 cubic yards stone, riprap, cubic yard.....	\$0.85	\$5,950.00	\$1.14	\$7,980.00	\$0.69	\$4,830.00	\$3.55	\$3,550.00

No. 3 accepted.

*Abstract of proposal for dynamite, etc. (Glasgow, Mo.), dated Feb. 18, 1916, opened Feb. 28, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers.*

	No. 1. Hercules Powder Co., Joplin, Mo.		No. 2. Burton Powder Co., Chicago, Ill.		No. 3. Aetna Explosives Co., St. Louis, Mo. <sup>1</sup>		No. 4. Atlas Powder Co., Kansas City, Mo.	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
150 cans powder, blasting...keg..	\$1.95	\$292.50	\$1.85	\$277.50	\$1.75	\$262.50	\$1.95	\$292.50
1,500 pounds dynamite, 60 per cent nitroglycerin, hundred-weight.....	24.75	371.25	24.75	371.25	24.75	371.25	19.75	296.25
200 exploders, 24 feet long, per 100.....	12.19 $\frac{1}{2}$	24.39	10.40	20.80	13.09	26.18	11.85	23.70
100 exploders, 18 feet long, per 100.....	9.99	9.99	8.60	8.60	9.99	9.99	9.40	9.40
Total.....		698.13		678.15		669.92		621.85

	No. 5. Austin Powder Co., St. Louis, Mo.		No. 6. Excelsior Powder Manufacturing Co., Kansas City, Mo.		No. 7. E. I. DuPont De Nemours Powder Co., St. Louis, Mo.	
	Price.	Amount.	Price.	Amount.	Price.	Amount.
150 cans powder, blasting.....keg..	\$1.8425	\$276.37	\$1.95	\$292.50	\$1.92	\$288.00
1,500 pounds dynamite, 60 per cent nitroglycerin, hundredweight.....	24.75	371.35	24.75	371.25	24.75	371.25
200 exploders, 24 feet long.....per 100.....	12.38	24.76	12.30	24.60	12.11	24.22
100 exploders, 18 feet long.....do.....	10.00	10.00	11.20	11.20	9.90	9.90
Total.....		682.38		699.55		703.27

<sup>1</sup> F. o. b. Kansas City, Mo.

No. 2 accepted.

*Abstract of proposal for boilers (Gasconade, Mo.), dated Feb. 18, 1916, opened Mar. 20, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers.*

	No. 1. Philip A. Rohan Boat Boiler & Tank Co., St. Louis, Mo.
2 Only boilers, marine (battery of 2), per specifications.....	\$2,891.00

Accepted; 22 proposals sent out and only one bid received.

76 MATERIAL AND LABOR FOR ENGINEER DEPARTMENT, 1916.

*Abstract of proposal for lumber (Gasconade, Mo.), dated Feb. 24, 1916, opened Mar. 10, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers, Kansas City, Mo.*

	No. 1. Houston Tie & Lumber Co., Houston, Tex. <sup>1</sup>		No. 2. Hogg Harris, St. Louis, Mo. <sup>2</sup>		No. 3. P. Ginners & Bros. Lumber Co., St. Louis, Mo. <sup>3</sup>		No. 4. The Nicola Stone & Myers Co., Cleveland, Ohio. <sup>4</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
196,800 feet yellow pine lumber: 600 pieces, 4 by 8 by 12, rough.....M feet..	\$17.00	\$326.40	\$17.00	\$326.40	\$17.50	\$336.00	\$17.50	\$336.00
600 pieces, 4 by 8 by 22, rough.....M feet..	18.00	1,900.80	18.00	1,900.80	18.50	651.20	18.50	651.20
1,600 pieces, 3 by 8 by 22, rough.....M feet..	18.00	1,368.00	20.00	1,440.00	19.75	1,390.40	18.50	1,302.40
9,000 linearfeet, 8 by 12inches.	19.00				19.00	1,368.00	20.00	1,440.00
Total.....		3,595.20		3,667.20		3,745.60		3,729.60
	No. 5. G. Elias & Bro., Buffalo, N. Y. <sup>5</sup>		No. 6. The McLeod Lumber Co., Hattiesburg, Miss. <sup>6</sup>		No. 7. Klenk Lumber Co., Hermann, Mo. <sup>7</sup>		No. 8. Caussey Yellow Pine Co., Hattiesburg, Miss. <sup>8</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
196,800 feet yellow pine lumber: 600 pieces, 4 by 8 by 12, rough.....M feet..	\$17.50	\$336.00	\$19.00	\$364.80	\$16.50	\$316.80	\$17.50	\$336.00
600 pieces, 4 by 8 by 22, rough.....M feet..	18.50	651.20	20.00	2,112.00	17.50	616.00	18.50	651.20
1,600 pieces, 3 by 8 by 22, rough.....M feet..	18.50	1,302.40	20.00	1,232.00	17.50	1,232.00	18.50	1,302.40
9,000 linear feet, 8 by 12 inches.....M feet..	20.50	1,476.00	21.00	1,512.00	18.00	1,296.00	19.00	1,368.00
Total.....		3,765.60		3,988.80		3,460.80		3,657.60
	No. 9. Missouri Lumber & Land Co., St. Louis, Mo. <sup>7</sup>		No. 10. Chas. C. Curry & Co., St. Louis, Mo. <sup>7</sup>		No. 11. Boeckeler Lumber Co., St. Louis, Mo. <sup>7</sup>		No. 12. A. L. Houghton & Co., Kansas City, Mo. <sup>7</sup>	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
196,800 feet yellow pine lumber: 600 pieces, 4 by 8 by 12, rough...M feet..	\$18.00	\$345.60	\$17.50	\$336.00	\$18.00	\$345.60	\$18.00	\$345.60
600 pieces, 4 by 8 by 22, rough...M feet..	18.50	651.20	18.50	651.20	19.00	668.80	19.00	668.80
1,600 pieces, 3 by 8 by 22, rough...M feet..	18.50	1,302.40	18.50	1,302.40	20.00	1,408.00	19.00	1,337.60
9,000 linearfeet, 8 by 12, rough...M feet..	19.50	1,404.00	19.00	1,368.00	19.00	1,368.00	19.00	1,368.00
Total.....		3,701.27		3,657.60		3,790.40		3,559.20

<sup>1</sup> F. o. b. Texas points.

<sup>2</sup> F. o. b. Pollock, La.

<sup>3</sup> F. o. b. Ninden, La.

<sup>4</sup> F. o. b. Hattiesburg, Miss.

<sup>5</sup> F. o. b. Louisiana points.

<sup>6</sup> F. o. b. Mississippi and Louisiana points.

<sup>7</sup> F. o. b. Louisiana points.

<sup>8</sup> F. o. b. Mississippi points.

<sup>9</sup> F. o. b. Lake Charles, La.

No. 9 accepted.

*Abstract of proposal for standard revetment (Murrays and Chamois Bends, Missouri River), opened Mar. 14, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers, Kansas City, Mo.*

	No. 1. Edward Jones, Leavenworth, Kans.		No. 2. Fruin-Colnon Construction Co., St. Louis, Mo.		No. 3. Kansas City Bridge Co., Kansas City, Mo.		No. 4. Marshall Rust, Kansas City, Mo.		No. 5. De Witt & Shobe, Glasgow, Mo.	
	Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount
4,350 feet standard dike, per specifications:										
High section dike..Lin. ft.	\$13.61	\$30,622.50	\$17.87	\$40,207.50	\$14.75	\$33,187.50	\$14.75	\$33,187.50	\$14.40	\$32,400.00
Low section dike..Lin. ft.	11.89	24,969.00	15.00	31,500.00	13.20	27,720.00	13.30	27,930.00	13.00	27,300.00
Bank protection..Lin. ft.	.....	9,789.00	.....	14,300.00	.....	6,000.00	.....	5,000.00	.....	4,000.00
Total.....	.....	65,380.50	.....	86,007.50	.....	66,907.50	.....	66,117.50	.....	63,700.00

No. 5 accepted.

*Abstract of proposal for engines and parts (Gasconade, Mo.), dated Mar. 13, 1916, opened Mar. 23, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers.*

	No. 1. Iowa Machine Works, Clinton, Iowa. <sup>1</sup>	No. 2. Gillett, Eaton & Squire, Lake City, Minn. <sup>2</sup>
2 only engines and parts (1 pair) Gillett & Eaton steamboat engines, or equal, as per specifications .....	\$3,452	\$3,420

<sup>1</sup> F. o. b. Gasconade, Mo.; deliveries, 45 days. <sup>2</sup> F. o. b. Lake City, Minn.; deliveries, 60 days.

No. 2 accepted.

*Abstract of proposal for clips and strand (Gasconade, Mo.), dated Apr. 10, 1916, opened Apr. 20, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers, Kansas City, Mo.*

	No. 1. Geo. B. Carpenter & Co., Chicago, Ill.		No. 2. A. Leschen & Sons Rope Co., St. Louis, Mo.		No. 3. Broderick & Bascom Rope Co., St. Louis, Mo.	
	Price	Amount	Price	Amount	Price	Amount
5,000 clips for 2 parts of $\frac{1}{2}$ -inch strand .....	\$0.18	\$900.00	\$0.18	\$900.00	\$0.16	\$800.00
75,000 feet strand, galvanized, $\frac{1}{2}$ inch diameter .....	.....	.....	1.85	1,337.50	1.88	1,410.00
150,000 feet strand, galvanized, $\frac{3}{8}$ inch diameter .....	.....	.....	1.17	11,755.00	1.20	1,800.00
Total.....	.....	900.00	.....	4,042.50	.....	4,010.00

	No. 4. Macomber & Whyte Rope Co., Chicago, Ill.		No. 5. Indiana Steel & Wire Co., Muncie, Ind.		No. 6. American Hoist & Derrick Co., St. Paul, Minn.	
	Price	Amount	Price	Amount	Price	Amount
5,000 clips for 2 parts of $\frac{1}{2}$ -inch strand .....	\$0.18	\$900.00	.....	.....	\$0.10 $\frac{1}{2}$	\$512.50
75,000 feet strand, galvanized, $\frac{1}{2}$ inch diameter .....	1,181.00	\$1,485.00	.....	.....	.....	.....
150,000 feet strand, galvanized, $\frac{3}{8}$ inch diameter .....	3,262.50	1.26	1,890.00	.....	.....	.....
Total.....	.....	5,343.50	.....	3,375.00	.....	512.50

<sup>1</sup> Nos. 2 and 4 accepted for strand.

No. 6 accepted for clips.

*Abstract of proposal for wire and strand (Glasgow, Mo.), dated Apr. 18, 1916, opened Apr. 28, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers, Kansas City, Mo.*

	No. 1. Indiana Steel & Wire Co., Munice, Ind.		No. 2. American Steel & Wire Co., Kansas City, Mo.		No. 3. Sears & Piou, St. Louis, Mo.		No. 4. Broderick & Bascom Rope Co., St. Louis, Mo.	
	Price.	Amount.	Price.	Amount.	Price.	Amount.	Price.	Amount.
69 spools strand, galvanized steel, $\frac{1}{4}$ inch, of 7 wires of No. 11 gauge annealed, in spools of 3,000 feet. 5,000 pounds wire, annealed, bind- ing, No. 18... hundred weight..	\$1.26	\$2,608.20	\$1.27	\$2,628.90	\$1.59	\$3,291.30	\$1.15	\$2,380.50
	4.05	202.50	3.679	183.95	1.10	500.00	.....	.....
Total.....		2,810.70		2,812.85		3,791.30		2,380.50

<sup>1</sup> Per pound.

No. 4 accepted for strand.

No. 2 accepted for wire.

*Abstract of proposal for coal (Gasconade, Mo. and other Missouri River points), dated Feb. 2, 1916, opened Feb. 12, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers.*

#### COAL.

	No. 1. Central Coal & Coke Co., Kansas City, Mo.		No. 2. Southern Coal, Coke, & Mining Co., St. Louis, Mo.		No. 3. Boehmer Coal Co., St. Louis, Mo.		No. 4. Con- solidated Coal Co. of St. Louis. Mo.	
	ton..	Price.	ton..	Price.	ton..	Price.	ton..	Price.
8 cars coal, run of mine.....		\$1.75		\$1.10		1 \$1.20		\$1.05
8 cars coal, run of mine.....								

<sup>1</sup> 2-inch lump.

No. 6 accepted.

Abstract of proposal for coal (Missouri River points), dated Mar. 17, 1916, opened Mar. 27, 1916, by Lieut. Col. J. F. McIndoe, Corps of Engineers, Kansas City, Mo.

	No. 1. Boehmer Coal Co., St. Louis, Mo.	No. 2. D. E. Mc- Millan Bros. St. Louis, Mo.	No. 3. P. R. Sin- clair Coal Co., Kan- sas City, Mo.	No. 4. Graves Coal & Coke Co., St. Louis, Mo.
50 cars coal, bituminous, standard lump, per specifications:				
25 cents freight rate to East St. Louis—				
6-inch lump.....ton.	<sup>1</sup> \$0.89	\$1.10	\$1.15	\$1.00
3-inch lump.....do.			1.05	1.00
Run of mine.....do.			1.00	.95
Perry County, Ill.—				
6-inch lump.....do.		<sup>2</sup> 1.00	1.35	1.30
3-inch lump.....do.			1.35	1.30
Run of mine.....do.		.95	1.20	1.10
Franklin County, Ill.—				
6-inch lump.....do.			1.45	1.35
3-inch lump.....do.			1.40	1.35
Run of mine.....do.			1.20	1.15
Williamson County, Ill.—				
6-inch lump.....do.			<sup>1</sup> 1.35	1.20
3-inch lump.....do.		1.45	1.30	1.20
Run of mine.....do.			1.15	1.07 <sup>1</sup>
50 cars coal, bituminous, standard lump, per specifications:				
25 cents freight rate to East St. Louis—				
6-inch lump.....ton.	<sup>2</sup> \$1.25			
3-inch lump.....do.				
Run of mine.....do.	1.15			
Perry County, Ill.—				
6-inch lump.....do.		\$1.25		
3-inch lump.....do.			1.25	
Run of mine.....do.			1.10	
Franklin County, Ill.—				
6-inch lump.....do.		1.25		
3-inch lump.....do.			1.10	
Run of mine.....do.				
Williamson County, Ill.—				
6-inch lump.....do.			\$1.40	\$1.35
3-inch lump.....do.			1.40	1.35
Run of mine.....do.			1.15	1.10
50 cars coal, bituminous, standard lump, per specifications:				
25 cents freight rate to East St. Louis—				
6-inch lump.....ton.	\$1.10	\$1.20	\$1.15	\$0.94
3-inch lump.....do.	1.00	1.15	1.15	.89
Run of mine.....do.	.90	1.00	1.10	.95
Perry County, Ill.—				
6-inch lump.....do.				1.25
3-inch lump.....do.				1.20
Run of mine.....do.				1.09
Franklin County, Ill.—				
6-inch lump.....do.				1.45
3-inch lump.....do.				1.45
Run of mine.....do.				1.15
Williamson County, Ill.—				
6-inch lump.....do.		1.34		
3-inch lump.....do.		1.24		
Run of mine.....do.		1.04		

No. 12 accepted.

<sup>1</sup> 2-inch shaker.<sup>2</sup> 2-inch lump.■

## PITTSBURGH (PA.) DISTRICT.

[Officer: Lieut. Col. Francis R. Shunk, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for furnishing and delivering service bridge and Poiree trestles at Dam No. 10, Ohio River, received in response to advertisement, opened at Pittsburgh, Pa., Aug. 26, 1915, by Lieut. Col. Francis R. Shunk, Corps of Engineers.*

[Appropriation maintenance and improvement of existing river and harbor works, as applied to Lock and Dam No. 10, Ohio River.]

Name and address of bidder.	Service bridge and Poiree trestles, 232,867 pounds.	
	Price.	Amount.
1. Penn Bridge Co., Beaver Falls, Pa.....	pound..	\$0.0395 <sup>1</sup> \$9,198.25

<sup>1</sup> Certified check for \$1,000 in lieu of bond.

*Informality.*—Evidence of authority to sign for company not furnished.  
Rejection of bid recommended.

*Abstract of proposals for furnishing and erecting steel lock gates, and furnishing valves and lock operating machinery, at Lock 6, Monongahela River, received in response to advertisement, opened at Pittsburgh, Pa., Aug. 20, 1915, by Lieut. Col. Francis R. Shunk, Corps of Engineers.*

[Appropriation maintenance and improvement of existing river and harbor works—Rebuilding Lock and Dam No. 6, Monongahela River.]

Name and address of bidder.	Section A.	Section B.	Total.
1. The Simonds Manufacturing Co., Pittsburgh, Pa.....	\$11,723.25		\$11,723.25
2. Ellicott Machine Corporation, Baltimore, Md.....	9,488.00		9,488.00
3. Union Foundry & Machine Co., Pittsburgh, Pa.....	10,374.83	\$13,556.81	23,931.64
4. Thos. Carlin's Sons Co., Pittsburgh, Pa.....	7,600.00		7,600.00
5. The Whitehead & Kales Iron Works, Detroit, Mich.....	13,665.00	16,319.00	29,984.00
6. Rosedale Foundry & Machine Co., Pittsburgh, Pa.....	11,095.00		11,095.00
7. Penn Bridge Co., Beaver Falls, Pa.....	9,900.00	13,890.00	<sup>2</sup> 23,790.00
8. Independent Bridge Co., Pittsburgh, Pa.....		14,500.00	<sup>3</sup> 14,500.00
9. H. P. Gazzam Machine Co., Pittsburgh, Pa.....	9,995.50		9,995.50
10. J. & J. B. Milholland Co., Pittsburgh, Pa.....	7,995.00		7,995.00

<sup>1</sup> Certified checks for \$2,999 in lieu of bond.

<sup>2</sup> Certified check for \$2,500 in lieu of bond.

<sup>3</sup> Certified check for \$1,450 in lieu of bond.

*Informalities.*—Bids Nos. 1, 2, 3, 4, 5, 6, 7, 9, and 10: No evidence of authority of signers to sign for the company.

Acceptance of the following bids is recommended:

No. 4, Thos. Carlin's Sons Co., Pittsburgh, Pa., section A, \$7,600.

No. 3, Union Foundry & Machine Co., Pittsburgh, Pa., section B, \$13,556.81.

*Abstract of proposals for furnishing and installing air compressors, gas engine, turbine, electric light plant, etc., at Lock 6, Monongahela River, received in response to advertisement, opened at Pittsburgh, Pa., Aug. 21, 1915, by Lieut. Col. Francis R. Shunk, Corps of Engineers.*

[Appropriation, maintenance and improvement of existing river and harbor works, rebuilding Lock and Dam No. 6, Monongahela River.]

Name and address of bidder.	Lot 1.	Lot 2.
1. The Foos Gas Engine Co., Springfield, Ohio.....		<sup>1</sup> \$3,575
2. The Bruce-Macbeth Engine Co., Cleveland, Ohio.....		<sup>2</sup> 3,705
3. Turner, Fricke Manufacturing Co., Pittsburgh, Pa.....		3,850
4. Combination Engine & Compressor Co., Bradford, Pa.....	\$6,000	
5. Hope Engineering & Supply Co., Mt. Vernon, Ohio.....		3,100
6. Hall Steam Pump Co., Pittsburgh, Pa.....	4,444	

<sup>1</sup> Check for \$400 in lieu of bond.

<sup>2</sup> Check for \$379 in lieu of bond.

Informalities.—Bids Nos. 1, 2, 3, 4: Price bid not expressed in words.

Bid No. 1: Official title of signer not stated.

Bids Nos. 1, 2, 3, 4, 5, and 6: No evidence of authority to sign.

Bid No. 3: Guaranty filled out by bidder.

Acceptance of the following bids is recommended:

No. 6, Hall Steam Pump Co., Pittsburgh, Pa., lot 1, \$4,444.

No. 5, The Hope Engineering & Supply Co., Mt. Vernon, Ohio, lot 2, \$3,100.

*Abstract of proposals for building two brick lock keepers' houses at Dam No. 10, Ohio River, received in response to advertisement, opened at Pittsburgh, Pa., Aug. 25, 1915, by Lieut. Col. Francis R. Shunk, Corps of Engineers.*

[Appropriation, maintenance and improvement of existing river and harbor works, Dam No. 10, Ohio River.]

Name and address of bidder.	2 lock keepers' houses at Dam No. 10, Ohio River.	
	Price each.	Total.
1. The Guy Johnston Contracting Co., Toronto, Ohio.....	\$5,700	<sup>1</sup> \$11,400
2. Earl N. Everson, Brilliant, Ohio.....	5,550	<sup>2</sup> 11,100
3. McFeely Bros., Steubenville, Ohio.....	6,450	<sup>3</sup> 12,900
4. Schutz, Schreiner & Clyde Co., Pittsburgh, Pa.....	6,625	13,250

<sup>1</sup> Check for \$1,140 in lieu of bond. <sup>2</sup> Check for \$1,200 in lieu of bond. <sup>3</sup> Check for \$1,500 in lieu of bond.

Informalities.—Bids Nos. 1, 3, and 4: No evidence of authority to sign.

Bids Nos. 3 and 4: Official title of signer not stated.

Acceptance of the following bid is recommended: No. 2, Earl N. Everson, Brilliant, Ohio, \$11,100.

*Abstract of proposals for furnishing and delivering service bridge and Pooree trestles for dam No. 10, Ohio River, received in response to advertisement at Pittsburgh, Pa., Nov. 5, 1915, by Lieut. Col. Francis R. Shunk, Corps of Engineers.*

[Appropriation maintenance and improvement of existing river and harbor works, as applied to Lock and Dam No. 10, Ohio River.]

Name and address of bidder.	Service bridge and Pooree trestles, 232,867 pounds.	Certified check in lieu of bond.
	Price.	Amount.
	Pound.	
1. Lawrence D. Weaning, Cleveland, Ohio.....	\$0.045	\$10,479.01
2. Independent Bridge Co., Pittsburgh, Pa.....	.0375	8,732.52
3. York Bridge & Construction Co., York, Pa.....	.043	10,013.28
4. Penn Bridge Co., Beaver Falls, Pa.....	.0395	9,198.25

Informalities.—Bids Nos. 3 and 4: No evidence of authority to sign.

Bid No. 4: Total amount of bid not stated.

Acceptance of the bid of the Independent Bridge Co., of \$8,732.52, is recommended.

*Abstract of proposals for furnishing and erecting steel lock gates, and furnishing valves and lock operating machinery for inner lock, at Lock 4, Monongahela River, received in response to advertisement, opened at Pittsburgh, Pa., Apr. 26, 1916, by Lieut. Col. Francis R. Shunk, Corps of Engineers.*

[Appropriation operating and care of canals and other works of navigation (indefinite) for rebuilding Lock and Dam No. 4, Monongahela River.]

Names and address of bidder.	Section A.	Section B.	Total.
1. The Whitehead & Kales Iron Works, Beecher Avenue and M. C. R. R., Detroit, Mich. ....	\$25,500.00	\$30,500.00	\$56,000.00
2. S. B. Harding, Chicago, Ill. ....	14,371.00	28,382.00	42,753.00
3. J. & J. B. Milholland Co., 714 Fifth Avenue, Chicago, Ill. ....	11,995.00		11,995.00
4. Penn Bridge Co., Beaver Falls, Pa. ....	9,256.00	21,847.00	31,103.00
5. Rosedale Foundry & Machine Co., Pittsburgh, Pa. ....	15,900.00		15,900.00
6. Independent Bridge Co., Beaver Avenue, Pittsburgh, Pa. ....		20,550.00	1 20,550.00

<sup>1</sup> Certified check for \$2,500 in lieu of bond.

*Informalities.*—Bids Nos. 1, 3, and 5: Evidence of authority of signer to sign for the company not furnished. Bid No. 2: No bond or check furnished.

Acceptance of the following bids is recommended:

No. 4, Penn Bridge Co., Beaver Falls, Pa., section A, \$9,256.

No. 6, Independent Bridge Co., Pittsburgh, Pa., section B, \$20,550.

*Abstract of proposals for building two lock keepers' brick houses at Dam No. 1, Monongahela River, received in response to advertisement, opened at Pittsburgh, Pa., 12 o'clock m. (eastern standard time), June 21, 1916, by Lieut. Col. Francis R. Shunk, Corps of Engineers.*

[Appropriation: Operating and care of canals and other works of navigation (indefinite), as applied to Monongahela River.]

Name and address of bidder.	2 lock keepers' houses at Dam No. 1, Monongahela River.	Price each.	Total.
1. Martolf Bros. Co., New Brighton, Pa. ....	\$6,295	\$12,590	
2. Wilson Construction Co., 1321 Fulton Building, Pittsburgh, Pa. ....	7,570	15,140	
3. D. A. File & Co., 201 Fitzsimmons Building, Pittsburgh, Pa. ....	5,998	11,996	
4. Earl N. Everson, Brilliant, Ohio. ....	6,749	13,498	

*Informalities.*—Bid No. 1: Proper bond not furnished, the bond form having been filled in and signed by the bidder. Evidence of authority to sign proposal for the company not furnished.

Bid No. 2: Evidence of authority to sign for the company not furnished. Signer of proposal has not stated his official designation.

Bid No. 4: No witness to signature on bond.

Recommended that the bid of D. A. File & Co., Pittsburgh, Pa. for \$11,996 be accepted.

## WHEELING (W. VA.) DISTRICT.

[Officer: Maj. T. H. Jackson, Corps of Engineers.]

## RIVERS AND HARBORS.

Abstract of proposals for furnishing and delivering valve-operating mechanism for various dams in the Wheeling (W. Va.) district, received in response to advertisement dated July 20, 1915, and opened at Wheeling, W. Va., July 30, 1915, by Maj. T. H. Jackson, Corps of Engineers.

Article.	1. Marine Manufacturing & Supply Co., Pittsburgh, Pa.	2. Chas. Hegewald Co., New Albany, Ind.	3. J. & J. B. Milholland Co., Pittsburgh, Pa.	4. Rosedale Foundry & Machine Co., Pittsburgh, Pa.
Valve-operating mechanism:				
Dam No. 11.....	\$631.25	\$464.99	\$558.74	\$599.00
12.....	633.25	464.99	557.60	599.00
13.....	570.40	419.99	503.94	540.00
14.....	635.60	464.99	564.18	605.00
15.....	636.50	464.99	564.18	605.00
16.....	638.75	464.99	566.54	607.00
17.....	638.75	464.99	566.54	607.00
18.....	507.20	375.99	453.29	486.00
19.....	640.50	464.99	570.62	610.00
20.....	640.50	464.99	569.78	609.00
24.....	642.50	464.99	569.78	609.00
26.....	642.50	464.99	572.14	611.00
28.....	642.50	464.99	572.14	611.00
	8,100.20	5,910.87	7,189.47	7,698.00

No. 2 accepted.

Abstract of proposals for furnishing and delivering structural steel forgings, steel castings, etc., for pass and weir wickets, Dams Nos. 16 and 17, Ohio River, opened at Wheeling, W. Va., Oct. 22, 1915, by Maj. T. H. Jackson, Corps of Engineers.

Material.	1. Pitts-burgh Trolley & Forge Co., Pittsburgh, Pa.	2. J. & J. B. Milholland Co., Pittsburgh, Pa.	3. J. E. Moss Iron Works, Wheeling, W. Va.	4. Penn Bridge Co., Beaver, Falls, Pa.	5. Law-rence D. Weaning, Cleveland, Ohio.
<i>Lot A.</i>					
1. Structural steel, Dam 16.....	\$3,064.00	\$3,834.00	\$3,650.00	\$3,189.00	\$3,000.00
2. Structural steel, Dam 17.....	3,998.00	5,022.00	4,773.00	4,189.00	3,900.00
Total.....	7,062.00	8,856.00	8,423.00	7,378.00	6,900.00
<i>Lot B.</i>					
1. forgings, Dam 16.....	929.00	1,128.00	2,328.00	867.00	1,300.00
2. forgings, Dam 17.....	1,244.00	1,550.00	3,193.00	1,137.00	1,800.00
Total.....	2,173.00	2,678.00	5,521.00	2,004.00	3,100.00
<i>Lot C.</i>					
1. Steel castings, Dam 16.....	1,002.55	940.00	.....	1,054.00	1,670.00
2. Steel castings, Dam 17.....	1,344.25	1,290.00	.....	1,335.00	2,290.00
Total.....	2,346.80	2,230.00	.....	2,389.00	3,960.00
<i>Lot D.</i>					
1. Bolts and rods, Dam 16.....	792.00	945.00	1,770.00	912.00	760.00
2. Bolts and rods, Dam 17.....	1,017.00	1,287.00	2,420.00	1,363.00	930.00
Total.....	1,839.00	2,232.00	4,190.00	2,275.00	1,690.00
Grand total.....	13,420.80	15,996.00	18,134.00	14,046.00	15,650.00

Accepted: Lots A and D to No. 5; lot B to No. 4; lot C to No. 2.

