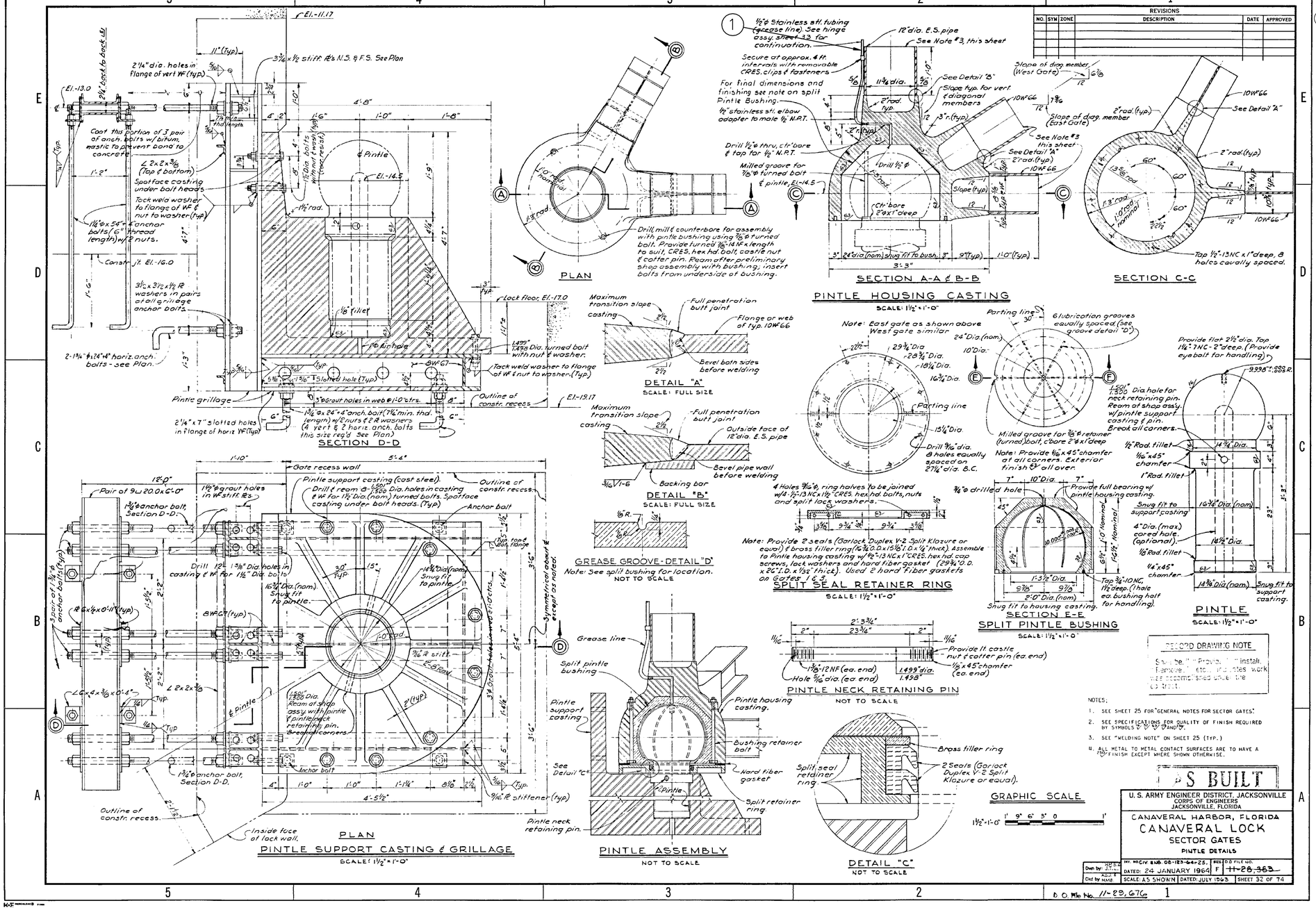


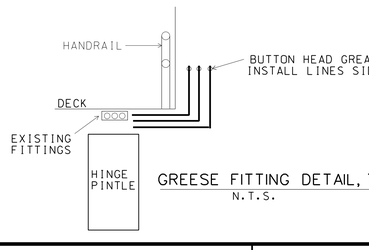
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

KEY NOTES:

(1) REPLACE EXISTING GREASE LINES AND FITTINGS. TWO OF THE LINES HAVE BEEN MODIFIED AND AS-BUILD DRAWINGS DO NOT DEPICT THEIR ACTUAL CONDITIONS. TERMINATE THE LINES AS SHOWN ON NEW SKECTH SHOWN ON THIS DRAWING. ANCHOR EXTENDED LINES TO HANDRAIL IN A POSITION CONVENIENT TO THE OPERATOR.

GENERAL NOTE:

1. PAINT ALL FERROUS SURFACES OF AND IN EACH GATE WITH SYSTEM NO. 6-A-Z.



GREESE FITTING DETAIL, TYP.
N.T.S.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: W.E.
Drawn by: M.R.
Checked by: M.R.
Traced by:
Dated: MAR 2003
Scale: AS SHOWN
Inv. No.

D.O. FILE NO. 90C-38,319

File name: CANLKRPXXXX0508.DGN
Reference files: CANLKRPXXXXBRDR.DGN
32-74EDITED.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
PINTLE DETAILS

DRAWING NO.
5/8

D.O. File No. 11-28,676

.../dms01903/canlkrpxxxx0508.dgn 05/04/2004 08:18:34 AM

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED
9	△		REVISED DIMENSIONS OF HINGE PIN, HINGE PIN KEEPER, HINGE CASTING, HINGE BRACKET CASTING AND DETAIL "A". ADDED NOTE 5. DELETED NOTE NO. 3 TO ACCOMP. MOD. TO CONTRACT DA-23-[illegible]	4-8-64	[illegible]

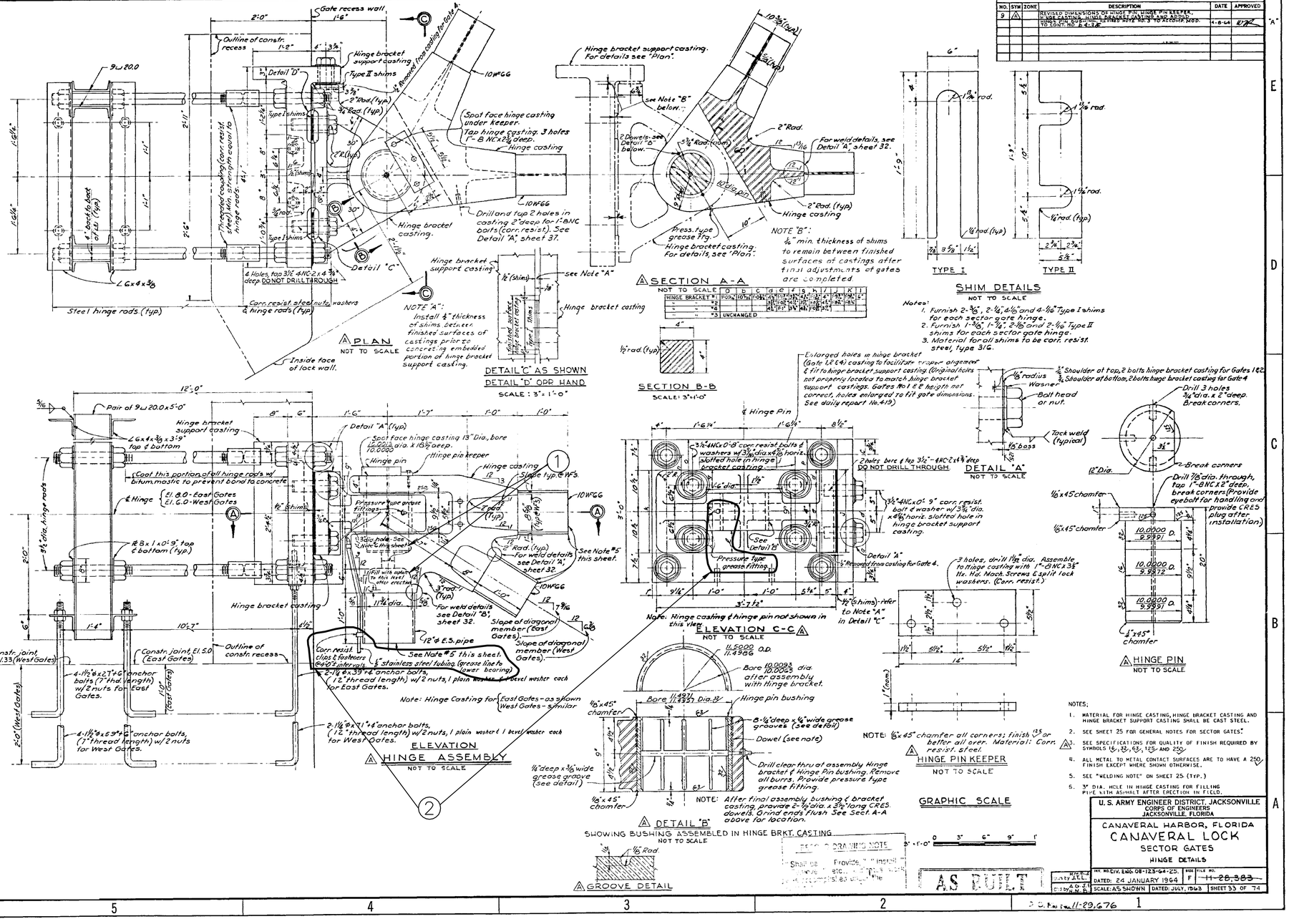
US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

KEY NOTE:

① FILL WITH ASPHALT AFTER INSTALLATION OF MANATEE PROTECTION SCREENS.

② REPLACE GREASE LINES AND FITTINGS. SEE KEY NOTE 1, DWG. 5/8



NOTES:
1. MATERIAL FOR HINGE CASTING, HINGE BRACKET CASTING AND HINGE BRACKET SUPPORT CASTING SHALL BE CAST STEEL.
2. SEE SHEET 25 FOR GENERAL NOTES FOR SECTOR GATES.
3. SEE SPECIFICATIONS FOR QUALITY OF FINISH REQUIRED BY SYMBOLS 16, 32, 63, 125 AND 250.
4. ALL METAL TO METAL CONTACT SURFACES ARE TO HAVE A 250 FINISH EXCEPT WHERE SHOWN OTHERWISE.
5. SEE "WELDING NOTE" ON SHEET 25 (TYP.)
6. 3" DIA. HOLE IN HINGE CASTING FOR FILLING PIPE WITH ASPHALT AFTER ERECTION IN FIELD.

GENERAL NOTE:

1. PAINT ALL FERROUS SURFACES OF AND IN EACH GATE WITH SYSTEM NO. 6-A-Z.

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
SECTOR GATES
HINGE DETAILS

INV. NO. DIV. ENG. 08-123-64-25. | BOX FILE NO. F 11-28,383
DATED: 24 JANUARY 1964
SCALE: AS SHOWN | DATED: JULY, 1963 | SHEET 33 OF 74

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Inv. No. | Scale: AS SHOWN | Dated: MAR 2003
Designed by: W.M.
Det. by: M.R.
Cad by: M.R.
File name: CANLKRPXXXX0509.DGN
Reference files: CANLKRPXXXXBRDR.DGN
33-74EDITED.TIF

D.O. FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
HINGE DETAILS

DRAWING NO.
5/9

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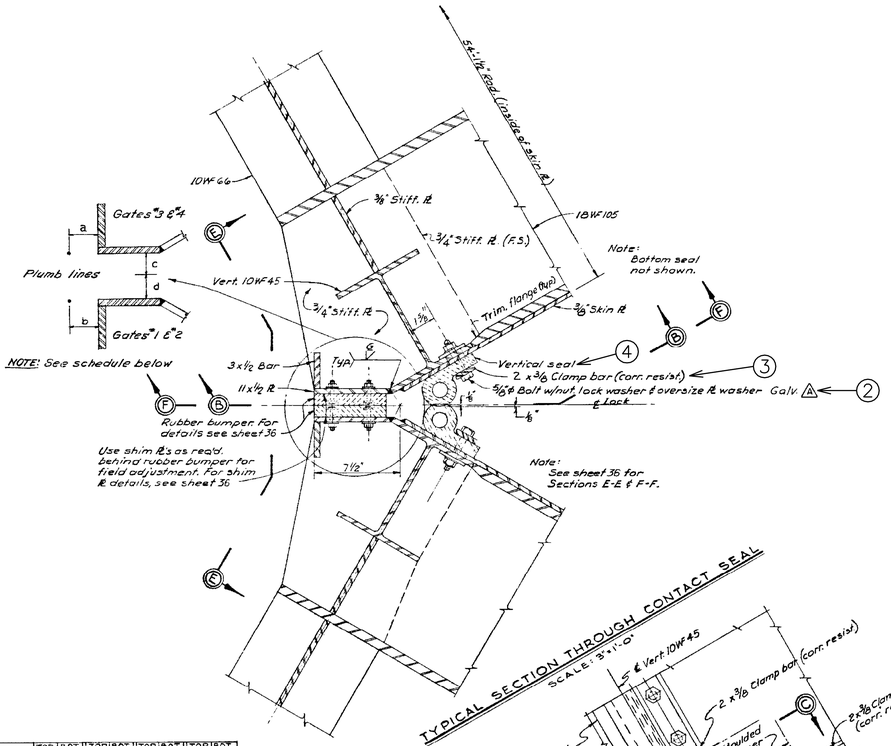
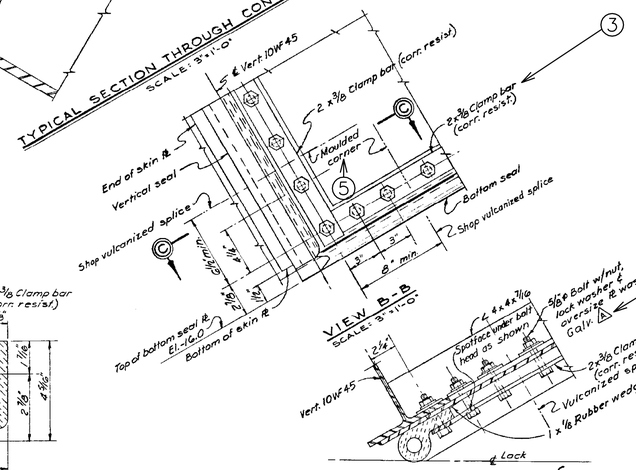
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED
4	△	3 2 D 1	UPDATED PER 1986 CONTRACT	22891	LBI

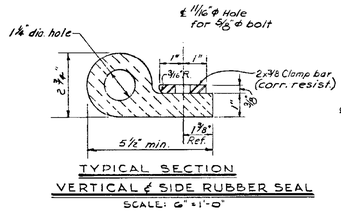
Note: Gate seal angle to be located as shown and bolted to skin pl in field after gates are completely assembled, adjusted, and set in closed position, with rubber bumpers in contact, and side seat compressed 1/8".



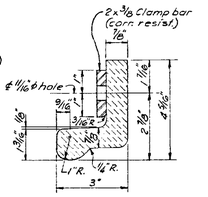
TYPICAL SECTION THROUGH CONTACT SEAL
SCALE: 3"=1'-0"



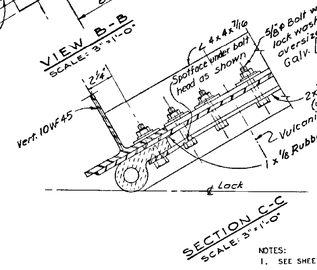
GATE No. 1	TOP "a"	BOT. "a"	TOP "b"	BOT. "b"	TOP "c"	BOT. "c"	TOP "d"	BOT. "d"
TOP BUMPER	X	X	1⅝"	1⅝"	X	X	2"	2⅛"
MIDDLE BUMPER	X	X	1⅝"	1⅝"	X	X	2¼"	2⅝"
BOTTOM BUMPER	X	X	2⅛"	2⅝"	X	X	2⅛"	2⅝"
GATE No. 3								
TOP BUMPER	1⅛"	1⅝"	X	X	1⅝"	1⅝"	X	X
MIDDLE BUMPER	1⅝"	1⅝"	X	X	⅞"	1⅝"	X	X
BOTTOM BUMPER	1⅝"	1⅝"	X	X	1⅛"	1⅛"	X	X

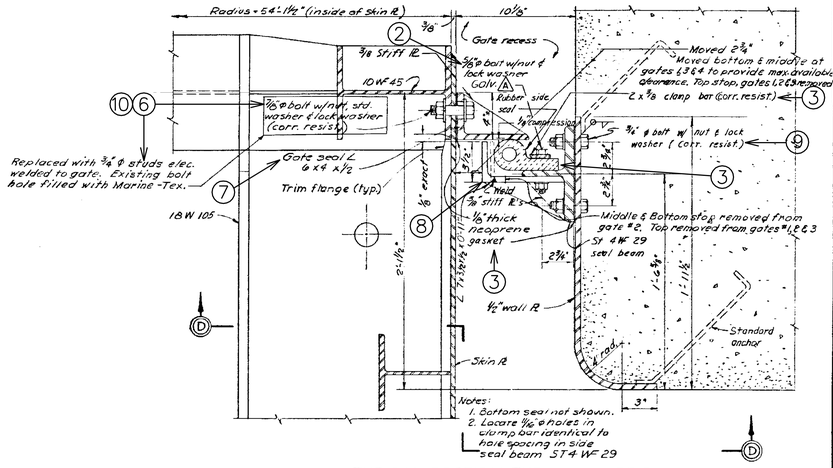


TYPICAL SECTION
VERTICAL & SIDE RUBBER SEAL
SCALE: 6"=1'-0"

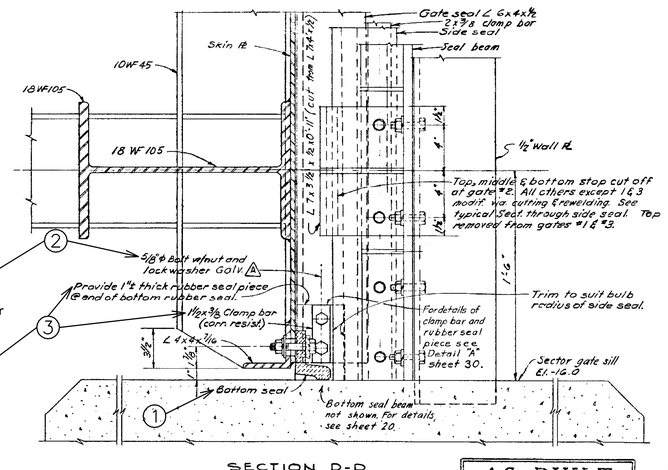


TYPICAL SECTION
BOTTOM RUBBER SEAL
SCALE: 6"=1'-0"





TYPICAL SECTION THROUGH SIDE SEAL
SCALE: 3"=1'-0"



SECTION D-D
SCALE: 3"=1'-0"

NOTES:
1. SEE SHEET 25 FOR "GENERAL NOTES FOR SECTOR GATES"
2. FOR PLAN OF BOTTOM SEAL SEE SHEET 25.
3. SEE SHEET 36 FOR SECTIONS E-E AND F-F.

RECOPD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., in notes work was accomplished under the contract.

GRAPHIC SCALES
3"=1'-0" 0 3" 6" 9" 1'
6"=1'-0" 0 3" 6"

AS BUILT
U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
SECTOR GATES
RUBBER SEALS

Drn by: JSC
Chd by: JDC
INV. NO. CIV. ENG. 08-123-66-25 | SIZE: F | FILE NO.: H-28,383
DATED: 24 JANUARY 1964
SCALE: AS SHOWN | DATED: JULY 1963 | SHEET 34 OF 74

U.S. Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

KEY NOTES:

1. REPLACE BOTTOM SEALS FOR EACH GATE; TEFLON CLADDING REQUIRED.
2. REPLACE FASTENERS WITH STAINLESS STEEL FASTENERS.
3. REUSE MATERIAL.
4. REPLACE VERTICAL SEALS FOR EACH GATE; TEFLON CLADDING NOT REQUIRED
5. REPLACE MOLDED CORNER SPLICED TO VERTICAL AND BOTTOM SEALS FOR EACH GATE; TEFLON CLADDING NOT REQUIRED
6. THE 7/8" DIAMETER STAINLESS STEEL FASTENERS USED TO FASTEN THE GATE SEAL ANGLE TO THE GATE WERE CHANGED TO 3/4" STUDS UNDER THE ORIGINAL CONTRACT.
7. REMOVE EACH GATE SEAL ANGLE, PAINT WITH SYSTEM NO. 6-A-Z, AND REINSTALL. PAINT SKIN PLATE WHILE SEAL ANGLES ARE REMOVED.
8. REMOVE EACH GATE SEAL BEAM, PAINT WITH SYSTEM NO. 6-A-Z, AND REINSTALL. PAINT WALL PLATES WHILE SEAL BEAMS ARE REMOVED.
9. REPLACE LOCK WASHERS AND NUTS WITH STAINLESS STEEL LOCK WASHERS AND NUTS.
10. REPLACE STAINLESS STEEL AND GALVANIZED LOCK WASHERS AND NUTS ON STUDS. USE STAINLESS STEEL LOCK WASHERS AND NUTS ON STAILESS STEEL STUDS AND GALVANIZED LOCK WASHERS AND NUTS ON GALVANIZED STUDS.

GENERAL NOTES:

1. A MANATEE DETECTION SYSTEM (NOT SHOWN) WAS ADDED TO THE GATES IN 1999. THE DETECTION SYSTEM WILL BE REMOVED AND REINSTALLED BY OTHERS DURING THE CONTRACT PERIOD.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M.R.
Drawn by: M.R.
Checked by: M.W.
Traced by:
Dated: MAR 2003
Rev. No.
Scale: AS SHOWN

File name: CANLKRPXXX0510.DGN
Reference files: CANLKRPXXX0BOR.DGN
34-74EDITED.TIF

D.O. FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
RUBBER SEALS

DRAWING NO.
5/10

No. | Symbol | Zone | Description | Approved

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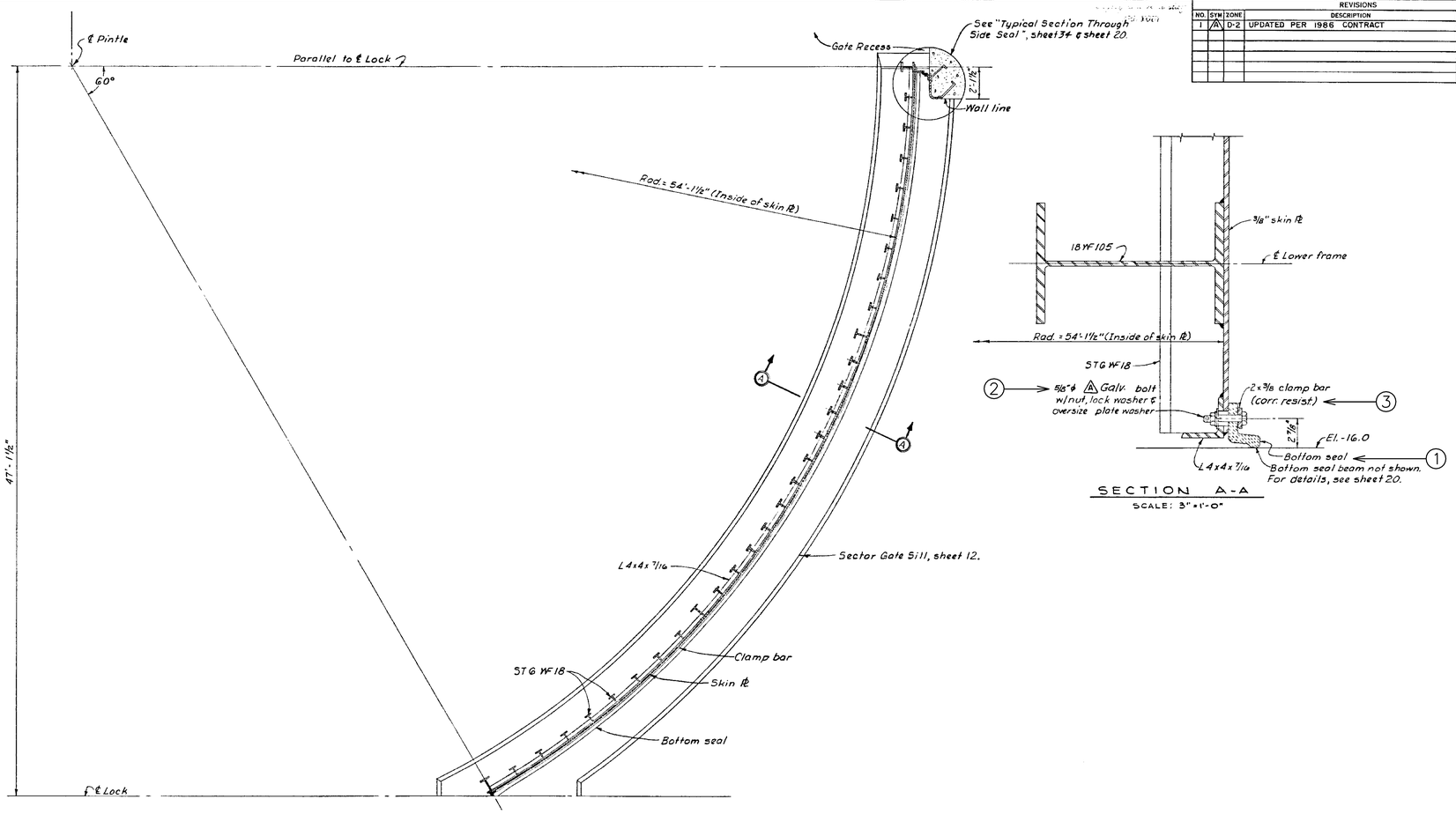

PLAN OF BOTTOM SEAL

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

SECTION A-A

SCALE: 3" = 1'-0"

NOTES:

1. SEE SHEET 25 FOR "GENERAL NOTES FOR SECTOR GATES."
2. SEE SHEET 34 FOR DETAILS OF BOTTOM SEAL.

RECORD DRAWING NOTE

"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

AS BUILT

GRAPHIC SCALES

3/8" = 1'-0" 2' 1' 0 2' 4' 6"

3" = 1'-0" 0 3" 6" 9" 1'

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
SECTOR GATES
PLAN OF BOTTOM SEAL

Dwn by J.T.L. & C.J.T. | Ckd by A.G.J. | INV. NO. CIV. ENG. 08-123-64-25. DATED: 24 JANUARY 1964 | SIZE F | D.O. FILE NO. ~~11-28,383~~ | SCALE: AS SHOWN | DATED: JULY 1963 | SHEET 35 OF 74

D.O. File No. 11-29,676

REVISIONS

NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED
1	A	D-2	UPDATED PER 1986 CONTRACT	2-28-91	LBT

KEY NOTES:

1. REPLACE BOTTOM SEALS FOR EACH GATE; TEFLON CLADDING REQUIRED.
2. REPLACE FASTENERS WITH STAINLESS STEEL FASTENERS.
3. REUSE MATERIAL.

US Army Corps of Engineers
Jacksonville District

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No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M.R. | Dwn by: M.R. | Ckd by: M.W. | Inv. No. | Scale: AS SHOWN

Dated: MAR 2003

D.O. FILE NO. 90C-38,319

File name: CANLKRPXXXX0511.DGN | Reference files: CANLKRPXXXXBRDR.DGN 35-74EDITED.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
PLAN OF BOTTOM SEAL

DRAWING NO.
5/11

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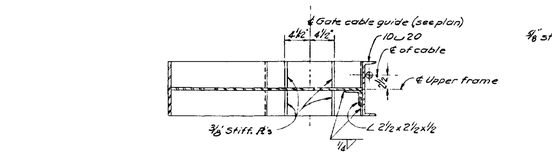
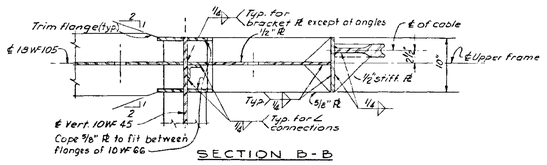
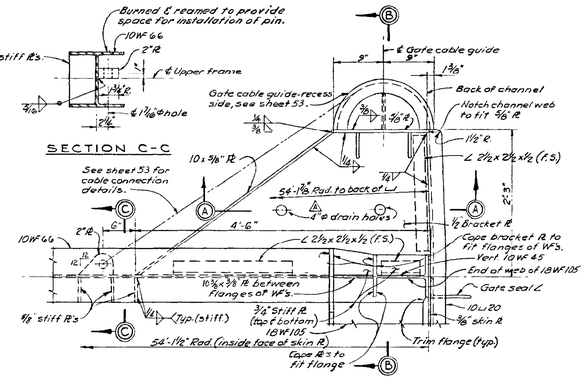


SECTION A-A



SECTION B-B

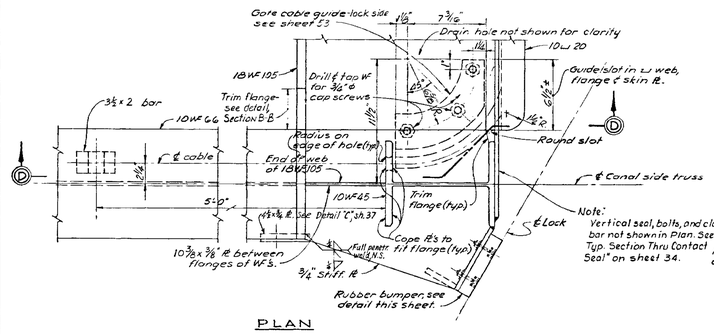


SECTION C-C

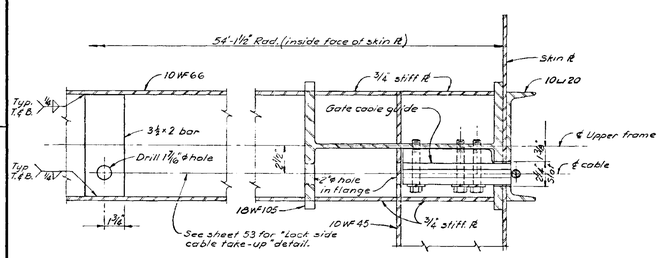
PLAN

CABLE CONNECTION – RECESS SIDE

SCALE: 1½" = 1'-0"



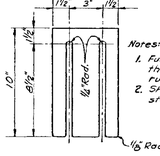
PLAN



SECTION D-D

CABLE CONNECTION – CANAL SIDE

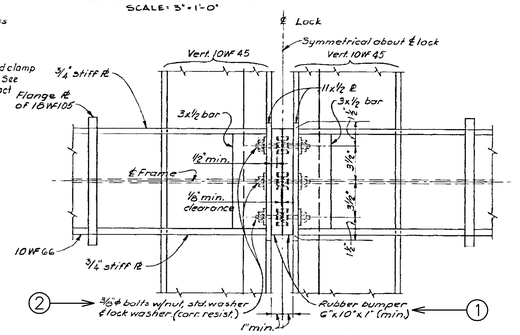
SCALE: 3" = 1'-0"



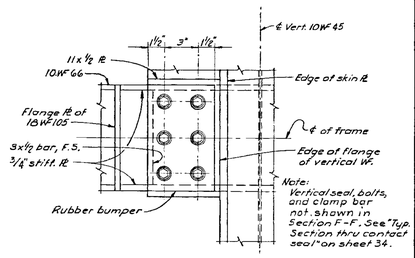
Notes:
1. Furnish 1-3/16", 1-1/4" & 2-1/16" thick shims for each rubber bumper.
2. Shims to be corr. resist. steel, type 316.

SHIM DETAILS FOR RUBBER BUMPER

SCALE: 3" = 1'-0"



SECTION E-E (SHEET 34)



SECTION F-F

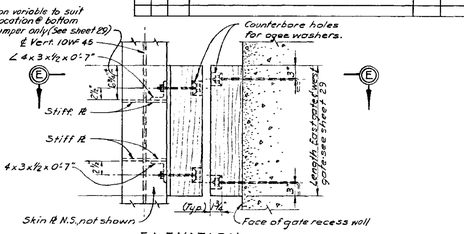
NOTES:
1. SEE SHEET 25 FOR "GENERAL NOTES FOR SECTOR GATES"

RUBBER BUMPER SUPPORT FRAMING

SCALE: 3" = 1'-0"

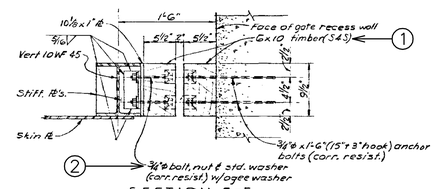
LOWER AND MIDDLE FRAME AS SHOWN
UPPER FRAME - SIMILAR

NOTES:
1. FOR LOCATION OF SECTIONS E-E AND F-F SEE SHEET 34.
2. FURNISH RUBBER BUMPER @ ℄ OF ALL HORIZONTAL FRAMES OF EACH SECTOR GATE.



ELEVATION

℄ Vertical frame - recess side of gate - gate open



SECTION E-E

RECESS BUMPER

NO SCALE

RECORD OF AWING NOTE

"Shall be" "Provide" "Install" "Remove" etc. indicates work to be accomplished under the contract

AS BUILT

GRAPHIC SCALES

1½"=1'-0" 0 3" 6" 9" 1'
3"=1'-0" 0 3" 6" 9"

Dwn by J.T.L.	Div. No. SV ENG. 08-123-64-25 DATED: 24 JANUARY 1964	SIZE F	FILE NO. 11-28,383
Ckd by A.G.J.	SCALE: AS SHOWN	DATED: JULY 1963	SHEET 36 OF 74

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
SECTOR GATES
CABLE CONNECTIONS AND RECESS BUMPER

O. D. File No: 11-29,676

KEY NOTES:

① REMOVE EACH BUMPER PRIOR TO PAINTING AND REINSTALL AFTER PAINTING.

② REPLACE STAINLESS STEEL FASTENERS WITH STAINLESS STEEL FASTENERS.

