

DRAWING AND SPECIFICATION TRANSMITTAL

LOCKWOOD GREENE ENGINEERS, INC.

SPARTANBURG, SOUTH CAROLINA 29304
P.O. BOX 491 (803)582-2351

*file
sect
15*

TO Naval Facilities
Engineering Command
Atlantic Division
Norfolk, Va. 23511

DATE May 28, 1979
JOB NO. 77239.17
JOB NAME Naval Regional Medical
Center

TRANSMITTAL NO. 1026
SHEET 1 OF 1
ORDER NO.

ATTN. Code 09A21A - Mr. L.F. Butts

WE ARE SENDING YOU THE FOLLOWING DATA XX HEREWITH UNDER SEPARATE COVER

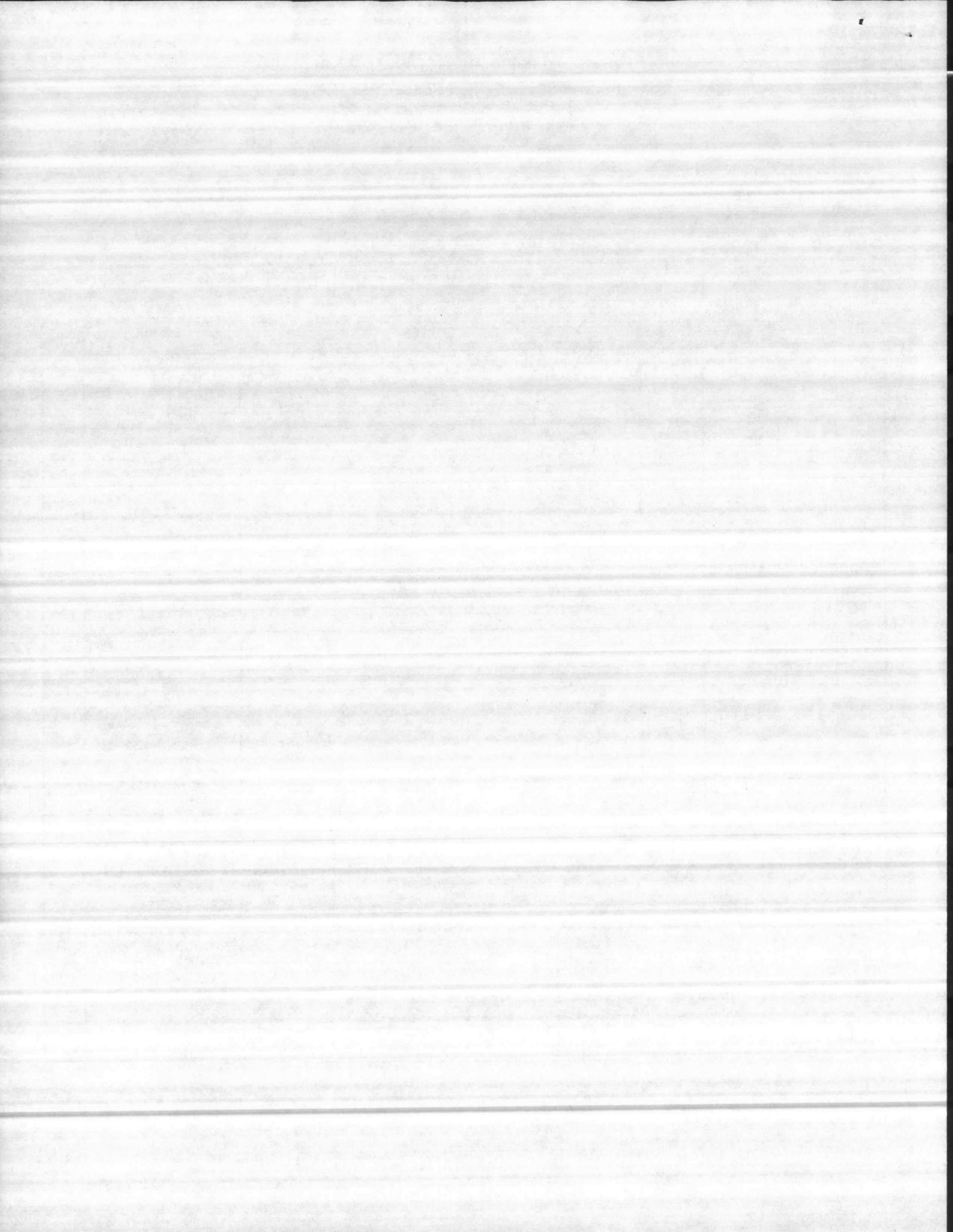
QUAN.	DOCUMENT NO.	REV. NO.	DESCRIPTION	VENDOR	CODE
1	Catalog Data		2 Piece Valve Box	Charlotte Pipe & Foundry Co.	K
<p><i>Roicc</i> Please Note that this will be transmittal # 708, in the Submittal Log Journal.</p>					

CODE FOR							
LOCKWOOD GREENE DOCUMENTS			VENDOR DOCUMENTS				
A - INFORMATION	E - BID	K - NO CORRECTIONS NOTED					
B - REVIEW	F - CONSTRUCTION	L - MAKE CORRECTIONS NOTED					
C - APPROVAL	G - PURCHASING	M - REVISE AND RESUBMIT					
D - REVISED DWG. (SEE REVISION)	H -	N - REJECTED (SEE REMARKS)					
COPIES TO	QUAN	TRANS ONLY	CODE	COPIES TO	QUAN	TRANS ONLY	CODE
ROICC (Mr. Roger Coley)	2		A				
Cardinal Construction	1		A				

REMARKS

PLEASE ACKNOWLEDGE RECEIPT BY IMMEDIATE RETURN OF SIGNED COPY OF THIS TRANSMITTAL

RECEIVED BY Wm. J. Haynes DATE 6/11/79 TRANSMITTED BY Richard McKnight



RO ICC

N62470-77C-7526

file

CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV #4355/3 (Rev. 6/76)

SECTION 15272

CONTRACT NO.	TRANSMITTAL NO.	DATE
		5-14-79

FROM CONTRACTOR
 Cardinal Contr. Co.
 TO
 Lockwood Greene Eng'rs

PROJECT TITLE AND LOCATION
 NAVAL REGIONAL MED. CENTER
 CAMP LEJEUNE N.C.

CONTRACTOR USE ONLY

REVIEWER USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

Contractor Approved OICC Approval Deviation/Substitution For OICC Approval

ACTION CODES
 A-Approved
 D-Disapproved
 AN-Approved as noted
 RA-Receipt acknowledged.
 C-Comments
 R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO.	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
* 317		Catalog Data - 2 piece valve box Charlotte Pipe & Foundry Co.	4	RA	mmj 5/28/79

CONTRACTOR'S COMMENTS

COCR Action Code: A.N.

* Transmittal Numbers will be provided at an early date as soon as submittal status journal is completed.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: 5-14-79

CONTRACTOR REPRESENTATIVE (Signature): W.M.J. Haymaker

DATE RECEIVED BY REVIEWER: FROM (Reviewer) TO

- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

77239.16 LANTDIV

J.C. CUNNINGHAM MIKE JONES

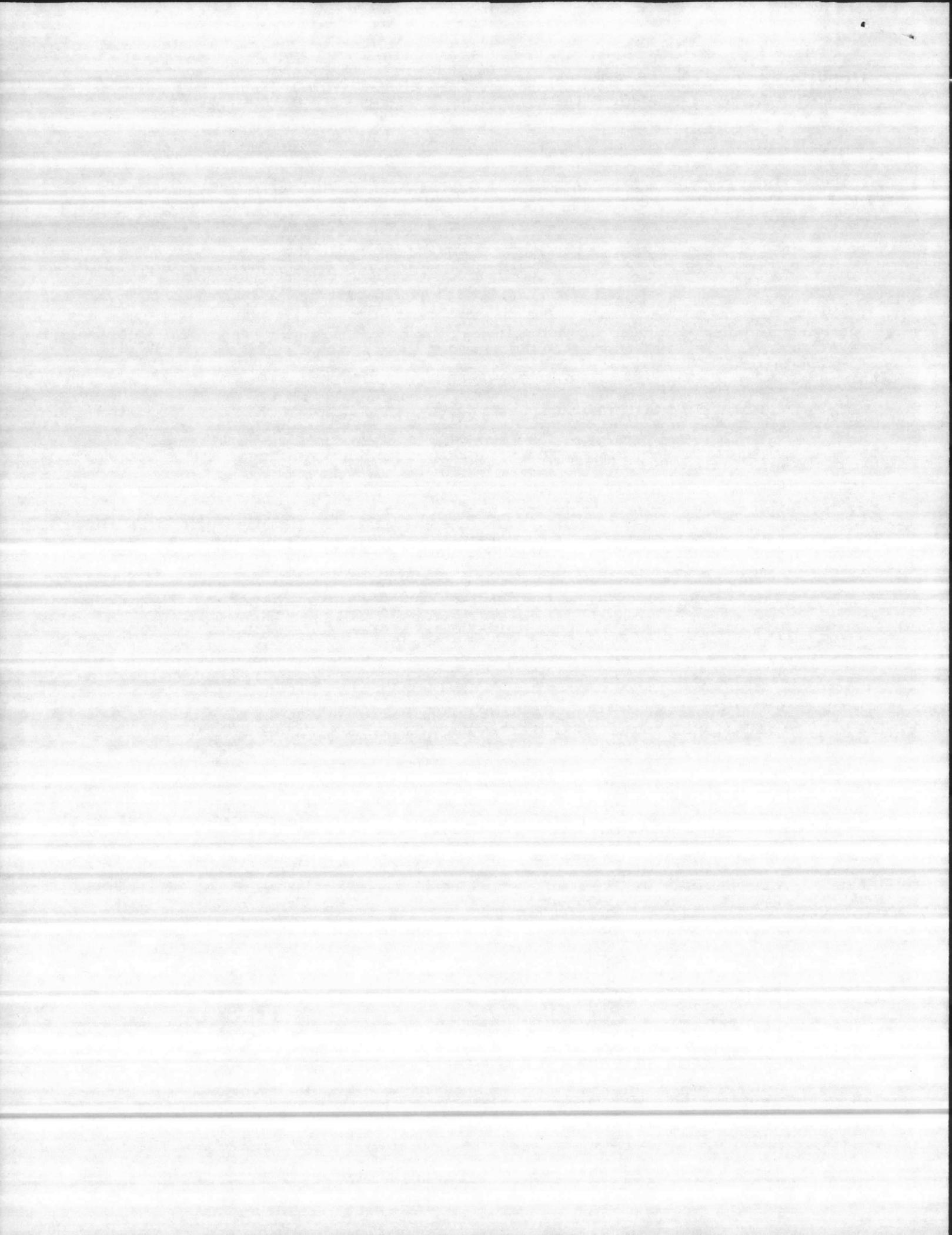
mmj 5/28/79

1026

file/field 6-19-79

COPIES TO: ROICC (2), LANTDIV (1), A-E (1)

DATE: SIGNATURE:



THREE PIECE VALVE BOXES

For Gas or Water Mains, Diameter of Shaft, 5/8 Inches
For 24" and Smaller Values

Size	Extension, Inches	Complete			Top and Cover			Bottom		Base	
		Wt. Lbs.	List Each	Lgth. Ins.	Wt. Lbs.	List Each	Lgth. Ins.	Wt. Lbs.	List Each	Wt. Lbs.	List Each
AAA17" Stationary		55	\$41.20	6	19	\$20.00				36	\$21.20
AA	26-30	79	60.25	10	25	23.45	12	18	15.60	36	21.20
A	33-42	95	66.95	16	35	29.00	18	24	18.75	36	21.20
B	36-48	100	69.15	16	35	29.00	24	28	18.95	36	21.20
C	45-54	109	71.40	16	35	29.00	30	36	21.20	36	21.20
CC	51-60	111	75.85	16	35	29.00	36	40	25.65	36	21.20
D	45-66	132	80.35	28	58	37.95	30	38	21.20	36	21.20
E	63-72	128	84.80	16	35	29.00	48	57	34.60	36	21.20
F	63-84	151	93.75	28	58	37.95	48	57	34.60	36	21.20
G	75-96	144	102.65	28	35	27.95	60	70	43.50	36	21.20



Fig. 272
Slip Type

Note: Made in Size "B" only

NOTE: The above prices are with No. 6 Round Base which will always be furnished unless otherwise specified.

Drop Covers marked "WATER" furnished unless otherwise specified.

Subject to all contract requirements

CARDINAL CONTRACTING CO., INC.

By W.J.A. Date 5/14/79

Section 15.2.72

Paragraph 4b

Valve Boxes

2470-77-C-7526

MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

TWO PIECE VALVE BOXES

For Gas or Water Mains, Diameter of Shaft, 5/8 Inches
Screw Type or Slip Type for 10" and Smaller Valves

Screw Type	Slip Type	Extension, Inches	Complete		Top and Cover			Bottom		
			Wt. Lbs.	List Each	Ins.	Wt. Lbs.	List Each	Ins.	Wt. Lbs.	List Each
461-S	461-A	18-24	60	\$40.20	10	35	\$23.45	15	25	\$16.75
562-S	562-A	24-36	80	49.10	16	45	29.00	24	35	20.10
564-S	564-A	36-48	92	55.80	16	47	29.00	36	45	26.80
664-S	664-A	39-60	106	64.75	28	63	37.95	36	45	26.80

Drop Cover marked "WATER" furnished unless otherwise specified.



Fig. 274

Each Box to have heavy coat of Bituminous Paint

It is hereby certified that the (material) (equipment) shown and marked in this submittal is that approved/proposed to be incorporated into Contract Number W.J.A., is in compliance with the contract drawings and specifications, and can be installed in the spaces, and is (approved for use) (submitted for use).

CARDINAL CONTRACTING CO.

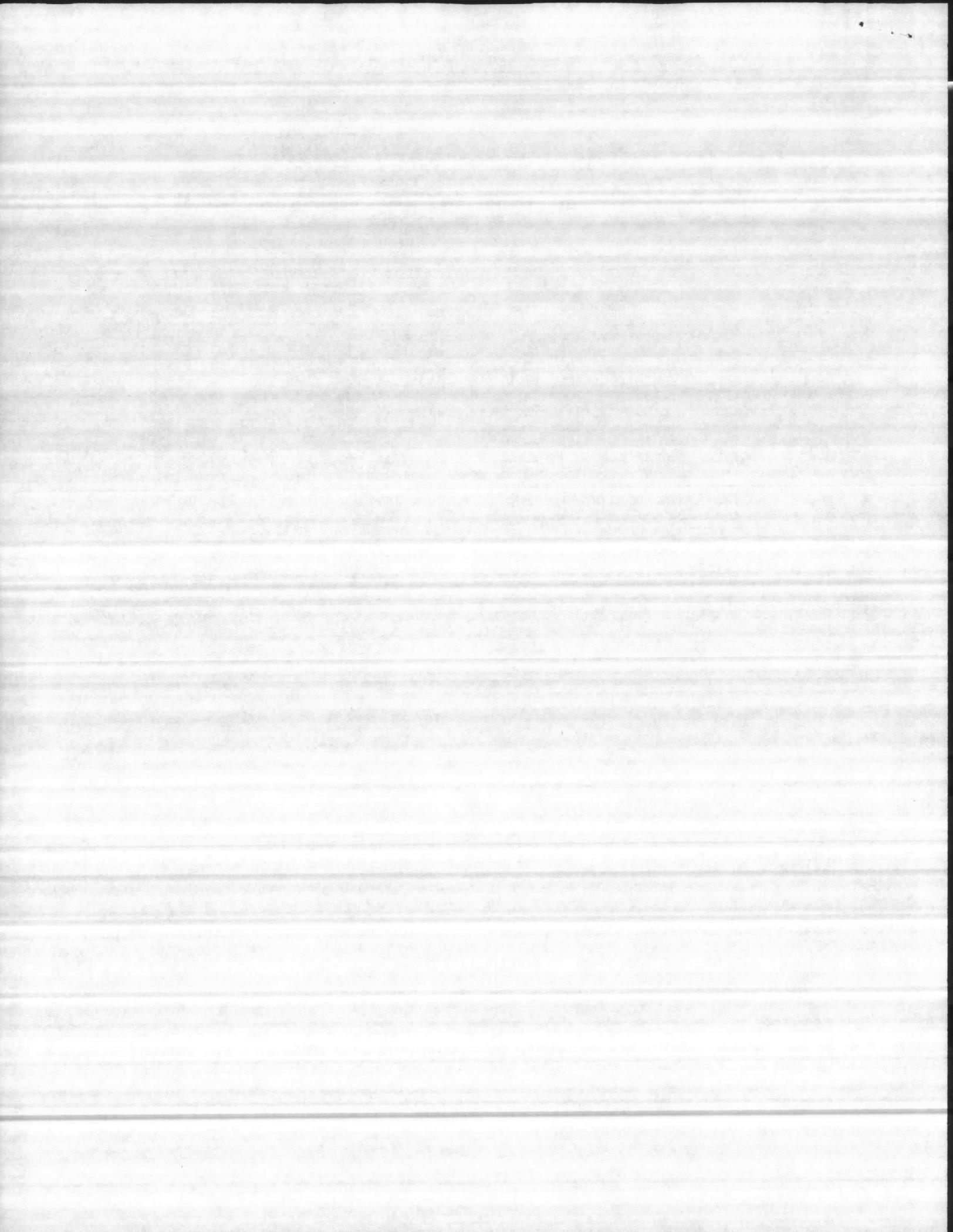
Authorized Reviewer

Signature CQC Rep W.J.A.

Date 5/14/79

Date 5/14/79

Fig. 273



sect 15
file

DRAWING AND SPECIFICATION TRANSMITTAL
LOCKWOOD GREENE ENGINEERS, INC.

SPARTANBURG, SOUTH CAROLINA 29304
P.O. BOX 491 (803)582-2351

TO NAVAL FACILITIES ENGINEERING
COMMAND
ATLANTIC DIVISION
NORFOLK VA 23511

DATE May 28, 1979
JOB NO. 77239.16
JOB NAME Naval Regional Medical Cen.

TRANSMITTAL NO. 1027
SHEET 1 OF 1
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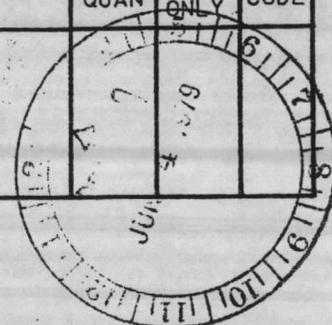
ATTN: CODE 09A21A - Mr. L.F. Butts

WE ARE SENDING YOU THE FOLLOWING DATA xx HEREWITH _____ UNDER SEPARATE COVER

QUAN.	DOCUMENT NO.	REV. NO.	DESCRIPTION	VENDOR	CODE
1	Shts 2 Thru 5		B-62-B Fire Hydrant	American-Darling	K
	Shts. 17 & 18		Gate Valves	American-Darling	K

Please make a note in your submittal Journal that these are Transmittals # 703 and #704.

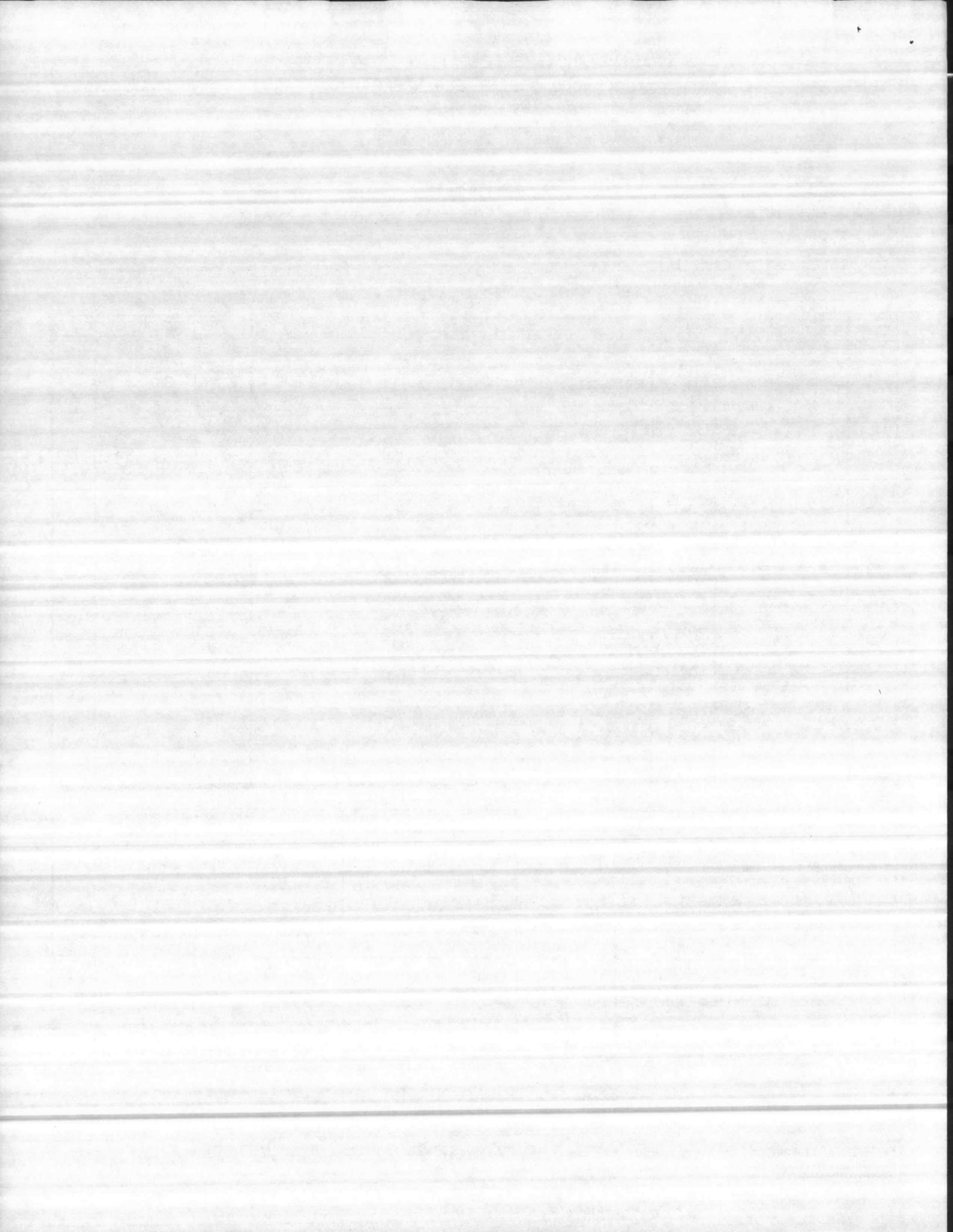
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COPIES TO		QUAN	TRANS ONLY	CODE	COPIES TO		QUAN	TRANS ONLY	CODE
ROICC Cardinal Construction ✓		22 *3		A A					



REMARKS

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RECEIVED BY Cardinal Construction 6/11/79 TRANSMITTED BY Richard McKnight
Wm. J. Haymaker



ROICC

CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV 4-4355/3 (Rev. 6/76)

SECTION 15272

CONTRACT NO. 62470-77-C-7526 DATE 5-14-79

FROM CONTRACTOR Cardinal Contracting Co. TO Lockwood Greene Engineers, Inc.

PROJECT TITLE AND LOCATION NAVAL REGIONAL MED. CENTER Camp Lejeune, N.C.

CONTRACTOR USE ONLY

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Contractor Approved

OICC Approval

Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

ACTION CODES A-Approved D-Disapproved AN-Approved as noted RA-Receipt acknowledged C-Comments R-Resubmit

Table with columns: ITEM NO., PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO., ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number), NO. OF COPIES, ACTION CODES, REVIEWER'S INITIALS CODE AND DATE. Includes entries for Am. Darling Gate Valves and Am. Darling B-62-B Fire Hydrant.

CONTRACTOR'S COMMENTS

* Transmittal Numbers will be provided at an early date as soon as Submittal Status journal is completed.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

5-14-79

CONTRACTOR REPRESENTATIVE (Signature)

W.M.J. Haymaker

DATE RECEIVED BY REVIEWER

FROM (Reviewer)

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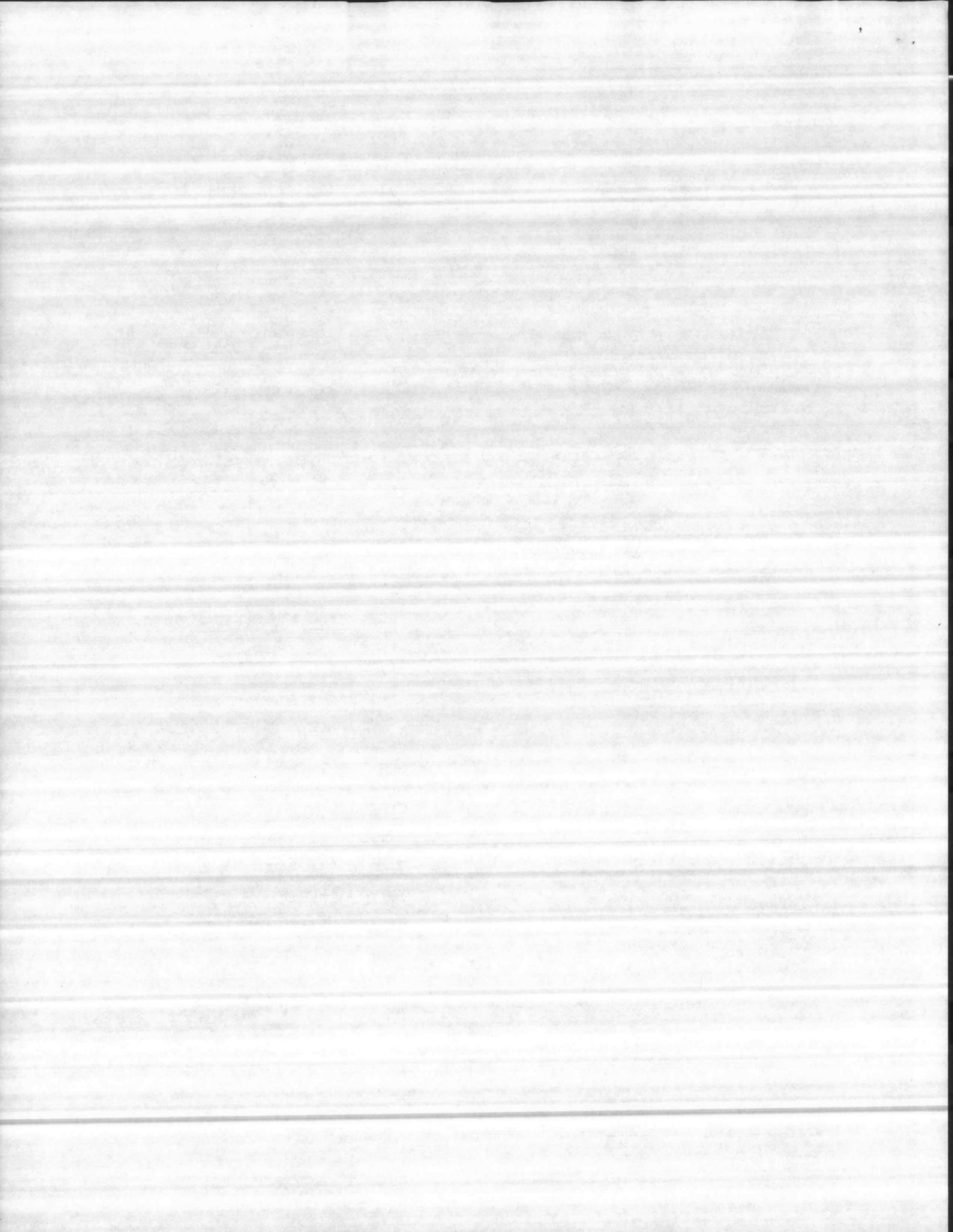
1027

file/field 6.14.79

COPIES TO: ROICC (2) LANTDIV (1) A-E (1)

DATE

SIGNATURE



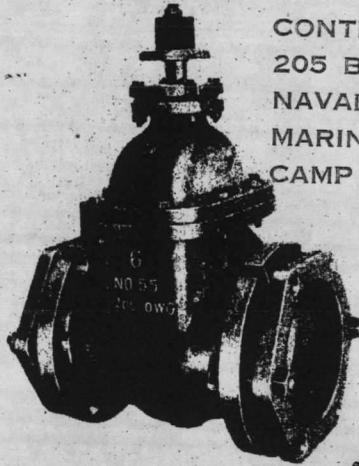


FOR 10" AND 8" Ring tite AC Pipe
 AND 6" AND 4" MJ
 205 BED HOSPITAL
 Section 15272
 Paragraph 4.4

GATE VALVES

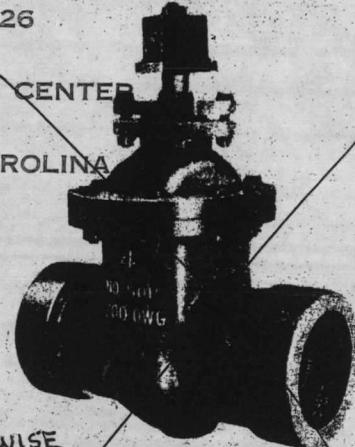
A.W.W.A. type

C 500



Mechanical Joint NRS
 No. 55

CONTRACT N62470-77-C-7526
 205 BED HOSPITAL
 NAVAL REGIONAL MEDICAL CENTER
 MARINE CORPS BASE
 CAMP LEJEUNE, NORTH CAROLINA



Plastic Ends NRS
 No. 50P

OPENS COUNTER CLOCKWISE

PRESSURE RATINGS

Size Valve Inches	Non-Shock Service Pressure		Hydrostatic Test Pressure	
	Water	Shell Test	Seat Test	
2 to 12	150	400	200	
14 to 54	150	500	150	

American-Darling A.W.W.A. Type Iron Body Double Disc Parallel Seat Gate Valves are made to the specifications adopted by the American Water Works Association and New England Water Works Association. Many of the requirements of these specifications, such as tensile strength of metals, test and service pressures, are greatly exceeded in their construction. These valves are in use in general water works service.

Where required, valves can be furnished with low zinc alloy bronze trim. Low zinc alloy bronze trim is recommended for valves to be used in waters that promote galvanic corrosion. See page 7.

CONSTRUCTION DETAILS—The stems, seat rings, stem nuts or wedge bushings on all sizes are made of bronze. All bolts and nuts are cadmium plated.

2 to 3 INCH—Discs and wedges are bronze.

4 INCH—Discs are cast iron bronze mounted and wedges are bronze.

6 TO 16 INCH—Lower wedges are cast iron and inside screw upper wedges and discs are bronze mounted cast iron. Upper wedges are provided with non-corrodible wedging surfaces.

16 INCH AND LARGER—Discs and wedges are cast iron bronze mounted.

FLANGE DIMENSIONS—The drilling and dimensions of end flanges conform to ANSI B16.1, Class 125. Flanges are plain faced with smooth finish.

CONSTRUCTION DETAILS—See page 7.

STYLE OF ENDS—Valves can be furnished with various types of ends as shown on page 18.

BY-PASSES—Valves 16" and larger should have a by-pass to equalize pressure on both sides of the valve to facilitate opening. See page 47.

GEARING—Valves 24" and larger should be equipped with gearing to facilitate opening. See page 51.

TRACKS AND SCRAPERS—Valves 16" and larger when placed in a horizontal line with main stem in horizontal position have bronze or alloy tracks placed in the lower side of the body and scrapers attached to the upper wedge. Auxiliary rollers are not required as the discs are free to rotate as the valve is opened or closed. See page 5.

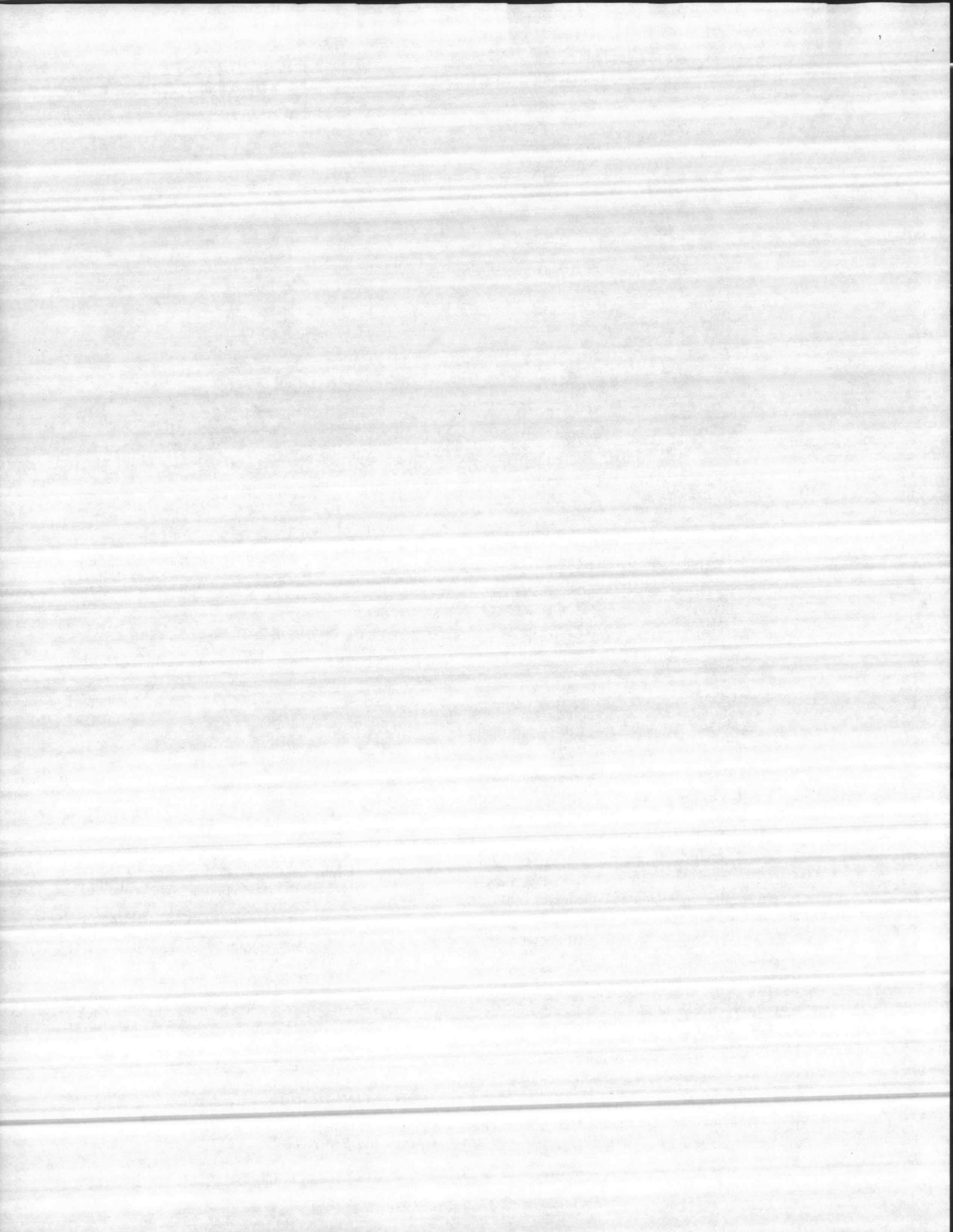
STEM SEAL AND STUFFING BOX—Stem seals with double BUNA-N O-Rings are supplied as standard on NRS non-geared valves 2" to 24" size. Compression packing using asbestos is standard on NRS geared and O S & Y valves. O S & Y valves can be repacked under pressure when fully opened.

ACCESSORIES—See page 46.

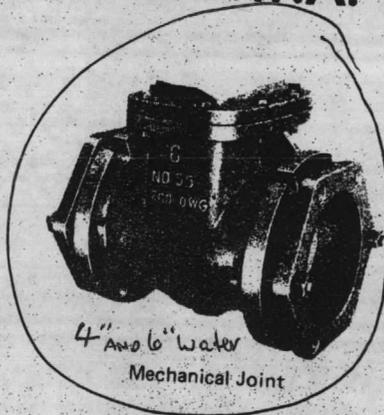
FOR DIMENSIONS—See pages 19, 20, 21, 22.

SQUARE BOTTOM CONSTRUCTION—Can be furnished. See page 29.

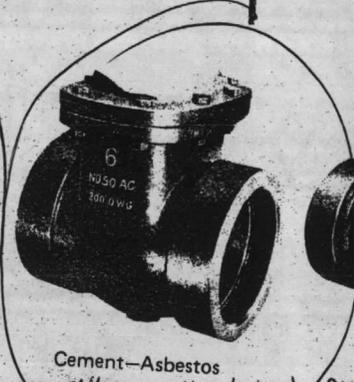
See Reverse Side for stamp 1027



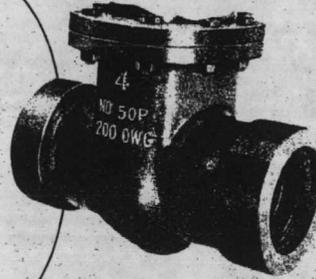
valve ends available on A.W.W.A. valves



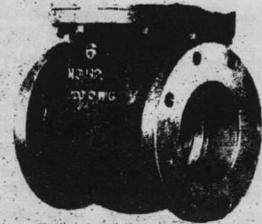
4" AND 6" Water
Mechanical Joint



Cement-Asbestos
8" AND 10" A/C Water PIPE



Plastic End



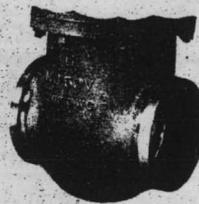
Flange End



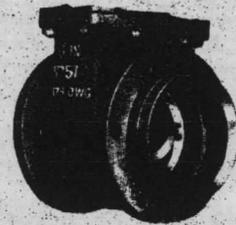
Hub End



Screw End



Victaulic End



Dresser End

* **MECHANICAL JOINT**—Mechanical Joint Gate Valves are used for water service. This joint employs the stuffing box principle. A thick triangular gasket is compressed between the pipe and bell of the gate valve by a bolted gland follower ring. It provides a tight joint with some flexibility and allows for expansion and contraction. American-Darling Mechanical Joint Valves are regularly furnished for pressures up to and including 500 lbs. O.W.G.

CEMENT-ASBESTOS—Valves with ends to receive Cement-Asbestos pipe are made in accordance with the manufacturer's specifications and are chiefly used in water or corrosive service installations.

PVC PLASTIC—American-Darling's push-on joint for PVC Plastic Pipe. Rubber end joint gaskets are regularly furnished with each valve.

FLANGE—Flange End Valves are generally used on large lines in industrial piping, sewage disposal, filtration plants, pumping stations. The use of Flange End Valves is particularly advantageous since valves can be quickly removed from lines without disrupting piping installations. Flanged ends are regularly faced and drilled in accordance with ANSI B16.1 standard.

HUB—Hub End Valves are generally used in underground installations in water systems and on low pressure gas lines, and are regularly furnished with wrench nuts for valve key operation from above ground. Joints between valves and pipe are

caulked in the same manner as regular bell and spigot pipe joints. American-Darling Hub End Valves are regularly made in iron body patterns for pressures up to and including 250 lbs. O.W.G.

FASTITE JOINT—American-Darling's push-on joint for cast iron or ductile iron pipe (not illustrated).

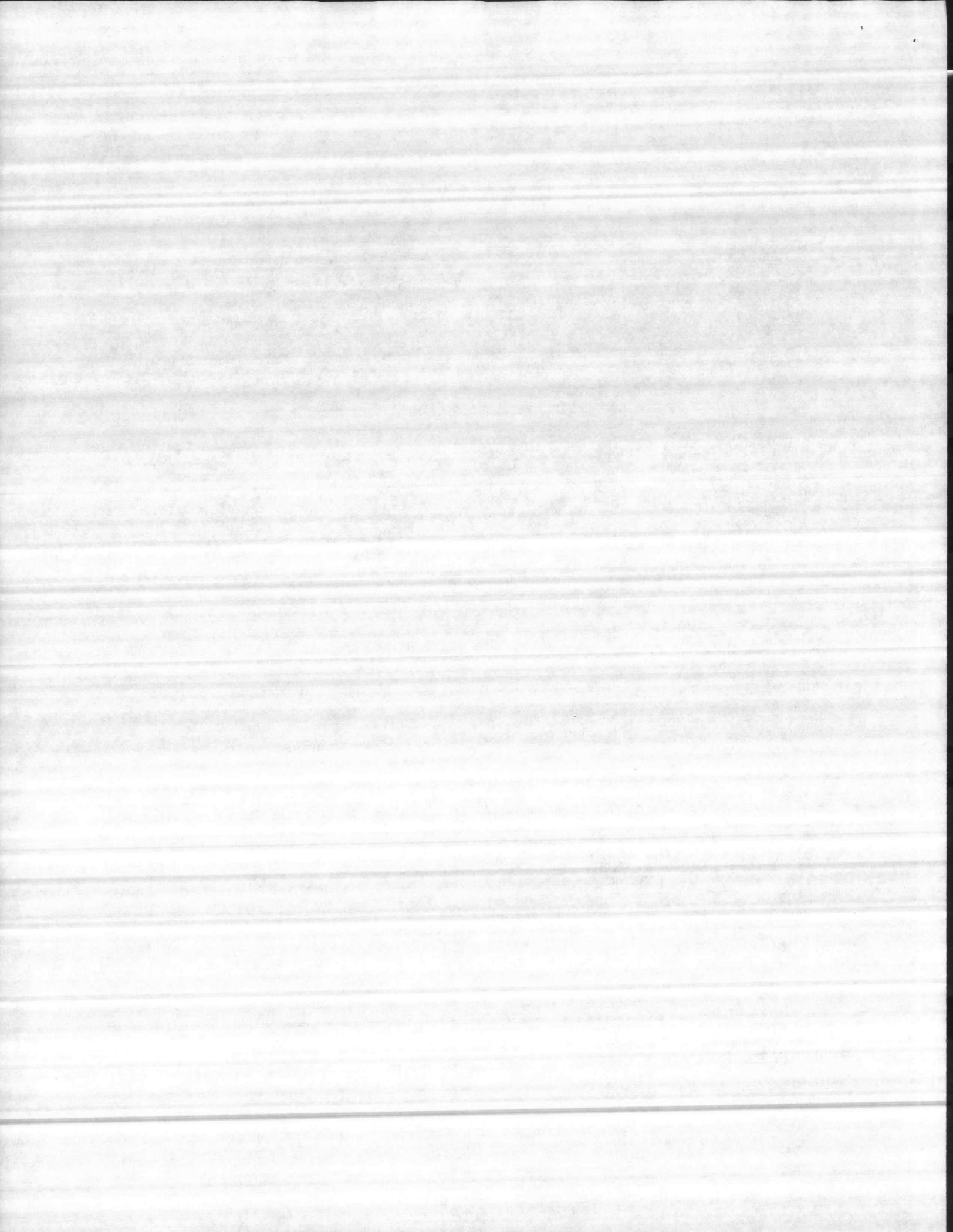
SCREW—Screw End Valves are regularly used on small lines on inside piping installations, and in general construction service. Screw ends are regularly threaded in accordance with ANSI B2.1 standard.

