

PLANS FOR  
SEWAGE DISPOSAL WORKS  
AND  
INTERCEPTING SEWERS  
**GRAND JUNCTION COLORADO**



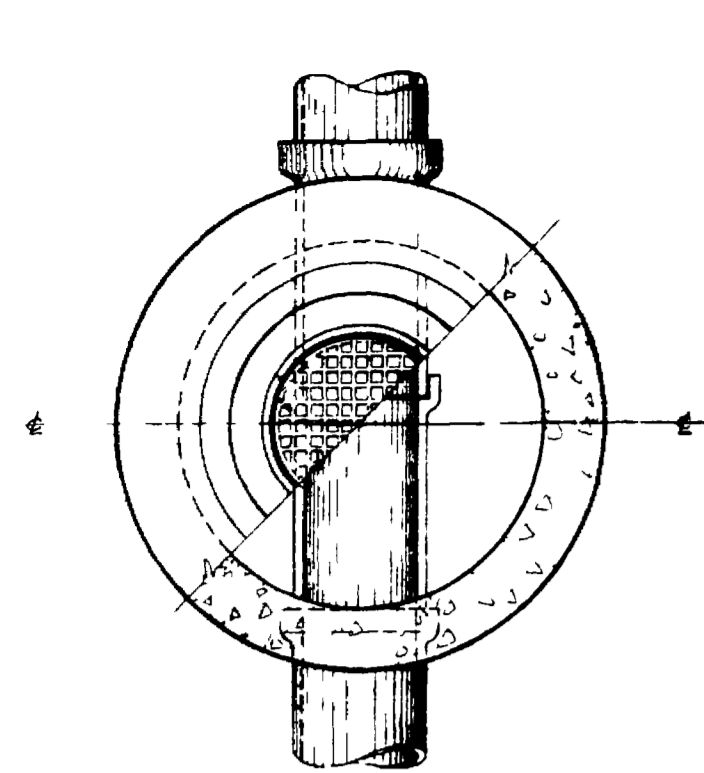
INDEX - CONTRACT NO. II  
INTERCEPTING SEWERS

- 1 SEWERS, GRAND AVENUE LINE
- 2 SEWERS, GRAND AVENUE LINE
- 3 SEWERS, GRAND AVENUE LINE
- 4 SEWERS, GRAND AVENUE LINE
- 5 SEWERS, CROSBY - SOUTH LINE
- 6 SEWERS, CROSBY - SOUTH LINE
- 7 SEWERS, CROSBY - SOUTH LINE
- 8 SEWERS, NINTH STREET LINE
- 9 SEWERS, NINTH STREET LINE
- 10 FIFTH AND STRUTHERS PUMP STATION CONNECTING SEWERS
- 11 FIFTH AVENUE FORCE MAIN
- 12 STANDARD MANHOLE STRUCTURES

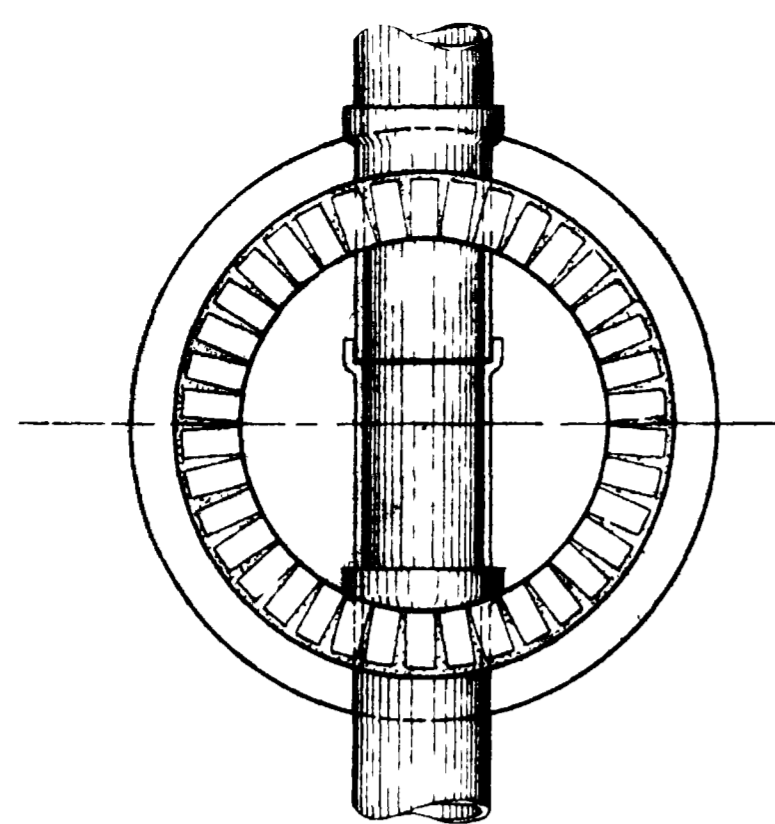
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KANSAS CITY MO.

INDEX - CONTRACT NO III  
SEWAGE DISPOSAL WORKS

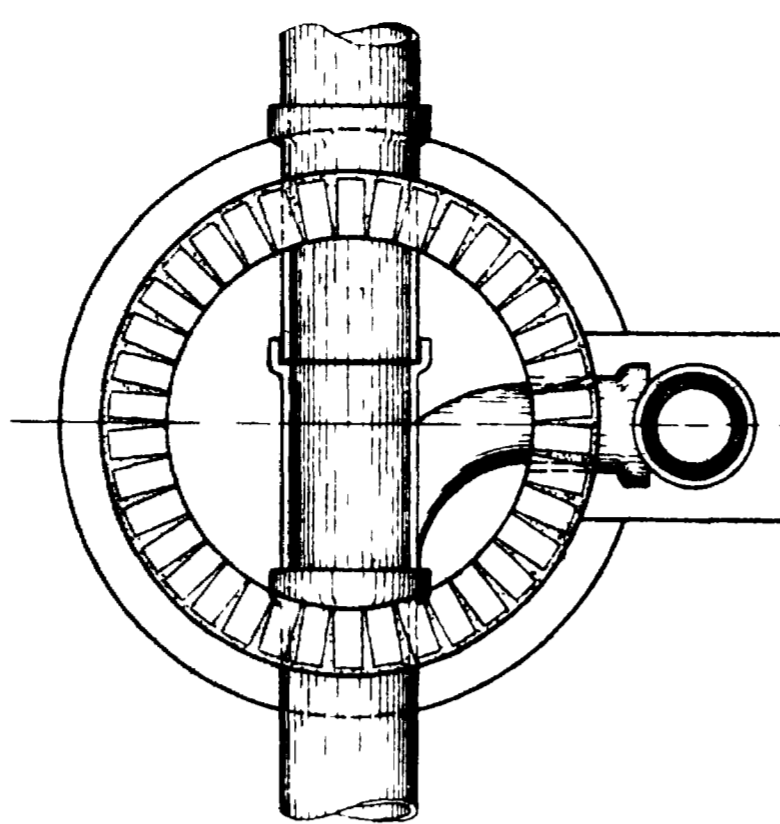
- 13 GENERAL LAYOUT
- 14 PLANT PUMP STATION
- 15 SETTLING BASIN - PLAN AND SECTIONS
- 16 SETTLING BASIN - DETAILS
- 17 SETTLING BASIN - DETAILS
- 18 SLUDGE DIGESTION TANK
- 19 SLUDGE DIGESTION TANK AND SCREENING UNIT
- 20 MISCELLANEOUS DETAILS
- 21 STANDARD HEATING
- 22 PUMP STATION AT FIFTH AND STRUTHERS
- 12 STANDARD MANHOLE STRUCTURES



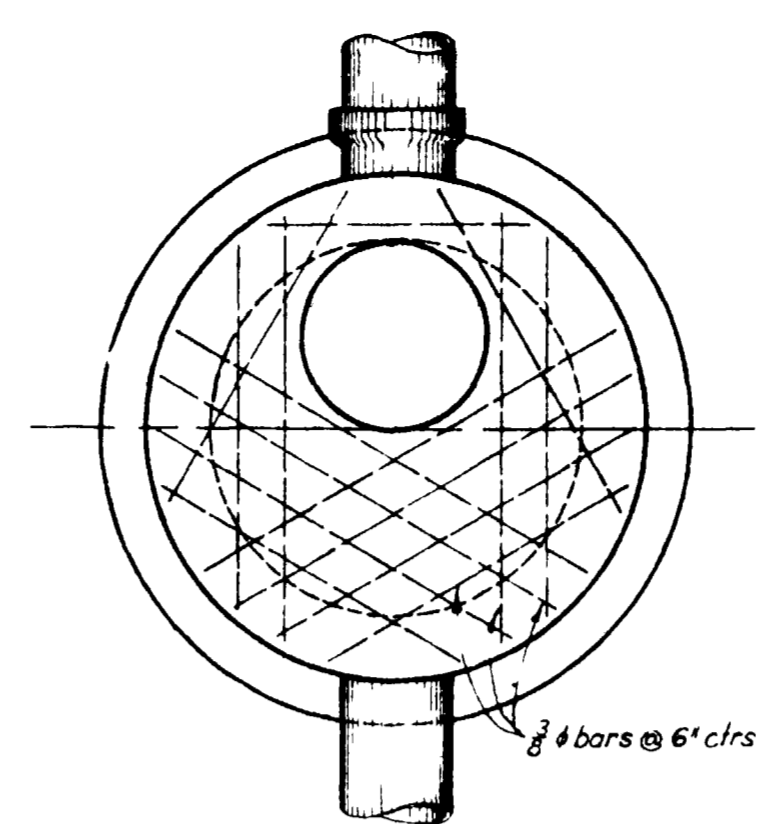
PLAN  
STANDARD CONCRETE MANHOLE



PLAN  
STANDARD BRICK MANHOLE  
STRAIGHT INVERT

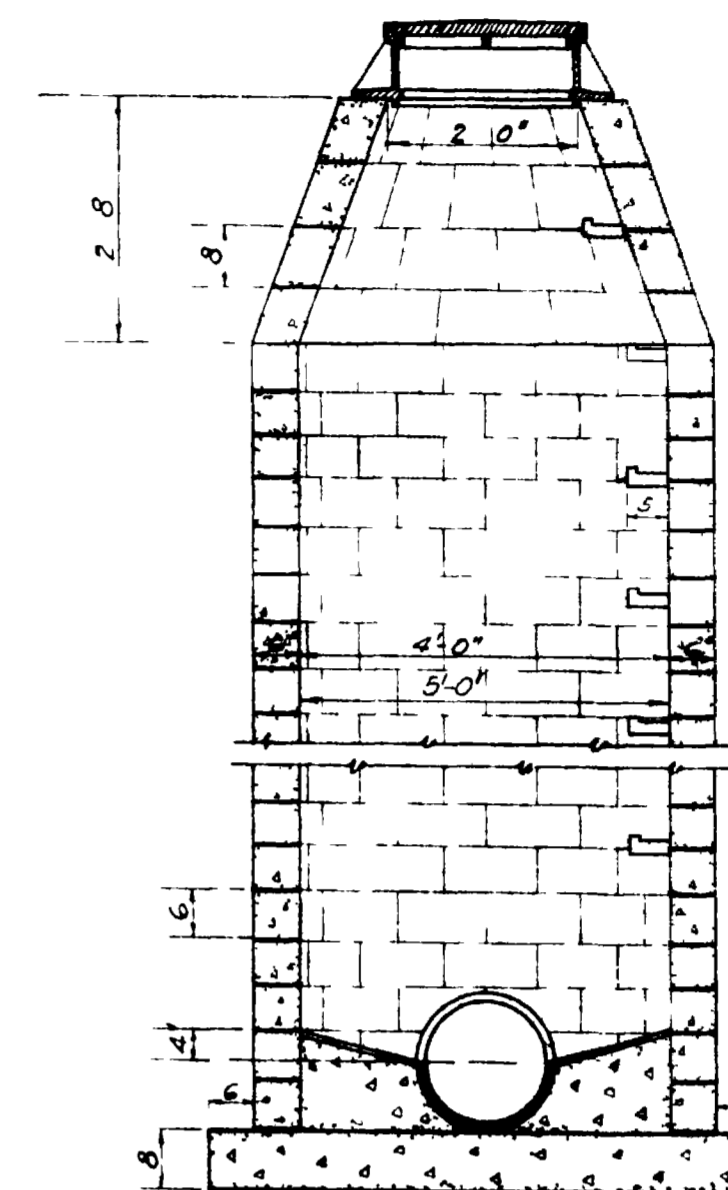


PLAN  
DROP MANHOLE

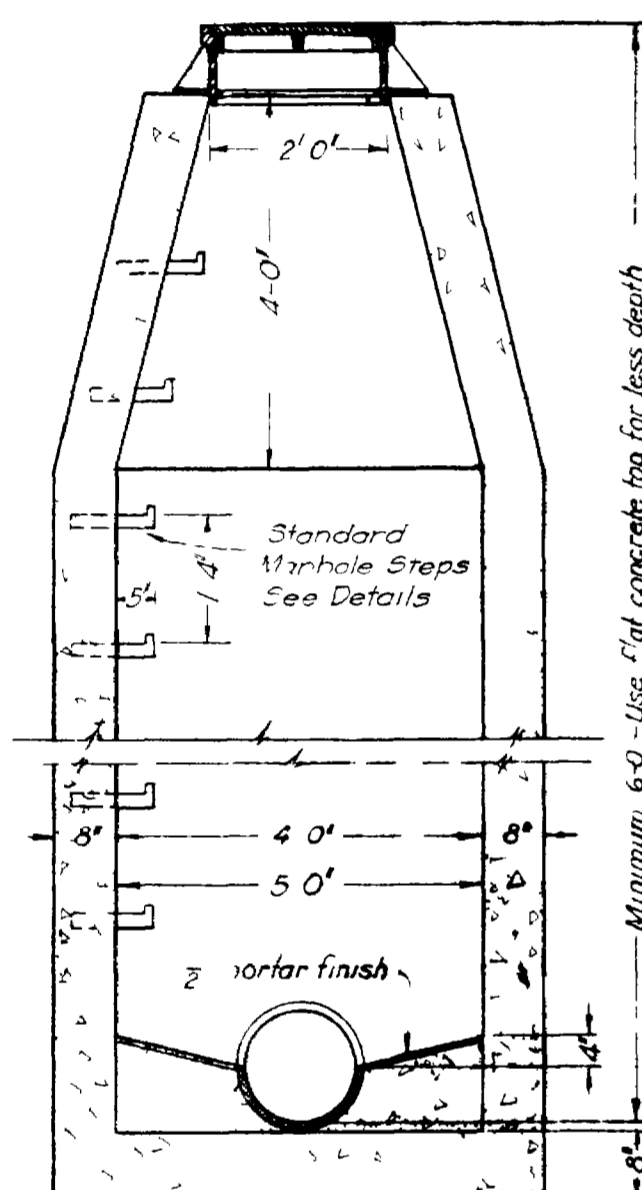


PLAN  
STANDARD SHALLOW MANHOLE

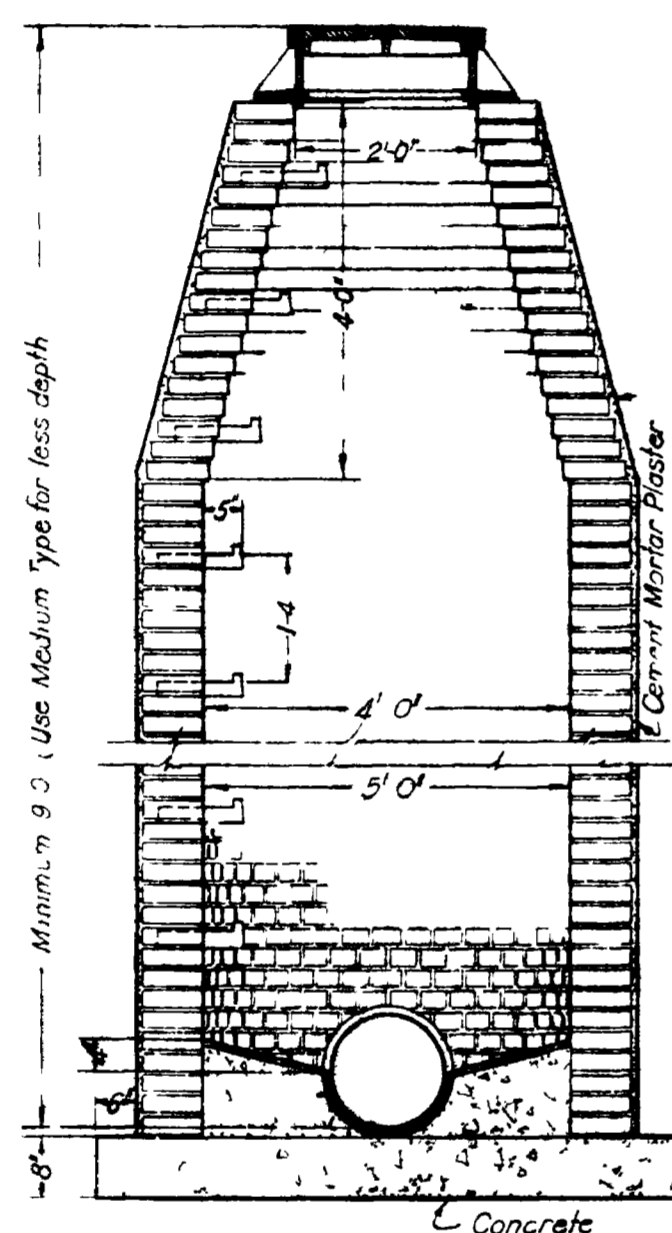
Plan is similar to standard brick or concrete manhole



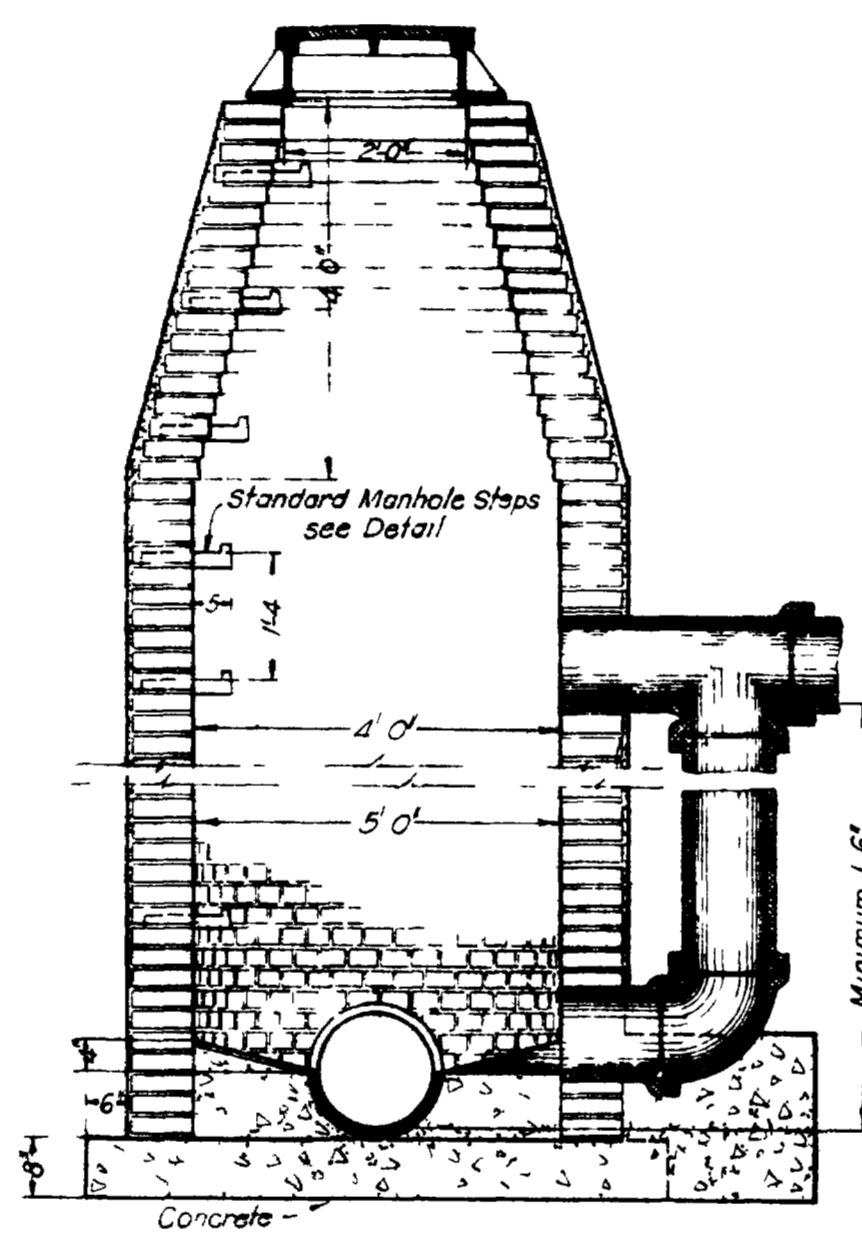
SECTION  
STANDARD CONCRETE BLOCK MANHOLE



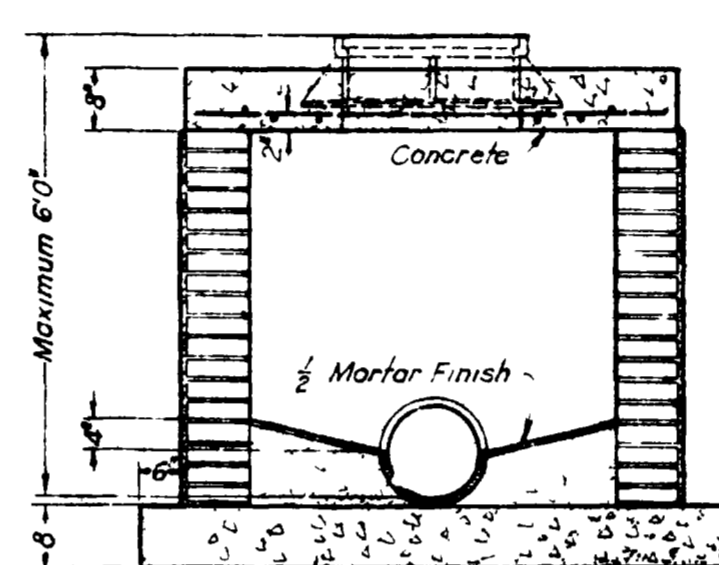
SECTION  
STANDARD CONCRETE MANHOLE



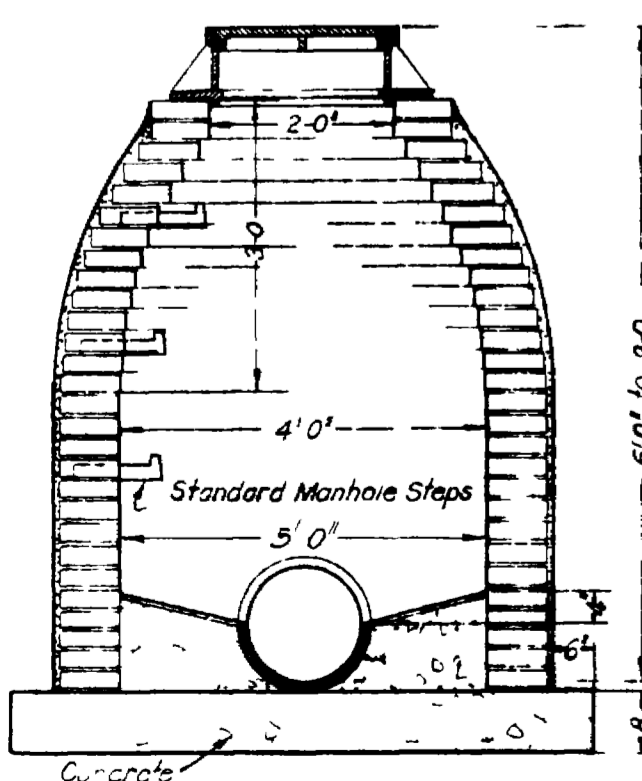
SECTION  
STANDARD BRICK MANHOLE  
DEEP TYPE