*Abstract of proposals for furnishing and delivering white-oak timber for wickets for Dams Nos. 16 and 17, Ohio River, opened at Wheeling, W. Va., Oct. 23, 1915, by Maj. T. H. Jackson, Corps of Engineers.*

Name and address of bidder.	Dam No. 16. White-oak timber, 150,896 feet board measure.		Dam No. 17. White-oak timber, 198,998 feet board measure.	
	Rate.	Amount.	Rate.	Amount.
1. The Hood Lumber Co., Glendale, W. Va.....	\$30.00	\$4,526.88	\$32.50	\$6,467.44
2. Parkersburg Mill Co., Parkersburg, W. Va.....	37.00	5,583.15	35.00	6,964.93
3. Chas. E. Lane Co., Parkersburg, W. Va.....	31.00	4,677.78	31.00	6,168.94
4. W. M. Ritter Lumber Co., Columbus, Ohio.....	37.50	5,658.60		
5. Rockcastle Lumber Co. (Inc.), Huntington, W. Va.....	30.00	4,526.88	30.00	5,969.94
6. Meadow River Lumber Co., Rainelle, W. Va.....	35.00	5,281.36	35.00	6,964.93

Accepted as follows: No. 1 for Dam No. 16; No. 5 for Dam No. 17.

*Abstract of proposals for building a fireproof power house at Dam No. 14, Ohio River, opened at Wheeling, W. Va., on Jan. 6, 1916, by Maj. T. H. Jackson, Corps of Engineers.*

Name and address of bidder.	Power-house and boiler chimney.	Extra concrete, cubic yard.	Extra excavation, cubic yard.
1. Wilson Construction Co., Pittsburgh, Pa.....	\$27,400	\$10.00	\$4.00
2. Schutz, Schreiner & Clyde Co., Pittsburgh, Pa.....	28,047	12.00	2.50
3. D. T. Burton, Moundsville, W. Va.....	24,800	8.90	.80
4. Earl N. Everson, Brilliant, Ohio.....	24,879	12.00	1.00
5. The Ohio Building & Construction Co., Cincinnati, Ohio.....	23,500	8.00	.75
6. H. L. Kreusler, Pittsburgh, Pa.....	29,941	14.00	3.00
Alternative bid.....	29,043		

No. 5 accepted.

*Abstract of proposals for building fireproof power houses at Dams Nos. 16 and 17, Ohio River, opened at Wheeling, W. Va., Jan. 22, 1916, by Maj. T. H. Jackson, Corps of Engineers.*

Name and address of bidder.	Power-house, Dam No. 16.	Power-house, Dam No. 17.	Extra concrete, cubic yard.	Extra excavation, cubic yard.
1. Dayton & Francis, New Martinsville, W. Va.....	\$19,989	\$20,188	\$8.50	\$0.95
2. The Ohio Building & Construction Co., Cincinnati, Ohio.....	18,950	19,900	{ 1 9.00 1 10.00	1.00 1.50
3. Foreman & Putman, Marietta, Ohio.....	24,677	24,477	7.50	.65
4. Earl N. Everson, Brilliant, Ohio.....	19,550	19,898	12.50	1.00
5. A. L. Shockley, Huntington, W. Va.....	27,300	27,300	16.50	1.25
6. Newport Contracting & Engineering Co. (Inc.), Newport News, Va.....	17,463	18,563	2 7.00	\$.60
7. The Pitt Construction Co. (Inc.), Pittsburgh, Pa.....	20,000	20,000	12.00	1.00
8. H. L. Kreusler, Pittsburgh, Pa.....	23,317	23,354	12.50	3.00

<sup>1</sup> Dams 16 and 17, exclusive of reinforcing and form work.

<sup>2</sup> Except forms.

<sup>3</sup> Trench excepted.

*Abstract of proposals for furnishing and delivering horses and props for Dams Nos. 14, 16, and 17, Ohio River, opened at Wheeling, W. Va., Feb. 4, 1916, by Maj. T. H. Jackson, Corps of Engineers.*

Material.	1. J. & J. B. Milholland Co., Pitts- burgh, Pa.	2. Pitts- burgh Trolley & Forge Co., Pittsburgh, Pa.
<i>Lot A, Dam No. 14.</i>		
Item 1. Pass horses and props.....	\$14,298.75	\$22,400.00
2. Weir horses and props.....	2,650.00	4,200.00
Total.....	16,948.75	26,600.00
<i>Lot B, Dam No. 16.</i>		
Item 1. Pass horses and props.....	13,924.75	22,600.00
2. Weir horses and props.....	3,100.00	4,900.00
Total.....	17,024.75	27,500.00
<i>Lot C, Dam No. 17.</i>		
Item 1. Pass horses and props.....	16,205.25	25,600.00
2. Weir horses and props.....	6,508.25	10,800.00
Total.....	22,713.50	36,400.00
Grand total.....	56,687.00	90,500.00

No. 1 accepted.

*Abstract of proposals for furnishing and erecting lock gates for Dams Nos. 16 and 17, Ohio River, opened at Wheeling, W. Va., Feb. 9, 1916, by Maj. T. H. Jackson, Corps of Engineers.*

Name and address of bidder.	Mitering lock gates.			
	If separate contracts are awarded for each lock—		If one contract is awarded for both locks—	
	Dam No. 16.	Dam No. 17.	Dam No. 16.	Dam No. 17.
1. Milwaukee Bridge Co., Milwaukee, Wis.....	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.0
2. The Whitehead & Kales Iron Works, Detroit, Mich.....	40,558.42	40,552.00	40,558.42	40,558.4
3. Penn Bridge Co., Beaver Falls, Pa.....	46,350.00	46,350.00	46,350.00	46,350.0
4. Independent Bridge Co., Pittsburgh, Pa.....	44,852.00	49,852.00	44,852.00	49,852.0
5. Walter S. Rae, Pittsburgh, Pa.....	45,900.00	46,877.00	45,900.00	46,877.0

<sup>1</sup> If separate contracts are made, we prefer Dam No. 16.

No. 2 accepted.

*Abstract of proposals for furnishing and erecting steel lock gates for Dam No. 14, Ohio River, opened at Wheeling, W. Va., on Jan. 14, 1916, by Maj. T. H. Jackson, Corps of Engineers.*

Name and address of bidder.	Two lock gates.
1. Walter S. Rae, Pittsburgh, Pa.....	\$38,370
2. John Eichleay, Jr., Co., Pittsburgh, Pa.....	41,980
3. Milwaukee Bridge Co., Milwaukee, Wis.....	45,240
4. Penn Bridge Co., Beaver Falls, Pa.....	40,365
5. Independent Bridge Co., Pittsburgh, Pa.....	35,490
6. The Whitehead & Kales Iron Works, Detroit, Mich.....	45,150

No. 5 accepted.

*Abstract of proposals for furnishing and delivering structural steel, etc. (service-bridge trestles, etc.), for Dams Nos. 14, 16, and 17, Ohio River, opened at Wheeling, W. Va., Feb. 25, 1916, by Maj. T. H. Jackson, Corps of Engineers.*

Material.	1. Chas. Hegewald Co., New Albany, Ind.	2. Independent Bridge Co., Pittsburgh, Pa.
Service-bridge trestles, etc.:		
Dam No. 14.....	\$4,398	\$4,467
No. 16.....	4,998	5,392
No. 17.....	11,898	11,784

All bids rejected.

*Abstract of proposals for furnishing and delivering maneuver boats for Dams Nos. 14, 16, and 17, Ohio River, received in response to advertisement, opened at Wheeling, W. Va., on Feb. 29, 1916, by Maj. T. H. Jackson, Corps of Engineers.*

Article.	Quan- tity.	1. The Dravo Contracting Co., Pitts- burgh, Pa.	2. Ameri- can Bridge Co., Pitts- burgh, Pa.
Maneuver boats.....	3	\$37,950	\$33,750
Delivery first boat.....		140 days.	200 days.
Delivery second boat.....		147 days.	210 days.
Delivery third boat.....		154 days.	220 days.
<i>Alternative bid.</i>			
Maneuver boats.....	3	\$38,750	\$33,750

Capstan and engine manufactured by Marine Manufacturing and Supply Co., Pittsburgh, Pa.  
Wire rope and sheaves manufactured by—(1) Rope: John A. Roebling Sons Co. Sheaves: The Dravo Contracting Co. (2) Rope: American Steel & Wire Co. Sheaves: American Bridge Co.  
No. 2 alternative proposal accepted.

*Abstract of proposals for furnishing and delivering valve jacks and gate-operating machinery at Dams Nos. 16 and 17, Ohio River, opened at Wheeling, W. Va., Apr. 24, 1916, by Maj. T. H. Jackson, Corps of Engineers.*

Article.	1. Centre Foundry & Machine Co., Wheeling, W. Va.	2. J. & J. B. Milhol- land Co., Pitts- burgh, Pa.	3. The Whitehead & Kales Iron Works, Detroit, Mich.	4. Sterritt - Thomas Foundry Co., Pitts- burgh, Pa.
<i>Lot A.</i>				
34 river-wall valve jacks:				
For Dam No. 16.....	\$3,300	\$4,050	\$11,049	\$4,634
For Dam No. 17.....	3,300	4,050	11,049	4,634
<i>Lot B.</i>				
Gate-operating machinery:				
Alternative proposal (jack cylinders to be furnished by contractor and machined by the United States)—				
For Dam No. 16.....			36,000	
For Dam No. 17.....			36,000	

Lot A, to No. 1.

Lot B, bids rejected; price excessive.

Abstract of proposals for furnishing and delivering water turbines, air compressors, valve jacks, gate engines, gate winches, oil pumps, etc., received in response to advertisement dated Feb. 4, 1916, and opened at Wheeling, W. Va., Feb. 24, 1916, by Maj. T. H. Jackson, Corps of Engineers.

	No. 1. Smith Co., Pa.	S. Morgan York, Pa.	No. 12. Trump Manu- facturing Co., Spring- field, Ohio.
<i>Lot A.</i>			
Vertical water turbines with gearing:			
2 for Dam No. 12.....	\$2,758.00	1 \$2,698.00	\$2,000.00
2 for Dam No. 14.....	\$2,772.00	1 \$2,712.00	\$2,000.00
2 for Dam No. 20.....	\$2,790.00	1 \$2,730.00	\$2,000.00
With a head of 6 feet of water the power developed is..... horsepower	60	60	63
Number of revolutions per minute.....	85	85	85
Guaranteed efficiency .....	per cent	81	81
<i>Lot B.</i>			
Air compressors with accessories:			
2 for Dam No. 12.....	\$2,519.60	1 \$2,586.80	\$2,180.00
2 for Dam No. 14.....	\$2,529.20	1 \$2,596.40	\$2,180.00
2 for Dam No. 20.....	\$2,529.20	1 \$2,596.40	\$2,180.00
Brake horsepower required for each 100 cubic feet of air actually delivered per minute when compressed to 100 pounds per square inch.....	20	20	20 $\frac{1}{2}$
Horsepower when compressed to 50 pounds per square inch.....	13 $\frac{1}{2}$	13 $\frac{1}{2}$	15 $\frac{1}{2}$
Weight of fly wheel..... pounds.	2,000	2,000	1,600
<i>Lot C.</i>			
River-wall valve jacks:			
32 for Dam 12.....	\$2,860	\$3,150	\$4,950
32 for Dam 14.....	2,860	3,150	4,950
32 for Dam 20.....	2,860	3,150	4,950
<i>Lot D.</i>			
Gate winches:			
2 for Dam 12.....	3,800	3,250	3,900
2 for Dam 14.....	3,800	3,250	3,900
2 for Dam 20.....	3,800	3,250	3,900
<i>Lot E.</i>			
Gate engines:			
2 for Dam 12.....	\$1,200.00	\$1,595.00	\$1,505.30
2 for Dam 14.....	1,220.00	1,595.00	1,516.20
2 for Dam 20.....	1,220.00	1,595.00	1,523.88

<sup>1</sup> Alternative.

*Abstract of proposals for furnishing and delivering water turbines, air compressors, valve jacks, gate engines, gate winches, oil pumps, etc., received in response to advertisement dated Feb. 4, 1916, and opened at Wheeling, W. Va., Feb. 24, 1916, by Maj. T. H. Jackson, Corps of Engineers—Continued.*

	No. 4. Bury Compressor Co., Erie, Pa.	No. 5. J. & B. B. Milholland Co., Pittsburgh, Pa.	No. 9. Thos. Carlin's Sons Co., Pittsburgh, Pa.	No. 11. Beckwith Machinery Co., Pittsburgh, Pa.
<i>Lot F.</i>				
Air receivers and oil tanks:				
1 of each for Dam 12.....	\$245	\$127	\$356	\$151
1 of each for Dam 14.....	245	127	361	155
1 of each for Dam 20.....	245	127	361	155
			\$207	\$73
			207	73
			207	73
			\$160	\$60
			161	61
			161	61
<i>Lot G.</i>				
Duplex oil pump:				
1 for Dam 12.....			\$225.00	\$311.75
1 for Dam 14.....			225.00	311.75
1 for Dam 20.....			225.00	311.75
			\$240.00	240.00
			240.00	240.00
No. 4. Bury Compressor Co., Erie, Pa.				
No. 6. Epping-Carpenter Pump Co., Pittsburgh, Pa.				
No. 8. Reineke-Wagner Pump and Supply Co., Pittsburgh, Pa.				

Accepted: Lot A, No. 12; Lot B, No. 4; Lot C, No. 5; Lot D, No. 7; Lot E, No. 11.

Rejected: Lots F and G.

#### CINCINNATI (OHIO), FIRST DISTRICT.

[Officer: Robert R. Ralston, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of proposals for furnishing and installing new boilers on United States tow-boats Miami and Guyandot (Ohio River improvement), opened at United States Engineer office, First Cincinnati (Ohio) district, Feb. 23, 1916.*

For furnishing and installing boilers (each boat).....	1. Chas. Hegewald Co., New Albany, Ind.	2. Fowler-Wolfe Sheet Metal Works, Paducah, Ky.
Allowance for old boilers (each boat).....		
Time of completion.....	\$6,500.00 0 Indefinite.	\$4,927.50 0 180 days.

Bid No. 2 informal; no guarantee furnished.

Bid No. 1 rejected as excessive and contract awarded to bidder No. 2 on his informal proposal.

*Abstract of proposals for constructing four steel fuel flats and two steel barges (Ohio River improvement) opened at United States Engineer office, first district, Cincinnati, Ohio, Aug. 31, 1915.*

Name and address of bidder.	Delivered at Cincinnati, Ohio.		Delivered at bidder's yards.		Estimated weight.	
	Four fuel flats.	Two barges.	Four fuel flats.	Two barges.	One fuel flat.	One barge.
1. The Stacey Mfg. Co., Cincinnati, Ohio.....	Each. \$5,972	Each. \$5,730	Each. .....	.....	Pounds. 152,500	Pounds. 147,500
2. American Bridge Co., Cincinnati, Ohio.....	7,000	7,000	\$6,800	\$6,800	160,000	159,000
3. Nashville Bridge Co., Nashville, Tenn.....	7,905	8,090	7,755	7,940	157,710	162,000
4. Ed. J. Howard, Jeffersonville, Ind.....	7,228	7,168	7,178	7,118	158,736	157,304
5. Dubuque Boat & Boiler Works, Dubuque, Iowa.....	5,975	5,950	5,775	5,750	145,224	142,858
6. Dravo Contracting Co., Pittsburgh, Pa.....	7,260	6,990	7,110	6,840	158,000	152,000
7. Chas. Hegewald Co., New Albany, Ind.....	7,199	7,099	7,099	6,999	159,000	157,000

Bid No. 1 accepted.

*Abstract of proposals for wicket irons for Dam No. 39, Ohio River, received in response to public notice dated Oct. 20, 1915, and opened at United States Engineer office, first district, Cincinnati, Ohio, Nov. 9, 1915.*

Name and address of bidder.	Lot 1, steel castings, 24,582 pounds.		Lot 2, structural steel, 171,537 pounds.		Lot 3, forgings, rivets, etc., 63,279 pounds.	
	Rate.	Amount.	Rate.	Amount.	Rate.	Amount.
1. Marine Mfg. & Supply Co., Pittsburgh, Pa.....	\$0.063	\$1,548.67	\$0.0298	\$5,111.80	\$0.0595	\$3,765.10
2. Chas. Hegewald Co., New Albany, Ind.....	.05949	1,462.38	.02649	4,544.02	.04149	2,625.45
3. C. A. Turner, Pittsburgh, Pa.....	.052	1,278.26	.0237	4,065.43	.0363	2,297.03
4. J. & J. B. Milholland Co., Pittsburgh, Pa.....	.051	1,253.68	.0295	5,060.34	.037	2,341.32
5. York Bridge & Construction Co., York, Pa.....	.....	.....	.026	4,459.96	.042	2,657.72
6. Penn Bridge Co., Beaver Falls, Pa.....	.062	1,524.08	.0248	4,254.12	.0328	2,075.55
7. Chris. Erhart, Cincinnati, Ohio.....	.12	2,949.84	.....	.....	.....	.....
8. American Steel Foundries, Pittsburgh, Pa.....	.0496	1,044.74	.....	.....	.....	.....

	Bid 1.	Bid 2.	Bid 3.	Bid 4.	Bid 5.	Bid 6.	Bid 7.	Bid 8.
<i>Lot 1.</i>								
Time required to begin delivery ..... days.....	40	30	60	50	.....	45	30	14
Time required to complete delivery ..... days.....	40	90	60	50	.....	75	170	42
<i>Lot 2.</i>								
Time required to begin delivery ..... days.....	90	42	60	60	.....	60	.....	.....
Time required to complete delivery ..... days.....	90	90	60	60	120	90	.....	.....
<i>Lot 3.</i>								
Time required to begin delivery ..... days.....	40	30	60	60	.....	60	.....	.....
Time required to complete delivery ..... days.....	40	90	60	60	120	90	.....	.....

Lot No. 1 awarded to bidder No. 8. Lots 2 and 3 awarded to bidder No. 6.

*Abstract of proposals for filling terrace at Dam No. 29, Ohio River, opened Aug. 27, 1915, at United States Engineer office, first district, Cincinnati, Ohio.*

Item.	Quantity (cubic yards).	1. Western Rivers Co., Point Pleasant, W. Va.		2. Bates & Rogers Construction Co., Chicago, Ill.		3. Wheeler & Put- nam, Ashland, Ky.	
		Rate.	Amount.	Rate.	Amount.	Rate.	Amount.
Common fill.....	7,650	\$0.64	\$4,896.00	\$0.70	\$5,355.00	\$0.79	\$6,043.50
Loam.....	1,900	.64	1,216.00	.80	1,520.00	.94	1,786.00
Total.....			6,112.00	.....	6,875.00	.....	7,829.50

Bid No. 1 accepted.

*Abstract of proposals for furnishing and installing operating machinery, etc., at Dam No. 29, Ohio River, opened at United States Engineer office, first district, Cincinnati, Ohio, Sept. 24, 1915.*

LOT A.

Item.	Quan- tity.	1. J. & J. B. Mil- holland Co., Pitts- burgh, Pa.		2. Bury Compre- sor Co., Erie, Pa.		3. The Miller Sup- ply Co., Hunting- ton, W. Va.	
		Rate.	Amount.	Rate.	Amount.	Rate.	Amount.
Duplex reversing engines, cylinders 10 by 12 inches.....	2	\$803.40	\$1,606.80	.....	.....	.....	.....
Cast iron.....pounds.	18,174	.062	1,126.79	.....	.....	.....	.....
Steel castings.....do.	8,800	.067	539.60	.....	.....	.....	.....
Forged steel.....do.	12,114	.0825	999.41	.....	.....	.....	.....
Cold roller steel.....do.	1,480	.062	91.76	.....	.....	.....	.....
Tool steel.....do.	114	.31	35.34	.....	.....	.....	.....
Machinery steel.....do.	198	.11	21.78	.....	.....	.....	.....
Wrought iron or soft steel (bolts, etc.).....pounds.	3,345	.062	207.39	.....	.....	.....	.....
Babbitt metal (bearings).....do.	50	.29	14.50	.....	.....	.....	.....
Standard lap-welded wrought- iron pipe:							
3-inch.....linear feet.	30	.515	15.45	.....	.....	.....	.....
2½-inch.....do.	16	.3925	6.28	.....	.....	.....	.....
2-inch.....do.	8	.2575	2.06	.....	.....	.....	.....
1-inch.....do.	12	.155	1.86	.....	.....	.....	.....
½-inch.....do.	14	.105	1.47	.....	.....	.....	.....
¼-inch.....do.	2	.105	.21	.....	.....	.....	.....
Malleable-iron elbows, 2½ inches, extra heavy, long radius, flanged, number.....	2	4.74	9.48	.....	.....	.....	.....
Malleable-iron elbows, long sweep:							
3-inch.....number.	2	2.32	4.64	.....	.....	.....	.....
2½-inch, extra heavy.....do.	2	1.65	3.30	.....	.....	.....	.....
2½-inch, standard radius, number.....	4	.62	2.48	.....	.....	.....	.....
2-inch, standard radius, extra heavy.....number.	4	.62	2.48	.....	.....	.....	.....
1-inch, 45°, extra heavy.....do.	2	.26	.52	.....	.....	.....	.....
Malleable-iron tees:							
3-inch, extra heavy, flanged, number.....	2	4.95	9.90	.....	.....	.....	.....
2½-inch, extra heavy, flanged, number.....	2	4.12	8.24	.....	.....	.....	.....
2½ by 2½ by 3 inches.....do.	2	.73	1.46	.....	.....	.....	.....
1 by 1 by ½ inches, extra heavy.....number.	2	.42	.84	.....	.....	.....	.....
Cast-iron unions, extra heavy, flanged, 3-inch.....number.	2	1.24	2.48	.....	.....	.....	.....
Malleable-iron unions, flanged, 3-inch.....number.	2	1.65	3.30	.....	.....	.....	.....
Brass unions, semifinished:							
2½-inch.....number.	4	2.58	10.32	.....	.....	.....	.....
2-inch.....do.	4	1.55	6.20	.....	.....	.....	.....
1-inch.....do.	2	.83	1.66	.....	.....	.....	.....
½-inch.....do.	2	.26	.52	.....	.....	.....	.....
Malleable-iron bushings:							
2½ by 2 inches.....do.	4	.105	.42	.....	.....	.....	.....
½ by ¼ inch.....do.	2	.06	.12	.....	.....	.....	.....
Cast-iron plugs, 1-inch.....do.	2	.05	.10	.....	.....	.....	.....

Abstract of proposals for furnishing and installing operating machinery, etc., at Dam No. 29, Ohio River, opened at United States Engineer office, first district, Cincinnati, Ohio, Sept. 24, 1915—Continued.

## LOT A—Continued.

Item.	Quantity.	1. J. & J. B. Mil-holland Co., Pitts-burgh, Pa.		2. Bury Compre-sor Co., Erie, Pa.		3. The Miller Sup-ply Co., Hunting-ton, W. Va.	
		Rate.	Amount.	Rate.	Amount.	Rate.	Amount.
Brass globe valve, 3-inch, screw ends.....number.....	2	\$12.36	\$24.72				
Brass whistle, 2-inch, with valve, number.....	2	3.09	6.18				
Brass pressure gauges, $\frac{3}{4}$ -inch dial.....number.....	2	11.85	23.70				
Brass air cocks, $\frac{1}{2}$ -inch.....do.....	2	.62	1.24				
Throttle valves, 2 $\frac{1}{2}$ -inch, Lidger-wood.....number.....	2	15.45	30.90				
Wire rope, 1-inch diameter, linear feet.....	500	.31	155.00				
Cast-iron flanges, extra heavy, raised face:							
3-inch pipe.....number.....	2	3.09	6.18				
3 $\frac{1}{2}$ -inch pipe.....do.....	2	4.12	8.24				
Cast-iron flanges, extra heavy, companion, 2 $\frac{1}{2}$ -inch pipe, number.....	4	2.06	8.24				
Cutting concrete.....cubic feet.....	10	2.00	20.00				
Drilling bolt holes.....linear feet.....	207	1.50	310.50				
Concrete.....cubic yards.....	22	10.00	220.00				
Total.....			5,604.06				

## LOT B.

Water turbines complete with bevel-gear drives, shafting, and auxiliaries.....number.....	2	\$1,439.25	\$2,878.50	\$1,420.50	<sup>1</sup> \$2,841.00		
Air compressors, horizontal, 2-stage.....number.....	2	1,776.75	3,553.50	1,040.00	<sup>1</sup> 2,080.00		
Air-driven oil pump with auxiliaries.....number.....	1		329.60	350.00	1350.00		
Air receiver, 3 feet 10 inches diameter, 10 feet 8 inches high, number.....	1		128.75	295.00	1295.00		
Oil tank, 2 feet diameter, 5 feet high.....number.....	1		61.80	186.60	1186.60		
Standard lap-welded wrought-iron pipe:							
5-inch.....linear feet.....	27	.93	25.11				
4-inch.....do.....	4	.825	3.30				
3-inch.....do.....	50	.515	25.75				
2 $\frac{1}{2}$ -inch.....do.....	310	.40	124.00				
2-inch.....do.....	4	.26	1.04				
1 $\frac{1}{2}$ -inch.....do.....	38	.185	7.03				
1 $\frac{1}{4}$ -inch.....do.....	135	.155	20.93				
1-inch.....do.....	40	.155	6.20				
3 inches by 1 foot 7 inches radius quarter bend wrought-iron pipe.....No.....	1	3.09	3.09				
Cast-iron Y, extra heavy flanged, 3 by 3 by 5 inches.....No.....	1	10.30	10.30				
Cast-iron elbows, extra heavy flanged, 3-inch, 45°.....No.....	2	3.09	6.18				
Cast-iron tee, extra heavy flanged, 3 by 3 by 1 $\frac{1}{2}$ inches.....No.....	1		4.12				
Malleable-iron elbows:							
1 $\frac{1}{2}$ -inch, long radius.....No.....	2	.62	1.24				
2 $\frac{1}{2}$ -inch, long radius.....do.....	13	1.29	16.77				
2 $\frac{1}{2}$ -inch, 45°.....do.....	10	1.24	12.40				
1 $\frac{1}{2}$ -inch, long radius.....do.....	7	.515	3.61				
1-inch, long radius.....do.....	5	.415	2.08				
Malleable-iron tees, 2 $\frac{1}{2}$ by 2 $\frac{1}{2}$ inches.....No.....	3	.67	2.01				
Malleable-iron tees, 1 $\frac{1}{2}$ by 1 $\frac{1}{2}$ by 1 $\frac{1}{2}$ inches.....No.....	2	.21	.42				
Malleable-iron crosses, 2 $\frac{1}{2}$ by 2 $\frac{1}{2}$ by 2 $\frac{1}{2}$ inches.....No.....	2	1.24	2.48				

<sup>1</sup> Or lump sum of \$5,432.60 for all five items.