PRESTRESSED CONCRETE—(Not illustrated). Valves made with special ends machined for connecting concrete pipe with O-Ring gasket seals. Specify style and name of manufacturer.

VICTAULIC—Valves made with Victaulic Ends are regularly used on water lines, and made in accordance with specifications to fit standard Victaulic couplings. Specify whether iron or steel pipe is to be used with valve.

DRESSER—Dresser End Valves are used with Dresser pipe couplings on water lines. Valves are regularly furnished with ends to receive Dresser couplings, but without bolts, gaskets, or the necessary couplings. Valves can be furnished complete with couplings attached, when so specified.

COMBINATION—Valves can be supplied with any combination of the above ends.





*Note:
see Reverse side
for Stamp.*

B-62-B FIRE HYDRANT How to Order Parts

FOR ORDERING PARTS B-62-B HYDRANT

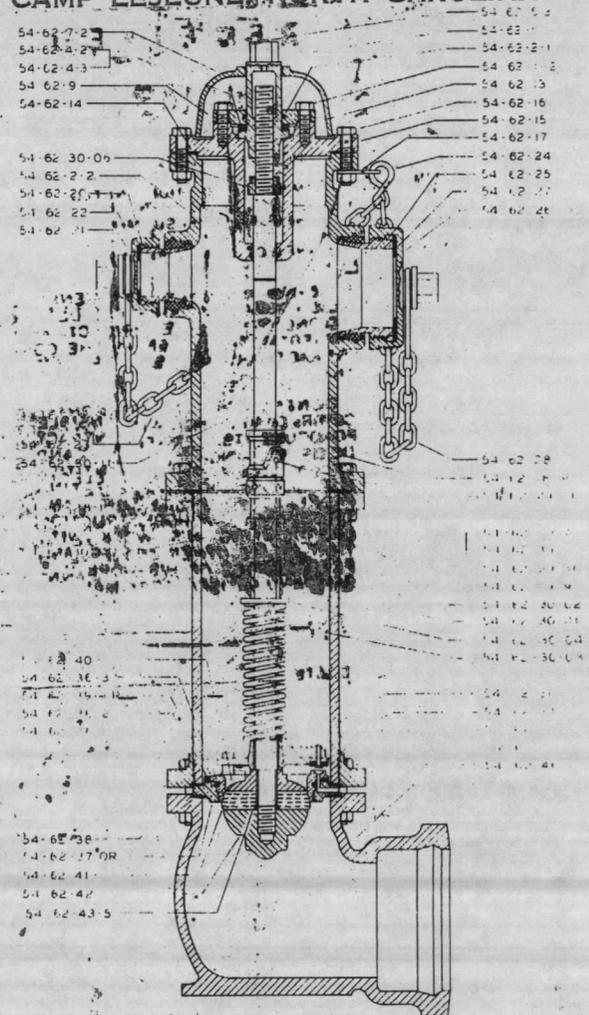
Orders for hydrant parts should specify:

- 1 Number of pieces of each part desired.
- 2 Part numbers and names of parts. (See Parts List below)
- 3 Where barrel or rod is required, give depth of trench.
- 4 If extension section is required, give length of extension.
- 5 If barrel is ordered, state the number of hose and/or steamer nozzles.
- 6 If rod or operating nut is required, state direction hydrant turns to open: whether "open right" (clockwise) or "open left" (counter-clockwise).
- 7 If base is required, specify size and type of pipe and base connection.

PART NO.	DESCRIPTION	MATERIAL
54-62-1	Operating Nut	Bronze
54-62-2-1	Housing Cover O-Ring	Buna N
54-62-2-2	Housing O-Rings	Buna N
54-62-4-2	Needle Thrust Bearings	Steel
54-62-4-3	Thrust Races	Steel
54-62-5-3	Socket Pipe Plug	Steel
54-62-7-2	Hydrant Cover	Cast Iron
54-62-9	Housing Cover	Cast Iron
54-62-11-2	Housing Cover Cap Screws	Cadmium
54-62-13	Housing Cover Gasket	Fibre
54-62-14	Housing Gasket	Asbestos
54-62-15	Housing	Cast Iron
54-62-16	Housing Bolts and Nuts	Cadmium
54-62-17	Chain Holder	Steel
54-62-18-9	Upper Hydrant Barrel	Cast Iron
54-62-19-9	Lower Hydrant Barrel	Cast Iron
54-62-20	Hose Nozzle	Bronze
54-62-21	Hose Nozzle Cap	Cast Iron
54-62-22	Hose Cap Gasket	Rubber
54-62-23	Hose Cap Chain	
	(specify single or double)	Steel
54-62-24	S Hook	Steel
54-62-25	Steamer Nozzle	Bronze
54-62-26	Steamer Nozzle Cap	Cast Iron
54-62-27	Steamer Cap Gasket	Rubber
54-62-28	Steamer Cap Chain	Steel
54-62-29-30	Breakable Rod Coupling	Cast Iron
54-62-29-31	Rod Coupling Pins	Bronze
54-62-30-01	Stop Plates	Steel
54-62-30-02	Stop Plate Rivets	Steel
54-62-30-03	Spring	Cadmium Plated Spring Steel coated with Jan-P-450
54-62-30-04	Spring Plate	Steel
54-62-30-06	Travel Stop Nut	Bronze
54-62-30-11	Upper Hydrant Rod	Steel
54-62-30-12	Lower Hydrant Rod	Steel
54-62-31	Hydrant Drain Lever	Bronze
54-62-33	Drain Lever Washers	Leather
54-62-34	Drain Lever Rivets	Bronze
54-62-35-OR	Hydrant Seat	Bronze
54-62-36-2	Seat O-Ring (outside)	Buna N
54-62-36-3	Seat O-Ring (inside)	Buna N
54-62-37-OR	Hydrant Drain Ring	Bronze
54-62-38	Drain Ring Gaskets	Asbestos
54-62-38-1	Barrel Gasket	Asbestos
54-62-39	Base Bolts and Nuts	Cadmium
54-62-39-7	Frangible Bolts and Nuts (traffic model)	Steel
54-62-39-9	Barrel Bolts and Nuts (regular model)	Cadmium
54-62-40	Hydrant Valve Top	Cast Iron
54-62-41	Hydrant Valve	Rubber
54-62-42	Hydrant Valve Bottom	Cast Iron
54-62-43-5	Hydrant Rod and Valve O-Ring	Buna N
54-62-46	Hydrant Base	Cast Iron

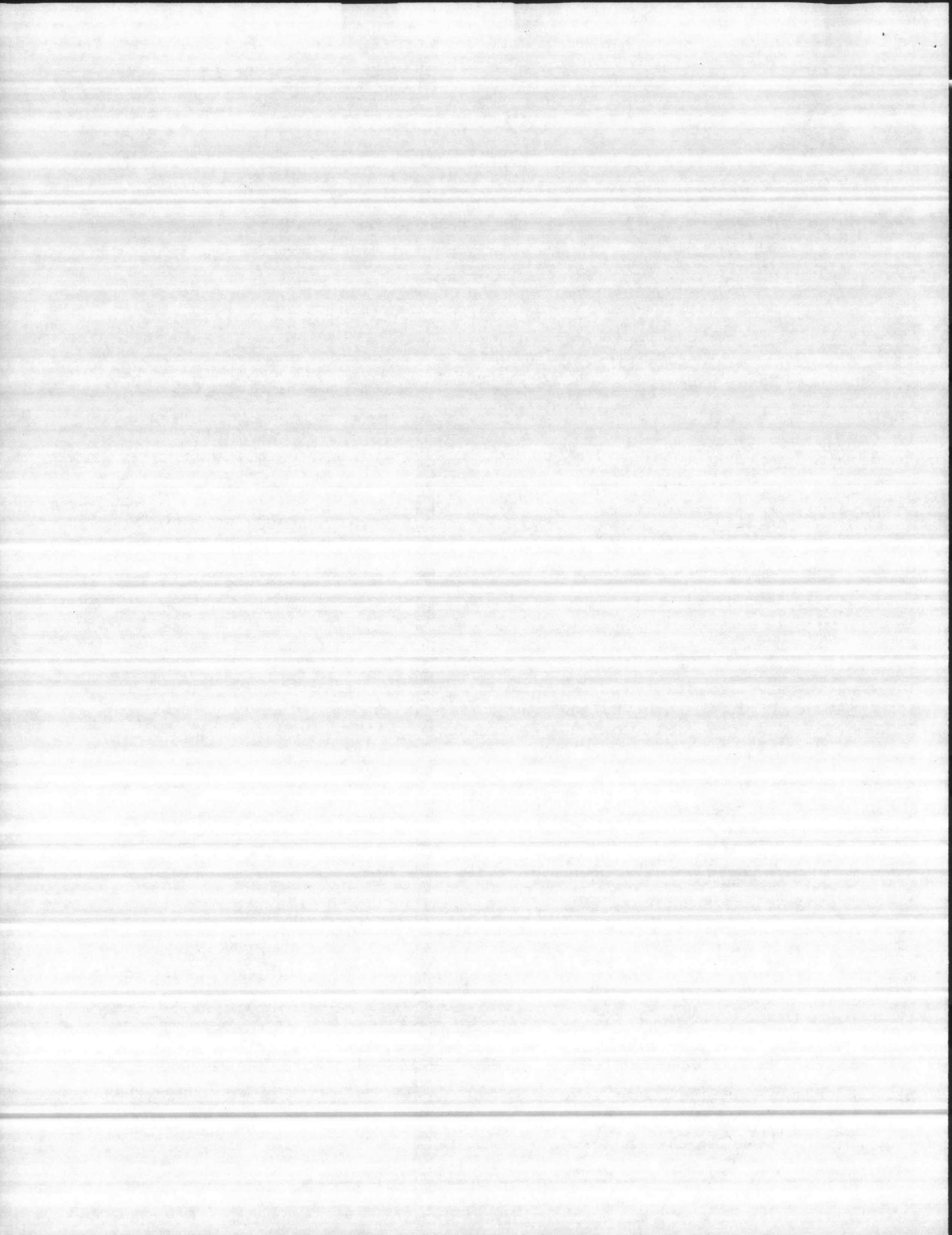
CONTRACT N62470-77-C-7526

205 BED HOSPITAL
NAVAL REGIONAL MEDICAL CENTER
MARINE CORPS BASE
CAMP LEJUNE, NORTH CAROLINA

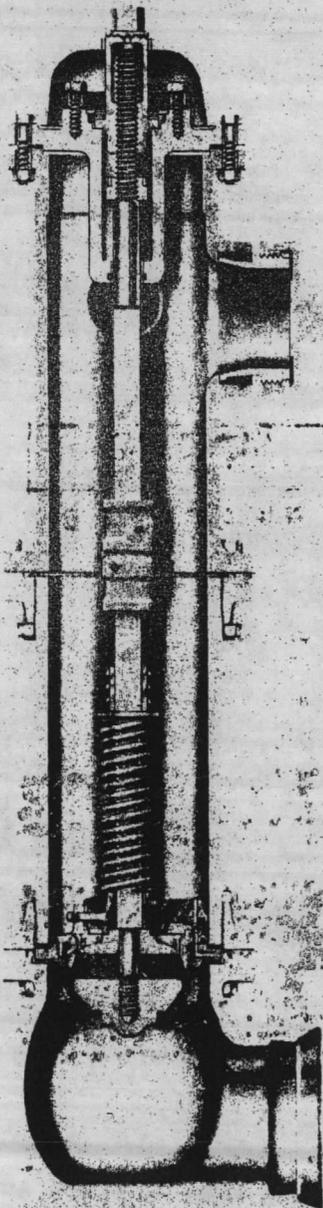


National Standard Threads

1027



B-62-B FIRE HYDRANT Operation



The American-Darling B-62-B compression type fire hydrant opens against the pressure and closes with the pressure. The operating mechanism at the top of the hydrant is subject to upward thrust, which is applied against a needle thrust bearing located at the top of the operating nut collar. The use of this thrust bearing reduces the required operating torque by more than 50%.

In opening, turning the operating nut lowers the hydrant rod and forces the hydrant valve away from its seat. The hydrant valve is unseated slightly before the drains are closed, making it possible to effectively flush the drain ports.

The drains close after approximately $1\frac{1}{2}$ turns of the operating nut and are securely held in their closed position by the spring on the hydrant rod.

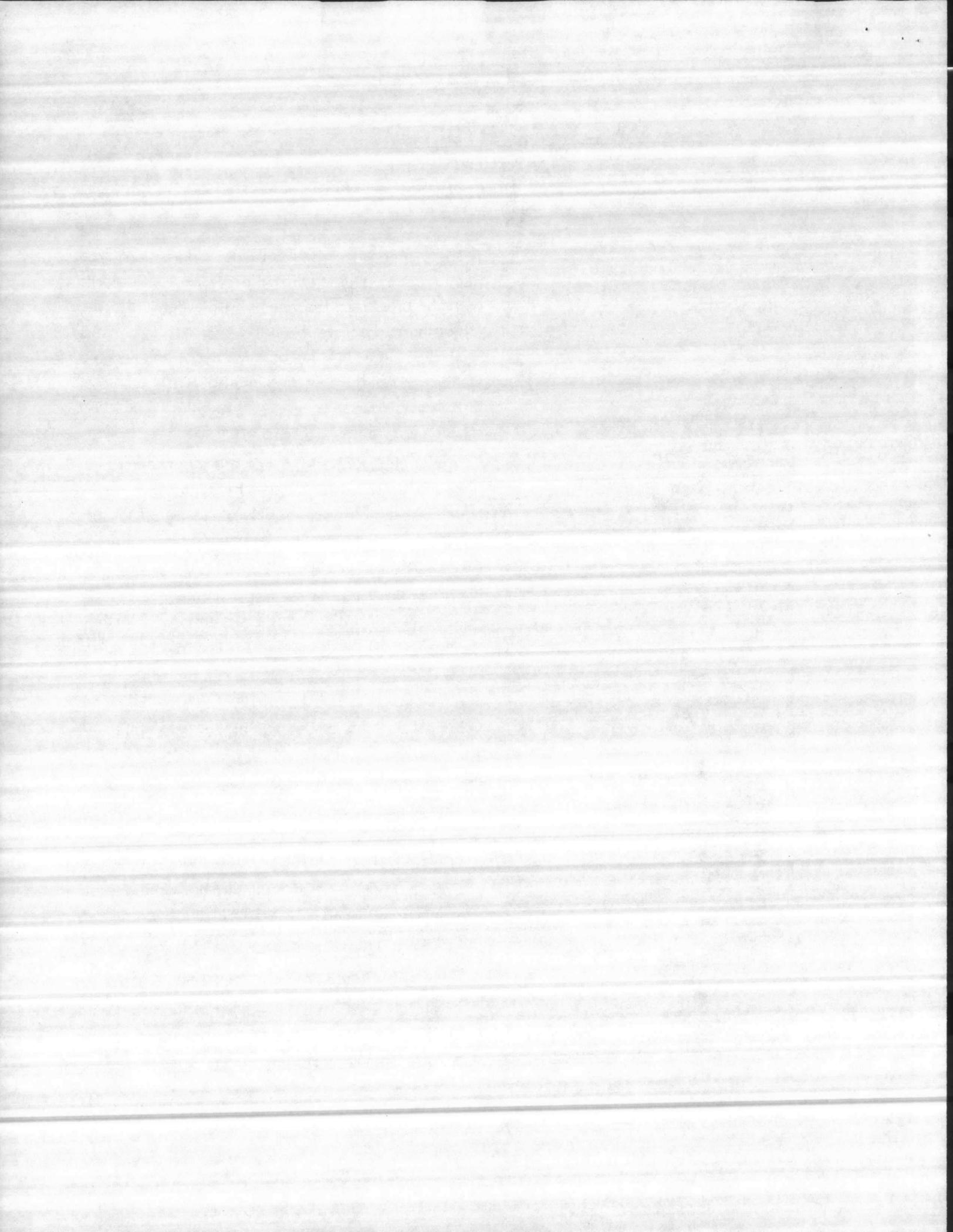
The use of O-ring seals provides a dry-top hydrant and eliminates friction normally found where conventional packing is used against the operating nut. The necessity for repacking and lubrication of packing is thus eliminated.

The sealed grease chamber feature of the operating nut assures thorough lubrication of the operating threads and the needle thrust bearing.

Complete removal of all internal working parts can be accomplished by taking out the hydrant rod, on which all working parts are assembled.

UNDERWRITERS' LABORATORIES HYDRANTS

The B-62-B hydrant has been tested and listed with Underwriters' Laboratories, Inc. and approved by Factory Mutual Laboratories.



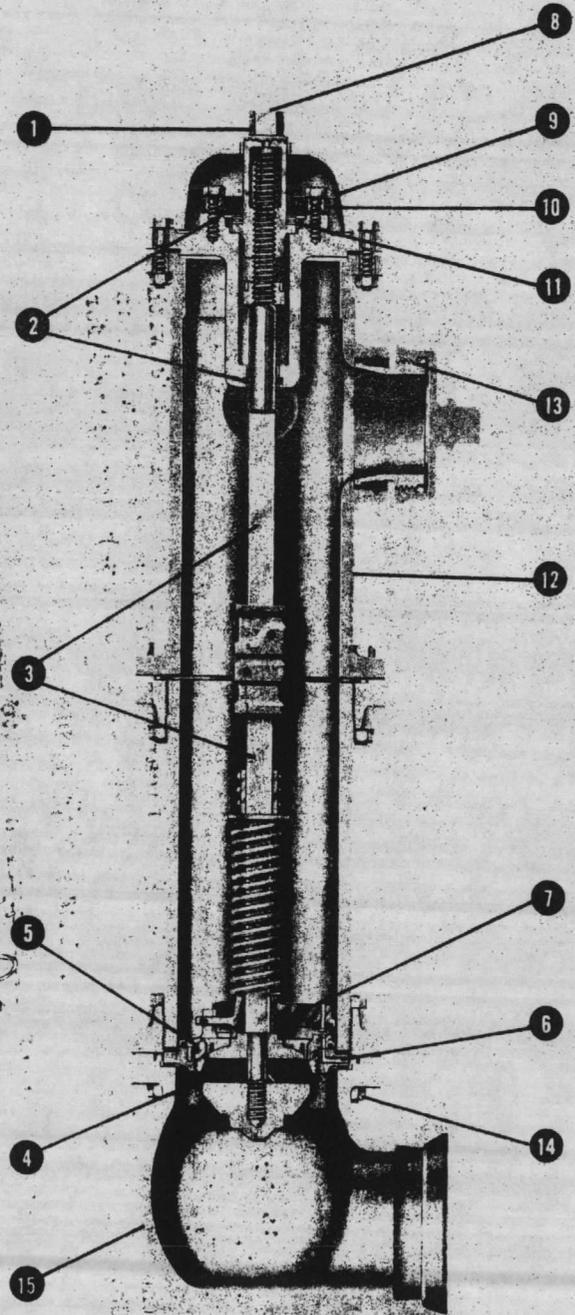


B-62-B FIRE HYDRANT Construction

- 1 OPERATING NUT—cast one-piece bronze operating nut directly actuates hydrant rod. Extra-long, close tolerance threads assure long life and easy operation. Grease groove insures complete lubrication of threads and needle thrust bearing. Lead of the operating thread permits slow closing of the hydrant valve, eliminating water hammer.
- 2 O-RINGS—seal lubrication chamber, eliminate stuffing box, assure dry top hydrant, reduce friction, prevent water from reaching the operating mechanism—no need for repacking or packing lubrication.
- 3 HYDRANT ROD—furnished in two sections of high tensile steel. Upper section has bronze sleeve where it passes through O-ring and has bronze stop nut to limit travel of rod. Lower section has a cadmium-plated spring with heavy bituminous coating to insure positive drain closure. Both sections are connected by cast iron coupling and bronze pins. Rod directly operates hydrant valve and drains without need for auxiliary connections.
- 4 HYDRANT VALVE—consists of a hydrant valve top, hydrant valve bottom and special hydrant valve rubber of conical shape. Hydrant valve bottom is threaded and screwed to valve rod, protecting rod threads from corrosion. Thread locking compound prevents loosening in service. Hydrant valve seats against the bronze hydrant seat.
- 5 HYDRANT SEAT—made of special bronze, with accurately machined seat for hydrant valve and tapered drain ports.
- 6 HYDRANT SEAT DRAIN RING—securely held between barrel and base flanges, provides bronze-to-bronze threaded connection for hydrant seat. Serves as non-corrosive multipoint drain channel.
- 7 DRAIN LEVER—rugged special bronze three-port drain performs dual function as carrier for drain lever washers and as wrench to remove working parts.
- 8 SOCKET HEAD PIPE, PLUG—sealed grease chamber. No greasing required as long as rod is intact. Grease fitting can replace plug for greasing.
- 9 COVER—cast iron cover is quickly removed by unbolting two bolts. The word "open" and an arrow show direction to turn the operating nut.
- 10 HOUSING AND HOUSING COVER—retains operating nut and needle thrust bearing. Rugged construction supports pressure and operating forces.
- 11 NEEDLE THRUST BEARING—takes upward thrust when opening and closing hydrant valve and reduces operating torque by more than 50%. Bearing is lubricated through top of operating nut.
- 12 BARREL—large, high-strength cast iron barrel is flanged at ground level with 8 bolts, permitting installation in eight different positions. Large barrel delivers water to nozzles with no perceptible pressure loss.
- 13 NOZZLES—Bronze nozzles are streamlined and have micrometer checked threads.
- 14 BOLTS AND NUTS—all bolts and nuts are cadmium plated.
- 15 BASE—large, spherical-shaped base has no projections or cavities to obstruct flow or collect sediment.

All American-Darling B-62-B barrel castings are painted inside and outside with a special primer. Section below ground level is given two coats of special black asphaltum paint which resists corrosion from moisture and soil. Exterior surface above ground is painted with special primer and high-grade enamel to customer's color requirement. **Yellow**

American-Darling B-62-B hydrants can be furnished as a TRAFFIC type by the use of frangible bolts at the flange joint above the ground line. Should the hydrant be damaged by traffic, new bolts, rod coupling and gasket would be the only parts necessary to place the hydrant back into service.



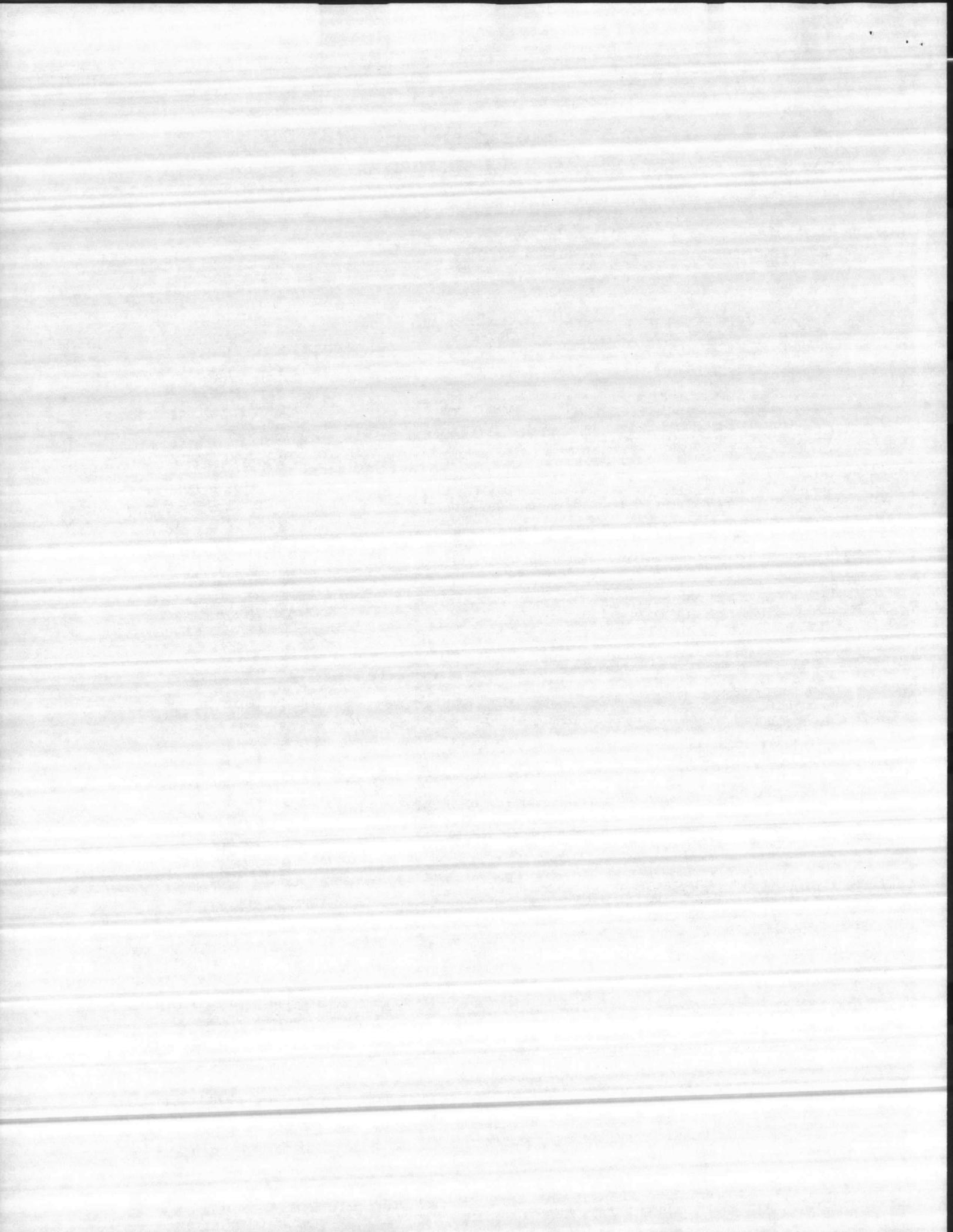
5/4" Main Valve Opening.

Fully complies with AWWA C-502

UL listed and FM approved.

1027

Yes



B-62-B FIRE HYDRANT Features

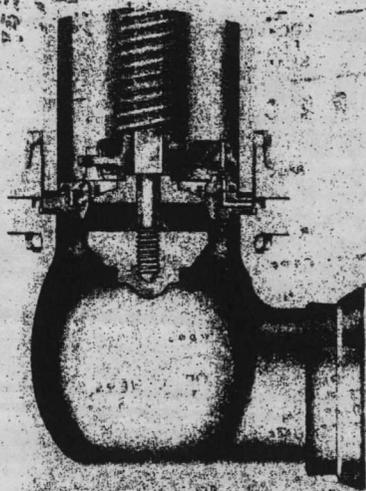


The design and construction of every American-Darling B-62-B fire hydrant provides for maximum water delivery to nozzles with minimum pressure drop. Features which assure years of uninterrupted service include: positive mechanical drain operation; ability to remove complete working part assembly, including hydrant valve, drain lever and hydrant seat; simple barrel extensions to accommodate grade changes.

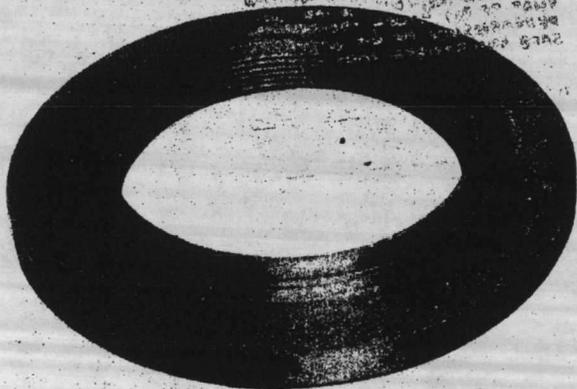
COMPRESSION TYPE DESIGN GUARDS AGAINST STREET FLOODING—hydrant valve closes with line pressure, preventing loss of water and consequent flooding in the event of traffic damage.

POSITIVE AUTOMATIC DRAIN PREVENTS FREEZING AND CLOGGED DRAINS—simple multiple port drain is automatically operated as hydrant valve is opened or closed. The 15-coil coated and plated spring closes the drain valve completely after 1½ turns of opening, thus maintaining a constant positive seal throughout the entire opening and closing operations.

When hydrant valve is closed, drain lever is held



Drain Assembly



Hydrant Seat Drain Ring

away from drain ports for positive drainage through drain ring.

The drains remain open on the first 1½ turns of opening the hydrant valve to allow drains to be flushed under pressure . . . thus removing any foreign matter or sediment.

Operating threads on rod and in operating nut can be readily lubricated through grease fitting. Grease is carried throughout the length of the thread by grooves in the operating nut.

EASY INSPECTION AND MAINTENANCE—removal and inspection of all parts for any length of hydrant is accomplished quickly and easily through the top of the barrel, by one man. A lightweight, short-sectioned wrench engages the square hydrant rod for disassembly.

The bronze hydrant seat threads into the bronze hydrant drain ring, making a bronze-to-bronze contact with an O-ring seal. This design eliminates any possibility of blow-out or leakage.

Unrestricted flow of water assures maximum water delivery at the nozzles and is accomplished through streamlined design which eliminates projections and cavities.

American-Darling's manufacturing quality control means that all parts are rigidly inspected before assembly. All replacement parts are interchangeable because they are made to templates and gauges. This assures easy operation and eliminates excessive service problems. Look closely at the following features:

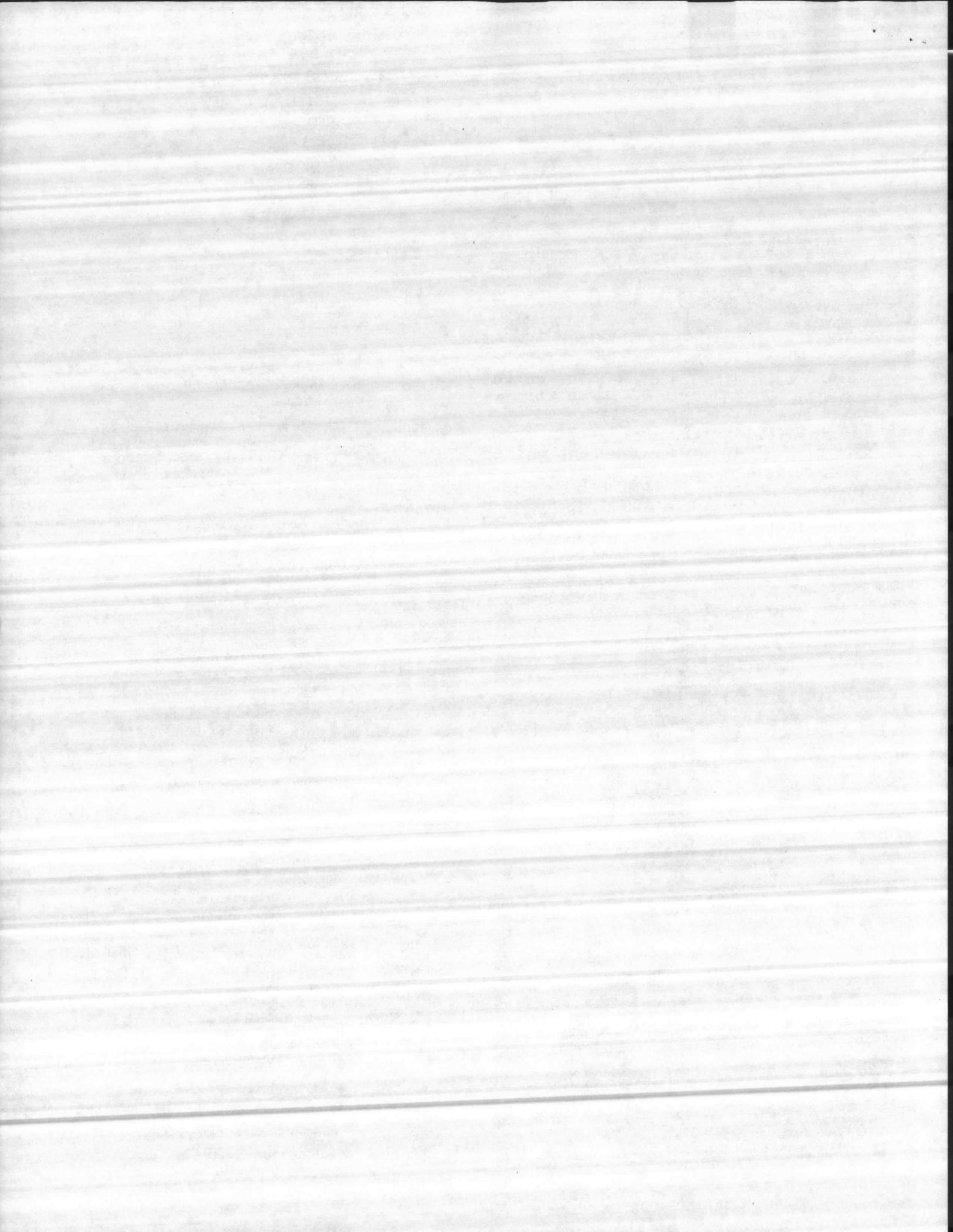
- 1 Extra large barrel for full-flow.
- 2 Streamlined nozzles minimize friction loss.
- 3 Venturi-type waterway through hydrant seat opening minimizes cavitation.
- 4 When open, hydrant valve is well below hydrant seat in the large spherical base, offering minimum restriction to flow of water.

Large spherical base with area larger than that of pipe connection eliminates all obstructions which impede flow of water and has no pockets to collect sediment.

5¼-INCH B-62-B HYDRANT DIMENSIONS IN INCHES

Combined Area of Nozzles:

One 2½-inch Hose	5.033
Two 2½-inch Hose	10.066
Two 2½-inch Hose and one 4½-inch Steamer	25.966
Ground Line to Center of Steamer Nozzle.....	14⅞
Ground Line to Center of Hose Nozzle.....	15⅞
Ground Line to Top of Hydrant.....	28⅞



1021V

[Signature]
705-707
712-718

DRAWING AND SPECIFICATION TRANSMITTAL
LOCKWOOD GREENE ENGINEERS, INC.

SPARTANBURG, SOUTH CAROLINA 29304
P.O. BOX 491 (803)582-2351

TO LANTDIV
Atlantic Division
Nav. Fac. Engr. Command
Norfolk, Va. 23511

DATE July 17, 1979
JOB NO. 77239.16
JOB NAME Lantdiv

TRANSMITTAL NO. 1270
SHEET 1 OF 1
ORDER NO.
Contract #
N-62470-77-C-7562

ATTN. Mr. John Grubbs - Code 05

WE ARE SENDING YOU THE FOLLOWING DATA XX HEREWITH _____ UNDER SEPARATE COVER

QUAN.	DOCUMENT NO.	REV. NO.	DESCRIPTION	VENDOR	CODE
1	705 706 707 712 718		Corporation Stops Curb Service Stops Goosenecks Indicator Posts Indicator Posts		RA RA RA RA RA

CODE FOR

LOCKWOOD GREENE DOCUMENTS

A - INFORMATION
B - REVIEW
C - APPROVAL
D - REVISED DWG. (SEE REVISION)

E - BID
F - CONSTRUCTION
G - PURCHASING
H -

VENDOR DOCUMENTS

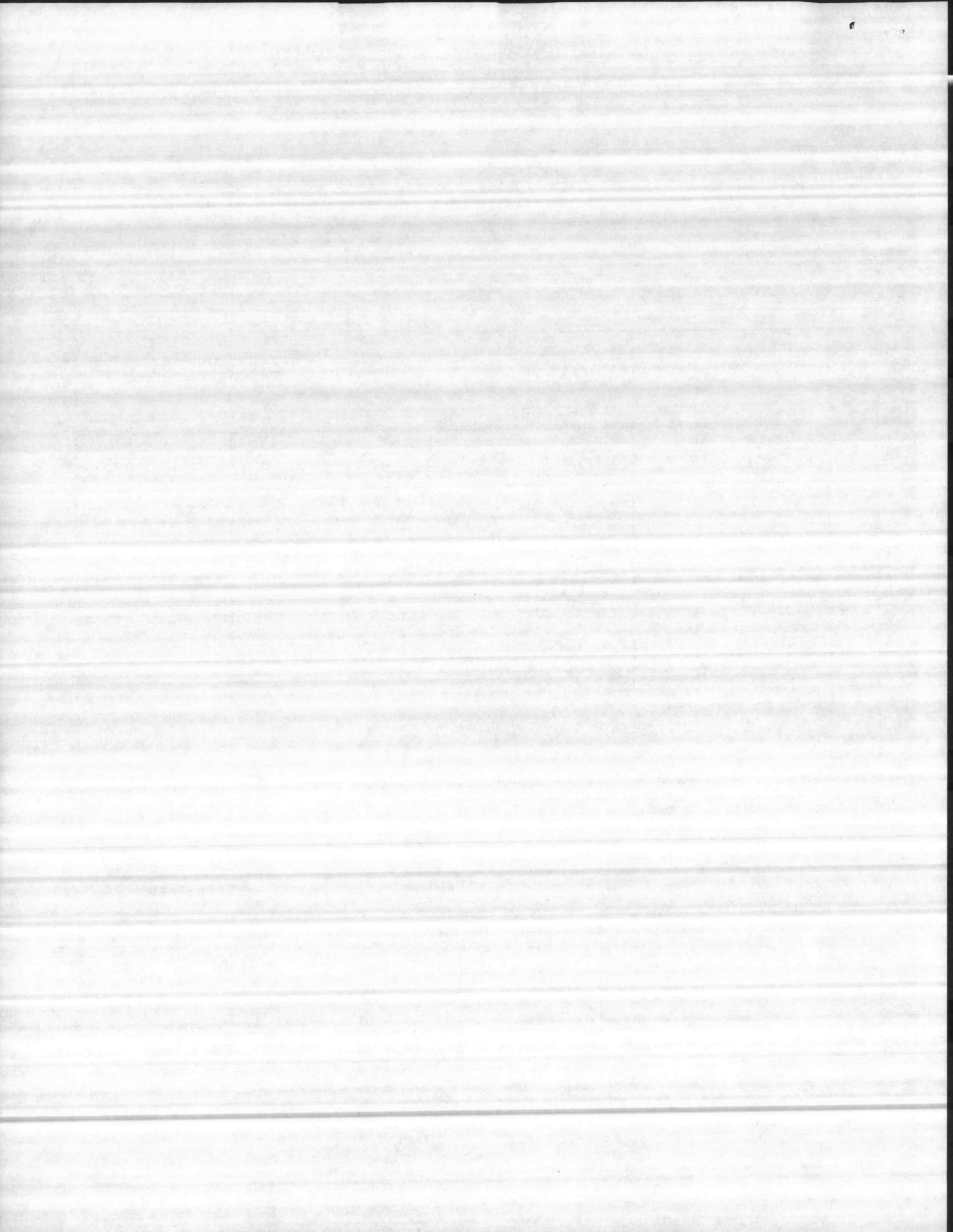
K - NO CORRECTIONS NOTED
L - MAKE CORRECTIONS NOTED
M - REVISE AND RESUBMIT
N - REJECTED (SEE REMARKS)

COPIES TO		QUAN	TRANS ONLY	CODE	COPIES TO		QUAN	TRANS ONLY	CODE
ROICC		3							

REMARKS

PLEASE ACKNOWLEDGE RECEIPT BY IMMEDIATE RETURN OF SIGNED COPY OF THIS TRANSMITTAL

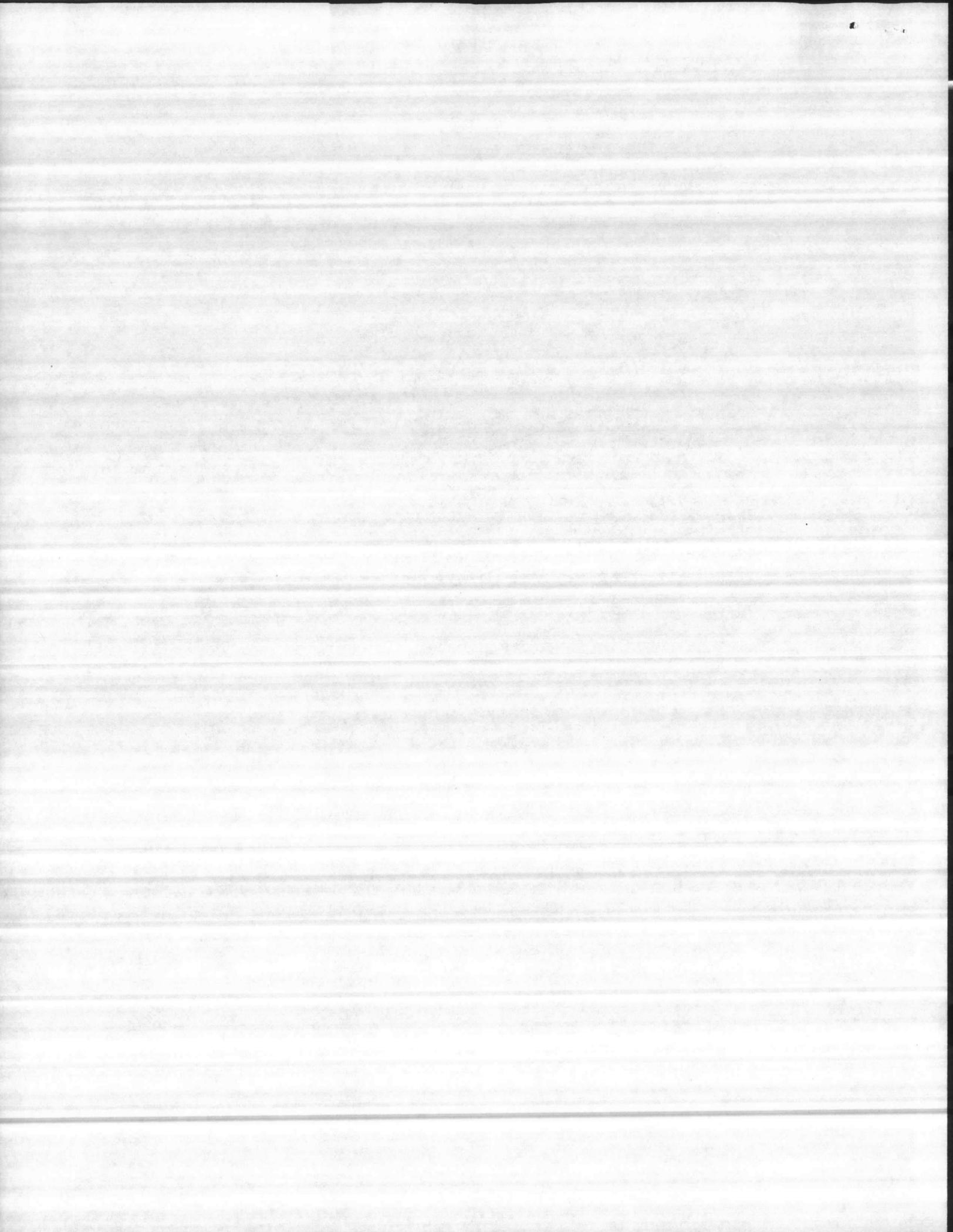
RECEIVED BY _____ DATE _____ TRANSMITTED BY George Leonard



ROUTING SLIP

NAME	SEQUENCE	INITIAL	DATE
CARLSON			
COLEY	2	RDC	
YOUNG			7-23-79
PARKS	1	CP	
RAVE			
WRAY			
JONES	3	LW	8-2

REMARKS: These have been logged
 in. Pending copy pulled
 & attached



CONTRACTOR'S SUBMITTAL TRANSMITTAL
5ND LANTDIV 4-4355/3 (Rev. 6/76)

SECTION 15272

705-707

FROM CONTRACTOR CARDINAL CONTRACTING CO	CONTRACT NO. A-62470-77-C-7520	TRANSMITTAL NO. 712 + 718	DATE 7/6/79
TO LOCKWOOD-GREENE ENDS	PROJECT TITLE AND LOCATION N. R. M. C CAMP LEJEUNE, N.C.		