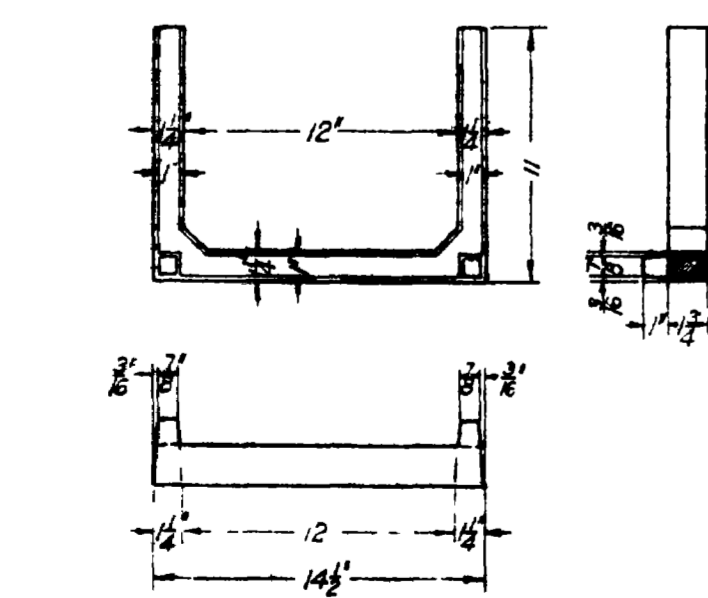
SECTION  
DROP MANHOLE  
None in this Contract



SECTION  
STANDARD SHALLOW MANHOLE  
None in this Contract



SECTION  
STANDARD BRICK MANHOLE  
FOR MEDIUM DEPTH



DETAIL OF STANDARD CAST IRON STEP

Note  
Manhole diameters are double dimensioned for the two standard sizes 4'-0" diameter and 5'-0" diameter

CONTRACT II  
ITEM IV

STANDARD MANHOLES  
4 & 5 FOOT DIAMETERS

SEWAGE DISPOSAL WORKS

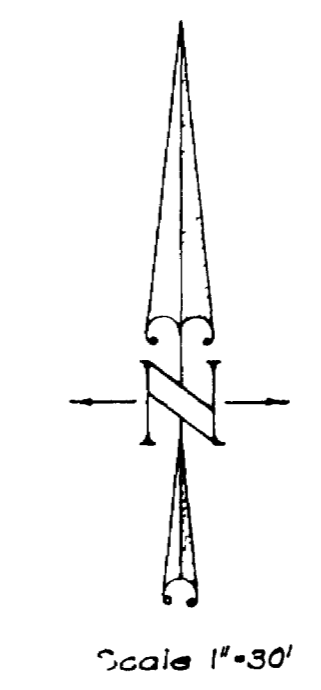
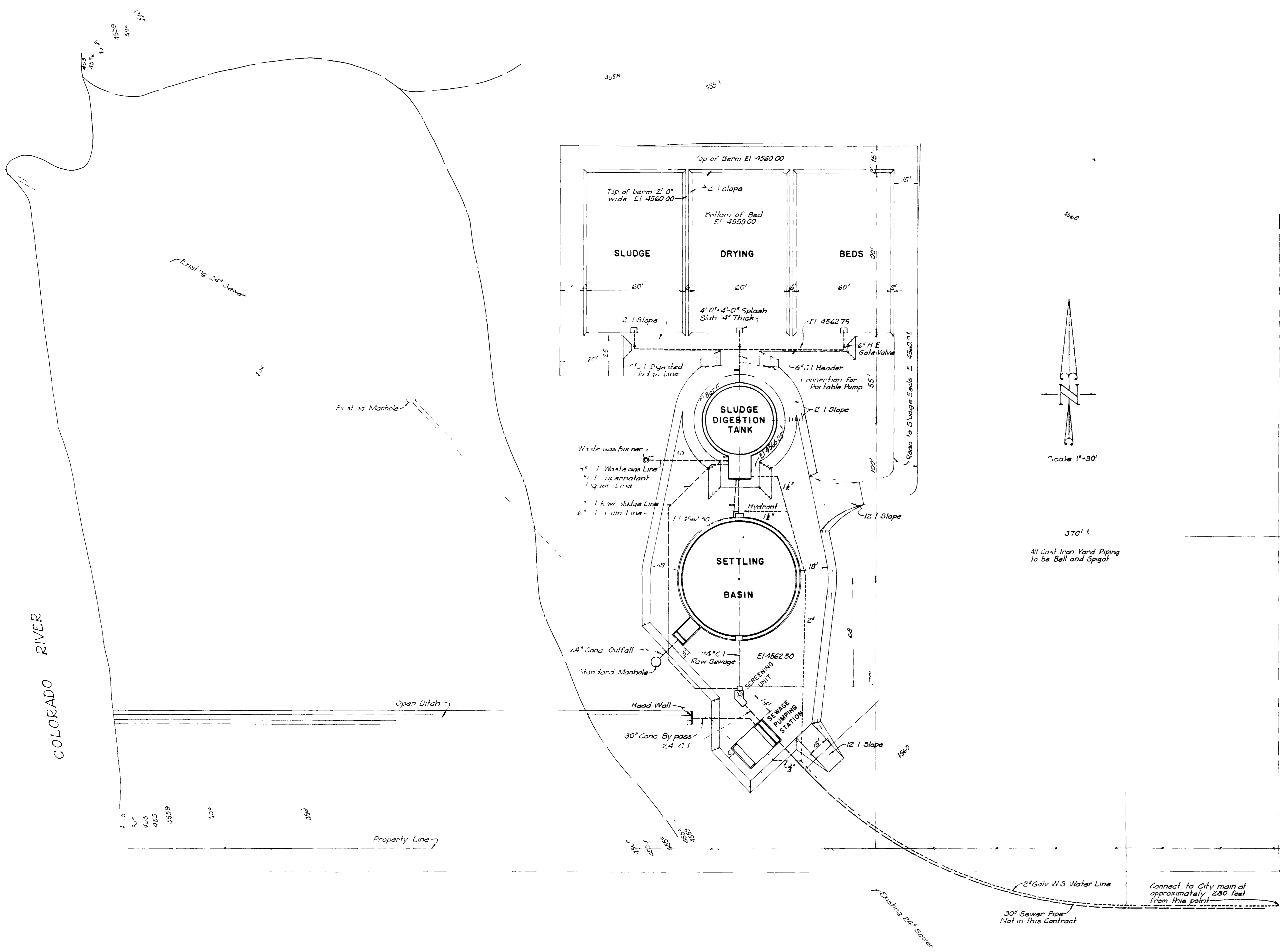
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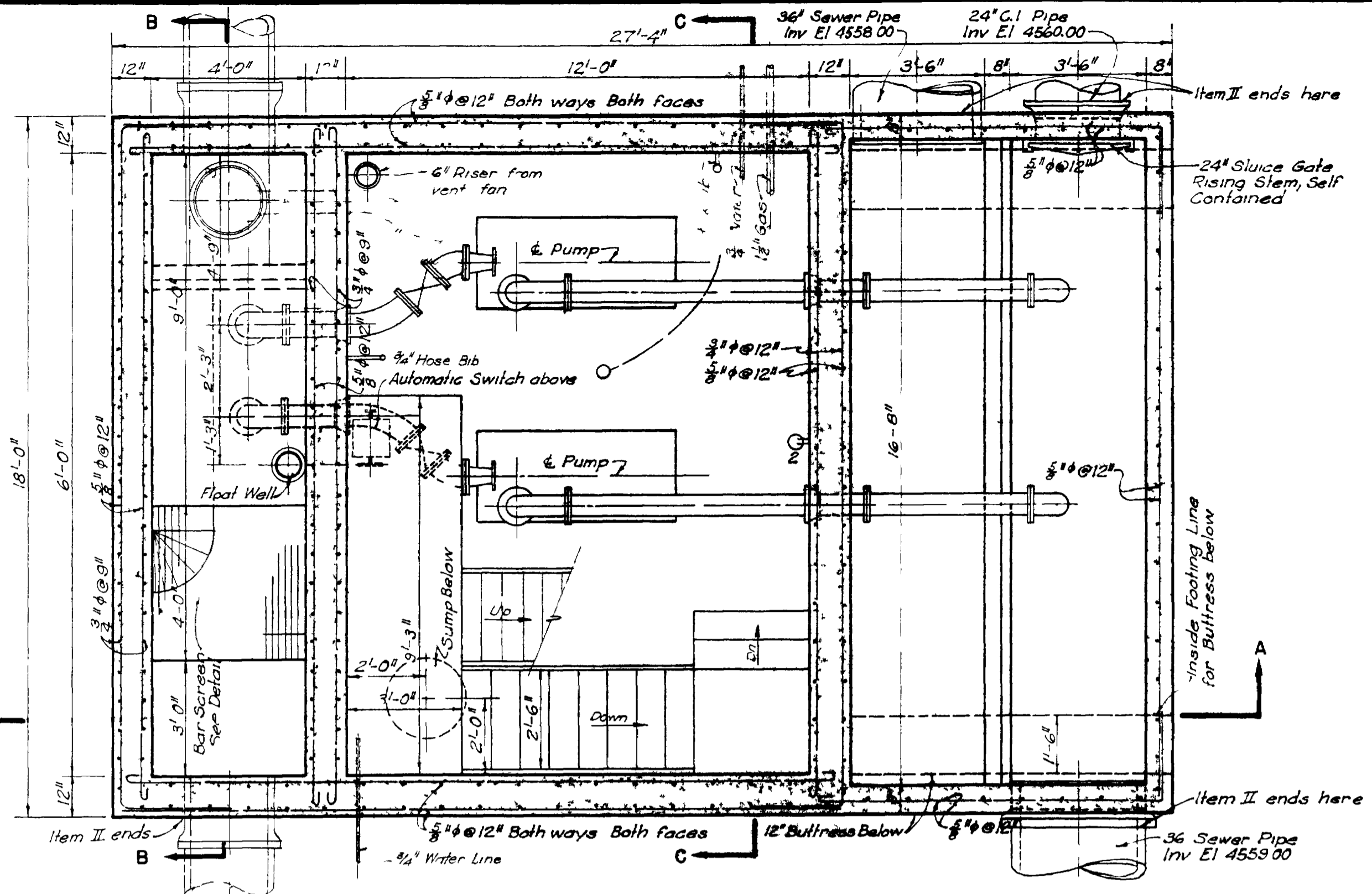


370' ±  
All Cast Iron Yard Piping  
to be Bell and Spigot

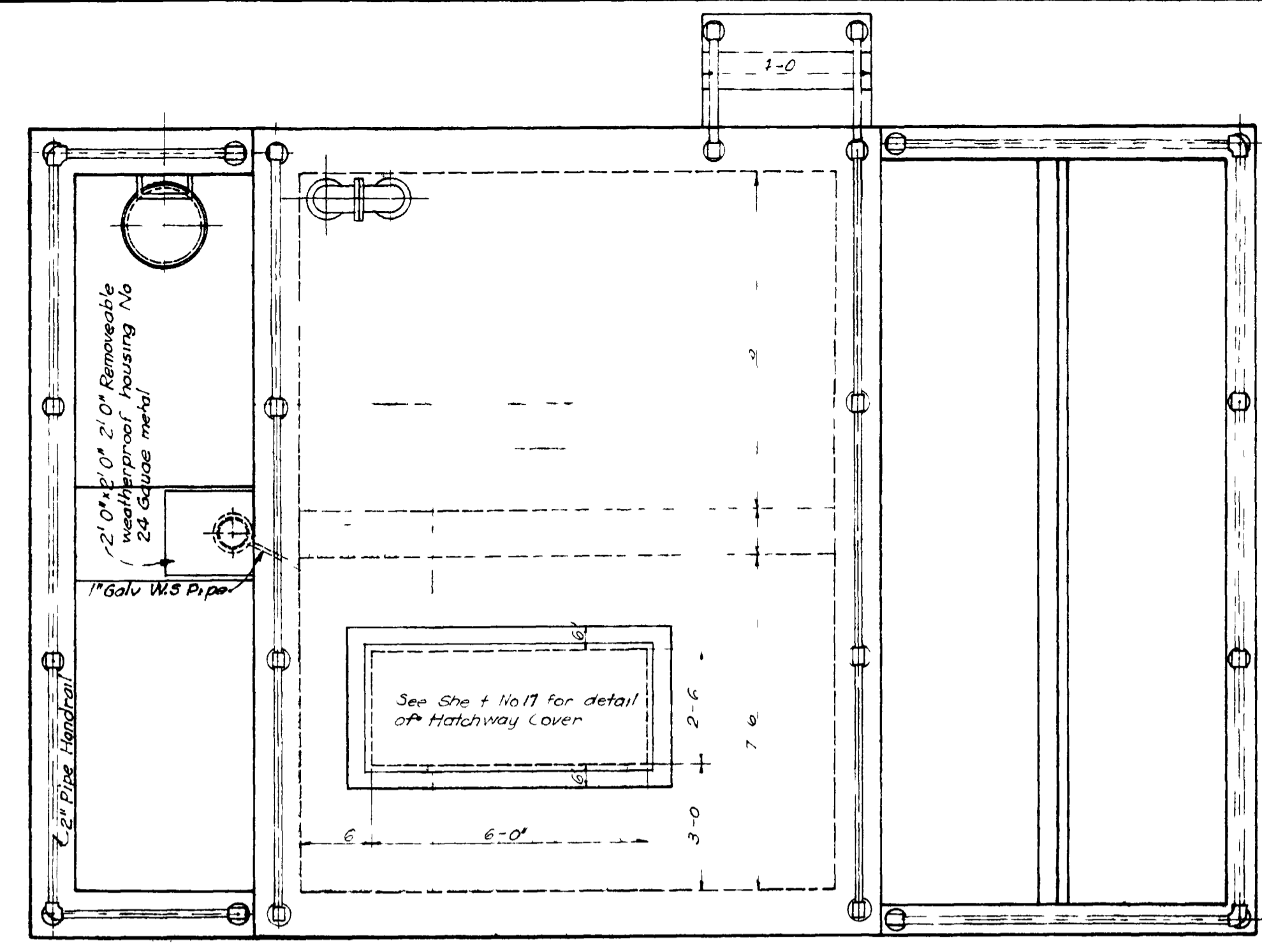
GENERAL LAYOUT  
SEWAGE DISPOSAL WORKS  
GRAND JUNCTION, COLORADO

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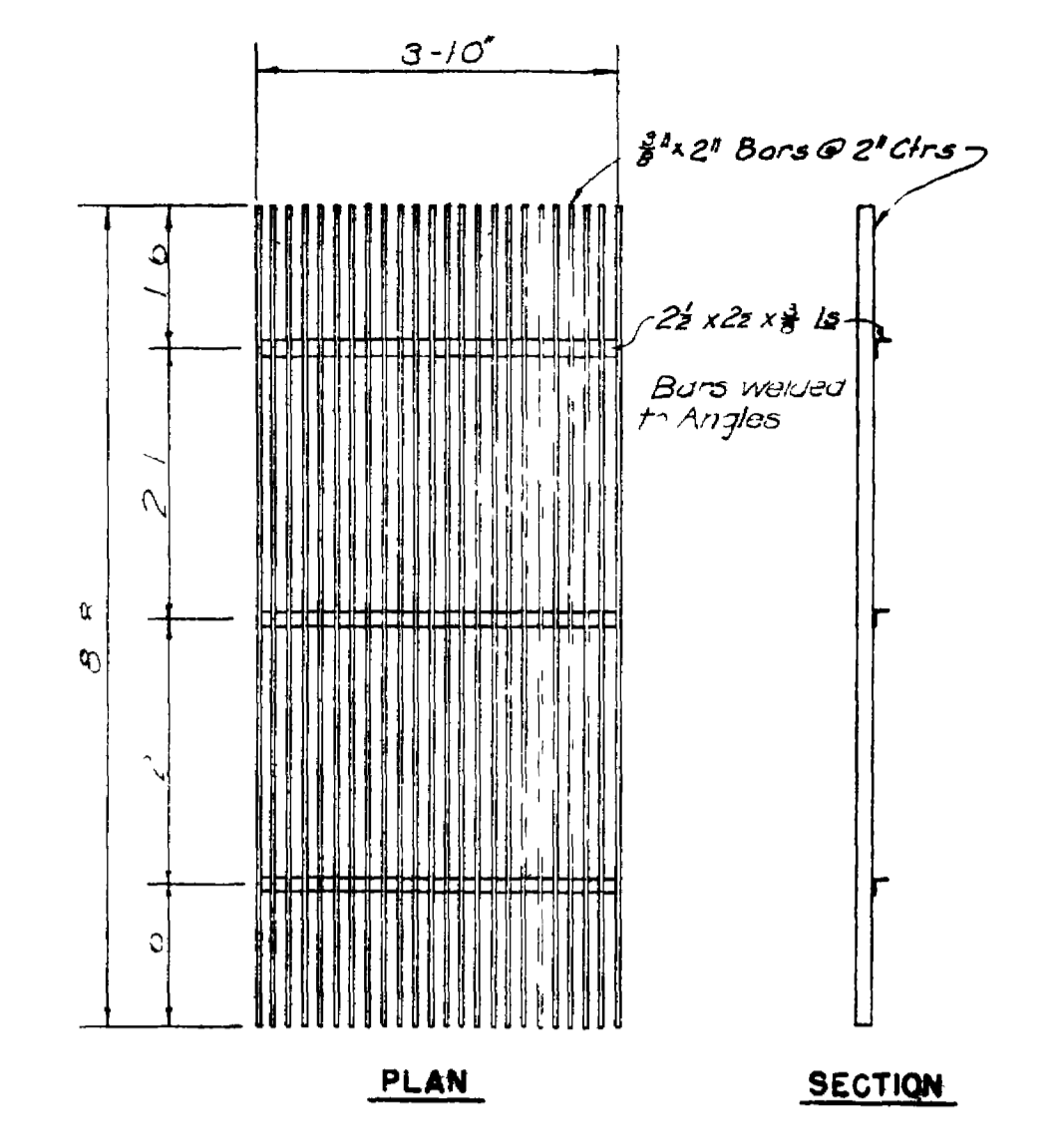
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**PLAN AT ELEVATION 4563 00**  
Scale  $\frac{3}{8}''=1'-0''$