GENERAL NOTE:

1. PAINT ALL FERROUS SURFACES OF AND IN EACH GATE WITH SYSTEM NO. 6-A-Z.

NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED
1	A		REVISED SIDE AND BOTTOM PLATE IN CABLE CONNECTION - RECESS SIDE TO ACCOMPANY AMENDMENT NO. 1	2-4-64	

US Army Corps of Engineers
Jacksonville District

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
CABLE CONNECTIONS

DRAWING NO.
5/12

Prepared by M.R.	Inv. No.	
Dwn by M.R.	Ckd by M.W.	Scale: AS SHOWN
		Dated: MAR 2003

D.O. FILE NO. 90C-38,319

File name: CBLCNXRXXXS12.DGN
Reference files: CANLKRPXXXBRGR.DGN 36-14GF105.TIF

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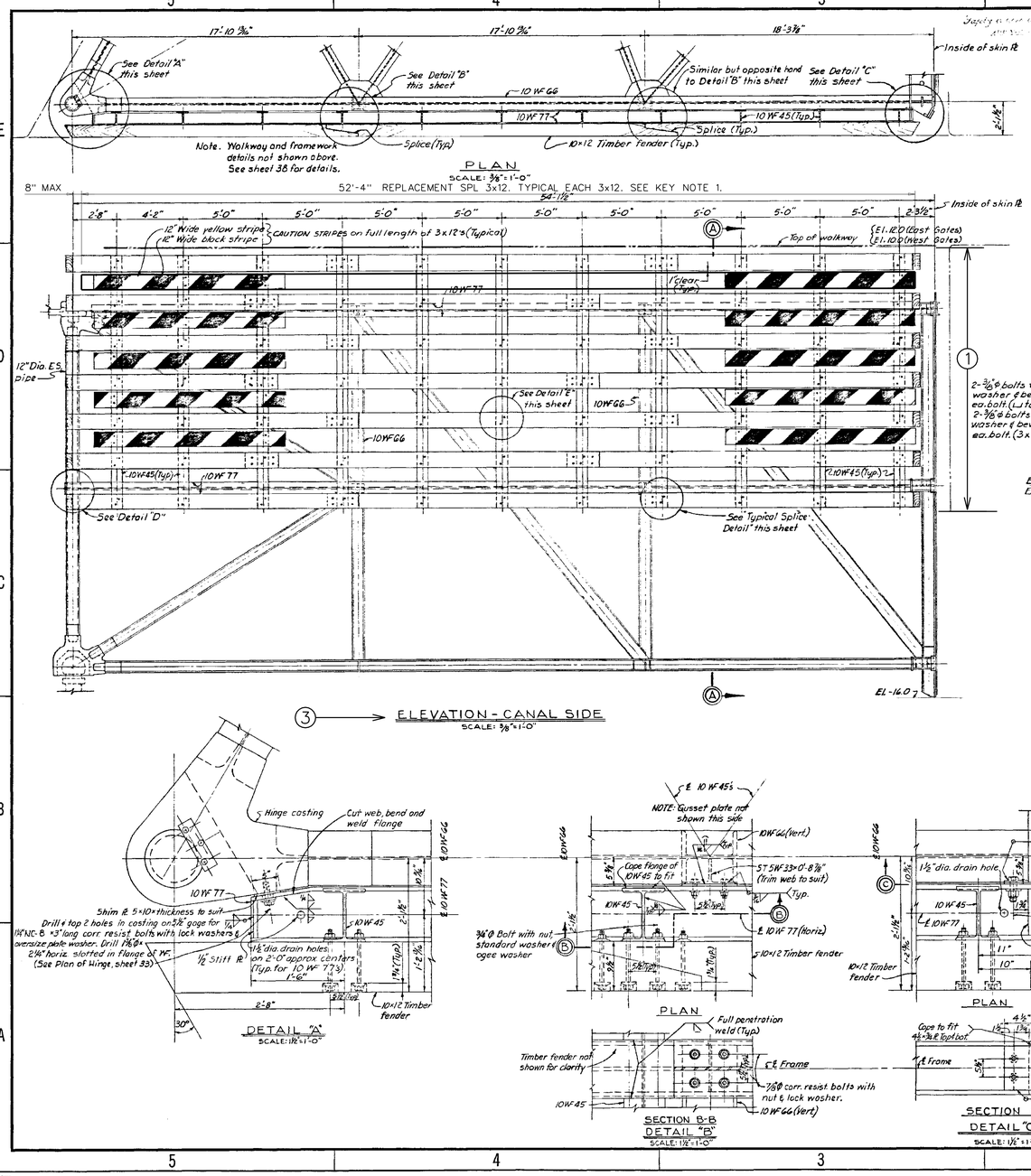

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

NOTES:

1. ALL FENDER TIMBER TO BE SYS.
2. ALL BOLTS, NUTS AND WASHERS TO BE GALVANIZED AFTER FABRICATION EXCEPT AS OTHERWISE NOTED.
3. SEE SHEET 25 FOR "GENERAL NOTES FOR SECTOR GATES".
4. MATERIAL FOR TIMBER FENDERS TO BE CREOSOTED PINE.

RECORD DRAWING NOTE

"Shall be" "Provide" "Install" "Remove" etc., indicates work accomplished under the contract

AS BUILT

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
SECTOR GATES
FENDERS

Drawn by J.T.L.	CONT. NO. CIV ENG. 08-123-64-25.	BID	CONT. NO.
Ckd by A.G.J.	DATED: 24 JANUARY 1964	F	11-28,383
	SCALE: AS SHOWN	DATED: JULY 1963	SHEET 37 OF 74

KEY NOTES:

(1) REMOVE TIMBER FENDERS AND 3x12S PRIOR TO PAINTING. REPLACE DOUBLE 3x12s WITH SINGLE SPL 3x12s (COLOR SAFETY YELLOW) AS INDICATED. RE-INSTALL REUSED TIMBER FENDERS AFTER PAINTING. SEE KEY NOTE 2 FOR FENDER REPLACEMENT. REPLACE FASTENERS WITH GALVANIZED BOLT ASSEMBLIES WITH NUT AND TWO STANDARD CUT WASHERS.

(2) REPLACE TIMBER FENDERS BETWEEN ELEVATIONS INDICATED WITH 10"x10" COMPOSITE MARINE FIBERGLASS REINFORCED PLASTIC FENDERS, WITH THE FOLLOWING MINIMUM PHYSICAL PROPERTIES:
SIZE: 10 IN X 10 IN; REINFORCEMENT: 4 - 1.0 INCH DIA BARS
STRAIGHTNESS: LESS THAN 1.5 INCH DEVIATION PER 10 FT
FLEXURAL STIFFNESS (EI): 2.39E8 LB-IN2
WEIGHT: 28-35 LB/FT
SPECIFIC GRAVITY: 0.67-0.82
COMPRESSIVE MODULUS: 143,900 PSI

(3) PAINT ALL FEROUS SURFACES WITH SYSTEM NO. 6-A-Z.

(4) PAINT CAUTION STRIPES.

GENERAL NOTE:

1. EXISTING MANATEE SCREENS NOT SHOWN. SEE DWG NO. 5/17, 5/18, AND 5/19.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
FENDERS

Designed by: M.W.	Rev. No.	Scale: AS SHOWN
Drawn by: M.R.	Ckd by: M.W.	
File name: CANLKRPXXX0513.DGN	Reference files: CANLKRPXXXBORDR.DGN 37-74DTED.TIF	Dated: MAR 2003

D.O. FILE NO. 90C-38,319

DRAWING NO.
5/13

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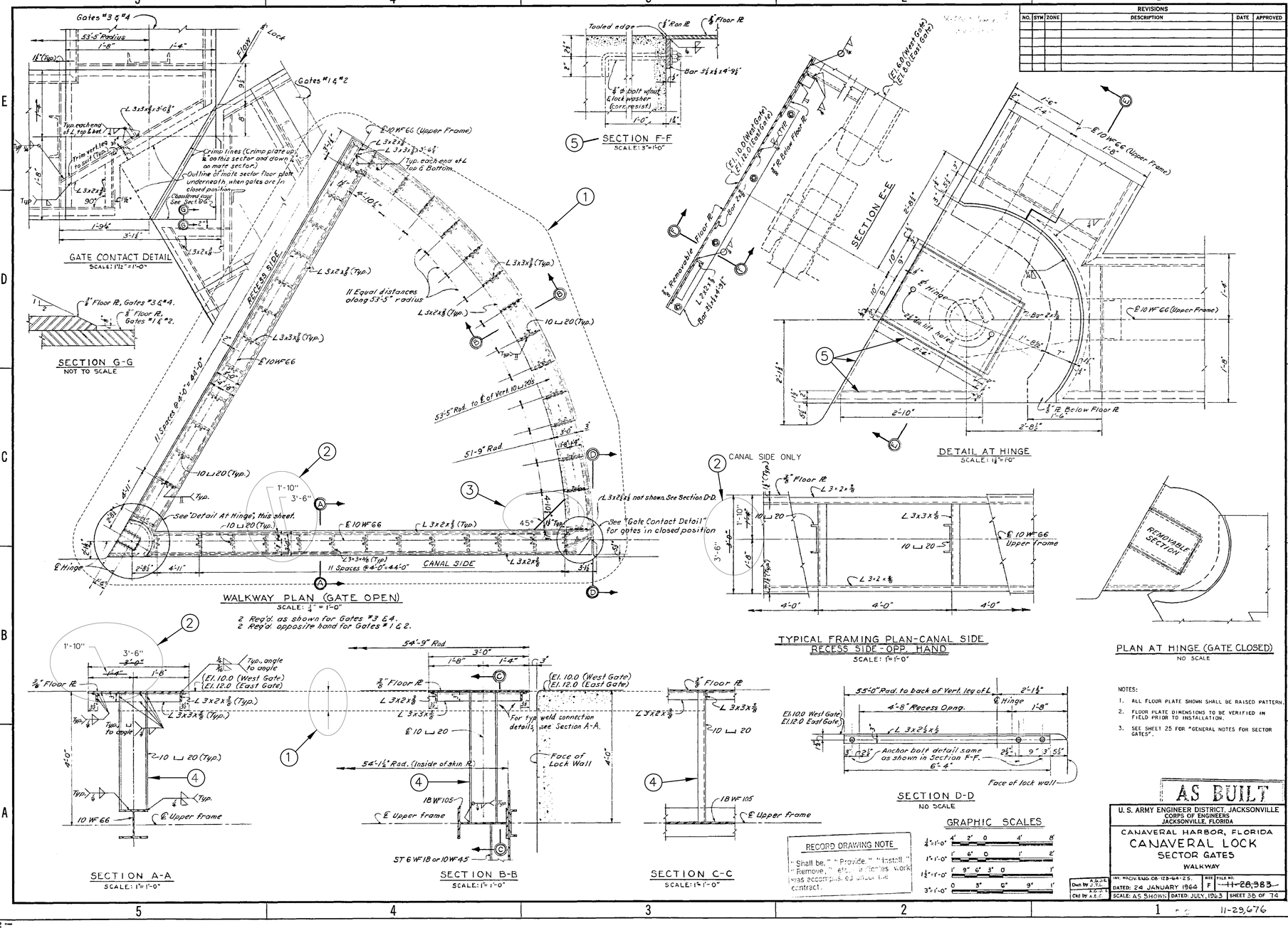

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

AS BUILT

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
SECTOR GATES
WALKWAY

Drawn by J.T.C. | Inv. No. CW-EMG-08-123-64-25 | Size F | File No. 11-28,383
Ckd by A.E.C. | DATED: 24 JANUARY 1964 | SCALE: AS SHOWN | DATED: JULY, 1963 | SHEET 38 OF 74

11-29,676

KEY NOTES:

(1) REMOVE UPPER 6" (MINIMUM) TO 12" (MAXIMUM) OF EXISTING WALKWAY. TOP OF REPLACEMENT WALKWAY TO MATCH TOP OF EXISTING WALKWAY.

(2) INCREASE "CANAL SIDE" SECTION OF WALKWAY BY 6" WITH RESPECT TO EXISTING WALKWAY.

(3) REPLACEMENT WALKWAY SHALL INCLUDE INCREASED CORNER WIDTH AS INDICATED.

(4) PAINT ALL FERROUS SURFACES OF REMAINING WALKWAY SUPPORTS WITH SYSTEMS NO. 6-A-Z, PRIOR TO WALKWAY INSTALLATION

(5) NEW WALKWAY DESIGN MAY REQUIRE INCREASED SUPPORT, INCLUDING KNEE BRACES, TO SATISFY DEFLECTION LIMITS OVER THE HINGE. MAINTAIN ACCESS HATCH.

GENERAL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF AN ALUMINUM REPLACEMENT WALKWAYS, WITH MODIFIED RE-USED HANDRAIL, FOR ALL GATES. THE WALKWAY SHALL BE DESIGNED AS A COMPLETE SYSTEM AND SHOULD EMPHASIZE SIMPLE, EFFICIENT INSTALLATION. FIELD WELDING, OTHER THAN TEMPORARY SPOT WELDING, IS NOT ALLOWED. ALUMINUM EXTRUSIONS SHALL BE IN ACCORDANCE WITH ASTM B 308, ALLOY 6061, TEMPER T6. FASTENERS SHALL BE STAINLESS STEEL, ASTM A 193 OR ASTM A 320, CLASS 2, GRADE B8 (AISC TYPE 304). THE DESIGN OF THE STRUCTURAL MEMBERS, CONNECTIONS, AND GRATING/PLATE SHALL BE IN ACCORDANCE WITH THE ALUMINUM DESIGN MANUAL (ADM), AND SUPPORT 150 PSF UNFACTORED VERTICAL LIVE LOAD APPLIED OVER ENTIRE SURFACE. LIMIT MAXIMUM DEFLECTION TO L/180, WHERE "L" IS THE UNSUPPORTED LENGTH IN INCHES. NEW RAILING MUST SUPPORT A CONCENTRATED 200-LB UNFACTORED LATERAL LIVE LOAD AT THE TOP RAIL. DECK PLATE SHALL BE NON-SKID. WALKWAY COLOR SHALL BE MILL FINISHED. THE CONTRACTOR SHALL SUBMIT THE COMPLETE DESIGN, INCLUDING COMPUTATIONS AND DRAWINGS, SEALED BY PROFESSIONAL ENGINEER, FOR INFORMATIONAL PURPOSES ONLY, PRIOR TO INSTALLATION. PAINT PER SPECIFICATIONS.

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CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
WALKWAY

DRAWING NO.
5/14

Designed by: W.E.B.
Drawn by: M.R.
Ckd by: M.W.
Inv. No.
Scale: AS SHOWN
Dated MAR 2003
D.O. FILE NO. 90C-38,319

File name: CANLKRPXXXX0534.DGN
Reference files: CANLKRPXXXXBRDR.DGN
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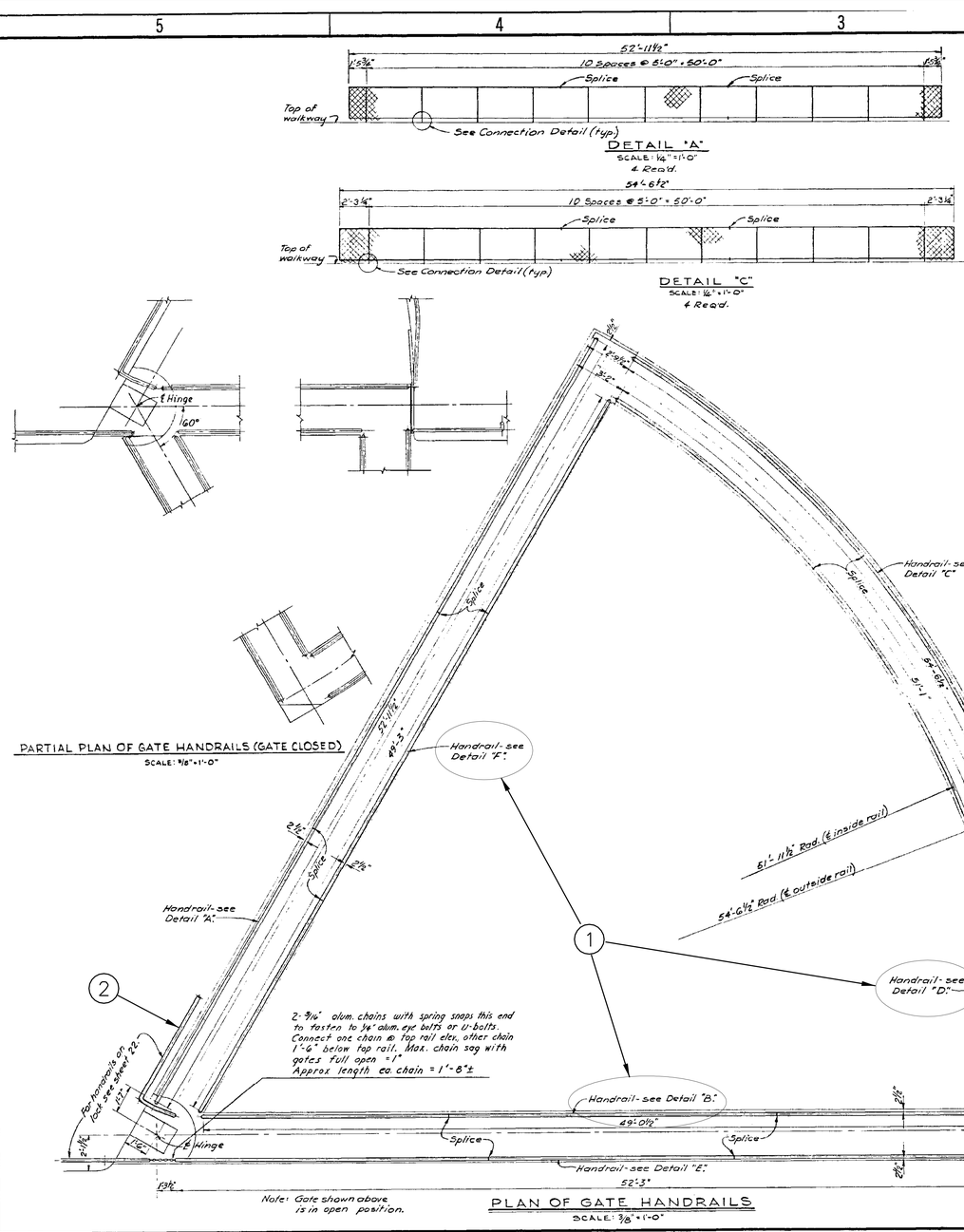

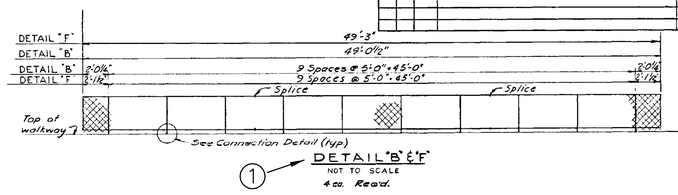

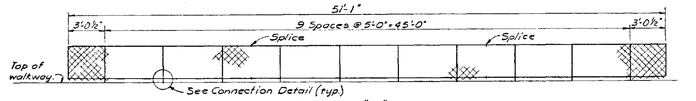

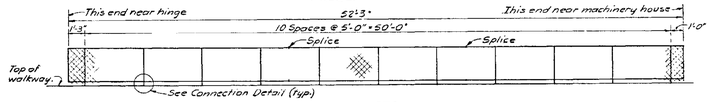

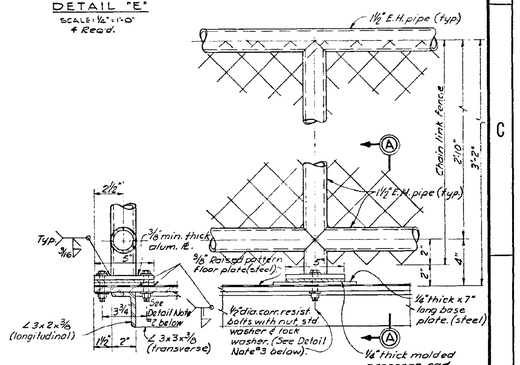

DETAIL NOTES:
1. FASTEN CHAIN LINK FENCE ON INSIDE OF HANDRAIL FRAME (FACING ℄ OF WALKWAY.)
2. WELD TO PROVIDE WATERTIGHT SEAL AROUND AND UNDER BASE PLATE.
3. ALL HOLES FOR BOLTS SHOWN ABOVE SHALL BE FIELD DRILLED TO AVOID INTERFERENCE WITH VERTICAL LEG OF WALKWAY SUPPORT TRANSVERSE ∠ 3x3x⅜.

NOTES:
1. SEE SHEET 25 FOR "GENERAL NOTES FOR SECTOR GATES"
2. SEE SHEET 22 FOR NOTES ON HANDRAIL AND CHAIN LINK FENCE.
3. SEE SHEET 23 FOR HANDRAIL SPLICE DETAIL.

RECORD DRAWING NOTE

"Shall be," "Provide," "Install" "Remove," etc., indicates work was accomplished under the contract.

GRAPHIC SCALES

1¼"=1'-0" 4' 2' 0 4' 8'
⅜"=1'-0" 2' 1' 0 2' 4' 6'
3"=1'-0" 0 3" 6" 9" 1'

AS BUILT

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
SECTOR GATES
WALKWAY HANDRAIL

Dwn by J.T.L.
Chd by A.G.I.
INV. NO. CIV.ENG.05-125-G4-25 | SIZE F | DWG. NO. 11-28,383
DATED: 24 JANUARY 1924
SCALE: AS SHOWN | DATED: JULY 1963 | SHEET 39 OF 74

D. O. FILE NO. ---------- 1 ... 11-29,676

KEY NOTES:
(1) ADJUST HANDRAIL DETAIL "B", "D", AND "F" TO ACCOMODATE NEW WALKWAY WIDTH. SEE HANDRAIL SPLICE DETAIL DWG NO 4/7.
(2) ADJUST EXISTING HANDRAIL TO SUIT ENTRANCE(S) TO GATE WALKWAY. SEE DWG NO 4/6.
(3) ADJUST HANDRAIL CONNECTION TO WALKWAY TO SUIT NEW WALKWAY DESIGN. ELIMINATE NEOPRENE PAD FROM CONNECTION DESIGN.

GENERAL NOTES:
1. RE-USE EXISTING GATE HANDRAIL SYSTEM, EXCEPT AS NOTED.

REVISIONS

NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

THIS SHEET is the Safety of this job depends on it

US Army Corps of Engineers
Jacksonville District

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No. | Symbol | Zone | Description | Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M.R.
Drawn by: M.R.
Chkd by: M.W.
Inv. No.
Scale: AS SHOWN
Dated: MAR 2003
D.O.FILE NO. 90C-38,319

File name: CANLKRPXXX0516.DGN
Reference files: CANLKRPXXXBORDER.DGN
39-74EDITED.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
WALKWAY HANDRAIL

DRAWING NO.
5/16

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SAFETY ON THIS JOB DEPENDS ON YOU

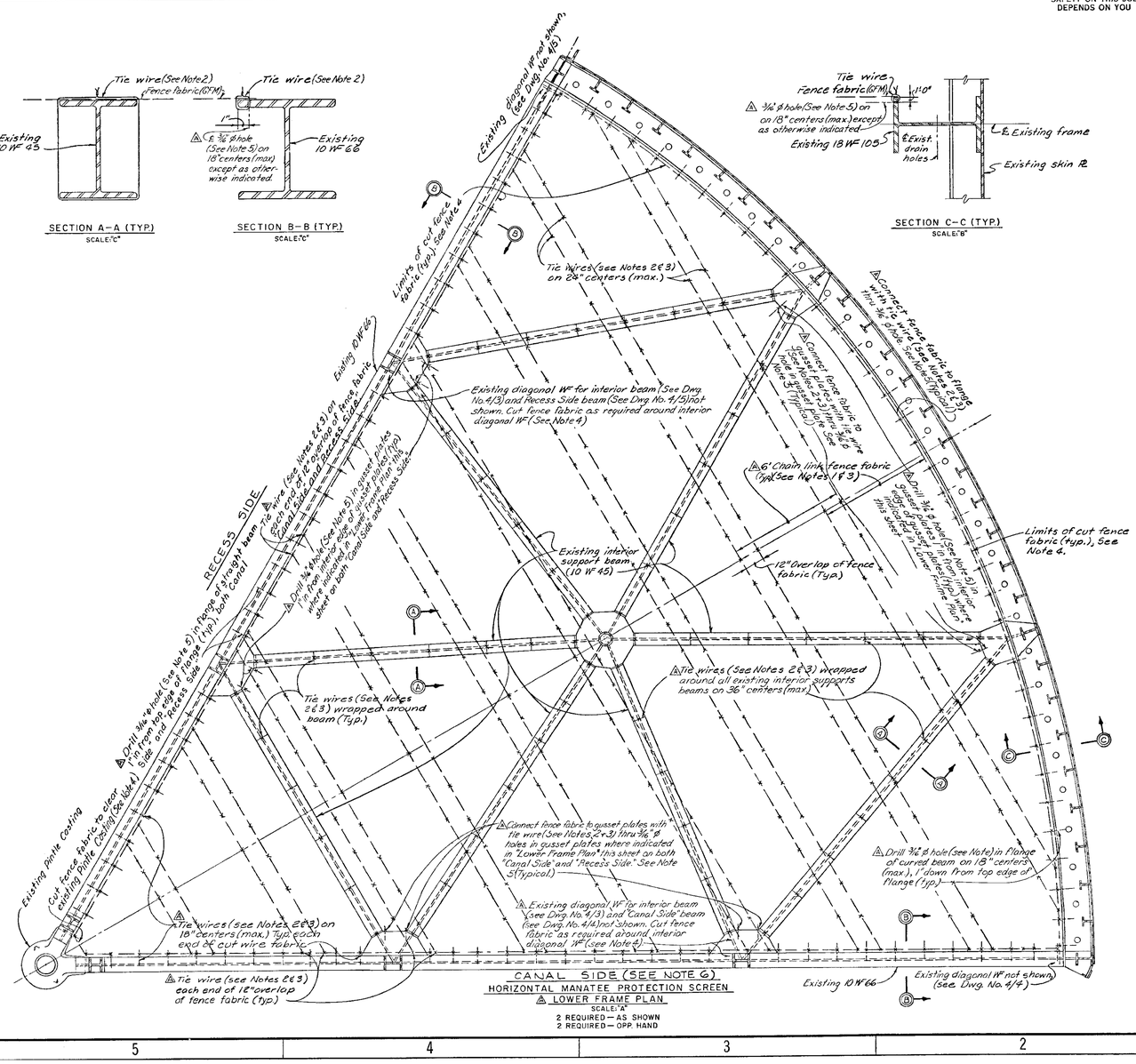
REVISIONS				
NO.	SYM	ZONE	DESCRIPTION	DATE APPROVED
21	△	–	REVISED TO ACCOMPANY AMENDMENT NO. 0002	12-6-85 WEM

△ MANATEE PROTECTION SCREEN NOTES:

1. 6' VINYL CHAIN LINK FENCE FABRIC (GFM) WILL BE 2"x2" MESH 9 GAGE. SEE SPECIFICATIONS.
2. TIE WIRES (GFM) WILL BE 11 GAGE STAINLESS STEEL WIRES.
3. CHAIN LINK FENCE FABRIC AND TIE WIRES ARE GOVERNMENT FURNISHED MATERIAL (GFM). SEE SPECIFICATIONS.
4. CUT ALL EDGES OF FENCE FABRIC TO LIMITS INDICATED IN PLAN. USE MECHANICAL CUTTING TOOL – NO FLAME CUTTING PERMITTED. BEND WIRE FABRIC INTO KNUCKLED SELVAGE WHEREVER FENCE FABRIC IS CUT.
5. △ HOLES FOR TIE WIRES AND OTHER BOLTED FASTENERS USED TO INSTALL MANATEE PROTECTION SCREENS AS SHOWN IN DETAILS ON DWG. NOS. 9/2 AND 9/3 SHALL BE DRILLED IN SECTOR GATE BEAMS AND FENDER SYSTEM HORIZONTAL AND VERTICAL SUPPORT BEAMS PRIOR TO SANDBLASTING AND PAINTING EACH OF THESE 4 SECTOR GATES.
6. △ FOR MANATEE PROTECTION SCREEN "CANAL SIDE GATE ELEVATION", SEE DWG. NO. 9/2.
7. △ ALL NEW STRUCTURAL STEEL BARS, NEW ANGLES AND NEW BOLTED FASTENERS (BOLTS, NUTS AND WASHERS) SHOWN IN MANATEE PROTECTION SCREEN ELEVATIONS. SECTIONS AND DETAILS ON DWG. NOS. 9/2 AND 9/3 SHALL BE GALVANIZED AFTER FABRICATION. SEE NOTE 8 BELOW.
8. △ WHERE GALVANIZED ITEMS LOSE THEIR COATING DUE TO FIELD WELDING OR CHIPPING, GALVANIZING REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE SPECIFICATIONS.

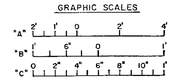
KEY NOTE:

(1) THESE NOTES ARE FOR AS-BUILT INFORMATION ONLY; THEY ARE NOT REQUIREMENTS FOR THIS CONTRACT.



CANAL SIDE (SEE NOTE 6)
HORIZONTAL MANATEE PROTECTION SCREEN
△ LOWER FRAME PLAN
SCALE: "A"
2 REQUIRED – AS SHOWN
2 REQUIRED – OPP. HAND

GRAPHIC SCALES



GENERAL NOTE:

1. NO MANATEE PROTECTION SCREENS ARE CURRENTLY INSTALLED HORIZONTALLY AT FRAMES.

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CANAVERAL HARBOR, FLORIDA		
SANDBLASTING, PAINTING AND GATE REPAIRS, CANAVERAL LOCK		
MISCELLANEOUS REPAIRS		
MANATEE PROTECTION SCREENS LOWER FRAME PLAN		
DESIGN BY: J.T.L. E.E.B.	DRAWN BY: JMED	TRACED BY:
CHK. BY:	SUBMITTED:	SIZE: F
DWG. NO: 9/1		
SCALE: AS SHOWN	DATED: SEPT. 1985	SHEET 55

D. O. FILE NO. 11-34,644

US Army Corps of Engineers
Jacksonville District

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No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
MANATEE PROTECTION SCREENS
LOWER FRAME PLAN

Designed by: J.T.L.	Drawn by: JMED	Checked by: M.R.	Traced by:	Inv. No.	Scale: AS SHOWN
File name: CANLKRPXXXX0517.DGN	Reference files: CANLKRPXXXXBRDR.DGN 55-74EDITED.TIF			Dated: MAR 2003	D.O. FILE NO. 90C-38,319

DRAWING NO.
5/17

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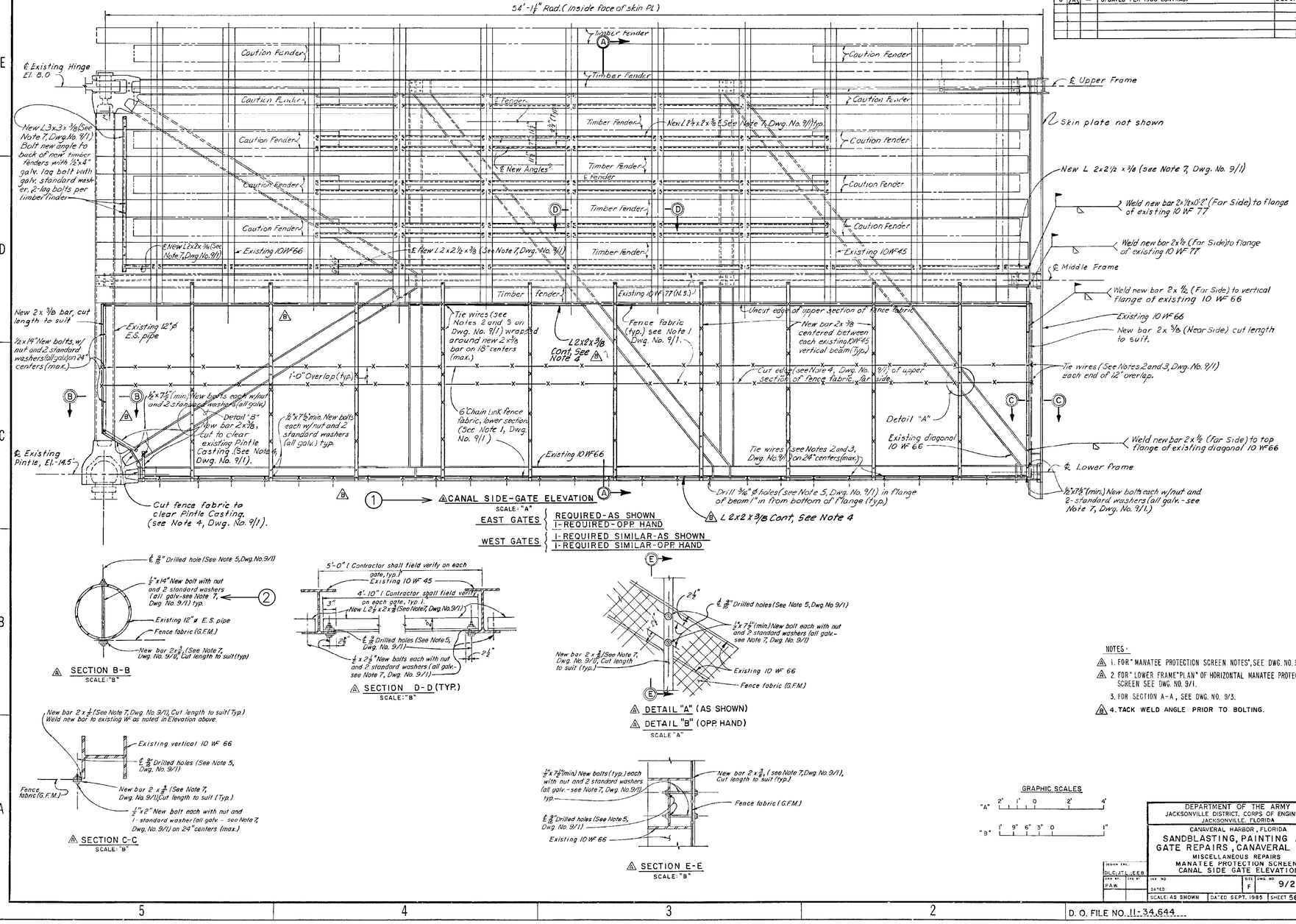
REVISIONS					
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED
9	A	—	REVISED TO ACCOMPANY AMENDMENT NO. 0002.	12-6-85	
6	A	—	UPDATED PER 1986 CONTRACT	2-28-91	D.L.C



① ⚠ CANAL SIDE-GATE ELEVATION
SCALE: "A"

EAST GATES { REQUIRED-AS SHOWN; 1-REQUIRED-OPP HAND }
WEST GATES { 1-REQUIRED SIMILAR-AS SHOWN; 1-REQUIRED SIMILAR-OPP HAND }

⚠ SECTION B-B
SCALE: "B"

⚠ SECTION D-D (TYP.)
SCALE: "B"

⚠ DETAIL "A" (AS SHOWN)
⚠ DETAIL "B" (OPP. HAND)
SCALE "A"

⚠ SECTION C-C
SCALE: "B"

⚠ SECTION E-E
SCALE: "B"

NOTES:
⚠ 1. FOR "MANATEE PROTECTION SCREEN NOTES", SEE DWG. NO. 9/1
⚠ 2. FOR "LOWER FRAME" PLAN" OF HORIZONTAL MANATEE PROTECTION SCREEN SEE DWG. NO. 9/1.
3. FOR SECTION A-A, SEE DWG. NO. 9/3.
⚠ 4. TACK WELD ANGLE PRIOR TO BOLTING.

