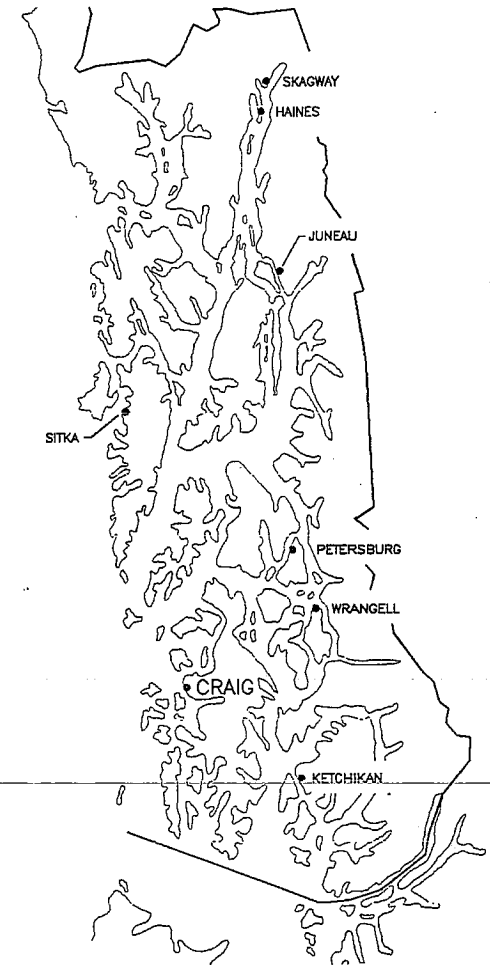
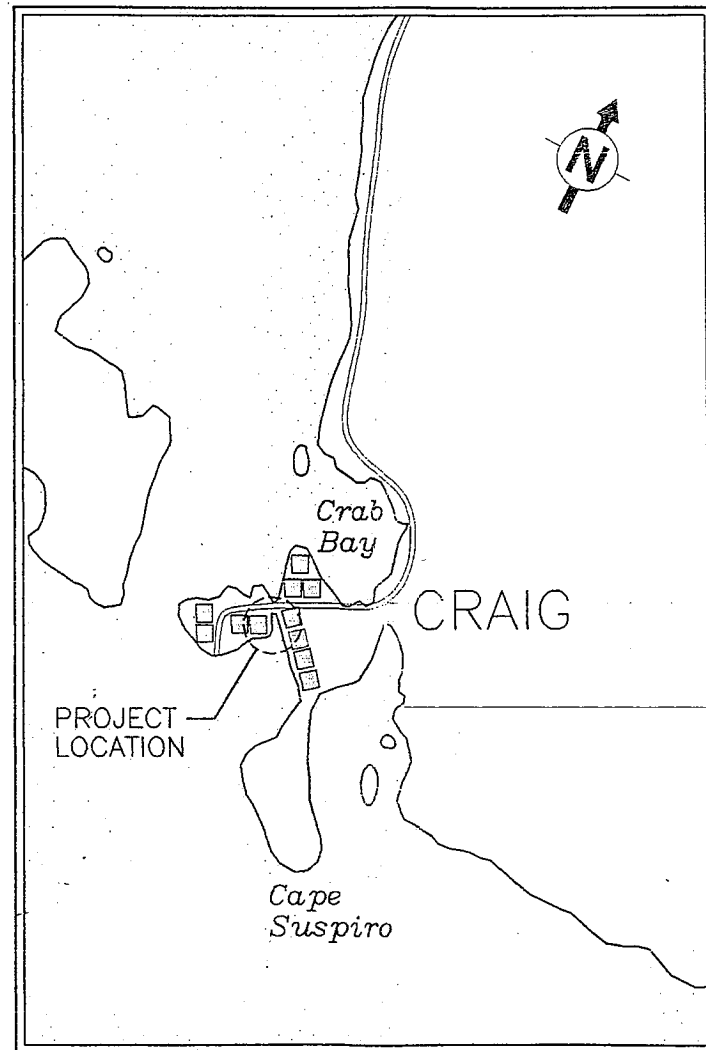
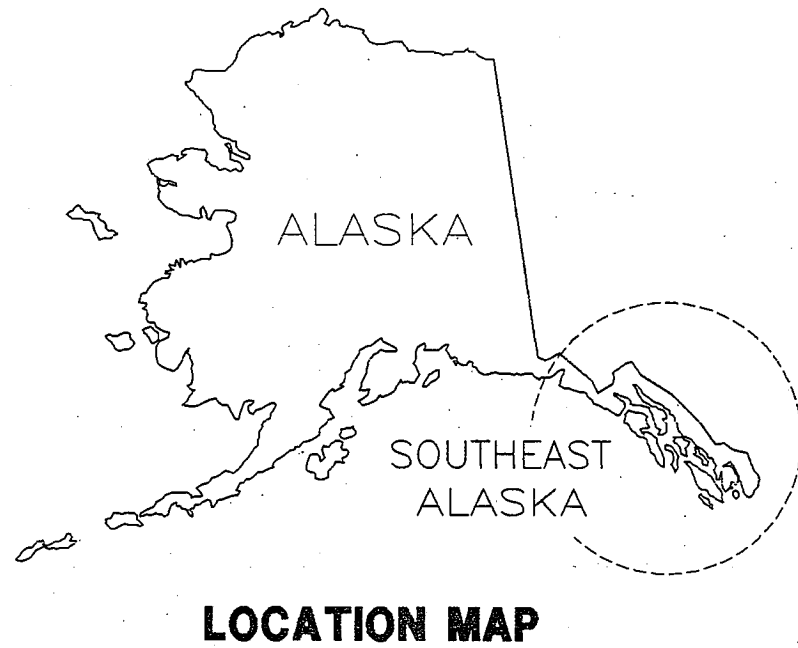


CITY OF CRAIG SOUTH COVE HARBOR IMPROVEMENTS 1995



FOR BIDDING PURPOSES ONLY

**CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS**



LEGEND

DETAIL NUMBER
 LOCATION OF DETAIL IS ON THIS SHEET
 SECTION LETTER
 LOCATION OF SECTION IS ON THIS SHEET

DRAWING INDEX			
DWG. NO.	TITLE	DWG. NO.	TITLE
1	COVER SHEET	12	SITE PLAN - POWER
2	SITE PLAN AND FLOAT LAYOUTS	13	SITE PLAN - LIGHTING AND HEAT CABLE
3	12' x 125' LOG REINFORCED FLOAT	14	DETAILS (ELECTRICAL)
4	10' x 144' AND 10' x 252' TIMBER FLOATS	15	SCHEMATIC AND DETAIL (ELECTRICAL)
5	5' x 37'-8" FINGER FLOAT	16	ELECTRICAL SPECIFICATIONS
6	3'-1 3/4" x 23' STALL FLOAT	-	-
7	3'-1 3/4" x 32' STALL FLOAT	-	-
8	FLOAT CONNECTION DETAILS	-	-
9	ANCHOR PILE SCHEDULE AND MISC. DETAILS	-	-
10	WATERLINE	-	-
11	GENERAL NOTES	-	-

Designed: JWG
 Drawn: TMS
 Checked: JLN
 Project No: 95236

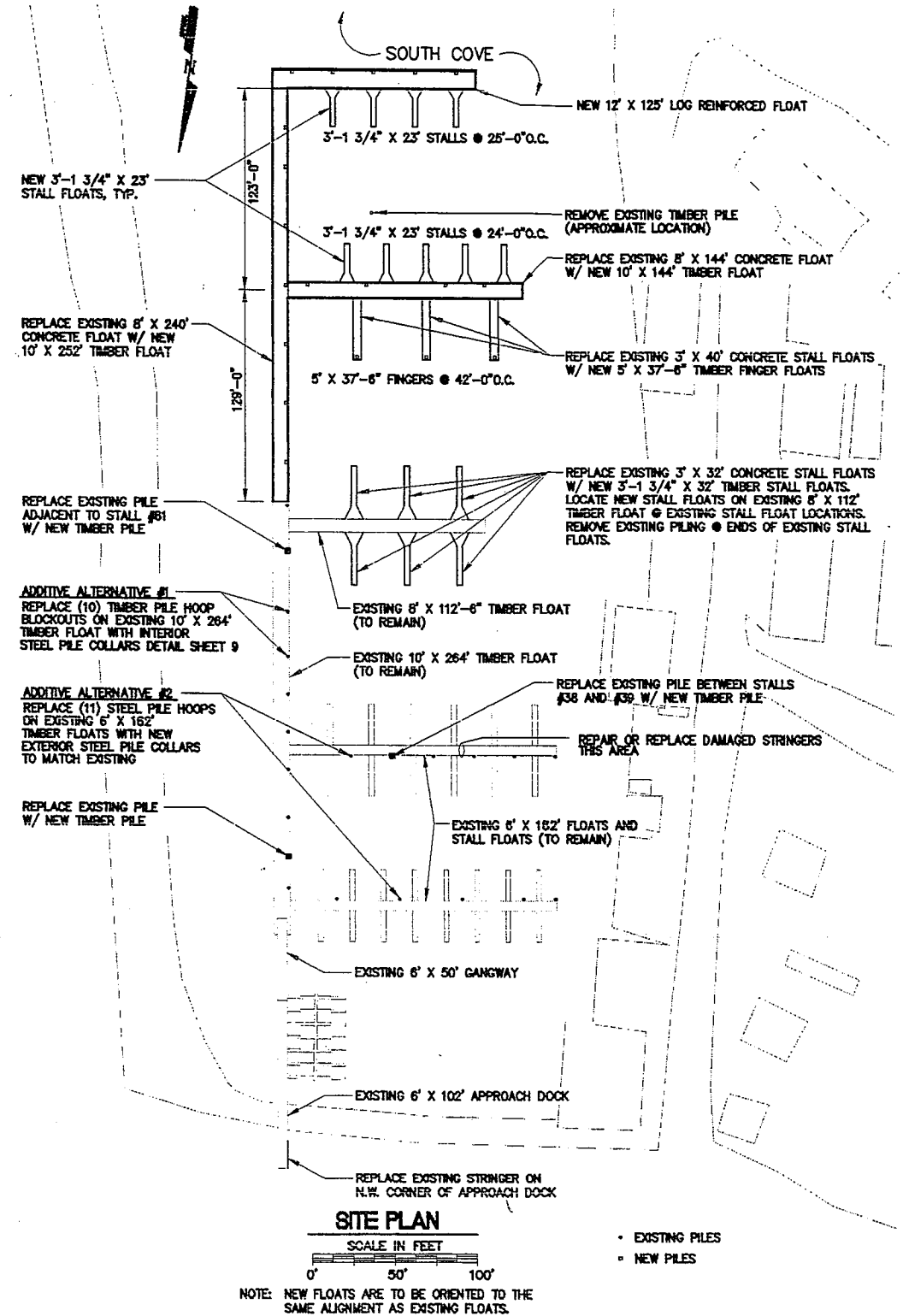
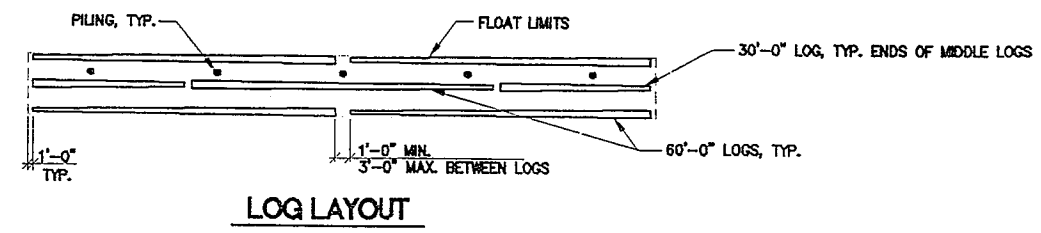
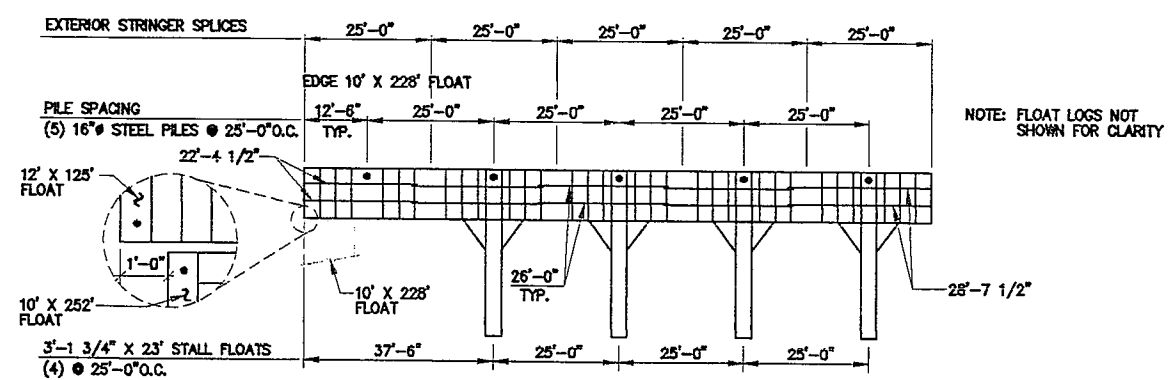
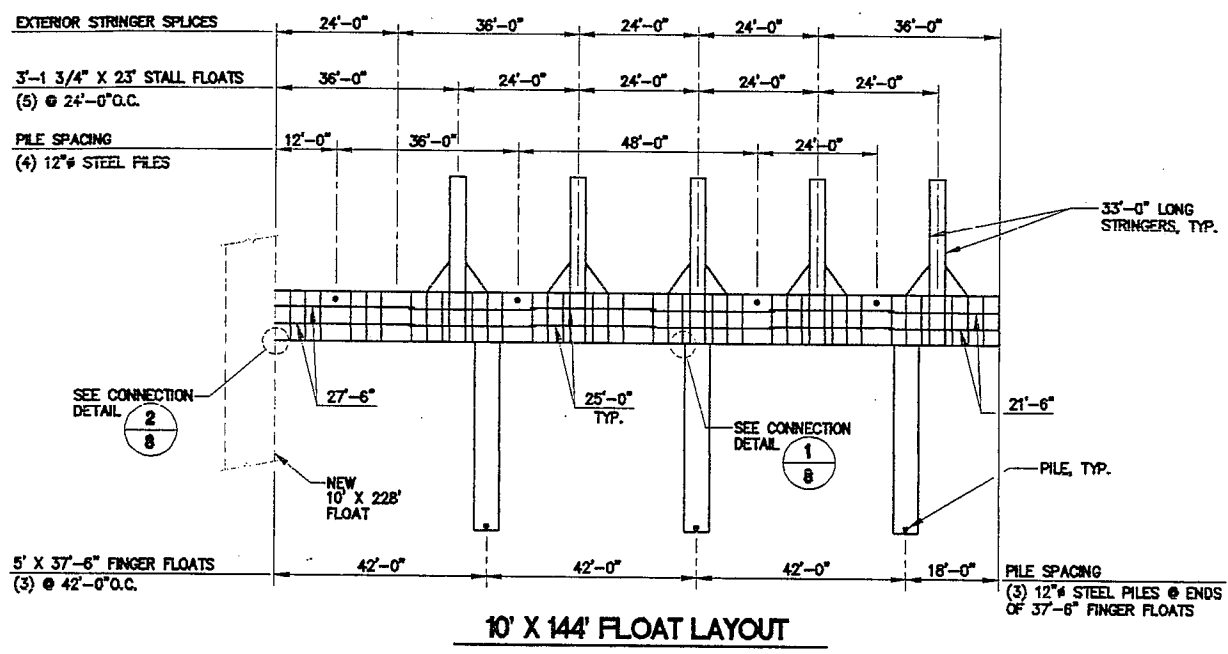
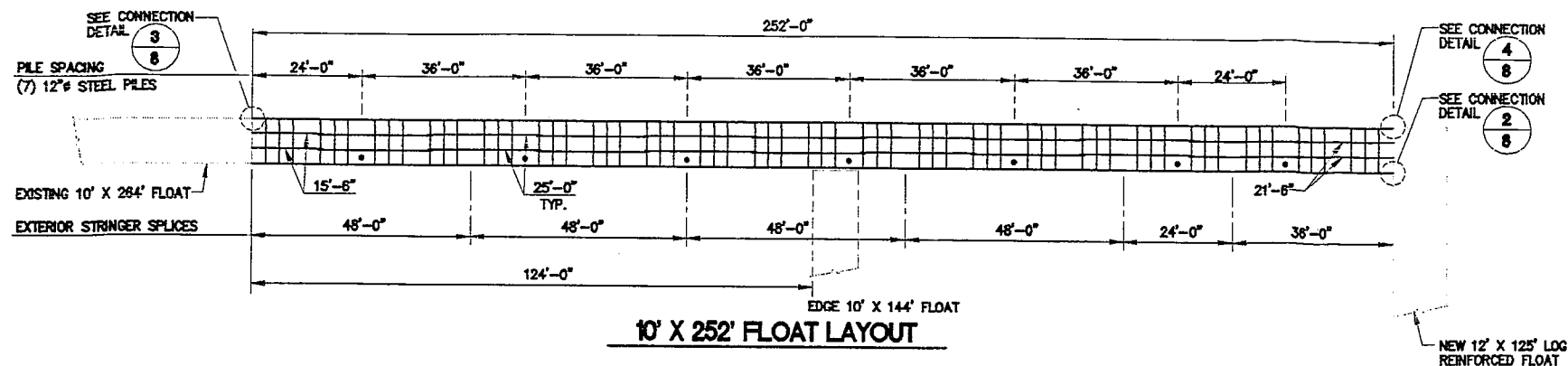
Date: OCT. 1995
 Scale: AS NOTED