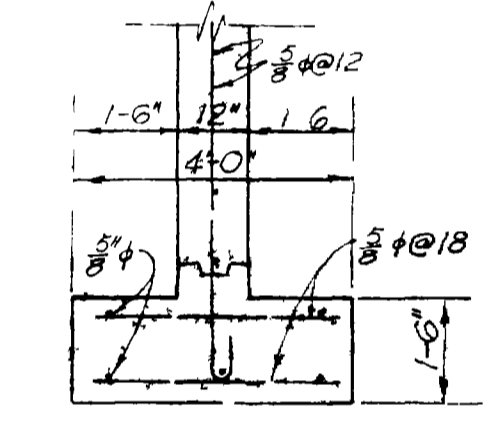


**PLAN AT ELEVATION 4569 00**  
Scale  $\frac{3}{8}''=1'-0''$

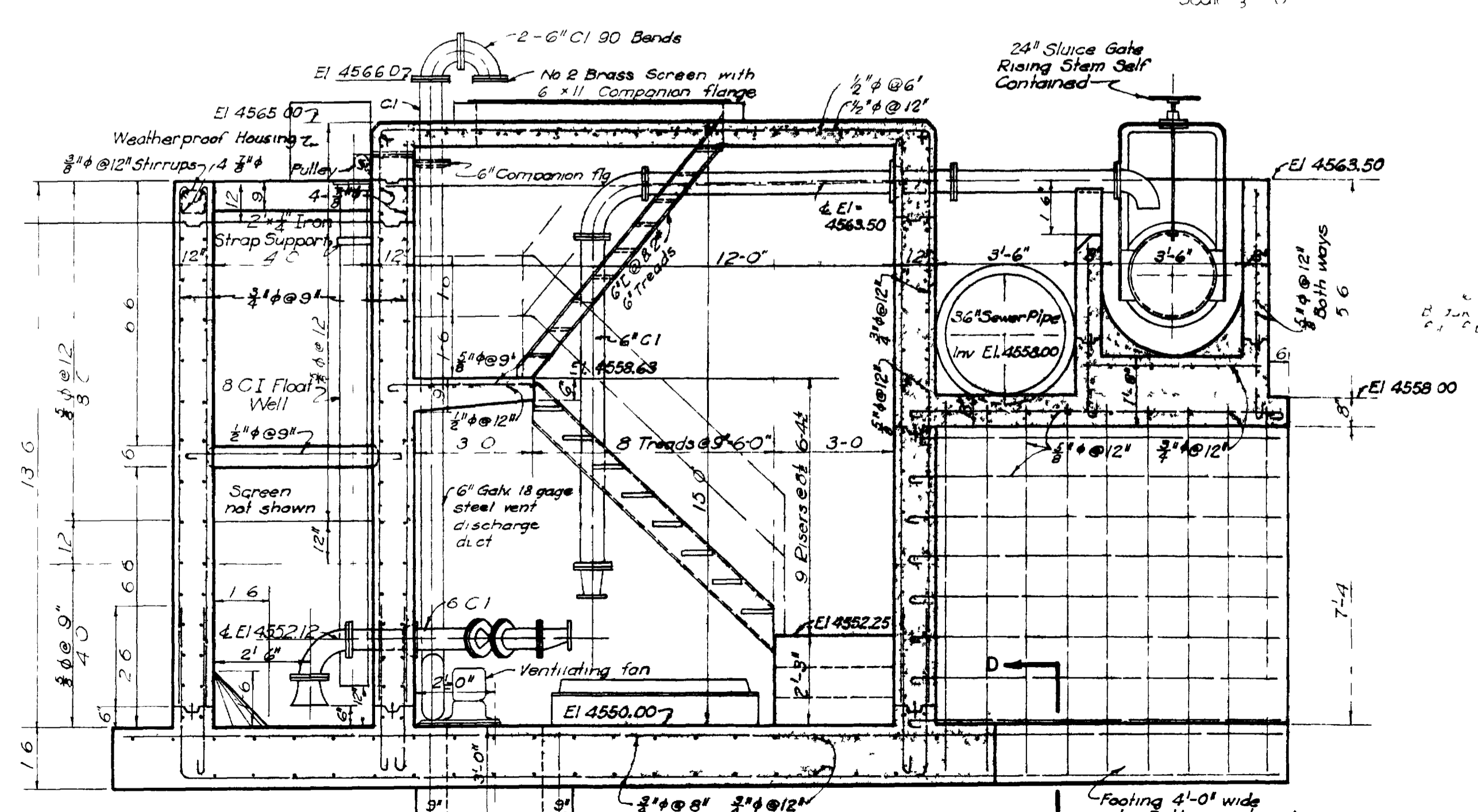


**BAR SCREEN**  
Scale  $\frac{1}{2}''=1'-0''$

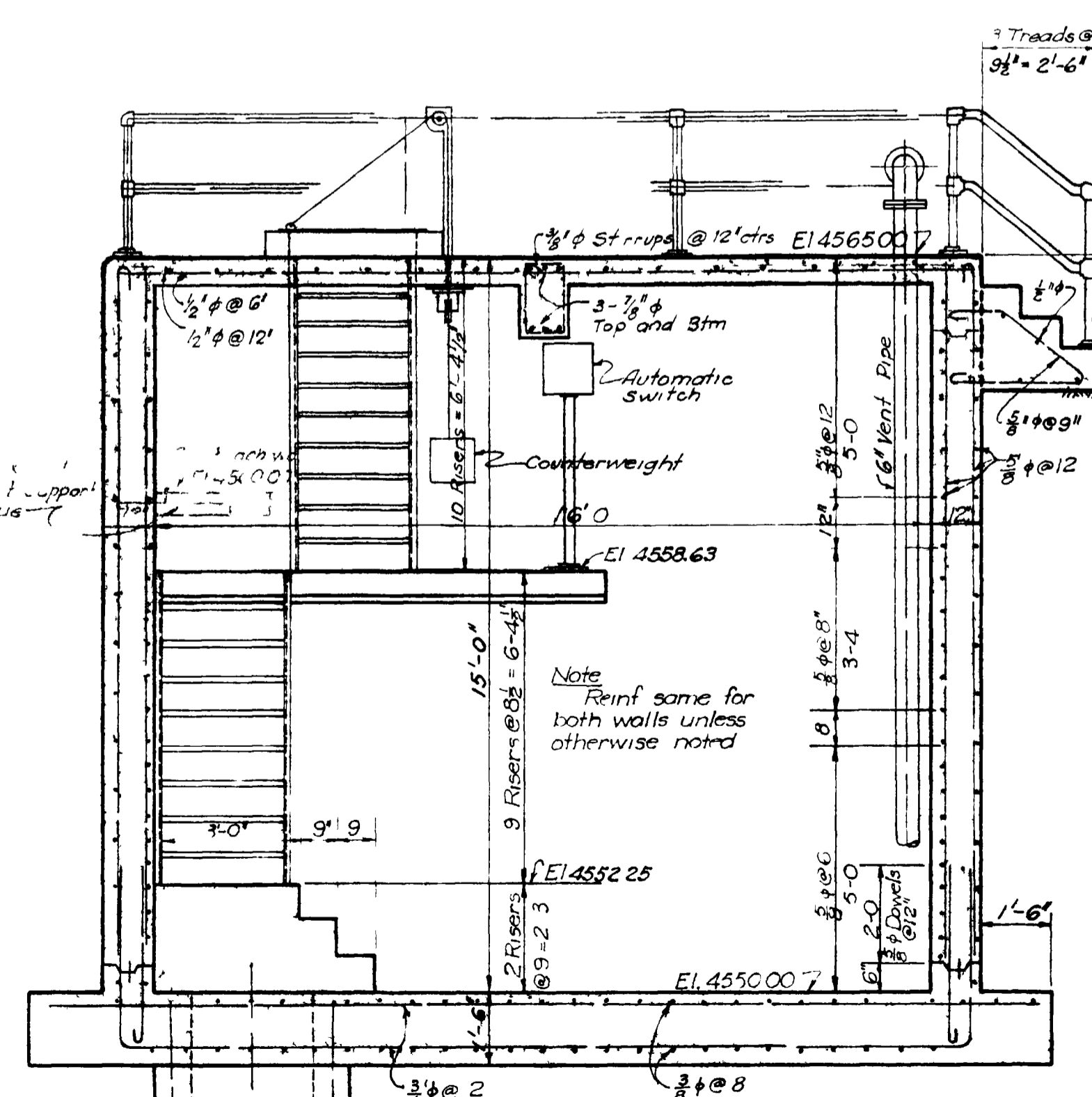
Note Ventilating fan to be American Blower Co Domestic forced draft fan size 1 or equal capacity not less than 400 cfm at 4\"/>



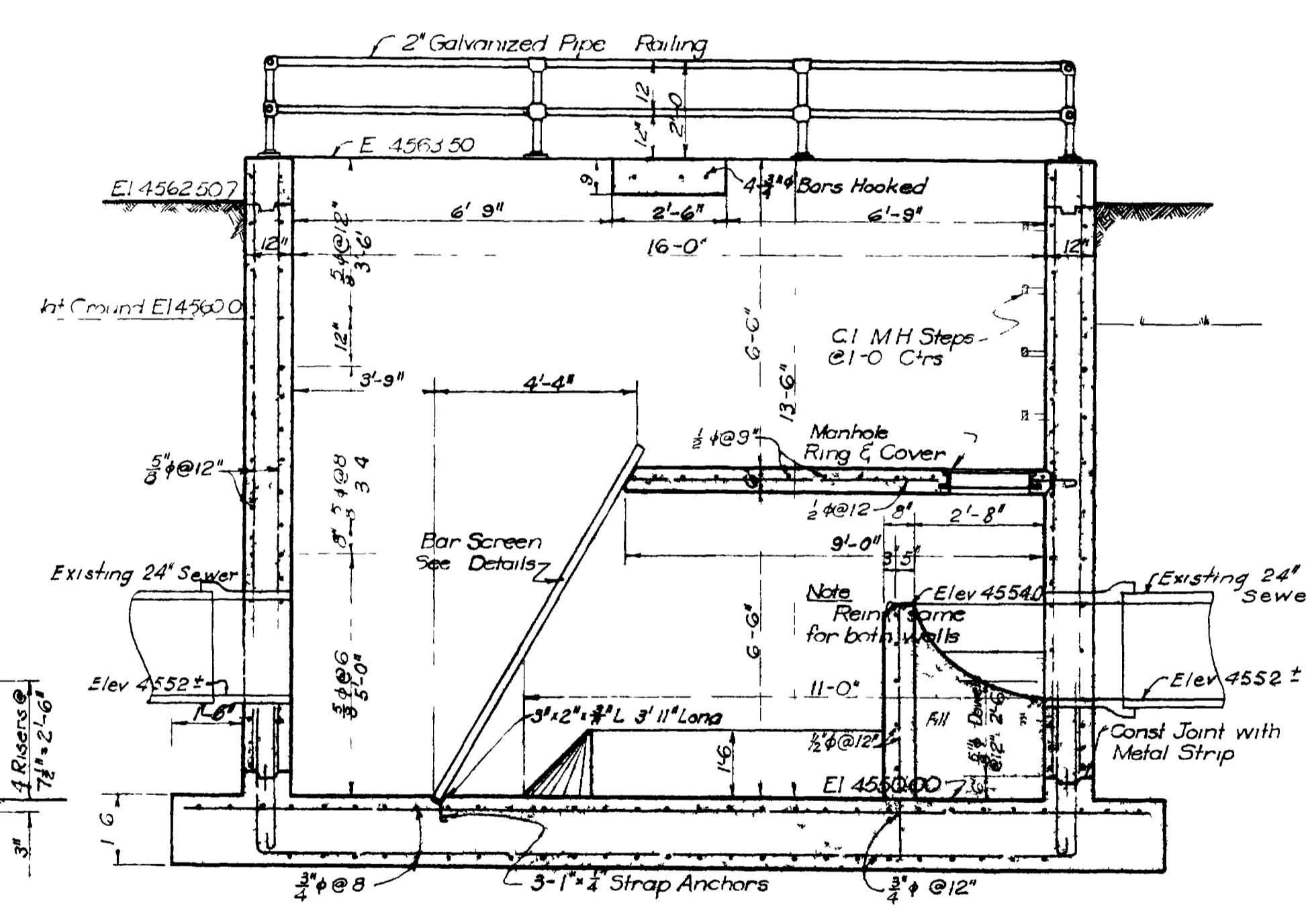
**SECTION D-D**  
Scale  $\frac{3}{8}''=1'-0''$



**SECTION A-A**  
Scale  $\frac{3}{8}''=1'-0''$



**SECTION C-C**  
Scale  $\frac{3}{8}''=1'-0''$



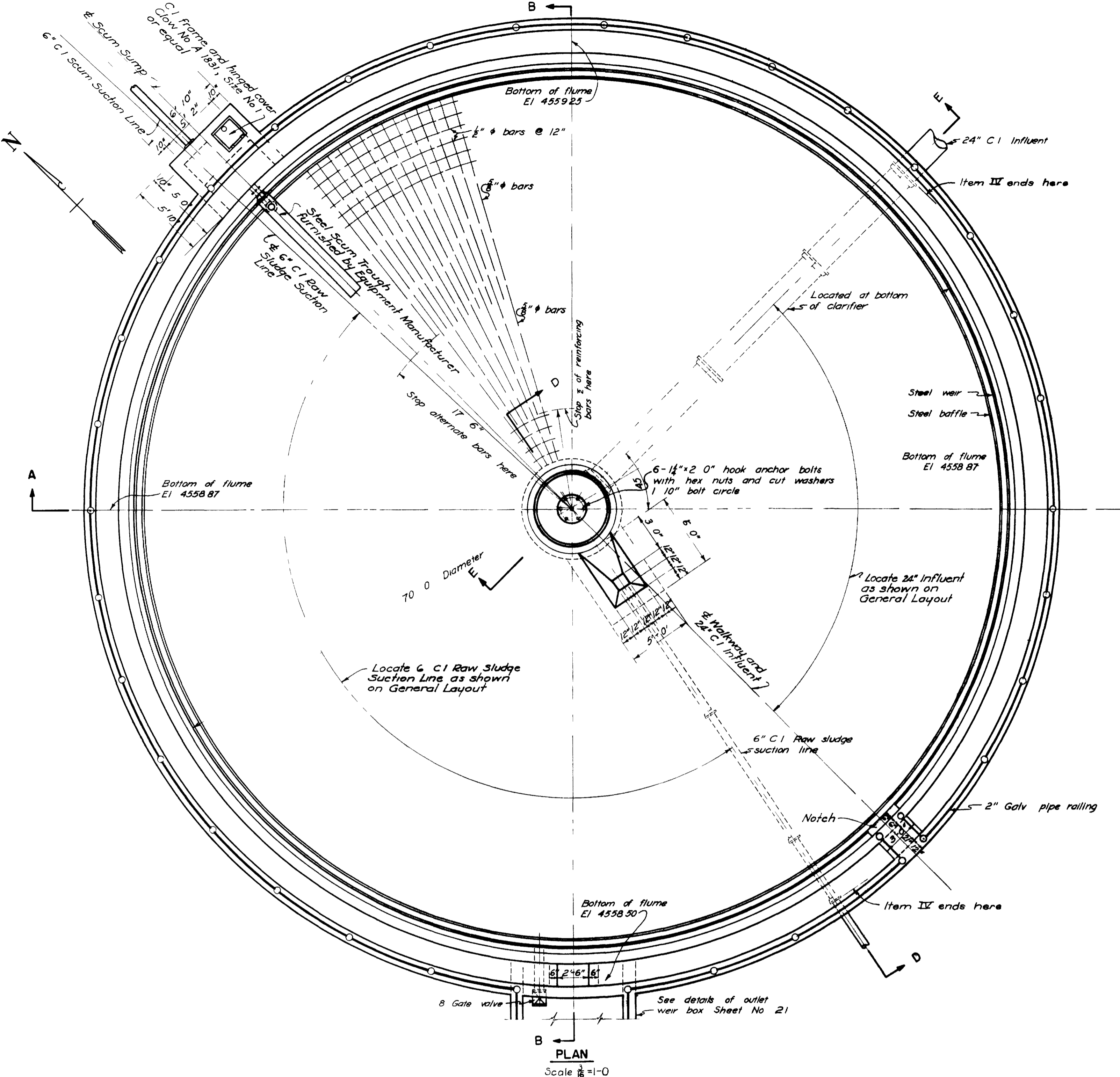
**SECTION B-B**  
Scale  $\frac{3}{8}''=1'-0''$

CONTRACT III  
ITEM II  
PUMP STATION DETAILS  
SEWAGE DISPOSAL WORKS  
**GRAND JUNCTION COLORADO**

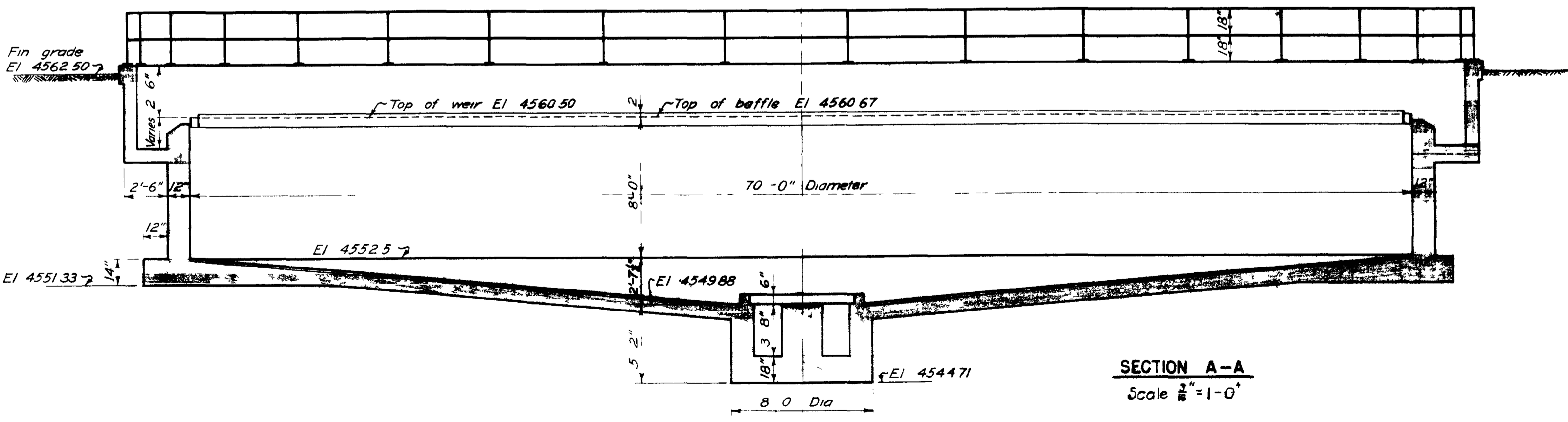
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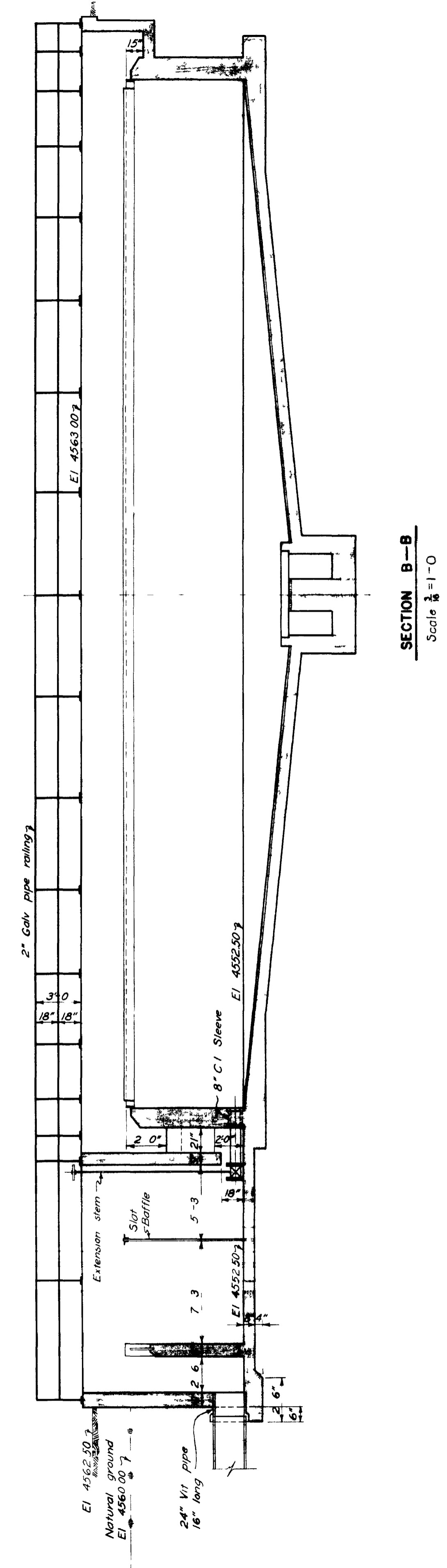




**PLAN**  
Scale  $\frac{1}{8}'' = 1'-0''$



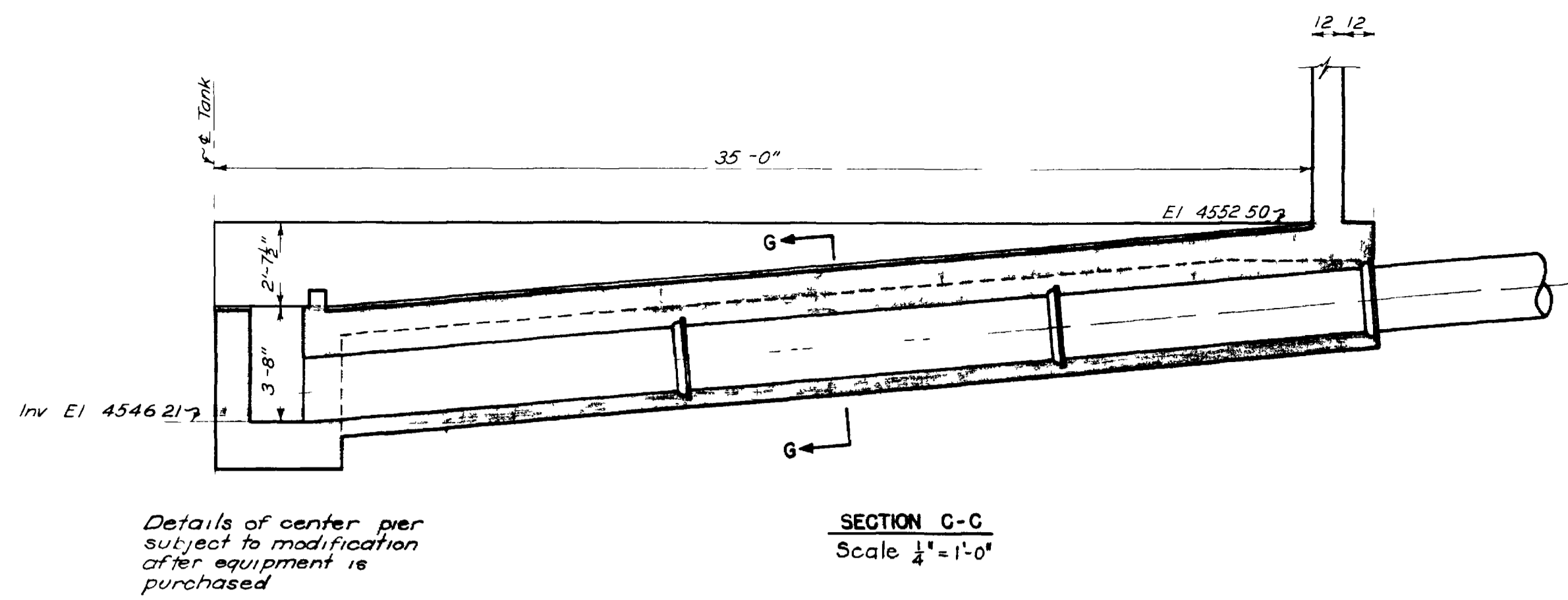
**SECTION A-A**  
Scale  $\frac{1}{8}'' = 1'-0''$



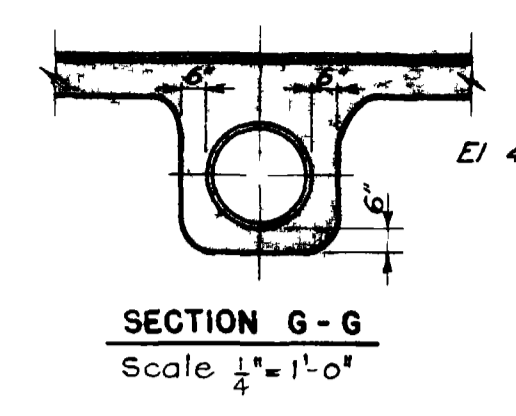
**SECTION B-B**  
Scale  $\frac{1}{8}'' = 1'-0''$

CONTRACT III  
ITEM IV  
PLAN AND SECTIONS  
SETTLING BASIN  
  
SEWAGE DISPOSAL WORKS  
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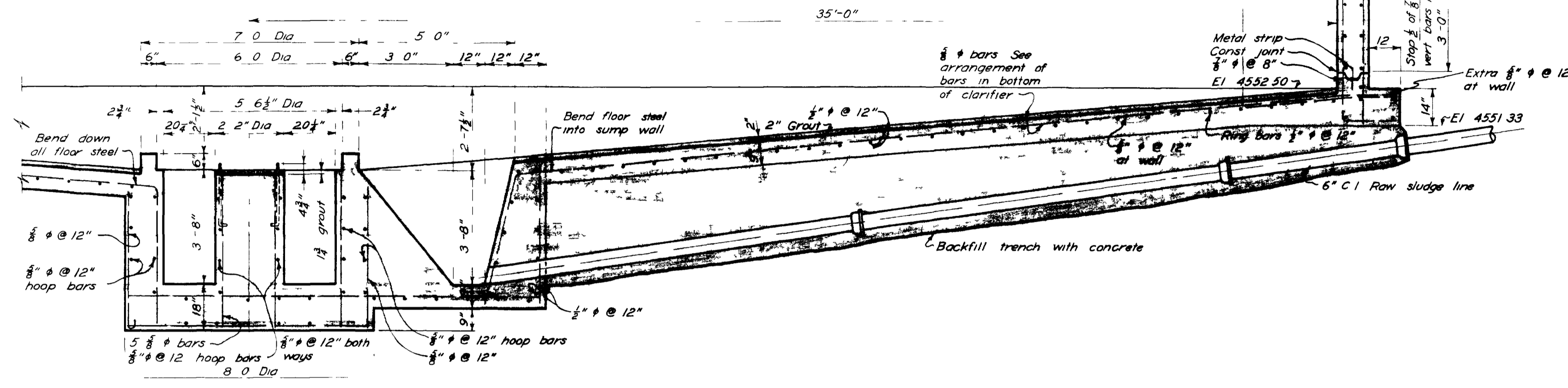
Revised 10-15-38



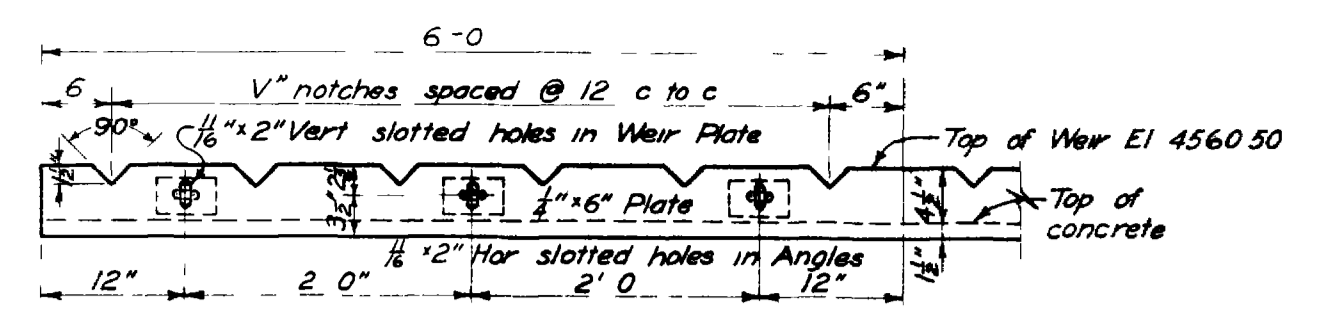
SECTION C-C  
Scale 1/4" = 1'-0"



