

Note:
1. For Lift Span Notes see Sheet No. 35
2. For details of ropes see Sheet No. 36.

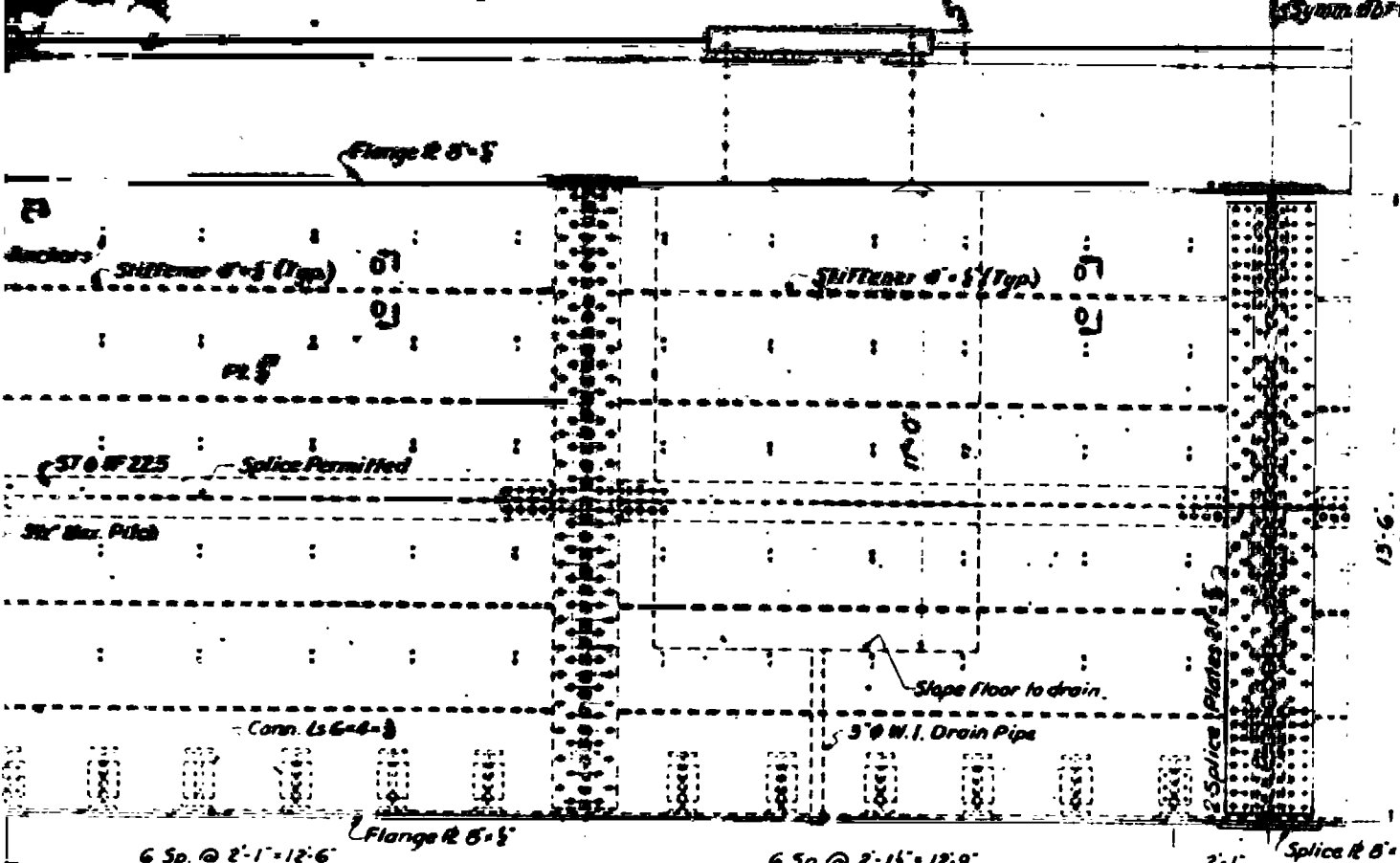
Scale: 1/2" = 1'-0" U.S. PROJECT NO. 8.135.10
NEW HANOVER COUNTY

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
DALE RIFE
CAPE FEAR RIVER BRIDGE
AT WILMINGTON
LIFT BRIDGE SUPERSTRUCTURE
LIFTING GIRDERS
AUXILIARY COUNTERWEIGHT BEAM

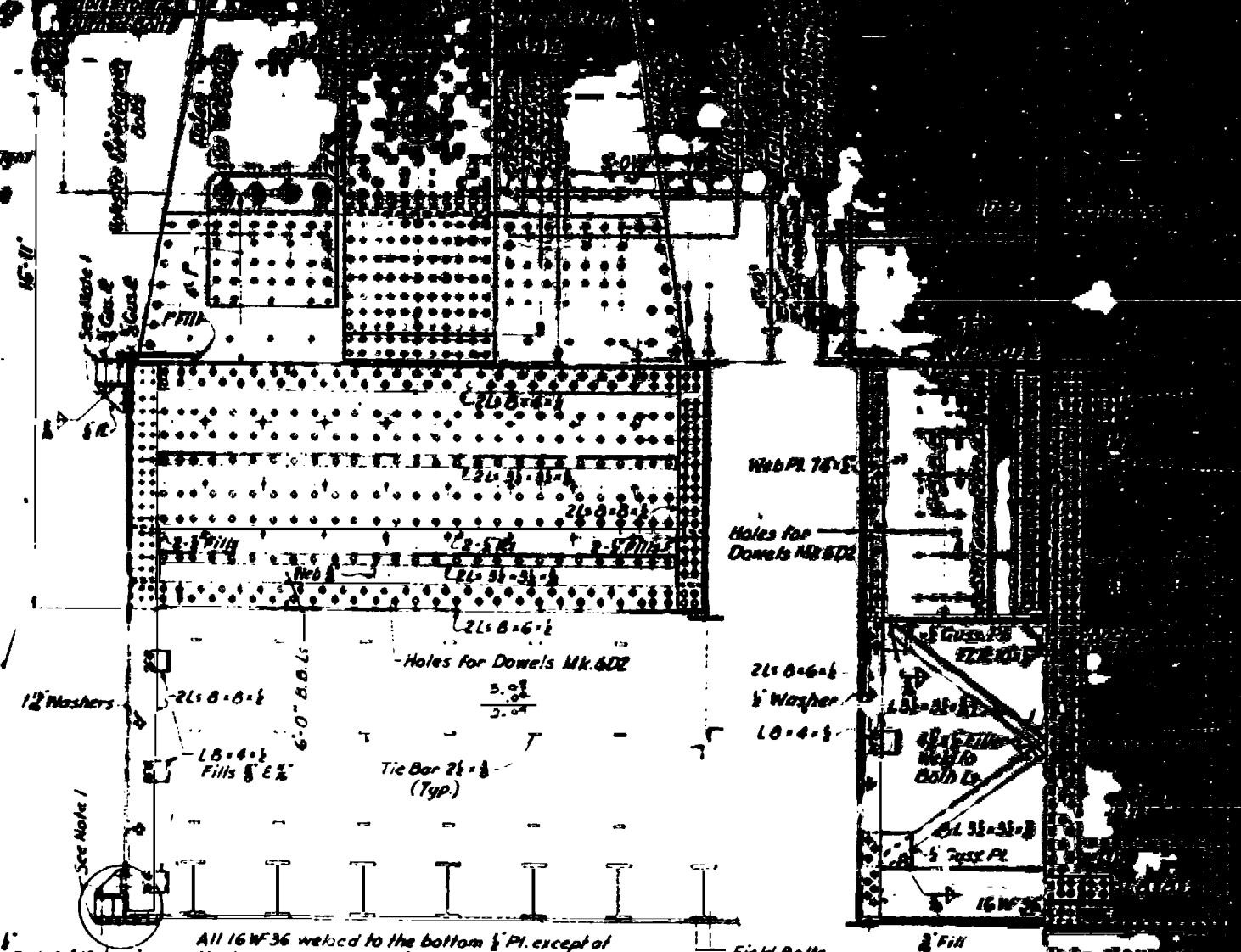
Drain Holes	MCS	8-10-67
Conduit Holes	MCS	9-18-67