Peratrovich, Nottingham & Drage, Inc.
 Engineering Consultants
 3220 Hospital Drive, Suite 200
 Juneau, Alaska 99901 (907) 588-2093 FAX (907) 588-2099

COVER SHEET

sheet
1 of 16

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CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS

Peratrovich, Nottingham & Drage, Inc.
Engineering Consultants

Designed: JWG
Drawn: TMS
Checked: JLN
Project No: 95236

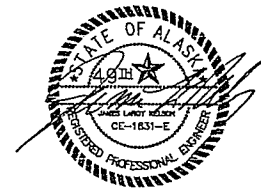
3220 Hospital Drive, Suite 200
Juneau, Alaska 99801 (907) 586-2068 FAX (907) 586-2069

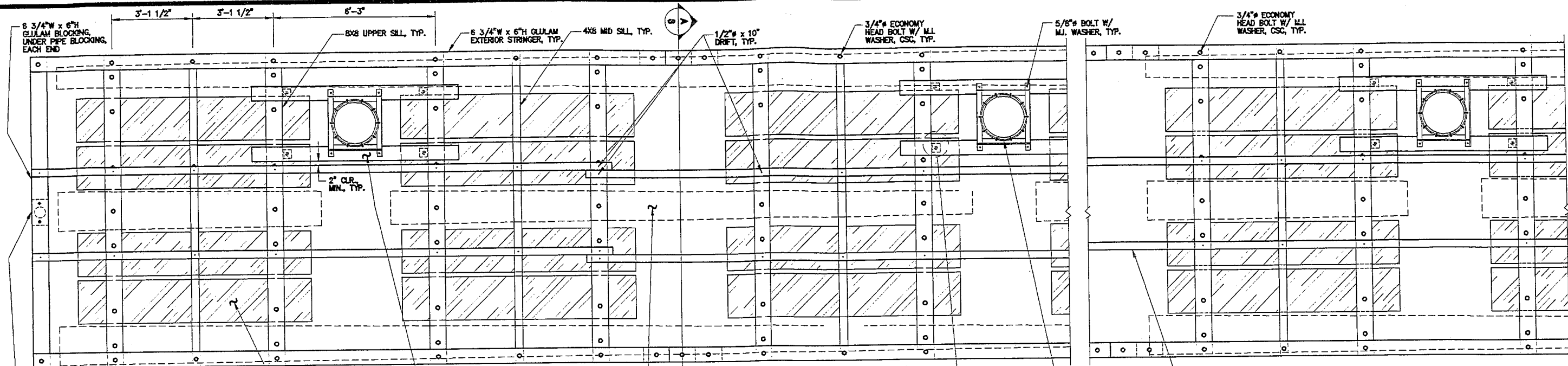
Date: OCT. 1995
Scale: AS NOTED

SITE PLAN AND FLOAT LAYOUTS

sheet
2 of 16

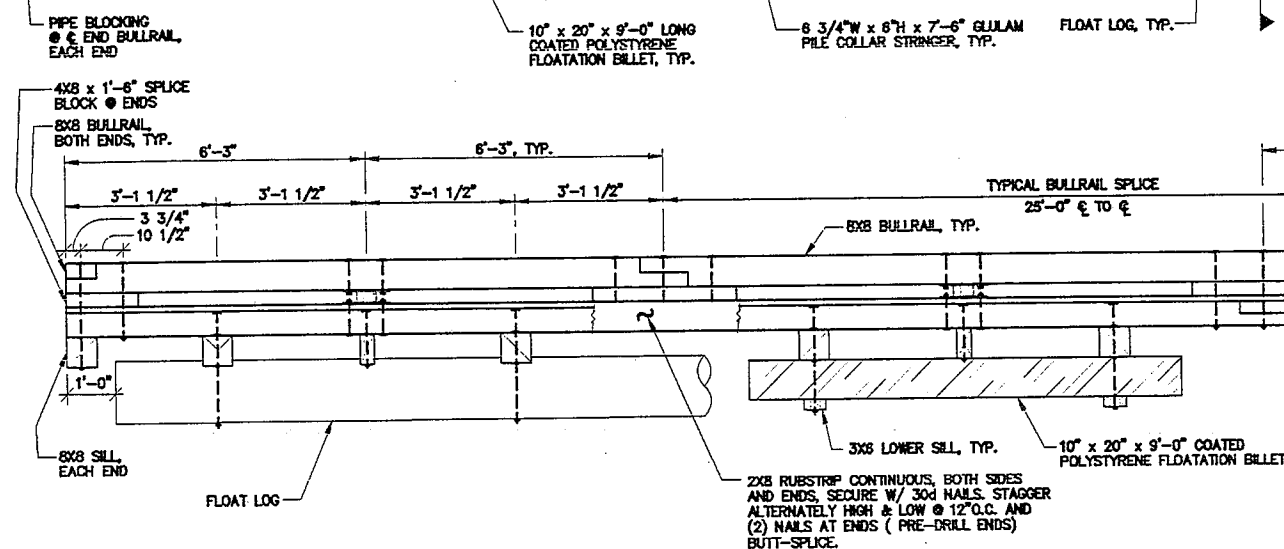
Peratrovich, Nottingham and Drage, Inc. (PN&D) is not responsible for safety programs, methods or procedures of operation, or the construction of the design shown on these drawings. Drawings are for the use of this project only and are not intended for reuse without written approval from PN&D. Drawings are also not to be used in any manner that would constitute a detriment directly or indirectly to Peratrovich, Nottingham and Drage, Inc.



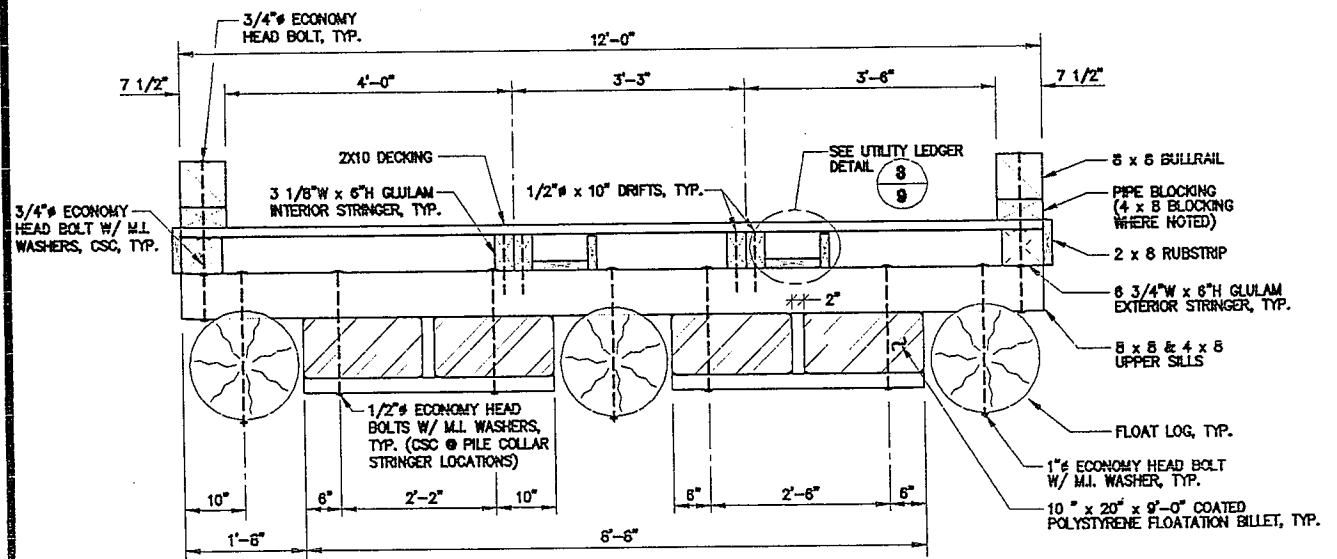
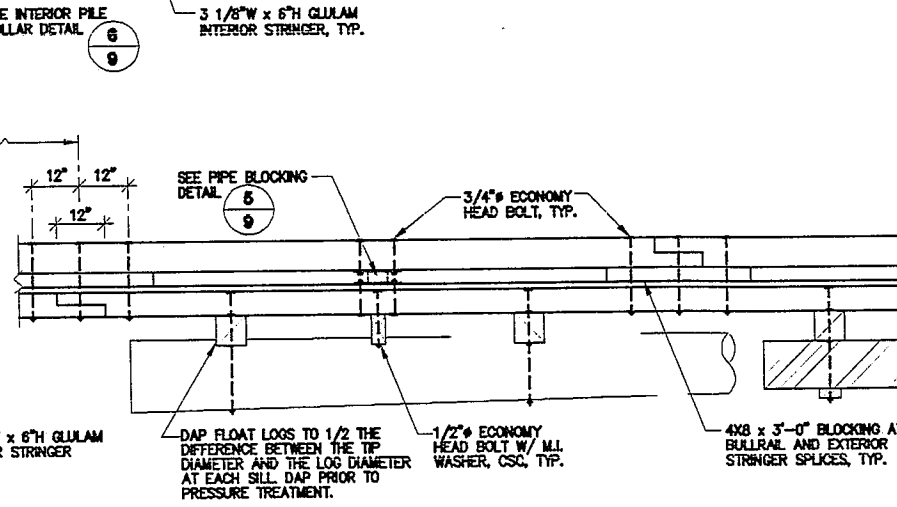


PLAN

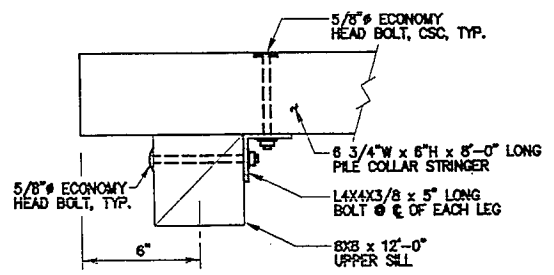
NOTES: 1. DECKING, BULLRAIL, AND UTILITY LEDGERS NOT SHOWN FOR CLARITY.
 2. FLOAT LOGS SHALL HAVE A MINIMUM TIP DIAMETER OF 10" AND A MAXIMUM BUTT DIAMETER OF 18".



ELEVATION

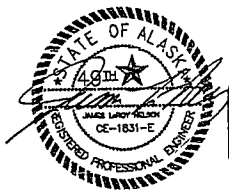


A
3 TYPICAL SECTION
 NOTE: UTILITY LEDGER NOT REQUIRED ON PILE HOOP SIDE OF FLOAT.



1
3 ELEVATION
1
3 PILE COLLAR STRINGER CONNECTION DETAIL

FOR BIDDING PURPOSES ONLY



CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS

Peratrovich, Nottingham & Drage, Inc.
 Engineering Consultants

Designed: JWG
 Drawn: TMS
 Checked: JLN
 Project No: 95236

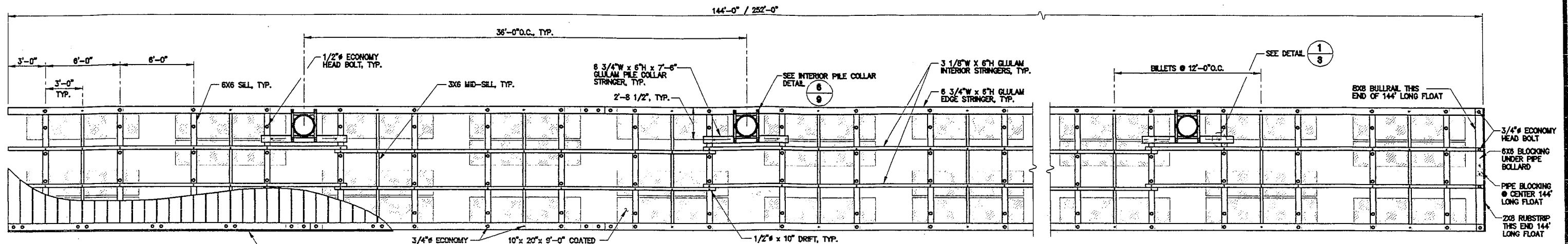
3220 Hospital Drive, Suite 200
 Juneau, Alaska 99801 (907) 586-2008 FAX (907) 586-2090

Date: OCT. 1995
 Scale: AS NOTED

12' x 125'
LOG REINFORCED FLOAT

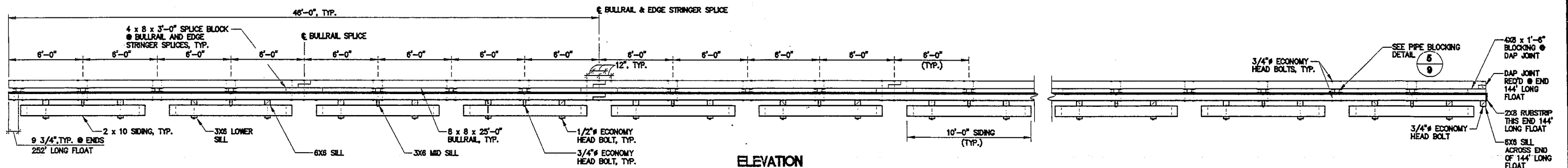
sheet
3 of 16

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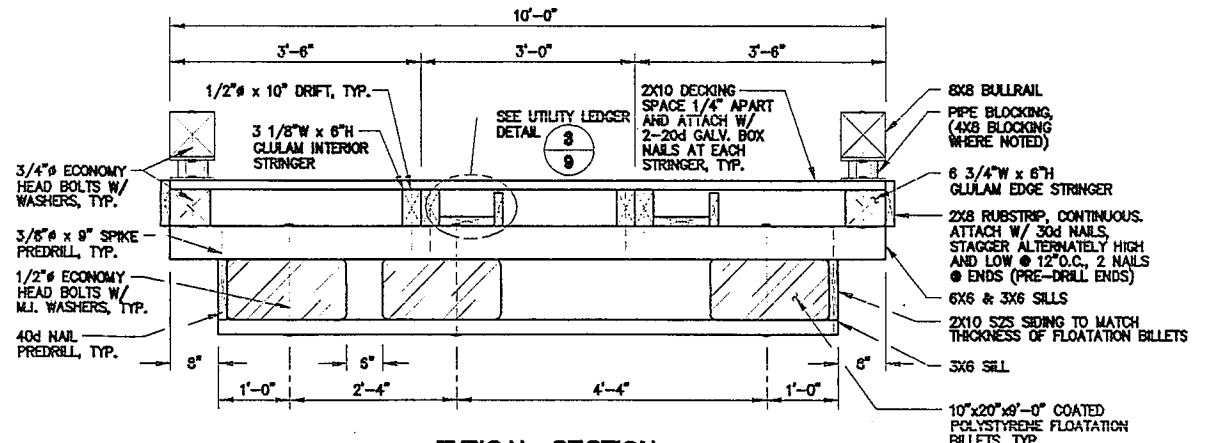
PLAN

NOTE: UTILITY LEDGERS NOT SHOWN FOR CLARITY



ELEVATION

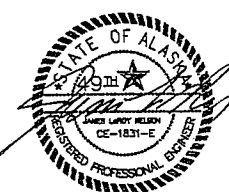
NOTE: 2 x 8 RUBSTRIP NOT SHOWN FOR CLARITY



TYPICAL SECTION

NOTE: UTILITY LEDGER NOT REQUIRED ON PILE HOOP SIDE OF FLOAT.