*Abstract of proposals for furnishing and installing operating machinery, etc., at Dam No. 29, Ohio River, opened at United States Engineer office, first district, Cincinnati, Ohio, Sept. 24, 1915—Continued.*

## LOT B—Continued.

Item.	Quan-	1. J. & J. B. Mil-		2. Bury Compre-		3. The Miller Sup-	
		holland Co., Pitts-	burgh, Pa.	sor Co., Erie, Pa.	Amount.	Rate.	Amount.
Cast-iron flanges, extra heavy:							
5-inch.....No.	6	\$2.22	\$13.32				
3-inch.....do.	9	1.55	13.95				
Gate valves, flanged:							
3-inch.....do.	2	6.13	12.26				
4-inch.....do.	1		7.73				
Globe valves, screw ends, $2\frac{1}{2}$ -inch.....No.	4	4.89	19.56				
Angle gate valves, flanged, 3-inch.....No.	2	25.75	51.50				
Angle valves, screw ends:							
1 $\frac{1}{2}$ -inch.....do.	2	3.35	6.70				
1 $\frac{1}{4}$ -inch.....do.	2	2.06	4.12				
Angle safety valves, screw ends, $2\frac{1}{2}$ -inch.....No.	1		21.11				
Wedge disk valves, screw ends, 1 $\frac{1}{2}$ -inch.....No.	2	3.61	7.22				
Globe valves, 1-inch.....do.	1	1.65	1.65				
Drip cocks, $\frac{1}{2}$ -inch.....do.	2	.62	1.24				
Hose connections, $1\frac{1}{2}$ -inch.....do.	1		.83				
Strainers for pipes, w24 and w25.....No.	2	3.60	7.20				
Pipe hangers, etc., for 3-inch pipe.....No.	2	1.03	2.06				
Floor support for $2\frac{1}{2}$ -inch pipe.....No.	1		1.55				
Brass unions:							
2 $\frac{1}{2}$ -inch, extra heavy, semi-finished.....No.	6	5.15	30.90				
2-inch, extra heavy, semi-finished.....No.	1		4.12				
1 $\frac{1}{2}$ -inch, extra heavy, semi-finished.....No.	1	3.20	3.20				
1 $\frac{1}{4}$ -inch, extra heavy, semi-finished.....No.	4	2.60	10.68				
1-inch, extra heavy, semi-finished.....No.	1		2.47				
Total.....			7,453.58				

## LOT C.

32 jack cylinders, cast iron.....lbs.	12,064	\$0.057	\$687.65			
4 hand-operating levers, forged iron.....lbs.	260	.114	29.64			
32 base plates, cast iron.....do.	7,296	.057	415.87			
32 gear sectors, cast steel.....do.	4,576	.0825	377.52			
32 racks, cast steel.....do.	3,328	.124	412.67			
32 cylinder heads, cast iron.....do.	976	.0775	75.64			
32 rear cylinder heads, cast iron.....lbs.	851	.0775	65.95			
32 stuffing-box glands, phosphor bronze.....lbs.	189	.45	85.05			
32 piston bodies, cast iron.....do.	374	.1225	45.82			
Piston packing, leather.....do.	80	.59	47.20			
Piston following rings, cast iron.....lbs.	288	.2775	79.92			
64 rack rollers, cast iron.....do.	576	.165	95.04			
32 rack keys, machine steel.....do.	23	.175	4.03			
32 pinions, cast steel.....do.	376	.124	71.42			
32 gear segment keys, tool steel.....lbs.	25	.31	7.75			
32 piston rods, cold-rolled steel.....lbs.	893	.072	64.30			
32 pinion spindles, cold-rolled steel.....lbs.	230	.072	16.56			
64 rack roller pins, machine steel.....lbs.	179	.072	12.89			

*Abstract of proposals for furnishing and installing operating machinery, etc., at Dam No. 29, Ohio River, opened at United States Engineer office, first district, Cincinnati, Ohio, Sept. 24, 1915—Continued.*

## LOT C—Continued.

Item.	Quantity.	1. J. & J. B. Mil-holland Co., Pitts-burgh, Pa.		2. Bury Compre-sor Co., Erie, Pa.		3. The Miller Sup-ply Co., Hunting-ton, W. Va.	
		Rate.	Amount.	Rate.	Amount.	Rate.	Amount.
Boats:							
1 by 12 inches, with washers, steel.....lbs.	1,050	\$0.042	\$44.10				
2 by 3 inches, steel.....do.	276	.042	11.59				
2 by 5½ inches, tobin bronze.....lbs.	64	.07	4.48				
1½ by 1½ inches, steel-cap screw.....lbs.	48	.062	2.98				
2 by 2 inches, steel, set screw.....lbs.	6	.062	.37				
2 by 1½ inches, steel-set screw.....lbs.	16	.062	.99				
Pipe plugs, 1-inch pipe, cast iron.....lbs.	15	.05	.75				
Standard lap-welded wrought-iron pipe:							
2½-inch.....linear feet.	1,010	.36	363.60				
1-inch.....do.	160	.155	24.80				
Malleable-iron elbows:							
2½-inch, long radius.....No.	8	1.03	8.24				
1-inch, long radius.....do.	128	.41	52.48				
Malleable-iron tees, 2½ by 2½ by 1 inches.....No.	64	.52	33.28				
Cast-iron plugs, 2½ inches.....do.	4	.11	.44				
Globe valves, 1-inch, extra heavy.....No.	64	2.06	131.84				
Cast-iron flanges, 2½-inch, extra heavy.....No.	16	.83	13.28				
Brass unions, 1-inch extra heavy.....No.	64	1.55	99.20				
Gaskets, 2½-inch, pipe, soft copper.....No.	8	.21	1.68				
Brass unions, 2½-inch, extra heavy.....No.	4	5.15	20.60				
Total.....			3,409.62				

## LOT D.

Two-stage air compressor, number.....	1	\$2,939.62	\$2,939.62	\$2,300.00	\$2,300.00	\$3,200.00	\$3,200.00
Air receivers with accessories, number.....	2	370.80	741.60	600.00	1,200.00	535.00	1,070.00
Boiler with fittings and tools, number.....	1	3,331.02	3,331.02			3,172.00	3,172.00
Feed-water heater, closed type, steel multicoil.....number.	1	247.20	247.20			118.00	118.00
Feed-water pump.....do.	1	164.80	164.80				348.00
Drainage receiver.....do.	1	61.80	61.80				
Oil separator.....do.	1	70.00	70.00			27.00	27.00
Standard lap-welded wrought-iron pipe:							
6-inch.....linear feet.	77	1.14	87.78				73.60
5-inch.....do.	102	.93	94.86				74.00
4-inch.....do.	53	.825	43.73				28.00
3½-inch.....do.	24	.67	16.08				12.20
3-inch.....do.	4	.515	2.06				1.74
2½-inch.....do.	40	.39	15.60				9.60
2-inch.....do.	93	.26	24.18				1.52
1½-inch.....do.	89	.185	16.46				9.43
1¼-inch.....do.	46	.155	7.13				4.21
1-inch.....do.	64	.155	9.92				.067
¾-inch.....do.	65	.125	8.13				4.29
½-inch.....do.	12	.105	1.26				.045
Cast-iron elbows:							
6-inch, long-radius, standard flanged.....number.	6	6.08	36.48			5.38	32.28
6-inch base, flanged.....do.	2	7.11	14.22			6.10	12.20

<sup>1</sup> Or lump sum of \$3,200 for both items.

*Abstract of proposals for furnishing and installing operating machinery, etc., at Dam No. 29, Ohio River, opened at United States Engineer office, first district, Cincinnati, Ohio Sept. 24, 1915—Continued.*

## LOT D—Continued.

Item.	Quan- tity.	1. J. & J. B. Mil- holland Co., Pitts- burgh, Pa.		2. Bury Compre- sor Co., Erie, Pa.		3. The Miller Sup- ply Co., Hunting- ton, W. Va.	
		Rate.	Amount.	Rate.	Amount.	Rate.	Amount.
<b>Cast-iron elbows—Continued.</b>							
6-inch, 45°, standard flanged, number.....	1	\$4.64	\$4.64.....			\$3.55	\$3.55
5-inch, long-radius, extra heavy, flanged.....		7.70	38.65.....			4.23	21.15
5-inch, 45°, extra heavy, flanged.....	5	6.70	6.70.....			2.90	2.90
4-inch, long-radius, extra heavy, flanged.....	1	6.19	24.76.....			3.32	13.28
3½-inch, long-radius, standard flanged.....	4	4.12	16.48.....			2.95	11.80
3-inch, long-radius, extra heavy, flanged.....	4	4.23	4.23.....			2.53	2.53
<b>Malleable-iron elbows:</b>							
3-inch, extra heavy, long-radius.....	1	2.16	2.16.....			1.60	1.60
2½-inch, extra heavy, long-radius.....	7	1.19	8.33.....			.95	6.65
2-inch, extra heavy, long-radius.....	21	1.03	21.63.....			.60	12.60
1½-inch, standard, long-radius, number.....	9	.50	4.50.....			.16	1.44
1½-inch, extra heavy, long radius.....	3	.65	1.95.....			.46	1.38
1½-inch, extra heavy.....do.....	1	.52	.52.....			.20	.20
1½-inch, standard.....do.....	5	.39	1.95.....			.12	.60
1-inch, standard.....do.....	9	.27	2.43.....			.08	.72
1-inch, extra heavy.....do.....	2	.27	.54.....			.15	.30
¾-inch, extra heavy.....do.....	5	.25	1.25.....			.14	.70
½-inch, extra heavy.....do.....	3	.15	.45.....			.08	.24
<b>Cast-iron fees, flanged:</b>							
6 by 6 by 3½ inches, standard, reducing.....number.....	2	6.18	12.36.....			6.05	12.10
6 by 6 by 1½ inches, standard, reducing.....number.....	1	6.08	6.08.....			6.05	6.05
6 by 6 by 6 inches, standard, reducing.....number.....	2	6.20	12.40.....			5.35	10.70
5 by 5 by 5 inches, extra heavy.....number.....	2	7.21	14.42.....			6.55	13.10
4 by 4 by 4 inches, extra heavy.....number.....	1	6.18	6.18.....			4.95	4.95
4 by 4 by 2 inches, extra heavy, reducing.....number.....	1	5.66	5.66.....			5.60	5.60
3 by 3 by 3 inches, extra heavy.....number.....	1	4.12	4.12.....			3.55	3.55
<b>Malleable-iron tees:</b>							
2½ by 1 by 2½ inches, extra heavy, reducing.....number.....	1	1.55	1.55.....			.78	.78
2½ by ½ by 2½ inches, extra heavy, reducing.....number.....	1	1.55	1.55.....			.78	.78
2 by 2 by 1 inches, extra heavy, reducing.....number.....	1	.67	.67.....			.50	.50
2 by 1½ by 1 inches, extra heavy, reducing.....number.....	1	.62	.62.....			.50	.50
½ by 1 by 1 inches, extra heavy, reducing.....number.....	1	.52	.52.....			.38	.38
1½ by 1½ by 1 inches, extra heavy, reducing.....number.....	1	.47	.47.....			.29	.29
1½ by ½ by 1½ inches, extra heavy, reducing.....number.....	1	.47	.47.....			.29	.29
1½ by 1 by 1½ inches, standard, reducing.....number.....	1	.42	.42.....			.29	.29
1 by 1 by 1 inch, standard, number.....	1	.42	.42.....			.22	.22
¾ by 1 by 1 inch, standard, reducing.....number.....	2	.36	.72.....			.22	.44
¾ by ½ by ¾ inch, extra heavy, number.....	3	.31	.93.....			.105	.32
½ by ½ by ½ inch, extra heavy, number.....	1	.15	.15.....			.10	.10
<b>Cast-iron crosses, extra heavy, 3½ by 2½ by 2½ by 2½ inches, number.....</b>							
	1	6.44	6.44.....			1.82	1.82

*Abstract of proposals for furnishing and installing operating machinery, etc., at Dam No. 29, Ohio River, opened at United States Engineer office, first district, Cincinnati, Ohio, Sept. 24, 1915—Continued.*

## LOT D—Continued.

Item.	Quantity.	1. J. & J. B. Mil-holland Co., Pitts-burgh, Pa.		2. Bury Compre-sor Co., Erie, Pa.		3. The Miller Sup-ply Co., Hunting-ton, W. Va.	
		Rate.	Amount.	Rate.	Amount.	Rate.	Amount.
Cast-iron flanges:							
6-inch.....number.	20	\$1.03	\$20.60			\$0.78	\$15.60
5-inch, extra heavy.....do.	13	1.55	20.15			1.05	13.65
4-inch, extra heavy.....do.	7	1.03	7.21			.93	6.51
3½-inch, extra heavy.....do.	10	.93	9.30			.80	8.00
3-inch, extra heavy.....do.	4	.88	3.52			.64	2.56
Brass unions:							
2½-inch.....do.	3	2.16	6.48			1.74	5.22
2-inch.....do.	5	1.29	6.45			1.05	5.25
1½-inch.....do.	1	1.03	1.03			.72	.72
1¼-inch.....do.	3	.77	2.31			.49	1.47
1-inch.....do.	5	.62	3.10			.37	1.85
¾-inch.....do.	5	.52	2.60			.26	1.30
½-inch.....do.	1	.27	.27			.10	.10
Gate valves, medium, rising stems:							
6-inch flanged.....number.	3	28.84	86.52			23.60	70.80
5-inch flanged.....do.	1	26.78	26.78			19.40	19.40
4-inch flanged.....do.	1	17.51	17.51			14.80	14.80
Globe valves, brass:							
3-inch water cut-off.....do.	1	7.32	7.32			6.45	6.45
2½-inch.....do.	3	5.15	15.45			4.45	13.35
2-inch.....do.	2	3.09	6.18			2.36	4.72
1½-inch.....do.	2	2.06	4.12			1.56	3.12
1¼-inch.....do.	1	1.55	1.55			1.13	1.13
1-inch.....do.	4	1.28	5.12			.80	3.20
¾-inch.....do.	3	1.03	3.09			.56	1.68
½-inch.....do.	1	.52	.52			.31	.31
Whistle valves, brass, 1-inch.....do.	1	2.06	2.06			1.30	1.30
Check valve, brass:							
5-inch.....do.	1	8.76	8.76			11.60	11.60
2½-inch.....do.	1	5.67	5.67			4.03	4.03
2-inch.....do.	1	3.09	3.09			2.11	2.11
1-inch.....do.	1	1.80	1.80			.68	.68
Angle valves, brass, 5-inch.....do.	4	10.30	41.20			10.20	40.80
Stop cocks, brass:							
1½-inch.....do.	2	1.86	3.72			1.05	2.10
¾-inch.....do.	3	.82	2.46			.52	1.56
Drip cocks, brass, ½-inch.....do.	4	.26	1.04			.19	.76
Reducer:							
5 by 4½ inch, cast-iron, extra heavy.....number.	1	8.24	8.24			7.45	7.45
4 by 3 inch, cast-iron, extra heavy.....number.	1	6.18	6.18			5.50	5.50
Stop and waste cock, 1½-inch.....do.	1	2.06	2.06			1.97	1.97
Gauge cocks, 3 ball.....do.	3	.83	2.49			.40	1.20
Steam cock, 1½-inch.....do.	1	2.06	2.06			1.40	1.40
Drip cock:							
1½-inch.....do.	1	2.06	2.06			1.45	1.45
1-inch.....do.	1	1.29	1.29			.78	.78
Air cock, ½-inch.....do.	5	.26	1.30			.20	1.00
Hose connection with cap, brass, 2½-inch.....number.	1	3.09	3.09			10.50	10.50
Hose babb cock, brass, ¾-inch.....do.	1	1.03	1.03			.90	.90
Air pressure gauge, 12-inch dial.....number.	1	22.15	22.15			12.50	12.50
Steam pressure gauge, 12-inch dial.....number.	1	22.15	22.15			12.50	12.50
Water pressure gauge, 6-inch dial.....number.	1	7.21	7.21			4.50	4.50
Steam whistle, 5 inches diameter.....number.	1	8.76	8.76			8.50	8.50
Exhaust head for 6-inch exhaust.....number.	1	47.38	47.38			34.00	34.00
Wrenches—water supply cut-off valves.....number.	2	1.03	2.06			1.40	2.80
Brass gong:							
13 inches diameter, connected.....number.	1	24.72	24.72			10.50	10.50
6 inches diameter, connected.....number.	1	12.36	12.36			1.25	1.25
Steel castings.....pounds.	1,440	.065	93.60			.05	72.00
Iron castings.....do.	568	.035	19.88			.035	19.88

*Abstract of proposals for furnishing and installing operating machinery, etc., at Dam No. 29, Ohio River, opened at United States Engineer office, first district, Cincinnati, Ohio, Sept. 24, 1915—Continued.*

## LOT D—Continued.

Item.	Quantity.	1. J. & J. B. Milholland Co., Pittsburgh, Pa.		2. Bury Compressor Co., Erie, Pa.		3. The Miller Supply Co., Huntington, W. Va.	
		Rate.	Amount.	Rate.	Amount.	Rate.	Amount.
Soft steel boiler pipe, 3-inch, flanged bend breeching and draft pipe, 36 inches diameter, $\frac{1}{8}$ -inch plate.....pounds.	1,374	\$0.04	\$54.96	.....	.....	\$0.185	\$254.19
Medium steel.....do.....	597	.0425	25.37	.....	.....	.05	29.85
Brass chain for whistle and damper.....number.	2	3.61	7.22	.....	.....	2.50	5.00
Sheet iron spiral pipe, galvanized, No. 12 B. W. G.....pounds.	180	.21	37.80	.....	.....	.15	27.00
Sheet iron spiral pipe, galvanized, No. 14 B. W. G.....pounds.	150	.21	31.50	.....	.....	.15	22.50
Sheet iron, black, No. 10 (for damper and draft pipe).pounds.	988	.165	163.02	.....	.....	(1)	(1)
Sheet iron, galvanized No. 14 B. W. G.....pounds.	50	.21	10.50	.....	.....	.05	2.50
Soft copper gaskets.....do.....	25	.42	10.50	.....	.....	.35	8.75
Brass hub for 3 by 3 by 3 inch tee.....number.	1	1.03	1.03	.....	.....	1.00	1.00
Double extra heavy lead pipe, $1\frac{1}{4}$ -inch.....linear feet.	50	.825	41.25	.....	.....	.046	2.30
Wall pipe supports for:							
6-inch pipe.....number.	1	5.15	5.15	.....	.....	15.50	15.50
4-inch pipe.....do.....	1	5.15	5.15	.....	.....	12.00	12.00
$2\frac{1}{2}$ -inch pipe.....do.....	3	4.12	12.36	.....	.....	4.50	13.50
2-inch pipe.....do.....	2	4.12	8.24	.....	.....	4.50	9.00
$1\frac{1}{2}$ -inch pipe.....do.....	2	4.12	8.24	.....	.....	4.25	8.50
Floor stand pipe supports for $3\frac{1}{2}$ -inch pipe.....number.	2	10.30	20.60	.....	.....	4.50	9.00
Support for 6-inch exhaust pipe, number.....	1	12.36	12.36	.....	.....	5.50	5.50
Pipe coverings for:							
6-inch pipe.....linear feet.	49	.50	24.50	.....	.....	.25	12.25
4-inch pipe.....do.....	34	.40	13.60	.....	.....	.185	6.29
$3\frac{1}{2}$ -inch pipe.....do.....	20	.36	7.20	.....	.....	.16	3.20
2-inch pipe.....do.....	26	.30	7.80	.....	.....	.12	3.12
$1\frac{1}{2}$ -inch pipe.....do.....	25	.29	7.25	.....	.....	.11	2.75
$1\frac{1}{4}$ -inch pipe.....do.....	22	.28	6.16	.....	.....	.10	2.20
1-inch pipe.....do.....	20	.26	5.20	.....	.....	.09	1.80
6-inch pipe fittings.....number.	10	.74	7.40	.....	.....	.57	5.70
4-inch pipe fittings.....do.....	8	.50	4.00	.....	.....	.46	3.68
$3\frac{1}{2}$ -inch pipe fittings.....do.....	4	.40	1.60	.....	.....	.38	1.52
3-inch pipe fittings.....do.....	4	.38	1.52	.....	.....	.33	1.32
2-inch pipe fittings.....do.....	6	.30	1.80	.....	.....	.19	1.14
$1\frac{1}{2}$ -inch pipe fittings.....do.....	3	.25	.75	.....	.....	.18	.54
$1\frac{1}{4}$ -inch pipe fittings.....do.....	4	.23	.92	.....	.....	.18	.72
1-inch pipe fittings.....do.....	4	.20	.80	.....	.....	.18	.72
Feed-water heater, square feet.....	25	.28	7.00	.....	.....	.25	6.25
Total.....			9,321.05	.....	.....		9,314.37

<sup>1</sup> Included in boiler pipe.

Lots A, B, and C awarded to bidder No. 1.  
Lot D awarded to bidder No. 3.

## LOUISVILLE (KY.) DISTRICT.

[Officer: Maj. Geo. R. Spalding, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for furnishing and delivering steel sheet piling for Dam No. 43, Ohio River, received in response to advertisement and specifications opened at United States Engineer office, Louisville, Ky., Sept. 16, 1915.*

Name and address of bidder.	Estimated weight of piling per square foot in place, pounds.	Total estimated weight required, pounds.	Price bid per pound.	Total.
1. Jones & Laughlin Steel Co., Pittsburgh, Pa. ....	42.25	2,305,160	\$0.0164	\$37,804.62
2. Carnegie Steel Co., Pittsburgh, Pa. ....	39.1	2,133,296	.01599	34,111.40
3. Lackawanna Steel Co., Lackawanna, N. Y. ....	40	2,182,400	.0164	35,791.36

Quantity: Sufficient for 1,364 linear feet of sheeting in place; piles 40 feet long; total quantity, 54,560 square feet in place.

*Abstract of proposals for furnishing and erecting 1 metering dry-dock gate of 2 leaves received in response to advertisement and specifications opened at United States Engineer office, Louisville, Ky., Oct. 22, 1915.*

Articles.	No. 1. The Dravo Contracting Co., Pittsburgh, Pa.		No. 2. Penn Bridge Co., Beaver Falls, Pa.		No. 3. Independent Bridge Co., Pittsburgh, Pa.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
133,700 pounds structural steel.....	\$0.075	\$10,027.50	\$0.0562	\$7,513.94	\$0.06	\$8,022.00
11,600 pounds cast steel.....	.13	1,508.00	.0925	1,073.00	.0815	945.40
1,270 pounds east iron.....	.08	101.60	.07	88.90	.07	88.90
47 pounds Babbitt.....	.30	14.10	.25	11.75	.30	14.10
530 feet b. m. yellow pine.....per M.	100.00	53.00	200.00	106.00	50.00	26.50
Total.....		11,704.20		8,793.59		9,096.90

Articles.	No. 4. Chas. Hegewald Co., New Albany, Ind.		No. 5. Louisville Bridge & Iron Co., Louisville, Ky.		No. 6. The Whitehead & Kales Iron Works, Detroit, Mich.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
133,700 pounds structural steel.....	\$0.0549	\$7,340.13	\$0.0507	\$6,778.59	\$0.0615	\$8,222.55
11,600 pounds cast steel.....	.0949	1,100.84	.1321	1,522.36	.124	1,438.40
1,270 pounds east iron.....	.0499	63.37	.0617	78.36	.102	129.54
47 pounds Babbitt.....	.059	2.77	.60	28.20	.60	28.20
530 feet b. m. yellow pine.....per M.	80.00	42.40	60.00	31.80	150.00	79.50
Total.....		8,549.51		8,449.31		9,898.19

Articles.	No. 7. York Bridge & Construction Co., York, Pa.		No. 8. American Bridge Co., Cincinnati, Ohio.		No. 9. Chicago Bridge & Iron Works, Chicago, Ill.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
133,700 pounds structural steel.....	\$0.057	\$7,620.90	\$0.05	\$6,685.00	\$0.0636	\$8,503.32
11,600 pounds cast steel.....	.12	1,392.00	.10	1,160.00	.114	1,322.40
1,270 pounds east iron.....	.095	120.65	.08	101.60	.092	116.84
47 pounds Babbitt.....	.50	23.50	.60	28.20	.50	23.50
530 feet b. m. yellow pine.....per M.	100.00	53.00	130.00	68.90	300.00	159.00
Total.....		9,210.05		8,043.70		10,125.06

*Abstract of proposals for furnishing and constructing a swing bridge over the locks of the Louisville and Portland Canal, Louisville, Ky., received in response to advertisement and specifications dated Nov. 6, 1915, and opened at United States Engineer office, Louisville, Ky., Dec. 6, 1915.*

Article.	No. 1. Milwaukee Bridge Co., Milwaukee, Wis.		No. 2. Strobel Steel Construction Co., Chicago, Ill.		No. 3. Penn Bridge Co., Beaver Falls, Pa.		No. 4. The Midland Bridge Co., Kansas City, Mo.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
320,000 pounds structural steel.....	\$0.0484	\$15,488.00	\$0.064	\$20,480.00	\$0.0485	\$15,520.00	\$0.05	\$16,000.00
28,000 pounds cast steel.....	.1045	2,926.00	.175	4,900.00	.135	3,780.00	.15	4,200.00
3,000 pounds cast iron.....	.0715	214.50	.15	450.00	.104	312.00	.15	450.00
10,000 pounds forged steel shafting and bolts (except anchor bolts).....	.1045	1,045.00	.12	1,200.00	.08	800.00	.20	2,000.00
200 pounds nickel steel.....	.1485	29.70	.30	60.00	.20	40.00	.32	64.00
200 pounds phosphor bronze.....	.5665	113.30	.80	160.00	.55	110.00	.65	130.00
300 pounds babbitt.....	.2695	80.85	.60	180.00	.60	180.00	.65	195.00
1 electrical equipment, complete.....		1,650.00		4,300.00		4,000.00		4,400.00
1 operator's house, complete, except the supporting channels and I-beams with their connections.....		550.00		1,850.00		700.00		630.00
1 wooden floor, complete.....		1,620.00		1,920.00		950.00		972.00
Total.....		23,717.35		35,500.00		26,392.00		29,041.00

Article.	No. 5. King Bridge Co., Cleveland, Ohio.		No. 6. American Bridge Co., Cincinnati, Ohio.		No. 7. Independent Bridge Co., Pittsburgh, Pa.		No. 8. Louisville Bridge & Iron Co., Louisville, Ky.	
	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.	Unit price.	Amount.
320,000 pounds structural steel.....	\$0.052	\$16,640.00	\$0.05	\$16,000.00	\$0.055	\$17,600.00	\$0.054	\$17,280.00
28,000 pounds cast steel.....	.125	3,500.00	.1235	3,458.00	.16	4,480.00	.1437	4,023.60
3,000 pounds cast iron.....	.10	300.00	.1265	379.50	.16	480.00	.1437	431.10
10,000 pounds forged steel shafting and bolts (except anchor bolts).....	.09	900.00	.091	910.00	.16	1,600.00	.08	800.00
200 pounds nickel steel.....	.40	80.00	.60	120.00	.16	32.00	.50	100.00
200 pounds phosphor bronze.....	.70	140.00	1.00	200.00	.16	32.00	.71	142.00
300 pounds babbitt.....	.60	180.00	.60	180.00	.16	48.00	.60	180.00
1 electrical equipment, complete.....		2,200.00		2,700.00		3,000.00		2,100.00
1 operator's house, complete, except the supporting channels and I-beams with their connections.....		800.00		900.00		800.00		450.00
1 wooden floor, complete.....		1,200.00		1,550.00		1,210.00		910.00
Total.....		25,940.00		26,397.50		29,282.00		26,416.70

*Abstract of proposals for furnishing and delivering American Portland cement for Dam 43, Ohio River, received in response to advertisement and specifications opened at United States Engineer office, Louisville, Ky., Apr. 15, 1916.*

Name and address of bidder.	Under plan a, par. 22 (delivery on United States barges on Ohio River between Louisville, Ky., and Dam 43).		Under plan b, par. 22 (delivery f. o. b. cars on United States siding at Pilchers, Ky.).		Price for empty sacks not returned.
	Price per barrel.	Total.	Price per barrel.	Total.	
1. Lehigh Portland Cement Co., Chicago, Ill.....					\$1.52
2. Louisville Cement Co., Louisville, Ky.....	\$1.50	\$37,500	1.57	39,250	10
3. Kosmos Portland Cement Co. (Inc.), Louisville, Ky	1.30	32,500	1.52	38,000	10

Estimated quantity, 25,000 barrels.

## CINCINNATI (OHIO) SECOND DISTRICT.

[Officer: Maj. Robert R. Ralston, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for reconstructing part of abutment at Dam No. 1, Muskingum River, Ohio, received in response to advertisement dated Oct. 14, 1915, and opened Nov. 1, 1915, by Maj. Robert R. Ralston, Corps of Engineers, at Cincinnati, Ohio.*

[Appropriation: Operating and care of canals and other works of navigation; indefinite; Muskingum River.]

Approximate quantities.	1. Clifton Bros., Zanesville, Ohio.		2. G. T. Fogle & Co., St. Albans, W. Va.		3. Foundation Co., Warwood, W. Va.		4. Dickison & Beardsley, Marietta, Ohio.		5. T. A. Gillespie Co., Pittsburgh, Pa.	
	Unit.	Total.	Unit.	Total.	Unit.	Total.	Unit.	Total.	Unit.	Total.
300 cubic yards excavation.....	\$6.00	\$1,800.00	\$2.50	\$750.00	\$3.21	\$963.00	\$5.00	\$1,500.00	\$1.50	\$450.00
250 cubic yards filling.....	1.00	250.00	.60	150.00	.73	195.00	1.50	375.00	1.50	375.00
864 linear feet piling, round.....	.50	432.00	.44	380.16	.50	432.00	1.50	1,296.00	2.00	1,728.00
500 cubic yards riprap.....	3.00	1,500.00	2.50	1,250.00	3.44	1,720.00	3.00	1,500.00	8.00	4,000.00
350 cubic yards concrete.....	9.00	3,150.00	6.50	2,275.00	6.71	2,348.50	12.00	4,200.00	13.00	4,550.00
400 barrels cement.....	1.65	660.00	1.50	600.00	1.64	656.00	2.00	800.00	2.00	800.00
Total.....		7,792.00		5,405.16		6,314.50		9,671.00		11,903.00

Award made to bid No. 2.

*Abstract of proposals for reconstructing, in concrete, top of spillway at Dam No. 4, Muskingum River, Ohio, received in response to advertisement dated Sept. 28, 1915, and opened Oct. 15, 1915, by Maj. Robert R. Ralston, Corps of Engineers, at Cincinnati, Ohio.*

[Appropriation: Operating and care of canals and other works of navigation; indefinite; Muskingum River.]

Approximate quantities.	1. J. A. Swingle Contracting Co., Zanesville, Ohio.		2. Clifton Bros., Zanesville, Ohio.		3. G. T. Fogle & Co., St. Albans, W. Va.	
	Unit.	Total.	Unit.	Total.	Unit.	Total.
350 cubic yards excavation.....	\$1.00	\$350.00	\$1.15	\$402.50	\$1.00	\$350.00
150 cubic yards filling.....	.25	37.50	.60	90.00	.30	120.00
606 cubic yards concrete.....	4.39	2,600.34	4.00	2,424.00	5.90	3,575.40
678 barrels cement.....	1.59	1,078.02	1.60	1,084.80	1.70	1,152.60
12,300 pounds reinforcing steel.....	.03	369.00	.03	369.00	.04	492.00
Total.....		4,494.86		4,370.30		5,690.00

Award made to bid No. 2.

*Abstract of proposals for one steel maneuver boat hull, for use on the Big Sandy River, W. Va. and Ky., including Tug and Levisa Forks, received in response to circular advertisement dated Feb. 4, 1916, and opened Mar. 4, 1916, by Maj. Robert R. Ralston, Corps of Engineers, at Cincinnati, Ohio.*

[Appropriation: Operating and care of canals and other works of navigation; indefinite; Big Sandy River, W. Va. and Ky.]