PERSONAL INVENTION, CHECK BY: _____

DETAIL A
Scale: 1/2" = 1'-0"



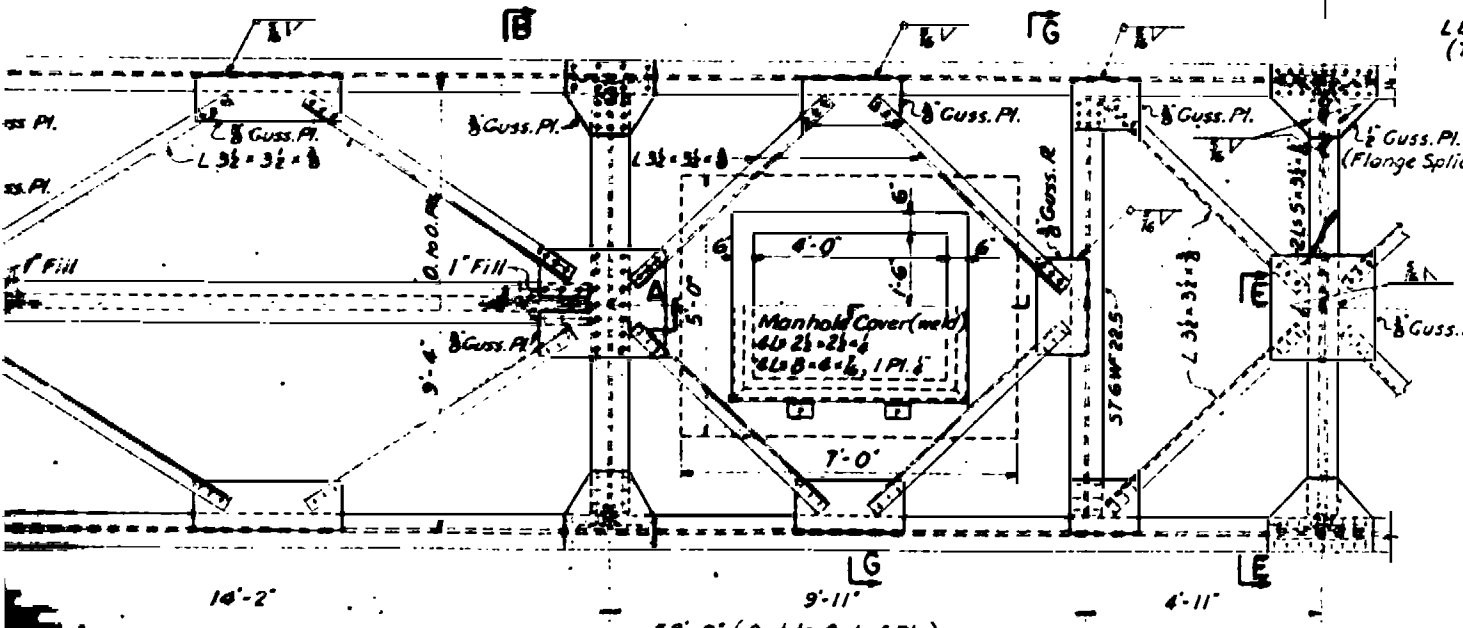
ELEVATION



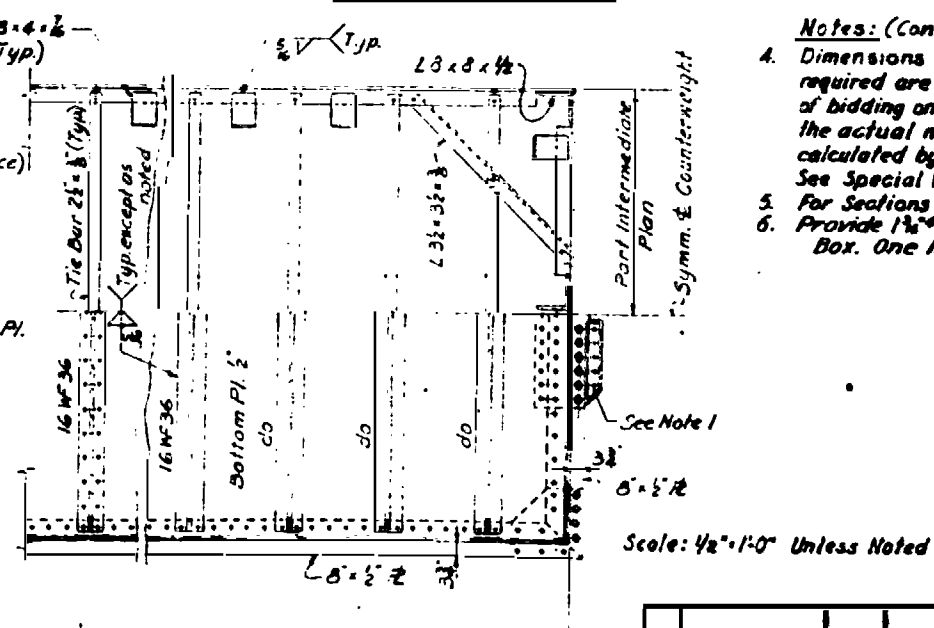
SECTION A-A

SECTION B-B

All 16 WF 36 welded to the bottom 1/2" Pl. except at the transverse splices of this plate and at cross-frames where Field bolts shall be used.