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

Contractor Approved

OICC Approval

Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES

- A-Approved
- D-Disapproved
- AN-Approved as noted
- RA-Receipt acknowledged.
- C-Comments
- R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO.	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
705	3.1	CORPORATION STOPS	4	RA	AS 7/13/79
706	3.1	CURB SERVICE STOPS	4	RA	AS 7/13/79
707	3.1	GOOSENECKS	4	RA	AS 7/13/79
712	3.1	INDICATOR POSTS	4	RA	AS 7/13/79
718	3.2	INDICATOR POSTS	4	RA	AS 7/13/79

CONTRACTOR'S COMMENTS

THE ABOVE ARE NOT APPLICABLE TO THIS PROJECT AND SHOULD BE DELETED FROM SUBMITTAL STATUS.

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

DATE RECEIVED BY REVIEWER: **7/6/79** FROM (Reviewer): _____

CONTRACTOR REPRESENTATIVE (Signature): **(Wm.) Haymaker** TO: _____

- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

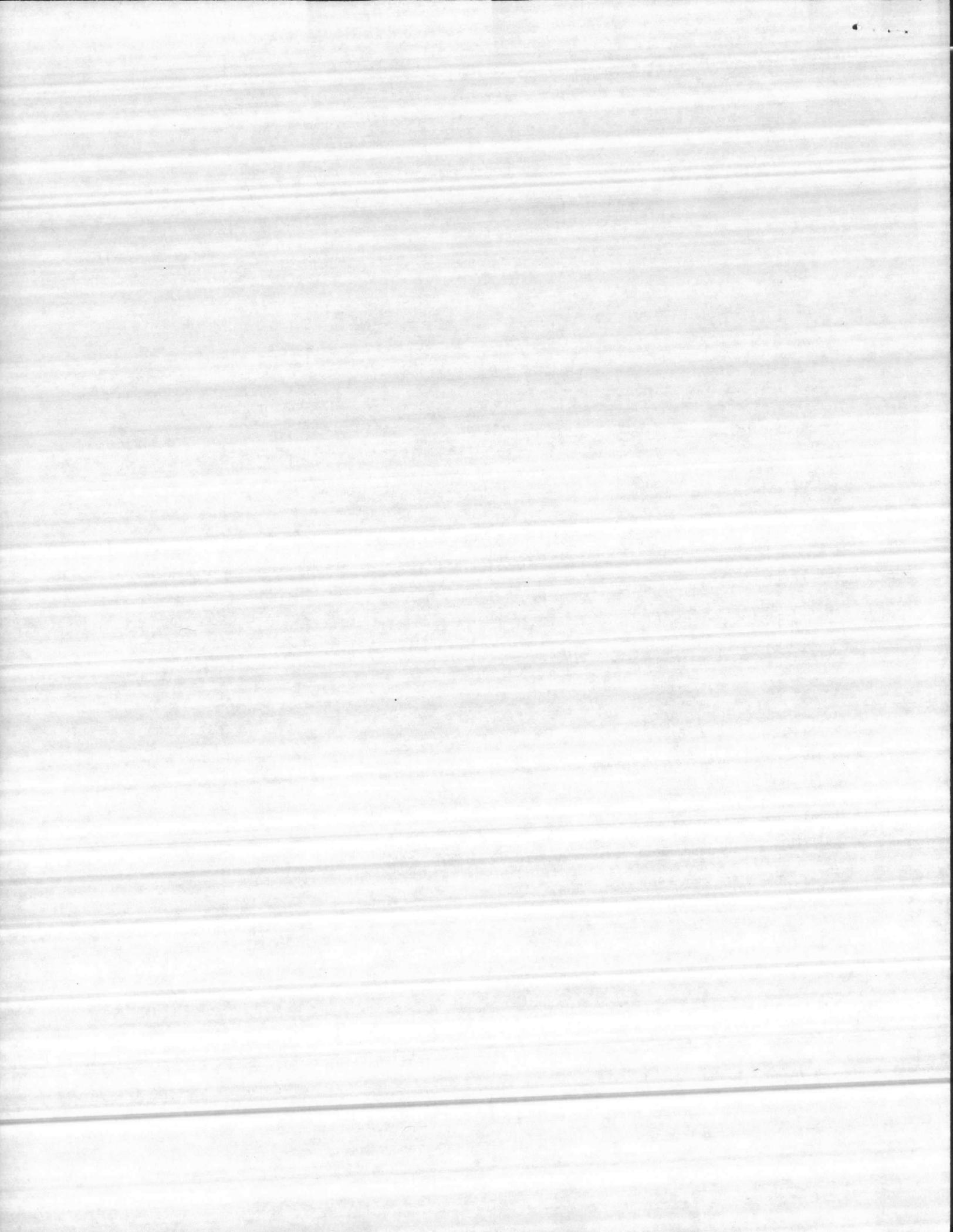
REVIEWER'S COMMENTS

Contractor's Comments appear to be appropriate

file/filed
8-2-79
ew

PIESTO: ROICC (2) LANTDIV (1) A-E(1)

DATE: **Jul 13/1979** SIGNATURE: **Robert L. Turner**



15

[Signature]

DRAWING AND SPECIFICATION TRANSMITTAL
LOCKWOOD GREENE ENGINEERS. INC.

SPARTANBURG, SOUTH CAROLINA 29304
P.O. BOX 491 (803)582-2351

TO LANTDIV
Atlantic Division
Nav. Fac. Engr. Command
Norfolk, Va. 23511

DATE July 17, 1979
JOB NO. 77239.16
JOB NAME Lantdiv

TRANSMITTAL NO. 1277
SHEET 1 OF 1
ORDER NO.
Contract #
N-62470-77-C-7526

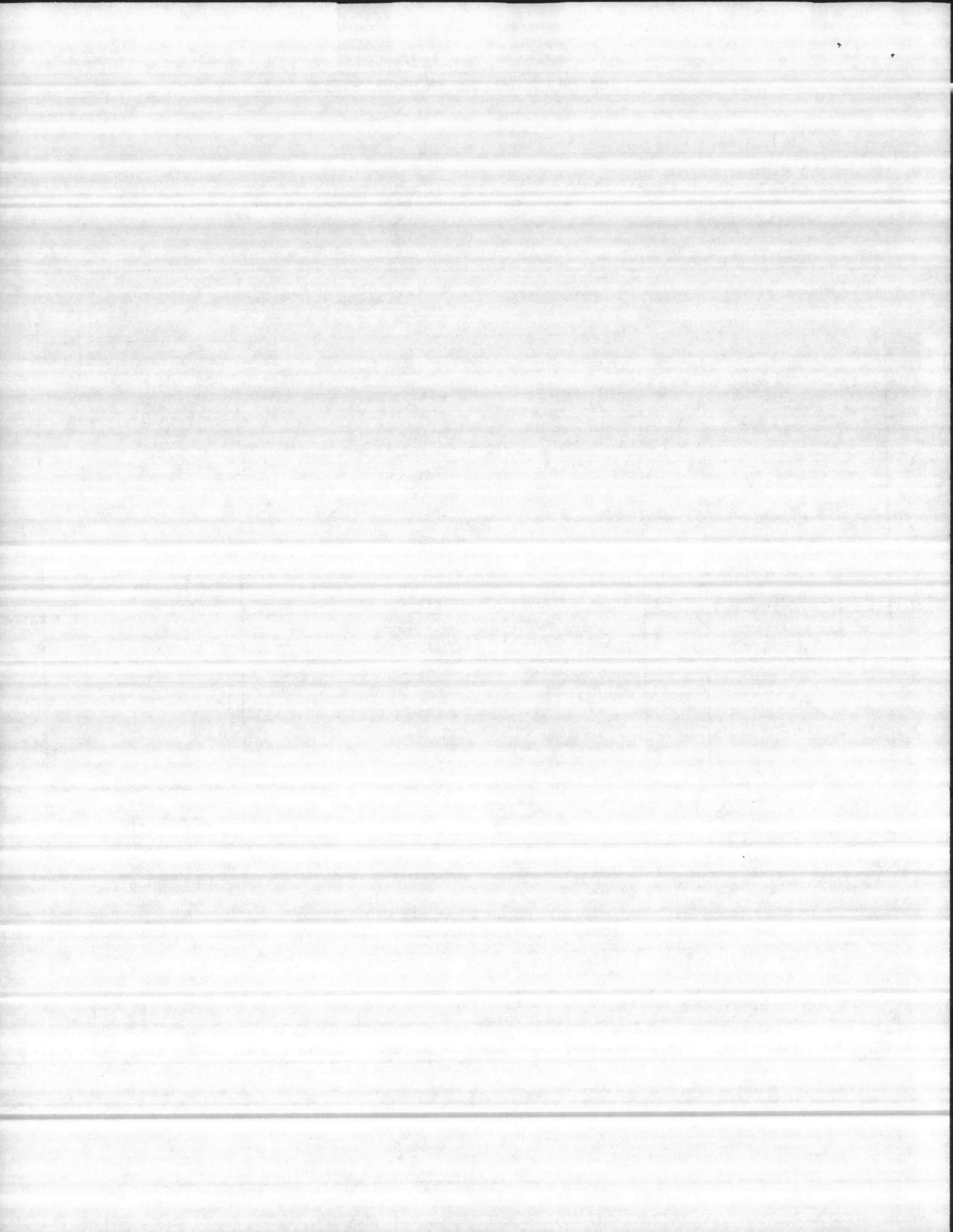
ATTN: Mr. John Grubbs - Code 05

WE ARE SENDING YOU THE FOLLOWING DATA XX HEREWITH _____ UNDER SEPARATE COVER

QUAN.	DOCUMENT NO.	REV. NO.	DESCRIPTION	VENDOR	CODE			
1	715 704-1 715 714 714		Yard Hydrant Certification Yard Hydrant Mfg. Data Fire Hydrant Certification Gate Valve Certification Gate Valve Switch Mfg. Data	Woodford " American Darling " "	A A A A			
CODE FOR								
LOCKWOOD GREENE DOCUMENTS			VENDOR DOCUMENTS					
A - INFORMATION B - REVIEW C - APPROVAL D - REVISED DWG. (SEE REVISION)			E - BID F - CONSTRUCTION G - PURCHASING H - K - NO CORRECTIONS NOTED L - MAKE CORRECTIONS NOTED M - REVISE AND RESUBMIT N - REJECTED (SEE REMARKS)					
COPIES TO		QUAN	TRANS ONLY	CODE	COPIES TO	QUAN	TRANS ONLY	CODE
Cardinal Contracting ROICC		3	1					
		2	2					
REMARKS								

PLEASE ACKNOWLEDGE RECEIPT BY IMMEDIATE RETURN OF SIGNED COPY OF THIS TRANSMITTAL

RECEIVED BY _____ DATE _____ TRANSMITTED BY George Leonard



ROUTING SLIP

NAME	SEQUENCE	INITIAL	DATE
CARLSON			
COLEY	2	ADC	7-23-79
YOUNG			
PARKS	1	CP	
RAVE			
WRAY	3		
JONES		LW	8-2

REMARKS: *These have been logged in - Pending copy pulled & attached*

5272

CONTRACT NO. **62470-77-G-7526** TRANSMITTAL NO. **714 & 715** DATE **7-2**

PROJECT TITLE AND LOCATION
AVAL REGIONAL MEDICAL CAMP LEJEUNE N.C.

		REVIEWER USE ONLY	
		**ACTION CODES	
		A-Approved	
		D-Disapproved	
		AN-Approved as noted	
		RA-Receipt acknowledged	
		C-Comments	
		R-Resubmit	
<input type="checkbox"/> Deviation/Substitution For OICC Approval			
dwg. or	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
BT CERT.	7	A	BT 7/13/79
MFG. DATA	7	A	BT 7/13/79
E HYDRANT CERT.	7	A	BT 7/13/79
E VALVE "	7	A	BT 7/13/79
H MFG. DATA	7	A	BT 7/13/79

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

DATE RECEIVED BY REVIEWER

7/6/79

FROM (Reviewer)

CONTRACTOR REPRESENTATIVE (Signature)

Wm. J. Haynes

- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

*file field
8-2-79
LW*

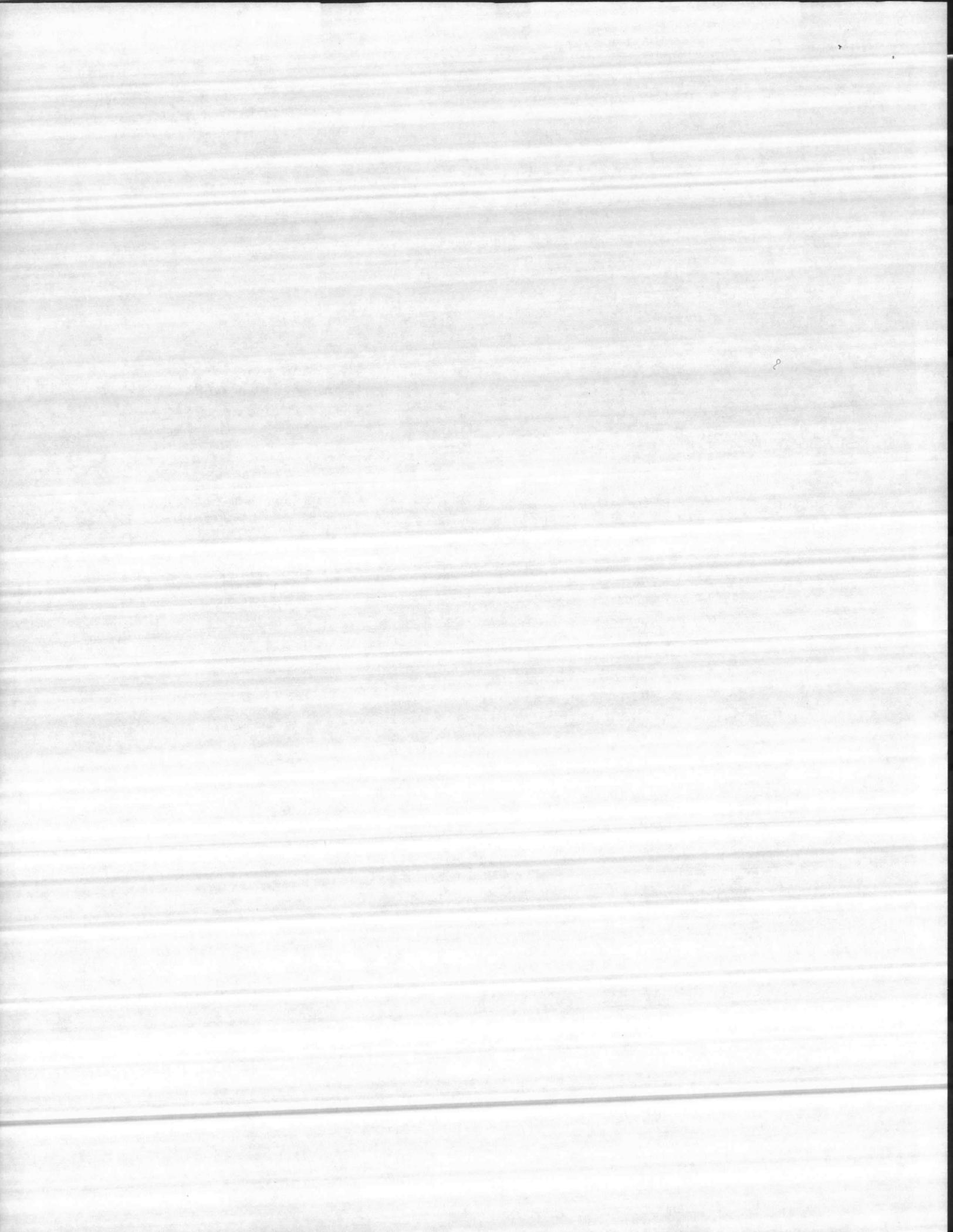
COPIES TO:
 ROICC (2)
 LANTDIV (1)
 A-E (1)

DATE

Jul 13, 1979

SIGNATURE

Robert E. Turner





WOODFORD MANUFACTURING COMPANY

1626 DELAWARE AVE. • P.O. BOX 3369 • DES MOINES, IOWA 50316 • PH. 515 265-3401

June 22, 1979

Section 15272
Paragraph 4.7

Mr. Bill Corbin, Jr.
East Coast Construction Company
P O Box 5004
Jacksonville, N C 28540

CONTRACT N62470-77-C-7526
205 BED HOSPITAL
NAVAL REGIONAL MEDICAL CENTER
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

Gentlemen:

REFERENCE: YARD HYDRANTS FOR CONTRACT N6247077C
7526 NAVAL REGIONAL MEDICAL CENTER

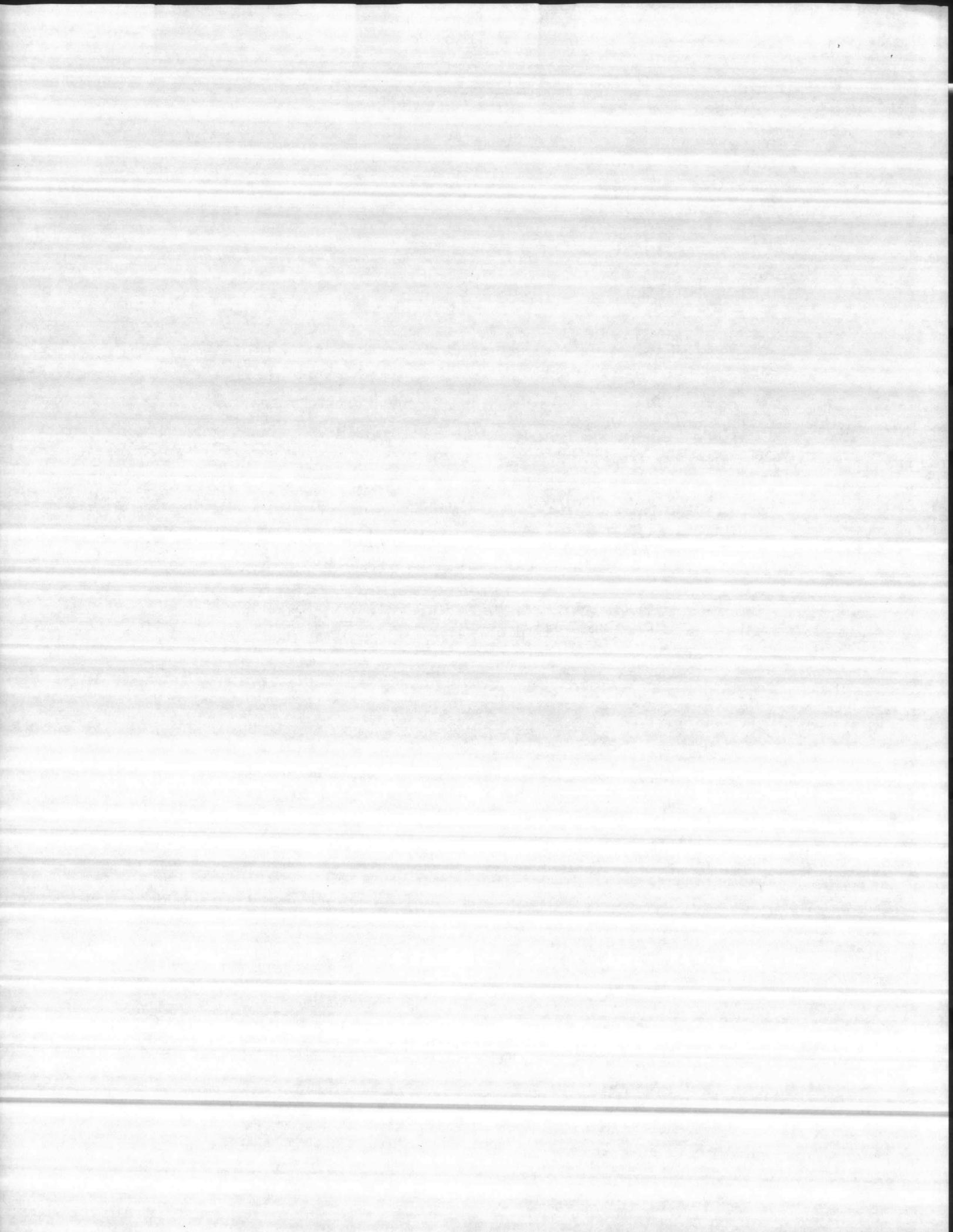
This is to certify that the Model Y70 freezeless yard hydrant meets the specifications on Contract N6247077C 7526 Section 15272, paragraph 4.7

Sincerely,

Vernon L. Kelly
Vice President-Sales

VLK:dk

1277



Section 15272
 Paragraph 4.7

CONTRACT N62470-77-C-7526
 205 BED HOSPITAL
 NAVAL REGIONAL MEDICAL CENTER
 MARINE CORPS BASE
 CAMP LEJEUNE, NORTH CAROLINA

Freezeless Yard Hydrants Lawn Hydrant Models Y70 and Y95

Lawn hydrants install flush with surrounding surfaces, and are intended for use on golf courses, in parks and recreation areas, shopping center malls, and landscaped areas around buildings.

TAMPER PROOF — Hinged cover locks with same tee key that operates hydrant, prevents unauthorized use.

ONE PIECE VARIABLE FLOW PLUNGER — Large cushion type seal for longer life — is not easily damaged and assures positive shut-off even when foreign particles are present. Automatic drain feature — plunger positively opens drain to prevent freezing — positively closes at any flow to prevent wasting water.

PARTS REPLACEMENT — Head nut assembly can be removed for ready access to internal parts.

→ **SPECIFICATIONS: — Y70**

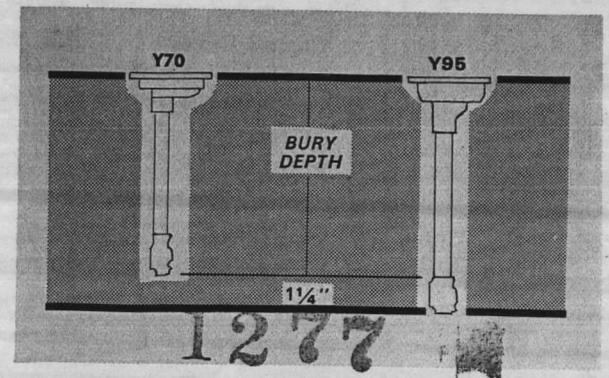
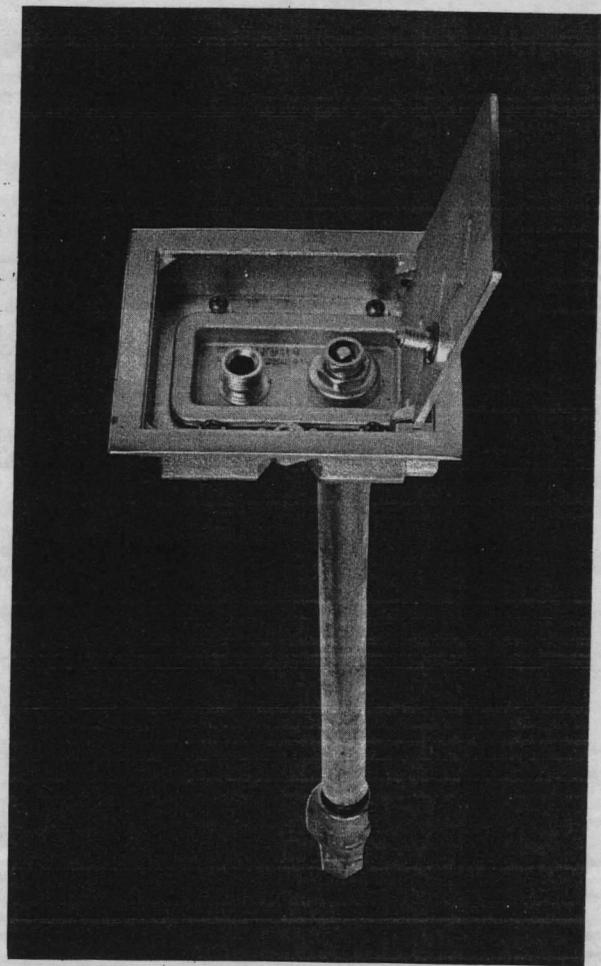
- BOX** — Brass casting. Dimensions same as B71.
- PACKING NUT ASSEMBLY** — Adjustable packing nut. Lock nut prevents packing nut from loosening. Teflon impregnated packing.
- FINISH** — Brass box, door, and head casting.
- INLET** — 3/4" N.P.T.
- DRAIN HOLE** — Tapped for 1/8" N.P.T.
- CASING** — 1" galvanized steel pipe
- OPTIONAL** — 1" brass pipe outer casing, 3/8" brass pipe operating rod.
- BRASS NOZZLE** — 3/4" Male hose thread

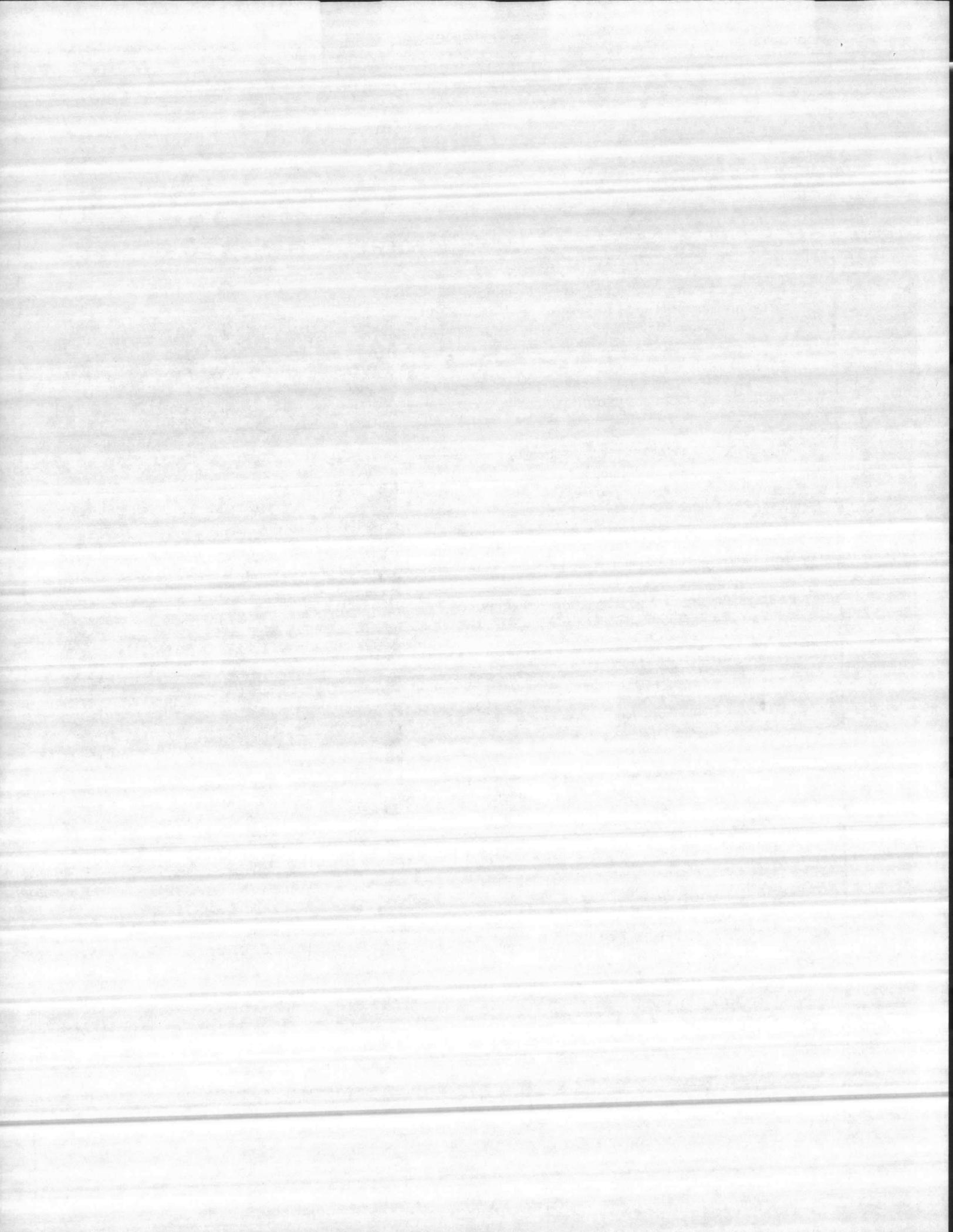
BURY DEPTH (feet)	1	2	3	4	5	6	7
SHIPPING WEIGHT (lbs.)	12	15	17	19	22	24	26

SPECIFICATIONS: — Y95

- VACUUM BREAKER** — Nidel Model 34HW with 3/4" Male hose thread
- BOX** — Deep box, cast brass. Dimensions same as 95.
- PACKING NUT ASSEMBLY** — Adjustable packing nut. Lock nut prevents packing nut from loosening. Teflon impregnated packing.
- FINISH** — Brass box, door, and head casting.
- INLET** — 3/4" N.P.T.
- DRAIN HOLE** — Tapped for 1/8" N.P.T.
- CASING** — 1" galvanized steel pipe
- OPTIONAL** — 1" brass pipe outer casing, 3/8" brass pipe operating rod.
- BRASS NOZZLE** — 3/4" Male hose thread

BURY DEPTH (feet)	1	2	3	4	5	6	7
SHIPPING WEIGHT (lbs.)	14	16	18	21	23	26	28





ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED _____
APPROVED AS NOTED _____
DISAPPROVED _____

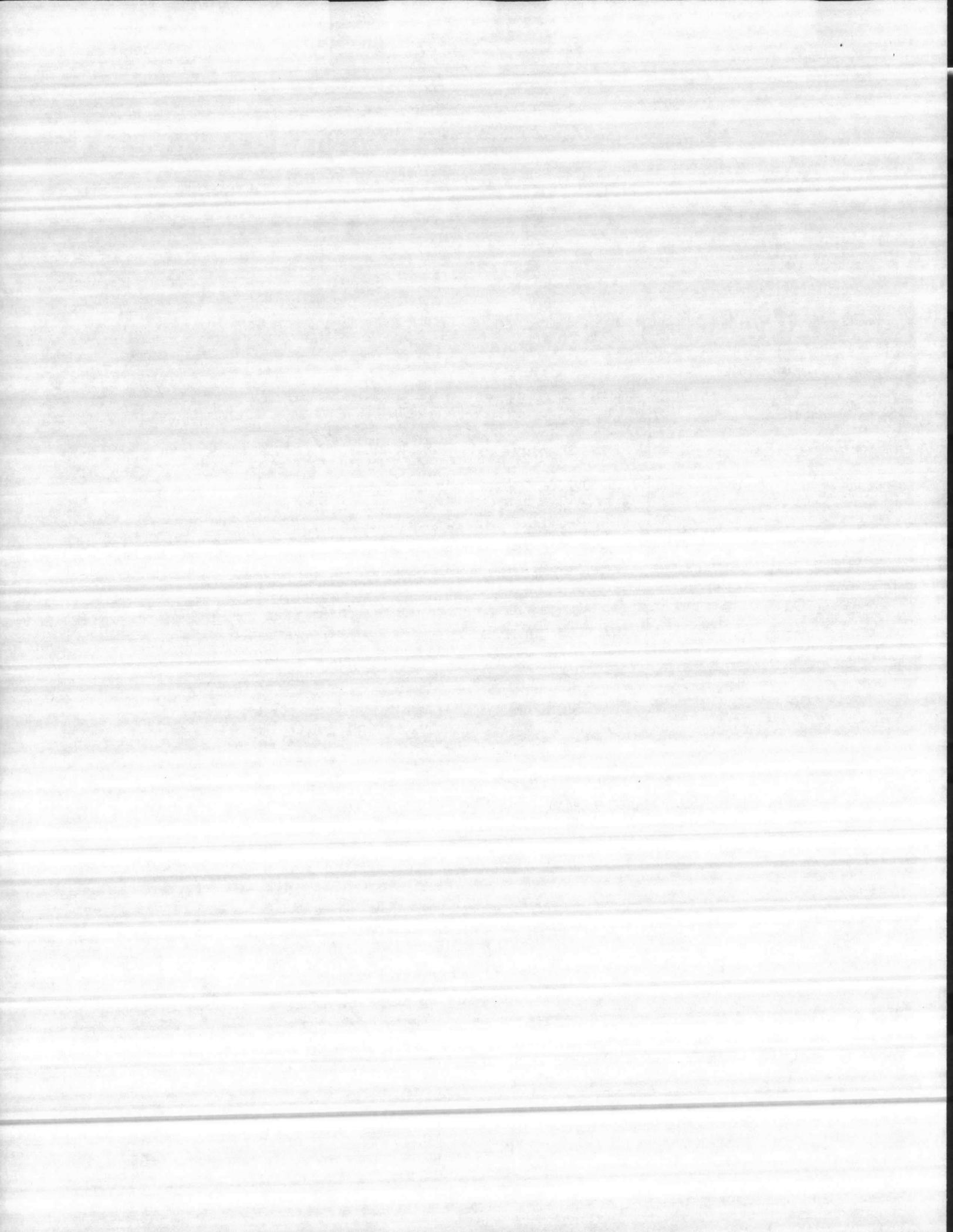
SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. N62470-77-C-7526

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE
APPROVAL OF ANY DEVIATION FROM THE CON-
TRACT REQUIREMENTS UNLESS THE CONTRAC-
TOR CALLS ATTENTION TO AND SUPPORTS THE
DEVIATION...THE CONTRACTOR SHALL BE RE-
SPONSIBLE FOR PROVIDING PROPER PHYSICAL
DIMENSIONS & WEIGHTS. COORDINATION OF
TRADES, ETC. AS REQUIRED

REVIEWER *Stinner* DATE *7/13/79*

FOR OFFICER IN CHARGE OF CONSTRUCTION

FILE NO. _____
Lockwood Greene Engineers, Inc.
RECEIVED
JUL 17 1979
REF. TO _____
ACK. _____



Certificate of Compliance

AMERICAN-DARLING VALVE & MANUFACTURING DIV.
AMERICAN CAST IRON PIPE COMPANY
BIRMINGHAM, ALABAMA, USA

CUSTOMER DAVIS METER & SUPPLY

DATE June 20, 1979

CUSTOMER ORDER D1-83-883-15

A-D ORDER 9-77872

The 15 5 1/4" B62B Hydrants on the subject order for Hospital Job N6247077C7526 were manufactured and factory tested in accordance with AWWA C502-74.

CONTRACT N62470-77-C-7526
205 BED HOSPITAL
NAVAL REGIONAL MEDICAL CENTER
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

Section 15272
Paragraph 4.5

1277

WE CERTIFY THE ABOVE INFORMATION TO BE CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.

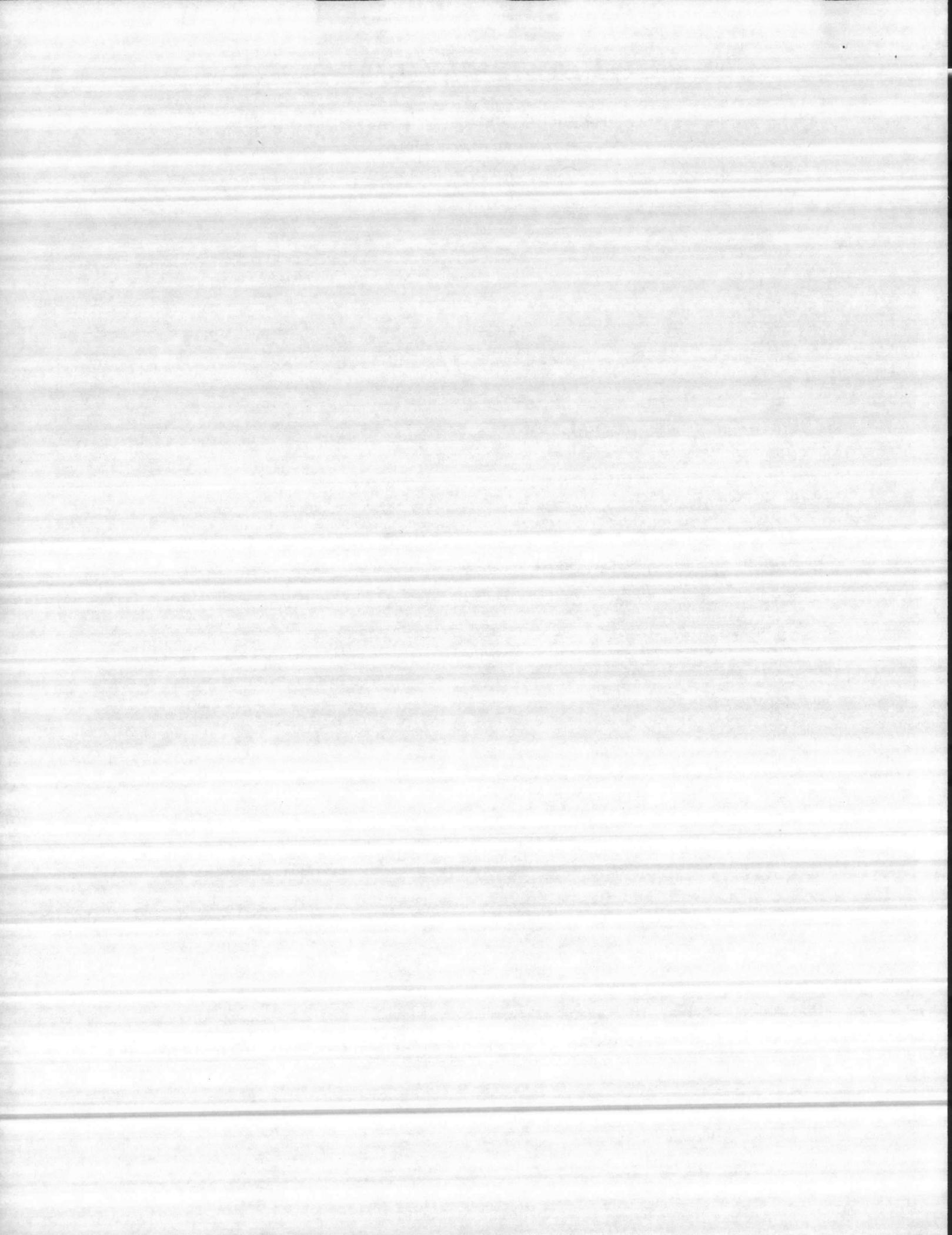
SUBSCRIBED AND SWORN BEFORE ME THIS

20 DAY OF June 19 79

R. H. Shafer
R. H. SHAFER NOTARY PUBLIC

Notary Public, State of Alabama at Large
My Commission Expires December 15, 1980

T. C. Lester
AMERICAN-DARLING VALVE & MANUFACTURING
Chief Engineer



Certificate of Compliance

AMERICAN-DARLING VALVE & MANUFACTURING DIV.

AMERICAN CAST IRON PIPE COMPANY

BIRMINGHAM, ALABAMA, USA

CUSTOMER DAVIS METER & SUPPLY

DATE June 20, 1979

CUSTOMER ORDER D1-83-883-15

A-D ORDER V2930, 9-77872

The 6", 8" and 10" No. 50 AC and 55 gate valves on the subject orders for Hospital Job N6247077C7526 were manufactured and factory tested in accordance with AWWA C500-71.

CONTRACT N62470-77-C-7526
205 BED HOSPITAL
NAVAL REGIONAL MEDICAL CENTER
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

Section 15272
Paragraph 4.4

1277

WE CERTIFY THE ABOVE INFORMATION TO BE CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.

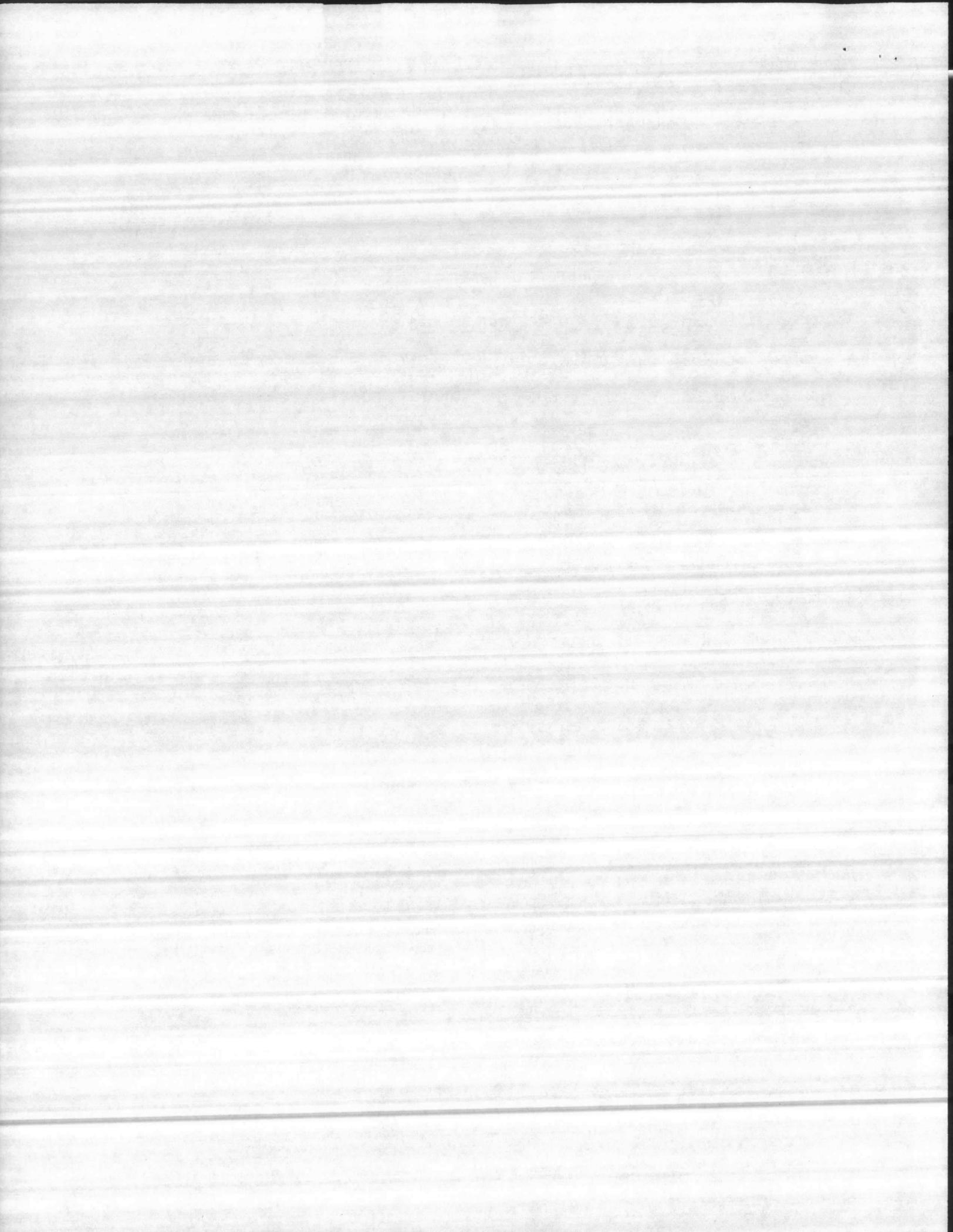
SUBSCRIBED AND SWORN BEFORE ME THIS

20 DAY OF June 1979

R. N. Shafer
R. N. SHAFER
NOTARY PUBLIC

Notary Public, State of Alabama at Large
My Commission Expires December 15, 1980

[Signature]
AMERICAN-DARLING VALVE & MANUFACTURING
Chief Engineer



Gate Valve Switches

CONTRACT N62470-77-C-7526
 205 BED HOSPITAL
 NAVAL REGIONAL MEDICAL CENTER
 MARINE CORPS BASE
 CAMP LEJEUNE, NORTH CAROLINA
 Section 15272
 Paragraph 4.4.1

The Model OSYS-B and OSYS-U are gate valve switches designed to monitor OS&Y (outside screw & yoke) type gate valves.