GRAPHIC SCALES
"A" 2' 1' 0 2' 4'
"B" 1' 9" 6" 3" 0 1'

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CANAVERAL HARBOR, FLORIDA
SANDBLASTING, PAINTING AND GATE REPAIRS, CANAVERAL LOCK
MISCELLANEOUS REPAIRS
MANATEE PROTECTION SCREENS
CANAL SIDE GATE ELEVATION ⚠

DESIGN ENG: DLC/JTL/EEB		INV. NO	SITE F / DWG. NO 9/2
DRN BY: P.A.W.	CKD BY	DATED:	
		SCALE: AS SHOWN	DATED SEPT. 1985 / SHEET 56

D. O. FILE NO. 11-34,644

KEY NOTES:

(1) REMOVE AND DISPOSE OF EXISTING MANATEE PROTECTION SCREENS (FASTENERS, BARS, ANGLES, TIE WIRES, AND FENCE FABRIC) PRIOR TO PAINTING. GRIND OFF WELD MATERIAL THAT REMAINS AFTER REMOVAL OF MANATEE PROTECTION SCREENS.

(2) REPLACE BOLT ASSEMBLY AFTER PAINTING TO PREVENT WATER INTRUSION.

GENERAL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF A REPLACEMENT MANATEE SCREEN SYSTEM BETWEEN THE MIDDLE AND LOWER FRAME OF EACH GATE. WITH RESPECT TO THE EXISTING SYSTEM, SUPPORT BARS AND FASTENERS SHALL BE STAINLESS STEEL. SCREEN MATERIAL SHALL BE 6"x6", 11-GAUGE WELDED WIRE FABRIC, GALVANIZED AFTER WELDING, WITH A 9-GAUGE PVC COATING. THE SYSTEM SHALL INCLUDE A REMOVABLE SECTION FOR PERSONNEL ACCESS FROM THE CONCRETE FLOOR, MINIMUM DIMENSIONS 3'x4'. THE CONTRACTOR SHALL SUBMIT THE SCREEN SYSTEM DESIGN, FOR GOVERNMENT APPROVAL, PRIOR TO INSTALLATION.

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JACKSONVILLE, FLORIDA

Approved | Description | No. | Symbol | Zone

Inv. No. | Scale: AS SHOWN | Dated MAR 2003 | D.O. FILE NO. 90C-38,319

Designed by: J.T.L. | Cal. by: M.W. | Drawn by: M.R.

File name: CANLKRPXXXX0538.DGN
Reference files: CANLKRPXXXXBRDR.DGN
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CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
MANATEE PROTECTION SCREENS
CANAL SIDE ELEVATION

DRAWING NO.
5/18

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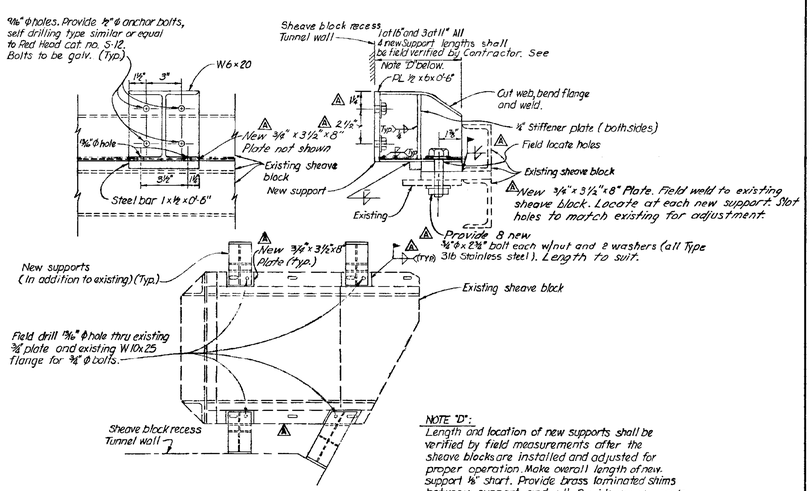
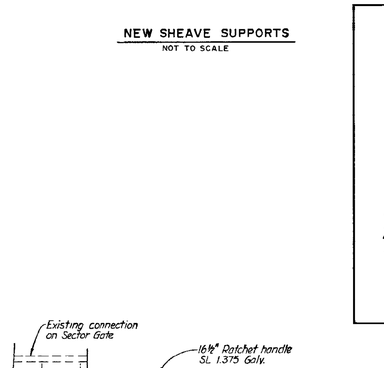
REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED
17	A	–	REVISED TO ACCOMPANY AMENDMENT NO. 0002.	12-6-85	[illegible]
4	B	C-3, D-3, E-3	UPDATED PER 1986 CONTRACT	2-28-91	DLC

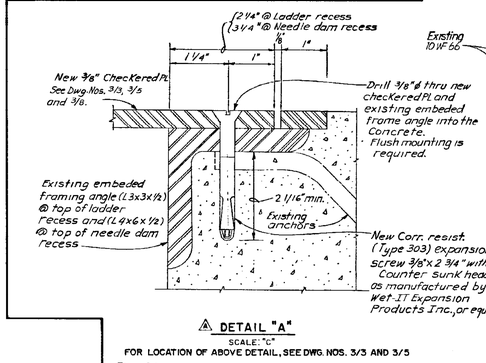


NEW SHEAVE SUPPORTS
NOT TO SCALE

NOTE "D":
Length and location of new supports shall be verified by field measurements after the sheave blocks are installed and adjusted for proper operation. Make overall length of new support 1/8" short. Provide brass laminated shims between support and wall. Provide new supports for all four sheave blocks.

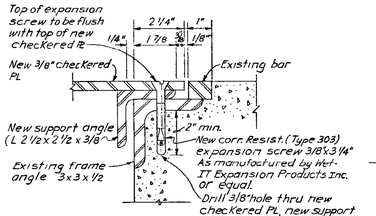


NEW CABLE TAKE-UP
NOT TO SCALE



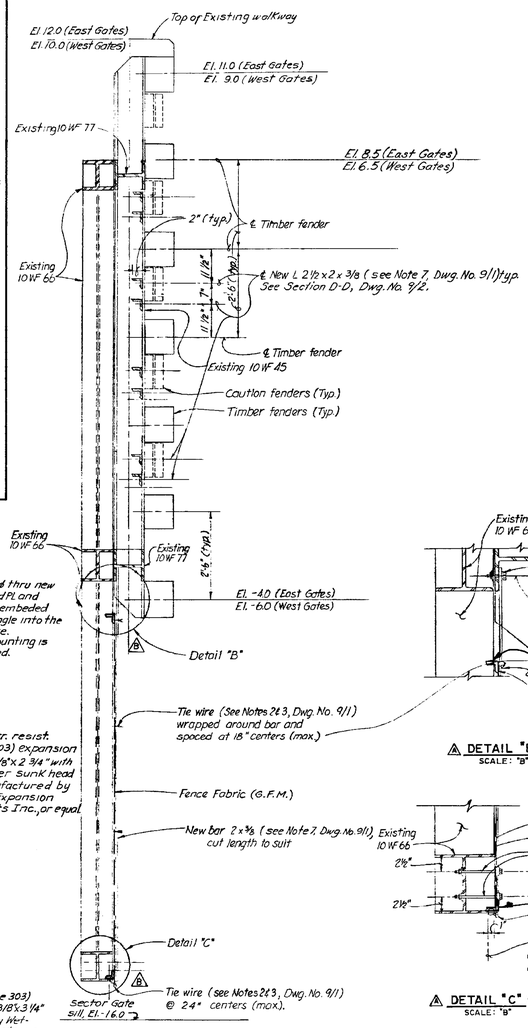
DETAIL "A"
SCALE: "C"

FOR LOCATION OF ABOVE DETAIL, SEE DWG NOS. 3/3 AND 3/5

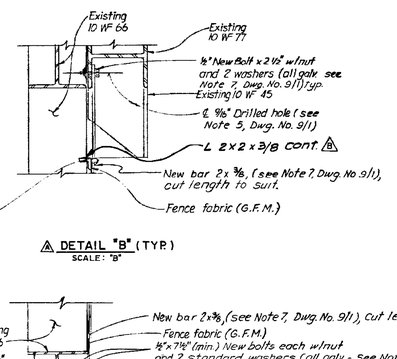


DETAIL "D"
SCALE: "D"

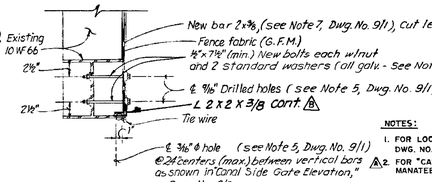
FOR LOCATION OF ABOVE DETAIL, SEE DWG. NO. 3/8



SECTION A-A
SCALE: "A"



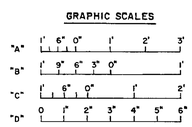
DETAIL "B" (TYP.)
SCALE: "B"



DETAIL "C" (TYP.)
SCALE: "B"

NOTES:
1. FOR LOCATION OF SECTION A-A, SEE DWG. NO. 9/2.
2. FOR "CANAL SIDE GATE ELEVATION" OF MANATEE PROTECTION SCREEN, SEE DWG. NO. 9/2.
3. FOR "MANATEE PROTECTION SCREEN NOTES", SEE DWG. NO. 9/1.
4. FOR "LOWER FRAME PLAN" OF HORIZONTAL MANATEE PROTECTION SCREEN, SEE DWG. NO. 9/1.

GRAPHIC SCALES



DESIGNED BY:	DRAWN BY:	CHECKED BY:
JTL, DLC, EEB		

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
SANDBLASTING, PAINTING AND GATE REPAIRS, CANAVERAL LOCK
MISCELLANEOUS REPAIRS
MANATEE PROTECTION SCREEN DETAILS AND MISCELLANEOUS REPAIRS

INV. NO.	SIZE	DWG. NO.
	F	9/3
DATED:		
SCALE: AS SHOWN	DATED: SEPT. 1985	SHEET 57

D. O. FILE NO. 11-34,644

GENERAL NOTES:

1. REPLACE MANATEE PROTECTION SCREENS (FASTENERS, BARS, ANGLES, TIE WIRES, AND FENCE FABRIC) AS NOTED ON DWG NO 5/18.

US Army Corps of Engineers
Jacksonville District

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No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

File name:	Designed by:	Inv. No.
CANLKRPXXXXDSN.DGN	W. R.	
Reference files:	Drawn by:	Scale: AS SHOWN
CANLKRPXXXXBRDR.DGN	M.R.	
STATEEDITED.TIF	Checked by:	Dated: MAR 2003

D.O. FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
SECTOR GATES
MANATEE PROTECTION SCREENS
DETAILS

DRAWING NO.
5/19

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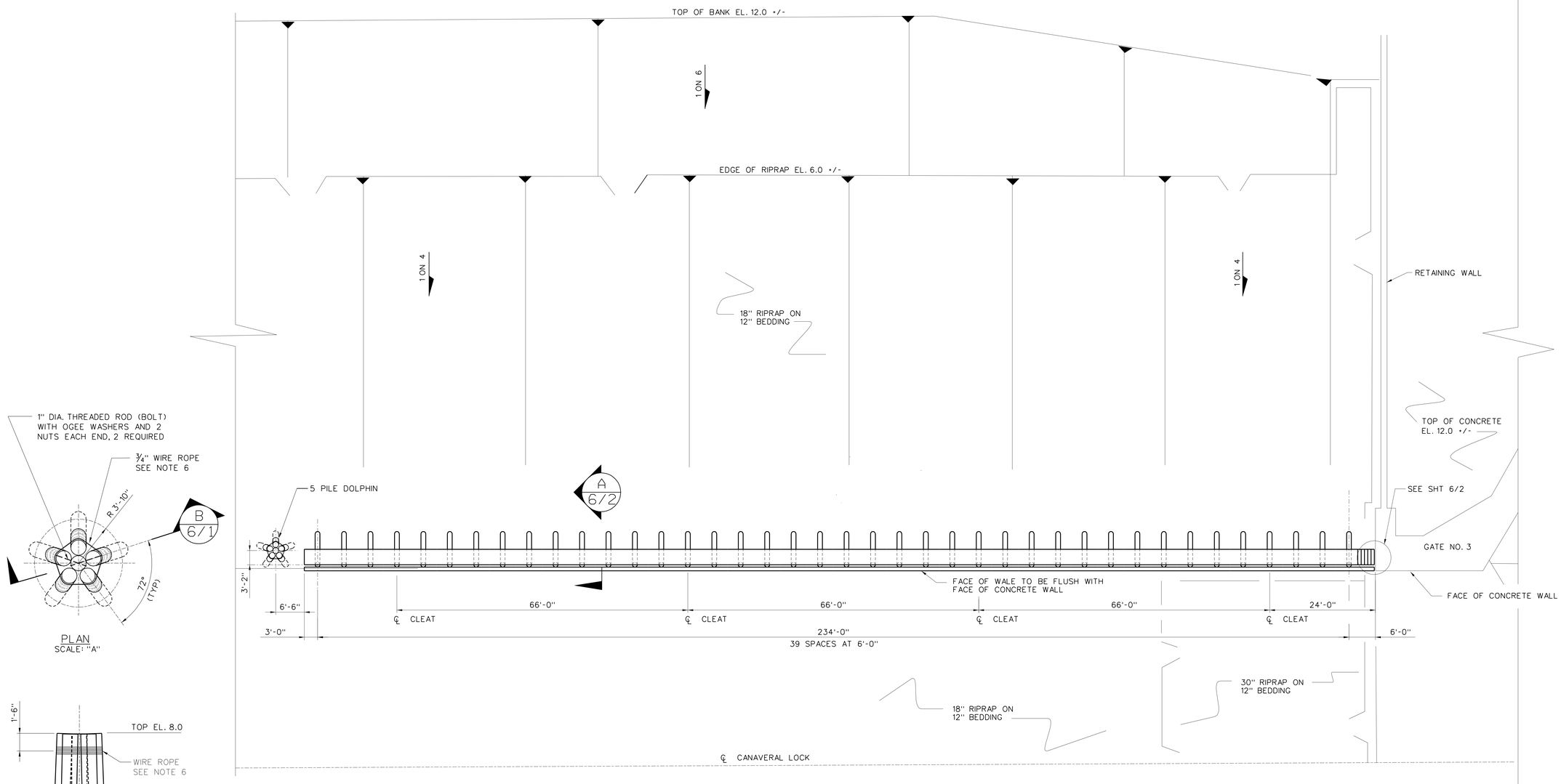
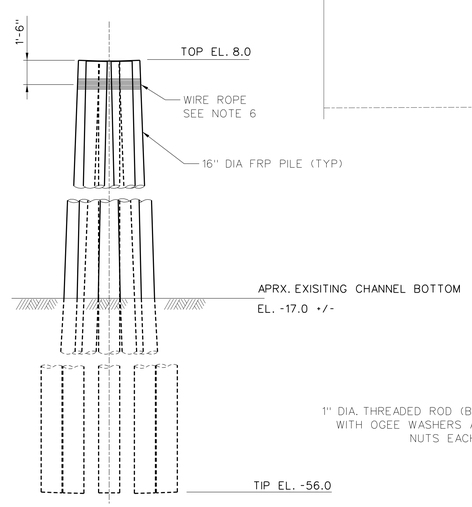
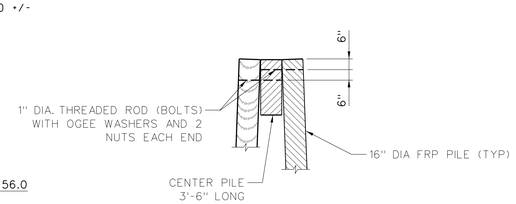


PARTIAL PLAN AT CHAMBER WALL
SCALE: 1" = 10'

PLAN
SCALE: "A"



ELEVATION
SCALE: "A"



SECTION B 6/1
SCALE: "A"

5-PILE DOLPHIN

DOLPHIN NOTES:

1. INSTALL PILES VERTICALLY TO DEPTH BEFORE BINDING THEM TOGETHER.
2. INSTALL PILES A MINIMUM OF 2.5 DIAMETERS APART AND A MAXIMIM OF 3.0 DIAMETERS APART.
3. WIRE ROPE SHALL BE ¾", 6X7 IWRC, DRAWN GALVANIZED IN ACCORDANCE WITH ASTM A 1023A.
4. STEEL STAPLES SHALL BE 0.38 INCH DIA.,
5. GALVANIZED, NOT LESS THAN 5 INCHES IN LENGTH.
6. CLIPS OR CLAMPS SHALL BE GALVANIZED STEEL.
BIND TOP OF PILES WITH 10 TURNS OF WIRE ROPE.
FASTEN EACH TURN OF THE WIRE ROPE WITH A STAPLE TO EACH PILE WITH WHICH IT IS IN CONTACT.
FASTEN ENDS OF WIRE ROPE WITH TWO CLIPS OR CLAMPS.

GENERAL NOTES:

1. GUIDEWALL SHALL INCLUDE COMPOSITE MARINE FIBERGLASS REINFORCED PLASTIC (FRP) PILING, COMPOSITE MARINE FRP FENDERS, AND STRUCTURAL PLASTIC LUMBER (SPL) WALKWAY AND HANDRAIL.
2. CONTRACTOR TO DEVELOP AND INSTALL CLOSURE RAILING AT END OF GUIDEWALL.
3. DURING CONSTRUCTION, PREVENT DEBRIS FROM ENTERING WATERWAY BY FLOATING BOOM, NETTING, OR OTHER MEANS.

GRAPHIC SCALE
SCALE: A 12" 0 4' 8'

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

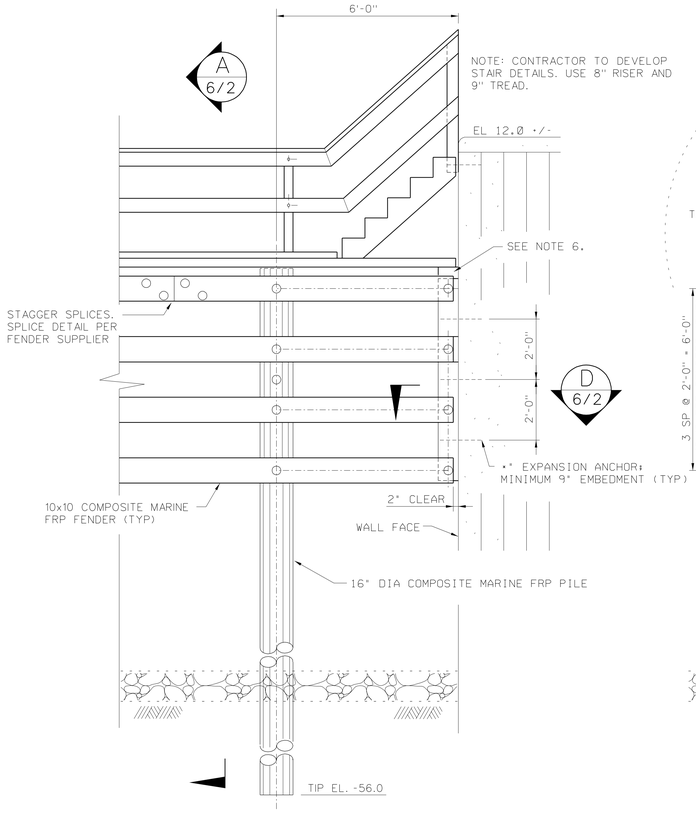
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M.W.W.
Dwn by: M.W.W.
Ckd by:
Inv. No.
Scale:
Dated: MAR 2003
D.O. FILE NO. 90C-38,319
File name: CANLKRPXXXX0601.DGN
Reference files: CANLKRPXXXXBRDR.DGN

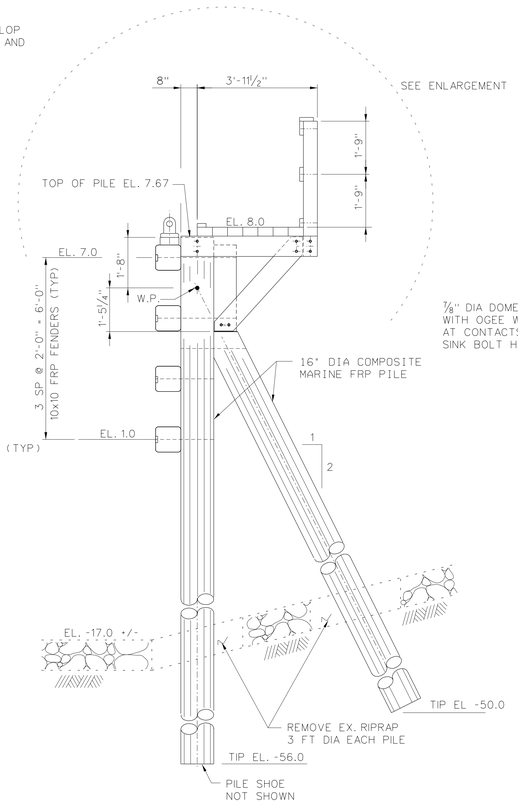
CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MISCELLANEOUS
CHAMBER WALL PARTIAL PLAN

DRAWING NO.
6/1

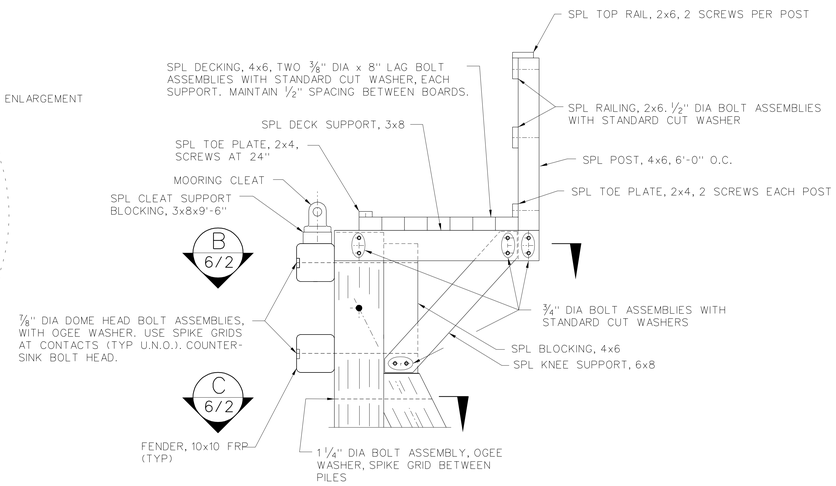
.../dms01903/canlkrpxxxx0601.dgn 05/04/2004 09:29:06 AM

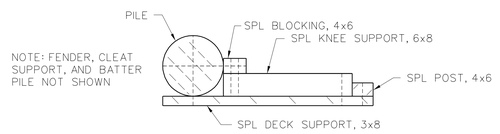


ELEVATION AT CONCRETE WALL
SCALE: "A"

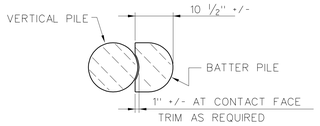


A 6/2 SECTION (TYP)
SCALE: "A"

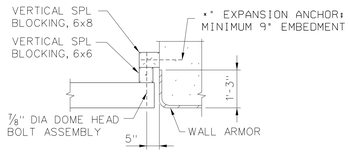




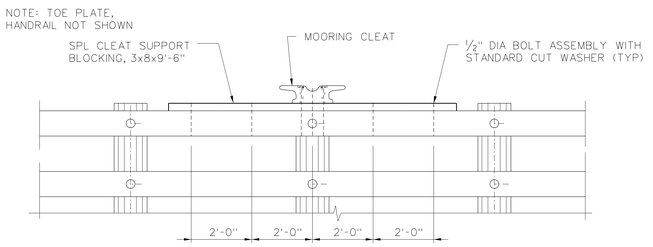
B 6/2 SECTION
SCALE: "B"



C 6/2 SECTION
NTS



D 6/2 SECTION (TYP)
SCALE: "A"



ELEVATION AT CLEAT
SCALE: "A"

GENERAL NOTES

1. USE MINIMUM 60 FT WALE LENGTH, EXCEPT AS REQUIRED TO ESTABLISH SPLICE STAGGER.
2. COMPOSITE MARINE FIBERGLASS REINFORCED PLASTIC (FRP) PILES SHALL HAVE THE FOLLOWING MINUMUM PHYSICAL PROPERTIES:
   - DIAMETER: 16 IN; REINFORCEMENT: 16 - 1.5 INCH DIA BARS
   - STRAIGHTNESS: LESS THAN 1.5 INCH DEVIATION PER 10 FT
   - FLEXURAL STIFFNESS (EI): 3.69E9 LB-IN2
   - SPECIFIC GRAVITY: 0.78 - 0.96
   - COMPRESSIVE MODULUS: 409,500 PSI
3. COMPOSITE MARINE FIBERGLASS REINFORCED PLASTIC (FRP) FENDERS SHALL HAVE THE FOLLOWING MINUMUM PHYSICAL PROPERTIES:
   - SIZE: 10 IN X 10 IN; REINFORCEMENT: 4 - 1.5 INCH DIA BARS
   - STRAIGHTNESS: LESS THAN 1.5 INCH DEVIATION PER 10 FT
   - FLEXURAL STIFFNESS (EI): 4.05E8 LB-IN2
   - WEIGHT: 30-37 LB/FT
   - SPECIFIC GRAVITY: 0.71-0.87
   - COMPRESSIVE MODULUS: 241,400 PSI
4. EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT II TYPE EXPANSION ANCHORS, SST 304, OR EQUAL.
5. CLEATS SHALL BE STANDARD CONFIGURATION MOORING CLEATS, HEAVY DUTY, CAST ALUMINUM (ALLOY 535.2), MINIMUM LENGTH 24", SECURED WITH TWO ½" DIA STAINLESS STEEL BOLT ASSEMBLIES.
6. PROVIDE HORIZONTAL SPL BLOCKING, 6x8, TO SUPPORT DECKING AT CONCRETE WALL. SECURE BLOCKING TO WALL WITH THREE ½" DIA EXPANSION ANCHORS, MIN 9" EMBED.

SCALE "A" : ½" = 1'-0"
SCALE "B" : ¾" = 1'-0"

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M.M.W.
Drawn by: M.M.W.
Chkd by:
Scale:
Inv. No.
Dated MAR 2003
D.O.FILE NO. 90C-38,319

File name: CANLKRPXXXX0602.DGN
Reference files: CANLKRPXXXXBR08.DGN

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MISCELLANEOUS
CHAMBER WALL, SECTIONS, AND DETAILS

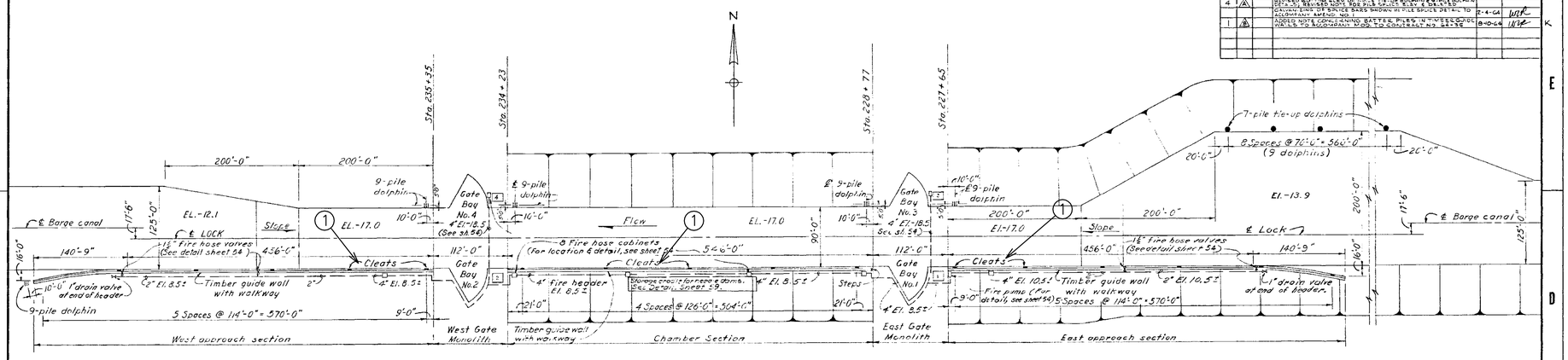
DRAWING NO.
6/2

.../dms01903/canlkrpxxxx0602.dgn 05/04/2004 09:29:12 AM

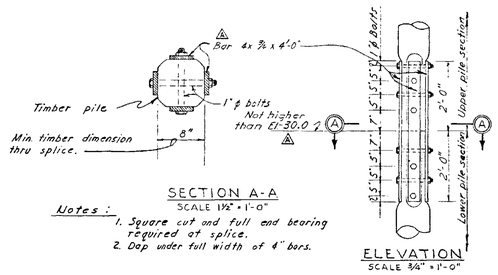
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
4	A		REVISED BOTTOM ELEV. OF SHEET PILING & PILE SPLICE IN SECT. A-A, REVISED NOTE FOR PILE SPLICE ELEV. & DETAILS		
3	A		GALVANIZING OF SPLICE BARS SHOWN IN PILE SPLICE DETAIL TO ADJOINING AMEND. NO. 1	2-4-64	
1	A		ADDED NOTE CONCERNING BATTER PILES IN TYPES OF DOLPHINS TO AGREEMENT NO. 64-38	8-10-64	

KEY NOTE:

(1) REMOVE AND PAINT EACH CLEAT WITH SYSTEM NO. 21-A-Z. THEN PAINT SAME CLEATS YELLOW. REINSTALL WITH SAME FASTENERS.



KEY PLAN
SCALE 1" = 60'

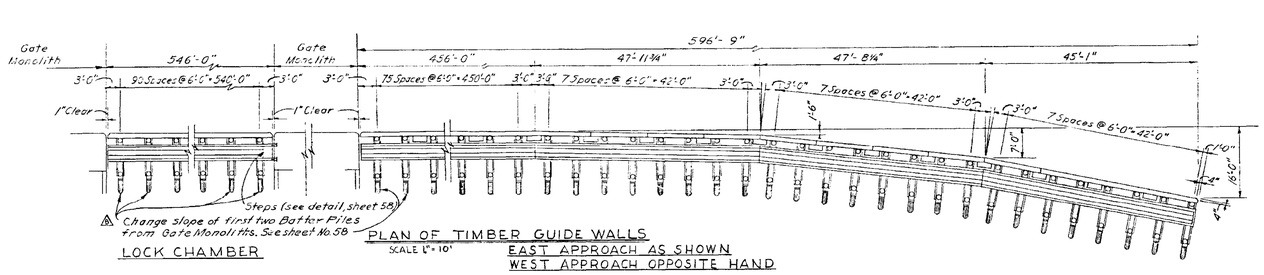


SECTION A-A
SCALE 1½" = 1'-0"

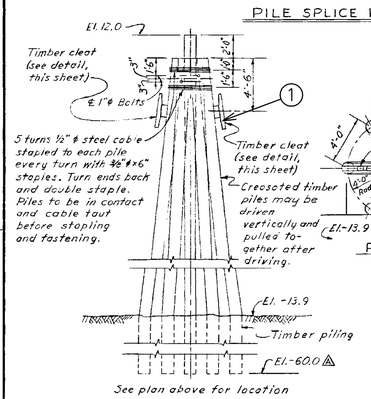
Notes:
1. Square cut and full end bearing required at splice.
2. Dap under full width of 4" bars.

ELEVATION
SCALE ¾" = 1'-0"

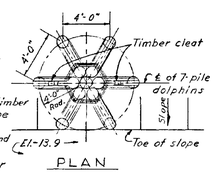
PILE SPLICE DETAIL



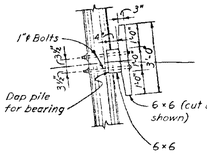
PLAN OF TIMBER GUIDE WALLS
SCALE 1" = 10'
LOCK CHAMBER
EAST APPROACH AS SHOWN
WEST APPROACH OPPOSITE HAND



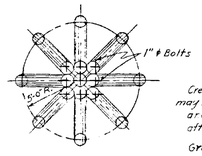
See plan above for location
ELEVATION
7- PILE TIE-UP DOLPHIN
SCALE ¼" = 1'-0"
9 - Required



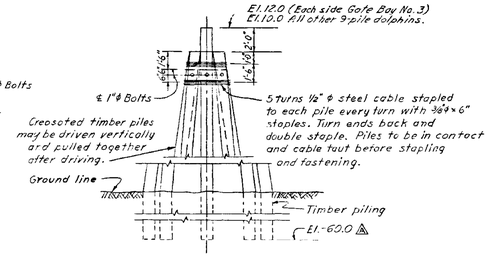
PLAN



DETAIL OF TIMBER CLEAT
SCALE ½" = 1'-0"



PLAN



See plan above for location.
ELEVATION
9-PILE DOLPHIN
SCALE ¼" = 1'-0"
5 Required

Dolphin notes:
1. All bolts, nuts, washers, staples and wire rope to be galvanized.
2. All bolts to have Ogee washers under heads and nuts except at pile splice.
3. In addition to treatment required by note No. 1 sheet 58, all dolphin pile heads to be capped with 3 lb/sq ft. sheet lead, formed in field and fastened to side of pile with 5d galv. nails at 2" centers around edge.
4. Timber piles may be spliced at the option of the contractor. See Splice detail above.