HALF TOP PLAN



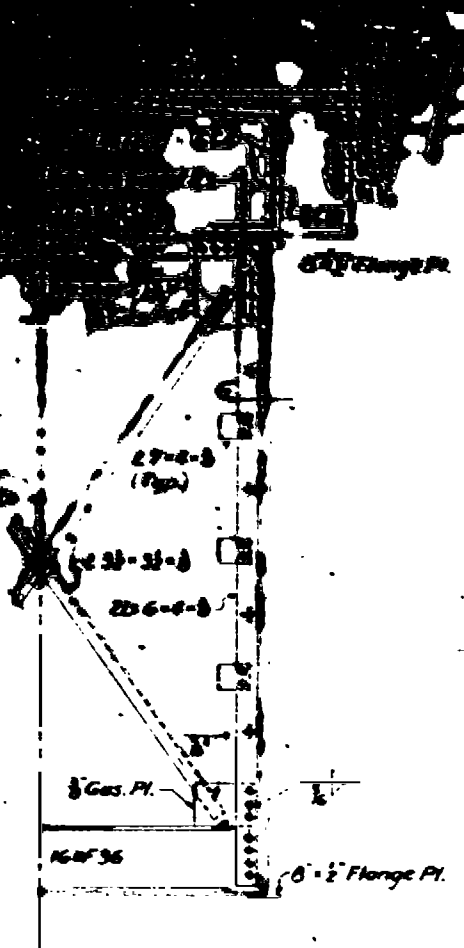
PART BOTTOM PLAN

- Notes: (Cont)**
- Dimensions of Counterweight and number of Balance Blocks required are based on the design drawings and are for bidding only. The actual dimensions of the Counterweight and the actual number of Balance Blocks to be furnished shall be calculated by the Contractor from the detailed drawings. See Special Provisions.
 - For Sections G-G and E-E, see Sheet No. 52.
 - Provide 1/2" drain holes in all sides and bottom of the Box. One hole to be provided for each 10 sq. ft. of area.

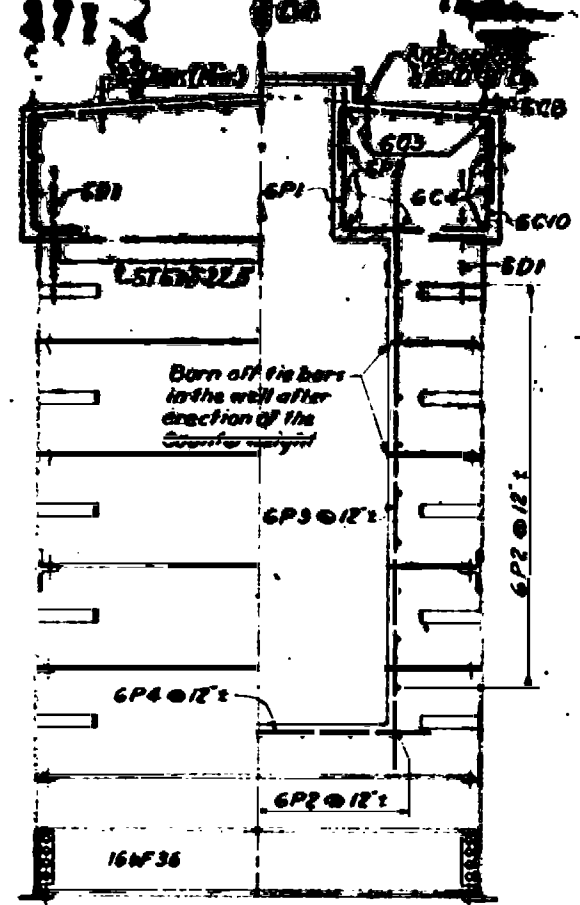
PROJECT NO. 1000
NEW HANOVER COUNTY
STATE OF NORTH CAROLINA
STATE HIGHWAY DEPARTMENT
CAPE FEAR DIVISION
LIFT BRIDGE SURVEY
MAIN COUNTERWEIGHT
ELEVATION

Scale: 1/2" = 1'-0" Unless Noted

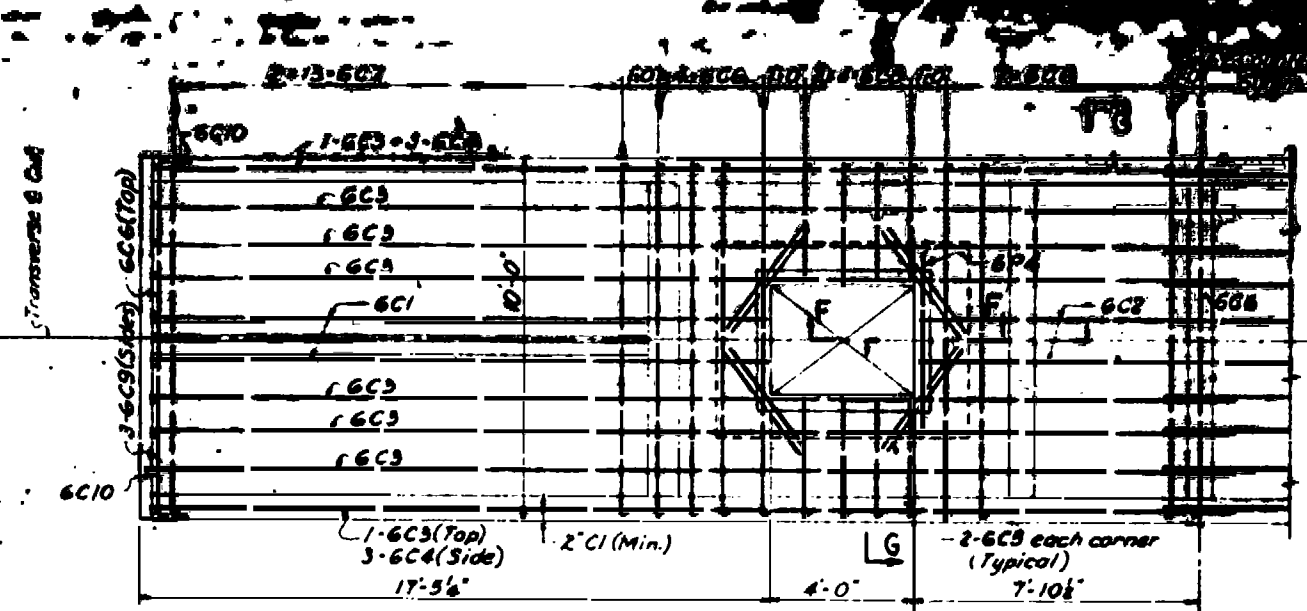
REVISION	BY	DATE



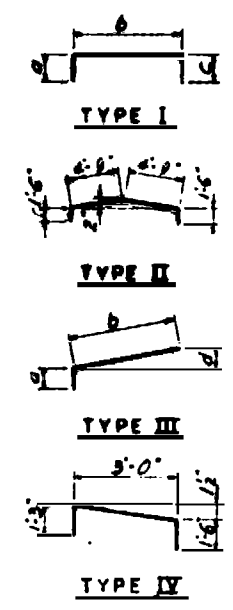
HALF SECTION E-E
Scale: 1/2" = 1'-0"