One or more of these devices may be used with supervisory-type transmitters for Central Station operation or may be utilized in local systems, annunciators, bells, horns, etc.

The OSYS-B has one single pole, double throw microswitch for either normally open or normally closed circuits. This device will fit most OS&Y valves from 4" through 12" sizes.

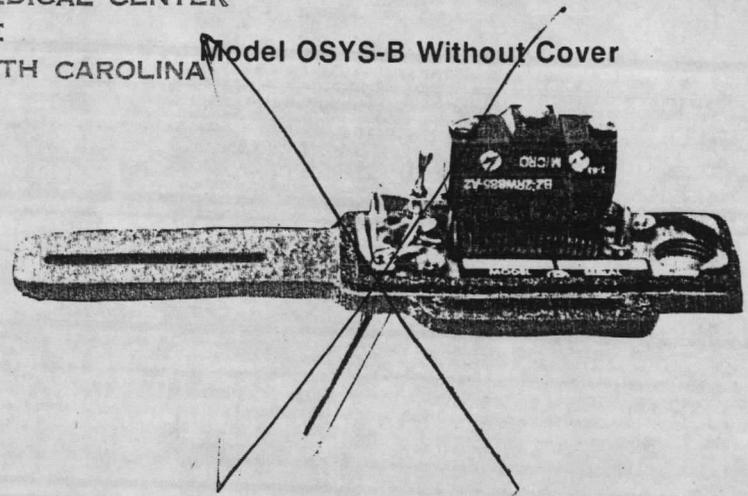
The OSYS-U has two single pole, double throw microswitches and is designed to fit most OS&Y valves from 1/2" through 12" sizes.

Both units incorporate cover tamper and are supplied with "J" bolts for mounting.

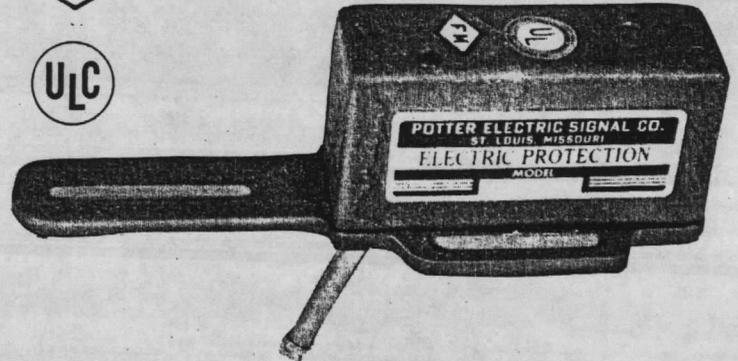
Installation is accomplished by filing a small notch in the side of the valve stem to receive the actuating roller rod on the gate valve switch and securing the device with the "J" bolts.

An explosion proof model is available with one single pole, double throw microswitch—Model OSYS-EX.

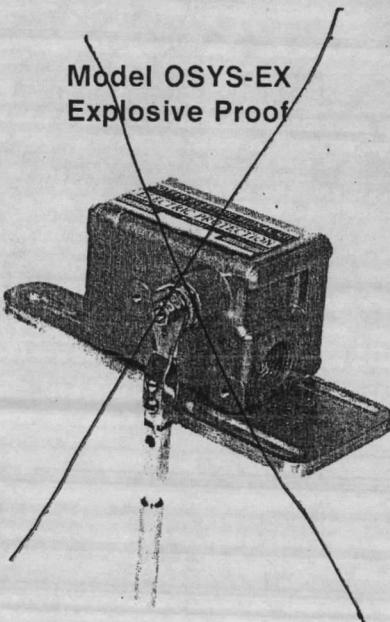
NOTE: For Demco (Griffnell) butterfly valves, see Models PIVS-B, PIVS-C & PIVS-U.



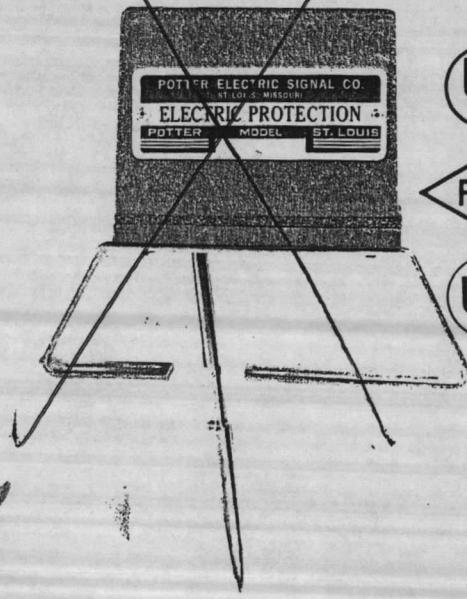
Model OSYS-B (Small Case)
 L—8-1/8" W—2-1/4" D—2-1/2"
 Allow 2-1/2" to remove cover.



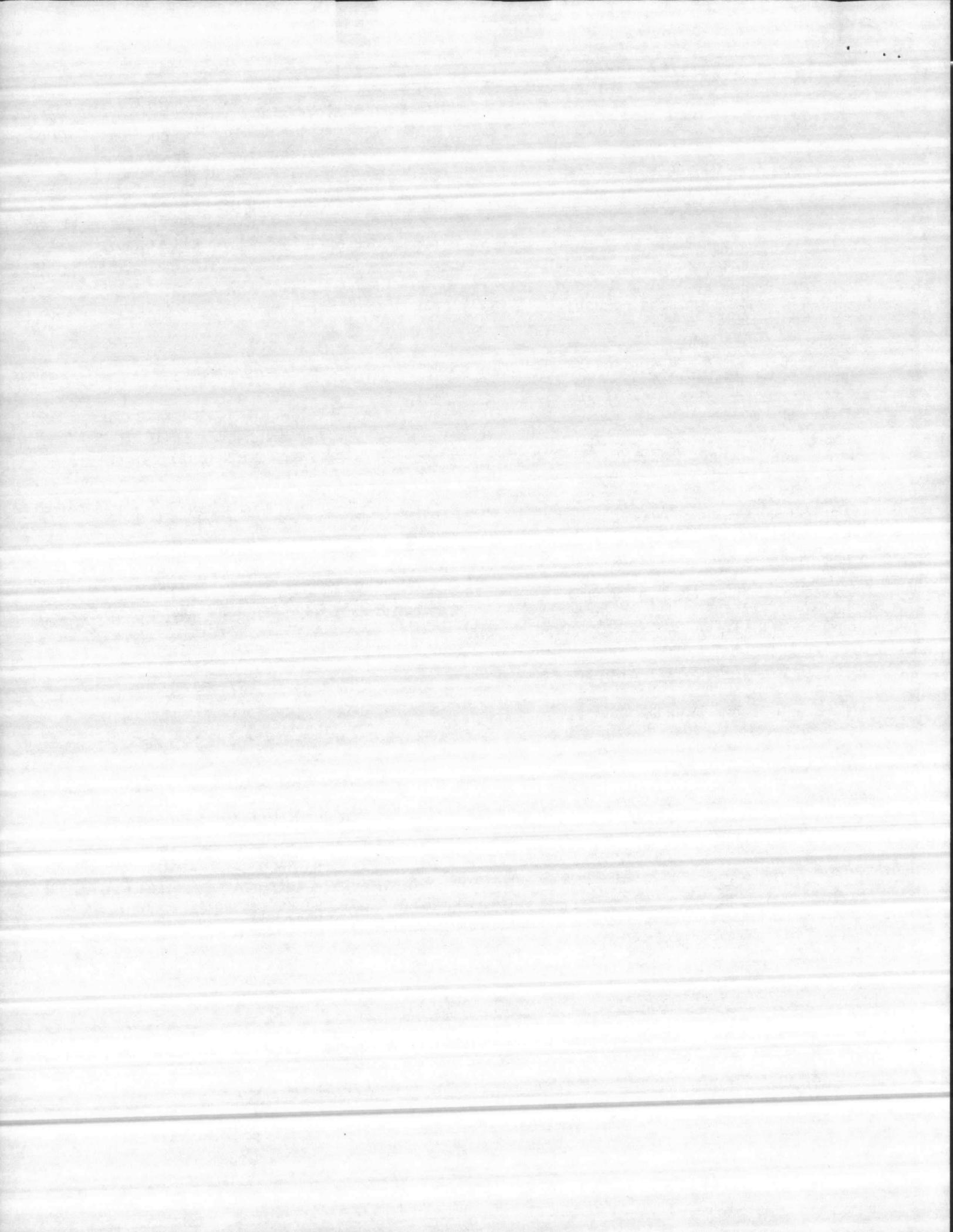
Model OSYS-EX
 Explosive Proof



Model OSYS-U
 W—6" H—5-1/4" D—2-1/2"
 (Dimensions include Bracket)
 Allow 3" to remove cover



1277



150
716
710
717

DRAWING AND SPECIFICATION TRANSMITTAL
LOCKWOOD GREENE ENGINEERS, INC.

SPARTANBURG, SOUTH CAROLINA 29304
P.O. BOX 491 (803)582-2351

TO Naval Facilities Engineering
Command
Atlantic Division
Norfolk, Va. 23511

DATE Nov. 28, 1979
JOB NO. 77239.16
JOB NAME Naval Regional Medical Center

TRANSMITTAL NO. 1904
SHEET 1 OF 1
ORDER NO.
Contract Number
N-62470-77-C-7526

ATTN: Mr. John Grubbs Code 05

WE ARE SENDING YOU THE FOLLOWING DATA xx HEREWITH _____ UNDER SEPARATE COVER

QUAN.	DOCUMENT NO.	REV. NO.	DESCRIPTION	VENDOR	CODE
1			Meter Certification	Hersey Prod.	A
1			Certification Tests	Badger Meter	A
1			Meter Cat. Data	Hersey	A
1			Cat. Data	Badger Meter	A
1			Pedestal Drinking Foundation	Haws	A

CODE FOR

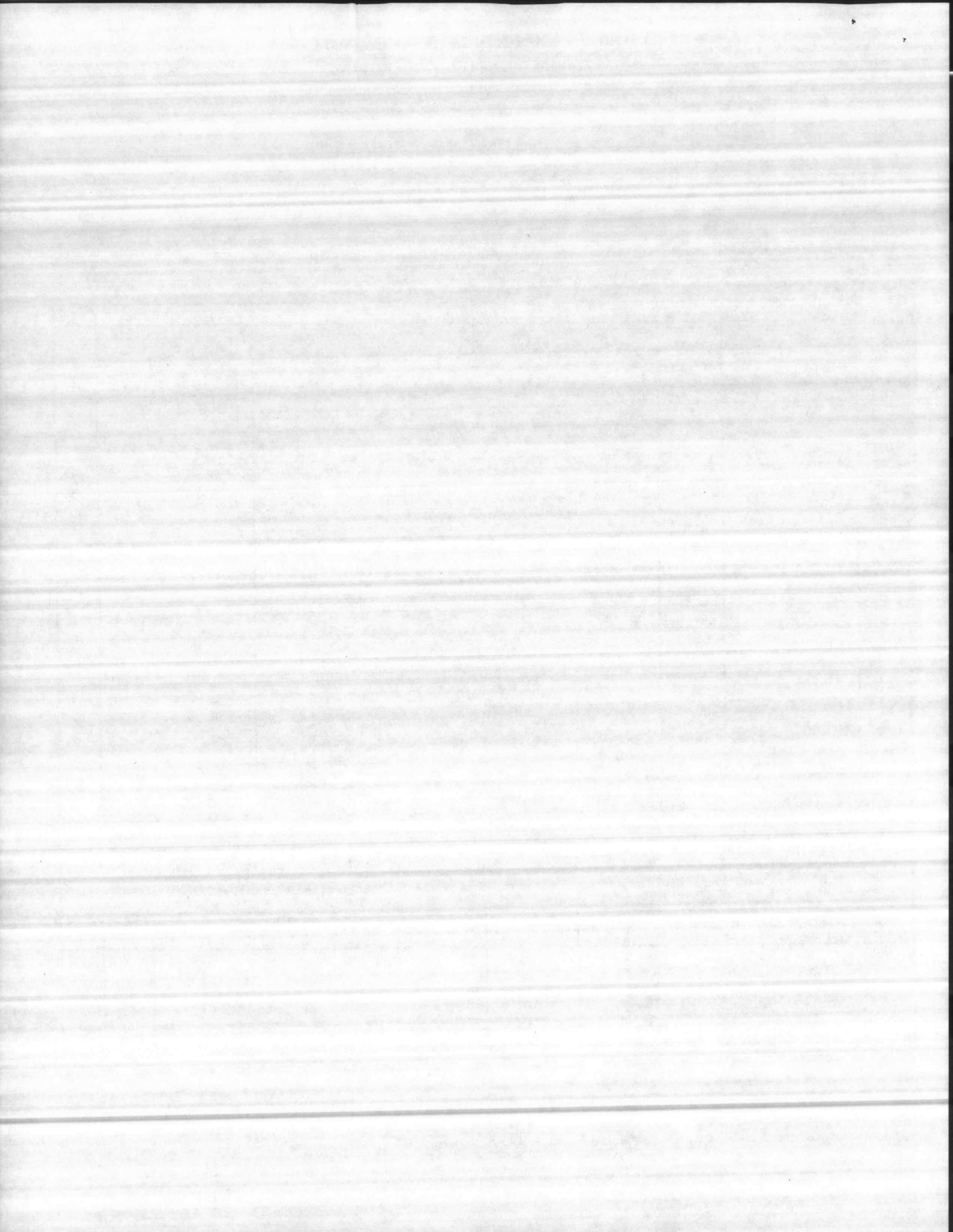
LOCKWOOD GREENE DOCUMENTS		VENDOR DOCUMENTS	
A - INFORMATION	E - BID	K - NO CORRECTIONS NOTED	
B - REVIEW	F - CONSTRUCTION	L - MAKE CORRECTIONS NOTED	
C - APPROVAL	G - PURCHASING	M - REVISE AND RESUBMIT	
D - REVISED DWG. (SEE REVISION)	H -	N - REJECTED (SEE REMARKS)	

COPIES TO		QUAN	TRANS ONLY	CODE	COPIES TO		QUAN	TRANS ONLY	CODE
ROICC		2							
Cardinal		3							

REMARKS

PLEASE ACKNOWLEDGE RECEIPT BY IMMEDIATE RETURN OF SIGNED COPY OF THIS TRANSMITTAL

RECEIVED BY _____ DATE _____ TRANSMITTED BY Richard McKnight



Recordall Meters Provide Greater Flexibility in Proper Meter Sizing

7 1/2" LAYING LENGTH



RECORDALL 15 (PLUS 5)
SPUDS 20 GPM CAPACITY

8" LENGTH



MODEL 25 (PLUS 5)
SPUDS 30 GPM

10 1/2" LENGTH



MODEL 40 (PLUS 10)
SPUDS 50 GPM

12 1/2" LENGTH



MODEL 70 (PLUS 30)
HEX ENDS 100 GPM

14" LENGTH



MODEL 70 (PLUS 40)
ELLIPTICAL FLANGE 100 GPM

15 1/2" LENGTH



MODEL 120 (PLUS 40)
ELLIPTICAL AND
HEX ENDS 100 GPM

17" LENGTH



MODEL 120 (PLUS 40)
ELLIPTICAL FLANGE 100 GPM



CONTRACT N62470-77-G-7526
200 BED HOSPITAL
NAVAL REGIONAL MEDICAL CENTER
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA



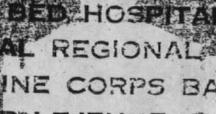
8" SIZE DISC METER
SPUDS 20 GPM CAPACITY



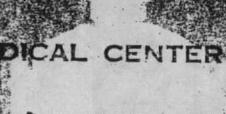
1 1/2" DISC METER
SPUDS 30 GPM



1" AND 1 1/4" DISC METERS
SPUDS 50 GPM



1 1/2" DISC METER
HEX ELLIPTICAL AND
ROUND FLANGES 100 GPM



1 1/2" DISC METER
HEX ELLIPTICAL AND
ROUND FLANGES 100 GPM



2" DISC METER
HEX ELLIPTICAL AND
ROUND FLANGES 150 GPM



2" DISC METER
HEX ELLIPTICAL AND
ROUND FLANGES 150 GPM



RECORDALL 25 (PLUS 10)
SPUDS 30 GPM CAPACITY



MODEL 40 (PLUS 10)
SPUDS 50 GPM



MODEL 70 (PLUS 10)
SPUDS 100 GPM



MODEL 70 (PLUS 10)
ELLIPTICAL AND
HEX ENDS 100 GPM



MODEL 120 (PLUS 40)
ELLIPTICAL FLANGES 100 GPM

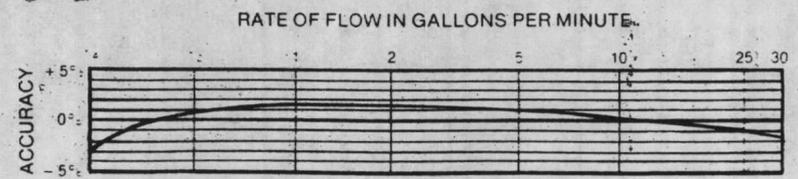
Disc meters in all these sizes and configurations are available from Badger Meter, Inc. Flow Products Division. Recordalls are shown in black silhouettes, conventional disc meters in white. For a detailed description of plastic Recordalls, Models 15, 25 and 40, please refer to Bulletin RD-1.

SPEC. Section 1527Z PARAGRAPH 4.8
YARD HYDRANT VALVE VAULTS 1904

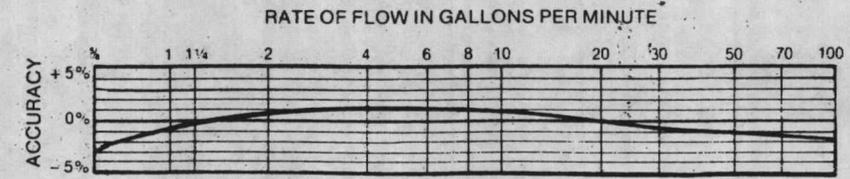
WARRANTY

Badger warrants meters and parts manufactured by it and supplied hereunder to be free from defects in materials and workmanship for a period of 18 months from date of shipment or 12 months from date of installation, whichever period shall be shorter; except that for the sealed register unit, the warranty period shall be fifteen (15) years from date of shipment. If within such period any meters or parts shall be proved to Seller's satisfaction to be defective, such meters or parts shall be repaired or replaced at Seller's option. Seller's obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Seller's receiving written notice of any alleged defect within 10 days after its discovery and, at Seller's option, return of such meters or parts to Seller f.o.b. its factory. THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES WHATSOEVER INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES (EXCEPT OF TITLE) OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Badger shall not be liable for any defects attributable to acts or omissions of others after shipment.

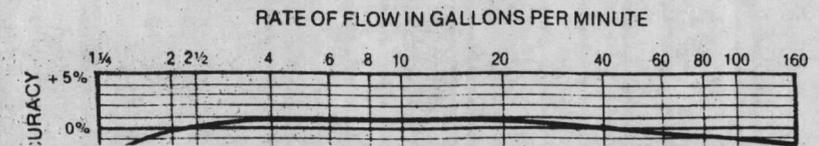
MODEL 25

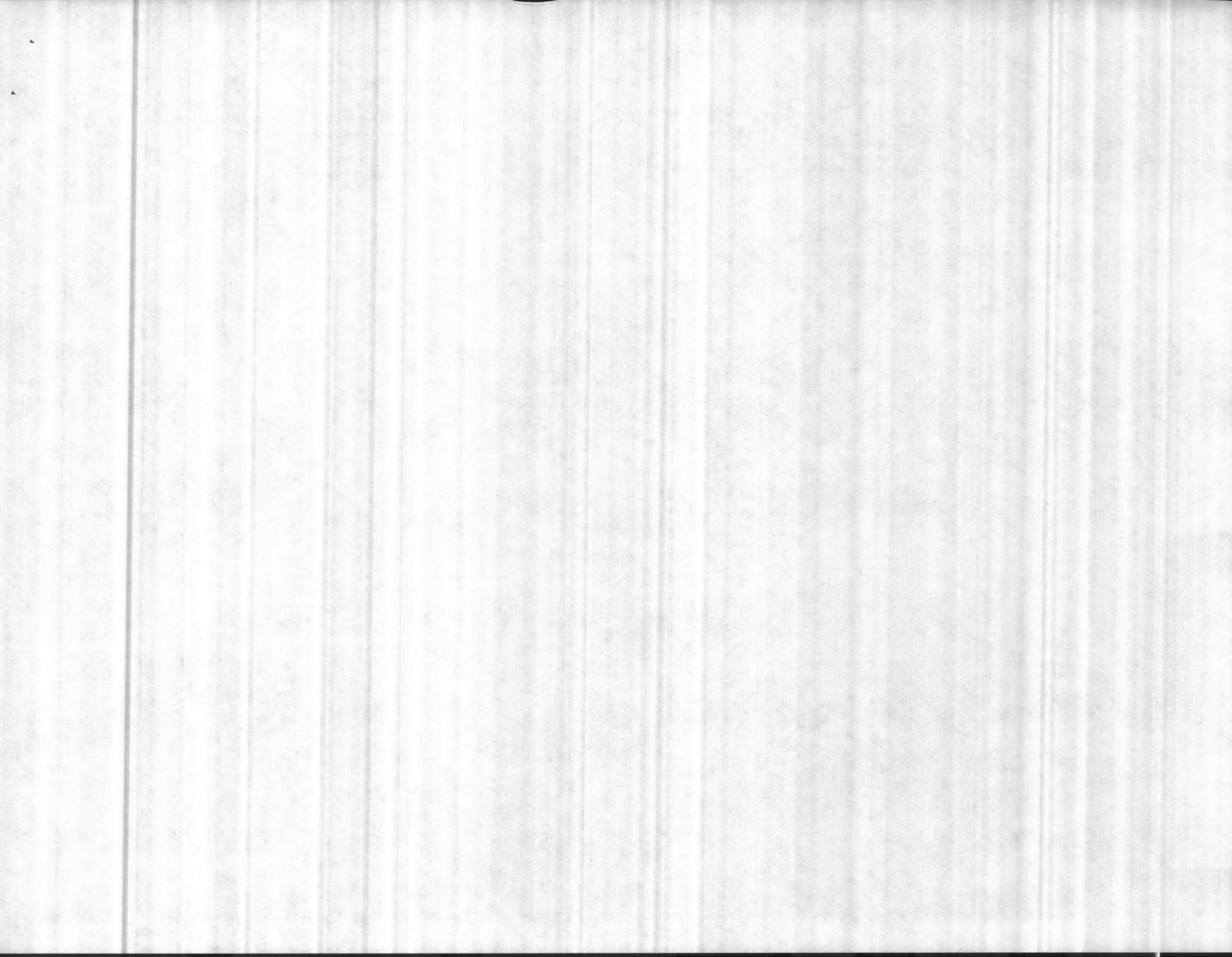


MODEL 70



MODEL 120



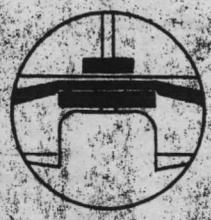


t To Deliver More Water Revenue

CONTRACT N62470-77-C-7526
 205 BED HOSPITAL
 NAVAL REGIONAL MEDICAL CENTER
 MARINE CORPS BASE
 CAMP LEJEUNE, NORTH CAROLINA
RECORDALL FEATURES

MAGNETIC DRIVE

Operates through top wall of meter housing. No gears in water. No packing glands.



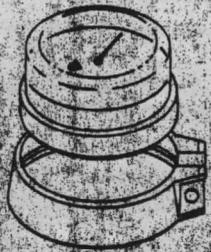
CORROSION RESISTANCE

Gears, chambers and many other parts molded of durable thermoplastic.



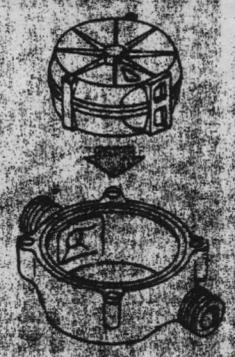
SEALED REGISTER

Protected against moisture and corrosion. Locks onto meter with clamp ring.



EASY SERVICING

Chambers and disc assemblies can be replaced without removing meter from line. Meter components can be readily cleaned with detergent and brush.



FLOW FINDER

Small trickles of water cause Flow Finder to spin. Sends signal plumbing crew.



REMOTE REGISTER

Badger Read-o-Matic available as optional register for installations where access is difficult.



SPECIFICATIONS

MODEL 25 (PLUS 5) FLOW RANGE

Minimum test flow: 1/4 gpm, accuracy 97% or better
 Normal test flow limits: 1/2 to 30 gpm, accuracy of 98.5 to 101.5%.
 Normal operating capacity: 25 gpm.
 Safe maximum capacity: 30 gpm.
 Totalizer capacities: Up to 10 million gallons, 1 million cu. ft., 10,000 or 100,000 cu. meters.

MODEL 70 (PLUS 30) FLOW RANGE

Minimum test flow: 5/8 gpm, 97% accuracy.
 Normal test flow limits: 1 1/4 to 100 gpm, 98.5 to 101.5% accuracy.
 Normal operating capacity: 70 gpm.
 Safe maximum capacity: 100 gpm.
 Totalizer capacities: Up to 100 million gallons, 10 million cu. ft., 100,000 or 1 million cu. meters.

MODEL 120 (PLUS 40) FLOW RANGE

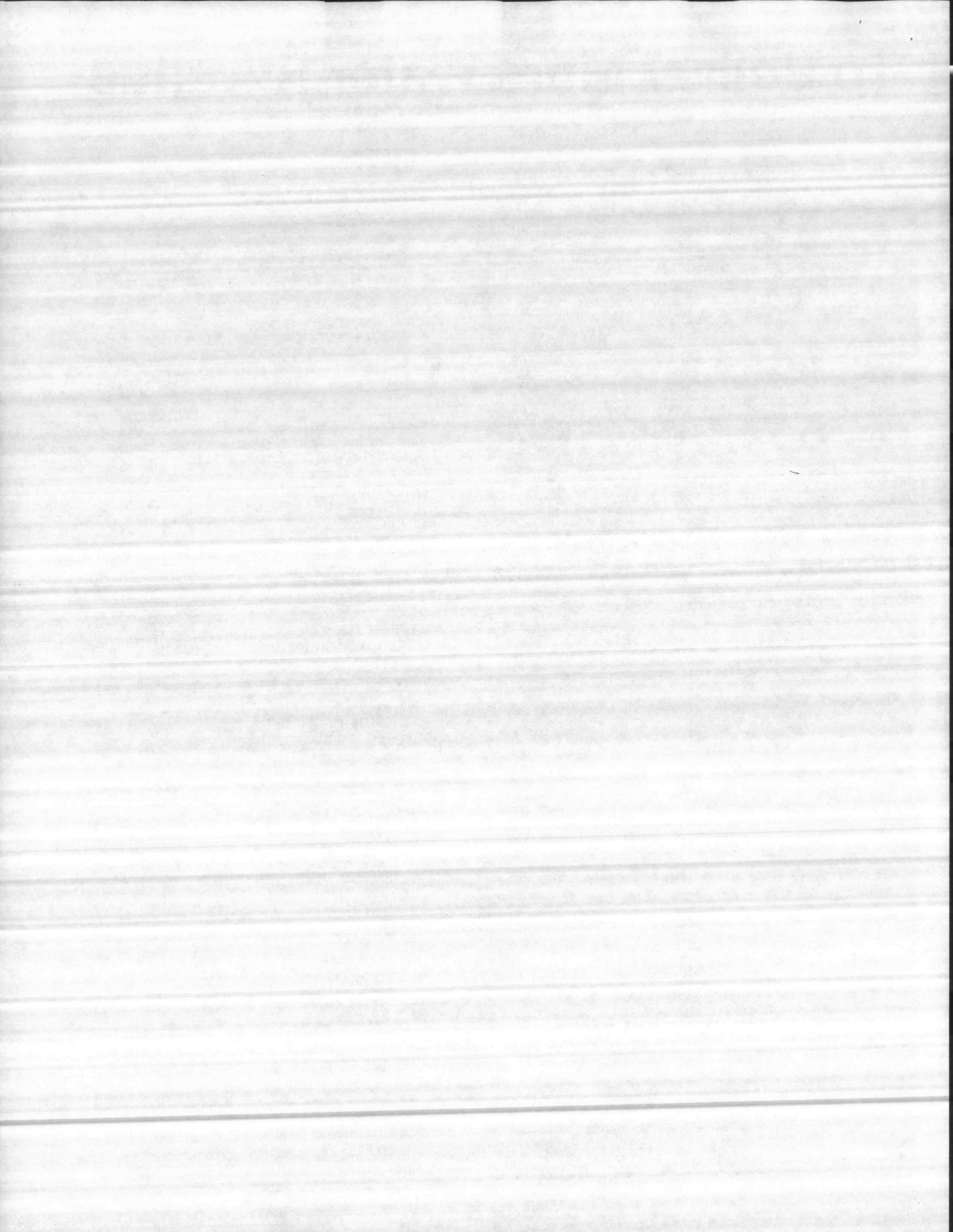
Minimum test flow: 1 1/4 gpm, 97% accuracy.

~~Normal test flow limits: 2 1/2 to 160 gpm, 98.5 to 101.5% accuracy.
 Normal operating capacity: 120 gpm.
 Safe maximum capacity: 160 gpm.
 Totalizer capacities: Same as Model 70.~~

MATERIALS

Housings: bronze.
Bottom plates: cast iron standard, bronze optional on Model 25; bronze only on Models 70 and 120.
 Chamber, partition plate, thrust roller, gear train, screen, register lid and clamp ring: all molded of thermoplastic.
 Nutating disc: thermoplastic on Model 25, hard rubber on Models 70 and 120.
 Chamber O Ring: Buna N.
 Thrust roller insert, disc and magnet spindles: 316 stainless steel.
 Magnets: Barium ferrite.

OPERATING PRESSURES: 150 psi maximum.
 OPERATING TEMPERATURES: 38°F to 80°F.



Badger Recordall . . . Sized Right

Recordall disc meters quickly pay for themselves by increasing water revenue. The reason for this is a totally new approach to meter sizing.

In developing Recordall, Badger took into account evidence that water meters generally have been oversized and that a substantial amount of water has not been adequately measured at low flows. Recordall was designed, therefore, to improve accuracy and revenue in a "practical" flow range that closely matches typical usage.

The new sizing concept has become so firmly established that Badger now offers Recordall disc meters with bronze housings for certain specialized applications in addition to its thermoplastic Recordalls for residential and small commercial installations. The bronze meters are designated as Model 25 (plus 5), Model 70 (plus 30) and Model 120 (plus 40).

With Recordall disc meters, the model number corresponds to the upper limit of the "practical" flow range. The plus factor designates reserve capacity for intermittent use. Thus, the Model 25 (plus 5) is intended primarily for applications up to 25 gpm, but will function satisfactorily up to 30 gpm.

Bronze Model 25 meets or exceeds Standard C-700 of the American Water Works Association for materials and disc nutations in a 1/2" meter. It is designed for water utilities that prefer bronze for pit settings and certain other applications, even though it does not offer the initial economy, corrosion resistance and long-term maintenance savings of Recordall plastic meters.

Except for housings and bottom plates, the bronze and plastic versions of Recordall Model 25 use

the same major components, including registers, hoods and measuring chambers. With a 7 1/2" laying length, bronze Model 25 is interchangeable with a conventional 1/2" meter, a plastic Model 15 Recordall or a plastic Model 25S.

Models 70 and 120 are for applications which require larger capacities than the plastic meters presently available. They are offered in a wide selection of laying lengths and end connections (see chart on back page).

As shown on this same chart, the Recordall product line generally gives your water utility a choice of two or more disc meters in the same laying length, but with different capacities. That way, you pay only for the capacity you need—not more than you need. And you don't sacrifice accuracy and revenue at low flows.

Recordall Design Improves Accuracy

Recordall's innovative sizing concept and certain design features help to improve meter accuracy, especially in the low flow range where other meters are least efficient. Here are three major reasons for the high accuracy performance:

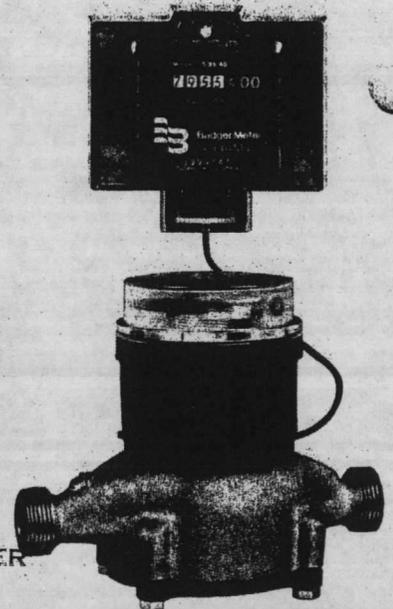
—Gears and many other components are molded of lightweight, but durable plastics which "run smooth" and impose very little load on the measuring elements.

—An O ring on the chamber's outlet port effectively seals the area between chamber and meter housing.

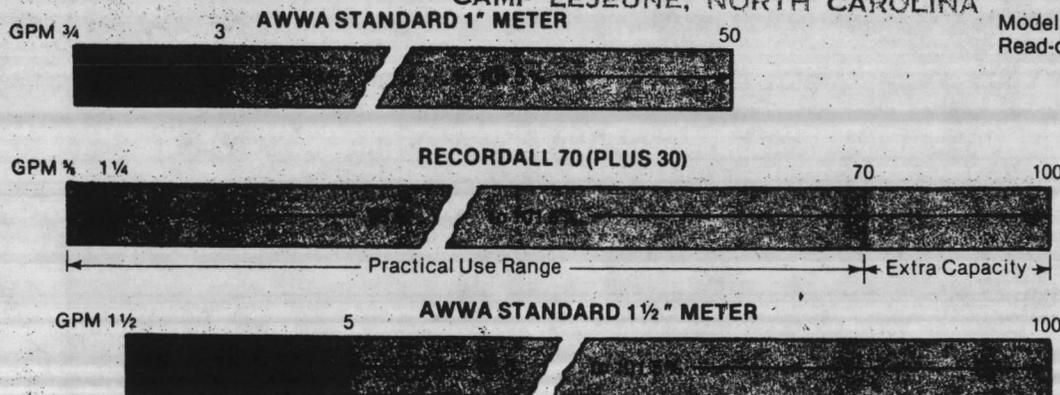
—A powerful magnetic coupling is used to drive the meter's register, thus eliminating the friction load and drag associated with stuffing box meters.

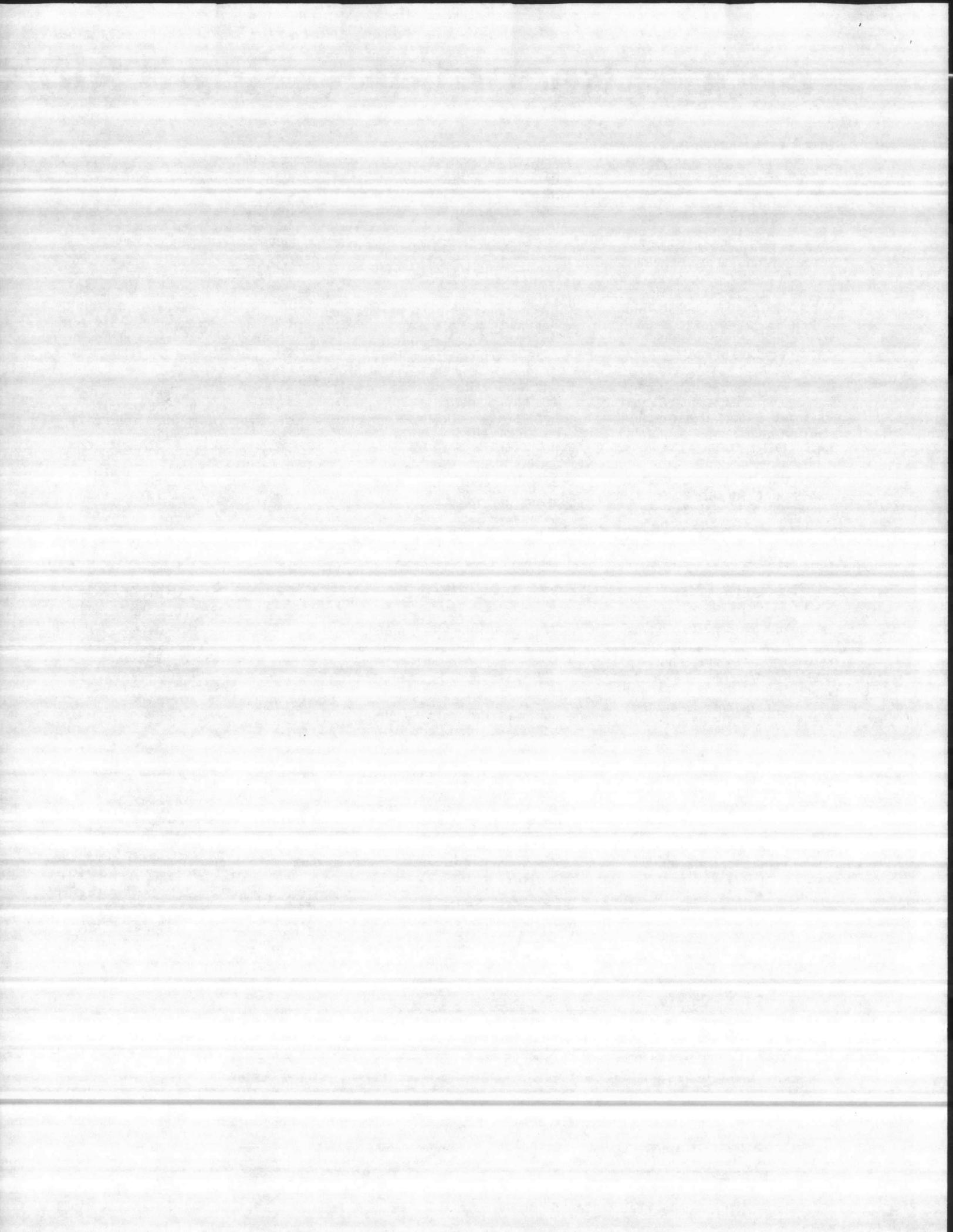
As shown in the accompanying graph, AWWA standards for a 1 1/2" meter call for 95% accuracy at minimum test flow of 1 1/2 gpm and 98.5 to 101.5% accuracy above 5 gpm. Recordall Model 70 beats that hands down with 97% accuracy at 1/2 gpm and 98.5 to 101.5% starting as low as 1/4 gpm.

CONTRACT N62470-77-C-7526
205 BED HOSPITAL
NAVAL REGIONAL MEDICAL CENTER
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA



Model 25 Recordall with Optional Read-o-Matic for Remote Reading

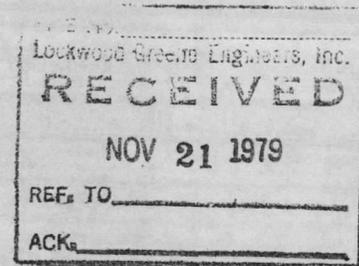




Hersey

PRODUCTS INC. Water Meter & Controls Division
1874 Piedmont Road N.E. Suite 210B Atlanta, Georgia 30324 (404) 371-1151

June 8, 1979



Mr. Bill Corbin, Jr.
East Coast Construction Company
P. O. Box 5004
Jacksonville, North Carolina 28540

Dear Mr. Corbin:

Reference is made to #205 DED Naval Hospital Job, Contract Number N6247077C7526 on 1 - 6" MCT Compound Water Meter.

This letter is to certify the Model MCT meets or exceeds AWWA Standard C702-70.

Very truly yours,

HERSEY PRODUCTS INC.