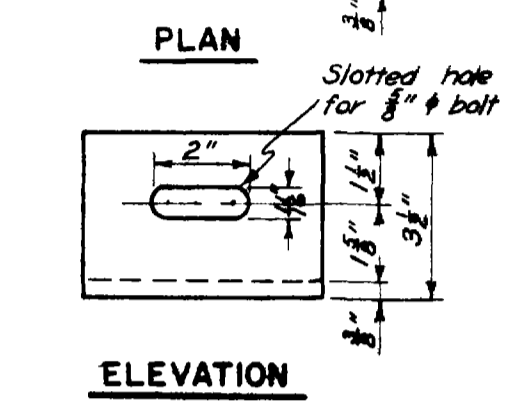
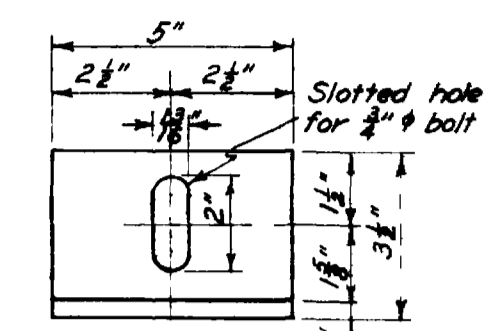
SECTION G-G  
Scale 1/4" = 1'-0"



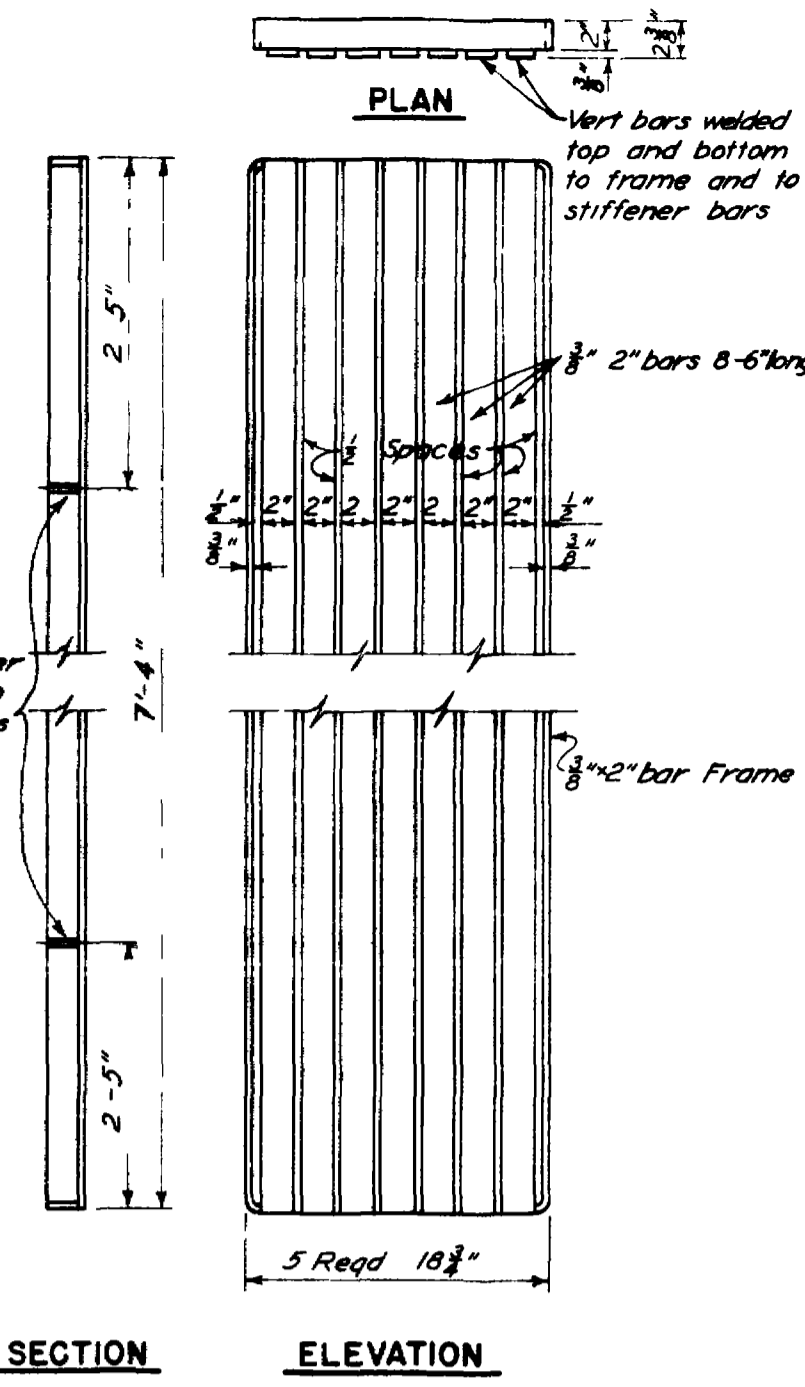
SECTION D-D  
Scale 3/8" = 1'-0"



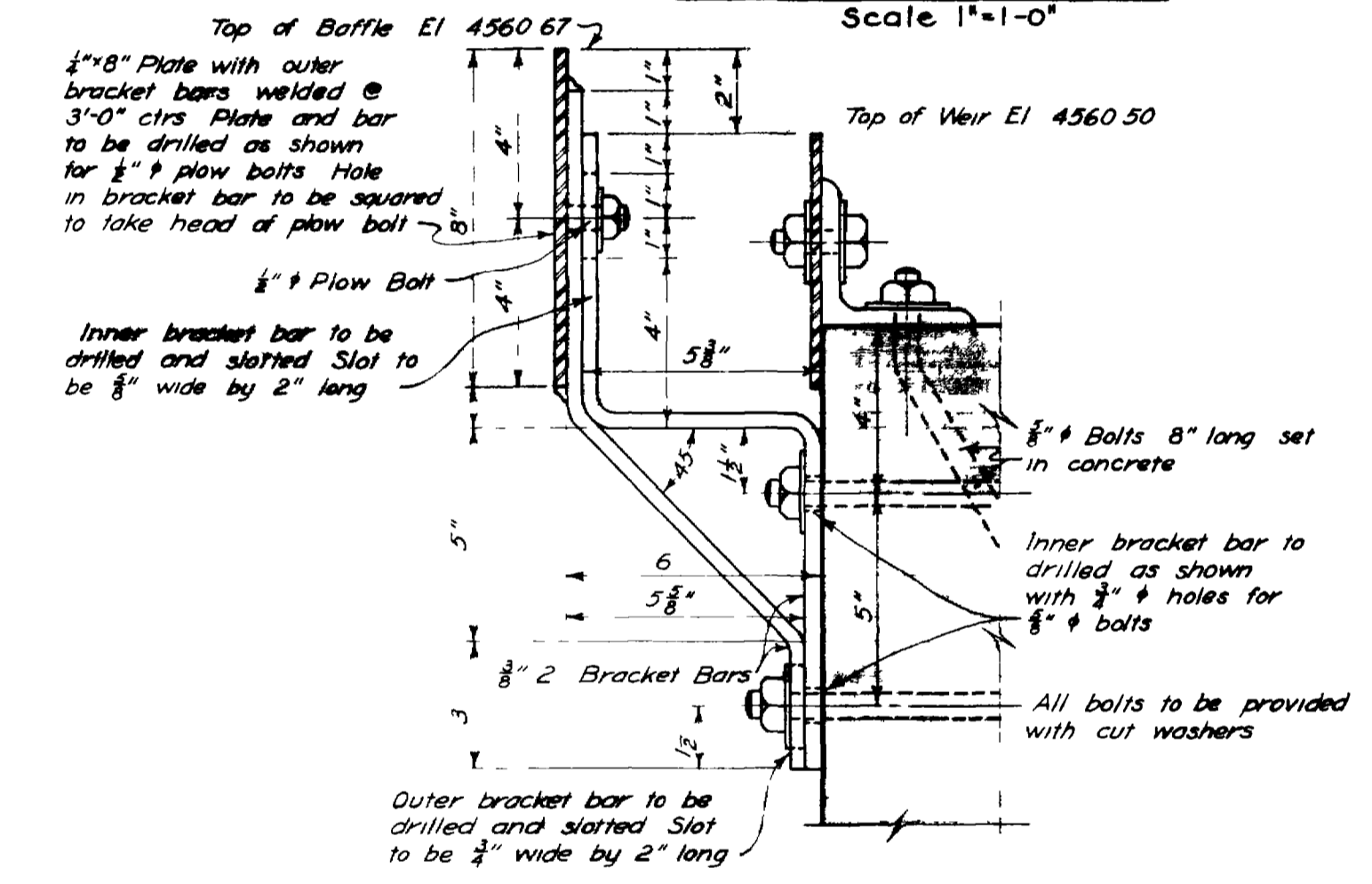
DETAIL OF WEIR PLATE  
Scale 3/4" = 1'-0"



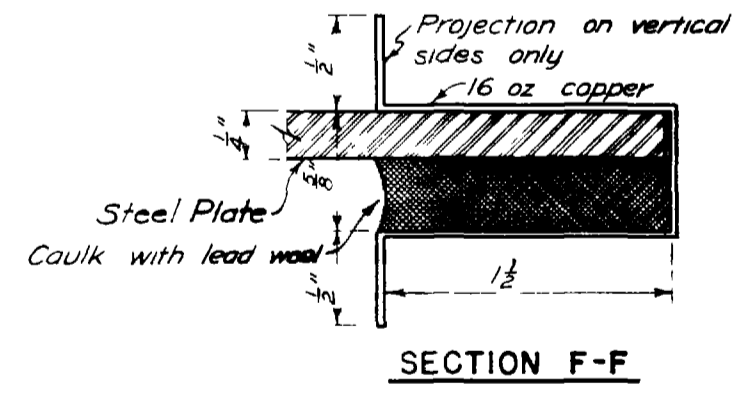
DETAILS OF CLIP ANGLE  
Scale 3" = 1'-0"



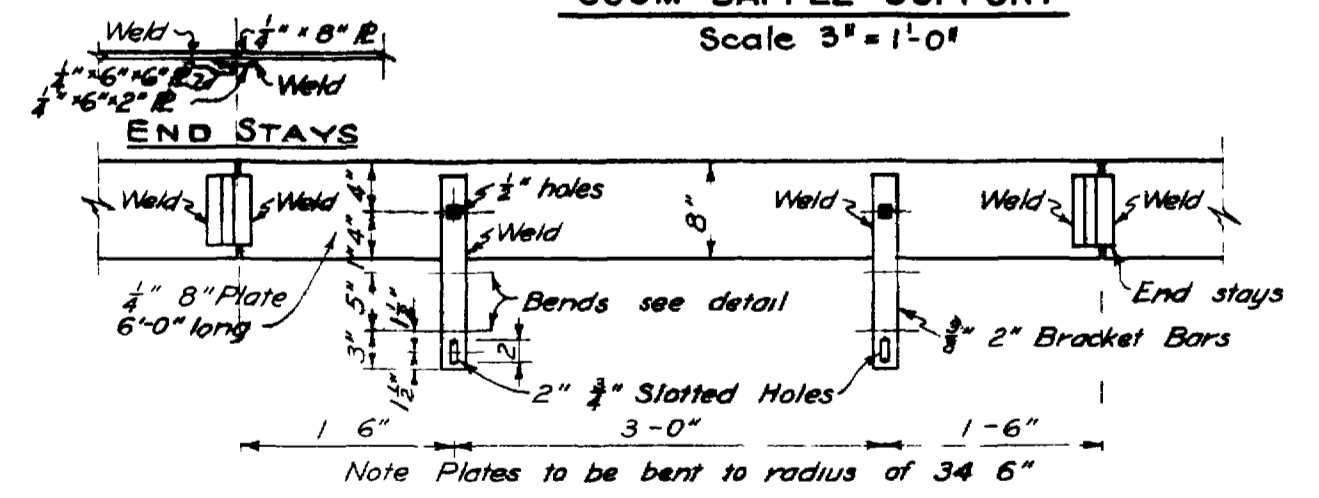
DETAILS OF SLAT BAFFLES  
Scale 1" = 1'-0"



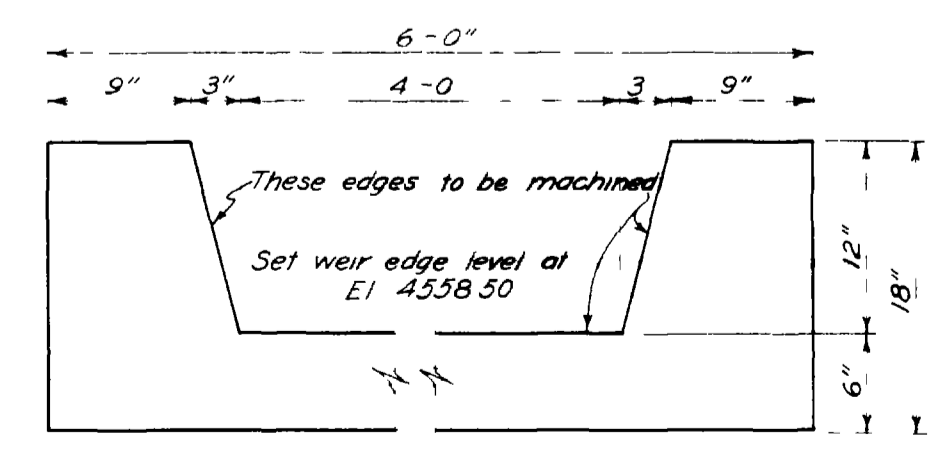
SCUM BAFFLE SUPPORT  
Scale 3" = 1'-0"



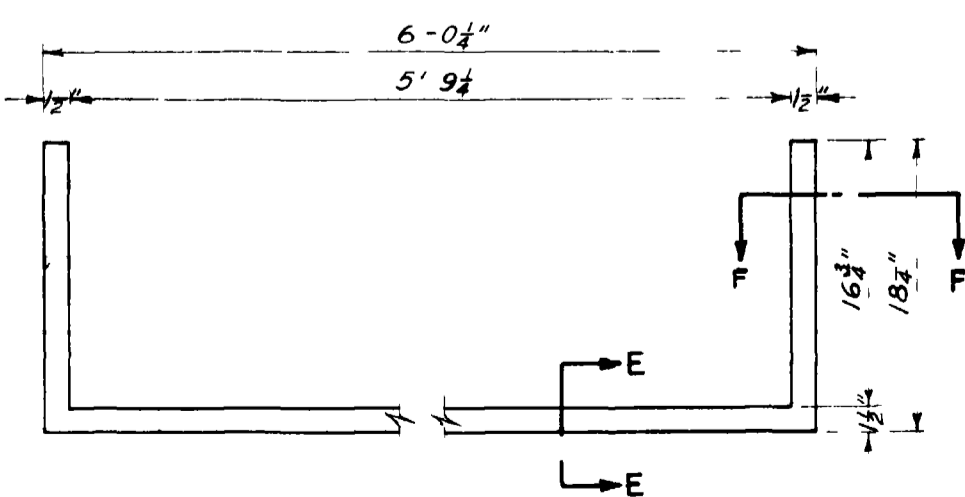
SECTION F-F



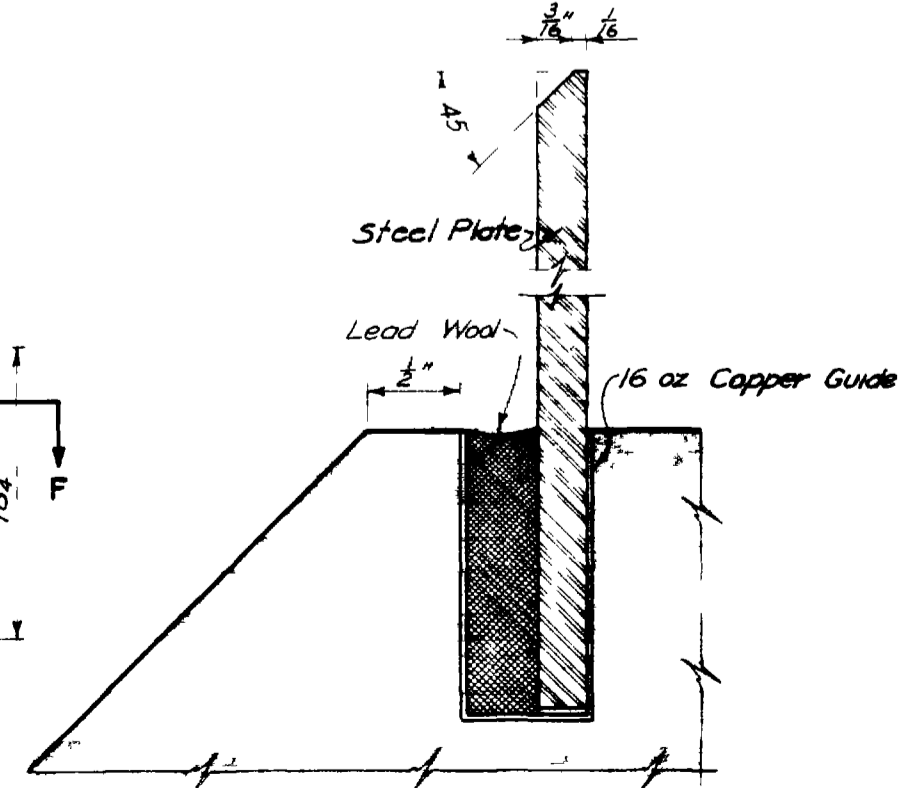
REAR ELEVATION OF SCUM BAFFLE PLATE  
Scale 3/4" = 1'-0"