SECTION G-G
Scale: 1/2" = 1'-0"

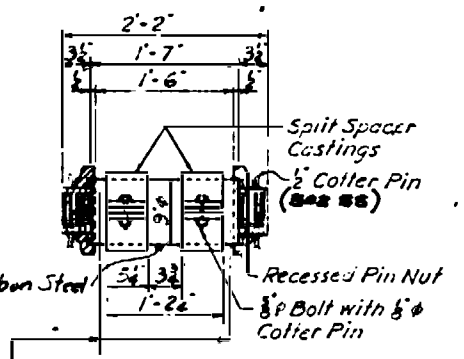


REINFORCEMENT PLAN
Scale: 1/8" = 1'-0"



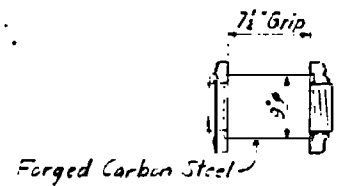
MARK	TOTAL LENGTH	TYPE	TOTAL NUMBER	DIMENSION				REMARKS
				a	b	c	d	
6C1	18'-9"	I	4	1'-9"	17'-0"	0		
6C2	15'-4"		2					
6C3	31'-6"	I	16	1'-9"	29'-9"	0		
6C4	29'-9"		12					
6C5	3'-6"		16					
6C6	12'-6"	II	22	See Bending Diagram				
6C7	5'-8"	III	52	1'-6"	4'-2"		2"	
6C8	5'-9"	IV	16	See Bending Diagram				
6C9	12'-5"	I	6	1'-6"	9'-5"	1'-6"		
6C10	3'-11"	I	134	1'-6"	2'-5"	0		
6D1	3'-0"		88					
6D2	5'-0"		96					
6P1	5'-3"	I	28	2'-5"	2'-10"	0		
6P2	9'-6"		66					
6P3	14'-0"		48					
6P4	7'-6"		78					

LEGEND:
6C1: 6-Bar Size, CI-Bar Mark.
All dimensions are out to out of bars.
Quantities shown are for one counterweight.



Hangers When Not in Use.
Contractor to leave them in this position after attachment of Counterweight to span. When Hangers are supporting the Counterweight, they are to be interchanged in position with the Spacers.

PIN P1 (4 Req'd)
Scale: 1" = 1'-0"

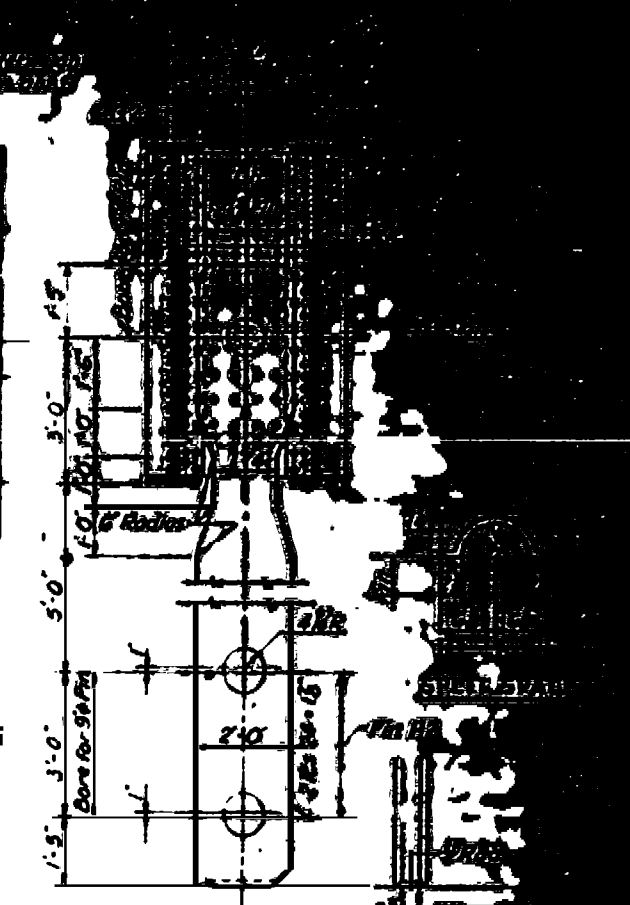


PIN P2
Not to Scale
4 REQUIRED
To Connect Cfw. to Temp. Hgr
Store Pins in Machinery House when not in use.

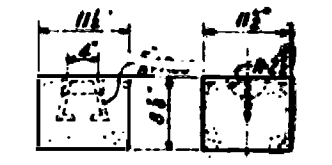
FINAL DISTRIBUTION Counterweight Balance Blocks	
Counters	Blocks
NE	275
SE	516
NW	187
SW	212
Total	1,190

Final Distribution Counterweight Balance Blocks	
Counters	Blocks
NE	288
SE	418
NW	157
SW	187
Total	1,050

+ Plus 100 Blocks to be supplied as per specifications

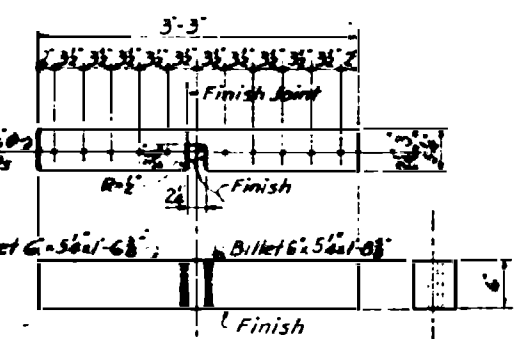


SECTION X-X
MAIN COUNTERWEIGHT HANGERS
Scale: 1/2" = 1'-0"

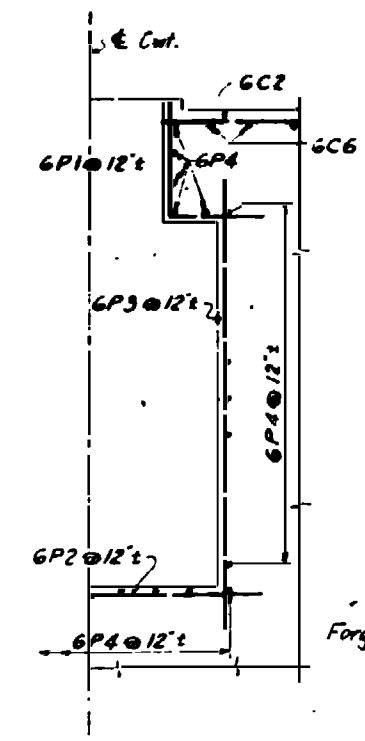


DETAIL OF BALANCE BLOCK
1400-Required For Two Counterweights
Scale: 1" = 1'-0"

- Notes:**
- For Location of Section X-X, see Sheet No. 3B.
 - For Locations of Sections G-G and E-E see Sheet No. 3B.
 - For additional notes, see Sheet No. 3B.



