

N62470-81-B-1478

**NAVFAC  
SPECIFICATION**

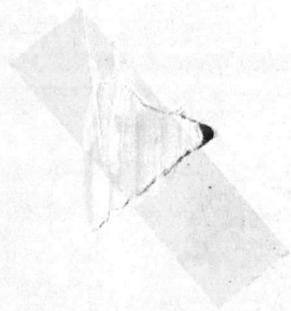
No. 05-81-1478

AMENDMENT NO. 0001

# **IMPORTANT**

This amendment should be acknowledged when your bid is submitted. Failure to acknowledge the amendment may constitute grounds for rejection of the bid.

If your bid has been submitted prior to the receipt of this amendment, acknowledgment should be made by telegram, which should state whether the price contained in your sealed bid is to remain unchanged, is to be decreased by an amount, or is to be increased by an amount. The acknowledgment must be received prior to bid opening time.



1. AMENDMENT/MODIFICATION NO. 0001      2. EFFECTIVE DATE 1-25-84      3. REQUISITION/PURCHASE REQUEST NO.      4. PROJECT NO. (If applicable)

5. ISSUED BY COL E      6. ADMINISTERED BY (If other than block 5)      CODE

Commander, Atlantic Division  
 Naval Facilities Engineering Command  
 Norfolk, Virginia 23511

7. CONTRACTOR NAME AND ADDRESS      CODE      FACILITY CODE

(Street, city, county, state, and ZIP Code)

8.  AMENDMENT OF SOLICITATION NO. N62470-81-B-1478  
 DATED 2-7-84 (See block 9)  
 MODIFICATION OF CONTRACT/ORDER NO. \_\_\_\_\_  
 DATED \_\_\_\_\_ (See block 11)

9. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in block 12. The hour and date specified for receipt of Offers  is extended,  is not extended.

Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended, by one of the following methods:

(a) By signing and returning 2 copies of this amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If, by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

10. ACCOUNTING AND APPROPRIATION DATA (If required)

11. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS

(a)  This Change Order is issued pursuant to \_\_\_\_\_  
 The Changes set forth in block 12 are made to the above numbered contract/order.

(b)  The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation data, etc.) set forth in block 12.

(c)  This Supplemental Agreement is entered into pursuant to authority of \_\_\_\_\_  
 It modifies the above numbered contract as set forth in block 12.

12. DESCRIPTION OF AMENDMENT/MODIFICATION

UTILITIES IMPROVEMENTS  
 at the  
 MARINE CORPS BASE - COURTHOUSE BAY AREA  
 CAMP LEJEUNE, NORTH CAROLINA

SECTION 00101. BIDDING INFORMATION

1. CONTENTS:

(b) Bid Submittal Documents

(i) Bid Form.....Delete Standard Form 21, Bid Form, dated 16 December 1983 and substitute the attached new bid form therefor.

In the "INDEX", under "DIVISION 14. CONVEYING SYSTEMS", delete Section 14337 and substitute the following new section: "14325. Electric Powered Chain Hoist".

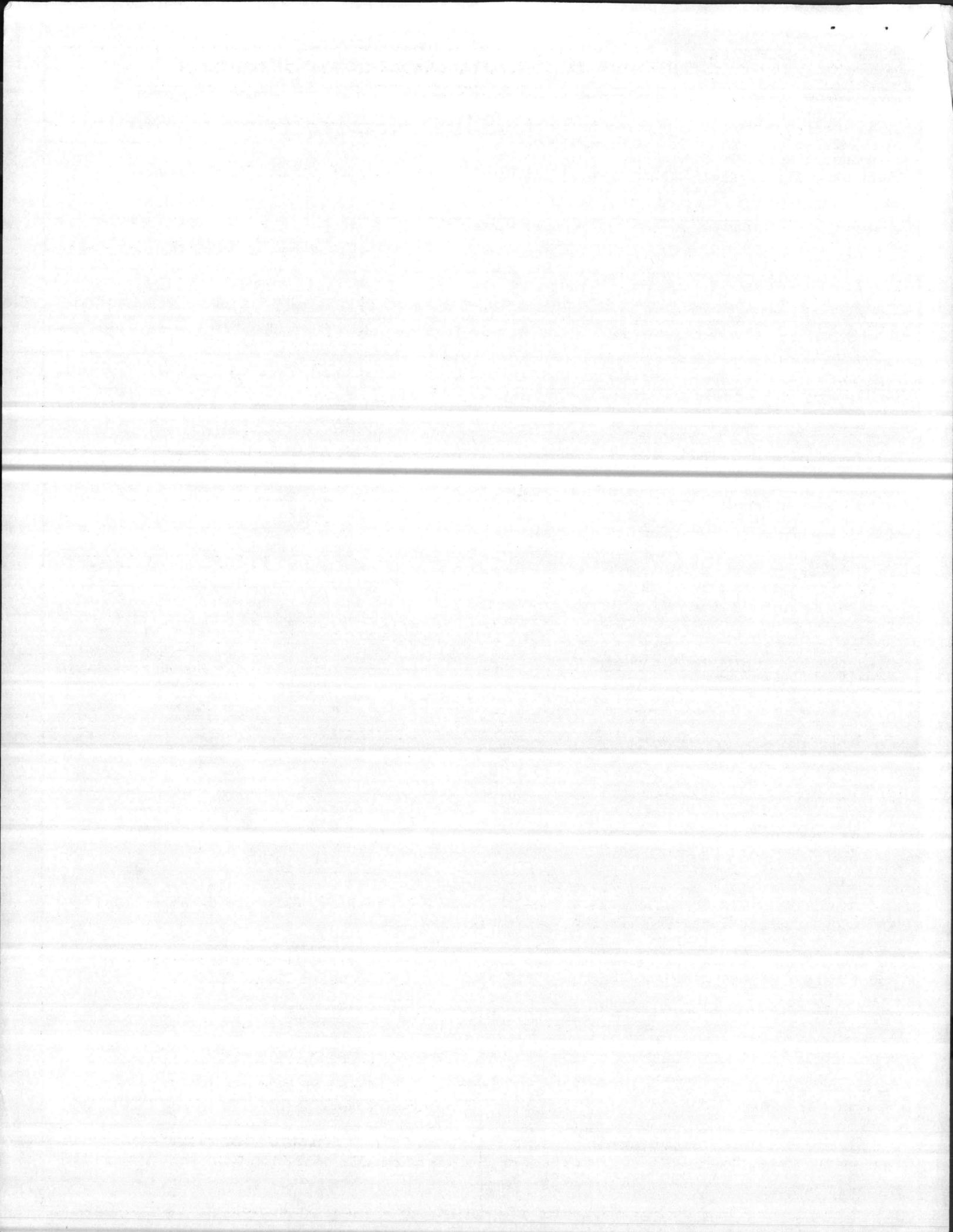
SEE CONTINUATION SHEET

13.  CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT       CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN \_\_\_\_\_ COPIES TO ISSUING OFFICE

14. NAME OF CONTRACTOR/OFFEROR      17. UNITED STATES OF AMERICA

BY \_\_\_\_\_      BY \_\_\_\_\_  
 (Signature of person authorized to sign)      (Signature of Contracting Officer)

15. NAME AND TITLE OF SIGNER (Type or print)      16. DATE SIGNED      18. NAME OF CONTRACTING OFFICER (Type or print)      19. DATE SIGNED



CONTINUATION SHEET

DIVISION 1. GENERAL REQUIREMENTS

SECTION 01011. GENERAL PARAGRAPHS

6. DRAWINGS ACCOMPANYING SPECIFICATION: Make the following changes:

On NAVFAC Dwg. No. 4091412

Add the following note to the Manhole Rehabilitation Schedule: "As basis for bid, the average manhole depth is 8.5 Ft."

On NAVFAC Dwg. No. 4091428

Control Building - Floor Plan: On the exterior wall of the chlorine contact room, revise "flow recorders" to read "1 - effluent meter flow indicator/recorder".

On NAVFAC Dwg. No. 4091429

In the Rear Elevation, in the note pertaining to the hoist, change note "Electric hoist 6000 lb. capacity, 5 HP motor. 12' lift" to "Electric powered chain hoist, 6000 lb. capacity".

To the list of drawings add LANTDIV Sketch No. SK-C-18-84 which accompanies this amendment.