FOR BIDDING PURPOSES ONLY



CITY OF CRAIG SOUTH COVE HARBOR IMPROVEMENTS

Peratrovich, Nottingham & Drage, Inc.
Engineering Consultants

Designed: JWG
Drawn: TMS
Checked: JLN
Project No: 95236

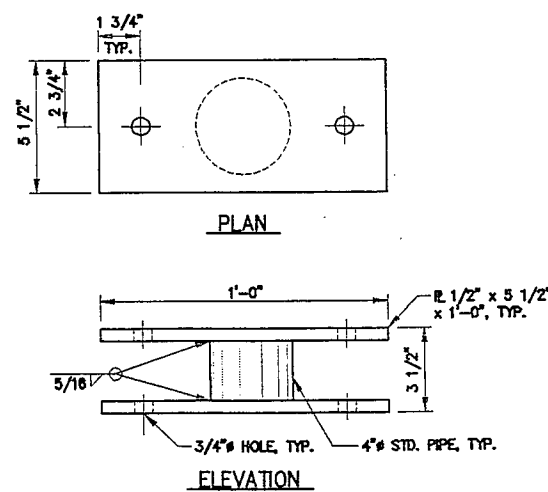
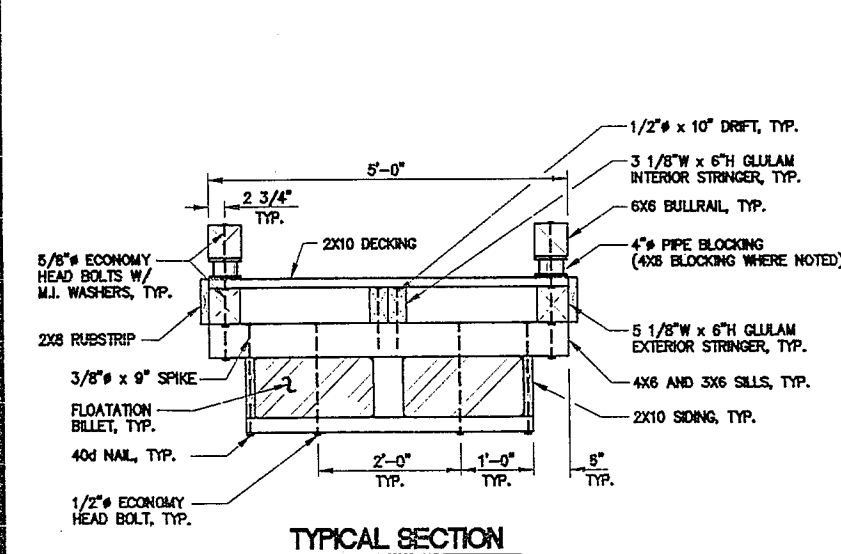
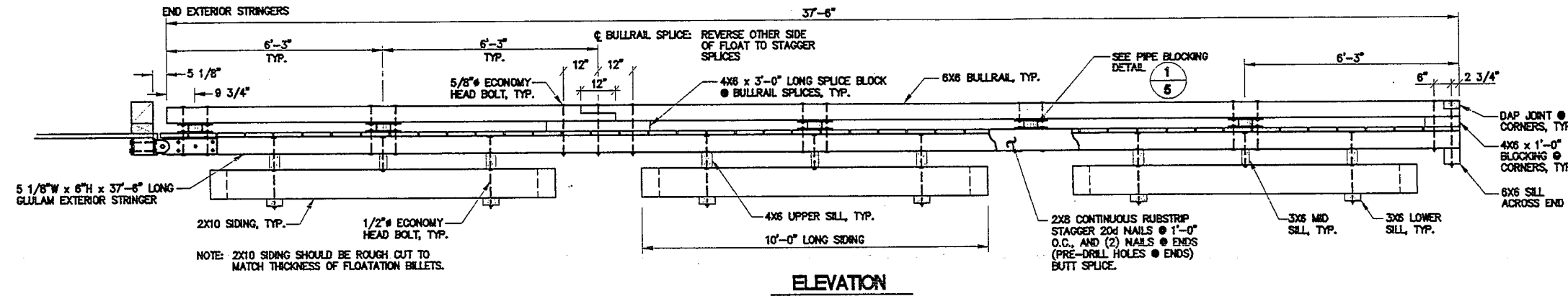
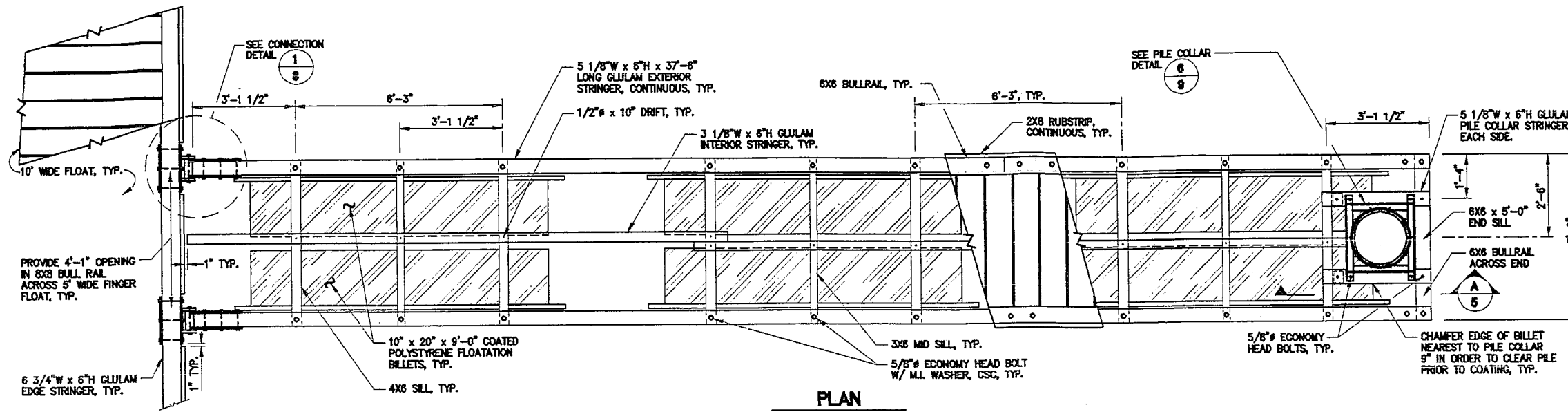
3220 Hospital Drive, Suite 200
Juneau, Alaska 99801 (907) 589-2093 FAX (907) 589-2099

Date: OCT. 1995
Scale: AS NOTED

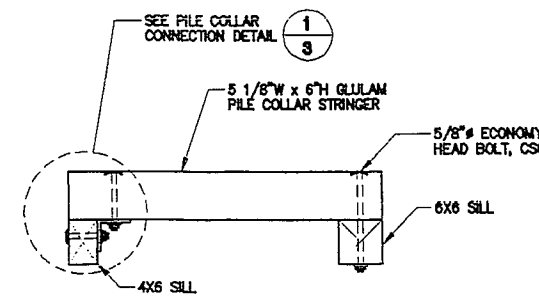
10' X 144' AND 10' X 252' TIMBER FLOATS

sheet
4 of 16

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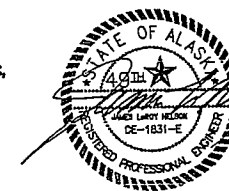


1/5 PIPE BLOCKING FOR 5' WIDE FLOAT



A/5 PILE COLLAR STRINGER SECTION

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CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS

Peratrovich, Nottingham & Drage, Inc.
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Designed: JWG
Drawn: TMS
Checked: JLN
Project No: 95236

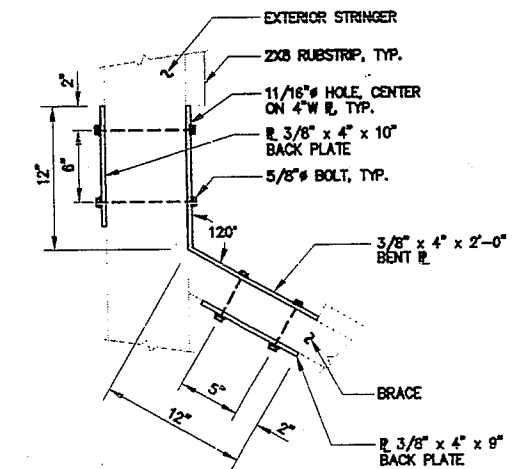
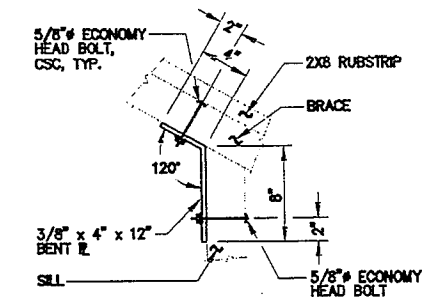
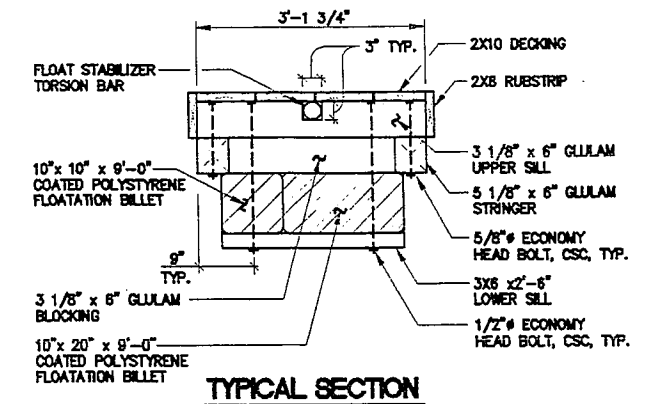
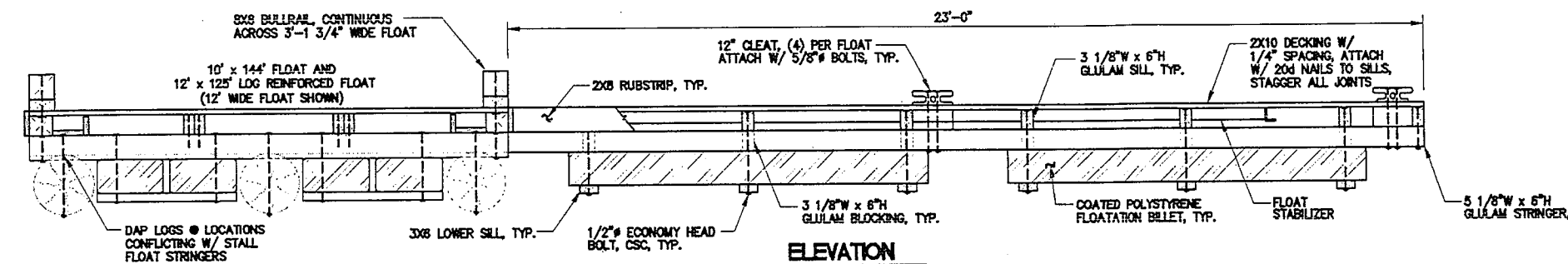
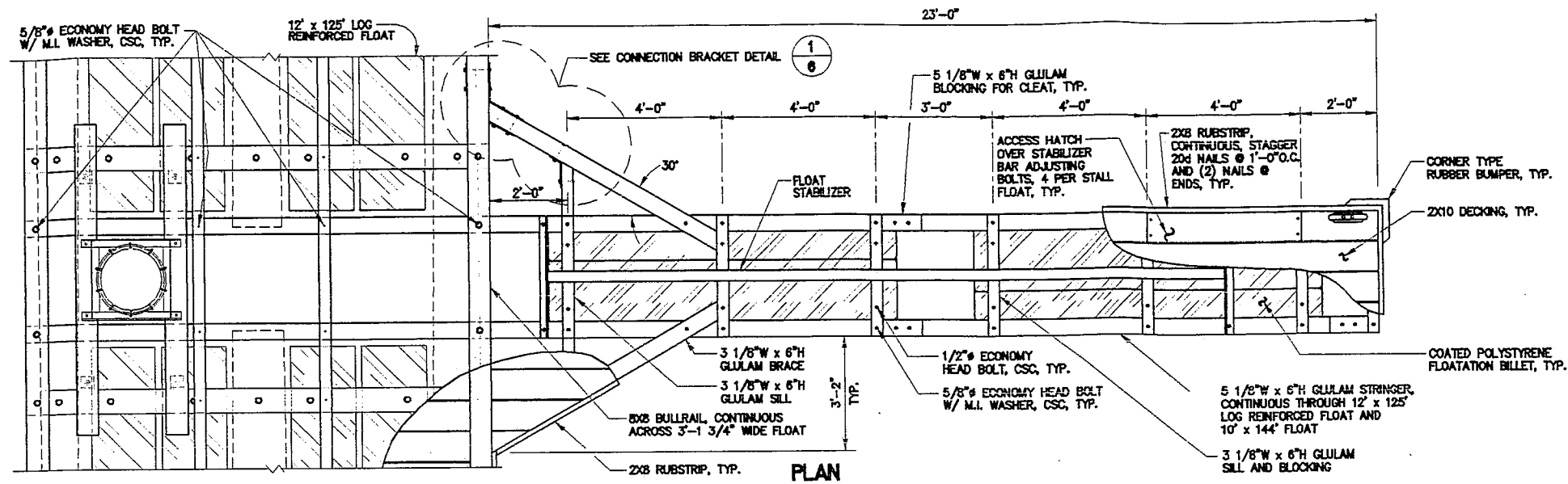
3220 Hospital Drive, Suite 200
Juneau, Alaska 99801 (907) 586-2083 FAX (907) 586-2022

Date: OCT. 1995
Scale: AS NOTED

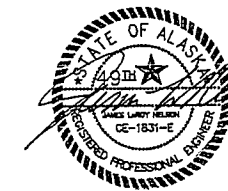
5' x 37'-6" FINGER FLOAT

sheet
5 of 16

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(1/6) CONNECTION BRACKET DETAIL



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**CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS**

Peratrovich, Nottingham & Drage, Inc.
Engineering Consultants

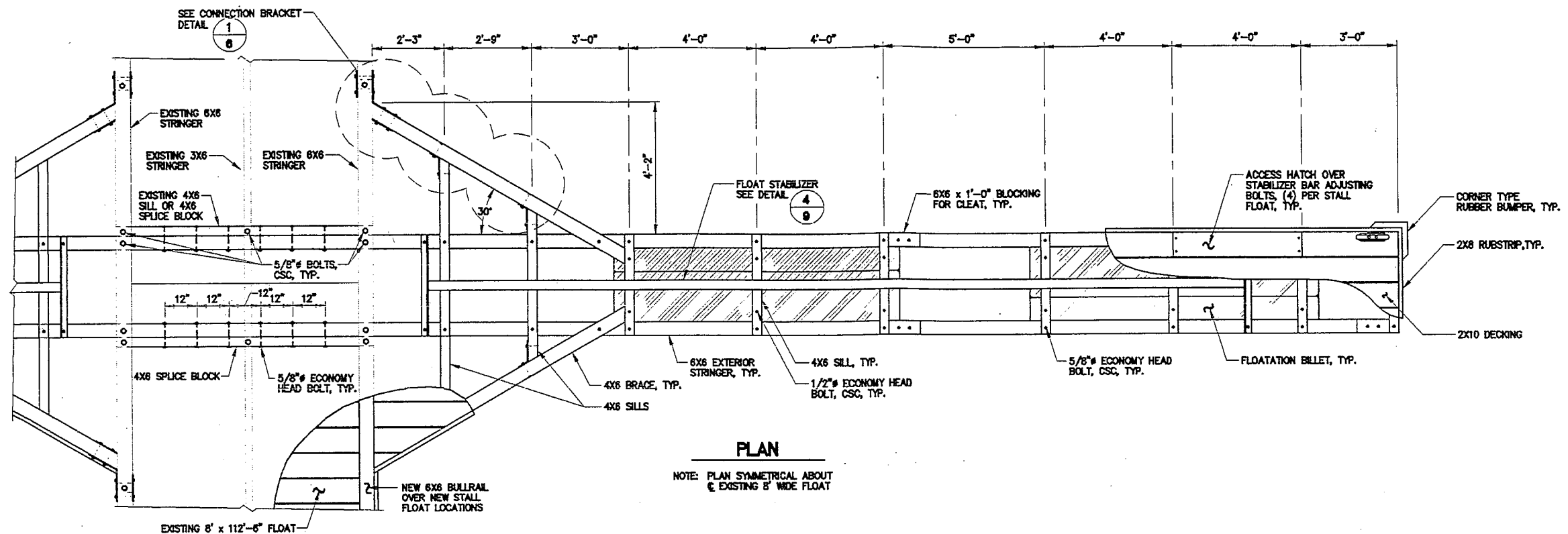
3220 Hospital Drive, Suite 200
Juneau, Alaska 99801 (907) 586-2093 FAX (907) 586-2099

3'-1 3/4" x 23' STALL FLOAT sheet 6 of 10

Designed: JWG
Drawn: TMS
Checked: JLN
Project No: 95236

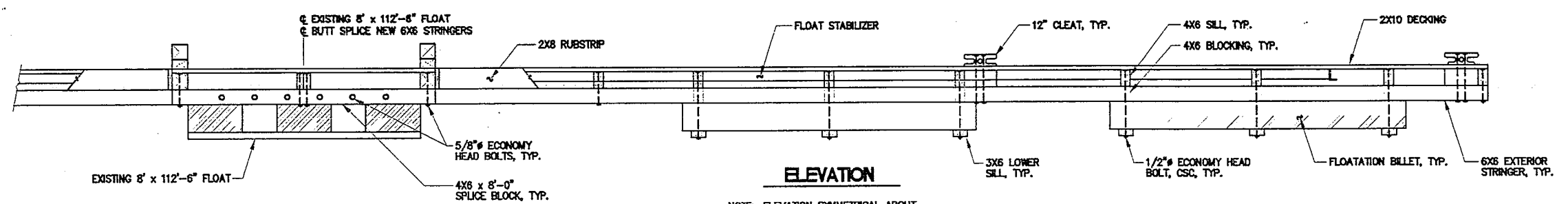
Date: OCT. 1995
Scale: AS NOTED

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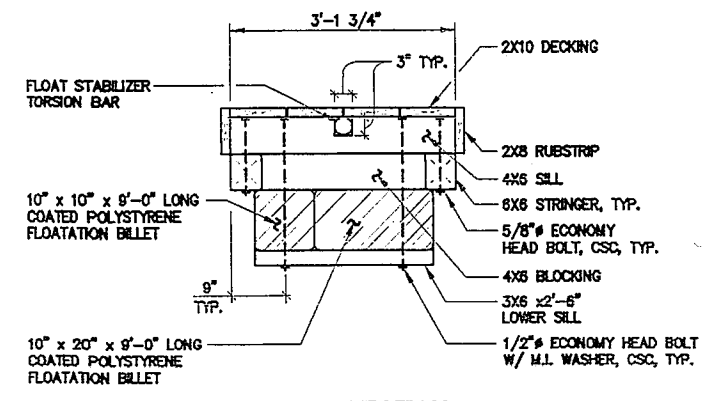
PLAN

NOTE: PLAN SYMMETRICAL ABOUT
 ö EXISTING 8' WIDE FLOAT



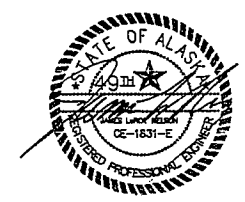
ELEVATION

NOTE: ELEVATION SYMMETRICAL ABOUT
 ö EXISTING 8' WIDE FLOAT



TYPICAL SECTION

FOR BIDDING PURPOSES ONLY



CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS

Peratrovich, Nottingham & Drage, Inc.
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Designed: JWC
 Drawn: TMS
 Checked: JLN
 Project No: 95236