DETAIL OF GUIDE BILLETS
8 REQUIRED
Scale: 1" = 1'-0"

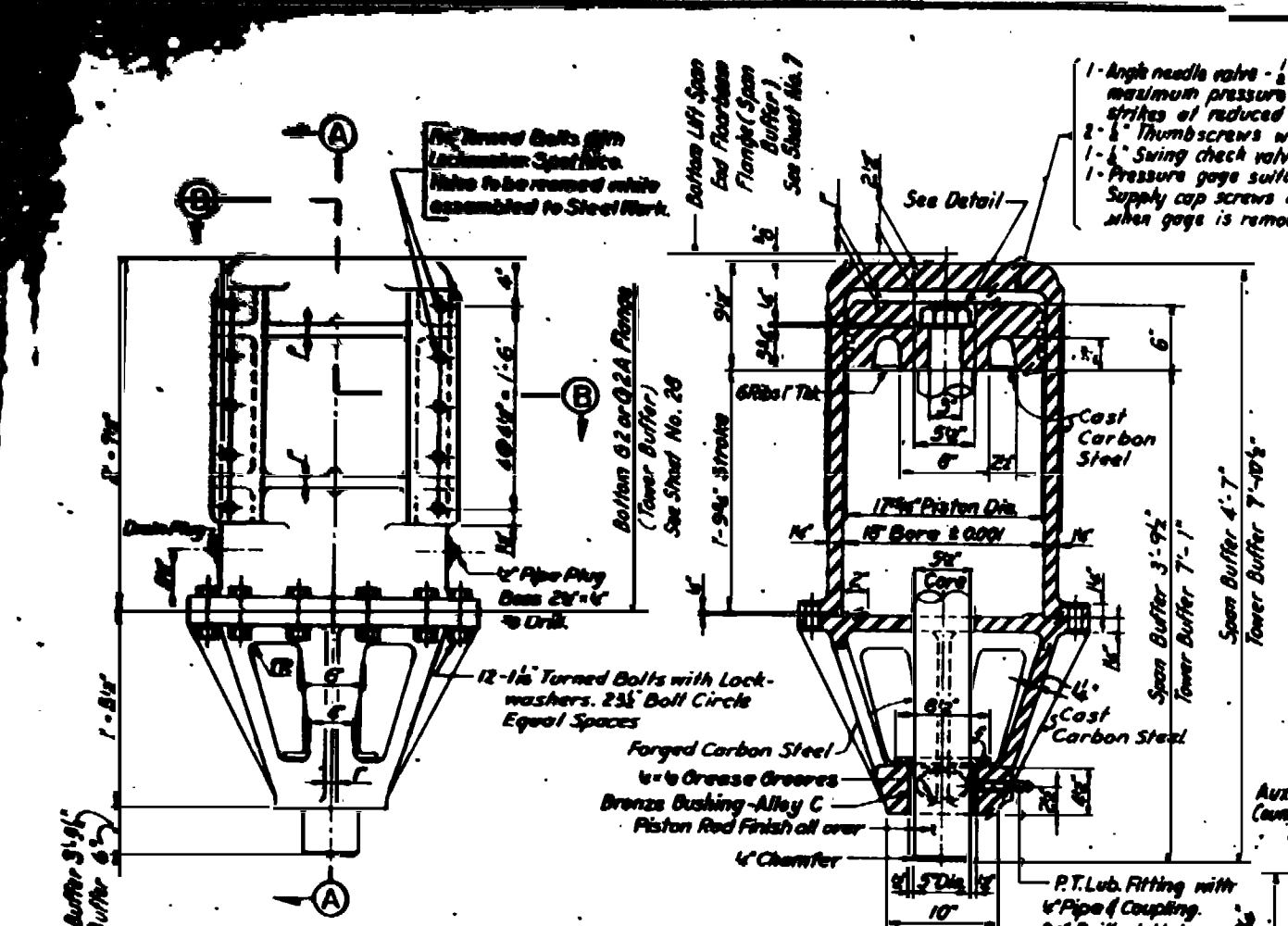


HALF SECTION F-F
Scale: 1/2" = 1'-0"

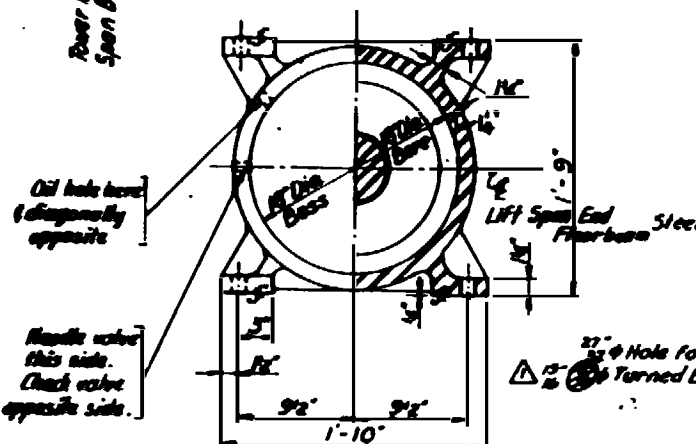
PROJECT NO. B-13550
NEW HANOVER COUNTY
STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
ALDEN
CAPE FEAR RIVER CROSSING
AT WILSON
LIFT BRIDGE SUPERSTRUCTURE
MAIN COUNTERWEIGHTS AND REINFORCEMENT