DIVISION 11. EQUIPMENT

SECTION 11233. WATER SOFTENERS

PART 2 - PRODUCTS

2.6 OPERATING VALVES AND PIPING:

2.6.1 Each softener....In the last sentence change the word "manufactured" to "provided".

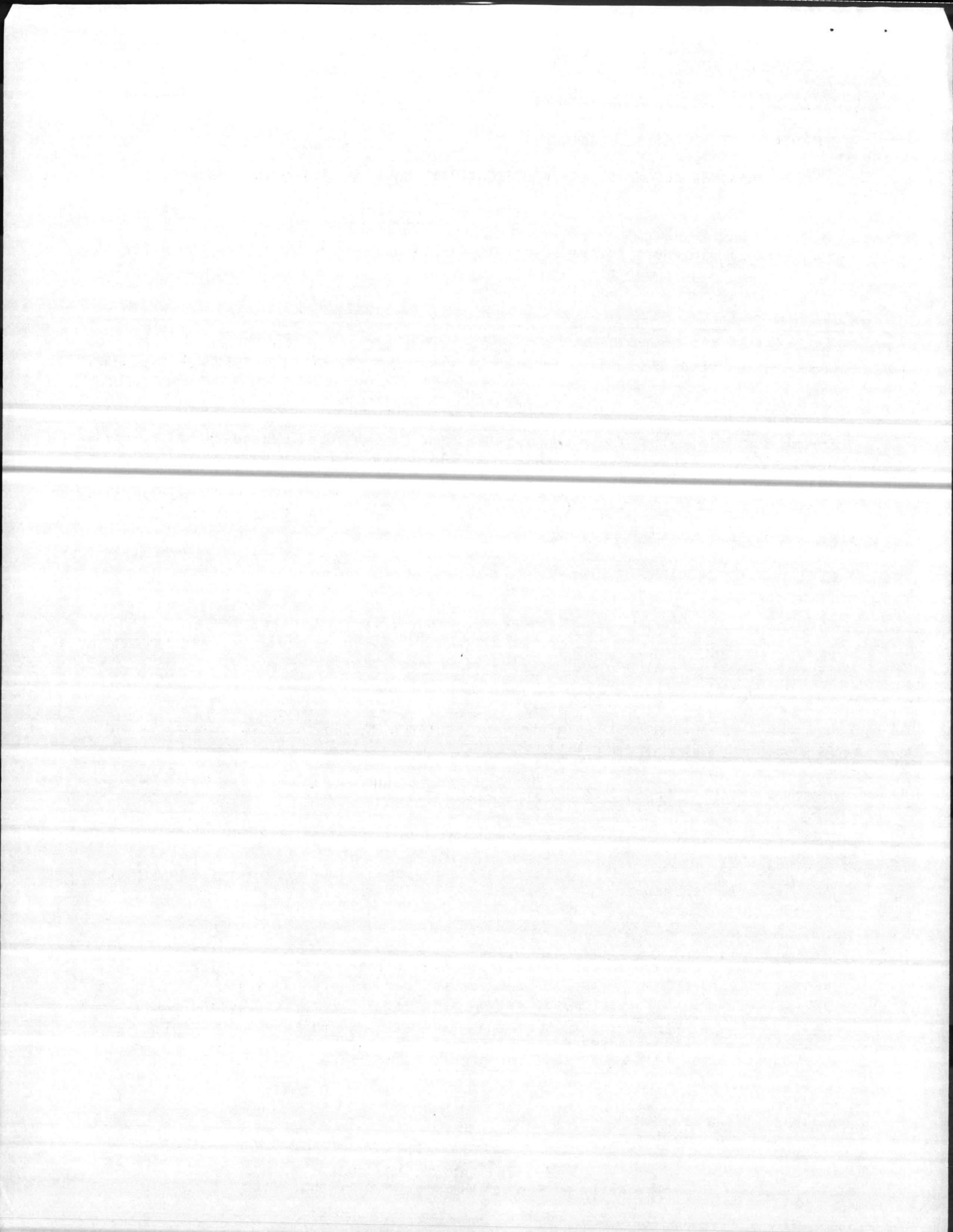
SECTION 11240. PRESSURE WATER FILTERS

PART 2 - PRODUCTS

2.4 AUTOMATIC VALVES: Delete this paragraph in its entirety and substitute the following therefor:

"2.4x AUTOMATIC VALVES:

2.4x.1 Pneumatic Butterfly Valves: Each filter shall be provided with one automatic filter inlet valve and one wash outlet valve in addition to the manual isolation valves. The automatic valves provided shall be iron bodied butterfly valves meeting the requirements of AWWA C504 for both valve and operator. Valve ends shall be flanged and drilled for 125 pound ANSI. Valves must use full AWWA C504, Class 150B single or double flange wafer type.



CONTINUATION SHEET

2.4x.1.1 Valve Materials:

- a. Body: Cast iron
- b. Seat: 18-8 stainless steel to rubber
- c. Shaft: Stainless steel
- d. Disc: High strength cast or ductile iron

2.4x.1.2 Operator: Pneumatic cylinder operated at 15 psi. Operation control by 120 volt, 12.3 watt solenoid valve mounted to cylinder control.

2.4x.2 Multiport Valves: Each filter shall be equipped with one multiport valve to control all service, wash, and rinse steps. The valve shall have a rotating disc and stationary port plate and rated for 140 psi working pressure. The valve gear reduction shall be such as to permit easy manual operation of the valve with a single, simple crank. For automatic operation as specified, the valve rotating disc shall be driven through the gear train by a fractional H.P. 120 V motor. The valve shall be provided by the same manufacturer as the filter."

DIVISION 13. SPECIAL CONSTRUCTION

SECTION 13625.1. FLOW MEASURING EQUIPMENT (SEWAGE TREATMENT PLANT) VARIABLE HEAD METER FOR OPEN CHANNEL

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT:

2.1.1 Variable Head Meters for Open Channel:

2.1.1.1 Weirs: Delete the last sentence of this paragraph and substitute the following therefor: "Make the weir plate of commercial grade steel, hot-dipped zinc galvanized in accordance with ASTM A 123."

2.1.1.3 Read-Out Device:

a. Local Read-Out and Remote Transmission: Delete this subparagraph in its entirety and substitute the following therefor:

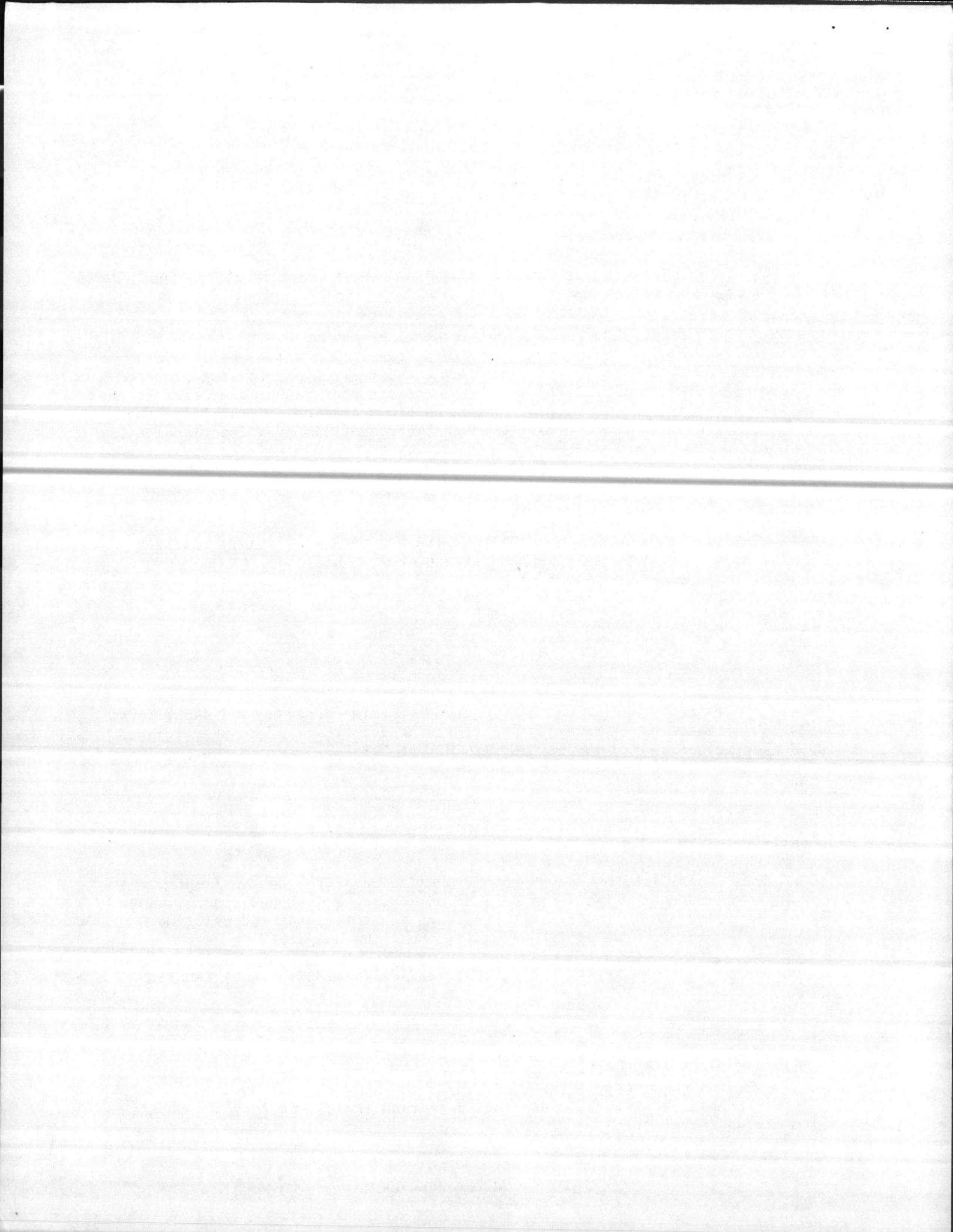
"a.x Local Read-Out and Remote Transmission: Provide the float and cable with local indication of flow and signal transmission for remote indicating, recording and totalizing and chlorine pacing. The scale graduations shall be uniform."