NOTES:
1. FOR GENERAL NOTES COVERING GUIDE WALLS AND DOLPHINS SEE SHEET NO. 58.
2. FOR DETAILS OF GUIDE WALLS SEE SHEET NO. 58.
3. RIPRAP AND BEDDING NOT SHOWN ON THIS SHEET. SEE SHEET 10 FOR DETAILS.

RECORD DRAWING NOTE
"Shall be," "Provide," "Install," "Remove," etc., implies work was accomplished under the contract.

AS BUILT

GRAPHIC SCALES
1/4" = 1'-0" 4' 2' 0 4' 8'
1/2" = 1'-0" 2' 1' 0 1' 2' 3' 4'
3/4" = 1'-0" 3' 2' 1' 0 1' 2' 3'
1 1/2" = 1'-0" 2' 1' 0 1' 2'
1" = 10' 10' 0 10' 20'
1" = 60' 60' 30' 0 60' 120'

DWN. BY	M.R.S.
CKD. BY	R.E.W. A.G.H.

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE CORPS OF ENGINEERS JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
MISCELLANEOUS
GUIDE WALLS AND DOLPHINS-LAYOUT AND DETAILS

INVITATION NO. CIVENG 05-12-64-25		SIZE	FILE NO.
DATED: 24 JANUARY 1964		F	~~11-28,363~~
SCALE: AS SHOWN	DATED: JULY 1963	SHEET 57 OF 74	

D.O. File No. 11-28,676

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M.R.	Cad by: M.R.	Inv. No.	
Drawn by: M.R.		Scale: AS SHOWN	
File name: CANLKRPXXXX0604.DGN		Dated: MAR 2003	D.O. FILE NO. 90C-38,319
Reference files: CANLKRPXXXXBRDR.DGN 57-74EDITED.TIF			

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MISCELLANEOUS
GUIDE WALLS AND DOLPHINS

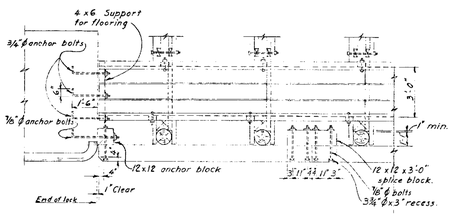
DRAWING NO.
6/4

.../dms01903/canlkrpxxxx0604.dgn 05/04/2004 10:03:47 AM

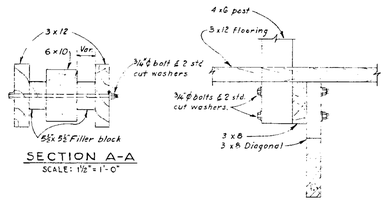
REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED BOTTOM ELEV. OF 4th GUIDE WALL PILING TO ACCOMPANY ANGLE WALL	2-4-64	[illegible]
1	A		CHANGE IN THE SLOPE OF 8 BATTER PILES IN THE TIMBER GUIDE WALL ON RIGHT LOCK WALL TO CONFORM W/ CONTRACT NO. 64-15-1.	8-10-64	[illegible]

KEY NOTES:

1. PAINTING ENTIRE CLEAT WITH SYSTEM NO. 21-A-Z. THEN PAINT HORNS YELLOW.
2. REFILL RECESS WITH BITUMEN.
3. PAINT 3" YELLOW CAUTION MARKING ON TOP OF EACH 2 X 12 TREAD. PAINT YELLOW CAUTION MARKING ON END VERTICAL FACE OF EACH 2 X 12 TREAD.

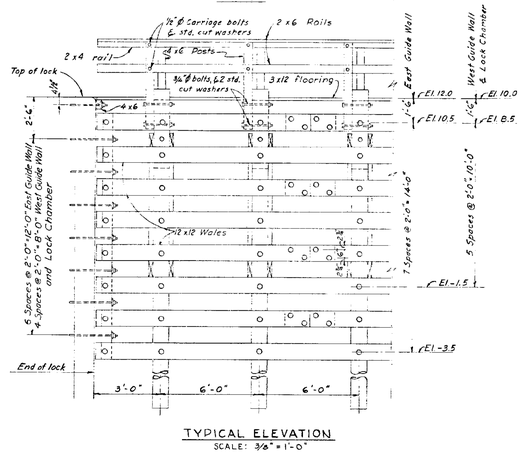


PLAN

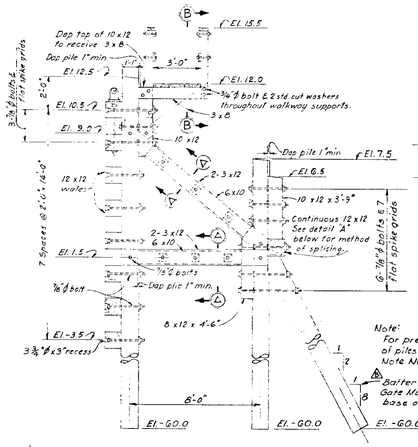


SECTION A-A
SCALE: 1 1/2" = 1'-0"

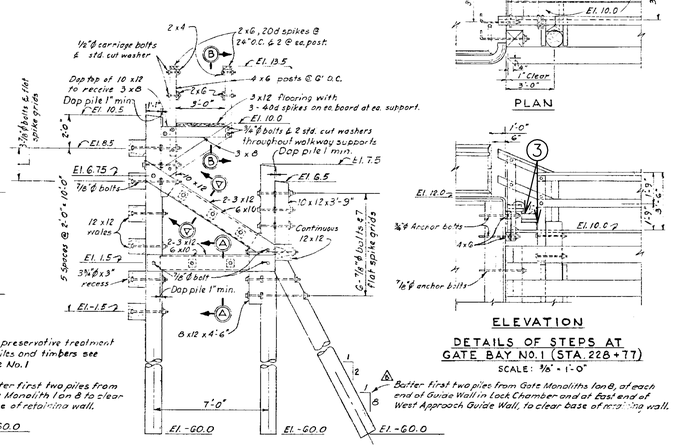
SECTION B-B
SCALE: 1 1/2" = 1'-0"



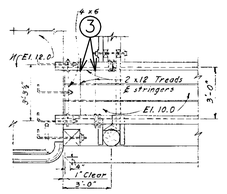
TYPICAL ELEVATION
SCALE: 3/8" = 1'-0"



A TYPICAL SECTION EAST APPROACH GUIDE WALL
SCALE: 3/8" = 1'-0"



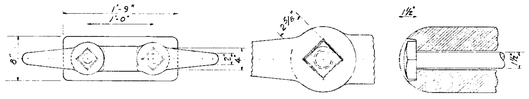
A TYPICAL SECTION LOCK CHAMBER AND WEST APPROACH GUIDE WALL
SCALE: 3/8" = 1'-0"



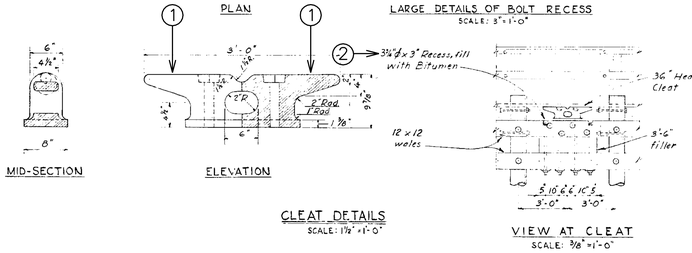
PLAN

ELEVATION

DETAILS OF STEPS AT GATE BAY NO. 1 (STA. 228+77)
SCALE: 3/8" = 1'-0"

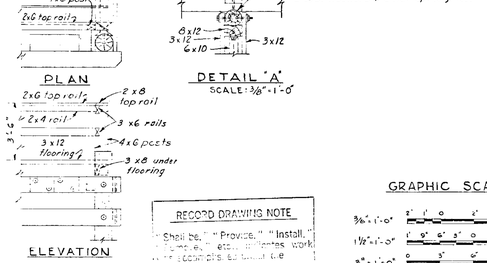


LARGE DETAILS OF BOLT RECESS
SCALE: 3" = 1'-0"



CLEAT DETAILS
SCALE: 1 1/2" = 1'-0"

VIEW AT CLEAT
SCALE: 3/8" = 1'-0"



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

DETAILS AT EAST & WEST END OF GUIDE WALL
SCALE: 3/8" = 1'-0"

RECORD DRAWING NOTE
Shall be," "Provide," "Install," [illegible] work & accomplish as shown & noted on contract.

AS BUILT

GRAPHIC SCALES

3/8" = 1'-0" — 2" 1' 0 2' 4' 6'
1 1/2" = 1'-0" — 1' 0" 2' 0 1'
3" = 1'-0" — 0 3' 6' 9' 1'

GENERAL NOTES COVERING GUIDE WALLS AND DOLPHINS

1. ALL TIMBER TO BE AS FOLLOWS:
   A. WALKWAY FLOOR, HANDRAIL AND POSTS, AND TIMBER CLEATS TO BE PINE, TREATED TO CONFORM TO SPECIFICATION PARAGRAPH 6-20.
   B. ALL OTHER TIMBER TO BE CREOSOTED PINE.
2. EACH BOLT SHALL BE FURNISHED AND INSTALLED WITH O.G. WASHERS UNDER HEAD AND NUT UNLESS ANOTHER TYPE OF WASHER IS INDICATED.
3. ALL BOLTS, WASHERS AND OTHER HARDWARE SHALL BE GALVANIZED UNLESS OTHERWISE INDICATED.
4. WALE TIMBERS MAY BE 12'-0", 18'-0" OR 24'-0" LONG AT OPTION OF THE CONTRACTOR.
5. ALL TIMBERS SHOWN WITH ENDS BEARING AGAINST OTHER TIMBERS ARE TO BE IN FIRM CONTACT SO THAT LOADS ARE TRANSMITTED THROUGH END BEARING RATHER THAN BOLT SHEAR.
6. PILES MAY BE SPLICED AT THE OPTION OF THE CONTRACTOR.
7. APPLY TWO COATS OF HOT CREOSOTE AND A HEAVY COAT OF BITUMEN TO TOPS OF PILING AND EXPOSED ENDS OF VERTICAL TIMBER BLOCKS. ALL SUCH TOPS TO BE SLOPED 1/2 IN 12.
8. ALL BOLTS SHALL BE 7/8"ϕ UNLESS OTHERWISE INDICATED.

U. S. ARMY ENGINEER DISTRICT JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
MISCELLANEOUS
GUIDE WALLS - DETAILS

DSN BY J.L.A.	INVITATION NO. CW-EN96-07-123-64-25	SIZE	FILE NO.
DRN BY [illegible]	DATED: 24 JANUARY 1964	F	11-28,389
CKD. BY R.E.M.	SCALE: AS SHOWN	DATED: JULY 1963	SHEET 55 OF 74

D.O. File No. 11-28,676

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

Approved
Description
No. Symbol Zone

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M.R.
Drawn by: M.R.
Checked by: W.A.
Traced by:
Scale: AS SHOWN
Dated: MAR 2003
Rev. No.

File name: DRGRPXXXX0605.DGN
Reference files: CANLKRPXXXXBRDR.DGN
SB-7-E01D1.TIF

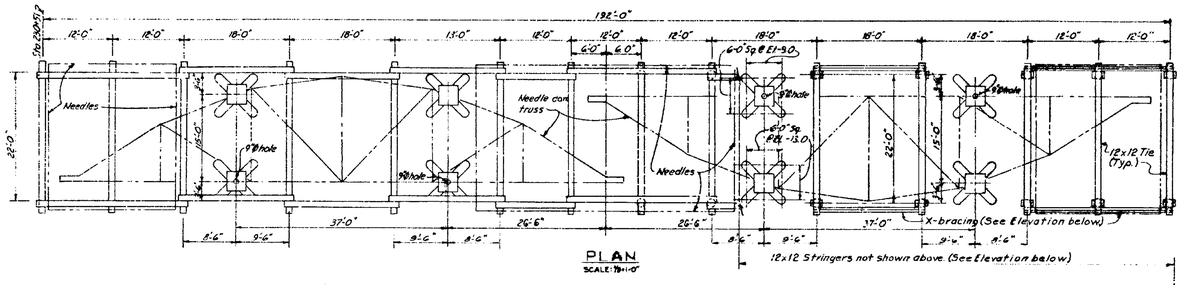
D.O. FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MISCELLANEOUS
GUIDE WALLS - DETAILS

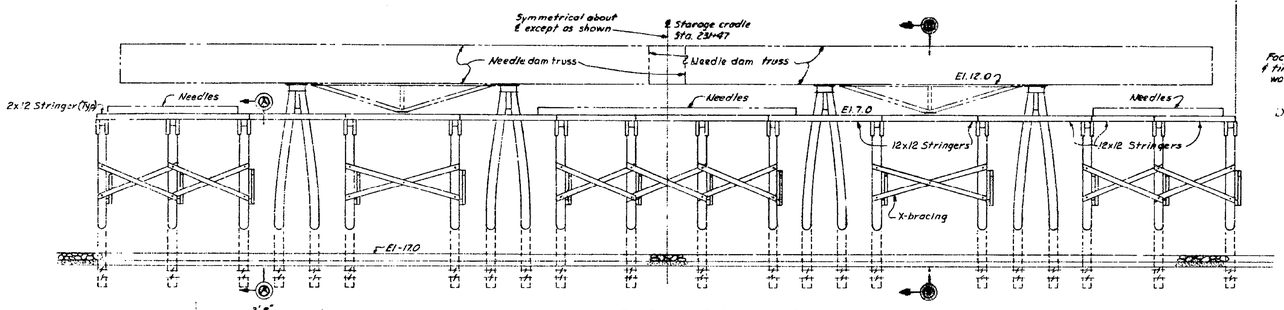
DRAWING NO.
6/5

.../dms01903/canlkrpxxxx0605.dgn 05/03/2004 09:06:44 AM

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROV'D

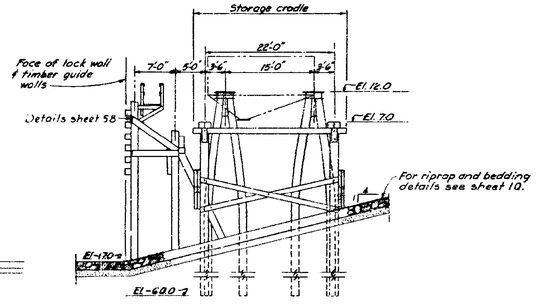


PLAN
SCALE: 1/8"=1'-0"

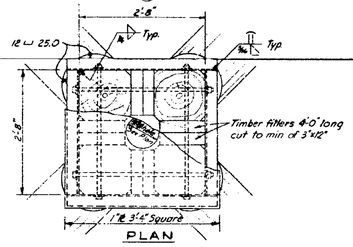


ELEVATION
SCALE: 1/8"=1'-0"

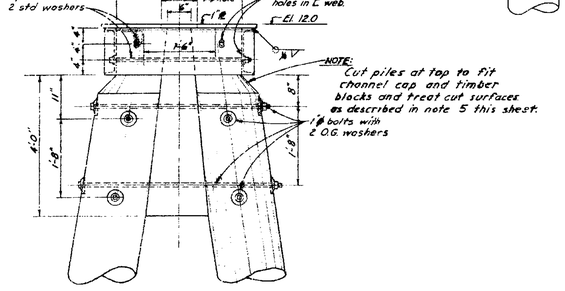
Note: Guide wall and walkway not shown.



SECTION B-B
NO SCALE

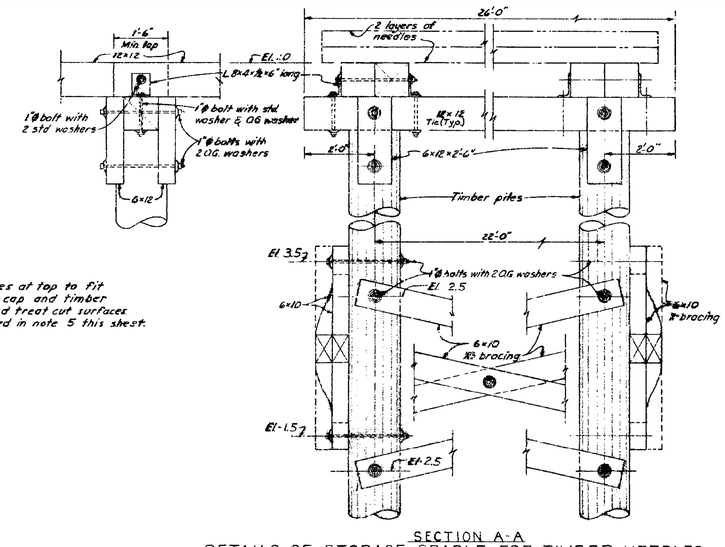


PLAN



ELEVATION AT TOP

NEEDLE DAM TRUSS SUPPORT PILES
SCALE: 1"=1'-0"



SECTION A-A

DETAILS OF STORAGE CRADLE FOR TIMBER NEEDLES
SCALE: 3/4"=1'-0"

NOTES:

1. ALL PILING AND TIMBERS TO BE CREOSOTED.
2. ALL BOLTS SHALL BE FURNISHED AND INSTALLED WITH O.G. OR STANDARD WASHERS AS INDICATED.
3. ALL BOLTS, WASHERS AND MISCELLANEOUS STRUCTURAL STEEL ITEMS TO BE GALVANIZED AFTER FABRICATION.
4. ALL TIMBERS SHOWN WITH ENDS BEARING AGAINST OTHER TIMBERS ARE TO BE IN FIRM CONTACT SO THAT LOADS ARE TRANSMITTED THROUGH END BEARING RATHER THAN BOLT SHEAR.
5. APPLY TWO COATS OF HOT CREOSOTE AND A HEAVY COAT OF BITUMEN TO EXPOSED TOPS OF VERTICAL TIMBER BLOCKS AND ENDS OF HORIZONTAL AND X-BRACING TIMBERS.
6. PILES MAY BE SPLICED AT THE OPTION OF THE CONTRACTOR. SEE SHEET 57 FOR DETAIL OF SPLICE.

RECORD DRAWING NOTE

Shall be Prepared under the Supervision of the Contractor

AS BUILT

GRAPHIC SCALES

1/16"=1'-0" 6' 3' 0 6' 12' 18'
3/4"=1'-0" 1' 6" 0 1' 2' 3'
1"= 1'-0" 1' 6" 0 1' 2'

GENERAL NOTE:

1. THE DRAWING SHOWS THE STORAGE LOCATION OF NEEDLES AND NEEDLE DAM TRUSS.

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
MISCELLANEOUS
STORAGE CRADLE FOR NEEDLE DAMS

WT. NO.	CIV ENG 08-123-64-25	SHT. FILE NO.	F	11-28,388
DATED:	24 JANUARY 1964			
SCALE:	AS SHOWN	DATED:	JULY 1963	SHEET 59 OF 74

11-29,674

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: W.E.	Cad by: M.W.	Inv. No.	Scale: AS SHOWN
Chkd by: M.R.		Dated: MAR 2003	

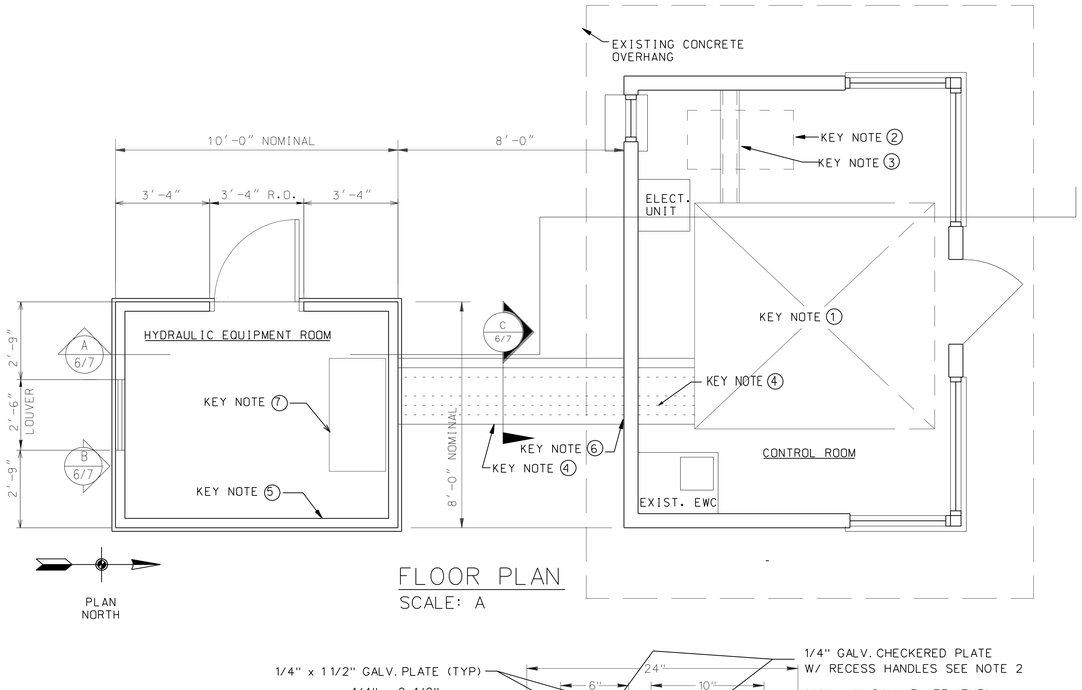
File name: CANLKRPXXXX0606.DGN
Reference files: CANLKRPXXXXBRDR.DGN
59-74 EDITED.TIF

D.O. FILE NO. 90C-38,319

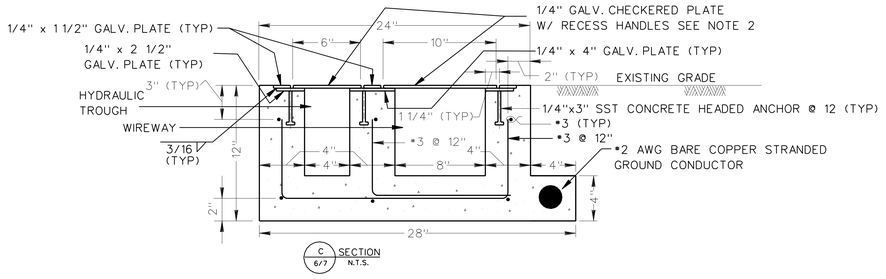
CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MISCELLANEOUS
STORAGE CRADLE FOR DEWATERING DAM

DRAWING NO.
6/6

.../dms01903/canlkrpxxxx0606.dgn 05/04/2004 09:30:06 AM



FLOOR PLAN
SCALE: A



KEY NOTES

1. EXISTING OPENING IN FLOOR SLAB WITH FLOOR PANELS.
2. REMOVE HYDRAULIC UNIT- REPLACE WITH NEW UNIT AT NEW HYDRAULIC EQUIPMENT ROOM.
3. EXISTING PIPE TRENCH WITH COVER PLATE.
4. NEW PIPE TRENCH WITH COVER PLATE.
5. MODULAR PRECAST UTILITY BUILDING FOR ENCLOSURE OF HYDRAULIC EQUIPMENT- FINISH AND COLOR OF CONCRETE FINISH TO MATCH EXISTING CONTROL BUILDING.
6. SAW CUT CONCRETE TO FACILITATE INSTALLATION OF NEW PIPE TRENCH. CARE TO BE TAKEN TO MINIMIZE MODIFICATION TO EXISTING STRUCTURE.
7. NEW HYDRAULIC UNIT- REFER TO MECHINCAL DRAWINGS FOR EXACT LOCATION.

GENERAL NOTES

1. BUILDING DIMENSIONS ARE NOMINAL. EXACT DIMENSIONS ARE TO BE DETERMINED BY THE PRECAST MODULAR BUILDING MANUFACTURER. FOR CONTROL BUILDING REQUIREMENTS, REFER TO SPECIFICATIONS, SECTION 13130, PRECAST CONCRETE BUILDING.

2. INTERIOR FINISH SCHEDULE FOR WALLS AND CEILING SHALL BE SMOOTH STEEL TROWEL.

3. ALUMINUM IN CONTACT WITH CONCRETE OR STEEL SHALL BE PROTECTED FROM GALVANIC OR CORROSIVE ACTION. FOR COATING DETAILS, REFER TO SPECIFICATIONS, SECTION 05055, METALWORK, FABRICATION, MACHINE WORK, AND MISCELLANEOUS PROVISION.

4. EXTERIOR MOLDING ON DOOR SHALL BE WELDED INTO THE DOOR AND ALL EXPOSED FASTENERS AND HINGES SHALL BE TAMPER PROOF.

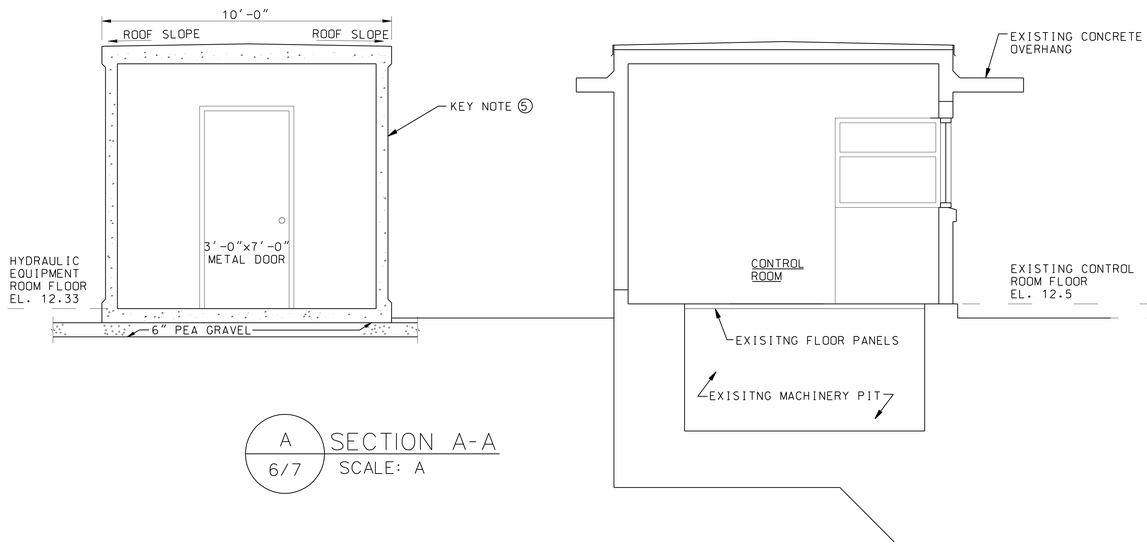
5. COORDINATE ROUGH OPENING DIMENSIONS FOR LOUVERS AND DOOR WITH MANUFACTURERS.

6. WIND PRESSURES AND MISSLE IMPACT LOADS FOR DOOR AND LOUVERS SHALL BE DETERMINED IN ACCORDANCE WITH ASCE 7 AND SPECIFICATIONS.

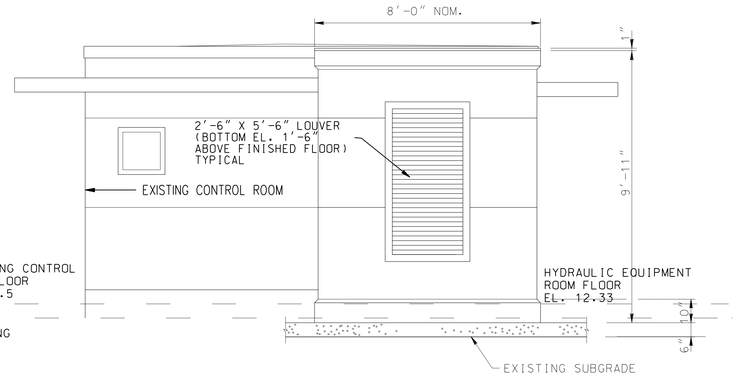
7. PRECAST BUILDING SHALL HAVE TROWEL FINISH.

8. CONTRACTOR SHALL COORDINATE WITH THE CONTRACTING OFFICER FOR PAINTING REQUIREMENTS OF THE CONTROL BUILDING.

9. FOR EQUIPMENT LAYOUT INSIDE THE CONTROL BUILDING, REFER TO MECHANICAL AND ELECTRICAL DRAWINGS



A 6/7 SECTION A-A
SCALE: A



B 6/7 SOUTH ELEVATION
SCALE: A

GRAPHIC SCALES
SCALE "A" 12" 6" 0 1' 2' 3' 4' 5'

US Army Corps of Engineers
Jacksonville District

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MISCELLANEOUS
HYDRAULIC EQUIPMENT ROOM

Designed by S.R.
Drawn by S.R.
Ckd by M.W.
Scale: AS SHOWN
Dated: MAR 2003
Inv. No.
File name: CANLKRPXXXX0607.DGN
Reference files: CANLKRPXXXXBRDR.DGN
D.O.FILE NO. 90C-38,319

DRAWING NO.
6/7

.../dms01903/canlkrpxxxx0607.dgn 05/03/2004 09:07:38 AM

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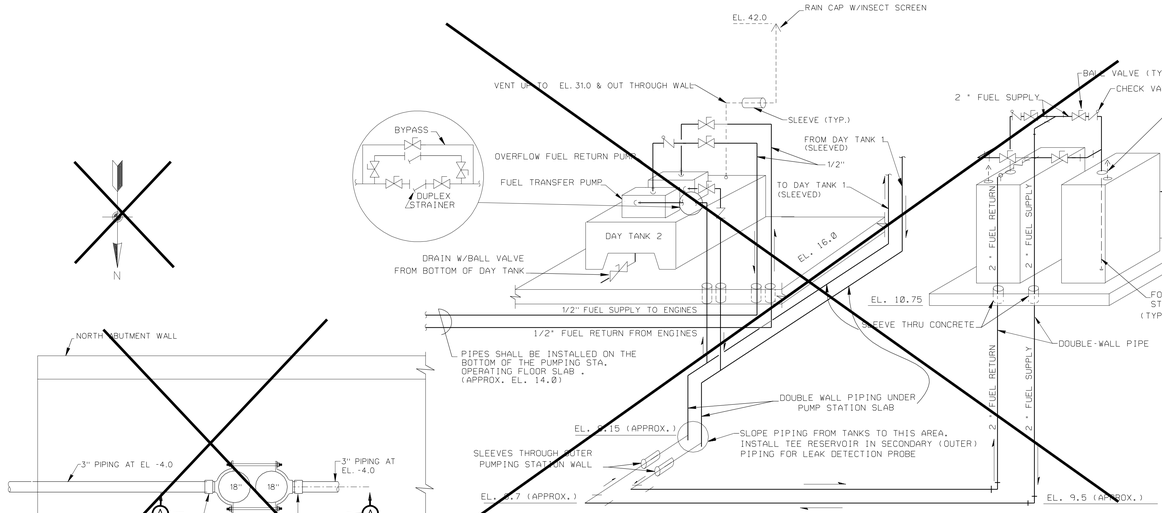
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	2	B-C-5	REVISED TO ACCOMPANY AMENDMENT NO 0001.	5/2/96	

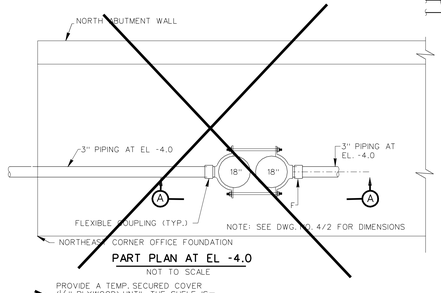
FOR INFORMATION ONLY
NOT FOR CONSTRUCTION



FUEL SYSTEM SCHEMATIC

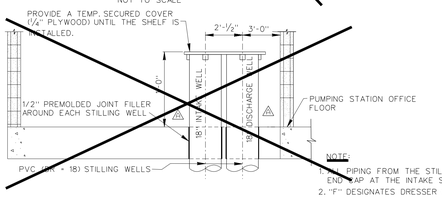
NOT TO SCALE

NOTES:
1. DAY TANK PIPING AT DAY TANK 1 IS THE SAME AS ARRANGEMENT SHOWN FOR DAY TANK 2.
2. DAY TANK 2 FEEDS THE ENGINES IN PUMP BAYS 1 & 2 AND THE EMERGENCY GENERATOR.
3. VALVES ON TOP OF THE TANKS SHALL BE ACCESSIBLE FROM THE TOPS OF THE TANKS.
4. ALL SUPPLY AND RETURN FUEL PIPING SHALL BE DOUBLE WALL.
5. FUEL PIPING BETWEEN EMERGENCY GENERATOR AND DAY TANKS SHALL BE MONITORED FOR LEAKS IN A LINEAR MANNER AS THAT SHOWN IN THE SCHEMATIC FOR THE MAIN PUMPS. THE FUEL PIPING SHALL SLOPE DOWN IN THE DIRECTION OF THE DAY TANKS.

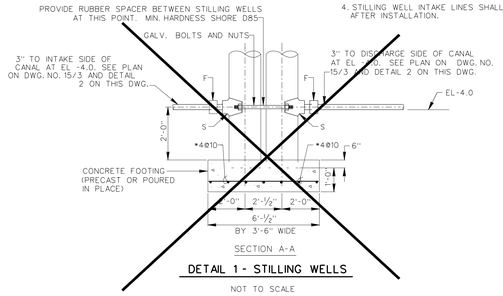


PART PLAN AT EL -4.0

NOT TO SCALE



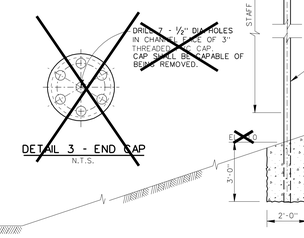
NOTE:
1. ALL PIPING FROM THE STILLING WELLS TO THE END CAP AT THE INTAKE SHALL BE 3" SCH. 80 PVC
2. "F" DESIGNATES DRESSER COUPLING
3. "S" DESIGNATES GALV. C.I. PIPE SADDLES WITH RUBBER GASKET SEALS.
4. STILLING WELL INTAKE LINES SHALL BE FLUSHED AFTER INSTALLATION.