WEIR PLATE



COPPER GUIDE FOR WEIR PLATE



SECTION E-E  
Full Size

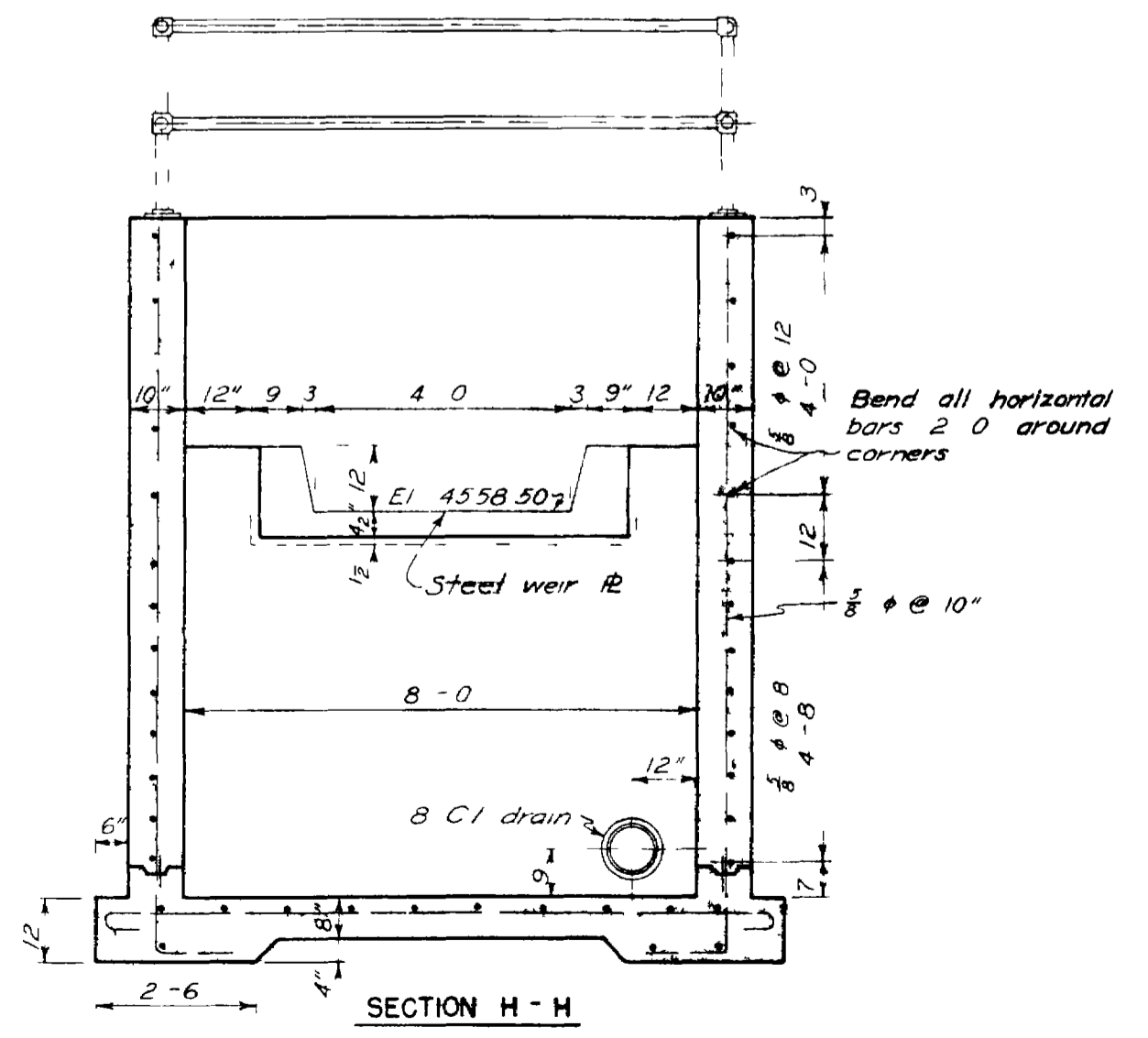
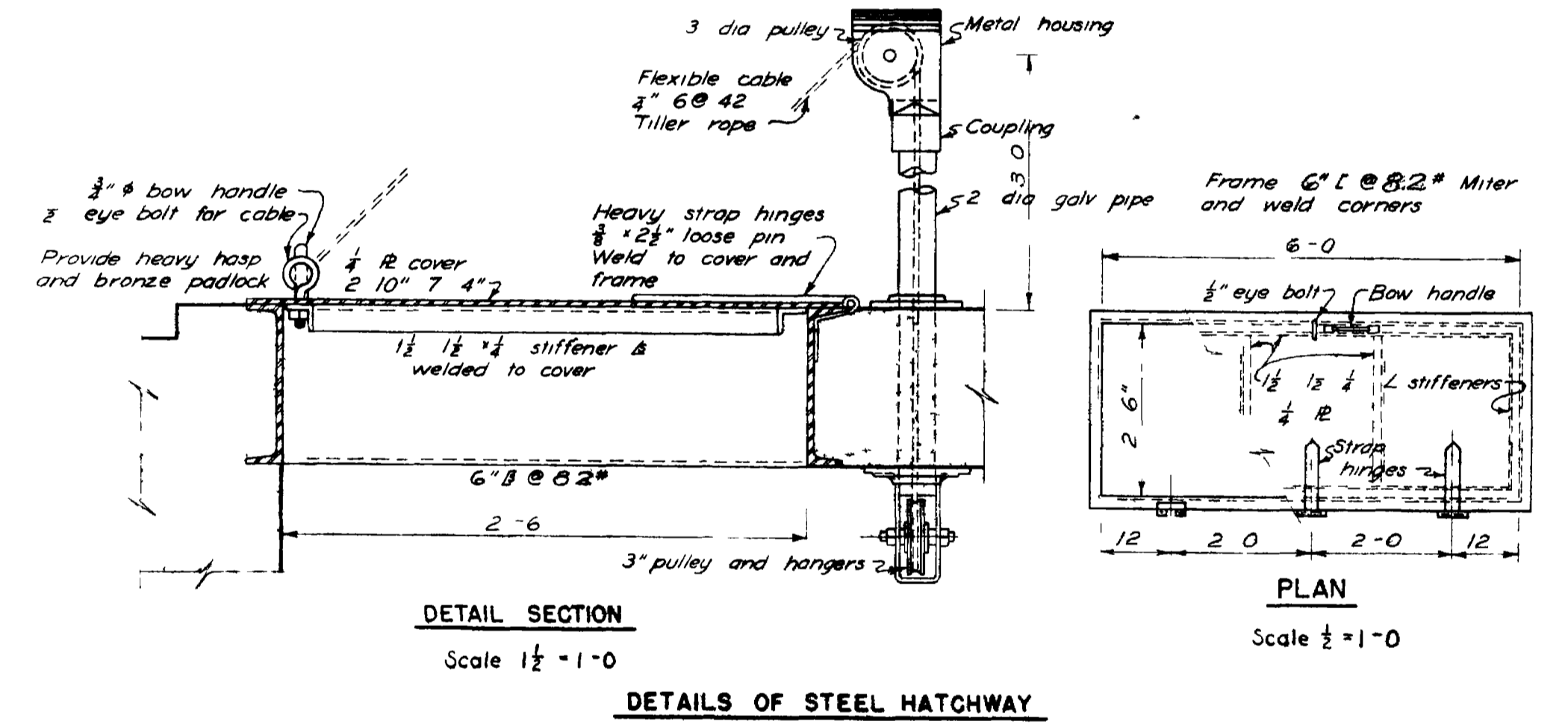
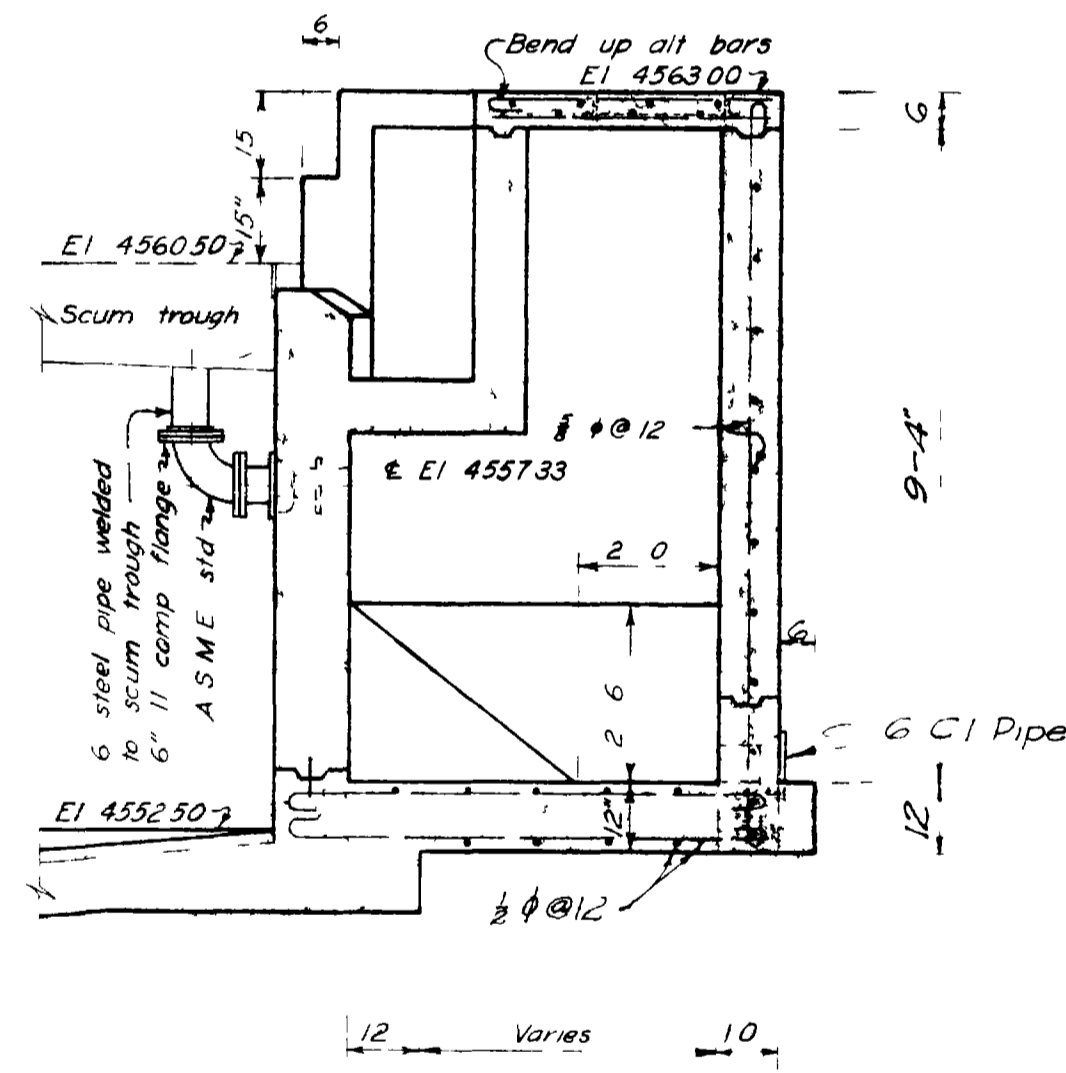
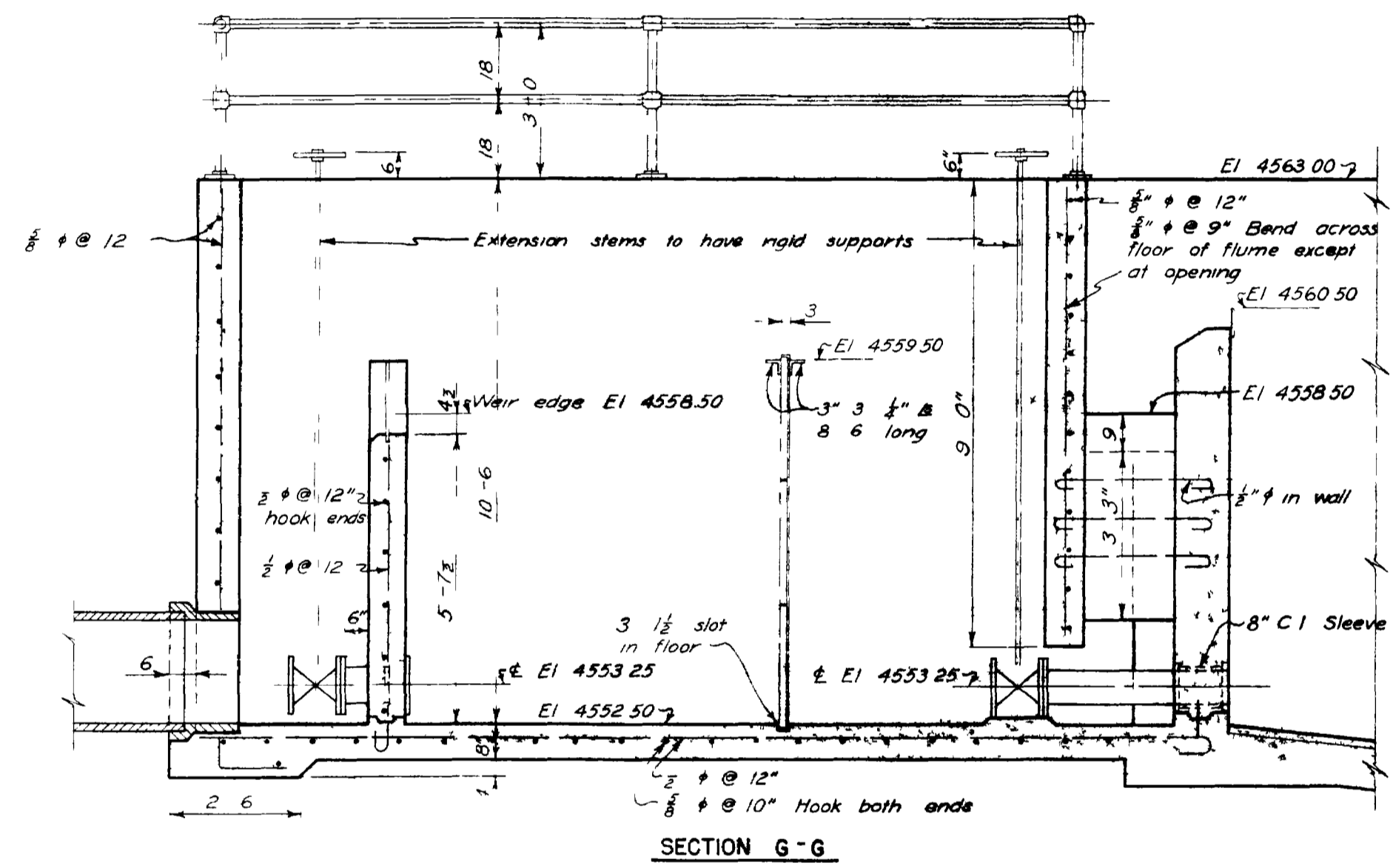
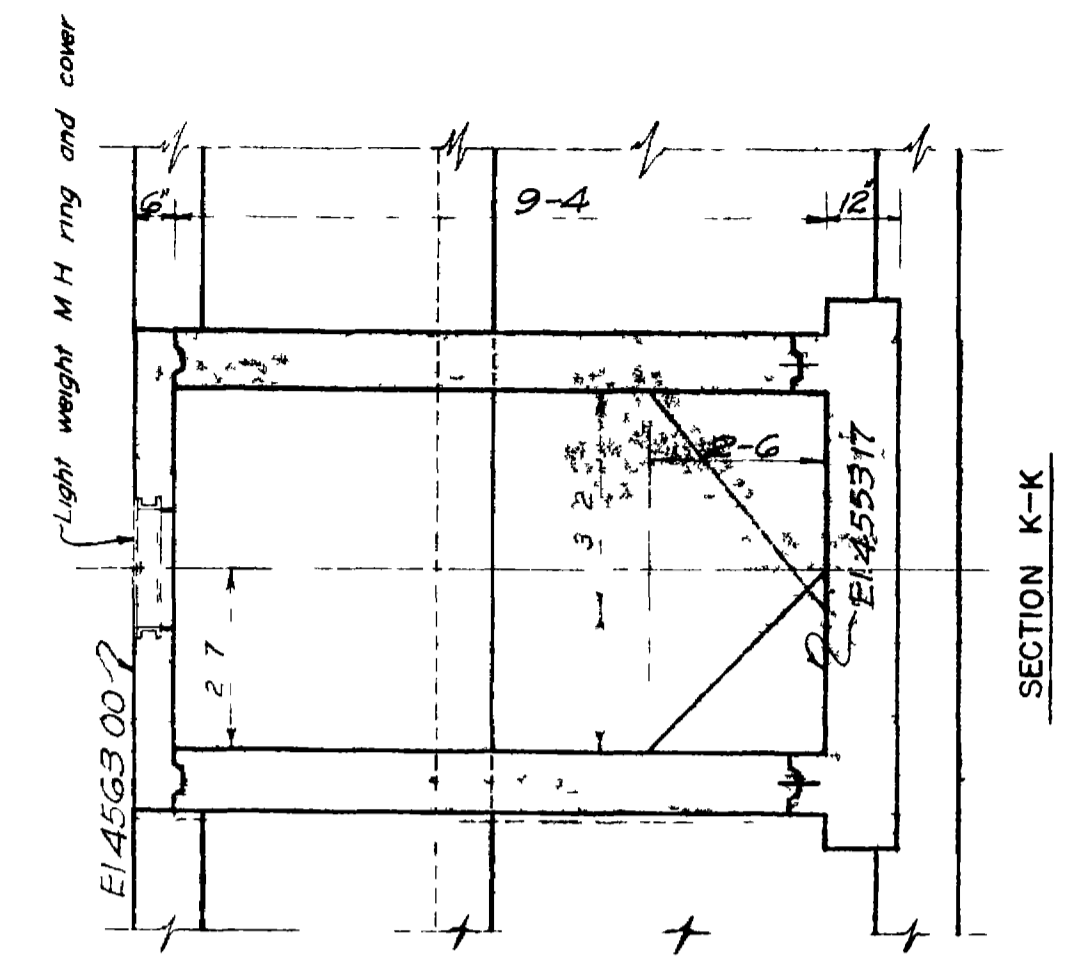
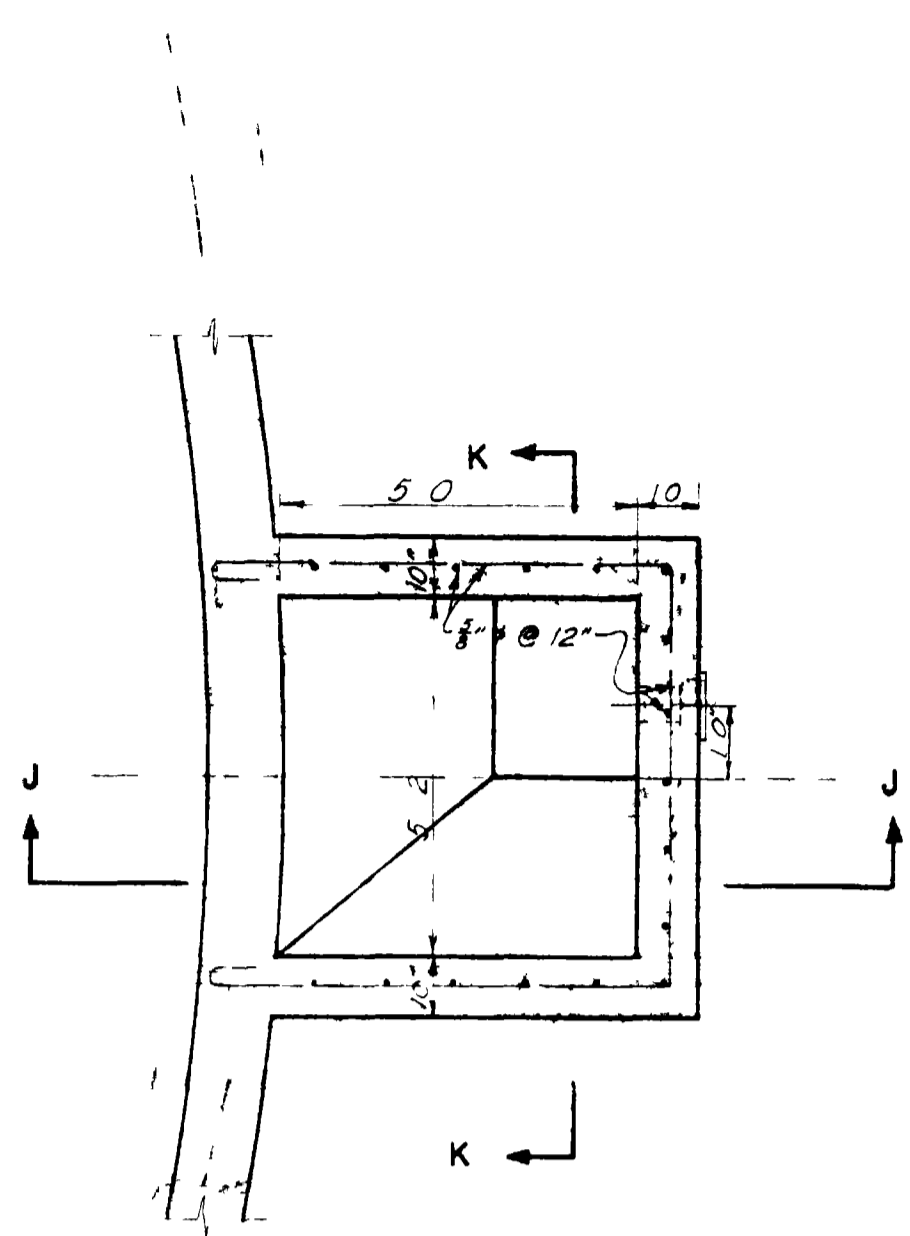
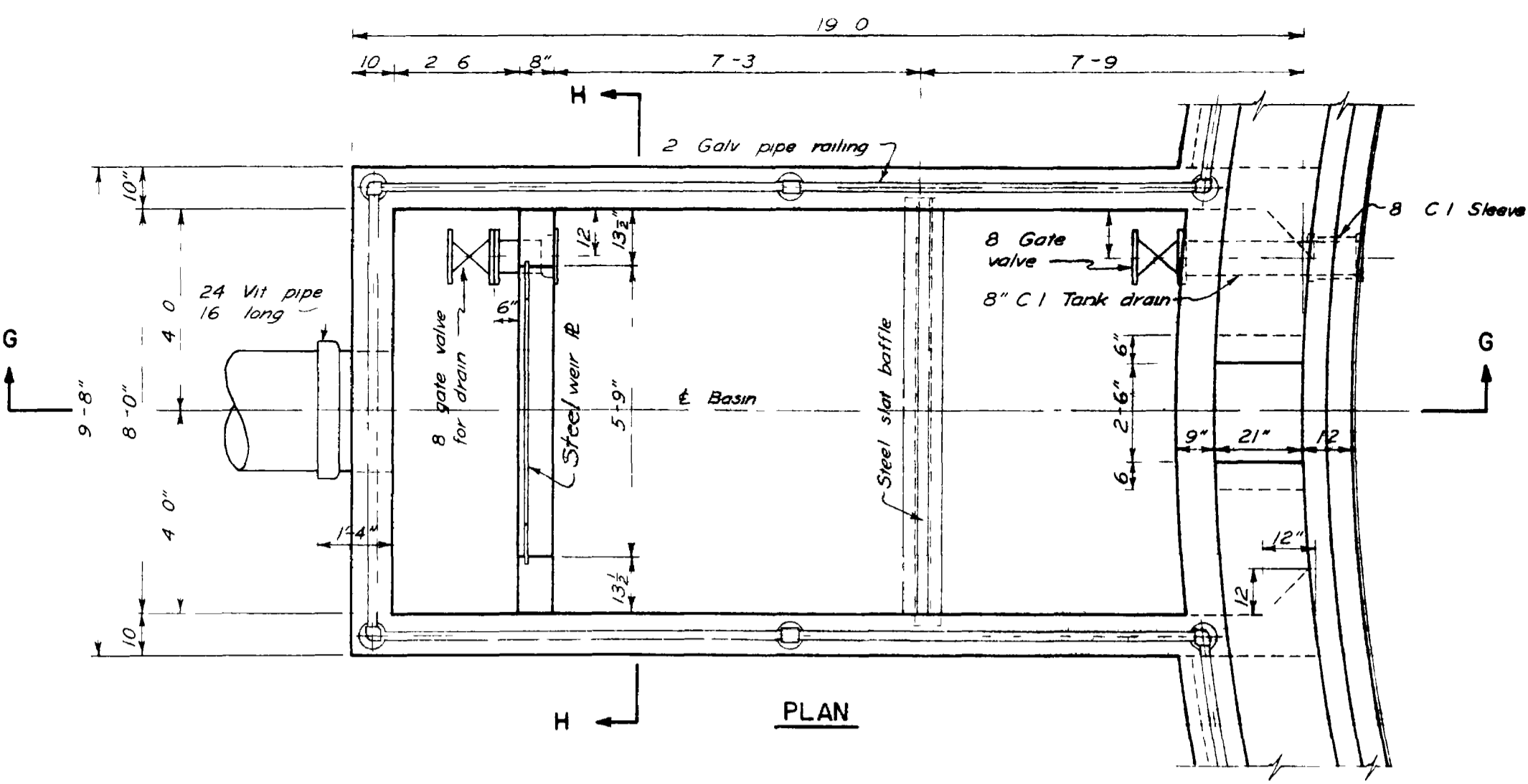
DETAILS OF WEIR  
Scale 1" = 1'-0"

CONTRACT III  
ITEM IX  
SETTLING BASIN DETAILS  
SEWAGE DISPOSAL WORKS  
**GRAND JUNCTION, COLORADO**

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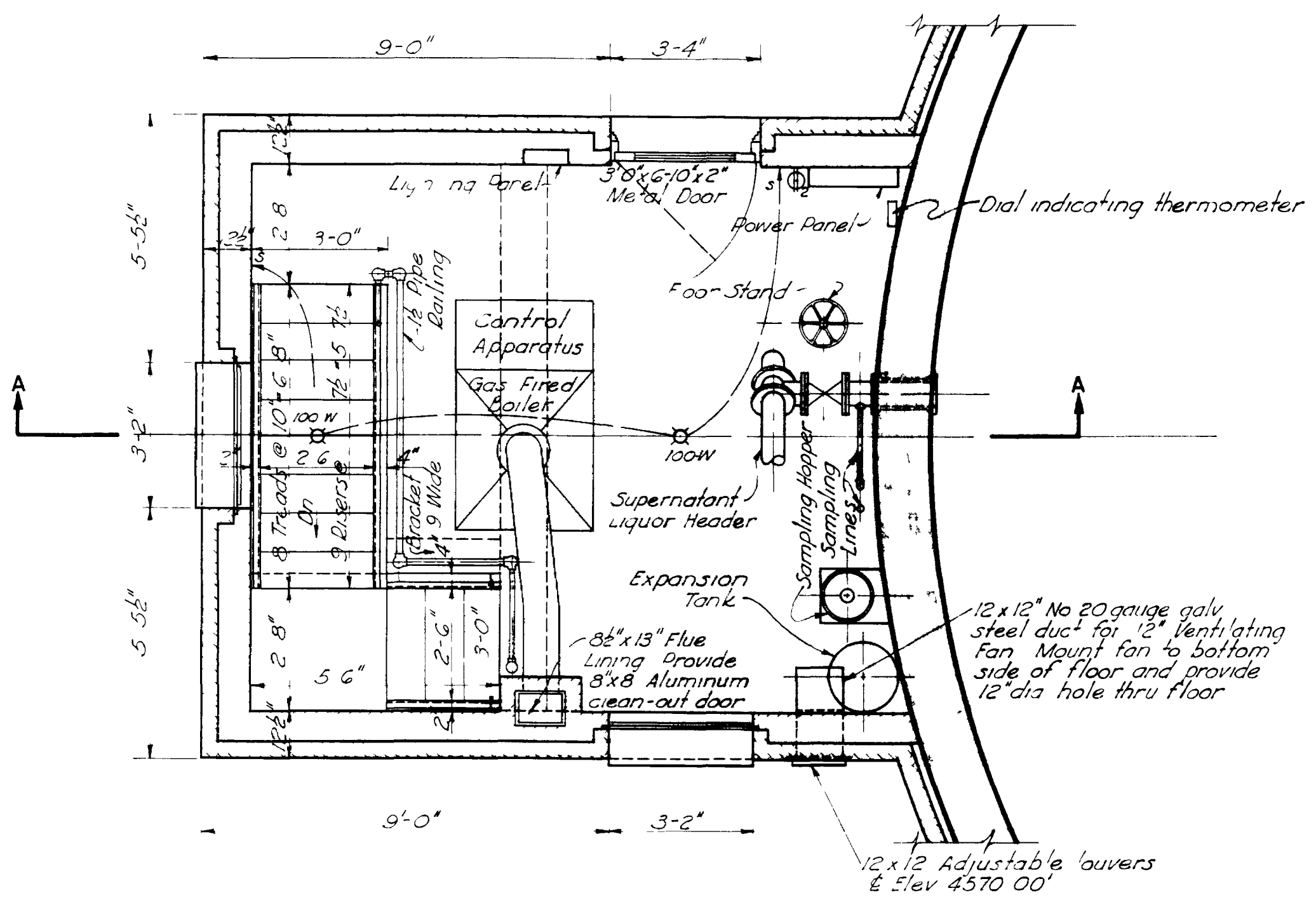
OUTLET WEIR BOX  
Scale 1/8" = 1'-0"