PARSONS BRINCKERHOFF CONSULTANTS
INCORPORATED
1000 MARKET STREET
PHILADELPHIA, PA. 19103

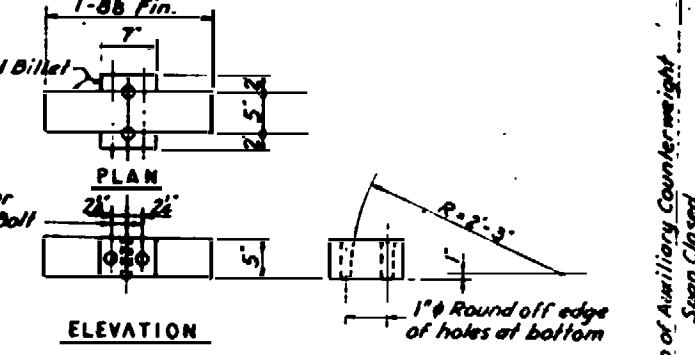
REVISION



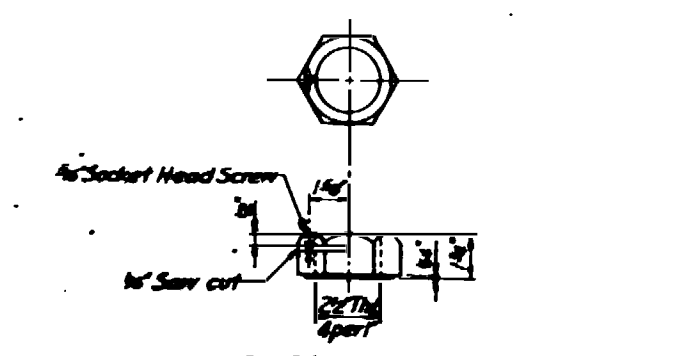
**SECTION A-A
AIR BUFFER**
Scale: 1/2" = 1'-0"
8 Required



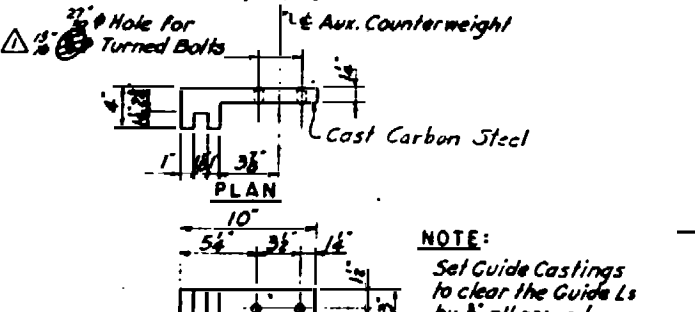
SECTION B-B



DETAIL OF ROPE DEFLECTOR
Scale: 1" = 1'-0"

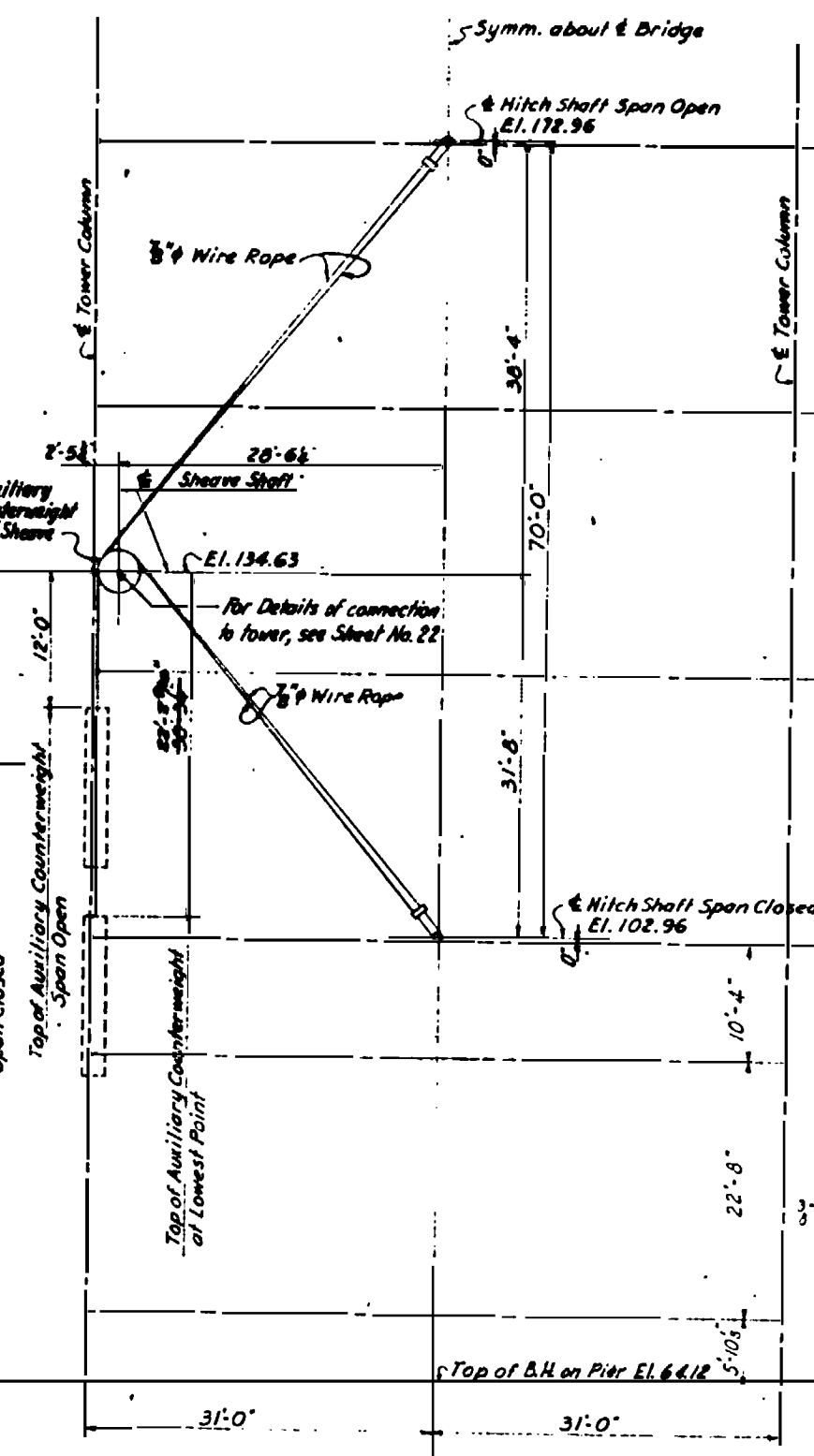
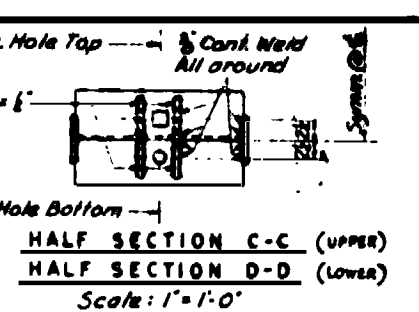


PISTON ROD NUT
ASA Std semi finished Heavy Series.
Cut to 1/2" thick with washer face.
Scale: 3/4" = 1'-0"
8 Required