Beckye Mosely
Beckye Mosely
Administrative Assistant

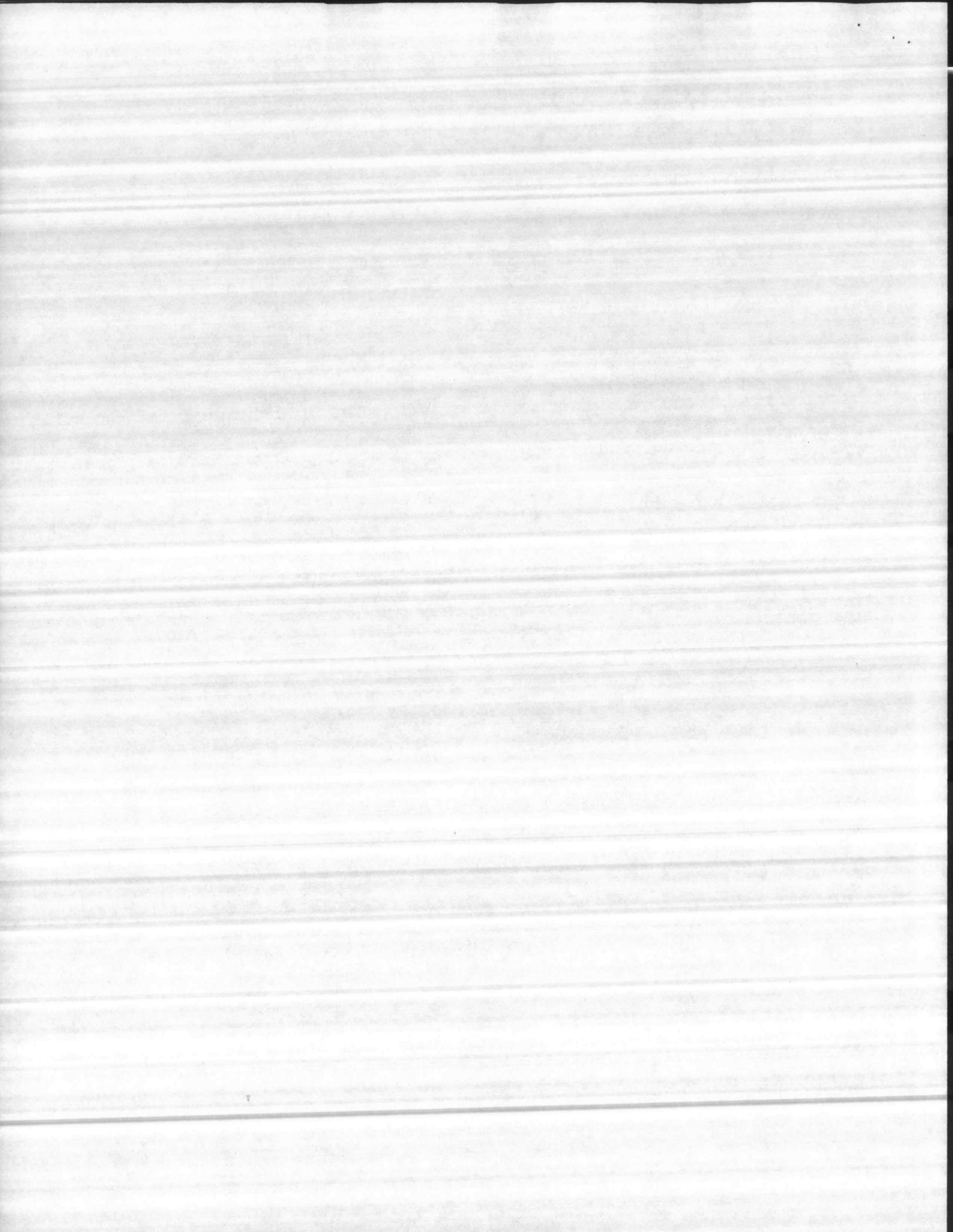
rlm

cc: Mr. Robert Stokely, Davis Meter & Supply, Raleigh, N. C.

June 8, 1979

Carla Hoffman

1904



FILE NO. _____
Lockwood Greene Engineers, Inc.
RECEIVED
NOV 21 1979
REF TO _____
ACK _____

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

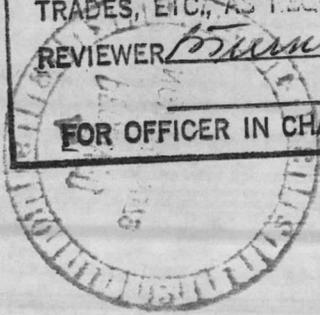
APPROVED _____
APPROVED AS NOTED _____
DISAPPROVED _____

SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. N32470-77-C-7525

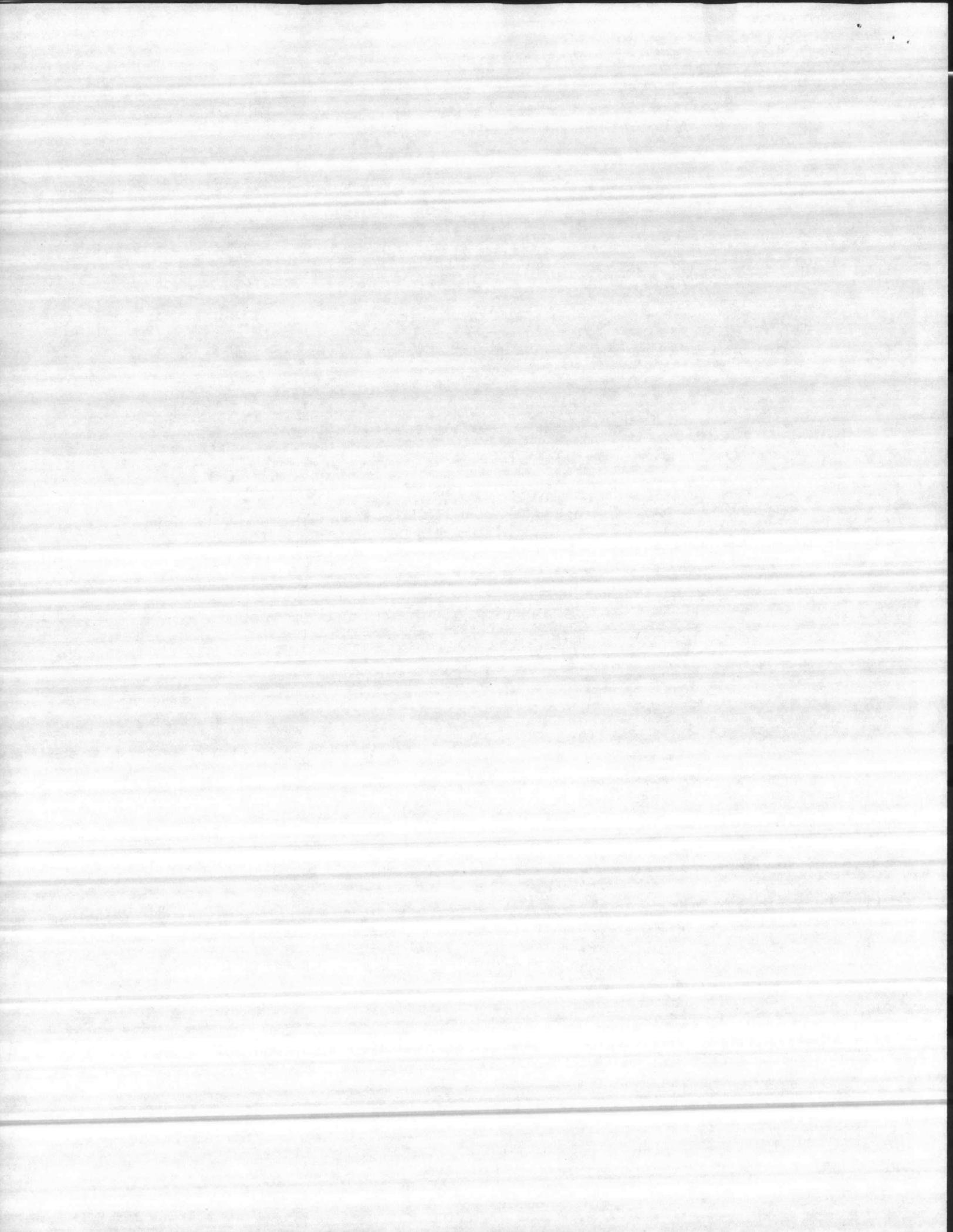
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE
APPROVAL OF A DEVIATION FROM THE CON-
TRACT REQUIREMENTS UNLESS THE CONTRAC-
TOR CALLS ATTENTION TO AND SUPPORTS THE
DEVIATION. THE CONTRACTOR SHALL BE RE-
SPONSIBLE FOR PROVIDING PROPER PHYSICAL
DIMENSIONS & WEIGHTS, COORDINATION OF
TRADES, ETC., AS REQUIRED

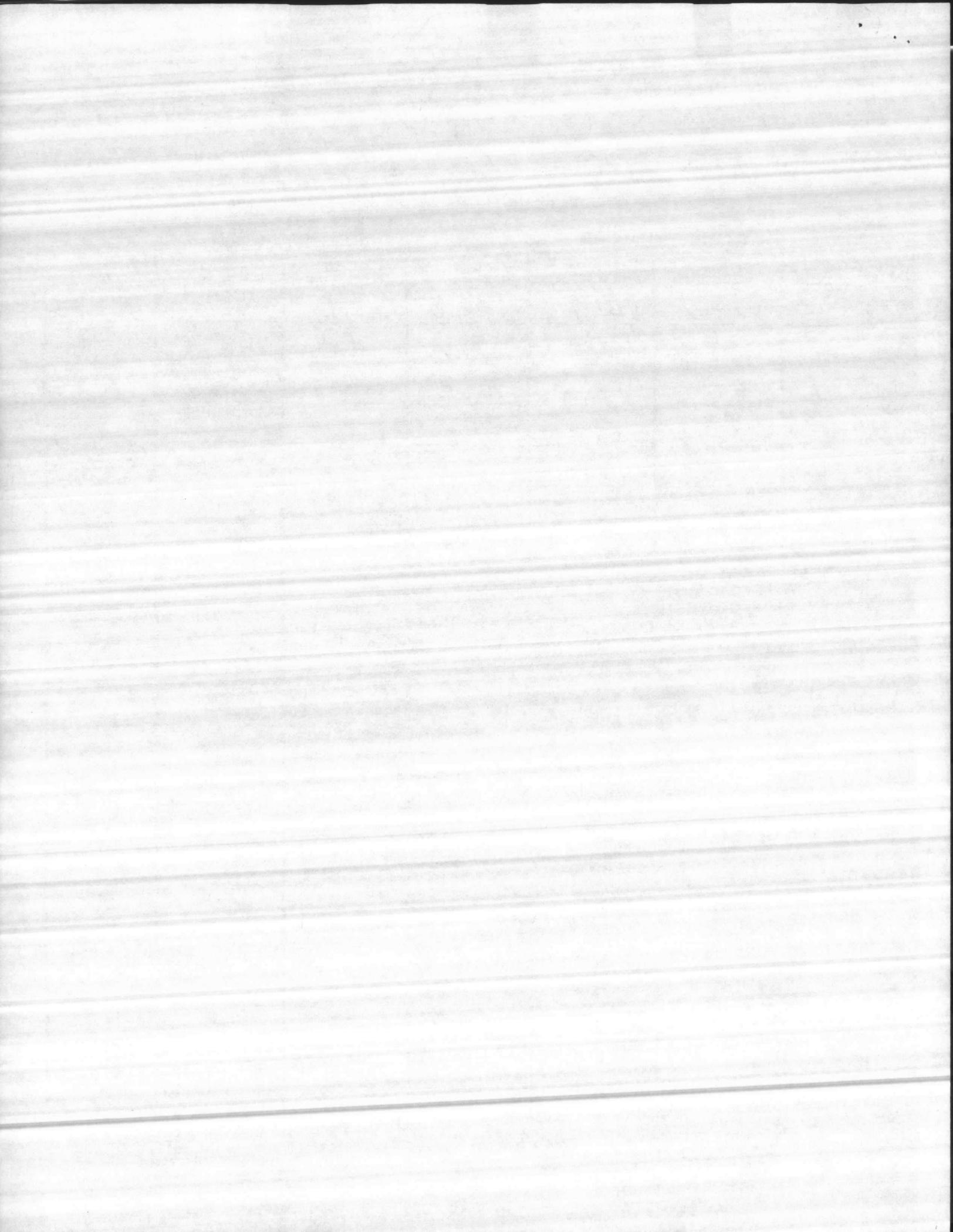
REVIEWER BSumner DATE 11/27/79

FOR OFFICER IN CHARGE OF CONSTRUCTION



1904





15292 714717

DRAWING AND SPECIFICATION TRANSMITTAL
 LOCKWOOD GREENE ENGINEERS, INC.

SPARTANBURG, SOUTH CAROLINA 29304
 P.O. BOX 491 (803)582-2351

TO Naval Facilities Engineering
 Command
 Atlantic Division
 Norfolk, Va. 23511

DATE Jan. 16, 1980
 JOB NO. 77239.16
 JOB NAME Naval Regional Medical
 Center

TRANSMITTAL NO. 77
 SHEET 1 OF 1
 ORDER NO.
 Contract No.

ATTN, Mr. John Grubbs Code 05

N-62470-77-C-7526

WE ARE SENDING YOU THE FOLLOWING DATA xx HEREWITH UNDER SEPARATE COVER

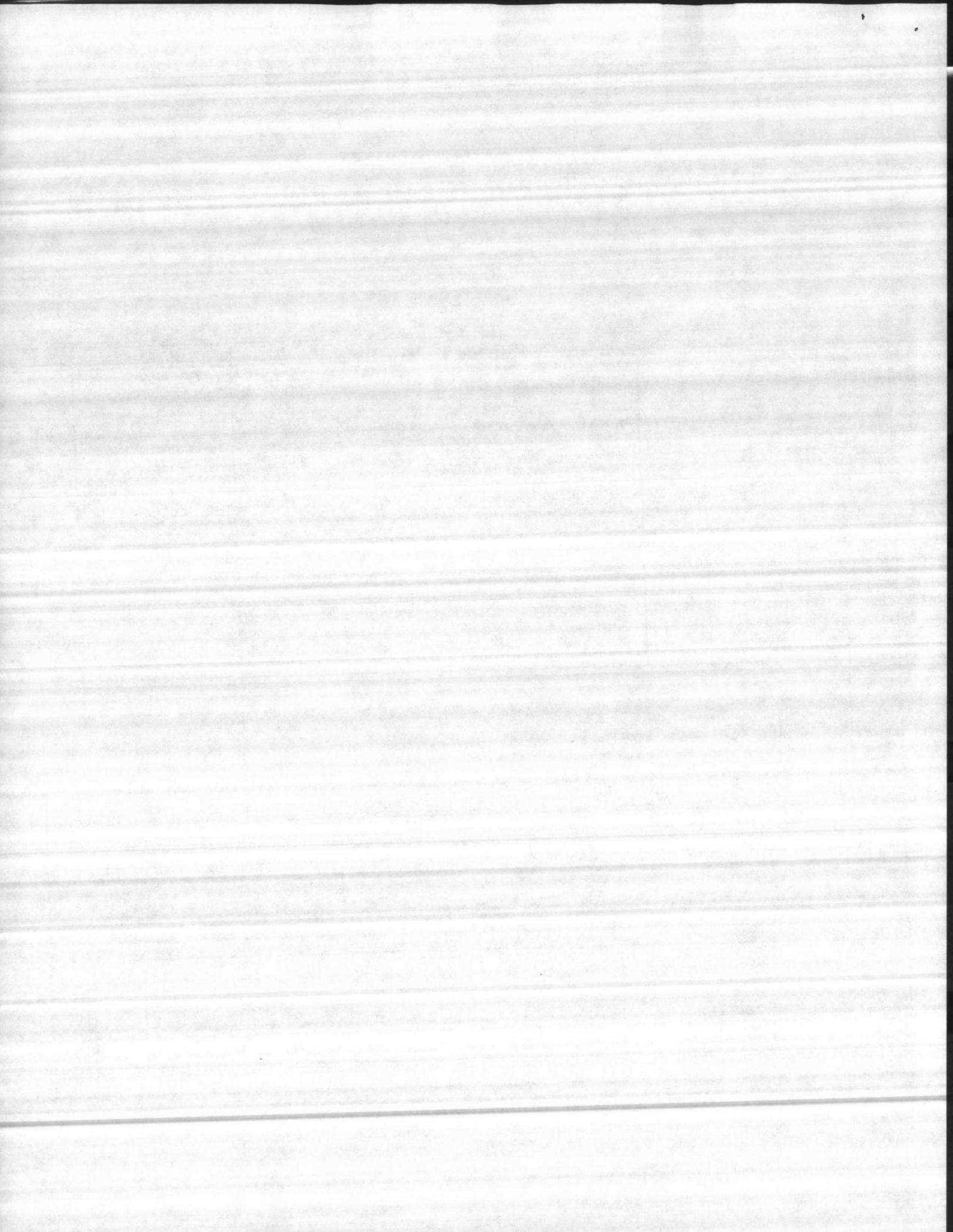
QUAN.	DOCUMENT NO.	REV.NO.	DESCRIPTION	VENDOR	CODE
1	Cat. Data		Backflow Preventer	BEECO	A
1			Antifreeze Device	Ogontz Control	AN
1			353½ 2" Y Straingers	Mueller	A
1			Backflow Preventer Letter of Certification	Beeco	A
1			Letter of Certification Strainer	Mueller	A

LOCKWOOD GREENE DOCUMENTS				VENDOR DOCUMENTS			
A - INFORMATION	E - BID			K - NO CORRECTIONS NOTED			
B - REVIEW	F - CONSTRUCTION			L - MAKE CORRECTIONS NOTED			
C - APPROVAL	G - PURCHASING			M - REVISE AND RESUBMIT			
D - REVISED DWG. (SEE REVISION)	H -			N - REJECTED (SEE REMARKS)			

COPIES TO		QUAN	TRANS ONLY	CODE	COPIES TO		QUAN	TRANS ONLY	CODE
ROICC		2							
Cardinal Contracting		3							

REMARKS

PLEASE ACKNOWLEDGE RECEIPT BY IMMEDIATE RETURN OF SIGNED COPY OF THIS TRANSMITTAL
 RECEIVED BY _____ DATE _____ TRANSMITTED BY Richard McKnight

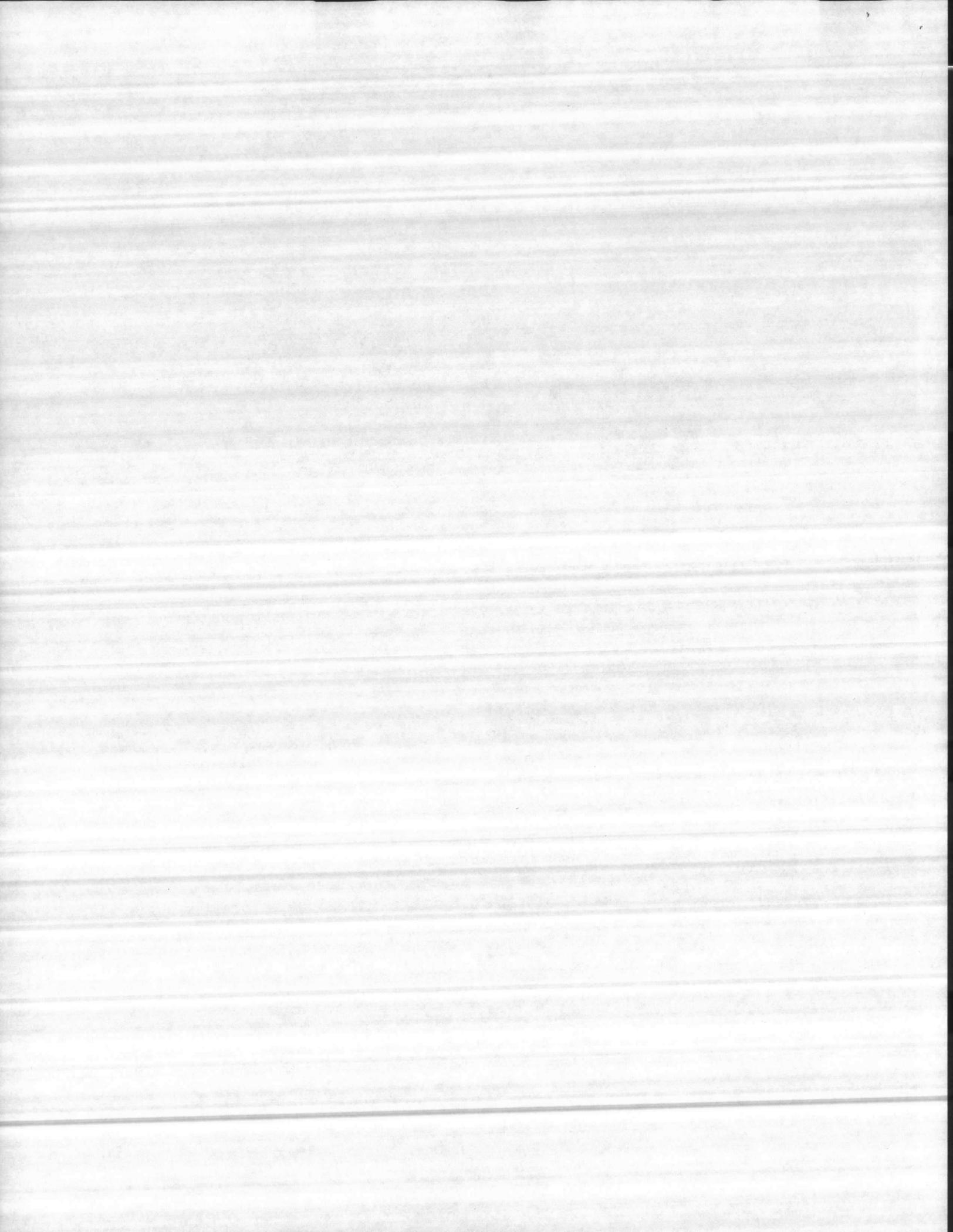


ROUTING SLIP
NRMC, CLNC

	INT.	DATE	REMARKS
2 CARLSON	C		
1 COLEY	MC	1-18	
3 RAVE	R	11-18-79	
YOUNG	Y	1/18/0	
4 PARKS	CP		
5 EZZELL			
6 WRAY	W	1-22	

SEC'Y TO FILE _____

ACTION: _____



CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV 4-4355/3 (Rev. 6/76)

SECTION 15272

CONTRACT NO. N-62470-77-C-7526
 TRANSMITTAL NO. 711 + 717
 DATE 1-3-80

FROM CONTRACTOR
 CARDINAL CONT. CO. INC.
 TO
 LOCKWOOD GREEN ENGRS

PROJECT TITLE AND LOCATION
 N. R. M. C.
 CAMP LEJEUNE N.C.

CONTRACTOR USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

- Contractor Approved OICC Approval Deviation/Substitution For OICC Approval

REVIEWER USE ONLY

**ACTION CODES

- A-Approved
 D-Disapproved
 AN-Approved as noted
 RA-Receipt acknowledged.
 C-Comments
 R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
711	3.1	BEECO BACKFLOW PREVENTER CAT DATA	7	A	BT 1/14/80
"	"	OGONTZ ANTIFREEZE DEVICE	7	AN	BT 1/14/80
"	"	MUeller # 353 1/2 2" Y STRAINER	7	A	BT 1/14/80
717	3.2	BEECO BACKFLOW PREVENTER LETTER OF CERTIFICATION	7	A	BT 1/14/80
"	"	MUeller's LETTER OF CERTIFICATION STRAINER	7	A	BT 1/14/80

CONTRACTOR'S COMMENTS

COPIES OF TRANSMITTAL AND SUBMITTALS TO ROICC

1-3-80

CONTRACTOR REPRESENTATIVE (Signature)

W.M.J. Haymaker

DATE RECEIVED BY REVIEWER

FROM (Reviewer)

TO

Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.

Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

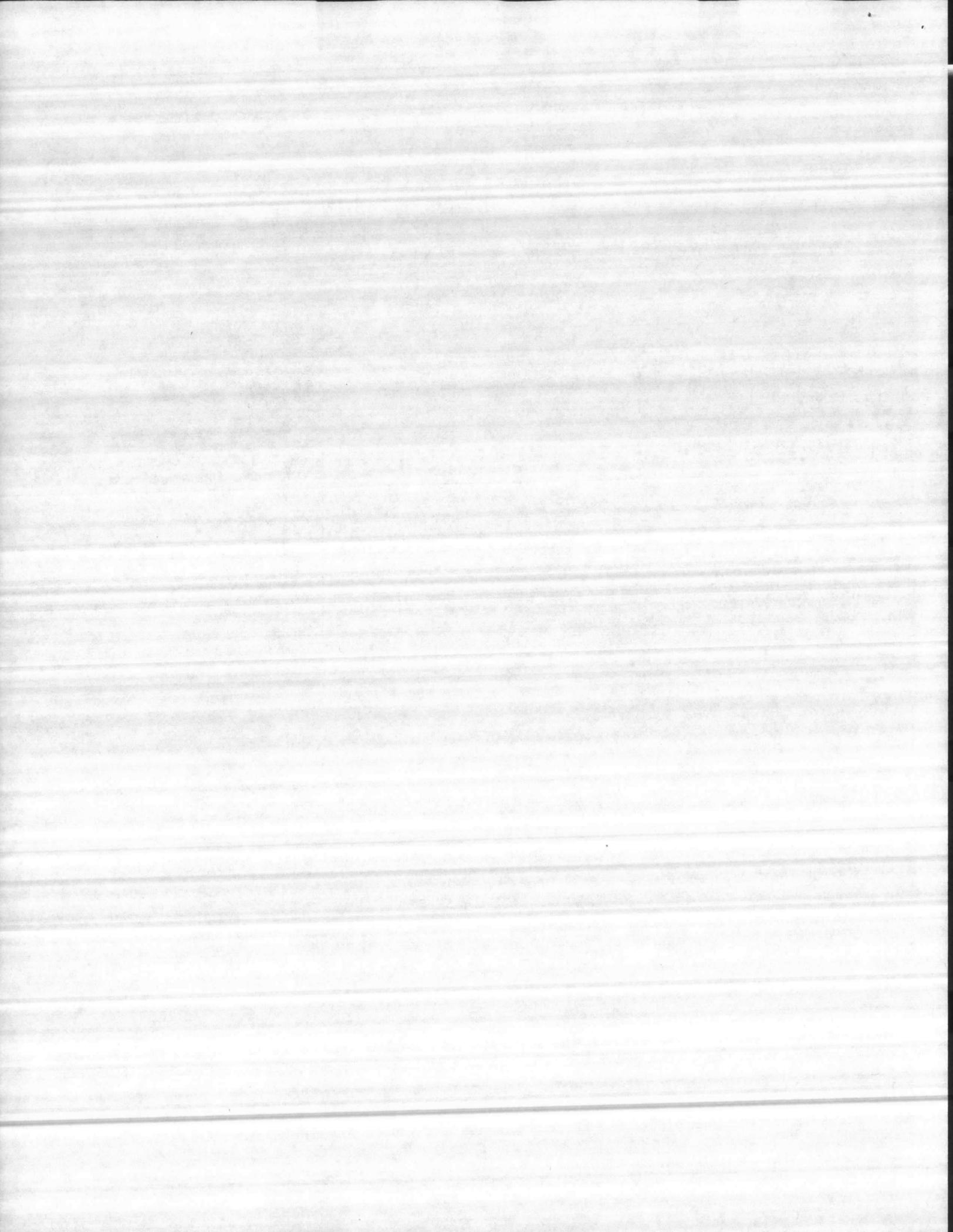
REVIEWER'S COMMENTS

file/field
 1-22-80
 JW

COPIES TO:
 ROICC (2)
 LANTDIV (1)
 A-E (1)

DATE 1/14/80

SIGNATURE Robert L. Turner



Hersey

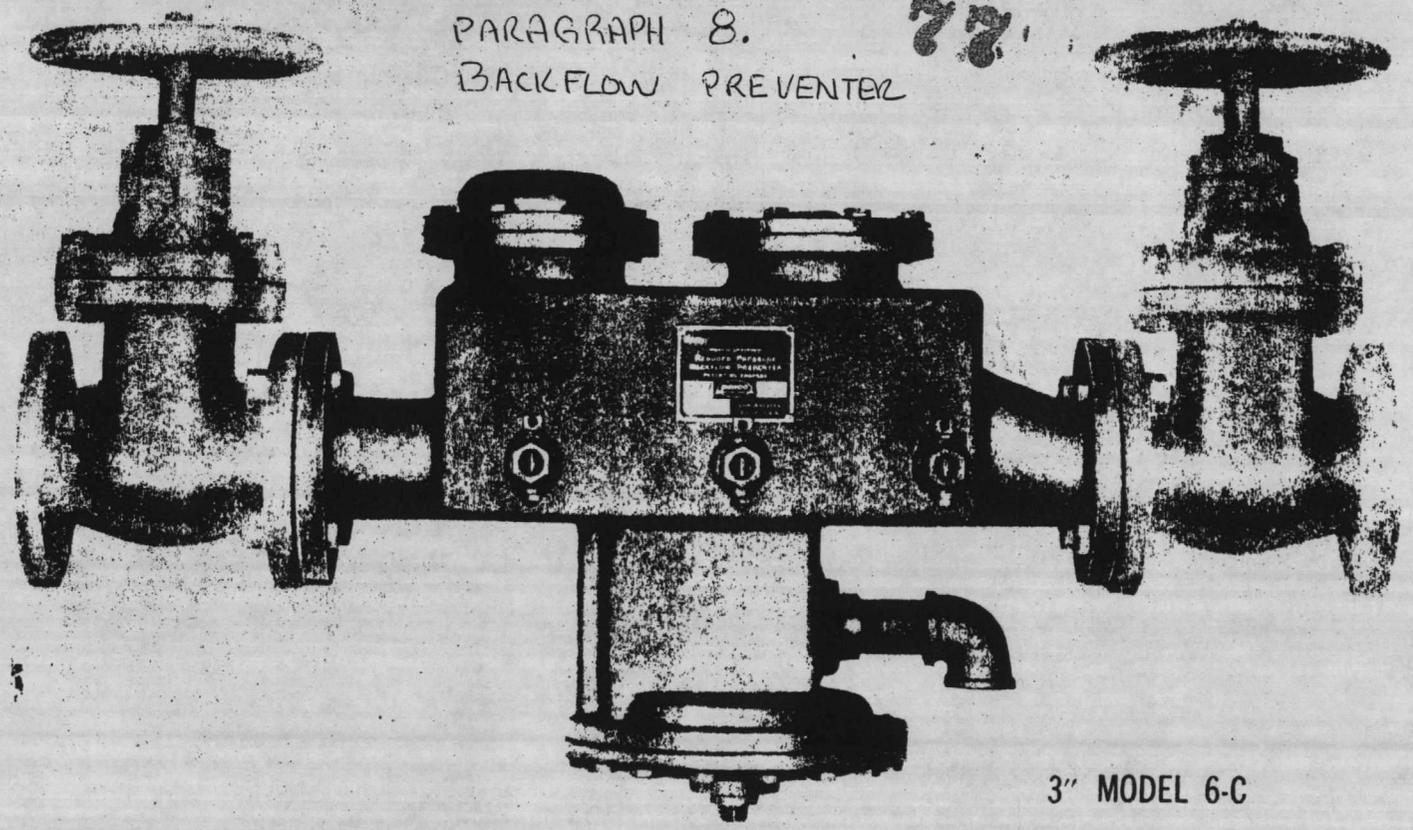
PRODUCTS INC.

Water Meter & Controls Division
Needham, Mass. 02026 (617) 326-9400

MODEL 6-C 1" 1½" **2"** 2½" 3" 4" 6" 8" 10"

SECTION 15272
PARAGRAPH 8.
BACKFLOW PREVENTER

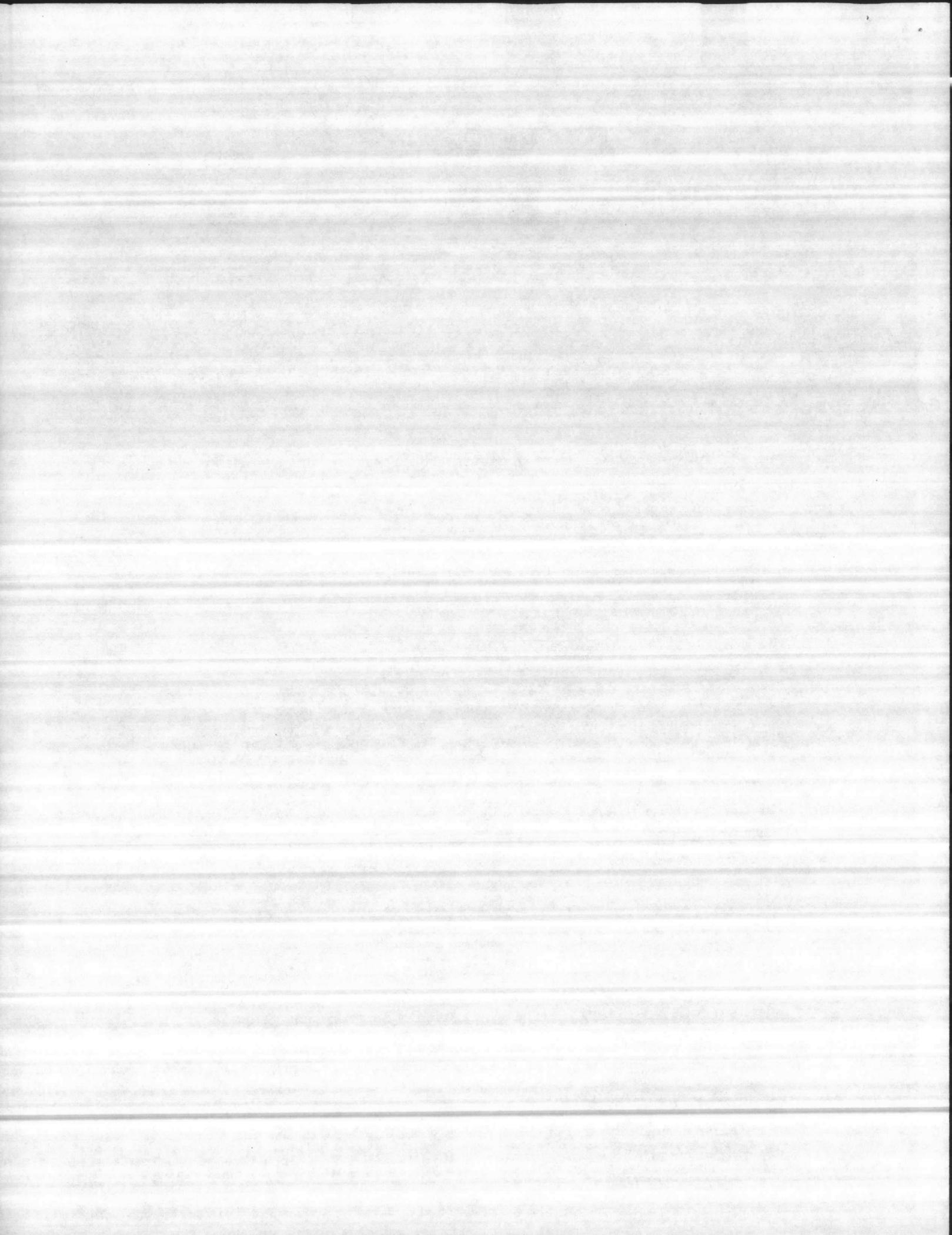
77'



3" MODEL 6-C



REDUCED PRESSURE
backflow/preventer



DESCRIPTION

The BEECO Reduced Pressure Backflow Preventer operates on the principle that water will not flow from a zone of lower pressure to one of higher pressure.

The device consists of two spring-loaded check valves and a spring-loaded, diaphragm actuated, differential pressure relief valve located in the zone between the check valves.

OPERATION

NORMAL:

The check valves remain closed until there is a demand for water. In opening and crossing the first check valve, water is reduced in pressure by a predetermined amount. The differential pressure relief valve remains in a closed position because of the differential between the supply pressure and the reduced pressure within the zone. The second check valve is lightly loaded and remains open as water flows through the device in the normal direction.

BACKPRESSURE:

In the event pressure increases downstream of the device, tending to reverse the direction of flow, both check valves are closed and operating to prevent backflow.

Because any check valve may leak as a result of wear or obstruction, the protection provided by check valves alone is not sufficient where there is a health hazard. If the second check valve is prevented from closing tightly, leakage back into the zone increases the zone pressure to within a few pounds of the supply pressure, the relief valve opens, and water is discharged to atmosphere. The relief valve operates automatically to maintain pressure within the zone lower than the supply pressure.

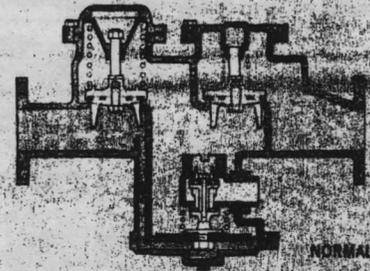
When supply pressure drops, the relief valve opens automatically and drains enough water to atmosphere to maintain pressure in the zone lower than the supply pressure.

BACKSIPHONAGE:

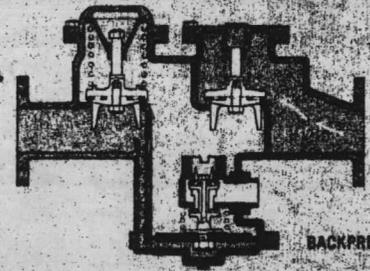
When the supply pressure drops below atmospheric, the pressure in the zone will be atmospheric and the relief valve will remain fully open, providing, in effect, an air gap between the two check valves.

BEECO BACKFLOW PREVENTERS MEET THE REQUIREMENTS OF

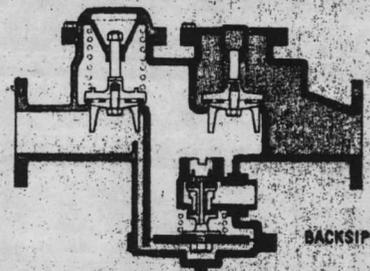
Research Foundation for Cross-Connection Control, University of Southern California/U.S. Army Corps of Engineers/
U.S. Navy/IAMPO/Southern Building Code Congress/AWWA/ASSE.



NORMAL OPERATION

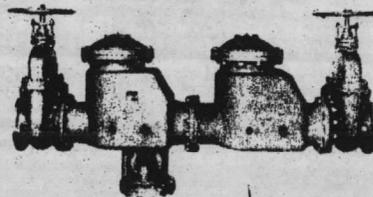


BACKPRESSURE CONDITION

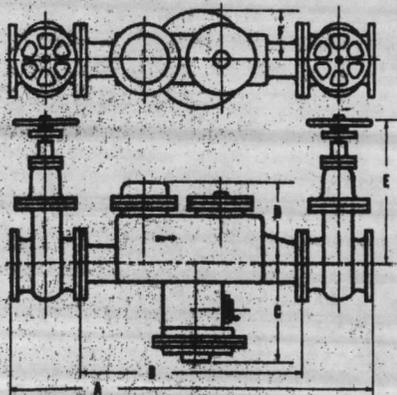


BACKSIPHONAGE CONDITION

MODEL 6-C 8" SIZE



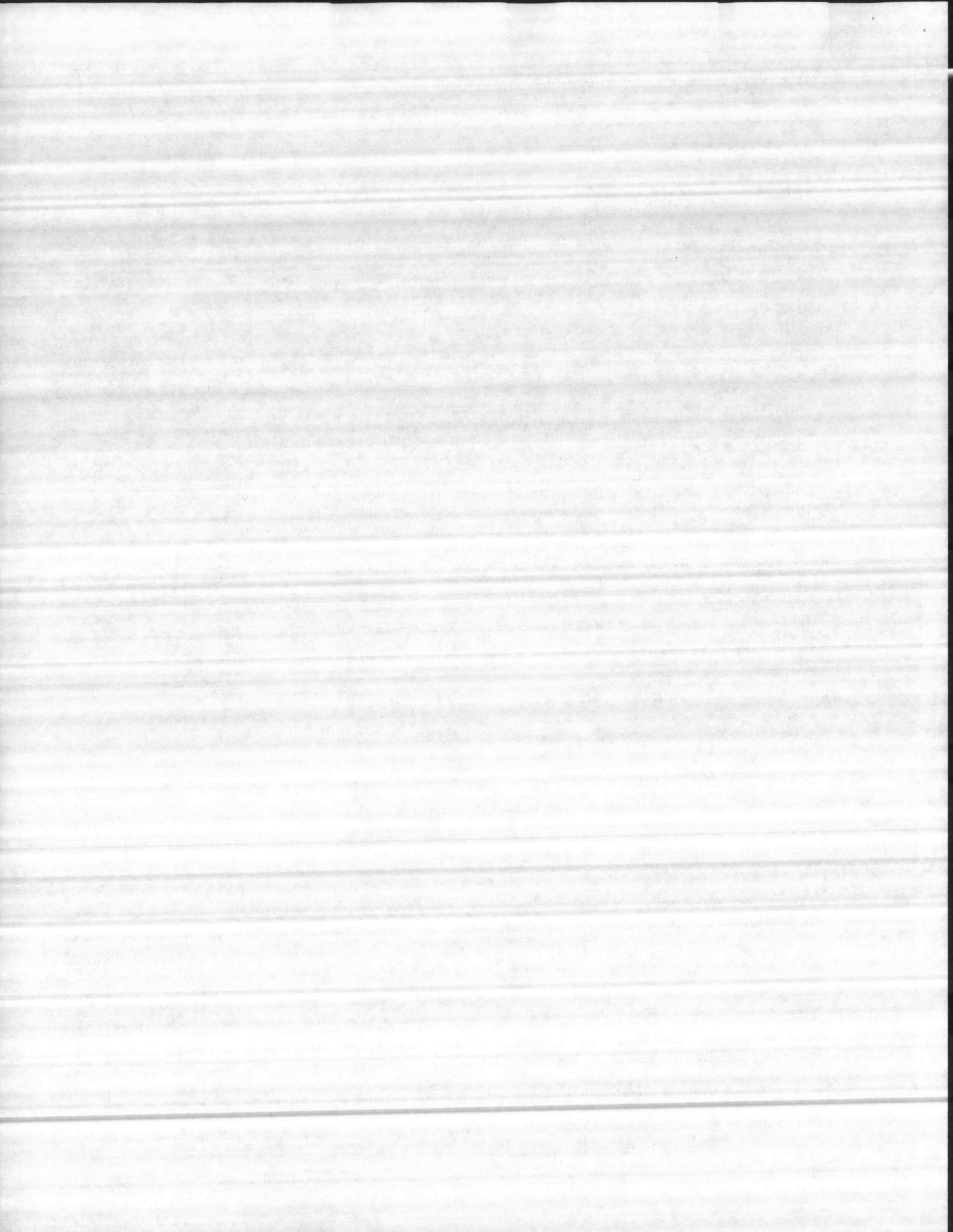
DIMENSIONS



Size	* 1	* 1 1/2	* 2	2 1/2	3	4	6	8	10	1 1/2	2	8 DR
End Detail	SCR	SCR	SCR	FLG	FLG	FLG	FLG	FLG	FLG	FLG	FLG	FLG
GPM*	50	100	160	225	320	500	1000	1600	2300	50	100	1600
A	25	33	34	35 1/8	40 1/8	46 5/8	62 1/8	90 3/4	100 1/4	18 1/4	25 1/2	31
B	8 1/4	12 1/4	12	20	24	28 1/2	41	67 3/4	74 1/4	11 1/8	16 3/8	16 7/8
C	8 1/4	8 1/2	11	11	11	12	14 1/2	21	22	8 1/4	8 1/2	11
D	5	6 1/4	10	7 1/4	8 1/2	10	15 1/2	21	22	5	6 1/4	10
E	5 1/4	6 1/2	7 1/2	13 3/4	15 1/2	18 3/4	23 1/4	27 1/2	33	5 3/4	7 1/4	13
F	4 1/2	4 1/2	5 1/4	5 1/4	5 1/4	5 1/2	10	13	13	4 1/2	4 1/2	5 1/4
Relief Valve Opening	3/4	3/4	1 1/4	1 1/4	1 1/4	2	2	3	3	3/4	3/4	1 1/4
Size of Test Cocks	1/4	1/4	1/4	1/2	1/2	1/2	3/4	3/4	3/4	1/4	1/4	3/4
NET WT. No valves	47	70	105	130	170	280	730	1750	2450	50	80	115
With valves	65	85	130	235	315	480	1100	2350	3400	85	95	290
GROSS WT. No valves	50	80	130	160	200	300	840	2000	2800	60	90	140
With valves	60	110	160	280	360	540	1230	2700	3800	90	120	230

Gate Valves are Non-Rising Stem
Performance Charts available on request
*Maximum Rated Flow: AWWA Standard C506-05 - Backflow Preventers.