CONTRACT III  
ITEM IV  
SETTLING BASIN DETAILS  
SEWAGE DISPOSAL WORKS  
GRAND JUNCTION, COLORADO

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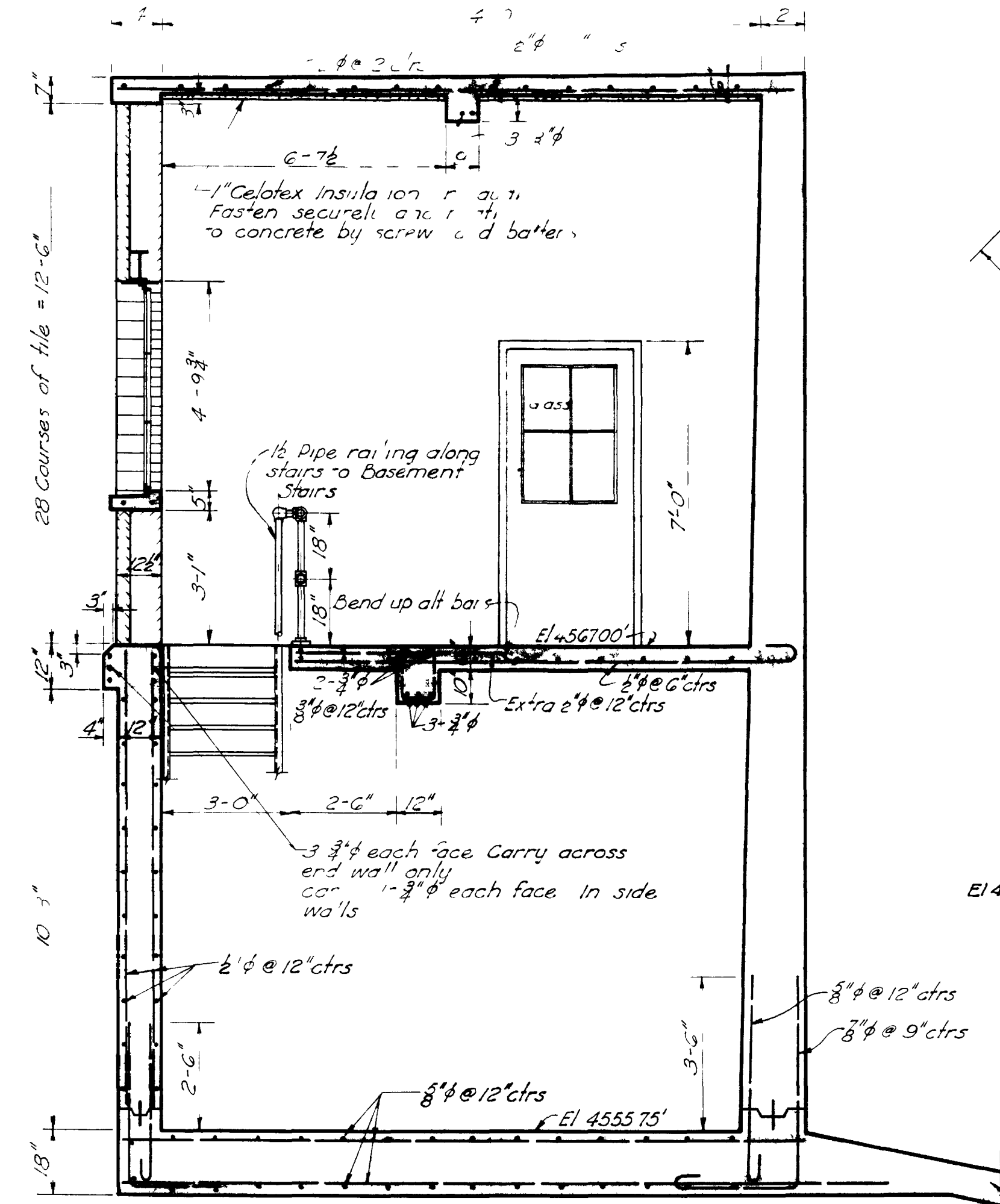




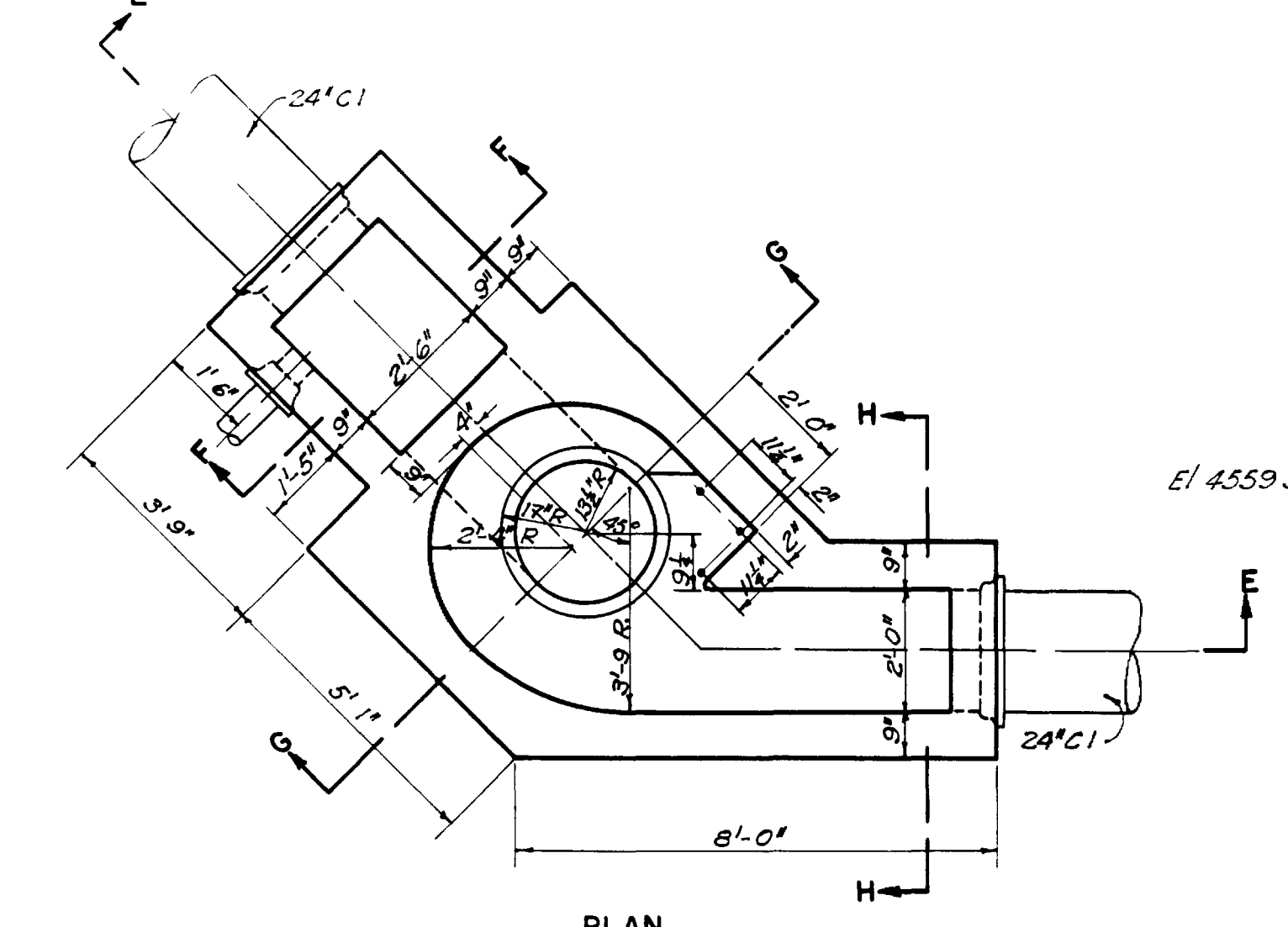
**MAIN FLOOR PLAN**  
Scale 3/8" = 1'-0"

Note All Flame Traps Gas Piping and Hot Water Lines shall be placed near ceiling so as to allow 7'-0" minimum head room

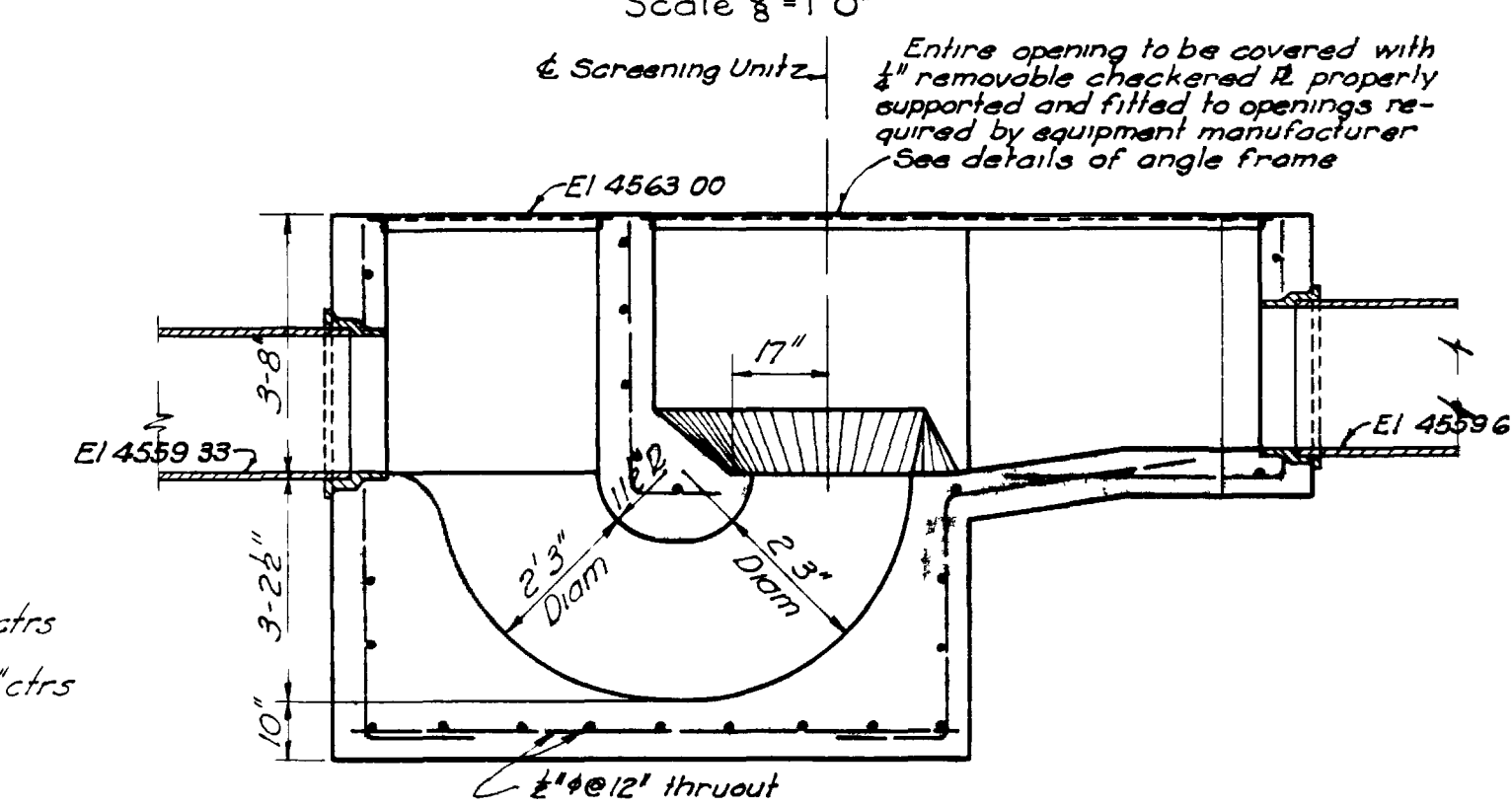
Note All Lighting Fixtures are drop cords with lights 8'-0" above floor



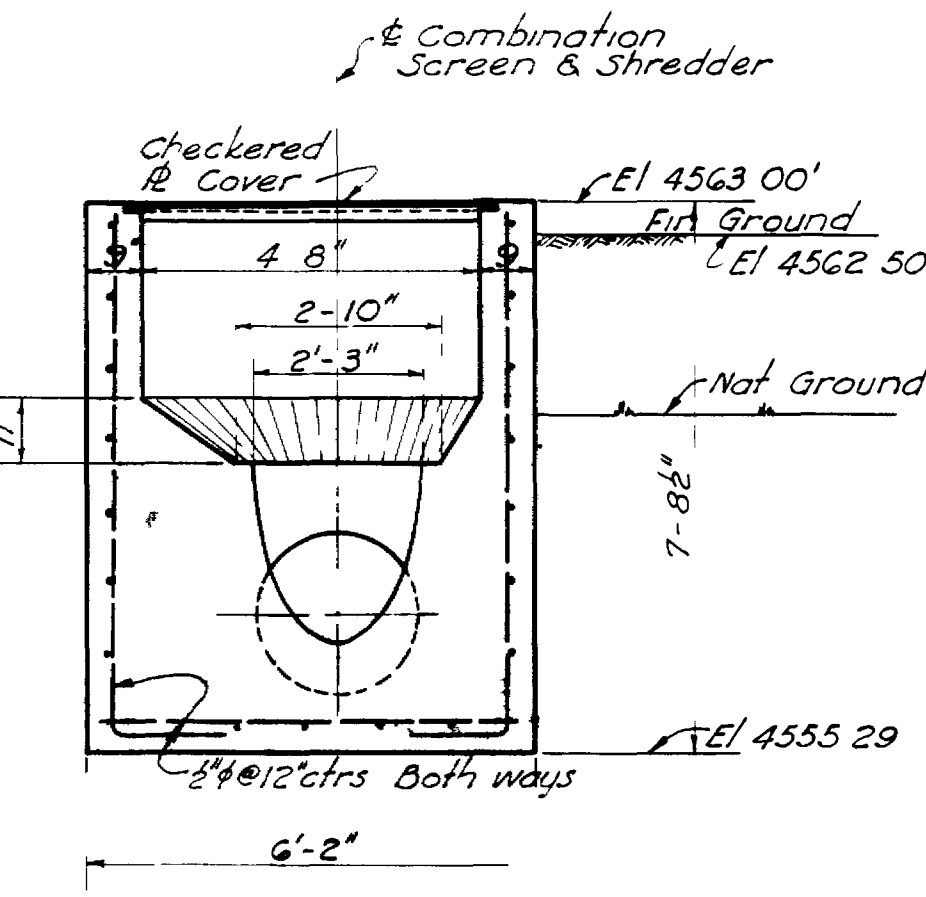
**SECTION A-A**  
Scale 3/8" = 1'-0"



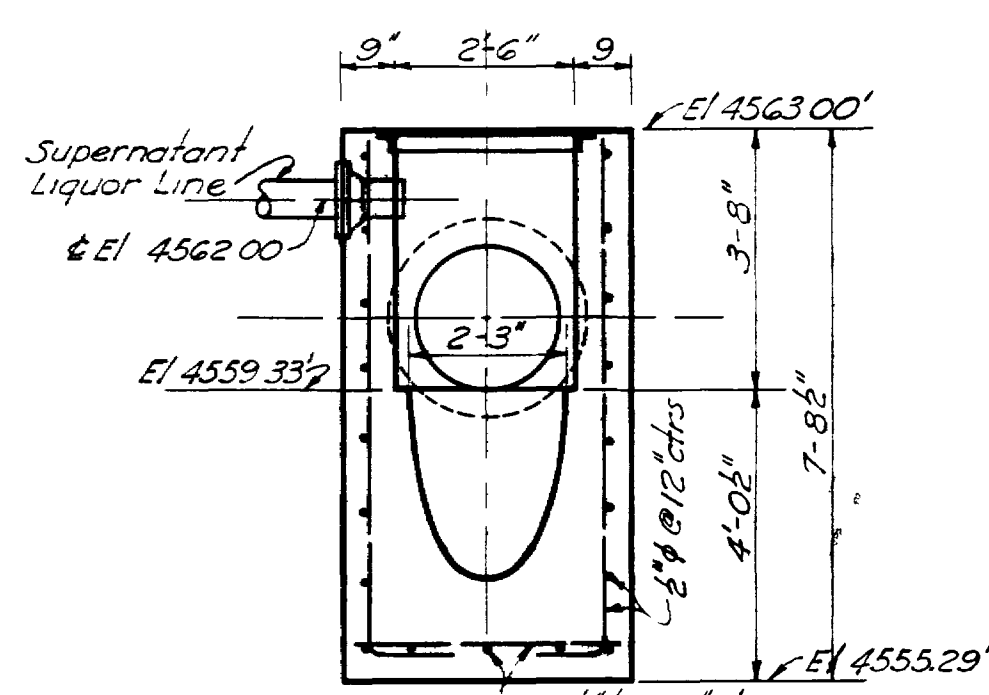
**PLAN**  
Scale 3/8" = 1'-0"



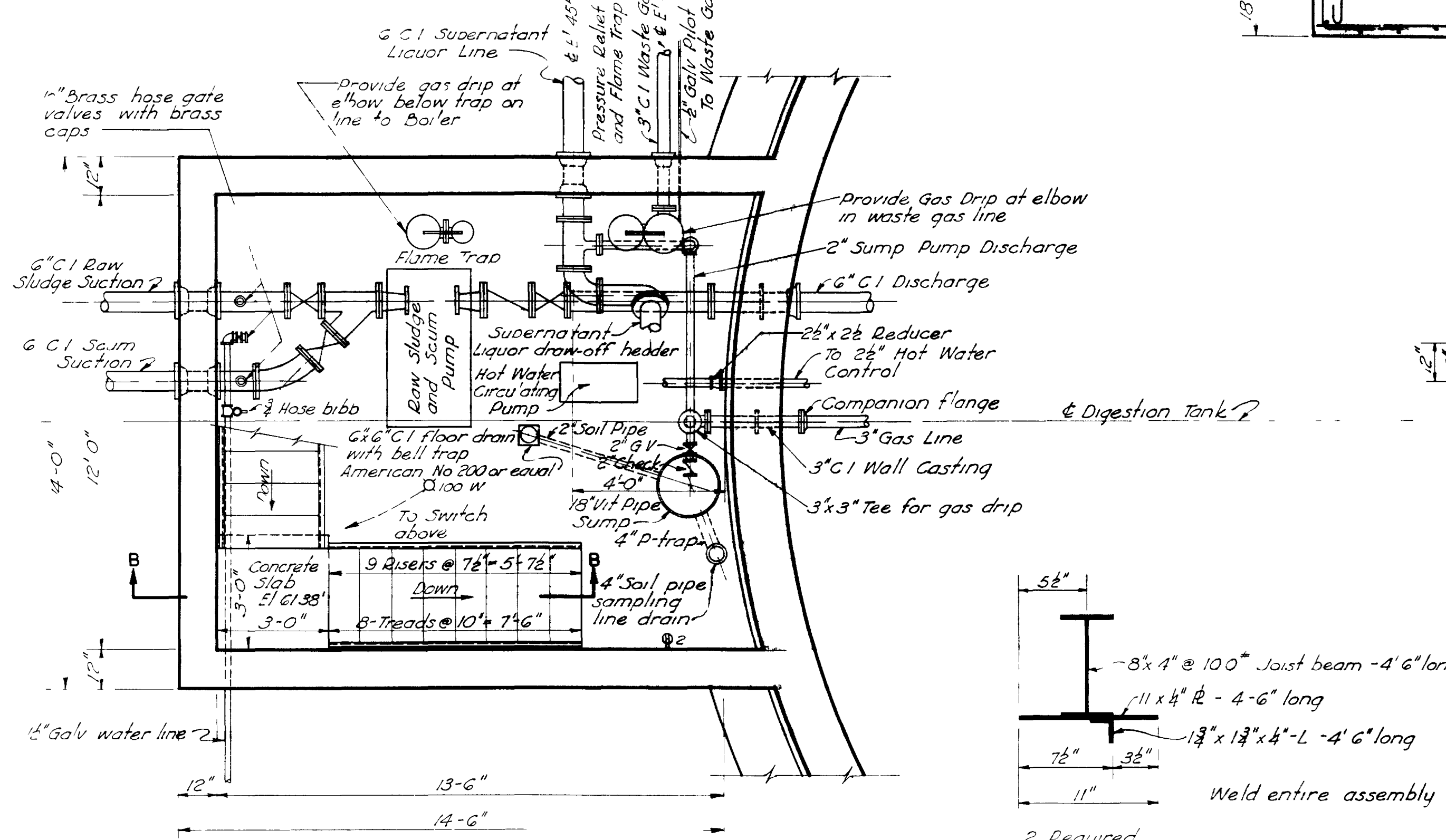
**SECTION E-E**  
Scale 3/8" = 1'-0"



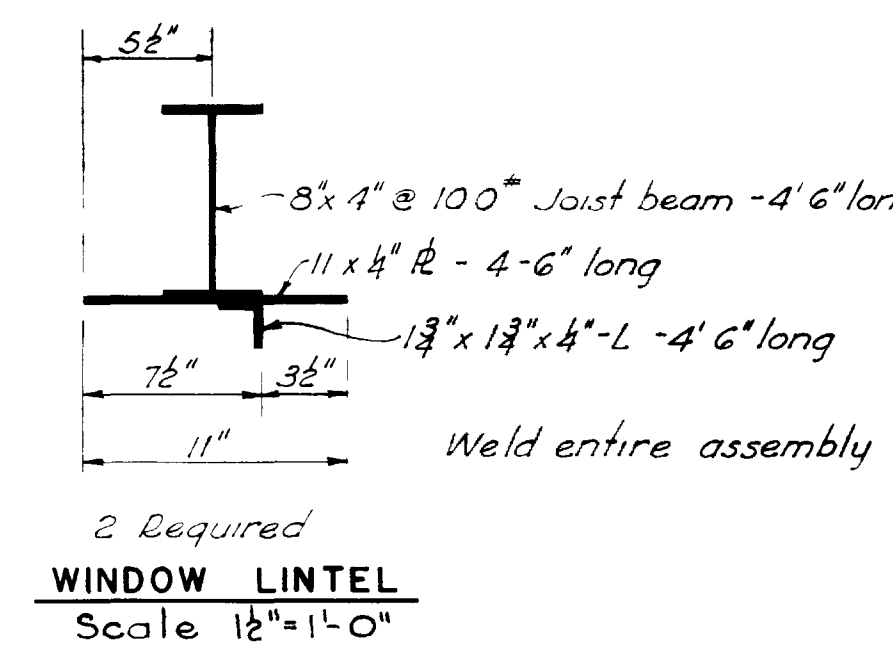
**SECTION G-G**  
Scale 3/8" = 1'-0"