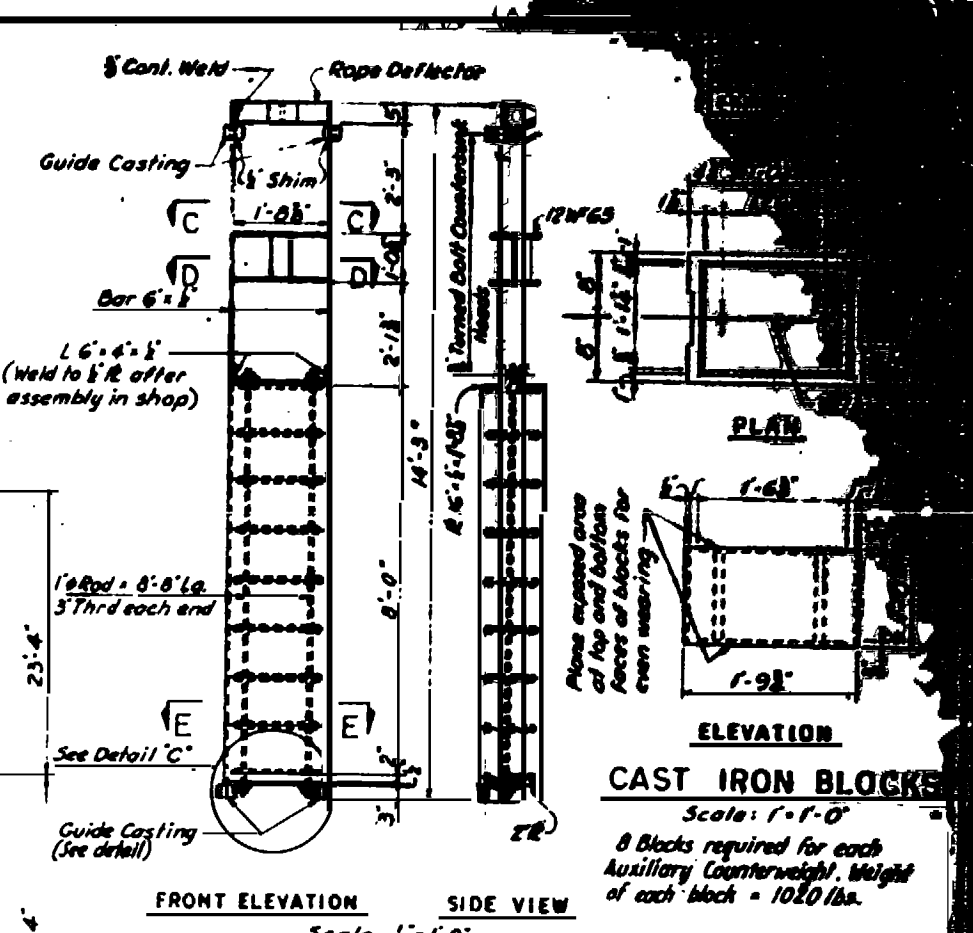


DETAIL OF GUIDES
Scale: 1/2" = 1'-0"
4 Required for each Auxiliary Counterweight

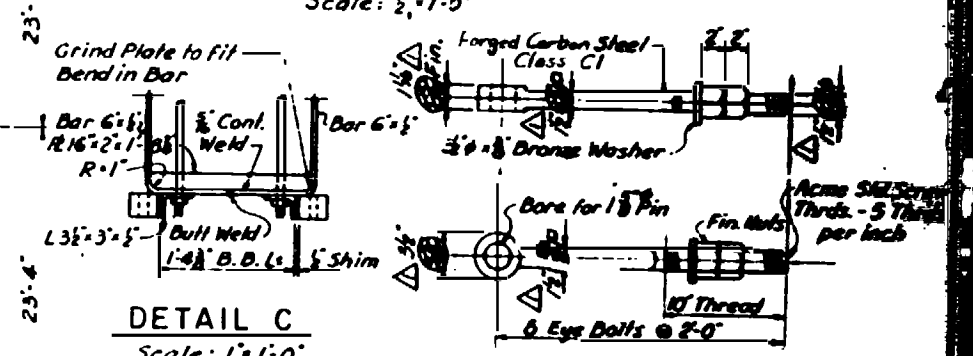
1 - Angle needle valve - 1/2" opening. (To be adjusted to obtain a maximum pressure of 100 psi/gage in Duffer when span is 5' x 6' strikes at reduced closing speed.)
2 - 1/2" Thumbscrews with lead washers for oil holes.
1 - Swing check valve suitable for 1000 psi/g pressures.
1 - Pressure gage suitable for pressures of 1000 psi/g.
Supply cap screws and lead washers to close opening when gage is removed.



**SPAN FACE OF TOWER SHOWING
AUXILIARY COUNTERWEIGHT**
Scale: 3/8" = 1'-0"



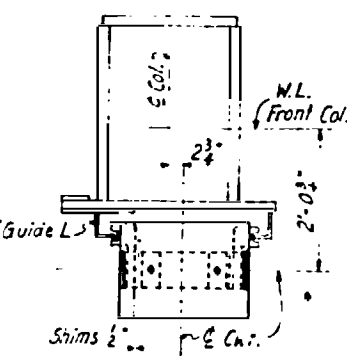
FRONT ELEVATION SIDE VIEW
Scale: 1/2" = 1'-0"
CAST IRON BLOCKS
Scale: 1" = 1'-0"
8 Blocks required for each Auxiliary Counterweight. Weight of each block = 1020 lbs.



DETAIL C
Scale: 1" = 1'-0"

TAKE-UPS FOR AUXILIARY COUNTERWEIGHT ROPES
Scale: 1/2" = 1'-0"
2 REQUIRED FOR EACH AUX. COUNTERWEIGHT

Notes:
1. For details of Auxiliary Counterweight Sheaves, see sheet No. 34.
2. 4 Auxiliary Counterweights are required. Weight of each = 9,200 lbs approximately.



SECTION E-E
Scale: 3/4" = 1'-0"