Bidder's name and address.	One steel maneuver boat hull delivered at Catlettsburg, Ky.
1. American Bridge Co., Cincinnati, Ohio.....	\$6,000
2. Milwaukee Bridge Co., Milwaukee, Wis.....	10,984
3. Rock Island Bridge & Iron Works, Rock Island, Ill.....	6,500
4. Chas. Hegewald Co., New Albany, Ind.....	5,999

Award recommended to bid No. 1.

*Abstract of proposals for furnishing and delivering about 4,200 barrels of American Portland cement at Heidelberg, Lee County, Ky., for use in completing the construction of Lock and Dam No. 14, Kentucky River, Ky., received in response to advertisement dated May 8, 1916, and opened May 22, 1916, by Maj. Robert R. Ralston, Corps of Engineers, at Cincinnati, Ohio.*

[Appropriation: Improving Kentucky River, Ky., allotment for "Locks and dams."]

Item.	1. Louisville Cement Co., Louisville, Ky.		2. The Superior Portland Cement Co., Cincinnati, Ohio.		3. Kosmos Portland Cement Co. (Inc.), Louisville, Ky.		4. Lehigh Portland Cement Co., Chicago, Ill.		5. Universal Portland Cement Co., Pittsburgh, Pa.	
	Barrel.	Total.	Barrel.	Total.	Barrel.	Total.	Barrel.	Total.	Barrel.	Total.
4,200 barrels American Portland cement, delivered at Heidelberg, Ky....	\$1.71	\$7,182.00	\$1.74	\$7,308.00	\$1.66	\$6,972.00	\$2.06	\$8,652.00	\$2.12	\$8,904.00

Award recommended to bid No. 3.

### DULUTH (MINN.) DISTRICT.

[Officer: Maj. E. D. Peek, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of proposals for dredging at Grand Marais, Mich., opened at Duluth, Minn., July 15, 1915, by Maj. E. D. Peek, Corps of Engineers.*

Name and address of bidder.	30,000 cubic yards, per cubic yard.	Total.
1. Zenith Dredge Co., Duluth, Minn.....	Cents. 30	\$9,000
2. Great Lakes Dredge & Dock Co., Duluth, Minn.....	20.3	6,090
3. Duluth-Superior Dredging Co., Duluth, Minn.....	19.8	1 5,940
4. Northern Dredge & Dock Co., Duluth, Minn.....	20.5	6,150

<sup>1</sup> Recommended for acceptance.

*Abstract of proposals for constructing and delivering two steel dump scows in response to advertisement and opened at Duluth, Minn., Oct. 20, 1915, by Maj. E. D. Peek, Corps of Engineers.*

Name and address of bidder.	(a) Two steel scows, delivery afloat, at contractor's yard, as specified.	(b) Delivery at Duluth-Superior, as specified.	(d) Rounded bilges, additional.	Total.
1. Johnston Bros., Ferrysburg, Mich.....	\$49,900	\$1,150		\$49,900
2. The Superior Shipbuilding Co., Superior, Wis.....	77,900			77,900
3. Hartmann-Greiling Co., Green Bay, Wis.....	52,248	1,954	\$964	52,248 54,202 55,166

<sup>1</sup> Recommended for acceptance.

*Abstract of proposals for furnishing boiler tubes for the Duluth, Minn., district, opened Feb. 24, 1916, by Maj. E. D. Peek, Corps of Engineers, at Duluth, Minn.*

[Appropriation: Improving harbor at Duluth, Minn., and Superior, Wis.]

Article.	No. 1.		No. 2.		No. 3.	
	Gogebic Steam Boiler Works, Duluth, Minn.		N. W. Boiler Mfg. Co., Superior, Wis.		Marshall-W e l l s Hardware Co., Duluth, Minn.	
	Per foot.	Total.	Per unit.	Total.	Per 100 feet.	Total.
130 boiler tubes, 2 inches by $\frac{3}{8}$ -inch by 6 feet, lap welded.....	\$0.12 $\frac{1}{4}$	\$95.55	.....	\$119.55	<sup>1</sup> \$13.25	\$103.35

<sup>1</sup> Would furnish in "random lengths" of about 20 feet each.

Recommended for approval.

*Abstract of proposals for articles required for work at Keweenaw Point, Mich., harbor of refuge, opened Mar. 2, 1916, at the United States Engineer office, Duluth, Minn., by Maj. E. D. Peek, Corps of Engineers; advertised 20 days by circular letter and poster.*

[Maintenance and improvement of existing river and harbor works: For harbor of refuge, Keweenaw Point, Mich.]

Name and address of bidder.	Per M feet b. m.					
	1,067 feet, 2 by 4 inches.	2,133 feet, 2 by 10 inches.	3,840 feet, 2 by 12 inches.	227,760 feet, 3 by 12 inches.	63,424 feet, 4 by 12 inches.	4,480 feet, 6 by 10 inches.
1. Duncan Lumber Co., Portland, Oreg.	\$11.50	\$11.50	\$11.50	\$13.00	\$13.00	\$13.00
2. H. B. Waite Lumber Co., Minneapolis, Minn.	12.27	24.53	44.16	2,960.88	824.51	58.24
3. The Charles Nelson Co., San Francisco, Cal.	11.00	11.00	11.00	11.00	11.00	11.00
4. Pacific States Lumber Co., Tacoma, Wash.	11.74	27.73	49.92	3,175.20	403.20	11.00
5. Lindstrom - Handforth Lumber Co., Tacoma, Wash.	10.00	14.00	14.00	14.00	13.00	13.00
6. G. Elias & Bro. (Inc.), Buffalo, N. Y.	10.67	29.86	53.76	3,188.64	824.51	58.24
7. Union Lumber Co., Union Mills, Wash.	12.48	12.48	12.48	12.48	12.48	12.48
8. Sullivan & Forbes (Inc.), Portland, Oreg.	13.32	26.62	47.92	2,842.44	791.53	55.91
9. The Fir Tree Lumber Co., Tacoma, Wash. <sup>4</sup>	10.85	10.85	10.85	10.85	10.85	10.85
10. J. G. Newbegin, Tacoma, Wash.	11.58	23.14	41.66	2,471.20	688.15	48.61
11. Pacific Fir Co., Seattle.	9.00	12.00	12.00	12.00	11.00	11.00
12. Woodruff Lumber Co., Duluth, Minn.	9.60	25.60	46.08	2,733.12	697.66	49.28
	9.50	13.00	13.00	11.50	10.50	10.00
	10.40	10.40	10.40	10.40	10.40	10.40
	11.10	22.18	39.94	2,368.70	659.61	46.59
	10.14	27.73	49.92	2,619.24	665.95	44.80
	10.67	21.33	38.40	2,277.60	634.24	44.80
	11.00	11.00	11.00	11.00	11.00	11.00
	11.74	23.46	42.24	2,505.36	697.66	49.28

<sup>1</sup> 30 feet.

<sup>2</sup> 24 feet.

<sup>3</sup> 32 feet.

*Abstract of proposals for articles required for work at Keweenaw Point, Mich., harbor of refuge, opened Mar. 2, 1916, at the United States engineer office, Duluth, Minn., by Maj. E. D. Peek, Corps of Engineers; advertised 20 days by circular letter and poster—Continued.*

Name and address of bidder.	Per M feet b. m.			Special list.	1,381 feet, 194 feet, 2,880 feet.	Total.
	8,704 feet, 8 by 12 inches.	37,200 feet, 10 by 12 inches.	167,376 feet, 12 by 12 inches.			
1. Duncan Lumber Co., Portland, Oreg.	\$13.50	\$13.50	\$13.50	.....	\$28.00	\$6,928.61
2. H. B. Waite Lumber Co., Minneapolis, Minn.	117.50	502.20	2,259.58	.....	124.74	5,827.20
3. The Charles Nelson Co., San Francisco, Cal.	11.00	11.00	11.00	.....	25.00	111.38
4. Pacific States Lumber Co., Tacoma, Wash.	95.74	409.20	1,841.14	.....	42.50	6,638.07
5. Lindstrom-Handforth Lumber Co., Tacoma, Wash.	12.50	12.50	12.50	.....	189.34	42.81
6. G. Elias & Bro. (Inc.), Buffalo, N. Y.	108.80	465.00	2,092.20	.....	20.00	3.88
7. Union Lumber Co., Union Mills, Wash.	11.00	11.00	11.00	.....	46.00	132.48
8. Sullivan & Forbes (Inc.), Portland, Oreg.	95.74	409.20	1,841.14	.....	31.00	35.50
9. The Fir Tree Lumber Co., Tacoma, Wash. <sup>1</sup>	10.85	10.85	10.85	.....	12.48	55.60
10. J. G. Newbegin, Tacoma, Wash.	94.44	403.62	1,816.03	.....	167.06	5,765.49
11. Pacific Fir Co., Seattle	10.00	11.00	11.00	.....	30.00	6,041.07
12. Woolruff Lumber Co., Duluth, Minn.	95.74	409.20	1,908.09	.....	133.65	25.00
	90.52	386.88	1,740.71	.....	111.38	5,477.61
	87.04	372.00	1,673.76	25.00	34.53	5,688.82
	87.04	372.00	1,673.76	15.00	2.91	5,271.22
	11.00	11.00	11.40	35.00	100.80	5,867.51
	95.74	409.20	1,908.09	.....	124.74	

<sup>1</sup> Recommended for acceptance.

Adding the estimated amount of freight to be paid by the Government to the total of the lowest three bidders makes the following: Fir Tree Lumber Co., \$9,060.49; J. G. Newbegin, \$9,553.19; Pacific Fir Co., \$9,712.67.

*Abstract of proposals for furnishing f. o. b. dock, Duluth-Superior Harbor, manila rope, and opened at Duluth, Minn., Apr. 11, 1916, by Maj. E. D. Peek, Corps of Engineers.*

Name and address of bidder.	1,000 feet 2½-inch manila rope, per pound.	320 feet 2-inch manila rope, per pound.	
		Cents.	Cents.
1. Marshall-Wells Hardware Co., Duluth, Minn.	17½	17½	118½
2. Kelley-How-Thomson Co., Duluth, Minn.	18½	18½	22½
3. Farwell-Ozmun-Kirk & Co., St. Paul, Minn.	21.47	21.47	23.47
4. Hartmann-Greiling Co., Green Bay, Wis.	23½	23½	23½
5. Portage Lake Hardware Co. (Ltd.), Houghton, Mich.	18	18	22

<sup>1</sup> Accepted.

Abstract of proposals for furnishing cables for United States dredge "Col. D. D. Gaillard," opened at United States Engineer Office, Duluth, Minn., Apr. 12, 1916, by Maj. E. D. Peek, Corps of Engineers.

Article.	Bid.	No. 1. A. Leschen & Sons Rope Co., St. Louis.	No. 2. National Iron Co., Duluth. <sup>1</sup>	No. 3. Clyde Iron Works, Duluth.	No. 4. John A. Roebling's Sons Rope Co., Chicago.
4 backing cables, 1 $\frac{1}{4}$ -inch, 142 feet long.....	{ 1	\$249.60	2 \$269.98	\$249.60	\$249.75
	2	308.40			
1 swing cable, 1 $\frac{1}{4}$ -inch, 175 feet long.....	{ 1	76.90	2 83.18	76.90	76.95
	2	95.00			
1 swing cable, 1 $\frac{1}{4}$ -inch, 190 feet long.....	{ 1	83.50	2 90.30	83.50	83.54
	2	103.00			
3 main hoist cables, 1 $\frac{3}{4}$ -inch, 460 feet long.....	{ 1	1,213.50	3 1,311.86	1,213.50	1,677.00
	2	1,518.00			
2 spud pinning-up cables, 2-inch, 175 feet long.....	{ 1	369.20	3 399.26	369.20	369.15
	2	463.70			
2 spud hoist cables, 2-inch, 195 feet long.....	{ 1	411.40	3 444.90	411.40	411.50
	2	516.70			
2 dipper dumps, $\frac{5}{8}$ -inch, 75 feet long.....	{ 1	21.10	4 22.82	21.10	16.70
	2	25.50			
Total.....	{ 1	2,425.20	2,622.30	2,425.20	2,884.59
	2	3,030.30			

Article.	No. 5. Kelley- How- Thomson Co., Duluth. <sup>5</sup>	No. 6. Marshall- Wells Hardware Co., Duluth.	No. 7. Hartmann- Greiling Co., Green Bay, Wis.
4 backing cables, 1 $\frac{1}{4}$ -inch, 142 feet long.....	6 \$225.61	\$249.75	\$255.60
1 swing cable, 1 $\frac{1}{4}$ -inch, 175 feet long.....	6 69.61	76.95	78.75
1 swing cable, 1 $\frac{1}{4}$ -inch, 190 feet long.....	6 75.47	83.54	85.50
3 main hoist cables, 1 $\frac{3}{4}$ -inch, 460 feet long.....	7 1,096.00	1,677.00	1,233.40
2 spud pinning-up cables, 2-inch, 175 feet long.....	8 333.59	369.15	385.00
2 spud hoist cables, 2-inch, 195 feet long.....	8 371.71	411.50	409.00
2 dipper dumps, $\frac{5}{8}$ -inch, 75 feet long.....	9 19.06	16.70	24.00
Total.....	2,190.95	2,884.59	2,521.25

Article.	No. 8. Broderick- Bascomb Rope Co., St. Louis.	No. 9. Macomber & Whyte Rope Co., Chicago.	No. 10. Water- bury Co., New York.
4 backing cables, 1 $\frac{1}{4}$ -inch, 142 feet long.....	\$244.24	\$270.00	\$244.24
1 swing cable, 1 $\frac{1}{4}$ -inch, 175 feet long.....	75.25	83.17	75.25
1 swing cable, 1 $\frac{1}{4}$ -inch, 190 feet long.....	81.70	90.30	81.70
3 main hoist cables, 1 $\frac{3}{4}$ -inch, 460 feet long.....	1,214.40	1,311.75	1,173.00
2 spud pinning-up cables, 2-inch, 175 feet long.....	367.50	399.23	357.00
2 spud hoist cables, 2-inch, 195 feet long.....	409.50	444.86	397.80
2 dipper dumps, $\frac{5}{8}$ -inch, 75 feet long.....	21.00	22.81	21.00
Total.....	2,413.59	2,622.12	2,349.99

<sup>1</sup> Less 35 per cent and 2 $\frac{1}{2}$  per cent.

<sup>2</sup> Per foot, 75 cents.

<sup>3</sup> Per foot, \$1.50.

<sup>4</sup> Per foot, 24 cents.

<sup>5</sup> Accepted.

<sup>6</sup> Per 1,000 feet, \$39.72.

<sup>7</sup> Per 1,000 feet, \$79.42.

<sup>8</sup> Per 1,000 feet, \$95.31.

<sup>9</sup> Per 1,000 feet, \$12.71.

*Abstract of proposals for furnishing rubble stone and removing superstructure to break-water in response to advertisement, and opened at Duluth, Minn., May 15, 1916, by Maj. E. D. Peek, Corps of Engineers.*

[Maintenance and improvement of existing river and harbor works: For waterway across Keweenaw Point, Mich.]

Name and address of bidder.	Removing superstructure, 500 linear feet.	Furnishing 11,100 tons stone, per ton of 2,000 pounds.	Total.
1. Great Lakes Dredge & Dock Co., Duluth, Minn.....	{ \$9.50 4,750.00	{ \$3.85 42,735.00	{ \$47,485.00
2. Zenith Dredge Co., Duluth, Minn.....	2.50	2.00	23,450.00
3. Whitney Bros. Co., Superior, Wis.....	1,250.00	22,200.00	27,200.00
4. England Towing Co., Duluth, Minn. <sup>1</sup> .....	{ 10.00 5,000.00	{ 2.00 22,200.00	{ 1.89 22,479.00
Informal bid dated May 18, 1916.....	{ 3.00 1,500.00	{ 1.65 20,979.00	{ 18,315.00 19,815.00

<sup>1</sup> Informal bid recommended for acceptance.

Recommended all formal bids be rejected; too high.

*Abstract of proposals for furnishing rubble stone and removing superstructure to break-water in response to advertisement, and opened at Duluth, Minn., June 7, 1916, by Maj. E. D. Peek, Corps of Engineers.*

[Maintenance and improvement of existing river and harbor works: For waterway across Keweenaw Point, Mich.]

Name and address of bidder.	Removing superstructure, 500 linear feet, per linear foot.	Furnishing 11,100 tons of stone, per ton of 2,000 pounds.	Total.
1. England Towing Co., Duluth, Minn.....	{ \$3.00 1,500.00	{ \$1.65 18,315.00	{ \$19,815.00

Recommended for acceptance.

*Abstract of proposals for dredging in Ontonagon Harbor, Mich., in response to advertisement, and opened at Duluth, Minn., June 7, 1916, by Maj. E. D. Peek, Corps of Engineers.*

[Emergencies in river and harbor works: For Ontonagon Harbor, Mich.]

Name and address of bidder.	Dredging 75,000 cubic yards, per cubic yard.	Total.
1. Great Lakes Dredge & Dock Co., Duluth, Minn.....	\$0.29	\$21,750.00
2. Zenith Dredge Co., Duluth, Minn. <sup>1</sup> .....	.265	19,875.00
3. Northern Dredge & Dock Co., Duluth, Minn.....	.295	22,125.00

<sup>1</sup> Recommended for acceptance.

## WRECK.

*Abstract of proposals for removing wrecked tug "Searchlight" in response to advertisement and opened at Duluth, Minn., Mar. 30, 1916, by Maj. E. D. Peek, Corps of Engineers.*

[Removing sunken vessels or craft obstructing or endangering navigation; indefinite; for wrecked steam tug *Searchlight*.]

Name and address of bidder.	For removing wrecked tug <i>Searchlight</i> from Duluth Harbor.	Remarks.
1. H. H. Thompson, Duluth, Minn.....	\$345.00	
2. John B. Wanless, Duluth, Minn.....	600.00	Guaranty incomplete.
3. Whitney Bros. Co., Superior, Wis. <sup>1</sup> .....	200.00	No authority for signature.

<sup>1</sup> Accepted.

## MILWAUKEE (WIS.) DISTRICT.

[Maj. H. B. Ferguson, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for furnishing and delivering in Government warehouse at Milwaukee, Wis., 5,500 barrels, more or less, of Portland cement, for use in connection with the improvement of Racine Harbor, Wis., received in response to poster and circular-letter advertisement, and opened at Milwaukee, Wis., Feb. 25, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works, for Racine Harbor, Wis.]

Name and address of bidder.	Rate per barrel.	Total.	Brand.	Furnished from mill at—
W. H. Pipkorn Co., Milwaukee, Wis...	\$1.43	\$7,865.00	Newaygo Portland....	Newaygo, Mich.
Western Lime & Cement Co., Milwaukee, Wis.	1.35	7,425.00	Huron Portland.....	Alpena, Mich.

Contract entered into with Western Lime & Cement Co., Mar. 14, 1916.

*Abstract of proposals for constructing reinforced concrete caisson breakwater and removing old timber crib pier at Racine Harbor, Wis., received in response to advertisement and opened at Milwaukee, Wis., Mar. 10, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works for Racine Harbor, Wis.]

Items.	Name and address of bidder.					
	Edward E. Gillen Co., Milwaukee, Wis.	Great Lakes Dredge & Dock Co., Chicago, Ill.	The Edward Gil len Dock, Dredge & Construction Co., Racine, Wis.	Greiling Bros. Co., Green Bay, Wis.	East Shore Dredging Co., Muskegon, Mich.	Byrne Bros. Dredging & Engineering Co., Chicago, Ill.
7,500 cubic yards trench excavation, scow measurement, per cubic yard.....	\$0.80	\$0.45	\$0.45	\$0.50	\$0.50	\$0.50
6,000 tons stone for subfoundation, per ton of 2,000 pounds.....	1.80	2.10	1.30	1.50	1.75	2.00
9,300 tons stone for main foundation, rip-rap, and caisson filling, per ton of 2,000 pounds.....	2.30	2.90	1.70	1.60	1.75	2.50
Sinking 15 caissons, each.....	500.00	275.00	200.00	250.00	400.00	750.00
132 cubic yards concrete filling in caissons, per cubic yard.....	8.50	6.10	4.50	7.00	7.00	8.00
1,565 cubic yards concrete superstructure on caissons, per cubic yard.....	10.00	7.30	6.50	7.00	7.00	9.00
Removing 300 linear feet old pier, per linear foot.....	35.00	19.00	30.00	15.00	25.00	25.00
Total.....	72,962.00	64,999.70	49,751.50	47,759.00	55,904.00	72,891.00

Contract entered into with Greiling Bros. Co. Mar. 28, 1916.

*Abstract of proposals for furnishing and delivering at Milwaukee, Wis., 1,420 cubic yards, more or less, of sand and 2,840 cubic yards, more or less, of broken stone for improvement of Racine Harbor, Wis., received in response to poster and circular letter advertisement and opened at Milwaukee, Wis., Apr. 15, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works for Racine Harbor, Wis.]

Name and address of bidder.	Per cubic yard of finished concrete, 3,230 cubic yards.	Total.
Lake Shore Stone Co., Milwaukee, Wis.....	\$1.55	\$5,006.50

Contract entered into with Lake Shore Stone Co. May 1, 1916.

*Abstract of proposals for furnishing and delivering at Racine, Wis., 2,550 barrels, more or less, of Portland cement, for use in improvement of Racine Harbor, received in response to advertisement, and opened at Milwaukee, Wis., Apr. 22, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works, for Racine Harbor, Wis.]

Name and address of bidder.	Rate per barrel.	Total.	Brand.	Furnished from mill at—
Western Lime & Cement Co., Milwaukee, Wis.	\$1.42	\$3,621.00	Huron.....	Alpena, Mich.
Marquette Cement Mfg. Co., Chicago, Ill.	1.43	3,646.50	Marquette..	La Salle, Ill.
Lehigh Portland Cement Co., Chicago, Ill.	1 1.83	4,666.50	Lehigh.....	Mason City, Iowa, or Mitchell, Ind.
Universal Portland Cement Co., Chicago, Ill.	1 1.86	4,743.00	Universal..	Buffington, Ind.

<sup>1</sup> Includes 4 cloth sacks, which bidder will repurchase at 10 cents each on their return at its works, freight prepaid.

Contract entered into with Western Lime & Cement Co. May 5, 1916.

*Abstract of proposals for furnishing f. o. b. United States barge at contractor's dock, Sturgeon Bay, Wis., 12,000 tons, more or less, of rubblestone, received in response to advertisement, and opened at Milwaukee, Wis., Apr. 20, 1916.*

[Appropriations: Improving harbor at Sheboygan, Wis.; maintenance and improvement of existing river and harbor works, for Milwaukee, Racine, Kenosha (Wis.), and Waukegan (Ill.) Harbors.]

Name and address of bidder.	Price per ton of 2,000 pounds.	Total.
Leathem & Smith Towing & Wrecking Co., Sturgeon Bay, Wis.....	\$0.66	\$7,920
The Green Stone & Quarrying Co., Sawyer, Wis.....	.70	8,400
Sturgeon Bay Stone Co., Sawyer, Wis.....	.68	8,160

Contract entered into with Leathem & Smith Towing & Wrecking Co. May 15, 1916.

## CHICAGO (ILL.) DISTRICT.

[Lieut. Col. W. V. Judson, Corps of Engineers.]

## RIVERS AND HARBORS.

Abstract of proposals for dredging in Michigan City Harbor, Ind., received in response to advertisement hereto attached and opened at United States engineer office, Chicago, Ill., June 10, 1916.

Name and address of bidder.	Rate per cubic yard.	Amount.
1. Fitz Simons & Connell Dredge & Dock Co., Chicago, Ill.	23 cents	\$4,887.50
2. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.	40 cents	8,500.00
3. Great Lakes Dredge & Dock Co., Chicago, Ill.	22 cents	4,675.00

No. 3 lowest bid; recommended for acceptance.

Abstract of proposals for repairing superstructure on exterior breakwater at Chicago Harbor, Ill., received in response to advertisement opened at United States Engineer Office, Chicago, Ill., June 10, 1916.

Item.	1. Fitz Simons & Connell Dredge & Dock Co., Chicago, Ill.	2. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.	3. Great Lakes Dredge & Dock Co., Chicago, Ill.	4. Chicago General Construction Co., Chicago, Ill.			
	Rate.	Amount.	Rate.	Amount.	Rate.	Amount.	
Removing old superstructure.....							
Timber, 64,000 feet, B. M.....	\$75.00	\$1,500.00	\$70.00	\$1,000.00	\$95.00	\$950.00	\$1,120.00
Wrought iron or steel screw bolts and washers, 1,045 pounds.....	.05	52.25	.07	73.15	.07	73.15	49.64
Wrought iron or steel drift-bolts, 6,100 pounds.....	.05	305.00	.07	427.00	.07	427.00	335.50
Wrought iron or steel spikes, and washers, 2,300 pounds.....	.05	115.00	.07	161.00	.07	161.00	138.00
Stone, all classes.....	2.00	2,400.00	2.50	3,000.00	2.50	3,000.00	2.75
Total.....		9,172.25		9,141.15		8,771.15	8,527.14

No. 4 accepted bid.

Abstract of proposals for constructing rubble mound breakwater at Indiana Harbor, Ind., received in response to advertisement opened at Chicago, Ill., June 2, 1916, by Lieut. Col. W. V. Judson, Corps of Engineers.

Name and address of bidder.	Furnish and place stone and construct breakwater, per ton of 2,000 pounds.
1. The Edward Gillen Dock, Dredge & Construction Co., Racine, Wis.....	\$1.45
2. Great Lakes Dredge & Dock Co., Chicago, Ill.....	1.37
3. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	2.43

No. 2, lowest bid, recommended for acceptance.

Abstract of proposals for dredging in Calumet River, Illinois and Indiana, received in response to advertisement opened at United States Engineer Office, Chicago, Ill., May 26, 1916.

Name and address of bidder.	Rate per cubic yard.	Amount.
1. Great Lakes Dredge & Dock Co., Chicago, Ill.....	\$0.1975	\$8,216.00
2. Fitz Simons & Connell Dredge & Dock Co., Chicago, Ill.....	.175	7,280.00
3. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	.27	11,232.00

No. 2, lowest bid, recommended for acceptance.

*Abstract of proposals for dredging in Chicago River, Ill., received in response to advertisement opened at United States Engineer office, Chicago, Ill., Apr. 1, 1916.*

Name and address of bidder.	Section 1, 7,200 cubic yards.		Section 2, 8,500 cubic yards.		Section 3, 26,860 cubic yards.		Total.
	Rate.	Amount.	Rate.	Amount.	Rate.	Amount.	
1. Fitz Simons & Connell Dredge & Dock Co., Chicago, Ill.....	\$0.147	\$1,058.40	\$0.147	\$1,249.50	\$0.147	\$3,948.42	\$6,256.32
2. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	.21	1,512.00	.21	1,785.00	.21	5,640.60	8,937.60
3. Great Lakes Dredge & Dock Co., Chicago, Ill.....	.16	1,152.00	.18	1,530.00	.145	3,894.70	6,576.70

No. 1, lowest bid, recommended for acceptance.

*Abstract of proposals for construction of motor survey cruiser "Chicago" opened at United States Engineer office, Chicago, Ill., Jan. 12, 1916.*

Name and address of bidder.	Cruiser complete with Buffalo engine.	Cruiser complete with Winton engine.	For delivery of cruiser from contractor's works to Chicago, Ill.	Totals.	
				Buffalo motor.	Winton motor.
1. Matthews Boat Co., Port Clinton, Ohio.....	\$21,550.00	\$22,460.00	\$400.00	\$21,950.00	\$22,860.00
2. Dan Kidney & Son, De Pere, Wis.....	26,575.00	28,775.00	175.00	26,750.00	28,950.00
3. St. Louis Yacht & Boat Co., St. Louis, Mo.....	19,990.00	1 21,590.00	No charge.	19,990.00	21,590.00

<sup>1</sup> Recommended for acceptance.

*Abstract of proposals for placing riprap stone at breakwaters, Chicago Harbor and Calumet Harbor, Ill., opened Sept. 17, 1915, at United States Engineer office, Chicago, Ill.*

Name and address of bidder.	6,373 tons for Chicago Harbor.		1,627 tons for Calumet Harbor.		Total.
	Per ton.	Total.	Per ton.	Total.	
1. Great Lakes Dredge & Dock Co., Chicago, Ill....	\$1.70	\$10,834.10	\$1.70	\$2,765.90	\$13,600.00
2. The Edward Gillen Dock, Dredge & Construction Co., Racine, Wis.....	1.98	12,618.54	1.85	3,009.95	15,628.49
3. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	1.60	10,196.80	1.70	2,765.90	12,962.70

No. 3, lowest bid, recommended for acceptance.