**SECTION D-D**  
Scale 3/8" = 1'-0"

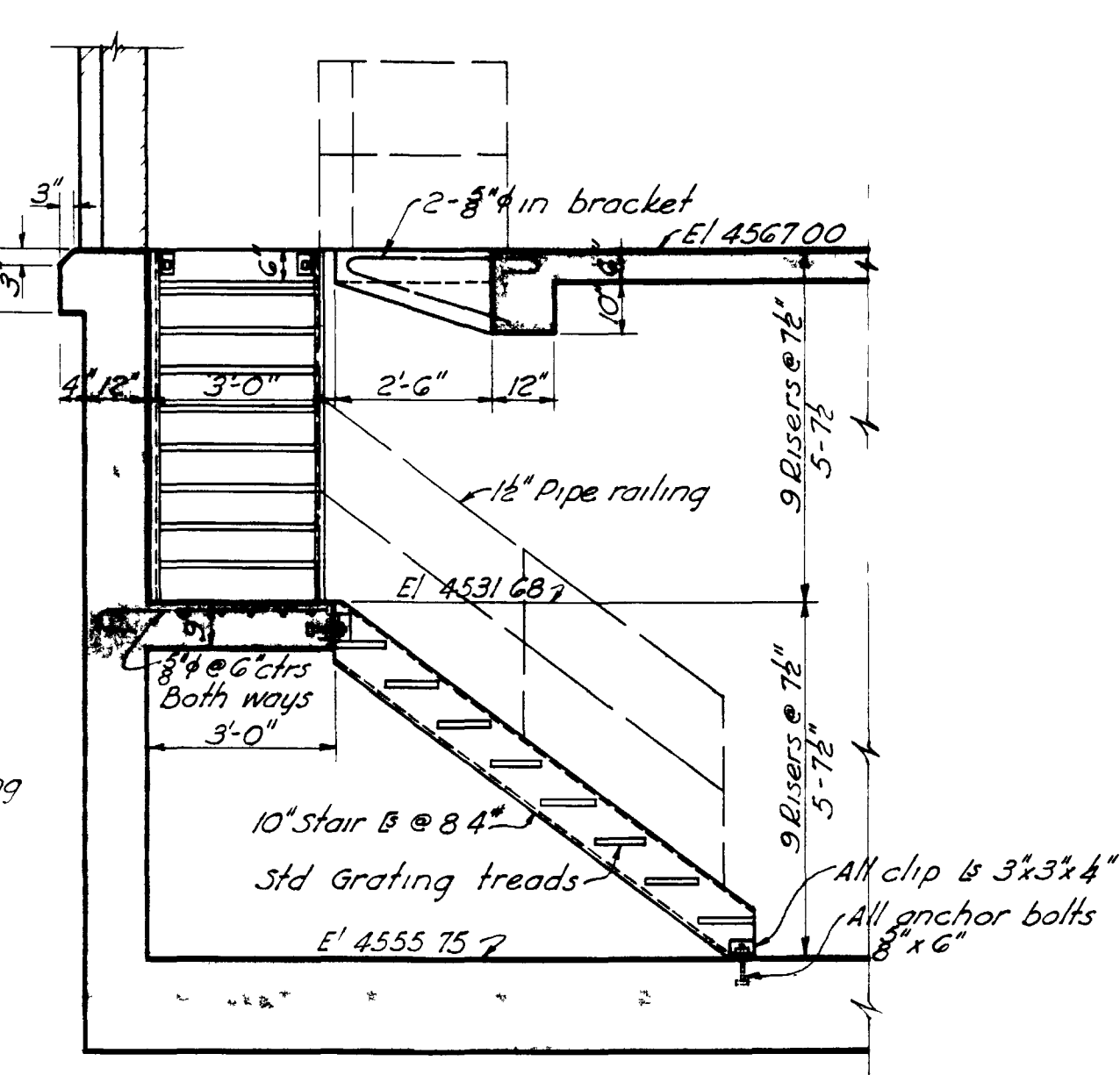


**BASEMENT PLAN**  
Scale 3/8" = 1'-0"

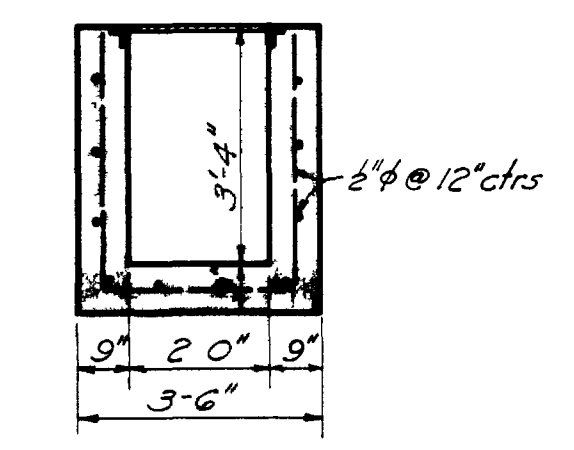


**WINDOW LINTEL**  
Scale 1/2" = 1'-0"

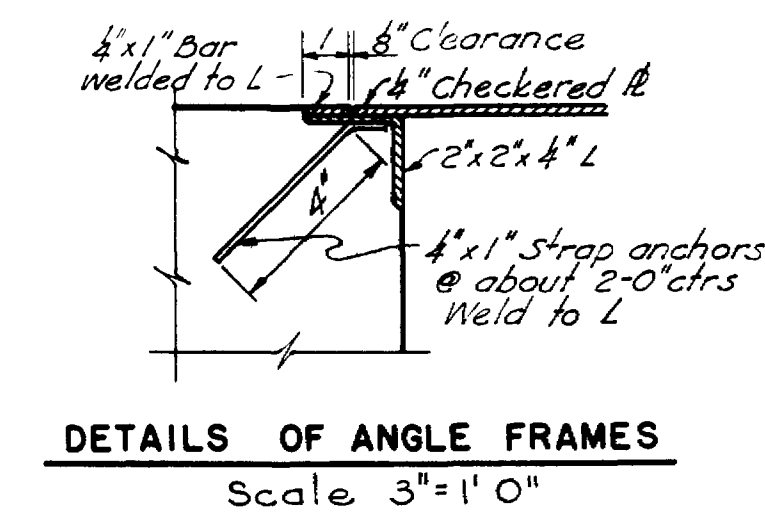
Lintel over door similar except angle is to be omitted



**SECTION B-B**  
Scale 3/8" = 1'-0"



**SECTION C-C**  
Scale 3/8" = 1'-0"

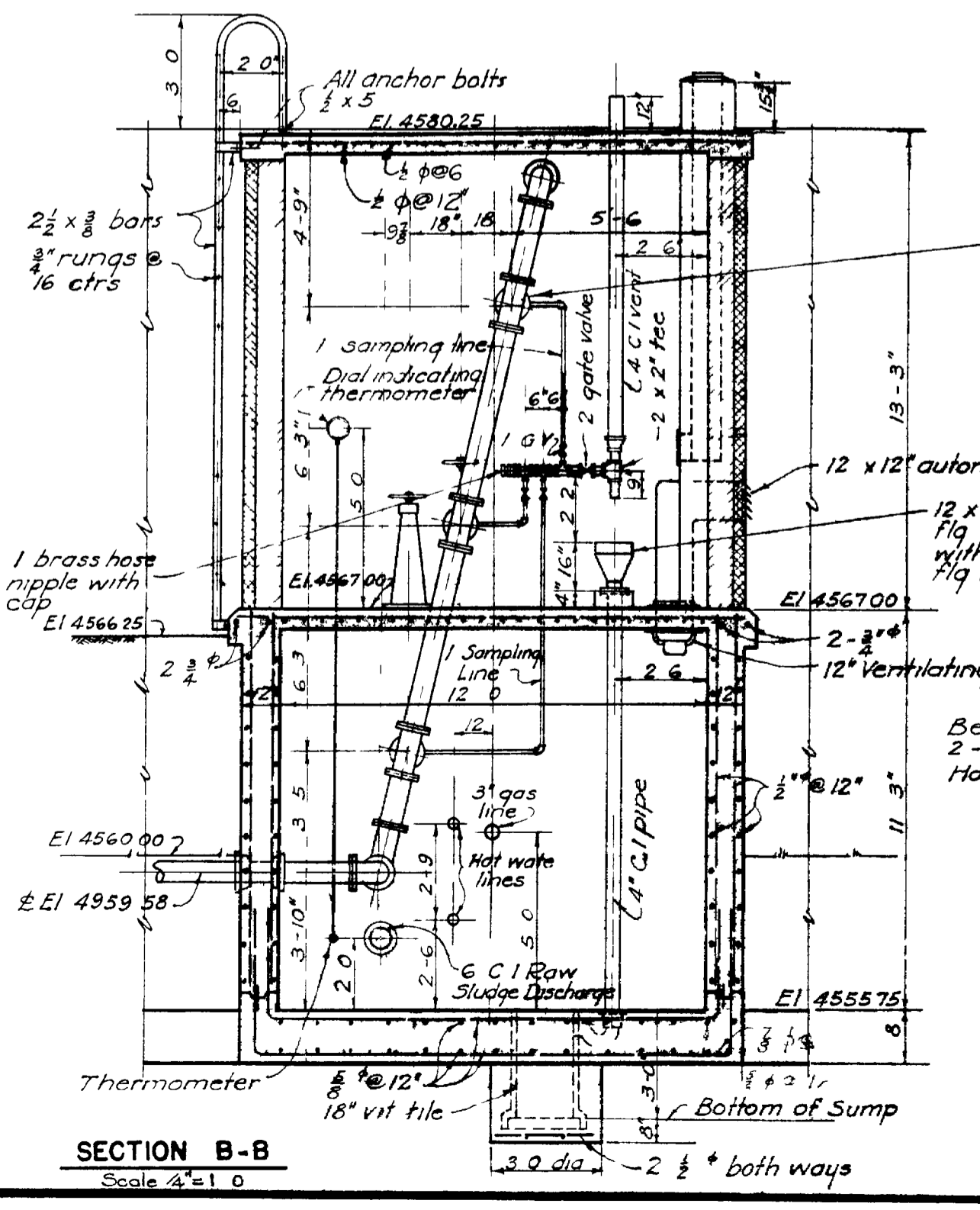
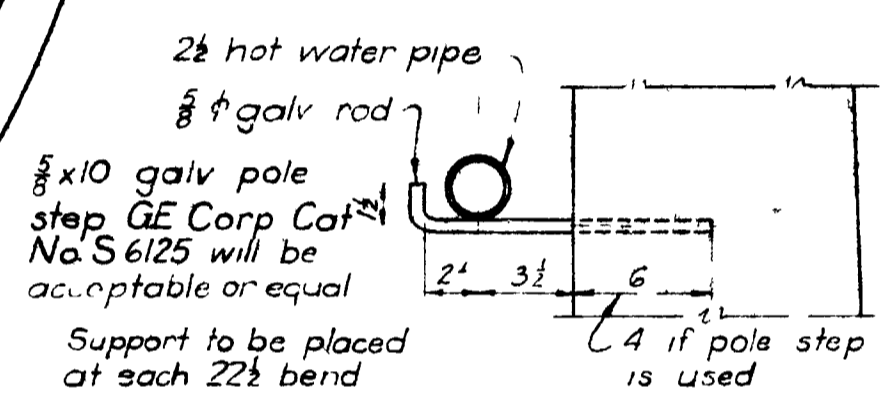
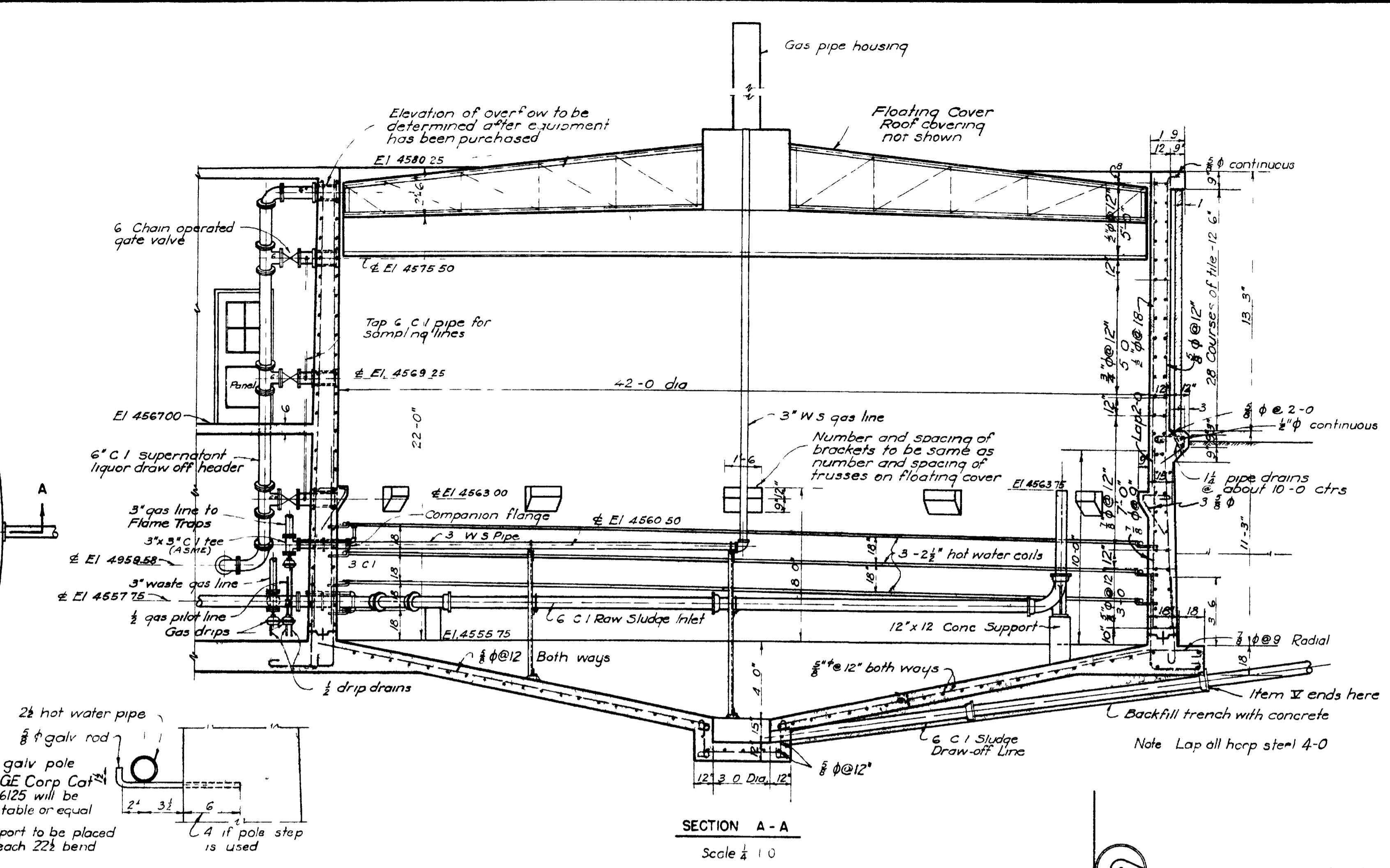
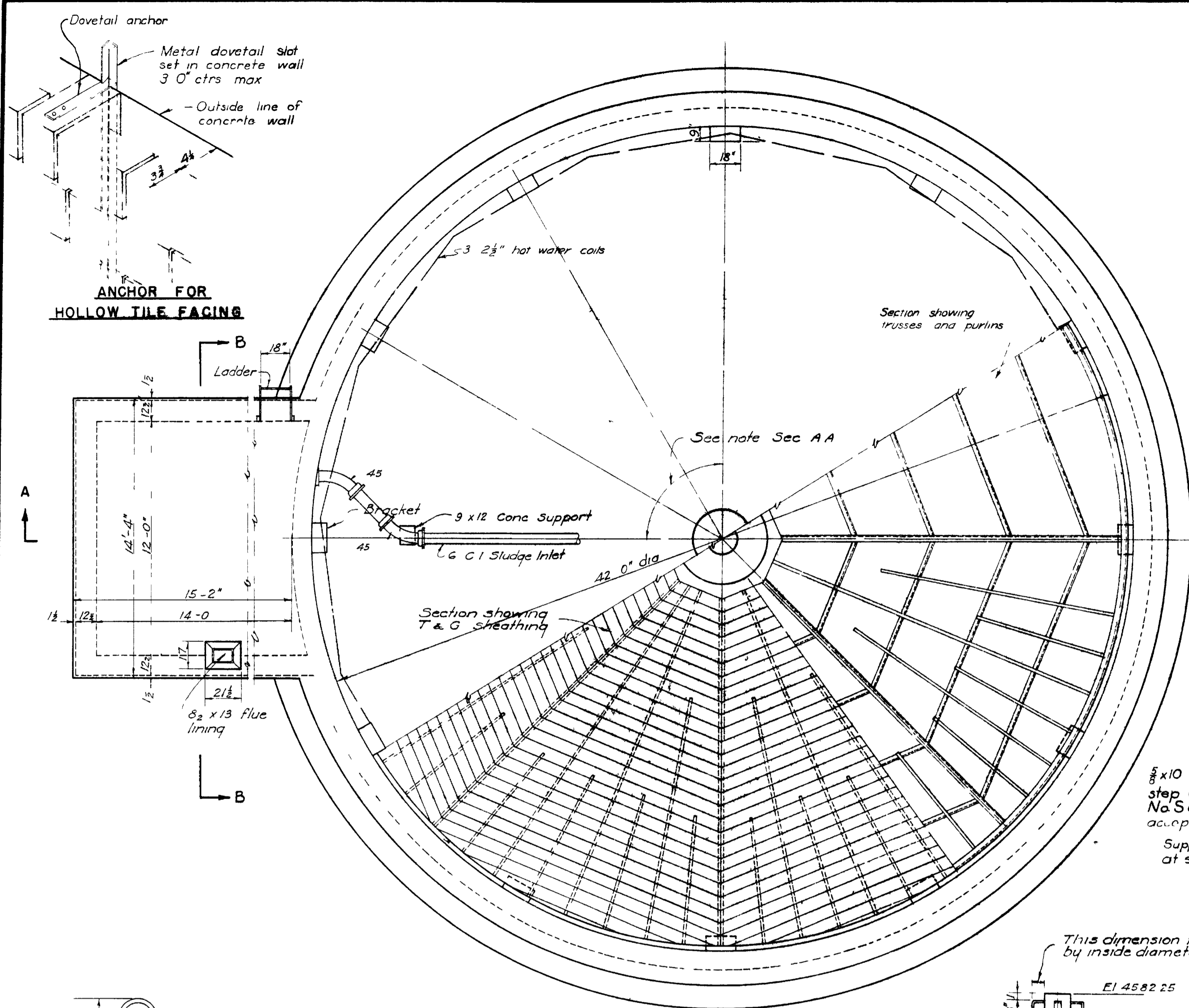


**DETAILS OF ANGLE FRAMES**  
Scale 3" = 1'-0"

CONTRACT III  
ITEMS III & V  
SLUDGE DIGESTION TANK  
AND SCREENING UNIT  
SEWAGE DISPOSAL WORKS  
GRAND JUNCTION, COLORADO