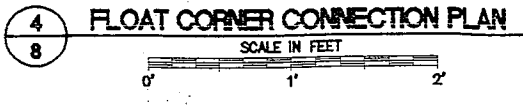
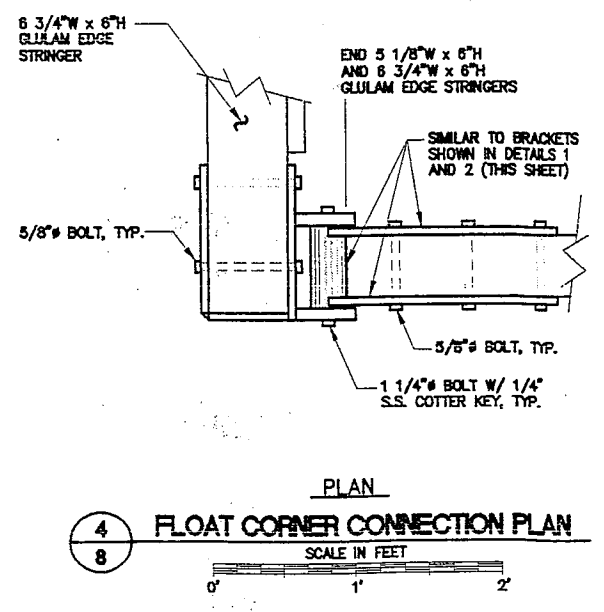
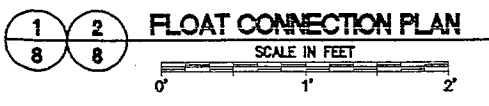
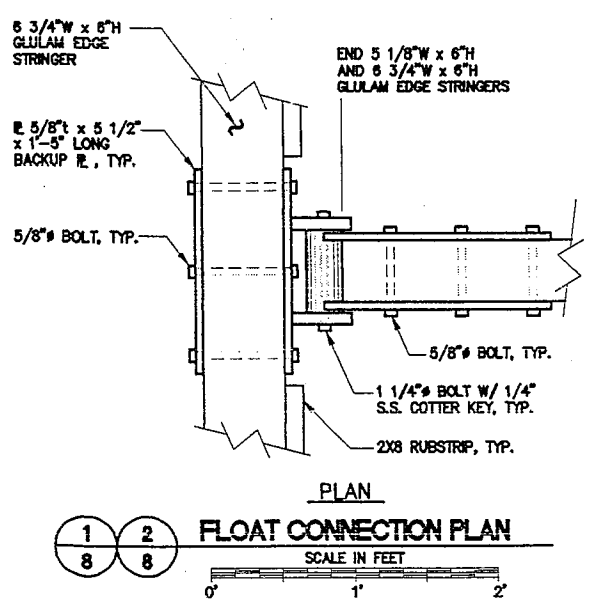
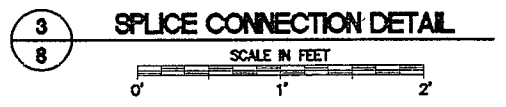
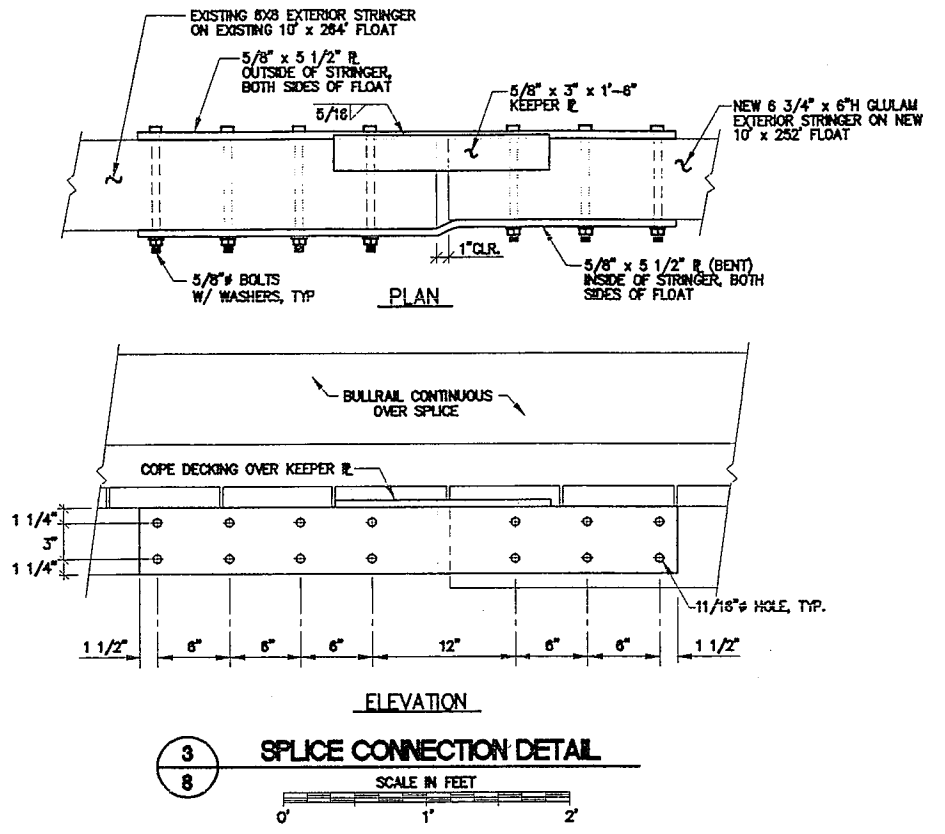
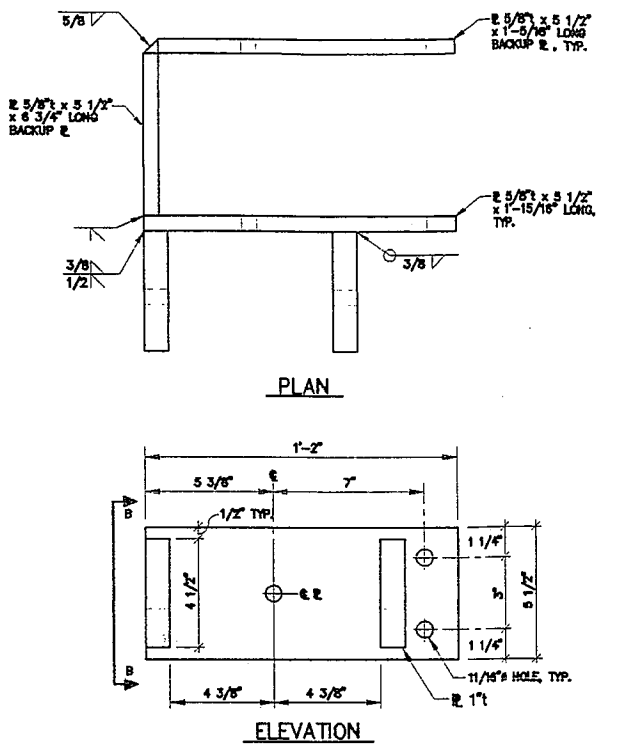
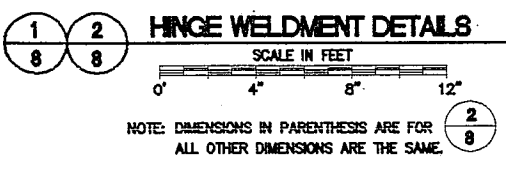
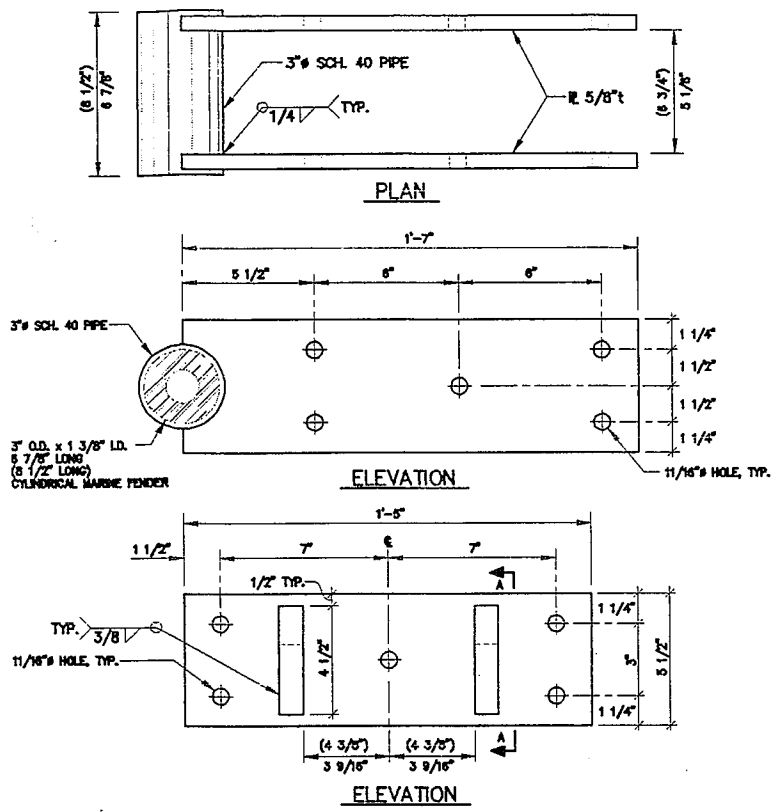
3220 Hospital Drive, Suite 200
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3'-1 3/4' x 32' STALL FLOAT

sheet
7 of 16

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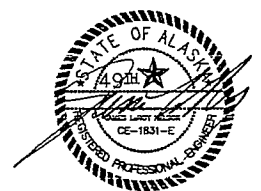
**CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS**

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Engineering Consultants

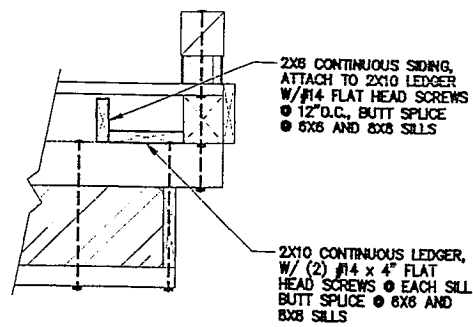
3220 Hospital Drive, Suite 200
Juneau, Alaska 99801 (907) 598-2093 FAX (907) 598-2099

Designed: JWC
Drawn: TMS
Checked: JLN
Project No: 95238

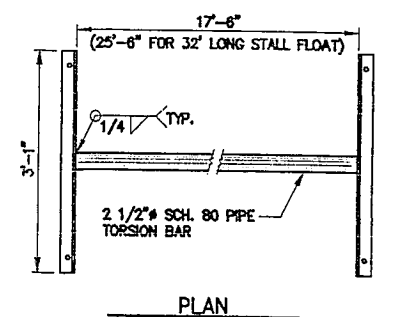
Date: OCT. 1995
Scale: AS NOTED



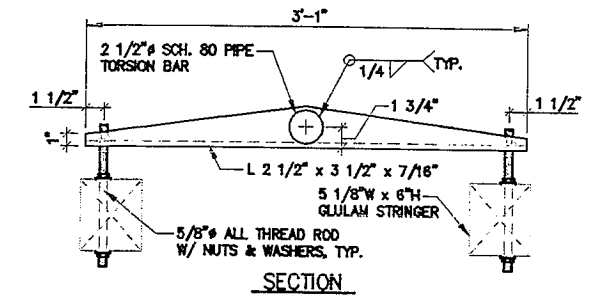
FILE SCHEDULE				
LOCATION	QUANTITY	PILE DIAMETER	PILE LENGTH	WALL THICKNESS
10' X 228' FLOAT	6	12"	70'	3/8"
10' X 144' FLOAT	4	12"	70'	3/8"
12' X 125' LOG REINFORCED FLOAT	5	12"	70'	1/2"
ENDS OF 5' X 37'-6" FINGER FLOATS	3	12"	70'	3/8"
PILES NOTED FOR REPLACEMENT	3	TIMBER PILES	70'	



3 UTILITY LEDGER DETAIL

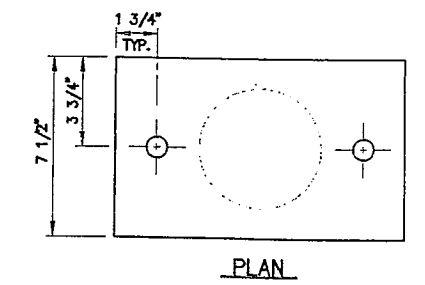


PLAN

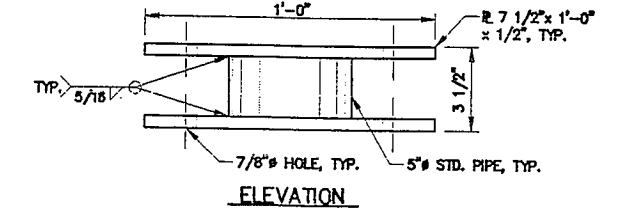


SECTION

4 FLOAT STABILIZER DETAIL

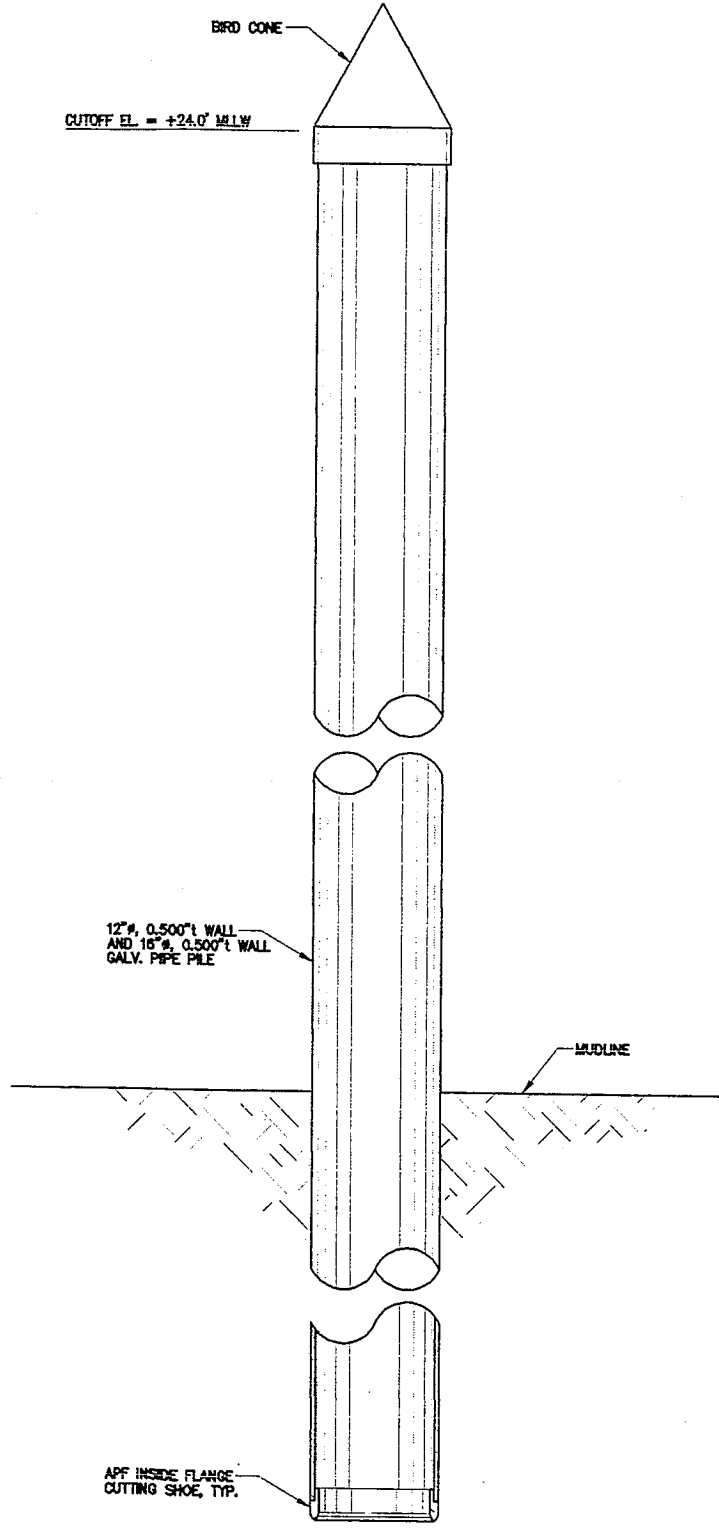


PLAN

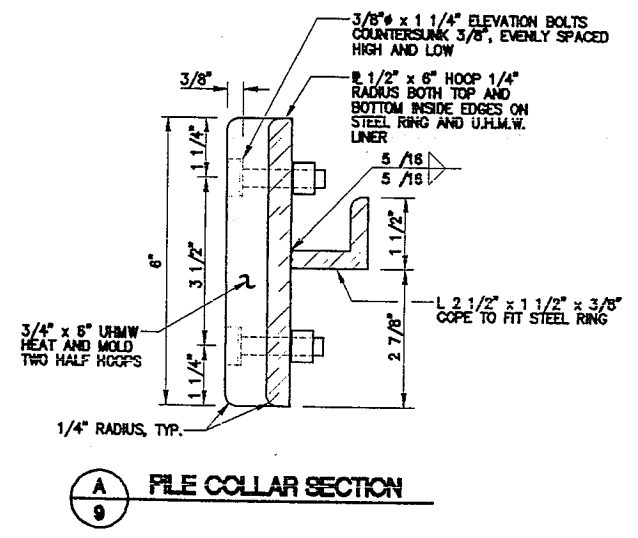


ELEVATION

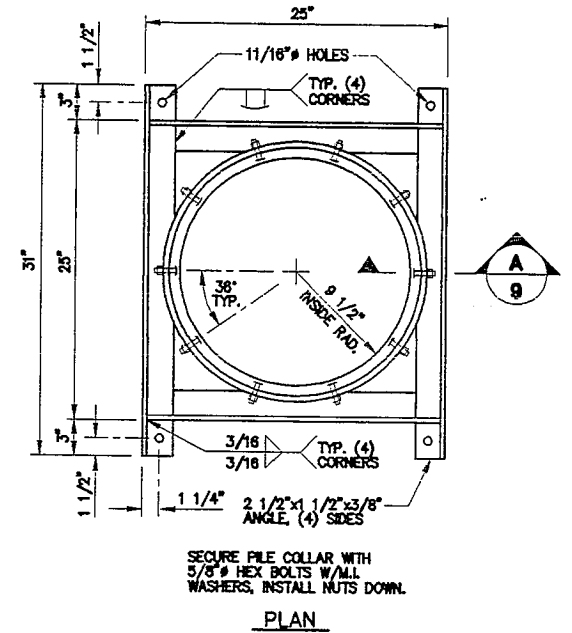
5 PIPE BLOCKING DETAIL



ANCHOR PILE DETAIL



A FILE COLLAR SECTION



PLAN

6 INTERIOR PILE COLLAR DETAIL

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CITY OF CRAIG
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Engineering Consultants

