City of El Segundo

350 Main Street
El Segundo, California 90245
(213) 322-4670

ROBERT N. GIORDANO
DIRECTOR OF FINANCE

August 20, 1981

① copy for SD
② original in log

Steve Gordon, Director of Buy Quiet
N.I.G.P.
1735 Jefferson Davis Hwy, Ste.101
Arlington, VA., 22202

Dear Steve:

I want to express my appreciation for the recent "Buy Quiet" Seminar held in Inglewood, CA. It was well organized and very informative.

As you know El Segundo was one of the first to incorporate sound level requirements in our specifications. I was happy to see that you have made available, to every agency, a set of basic specifications which offer a formula incorporating encentives to encourage production of quieter equipment.

Small cities such as El Segundo do not buy such equipment often or in large quantities but I plan on using your specifications on my next bid.

Keep up the good work and please extend my thanks to all who participated in the seminar and made it such a success.

Sincerely,

Robert Gambrel,
Purchasing Supervisor

RG/sr

REQUEST FOR

BID # 75-34

CITY OF EL SEGUNDO

NOTICE TO BIDDERS
SPECIFICATIONS

Sealed bids will be received at the office of the Purchasing Officer of the City of El Segundo, 350 Main Street, El Segundo, California 90245, until 11:00 A.M. on Monday, 4-5-76 at which time bids will be publicly opened and read in the City Council Chambers.

It is requested that the sealed bids be delivered, in person or by mail, on or before the aforementioned date and time.

Specifications, bid requirements, bid sheets and additional copies of the bid package are available at the office of the Purchasing Officer.

The City Council of the City of El Segundo reserves the right to reject any or all bids, to accept or reject any item in the bid and to waive informality in the bid.

See enclosed items to be bid.

DATED: March 12, 1976

BY: R. Gambrel

City of El Segundo
R. Gambrel
Purchasing Officer

BID #75-34

CITY OF EL SEGUNDO

Specifications for a Trailer Mounted Brush Chipper

General:

The following specifications shall be considered MINIMUM requirements, and items not specifically covered shall be standard to the make and model bid. Bidder shall complete right hand column, indicating specific size and/or make and model of all components.

The vehicles covered by these specifications shall be complete with all necessary equipment and accessories, and shall conform in all respects to State of California Motor Vehicle Code, and Division of Industrial Safety Orders. All separate accessories shall be installed and connected for operation. Local parts and service facilities must be available.

The City reserves the right to reject all bids.

The City reserves the right to require all bidders to conduct a demonstration of their unit, and said demonstration must be to the satisfaction of the City of El Segundo's Director of Parks prior to completion of awarding of bid.

Determination of Needs & Requirements:

The City shall be the sole judge as to which bid best meets the needs and requirements of the City and its decision shall be accepted as final.

Bid & Performance Bonds:

For the purpose of these specifications and this bid, bid and performance bonds are waived.

NOISE EMISSION:

The City of El Segundo will use equipment specified, in close proximity to residential and business districts throughout the City. We are, therefore, concerned as to the amount of noise created by the equipment used in the city areas. We are also concerned with the noise factor as related to the operator of the equipment or other employees working close to the equipment.

We, therefore, find it necessary to ask for noise factors in relation to equipment submitted for evaluation for purchase by the City. Please fill in the ratings for equipment submitted under the bid and with readings taken under normal operating range.

Ratings will be a factor in bid evaluation and, if equipment is purchased by the City, must operate with ratings given.

96 dba at the operator's ear level, under normal operating load.

80 dba at 50 ft. from equipment operating under normal load.

Failure to list ratings may result in rejection of bid.