*May be shorter depending on type and model gate valves available.



CROSS-CONNECTION CONTROL EQUIPMENT of PROVEN DEPENDABILITY REDUCED PRESSURE BACKFLOW PREVENTERS

Maximum Protection against backflow due to backpressure and backsiphonage. Contamination of drinking water supplies is prevented by maintaining a zone of reduced pressure which is less than the supply pressure.

Visual Indication of need for repair is provided by continuous discharge from the relief valve opening.

Ease of Repair: All internal working parts are accessible without removing the backflow preventer from the line.

Corrosion Resistant: All parts are made from materials that withstand corrosion.

Economical: BEECO Reduced Pressure Backflow Preventers provide an effective alternative to costly air gap separation systems and can be installed subject to full line pressure.

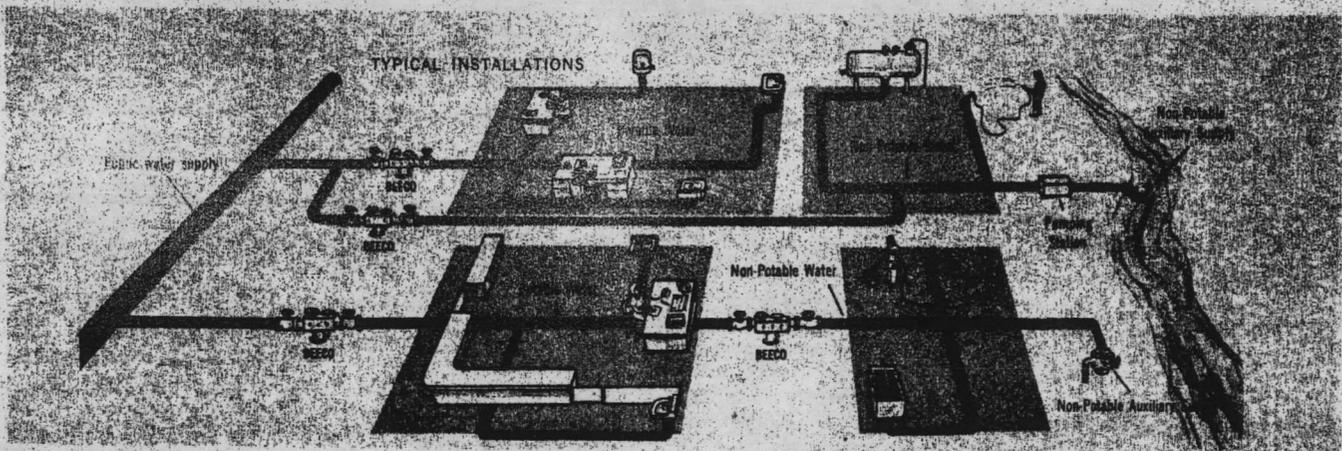
Durable: Simple, rugged design allows BEECO devices to give trouble-free performance with a minimum of attention.

Automatic Control: The double-ported balanced relief valve operates automatically with no adjustments necessary, regardless of line pressure.

CROSS-CONNECTION CONTROL BY "CONTAINMENT"

Install BEECO Reduced Pressure Backflow Preventers at the water service connection to a premises or use them for in-plant protection of drinking water supplies.

BEECO Reduced Pressure Backflow Preventers allow practical and economical backflow protection from dangerous contamination of drinking water supplies due to cross-connections.



BEECO equipment has for many years provided dependable and reliable protection for cross-connections when installed within, or at the service connection to:

Atomic energy plants / Plating plants / Chemical plants / Sewage treatment and pumping plants / Hospitals and Medical buildings / Canneries and Food processing plants / Auxiliary water supplies / Waterfront facilities / Industrial plants / Farms and dairies.

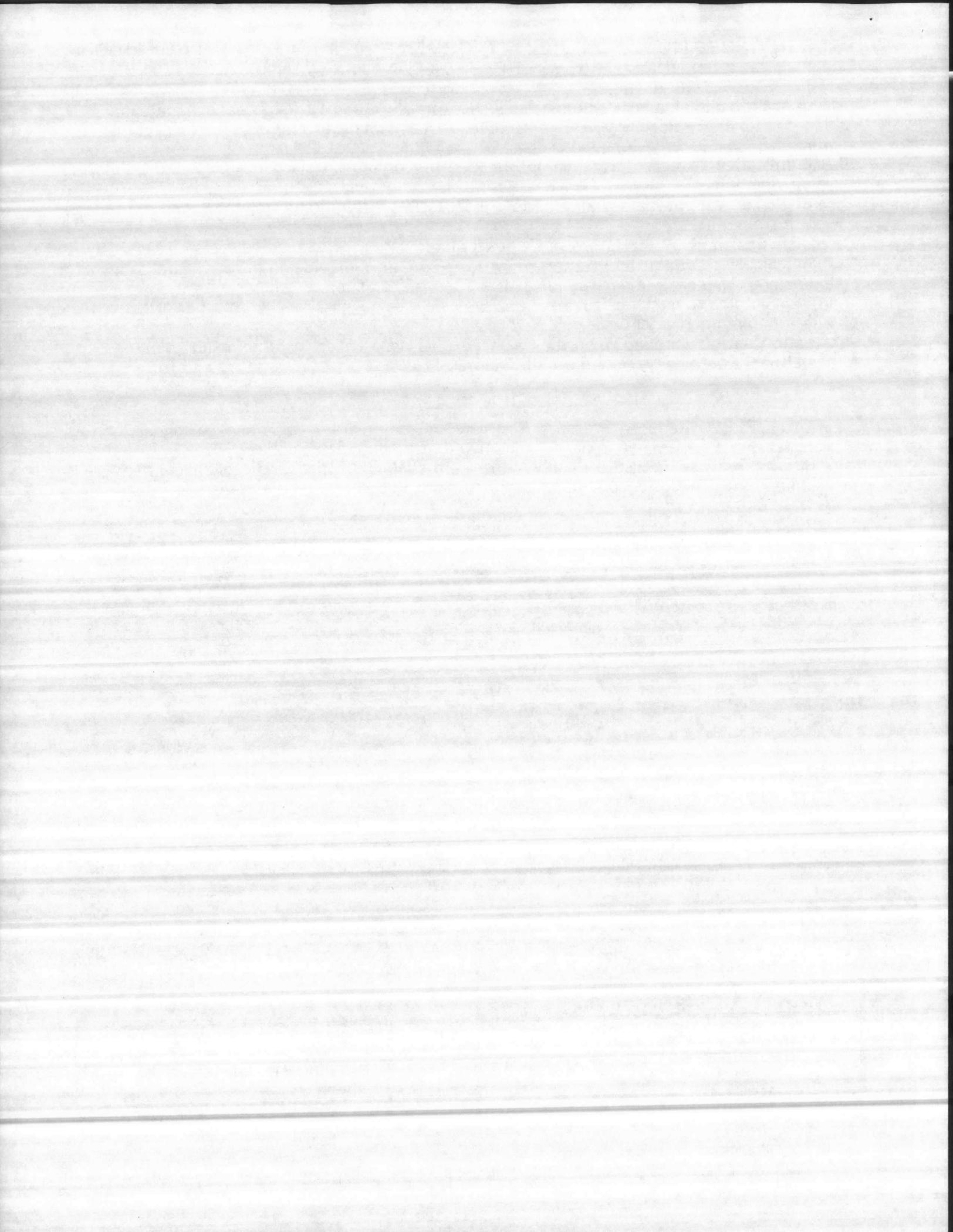
SPECIFICATIONS

Body:	1" - 4" Bronze (6" optional) 6" - 10" Galvanized cast iron	
Working Parts:	Bronze	
Springs:	Stainless Steel	Plastic-Coated Carbon Steel
1" - 3"	All	
4"	Second check valve Relief valve	First check valve
6"	Second check valve Relief valve	First check valve
8" - 10"	All	

Valve Discs:	Neoprene
Diaphragm:	Neoprene coated cotton duck
Maximum working pressure:	175 psi
Hydrostatic test pressure:	350 psi
Temperature Range:	32° F. - 145° F.

ORDERING INFORMATION

Specify End Detail & Backflow Preventer with or without gate valves. (If Backflow Preventer is ordered complete with gate valves, the inlet side of the inlet gate valve will be fitted with the necessary test cock and fittings.)



Hersey

PRODUCTS INC. Water Meter & Controls Division
1874 Piedmont Road, N.E., Suite 210B, Atlanta, Georgia 30324 (404) 874-5726

June 8, 1979

Mr. Bill Corbin, Jr.
East Coast Construction Company
P. O. Box 5004
Jacksonville, North Carolina 28540

Dear Mr. Corbin:

Reference is made to #205 DED Naval Hospital Job, Contract Number N6247077C7526 on 3 - 2" Model 6-C Beeco Reduced Pressure Backflow Preventers.

This letter is to certify that the Model 6-C device meets or exceeds AWWA Standard C506-78.

Also, this device is fully approved by University of Southern California, Foundation for Cross Connection Control & Hydraulic Research, ASSE, U. S. Army Corps of Engineers, U.S. Navy, IAMPO, (see copy of USC approval list attached).

We trust this is the information you desire.

Very truly yours,

HERSEY PRODUCTS INC.

Becky Mosely
Becky Mosely
Administrative Assistant

rlm

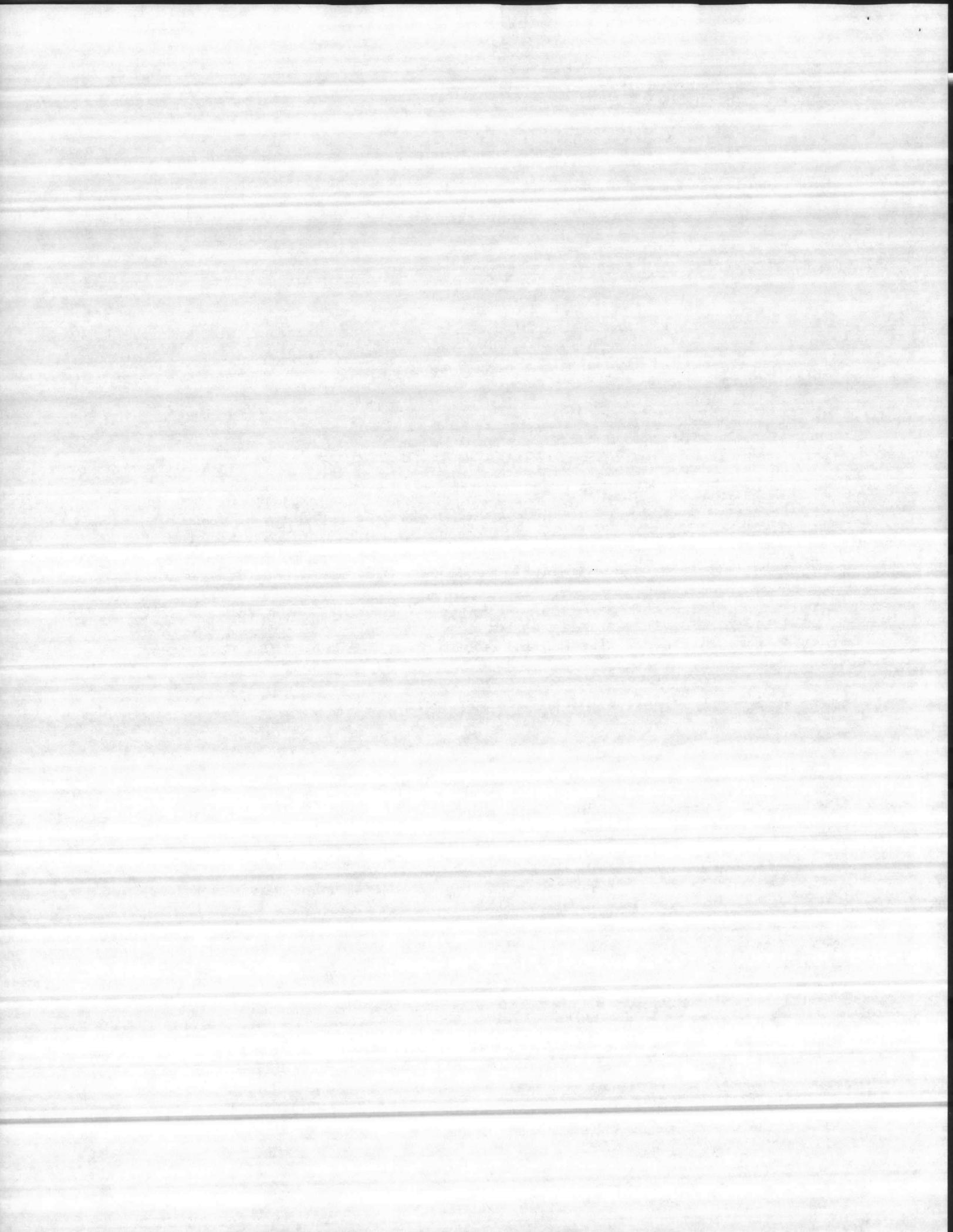
attachment

cc: Mr. Robert Stokely, Davis Meter & Supply, Raleigh, N. C.

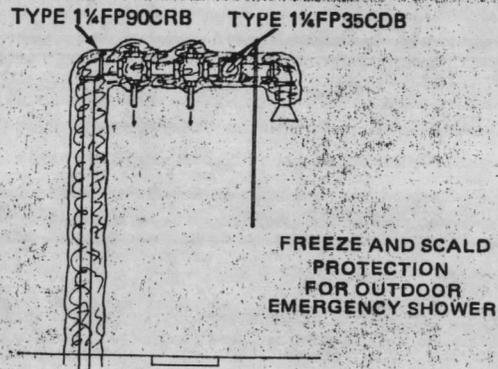
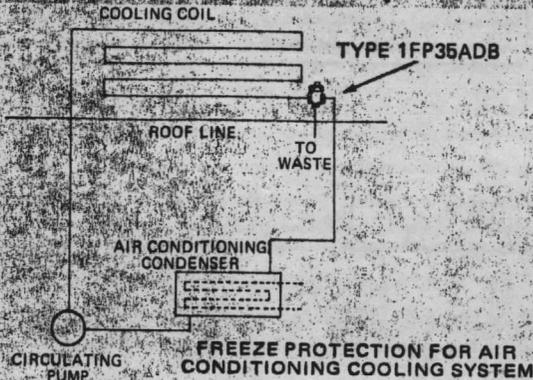
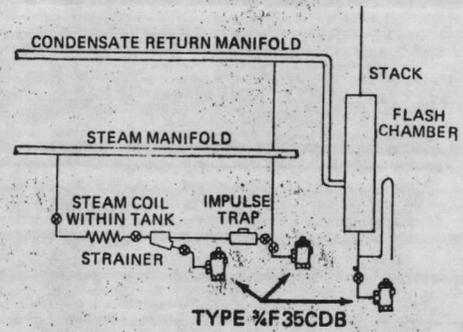
June 8, 1979

Thomas Hoffman

Notary Public, Georgia, State At Large
My Commission Expires Oct. 23, 1982



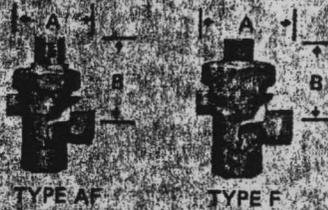
TYPICAL PIPING APPLICATIONS



OTHER APPLICATIONS INCLUDE

- Anti-Freeze Protection for Washroom on Elevated Train Platform
- Winterization of Exposed Pipe under Bridge
- Freeze Protection on Engine Water Cooling System
- Temperature Control on Water Cooled Air Compressor
- Anti-Freeze Protection of Ship Supply Line

PHYSICAL DATA



NPT	TYPE F		TYPE AF		WGT.	TYPE
	A	B	A	B		
3/4"	3-1/4"	2-1/2"	3-1/4"	3-1/8"	2-3/4 lbs.	ANGLE
1"	5"	3-3/4"	5"	4-3/8"	3-3/4 lbs.	GLOBE

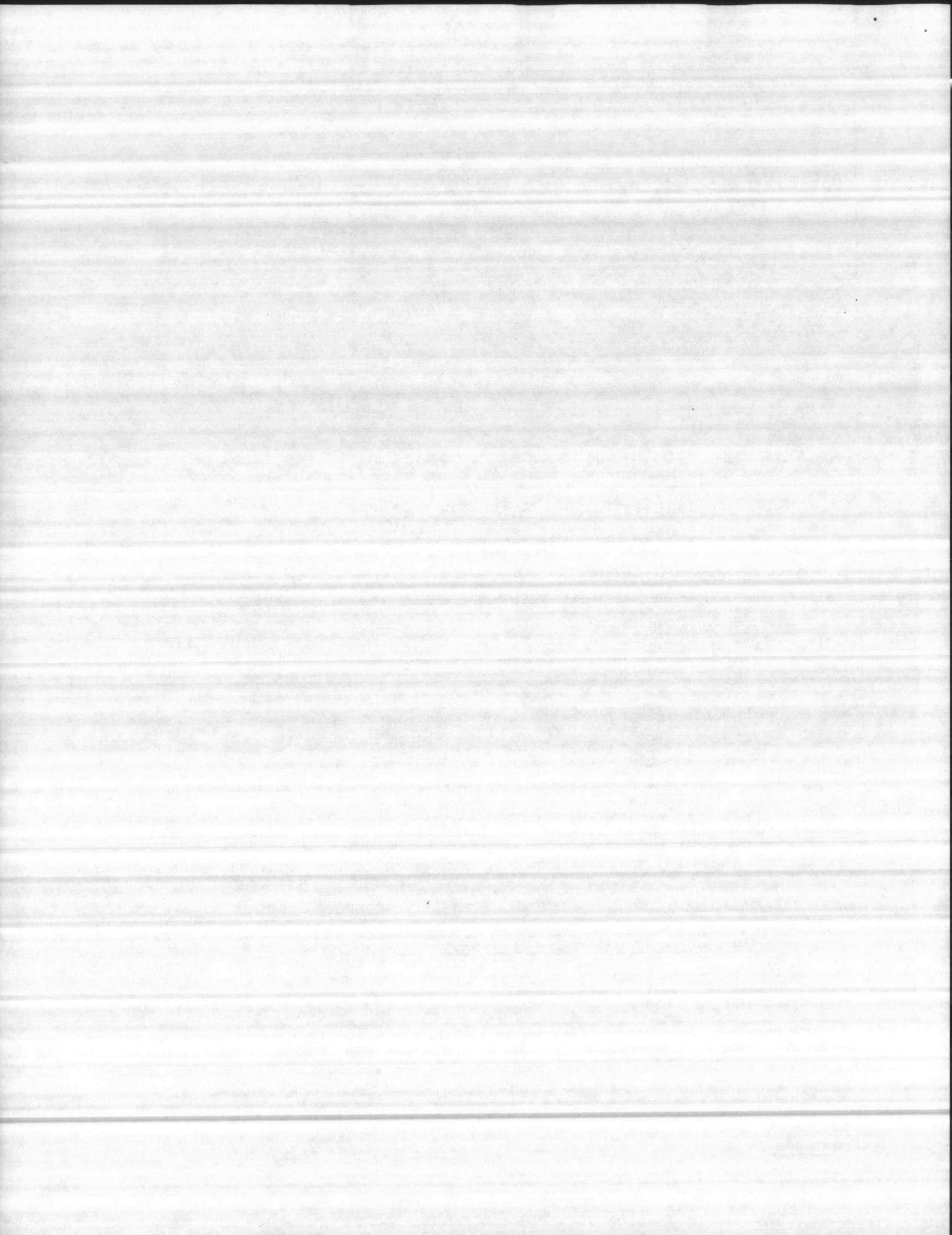
ORDERING INFORMATION

VALVE SIZE	MAX. PRESS. PSI	GPM FLOW @ 50 PSI TO ATMOSPHERE	TEMP. TO FULLY OPEN °F	TEMP. DIFFERENTIAL FROM OPEN TO CLOSE	BODY MATERIAL	TYPE "F" FLUID SENSING MODEL NO.	TYPE "AF" AIR-FLUID SENSING MODEL NO.
3/4"	200	0.53	35°F	7°F	BRONZE	3/4F35ADB	3/4AF35ADB
3/4"	200	0.73	35°F	7°F	STEEL	3/4F35ADS	3/4AF35ADS
3/4"	150	1.18	29°F	7°F	BRONZE	3/4F35BDB	3/4AF35BDB
3/4"	150	1.18	29°F	7°F	STEEL	3/4F35BDS	3/4AF35BDS
3/4"	150	1.18	29°F	7°F	BRONZE	3/4F35CDB	3/4AF35CDB
3/4"	150	1.18	29°F	7°F	STEEL	3/4F35CDS	3/4AF35CDS
1"	180	2.5	35°F	7°F	BRONZE	1F35ADB	1AF35ADB
1"	50	2.8	35°F	7°F	BRONZE	1F35BDB	1AF35BDB

*CHOOSE ANY TEMPERATURE TO FULLY OPEN BETWEEN 35 - 255°F. **29°F** *EXAMPLE: IF 50°F, NEEDED, SPECIFY MODEL #3/4F50ADB.

MODEL # **3/4 AF 29CDB**

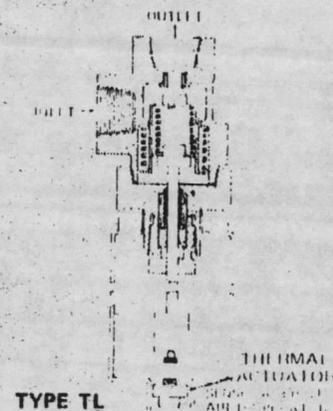
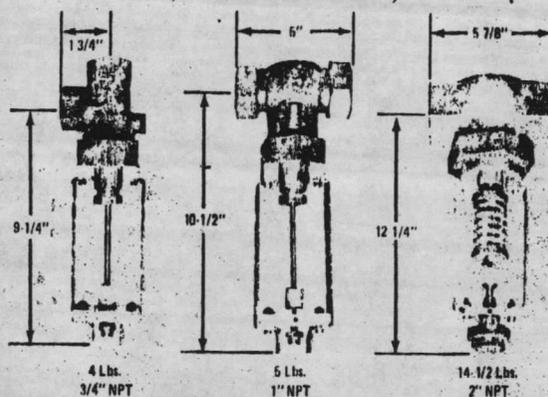




TYPE TL AMBIENT-AIR SENSING VALVE (See Bulletin TL200)

For:

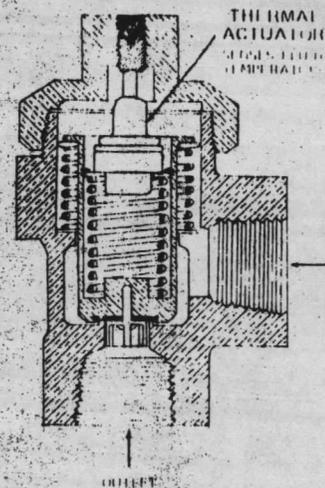
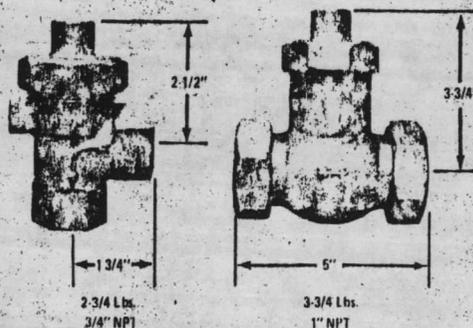
- Winterizing Steam Tracer Lines
- freeze protection of water lines
- freeze protection of process lines (sulfuric acid, phenol, borax, elastics, etc.)
- Instrumentation freeze protection
- Steam & Hot Water Unit Heaters
- Vessel Surface Cooling



TYPE F FLUID SENSING VALVE (See Bulletin F100)

For:

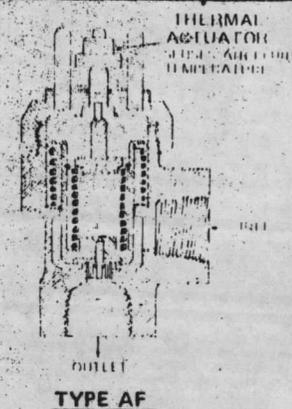
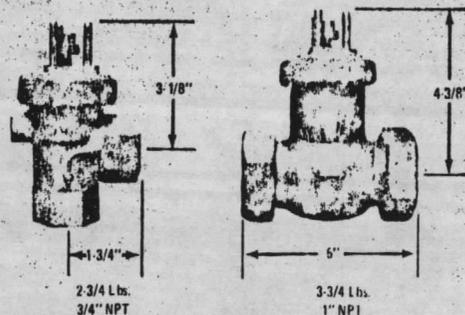
- Bleeder Type Freeze Protection
 - exposed water lines
 - unheated buildings
 - fire lines
 - sprinkler systems
 - ship supply lines
 - safety showers
- Drain Type Freeze Protection
 - tanks
 - condensate returns
 - cooling towers
 - air scrubbers
- Thermal Traps
 - maintaining process temp.
 - conserving energy
- Cooling Water Controls
 - air compressors
 - heat exchangers



TYPE AF AIR FLUID SENSING VALVE (See Bulletin F100)

For:

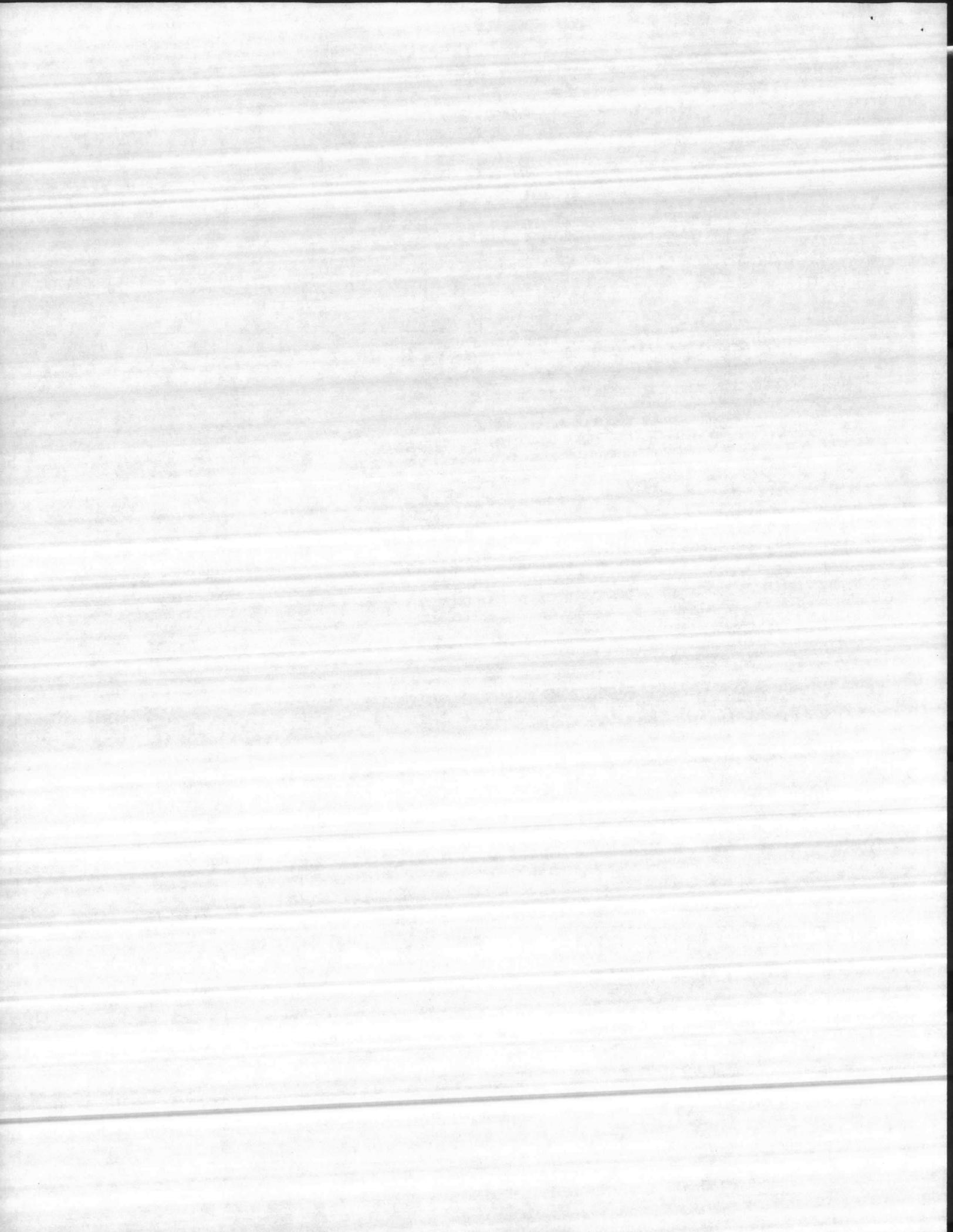
- Bleeder Type Freeze Protection
 - exposed water lines
 - unheated buildings
 - fire lines
 - sprinkler systems
 - ship supply lines
- Drain Type Freeze Protection
 - tanks
 - condensate returns
 - cooling towers
 - air scrubbers



VALVE CHART FOR TYPES TL, F, AF, AND ST

SIZE NPT	VALVE TYPE	TEMP TO FULLY OPEN	PORT SIZE (in.)	MAX. PRESS. (psi)	Cv*	ACTION	LEGEND MATERIAL
3/4"	TL, F, AF, ST	* specify any temp. from 35° - 255°F	A - 3/16	200	0.53	D-Direct (closes on temp. rise) R-Reverse (opens on temp. rise)	B = bronze (available from stock) S = c.r. steel
1"	TL (F, AF - See Note)		B - 1/4	200	0.73		
			C - 3/8	150	1.16		
			A - 1/2	200	6.5		
			B - 5/8	200	9.5		
			C - 3/4	200	12.5		
			A - 3/4	200	13.0		
2"	TL only		B - 1	150	17.6		
			C - 1-1/2	50	20.0		

Note: Port size A - 3/8" Max. press. 150 Cv 2.5
 B - 1/2" Max. press. 50 Cv 2.8



MUELLER
Steam Specialty

DIVISION OF CORE INDUSTRIES, INC.

Spec. Section 15272
Paragraph 8.2

BOX 1569
LUMBERTON, N.C. 28358
(919) 738-8241

December 5, 1979

East Coast Construction Co., Inc.
Post Office Box 5004
Jacksonville, North Carolina 28540

Attn: Mr. Bill Corbin., Jr.

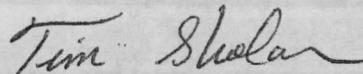
Ref: 205-Bed Hospital
Naval Regional Medical Center
Camps Lejeune, North Carolina
Contract - N6247077C7526

Gentlemen,

We hereby certify that the three (3) Mueller #353-1/2
M-Metal Body 250# Solder Joint Self Cleaning Y
Strainers Purchased on P.O. 0227 are manufactured to
meet ANSI B16.18 and B16.22 Solder Joint for water
service.

Sincerely,

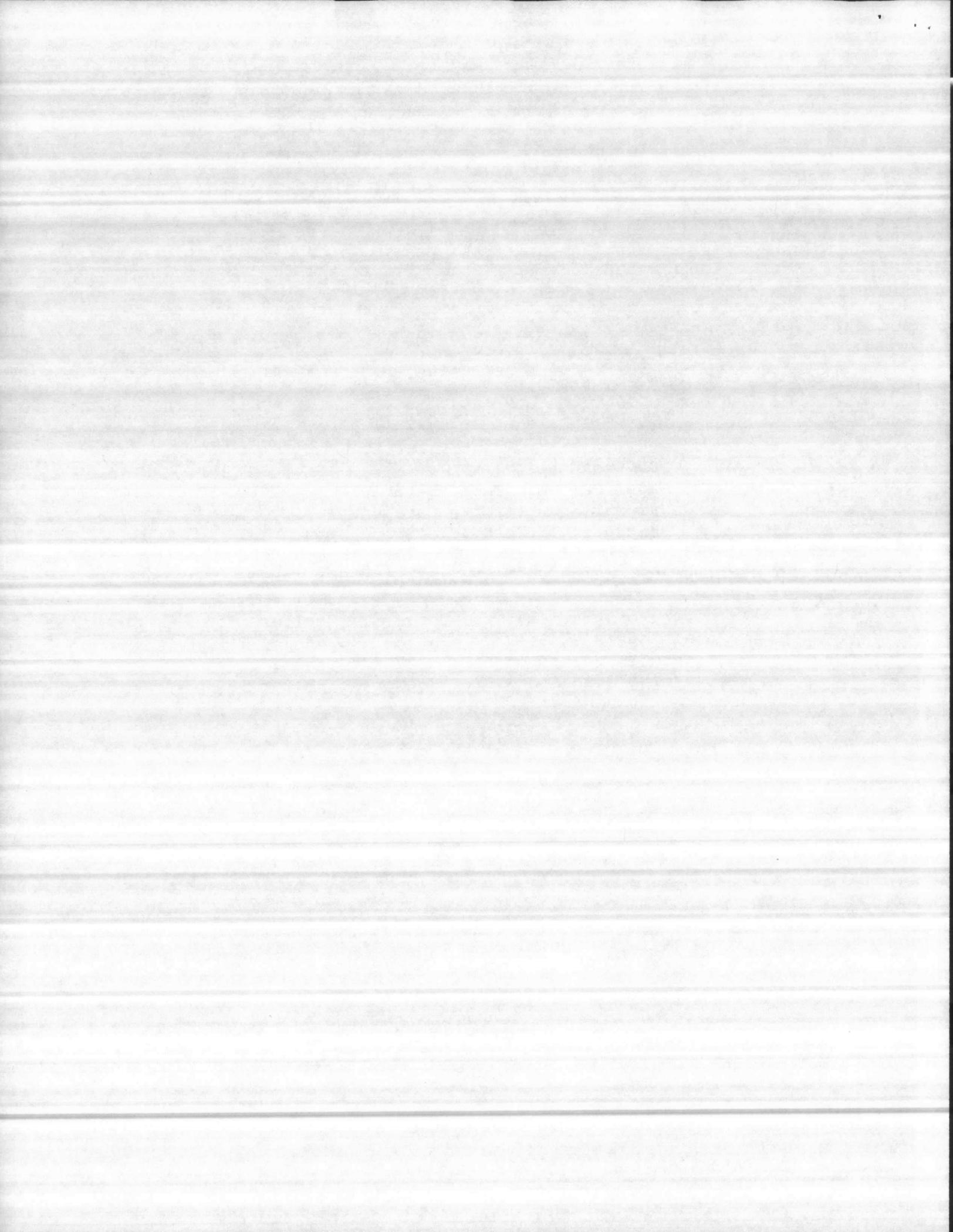
MUELLER STEAM SPECIALTY



Tim Sholar
Sales Engineer

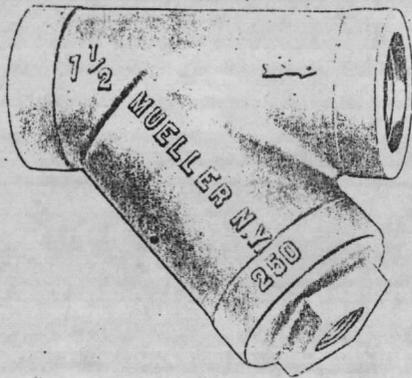
TS/anr

ENC:

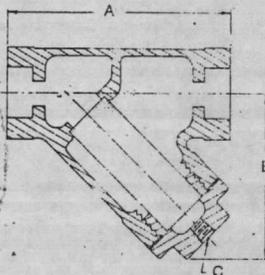


MUESSCO**BRONZE SIL-BRAZE OR SOLDER JOINT "Y" STRAINER****#352¹/₂ 250 lb.
SILVER BRAZING**

(With or without Pre-inserted Silver Solder Rings)

**#353¹/₂ 250 lb.
SOLDER JOINT****IMPORTANT:**

Unless otherwise specified #353-1/2 strainers are furnished with bore for copper tube.

**COMMERCIAL
AND/OR MILITARY
SPECIFICATION****WORKING PRESSURE: 250 SWP @ 425°F.**

SERVICE RECOMMENDATIONS: These strainers offer complete protection to pumps, meters, traps, valves and similar expensive automatic equipment. Installation of a strainer before any automatic equipment will insure trouble free service and avoid the costly repairs of replacement so often caused by the introduction of foreign matter in pipe lines.

FEATURES: In addition to all of the usual commercial applications these strainers are in complete accordance with Military specifications. #352-1/2 strainers conform to latest revision of BuShip dwg. #5000-S4823-841499. Unless otherwise specified all sizes of #352-1/2 are furnished grooved, less rings.

CONSTRUCTION: All sizes, in both types feature a machined seat in the body, which, combined with the machined seat in the cap assures perfect screen alignment and easy dis-assembly. All sizes assembled with copper gaskets. ASTM B-61 bronze for military strainers and B-62 for commercial strainers.

BLOWOFFS: For commercial use both types are furnished with FIPT blowoff connections, unplugged. Bureau of Ships dwg. #5000-S4823-841499 strainers are supplied with plugged blowoff connections. See chart below for blowoff sizes.

SCREENS: #352-1/2 Strainers furnished with perforated monel screens — .062 dia. holes through 2" size and .093 holes for larger sizes. #353-1/2 strainers furnished with perforated brass screens — 3/64" holes for steam and 1/16" for liquid. For other perforations or mesh see page 4.

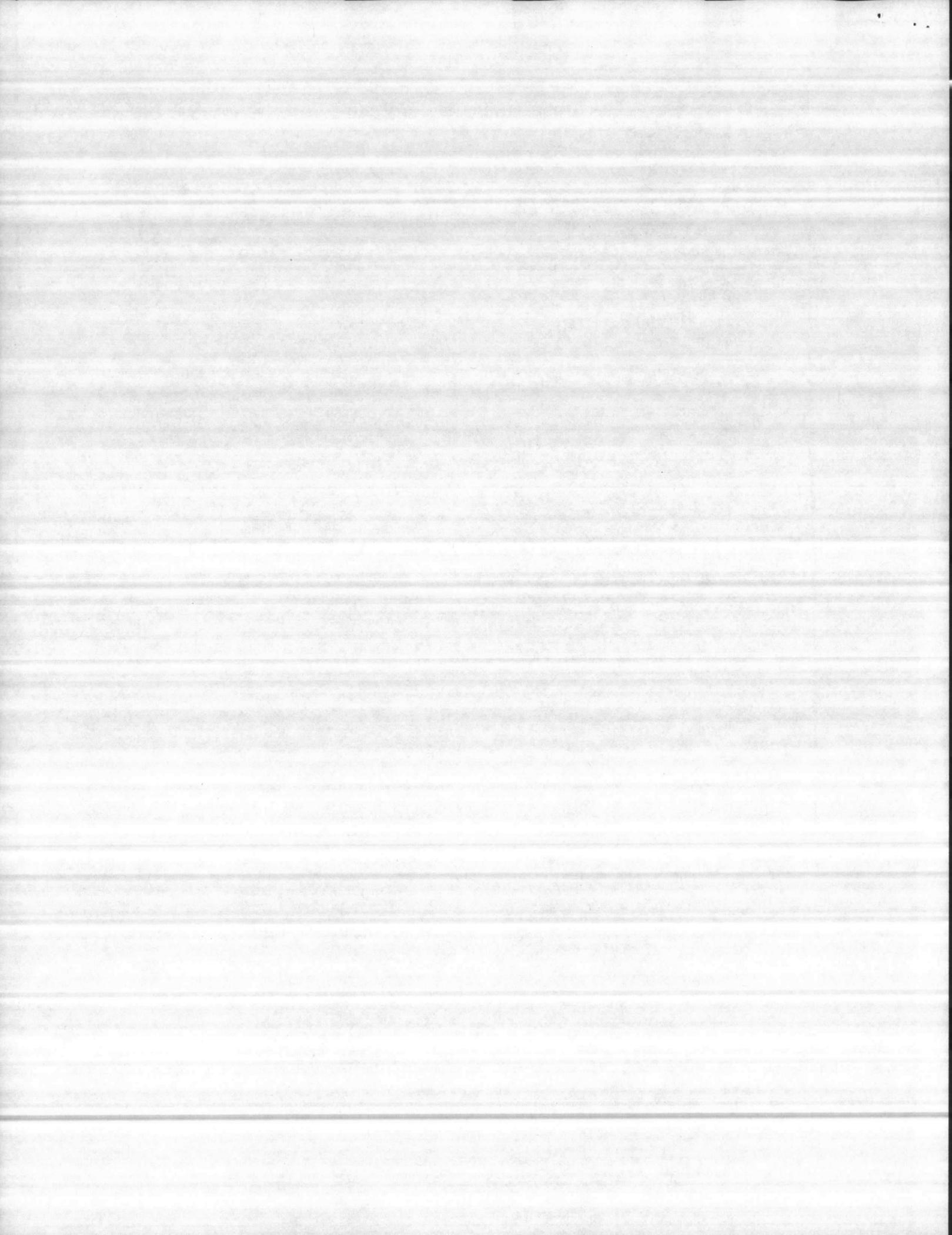
PRESSURE DROP: See page 13.**TESTING:** 500 PSI. Individual hydrostatic test.

JOB: P.O. No: 0227 Contract N6247077C7526

SPECIAL FEATURES: M-Metal Body with 1/32" Perf. Stainless Steel Screen**DIMENSIONS AND WEIGHTS — APPROXIMATE**

Size	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
"A"	2-9/16	2-9/16	2-15/16	3-3/8	4-1/8	4-13/16	5-3/8	6-5/8	7-7/8	11-3/4
"B"	1-7/8	1-7/8	2-1/8	2-9/16	3	3-9/16	4-3/16	5-5/16	6-3/16	7-1/2
"C"	#352-1/2	1/8	1/8	1/8	1/4	3/8	1/2	3/4	1	1
	#353-1/2	1/4	1/4	1/4	1/4	1/2	3/4	1	1-1/4	1-1/2
Weight	3/4	3/4	1	1-1/4	2-1/2	4-1/4	5-1/2	8-1/4	15-1/2	36

MUELLER STEAM SPECIALTY • LUMBERTON, N. C. 28358



113-1 15272
713

DRAWING AND SPECIFICATION TRANSMITTAL
LOCKWOOD GREENE ENGINEERS, INC.