*Abstract of proposals for dredging in Calumet River, Ill., received in response to advertisement and opened at Chicago, Ill., Aug. 17, 1915.*

Name and address of bidder.	In channel (section 1), 100,000 cubic yards.		In turning basin (section 2), 10,900 cubic yards.		In channel (section 3), 27,500 cubic yards.		In channel (section 4), 81,400 cubic yards.		Total.
	Per cubic yard.	Amount.	Per cubic yard.	Amount.	Per cubic yard.	Amount.	Per cubic yard.	Amount.	
1. Duluth - Superior Dredging Co., Duluth, Minn. ....	<i>Cents.</i> 22	\$22,000.00	<i>Cents.</i> 22	\$2,398.00	<i>Cents.</i> 22	\$6,050.00	<i>Cents.</i> 22	\$17,908.00	\$48,356.00
2. Greiling Bros. Co., Green Bay, Wis. ....	21	21,000.00	23	2,507.00	26	7,150.00	29	23,606.00	54,263.00
3. Fitz Simons & Connell Dredge & Dock Co., Chicago, Ill. ....	14.40	14,400.00	14.40	1,569.60	14.40	3,960.00	14.40	11,721.60	31,651.20
4. Great Lakes Dredge & Dock Co., Chicago, Ill. ....	16.45	16,450.00	16.45	1,793.05	16.45	4,523.75	16.45	13,390.30	36,157.10
5. Byrne Bros. Dredging & Engineering Co., Chicago, Ill. ....	17	17,000.00	17	1,853.00	17	4,675.00	17	13,838.00	37,366.00

No. 3, lowest bid; recommended for acceptance.

*Abstract of proposals for constructing rubble mound breakwater at Chicago Harbor, Ill., received in response to advertisement and opened at Chicago, Ill., Aug. 3, 1915.*

Name and address of bidder.	Furnish and place all stone and construct breakwater as specified, per ton of 2,000 pounds.
1. Greiling Bros. Co., Green Bay, Wis. ....	\$1.75
2. Great Lakes Dredge & Dock Co., Chicago, Ill. ....	1.29
3. Byrne Bros. Dredging & Engineering Co., Chicago, Ill. ....	1.51
4. Edward Gillen Dock, Dredge & Construction Co., Racine, Wis. ....	<sup>1</sup> 1.44 <sup>1</sup>
5. Edward Gillen Dock, Dredge & Construction Co., Racine, Wis. ....	<sup>2</sup> 1.40

<sup>1</sup> All covering stone "D" to be granite.

<sup>2</sup> Based on Bedford, Ind., limestone.

No. 2, lowest bid; recommended for acceptance.

### GRAND RAPIDS (MICH.) DISTRICT.

[Maj. F. W. Altstaetter, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of bids for improving harbor at Holland, Mich., repairs to north pier at Holland Harbor, Mich., received and opened July 9, 1915, in accordance with advertisement dated June 23, 1915, by Maj. F. W. Altstaetter, Corps of Engineers.*

Articles.	1. Edward R. Sterling, Ludington, Mich. <sup>1</sup>	2. H. M. Warner, St. Joseph, Mich.	3. East Shore Dredging Co., Muskegon, Mich.	4. Walsh Bros., Grand Haven, Mich.	5. (2)
Cutting down rear piles to elevation - 2 feet, 60 pieces, per piece.....	\$1.00	\$0.10	\$2.90	\$1.50	\$1.00
Furnish following material and secure it in work:					
Oak piles, 2,232 linear feet, per linear foot.....	.40	.38	.59	.80	.38
Oak timber, 544 feet b. m., per M foot b. m. ....	90.00	62.50	80.00	180.00	60.00
Pine or Douglas fir timber, 15,884 feet b. m., per M foot b. m. ....	55.00	57.00	59.00	80.00	40.00
Drift bolts, 390 pounds, per pound.....	.04	.05	.05	.05	.03
Screw bolts, 2,503 pounds, per pound.....	.04	.05	.05	.06	.04
Tie rods, 8,914 pounds, per pound.....	.04	.06	.07	.10	.06
Turnbuckles, 67 pieces, per piece.....	.60	.78	.07	.70	1.25
Total.....	2,387.86	2,525.30	3,244.88	4,352.22	2,306.57

<sup>1</sup> Contract entered into July 14, 1915.

<sup>2</sup> Only one copy of this bid was received and was not signed. It is not known from whom received.

*Abstract of bids, maintenance and improvement of existing river and harbor works (for Ludington Harbor, Mich.); stone filling in the breakwaters at Ludington Harbor, Mich., received and opened Aug. 7, 1915, in accordance with advertisement, by Maj. F. W. Altstaetter, Corps of Engineers.*

Name and address of bidder.	Stone, 10 to 200 pounds, per ton.	Total.
1. Greiling Bros. Co., Green Bay, Wis. <sup>1</sup> .....	\$1.60	\$2,400.00
2. Sturgeon Bay Stone Co., Sawyer, Wis.....	1.63	2,445.00
3. Green Stone & Quarrying Co., Sawyer, Wis.....	1.81	2,715.00

<sup>1</sup> Contract entered into Aug. 12, 1915.

*Abstract of bids, "Improving harbor at Manistee, Mich.," for furnishing about 1,305,000 feet b. m. Oregon fir timber for use in breakwater construction at Manistee Harbor, Mich., received and opened Feb. 14, 1916, in accordance with advertisement, by Maj. F. W. Altstaetter, Corps of Engineers.*

Name and address of bidder.	12 by 18 inch tim- ber, 24,588 feet b. m. per M feet b. m. (sisle).	Total.	12 by 12 inch tim- ber, 1,156,824 feet b. m. per M feet b. m. (sisle).	Total.	9 by 12 inch tim- ber, 7,020 feet b. m. per M feet b. m. (sisle).	Total.
1. Union Lumber Co., Union Mills, Wash. <sup>1</sup> .....	\$10.85	\$266.78	\$10.85	\$12,551.54	\$10.85	\$76.17
2. The Booth Kelly Lumber Co., Chicago, Ill.....	11.00	270.47	11.00	12,725.06	11.00	77.22
3. Douglas Fir Lumber Co., Port- land, Oreg.....	11.25	276.62	11.25	13,014.27	11.25	78.98
4. The Charles Nelson Co., San Francisco, Cal.....	13.50	331.94	11.50	13,303.48	13.00	91.26
5. H. B. Waite Lumber Co., Minne- apolis, Minn.....	13.75	338.09	12.00	13,881.88	12.00	84.24
6. Willapa Lumber Co., Raymond, Wash.....	12.00	295.06	12.00	13,881.88	12.00	84.24
7. Pacific National Lumber Co., Tacoma, Wash.....	18.50	454.88	12.00	13,881.88	12.00	84.24
8. Weyerhaeuser Lumber Co., Everett, Wash.....	14.50	356.53	12.00	13,881.88	12.00	84.24
9. Marsh & Truman Lumber Co., Chicago, Ill.....	16.00	393.41	12.00	13,881.88	12.00	84.24
10. Pacific Lumber Agency, Aber- deen, Wash.....	17.50	430.29	12.40	14,344.62	12.40	87.05
11. Sullivan & Forbes (Inc.), Port- land, Oreg.....	16.00	393.41	13.00	15,038.71	13.00	91.26

Name and address of bidders.	6 by 12 inch tim- ber, 115,884 feet b. m. per M feet b. m. (rough).	Total.	6 by 6 inch timber, 75 feet b. m. per M feet b. m. (rough).	Total.	Grand total.
1. Union Lumber Co., Union Mills, Wash. <sup>1</sup> .....	\$10.35	\$1,199.40	\$10.35	\$0.78	\$14,094.67
2. The Booth Kelly Lumber Co., Chicago, Ill.....	11.00	1,274.72	11.00	.83	14,348.30
3. Douglas Fir Lumber Co., Portland, Oreg.....	11.25	1,303.70	11.25	.84	14,674.41
4. The Charles Nelson Co., San Francisco, Cal.....	12.50	1,448.55	11.50	.86	15,176.09
5. H. B. Waite Lumber Co., Minneapolis, Minn.....	11.00	1,274.72	11.00	.83	15,579.76
6. Willapa Lumber Co., Raymond, Wash.....	12.00	1,390.61	12.00	.90	15,652.69
7. Pacific National Lumber Co., Tacoma, Wash.....	11.00	1,274.72	11.00	.83	15,696.56
8. Weyerhaeuser Lumber Co., Everett, Wash.....	12.00	1,390.61	12.00	.90	15,714.16
9. Marsh & Truman Lumber Co., Chicago, Ill.....	12.00	1,390.61	11.00	.83	15,750.97
10. Pacific Lumber Agency, Aberdeen, Wash.....	12.40	1,436.96	12.40	.93	16,299.85
11. Sullivan & Forbes (Inc.), Portland, Oreg.....	12.00	1,390.61	12.00	.90	16,914.89

<sup>1</sup> Contract entered into Feb. 29, 1916.

Abstract of bids, "Improving harbor at Manistee, Mich.," for building timber breakwater and pile-concrete shore connection and removing part of old pier at Manistee Harbor, Mich., received and opened Feb. 21, 1916, in accordance with advertisement, by Maj. F. W. Altstaetter, Corps of Engineers.

Name and address of bidder.	1. Removing old pier, 450 linear feet, per linear foot.	2. Dredging site of removed pier (place measure), 9,500 cubic yards, per cubic yard.	3. Dredging for crib foundations (place measure), 7,100 cubic yards, per cubic yard.	4. Framing and placing timber for cribs, superstructure, guides, binders, blocks, and deck, 1,315,400 feet b. m., per M feet b. m.	5. Framing and driving sheet piles, 350,000 feet b. m., per M feet b. m.
1. John Ginzel, Detroit, Mich. <sup>1</sup> .....	{ \$22.00 9,900.00	\$0.70 6,650.00	\$0.61 4,331.00	\$13.00 17,100.20	\$10.00 3,500.00
2. East Shore Dredging Co., Muskegon, Mich. <sup>2</sup> .....	{ 25.00 11,250.00	.40 3,800.00	.40 2,840.00	12.00 15,784.80	15.00 5,250.00
3. Greiling Bros. Co., Green Bay, Wis.....	{ 12.50 5,625.00	.50 4,750.00	.75 5,325.00	15.00 19,731.00	15.00 5,250.00
4. The T. A. Gillespie Co., Pittsburgh, Pa.....	{ 18.60 8,370.00	.52 4,940.00	.52 3,692.00	16.10 21,177.94	30.00 10,500.00
5. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	{ 15.00 6,750.00	.33 $\frac{1}{2}$ 3,166.66	.50 3,550.00	20.00 26,308.00	33.00 11,550.00
6. Great Lakes Dredge & Dock Co., Chicago, Ill.....	{ 27.00 12,150.00	.50 4,750.00	.99 7,029.00	19.00 24,992.60	23.00 8,050.00

Furnish following material and secure it in work.					
Name and address of bidder.	6. Foundation piles, 6,860 linear feet, per linear foot.	7. Oak piles, 12,180 linear feet, per linear foot.	8. Wing wall round piles, 170 linear feet, per linear foot.	9. Oak timber, 27,300 feet b. m., per M feet b. m.	10. Drift bolts and washers, 135,100 pounds, per pound.
1. John Ginzel, Detroit, Mich. <sup>1</sup> .....	{ \$0.56 3,841.60	\$0.33 4,019.40	\$0.41 69.70	\$58.00 1,583.40	\$0.04 5,404.00
2. East Shore Dredging Co., Muskegon, Mich. <sup>2</sup> .....	{ .74 5,076.40	.35 4,263.00	.35 59.50	70.00 1,911.00	.05 6,755.00
3. Greiling Bros. Co., Green Bay, Wis.....	{ .90 6,174.00	.40 4,872.00	.40 68.00	70.00 1,911.00	.05 6,755.00
4. The T. A. Gillespie Co., Pittsburgh, Pa.....	{ .58 3,978.80	.57 6,942.60	.75 127.50	97.00 2,648.10	.06 8,106.00
5. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	{ 1.00 6,860.00	.40 4,872.00	.40 68.00	70.00 1,911.00	.07 9,457.00
6. Great Lakes Dredge & Dock Co., Chicago, Ill.....	{ .70 4,802.00	.48 5,846.40	.48 81.60	85.00 2,320.50	.07 9,457.00

Furnish following material and secure it in work.					
Name and address of bidder.	11. Screw bolts, 66,900 pounds, per pound.	12. Carriage bolts, 10,500 pounds, per pound.	13. Tie-rods, 18,600 pounds, per pound.	14. Spikes, 21,100 pounds, per pound.	15. Steel or iron plates, 15,900 pounds, per pound.
1. John Ginzel, Detroit, Mich. <sup>1</sup> .....	{ \$0.04 $\frac{1}{2}$ 2,843.25	\$0.06 $\frac{1}{2}$ 682.50	\$0.04 $\frac{1}{2}$ 790.50	\$0.04 $\frac{1}{2}$ 949.50	\$0.06 $\frac{1}{2}$ 1,033.50
2. East Shore Dredging Co., Muskegon, Mich. <sup>2</sup> .....	{ .05 3,345.00	.05 525.00	.05 930.00	.05 1,055.00	.05 795.00
3. Greiling Bros. Co., Green Bay, Wis.....	{ .05 3,345.00	.05 525.00	.05 930.00	.05 1,055.00	.05 795.00
4. The T. A. Gillespie Co., Pittsburgh, Pa.....	{ .06 4,014.00	.06 630.00	.06 1,116.00	.06 1,266.00	.06 954.00
5. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	{ .07 4,683.00	.07 735.00	.07 1,302.00	.07 1,477.00	.07 1,113.00
6. Great Lakes Dredge & Dock Co., Chicago, Ill.....	{ .08 5,352.00	.07 735.00	.07 1,302.00	.06 1,266.00	.07 1,113.00

<sup>1</sup> Contract entered into Mar. 7, 1916.

<sup>2</sup> Signer failed to state his official capacity.

Abstract of bids, "Improving harbor at Manistee, Mich.," for building timber, breakwater and pile-concrete shore connection and removing part of old pier at Manistee Harbor, Mich., received and opened Feb. 21, 1916, in accordance with advertisement, by Maj. F. W. Altstaetter, Corps of Engineers—Continued.

Name and address of bidder.	Furnish following material and secure it in work.			
	16. Reinforcing rods, 60,800 pounds, per pound.	17. Quarry spalls, 3,500 short tons, per ton.	18. Crib stone, 10 to 200 pounds, 15,200 short tons, per ton.	19. Small riprap, 50 to 1,000 pounds, 6,200 short tons, per ton.
1. John Ginzel, Detroit, Mich. <sup>1</sup> .....	{ \$0.04½ 2, 584.00	{ \$1.25 4,375.00	{ \$1.35 20,520.00	{ \$1.60 9,920.00
2. East Shore Dredging Co., Muskegon, Mich. <sup>2</sup> .....	{ .05 3,040.00	{ 1.50 5,250.00	{ 1.60 24,320.00	{ 1.80 11,160.00
3. Greiling Bros. Co., Green Bay, Wis.....	{ .05 3,040.00	{ 1.55 5,425.00	{ 1.55 23,560.00	{ 1.70 10,540.00
4. The T. A. Gillespie Co., Pittsburgh, Pa.....	{ .07½ 4,560.00	{ 1.82 6,370.00	{ 1.95 29,640.00	{ 2.25 13,950.00
5. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	{ .07 4,256.00	{ 1.50 5,250.00	{ 1.70 25,840.00	{ 1.91 11,842.00
6. Great Lakes Dredge & Dock Co., Chicago, Ill.....	{ .06 3,648.00	{ 1.65 5,775.00	{ 1.90 28,880.00	{ 2.40 14,880.00

Name and address of bidder.	Furnish following material and secure it in work.			
	20. Large riprap, 3 to 8 tons, 3,400 short tons, per ton.	21. Built-in-place concrete, 1,230 cubic yards, per cubic yard.	22. Concrete deck slabs, 180 cubic yards, per cubic yard.	Grand total.
1. John Ginzel, Detroit, Mich. <sup>1</sup> .....	{ \$2.00 6,800.00	{ \$9.00 11,070.00	{ \$9.00 1,620.00	{ \$119,587.55 119,587.55
2. East Shore Dredging Co., Muskegon, Mich. <sup>2</sup> .....	{ 2.40 8,160.00	{ 9.00 11,070.00	{ 12.00 2,160.00	{ 128,799.70 128,799.70
3. Greiling Bros. Co., Green Bay, Wis.....	{ 2.30 7,820.00	{ 10.00 12,300.00	{ 10.00 1,800.00	{ 131,596.00 131,596.00
4. The T. A. Gillespie Co., Pittsburgh, Pa.....	{ 3.15 10,710.00	{ 10.65 13,099.50	{ 15.00 2,700.00	{ 159,492.44 159,492.44
5. Byrne Bros. Dredging & Engineering Co., Chicago, Ill.....	{ 2.75 9,350.00	{ 15.00 18,450.00	{ 10.00 1,800.00	{ 160,590.66 160,590.66
6. Great Lakes Dredge & Dock Co., Chicago, Ill.....	{ 3.00 10,200.00	{ 19.00 23,370.00	{ 22.00 3,960.00	{ 179,960.10 179,960.10

Abstract of bids, "Improving harbor at Manistee, Mich.," for dredging in Manistee Harbor, Mich., received and opened Apr. 20, 1916, in accordance with advertisement, by Maj. F. W. Altstaetter, Corps of Engineers.

Name and address of bidder.	57,000 cubic yards, scow measurement, per cubic yard, scow measurement.	Total.
1. Greiling Bros. Co., Green Bay, Wis. <sup>3</sup> .....	\$0.17½	\$9,975
2. John Ginzel, Detroit, Mich. ....	.22	12,540
3. Great Lakes Dredge & Dock Co., Chicago, Ill.....	.23	13,110

<sup>1</sup> Contract entered into Mar. 7, 1916.

<sup>2</sup> Signer failed to state his official capacity.

<sup>3</sup> Contract entered into May 1, 1916.

Abstract of bids, "Maintenance and improvement of existing river and harbor works," for Grand Haven Harbor, Mich., for repairing pile substructure and constructing concrete superstructure on the south revetment at Grand Haven Harbor, Mich., received and opened Apr. 27, 1916, in accordance with advertisement, by Maj. F. W. Altstaetter, Corps of Engineers.

Name and address of bidder.	1. Cutting down and removing old work, 677 linear feet, per linear foot.	2. Framing and placing timber furnished by United States for anchor wale, 5,870 feet b. m., per M foot b. m.	Furnish following material and secure it in work:		
			3. Front oak piles and 2 anchor piles in place, 5,076 linear feet, per linear foot.	4. Rear oak piles, 91 piles, per pile.	5. Oak timber, 7,670 feet b. m., per M foot b. m.
1. John Ginzel, Detroit, Mich. <sup>1</sup> .....	{ \$2.50 \$1,692.50	\$12.00 70.44 1,827.36	\$0.36 .33 8.00	\$8.00 728.00	\$60.00 460.20
2. Robert Love & Son, Muskegon, Mich. ....	{ 2.50 1,692.50	15.00 88.05 1,675.08	.33 .40 9.00	8.00 728.00	70.00 536.90
3. Nelson Bros. & Lee, Muskegon, Mich. ....	{ 2.00 1,354.00	10.00 58.70 2,030.40	.40 9.00	80.00 819.00	80.00 613.60
4. East Shore Dredging Co., Muskegon, Mich. ....	{ 5.00 3,385.00	40.00 234.80 2,030.40	.40 10.00	10.00 910.00	80.00 613.60
5. McMullen & Pitz, Manitowoc, Wis. ....	{ 6.00 4,062.00	40.00 234.80 2,538.00	.50 .46 819.00	9.00 12.00 536.90	70.00 100.00 536.90
6. Walsh Bros. & Blasklee, Grand Haven, Mich. ....	{ 2.00 1,354.00	40.00 234.80 2,334.96	.50 2,334.96	12.00 1,092.00	100.00 767.00
7. Greiling Bros. Co., Green Bay, Wis. ....	{ 5.00 3,385.00	22.00 129.14 2,538.00	.50 1,183.00	13.00 613.60	80.00 613.60

Name and address of bidder.	Furnish following material and secure it in work:				
	6. Pine or fir timber, 25,878 feet b. m., per M foot b. m.	7. Pine or fir planks for sheet piles, 144,936 feet b. m., per M foot b. m.	8. Screw bolts, 8,255 pounds, per pound.	9. Carriage bolts, 3,760 pounds, per pound.	10. Tie rods, 6,988 pounds, per pound.
1. John Ginzel, Detroit, Mich. <sup>1</sup> .....	{ \$43.50 1,125.69	\$43.50 6,304.72	\$0.07 577.85	\$0.08 300.80	\$0.07 489.16
2. Robert Love & Son, Muskegon, Mich. ....	{ 50.00 1,293.90	50.00 7,246.80	.05 412.75	.06 225.60	.05 349.40
3. Nelson Bros. & Lee, Muskegon, Mich. ....	{ 50.00 1,293.90	50.00 7,246.80	.06 495.30	.06 225.60	.06 419.28
4. East Shore Dredging Co., Muskegon, Mich. ....	{ 60.00 1,552.68	55.00 7,971.48	.06 495.30	.06 225.60	.06 419.28
5. McMullen & Pitz, Manitowoc, Wis. ....	{ 65.00 1,682.07	61.00 8,841.10	.05 412.75	.06 225.60	.05 349.40
6. Walsh Bros. & Blasklee, Grand Haven, Mich. ....	{ 80.00 2,070.24	75.00 10,870.20	.05 412.75	.10 376.00	.05 349.40
7. Greiling Bros. Co., Green Bay, Wis. ....	{ 60.00 1,552.68	55.00 7,971.48	.08 660.40	.10 376.00	.08 559.04

<sup>1</sup> Contract entered into May 12, 1916.

75977°—H. Doc. 1926, 64-2—8

Abstract of bids, "Maintenance and improvement of existing river and harbor works," for Grand Haven Harbor, Mich., for repairing pile substructure and constructing concrete substructure on the south revetment at Grand Haven Harbor, Mich., received and opened Apr. 27, 1916, in accordance with advertisement by Maj. F. W. Altstaetter, Corps of Engineers—Continued.

Name and address of bidder.	Furnish following material and secure it in work:					Total.
	11. Spikes, 250 pounds, per pound.	12. Built-in-place concrete, 526 cubic yards, per cubic yard.	13. Deck slab concrete, 30 cubic yards, per cubic yard.	14. Rein- forcing rods, 13,662 pounds, per pound.	15. Filling stone 50 to 200 pounds, 1,100 tons, per ton.	
1. John Ginzel, Detroit, Mich. <sup>1</sup>	\$0.08	\$9.50	\$0.50	\$0.06	\$1.55	
	20.00	4,997.00	285.00	819.72	1,705.00	\$21,403.44
2. Robert Love & Son, Muskegon, Mich.	.05	9.00	9.00	.05	1.60	
	12.50	4,734.00	270.00	683.10	1,760.00	21,708.58
3. Nelson Bros. & Lee, Muskegon, Mich.	.06	9.00	12.00	.06	1.75	
	15.00	4,734.00	360.00	819.72	1,925.00	22,410.30
4. East Shore Dredging Co., Muskegon, Mich.	.06	10.00	12.00	.05	1.70	
	15.00	5,260.00	360.00	683.10	1,870.00	26,026.24
5. McMullen & Pitz, Manitowoc, Wis.	.04 $\frac{1}{2}$	9.00	10.00	.04 $\frac{1}{2}$	2.00	
	11.25	4,734.00	300.00	614.79	2,200.00	27,561.66
6. Walsh Bros. & Blasklee, Grand Haven, Mich.	.05	8.50	20.00	.75.00	2.00	
	12.50	4,471.00	600.00	512.33	2,200.00	27,657.18
7. Greifing Bros. Co., Green Bay, Wis.	.05	14.50	16.00	.07	2.00	
	12.50	7,627.00	480.00	956.34	2,200.00	30,244.18

<sup>1</sup> Contract entered into May 12, 1916.<sup>2</sup> Per ton.

## COAL.

Abstract of bids for furnishing and delivering coal until Mar. 31, 1917, for United States dredge "General Meude" on account of appropriations pertaining to river and harbor works in the Grand Rapids, Mich., district, received and opened Mar. 20, 1916, in accordance with advertisement by Maj. F. W. Altstaetter, Corps of Engineers.

Name and address of bidder.	Description of coal to be furnished.								
	At St. Joseph, South Haven, Holland, Grand Haven, and Muskegon, Mich., per ton of 2,000 pounds.	At Laudington, Manistee, and Frankfort, Mich., per ton of 2,000 pounds.	At Charlevoix, Mich., per ton of 2,000 pounds.	Moisture in coal "as received."	Percentage of ash in "dry coal."	Percentage of volatile matter in "dry coal."	Percentage of sulphur in "dry coal."		
1. Home Fuel Co., Grand Rapids, Mich.	\$3.08	\$3.30	\$3.40	1.90	5.50	37.37	0.85	14,400	Smithers Creek, three-fourths gas.

Accepted; contract entered into Mar. 28, 1916.

This is the same coal we have furnished the last two seasons.

## DETROIT (MICH.) DISTRICT.

[Officer: Col. Mason M. Patrick, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for furnishing and delivering f. o. b. cars at Pacific coast about 236,000 feet board measure of fir timber for construction of guard gates of Fourth Lock at Sault Ste. Marie, Mich., received in response to advertisements and publicly opened on July 31, 1915, by Lieut. Col. Mason M. Patrick, Corps of Engineers.*

[Appropriation: Preservation and maintenance of existing river and harbor works (St. Marys River at the Falls, Mich., Fourth Lock).]

Name and address of bidder.	Per M feet board measure.	Total.
1. Firm Lumber Co., Hattiesburg, Miss.	\$19.75	\$4,661.00
2. Duncan Lumber Co., <sup>1</sup> Portland, Oreg.	25.64	6,051.04
3. G. Elias & Bro., Buffalo, N. Y.	26.85	6,336.60
4. The Charles Nelson Co., San Francisco, Cal.	37.87	8,937.32
5. Lupfer & Remick, Buffalo, N. Y.	39.75	9,381.00
6. McCormick Lumber Co., McCormick, Wash.	75.00	17,700.00

<sup>1</sup> Contract entered into Sept. 12, 1915.

*Abstract of proposals for furnishing and delivering at Sault Ste. Marie, Mich., about 110,000 feet board measure of white oak timber, received in response to advertisement and publicly opened Dec. 15, 1915, by Lieut. Col. Mason M. Patrick, Corps of Engineers.*

[Appropriations: Maintenance and improvement of existing river and harbor works. (St. Marys River at the Falls, Mich., Fourth Lock.) Operating and care of canals and other works of navigation, indefinite. (St. Marys Falls Canal, Mich.)]

Name and address of bidder.	Per M feet board measure.	Total.
1. J. W. Black Lumber Co., Corning, Ark. <sup>1</sup>	\$37.00	\$4,070.00
2. G. Elias & Bro. (Inc.), Buffalo, N. Y.	37.90	4,169.00
3. N. G. De Haas, Marquette, Mich.	38.75	4,262.50
4. Lock City Manufacturing Co. (Ltd.), Sault Ste. Marie, Mich.	40.00	4,400.00
5. The Chas. E. Lane Co., Parkersburg, W. Va.	41.00	4,510.00
6. West Virginia Timber Co., Charleston, W. Va.	42.00	4,620.00
7. J. M. Sensemire Lumber Co., Parkersburg, W. Va.	44.50	4,895.00
8. The Parkersburg Mill Co., Parkersburg, W. Va.	45.00	4,950.00
9. The Mowbray & Robinson Co., Cincinnati, Ohio.	45.00	4,950.00
10. Tschudy Lumber Co., Kansas City, Mo.	46.00	5,060.00
11. W. M. Ritter Lumber Co., Columbus, Ohio.	47.50	5,225.00
12. E. McClintock, Baltimore, Md.	47.75	5,252.50

<sup>1</sup> Contract entered into Jan. 4, 1916.

*Abstract of proposals for furnishing and delivering at Sault Ste. Marie, Mich., about 200 tons of steel, etc., for construction of guard gates for Fourth Lock, received in response to advertisement and publicly opened Feb. 23, 1916, by Lieut. Col. Mason M. Patrick, Corps of Engineers.*

[Appropriations: Improving St. Marys River, Mich. (Fourth Lock), maintenance and improvement of existing river and harbor works. (St. Marys River at the Falls, Mich., Fourth Lock).]

Name and address of bidder.	Prices bid per hundredweight.					Total.
	Class A, 122,660 pounds.	Class B, 3,930 pounds.	Class C, 10,630 pounds.	Class D, 261,500 pounds.	Class E, 930 pounds.	
1. Wisconsin Bridge & Iron Co., Milwaukee, Wis. <sup>1</sup>	\$4.79 5,875.41	\$16.50 648.45	\$7.97 847.21	\$1.97 5,151.55	\$53.30 495.69	\$13,018.31
2. J. & J. B. Milholland Co., Pittsburgh, Pa.	4.92 6,034.87	10.00 393.00	10.00 1,063.00	1.90 4,968.50	80.00 744.00	80.00 13,203.37
3. Independent Bridge Co., Pittsburgh, Pa.	4.75 5,826.35	10.00 393.00	10.50 1,116.15	2.00 5,230.00	85.00 790.50	85.00 13,356.00
4. Lakeside Bridge & Steel Co., North Milwaukee, Wis.	5.06 6,206.59	16.51 648.84	8.90 946.07	2.00 5,230.00	41.40 385.02	41.40 13,416.52
5. Milwaukee Bridge Co., Milwaukee, Wis.	5.87 7,200.14	8.15 320.29	9.20 977.96	2.45 6,406.75	50.00 465.00	50.00 15,370.14
6. Whitehead & Kales Iron Works, Detroit, Mich.	5.60 6,868.96	24.40 958.92	11.00 1,169.30	3.25 8,498.75	80.00 744.00	80.00 18,239.93
7. Minneapolis Steel & Machinery Co., Minneapolis, Minn.	6.18 7,580.38	37.00 1,454.10	13.00 1,381.90	2.85 7,452.75	80.00 744.00	80.00 18,613.13

<sup>1</sup> Contract entered into Mar. 13, 1916.