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ANCHOR PILE SCHEDULE AND MISC. DETAILS

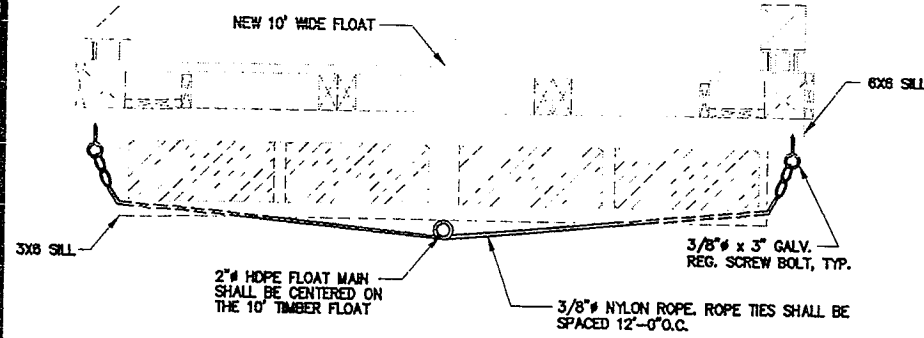
sheet
9 of 18



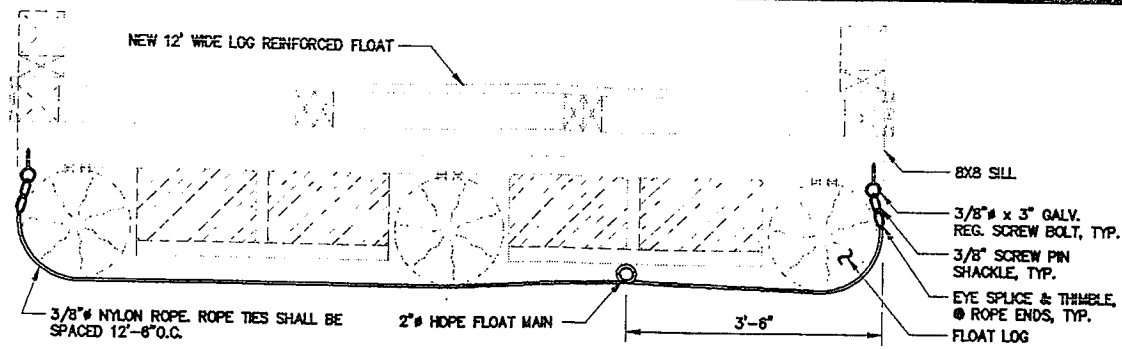
Designed: JWG
Drawn: TMS
Checked: JLN
Project No: 99236

Date: OCT. 1995
Scale: AS NOTED

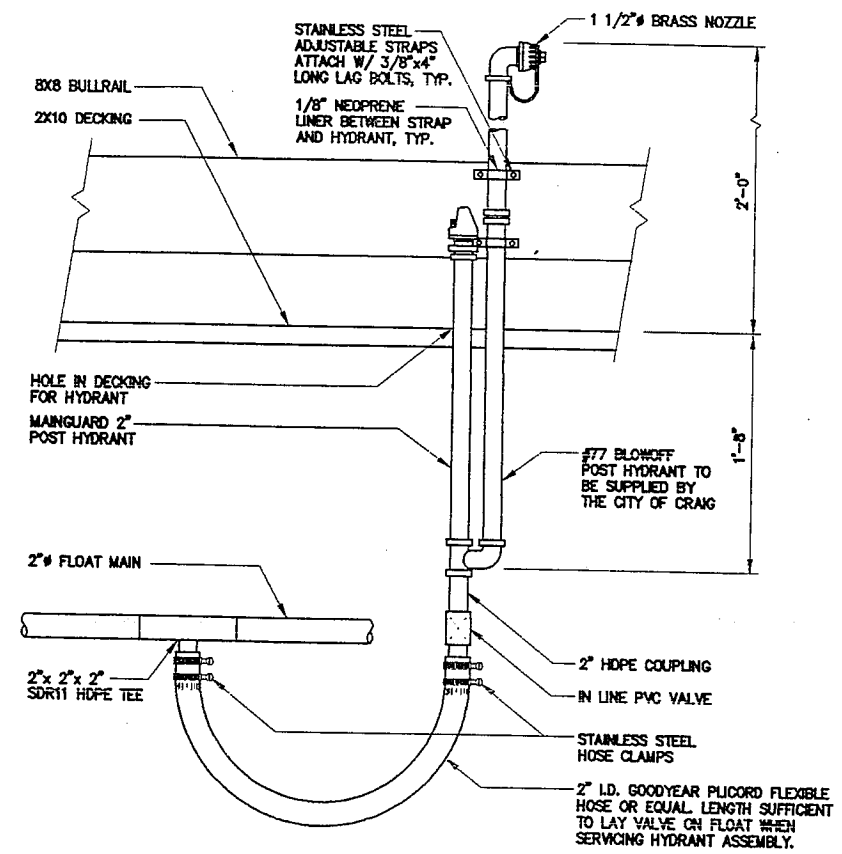
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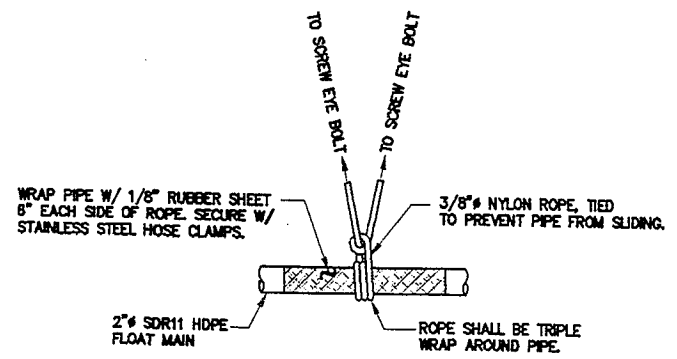
WATERLINE INSTALLATION (10' FLOAT)
NOT TO SCALE