SECTION 13625.2. FLOW MEASURING EQUIPMENT (SEWAGE TREATMENT PLANT) KENNISON NOZZLE

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT:

2.1.1 Kennison Nozzle: Delete this paragraph in its entirety and substitute the following therefor:



CONTINUATION SHEET

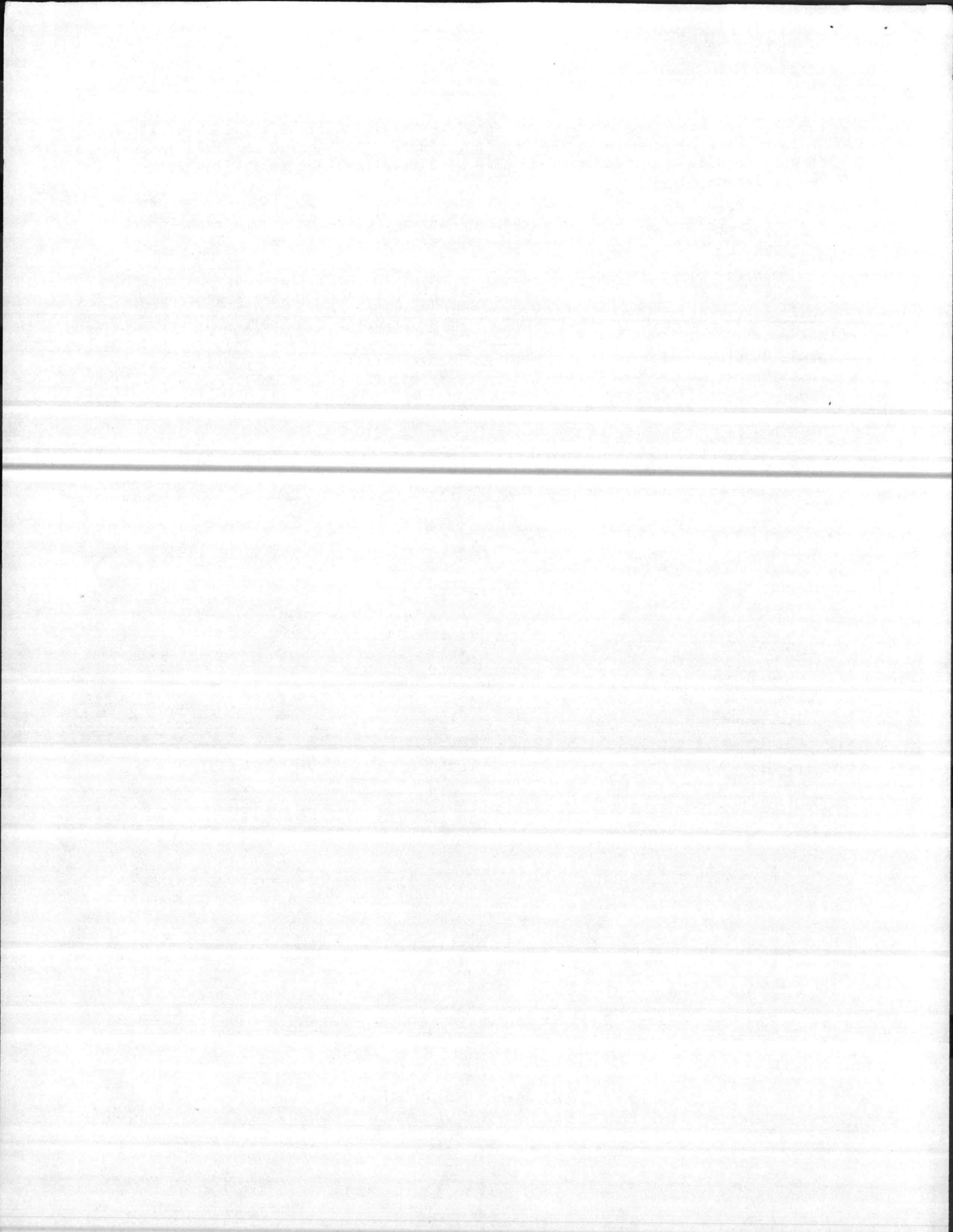
"2.1.1x Kennison Nozzle: The Kennison Nozzle shall be a 6 inch nozzle and measure the flow of 0 to 200 gallons per minute. The nozzle shall be constructed of high tensile cast iron and equipped with leveling lugs (trickling filter recirculation flow)."

2.1.2 Bubbler System for Kennison Nozzle: Delete this paragraph in its entirety and substitute the following therefor:

"2.1.2x Bubbler System for Kennison Nozzle: The system shall be suitable for installation ahead of a Kennison Nozzle with a 0 to 6 inch head range. The system shall show the flow in GPM flowing in the nozzle. There shall be provided one reed type air pump, air flow meter, instantaneous readout (digital or mechanical arm), dust and moisture tight metal enclosure, air tubing, corporation stop system fuse, on-off switch and wall mounting bracket. The system shall operate on 120 V, single phase, 60 Hz current."

DIVISION 14. CONVEYING SYSTEMS

SECTION 14337. UNDERRUNNING BRIDGE CRANE, 3-TON CAPACITY - Delete this section in its entirety and substitute Section 14325 therefor. Section 14325 accompanies this amendment.



SECTION 14325

ELECTRIC POWERED CHAIN HOIST

PART 1 - GENERAL

1.1 APPLICABLE PUBLICATIONS: The following publications of the issues listed below, but referred to hereafter by basic designation only, form a part of this specification to the extent indicated by the references thereto:

1.1.1 American National Standards Institute (ANSI):

B30.11-73 Monorail Systems and Underhung Cranes

B30.16-73 Overhead Hoists

1.1.2 American Society for Testing and Materials (ASTM):

A275-77 Magnetic Particle Examination of Steel Forgings

1.1.3 Hoist Manufacturer's Institute (HMI):

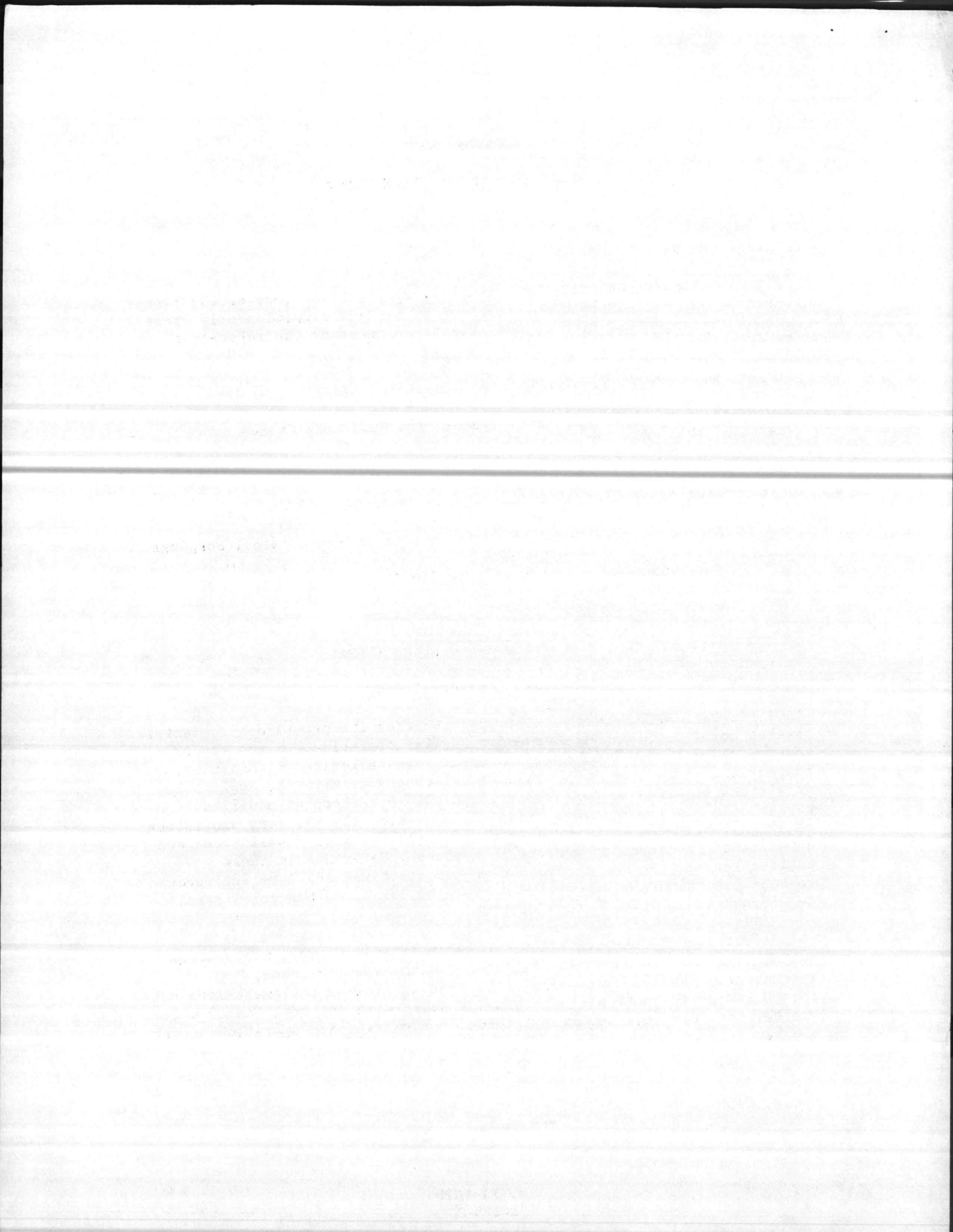
HMI 400-71 Electric Chain Hoists

1.1.4 National Fire Protection Association (NFPA):

70-84 National Electrical Code

1.2 GENERAL REQUIREMENTS: The work includes the provision of electric powered hoist complete, tested and ready for operation. 3-ton electric powered chain hoist, equipment, materials, installation, examination, inspection, and workmanship shall be in accordance with the applicable provisions of NFPA-70, ANSI B30.11, and B30.16, except as modified herein. In the publications referred to herein, the advisory provisions shall be considered to be mandatory as though the word "shall" had been substituted for "should" wherever it appears. Reference in these publications to the "authority having jurisdiction" shall be interpreted to mean "the Contracting Officer." Section 15011, Mechanical General Requirements, applies to this section.