## 116 MATERIAL AND LABOR FOR ENGINEER DEPARTMENT, 1916.

*Abstract of proposals for dredging in Lake St. Clair, Mich., received in response to advertisement and publicly opened Mar. 24, 1916, by Lieut. Col. Mason M. Patrick, Corps of Engineers.*

[Appropriation: Maintenance and improvement of existing river and harbor works (allotment for ship channel connecting waters of the Great Lakes between Chicago, Duluth, and Buffalo.)]

Name and address of bidder.	400,000 cubic yards, unit price.	Total.
1. Great Lakes Dredge & Dock Co., Chicago, Ill <sup>1</sup> .....	\$0.12	\$48,000
2. Greiling Bros. Co., Green Bay, Wis.....	.12 $\frac{3}{4}$	51,900
3. John B. Breymann, Toledo, Ohio.....	.13 $\frac{3}{8}$	54,500
4. Duluth-Superior Dredging Co., Duluth, Minn.....	.14	56,000
5. Oliver E. Dunbar, Detroit, Mich.....	.15	60,000

<sup>1</sup> Contract entered into Apr. 6, 1916.

### WRECK.

*Abstract of proposals for removing wreck of barge "Melvin S. Bacon," received in response to poster and circular letter advertisement and publicly opened May 18, 1916, by Col. Mason M. Patrick, Corps of Engineers.*

[Appropriation: Removing sunken vessels or craft obstructing or endangering navigation; indefinite.]

Name and address of bidder.	Amount.
1. Reid Wrecking Co., Port Huron, Mich <sup>1</sup> .....	\$0.00
2. H. N. Jex, Toledo, Ohio.....	2,475.00
3. Oliver E. Dunbar, Detroit, Mich.....	3,000.00

<sup>1</sup> Contract entered into May 20, 1916. No money consideration. Wreck to become property of contractor as provided by specifications.

### CLEVELAND (OHIO), DISTRICT.

[Officer: Maj. P. S. Bond, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of proposals for repairing rubble mound breakwater at Lorain Harbor, Ohio; received by Maj. P. S. Bond, Corps of Engineers; opened July 30, 1915.*

[Appropriation: Improving harbor at Lorain, Ohio.]

Name and address of bidder.	Furnishing and placing stone, per ton of 2,000 pounds.	Rehan- dling stone, each barge, per hour.	Total of bid.
1. Great Lakes Dredge & Dock Co., Cleveland, Ohio.....	\$1.44	\$25.00	\$9,700
2. Coast & Lakes Contracting Corporation, New York, N. Y.....	1.30	8.00	17,300
3. The Edw. Gillen Dock, Dredge & Construction Co., Racine, Wis.....	1.40	11.00	8,100
4. The Cleveland Engineering Construction Co., Cleveland, Ohio.....	2.49	9.95	13,445
5. The Lake Shore Contracting Co., Cleveland, Ohio.....	1.70	10.00	9,500

<sup>1</sup> Accepted.

*Abstract of proposals for constructing pierhead and rubble mound breakwater at Conneaut Harbor, Ohio, received by Maj. P. S. Bond, Corps of Engineers, opened July 30, 1915.*

[Appropriation: Maintenance and improvement of existing river and harbor works (act of Oct. 2, 1914), Conneaut Harbor, Ohio.]

Name and address of bidder.	Entire break-water, except covering D stone, per ton of 2,000 pounds.	Covering D stone, per ton of 2,000 pounds.	Pierhead complete except stone protection.		Total.	
			Timber-crib type.	Steel-cylinder type.	With timber-crib type of pierhead.	With steel-cylinder type of pierhead.
1. Great Lakes Dredge & Dock Co., Cleveland, Ohio.....	\$1.36	\$1.59	\$18,945	\$14,875	\$144,531.20	\$137,358.80
2. Coast & Lakes Contracting Corporation, New York, N. Y.....	.95	1.20	10,980	12,600	99,536.50	199,007.25
3. The Edward Gillen Dock, Dredge & Construction Co., Racine, Wis.....	1.16	1.16	15,500	16,000	120,793.20	118,607.80
4. Greiling Bros. Co., Green Bay, Wis.....	1.098	1.298	15,000	16,000	116,525.46	115,023.59

<sup>1</sup> Accepted.

*Abstract of proposals for dredging in Cleveland Harbor, Ohio, received by Maj. P. S. Bond, Corps of Engineers, opened Nov. 26, 1915.*

[Appropriation: Maintenance and improvement of existing river and harbor works (act of Mar. 4, 1915), Cleveland Harbor, Ohio.]

Name and address of bidder.	Price per cubic yard, place measurement.	Total of bid. <sup>1</sup>
1. Fitz Simons & Connell Dredge & Dock Co., Chicago, Ill.....	\$0.144	\$72,000
2. Greiling Bros. Co., Green Bay, Wis.....	.16	80,000
3. Duluth-Superior Dredging Co., Duluth, Minn.....	.10	50,000
4. Arthur E. Breymann, Toledo, Ohio.....	.119	59,500
5. H. S. Kerbaugh (Inc.), Buffalo, N. Y.....	.16	80,000
6. Duluth Marine Contracting Co., Duluth, Minn.....	.10	55,000
7. Great Lakes Dredge & Dock Co., Cleveland, Ohio.....	.075	237,500

<sup>1</sup> Based on 500,000 cubic yards, place measurement.

<sup>2</sup> Accepted.

Approximate quantity of material to be dredged, 790,000 cubic yards, including allowable overdepth.

*Abstract of proposals for constructing rubble mound breakwater at Conneaut Harbor, Ohio, received by Maj. P. S. Bond, Corps of Engineers, opened Mar. 24, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works (act of Mar. 4, 1915), Conneaut Harbor, Ohio.]

Name and address of bidder.	All stone except covering "D." <sup>1</sup>	Covering "D" stone. <sup>2</sup>	Total of bid.
1. Great Lakes Dredge & Dock Co., Cleveland, Ohio.....	\$1.58	\$1.70	\$177,916
2. Zenith Dredge Co., Duluth, Minn.....	1.65	1.65	183,480
3. The Edw. Gillen Dock, Dredge, & Construction Co., Racine, Wis.....	1.40	1.40	<sup>3</sup> 155,680
4. Coast & Lakes Contracting Corporation, New York, N. Y.....	1.41	1.41	156,792

<sup>1</sup> Estimate, 92,700 short tons.

<sup>2</sup> Estimate, 18,500 short tons.

<sup>3</sup> Accepted.

## BUFFALO (N. Y.) DISTRICT.

[Officer: Maj. L. V. Frazier, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for dredging in Lake Erie entrance to Black Rock Harbor and Erie Basin and in Black Rock Canal, Buffalo, N. Y., opened under advertisement and specifications attached, May 10, 1916, at Buffalo, N. Y., by Maj. L. V. Frazier, Corps of Engineers.*

[Appropriations: Maintenance and improvement of existing river and harbor works (Lake Erie entrance to Black Rock Harbor and Erie Basin, N. Y.); operating and care of canals and other works of navigation; indefinite; for Black Rock Canal and Lock, and Ferry Street Bridge, Buffalo, N. Y.]

Name and address of bidder.	Dredging in Lake Erie entrance to Black Rock Harbor and Erie Basin, N. Y., 60,000 cubic yards, scow measure.		Dredging in Black Rock Canal, 34,000 cubic yards, scow measure.		Grand total.
	Per cubic yard.	Total.	Per cubic yard.	Total.	
1. Great Lakes Dredge & Dock Co., Buffalo, N. Y.	\$0.26 <sup>10</sup>	\$15,960	\$0.26 <sup>10</sup>	\$9,044	\$25,004
2. James Stewart & Co. (Inc.), New York, N. Y.	.55	33,000	.55	18,700	51,700
3. H. S. Kerbaugh (Inc.), Buffalo, N. Y.	.24 <sup>1</sup> <sub>2</sub>	14,700	.24 <sup>1</sup> <sub>2</sub>	8,330	23,030

Proposal No. 3 accepted and contract made.

*Abstract of proposals for Portland cement, opened by Maj. L. V. Frazier, Corps of Engineers, at Buffalo, N. Y., Apr. 8, 1916.*

[Appropriation: Improving harbor at Little Sodus Bay, N. Y.]

Name and address of bidder.	2,000 barrels cement, delivered f. o. b. cars at North Fair Haven, N. Y.		Brand.	Rebate for sacks to be returned, serviceable or repairable, per sack.	Net total for tested cement.
	Tested by United States Bureau of Standards.	Untested.			
	Per barrel (in sacks).	Total.			
	Per barrel (in sacks).	Total.			
1. Atlas Portland Cement Co., New York, N. Y.	\$1.82	\$3,640.00	Atlas Portland	\$0.10	\$2,840.00
2. Alpha Portland Cement Co., Easton, Pa.	1.82	3,640.00	Alpha Portland	.10	2,840.00
3. Universal Portland Cement Co., Pittsburgh, Pa.	1.87	3,740.00	Universal Portland	.10	2,940.00

Proposal No. 1 accepted for untested cement and emergency contract made.

*Abstract of proposals for furnishing and placing riprap and repairing concrete superstructure on Buffalo Breakwater, received in response to advertisement, and publicly opened Sept. 1, 1915, at Buffalo, N. Y., by Maj. L. V. Frazier, Corps of Engineers.*

[Appropriation: Maintenance and improvement of existing river and harbor works for Buffalo Harbor, N. Y.]

Name and address of bidder.	Furnishing and placing large riprap, 6,000 tons.		Concrete in place (proportions, 1:3:6), 660 cubic yards.		Concrete in place (proportions, 1½:3:6), 100 cubic yards.		Derrick hire, 50 hours.		Total.
	Rate.	Aggregate.	Rate.	Aggregate.	Rate.	Aggregate.	Rate.	Aggregate.	
1. Great Lakes Dredge & Dock Co., Buffalo, N. Y. ....	\$2.50	\$15,000.00	\$9.50	\$6,270.00	\$12.00	\$1,200.00	\$8.00	\$400.00	\$22,870.00
2. H. S. Kerbaugh (Inc.), Buffalo, N. Y. ....	1.60	9,600.00	5.50	3,630.00	6.25	625.00	15.00	750.00	14,605.00
3. Lake Shore Contracting Co., Cleveland, Ohio. ....	2.60	15,600.00	8.00	5,280.00	8.00	800.00	12.00	600.00	22,280.00
4. Coast & Lakes Contracting Corporation, New York, N. Y. ....	1.44	8,640.00	6.50	4,290.00	6.50	650.00	9.50	475.00	14,055.00

Proposal No. 4 accepted and contract made.

*Abstract of proposals for dredging north (Buffalo River) entrance channel and Watson Elevator site, Buffalo, N. Y., opened Apr. 26, 1916, by Maj. L. V. Frazier, Corps of Engineers, at Buffalo, N. Y.*

[Appropriations: Improving harbor at Buffalo, N. Y. (outer harbor, and removing Watson Elevator site), maintenance and improvement of existing river and harbor works for Buffalo Harbor, N. Y.]

Name and address of bidder.	Dredging 65,000 cubic yards scow measure, per cubic yard.	Total.
1. H. S. Kerbaugh (Inc.), Buffalo, N. Y. ....	\$0.21½	\$13,975.00
2. Great Lakes Dredge & Dock Co., Buffalo, N. Y. ....	.22½	14,885.00

Proposal No. 1 accepted and contract made.

### LOS ANGELES, CAL., DISTRICT.

[Officer: Maj. G. B. Pillsbury, Corps of Engineers.]

#### FORTIFICATIONS.

*Abstract of proposals for furnishing cement, sand, and crushed rock at Fort Rosecrans, San Diego, Cal., received in response to advertisement of Sept. 28, 1915, and opened at Los Angeles, Cal., Oct. 11, 1915, by Maj. R. R. Raymond, Corps of Engineers.*

[Appropriation: Gun and mortar batteries.]

#### PORLAND CEMENT.

Name and address of bidder.	Price per barrel.	For furnishing 8,000 barrels.
1. Spreckels Bros. Commercial Co., San Diego, Cal. <sup>1</sup> ....	\$2.30	\$18,400
2. California Portland Cement Co., Los Angeles, Cal. ....	2 2.39	19,120
3. Golden State Portland Cement Co., Los Angeles, Cal. ....	2 2.85	22,800

<sup>1</sup> Accepted.

<sup>2</sup> Less 10 per cent if paid by 10th of following month.

*Abstract of proposals for furnishing cement, sand, and crushed rock at Fort Rosecrans, San Diego, Cal., received in response to advertisement of Sept. 28, 1915, and opened at Los Angeles, Cal., Oct. 11, 1915, by Maj. R. R. Raymond, Corps of Engineers—Con.*

## SAND, OR ROCK SCREENINGS.

Name and address of bidder.	Price per ton for sand.	For furnishing 5,400 tons.	Price per ton for screenings.	For furnishing 5,400 tons.
4. Independent Stone Co., San Diego, Cal.....	\$1.73	\$9,342	.....	.....
5. M. D. Goodbody, San Diego, Cal.....	1.95	10,530	.....	.....
6. Fenton-Sumption-Barnes Co., San Diego, Cal.....	{ 1 2 1.73	9,342	.....	.....
8. Pacific Rock & Gravel Co., Los Angeles, Cal.....	3 1.85	9,990	.....	.....
	1.95	10,530	\$2.00	\$10,800

<sup>1</sup> Accepted.<sup>2</sup> If both sand and rock are furnished.<sup>3</sup> If sand only is furnished.

## CRUSHED ROCK.

Name and address of bidder.	Price per ton.	For furnishing 10,400 tons.
4. Independent Stone Co., San Diego, Cal.....	\$2.23	\$23,192
5. M. D. Goodbody, San Diego, Cal.....	2.20	22,880
6. Fenton-Sumption-Barnes Co., San Diego, Cal.....	{ 1 2 2.04	21,216
7. San Diego Stone Co., San Diego, Cal.....	3 2.08	21,632
8. Pacific Rock & Gravel Co., Los Angeles, Cal.....	2.25	23,400
	2.35	24,440

<sup>1</sup> Accepted.<sup>2</sup> If both sand and rock are furnished.<sup>3</sup> If sand only is furnished.

*Abstract of proposals for furnishing cement, sand, and crushed rock at San Pedro, Cal., received in response to advertisement of Nov. 10, 1915, and opened at Los Angeles, Cal., Dec. 10, 1915, by Maj. R. R. Raymond, Corps of Engineers.*

[Appropriation: "Gun and mortar batteries."]

## PORTLAND CEMENT.

Name and address of bidder.	Price per barrel.	For furnishing 19,000 barrels.
3. Riverside Portland Cement Co., Los Angeles, Cal. <sup>1</sup> .....	\$1.68	\$31,920
5. California Portland Cement Co., Los Angeles, Cal.....	1.75	33,250
7. Golden State Portland Cement Co., Los Angeles, Cal.....	1.78	33,820

<sup>1</sup> Accepted.

## SAND OR ROCK SCREENINGS.

Name and address of bidder.	Sand, price per ton.	For furnishing 12,800 tons.	Screenings, price per ton.	For furnishing 12,800 tons.
1. Pacific Rock & Gravel Co., Los Angeles, Cal. <sup>1</sup> .....	\$0.65	\$8,320	\$0.75	\$9,600
2. Los Angeles Stone Co., Los Angeles, Cal.....	.67	8,576	.....	.....
4. Russell-Greene-Foell Co., Los Angeles, Cal.....	.72	9,216	.....	.....

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing cement, sand, and crushed rock at San Pedro, Cal., received in response to advertisement of Nov. 10, 1915, and opened at Los Angeles, Cal., Dec. 10, 1915, by Maj. R. R. Raymond, Corps of Engineers—Continued.*

## CRUSHED ROCK.

Name and address of bidder.	Price per ton.	For furnishing 25,250 tons.
1. Pacific Rock & Gravel Co., Los Angeles, Cal.....	\$1.09	\$27,522.50
2. Los Angeles Stone Co., Los Angeles, Cal. <sup>1</sup> .....	.94	23,735.00
4. Russell-Greene-Foell Co., Los Angeles, Cal.....	1.05	26,512.50
6. Temescal Rock Co., Los Angeles, Cal.....	1.24 <sup>1</sup> <sub>2</sub>	31,436.25

<sup>1</sup> Accepted.

*Abstract of proposals for stripping and excavating at Fort MacArthur, Cal., received in response to advertisement of Feb. 17, 1916, and opened at Los Angeles, Cal., Feb. 24, 1916, by Maj. G. B. Pillsbury, Corps of Engineers.*

[Appropriation: "Gun and mortar batteries."]

Name and address of bidder.	Price per cubic yard for stripping.	For stripping 900 cubic yards.	Price per cubic yard for excavating.	For excavating 8,400 cubic yards.	Total.
1. Wattson & Spicer, Los Angeles, Cal.....	\$0.38	\$342.00	\$0.38	\$3,192.00	\$3,534.00
2. John F. Dodson & C. R. Butterfield, San Pedro, Cal.....	.45	405.00	.45	3,780.00	4,185.00
3. H. M. Snyder, San Pedro, Cal.....	.475	427.50	.475	3,990.00	4,317.50
4. Richard Rothwell, Los Angeles, Cal.....	.22	198.00	.55	4,620.00	4,818.00

<sup>1</sup> Accepted.

*Abstract of proposals for excavating at Fort Rosecrans, Cal., received in response to advertisement of Mar. 1, 1916, and opened at Los Angeles, Cal., Mar. 15, 1916, by Maj. G. B. Pillsbury, Corps of Engineers.*

[Appropriation: "Gun and mortar batteries."]

Name and address of bidder.	Price per cubic yard.	For excavating 11,000 cubic yards.
1. M. D. Goodbody, San Diego, Cal.....	\$0.545	\$5,995
2. C. L. Hyde Construction Co., San Diego, Cal.....	.30	3,300
3. Wattson & Spicer, Los Angeles, Cal.....	.33	3,630
4. John Engebretsen, San Diego, Cal.....	.38	4,180
5. John F. Dodson & C. R. Butterfield, San Pedro, Cal.....	.50	5,500
6. Robt. Sherer, Los Angeles, Cal. <sup>1</sup> .....	.28	3,080
7. Jonas Hansson, San Diego, Cal.....	.32	3,520

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing cement, sand, and rock at Fort Rosecrans, San Diego, Cal., received in response to advertisement of Mar. 1, 1916, and opened at Los Angeles, Cal., Mar. 31, 1916, by Maj. G. B. Pillsbury, Corps of Engineers.*

[Appropriation: "Gun and mortar batteries."]

## PORTLAND CEMENT.

Name and address of bidder.	Price per barrel.	For furnishing 8,000 barrels.
1. John Engebretsen, San Diego, Cal.....	\$2.28	\$18,240
3. Jonas Hansson, San Diego, Cal. <sup>1</sup> .....	2.23	17,840
4. J. R. Atchison, San Francisco, Cal.....	2.2475	17,980
8. California Portland Cement Co., Los Angeles, Cal.....	2.34	18,720
9. Spreckels Bros. Commercial Co., San Diego, Cal.....	2.30	18,400

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing cement, sand, and rock at Fort Rosecrans, San Diego, Cal., received in response to advertisement of Mar. 1, 1916, and opened at Los Angeles, Cal., Mar. 31, 1916, by Maj. G. B. Pillsbury, Corps of Engineers—Continued.*

## SAND.

Name and address of bidder.	Price per ton.	For furnishing 5,400 tons.
1. John Engebretsen, San Diego, Cal.....	\$2.26	\$12,204
3. Jonas Hansson, San Diego, Cal.....	1.84	9,936
5. Fenton-Sumption-Barnes Co., San Diego, Cal.....	{ 1.87 2.02	{ 10,998 10,908
6. Independent Stone Co., San Diego, Cal.....	{ 1.92 1.94	{ 10,368 10,476

<sup>1</sup> If both Otay sand and rock are furnished.<sup>2</sup> For furnishing Otay sand only.<sup>3</sup> For Cuyamaca sand.

All bids for sand rejected.

## ROCK.

Name and address of bidder.	Price per ton.	For furnishing 10,600 tons.
1. John Engebretsen, San Diego, Cal.....	\$2.57	\$27,242
2. C. L. Hyde Construction Co., San Diego.....	{ 1.85 2.15	{ 19,610 22,790
3. Jonas Hansson, San Diego, Cal.....	2.14	22,684
5. Fenton-Sumption-Barnes Co., San Diego, Cal.....	{ 2.08 2.24	{ 22,048 23,744
6. Independent Stone Co., San Diego, Cal.....	1.88	19,928
7. Mission Sand & Rock Co., San Diego, Cal. <sup>3</sup> .....		

<sup>1</sup> \$1.85 for rock from Ballast Point. If not enough rock to fill the contract can be obtained from this location, \$2.15 to be charged for the amount obtained elsewhere.

<sup>2</sup> If both Otay sand and rock are furnished.<sup>3</sup> Accepted.

*Abstract of proposals for transporting sand at the Naval Reservation, Fort Rosecrans, San Diego, Cal., received in response to advertisement of Apr. 28, 1916, and opened at Los Angeles, Cal., May 8, 1916, by Maj. G. B. Pillsbury, Corps of Engineers.*

[Appropriation: "Gun and mortar batteries."]

Name and address of bidder.	Price per ton.	For transporting 5,400 short tons.
1. Pioneer Truck Co., San Diego, Cal. <sup>1</sup> .....	\$1.18	\$6,372
2. John Engebretsen, San Diego, Cal.....	1.29	6,966
3. Jonas Hansson, San Diego, Cal.....	1.285	6,939
4. M. D. Goodbody, San Diego, Cal.....	1.50	8,100

<sup>1</sup> Accepted.

## RIVERS AND HARBORS.

*Abstract of proposals for dredging in Los Angeles Harbor, Cal., received in response to advertisement of Apr. 10, 1916, and opened at Los Angeles, Cal., May 10, 1916, by Maj. G. B. Pillsbury, Corps of Engineers.*

[Appropriation: "Maintenance and improvement of existing river and harbor works."]

Name and address of bidder.	Price per cubic yard.	For dredging 515,000 cubic yards.
1. Standard American Dredging Co., Los Angeles, Cal.....	\$0.0587	\$30,230.50
2. Los Angeles Dredging Co., Los Angeles, Cal.....	.0645	33,217.50
3. San Francisco Bridge Co., San Francisco, Cal. <sup>1</sup> .....	.0534	27,501.00

<sup>1</sup> Accepted.

## SAN FRANCISCO (CAL.) FIRST DISTRICT.

[Officer: Lieut. Col. Thos. H. Rees, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of bids for dredging in Petaluma Creek, Cal., opened Mar. 22, 1916, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Price per cubic yard.	Total for 33,000 cubic yards.
	Cents.	
Standard American Dredging Co., Oakland, Cal.....	29	\$9,570.00
American Dredging Co., San Francisco, Cal.....	27.94	9,220.20

*Abstract of bids for dredging in Oakland Harbor, Cal., opened Apr. 29, 1916, by Lieut Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Price per cubic yard.	Total for 520,000 cubic yards.
	Cents.	
Standard American Dredging Co., San Francisco, Cal.....	8	\$41,600.00
San Francisco Bridge Co., San Francisco, Cal.....	7.87	40,924.00
American Dredging Co., San Francisco, Cal.....	7.23	37,596.00

*Abstract of bids for dredging in Redwood Creek, Cal., opened May 22, 1916, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Price per cubic yard.	Amount of bid.
	Cents.	
San Francisco Bridge Co., San Francisco, Cal.....	6.48	\$4,212.00

*Abstract of bids for dredging in Oakland Harbor, Cal., opened at San Francisco, Cal., Aug. 31, 1915, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Price per cubic yard.	Total for 520,000 cubic yards.
	Cents.	
C. E. Cotton, San Francisco, Cal.....	14.9	\$77,480.00
American Dredging Co., San Francisco, Cal.....	12.5	65,000.00
Standard American Dredging Co., San Francisco, Cal.....	11 $\frac{1}{2}$	60,450.00
San Francisco Bridge Co., San Francisco, Cal.....	9.87	51,324.00
W. J. Schmidt, Berkeley, Cal.....	15.5	80,600.00

*Abstract of bids for hire and operation of 1 clamshell dredge, 1 tugboat, and 2 barges for work on Napa River, Cal., opened at San Francisco, Cal., Sept. 18, 1915, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	For clamshell dredge.	For 2 bottom-dump barges (each).	For tug-boat.
	1 \$140.00	1 \$25.00	1 \$65.00
Marshall C. Harris, San Francisco, Cal.....			

1 Per day of 24 hours.

*Abstract of bids received for the hire of a gasoline launch and 1 or more lighters for use in connection with the work of rebuilding the jetties at entrance to Humboldt Bay, Cal., opened Sept. 25, 1915, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	For launch.	For lighters.
Coggeshall Launch Co., Eureka, Cal.	\$8 per day, or \$1.50 per hour when used for fractional part of a day.	\$2.50 per hour for each lighter, or 50 cents per hour when used for fractional part of a day.

*Abstract of bids for repairing bulkhead along Sausal Creek (Alameda Canal), Cal., opened Nov. 1, 1915, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Amount.
Hyde Harjes & Co., San Francisco, Cal.	\$580
Mervy-Elwell Co., Oakland, Cal.	485
Healy-Tibbitts Construction Co., San Francisco, Cal.	866

*Abstract of bids for hire and operation of one clamshell dredge for work in Petaluma Creek, Cal., opened Nov. 8, 1915, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Amount.
American Dredging Co., San Francisco, Cal.	\$125 per day.

*Abstract of bids for hire and operation of launch and skiff, for use on surveys, opened Feb. 19, 1916, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Amount.
Wm. D. Nutz, Vallejo, Cal.	\$9 per day for launch, 50 cents per day for skiff.
W. B. Ortleay, Alviso, Cal.	\$8.50 per day for launch, 50 cents per day for skiff.
Louis Chamberlain, San Francisco, Cal.	\$12 per day for launch, 50 cents per day for skiff.

#### WRECKS.

*Abstract of bids for removing wreck of schooner "Orient" from Oakland Harbor, Cal., opened Apr. 29, 1916, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Amount.
San Francisco Bridge Co., San Francisco, Cal.	\$1,100
American Dredging Co., San Francisco, Cal.	899
Melvin A. Taylor, San Francisco, Cal.	928

*Abstract of bids for removing wreck of schooner "Anna Aden" from San Francisco Bay, Cal., opened at San Francisco, Cal., Aug. 16, 1915, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Amount.
G. O. Abrahamson, San Francisco.	\$640
Whitelaw Wrecking Co., San Francisco.	585
Oakland Launch & Tugboat Co., Oakland, Cal.	470

*Abstract of bids for removal of wreck of schooner "Lettitia" from San Francisco Bay, Cal., opened Oct. 4, 1915, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Amount.
American Dredging Co., San Francisco, Cal.....	\$1,875
Whitelaw Wrecking Co., San Francisco, Cal.....	740

*Abstract of bids for removal of wreck of barge "City of Panama" from San Francisco Bay, Cal., opened Jan. 20, 1916, by Lieut. Col. Thos. H. Rees, Corps of Engineers.*

Name and address of bidder.	Amount.
Martin Lund, San Francisco, Cal.....	\$13,400
San Francisco Bridge Co., San Francisco, Cal.....	19,800
Whitelaw Wrecking Co., San Francisco, Cal.....	11,400
Melvin A. Taylor, East Oakland, Cal.....	9,280
Charles W. Johnston, Lewes, Del.....	12,845

### SAN FRANCISCO (CAL.), THIRD DISTRICT.

[Officer: Maj. L. H. Rand, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of bids for hire and operation of dredging plant for work in San Joaquin River, Cal. (completion of cut-off C), opened at San Francisco, Cal., by Maj. L. H. Rand, Corps of Engineers, Aug. 9, 1915.*

[Appropriation: "Improving San Joaquin River, Cal., 9-foot channel and cut-offs."]

Bidder.	Price per hour.	Dredge.	Engine (horse-power).	Bucket (cubic yards).	Weight of bucket.	Boom (feet).	Auxiliary plant.
1. California Delta Farms (Inc.), Stockton, Cal. <sup>1</sup>	\$7.30	Holland...	150	4	Tons. $7\frac{1}{2}$	165	Necessary towboats and oil barges for supply of dredger.
2. American Dredging Co., San Francisco, Cal. <sup>2</sup>	6.85	Uncle Sam	500	5	9	152	1 oil barge, 2 skiffs, 1 extra 5-yard bucket, 1 gasoline launch.
3. Olympian Dredging Co., San Francisco, Cal. <sup>3</sup>	{ 9.00 10.00	Jupiter.... Trojan....	500 600	4 $\frac{1}{2}$ $5\frac{1}{2}$	Pounds. 20,715 25,950	168 205	Launch. Do.

<sup>1</sup> Authority of G. A. Atherton, general manager, to bind the corporation not furnished. Revenue stamps omitted, but furnished subsequent to opening.

<sup>2</sup> The capacity in which Marshal C. Harris signed for American Dredging Co. not stated, and his authority for signing for the company not furnished. Guaranty deficient in omission of date of bid guaranteed. Signature of resident assistant secretary of indemnity company not attested. Boom specified will permit depositing material at perpendicular distance of 104 feet 6 inches from clearance side line of hull (115 feet specified in par. 20 of specifications).