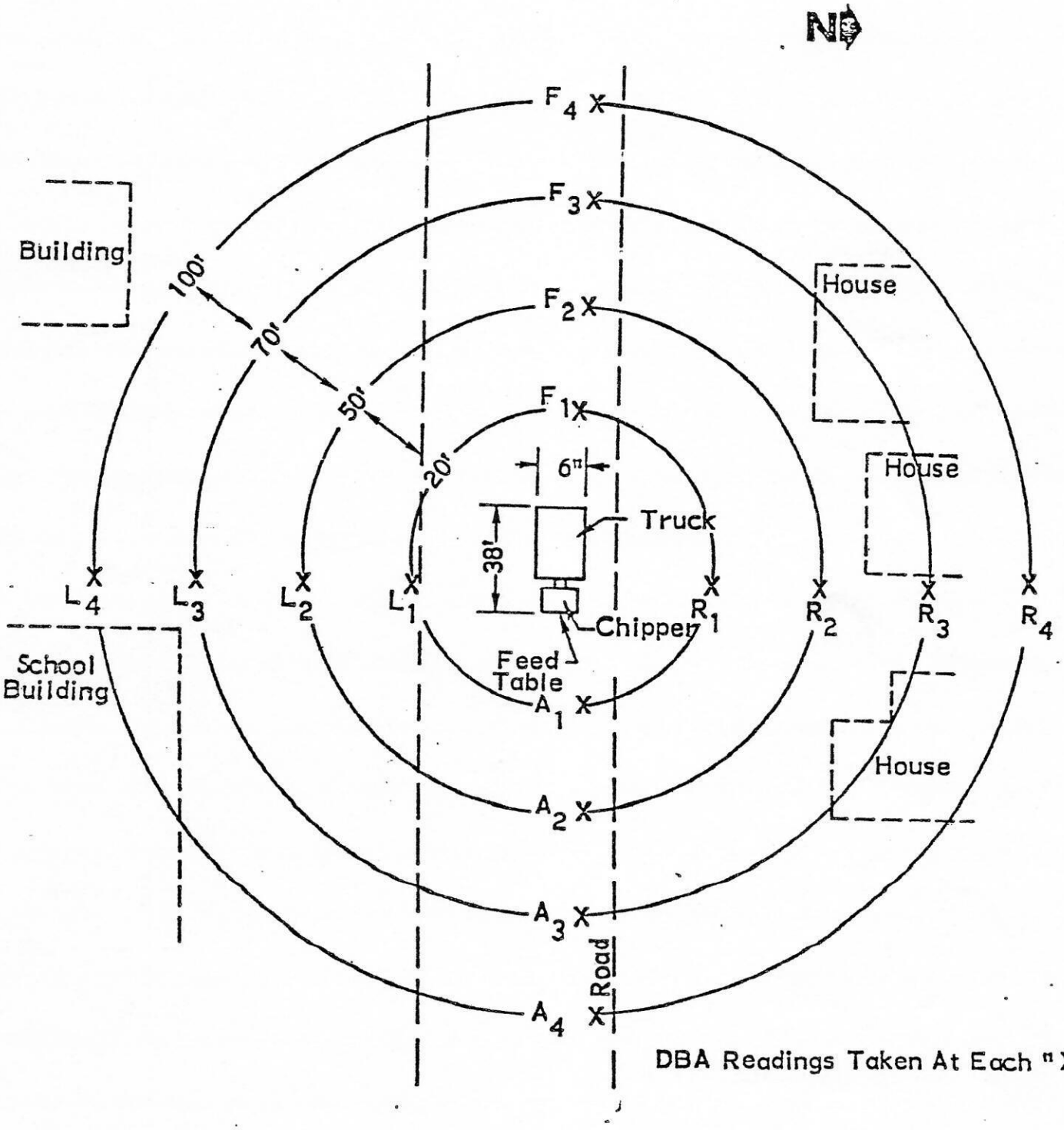


FIGURE 1 NOISE MEASUREMENT LOCATIONS

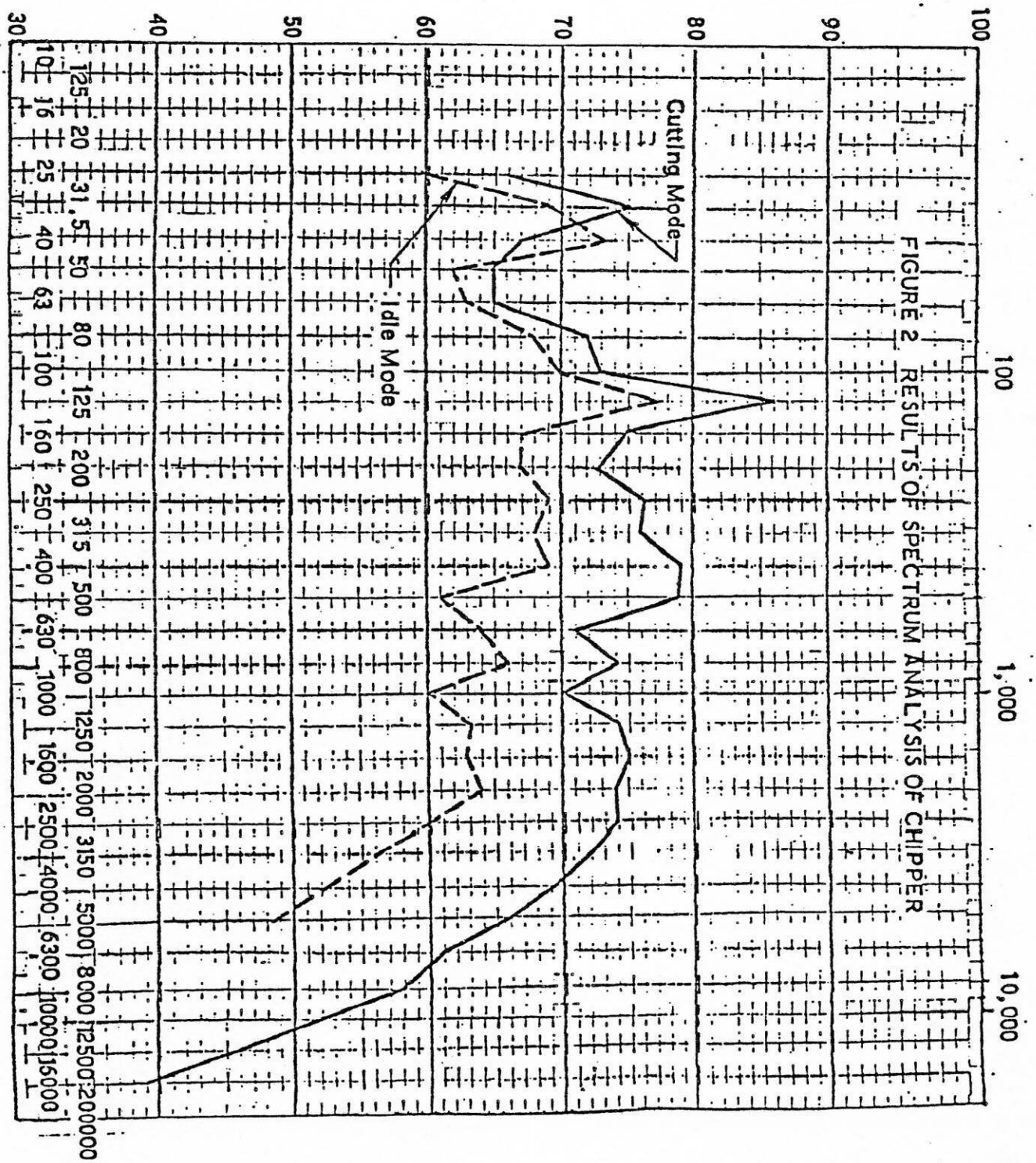


FIGURE 2 RESULTS OF SPECTRUM ANALYSIS OF CHIPPER

Table 1

NOISE LEVELS MEASURED AT LOCATIONS SHOWN IN FIGURE 1

Location #	Distance From Rear of Chipper (ft)	Noise Level (dBA)* Idle	Operational
A_1	20	80	93
A_2	50	74	85
A_3	70	71	85
A_4	100	69	79
F_1	58	64	78
F_2	88	60	75
F_3	108	58	71
F_4	138	57	68
R_1	35	75	91
R_2	63	68	86
R_3	82	66	81
R_4	112	64	80
L_1	35	77	90
L_2	63	70	85
L_3	82	68	77
L_4	112	61	76

* Sound level meter set on "fast" response.