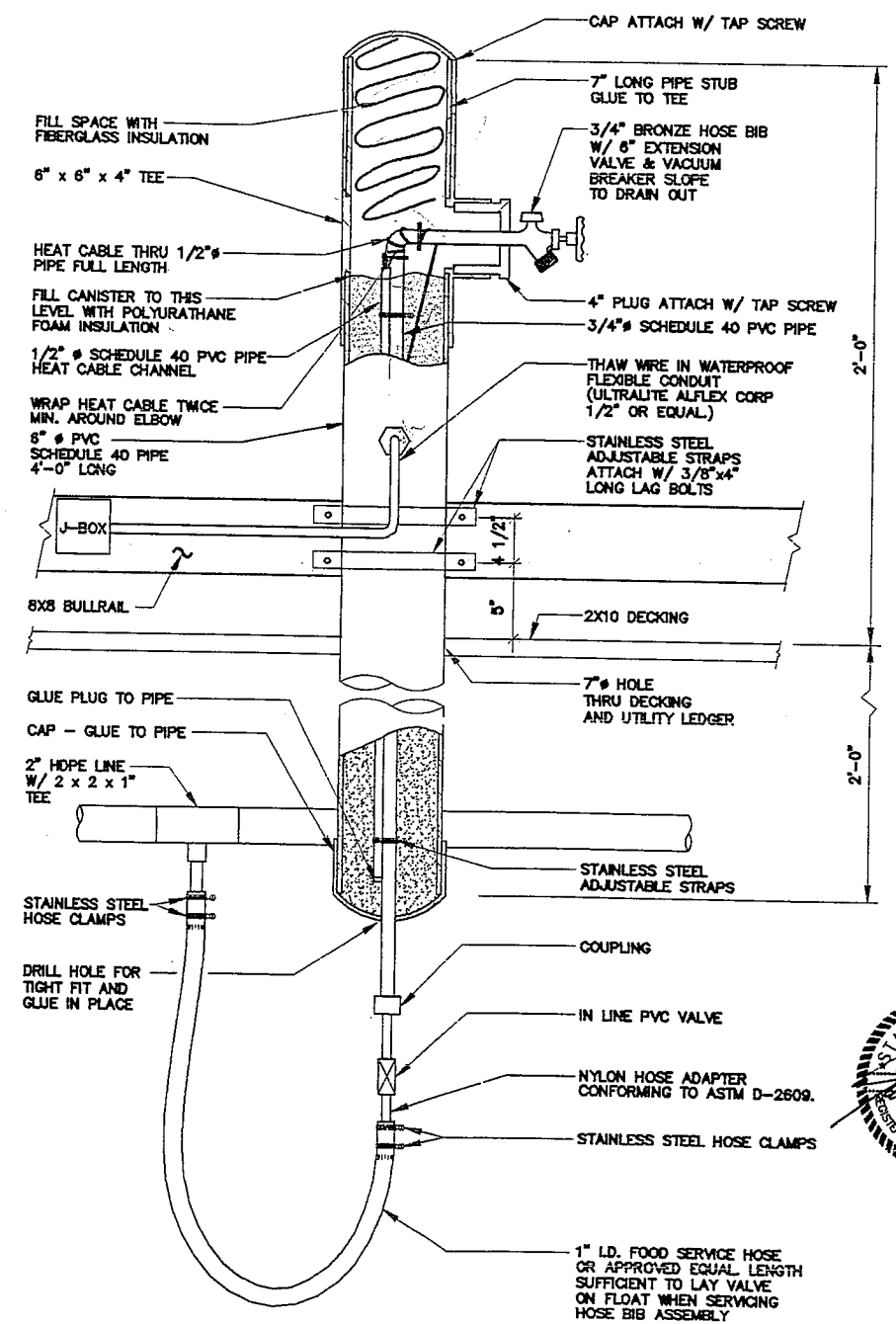
WATERLINE INSTALLATION (12' LOG REINFORCED FLOAT)
NOT TO SCALE



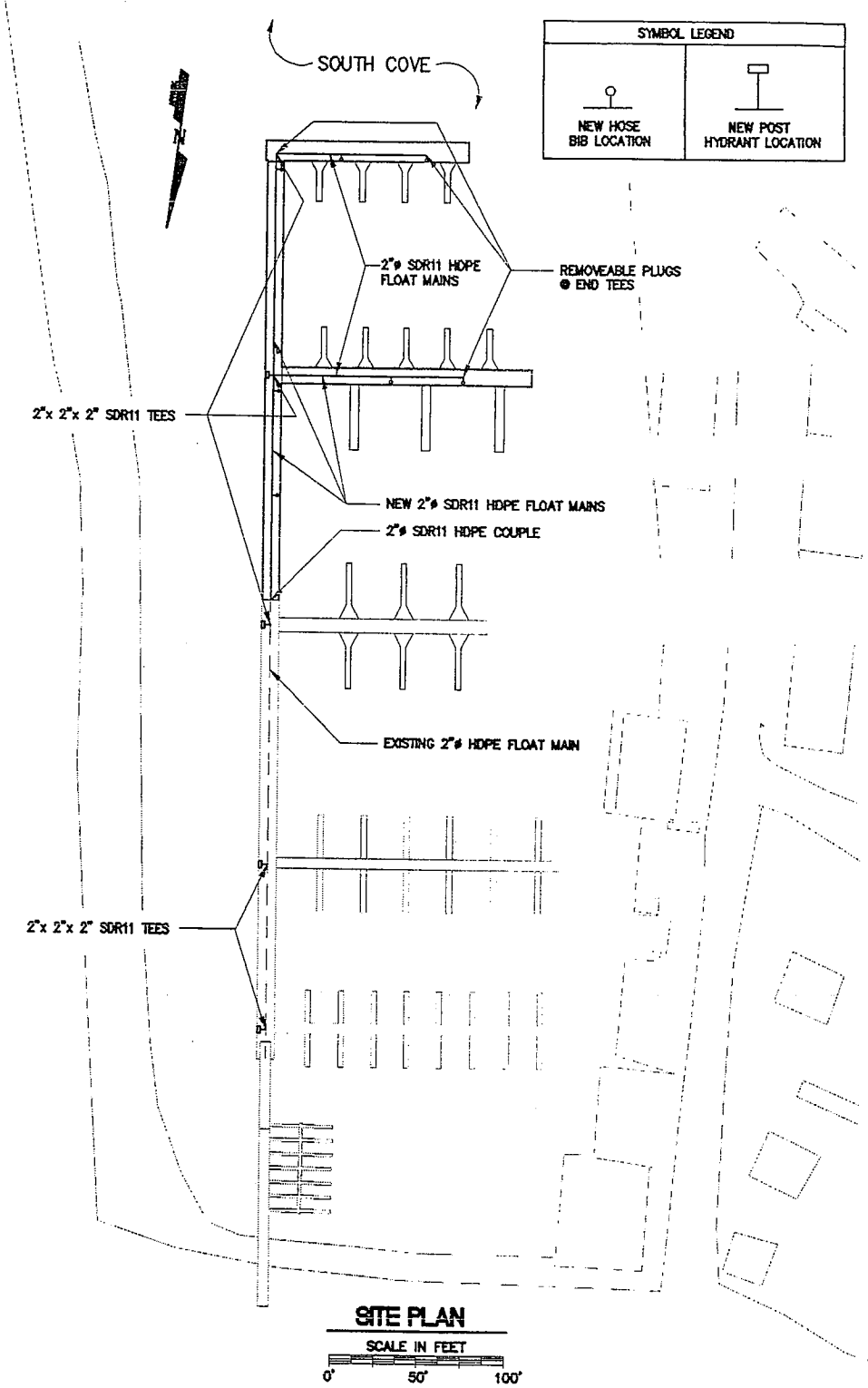
HYDRANT ASSEMBLY DETAIL
NOT TO SCALE



TYPICAL ROPE ATTACHMENT DETAIL



HOSE BIB ASSEMBLY DETAIL
NOT TO SCALE



FOR BIDDING PURPOSES ONLY

**CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS**

Peratrovich, Nottingham & Drage, Inc.
Engineering Consultants

3220 Hospital Drive, Suite 200
Juneau, Alaska 99801 (907) 586-2093 FAX (907) 586-2099

Designed: JWG
Drawn: TMS
Checked: JLN
Project No: 95236

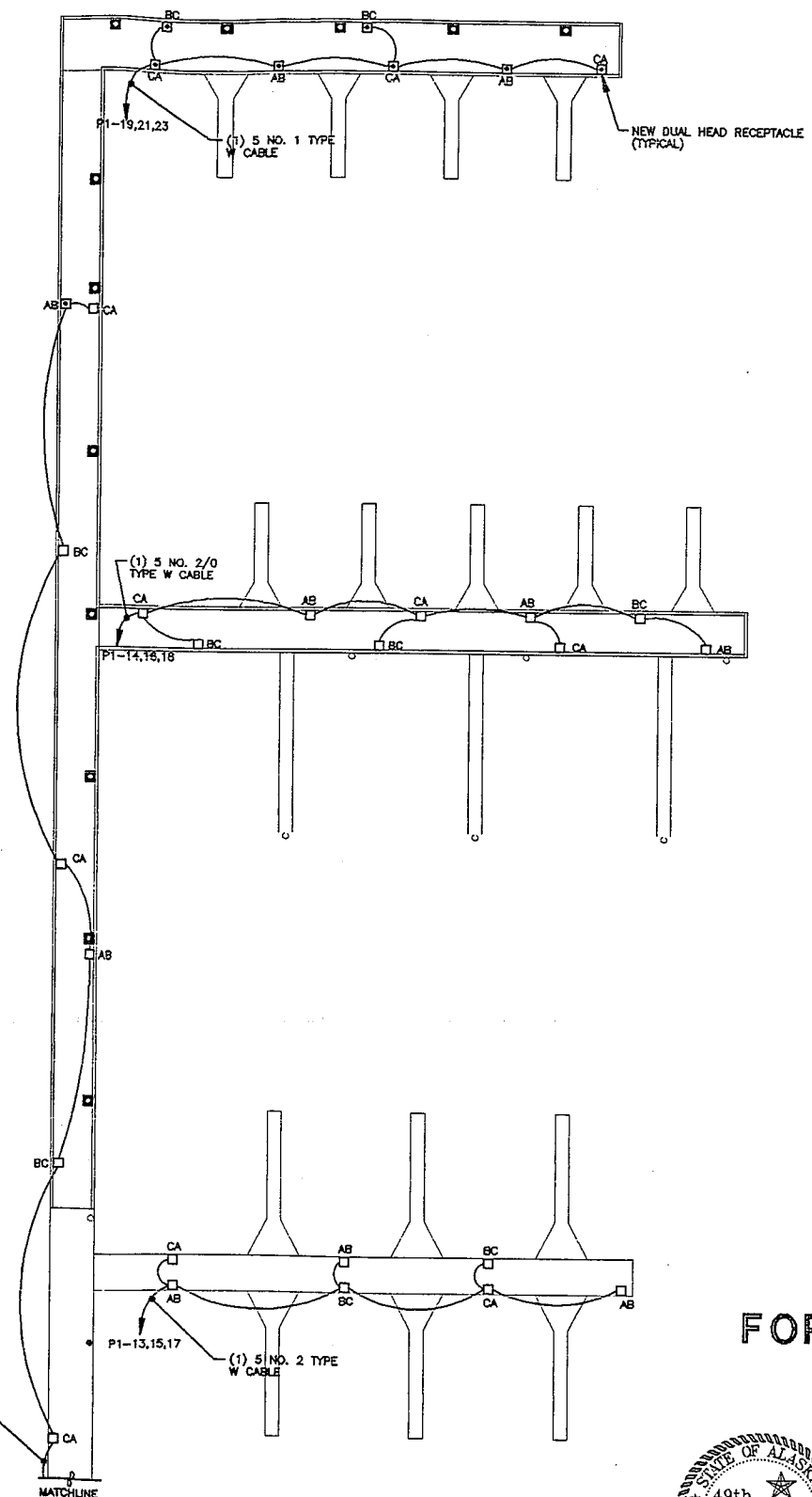
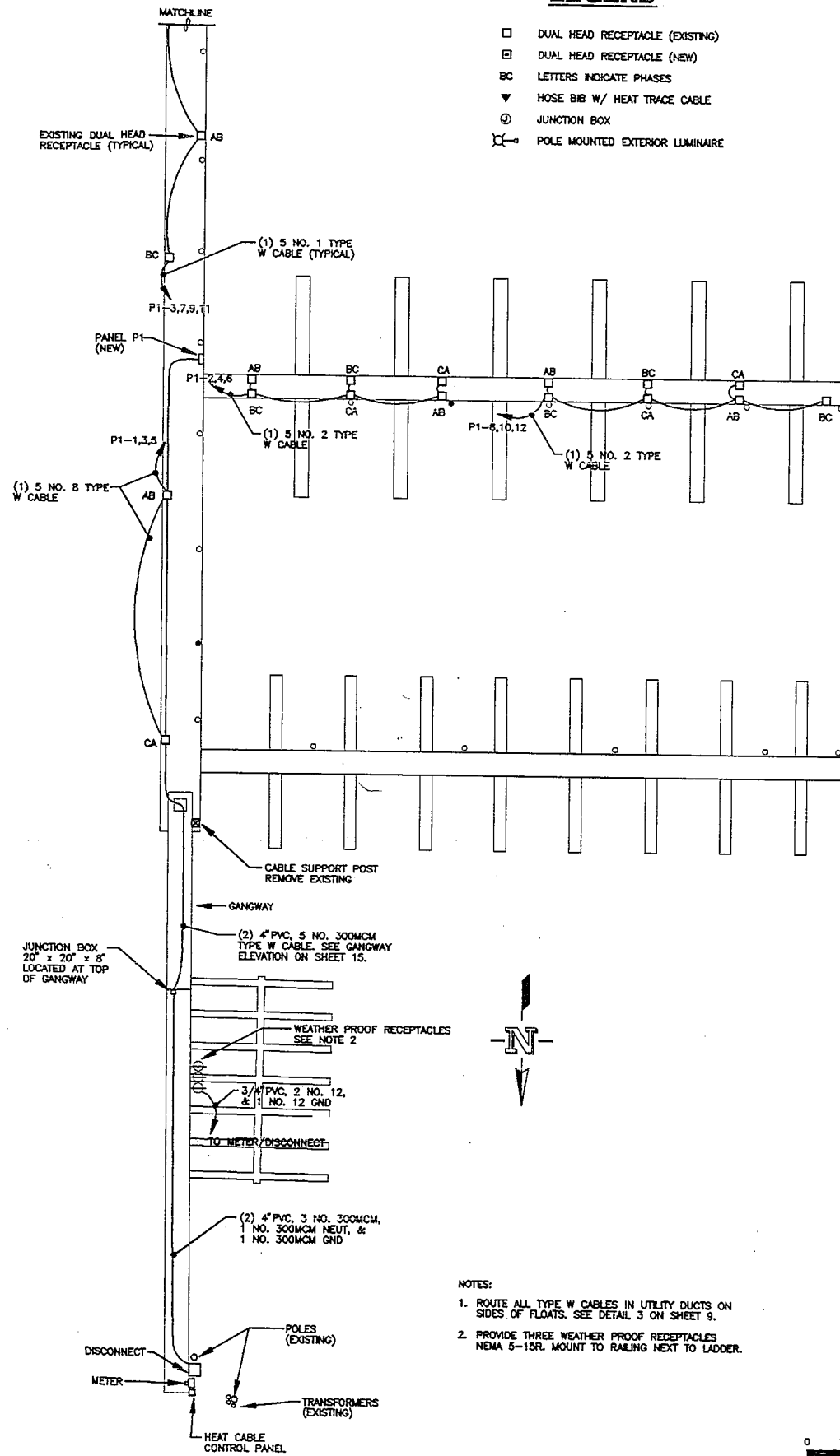
Date: OCT. 1995
Scale: AS NOTED

WATERLINE
sheet 10 of 16

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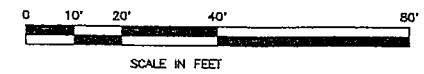
LEGEND

- DUAL HEAD RECEPTACLE (EXISTING)
- ▣ DUAL HEAD RECEPTACLE (NEW)
- BC LETTERS INDICATE PHASES
- ▼ HOSE BIB W/ HEAT TRACE CABLE
- ⊕ JUNCTION BOX
- ⊕ POLE MOUNTED EXTERIOR LUMINAIRE

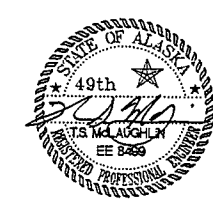


- NOTES:
1. ROUTE ALL TYPE W CABLES IN UTILITY DUCTS ON SIDES OF FLOATS. SEE DETAIL 3 ON SHEET 9.
 2. PROVIDE THREE WEATHER PROOF RECEPTACLES NEMA 5-15R. MOUNT TO RAILING NEXT TO LADDER.

SITE PLAN



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E-1

**CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS**

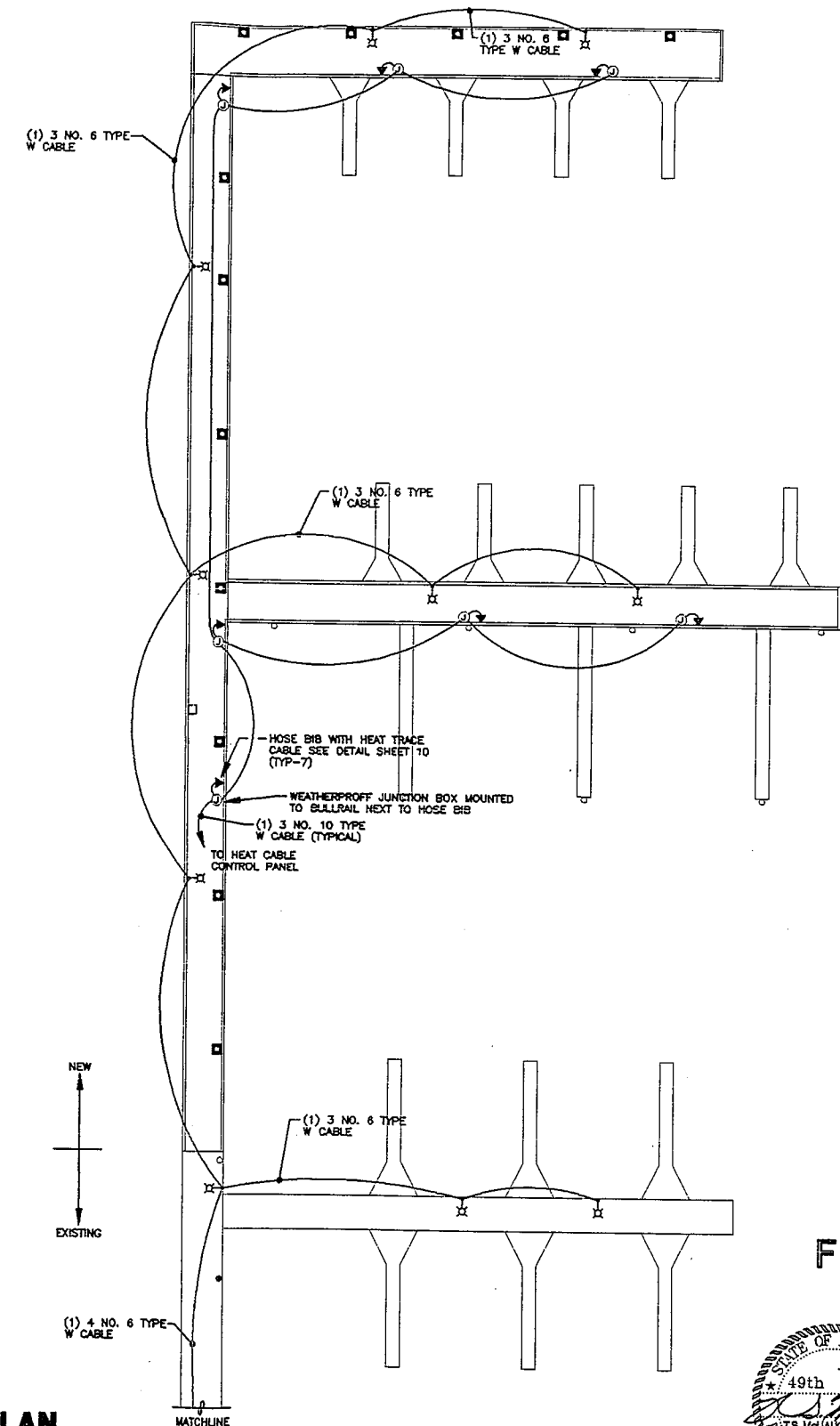
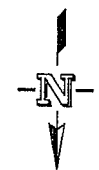
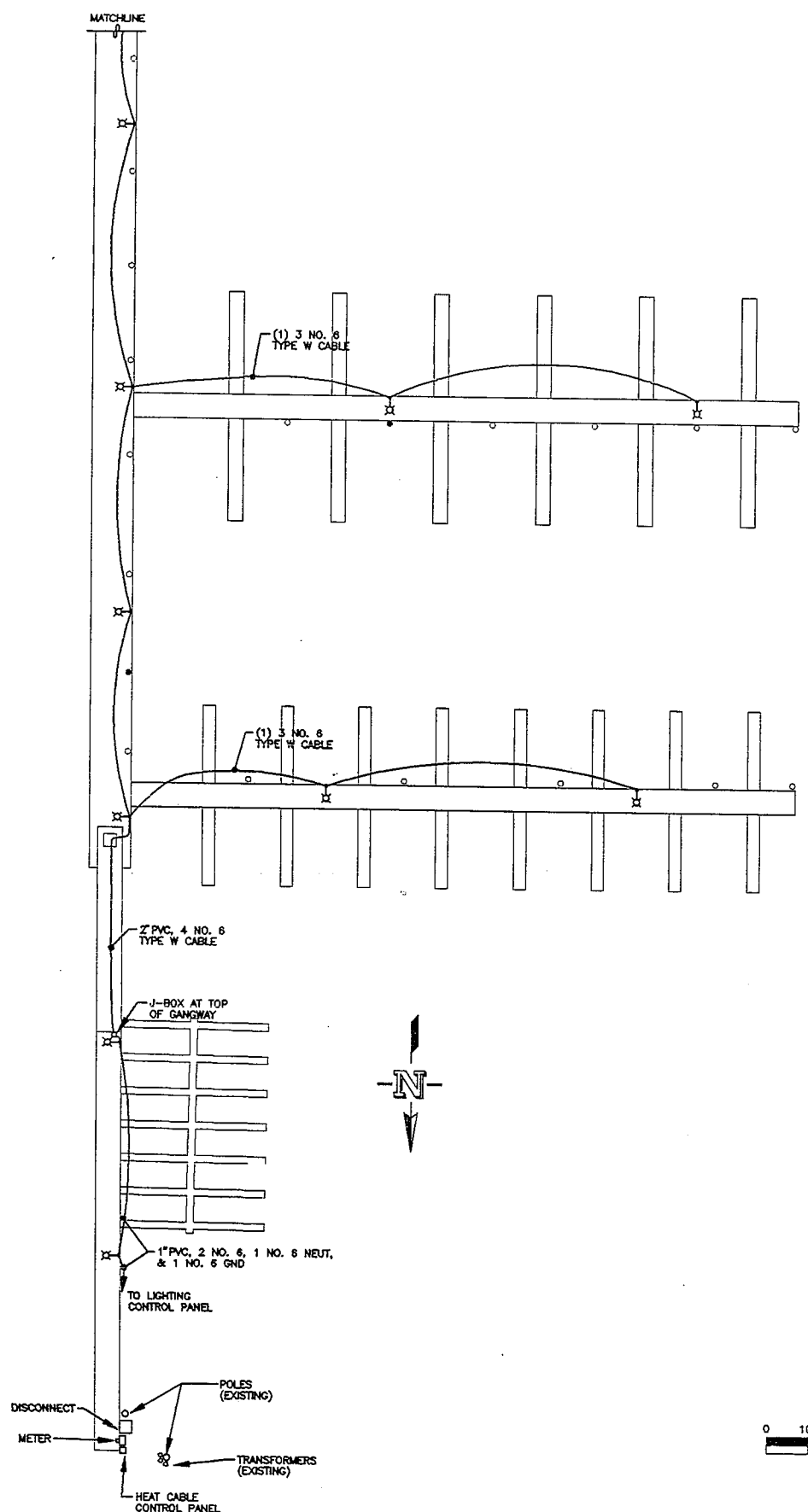
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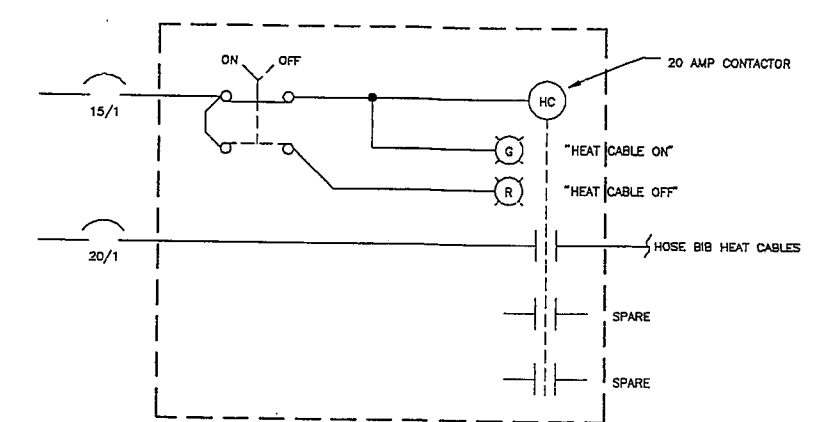
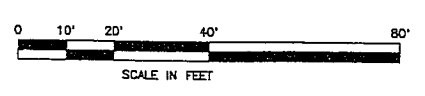
Designed: GSS
Drawn: JLC
Checked: TSM
Project No: 95236

Date: 7-NOV-95
Scale: GRAPHIC

SITE PLAN - POWER sheet 12 of 16



SITE PLAN



NOTE:
 1. PROVIDE HEAT CABLE CONTROLS AS SHOWN. SELECTOR SWITCH PILOT LIGHTS, AND CONTACTOR SHALL BE MOUNTED INSIDE A 18" H x 12" W, NEMA 4X ENCLOSURE WITH A 3" x 5" WINDOW. THE PILOT LIGHTS SHALL BE VISIBLE THROUGH THE WINDOW.