<sup>3</sup> Certified check accompanied this proposal. The authority of Mr. Stetson, secretary, to bind the company not furnished. Bid submitted contingent upon permission to operate nights and water enough to float dredger into and out of location of work to navigable water. Bid received at 10.02 a. m.

*Abstract of bids for fuel oil and engine distillate opened at San Francisco, Cal., by Maj. L. H. Rand, Corps of Engineers, Apr. 1, 1916, for use of floating plant in third San Francisco, Cal. engineer district.*

[Appropriations: Improving San Joaquin River, Cal., maintenance; maintenance and improvement of existing river and harbor works, 1915 (Sacramento and Feather Rivers, Cal.); funds contributed for improvement of Sacramento and Feather Rivers, Cal., special fund.]

Name and address of bidder.	Fuel oil.		Distillate.	
	Delivery.	Price.	Delivery.	Price.
<i>Not less than 14°.</i>		<i>48 to 50°.</i>		
1. Standard Oil Co., San Francisco, Cal.	F. o. b. dredges..... Pittsburgh..... Richmond..... San Francisco..... Oakland..... Sacramento.....	Bbl. .90 .90 .90 .90 1.10	F. o. b. dredges..... San Francisco..... Oakland..... Richmond..... Martinez..... Sacramento..... Sausalito..... Pittsburg Landing..... Collinsville..... Jersey..... Los Medanos..... Dutton Island.....	Gal. \$1.10 .075 .075 .075 .075 .08 .08 .08 .08 .08 .08
<i>Not heavier than 14°.</i>				
2. Shell Co. of California, San Francisco, Cal.	F. o. b. dredges..... Martinez..... San Francisco.....	.92 <sup>1</sup> .90 .90	No bid.....	
<i>50°.</i>				
3. Associated Oil Co., San Francisco, Cal.	No bid.....		Avon..... Sacramento..... Stockton..... San Francisco.....	.07 .08 .08 .075

<sup>1</sup> Bulk.

*Abstract of proposals for wooden pontoons for United States dredges "Sacramento" and "San Joaquin," opened at San Francisco, Cal., Mar. 1, 1916, by Maj. L. H. Rand, Corps of Engineers.*

[Appropriation: Maintenance and improvement of existing river and harbor works, Sacramento and Feather Rivers, Cal., work at mouth.]

Name and address of bidder.	Amount.
1. W. G. Tibbitts & Co., San Francisco, Cal.....	\$4,995.00
2. Geo. W. Kneass, San Francisco, Cal.....	5,370.00
3. John Twigg & Sons, San Francisco, Cal.....	3,950.00
4. Jas. Robertson, Benicia, Cal.....	3,700.00
5. Wm. S. Brusstar, Jr., Oakland, Cal.....	3,225.00
6. Johnson & Lanteri, Pittsburg, Cal.....	4,446.30
7. Schultze & Schultze, San Francisco, Cal.....	5,420.00
8. United States navy yard, Mare Island, Cal.....	5,000.00
9. Nunes Bros., Sacramento, Cal.....	4,360.00
10. Joseph Supple, Portland, Oreg.....	4,800.00
11. Chas. E. Fulton, San Pedro, Cal.....	14,975.00
12. Schnebly, Hostrawser & Pedgrift, Oakland, Cal.....	6,460.00
13. Benj. Dallerup, San Francisco, Cal.....	4,984.00

<sup>1</sup> At San Francisco.

*Abstract of bids for leasing barge for use in connection with dredging operations at mouth of Sacramento River, Cal., opened at San Francisco, Cal., Sept. 15, 1915, by Maj. L. H. Rand, Corps of Engineers.*

[Appropriation: Funds contributed for improvement of Sacramento and Feather Rivers, Cal., special fund.]

Name and address of bidder.	Name or number of barge proposed.	Capacity in tons.	Price bid per month.
1. Oakland Launch & Tugboat Co., Oakland, Cal.....	No. 1.....	150	\$65.00
2. Schultz, Robertson & Schultz, San Francisco, Cal.....	S. R. S., No. 1.....	200	97.00
3. Crowley Launch & Tugboat Co., San Francisco, Cal.....	Crowley, No. 2.....	125	75.00
	{ Not given .....	150	50.00
4. San Francisco Bridge Co., San Francisco, Cal.....	.....do.....	250	60.00
	.....do.....	400	75.00
5. William D. Nutz, Vallejo, Cal.....	Eva.....	100	45.00
6. J. C. Freese, San Francisco, Cal.....	No. 21.....	140	60.00

### PORLAND (OREG.) FIRST DISTRICT.

(Officer: Maj. Arthur Williams, Corps of Engineers.)

#### RIVERS AND HARBORS.

*Abstract of proposals for alterations and repairs to U. S. dredge Col. P. S. Michie, received in response to advertisement dated Feb. 14, 1916, and opened Feb. 28, 1916, by Lieut. Col. Chas. L. Potter, Corps of Engineers, Portland, Oreg.*

[Maintenance and improvement of existing river and harbor works; for Coos Bay, Oreg.]

Designation.	Name and address of bidder.		
	McAllister & Son, Portland, Oreg.	Vulcan Iron Works, Portland, Oreg.	Willamette Iron & Steel Works, Portland, Oreg.
1.....per job.....	\$1,125.00	\$1,100.00	\$1,992.00
2.....do.....	180.00	175.00	145.00
3a.....per pound.....	.14	.15	.95
3b.....per job.....	321.26	300.00	185.00
3c.....do.....	168.00	175.00	145.00
5a.....do.....	198.60	187.00	90.00
5c.....do.....	164.50	157.50	95.00
6b.....do.....	81.00	75.00	76.00
8.....do.....	235.00	185.00	214.00
14b.....do.....	123.60	99.00	584.00
15.....each.....	14.75	16.50	53.00
18.....per job.....	1,451.25	1,406.00	1,375.00
19.....do.....	142.00	150.00	80.00
21.....do.....	245.00	265.00	152.00
22.....do.....	121.00	140.00	127.00
23a.....each.....	75.00	40.00	35.00
23c.....per job.....	105.00	85.00	120.00
23d.....do.....	115.00	65.00	60.00
23e.....do.....	237.00	245.00	480.00
23f.....do.....	139.00	145.00	210.00
23g.....do.....	194.00	185.00	285.00
23h.....do.....	4,427.60	4,135.00	4,375.00
23i.....do.....	453.00	485.00	278.00
23j.....each.....	91.00	82.00	48.50
23k.....do.....	6.00	9.00	9.50
23m.....per job.....	159.00	178.00	110.00
26.....do.....	90.00	75.00	115.00
3d.....per c. s. f.....	3.50	3.30	2.50
4a.....each.....	18.00	16.00	5.65
4b.....do.....	22.00	24.00	18.00
5b.....per job.....	40.00	35.00	52.00
5d.....per linear foot.....	.08 $\frac{1}{2}$	.09	.15
5e.....do.....	.16	.15	.25
5f.....per head.....	.24	.25	.25
6a.....per job.....	120.00	103.00	92.00
6c.....each.....	15.00	12.50	15.00

*Abstract of proposals for alterations and repairs to U. S. dredge Col. P. S. Michie, received in response to advertisement dated Feb. 14, 1916, and opened Feb. 28, 1916, by Lieut. Col. Chas. L. Potter, Corps of Engineers, Portland, Oreg.—Continued.*

Designation.	McAllister & Son, Portland, Oreg.	Vulcan Iron Works, Portland, Oreg.	Name and address of bidder.
6d.....	each.....	\$14.00	Willamette Iron & Steel Works, Portland, Oreg.
6e.....	do.....	45.00	\$22.50
7.....	per job.....	160.00	27.50
9.....	do.....	25.00	210.00
10.....	do.....	40.00	30.00
11.....	do.....	22.50	12.00
12.....	each.....	8.00	32.00
13.....	per job.....	341.00	17.00
14a.....	do.....	114.50	192.00
14c.....	per pound.....	2.05	284.00
14d.....	each.....	7.75	1.70
14e.....	do.....	18.00	14.05
14e.....	do.....	5.00	16.00
14f.....	do.....	11.00	6.00
14f.....	do.....	3.25	31.50
14g.....	do.....	1.65	14.50
14g.....	do.....	.80	2.50
14h.....	each wire.....	5.75	10.00
14i.....	do.....	1.90	10.00
14j.....	each.....	2.80	6.00
14k.....	do.....	7.25	10.00
14k.....	per stud.....	1.90	2.50
14l.....	each.....	3.10	18.25
14m.....	do.....	10.25	10.00
14m.....	per stud.....	2.75	2.50
14n.....	each.....	9.00	9.00
14n.....	do.....	3.25	3.25
14o.....	do.....	8.75	14.00
14p.....	do.....	15.00	16.00
14p.....	per stud.....	2.75	4.50
14q.....	each.....	8.00	19.25
14r.....	do.....	8.25	15.00
14r.....	per stud.....	2.25	4.50
14s.....	each.....	4.40	6.50
14t.....	do.....	4.75	6.00
14u.....	per job.....	115.00	35.00
14v.....	do.....	263.80	260.00
14w.....	do.....	171.50	165.00
16a.....	each.....	1.25	2.25
16a.....	do.....	1.25	1.25
16b.....	do.....	1.30	4.50
16b.....	do.....	1.25	3.00
16c.....	do.....	1.30	5.50
16c.....	do.....	1.25	4.00
16d.....	do.....	1.10	2.25
16d.....	do.....	1.00	1.25
16e.....	do.....	1.50	2.50
16e.....	do.....	1.40	1.50
16f.....	per job.....	27.50	60.00
16g.....	each.....	.75	2.25
16h.....	do.....	1.15	4.75
16i.....	do.....	1.50	5.25
17a.....	per job.....	378.50	325.00
17b.....	each side.....	25.00	145.00
17c.....	per job.....	290.00	182.00
20.....	do.....	490.00	(1)
23b.....	each.....	50.00	48.00
23i.....	do.....	42.50	9.50
24.....	per pound.....	.06	.06
24.....	do.....	.09	.06
24.....	per linear foot.....	.05	.08
24.....	do.....	.05	.10
24.....	per hour.....	.75	.85
24.....	do.....	1.25	1.50
24.....	do.....	.75	.85
24.....	do.....	.45	.60
24.....	do.....	.75	1.00
24.....	do.....	.75	.85
24.....	do.....	.45	.60
24.....	do.....	1.20	1.50

<sup>1</sup> No figure.

*Abstract of proposals for alterations and repairs to U. S. dredge Col. P. S. Michie, received in response to advertisement dated Feb. 14, 1916, and opened Feb. 28, 1916, by Lieut. Col. Chas. L. Potter, Corps of Engineers, Portland, Oreg.—Continued.*

Designation.	Name and address of bidder.		
	McAllister & Son, Portland, Oreg.	Vulcan Iron Works, Portland, Oreg.	Willamette Iron and Steel Works, Portland, Oreg.
24.....per hour.....	\$1.75	\$1.50	\$1.25
24.....do.....	.75	.75	.50 <sup>50</sup>
24.....do.....	.75	.75	.85
24.....per pound.....	.50	.50	.38
24.....do.....	.45	.45	.45
25.....do.....	.38	.35	.50 <sup>50</sup>
27.....each.....	257.50	245.00	170.00
29.....do.....	74.00	62.00	75.00 <sup>00</sup>

Bid of Vulcan Iron Works accepted.

TIME REQUIRED TO COMPLETE CONTRACT.

McAllister & Son, 43 days from date of notice of acceptance of proposal.

Vulcan Iron Works, 35 days from date of notice of acceptance.

Willamette Iron & Steel Works, 30 days after receiving castings for stern tube casings.

*Abstract of proposals for furnishing 100,000 tons of rock for construction of north jetty at mouth of Nehalem River, Oreg., received in response to advertisement dated Jan. 21, 1916, and opened Feb. 21, 1916, by Lieut. Col. Chas. L. Potter, Corps of Engineers, Portland, Oreg.*

[Maintenance and improvement of existing river and harbor works and funds contributed by the port of Nehalem (equally from each).]

Name and address of bidder.	Price per ton of 2,000 pounds.			Time required to establish average monthly delivery.
	Bid A. Delivery f. o. b. cars on South Jetty siding.	Bid B. Delivery f. o. b. barges moored alongside North Jetty Wharf.	Bid C. Delivery f. o. b. cars at shore end of North Jetty.	
1. Robert Wakefield, Portland, Oreg. <sup>1</sup> .....	\$1.10	\$1.30	<sup>1</sup> \$1.34	Bid A, 60 days; bid B, 60 days; bid C, 60 days.
2. E. T. Johnson, Portland, Oreg. ....	1.17	<sup>(2)</sup> 1.30	<sup>(2)</sup> 1.30	Bid A, 60 days.
3. The Miami Quarry Co., Portland, Oreg. ....	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	Bid B, 90 days.
4. Southwestern Construction Co., Los Angeles, Cal. ....	<sup>(2)</sup>	<sup>(2)</sup>	1.58	Bid C, 100 days.

<sup>1</sup> Bid C recommended for acceptance.

<sup>2</sup> No bid.

*Abstract of bids for enlarging and repairing receiving wharves and tramway and extending north and south jetties at mouth of Siuslaw River, Oreg., opened by Lieut. Col. Jay J. Morrow, Corps of Engineers, at Portland, Oreg., July 12, 1915, received in response to advertisement dated June 12, 1915.*

Material.	Quantity.	Name and address of bidder.						
		Johnson-Anderson Co., Portland, Oreg.		The Miami Quarry Co., Portland, Oreg. <sup>1</sup>		Beers Building Co., Portland, Oreg.		
		Price.	Amount.	Price.	Amount.	Price.	Amount.	
Piles.....	linear feet..	34,000	\$0.20	\$6,800.00	\$0.25	\$8,500.00	\$0.30	\$10,200.00
Lumber.....	feet b. m.	220,500	20.00	4,410.00	30.00	6,615.00	22.00	4,851.00
Drift bolts.....	pounds.	9,600	.05	480.00	.05	480.00	.05	480.00
Old rails relaid.....	feet of track.	10,320	.10	1,032.00	.12	1,238.40	.50	5,160.00
Wire spikes.....	pounds.	1,050	.05	52.50	.05	52.50	.06	63.00
Ship spikes.....	do.....	3,100	.06	186.00	.05	155.00	.05	155.00
Stone.....	tons.	179,000	.94	168,260.00	.89	159,310.00	.87	155,730.00
Straps and stirrups.....	pounds.	450	.10	45.00	.05	22.50	.05	22.50
Bolts.....	do.....	450	.10	45.00	.05	22.50	.05	22.50
Steel-point shoes.....	each..	50	5.00	250.00	3.50	175.00	4.00	200.00
Total.....				181,560.50		176,570.90		176,884.00

Material.	Quantity.	Name and address of bidder.				
		Porter Bros. Co., Portland, Oreg.		I. N. Day, Portland, Oreg.		
		Price.	Amount.	Price.	Amount.	
Piles.....	linear feet..	341,000	\$0.25	\$8,500.00	\$0.25	\$8,500.00
Lumber.....	feet b. m.	220,500	22.00	4,851.00	22.00	4,851.00
Drift bolts.....	pounds.	9,600	.047	451.20	.04	384.00
Old rails relaid.....	feet of track.	10,320	.10	1,032.00	.10	1,032.00
Wire spikes.....	pounds.	1,050	.049	51.45	.05	52.50
Ship spikes.....	do.....	3,100	.05	155.00	.07	217.00
Stone.....	tons.	179,000	.96	171,840.00	.94	168,260.00
Straps and stirrups.....	pounds.	450	.08	36.00	.05	22.50
Bolts.....	do.....	450	.05	22.50	.09	40.50
Steel-point shoes.....	each..	50	6.80	340.00	5.00	250.00
Total.....				187,279.15		183,609.50

<sup>1</sup> Recommended for acceptance.

### PORTLAND (OREG.), SECOND DISTRICT.

[Officer: Maj. Henry C. Jewett, Corps of Engineers.]

#### RIVERS AND HARBORS.

*Abstract of proposals for fuel barges, opened at United States Engineer office, second district, Portland, Oreg., July 15, 1915, in response to advertisement dated June 15, 1915.*

[Appropriation: Maintenance and improvement of existing river and harbor works, allotment for Columbia and lower Willamette Rivers below Portland, Oreg.]

Name and address of bidder.	Prices bid each for 2 barges.	Total.
1. St. Johns Ship Building Co., Portland, Oreg.....	\$4,487.50	\$8,975.00
2. Wilson Bros., Astoria, Oreg.....	4,690.00	9,380.00
3. St. Helens Ship Building Co., St. Helens, Oreg.....	4,700.00	9,400.00
4. Portland Shipyard, Portland, Oreg.....	4,800.00	9,600.00
5. Joseph Supple, Portland, Oreg.....	5,000.00	10,000.00

<sup>1</sup> Lowest bid; accepted.

*Abstract of proposals for cement, opened at United States Engineer office, second district, Portland, Oreg., Oct. 7, 1915, in response to advertisement dated Sept. 7, 1915.*

[Appropriation: Improving Willamette River, Oreg., for Willamette Falls.]

Contents of bid.	Name and address of bidder.		
	1. Washington Portland Cement Co., Portland, Oreg.	2. Standard Portland Cement Corporation, San Francisco, Cal.	3. Henry Cowell Lime & Cement Co., Portland, Oreg.
Price bid per barrel (not including sacks). F. o. b. cars at.....	\$1.55.	\$1.40.....	\$1.45.
Government freight rate per barrel from shipping point to Oregon City, Oreg.	Concrete, Wash.....	Napa Junction, Cal.....	Cowell, Cal.
Cost per barrel, f. o. b. cars, Oregon City, Oreg.	\$0.23883.....	\$0.07562.....	\$0.12318.
Quantity..... barrels.	\$1.81883.....	\$1.47562.....	\$1.57318.
Total cost, f. o. b. cars, Oregon City, Oreg.	10,000.....	10,000.....	10,000.
Brand of cement proposed to be furnished.	Washington.....	\$14,756.20 <sup>1</sup> .....	\$15,731.80.
Weight per barrel..... pounds.	376.....	Standard.....	Mount Diablo.
Charge to the United States for each sack lost or damaged, cents.	10.....	376.....	380.
		10.....	10.

Contents of bid.	Name and address of bidder.		
	4. Balfour-Guthrie & Co., Seattle, Wash.	5. Pacific Portland Cement Co., Consolidated, San Francisco, Cal.	6. Geo. N. Short, Butte, Mont.
Price bid per barrel (not including sacks). F. o. b. cars at.....	\$1.55.....	\$1.45.....	\$1.25.
Government freight rate per barrel from shipping point to Oregon City, Oreg.	Bellingham, Wash.....	Tolena, Cal.....	Trident, Mont.
Cost per barrel, f. o. b. cars, Oregon City, Oreg.	\$0.23883.....	\$0.05978.....	\$0.665.
Quantity..... barrels.	\$1.81883.....	\$1.50978.....	\$1.915.
Total cost, f. o. b. cars, Oregon City, Oreg.	10,000.....	10,000.....	10,000.
Brand of cement proposed to be furnished.	Olympic.....	Golden Gate.....	Red Devil.
Weight per barrel..... pounds.	376.....	376.....	380.
Charge to the United States for each sack lost or damaged, cents.	10.....	10.....	10.

<sup>1</sup> Lowest cost to the United States, f. o. b. cars at Oregon City, Oreg.; accepted.

*Abstract of proposals for repairing U. S. dredge "Chinook," opened at United States Engineer office, second district, Portland, Oreg., Feb. 11, 1916, in response to advertisement dated Jan. 12, 1916.*

[Appropriation: Maintenance and improvement of existing river and harbor works, allotment for mouth of Columbia River, Oreg. and Wash.]

Work.	Specifica- tions para- graph—	Name and address of bidder.			
		1. Albina Engine & Machine Works, Portland, Oreg.	2. Portland Iron Works, Portland, Oreg.	3. Helser & Uden Machine works (Inc.), Port- land, Oreg.	4. John Wood Iron Works, Portland, Oreg.
Dry dock, clean and paint.	28	\$3,518.00	\$6,313.00	\$4,325.00	\$11,250.00
Rudder work.	29	795.80	703.00	512.00	884.00
Bin-gate work.	30	620.80	796.00	380.00	349.00
Gate-rod work.	31	2,560.85	2,520.00	2,375.00	2,100.00
Bin repair work (estimated).	32	2,334.00	2,100.00	2,560.00	2,215.00
Stern-bearing and tail-shaft work.	33	1,590.60	1,574.00	1,515.00	2,500.00
Bin-gate machinery work.	34	233.20	223.00	206.50	300.00
Steering-engine work.	35	126.50	135.00	92.00	175.00
Stern-winch work.	36	140.80	108.00	124.00	155.00
Wheelhouse work.	37	66.00	49.00	70.00	100.00
Anchor-chain work.	38	17.60	15.00	27.00	30.00
20-inch pipe support work.	39	7,775.70	11,953.00	8,254.00	9,900.00
Fuel-oil pipe work.	40	185.70	318.00	254.00	400.00
Forward quarters work.	41	273.35	327.00	450.00	300.00
Spea ing-tube work.	42	91.75	95.00	90.00	75.00
Lattice boom work.	43	366.50	133.00	350.00	200.00
Discharge-chute work.	44	161.70	118.00	196.00	200.00
Water-tank work.	45	51.50	33.00	65.00	60.00
Main engine work.	46	1,176.45	2,023.00	1,576.00	1,400.00
Dynamo-engine work.	47	123.20	82.00	135.00	225.00
Boiler work.	48	121.00	172.00	150.00	145.00
30-inch pump and engine work.	49	1,564.75	2,360.00	1,614.00	1,200.00
20-inch pump and engine work.	50	1,705.00	1,445.00	1,609.00	2,050.00
Piping work.	51	781.65	726.00	292.00	900.00
Total.		1 26,382.40	34,321.00	27,311.50	37,113.00

<sup>1</sup> Lowest cost to the United States; accepted.

*Abstract of proposals for fuel oil, opened at United States Engineer office, second district, Portland, Oreg., June 5, 1916, in response to advertisement dated May 6, 1916.*

[Appropriations: Improving mouth of Columbia River, Oreg. and Wash.; Columbia and lower Willamette Rivers below Portland, Oreg.; Cowlitz and Lewis Rivers, Wash.; Clatskanie River, Oreg.; and Coos Bay, Oreg.]

Name and address of bidder.	Approximate quantity, 70,000 barrels, with delivery of—		Total.
	30,000 barrels from docks.	40,000 barrels from barges.	
1. Standard Oil Co. (California), Richmond, Cal.	Barrel. \$1.10	Barrel. \$1.15	\$79,000
2. Union Oil Co. (California), San Francisco, Cal.	1.10	1.15	79,000

The proposal of Standard Oil Co. (California) was accepted. It was in accordance with this office's specifications, and that company has the best facilities at Astoria, Oreg., for delivering fuel oil to dredges. The Union Oil Co.'s proposal was not in accordance with specifications, and their facilities for delivering fuel oil to dredges at Astoria, Oreg., are not so good as the Standard Oil Co.'s.

## SEATTLE (WASH.) DISTRICT.

[Officer: Lieut. Col. J. B. Cavanaugh, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for construction of Tainter gates received by Lieut. Col. J. B. Cavanaugh, Corps of Engineers, in response to advertisement dated Jan. 17, 1916, opened Feb. 16, 1916.*

[Improving waterway connecting Puget Sound with Lakes Union and Washington, entrance to Salmon Bay.]

Item.	1. Westerman Iron Works, Seattle, Wash. <sup>1</sup>		2. National Steel Construction Co., Seattle, Wash. <sup>1</sup>		3. United States Steel Products Co., Seattle, Wash. <sup>2</sup>	
	Unit price.	Total.	Unit price.	Total.	Unit price.	Total.
Class A, 105,500 pounds	\$0.101	\$10,655.50	\$0.08	\$8,440.00	\$0.0573	\$6,045.15
Class B, 5,600 pounds	.21	1,176.00	.15	840.00	.1803	1,009.68
Class C, 19,500 pounds	.18	3,510.00	.20	3,900.00	.1035	2,018.25
Class D, 4,400 pounds	.275	1,210.00	.20	880.00	.1815	798.60
Class E, 1,100 pounds	1.28	1,408.00	1.25	1,375.00	1.6980	1,867.80
Class F, 2,940 pounds	.135	396.90	.0725	213.15	.1197	351.92
Total bid f. o. b. works		18,356.40		15,648.15		12,091.40
Estimated freight cost to Ballard, Wash.		40.50		40.50		408.40
Time stated in bid for delivery f. o. b. works	120		45		200	
Time (estimated) required to deliver from works	1		1		14	
Total days delivered at locks	121		46		214	
Time difference in delivery (par. 24, specifications), days at \$20	75	1,500.00			168	3,360.00
Total for comparison		18,896.90		15,688.65		15,859.80

Item.	4. Minneapolis Steel & Machinery Co., Minneapolis, Minn. <sup>3</sup>		5. S. B. Harding, Chicago, Ill. <sup>4</sup>	
	Unit price.	Total.	Unit price.	Total.
Class A, 105,500 pounds	\$0.0625	\$6,593.75	\$0.0545	\$5,749.75
Class B, 5,600 pounds	.185	1,036.00	.125	700.00
Class C, 19,500 pounds	.12	2,340.00	.102	1,989.00
Class D, 4,400 pounds	.35	1,540.00	.085	374.00
Class E, 1,100 pounds	1.25	1,375.00	.84	924.00
Class F, 2,940 pounds	.085	249.90	.095	279.30
Total bid f. o. b. works		13,134.65		10,016.05
Estimated freight cost to Ballard, Wash.		403.79		6408.40
Time stated in bid for delivery f. o. b. works	150		60	
Time (estimated) required to deliver from works	11		14	
Total days delivered at locks	161		74	
Time difference in delivery (par. 24, specifications), days at \$20	115	2,300.00	28	560.00
Total for comparison		15,838.44		10,984.45

<sup>1</sup> Place of delivery, Seattle, Wash.<sup>2</sup> Place of delivery, Chicago, Ill.<sup>3</sup> Place of delivery, Minneapolis, Minn.<sup>4</sup> Place of delivery, Milwaukee, Wis., or Chicago, Ill.<sup>4</sup> Freight computed from Chicago, Ill.

*Abstract of proposals for construction of guide wall received by Lieut. Col. J. B. Cavanaugh, Corps of Engineers, in response to advertisement, opened Oct. 11, 1915.*

[Improving waterway connecting Puget Sound with Lakes Union and Washington, entrance to Salmon Bay.]

Article.	1. Weymouth Construction Co., Seattle, Wash.		2. J. A. McEachern Co., Seattle, Wash.		3. J. M. Clapp, Seattle, Wash.	
	Unit price.	Total.	Unit price.	Total.	Unit price.	Total
Round piles, creosoted, 14,500 linear feet.....	\$0.42	\$6,090.00	\$0.36	\$5,220.00	\$0.40	\$5,800.00
Lumber, creosoted, 35,600 feet b. m.....	44.00	1,566.40	36.00	1,281.60	34.00	1,210.40
Lumber, not creosoted, 94,000 feet b. m.....	24.60	2,312.40	17.00	1,598.00	17.00	1,598.00
Spikes, 900 pounds.....	.05	45.00	.04	36.00	.04	36.00
Iron and steel, 12,500 pounds.....	.065	812.50	.04	500.00	.04	500.00
Total.....		10,826.30		8,635.60		9,144.40

Article.	4. Lester & Monahan, Seattle, Wash.		5. P. E. Manson, Seattle, Wash.		6. Beer's Building Co., Seattle, Wash.	
	Unit price.	Total.	Unit price.	Total.	Unit price.	Total
Round piles, creosoted, 14,500 linear feet.....	\$0.335	\$4,857.50	\$0.40	\$5,800.00	\$0.33	\$4,785.00
Lumber, creosoted, 35,600 feet b. m.....	37.50	1,335.00	38.00	1,352.80	34.00	1,210.40
Lumber, not creosoted, 94,000 feet b. m.....	20.10	1,889.40	17.00	1,598.00	13.00	1,222.00
Spikes, 900 pounds.....	.03	27.00	.05	45.00	.06	54.00
Iron and steel, 12,500 pounds.....	.04	500.00	.05	625.00	.04	500.00
Total.....		8,608.90		9,420.80		7,771.40

*Abstract of proposals received by Lieut. Col. J. B. Cavanaugh, Corps of Engineers, for dredging, removal of cofferdams, etc., at the Lake Washington Canal Locks, opened May 31, 1916; first advertisement, May 1, 1916.*

[Improving waterway connecting Puget Sound with Lakes Union and Washington, entrance to Salmon Bay.]

Item.	1. Butler & Parry, Seattle, Wash.		2. Erickson Construction Co., Seattle, Wash.	
	Unit price.	Total.	Unit price.	Total
Dredging 33,000 cubic yards.....	\$0.49 $\frac{1}{2}$	\$16,335	\$0.32	\$10,560
Remove 560 round piles.....	4.10	2,296	1.50	840
Remove 1,500 sheet piles.....	5.10	7,650	1.75	2,625
Total.....		26,281		14,025

*Abstract of proposals received by Lieut. Col. J. B. Cavanaugh, Corps of Engineers, for construction of guide wall at the Lake Washington Canal Locks, opened May 12, 1916, first advertisement, Apr. 28, 1916.*

[Improving waterway connecting Puget Sound with Lakes Union and Washington, entrance to Salmon Bay.]