1.3 HOIST DUTY CLASSIFICATION: Light maintenance work, where loads and utilization are randomly distributed with capacity loads, infrequently handled, and where total running time of equipment does not exceed 10% of the work period. Provide hoist with optional features for weatherproofing; this hoist is intended for storage and operation in the weather.



1.4 SUBMITTALS REQUIRED: The submittal requirements of Section 15011, Mechanical General Requirements, apply to the following lists.

(a) Manufacturer's Data:

1. Hoists complete with trolley assemblies
2. Electrification

(b) Shop Drawing:

1. Electrical Schematic of Hoists, trolleys and electrification

(c) Certified Test Reports:

1. Standard Pre-shipment Factory Test for hoists and trolleys
2. Non-destructive test of hooks

(d) Certificates of Compliance:

1. Painting Systems

(e) Operation and Maintenance Manual: Manual shall be submitted for approval no less than 60 calendar days prior to equipment field tests date.

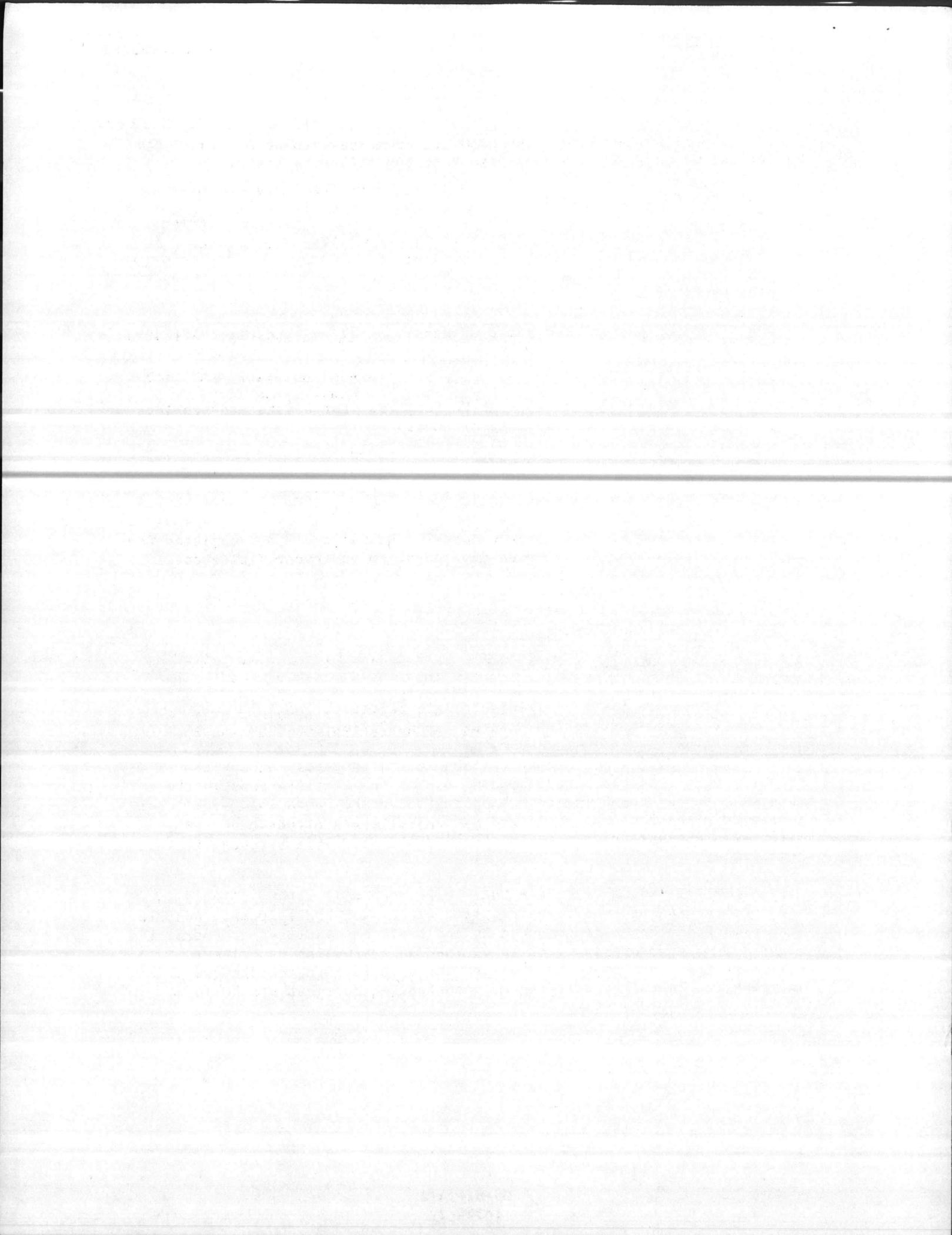
1. Hoist and trolley assemblies
2. Electrification

(f) Miscellaneous:

1. Load chain breaking strength certification
2. Non-destructive testing lab qualification data

1.5 DESIGN STRESSES: Mechanical load carrying parts, except the hoisting wire rope shall be designed so that the static stress in the material, stress resulting from handling the crane rated load, shall not exceed 20 percent of the published average ultimate strength of the material. Strength requirements for hoisting wire rope are specified hereinafter.

1.6 LIMITATIONS ON CAST IRON USE: Cast iron will not be allowed in the construction of load carrying parts except for brake drums. Ductile cast iron brake drums recommended by the brake manufacturer are permitted on brakes. Load carrying part is defined as any weight handling equipment part that supports the load and upon failure could cause dropping, uncontrolled shifting or uncontrolled movement of the load.



## PART 2 - PRODUCTS

2.1 MONORAIL TRACK SYSTEM: Monorail track system shall be provided in and specified in Division 5, Metals.

2.2 ELECTRIC POWERED CHAIN HOIST AND TROLLEY: HMI 400, except as modified herein.

2.2.1 Capacity: 6000 pounds.

2.2.2 Hook Lift Range: Minimum of 10 foot lift range.

2.2.3 Hoisting Speeds: Provide hoist capable of hoisting and lowering capacity load at a single speed of 10 feet per minute. Hoist motor shall be rated at 2 or 3 horsepower.

2.2.4 Controls: Pendant push button controls for hoist and trolley suspended from the hoist at a level of 4 feet above finished floor. Provide controls with a minimum of four push buttons: Power on, Hoist Start-Stop (momentary contact), Hoisting, Lowering.

2.2.5 Hoist Gear Train: Alloy steel spur gears or helical gears.

2.2.6 Hoist Brakes: Provide hoist motor brake in addition to an automatic mechanical load brake. Mechanical load brake shall be Weston type or roller clutch type.

2.2.7 Chain: High strength steel links, flexible; minimum safety factor of 5 to 1 based on ratio of minimum chain breaking load to the calculated load on the chain when the hoist is assumed loaded to rated capacity. Certification from hoist manufacturer of provided chain's breaking strength shall be submitted to Contracting Officer and approved prior to final acceptance of hoist.

2.2.8 Protection Devices:

2.2.8.1 Hoist motors running over current protection: Thermostats installed as integral part of motors or thermal overload relays provided in each motor controller.

2.2.8.2 Hoist Motor electro-mechanical upper and lower adjustable limit switch to limit travel of load block: Traveling nut type or equivalent.

2.2.8.3 Upper plugging limit switch to limit upward travel of load block. Provide paddle on weight to activate plugging limit switch when struck by hoist load block. Provide this upper limiting device in addition to and as a backup for limit switches specified hereinbefore.

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2.2.9 Trolley: Electric powered, motorized trolley, capable of operating on provided monorail track beam with hoist load to rated capacity.

2.2.9.1 Trolley Speed: Provide trolley for hoist capable of moving hoist, loaded to capacity, along monorail track beam at a speed of 30 feet per minute. Provide cushion start or soft start feature on trolley drive motor by means of ballast resistor, solid state circuitry or some other approved means for gradual trolley acceleration upon starting.

2.2.9.2 Drive: In-line drive with steel spur gear or helical gear train; or right angle drive with steel worm gear train.