SECTION A-A

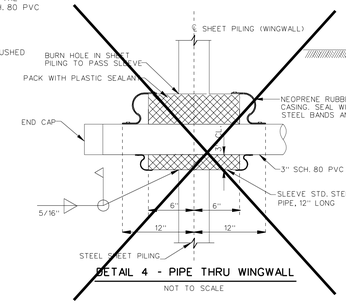
DETAIL 1 - STILLING WELLS

NOT TO SCALE



DETAIL 3 - END CAP

N.T.S.

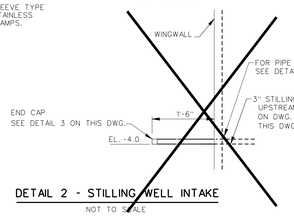


DETAIL 4 - PIPE THRU WINGWALL

NOT TO SCALE

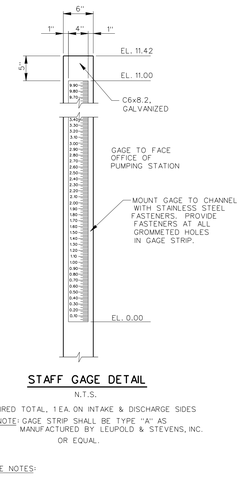
DETAIL 5 - STAFF GAGE PILE SUPPORT

NOT TO SCALE



DETAIL 2 - STILLING WELL INTAKE

NOT TO SCALE



STAFF GAGE DETAIL

N.T.S.

2 REQUIRED TOTAL, 1 EA. ON INTAKE & DISCHARGE SIDES

NOTE: GAGE STRIP SHALL BE TYPE "A" AS MANUFACTURED BY LEUPOLD & STEVENS, INC. OR EQUAL.

STAFF GAGE NOTES:
1. ALL MATERIAL SHALL BE STRUCTURAL STEEL, UNLESS OTHERWISE NOTED.
2. ALL MATERIAL NOTED ON THIS SHEET AS STAINLESS STEEL SHALL BE TYPE 304, UNLESS SHOWN OR SPECIFIED OTHERWISE.
3. ALL GALVANIZED ITEMS SHALL BE GALVANIZED AFTER FABRICATION.
4. ALL BOLTS SHALL BE FURNISHED WITH ONE NUT AND WASHER, UNLESS OTHERWISE INDICATED. ALL BOLTS, NUTS, WASHERS, AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED, UNLESS OTHERWISE NOTED.
5. WHERE GALVANIZED ITEMS LOSE THEIR COATING DUE TO FIELD WELDING OR CHIPPING, GALVANIZING REPAIRS SHALL BE MADE IN ACCORDANCE WITH THE SPECIFICATIONS.

FILE NAME: 332D1504.DGN

DESIGN ENG.: S.P.

DWN. BY: W.F. | CKD. BY:

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CENTRAL AND SOUTHERN FLORIDA PROJECT FOR FLOOD CONTROL AND OTHER PURPOSES
PUMPING STATION 332D
MECHANICAL
DETAILS AND SECTIONS

INV. NO.
DATED:
SIZE: F
DRAWING NO. 15/4
SCALE: AS SHOWN
DATED: OCT. 1995

D.O.FILE NO. 420-37,047

$$USERNAME$$ $$$$DONSPECIFICATION$$$$$$$ $$$$$$$SYTME$$$$$$

US Army Corps of Engineers
Jacksonville District

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No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: S.P.
Drawn by: J.M.
Ckd by: S.M.
Inv. No.
Scale: AS SHOWN
Dated: MAR 2003
D.O.FILE NO. 90C-38,319

File name: CANLKPXXXX01D.DGN
Reference files: CANLKPXXXXBORDR.DGN CANLKPXXXX01D.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
STAFF GUAGE SECTION AND DETAILS

DRAWING NO.
9/1

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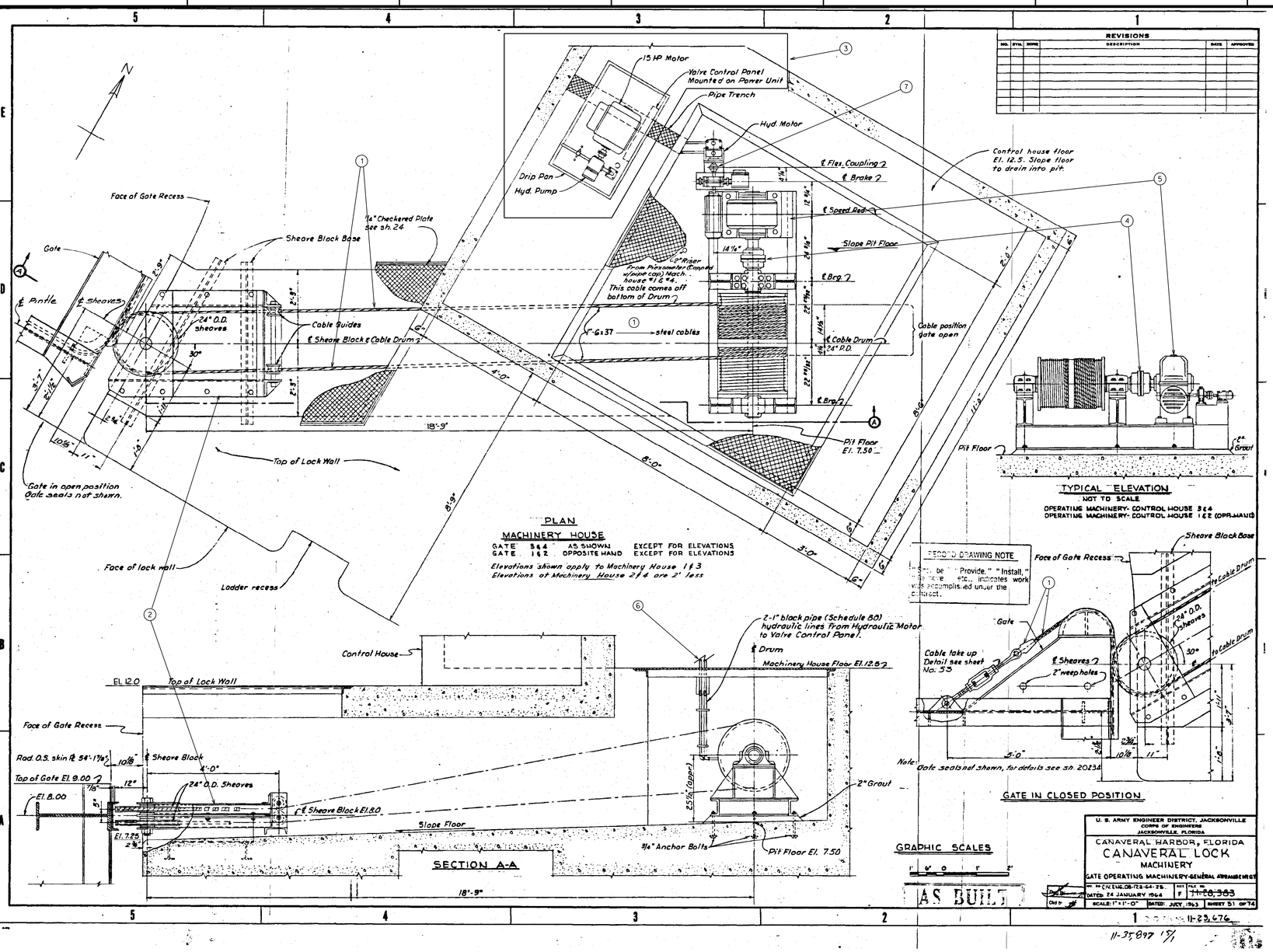

REVISIONS

NO.	BY/IL	SCOPE	DESCRIPTION	DATE	APPROVED

US Army Corps of Engineers
Jacksonville District

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GENERAL NOTES:

1. REDUCED DRAWING IMAGE IS AN AS-BUILT FROM CANAVERAL LOCK CONTRACT DATED JULY 1963. D.O. FILE 11-29.676 DRAWING NO. 51 OF 74. ALL DIMENSIONS SHOWN ARE ORIGINAL DESIGN DIMENSIONS. VERIFY ACTUAL DIMENSIONS IN THE FIELD. AS-BUILT DRAWING INCLUDES INFORMATION THAT IS PART OF THE ORIGINAL DESIGN. NEW PARTS CHANGED AS PART OF THE SCOPE OF WORK ON THIS CONTRACT. SHALL MAINTAIN THE INTEGRITY OF THE DESIGN.
2. UNLESS OTHERWISE NOTED. ALL WORK AS REQUIRED ON THE KEY NOTES IS APPLICABLE TO ALL FOUR GATES. THEIR MECHANICAL COMPONENTS AND OPERATING SYSTEMS.
3. NEW PAINTABLE MATERIAL SHALL BE PAINTED USING PAINT SYSTEM NO.21-A-Z.
4. SEE SPECIFICATIONS FOR DETAILS OF WORK REQUIREMENTS.

KEY NOTES:

(1) REPLACE ALL WIRE ROPES AND CLOSED SOCKET FITTINGS. A RECESS SIDE AND A LOCK SIDE WIRE ROPE SHALL BE REPLACED WITH NEW PRE STRETCHED GALVANIZED IMPROVED PLOW STEEL WIRE ROPE. NEW WIRE ROPE SOCKET FITTINGS SHALL BE SWAGED TYPE. EXISTING TURNBUCKLES AND LOAD RATCHETS SHALL BE REUSED. RELOCATE THEM IN SAME LOCATION I.E. TURNBUCKLES IN RECESS SIDE AND LOAD RATCHETS IN LOCK SIDE. SUBMIT WIRE ROPE INFORMATION FOR APPROVAL.

(2) REPLACE THE SHEAVE BLOCK. THE NEW SHEAVE BLOCK SHALL INCLUDE ALL PARTS DEPICTED ON DRAWINGS 15/2 AND 15/3 INCLUDING: (A) TWO ADDITIONAL CABLE GUIDES (B) TWO CABLE GUIDE PINS AND (C) WALL ANCHORS TO PREVENT LATERAL MOVEMENT. THESE ADDITIONS AND THE MODIFICATION TO INCLUDE GREASE FITTINGS IN ALL FOUR CABLE GUIDES ARE NOT SHOWN ON THE AS-BUILT DRAWINGS. BUSHINGS IN SHEAVES AND CABLE GUIDES SHALL BE PRESS FIT AND HAVE A MECHANICAL MEANS TO KEEP THEM FROM ROTATING IN THE HUBS. SEE GENERAL NOTE 3. USE EXISTING SHEAVE BLOCKS AS TEMPLATES. SUBMIT DETAILED DRAWINGS OF EACH SHEAVE BLOCK FOR APPROVAL.

(3) SEE DRAWING NO. 15/3 KEY NOTE 2.

(4) REPLACE COUPLING. NEW COUPLING SHALL BE PRESS FIT ONTO REDUCTION GEAR SHAFT AND CABLE DRUM SHAFT ACCORDING TO MANUFACTURER'S RECOMMENDATION. PROPER INSTALLATION OF THE COUPLING WILL REQUIRE THE REMOVAL OF THE SPEED REDUCER FROM ITS SUPPORT FRAME. REALIGN UPON REINSTALLATION.

(5) SEE KEY NOTE NO. 3 DRAWING 15/2.

(6) LOWER LIMIT OF HPU REPLACEMENT.

(7) REPLACE THE SPEED REDUCER FLEXIBLE COUPLINGS. COORDINATE REPLACEMENT WITH WORK REQUESTED ON KEY NOTE 4 ABOVE.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MECHANICAL
GATE OPERATING MACHINERY
GENERAL ARRANGEMENT

Designed by: MWW
Drawn by: D.S.
Cad by:
Inv. No.
Scale: NONE
Dated JULY 2002
D.O.FILE NO. 90C-38,319

File name: f:\pm\lkpxxxm1501.dgn
Reference files: dms01903/canlkpxxxdrgn 11135897-1501-tif

DRAWING NO.
15/1

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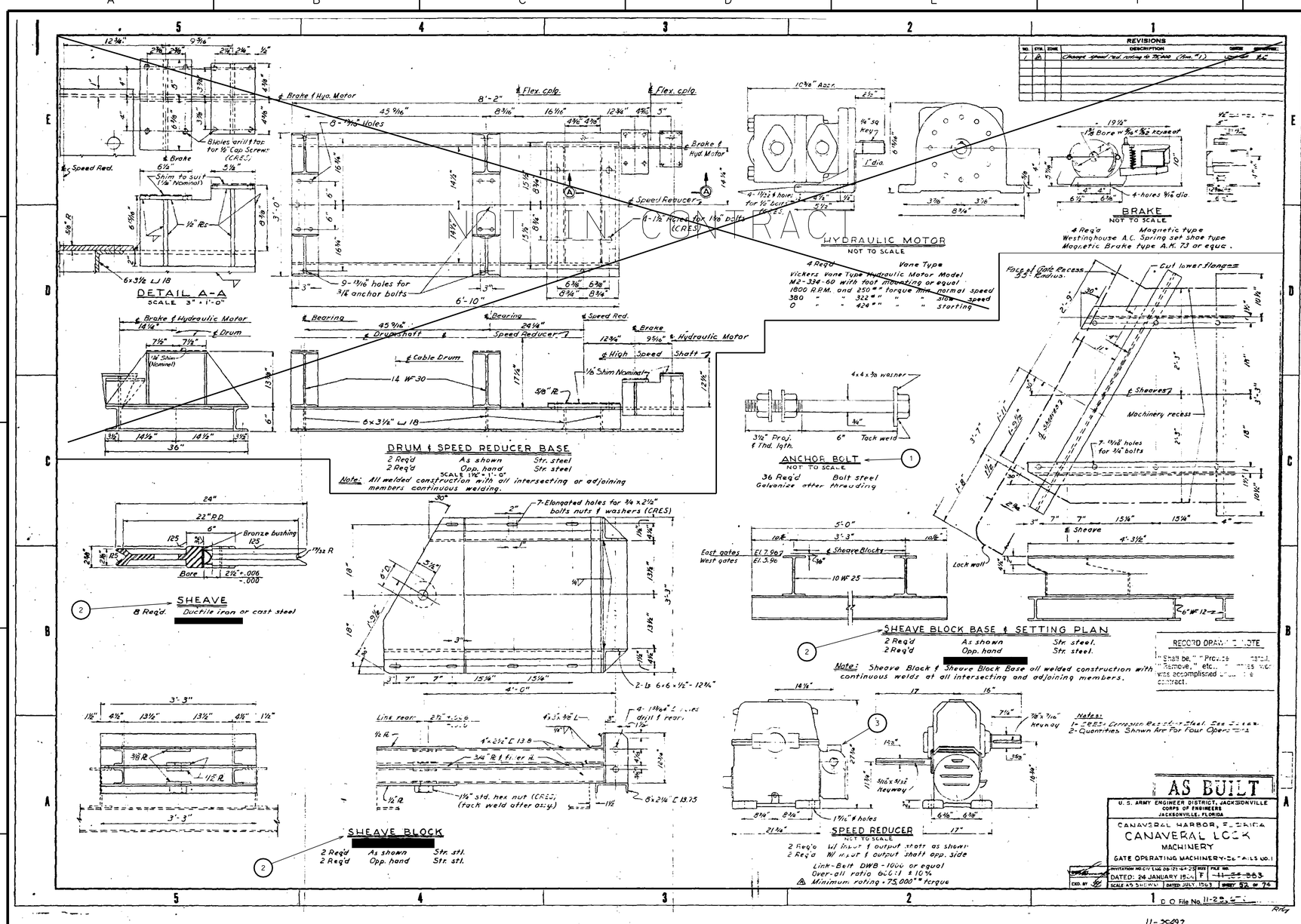

GENERAL NOTES:

1. REDUCED DRAWING IMAGE IS AN AS-BUILT FROM CANAVERAL LOCK CONTRACT DATED JULY 1963. D.O. FILE 11-29.676 DRAWING NO. 52 OF 74. ALL DIMENSIONS SHOWN ARE ORIGINAL DESIGN DIMENSIONS. VERIFY ACTUAL DIMENSIONS IN THE FIELD. AS-BUILT DRAWING INCLUDES INFORMATION THAT IS PART OF THE ORIGINAL DESIGN. NEW PARTS CHANGED AS PART OF THE SCOPE OF WORK ON THIS CONTRACT SHALL MAINTAIN THE INTEGRITY OF THE DESIGN.
2. UNLESS OTHERWISE NOTED, ALL WORK AS REQUIRED ON THE KEY NOTES IS APPLICABLE TO ALL FOUR GATES, THEIR MECHANICAL COMPONENTS AND OPERATING SYSTEMS.
3. NEW PAINTABLE MATERIAL SHALL BE PAINTED USING PAINT SYSTEM NO. 21-A-Z.
4. SEE SPECIFICATIONS FOR DETAILS OF WORK REQUIREMENTS.

KEY NOTES:

(1) VERIFY CONDITION OF ALL ANCHOR BOLTS ESPECIALLY THOSE STILL BEING USED. REPORT CONDITION IN WRITING TO THE CONTRACTING OFFICER REPRESENTATIVE (COR).

(2) SEE KEY NOTE NO. 2. DRAWING NO. 15/1.

(3) DRAIN OIL FROM HOUSING BASE AND PRIMARY HOUSING. USE SUCTION IF NECESSARY. REPLACE THE FOLLOWING PARTS IN THE PRIMARY HOUSING: BOTH PRIMARY WORM SHAFT BEARINGS AND THEIR RETAINERS, BOTH OIL SEALS, THE PRIMARY HOUSING COVER GASKET AND THE COOLING FAN. ENSURE HOUSING OIL TIGHTNESS BY CLEANING HOUSE JOINTS AND APPLYING AN ACCEPTABLE SEALING COMPOUND ON ALL METAL-TO-METAL AND SKIM-TO-METAL PARTS. REFILL HOUSINGS WITH WEIGHT 90 OIL. REDUCTION GEAR WORK SHALL BE PERFORMED BY A TECHNICIAN ENGAGED ON THIS TYPE OF WORK ON A REGULAR BASIS.

US Army Corps of Engineers
Jacksonville District

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

No. | Symbol | Zone | Description | Approved

Designed by: [illegible]
Drawn by: D.B.S.
Chkd by:
Rev. No.:
Scale: AS SHOWN
Dated: MAR 2003

File name: CANLKRPXXM1502.DGN
Reference files: CANLKRPXXXBASE.DGN
ITD5897150Z.tif

D.O.-FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MECHANICAL
GATE OPERATING MACHINERY-DETAILS NO. 1

DRAWING NO.
15/2

D O File No. 11-29.676

11-35897

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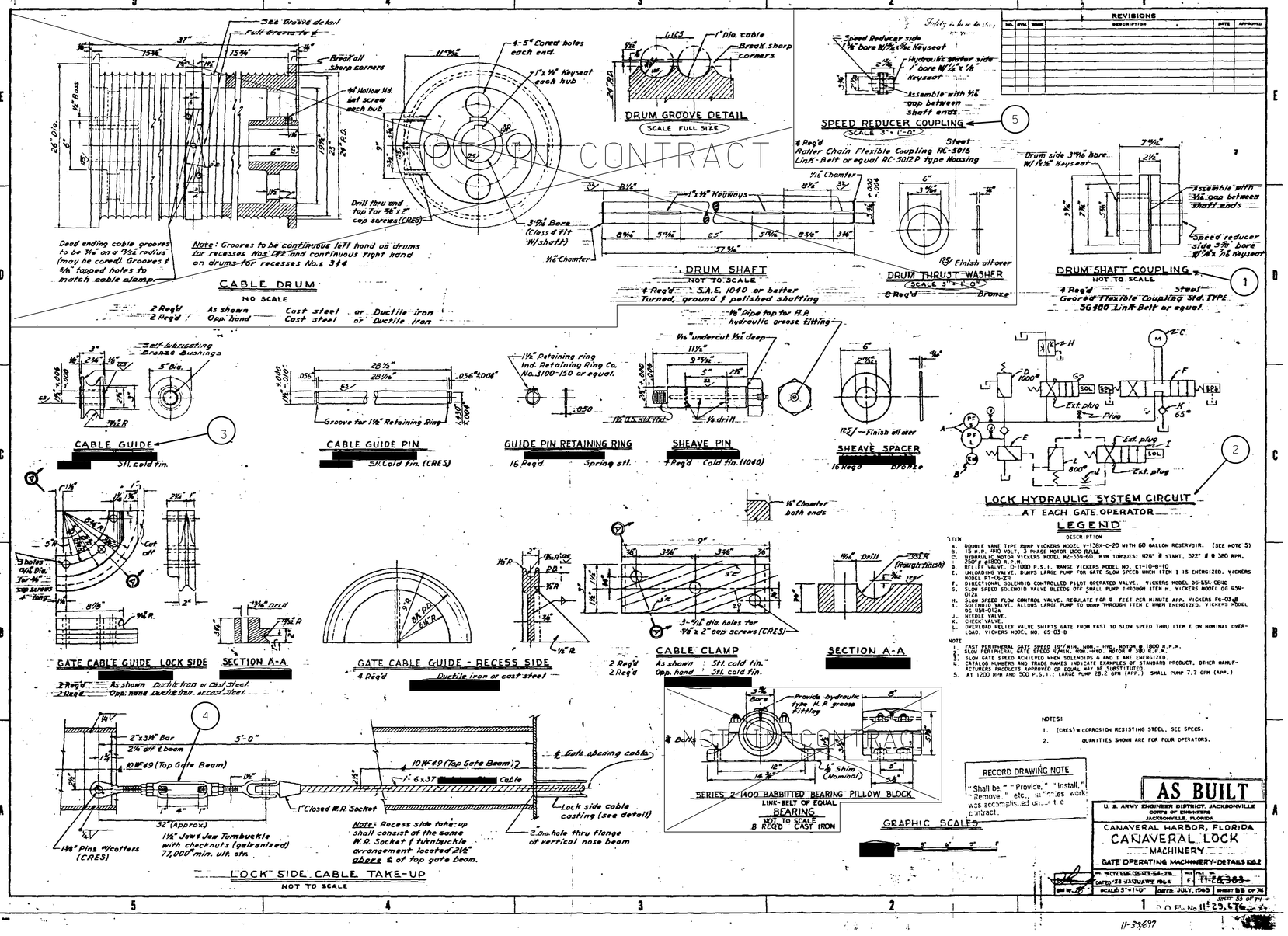


NOT IN CONTRACT

GENERAL NOTES:

1. REDUCED DRAWING IMAGE IS AN AS-BUILT FROM CANAVERAL LOCK CONTRACT DATED JULY 1963. d.o. FILE 11-29.676 DRAWING NO. 53 OF 74. ALL DIMENSIONS SHOWN ARE ORIGINAL DESIGN DIMENSIONS. VERIFY ACTUAL DIMENSIONS IN THE FIELD. AS-BUILT DRAWING INCLUDES INFORMATION THAT IS PART OF THE ORIGINAL DESIGN. NEW PARTS CHANGED AS PART OF THE SCOPE OF WORK ON THIS CONTRACT SHALL MAINTAIN THE INTEGRITY OF THE DESIGN.
2. UNLESS OTHERWISE NOTED. ALL WORK AS REQUIRED ON THE KEY NOTES IS APPLICABLE TO ALL FOUR GATES. THEIR MECHANICAL COMPONENTS AND OPERATING SYSTEMS.
3. NEW PAINTABLE MATERIAL SHALL BE PAINTED USING PAINT SYSTEM NO. 21-A-Z.
4. SEE SPECIFICATIONS FOR DETAILS OF WORK REQUIREMENTS.

KEY NOTES:

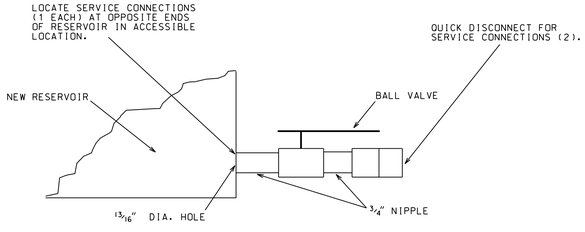
(1) REPLACE DRUM SHAFT COUPLING. DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL MEASURE EACH SHAFT AND DETERMINE THE EXACT DIMENSIONS NECESSARY TO OBTAIN A PRESS FIT AS REQUIRED. SEE DRAWING NO. 15/1 KEY NOTES NO. 4 AND 7.

(2) REPLACE HPU. NEW HPU SHALL HAVE QUICK DISCONNECTS AS SHOWN ON THIS DRAWING. UNITS 1 & 2 SHALL HAVE COVERS FOR NOISE ATTENUATION. SUBMIT DRAWINGS OF THE COVERS FOR APPROVAL. THE DRIP PAN SHALL HAVE ANCHOR BOLT PENETRATION AS SHOWN. SEE DRAWING 15/1 KEY NOTE 6 FOR LIMITS OF REPLACEMENT.

(3) EXISTING CABLE GUIDES HAVE BEEN MODIFIED TO INCLUDE GREASE FITTINGS. NEW CABLE GUIDES SHALL INCLUDE GREASE FITTINGS.

(4) REUSE ALL CABLE TAKE UP TURNBUCKLES AND LOAD RATCHETS (NOT SHOWN).

(5) REPLACE SPEED REDUCER COUPLING. SEE DWG. 15/1. KEY NOTES 4 AND 7.



RESERVOIR CONNECTION DETAIL

US Army Corps of Engineers
Jacksonville District

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No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Inv. No.
Scale:
Designed by:
Drawn by: D.S.
Quid by:
Dated MAR 2003
D.O.FILE NO. 90C-38,319

File name: canlkrpxxm1503.dgn
Reference files: CAN_KRPXXXXDBOR.DGN 1135897503.tif

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MECHANICAL
GATE OPERATING MACHINERY-DETAIL NO. 2

DRAWING NO.
15/3

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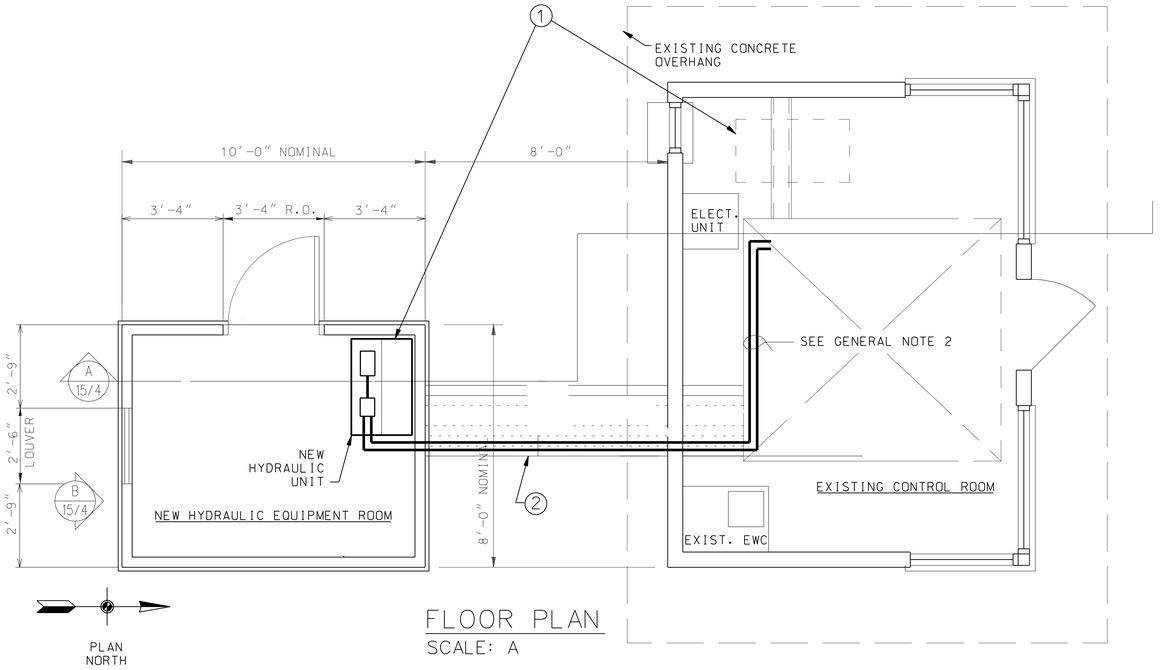


FLOOR PLAN
SCALE: A

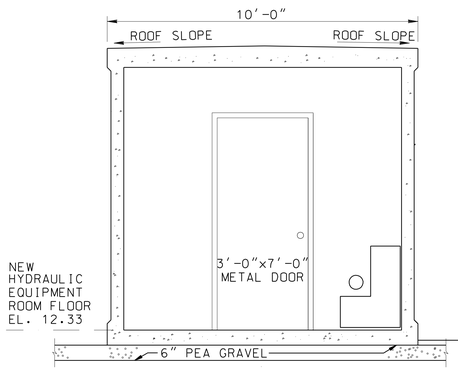
KEY NOTES:

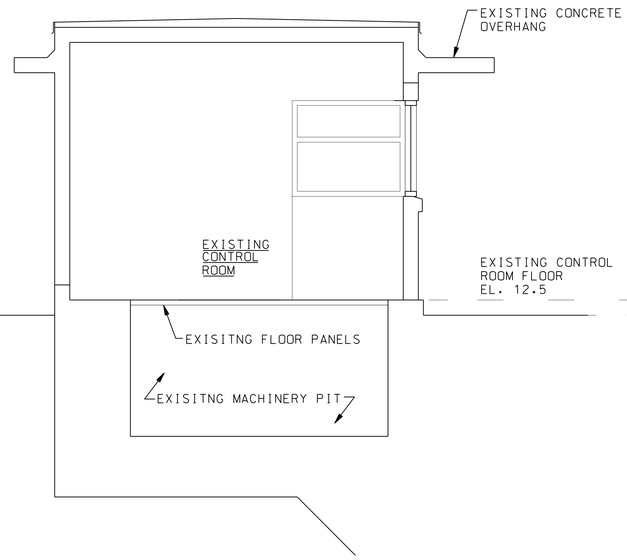
(1) REMOVE HYDRAULIC POWER UNIT FROM EXISTING CONTROL ROOM. REPLACE WITH NEW UNIT AT NEW HYDRAULIC EQUIPMENT ROOM. (SEE GENERAL NOTE 2)

(2) SEE KEY SECTION 6, DRAWING 6/7.

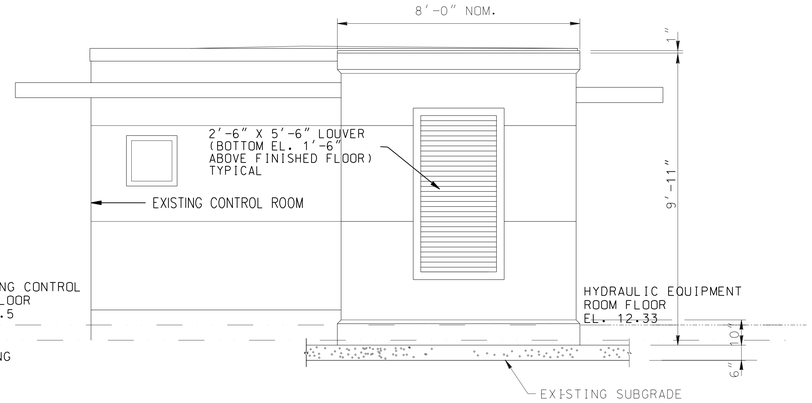
GENERAL NOTES:

1. WORK SHOWN ON THIS DRAWING IS FOR CONTROL ROOM NO. 1 ONLY. OTHER HPU'S WILL BE HOUSED AT THEIR RESPECTIVE EXISTING CONTROL ROOMS.
2. PROVIDE ADDITIONAL PIPE OR TUBING AS NECESSARY.
3. SEE DRAWING 16/12 FOR HPU ELECTRICAL POWER CONNECTION AND TRENCH DETAILS.