SPARTANBURG, SOUTH CAROLINA 29304
P.O. BOX 491 (803)582-2351

TO Naval Facilities
Engineering Command
Atlanta Division
Norfolk, VA 25311

DATE 1-22-80
JOB NO. 77239.16
JOB NAME NRMC

TRANSMITTAL NO. 142
SHEET 1 OF 1
ORDER NO.
N-62470-77-C-7526

ATTN: Mr. John Grubbs, Code 05

WE ARE SENDING YOU THE FOLLOWING DATA _____ HEREWITH _____ UNDER SEPARATE COVER

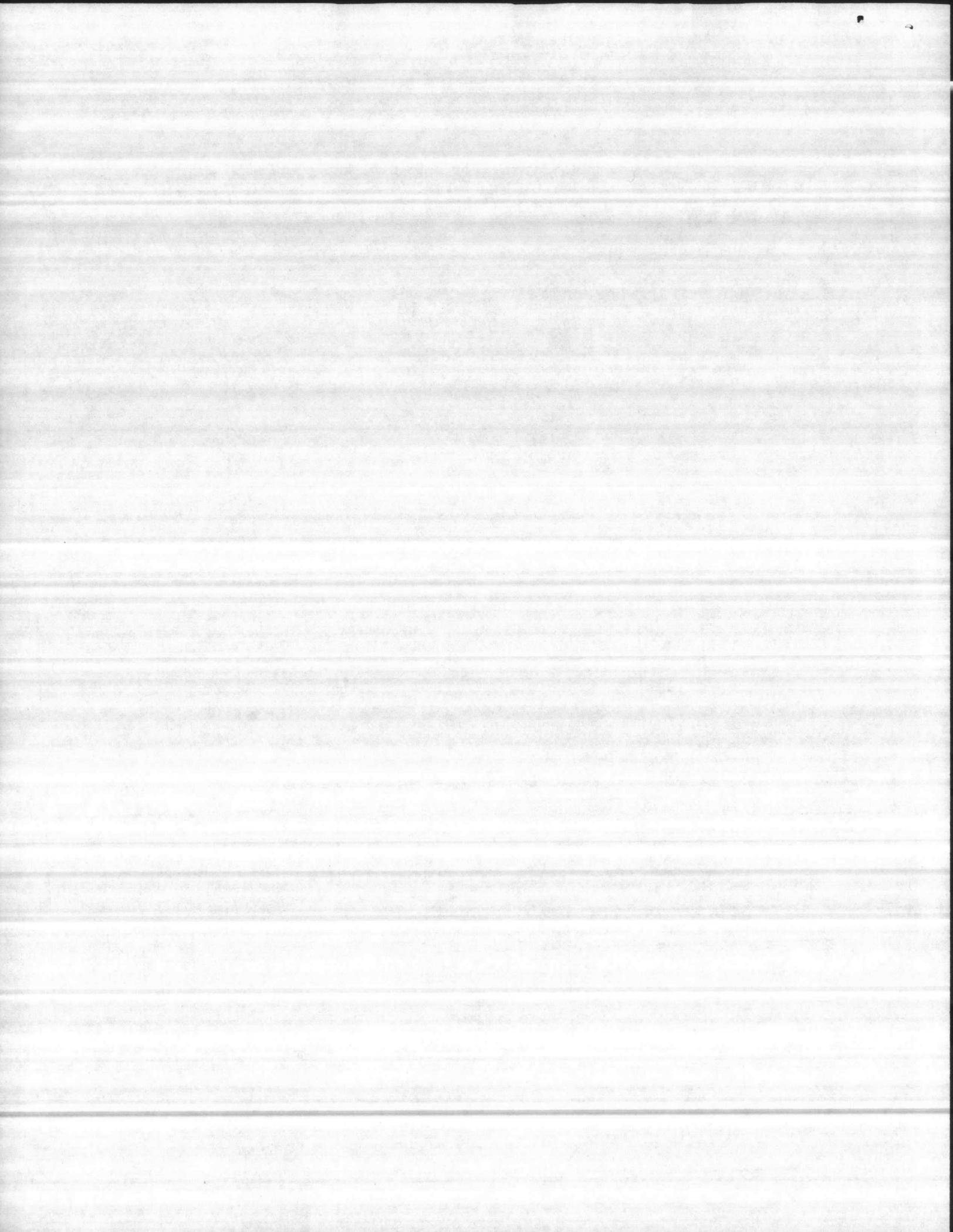
QUAN.	DOCUMENT NO.	REV. NO.	DESCRIPTION	VENDOR	CODE
1			letter on certification for pipe fittings	Tyler	RA

LOCKWOOD GREENE DOCUMENTS				VENDOR DOCUMENTS			
A - INFORMATION	E - BID	K - NO CORRECTIONS NOTED					
B - REVIEW	F - CONSTRUCTION	L - MAKE CORRECTIONS NOTED					
C - APPROVAL	G - PURCHASING	M - REVISE AND RESUBMIT					
D - REVISED DWG. (SEE REVISION)	H -	N - REJECTED (SEE REMARKS)					

COPIES TO				COPIES TO			
QUAN	TRANS ONLY	CODE		QUAN	TRANS ONLY	CODE	
2			ROICC				
3			Cardinal				

REMARKS

PLEASE ACKNOWLEDGE RECEIPT BY IMMEDIATE RETURN OF SIGNED COPY OF THIS TRANSMITTAL
RECEIVED BY _____ DATE _____ TRANSMITTED BY _____



	INT.	DATE	REMARKS
2 CARLSON	C		
3 COLEY	ADC	1-29	
1 RAVE	R		
YOUNG	Y		
4 PARKS	P		
5 EZZELL	WAK	1-29-80	
6 WRAY	W	1-31	

CONTRACT NO. **1-62470-77-C-7526** TRANSMITTAL NO. **713-1** DATE **1-3-80** *file*

PROJECT TITLE AND LOCATION
N.R.M.C.
CAMP LEFEBRE N.C.

REVIEWER USE ONLY	
**ACTION CODES A-Approved D-Disapproved AN-Approved as noted RA-Receipt acknowledged. C-Comments R-Resubmit	ACTION CODES RA
REVIEWER'S INITIALS AND DATE BT 1/21/80	

SEC'Y TO FILE _____

ACTION: _____

DESCRIPTION (Mfg. name, dwg. or number)	NO. OF COPIES	ACTION CODES	REVIEWER'S INITIALS AND DATE
LETTER OF INTENT FOR PIPE	4	RA	BT 1/21/80

C.Q.C.R. ACTION : A

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC _____

DATE RECEIVED BY REVIEWER **1-3-80** FROM (Reviewer) _____

CONTRACTOR REPRESENTATIVE (Signature) *W.M.J. Haymaker*

- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

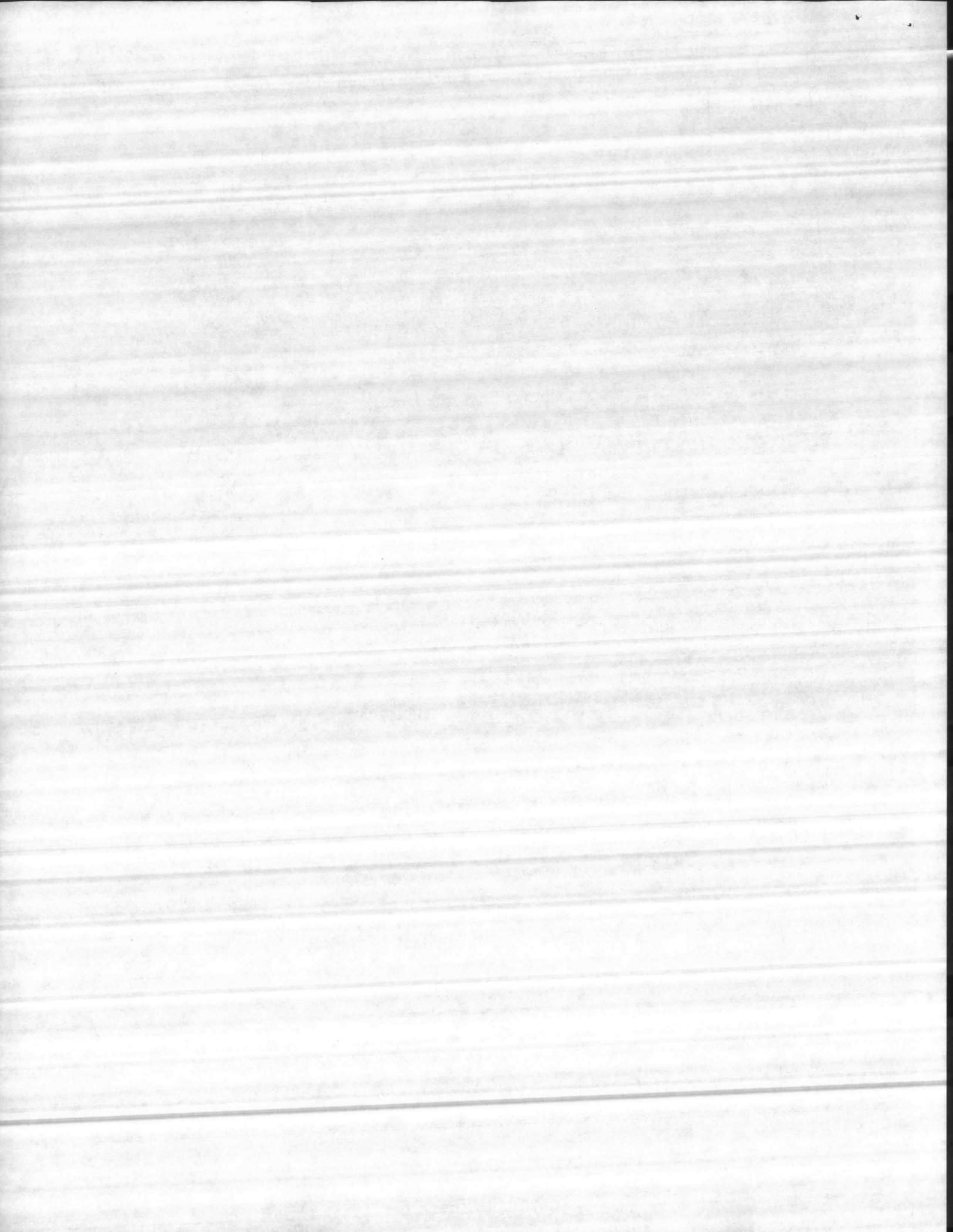
REVIEWER'S COMMENTS

Contractors Approval Appears to be Appropriate

File Filed 1-3-80

COPIES TO: ROICC (2), LANTDIV (1), A-E (1)

DATE **1/21/80** SIGNATURE *Robert L. Turner*



Spec. Section 15272
Paragraph 4.2



Tyler Pipe

Subsidiary of
Tyler Corporation

CONTRACT N62470-77-C-7526
205 BED HOSPITAL
NAVAL REGIONAL MEDICAL CENTER
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

TO WHOM IT MAY CONCERN:

This is to certify that the cast iron water main fittings furnished by Tyler Pipe Industries, Inc., Tyler, Texas are produced in accordance with and meet all applicable terms and provisions of Federal Specification WW-P-421c; ANSI A21.10 (AWWA C110-77), ANSI A21.11 (AWWA C111-72), ANSI B16.1 125#.

The sizes 3" through 16" AC fittings have bells designed to receive Class 150 - 200 asbestos-cement pipe; the sizes 18" and above for Class 150 only.

The CI/PVC and AC short-short body fittings, with AWWA C110-77 metal thickness throughout, have reduced laying lengths and radii per manufacturer's standards.

Where cement lining is required this material meets Specification ANSI A21.4 (AWWA C104-74).

The Valve, Service and Roadway boxes meet Federal Specification QQ-I-652a.

TYLER PIPE INDUSTRIES, INC.
Utilities Division

142

BY: Dale Meador
Dale Meador, Vice President

JOB East Coast Const.
c/o 205 Bed Hospital
Lejuene, NC

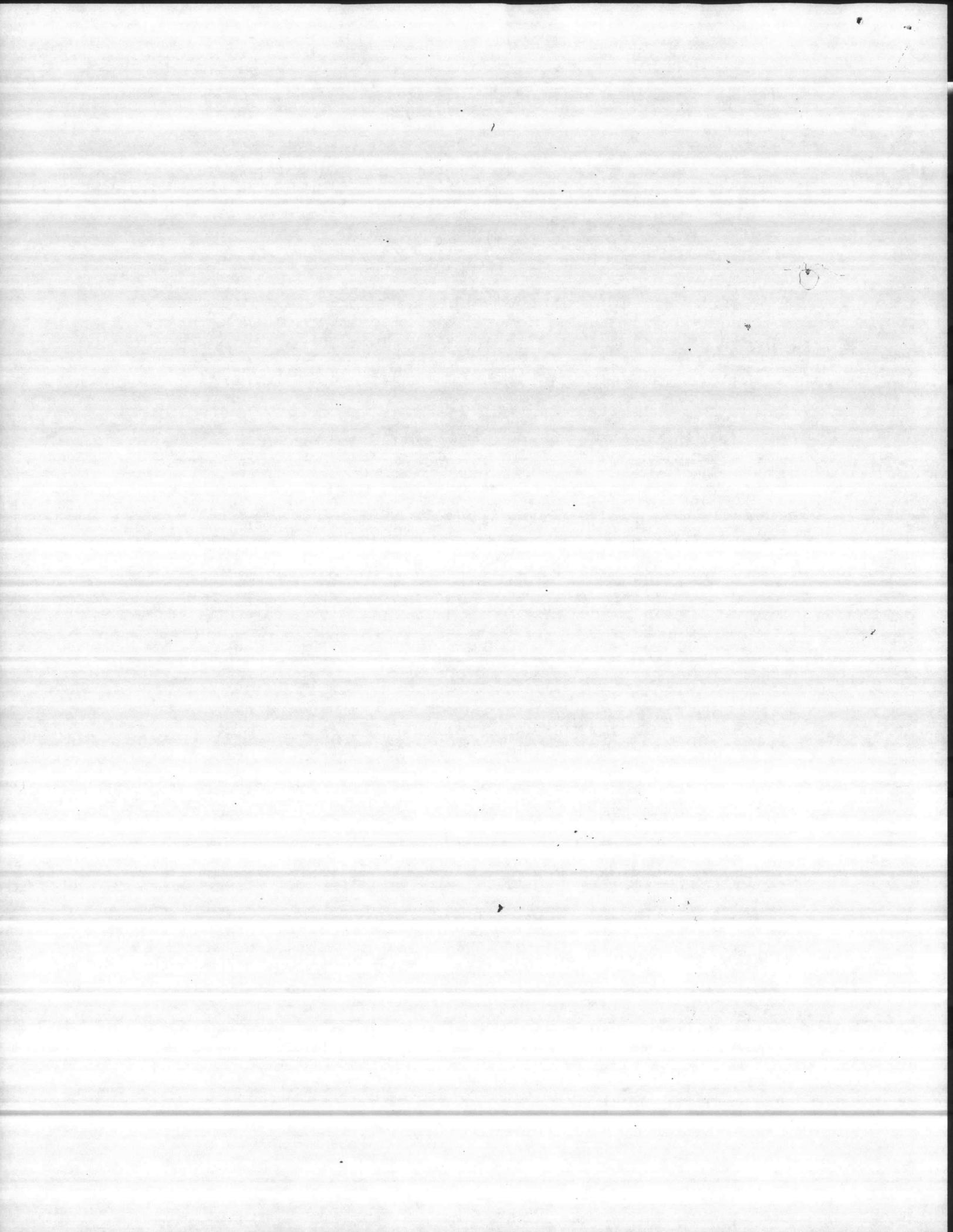
SUBSCRIBED AND SWORN TO BEFORE

ME THIS THE 14th DAY OF

August, 1979

CC: East Coast Const.
P. O. Box 5004
Jacksonville, NC 28540

George L. Brutz
Notary Public
Smith County, Texas



CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV 4-4355/3 (Rev. 6/76)

SECTION 15272

CONTRACT NO. N-62470-77-C-7526

TRANSMITTAL NO. 713-1

DATE 1-3-80

FROM CONTRACTOR
CARDINAL CONT. CO.
 TO
LOCKWOOD-GREENE ENGR.

PROJECT TITLE AND LOCATION
N.R.M.C.
CAMP LETEUNE N.C.

CONTRACTOR USE ONLY

REVIEWER USE ONLY

*List only one specification division per form.

List only one of the following categories on each transmittal form, and indicate which is being submitted

Contractor Approved

OICC Approval

Deviation/Substitution For OICC Approval

****ACTION CODES**

- A-Approved
- D-Disapproved
- AN-Approved as noted
- RA-Receipt acknowledged.
- C-Comments
- R-Resubmit

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
713-1	3.2	TYLER PIPE LETTER OF CERTIFICATION FOR PIPE FITTINGS	4		

CONTRACTOR'S COMMENTS

C.Q.C.R. ACTION : A

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

CONTRACTOR REPRESENTATIVE (Signature)

1-3-80

Wm. J. Haymaker

DATE RECEIVED BY REVIEWER

FROM (Reviewer)

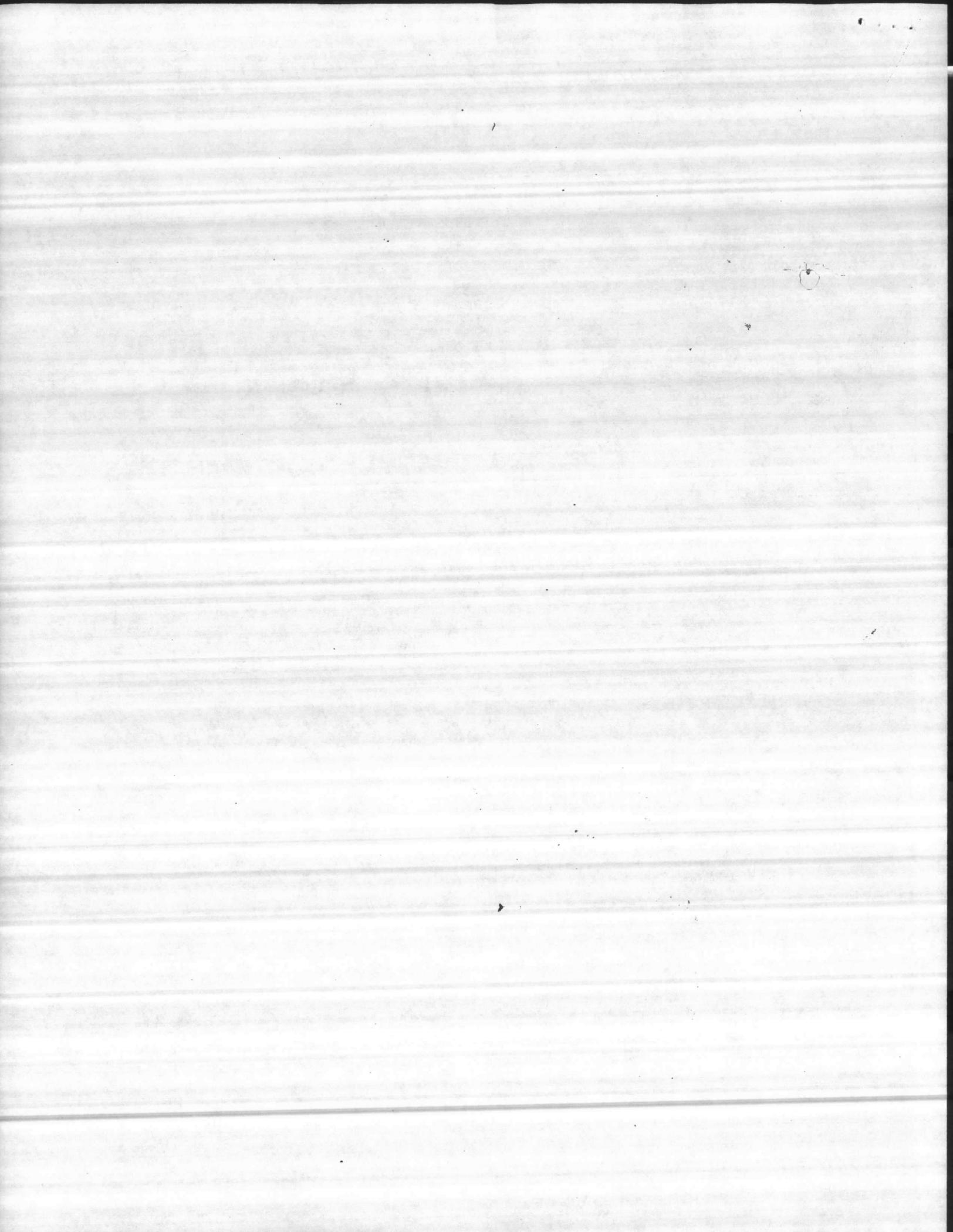
- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

COPIES TO:
 ROICC (2)
 LANTDIV (1)
 A-E (1)

DATE

SIGNATURE



SECTION 15272

file 10/19/81

CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV 4-4355/3 (Rev. 6/76)

CONTRACT NO. N-62470-77-C-7526 TRANSMITTAL NO. 713-2 DATE 9-14-81

FROM CONTRACTOR Cardinal Conti Co

PROJECT TITLE AND LOCATION NAVAL REGIONAL MED CTR.

TO Commander Atlantic Div (Code 05) Camp Lejeune, N.C.

NAVAL FACILITIES ENGINEERING COMMAND

CONTRACTOR USE ONLY List only one specification division per form. NAVAL STATION Norfolk, VA. 23511

REVIEWER USE ONLY

List only one of the following categories on each transmittal form, and indicate which is being submitted

- Contractor Approved, OICC Approval, Deviation/Substitution For OICC Approval

- ACTION CODES: A-Approved, D-Disapproved, AN-Approved as noted, RA-Receipt acknowledged, C-Comments, R-Resubmit

ATTENTION: SPRINKLER... ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)

ACTION CODES, REVIEWER'S INITIALS CODE AND DATE

Table with 4 columns: ITEM NO, PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO., ITEM IDENTIFICATION, NO. OF COPIES. Includes entries for Cardinal Conti Co. letter to East Coast Const. Co. dated 9/2/81, East Coast Const. Co. letter, 9/14/81, Certification, McWane C. Z. Pipe Co., and Material List, Davis Motor & Supply.

Table with 3 columns: ACTION CODES, REVIEWER'S INITIALS CODE AND DATE. Includes entries for RDC, RJD, JR, AY, JJ with dates like 10-1, 10/1, 10-6-8.

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

CONTRACTOR REPRESENTATIVE (Signature)

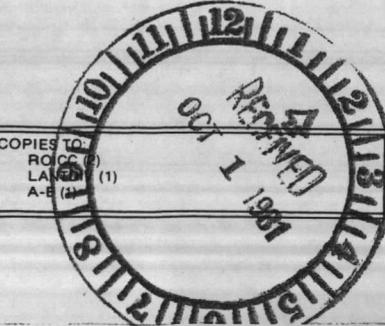
DATE RECEIVED BY REVIEWER 9-14-81

FROM (Reviewer) LANTDIV TO CARDINAL CONTI CO

- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation. Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

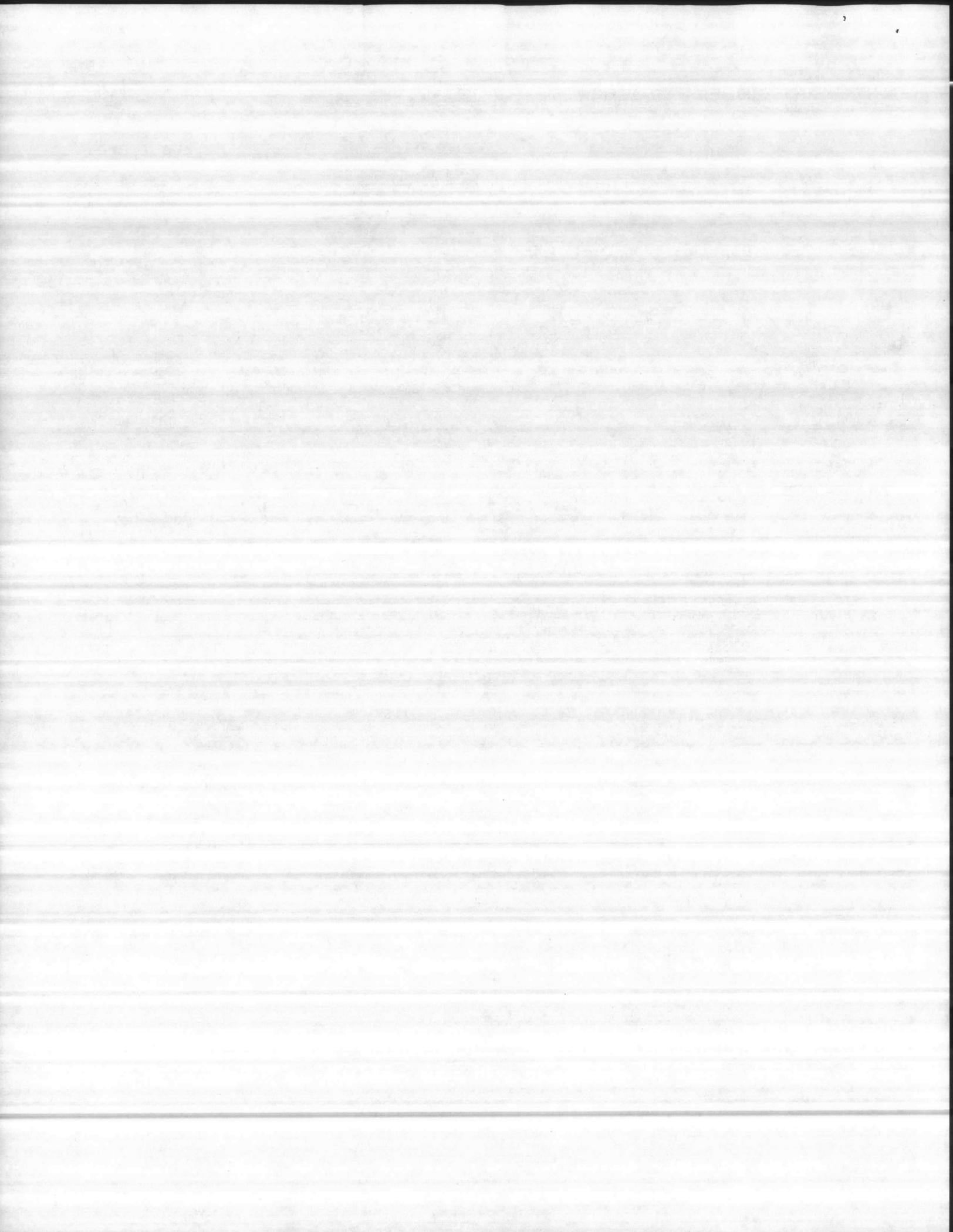
REVIEWER'S COMMENTS

DUCTILE IRON-CEMENT LINED PIPE IS ACCEPTABLE



COPIES ROICC (1) LANTDIV (1) A-E (1) DATE 2355-891

SIGNATURE [Signature]



SECTION 15272

CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV 4-4355/3 (Rev 6/76)

CONTRACT NO N-62470-77-C-7523	TRANSMITTAL NO 713-2	DATE 9-14-81
----------------------------------	-------------------------	-----------------

FROM CONTRACTOR
Cardinal Contr. Co.
TO *Commander, Atlantia Div. (Code 05)*
NAVAL FACILITIES ENGINEERING COMMAND

PROJECT TITLE AND LOCATION
NAVAL REGIONAL MED. CTR.
Camp Lejeune, N.C.

CONTRACTOR USE ONLY
NAVAL STATION, NORFOLK, VA. 23511

REVIEWER USE ONLY
**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

List only one of the following categories on each transmittal form, and indicate which is being submitted

Contractor Approved OICC Approval Deviation/Substitution For OICC Approval

ATTENTION: SPRINKLER DIV.

ITEM NO. PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. * ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number) NO. OF COPIES

713-2		<i>Cardinal Contr. Co. letter to East Coast Const. Co. dated 9/2/81 with attached 9/2/81 letter/Race</i>	7
ii		<i>East Coast Const. Co. letter, 9/14/81</i>	7
ii		<i>Certification, McWane ^{9/8/81} Pipe Co.</i>	7
ii		<i>Material List, Davis Meter & Supply</i>	7

ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE		
	FEB	INIT	DATE
MC			9-15
JD			9/16
JA			
AX			
JJ			

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC 9-14-81 CONTRACTOR REPRESENTATIVE (Signature) *W.M.J. Haymaker*

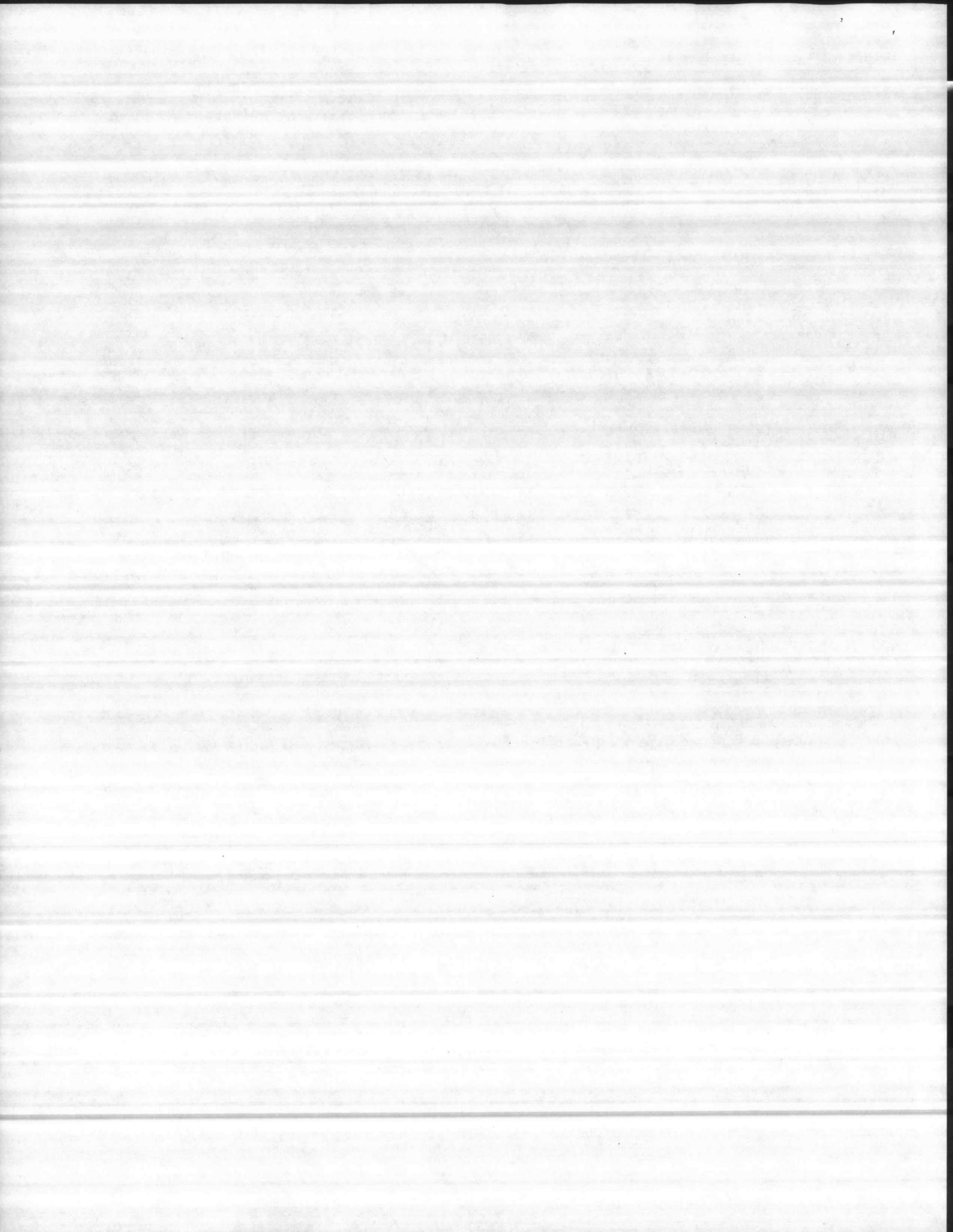
DATE RECEIVED BY REVIEWER FROM (Reviewer)

- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS



COPIES TO: ROICC (2), LANTDIV (1), A-E (1) DATE SIGNATURE



McWANE CAST IRON PIPE CO.

P. O. BOX 607 • BIRMINGHAM, ALABAMA 35201

GENERAL CERTIFICATION

STATE OF ALABAMA)
JEFFERSON COUNTY)

Before me, the undersigned authority, personally appeared R. Fred Rushing, known to me to be the General Sales Assistant of the McWane Cast Iron Pipe Company, who upon being duly sworn, deposes and says that each and every length of pipe furnished by this company to:

Davis Meter Supply Division
Raleigh Branch #15
P. O. Box 1419
Thomasville, Georgia 31792

for use at Raleigh, North Carolina Stock,
who shipped 270 feet 8" D.I. Cl.52
pipe to East Construction Co.,
P.O. Box 5004, Jacksonville, N.C.
28540 for Camp Lejeune Hospital Jol
#125, Marine Corp. Contract No.
N6247077-77C-7526

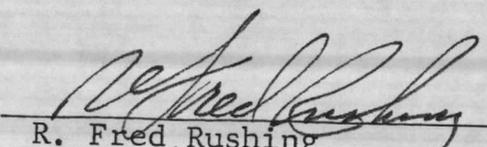
our Sales Order No. 52608/Davis Meter Order #1-107435-15 were inspected and all specified tests made with the results thereof complying with the requirements of the specification indicated below:

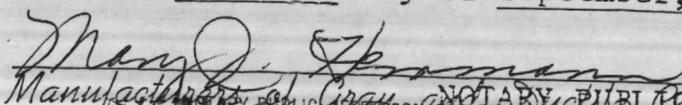
Grade 60-42-10

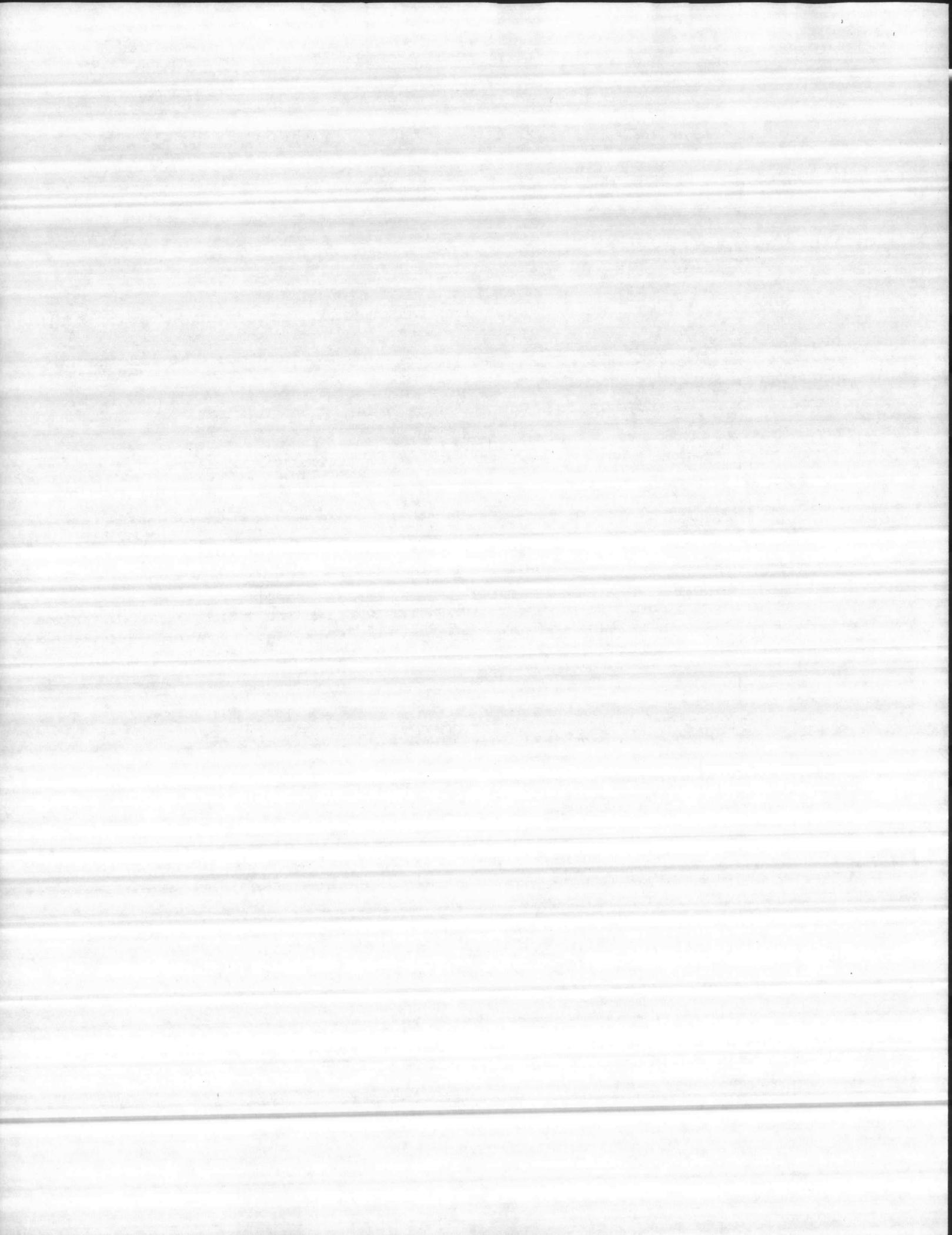
<u>SIZE</u>	<u>TYPE JOINT</u>	<u>CLASS</u>	<u>SPECIFICATION</u>	<u>NOMINAL METAL THICKNESS</u>	<u>LINING</u>
8"	Mechanical Jt.	52	ANSI A21.51	.33"	C/L

Joints comply with ANSI Specification A21.11 (Latest Revision); Cement Lining per ANSI A21.4 (Latest Revision); Fittings, if included, per ANSI A21.10 (Latest Revision).

Subscribed and sworn to before me this 8 day of September, 1981


R. Fred Rushing
General Sales Assistant


Manufacturers of Gray Cast Iron Pipe and Fittings Since 1921.
NOTARY PUBLIC, JEFFERSON COUNTY
MY COMMISSION EXPIRES MAY 4, 1983



September 2, 1981

East Coast Construction Company, Inc.
P. O. Box 5004
Jacksonville, North Carolina 28540

Attention: Woody Myers

RE: 205 Bed Hospital
Naval Regional Medical Center
Camp Lejeune, North Carolina
Contract Number N62470-77-C-7526

SUBJ: Fire Protection Water Line at Building

Gentlemen:

We enclose copy of September 2, 1981, letter from the Assistant Resident Officer in Charge of Construction regarding the above captioned subject.

In telephone conversation with your Mr. Myers this date, we learned that you have decided to proceed with the installation of the water line using ductile iron pipe rather than the specified cast iron pipe. Since the deviation from the contract specifications has not been approved, you are proceeding at your own risk.

We trust that you will promptly submit a deviation request for the use of the ductile pipe.

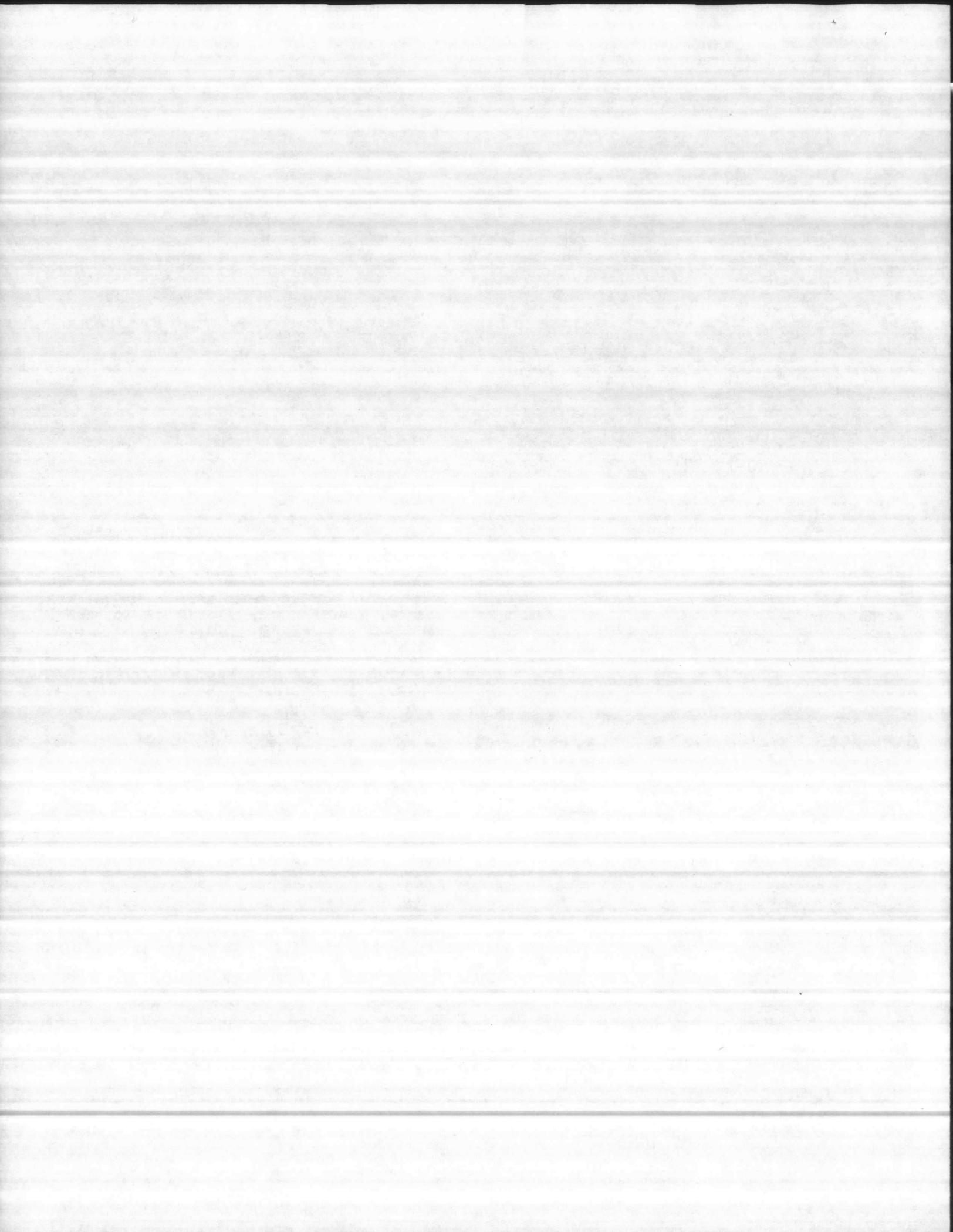
Very truly yours,

CARDINAL CONTRACTING COMPANY, INC.