DETAIL - HEAT CABLE CONTROLS
 NO SCALE

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CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS

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 Engineering Consultants

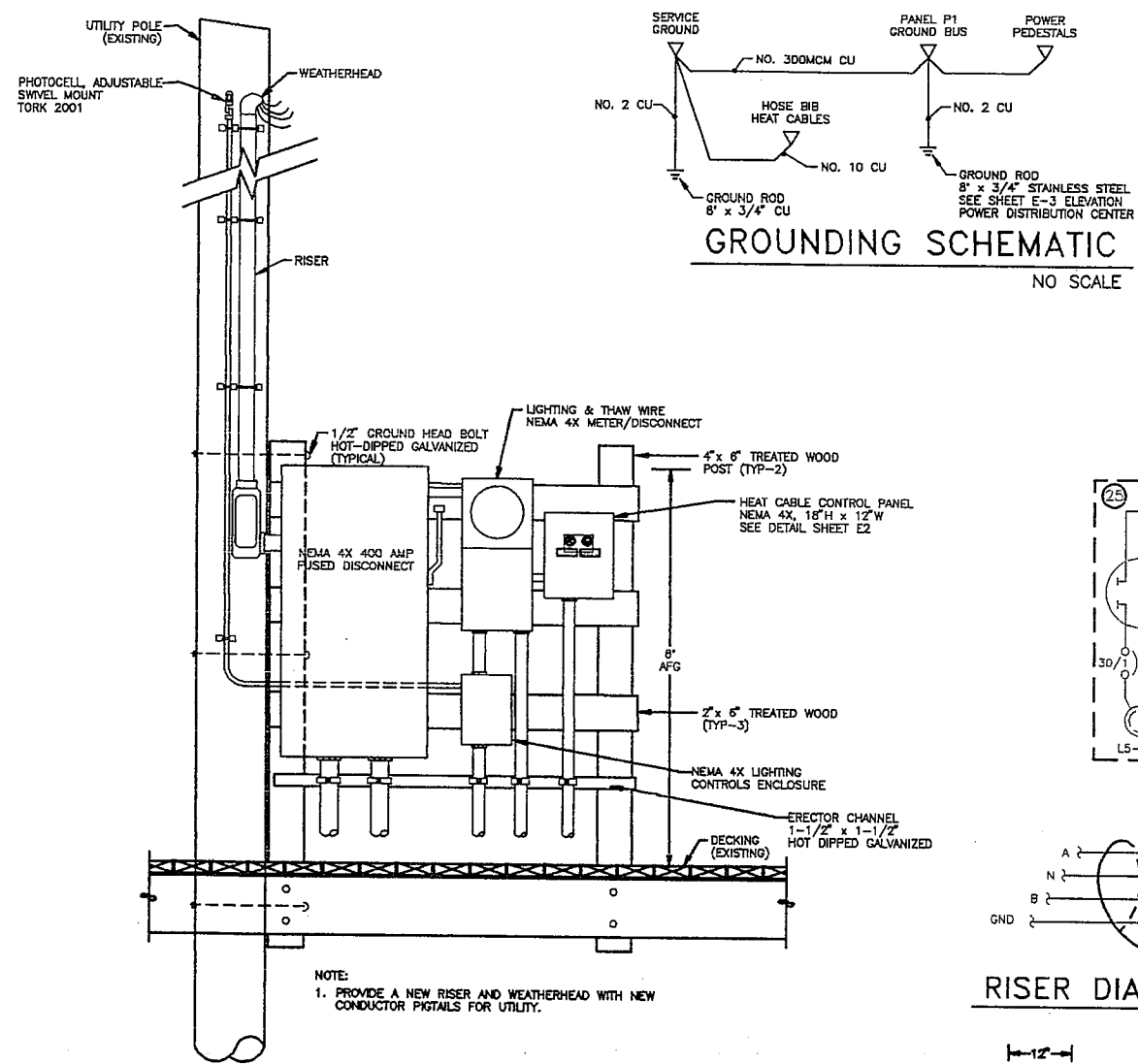
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Designed: GSS
 Drawn: JLC
 Checked: TSM
 Project No: 95236

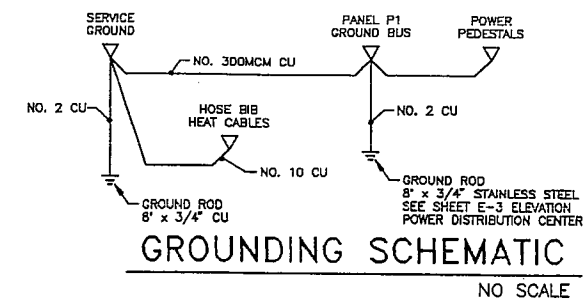
Date: 7-NOV-95
 Scale: GRAPHIC

SITE PLAN - LIGHTING & HEAT CABLE

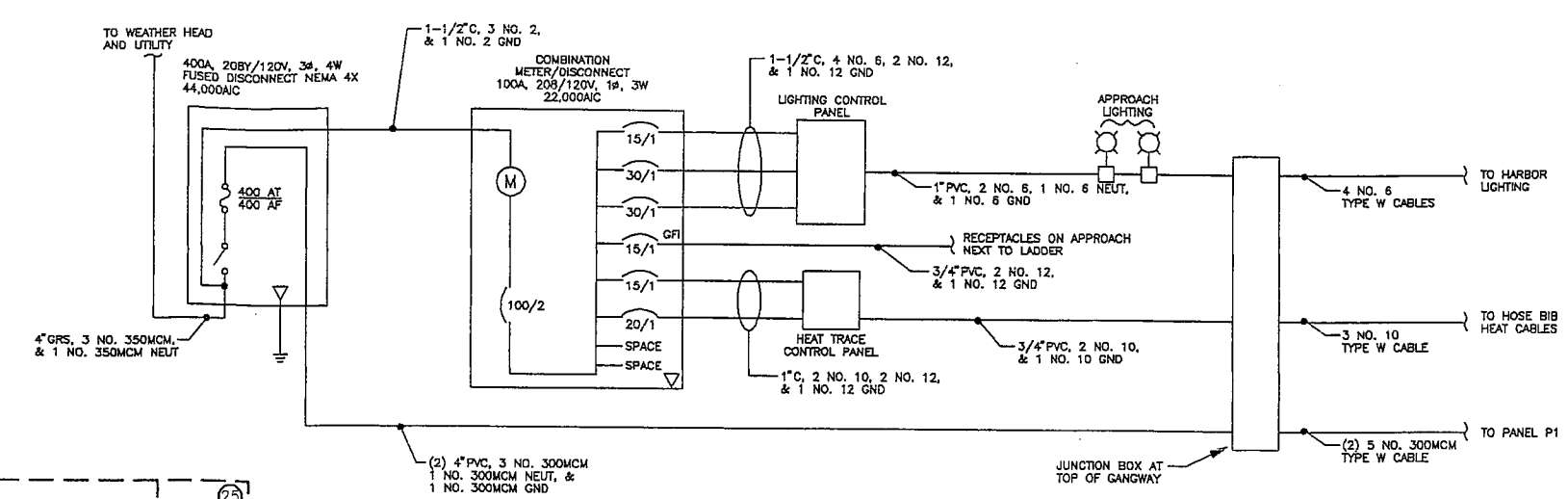
sheet
13 of 16



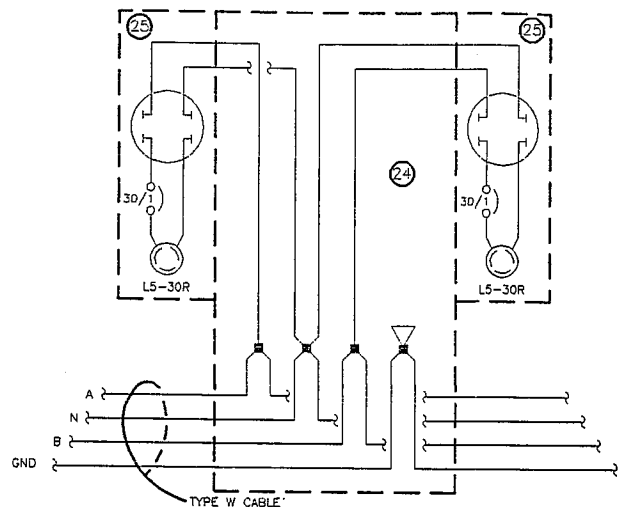
ELEVATION - SERVICE ENTRANCE
NO SCALE



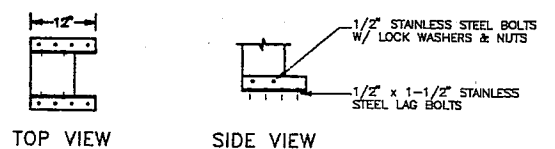
GROUNDING SCHEMATIC
NO SCALE



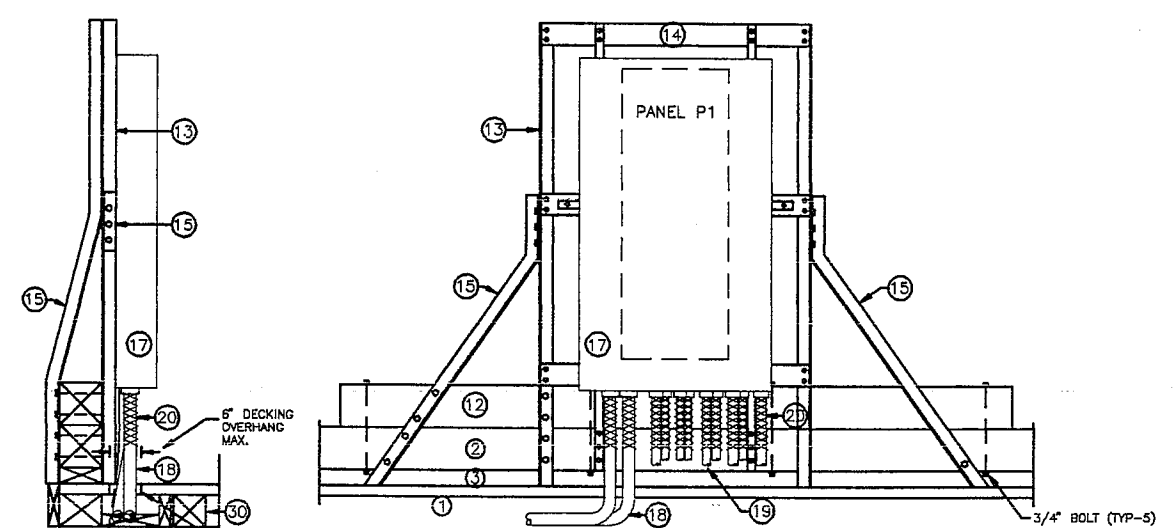
SINGLE LINE DIAGRAM



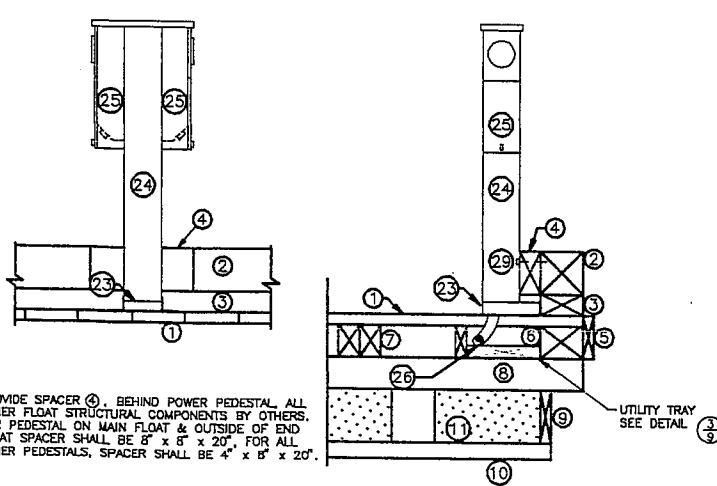
RISER DIAGRAM - 120 VOLT PEDESTAL
NO SCALE



DETAIL - PEDESTAL BASE
Scale in Feet



ELEVATION - POWER DISTRIBUTION CENTER
Scale in Feet

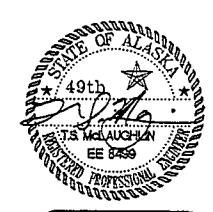


ELEVATION - POWER PEDESTAL
Scale in Feet

EQUIPMENT SCHEDULE:

- | | | |
|---|-------------|--|
| ① DECKING | } BY OTHERS | ⑱ TYPE W SERVICE CABLE |
| ② BULLRAIL | | ⑲ TYPE W FEEDER CABLE |
| ③ BLOCKING | } BY OTHERS | ⑳ CABLE GRIPS, STAINLESS STEEL |
| ④ 4" x 8" x 20" OR 8" x 8" x 20" TREATED WOOD SPACER (NEW) | | ㉑ NOT USED |
| ⑤ BUMPER BOARD | } BY OTHERS | ㉒ NOT USED |
| ⑥ STRINGER | | ㉓ PEDESTAL BASE - 2-1/2" H x 4" W x 12", 1/4" STAINLESS STEEL ANGLE IRON (SEE DETAIL) |
| ⑦ STRINGER | } BY OTHERS | ㉔ 8x10 PEDESTAL - 14 GA. STAINLESS STEEL (316) |
| ⑧ SILLS | | ㉕ POWER HEAD W/ METER BASE, CIRCUIT BREAKER, & RECEPTACLE & LOCKABLE COVER - 16 GA. STAINLESS STEEL (316) |
| ⑨ SIDING | } BY OTHERS | ㉖ TYPE W CABLES (TYP) |
| ⑩ SILL | | ㉗ 3/4" x 8" GROUND ROD, STAINLESS STEEL, FASTENED TO BASE OF FLOAT W/ COPPER STRAPS, CONNECT TO SYSTEM GROUND |
| ⑪ FLOTATION PLANKS | } BY OTHERS | ㉘ NO. 2 COPPER GROUND |
| ⑫ 6" x 8" SUPPORT (NEW) | | ㉙ 1/2" x 6" STAINLESS STEEL LAG BOLT |
| ⑬ 2-1/2" x 2-1/2" x 1/4" ANGLE IRON STAND | } BY OTHERS | ㉚ NEW 6" x 6" TIMBER DECKING SUPPORT, SPANNING AT LEAST TWO SILLS AND SECURED TO SILLS W/ ONE 1/2" x 10" HOT-DIPPED GALVANIZED STEEL DRIFT PER SILL. DECKING TO BE SECURED TO SUPPORT W/ 2-20d BOX NAILS PER PLANK. THE SUPPORT SHALL BE TREATED TO 0.5 PCF RETENTION BY ASSAY PER A.W.P.A. C-18 (LATEST EDITION). |
| ⑭ 4" x 1/4" FLAT STEEL PLATE | | |
| ⑮ 2-1/2" x 2-1/2" x 1/4" ANGLE IRON BRACE HOT-DIPPED GALV. OR STAINLESS STEEL | | |
| ⑯ NOT USED | | |
| ⑰ HOFFMAN FIBERGLASS NEMA 4X ENCLOSURE W/ CHROMALOX 1-1/2" x 6-1/2" 150W STRIP HEATER & THERMOSTAT (ALLEN BRADLEY BULLETIN 837) | | |

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E-3

CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS

Peretrovich, Nottingham & Drage, Inc.
Engineering Consultants

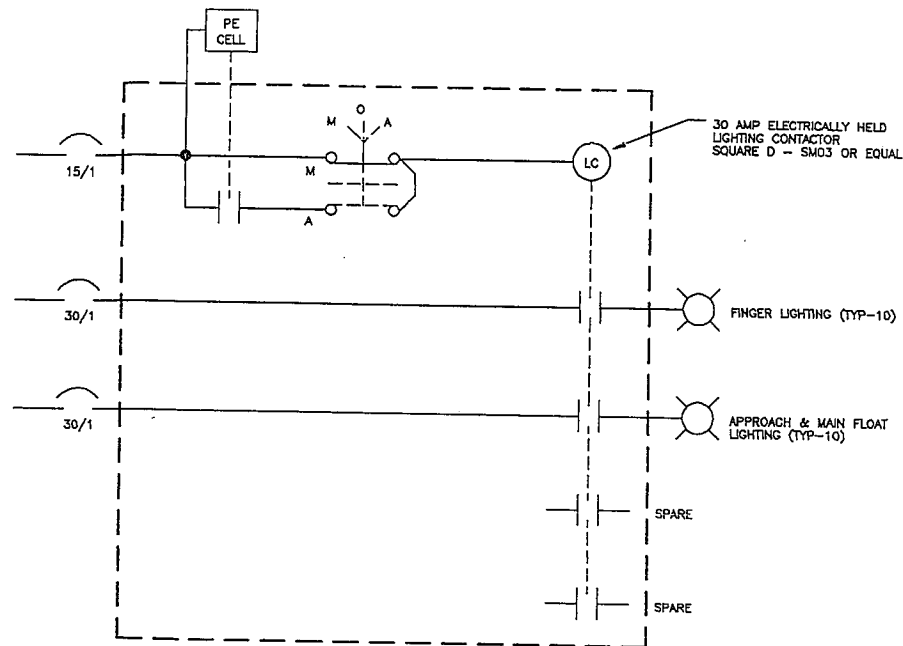
Designed: GSS
Drawn: J.C.
Checked: TSM
Project No: 95236

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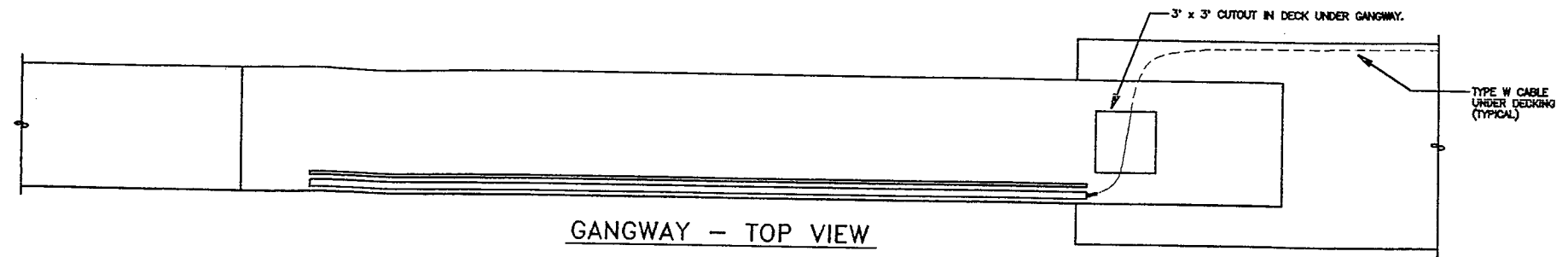
Date: 7-NOV-95
Scale: 1" = 1'