A 15/4 SECTION A-A
SCALE: A



B 15/4 SOUTH ELEVATION
SCALE: A

GRAPHIC SCALES
SCALE "A" 12" 6" 0 1' 2' 3' 4' 5'

US Army Corps of Engineers
Jacksonville District

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No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: S.R.
Drawn by: S.R.
Cad by: M.DE J.
Inv. No.
Scale: AS SHOWN
Dated MAR 2003
D.O.FILE NO. 90C-38.319

File name: CANLKRPXXXM1504.DGN
Reference files: CANLKRPXXXBRDR.DGN CANLKRPXXXX0607.DGN

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
MECHANICAL
HYDRAULIC POWER UNIT NO. 1

DRAWING NO.
15/4

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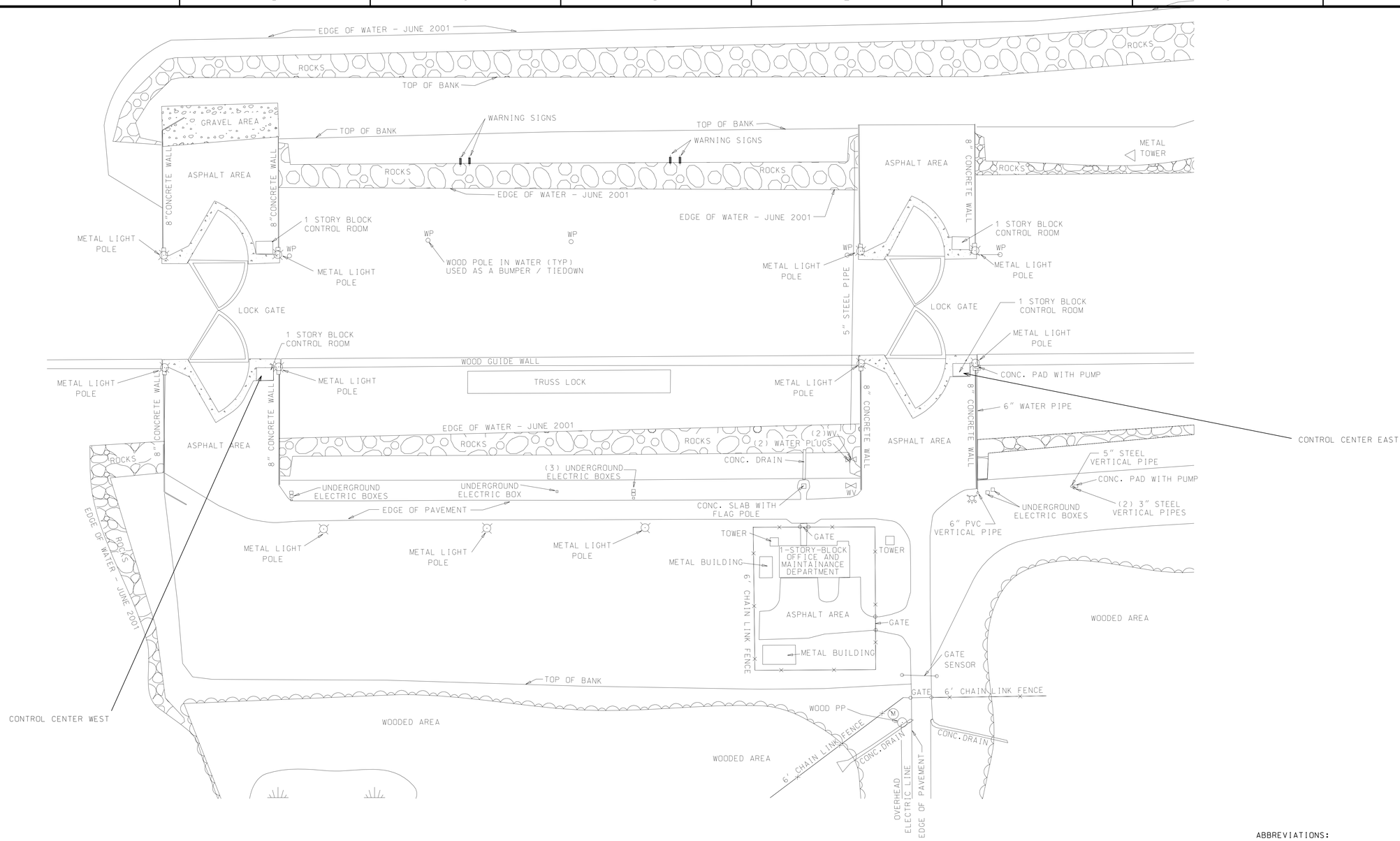

GENERAL NOTES:

1. THIS DRAWING PROVIDES GENERAL INFORMATION RELATING TO ELECTRICAL SITE PLAN AND SYMBOL LIST USED IN THIS CONTRACT.
2. SUMMARY OF ELECTRICAL WORK TO BE DONE UNDER THIS CONTRACT IS AS FOLLOWS.

A. REPLACE ALL LIMIT SWITCHES ON GATES AS SHOWN ON DEG. NO. 16/3.

B. PROVIDE SURGE PROTECTION OF ELECTRICAL SERVICE AT CCM.

C. REMOVE EXISTING ANODE STUDS FROM THE SKIN PLATE OF ALL GATES AND PROTECT NEW CATHOTIC PROTECTION CONDUIT ON EACH FRAME DURING SANDBLASTING AND PAINTING AS SHOWN ON DWG. NO. 16/8 REINSTALL CATHODIC PROTECTION SYSTEM AND ENSURE OPERATION. CALIBRATE AS NECESSARY.

D. REPLACE LIGHTING, LIGHT SWITCHING AND COUDUIT IN MACHINERY PIT. SEE DETAIL SHEET 16/4.

E. PROVIDE BONDING OF HANDRAILS AND REPLACE GATE GROUNDING CABLES.

3. CONTRACTOR SHALL UTILIZE THE "GRAPHIC SCALE" IN ANALYSIS OF "AS BUILT" DRAWINGS.
4. ALL ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR.
5. ALL ELECTRICAL WORK AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND THE REQUIREMENTS OF THE FLORIDA STATE AND LOCAL AUTHORITIES HAVING JURISDITION.
6. ALL CONDUITS ABOVE GROUND SHALL BE PVC COATED RIGID GALVANIZED STEEL AND ALL CONDUITS BELOW GRADE SHALL BE SCHEDULE 80 PVC UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REPLACE ANY RIGID GALVANIZED STEEL CONDUIT HAVING A DAMAGED OR PENETRATED OR OTHERWISE DISCONTINUOUS PVC COATING.
7. ALL POWER AND CONTROL CIRCUITS SHALL BE COPPER WITH XHHW-2 OR EPR INSULATION UNLESS OTHERWISE NOTED.
8. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE CONSTRUCTION SITE TO VERIFY EXISTING CONDITIONS PRIOR TO BID DATE.
9. WHERE CONCENTRIC RING KNOCKOUTS ARE BEING UTILIZED, PROVIDE BONDING JUMPERS FROM BUSHING TO ENCLOSURE.
10. CONTRACTOR SHALL PERFORM LOCKOUT TAGOUT DURING ELECTRICAL WORK.
11. MANATEE PROTECTION SYSTEM (MPS) SHALL BE REMOVED PRIOR TO THE BEGINING OF SANDBLASTING BY HARBOR BRANCH OCEANOGRAPHIC INSTITUTE (HBOI). CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH HBOI TO INSURE THAT NO DELAY OCCURS IN THE WORK SCHEDULE ASSOCIATED WITH THE SANDBLASTING AND PAINTING OR MPS REMOVAL/REINSTALLATION.

ABBREVIATIONS:

AWG	AMERICAN WIRE GAUAGE
C	CONDUIT
CU	COPPER
GRC	GALVANIZED RIGID STEEL
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
PVC	POLYVINYLCHLORIDE

US Army Corps of Engineers
Jacksonville District

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No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

File name: CANLKRPXXXX1601.DGN
Reference files: CANLKRPXXXBRDR.DGN C169-P1BGLIP.DGN

Designed by: Mike Dodd
Drawn by: D.S.
Cad by:
Scale: AS SHOWN
Inv. No.
Dated: MAR 2003

D.O.FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
SITE PLAN

DRAWING NO.
16/1

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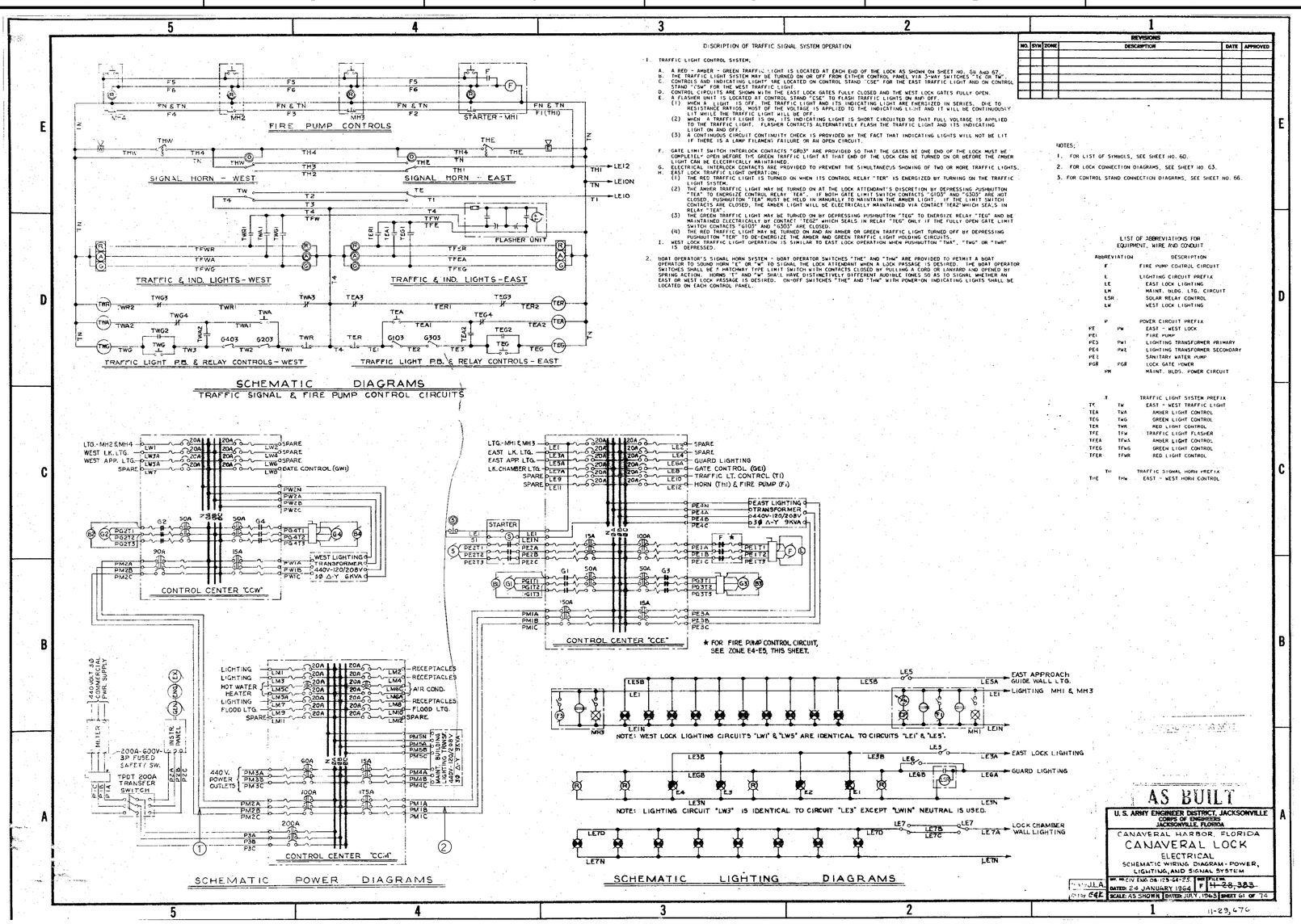


SCHEMATIC DIAGRAMS
TRAFFIC SIGNAL & FIRE PUMP CONTROL CIRCUITS

SCHEMATIC POWER DIAGRAMS

SCHEMATIC LIGHTING DIAGRAMS

DISCRIPTION OF TRAFFIC SIGNAL SYSTEM OPERATION

1. TRAFFIC LIGHT CONTROL SYSTEM.
   - A. A RED - AMBER - GREEN TRAFFIC LIGHT IS LOCATED AT EACH END OF THE LOCK AS SHOWN ON SHEET NO. 60 AND 62.
   - B. THE TRAFFIC LIGHT SYSTEM MAY BE TURNED ON OR OFF FROM EITHER CONTROL PANEL VIA 3-WAY SWITCHES "TE" OR "TW".
   - C. CONTROLS AND INDICATING LIGHT ARE LOCATED ON CONTROL STAND "CSE" FOR THE EAST TRAFFIC LIGHT AND ON CONTROL STAND "CSW" FOR THE WEST TRAFFIC LIGHT.
   - D. CONTROL CIRCUITS ARE SHOWN WITH THE EAST LOCK GATES FULLY CLOSED AND THE WEST LOCK GATES FULLY OPEN.
   - E. A FLASHER UNIT IS LOCATED AT CONTROL STAND "CSE" TO FLASH TRAFFIC LIGHTS ON AND OFF.
     - (1) WHEN A LIGHT IS OFF, THE TRAFFIC LIGHT AND ITS INDICATING LIGHT ARE ENERGIZED IN SERIES. DUE TO RESISTANCE RATIOS, MOST OF THE VOLTAGE IS APPLIED TO THE INDICATING LIGHT AND IT WILL BE CONTINUOUSLY LIT WHILE THE TRAFFIC LIGHT WILL BE OFF.
     - (2) WHEN A TRAFFIC LIGHT IS ON, ITS INDICATING LIGHT IS SHORT CIRCUITED SO THAT FULL VOLTAGE IS APPLIED TO THE TRAFFIC LIGHT. FLASHER CONTACTS ALTERNATIVELY FLASH THE TRAFFIC LIGHT AND ITS INDICATING LIGHT ON AND OFF.
     - (3) A CONTINUOUS CIRCUIT CONTINUITY CHECK IS PROVIDED BY THE FACT THAT INDICATING LIGHTS WILL NOT BE LIT IF THERE IS A LAMP FILAMENT FAILURE OR AN OPEN CIRCUIT.
   - F. GATE LIMIT SWITCH INTERLOCK CONTACTS "G103" ARE PROVIDED SO THAT THE GATES AT ONE END OF THE LOCK MUST BE COMPLETELY OPEN BEFORE THE GREEN TRAFFIC LIGHT AT THAT END OF THE LOCK CAN BE TURNED ON OR BEFORE THE AMBER LIGHT CAN BE ELECTRICALLY MAINTAINED.
   - G. ELECTRICAL INTERLOCKS ARE PROVIDED TO PREVENT THE SIMULTANEOUS SHOWING OF TWO OR MORE TRAFFIC LIGHTS.
   - H. EAST LOCK TRAFFIC LIGHT OPERATION
     - (1) THE RED TRAFFIC LIGHT IS TURNED ON WHEN ITS CONTROL RELAY "TER" IS ENERGIZED BY TURNING ON THE TRAFFIC LIGHT SYSTEM.
     - (2) THE AMBER TRAFFIC LIGHT MAY BE TURNED ON AT THE LOCK ATTENDANT'S DISCRETION BY DEPRESSING PUSHBUTTON "TEA" TO ENERGIZE CONTROL RELAY "TEA". IF BOTH GATE LIMIT SWITCH CONTACTS "G103" AND "G303" ARE NOT CLOSED, PUSHBUTTON "TEA" MUST BE HELD IN MANUALLY TO MAINTAIN THE AMBER LIGHT. IF THE LIMIT SWITCH CONTACTS ARE CLOSED, THE AMBER LIGHT WILL BE ELECTRICALLY MAINTAINED VIA CONTACT "TEA2" WHICH SEALS IN RELAY "TEA".
     - (3) THE GREEN TRAFFIC LIGHT MAY BE TURNED ON BY DEPRESSING PUSHBUTTON "TEG" TO ENERGIZE RELAY "TEG" AND BE MAINTAINED ELECTRICALLY BY CONTACT "TEG2" WHICH SEALS IN RELAY "TEG" ONLY IF THE FULLY OPEN GATE LIMIT SWITCH CONTACTS "G103" AND "G303" ARE CLOSED.
     - (4) THE RED TRAFFIC LIGHT MAY BE TURNED ON AND AN AMBER OR GREEN TRAFFIC LIGHT TURNED OFF BY DEPRESSING PUSHBUTTON "TER" TO DE-ENERGIZE THE AMBER AND GREEN TRAFFIC LIGHT HOLDING CIRCUITS.
   - I. WEST LOCK TRAFFIC LIGHT OPERATION IS SIMILAR TO EAST LOCK OPERATION WHEN PUSHBUTTON "TWA", "TWG" OR "TWR" IS DEPRESSED.
2. BOAT OPERATOR'S SIGNAL HORN SYSTEM - BOAT OPERATOR SWITCHES "THE" AND "THW" ARE PROVIDED TO PERMIT A BOAT OPERATOR TO SOUND HORN "E" OR "W" TO SIGNAL THE LOCK ATTENDANT WHEN A LOCK PASSAGE IS DESIRED. THE BOAT OPERATOR SWITCHES SHALL BE A MATCHAX TYPE LIMIT SWITCH WITH CONTACTS CLOSED BY PULLING A CORD OR LANYARD AND OPENED BY SPRING ACTION. HORNS "E" AND "W" SHALL HAVE DISTINCTIVELY DIFFERENT AUDIBLE TONES SO AS TO SIGNAL WHETHER AN EAST OR WEST LOCK PASSAGE IS DESIRED. ON-OFF SWITCHES "THE" AND "THW" WITH POWER-ON INDICATING LIGHTS SHALL BE LOCATED ON EACH CONTROL PANEL.

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

NOTES:
1. FOR LIST OF SYMBOLS, SEE SHEET NO. 60.
2. FOR LOCK CONNECTION DIAGRAMS, SEE SHEET NO 63.
3. FOR CONTROL STAND CONNECTION DIAGRAMS, SEE SHEET NO. 66.

LIST OF ABBREVIATIONS FOR EQUIPMENT, WIRE AND CONDUIT

ABBREVIATION		DESCRIPTION
F		FIRE PUMP CONTROL CIRCUIT
L		LIGHTING CIRCUIT PREFIX
LE		EAST LOCK LIGHTING
LM		MAINT. BLDG. LTG. CIRCUIT
LSR		SOLAR RELAY CONTROL
LW		WEST LOCK LIGHTING
P		POWER CIRCUIT PREFIX
PE	PW	EAST - WEST LOCK
PEI		FIRE PUMP
PE3	PW1	LIGHTING TRANSFORMER PRIMARY
PE4	PW2	LIGHTING TRANSFORMER SECONDARY
PES		SANITARY WATER PUMP
PGB	PGB	LOCK GATE POWER
	PM	MAINT. BLDG. POWER CIRCUIT
T		TRAFFIC LIGHT SYSTEM PREFIX
TC	TW	EAST - WEST TRAFFIC LIGHT
TEA	TWA	AMBER LIGHT CONTROL
TEG	TWG	GREEN LIGHT CONTROL
TER	TWR	RED LIGHT CONTROL
TFE	TFW	TRAFFIC LIGHT FLASHER
TFEA	TFWA	AMBER LIGHT CONTROL
TFEG	TFWG	GREEN LIGHT CONTROL
TFER	TFWR	RED LIGHT CONTROL
TH		TRAFFIC SIGNAL HORN PREFIX
THE	THW	EAST - WEST HORN CONTROL

AS BUILT
U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE CORPS OF ENGINEERS JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
ELECTRICAL
SCHEMATIC WIRING DIAGRAM - POWER, LIGHTING, AND SIGNAL SYSTEM

DF 40 CIV ENG DR 125-54-25 | SHEET NO. F | 4-28,383
DATED: 24 JANUARY 1924
SCALE: AS SHOWN | DATED: JULY 1963 | SHEET 61 OF 74

11-23,476

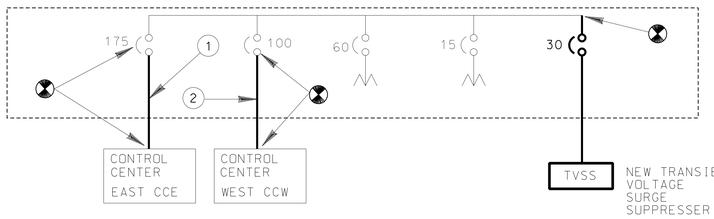
KEY NOTES:

1. PROVIDE NEW CIRCUIT "PM2" 600V, 4-3/0 AWG. CU. 1-#6 AWG CU. IN EXISTING CONDUIT.
2. PROVIDE NEW CIRCUIT "PM2 600V, 4-1/0 AWG. CU. 1 #6 AWG CU. IN EXISTING CONDUIT.

GENERAL NOTES:

1. THIS SHEET IS FURNISHED TO PROVIDE GENERAL INFORMATION ABOUT GUIDE WALL LIGHTING CIRCUIT, LOCK CHAMBER LIGHTING CIRCUIT, SIGNAL CIRCUITS AND CONTRACTOR SHALL TEST AND ENSURE ALL CIRCUITS ARE FUNCTIONING PROPERLY AFTER REWIRING.

CONTROL CENTER MAIN (CCM)



SINGLE LINE DIAGRAM
n.t.s.

DETAIL NOTE: BOLD LINES NOTE SCOPE OF NEW WORK

NOTES LIMITS OF NEW WORK.

100 MOLDED CASE CIRCUIT BREAKER. NUMERIC DESIGNATION INDICATES CURRENT RATING.

US Army Corps of Engineers
Jacksonville District

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DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

No.	Symbol	Zone	Description	Approved

Designed by: M. WOOD
Drawn by: D.S.
Checked by:
Inv. No.
Scale: AS SHOWN
Dated: MAR 2003
D.O.FILE NO. 90C-38,319

File name: CANLKRPXXXX1602.DGN
Reference files: CANLKRPXXXXBRDR.DGN
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CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL WIRING SCHEMATIC

DRAWING NO.
16/2

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SCHEMATIC GATE CONTROL WIRING DIAGRAM ④

★ FOR CONTINUATION, SEE TRAFFIC LIGHT SIGNAL SYSTEM SCHEMATIC WIRING DIAGRAM ON SHEET Nº GI

DESCRIPTION OF OPERATION

1. THE SCHEMATIC CONTROL DIAGRAM IS SHOWN WITH THE EAST LOCK GATES FULLY CLOSED AND THE WEST LOCK GATES FULLY OPEN.
2. THE SCHEMATIC POWER DIAGRAM FOR GATE MOTORS IS SHOWN ON SHEET NO. 61.
3. INDIVIDUAL OPERATION FOR EACH GATE SHALL BE PROVIDED BY AN INDEPENDENT ELECTRO-HYDRAULIC SYSTEM EQUIPPED WITH AN ELECTRIC MOTOR TO DRIVE A HYDRAULIC PUMP, A HYDRAULIC MOTOR WITH BRAKE TO OPEN AND CLOSE THE GATE AND VARIOUS SOLENOID VALVES AND LIMIT SWITCHES TO CONTROL GATE TRAVEL AND SPEED.
4. A COMBINATION MOTOR-STARTER SHALL BE PROVIDED FOR EACH GATE MOTOR AS INDICATED ON THE CONTROL CENTER EQUIPMENT DATA LIST ON SHEET NO. 66 IN ADDITION, A NON-FUSIBLE SAFETY SWITCH SHALL BE PROVIDED FOR GATE NO. 3 AND GATE NO. 4 MOTORS.
5. HYDRAULIC SOLENOID OPERATED VALVES SHALL BE PROVIDED AS SHOWN ON MECHANICAL DRAWINGS FOR GATE "OPEN-CLOSE" AND "SLOW SPEED" CONTROL.
6. LIMIT SWITCHES SHALL BE PROVIDED TO FUNCTION AS SHOWN ELSEWHERE ON THIS SHEET IN A LIMIT SWITCH CONTACT SCHEDULE.
7. AN EAST-WEST GATE INTERLOCK CIRCUIT SHALL BE PROVIDED TO PREVENT OPENING THE GATES AT ONE END OF THE LOCK UNLESS THE GATES AT THE OTHER END ARE FULLY CLOSED. INTERLOCK CIRCUIT BY-PASS PUSHBUTTONS "GEB" AND "GWB" SHALL BE PROVIDED IN CASE IT SHOULD BE DESIRED TO OPEN THE GATES AT BOTH ENDS OF THE LOCK.
8. INTERLOCK RELAY CONTACTS ARE PROVIDED TO PREVENT ENERGIZATION OF BOTH AN OPEN AND A CLOSE GATE CONTROL RELAY.
9. A TRAFFIC LIGHT INTERLOCK CIRCUIT SHALL BE PROVIDED TO FUNCTION AS NOTED IN THE DESCRIPTION OF THE TRAFFIC LIGHT SYSTEM ON SHEET NO. 61.
10. CONTROLS FOR THE EAST GATES SHALL BE LOCATED ON CONTROL STAND "CSE" IN MACHINERY HOUSE NO. 1 AND, FOR THE WEST GATES, ON CONTROL STAND "CSW" IN MACHINERY HOUSE NO. 2.
11. INDICATING LIGHTS SHALL BE LOCATED ON CONTROL STANDS "CSE" AND "CSW" TO INDICATE THE FOLLOWING EAST AND WEST GATE POSITIONS.
    A. BLUE IND. LT. -GATES FULLY OPENED
    B. AMBER IND. LT. -GATES OPENING
    C. AMBER IND LT. -GATES CLOSING
    D. BLUE IND. LT. -GATES FULLY CLOSED
12. TOGGLE SWITCHES SHALL BE PROVIDED AS FOLLOWS:
    A. SWITCHES "GE" AND "GW" FOR GATE CONTROL CIRCUIT ON-OFF CONTROL.
    B. SWITCHES "G1", "G2", "G3" AND "G4" FOR MAINTENANCE PURPOSES AND TO PERMIT INDIVIDUAL GATE OPERATION.
13. SELECTOR SWITCHES "GESS" AND "GWSS" SHALL BE PROVIDED TO PERMIT MANUAL SELECTION OF NORMAL SPEED OR OF SLOW SPEED IF GATES ARE BEING OPENED AGAINST A WATER LEVEL DIFFERENTIAL.
14. TO OPEN EAST GATES:
    A. MANUALLY SET SELECTOR SWITCH "GESS" TO ENERGIZE GATE NO. 1 AND NO. 3 SLOW SPEED SOLENOID VALVES IF OPENING GATES AGAINST A WATER LEVEL DIFFERENTIAL.
    B. IF THE WEST LOCK GATES ARE NOT FULLY CLOSED AND THE INTERLOCK LIMIT SWITCH CONTACTS "G2C-3" AND "G4C-3" ARE OPEN, THE BY-PASS PUSHBUTTON "GWB" MUST BE MANUALLY HELD IN A DEPRESSED POSITION TO BE ABLE TO OPEN THE EAST GATES.
    ★C. DEPRESS GATE OPEN PUSHBUTTON "GEO" TO ENERGIZE THE OPEN CONTROL RELAY "GEO". CONTACTS CLOSE TO ENERGIZE THE MOTOR OPEN AND SOLENOID VALVE OPEN CONTROL CIRCUITS AND CONTACTS "G1-1", "G3-1" AND "GEO2" SEAL IN THE OPEN RELAY "GEO".
    D. THE GATES WILL START TO OPEN AT NORMAL OR SLOW SPEED ACCORDING TO THE SPEED CONTROL SELECTOR SWITCH "GESS" SETTING. IF OPENING AT SLOW SPEED AGAINST A WATER LEVEL DIFFERENTIAL, THE LOCK OPERATOR MAY, AT HIS DISCRETION, SHIFT TO NORMAL SPEED BY ROTATING SWITCH "GESS" WHEN THE WATER LEVEL DIFFERENTIAL HAS FALLEN TO A SAFE LEVEL.
    E. THE GATES WILL THEN CONTINUE TO OPEN AT NORMAL SPEED UNTIL INDEPENDENTLY SHIFTED TO SLOW SPEED BY NEAR OPEN LIMIT SWITCH CONTACTS "G1NO" AND "G3NO" AND STOPPED BY FULLY OPEN LIMIT SWITCH CONTACTS "G1O-1" AND "G3O-1"
15. OPEN WEST GATE OPERATIONS ARE SIMILAR TO THE ABOVE EAST GATE OPERATIONS WHEN THE OPEN PUSHBUTTON "GWO" IS DEPRESSED.
16. TO CLOSE EAST GATES:
    A. SELECTOR SWITCH "GESS" SHOULD NORMALLY BE SET AT NORMAL SPEED SINCE THE GATES WOULD NOT BE OPERATING AGAINST A WATER LEVEL DIFFERENTIAL.
    ★B. DEPRESS GATE CLOSE PUSHBUTTON "GEC" TO ENERGIZE THE CLOSE CONTROL RELAY "GEC". CONTACTS CLOSE TO ENERGIZE THE MOTOR CLOSE AND THE SOLENOID VALVE CLOSE CONTROL CIRCUITS AND CONTACTS "G1-1", "G3-1" AND "GEC2" SEAL IN THE CLOSE RELAY "GEC".
    C. THE GATES WILL THEN CLOSE AT NORMAL SPEED UNTIL INDEPENDENTLY SHIFTED TO SLOW SPEED BY NEAR CLOSED LIMIT SWITCH CONTACTS "G1NC" AND G3NC" AND STOPPED BY FULLY CLOSED LIMIT SWITCH CONTACTS "G1C-1" AND "G3C-1".
17. CLOSE WEST GATE OPERATIONS ARE SIMILAR TO THE ABOVE EAST GATE OPERATIONS WHEN THE CLOSE PUSHBUTTON "GWC" IS DEPRESSED.
★18. TIME DELAY CONTACTS, WITH A 5 SECOND CLOSING DELAY ON ENERGIZATION, SHALL BE PROVIDED FOR THE HYDRAULIC SOLENOID VALVE CIRCUITS TO PERMIT THE MOTORS TO START UNDER A NO LOAD CONDITION.

REVISIONS

NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

NOTES:

1. FOR LIST OF SYMBOLS, SEE SHEET NO. 60.
2. FOR CONTROL STAND AND CONTROL CENTER WIRING DIAGRAMS, SEE SHEET NO. 66.
3. FOR LOCK POWER WIRING DIAGRAM, SEE SHEET NO. 61.
4. IDENTIFICATION LETTERS SHOWN ON THE SOLENOID OPERATED HYDRAULIC VALVES CORRESPOND TO THOSE SHOWN ON THE HYDRAULIC SCHEMATIC DIAGRAM ON SHEET NO. 53.

LIST OF ABBREVATIONS

	G		LOCK GATE CONTROL
G#			GATE # CONTROL
	GE	GW	GATE CONTROL: EAST - WEST
G#C	GEC	GWC	CLOSE CONTROL
	GECI	GWCI	GATES CLOSED INDICATING LT. CONTROL
	GECS	GWCS	CLOSE SLOW SPEED CONTROL
	GECV	GWCV	CLOSE SOLENOID VALVE CONTROL
G#M			GATE # MOTOR CONTROL
G#O	GEO	GWO	OPEN CONTROL
	GEOI	GWOI	GATES OPENED INDICATING LT. CONTROL
	GEOS	GWOS	OPEN SLOW SPEED CONTROL
	GEOV	GWOV	OPEN SOLENOID VALVE CONTROL
G#SS			GATE # SLOW SPEED CONTROL
G#V			GATE # SOLENOID VALVE CONTROL

LIMIT SWITCH CONTACT SCHEDULE ④

CONTROL FUNCTION	SYMBOL	CONTACTS NO.	CONTACTS NC NO	GATE POSITION (FULLY OPENED – 1 FT. FROM OPEN – 1 FT. FROM CLOSED – FULLY CLOSED)	ENCLOSURE
GATE FULLY OPENED LIMIT SWITCH	G#O				NEMA IV
GATE FULLY OPENED		1	NC		
GATE OPENED IND. LIGHT		2	NO		
TRAFFIC LT. INTERLOCK		3	NO		
NEAR OPEN SLOW SPEED CONTROL	G#NO	1	NO		NEMA IV
NEAR CLOSED SLOW SPEED CONTROL	G#NC	1	NO		NEMA IV
GATE FULLY CLOSED LIMIT SWITCH	G#C				NEMA IV
GATE FULLY CLOSED		1	NC		
GATE CLOSED IND. LIGHT		2	NO		
GATE INTERLOCK CIRCUIT		3	NO		

DENOTES CLOSED CONTACT ▬ DENOTES OPEN CONTACT ▨

TYPICAL LOCK GATE CONTROL LIMIT SWITCH INSTALLATION
SCALE 3"=1'-0"
(SHOWN FOR GATES NO. 3&4 - TO OPPOSITE HAND FOR GATES NO. 1&2)

GRAPHIC SCALES 0 3" 6" 9" 1'

SECTION A-A

AS BUILT

U.S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
ELECTRICAL
SCHEMATIC WIRING DIAGRAM-LOCK GATE CONTROL

Dwn by J.L.A. | Ckd by E&K | INV. NO. CIV. ENG. 08-125-64-25 | DATED: 24 JANUARY 1964 | SIZE F | FILE NO. ~~11-28,383~~ | SCALE: AS SHOWN | DATED: ~~JULY 1963~~ | SHEET 62 OF 74

11-29,676

KEY NOTES:

1. CONTRACTOR SHALL REPLACE ALL EXISTING STOP LIMIT SWITCHES ON ALL FOUR GATES. EACH GATE HAS TWO STOP LIMIT SWITCHES AS SHOWN. CONTRACTOR SHALL PROVIDE CUTLER HAMMER # E84ABA2 (OR APPROVED EQUAL).
2. CONTRACTOR SHALL REPLACE ALL EXISTING SLOW SPEED CONTROL SWITCHES ON ALL FOUR GATES. EACH GATE HAS TWO SLOW SPEED CONTROL SWITCHES AS SHOWN. CONTRACTOR SHALL PROVIDE CUTLER HAMMER #E84BBD2 (OR APPROVED EQUAL).
3. CONTRACTOR SHALL REPLACE FLEXIBLE CONDUIT, LB CONDULET, AND CONDUCTORS BETWEEN EACH LIMIT SWITCH AND JUNCTION BOX AS SHOWN. ALL CONDUIT, LB CONDULET AND CONDUCTOR SIZES SHALL MATCH EXISTING. CONTRACTOR SHALL ENSURE THE FUNCTION OF THE LIMIT SWITCHES IN THE CONTROL CIRCUIT AND REWIRING UNDER CONTRACT SHALL NOT AFFECT THE OPERATION.
4. THE LIMIT SWITCH SCHEDULE AND GATE CONTROL DIAGRAMS ARE FOR CONTRACTOR'S INFORMATION TO ENSURE THAT THE INTEGRITY OF THE CONTROL SYSTEM IS MAINTAINED.
5. CONTRACTOR SHALL MODIFY LIMIT SWITCH MOUNTING BRACKET AS NEEDED TO MATCH THE NEW LIMIT SWITCHES.