2.2.9.3 Trolley Drive Motor Brake: Provide motor brake for in-line drive motor or right angle worm gear drive motor.

2.2.9.4 Wheels: Forged steel or with treads hardened to minimum Brinell Hardness Number of 300.

2.2.10 Hoist Hook and Hook Components:

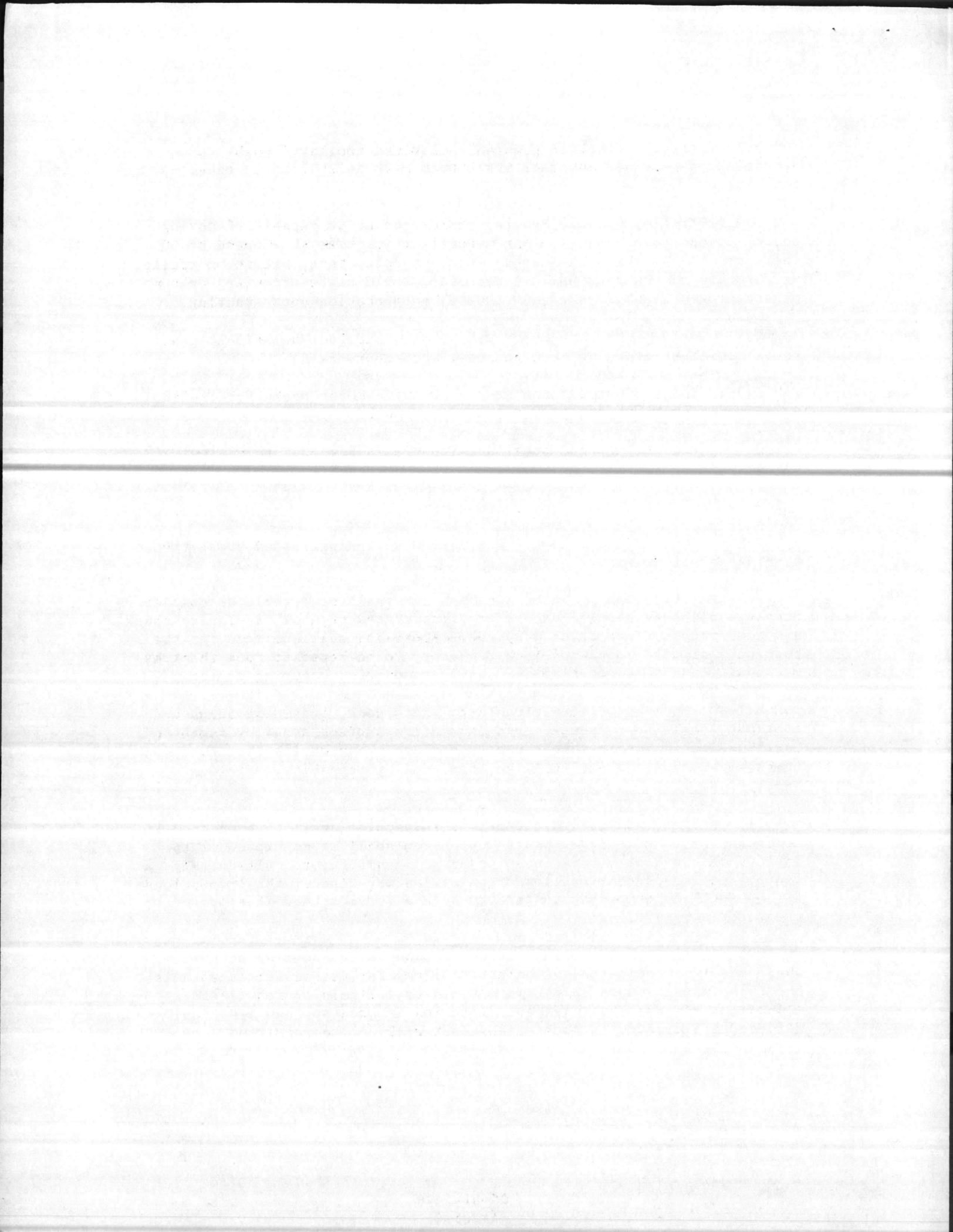
2.2.10.1 Forged Steel Hook: Complete with spring-loaded steel throat opening safety device.

2.2.10.2 Disassembly: Hook and hook nut shall be capable of complete disassembly that enables access to all surfaces of hook, including shank and hook nut for inspection purposes. Provision shall be made for the hook nut, or other hook-to-block fastener, to be keyed to hook shank by means of a set screw or similar, easily removable, securing device.

2.2.10.3 Hook Non-Destructive Test: Each hook, including shank and hook nut, shall be inspected over the entire surface areas by magnetic particle inspection. If hook nut is not used, any device that functions the same as the hook nut shall be inspected by magnetic particle inspection.

(a) Procedure: Magnetic particle inspection shall be conducted in accordance with ASTM A275. This inspection shall be conducted at the factory of the hook manufacturer or hoist manufacturer. Alternately, a recognized independent testing organization may conduct the inspections if equipped and competent to perform such a service, and if approved by the Contracting Officer.

(b) Acceptance Criteria: Defects found on the hook or hook nut shall result in rejection of defective items for use on furnished hoist. For this inspection, a defect is defined as a linear or non-linear indication for which the largest dimension is greater than 1/8 inch. Weld repairs defects on hook or hook nut will not be permitted.



(c) Test Report: A test report of the magnetic particle inspection of each hook and hook nut provided shall be submitted to and approved by the Contracting Officer prior to final acceptance of hoist installation. Test reports shall be certified by the testing organization.

2.3 ELECTRICAL MOTORS AND CONTROLLERS: Electrical motors, controllers, contactors, and disconnects. Furnish motors, controllers, contactors, and disconnects with their respective pieces of equipment. Motors, controllers, contactors, and disconnects shall conform to and shall have electrical connections provided under Section 16402, "Interior Wiring Systems" except as specified otherwise. Controllers and contactors shall have a maximum of 120 volt control circuits, and auxiliary contacts for use with the controls furnished. When motors and equipment furnished are larger than sizes indicated, the cost of providing additional electrical service and related work shall be included under this section.

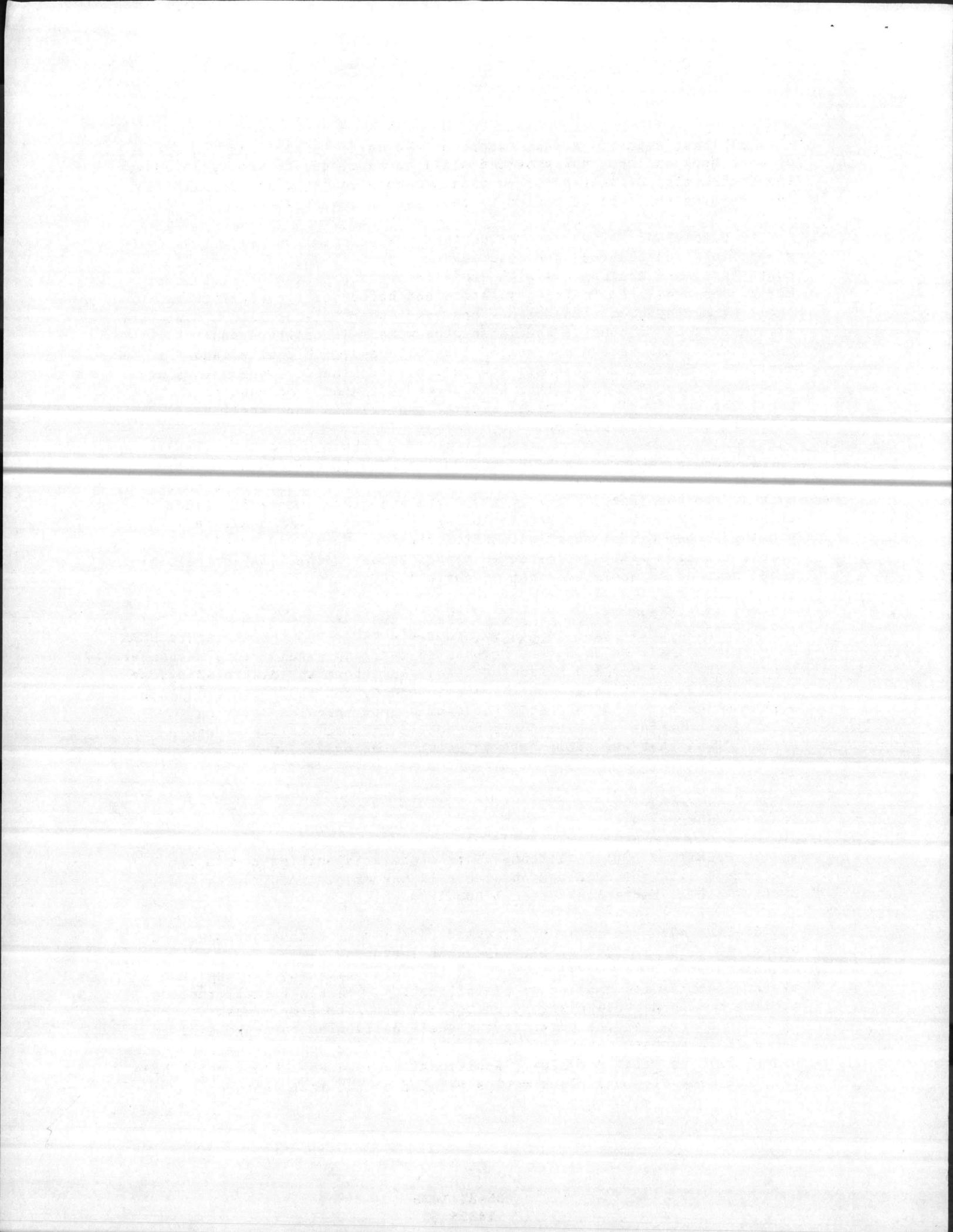
2.4 ELECTRICAL WORK in this section includes the provision of all apparatus, accessories and materials necessary to provide power to the hoists from the junction box at the elevation of the monorail system. All electrical work up to and including the junction box shall be provided under division entitled "Electrical". Hoist and trolley electrification shall be festooned type. Do not paint, coat or galvanize load chain, load hook, hook nut or chain load sheave.