DETAILS

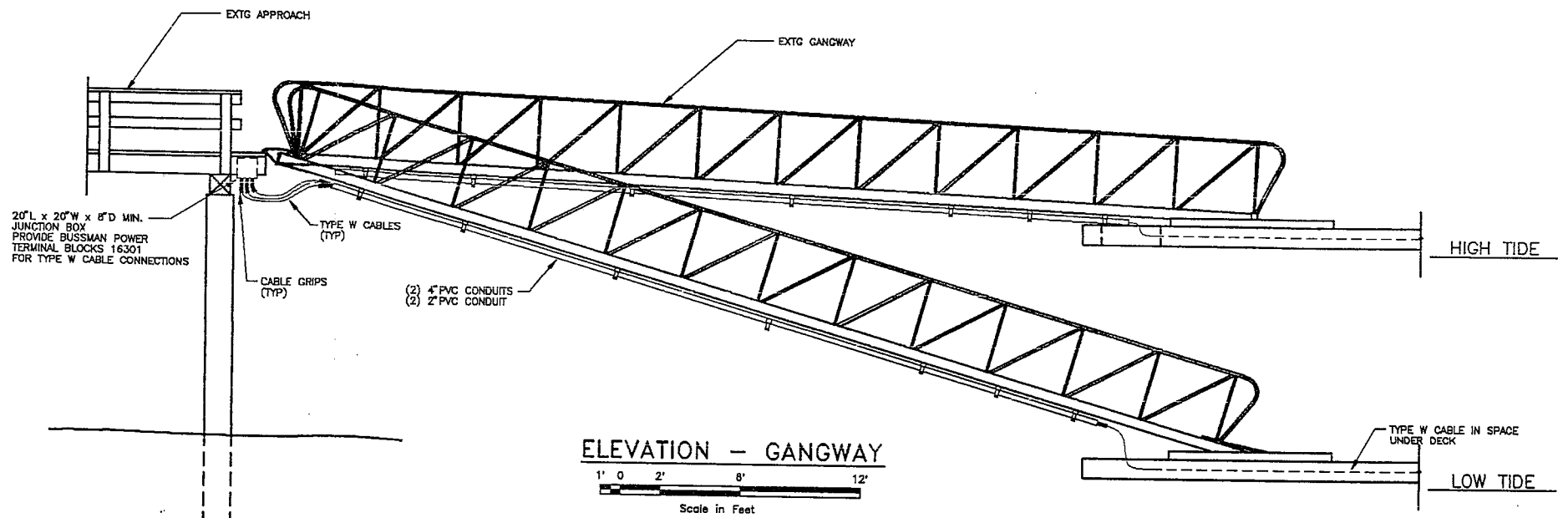
sheet
14 of 16



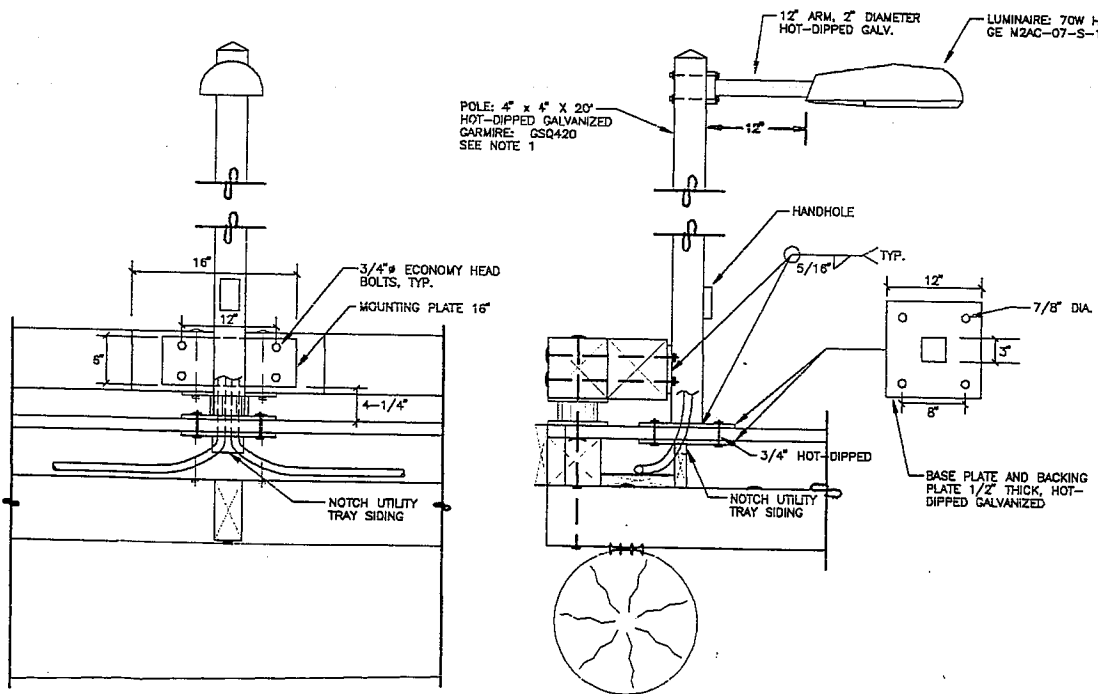
SCHEMATIC - LIGHTING CONTROLS
NO SCALE



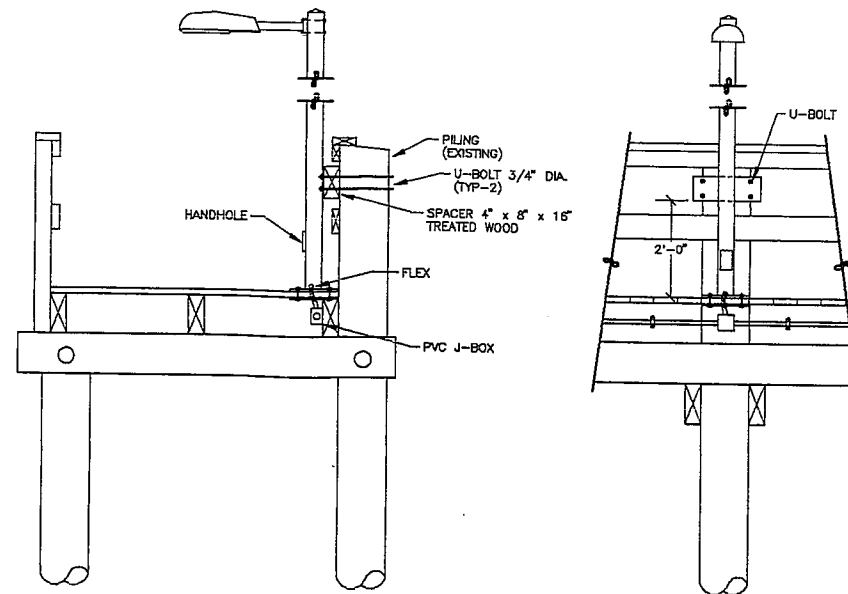
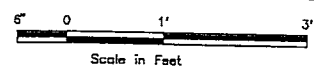
GANGWAY - TOP VIEW



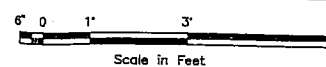
ELEVATION - GANGWAY



DETAIL - DOCK LIGHT POLES

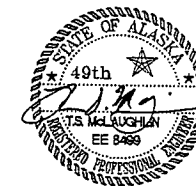


DETAIL - APPROACH LIGHT POLES



- NOTES:
1. PROVIDE LIGHTING AS SHOWN. WELD MOUNTING PLATE AND BASE PLATE TO POLE BEFORE HOT-DIP GALVANIZING. NOTE THAT THE MOUNTING PLATES FOR THE TWO POLES ON THE APPROACH DOCK ARE HIGHER THAN THOSE FOR THE POLES ON THE FLOAT.
 2. PROVIDE SLACK IN CABLE UNDER DECK, TO ALLOW FOR MOVEMENT OF GANGWAY. PROVIDE PLANKING UNDER CABLE TO KEEP CABLE ABOVE WATER.

FOR BIDDING PURPOSES ONLY



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E-4

CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS

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Designed: GSS
Drawn: JLC
Checked: TSM
Project No: 95236

Date: 7-NOV-95
Scale: GRAPHIC

SCHEMATIC & DETAIL

sheet
15 of 16

ELECTRICAL SPECIFICATIONS

16010 GENERAL

- A. The electrical drawings are diagrammatic in nature. The plans show the general locations of electrical devices, unless dimensioned thereon. Make minor relocations as required to provide a symmetrical appearance, or to avoid conflict with other structural, architectural, or mechanical features.
- B. Comply with the latest edition of the NEC and NFPA codes and standards as well as the applicable Federal, State, and local codes.
- D. Unless otherwise noted, provide new, high-quality equipment and materials which are standard and current within the industry, and approved by Underwriters' Laboratory.
- E. All products shall be delivered and stored in original containers. Protect all items from dirt, water, chemical, and/or mechanical damage.
- F. Bring discrepancies between drawings, or between the drawings and the field condition, or between the drawings and the specifications, to the attention of the Engineer.
- G. Submittals: Prior to purchasing or ordering materials, equipment, or systems, provide six sets of submittals for such items as noted in following Sections of these Specifications. Such submittals shall be in accordance with the following:
- Catalog Cuts: The submittals shall show the manufacturer, model number, options, and accessories provided with the equipment or material. All sizes, capacities, and dimensions shall be included.
- H. Variations from the specifications or design concept shall be so noted with the submittal.
- I. All submittal material shall be bound and indexed, and tabs shall segregate the specification sections. The submittal material shall be certified as having been reviewed for conformity with the contract documents.
- J. Obtain written permission from the Engineer prior to cutting or piercing structural members.
- K. All ferrous products exposed to the weather shall be hot dipped galvanized.

16015 - REFERENCE SYMBOLS

- A. The symbols used in the drawings are specific to this project and are shown on the legend.
- B. The following abbreviations and initials are utilized in the Contract Documents:
- | | |
|------|--|
| AWG | American Wire Gauge |
| NEC | National Electrical Code |
| NEMA | National Electrical Manufacturers' Association |
| UL | Underwriters' Laboratories |
| AFG | Above Finished Grade |
| GFI | Ground Fault Interrupter |
| GRS | Galvanized Rigid Steel |
| PVC | Polyvinyl Chloride |
| UON | Unless Otherwise Noted |
| WP | Weatherproof |

16020 SCOPE OF WORK

- A. Power - Demolish all existing electrical equipment except the power pedestals. Provide power to new hose bib heat cables and new and existing power pedestals as shown. This includes a new service entrance with a fused disconnect, a meter/disconnect for lighting and heat cables, control panels for lighting and heat cables, and a new main distribution panel. Replace all existing conductors with new conductors as shown.
- B. Lighting - Demolish existing lighting. Provide new lighting as shown.

16110 RACEWAYS

- A. No submittals required.
- B. All rigid steel conduit and fittings shall meet ANSI requirements.
- C. Exterior Conduit: Provide only GRS conduit within ten feet AFG, unless otherwise noted.
- D. Install conduit mechanically and electrically continuous from termination to termination. Connect securely to cabinets, junction boxes, and device boxes.
- E. PVC Conduit: Polyvinyl Chloride conduit shall be Schedule 80 UL Listed for exposed use.

16120 WIRE AND CABLE

- A. Provide catalog cuts for Type W cable.
- B. Utilize 600 volt rated wire insulation where the impressed voltage is less than 600 volts and greater than 100 volts.
- C. Utilize minimum wire sizes as follows, unless otherwise noted:
- No. 12 AWG for branch circuit wiring.
 - No. 18 AWG for control circuit wiring.
 - No. 18 AWG for lighting fixture wiring.
- D. Size all conductors according to American Wire Gauge (AWG).
- E. Provide conductors with THW, THWN, THHN, or XHHW insulation, unless otherwise noted.
- F. Provide solderless type connectors for conductors. Utilize preinsulated "twist-on" type for conductors No. 10 AWG or less in size, or bolt or compression set type with a preformed cover, heat shrink tubing, or tape for insulation.
- G. Float service and feeder cables shall be copper, flexible, Type W cables with a thermostat Chlorinated Polyethylene (CPE) jacket. The cable shall be suitable for immersion in saltwater, as manufactured by Carol or an approved equal.

16130 OUTLET AND JUNCTION BOXES

- A. Provide cast thermoplastic, or fiberglass outlet and junction boxes as required. All boxes shall be designed for wet locations and a corrosive environment (NEMA 4X).
- B. Install junction boxes in permanently accessible locations only.

16133 CABINETS

- A. Provide catalog cuts for the panelboard enclosure, the panelboard cabinet, the lighting control enclosure, and the heat cable control enclosure.
- B. All enclosures shall be Hoffman NEMA 4X, 316 stainless steel or fiberglass, with hinged, latchable, lockable doors.

16140 POWER PEDESTALS

- A. Provide shop drawings showing the pedestal wiring diagrams and catalog cuts for all related equipment.
- B. The pedestals shall be designed to provide shore tie service to boats moored at the floats, in accordance with the drawings. The pedestals posts shall be constructed of 1 1/2" marine grade stainless steel (316) and the covers shall be constructed of 1/2" marine grade stainless steel (316). All hardware shall be stainless steel. The pedestals shall provide access for type W cable in accordance with the drawings. Pedestals shall be provided with cable supporting clamps and loop-feed lugs. All inaccessible conductors shall be coated for protection from the sea spray environment. All conductors shall be copper. Each pedestal shall service one or two shore tie connections as shown on the plans. The power heads shall have a lockable cover. Receptacle plugs shall be locked in place when cover is locked.
- C. The pedestals shall provide 120 volt service at their associated receptacles. The internal buswork shall be rated a t 100 amperes or greater. The receptacles shall be rated a t 30 amperes, 120V, locking type, marine grade, NEMA LS-3DR. The meter bases shall utilize four jaw sockets connected for 120 volt meters.

16170 DISCONNECTS

- A. Provide catalog cuts for all disconnects.
- B. Provide disconnects with NEMA 4X enclosures.
- C. Provide switches which open all ungrounded conductors.
- D. Provide heavy duty type disconnects, rated for 800V service. Each disconnect shall be horsepower rated with quick-make, quick-break switching.
- E. Provide the enclosure with an interlocking cover which cannot be opened with the switch closed. Supply with a defeating mechanism.
- F. Provide disconnects with the handle lockable in the "off" position.
- G. Utilize Class RK1 fuses.
- H. Size fuses as shown in the drawings.
- I. Provide three spare fuses.

16180 CIRCUIT BREAKERS

- A. Provide 10,000 ampere symmetrical interrupting capacity minimum, unless otherwise noted. All circuit breakers shall be a bolt-in type.
- B. The schedules in the drawings indicate the number of poles and ampere ratings for branch circuits to electrical devices. Provide the ratings as required with changes in equipment or circuit requirements.
- C. Circuit all feeder and branch circuits as shown in the drawings.
- D. Provide GFI circuit breakers as indicated in the drawings.

16190 SUPPORTING DEVICES

- A. Conduit: Utilize galvanized conduit straps where surface mounted and spring cups or hangers where suspended.
- B. Boxes: Utilize purpose made hangers as required where flush mounted.
- C. Allow for a minimum safety factor of five to one to support equipment loads. Plumbers tape and wire are not approved.

16450 GROUNDING

- A. Connect all non-current carrying electrical equipment, raceways, and enclosures to the service entrance ground bar.
- B. Provide grounding as required and shown in the drawings.
- C. Provide conductors where non-metallic conduit is utilized, to connect metallic non-current carrying equipment to the ground plane.

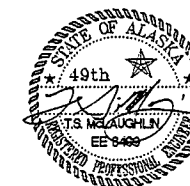
16471 PANELBOARDS

- A. Provide catalog cuts, device layouts and sizes for all panelboard equipment.
- B. Panelboards shall be sized and rated in accordance to the panel schedules in the drawings. The bus bars may be copper or aluminum. Provide with multiple lugs as required. Provide a neutral terminal bar. Provide a ground terminal bar if ground conductors are terminated in the panelboard. Brace for 10,000 symmetrical RMS amperes, unless otherwise noted.
- C. Size the enclosure to allow for adequate wire gutter space. The front shall be a single element with a lockable door. The front shall be removable only with the door open. A typed circuit directory shall be located inside the door. Provide keys. The interior assembly shall be deadfront with the front cover removed.
- D. Mount with the top of the enclosure at 72 inches above finished floor, unless otherwise noted. Install the panelboard interiors after the enclosure has been installed.
- E. Install circuit breakers in the order specified in the drawing panelboard schedules, unless approval otherwise is granted. Type the circuit directory with circuit descriptions as they are shown in the drawing panelboard schedules. The directory shall be configured identically with the circuit breaker configuration.

16865 HEAT CABLES

- A. Provide catalog cuts for heat cables equipment.
- B. Provide self regulating heat cables for hose bibs. Heat cables shall have a fluoropolymer outer jacket & shall be Raychem BBTV-CT or an approved equal.

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E-5

CITY OF CRAIG
SOUTH COVE HARBOR IMPROVEMENTS

Peratrovich, Nottingham & Drage, Inc.
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Project No: 95236

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Date: 7-NOV-95
Scale: GRAPHIC

ELECTRICAL SPECIFICATIONS

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