GENERAL NOTES:

1. INFORMATION ON THIS DRAWING SUCH AS LIST OF ABBREVIATIONS, DESCRIPTION OF OPERATIONS AND NOTES ARE FOR CONTRACTOR'S GENERAL INFORMATION AND SHALL BE USED TO COORDINATE WORK AS NEEDED.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

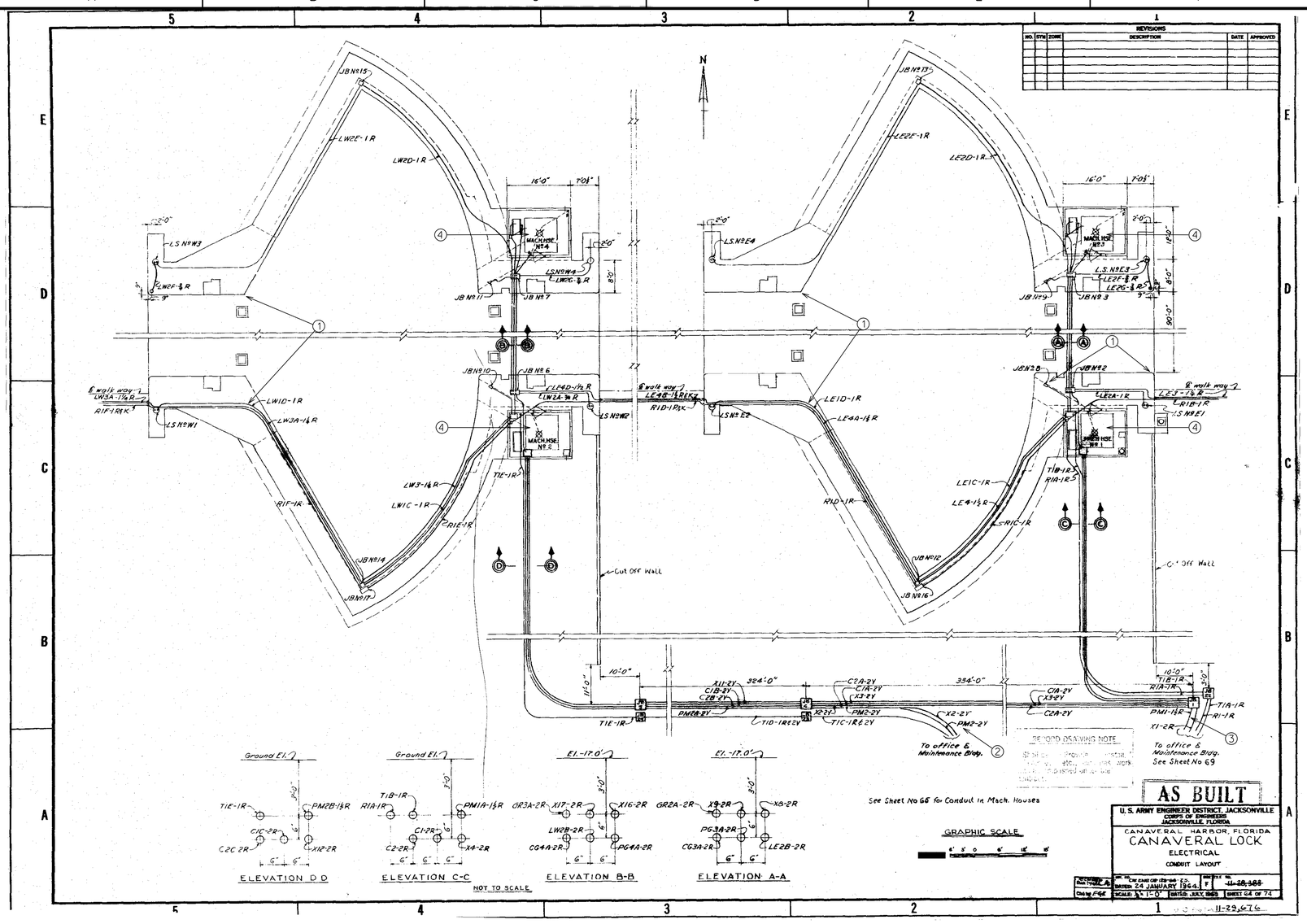
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M. WILSON | Dwn by: D.S. | Ckd by: | Inv. No. | Scale: AS SHOWN | Dated: MAR 2003
D.O. FILE NO. 90C-38,319

File name: CANLKRPXXXX1603.DGN
Reference files: CANLKRPXXXXBRDR.DGN 11296761603.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
LIMIT SWITCH REPLACEMENT

DRAWING NO.
16/3



REVISIONS

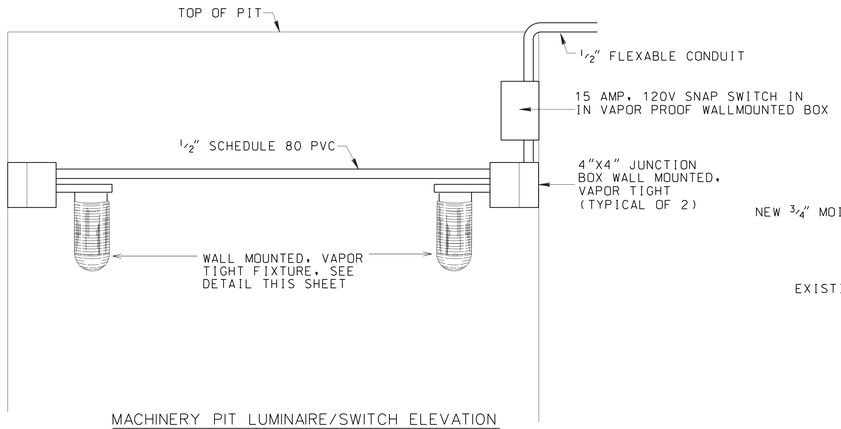
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

KEY NOTES:

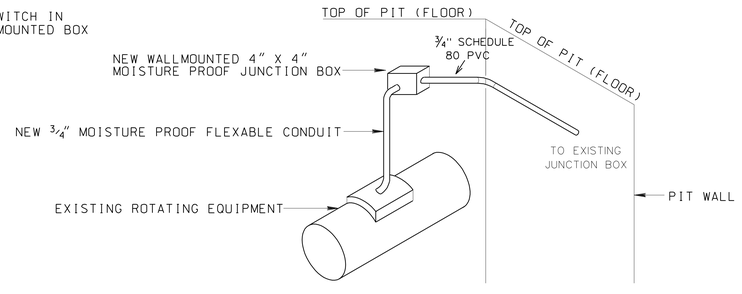
1. PROVIDE/REPLACE ALL EXISTING HANDRAIL BONDING CONDUCTORS TO MATCH EXISTING. REPLACE MAIN GROUNDING CABLE ALL FOUR GATES TO MATCH EXISTING.
2. PROVIDE NEW CIRCUIT "PM2" 600 V, 4 - #3/0 AWG - CU. 1 - #6 AWG CU, THWN - 2 IN EXISTING CONDUITS VIA JB4 AND JB5.
3. PROVIDE NEW CIRCUIT "PM1" 600 V, 4 - 1/0 AWG - CU, 1 - #6 AWG CU, THWN - 2, IN EXISTING CONDUITS VIA JB1.
4. REPLACE MACHINERY PIT CONDUIT. REPLACE EXISTING MACHINERY UNSWITCHED STRIP FLOURESCENT LUMINAIRE WITH 2 SWITCHED, VAPOR TIGHT LUMINAIRES. SEE DETAILS, THIS SHEET. PROVIDE ELECTRICAL POWER FROM 120V PANEL VIA VAPOR TIGHT FLEXABLE CONDUIT.

GENERAL NOTE:

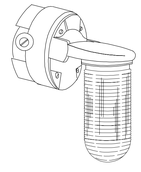
INFORMATION ON THIS DRAWING SUCH AS LIST OF ABBREVIATIONS, DESCRIPTION OF OPERATIONS AND NOTES ARE FOR CONTRACTOR'S GENERAL INFORMATION AND SHALL BE USED TO COORDINATE WORK AS NEEDED.



MACHINERY PIT LUMINAIRE/SWITCH ELEVATION
N.T.S.



MACHINERY PIT CONDUIT REPLACEMENT ELEVATION
N.T.S.



NOTE:
BOX WALL MOUNTED, VAPORTIGHT WITH 4" DIE CAST ALUMINUM BOX, WALL BRACKET TO BE DIE CAST ALUMINUM COMPLETE WITH GASKET AND MOUNTING SCREWS. DIE CAST ALUMINUM ADAPTER AND GLAZED PORCELAIN MEDIUM SOCKET WITH CLEAR PRISMATIC LEXAN GLOBE.

WALL MOUNTED VAPORTIGHT FIXTURE
N.T.S.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M. Mejia
Drawn by: D.S.
Checked by:
Traced by:
Inv. No.
Scale: AS SHOWN
Dated: MAR 2003

File name: CNVLKRPXXX1604.DGN
Reference files: CNVLKRPXXXBDR.DGN 1129676604.TIF

D.O. FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
CIRCUIT AND GROUND BOND REPLACEMENT

DRAWING NO.
16/4

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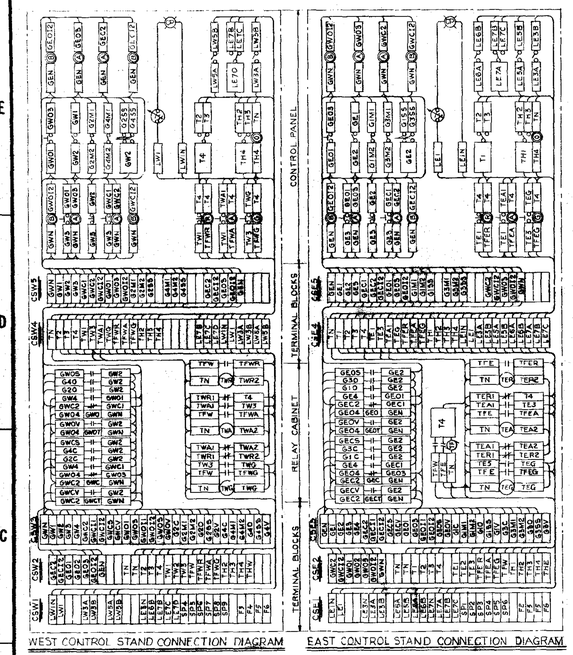


WEST CONTROL STAND CONNECTION DIAGRAM

EAST CONTROL STAND CONNECTION DIAGRAM

CONTROL STAND DATA

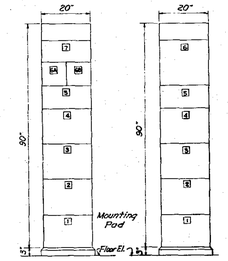
FUNCTION	ITEM	LEGEND CSE	LEGEND CSW	CONTACTS NC	CONTACTS NO	EQUIPMENT RELAY	EQUIPMENT PB	EQUIPMENT SPST SW.	EQUIPMENT 3-WAY SW.	EQUIPMENT SEL SW	EQUIPMENT IND LT.	MFG	MANUFACTURER OR EQUAL CATALOG NO.
GATE POSITION INDICATING LIGHT	1	X	X								B	W	OTIFF-1A-15-R34(05)
	2	X	X								A	W	OTIFF-1A-1N-R34(05)
GATE CONTROL	3	GWG	GEG		1		X					W	OTIID-1A-R34(05)
	4	GE	GW					X				B	4901
	5	G1	G2					X				B	4901
	6	G3	G4					X				B	4901
	7	GESS	GWSS		2					X		W	OTISI-1A-R34(05)
	8	GEO	GWO		1		X				A	W	OTIPF-1A-LN-R34(05)
	9	GES	GWS	1			X					W	OTIID2-1A-R34(05)
	10	GEC	GWC		1		X				A	W	OTIPF-1A-LN-R34(05)
LIGHTING CONTROL	11	LEG						X				B	4901
	12	LE7	LE7						X			B	4903
	13	LE5	LW5				X					B	4901
	14	LE3	LW3				X					B	4901
TRAFFIC SIGNAL CONTROL	15	TE	TW							X		W	OTISI-1A-R34(05)
	16	THE	THW							X	D	W	OTIJF-1A-J6-R34(05;
	17	TER	TWR	1			X				R	W	OTIPF-1A-L2-R34
	18	TEA	TWA		1		X				A	W	OTIPF-1A-LN-R34
	19	TEG	TWG		1		X				G	W	OTIPF-1A-L3-R34
PANEL LT. DIMMER AND ON-OFF SW	20	CVE	CPW	X								S	W80/-/W
PANEL LTG. FIXTURE-MODIFIED	20A	X	X									G	152755-24
PANEL LTG. FIXTURE LAMP	20B	X	X									GE	LUMILINE L30/1F
GATE CONTROL RELAY	21	GEO	GWO	1	4	K						W	BF62A (SPARES; INC, 2NO)
	22	GEC	GWC	1	4	K						W	BF62A (" " ")
TRAFFIC LT. CONTROL RELAY	23	TER	TWR	1	1	A						W	BF11A
	24	TEA	TWA	1	2	K						W	BF21A
	25	TEG	TWG	2	2	A						W	BF22A
TRAFFIC LIGHT FLASHER UNIT	26	TF		X								CH	TL165,#5A97
TERMINAL BLOCKS (AS REQ'D)	27												
NAMEPLATES (AS REQ'D)	28												
GATE CONTROL RELAY-TIME DELAY (5 SEC. CLOSING DELAY ON ENGER.)	29	GEGT	GWGT			ITD						W	BTG22A
	30	GECT	GWCT			ITD						W	BTG22A

*MANUFACTURERS: B- BRYANT ELECTRIC CO. CH-CROUSE-HINDS G-GOTHAM LIGHTING CORP. GE-GENERAL ELECTRIC CO.
S- SUPERIOR ELECTRIC CO. W-WESTINGHOUSE ELECTRIC CORP.

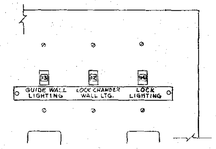
CONTROL CENTER DATA

EQUIPMENT AND NAMEPLATE DATA	ITEM CCE	ITEM CCW	BREAKER POLES	BREAKER FRAME	BREAKER TRIP	STARTER SIZE	STARTER W.C.	STARTER N.O	REMARKS
TERMINAL BLOCKS	1	1							
MAIN BREAKER	2		3	JA	150A				
		2	3	F	90A				
GATE NO. 4		3	3	F	50A	2		2	
GATE NO. 3	3		3	F	50A	2		2	
GATE NO. 2		4	3	F	50A	2		2	
GATE NO. 1	4		3	F	50A	2		2	
FIRE PUMP	5		3	F	100A				
SANITARY WATER PUMP	6A		3	F	15A				
LIGHTING PRIMARY	6B	5	3	F	15A				
LIGHTING PANELBOARD	6	6	1	E	20A				B CIRC.BKR'S REQ'D
BLANK	7								

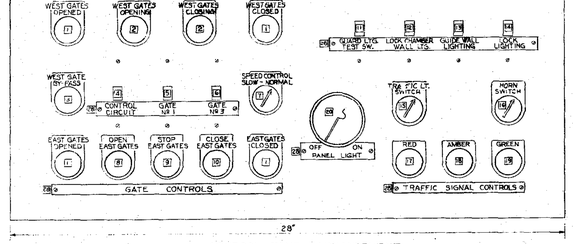
NOTES:
1. CONTROL PANEL STANDS SHALL BE CONSTRUCTED OF NOT SMALLER THAN 1½" ANGLE FRAME, 3/32" SIDE PANELS AND 11-GAGE TOP PANEL WITH NECESSARY CROSS BRACING. THE FRONT PANEL SECTION SHALL BE INSTALLED ON THE FRAME WITH SCREWS OR WITH HINGES SO AS TO PROVIDE EASY ACCESS TO THE RELAY CABINET.
2. CONTROL STAND LOUVERS SHALL BE PROVIDED WITH #10 MESH INSECT SCREENS.
3. THE CONTROL STAND LIGHTING FIXTURE SHALL BE SIMILAR AND EQUAL TO GOTHAM LIGHTING CORP. FIXTURE CAT. NO. TSZ155-24 MODIFIED FOR A LUMILINE TYPE L30/1F LAMP AND SHALL BE INSTALLED WITH 1/2" CONDUIT, ELL AND FLANGE.
4. SPACE HEATERS SHALL BE PROVIDED IN THE CONTROL CENTERS AND IN THE CONTROL STAND RELAY CABINETS AS SPECIFIED IN PARAGRAPHS 16-09(b) AND 16-09(b) (1) OF THE SPECIFICATIONS.



CONTROL CENTERS
"CCE" "CCW"

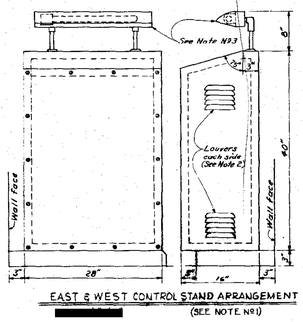


DETAIL "A"
LIGHT CONTROL SW. ARRANGEMENT
CONTROL PANEL "CPW"

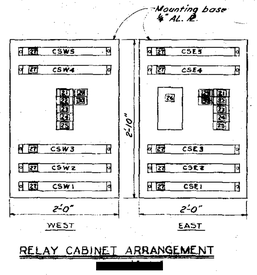


CONTROL PANEL ARRANGEMENT
EAST PANEL SHOWN

NOTE: The West control panel shall be identical except for the following:
1. On nameplate legends, change "East" to "West" and "West" to "East".
2. On nameplate legends, change "Gate N#1" & "Gate N#3" to "Gate N#2" & "Gate N#4".
3. Light control switches to be arranged as shown on Detail "A".



EAST & WEST CONTROL STAND ARRANGEMENT
(SEE NOTE N#1)



RELAY CABINET ARRANGEMENT

GRAPHIC SCALES

AS BUILT
U.S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
ELECTRICAL
LOCK CONTROL STANDS AND CONTROL CENTERS
Des. by J.L.A. DATED: 24 JANUARY 1964.
Chd. by G.P.S. SCALE: AS SHOWN DATED: JULY, 1963 SHEET 66 OF 74
CN Encl. 08-ED-64-25 REV. F
11-28,383 11-29,676

GENERAL NOTE:

INFORMATION ON THIS DRAWING SUCH AS LIST OF ABBREVIATIONS, DESCRIPTION OF OPERATIONS AND NOTES ARE FOR CONTRACTOR'S GENERAL INFORMATION AND SHALL BE USED TO COORDINATE WORK AS NEEDED.

REVISIONS

NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED
3	A		REVISED CONTROL CENTERS TO ACCORDANCE WITH TO CONTRACT NO. 38	7/14/64	JLC

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No. Symbol Zone Description Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M.A. Wood
Drawn by: D.S.
Checked by: ? ? ?
Traced by:
Inv. No.
Scale: AS SHOWN
Dated: MAR 2003
D.O.FILE NO. 90C-38,319

File name: CNLKRPXXX1605.DGN
Reference files: CNLKRPXXXXBRDR.DGN 11296716605.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
REFERENCE CONTROL DIAGRAM

DRAWING NO.
16/5

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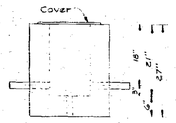
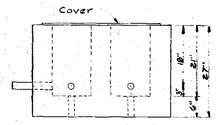
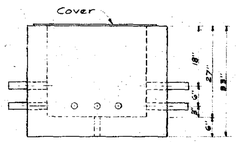
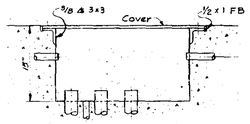
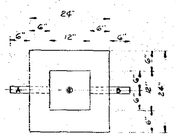




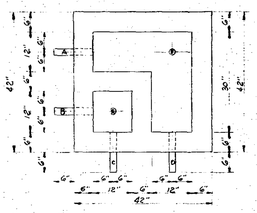


ELEVATION

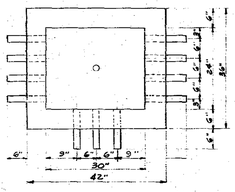




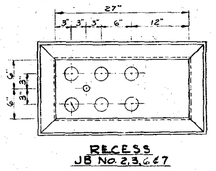
CONCRETE BOX
JB No. 23 & 24



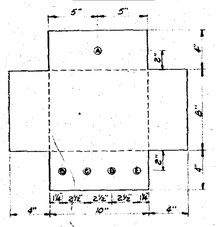
CONCRETE BOX
JB No. 22



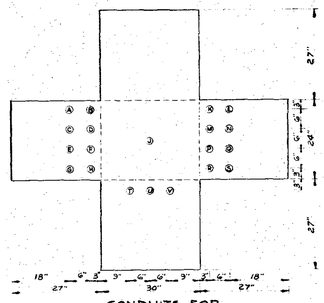
CONCRETE BOX
JB No. 1, 4 & 5



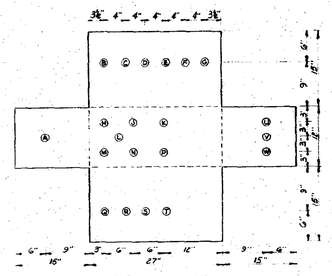
RECESS
JB No. 2, 3, 6 & 7



CONDUITS FOR
JB No. 8, 9, 10 & 11



CONDUITS FOR
JB No. 1, 4 & 5



CONDUITS FOR
JB No. 2, 3, 6 & 7

NOTES;

1. BOXES 8, 9, 10 AND 11 SPRING CITY TYPE H.F. SHOWN.
2. BOXES 12, 13, 14, 15, 16 AND 17 SPRING TYPE E.R. SHOWN.
3. ALL BOXES ON SECTOR GATE SPRING CITY TYPE H.F. SHOWN
4. BOXES 2, 3, 6, 7, 12, 13, 14, 15, 16 AND 17 SHALL BE PROVIDED WITH A NON-SLIP TYPE CHECKERED PLATE (WITH COUNTER BORED HOLES AND CORROSION RESISTING HEX HEAD CAP SCREWS)
5. PVC CONDUIT TERMINATING IN CONCRETE BOXES SHALL BE PROVIDED WITH END BELLS.

CAST JUNCTION BOXES
CONDUIT DRILLING AND TAPPING SIZE

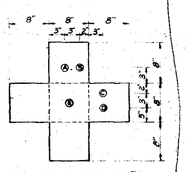
HOLE SYMBOL	JB8	JB9	JB10	JB11	JB12	JB13	JB14	JB15	JB16	JB17
A	CG1C-1 ½R	CG3E-1½R	CG2C-1 ½R	CG9E-1 ½R	LE4A-1 ½R	LE2D-1R	LW3A-1½R	LW2D-1R	R1D-1R	R1F-1R
B	CG1G-1R	CG3F-1R	CG2D-1R	CG9F-1R	LE1D-1R	BLANK	LW1D-1R	BLANK	R1C-1R	R1E-1R
C	CG1F-¾R	CG3G-¾R	CG2F-¾R	CG9E-¾R	LE1C-1R	BLANK	LW1-1¼R	BLANK	⅜ DRAIN	⅜ DRAIN
D	CG1E-¾R	CG3H-¾R	CG2E-¾R	CG9H-¾R	LE4-1 ½R	LE2E-1R	LW1C-1R	LW2E-1R		
E	CG1D-1R	CG3J-1R	CG2D-1R	CG9J-1R	⅜ DRAIN	⅜ DRAIN	⅜ DRAIN	¾ DRAIN		

CONDUITS ENTERING CONCRETE BOXES
CONDUIT SIZE

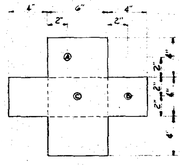
HOLE SYMBOL	JB1	JB4	JB5	JB22	JB23	JB24
A	PM1A-1 ½R	BLANK	BLANK	T1B-1R	T1D-1V	T1E-1R
B	A8-2R	A11-2V	X12-2R	R1A-1R	T1C-1V	T1D-1V
C	BLANK	BLANK	BLANK	R1-1R	¾ DRAIN	¾ DRAIN
D	X3-2V	C1B-2V	C1C-2V	T1A-1R		
E	C1-2V	BLANK	BLANK	¾ DRAIN		
F	C1A-2V	C2B-2V	C2C-2V	¾ DRAIN		
G	C2-2V	BLANK	BLANK			
H	C2A-2V	PM2A-1 ½V	PM2B-1½R			
J	¾ DRAIN	¾ DRAIN	¾ DRAIN			
K	BLANK	A3-2V	A11-2V			
L		BLANK	BLANK			
M		C1A-2V	C1B -2V			
N		BLANK	BLANK			
P		C2A-2V	C2B-2V			
Q		BLANK	BLANK			
R		PM2-1 ½R	PM-2V			
S	BLANK	X2-2V	BLANK			
T	PM1-1 ½R	BLANK				
U	BLANK					
V	X1-2R	BLANK	BLANK			

CONDUITS ENTERING RECESSES
CONDUIT SIZE

HOLE SYMBOL	JB2	JB3	JB6	JB7
A	BLANK	CG3E-1 ½R	BLANK	CG9E-1 ½R
B		X10-2R		X18-2R
C		LE2D-2R		LW2D-1R
D		PG3B-¾R		PGRB-¾R
E		CG3B-1R		CG9B-1R
F		CF1B-1R		CF1F-1R
G	BLANK	LE2C-¾R	BLANK	LW2C-¾R
H	GR2A-2R	CG3A-2R	GR3A-2R	CG9A-2R
J	X9-2R	PG3A-2R	X17-2R	LW2B-2R
K	X6-2R	LE2B-2R	X16-2R	PGRA-2R
L	⅜ DRAIN	⅜ DRAIN	⅜ DRAIN	⅜ DRAIN
M	CG3A-2R	GR2A-2R	CG9A-2R	GR3A-2R
N	PG3A-2R	X9-2R	LW2B-2R	X17-2R
P	LE2B-2R	X6-2R	PGRA-2R	X16-2R
Q	CG3-2R	BLANK	CG9-2R	BLANK
R	LE2-2R		LW2-2R	
S	PG3-¾R		PGR-¾R	
T	X7-2R	BLANK	X15-2R	BLANK
U	BLANK	LE2F-¾R	LE9D-1 ½R	LW2C-¾R
V	LE3-1 ½R	BLANK	LW2A-½R	BLANK
M	LE2A-1R	BLANK	BLANK	BLANK



CONDUITS FOR
JB No. 12, 13, 14 & 15



CONDUITS FOR
JB No. 16 & 17

GRAPHIC SCALE

RECORD DRAWING NOTE

"Shall be," "Provide," "Install," "Remove," etc., indicates work to be accomplished under the contract.

AS BUILT

U.S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
ELECTRICAL
JUNCTION BOX DETAILS

CW 81105-03-03-215 DATED 24 JANUARY 1964 | DRAWING NO. H-89,388
SCALE: AS SHOWN | DATED JULY, 1965 | SHEET 65 OF 74

D.O. File No. H-89,476

GENERAL NOTES:

INFORMATION ON THIS DRAWING SUCH AS LIST OF ABBREVIATIONS, DESCRIPTION OF OPERATIONS AND NOTES ARE FOR CONTRACTOR'S GENERAL INFORMATION AND SHALL BE USED TO COORDINATE WORK AS NEEDED.

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No. | Symbol | Zone | Description | Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: M. WOSNA
Drawn by: D.S.
Cad by:
Inv. No.
Scale: AS SHOWN
Dated MAR 2003
D.O.FILE NO. 90C-38,319

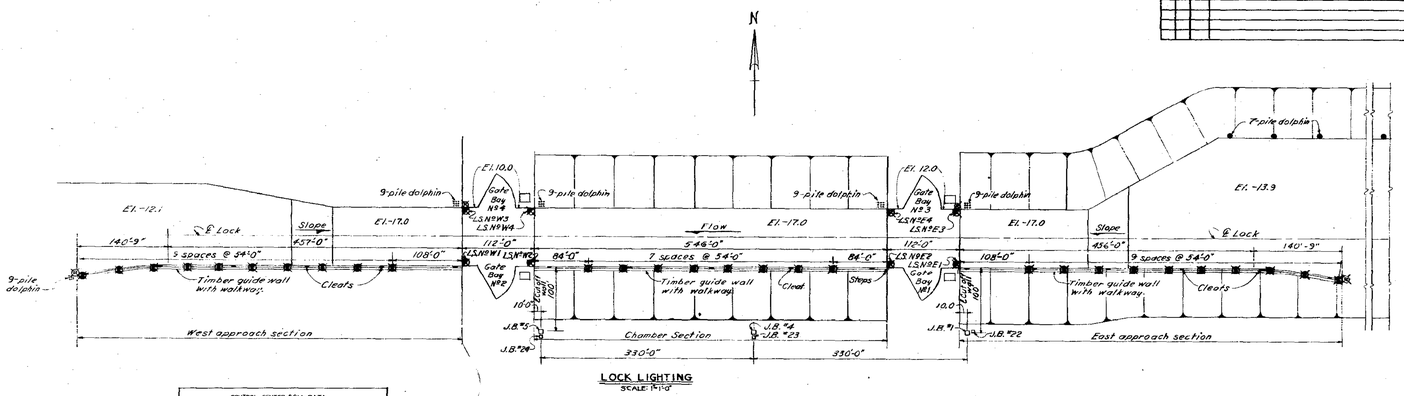
File name: CANLKRPXXXX1606.DGN
Reference files: CANLKRPXXXXBRDR.DGN 11296766606.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
REFERENCE HANDHOLE DIAGRAM/SCHEDULE

DRAWING NO.
16/6

.../dms01903/canlkrpxxxx1606.dgn 05/04/2004 10:18:07 AM

REVISIONS					
NO.	STR	ZONE	DESCRIPTION	DATE	APPROVED

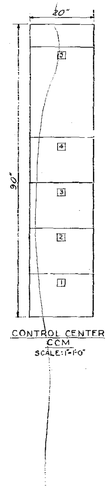


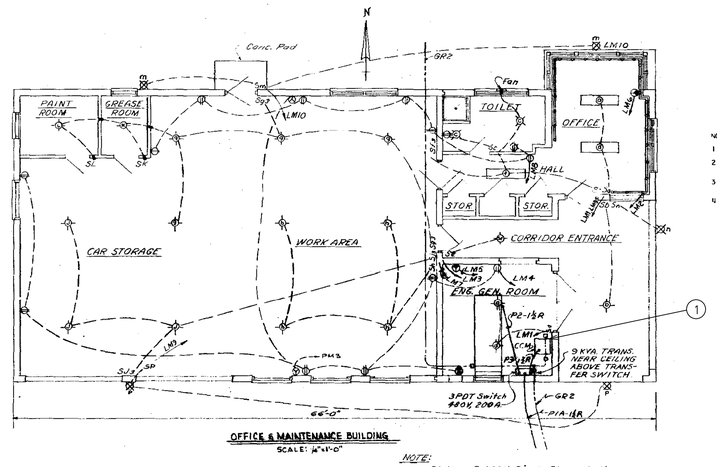
LOCK LIGHTING
SCALE: 1"=10'

CONTROL CENTER COM-DATA

EQUIPMENT AND NAME PLATE DATA	ITEM CCM	BREAKER POLES	BREAKER FRAME	BREAKER TRIP
TERMINAL BLOCKS	1			
MAIN BREAKER	2	3		150A
FEEDER TO CCE	3A	3		150A
FEEDER TO CCW	3B	3		70A
POWER OUTLETS MAINT. BLDG.	4A	3		70A
SPARE	4B			
LIGHTING PANEL BOARD	5	*		

* 10-20A SP. BR. BRKRS. AND 2-20A DP. BR. BRKRS.





OFFICE & MAINTENANCE BUILDING
SCALE: 1/4"=1'0"

NOTE:
1. SEE SHEET NO. 67 FOR LOCK LIGHTING DETAILS.
2. SEE SHEET NO. 64 FOR LOCK LIGHT STANDARDS LOCATION.
3. SEE SHEET NO. 60 FOR INCOMING POWER AND GROUNDING DETAILS.
4. SEE SHEET NO. 61 FOR POWER AND LIGHTING SCHEMATIC DIAGRAM.

NOTE:
20 Amps. @ 600 V. Single Phase, 4 Wire
Polarized Mfg Harvey Hubbell Inc.
Bridgeport Conn.

ELECTRICAL LEGEND

- DUPLEX OUTLET GROUNDED
- 208 V. OUTLET, SINGLE PHASE
- SHALLOW DOME INCANDESCENT
- FLOURESCENT - 4 LAMP
- FLOOD LT. INCANDESCENT W.P.
- 480 V. OUTLET, 3 PHASE
- 120 V. STRIP OUTLETS
- GROUND INSERT
- SEALING CONDULETS

GRAPHIC SCALE
1' 0" 0 1' 2'
4' 2" 0 4' 8'

REVISED DRAWING NOTE
[illegible]

AS BUILT
U.S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
ELECTRICAL
LIGHTING-EXTERNAL LOCK AND MAINTENANCE BLDG.
Drawn by JLA
Chkd by PBB
CW ENG. 06-123-24-24
DATED: 24 JANUARY 1964
SCALE: AS SHOWN DATED JULY 1963
REVISED
SHEET 49 OF 74
11-29,674

KEY NOTES:

(1) PROVIDE TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH VOLTAGE INDICATING LIGHTS FOR NORMAL (L-N AND L-L)

GENERAL NOTE:

INFORMATION ON THIS DRAWING SUCH AS LIST OF ABBREVIATIONS, DESCRIPTION OF OPERATIONS AND NOTES ARE FOR CONTRACTOR'S GENERAL INFORMATION AND SHALL BE USED TO COORDINATE WORK AS NEEDED.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: Mike Dodd
Drawn by: D.S.
Ckd by:
Inv. No.
Scale: AS SHOWN
Dated: MAR 2003

File name: CANLKRPXXXX1607.DGN
Reference files: CANLKRPXXXXBRDR.DGN 10287616607.TIF

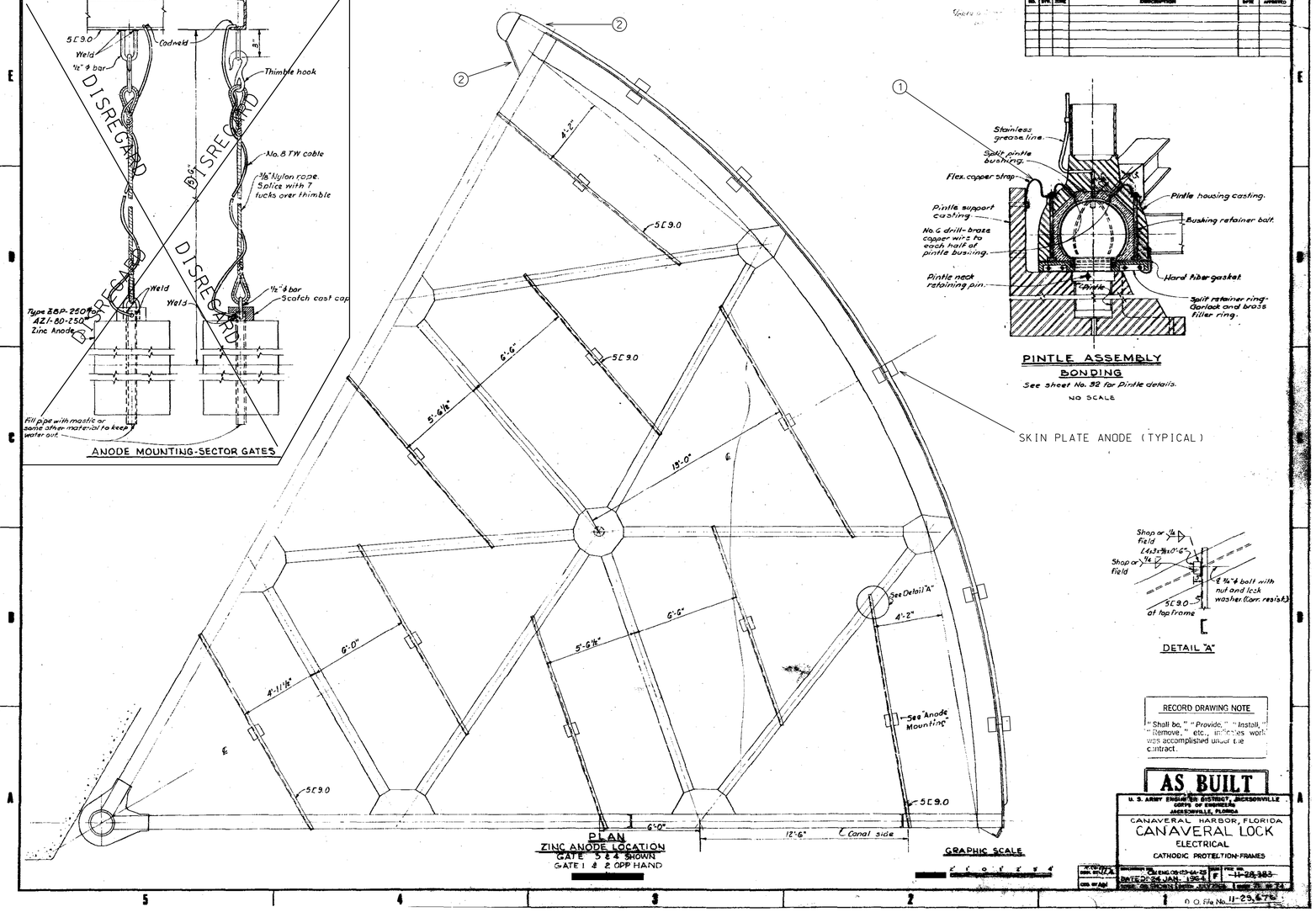
D.O. FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
GENERATOR FLOOR PLAN
AND SERVICE ENTRANCE ELEVATION DETAIL

DRAWING NO.
16/7

.../dms01903/canlkrpxxxx1607.dgn 05/04/2004 10:19:03 AM

ANODE MOUNTING-SECTOR GATES



PLAN
ZINC ANODE LOCATION
GATE 3 & 4 SHOWN
GATE 1 & 2 OPP HAND

GRAPHIC SCALE

PINTLE ASSEMBLY BONDING

See sheet No. 32 for Pintle details.