2.4.1 Festooned Type: Festooned type conductors shall be rope-stranded, flexible, insulated, portable cable and conforming to NEMA WC3. Cable shall be supported by wheeled carriers running in a messenger track. The carriers and messenger track shall form an integrated system manufactured specifically for the use intended, and shall function in a manner which protects the conductor cables from abrasion, kinking, or excessive twisting. Cables shall be coiled against the lay of cable stranding so that the cable relaxes as it is extended.

### PART 3 - EXECUTION

3.1 PAINTING: Paint all components of hoist specified herein in accordance with the requirements for painting of equipment specified in Section 15011, Mechanical General Requirements.

3.2 MARKING: Each item of equipment shall bear a non-corrosive metal nameplate with clearly legible permanent lettering giving the manufacturer's name, model number, and the rated capacity, rating, and other essential information or identification. Markings shall include trolley motion direction arrows on both sides of trolley. Markings shall be visible from pendant controls and shall be labeled corresponding to labeling on pendant controls. Pendant push button pendant and load hook block shall be painted yellow. Additionally, load hook block shall have one inch wide diagonal black strips painted on two inch centers.



### 3.3 TESTS:

#### 3.3.1 Factory Tests:

3.3.1.1 Certified Test Report: Furnish for approval test results of the manufacturer's standard pre-shipment factory tests performed on each unit to be provided for this contract.

3.3.2 Field Tests: Upon completion and before final acceptance, each hoist, trolley and monorail shall be load tested in operation as specified hereinafter. Verify that each component of the system operates as specified, is properly installed and adjusted, and is free from defects in material, manufacture, installation, and workmanship.

3.3.2.1 Test Apparatus: Contractor shall furnish operating personnel, instruments, electricity and all other apparatus necessary to conduct specified field tests on hoist and monorail. Test load shall be furnished by the Government. The Contractor shall receive and transport the load from a location not more than two miles from the job site and shall return it to that location when the tests have been completed.

3.3.2.2 Witnesses: The field test of the equipment shall be witnessed by the Contracting Officer and a representative of the Transportation Division (Code 12), Atlantic Division, Naval Facilities Engineering Command.

#### 3.3.2.3 No Load Test:

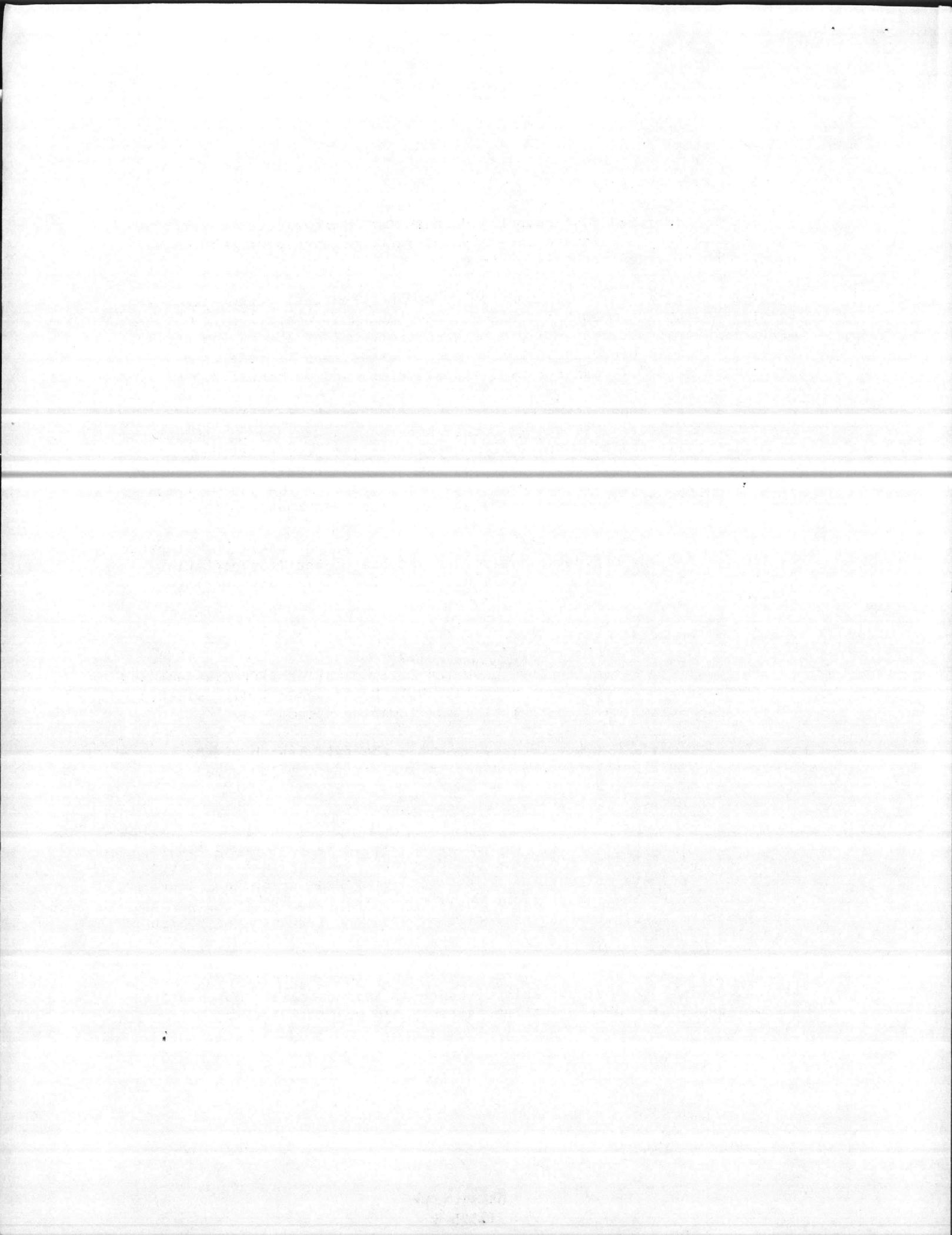
(a) Hoist: Raise the load hook the full operating lift distance and verify satisfactory operation of hoist, both hoist upper limit switches, lower limit switch, and the hoisting and lowering speeds.

(b) Trolley: Operate trolley assembly the full length of the monorail. Verify satisfactory operation and verify trolley speed.

#### 3.3.3 Load Test: 125 percent of rated capacity.

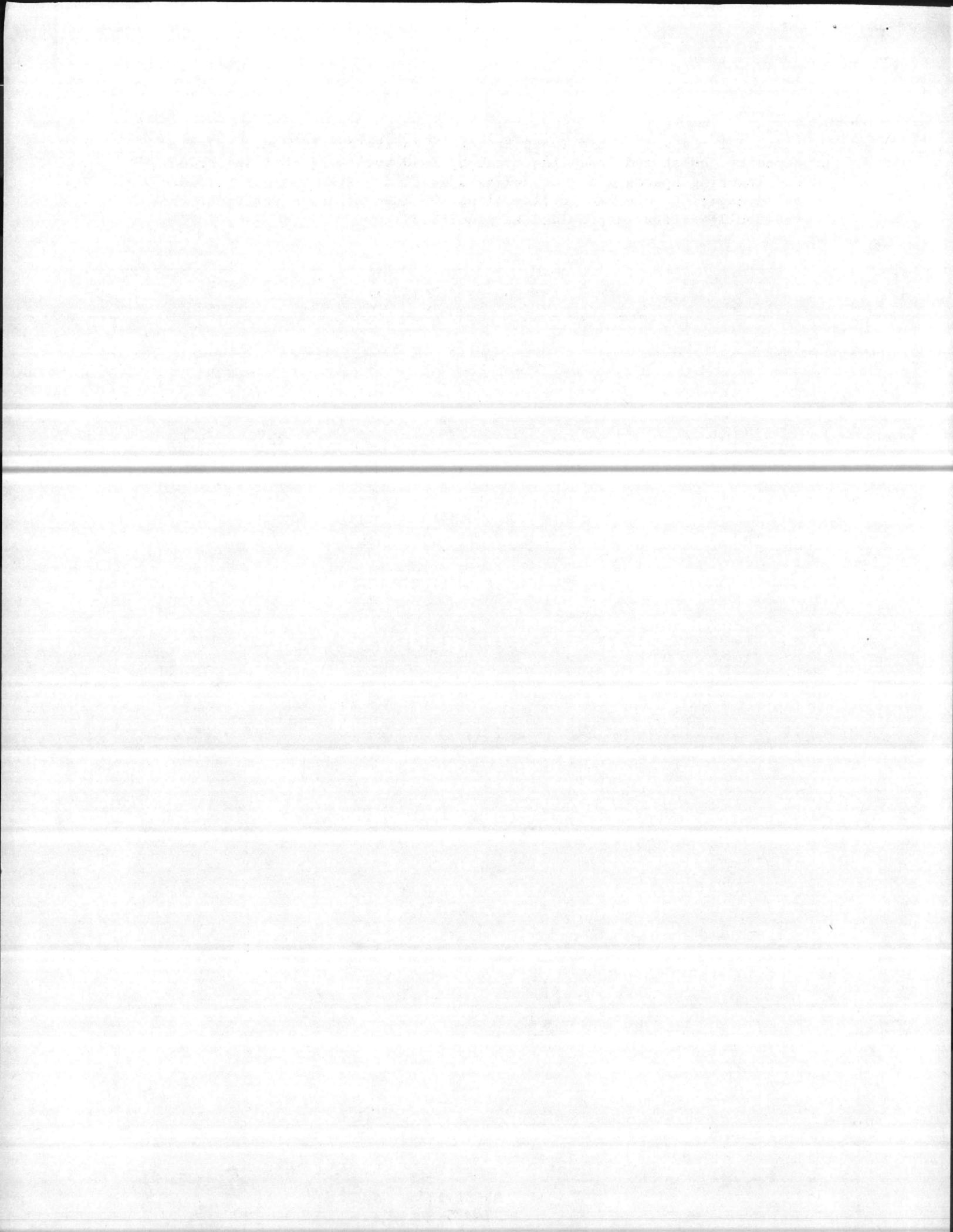
(a) Hoist: Raise test load approximately three feet above finish floor and hold for five minutes. Observe load lowering that may occur which will indicate malfunction of hoisting component or brake. Lower the test load to the finish floor until the hoist line is slack. Hoist load again to a height of three feet above finish floor and verify proper operation of hoist brake.