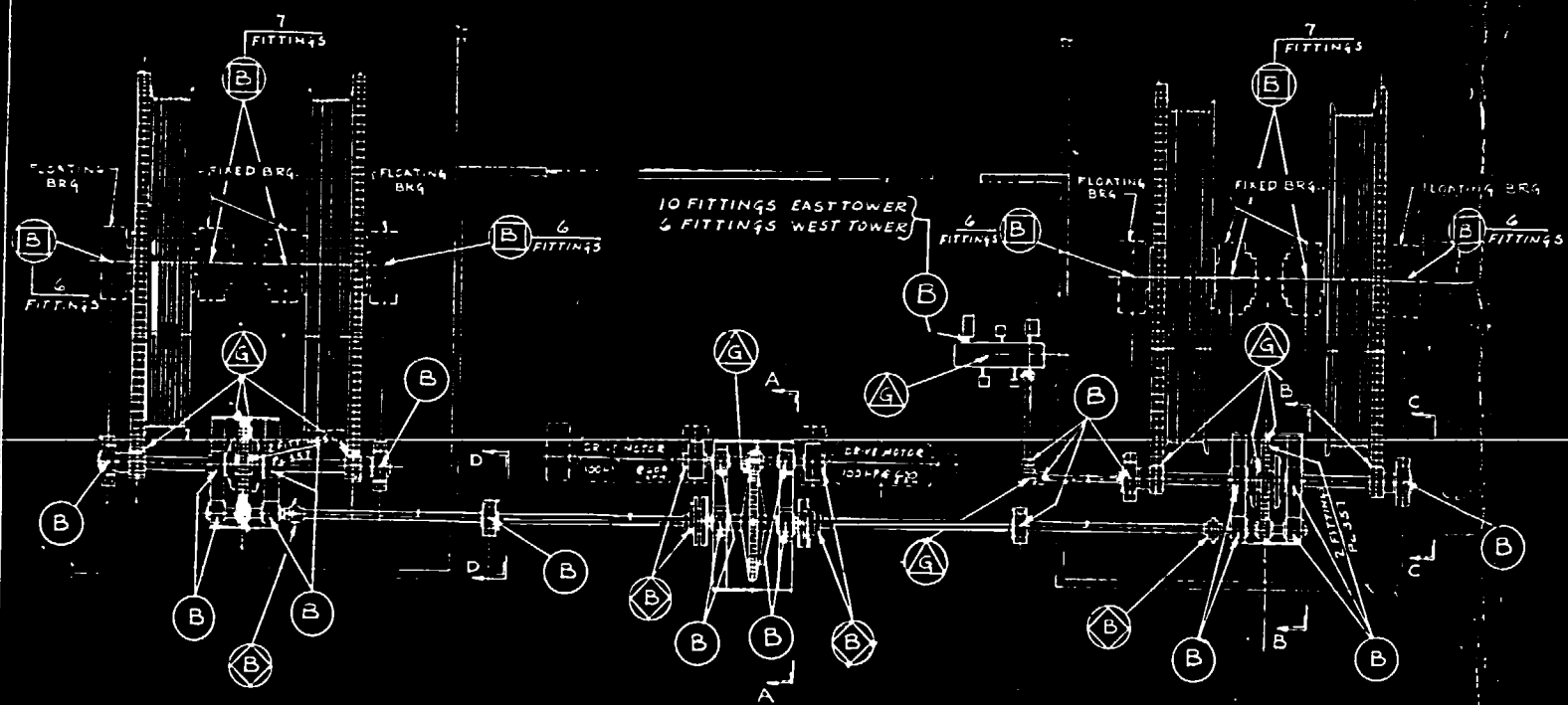
**PROJECT No. 6.1355105
NEW HANOVER COUNTY**

STATE OF NORTH CAROLINA
STATE HIGHWAY COMMISSION
RALEIGH

**CAPE FEAR RIVER CROSSING
AT WILMINGTON**

**LT BRIDGE SUPERSTRUCTURE
AUXILIARY COUNTERWEIGHT
AND AIR BUFFERS**

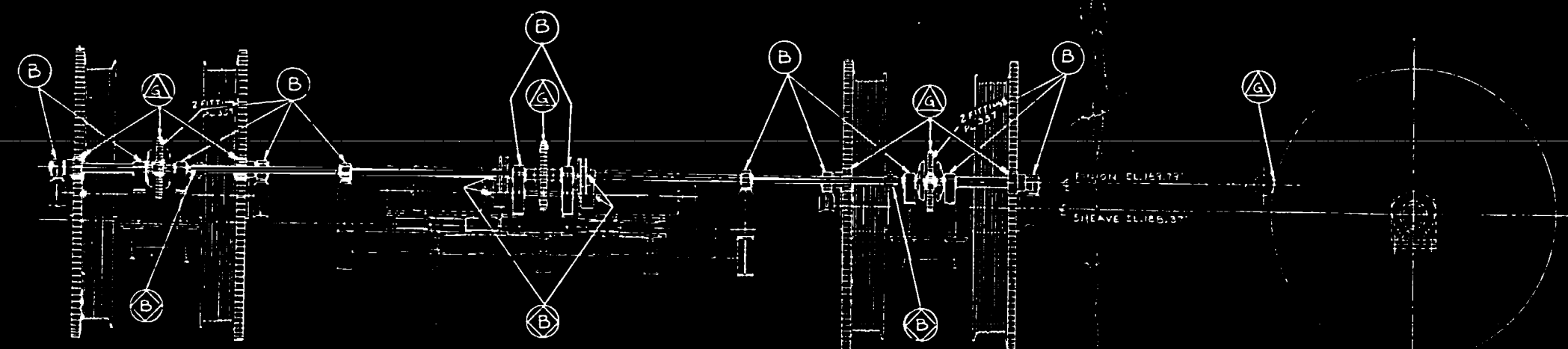
REVISION	BY	DATE



PLAN VIEW OPERATING MACHINERY
EAST TOWER
(WEST TOWER OPP. HAND EXCEPT AS NOTED)

RECOMMENDED		LUBRICANTS	
FITTINGS	LUB. SYMBS	LUBRICANT	
○ HYDRAULIC FITTING	B	MOBIL OIL CO.	MOBILPLEX No 47
◇ FLUSH TYPE FITTING	G	MOBIL OIL CO.	MOBILTAC C
△ BRUSH APPLICATION			
□ GIANT BUTTON HEAD			

CHECK LUBRICATION OF ALL EQUIPMENT TWICE A MONTH
AND GREASE OR OIL AS FOUND NECESSARY.



ELEVATION VIEW

M.C. 1143

1-2-47	2A	REVISED AS PER RETURNED DRAWING	
DATE	REV.	REVISIONS	APPROVED

SPECIFICATIONS A.A.S.H.O. & SPECIAL PROVISIONS
INSPECTION FRUEHLING & ROBERTSON

GENERAL NOTES
ALL STEEL CASTINGS & FORGINGS TO BE ANNEALED
SPOT FACE FOR ALL BOLT HEADS & NUTS
SCRIBE FITCH LINES ON BOTH SIDES OF ALL GEARS
SHOP PAINT — 3 COAT SYSTEM (SEE SPECS)
FINISHED SURFACES COATED — NO. 10-100 A SPECIAL
CUT OIL GROOVES IN ALL BEARINGS UNLESS NOTED
ALL SHIMS TO BE DRILLED

S.O. A. 9058 A-906 CONTRACT
OPERATING MACHINERY LUB. CHART
VERTICAL LIFT BRIDGE OVER
CAPE FEAR RIVER CROSSING
AT WILMINGTON, N.C.

THE EARLE GEAR AND MACHINE COMPANY
4707 TO 4715 STENTON AVENUE
PHILADELPHIA 44, PA.

DRAWN BY: AJR 1/19/48 CHECKED BY: [Signature]
DATE: 1/19/48 REV. AMEND: [Signature]
SHEET 1 OF 2 DWG. NO. 8106 E 30