NO SCALE

SKIN PLATE ANODE (TYPICAL)

DETAIL "A"

RECORD DRAWING NOTE

"Shall be," "Provide," "Install," "Remove," etc., indicates work was accomplished under the contract.

AS BUILT

U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE CORPS OF ENGINEERS JACKSONVILLE, FLORIDA

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
ELECTRICAL
CATHODIC PROTETION-FRAMES

DRAWN BY: WJA
DES. BY: WJA
DESIGNED: CHKD: 12-24-79
DATE: 24 JAN. 1964
SUPERVISED BY:
SPEC. NO.
REC'D FOR FILE: 11-28-383
SCALE: 1" = 1'-0"
O. D. File No. 11-23,678

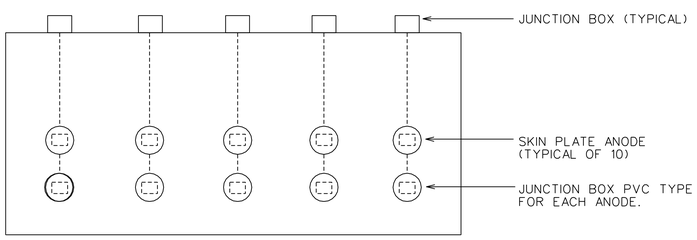
KEYED NOTES:

(1) FLEXABLE COPPER STRAP SHALL BE PROTECTED DURING SANDBLASTING. CONTRACTOR SHALL REPLACE ANY STRAP DAMAGED BY SANDBLASTING. CONTRACTOR SHALL INSPECT, WITH THE CONTRACTING OFFICER, EACH STRAP PRIOR TO BEGINNING WORK. TYPICAL OF 4.

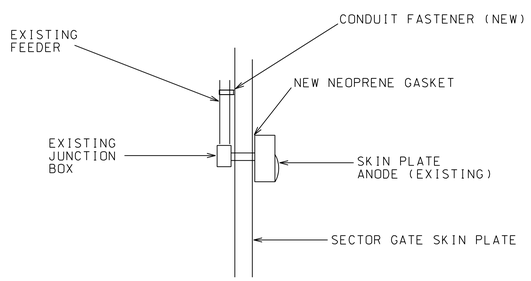
(2) MANATEE PROTECTION SENSOR ARRAY TO BE REMOVED BY OTHERS (TYPICAL OF 8).

GENERAL NOTE:

1. EACH GATE SECTION HAS NINE ANODE RODS HANGING VERTICALLY AND SKIN PLATE HAS TWO ROWS OF ANODES WITH FIVE ANODES PER ROW. CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER IMMEDIATELY UPON REMOVALOF THE SKINPLATE ANODES TO PREVENT ANY DELAYS FOR THE SANDBLASTING AND PAINTING, ETC..
2. THIS AS BUILT DRAWING INDICATES TYPICAL PLAN AND ELEVATION VIEW OF CONDUIT SYSTEM ON EACH GATE FOR IMPRESSED CURRENT CATHODIC PROTECTION SYSTEM. CONTRACTOR SHALL PROTECT THE CONDUIT SYSTEM DURING SANDBLASTING AND PAINTING OPERATION. CONTRACTOR SHALL REMOVE THE CONDUIT FASTENERS, ETC., TO MOVE THE CONDUIT AS NEEDED TO SANDBLAST AND PAINT THE METAL BEHIND/UNDER THE CONDUIT. CONTRACTOR SHALL PROVIDE NEW FASTENERS, ETC., AND REINSTALL THE CONDUIT IN PLACE. SEE GENERAL NOTE, THIS DRAWING.



SKIN PLATE ANODES ELEVATION DETAIL
(NOT TO SCALE)



SKIN PLATE (SIDE VIEW)
NOT TO SCALE

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: W. A. Jones
Drawn by: D.S.
Checked by:
Traced by:
Scale: AS SHOWN
Dated: MAR 2003
Inv. No.

File name: CANLKRPXXXX1608.DGN
Reference files: CANLKRPXXXXBASR.DGN
1129619608.TIF

D.O. FILE NO. 90C-38,319

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
CATHODIC PROTECTION

DRAWING NO.
16/8

.../dms01903/canlkrpxxxx1608.dgn 05/11/2004 02:09:00 PM

CONTROL

CABLE NO.	CONDUCTOR AWG	CONDUCTOR INSULATION VOLT.	CONDUCTOR FEET	CONDUIT NO.	CONDUIT SIZE AND MAT.	CONDUIT FEET	FUNCTION	FROM	TO	ROUTE OR REMARKS
C1	12-12	1000		C1	2R-V		EAST-WEST CONTROLS	CSE	CSW	
				C1A	"		"	CSE	JB1	
				C1B	"		"	JB1	JB4	
				C1C	"		"	JB4	JB5	
								JB5	CSW	
C2	18-12	1000		C2	2R-V		"	CSE	CSW	INCL. CF1C CABLE
				C2A	"		"	CSE	JW1	"
								JW1	JW4	
				C2B	"		"	JW4	JB5	"
				C2C	"		"	JB5	CSW	"
CE	11-12	1000		CE	1½R		EAST LOCK CONTROLS	CCE	CSE	
CF1	5-12	1000		CF1	1R		FIRE PUMP CONTROL	CSE	MOTOR STARTER	
CF1A	5-12	"						CSE	JB3	RUN IN CG3 AND CG3A
CF1B	5-12	"		CF1B	1R			JB3	M.H. NO. 3 P.B. STA.	
CF1C	5-12	"						CSE	CSW	RUN IN C2 - C2C
CF1D	5-12	"		CF1D	1R			CSW	M.H. NO. 2 F.B. STA.	
CF1E	4-12	"						CSW	JB7	RUN IN CGR AND CGRA
CF1F	4-12	"		CF1F	1R			JB7	M.H. NO. 4 P.B. STA.	
CG1	4-12	1000		CG1	1R		G1 SOLENOID VALVES	CSE	CONN. BOX	
CG1A	2-12	"		CG1A	½K		"	CONN. BOX	SOL. VALVE-SLOW SPEED	
CG1B	3-12	"		CG1B	¾K		"	"	OPEN-CLOSE	
CG1C	13-12	"		CG1C	1½R		G1 LIMIT SWITCHES	CSE	JB8	
CG1D	6-12	"		CG1D	1R		"	JB8	LIMIT SW.-OPEN	
CG1E	2-12	"		CG1E	½K		"	"	" NEAR OPEN	
				CG1F	"		"	"	" NEAR CLOSE	
CG1G	6-12	"		CG1G	1R		"	"	" CLOSE	
CG2	4-12	1000		CG2	1R		G2 SOLENOID VALVES	CSW	CONN. BOX	
CG2A	2-12	"		CG2A	½K		"	CONN. BOX	SOL. VALVE - SLOW SPEED	
CG2B	3-12	"		CG2B	¾K		"	"	" OPEN-CLOSE	
CG2C	13-12	"		CG2C	1½R		G2 LIMIT SWITCHES	CSW	JB10	
CG2D	6-12	"		CG2D	1R		"	JB10	LIMIT SW.-OPEN	
CG2E	2-12	"		CG2E	½K		"	"	" NEAR OPEN	
				CG2F	"		"	"	" NEAR CLOSE	
CG2G	6-12	"		CG2G	1R		"	"	" CLOSE	
CG3	22-12	1000		CG3	2R		G3 CONTROL	CSE	JB2	INCL. CF1A CABLE
				CG3A	"		"	JB2	JB3	
CG3B	4-12	"		CG3B	1R		G3 SOLENOID VALVES	JB3	CONN. BOX	
CG3C	2-12	"		CG3C	½K		"	CONN. BOX	SOL. VALVE - SLOW SPEED	
CG3D	3-12	"		CG3D	¾K		"	"	" OPEN-CLOSE	
CG3E	18-12	"		CG3E	1½R		G3 LIMIT SWITCHES	JB3	JB9	
CG3F	6-12	"		CG3F	1R		"	JB9	LIMIT SW.-OPEN	
CG3G	2-12	"		CG3G	½K		"	"	" NEAR OPEN	
				CG3H	"		"	"	" NEAR CLOSE	
CG3J	6-12	"		CG3J	1R		"	"	" CLOSE	
CGR	21-12	1000		CGR	2R		GR CONTROL	CSW	JB6	INCL. CF1E CABLE
CGRA	"	"		CGRA	2R		"	JB6	JB7	"
CGRB	4-12	"		CGRB	1R		GR SOLENOID VALVES	JB7	CONN. BOX	
CGRC	2-12	"		CGRC	½K		"	CONN. BOX	SOL. VALVE - SLOW SPEED	
CGRD	3-12	"		CGRD	¾K		"	"	" OPEN-CLOSE	
CGRE	18-12	"		CGRE	1½R		GR LIMIT SWITCHES	JB7	JB11	
CGRF	6-12	"		CGRF	1R		"	JB11	LIMIT SW.-OPEN	
CGRG	2-12	"		CGRG	½K		"	"	" NEAR OPEN	
				CGRH	¾K		"	"	" NEAR CLOSE	
CGRJ	6-12	"		CGRJ	1R		"	"	" CLOSE	
CW	8-12			CW	1½R		WEST LOCK CONTROL	CCW	CSW	

GROUNDING

GR1	1-0						GROUNDING SYS.	GROUND MAT	TEST STA.	BURY GR1, GR2 AND GR3
GR2	1-0						"	TEST STA.	JB2	IN EARTH AND CONCRETE
				GR2A	2R		"	JB2	JB3	
GR3	1-0						"	TEST STA.	JB6	TAPS FOR EQPT. GROUNDING
				GR3A	2R		"	JB6	JB7	IN M.H.'S AND JB'S

LIGHTING

CABLE NO.	CONDUCTOR AWG	CONDUCTOR INSULATION VOLT.	CONDUCTOR FEET	CONDUIT NO.	CONDUIT SIZE AND MAT.	CONDUIT FEET	FUNCTION	FROM	TO	ROUTE OR REMARKS
LE1	11-12	1000		LE1	2R		EAST LOCK LTG.	CCE	CSE	
LE1A	2-12	"		LE1A	¾R		WASH HOUSE NO. 1 LTG.	CCE	CSE	
				LE1B	¾R		"		CSE	LIGHT AND RECEPT.
				LE1C	1R		EAST LOCK EXT. LTG.	CSE	JB12	
				LE1E	1R		"	JB12	LOCK STD. NO. E2	
LE1E	5-12	"		LE1E	1R		HORN AND SOLAR RELAY	CSE	CONN. BOX	
LE1F	5-12	"		LE1F	¾R		"	CONN. BOX	SOLAR RELAY	
LE1G	2-12	"		LE1G	¾R		"	"	HORN	
LE2	10-12,2-8	2000,600		LE2	2R		EAST LOCK LTG.	CSE	JB7	BR FOR LOCK LTG. CIRC.
LE2A	8-12	1000		LE2A	1R		"	JB2	LOCK STD. NO. E1	
LE2B	8-12,2-8	1000,600		LE2B	2R		"	"	JB3	
LE2C	2-12	1000		LE2C	¾R		MACH. HOUSE NO. 3 LTG.	JB3	LT., RECEPT. AND FAN	
LE2D	2-8	600		LE2D	1R		EAST LOCK EXT. LTG.	JB3	JB13	
				LE2E	1R		"	JB13	LOCK STD NO. E6	
LE2F	1-12,2-8	1000,600		LE2F	¾R		"	JB3	" NO. E3	
LE2G	2-12	1000		LE2G	¾R		"	LOCK STD. NO. E3	GUARD LIGHT	
LE3	4-12,2-8	1000,600		LE3	1¼R		EAST LOCK EXT. LTG.	JB2	CONN. BOX	BR FOR WALKWAY LTG.
				LE3A	1¼R		"	"	"	9 RUNS
LE3B	2-12	1000		LE3B	¾K		"	"	WALKWAY LIGHT	10 RUNS-TAP #5
LE3C	4-12	1000		LE3C	1R-K		"	"	CONN. BOX	
LE3D	2-12	1000		LE3D	¾K		"	"	GUARD LIGHT	
				LE3E	¾K		"	"	SIGNAL HORN	
LE4	2-12,3-8	1000,600		LE4	1½R		LOCK CHAMBER LTG.	CSE	JB12	BR FOR LK. CHAMBER LTG.
				LE4A	1½R		"	"	"	
				LE4B	1½R		"	JB12	CONN. BOX	7 RUNS
LE4C	2-12	1000		LE4C	¾R		"	"	WALKWAY LIGHT	8 RUNS-TAP #6
LE4D	2-12,3-8	1000,600		LE4D	1½R		"	"	JB6	
LW1	7-12	1000		LW1	2R		WEST LOCK LTG.	CCW	CSW	
LW1A	2-12	"		LW1A	¾R		MACH. HOUSE NO. 2 LTG.	CCW	FAN AND RECEPT.	
				LW1B	¾R		"	CSW	LIGHT AND RECEPT.	
				LW1C	1R		WEST LOCK EXT. LTG.	CSW	JB11	
				LW1D	1R		"	JB11	LOCK STD. NO. W1	
				LW1E	¾R		"	CSW	SIGNAL HORN	
LW2	8-12	1000		LW2	2R		WEST LOCK LTG.	CSW	JB6	BR FOR LOCK LTG. CIRC.
	8-8,3-8	600								BR FOR LOCK CHAMBER LTG.
LW2A	2-12	1000		LW2A	¾R		"	JB6	LOCK STD. NO. W2	TAP #5
LW2B	3-12,2-8	1000,600		LW2B	2R		"	JB6	JB7	
LW2C	2-12	1000		LW2C	¾R		MACH. HOUSE NO. 4 LTG.	JB7	LT., RECEPT., AND FAN	
LW2D	2-12,2-8	1000,600		LW2D	1R		WEST LOCK EXT. LTG.	JB7	JB15	
				LW2E	1R		"	JB15	LOCK STD. NO. W3	
LW2F	2-12	1000		LW2F	¾R		"	LOCK STD. NO. W3	GUARD LIGHT	
LW2G	2-8	600		LW2G	¾R		"	JB7	LOCK STD. NO. W4	
LW3	4-12,2-8	1000,600		LW3	1¼R		WEST LOCK EXT. LTG.	CSW	JB16	BR FOR WALKWAY LTG.
				LW3A	1¼R		"	"	CONN. BOX	
				LW3B	1¼R		"	CONN. BOX		9 RUNS
LW3C	2-12	1000		LW3C	¾R		"	"	WALKWAY LIGHT	10 RUNS-TAP #5
LW3D	4-12	"		LW3D	1R-K		"	"	CONN. BOX	
LW3E	2-12	"		LW3E	¾K		"	"	GUARD LIGHT	
				LW3F	¾K		"	"	HORN SWITCH	

CABLE NO. AND CONDUIT NO. DESIGNATIONS

C PREFIX = CONTROL CIRCUIT
GR " = GROUNDING
L " = LIGHTING CIRCUIT
P " = POWER CIRCUIT
R " = PUBLIC ADDRESS SYSTEM CONDUIT
T " = TELEPHONE CIRCUIT CONDUIT
X " = SPARE CONDUIT

CONDUIT MATERIAL

R SUFFIX = STEEL CONDUIT
K " = FLEXIBLE STEEL CONDUIT WITH POLYVINYL CHLORIDE JACKET
V " = PVC CONDUIT

RECEIVED DRAWING NOTE
Shall ... Install ...
Remo... ...ates work.
...ts accounts for under the ...ntract.

AS BUILT
U.S. ARMY ENGINEER DISTRICT, JACKSONVILLE
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
ELECTRICAL
CONDUIT AND CABLE SCHEDULE
SHEET NO.1
Contr. NO. DACW17-84-C-0001 Spec. or Dr. No.
Drawn by T.A.K. Date 24 JAN. 1984
Check by [illegible] DRAWING Date [illegible]

D.O. FILE NO. II-29,676

GENERAL NOTES:

1. THIS DRAWING PROVIDES GENERAL INFORMATION REGARDING CONDUIT AND CABLE SYSTEM FOR THE LOCK.

NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED

THINK Safety on this job depends on YOU

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Inv. No.
Scale: NONE
Designed by: M.A.S.
Drawn by: D.S.
Cked by:
Dated MAR 2003
D.O.FILE NO. 90C-38,319

File name: CANLKRPXXX1609.DGN
Reference files: CANLKRPXXXDBRP.DGN 11298787609.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
REFERENCE FEEDER SCHEDULE

DRAWING NO.
16/9

.../dms01903/canlkrpxxxx1609.dgn 05/04/2004 10:33:42 AM

CABLE NO.	CONDUCTOR #1 C-AWG	CONDUCTOR INSULATION VOLT.	CONDUCTOR FEET	CONDUIT NO.	CONDUIT SIZE AND MAT.	CONDUIT FEET	FUNCTION	FROM	TO	ROUTE OR REMARKS
POWER										
P1 P1A	4-2 3-2	500 "		P1 P1A	2R 1½R-V		COMM. POWER SUPPLY " " "	TERMINAL POLE METER BOARD	METER BOARD TYDT TRANSFER SW.	 VIA SAFETY SW.
P2	3-2	600		P2	1½R		ENERG. POWER SUPPLY	STANDBY UNIT	TYDT TRANSFER SW.	
P3	3-2	600		P3	1½R		POWER SUPPLY	TYDT TRANSFER SW.	CCM MAIN BREAKER	
PE1	3-8	600		PE1	1R		FIRE PUMP POWER	CCE	MOTOR STARTER	
				PE1A	1R		"	MOTOR STARTER	SAFETY SW.	
				PE1B	1R-K		"	SAFETY SW.	MOTOR	
PE1C	2-12	1000		PE1C	½R-V		"	"	SOLENOID LUBRICATOR	
PE2	5-12	1000		PE2	1R		SALT WATER PUMP PWR.	CCE	MOTOR STARTER	INCL. CONTROL WIRING
				PE2A	1R-K		"	MOTOR STARTER	MOTOR AND PRESSURE SW.	
PE3	3-8	600		PE3	1R		EAST LOCK LTG. PRIMARY	CCE	LTG. TRANSFORMER	
PE4	4-8	600		PE4	1½R		" " " SECONDARY	"	"	
PG1	3-10	1000		PG1	½R-K		GATE NO. 1 POWER	CCE	MOTOR	
PG1A	2-12	"		PG1A	"		" "	"	BRAKE ON OIL MOTOR	
PG2	5-10	1063		PG2	¾R-K		GATE NO. 2 POWER	CCM	MOTOR	
PG2A	2-12	"		PG2A	"		" "	"	BRAKE ON OIL MOTOR	
PG3	3-8	600		PG3	¾R		GATE NO. 3 POWER	CCE	J62	
				PG3A	2R		" "	J62	J63	
				PG3B	¾R		" "	J63	SAFETY SW.	
				PG3C	¾R-K		" "	SAFETY SW.	MOTOR	
PG3D	2-12	1063		PG3D	"		" "	"	BRAKE ON OIL MOTOR	
PG4	3-8	600		PG4	¾R		GATE NO. 4 POWER	CCM	J86	
				PG4A	2R		" "	J86	J87	
				PG4B	¾R		" "	J87	SAFETY SW.	
				PG4C	¾R-K		" "	SAFETY SW.	MOTOR	
PG4D	2-12	1000		PG4D	"		" "	"	BRAKE ON OIL MOTOR	
PM1	3-8	600		PM1	1½R		EAST LOCK PWR. FEEDER	CCM	J87	
PM1A	"	"		PM1A	"		" " "	J81	CCE	
PM2	3-2	600		PM2	1½R-2V		WEST LOCK PWR. FEEDER	CCM	J84	
				PM2A	"		" "	J85	J85	
				PM2B	2R		" "	J80	CCM	
PM3	4-8	600		PM3	1½R		POWER OUTLET FEEDER	CCM	POWER OUTLETS	IN MAINT. BLDG.
PM4 PM5	3-8 4-8	600 "		PM4 PM5	1R 1R		MAIN. BLDG. LTG. PRIMARY " " SECONDARY	CCM "	LTG. TRANSFORMER "	
PW1 PW2	3-8 4-4	600 "		PW1 PW2	1R 1½R		WEST LOCK LTG. PRIMARY " SECONDARY	CCM "	LTG. TRANSFORMER "	

CABLE NO.	CONDUCTOR #1 C-AWG	CONDUCTOR INSULATION VOLT.	CONDUCTOR FEET	CONDUIT NO.	CONDUIT SIZE AND MAT.	CONDUIT FEET	FUNCTION	FROM	TO	ROUTE OR REMARKS
CONDUIT FOR PUBLIC ADDRESS SYSTEM										LOUD SPEAKER, MICROPHONE AND WIRING NOT UNDER THIS CONTRACT.
R1	1R						PUBLIC ADDRESS SYSTEM	JB22	CONN. BOX IN MAIN. BLDG.	
R1A	"						" "	JB22	" " " M.H. NO.1	
R1B	"						" "	CONN. BOX IN M.H. NO. 1	CONN. BOX	END PILE-EAST WALKWAY
R1C	"						" "	" " "	JB16	
R1D	"						" "	JB16	CONN. BOX IN M.H. NO.2	
R1E	"						" "	CONN. BOX IN M.H. NO. 2	JB17	
R1F	"						" "	JB17	CONN. BOX	END PILE-WEST WALKWAY
R1G	"						" "	CONN. BOX IN M.H. NO. 1	PUBLIC ADDRESS UNIT	FUTURE
R1H	"						" "	" " " " NO. 1	SPEAKER AND MICROPHONE	"
R1J	"						" "	" " " " NO. 2	" "	"
TELEPHONE CONDUIT										
T1	1R						TELEPHONE	TERMINAL POLE	TERMINAL BOX	IN MAIN. BLDG.
T1A	1R						"	TERM. BOX-MAIN. BLDG.	JB22	" " "
T1B	1R						"	JB22	TERMINAL BOX	IN M.H. NO. 1
T1C	1R-2V						"	TERM. BOX-MAIN. BLDG.	JB23	
T1D	"						"	JB23	JB24	
T1E	1R						"	JB24	TERMINAL BOX	IN M.H. NO. 2
SPARE CONDUITS										
X1	2R						SPARE	CCM	JB1	
X2	2R-V						"	"	JB81	
X3	2R						"	JB1	J08	
X4	2R						"	JB1	SCE	
X5	1½R						"	CCE	EXTERIOR OF BLDG.	THREAD AND CAP
X6	2R						"	CCE	CSE	
X7	2R						"	CCE	JB2	
X8	2R						"	JB2	JB3	
X9	2R						"	JB2	JB3	
X10	2R						"	JB3	M.H. NO. 3	THREAD AND CAP
X11	2R-V						"	JB4	JB5	
X12	2R						"	JB5	CCM	
X13	1½R						"	CCM	EXTERIOR OF BLDG.	THREAD AND CAP
X14	2R						"	CCM	CSW	
X15	2R						"	CCM	J86	
X16	2R						"	J86	J87	
X17	2R						"	J87	J86	
X18	2R						"	J87	M.H.NO.4	THREAD AND CAP

NO.	ZONE	DESCRIPTION	DATE	APPROVED
2	A	E-5 REVISED P.I.E. PIA CIRCUITS TO ACCOMM. MOD. TO CONT. 64-35	6-13-67	

THINK! Safety is the key to this job depends on YOU

CABLE NO. AND CONDUIT NO. DESIGNATIONS

C PREFIX = CONTROL CIRCUIT
GR " = GROUNDING
L " = LIGHTING CIRCUIT
P " = POWER CIRCUIT
N " = PUBLIC ADDRESS SYSTEM CONDUIT
T " = TELEPHONE CIRCUIT CONDUIT
X " = SPARE CONDUIT

CONDUIT MATERIAL

R SUFFIX = STEEL CONDUIT
K " = FLEXIBLE STEEL CONDUIT WITH POLYVINYL CHLORIDE JACKET
V " = PVC CONDUIT

RECORD DRAWING NOTE
"Shall be..."
...ntract.

AS BUILT
U. S. ARMY ENGINEER DISTRICT, JACKSONVILLE CORPS OF ENGINEERS JACKSONVILLE, FLORIDA
CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
ELECTRICAL
CONDUIT AND CABLE SCHEDULE
SHEET NO 2
Des. by T.A.P. Dwg. No. ENG DR-111-64-25
Ck'd by GJB DATE 26 JAN 1965 F 11-28,388
SCALE NONE DATE JULY, 1964 SHEET 75 OF 74

D. O. FILE NO. 11-28,676 1 C. O. Sht. No. 73

KEY NOTES:

(1) PROVIDE 600V 4-#1, 1-#6, IN EXISTING 1½" CONDUIT.

(2) PROVIDE 600V 4-#1, 1-#6, IN EXISTING 1½" CONDUIT.

GENERAL NOTES:

1. THIS DRAWING PROVIDES GENERAL INFORMATION REGARDING CONDUIT AND CABLE SYSTEM FOR THE LOCK.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

No. | Symbol | Zone | Description | Approved

Designed by: M.M. Wilson
Drawn by: D.S.
Ck'd by:
Inv. No.:
Scale: NONE
Dated: MAR 2003
D.O. FILE NO. 90C-38,319

File name: CANLKRPXXXX1610.DGN
Reference files: ICANLKRPXXXX01R0R.DGN 1128676161610.TIF

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL
REFERENCE FEEDER SCHEDULE

DRAWING NO.
16/10

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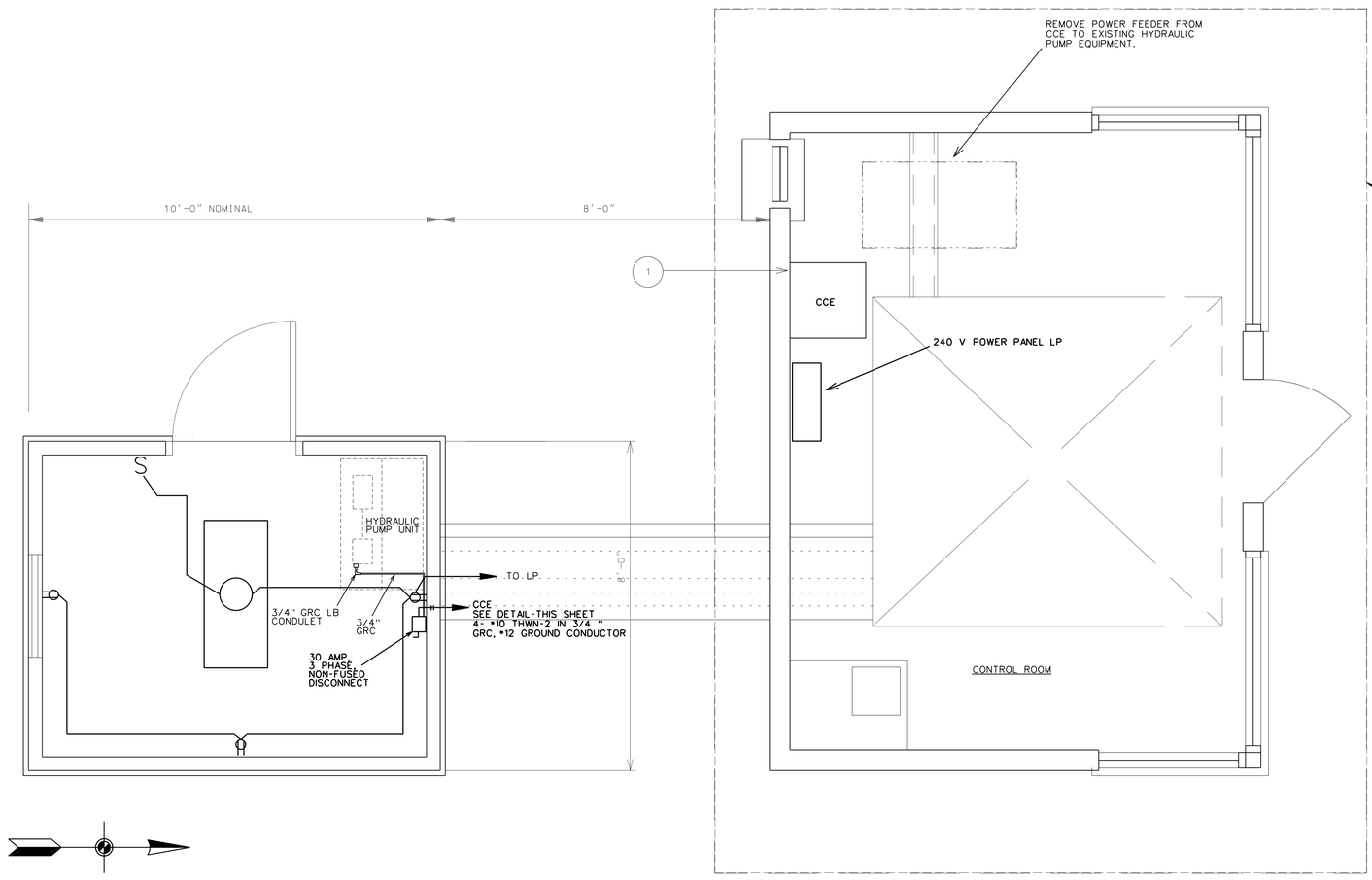
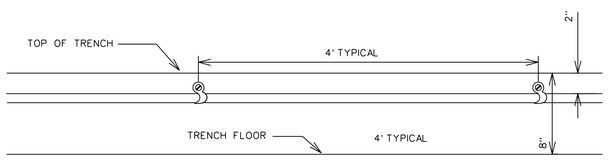
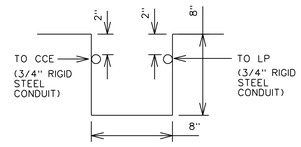


FLOOR PLAN



UTILITY TRENCH (SIDE VIEW)

N.T.S.



UTILITY TRENCH (END VIEW)

N.T.S.

KEYED NOTES:

1. DISCONNECT FEEDER TO EXISTING HYDRAULIC PUMP EQUIPMENT. CONNECT FEEDER FROM NEW HYDRAULIC PUMP EQUIPMENT USING SAME BREAKER IN CCE.

LEGEND:

- CEILING MOUNTED, 2 LAMP FLUORESCENT WRAP AROUND WITH PRUSMATIC ACRYLIC LENS - 32 WATT, T-8 LAMPS, MAGNETIC BALLAST. SEE DETAIL THIS SHEET.
- NEMA 15R, 120V, DUPLEX RECEPTACLE WALL MOUNT 30" O.C.,AFF, METAL FACE PLATE.
- 2-#12 AWG, CU. THWN-2, 1#12 AWG CU. GROUND IN 3/4" GRC, WALL MOUNT NOT LESS THAN 30" AFF.
- S — 15 AMP SNAP SWITCH WITH METAL FACE PLATE.
- HOMERUN VIA UTILITY TRENCH AND EQUIPMENT PIT. LONG SLASH INDICATES NEUTRAL, SHORT SLASH INDICATES PHASE CONDUCTOR. USE #12 CU. THWN-2 UNLESS OTHERWISE NOTED.
- 30A, 480V, 3 PHASE, 4 WIRE, 3 POLE, NON-FUSED, LOCKABLE DISCONNECT. WALL MOUNT NOT LESS THAN 48" AFF.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: S.R.
Dwn by: S.R.
Ckd by: M.W.
Rev. No.
Scale: AS SHOWN
Dated: MAR 2003
D.O.FILE NO. 90C-38,319
File name: CANLKRPXXXX0607.DGN
Reference files: CANLKRPXXXXBROR.DGN

CANAVERAL HARBOR, FLORIDA
CANAVERAL LOCK
PAINTING AND OTHER REPAIRS
ELECTRICAL POWER
NEW HYDRAULIC POWER UNIT

DRAWING NO.
16/12

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