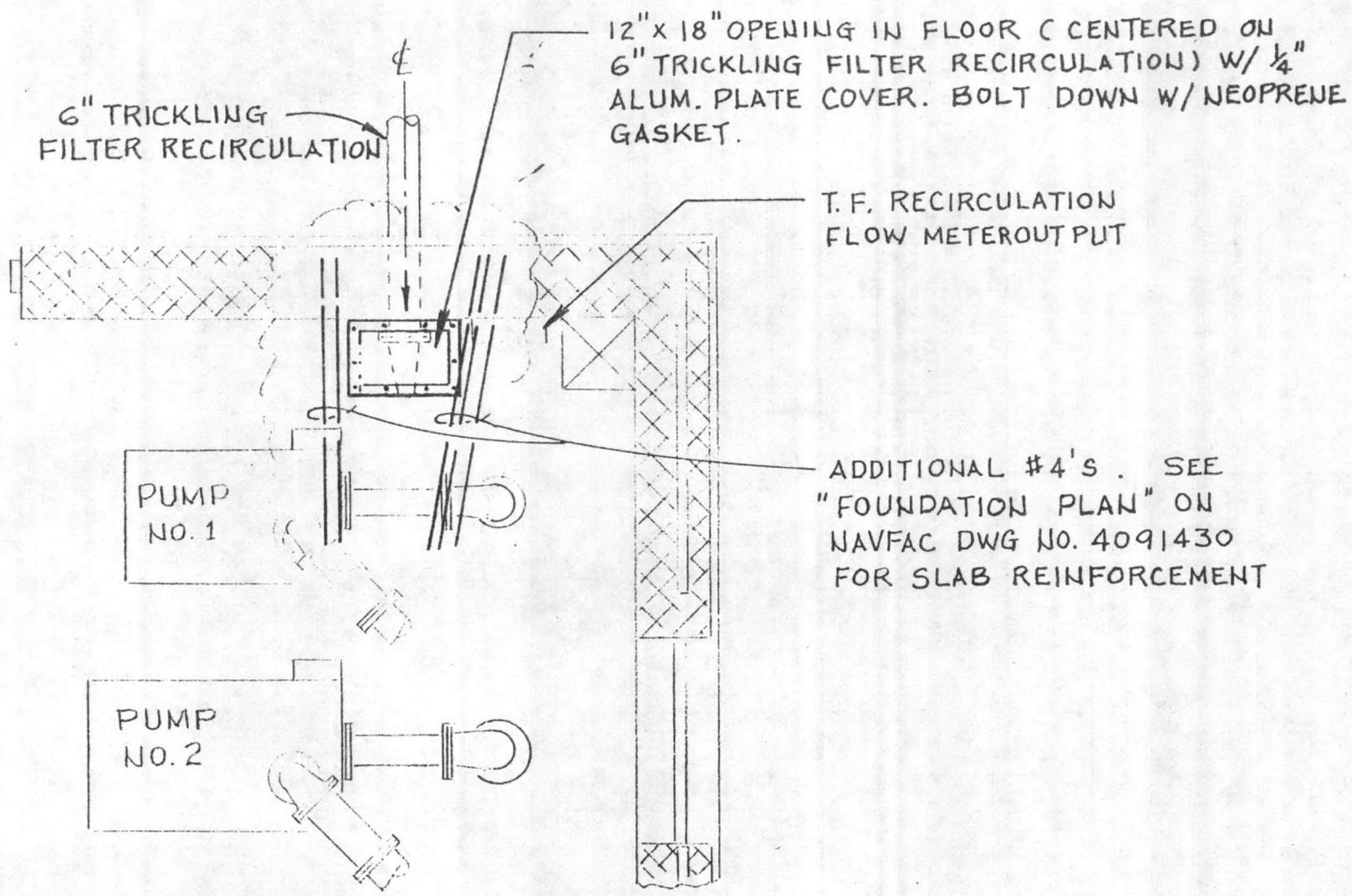
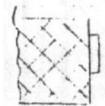
(b) Trolley: With test load hoisted to a height of one foot above finish, operate trolley the full distance of the monorail. Observe for any malfunctioning of the trolley assembly and monorail system.



3.3.3.1 Capacity Load Speed Tests: With the hoist loaded to rated capacity, hoist and lower the capacity load verifying that the hoisting and lowering speeds are provided as specified. With the hoist loaded to rated capacity, operate trolley along the monorail beam verifying that the trolley speed is provided as specified.

\*\*\* END OF SECTION \*\*\*





6" TRICKLING  
FILTER RECIRCULATION

12" x 18" OPENING IN FLOOR (CENTERED ON  
6" TRICKLING FILTER RECIRCULATION) W/ 1/4"  
ALUM. PLATE COVER. BOLT DOWN W/ NEOPRENE  
GASKET.

T.F. RECIRCULATION  
FLOW METER OUTPUT

PUMP  
NO. 1

ADDITIONAL #4'S . SEE  
"FOUNDATION PLAN" ON  
NAVFAC DWG NO. 4091430  
FOR SLAB REINFORCEMENT

PUMP  
NO. 2

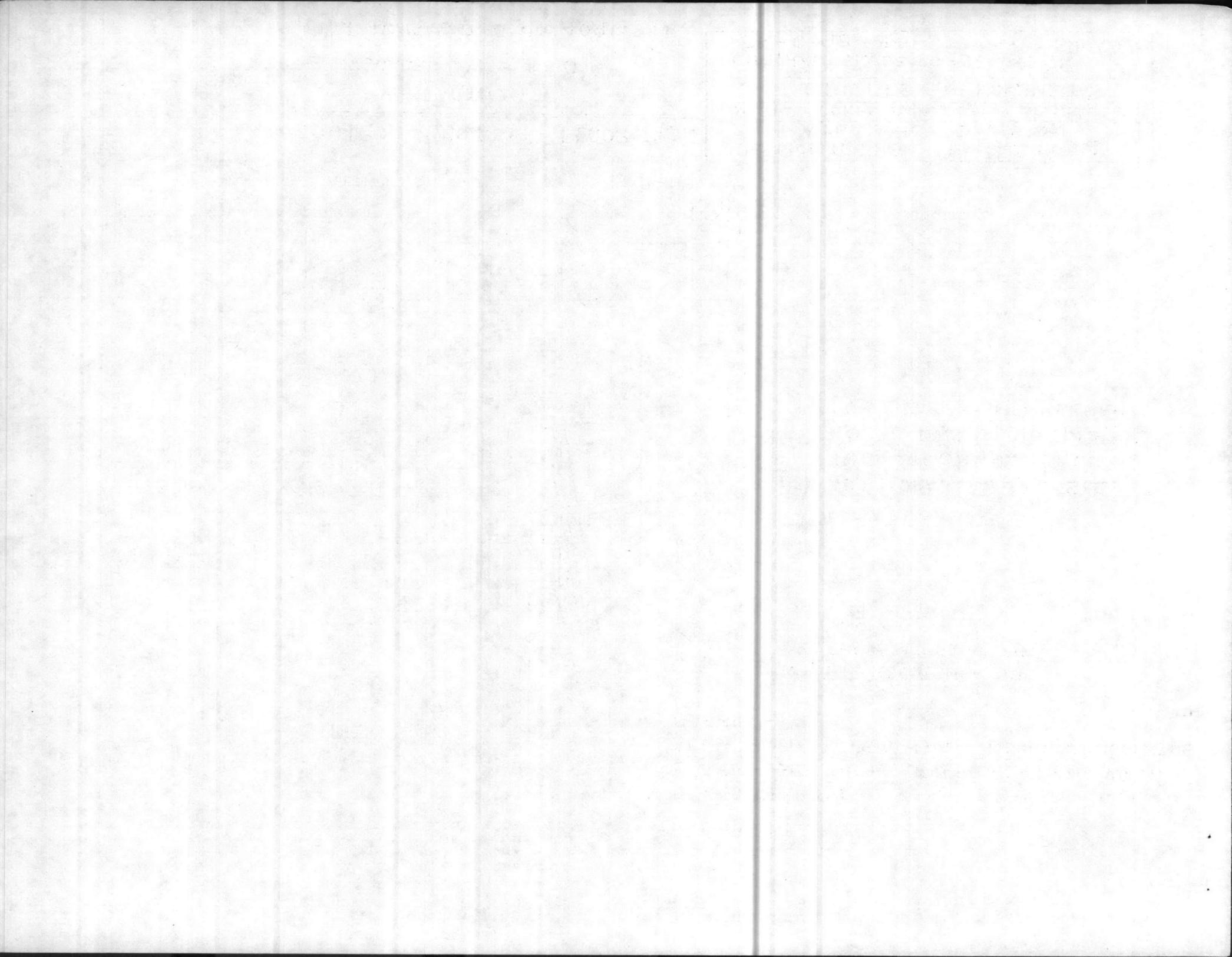
CONTROL BUILDING - FLOOR PLAN

(PARTIAL)