William Haymaker
COC Representative

WH/ac

Enclosure



DEPARTMENT OF THE NAVY
RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
NAVAL REGIONAL MEDICAL CENTER
FIELD OFFICE
CAMP LEJEUNE, NC 28542

TELEPHONE NO.
919-353-3455

IN REPLY REFER TO:
RDC:jj
N62470-77-C-7526

SEP 02 1981

Cardinal Contracting Co., Inc.
Post Office Box 8408
Camp Lejeune, North Carolina 28542

RE: Fire Protection Water Fine at
Building

Gentlemen:

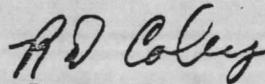
With reference to your letter of 26 August 1981, the installation of the fire protection water line shall be in accordance with the requirements of the contract and NFPA.

Based on Mr. Jacob's demonstration and the conversation with Mr. B. Wyatt on 13 August 1981, the joint at the 90° bend (at the stub up) and the first section of horizontal pipe shall be rodded. Mr. Jacob's demonstration indicated that there is no positive connection between the flanged 90° bend and the pipe.

The sketch forwarded by your letter indicates ductile iron in lieu of cast iron pipe as specified is to be installed between the building and the meter pit. It was the Resident Officer in Charge of Construction, Naval Regional Medical Centers understanding that since the pipe was not installed the specified type of pipe would be installed.

This deviation from the contract must have prior approval of Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia prior to being acceptable to the ROICC, NRMC.

Sincerely,

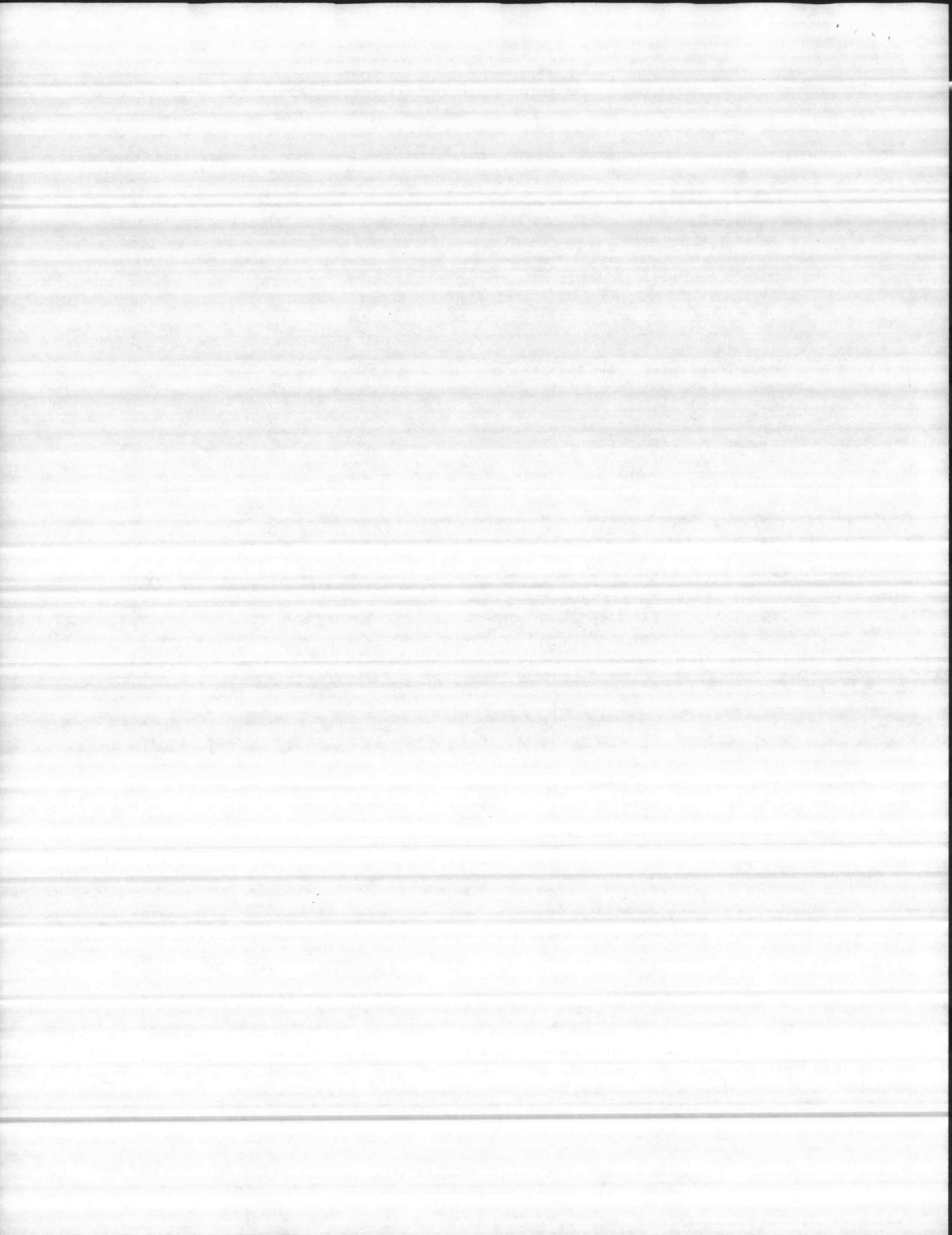


R. D. COLEY

Assistant Resident Officer in Charge
of Construction

Copy to:

LANTDIV (Code 05)



EAST COAST CONSTRUCTION COMPANY, INC.

GENERAL CONTRACTORS

Post Office Box 5004

JACKSONVILLE, NORTH CAROLINA 28540

September 14, 1981

Cardinal Contracting Company, Inc.
Post Office Box 8408
Camp Lejeune, North Carolina 28542

RE: 205 Bed Hospital
Naval Regional Medical Center
Camp Lejeune, North Carolina
Contract #N62470-77-C-7526

SUBJ: Fire Protection Water Lines

Gentlemen:

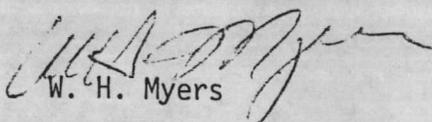
In response to your letter of September 2, 1981 and the ROICC letter of the same date, we submit the following data:

- (1) Quotations from our supplier, Davis Meter Company, indicating the cost and non-availability of grey iron pipe versus the availability and price of ductile iron pipe meeting the same specifications.
- (2) Manufacturers certificate on the ductile iron pipe that was installed.

Please advise if this meets your approval.

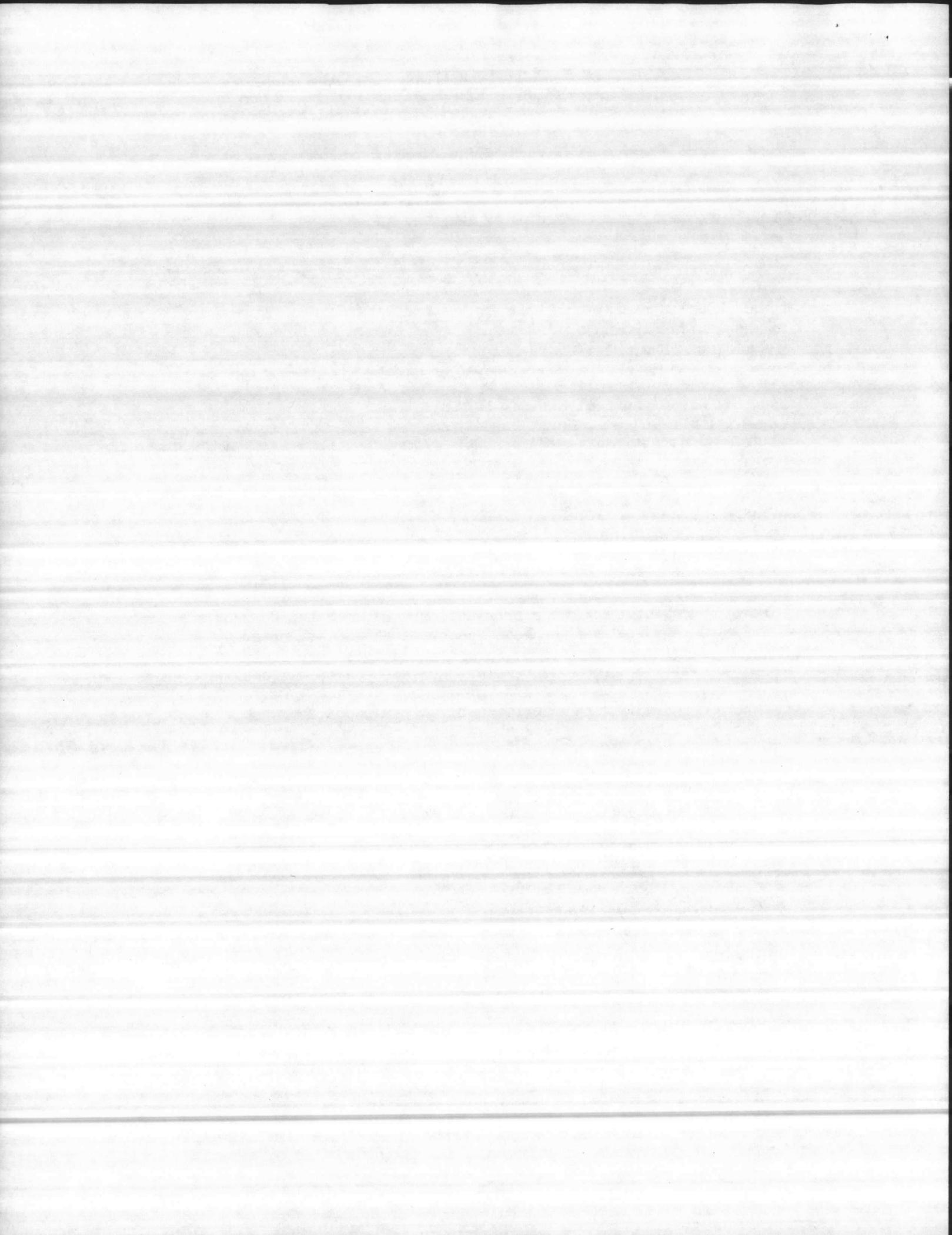
Yours very truly,

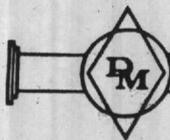
EAST COAST CONSTRUCTION CO., INC.


W. H. Myers

WHM/cdd

Enclosures





DAVIS METER & SUPPLY div.
DAVIS WATER & WASTE INDUSTRIES, Inc.
 THOMASVILLE, GEORGIA 31792

DISTRIBUTORS OF WATER WORKS SUPPLIES AND EQUIPMENT SINCE 1938



ATLANTA, GA. PH. 404-934-4916
 NASHVILLE, TENN. PH. 615-244-1824
 KNOXVILLE, TENN. PH. 615-524-6638
 THOMASVILLE, GA. PH. 912-226-5733
 COLUMBIA, S.C. PH. 803-798-0510
 FT. LAUDERDALE, FLA. PH. 305-587-0013
 ORLANDO, FLA. PH. 305-843-0790
 JACKSON, MISS. PH. 601-354-0330
 FT. MYERS, FLA. PH. 813-995-0527
 RALEIGH, N.C. PH. 919-876-4972
 JACKSONVILLE, FLA. PH. 904-388-4691
 FT. PIERCE, FLA. PH. 334-733-1111

MATERIAL PROPOSAL & CONTRACT Quote No. 2977

Sold To East Coast Const. Co. Branch Office Raleigh, N.C. Date Aug. 17, 1981
P.O. Box 5004 Shipping Address Camp Lejeune Hospital
Jacksonville, N.C. 28540 NC 247077-776-7526
Camp Lejeune, N.C.
 TERMS Net 30 days JOB NAME Camp Lejeune Hospital
 Subject to continuing approval of credit.
 QUOTE GOOD UNTIL Sept. 17, 1981 EST. DELIVERY TIME Stock F.O.B. POINT OF ORIGIN Raleigh, N.C.

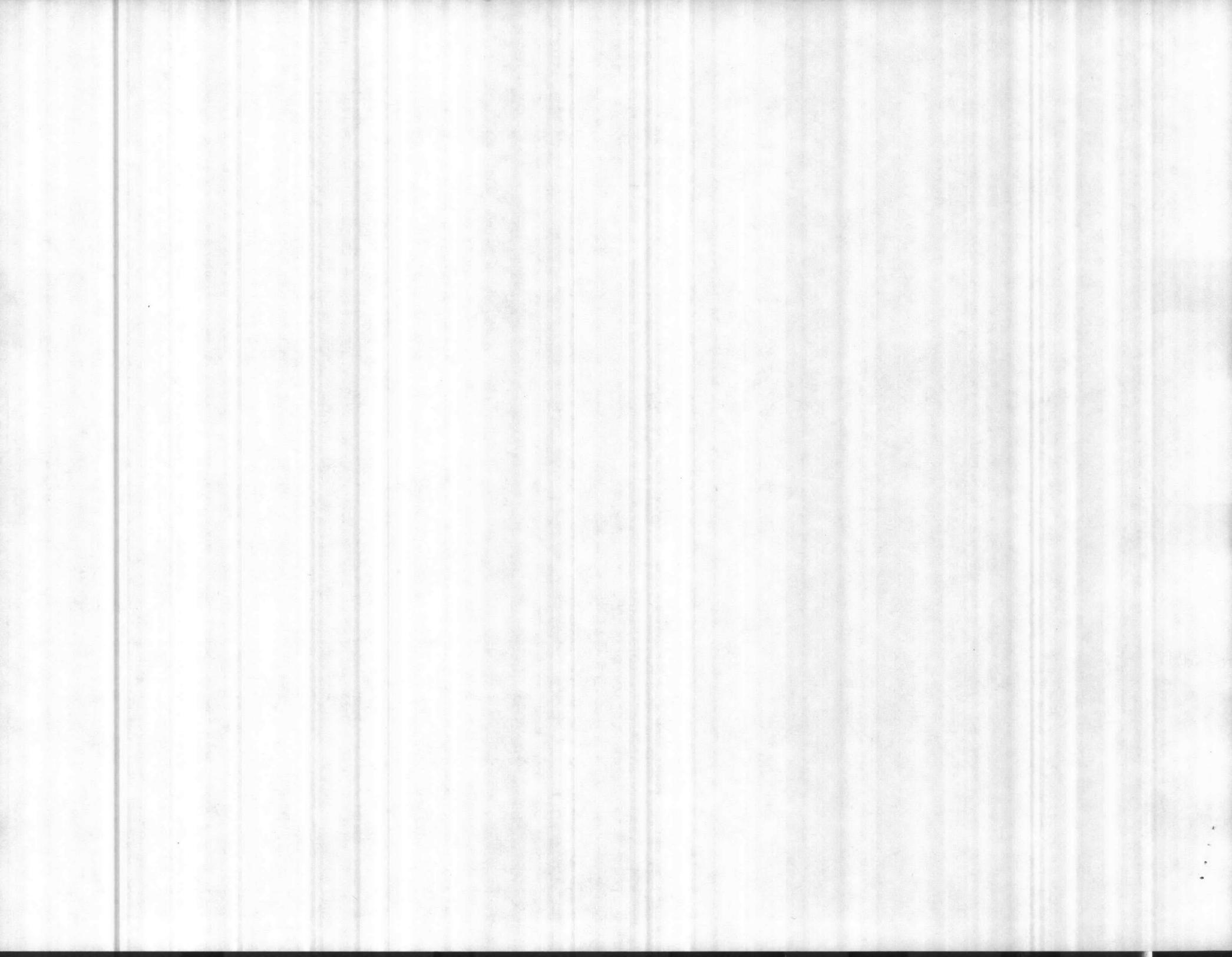
QUANTITY	SIZE AND DESCRIPTION OF ITEM	UNIT PRICE	EXTENSION
270'	8" M.S. D.I. Pipe Class 52	8.45	
22	8" Fig 380 Stellar Clamps For /C.F.	18.50	
100'	3/4" Plain All Thread Rod	.80	
4	3/4" Rod Couplings	.95	
30	3/4" x 4 1/2" 90° Offset Eye bolts	1.50	
52	3/4" Plain Hex Nuts	.13	
52	3/4" Plain Cut Washers	.06	
3	8" M.S. D.I. Retainer Glands	28.50	
3	8" M.S. Regular Gaskets	1.50	
18	3/4" x 4" T-Head Bolt + Nut	.85	
* Alternate:			
270'	8" M.S. Cast Iron Pipe Class 22	8.45	
* Delivery on Cast Iron Pipe will be Approx. - Price would be same AS Ductile IRON - But it is no longer Available			

EXCEPTIONS: Quotation good for quoted prices and quantities only. Any additions or changes will be negotiated. There are no exceptions to any part of these conditions unless agreed to in writing and attached hereto. The issuance of this quotation does not necessarily guarantee the quantities and specification as shown herein to be in exact accord with the job plans and specifications. In all cases unit prices will apply.

TERMS - CONDITIONS

TERMS Net 30 Days
 Notwithstanding any conflicting statement contained in this or any other quotation, the buyer in accepting this quotation, agrees to pay for materials upon delivery as invoiced, rather than upon completion of delivery of all materials described in the buyer's purchase order. It is also understood that the buyer agrees to the terms of payment as herein stated and this agreement supersedes any statement by the buyer upon its purchase order respecting time of payment.
 Late charge of 1% per month (18% per annum) will be charged on past due accounts, or the

Correction of such defects by repair or of supplying a replacement for defective parts shall constitute fulfillment of all obligations by Davis hereunder. All of Davis' obligations hereunder will be waived however, if Davis is not in receipt of written notice of such alleged defect within said one year period. All warranty claims will likewise be so waived. No warranty is included against, nor shall Davis be liable for, any expense involved in removal, reinstallation or any other incidental, consequential or other damages for any alleged negligence, breach of warranty, express or implied, strict liability or any other theory, other than under the limited warranty set forth above. Nor does Davis have any liability for loss, damage or expense directly or indirectly caused by the use of,



LOCKWOOD GREENE
 ARCHITECTS • ENGINEERS
 Spartanburg, South Carolina 29304
 P.O. Box 491 (803) 582-2351

Sheet 15272
 # 715-122

Drawing And Specification Transmittal

To Naval Facilities Engineering
 Command Bldg. N-26
 Atlantic Division
 Norfolk, Va. 23511

Date 8-16-82
 Job No. 77239.16
 Job Name N.R.M.C.
 Transmittal No. 201479
 Sheet _____ Of _____
 Order No. _____

Attn. Mr. John Grubbs Code 05

Contract No. N-62470-77-C-7526
 Under Separate Cover.

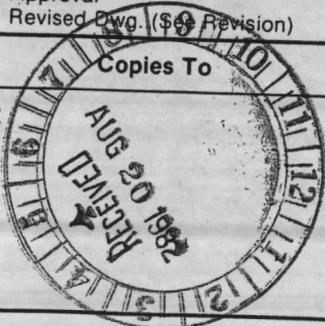
We Are Sending You The Following Data _____ Herewith _____

Qty.	Document No.	Rev. No.	Description	Vendor	Code
1 1	Letter		Dated 7-13-82 Lab Test Report #654 & 655	East Coast Const. Beacham	A A

	FOR	INIT	DATE
RDC		RDC	8-23
RJD		RJD	8/25
JN			
AY			
JH			

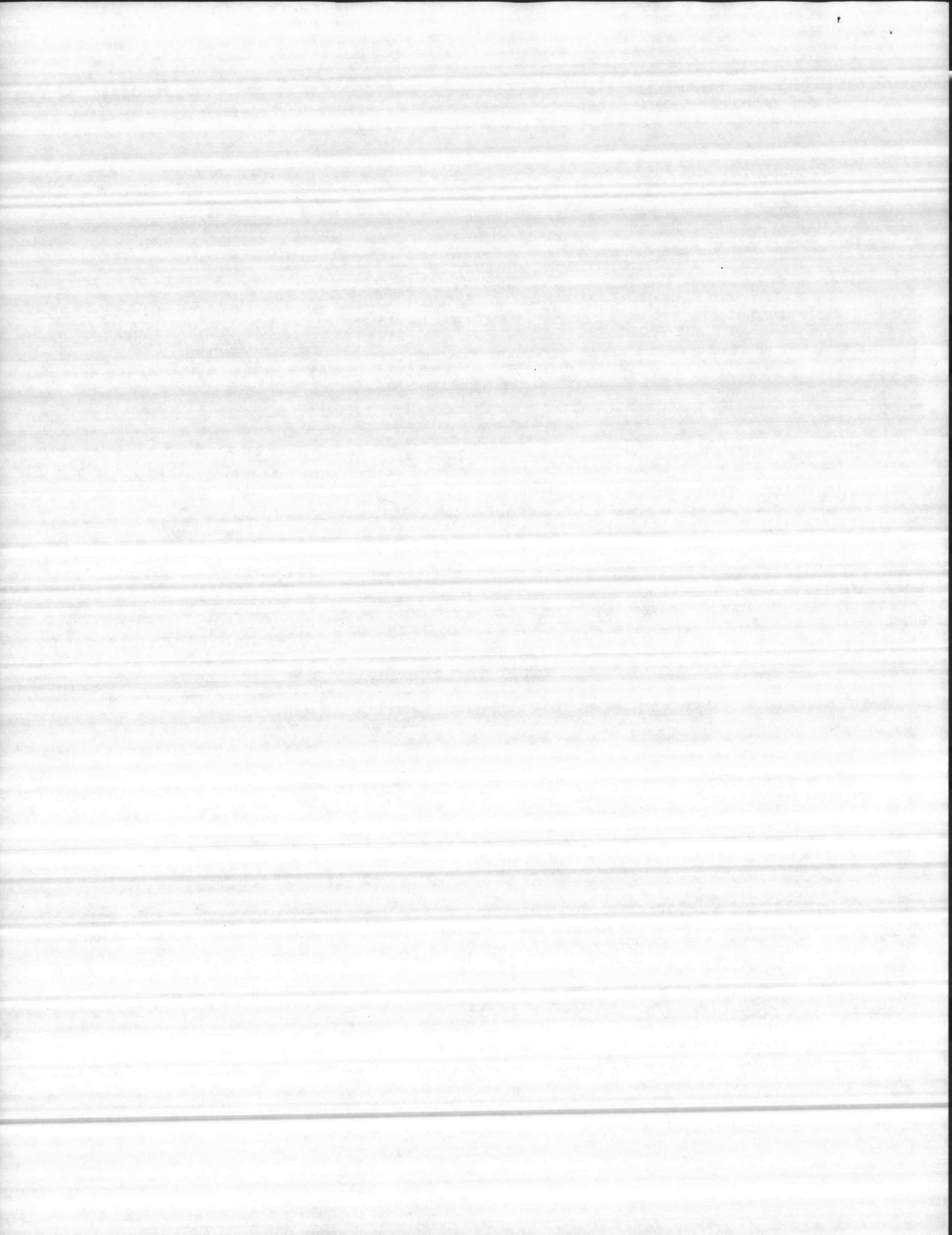
Code For Lockwood Greene Documents				Code For Vendor Documents			
A - Information	B - Review	C - Approval	D - Revised Dwg. (See Revision)	E - Bid	F - Construction	G - Purchasing	H -
				K - No Corrections Noted			
				L - Make Corrections Noted			
				M - Revise and Resubmit			
				N - Rejected (See Remarks)			

Copies To	Qty.	Trans Only	Code	Copies To	Qty.	Trans Only	Code
ROICC	2						



Remarks

Please Acknowledge Receipt By Immediate Return Of Signed Copy Of This Transmittal
 Received By _____ Date _____ Transmitted By Richard McKnight



SECTION # 15272

2

CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV 4-4355/3 (Rev. 6/76)

CONTRACT NO. N-62470-77-C-7526 TRANSMITTAL NO. 715-1 DATE 8-2-82

FROM CONTRACTOR Cardinal C.P.
TO Lackwood Group Engrs.

PROJECT TITLE AND LOCATION NAVAL REGIONAL MED. CTR.
Camp Lejeune, N.C.

CONTRACTOR USE ONLY

REVIEWER USE ONLY

*List only one specification division per form.

**ACTION CODES
A-Approved
D-Disapproved
AN-Approved as noted
RA-Receipt acknowledged.
C-Comments
R-Resubmit

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- OICC Approval
- Deviation/Substitution For OICC Approval

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
715-1	6.0	East Coast Const. Letter dated 7-13-82.	4	A	
		Beacham Lab. Test Reports # 654 and 655.	4	A	

CONTRACTOR'S COMMENTS

C&C Action: A 201479

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

CONTRACTOR REPRESENTATIVE (Signature)

8-2-82

Wm J. Haymaker

DATE RECEIVED BY REVIEWER

FROM (Reviewer)

TO

- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

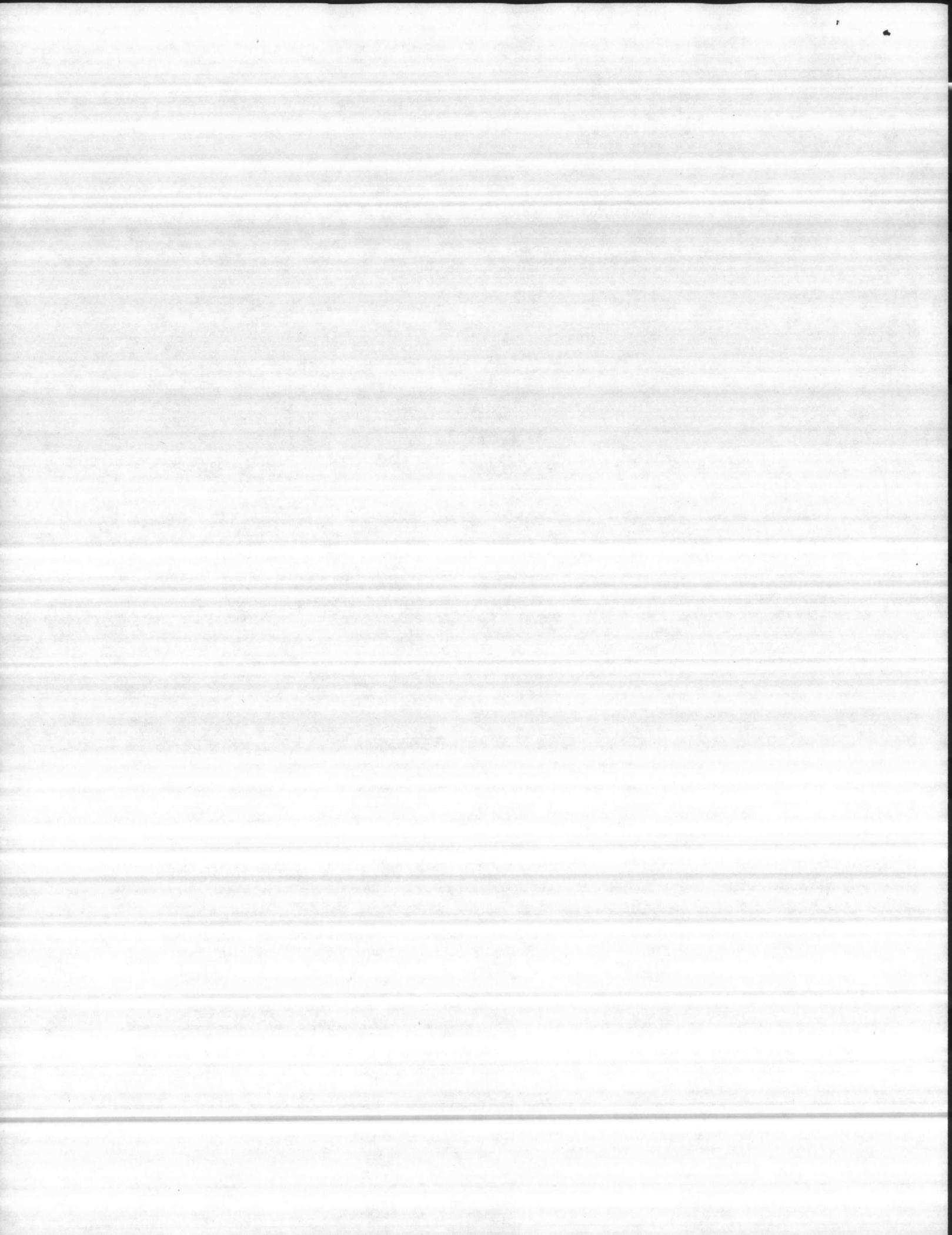
COPIES TO:
ROICC (2)
LANTDIV (1)
A-E (1)

DATE

8-16-82

SIGNATURE

C. A. Foley



SECTION # 1527 *and* 4002

CONTRACTOR'S SUBMITTAL TRANSMITTAL

5ND LANTDIV 4-4355/3 (Rev. 6/76)

CONTRACT NO. N-62470-17-C-7526	TRANSMITTAL NO. 715-1	DATE 3-2-82
--	---------------------------------	-----------------------

FROM CONTRACTOR
Lockwood Greene Eng'g.

TO
Lockwood Greene Eng'g.

PROJECT TITLE AND LOCATION
*NAVAL REGIONAL MED. CTR.
Camp Lejeune, N.C.*

CONTRACTOR USE ONLY

REVIEWER USE ONLY

*List only one specification division per form.

**ACTION CODES

List only one of the following categories on each transmittal form, and indicate which is being submitted

- A-Approved
- D-Disapproved
- AN-Approved as noted
- RA-Receipt acknowledged.
- C-Comments
- R-Resubmit

- Contractor Approved OICC Approval Deviation/Substitution For OICC Approval

ITEM NO.	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO. *	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES **	REVIEWER'S INITIALS CODE AND DATE
<i>715-1 610</i>		<i>East Coast Coast. Letter dated 7-13-82.</i>	<i>4</i>		
		<i>Beachham Lab. Test Reports # 654 and 655.</i>	<i>4</i>		

CONTRACTOR'S COMMENTS

PROCR ACTION: A **201479**

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC: *8-2-82*

CONTRACTOR REPRESENTATIVE (Signature): *Wm J. Haymaker*

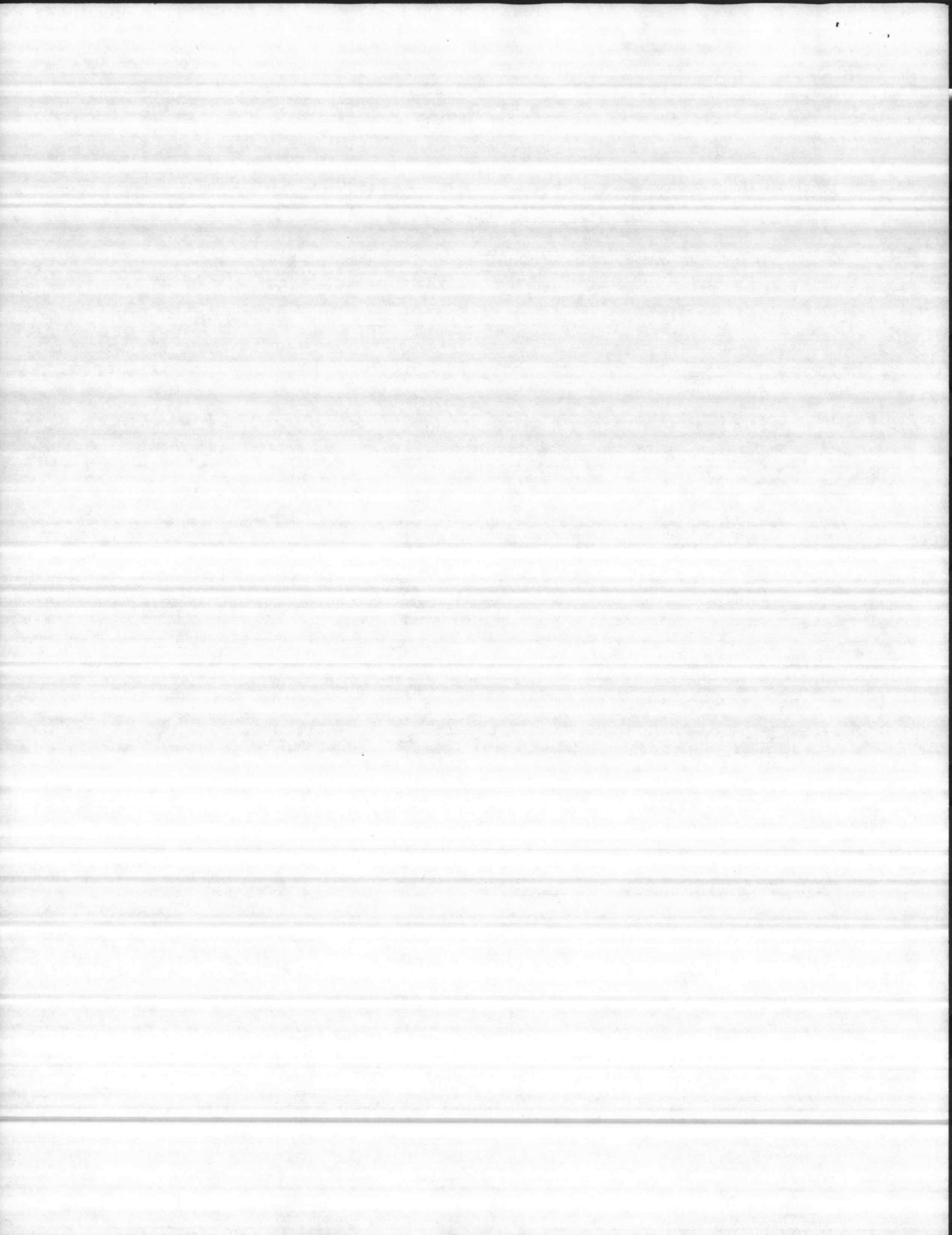
DATE RECEIVED BY REVIEWER: _____ FROM (Reviewer): _____ TO: _____

- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on **ONE COPY** of the transmittal form.

REVIEWER'S COMMENTS

58-21-8

COPIES TO: ROICC (2) LANTDIV (1) A-E (1)	DATE <i>3-2-82</i>	SIGNATURE <i>Wm J. Haymaker</i>
---	-----------------------	------------------------------------



EAST COAST CONSTRUCTION COMPANY, INC.

GENERAL CONTRACTORS

Post Office Box 5004

JACKSONVILLE, NORTH CAROLINA 28540

July 13, 1982

Cardinal Contracting Company, Inc.
Post Office Box 8303
Camp Lejeune, North Carolina 28542

RE: N62470-77-C-7526
205 Bed Hospital
NRMC - CLNC

Gentlemen:

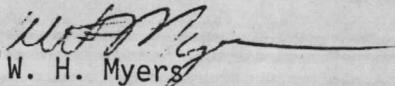
Enclosed are two (2) laboratory reports for drinking water samples taken at the referenced project site. The first sample, taken on 6/7/82 (Test #655), shows 600 mg/l Total Chlorine and 120 mg/l Free Chlorine. Coliform not found in this sample. The next sample, taken on 6/8/82 (Test #654), shows no chlorine reading and coliform not found.

Both samples were taken from the 10" drinking water line on the North side of the building.

If you have any question, please do not hesitate to write or call.

Yours very truly,

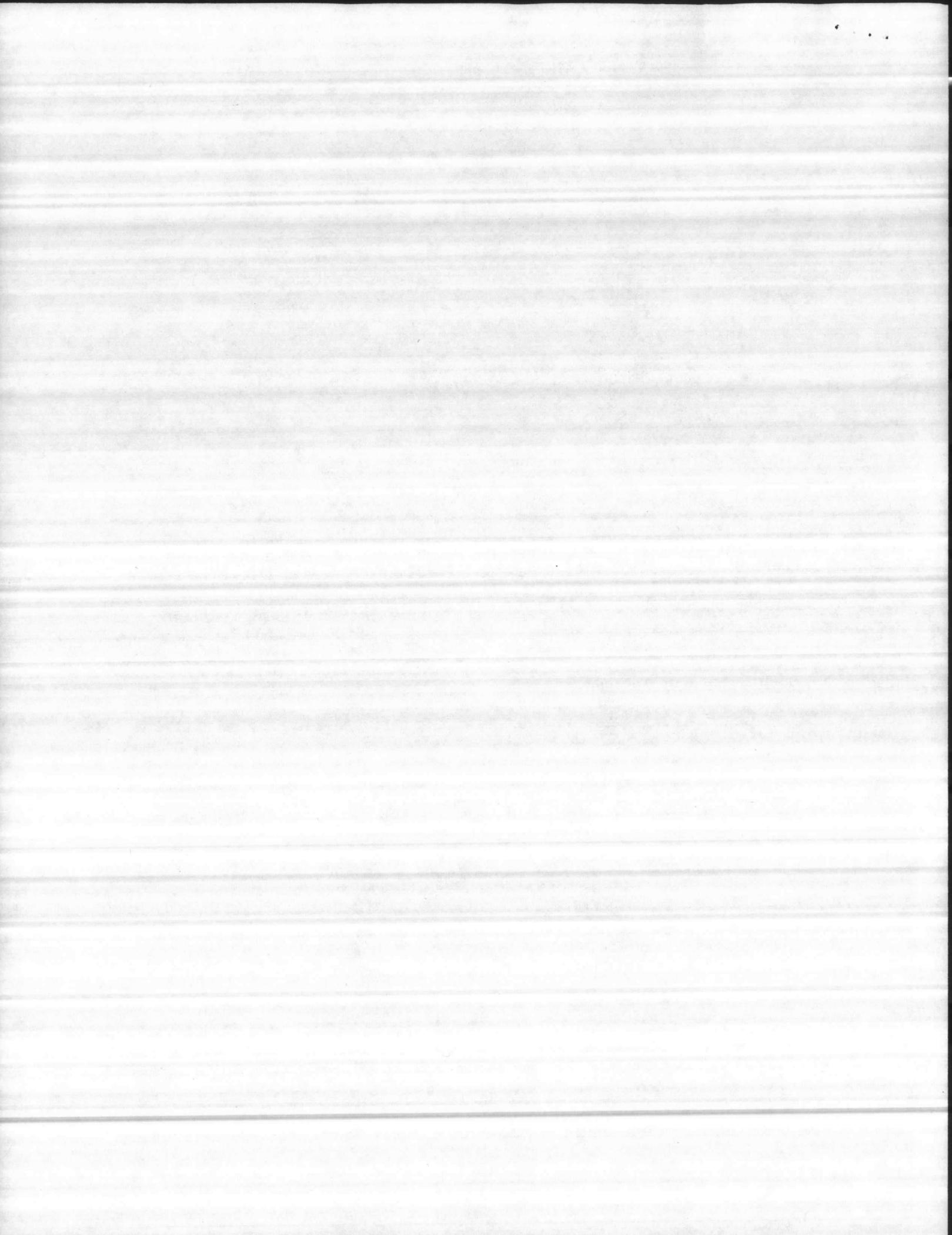
EAST COAST CONSTRUCTION COMPANY, INC.


W. H. Myers

WHM/cdd

Enclosures

201479



BEACHAM LABORATORY

WILMINGTON HWY.
JACKSONVILLE, NC 28540

LAB NO. 57

DRINKING WATER DESCRIPTION BLANK—FILLED IN BY SENDER
COLIFORM ANALYSIS—PUBLIC WATER SYSTEM

DATE REC. 6-9-82

TIME REC. 12:00 PM

REC. BY RCM

TEST # 1155

BACTERIOLOGIC ANALYSIS

MEDIA	POSITIVE TUBES				
	1	2	3	4	5
LTB	1	2	3	4	5
BGB	1	2	3	4	5
MEMBRANE FILTER METHOD					
TYPICAL COLONIES			VERIFIED		
ATYPICAL COLONIES			VERIFIED		
TNTC	<input type="checkbox"/>	CONFLUENT GROWTH	<input type="checkbox"/>	NON-IDEAL COUNT	<input type="checkbox"/>
COLIFORM-NOT FOUND	<input checked="" type="checkbox"/> 6-11-82	MPN	<input type="checkbox"/>	TOTAL COLONIES PER 100ml	<input type="checkbox"/>

NAME OF SYSTEM 10" DRINKING WATER - NORTH SIDE OF 205
RED HOSPITAL CLINIC COUNTY OKSLOW

LOCATION OF SAMPLING POINT END OF 10" LINE
ADDRESS WHERE SAMPLE WAS COLLECTED ()
COLLECTED BY HOY CAGLE DATE 6-7-82 TIME 10:00 AM

TYPE OF SAMPLE: REGULAR MONTHLY CHECK SPECIAL

TYPE OF SUPPLY: COMMUNITY NON-COMMUNITY

REPORT TO: EAST COAST CONSTRUCTION CO. INC. TELEPHONE NUMBER 3534479

ADDRESS P. O. BOX 5004
JACKSONVILLE, N. C. 28540 CITY ZIP

ALL INFORMATION REQUESTED MUST BE GIVEN.

600 ug/l
Total chlorine
120 ug/l free chlorine
REPORTED BY: RCM

DO NOT WRITE TO THE RIGHT OF HEAVY LINE

BEACHAM LABORATORY

WILMINGTON HWY.
JACKSONVILLE, NC 28540

LAB NO. 57

DRINKING WATER DESCRIPTION BLANK—FILLED IN BY SENDER
COLIFORM ANALYSIS—PUBLIC WATER SYSTEM

DATE REC. 6-9-82

TIME REC. 12:00 PM

REC. BY RCM

TEST # 654

BACTERIOLOGIC ANALYSIS

MEDIA	POSITIVE TUBES				
	1	2	3	4	5
LTB	1	2	3	4	5
BGB	1	2	3	4	5
MEMBRANE FILTER METHOD					
TYPICAL COLONIES			VERIFIED		
ATYPICAL COLONIES			VERIFIED		
TNTC	<input type="checkbox"/>	CONFLUENT GROWTH	<input type="checkbox"/>	NON-IDEAL COUNT	<input type="checkbox"/>
COLIFORM-NOT FOUND	<input checked="" type="checkbox"/> 6-11-82	MPN	<input type="checkbox"/>	TOTAL COLONIES PER 100ml	<input type="checkbox"/>

NAME OF SYSTEM 10" DRINKING WATER - NORTH SIDE OF
205 RED HOSPITAL - CLINIC COUNTY OKSLOW

LOCATION OF SAMPLING POINT END OF 10" LINE
ADDRESS WHERE SAMPLE WAS COLLECTED ()
COLLECTED BY DATE 6-8-82 TIME 3:30 AM

TYPE OF SAMPLE: REGULAR MONTHLY CHECK SPECIAL

TYPE OF SUPPLY: COMMUNITY NON-COMMUNITY

REPORT TO: EAST COAST CONSTRUCTION CO. INC. TELEPHONE NUMBER 3534479

ADDRESS P. O. BOX 5004
JACKSONVILLE, N. C. 28540 CITY ZIP

No chlorine reading

201479

REPORTED BY: RCM

OWNER'S COPY