Item.	1. Seattle Pile-driving Co., Seattle, Wash.		2. Pearson Construction Co., Seattle, Wash.		3. P. Manson, Seattle, Wash.		4. Booker, Kiehl & Whipple, Seattle, Wash.	
	Unit.	Total.	Unit.	Total.	Unit.	Total.	Unit.	Total.
1. Creosoted round piles, 35,710 linear feet.....	\$0.44	\$15,712.40	\$0.46	\$16,426.60	\$0.39	\$13,926.90	\$0.394	\$14,069.74
2. Plain round piles, 1,470 linear feet.....	.20	294.00	.23	338.10	.18	264.60	.162	238.14
3. Lumber, 154,844 feet b. m.....	28.00	4,335.63	31.00	4,800.16	20.00	3,096.88	29.50	4,567.90
4. Spikes, 1,200 pounds.....	.08	96.00	.05	60.00	.05	60.00	.05	60.00
5. Iron and steel, 12,000 pounds.....	.10	1,200.00	.07	840.00	.06	720.00	.08	960.00
Total.....		21,638.03		22,464.86		18,068.38		19,895.78

Item.	5. Cross, Parry & Co., Seattle, Wash.		6. Lester & Monahan, Seattle, Wash.		7. J. A. McEachern Co. (Inc.), Seattle, Wash.		8. R. H. Travellers & Co., Seattle, Wash.	
	Unit.	Total.	Unit.	Total.	Unit.	Total.	Unit.	Total.
1. Creosoted round piles, 35,710 linear feet.....	\$0.38	\$13,569.80	\$0.36	\$12,855.60	\$0.395	\$14,105.45	\$0.40	\$14,284.00
2. Plain round piles, 1,470 linear feet.....	.15	220.50	.15	220.50	.17	249.90	.17	249.90
3. Lumber, 154,844 feet b. m.....	19.00	2,942.04	23.00	3,561.41	26.50	4,103.37	26.00	4,025.94
4. Spikes, 12,000 pounds.....	.035	42.00	.04	48.00	.055	66.00	.05	60.00
5. Iron and steel, 12,000 pounds.....	.06	720.00	.05	600.00	.08	960.00	.08	960.00
Total.....		17,494.34		17,285.51		19,484.72		19,579.84

### HONOLULU (HAWAII) DISTRICT.

[Officer: Maj. R. R. Raymond, Corps of Engineers.]

#### FORTIFICATIONS.

*Abstract of proposals for furnishing Portland cement received in response to advertisement dated Sept. 14, 1915, and opened at Honolulu, Hawaii, Sept. 24, 1915, by Lieut. Col. Chas. S. Bromwell, Corps of Engineers.*

[Appropriation: Fortifications in insular possessions, for land defenses, Hawaiian Islands.]

Name and address of bidder.	Price per barrel of 4 bags delivered at Red Hill.	Price per barrel of 4 bags delivered at wharf, Honolulu.	Allowance per empty bag returned in good condition.	Amount delivered at Red Hill.	Amount delivered on wharf, Honolulu.
1. Theo. H. Davies & Co. (Ltd.), Honolulu, Hawaii, 1,125 barrels Golden Gate.....	\$3.15	\$2.45	\$0.05	\$3,543.75	\$2,756.25
2. H. Hackfield & Co. (Ltd.), Honolulu, Hawaii, 1,125 barrels Santa Cruz.....	3.15	2.45	.05	3,543.75	2,756.25

No. 1 accepted for delivery at Red Hill and contract entered into for 1,125 barrels Golden Gate cement, at \$3.15, \$3,543.75.

Award of bid made by lot.

*Abstract of proposals for furnishing 1,200 barrels Portland cement received in response to advertisement dated Oct. 14, 1915, and opened at Honolulu, Hawaii, Oct. 25, 1915, by Lieut. Col. Chas. S. Bromwell, Corps of Engineers.*

[Appropriation: Fortifications in insular possessions.]

Name and address of bidder.	Price per barrel delivered at sea walls, Fort De Russy.	Amount.	Total cost delivered at sea walls, Fort De Russy.	Time of delivery (days).
1. Theo. H. Davies & Co. (Ltd.), Honolulu, Hawaii, 1,200 barrels Golden Gate.....	\$2.63	\$3,156	\$3,156	60
2. H. Hackfeld & Co. (Ltd.), Honolulu, Hawaii, 1,200 barrels Santa Cruz.....	2.63	3,156	3,156	60

No. 1 accepted and contract entered into for 1,200 barrels Golden Gate cement, at \$2.63 per barrel, \$3,156. Award was made by lot.

#### RIVERS AND HARBORS.

*Abstract of proposals for dredging in Honolulu Harbor, Hawaii, received in response to advertisement and opened Apr. 27, 1916, at Honolulu, Hawaii, by Maj. R. R. Raymond, Corps of Engineers.*

[Appropriation: "Maintenance and improvement of Honolulu Harbor, Hawaii."]

Name and address of bidder.	Dredging to depth of 35 feet at mean lower low tide.		
	Price per cubic yard, place measurement.	Quantity that can be removed for \$80,000.	Total cost.
1. Lord-Young Engineering Co., Honolulu, Hawaii.....	\$0.62	129,032	\$79,999.84
2. Hawaiian Dredging Co. (Ltd.), Honolulu, Hawaii.....	.53	150,943	79,999.79
3. Standard American Dredging Co., Oakland, Cal.....	.239	334,728	79,999.92

No. 3 recommended for approval.

*Abstract of proposals for dredging in Honolulu Harbor, Hawaii, received in response to advertisement dated Jan. 11, 1915, and opened Feb. 15, 1915, at Honolulu, Hawaii, by Lieut. Col. Chas. S. Bromwell, Corps of Engineers.*

[Appropriation: "Maintenance and improvement of existing river and harbor works."]

Name and address of bidder.	Cents per cubic yard, place measurement.	Cost of 260,000 cubic yards to 35-foot depth.	Cost of 77,000 cubic yards (estimated) overdepth to 37-foot depth.	Total.
1. Hawaiian Dredging Co., Honolulu, Hawaii.....	17 $\frac{1}{2}$	\$46,280.00	\$13,706.00	\$59,986.00
2. Standard American Dredging Co., San Francisco, Cal.....	24 $\frac{1}{2}$	64,350.00	19,057.50	83,407.50
3. Lord-Young Engineering Co., Honolulu, Hawaii.....	27	70,200.00	20,790.00	90,990.00

<sup>1</sup> Recommended for approval.

Abstract of proposals for dredging in Kahului Harbor, Kahului, Maui, received in response to advertisement dated July 12, 1915, and opened July 30, 1915, at Honolulu, Hawaii, by Lieut. Col. Chas. S. Bromwell, Corps of Engineers.

[Appropriation: Improving Kahului Harbor, Hawaii.]

Name and address of bidder.	Price per cubic yard, measured in cut.	Cost of 50,000 cubic yards.
1. Kahului Railroad Co., Kahului, Maui, Hawaii <sup>1</sup> .....	\$0.30	\$15,000.00

<sup>1</sup> Bid being considered reasonable and bidder entirely responsible, award was made to Kahului Railroad Co. for 50,000 cubic yards dredging, measured in the cut, at 30 cents per cubic yard. It was considered to the interest of the Government to accept bid, and emergency contract was entered into bearing date Aug. 2, 1915.

Written evidence of authority of officers signing for bidder was waived; such written evidence is, however, submitted with guaranty bond accompanying contract.

### PORTO RICO DISTRICT, NEW YORK, N. Y.

[Officer: Lieut. Col. C. H. McKinstry, Corps of Engineers.]

#### WRECK.

Abstract of proposals for removal of wreck of the Spanish dredge "Espana," sunk in San Antonio Channel, San Juan Harbor, P. R., received in response to a 10-day public notice dated Aug. 6, 1915, and opened at San Juan, P. R., Aug. 16, 1915, by Mr. A. Stierle, United States assistant engineer.

Name and address of bidder.	Amount.
1. C. Moran, San Juan, P. R.....	{ <sup>1</sup> \$3,225.00
2. P. J. Carlin Construction Co., San Juan, P. R.....	<sup>2</sup> 4,000.00
3. Paulino Pumarada, Santurce, P. R.....	3,000.00
4. Manuel Agullo, Santurce, P. R.....	2,999.99
5. John Monks & Sons, San Juan, P. R.....	2,990.00
	2,800.00

<sup>1</sup> If deposited above high-water mark.

<sup>2</sup> If deposited in deep water at sea.

Awarded to No. 5.

### SECRETARY'S OFFICE, ST. LOUIS, MO.

[Officer: Maj. Clarke S. Smith, Corps of Engineers.]

#### ABSTRACT OF PROPOSALS RECEIVED DURING THE FISCAL YEAR ENDING JUNE 30, 1916, FOR WORKS UNDER THE MISSISSIPPI RIVER COMMISSION.

Abstract of proposals for mechanical stokers for United States dredges B. M. Harrod and Henry Flad, received in response to advertisement of Maj. Clarke S. Smith, Corps of Engineers, and opened Feb. 11, 1916.

[Appropriation for maintenance and improvement of existing river and harbor works.]

Name and address of bidder.	For dredge B. M. Harrod.	For dredge Henry Flad.	Total.
1. Combustion Engineering Corporation, New York, N. Y.....	\$9,150	\$6,850	\$16,000
2. The Under-Feed Stoker Co. of America, Chicago, Ill.....	8,645	6,990	15,635
3. Paul L. Crowe, Jersey City, N. J.....	9,720	7,628	17,348

<sup>1</sup> Accepted.

*Abstract of proposals for charts and maps, received in response to advertisement of May 16, 1916, and opened by Maj. Clarke S. Smith, Corps of Engineers, June 14, 1916.*

[Appropriation for maintenance and improvement of existing river and harbor works.]

Name and address of bidder.	500 copies, each, charts Nos. 1 to 63, per 100.	200 copies, each, charts Nos. 70 to 75, 77 to 81, 150, and 187 to 189, per 100.	500 copies, each, maps Nos. 1 to 23, per 100.	200 and 400 copies, respectively, maps Nos. 28 and 107, per 100.	Total.
1. U. S. Lake Survey Office, Detroit, Mich.	\$22.00 6,930.00	\$43.00 1,290.00	\$12.00 1,380.00	\$18.00 108.00	\$9,708.00
2. Standard Map Co., Chicago, Ill.	12.67 3,991.05	20.41 612.30	5.23 601.45	6.38 38.28	5,243.08
3. The Sackett & Wilhelms Co., Brooklyn, N. Y.	12.00 3,780.00	19.60 588.00	8.14 936.10	17.50 105.00	5,409.10
4. Eckert Lithographing Co., Washington, D. C.	17.14 <sup>2</sup> 5,400.00	24.90 747.00	7.82 899.30	9.00 54.00	7,100.30
5. A. Hoen & Co., Baltimore, Md.	18.00 5,670.00	35.00 1,050.00	10.00 1,150.00	12.00 72.00	7,942.00
6. Snyder & Black (Inc.), New York, N. Y.	18.61 5,862.15	31.52 945.60	12.89 1,482.35	18.50 111.00	8,401.10
7. Breuker & Kessler Co., Philadelphia, Pa.	.....	.....	5.60 644.00	6.05 36.30	.....

## COAL.

*Abstract of proposals for furnishing coal for operations under the Mississippi River Commission, received in response to advertisement of Maj. Clarke S. Smith, Corps of Engineers, and opened Mar. 17, 1916.*

[Appropriation for maintenance and improvement of existing river and harbor works.]

Name and address of bidder.		
1. West Kentucky Coal Co., Sturgis, Ky.	2. Pittsburgh Coal Co., Pittsburgh, Pa.	
<i>1,800 tons screened lump coal.</i>		
Commercial name of coal.	Baker.	Cyrus Creek (No. 2 lump).
Name of mine or mines.	No. 7.	Cypress Creek.
Location of mine or mines.	Near Clay, Webster County, Ky.	DeKoven, Ky.
Name or other designation of coal bed or beds.	Seam No. 12.	No. 9 seam.
Name of operator of mine or mines.	West Kentucky Coal Co.	Pittsburgh Coal Co.
Moisture in delivered coal.	3.4 per cent.	3 per cent.
Percentage of ash, "dry coal".	7.	11.
Percentage of volatile matter, "dry coal".	35.	34.
Percentage of sulphur, "dry coal".	1.5.	3.
B. t. u. per pound, "dry coal".	13,500.	13,000.
Price per ton.	\$2.60 <sup>1</sup>	\$2.36.
Price adjusted:		
For ash.	\$2.52.	\$2.36.
For ash and moisture.	\$2.69.	\$2.433.
Price per 1,000,000 B. t. u. (cents).	9.663.	9.358.
Number.	2.	1.
Total cost.	\$4,696.	\$4,379.40.
<i>10,000 tons run of mine coal.</i>		
Commercial name of coal.	Tradewater.	Cypress Creek.
Name of mine or mines.	Nos. 1, 2, 8, 9.	Do.
Location of mine or mines.	Near Sturgis, Union County, Ky.	DeKoven, Ky.
Name or other designation of coal bed or beds.	Seam No. 9.	No. 9 seam.
Name of operator of mine or mines.	West Kentucky Coal Co.	Pittsburgh Coal Co.
Moisture in delivered coal.	4 per cent.	3 per cent.
Percentage of ash, "dry coal".	10.	13.
Percentage of volatile matter, "dry coal".	35.	34.
Percentage of sulphur, "dry coal".	3.	3.75.
B. t. u. per pound, "dry coal".	13,000.	12,500.
Price per ton.	\$2.15 <sup>1</sup>	\$2.16.
Price adjusted:		
For ash.	\$2.09.	\$2.16.
For ash and moisture.	\$2.177.	\$2.227.

*Abstract of proposals for furnishing coal for operations under the Mississippi River Commission, received in response to advertisement of Maj. Clarke S. Smith, Corps of Engineers, and opened Mar. 17, 1916—Continued.*

Name and address of bidder.		
1. West Kentucky Coal Co., Sturgis, Ky.	2. Pittsburgh Coal Co., Pittsburgh, Pa.	
<i>10,000 tons run of mine coal—Continued.</i>		
Price per 1,000,000 B. t. u. (cents).....	8.373.....	8.908.
Number.....	1.....	2.
Total cost.....	\$21,770.....	\$22,270.
<i>7,000 tons pea and slack coal.</i>		
Commercial name of coal.....	Tradewater.....	
Name of mine or mines.....	Nos. 1, 2, 8, 9.....	
Location of mine or mines.....	Near Sturgis, Union County, Ky.	
Name or other designation of coal bed or beds.....	Seam No. 9.....	
Name of operator of mine or mines.....	West Kentucky Coal Co.....	
Moisture in delivered coal.....	6 per cent.....	
Percentage of ash, "dry coal".....	12.....	
Percentage of volatile matter, "dry coal".....	35.....	
Percentage of sulphur, "dry coal".....	3.5.....	
B. t. u. per pound, "dry coal".....	12,250.....	
Price per ton.....	\$1.95 <sup>1</sup> .....	
Price adjusted:		
For ash.....	\$1.95.....	
For ash and moisture.....	\$2.074.....	
Price per 1,000,000 B. t. u. (cents).....	8.465.....	
Number.....	1.....	
Total cost.....	\$18,666.....	

<sup>1</sup> Accepted.

*Abstract of proposals for furnishing coal for operations under the Mississippi River Commission, received in response to advertisement of Maj. Clarke S. Smith, Corps of Engineers, and opened June 12, 1916.*

[Appropriation for maintenance and improvement of existing river and harbor works.]

1. West Kentucky Coal Co., Sturgis, Ky.		
<i>9,000 tons screened lump coal.</i>		
Commercial name of coal.....	Baker.....	Tradewater.
Name of mine or mines.....	No. 7.....	Nos. 1, 2, 8, and 9.
Location of mine or mines.....	Near Clay, Webster County, Ky.	Near Sturgis, Ky.
Name or other designation of coal bed or beds.....	No. 12 seam.....	No. 9 seam.
Name of operator of mine or mines.....	West Kentucky Coal Co.....	West Kentucky Coal Co.
Moisture in delivered coal.....	3.4 per cent.....	3.5 per cent.
Percentage of ash, "dry coal".....	7.....	10.
Percentage of volatile matter, "dry coal".....	35.....	35.
Percentage of sulphur, "dry coal".....	1.5.....	2.5.
B. t. u. per pound, "dry coal".....	13,200.....	13,000.
Price per ton.....	\$2.60.....	\$2.50.
Price adjusted:		
For ash.....	\$2.54.....	\$2.50.
For ash and moisture.....	\$2.6294.....	\$2.5907.
Price per 1,000,000 B. t. u. (cents).....	9.9598.....	9.9642.
Number.....	1.....	2.
Total cost.....	\$23,400.....	\$22,500.

<sup>1</sup> Accepted.

## FIRST AND SECOND MISSISSIPPI RIVER DISTRICTS, MEMPHIS, TENN.

[Officer: Maj. E. M. Markham, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for furnishing 90,000 cubic yards levee work, received in response to advertisement dated Oct. 27, 1915, and opened Nov. 6, 1915, by Maj. E. M. Markham, Corps of Engineers, Memphis, Tenn.*

[Appropriation for maintenance and improvement of existing river and harbor works, allotment for White River Levee District.]

Name and address of bidder.		White River Levee District, 90,000 cubic yards.	
		Per yard.	Cost.
1. Roach & Stansell, Memphis, Tenn. <sup>1</sup> .....		\$0.299	\$26,910
2. Geo. F. Ramsey, Memphis, Tenn.....		.32	28,800

<sup>1</sup> Accepted and emergency contract entered into.

## THIRD MISSISSIPPI RIVER DISTRICT, VICKSBURG, MISS.

[Officer: Maj. J. R. Slattery, Corps of Engineers.]

## RIVERS AND HARBORS.

*Abstract of proposals for enlarging and extending the existing spur levee at Ashbrook Neck, Miss., which extends from station 3563 of the main levee, lower Yazoo Levee District, above Greenville, Miss., requiring about 1,415,000 cubic yards of new and enlargement work, received in response to advertisement issued June 19, 1915, and opened July 12, 1915.*

[Improving Mississippi River, Third District, Vicksburg, Miss.]

Portion of work bid on.		1. John G. Sessions, Oldtown, Ark.		2. Roach, Stansell, Lowrance Bros. & Co., Memphis, Tenn.		3. R. L. Leonard, Memphis, Tenn.		4. Hercules Co. (Ltd.), New Orleans, La.		5. Owens Construction Co., Vicksburg, Miss.	
Section.	Cubic yards.	Price.	Cost.	Price.	Cost.	Price.	Cost.	Price.	Cost.	Price.	Cost.
1.....	148,000.....			\$0.39	\$57,720.00					\$0.40	\$59,200.00
2.....	139,000.....			.36	50,040.00					.40	55,600.00
3.....	141,000.....			.36	50,760.00					.40	56,400.00
4.....	141,000.....			.36	50,760.00					.40	56,400.00
5.....	134,000.....			.34	45,560.00	\$0.32	\$42,880.00			.40	53,600.00
6.....	136,000.....			.28	38,080.00	23.5	31,960.00			.35	47,600.00
7.....	141,000.....	\$0.29	\$40,890.00	.27	38,070.00	22.85	32,218.50			.35	49,350.00
8.....	131,000.....	.29	37,990.00	.26	34,060.00	22	28,820.00	\$0.35	\$45,850.00	.33	43,230.00
9.....	155,000.....	.29	44,950.00	.26	40,300.00	22	34,100.00			.33	51,150.00
10.....	149,000.....	.29	43,210.00	.27	40,230.00	21.5	32,035.00			.33	49,170.00
All.....	1,415,000.....					28.7	406,105.00				

All bids rejected.

Abstract of proposals for construction and delivering six steel barges, received in response to advertisement issued July 10, 1915, and opened Aug. 12, 1915 (except proposal No. 12).

[Improving Mississippi River, Third District, Vicksburg, Miss.]

Name and address of bidder.	Proposed point of delivery.	Price for each barge.	Cost of six barges.
1. Dubuque Boat & Boiler Works, Dubuque, Iowa.	Dubuque, Iowa.....	\$8,745	\$52,470
2. Chas. Hegewald Co., New Albany, Ind.	New Albany, Ind.....	9,999	59,994
3. Nashville Bridge Co.	Nashville, Tenn.....	10,450	62,700
4. New Orleans Coal Co., New Orleans, La.	New Orleans, La.....	9,845	59,070
5. Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.	Neville Island, Pittsburgh, Pa.....	10,700	64,200
6. Ed J. Howard, Jeffersonville, Ind.	Jeffersonville, Ind.....	9,943	59,658
7. Rock Island Bridge & Iron Works, Rock Island, Ill.	Rock Island, Ill.....	10,540	63,240
8. The Johnson Iron Works (Ltd.), New Orleans, La.	New Orleans, La.....	12,578	75,468
9. American Bridge Co., Frick Building, Pittsburgh, Pa.	Ambridge, Pa.....	17,500	45,000
10. The Toledo Shipbuilding Co., Toledo, Ohio.	Toledo, Ohio, fabricated with freight prepaid to Vicksburg, Miss.	13,750	82,500
11. The Dravo Contracting Co., Pittsburgh, Pa.	Neville Island, Ohio River, 10 miles below Pittsburgh.	9,150	54,900
12. Spedden Shipbuilding Co., Baltimore, Md.	Baltimore, Md.....	12,990	77,940

<sup>1</sup> Accepted.

Abstract of proposals for constructing about 243,000 cubic yards of new levee for the closure of Rosemary crevasse (241,000 cubic yards) and of a small crevasse 5 miles below Rosemary (2,000 cubic yards), Upper Tensas Levee District, Arkansas River, below Red Fork, Ark., received in response to advertisement issued May 24, 1916, and opened June 10, 1916.

[Appropriation for maintenance and improvement of existing river and harbor works, act Mar. 4, 1915, allotment for "Upper Tensas Levee District."]

Name and address of bidder.	Price per cubic yard.	Cost.
	Cents.	
1. Francis T. Constant, Alexandria, La.....	34.4	\$83,592.00
2. W. T. & E. M. Lawrence & Co., Memphis, Tenn.....	31.25	75,937.50
3. Denison & Rodgers Bros., Memphis, Tenn.....	29.7	72,171.00
4. Roach & Stansell, Memphis, Tenn.....	32	77,760.00

All bids rejected.

#### FOURTH MISSISSIPPI RIVER DISTRICT, NEW ORLEANS, LA.

[Officer: Maj. W. G. Caples, Corps of Engineers.]

##### RIVERS AND HARBORS.

Abstract of proposals, Cowpen Neck Levee, Adams County, about 6 miles above Natchez, Miss., received in response to public notice by circular letter dated or advertisement published Aug. 17, 1915, and opened at United States Engineer office, New Orleans, La., Aug. 28, 1915, by Maj. W. G. Caples, Corps of Engineers.

[Maintenance and improvement of existing river and harbor works, 1915, harbors at Natchez and Vidalia, Miss. and La.]

Name and address of bidder.	1. 140,000 cubic yards.	2. 137,000 cubic yards.	3. 148,000 cubic yards.	Total.	All or none, 425,000 cubic yards.
1. R. T. Clark & Co., Natchez, Miss.....	\$0.1843 25,802.00	\$0.1821 24,947.70	\$0.2249 33,285.20	\$84,034.90	\$0.1940 82,450.00
2. Dameron-White Co. (Ltd.), New Orleans, La.	.1749 24,486.00	.1749 23,961.30	.1749 25,885.20	74,332.50	-----
3. Gibson-Hamilton & Co., New Orleans, La.	.17 23,800.00	.17 23,390.00	.17 25,160.00	72,250.00	-----
4. The Hercules Co. (Ltd.), New Orleans, La.	.1550 21,700.00	.165 22,605.00	-----	44,305.00	-----
5. E. H. Jackson, Natchez, Miss. <sup>2</sup> .....	.1498 20,972.00	.1638 22,440.60	.2398 35,490.40	78,903.00	-----
6. John G. Sessions, Old Town, Ark.....	----- 23,673.60	.1728 -----	-----	23,673.60	-----

<sup>1</sup> Recommended for acceptance.

<sup>2</sup> Will take any of the 3 lots, not exceeding 148,000 cubic yards.

Abstract of proposals received in response to advertisement published Sept. 8, 1915, and opened at United States Engineer office, New Orleans, La., Sept. 28, 1915, by Maj. W. G. Caples, Corps of Engineers, for levee work in fourth district, improving Mississippi River.

[Appropriations: Maintenance and improvement of existing river and harbor works, 1915.]

## Atchafalaya Levee District A.

Name and address of bidder.	Latenache, 768.5-R. miles B. C., embankment and filled excavations, 104,000 cubic yards.		Belle Vista, 769.5-R miles B. C., embankment and filled excavations, 102,300 cubic yards.		Batchelor, 772-R. miles B. C., embankment and filled excavations, 104,100 cubic yards.		Normandy, 773.5-R miles B. C., embankment and filled excavations, 104,300 cubic yards.		Unique, 775-R. miles B. C., embankment and filled excavations, 101,700 cubic yards.		Grand total, 516,400 cubic yards.
	Price per cubic yard.	Amount.	Price per cubic yard.	Amount.	Price per cubic yard.	Amount.	Price per cubic yard.	Amount.	Price per cubic yard.	Amount.	
1. Gibson, Hamilton & Co., New Orleans, La.....	\$0.0923	1 \$9,599.20	\$0.0923	1 \$9,442.29	\$0.0923	1 \$9,608.43	\$0.0923	1 \$9,626.89	\$0.923	1 \$9,386.91	\$47,663.52
2. W. T. & F. M. Lowrance & Co., Memphis, Tenn.....	.1590	16,536.00	.1590	16,265.70	.1590	16,551.90	.1590	16,583.70	.1590	16,170.30	82,107.60
7. Grasser Contracting Co., New Orleans, La.....			.1675	17,135.25							17,135.25
8. Hercules Co. (Ltd.), New Orleans, La.....	.13	13,520.00	.13	13,299.00	.13	13,533.00	.13	13,559.00	.13	13,221.00	67,132.00
13. D. B. Hearn & Son, Baton Rouge, La.....	.1023	10,639.20	.1023	10,465.29	.1023	10,649.43	.1023	10,669.89	.1023	10,403.91	52,827.72
14. Dameron-White Co. (Ltd.), New Orleans, La.....	.0925	9,620.00	.0925	9,462.75	.0925	9,629.25	.0925	9,647.75	.0925	9,407.25	47,767.00

## Atchafalaya Levee District B.

Name and address of bidder.	Latenache, 768.5-R. miles B. C., embankment and filled excavations, 95,500 cubic yards.		Belle Vista, 769.5-R. miles B. C., embankment and filled excavations, 113,000 cubic yards.		Batchelor, 772-R. miles B. C., embankment and filled excavations, 95,300 cubic yards.		Normandy, 773.5-R. miles B. C., embankment and filled excavations, 100,900 cubic yards.		Unique, 775-R. miles B. C., embankment and filled excavations, 92,600 cubic yards.		Grand total, embankment and filled excavations, 497,300 cubic yards.
	Price per cubic yard.	Amount.	Price per cubic yard.	Amount.	Price per cubic yard.	Amount.	Price per cubic yard.	Amount.	Price per cubic yard.	Amount.	
1. Gibson, Hamilton Co., New Orleans, La.....	\$0.1450	\$13,847.50	\$0.1450	\$16,385.00	\$0.1450	\$13,818.50	\$0.1450	\$14,630.50	\$0.1450	\$13,427.00	\$72,108.50
2. W. T. & F. M. Lowrance & Co., Memphis, Tenn.....	.1650	15,757.50	.1650	18,645.00	.1650	15,724.50	.1650	16,648.50	.1650	15,279.00	82,054.50
7. Grasser Contracting Co., New Orleans, La.....			.1875	21,187.50							21,187.50
8. Hercules Co. (Ltd.), New Orleans, La.....	.18	17,190.00	.18	20,340.00	.18	17,154.00	.18	18,162.00	.18	16,668.00	89,514.00
13. D. B. Hearn & Son, Baton Rouge, La.....	.2023	19,319.65	.2023	22,859.90	.2023	19,279.19	.2023	20,411.07	.2023	18,732.98	100,602.79
14. Dameron-White Co. (Ltd.), New Orleans, La.....	.16	15,280.00	.16	18,080.00	.16	15,248.00	.16	16,144.00	.16	14,816.00	79,568.00

## MANILA (P. I.) DISTRICT.

[Officer: Col. Edw. Burr, Corps of Engineers.]

## FORTIFICATIONS.

*Abstract of proposals for 9,000 barrels of Portland cement, dated Dec. 24, 1915, and opened Jan. 8, 1916, by Col. Edw. Burr, Corps of Engineers.*

[Appropriation: Fortifications in insular possessions.]

Name and address of bidder.	9,000 barrels of Portland cement, per barrel.	Brand.	Total.	Original estimated cost per barrel.
1. Mitsui Bussan Kaisha (Ltd.), Manila, P. I. ....	<sup>1</sup> \$2.095	Onoda....	\$18,855.00	\$2.00

<sup>1</sup> Accepted, and emergency contract entered into Jan. 12, 1916.