SCALE: 3/8" = 1'-0"

(REF. NAVFAC DWG NO. 4091428)

DEPT. OF THE NAVY	NAVFACENGCOM
ATLANTIC DIVISION	
MARINE CORPS BASE	CAMP LEJEUNE, N.C.
UTILITIES IMPROVEMENTS	
CONTRACT NO. 62470-81-B-1478	
SK-C-18-84	BY C. SHU 1/24/84



**BID FORM**  
**(CONSTRUCTION CONTRACT)**

IFB N62470-81-B-1478  
 Specification No. 05-81-1478

Read the Instructions to Bidders  
 This Form to be submitted in

DUPLICATE

DATE OF INVITATION  
 16 December 1983 (Revised 1-25-84)

NAME AND LOCATION OF PROJECT

Utilities Improvements  
 Marine Corps Base  
 Courthouse Bay Area  
 Camp Lejeune, NC

NAME OF BIDDER (Type or print)

(Date)

TO: Commander, Atlantic Division  
 Naval Facilities Engineering Command  
 Naval Station  
 Norfolk, Virginia 23511

In compliance with the above-dated invitation for bids, the undersigned hereby proposes to perform all work for Utilities Improvements - SPECIFICATION NO. - 05-81-1478 at the Marine Corps Base, Courthouse Bay Area, Camp Lejeune, NC.

in strict accordance with the General Provisions, Labor Standards Provisions, specifications, schedules, drawings and conditions, for the following amount(s)

BID ITEMS

Base Bid (a) \$ \_\_\_\_\_

Base Bid (b)

<u>ITEM</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>NO. UNITS</u>	<u>EXTENSION</u>
6-inch diameter pipe	EA	\$ _____	194	\$ _____
8-inch diameter pipe	EA	\$ _____	1,524	\$ _____
10-inch diameter pipe	EA	\$ _____	515	\$ _____
12-inch diameter pipe	EA	\$ _____	95	\$ _____

Base Bid (c)

<u>ITEM</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>NO. UNITS</u>	<u>EXTENSION</u>
6-inch diameter pipe	EA	\$ _____	155	\$ _____
8-inch diameter pipe	EA	\$ _____	1,215	\$ _____
10-inch diameter pipe	EA	\$ _____	410	\$ _____
12-inch diameter pipe	EA	\$ _____	75	\$ _____

TOTAL BASE BIDS (a), (b) and (c) \$ \_\_\_\_\_

05-81-1478

The undersigned agrees that, upon written acceptance of this bid, mailed or otherwise furnished within sixty calendar days 60 after the date of opening of bids, he will within 15 calendar days (unless a longer period is allowed) after receipt of the prescribed forms, execute Standard Form 23, Construction Contract, and give performance and payment bonds on Government standard forms with good and sufficient surety.

The undersigned agrees, if awarded the contract, to commence the work within fifteen (15) calendar days after the date of award, and to complete the work within 540 calendar days thereafter.

RECEIPT OF AMENDMENTS: The undersigned acknowledges receipt of the following amendments of the invitation for bids, drawings, and/or specifications, etc. (Give number and date of each):

The representations and certifications on the accompanying STANDARD FORM 19-B are made a part of this bid. ENCLOSED IS BID GUARANTEE, CONSISTING OF \_\_\_\_\_ IN THE AMOUNT OF \_\_\_\_\_

NAME OF BIDDER (Type or print)	FULL NAME OF ALL PARTNERS (Type or print)
BUSINESS ADDRESS (Type or print) (Include "ZIP Code")	
BY (Signature in ink. Type or print name under signature)	
TITLE (Type or print)	

DIRECTIONS FOR SUBMITTING BIDS: Envelopes containing bids, guarantees, etc., must be sealed, marked and addressed as follows:

Officer in Charge of Construction, IFB N62470-81-B-1478, Atlantic Division, Naval Facilities Engineering Command, Building S-21, Room 105, Naval Station, Norfolk, Virginia 23511

Bid for Utilities Improvements - SPECIFICATION NO. 05-81-1478

**BID FORM**  
**(CONSTRUCTION CONTRACT)**

REFERENCE

IFB N62470-81-B-1478  
 Specification No. 05-81-1478

Read the Instructions to Bidders  
 This Form to be submitted in

DUPLICATE

DATE OF INVITATION

16 December 1983 (Revised 1-25-84)

NAME AND LOCATION OF PROJECT

Utilities Improvements  
 Marine Corps Base  
 Courthouse Bay Area  
 Camp Lejeune, NC

NAME OF BIDDER (Type or print)

TO: Commander, Atlantic Division  
 Naval Facilities Engineering Command  
 Naval Station  
 Norfolk, Virginia 23511

(Date)

In compliance with the above-dated invitation for bids, the undersigned hereby proposes to perform all work for Utilities Improvements - SPECIFICATION NO. - 05-81-1478 at the Marine Corps Base, Courthouse Bay Area, Camp Lejeune, NC.

in strict accordance with the General Provisions, Labor Standards Provisions, specifications, schedules, drawings and conditions, for the following amount(s)

BID ITEMS

Base Bid (a) \$ \_\_\_\_\_

Base Bid (b)

<u>ITEM</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>NO. UNITS</u>	<u>EXTENSION</u>
6-inch diameter pipe	EA	\$ _____	194	\$ _____
8-inch diameter pipe	EA	\$ _____	1,524	\$ _____
10-inch diameter pipe	EA	\$ _____	515	\$ _____
12-inch diameter pipe	EA	\$ _____	95	\$ _____

Base Bid (c)

<u>ITEM</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>NO. UNITS</u>	<u>EXTENSION</u>
6-inch diameter pipe	EA	\$ _____	155	\$ _____
8-inch diameter pipe	EA	\$ _____	1,215	\$ _____
10-inch diameter pipe	EA	\$ _____	410	\$ _____
12-inch diameter pipe	EA	\$ _____	75	\$ _____

TOTAL BASE BIDS (a), (b) and (c) \$ \_\_\_\_\_

05-81-1478

The undersigned agrees that, upon written acceptance of this bid, mailed or otherwise furnished within SIXTY calendar days (60) after the date of opening of bids, he will within 15 calendar days (unless a longer period is allowed) after receipt of the prescribed forms, execute Standard Form 23, Construction Contract, and give performance and payment bonds on Government standard forms with good and sufficient surety.

The undersigned agrees, if awarded the contract, to commence the work within Fifteen (15) calendar days after the date of award, and to complete the work within 540 calendar days thereafter.

RECEIPT OF AMENDMENTS: The undersigned acknowledges receipt of the following amendments of the invitation for bids, drawings, and/or specifications, etc. (Give number and date of each):

The representations and certifications on the accompanying STANDARD FORM 19-B are made a part of this bid.  
ENCLOSED IS BID GUARANTEE, CONSISTING OF \_\_\_\_\_ IN THE AMOUNT OF \_\_\_\_\_

NAME OF BIDDER (Type or print)	FULL NAME OF ALL PARTNERS (Type or print)
BUSINESS ADDRESS (Type or print) (Include "ZIP Code")	
BY (Signature in ink. Type or print name under signature)	
TITLE (Type or print)	

DIRECTIONS FOR SUBMITTING BIDS: Envelopes containing bids, guaranties, etc., must be sealed, marked and addressed as follows:

Officer in Charge of Construction, LFB N62470-81-3-1478, Atlantic Division,  
Naval Facilities Engineering Command, Building N-21, Room 105, Naval Station,  
Norfolk, Virginia 23511

Bid for Utilities Improvements - SPECIFICATION NO. 05-81-1478

**BID FORM**  
**(CONSTRUCTION CONTRACT)**

IFB N62470-81-B-1478  
 Specification No. 05-81-1478

Read the Instructions to Bidders  
 This Form to be submitted in

DUPLICATE

DATE OF INVITATION  
 16 December 1983 (Revised 1-25-84)

NAME AND LOCATION OF PROJECT

Utilities Improvements  
 Marine Corps Base  
 Courthouse Bay Area  
 Camp Lejeune, NC

NAME OF BIDDER (Type or print)

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 Naval Facilities Engineering Command  
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<u>ITEM</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>NO. UNITS</u>	<u>EXTENSION</u>
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10-inch diameter pipe	EA	\$ _____	515	\$ _____
12-inch diameter pipe	EA	\$ _____	95	\$ _____

Base Bid (c)

<u>ITEM</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>NO. UNITS</u>	<u>EXTENSION</u>
6-inch diameter pipe	EA	\$ _____	155	\$ _____
8-inch diameter pipe	EA	\$ _____	1,215	\$ _____
10-inch diameter pipe	EA	\$ _____	410	\$ _____
12-inch diameter pipe	EA	\$ _____	75	\$ _____

TOTAL BASE BIDS (a), (b) and (c) \$ \_\_\_\_\_

05-81-1478

The undersigned agrees that, upon written acceptance of this bid, mailed or otherwise furnished within SIXTY calendar days 60 after the date of opening of bids, he will within 15 calendar days (unless a longer period is allowed) after receipt of the prescribed forms, execute Standard Form 23, Construction Contract, and give performance and payment bonds on Government standard forms with good and sufficient surety.

The undersigned agrees, if awarded the contract, to commence the work within fifteen (15) calendar days after the date of award, and to complete the work within 540 calendar days thereafter.

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