$20 \log \frac{35}{20} = 2.3$

Table 2

A-WEIGHTED NOISE LEVEL FROM CHIPPER NORMALIZED TO 100FEET*

	Noise Level (dBA)			
	Idle Mode		Operational Mode	
Direction**	SPL	σ***	SPL	σ***
Rear	68	1.0	80	1.0
Front	58	1.4	72	2.1
Right Side	64	1.3	81	1.3
Left Side	65	1.7	77	1.9

* measured from feed table of chipper

** reference direction is facing west as shown in Figure 1.

*** σ = standard deviaiton for all noise readings normalized to 100 feet from chipper feed table. This means that approximately 66 percent of all the normalized values were within the standard deviation about the mean value shown.

ASPLUNDH MANUFACTURING DIVISION

ASPLUNDH TREE EXPERT COMPANY

CHALFONT, PENNSYLVANIA 18914 (215) 822-0542

ASPLUNDH CHIPPER – MODEL JEY SPECIFICATIONS

CHIPPING UNIT: Heavy Duty Construction as follows:

ROTOR (Cylinder), Shaft, Bearings, & Blades:

Heat treated, machined solid carbon steel casting 11½" diameter.
Solid Shaft 3" diameter both sides.
Machined and balanced, normal operating speed 1950 RPM.
Shielded, prelubricated ball bearings (no greasing required).
Equipped with four (4) "Super Chip" (high carbon-high chrome) 3/8" thick tapered x 3" wide blades, secured with quick change tapered wedges.
Wedges to have specially treated wedge locking bolts, minimum length 2½" – ½" – 13
Plugged hole in wedge for use for forcing release under unusual conditions.
Blade adjusting bolts (8) ¾" x 3 1/8" long cadmium plated, Rockwell hardness 48-52.C.
Cylinder, blades, and wedges – 12" Model – 12"
16" Model – 16"
One extra set of "Super Chip" Blades included.

CUTTER BAR AND PRESSURE BAR:

Cutter Bar 1" square high grade hardened steel Rockwell 55 to 56.C with four (4) usable cutting edges, economically replaced.

Adjustable with mounting on pressure bar with base 2 1/16" x 1½". 12" Models 12" Long, 16" Models 16" long.

HOUSING:

Flame cut hot rolled steel plate welded construction.
Rotor Housing end plates 1¼" thick.
Bearing housing machined from 2 7/8" steel with bearing section 1 3/8" thick.
Hopper Section – side plates ½" thick, bottom plate 3/8" thick, top plate ¼" thick.
Removable floor plate of 3/8" abrasive resistant steel.
Flexible rubber shroud, mounted in hopper in front of blades to protect operator from dust and stray chips.
Feed Opening 12" Models 10" x 12"
Feed Opening 16" Models 10" x 16"
Hopper Opening – all models 26" high x 43¼" wide.

FLYWHEEL:

Flame cut from 3" thick hot rolled steel. Completely machined with a 26" O.D., balanced, attached to rotor shaft with a tapered split hub and key. Finished weight of 440 lbs. providing approx. 200,000 ft. lbs. of stored energy to insure uniform chipping action.

BLOWER:	Multiblade forward curve blower wheel flywheel mtd. with volute—type enclosure. The blower provides effective discharge of materials under all operating conditions including brush with heavy foliage. Blower provides approximately 1800 C.F.M. with connection to exhaust chute by 6" diameter flexible wire mold hose.
FEED TABLE:	12 ga. C.R.S. reinforced bottom, side plates have rolled edges. Table hinged for folding up or down. Up position for safety in traveling and protection when parked. Down position for operating with 60" minimum distance from blades to end of feed table. Feed position width 45".
EXHAUST TRANSITION:	14 ga. cold rolled steel construction. Hinged to rotor housing and tapered for attachment to the 10" x 10" exhaust chute. Securely bolted to rotor housing at bottom. Folds back for blade servicing. Hole provided for locking rotor during service and blade changing.
NOISE LEVEL:	At operating speed the noise level of the chipper will be less than 80 decibels at 50 feet. This level will be slightly higher when cutting and will depend on the material being chipped.

TRAILER AND ACCESSORIES

TRAILER:	Two Wheel with welded frame of 6" structural steel channel, reinforced.
AXLE:	2" x 2" x 74" track, 5200 lbs. capacity. (Electric Brakes available as option at additional cost).
SPRINGS:	(2) 6 leaf, 27 3/8" long, 5200 lb. total capacity.
WHEELS:	(2) 15" x 6.00" semi-drop center.
TIRES:	(2) 7.00 x 15, 8 ply rating with tubes
HUB CAPS:	(2) Chrome Finish
FENDERS:	(2) Pressed steel 16 gauge mounted by locking bolts on steel backing plate welded to trailer frame.
THIRD REST WHEEL:	Adjusting screw type, swivel ball bearing caster with 6" dia. tired wheel. Folding up for towing.
REAR JACK STAND:	2" sq. mechanical tubing with pad. Adjustable for height. Standard on 16" models, optional on 12" Models.
DRAW BAR:	Inner tube 3½" sq. welded mechanical tubing 3/16" with 3 positions for distance from towing vehicle. 2½" I.D. towing eye adjustable for height, 5 positions from 17" to 31" from ground. (2" ball coupler available as option).

5. National League of Cities. Councilman Nagel reported on a meeting he attended in San Francisco on environmental quality; that Bill HR-1580 had been discussed which proposes that waste water be discharged on individual bases rather than on one standard. Recommended the Council go on record in support of the Bill urging the extension of the deadline date for waste water discharge systems and that the analyses be made on a case by case basis. Thereafter, Staff was directed to draft a position for the Council along these lines.

REPORTS OF OFFICERS

CITY MANAGER JONES MADE REPORTS AS FOLLOWS:

1. Reported that the present brush chipper used by the Parks Department, exceeds the permitted noise regulations of the City, having been recorded at 98 dba at 50 feet from the equipment; and since this chipper is scheduled for replacement in 1976-77, bids were solicited for early replacement, which bids were as follows:

Name	Amount of Bid	Less Trade-in	Average Noise Factor at 50 ft.
Asplundh Equip. Sales	$6,087.61	$5,587.61	85 dba
Dearth Machinery Co.	$7,067.02	$6,167.02	85 dba
Causco West	$6,709.80	$6,209.80	85 dba
B. Hayman Co.	$7,842.94	$7,042.94	90.5 dba
B. Hayman Co. (alternate)	$8,374.00	$7,574.00	89.5 dba

Stated that the noise tests taken on the bidders' equipment indicated that none of the equipment met the City's noise regulations. Recommended that the Council permit exception to the noise code for operation of the chipper under the following conditions:

a) Operation only during hours of 7:00 o'clock a.m. to 6:00 o'clock p.m.

b) Operation limited in any one location to maximum of four hours per day.

Further recommended that permission be granted to purchase the equipment at this time from the low bidder, Asplundh Equipment Sales and Service in the amount of $6,087.61 and that the present chipper be sold by sealed bid.

After discussion, motion was made by Councilman Nagel, seconded by Councilman Rockhold, that the bid of Asplundh Equipment Sales and Service be accepted in total amount of $6,087.61 including sales tax, and that purchase order be issued to said company in said amount; that operation of the equipment be restricted to the hours of 8:00 a.m. to 6:00 p.m. for not more than four hours per day in any one location; and that the present chipper be sold by sealed bid. Motion carried by the following vote:

Ayes:	Councilmen Bue, Nagel, Rockhold, Van Vranken and Mayor Balmer;
Noes:	Councilmen None;
Absent:	Councilmen None.

2. Presented the tabulation of bids for one utility truck for use by the Parks Department, which bids were as follows:

Name	Amount of Bid
Cushman Motors Sales, Inc. (Alt. #2)	$ 2,237.66
Cushman Motors Sales, Inc. (Alt. #1)	$ 2,371.22
West Point Industries, Inc.	$ 2,432.70
Cushman Motors Sales, Inc.	$ 2,699.82
B. Hayman Co., Inc.	$ 3,694.10