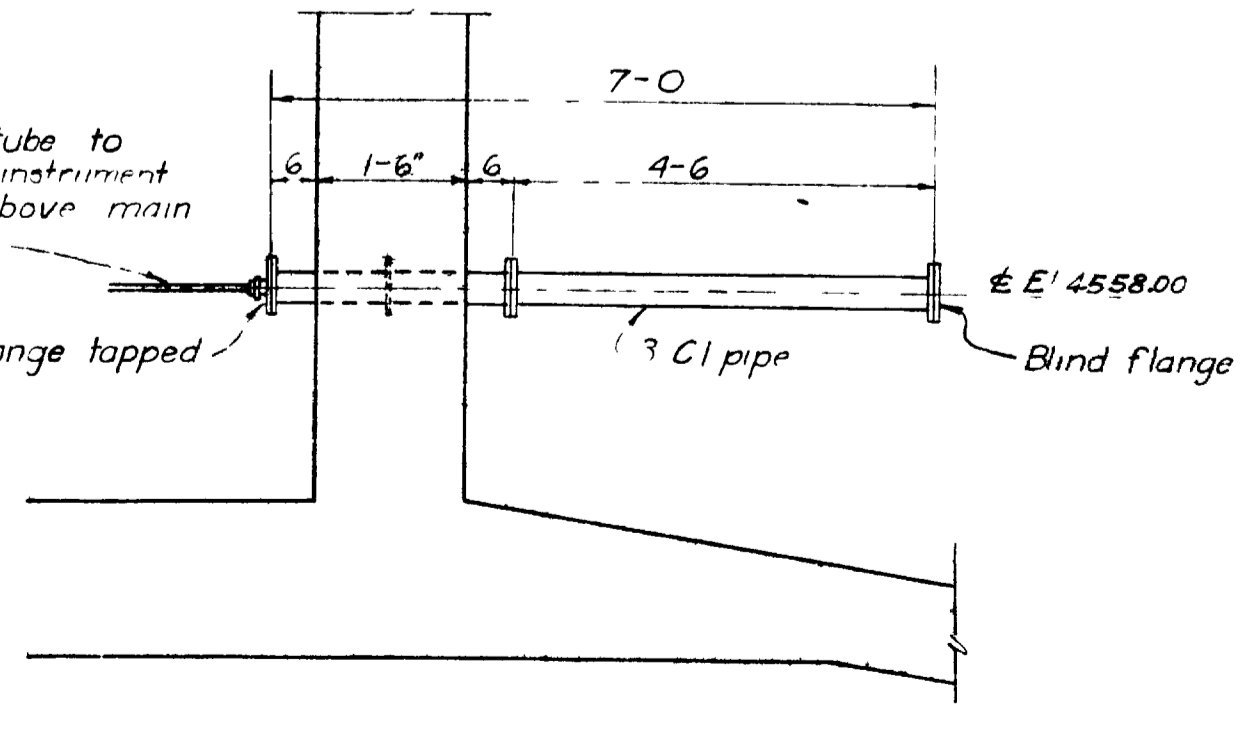
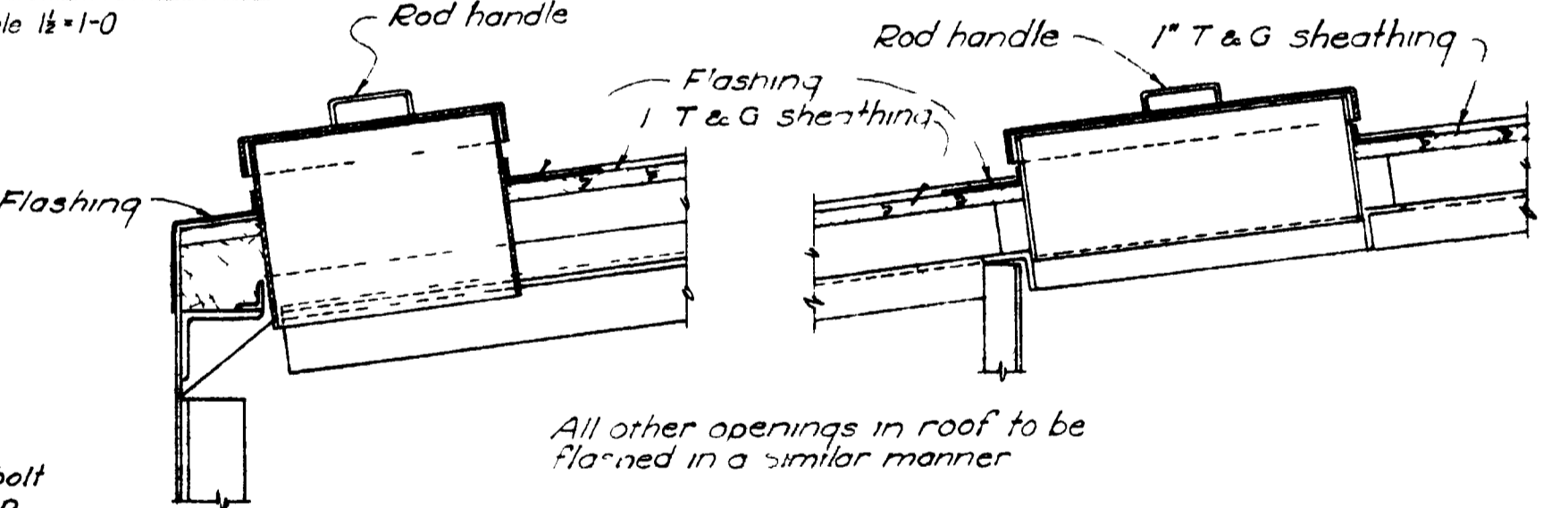
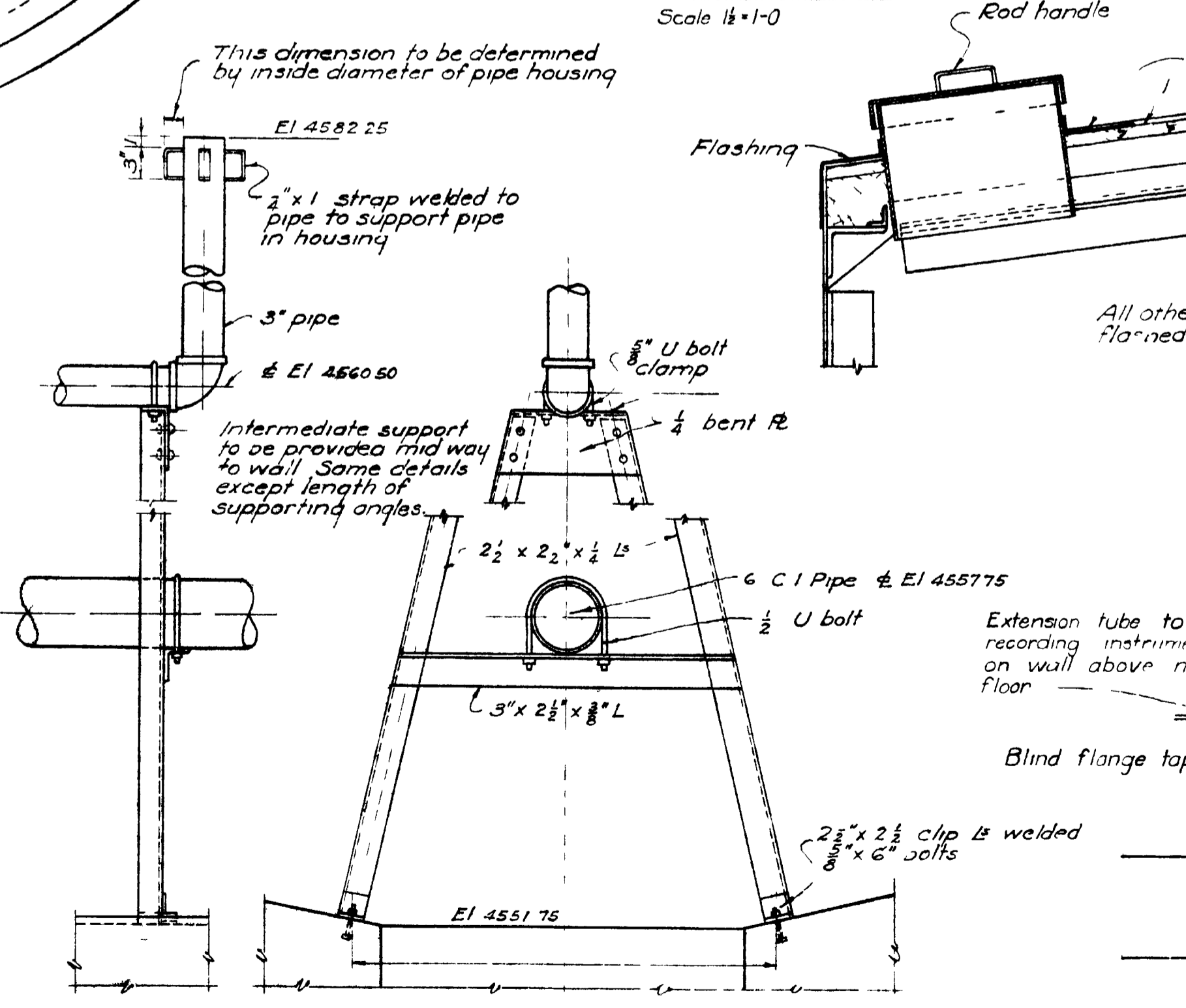
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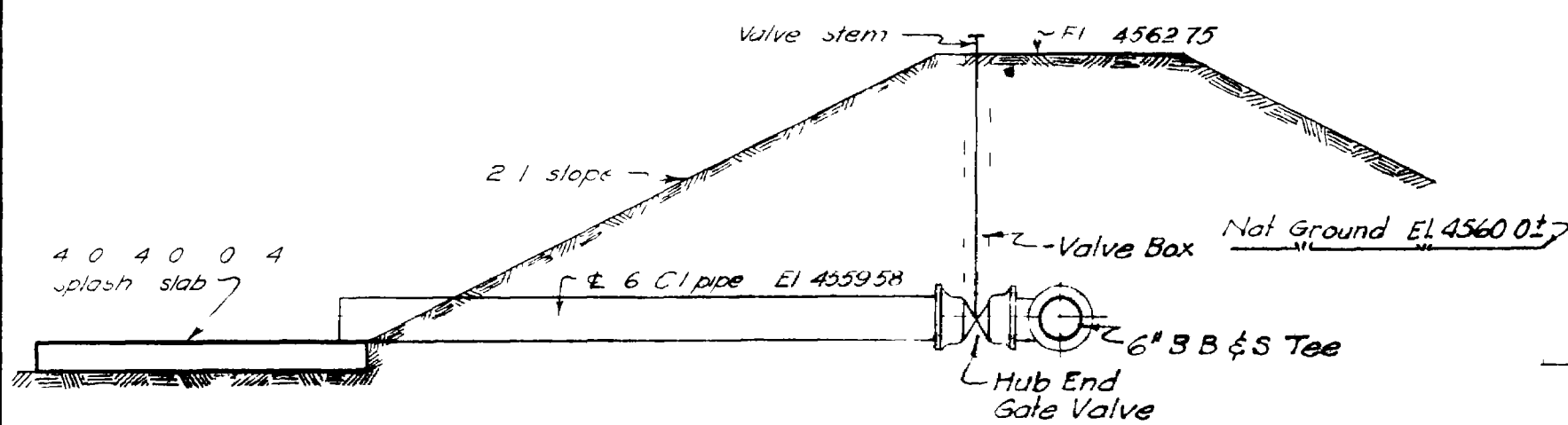
PLAN  
Scale 1/4" = 1'-0"

Drill branch of 6x6x6 Tee special so as to place valve stem in horizontal position

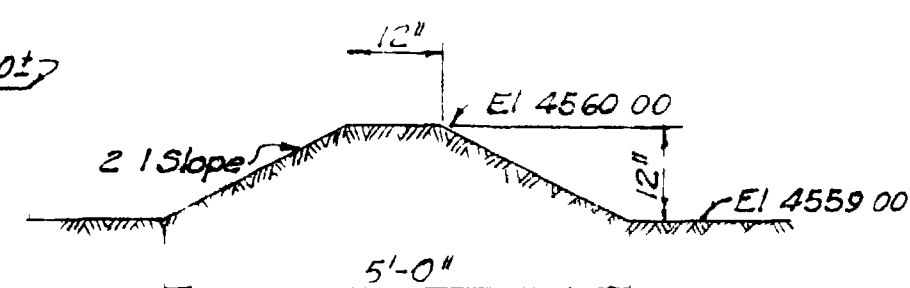


CONTRACT III  
ITEM V  
SLUDGE DIGESTION TANK  
SEWAGE DISPOSAL WORKS  
GRAND JUNCTION, COLORADO  
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DETAILS OF SLUDGE DISCHARGE PIPE



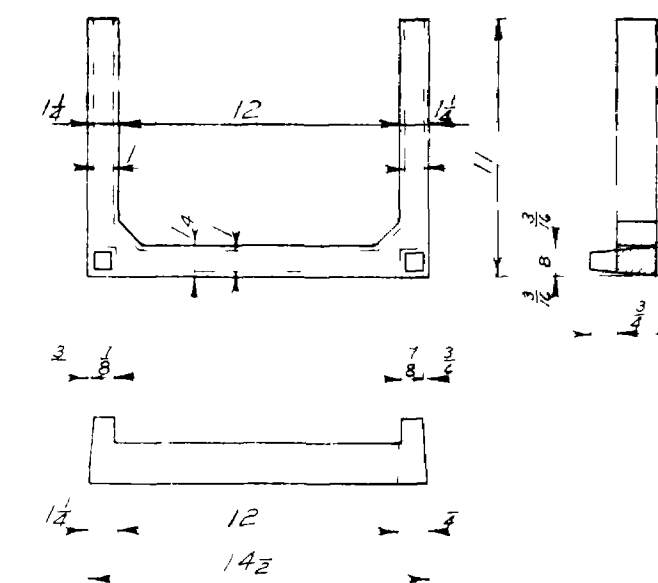
BERM BETWEEN SLUDGE BEDS

SLUDGE BED DETAILS

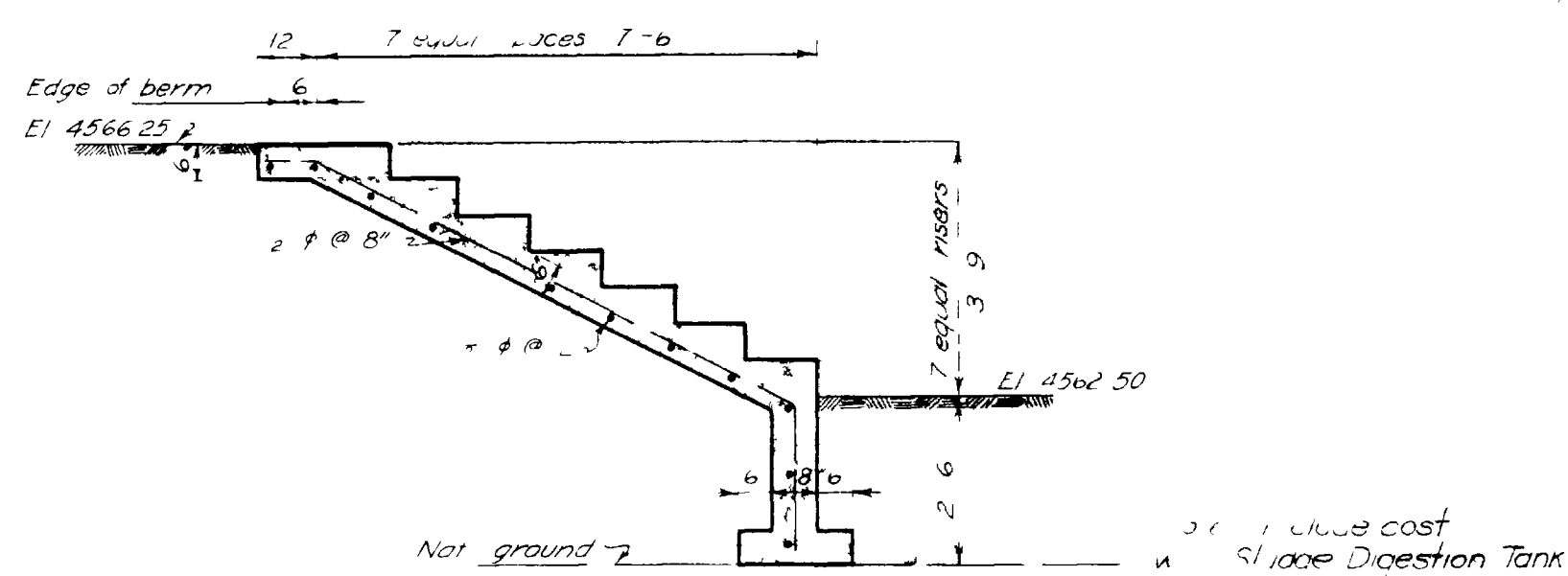
Scale 1/2" = 1'-0"

ITEM VI

Note: Sludge beds, Item VI include 6 valves and a 6" C.I. pipe header to and including tee connection to sludge line from sludge digestion tank.



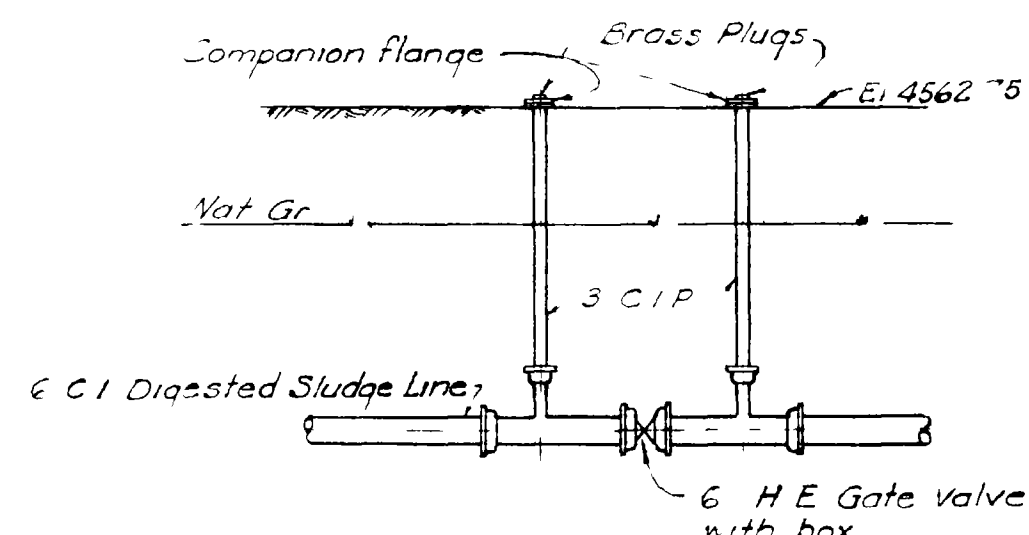
DETAILS OF STANDARD CAST IRON STEP



STEPS TO DIGESTION TANK BERM

Scale 1/2" = 1'-0"

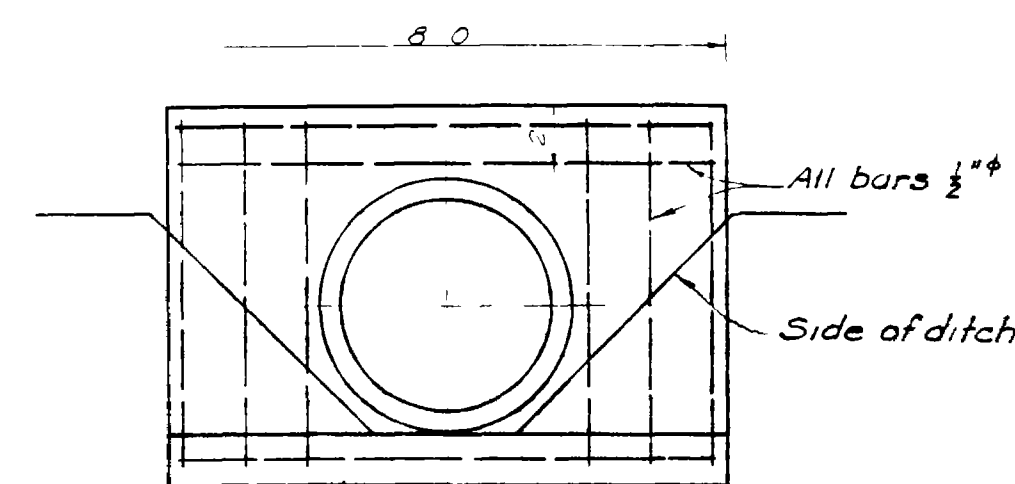
ITEM V



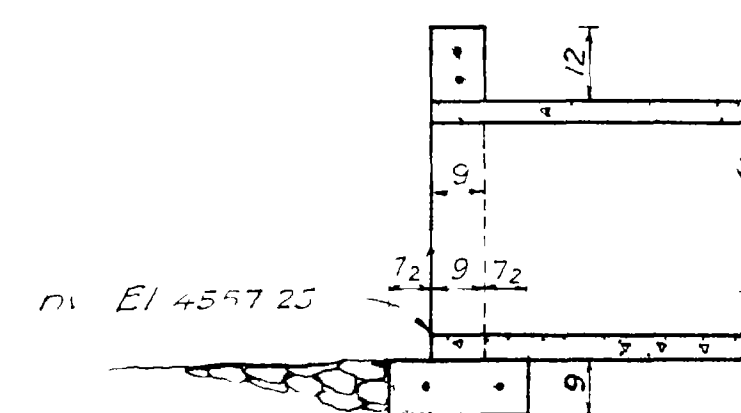
CONNECTIONS FOR PORTABLE PUMP

Scale 1/4" = 1'-0"

ITEM VII

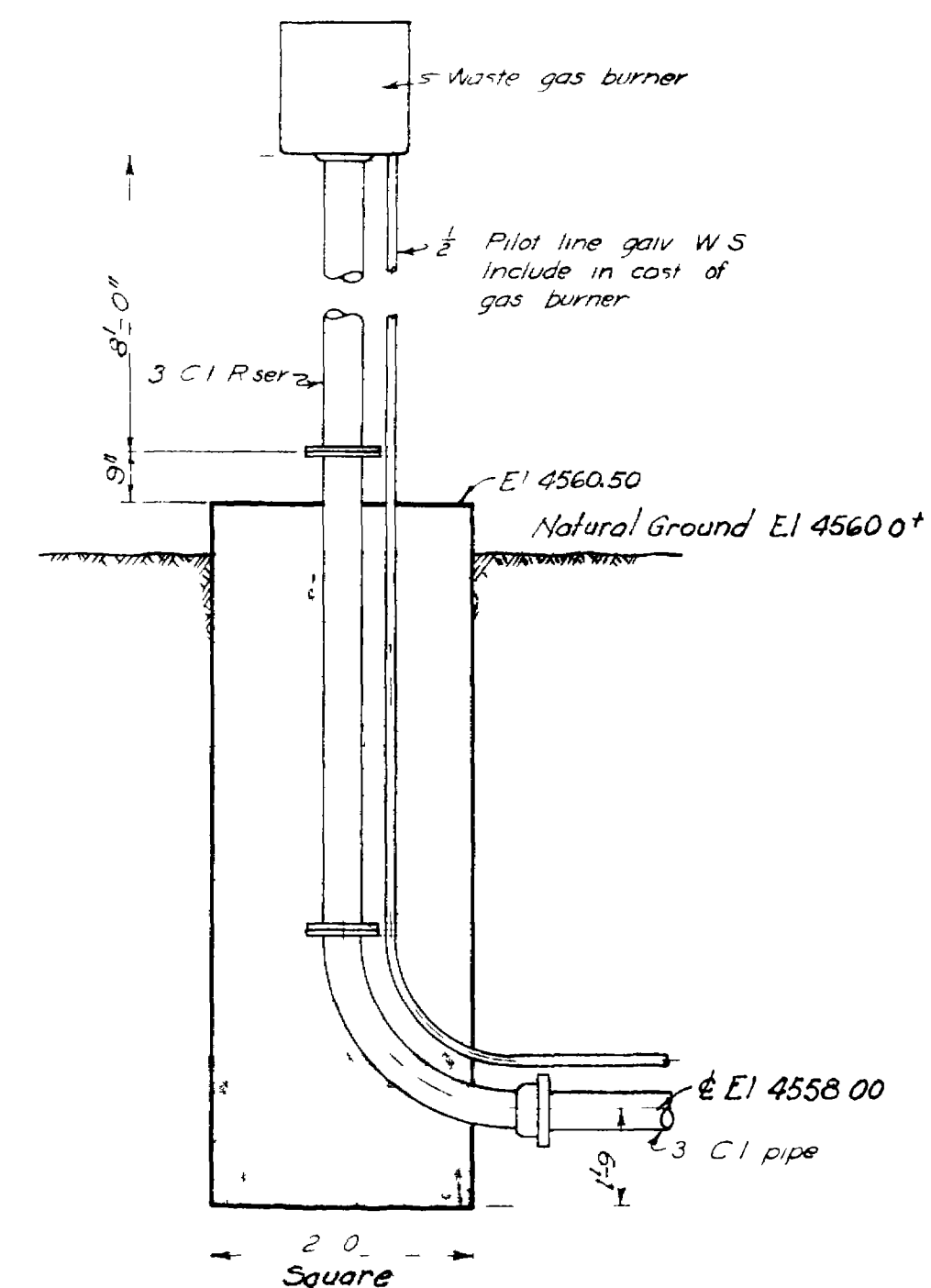


ELEVATION



ITEM VII (a) HEADWALL DETAILS

Scale 1/2" = 1'-0"



WASTE GAS BURNER INSTALLATION

Scale 1/2" = 1'-0"

CONTRACT III  
ITEMS V, VI, & VII

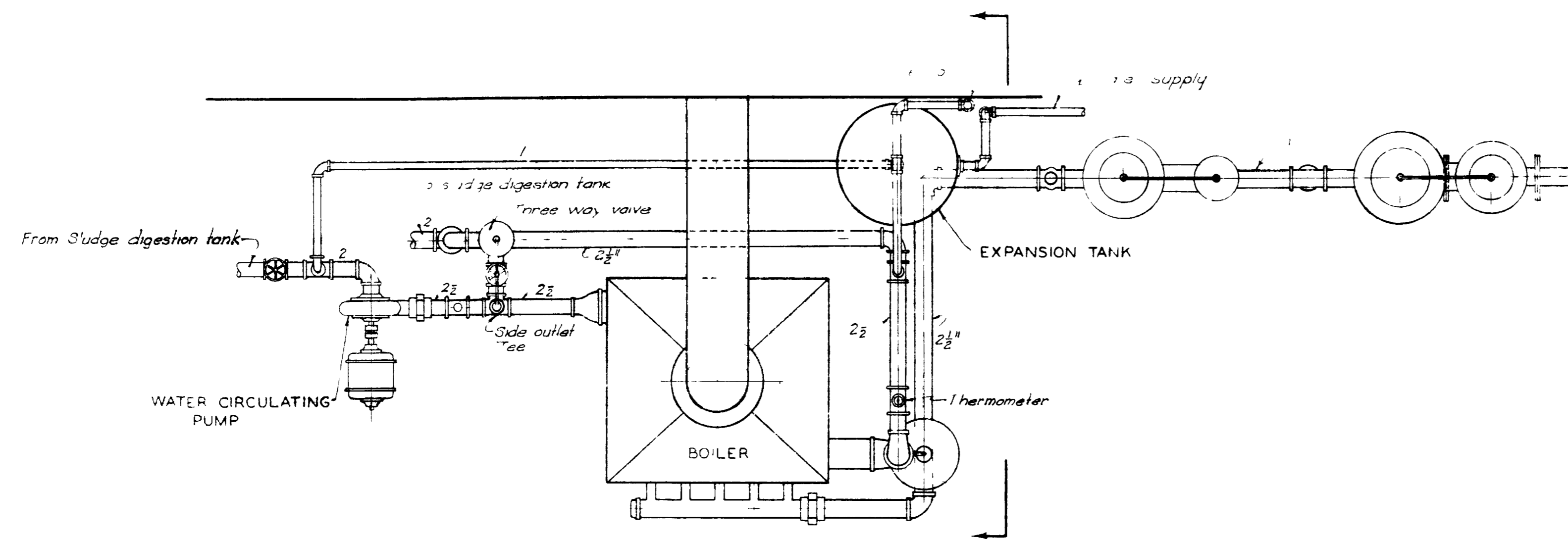
MISCELLANEOUS DETAILS

SEWAGE DISPOSAL WORKS

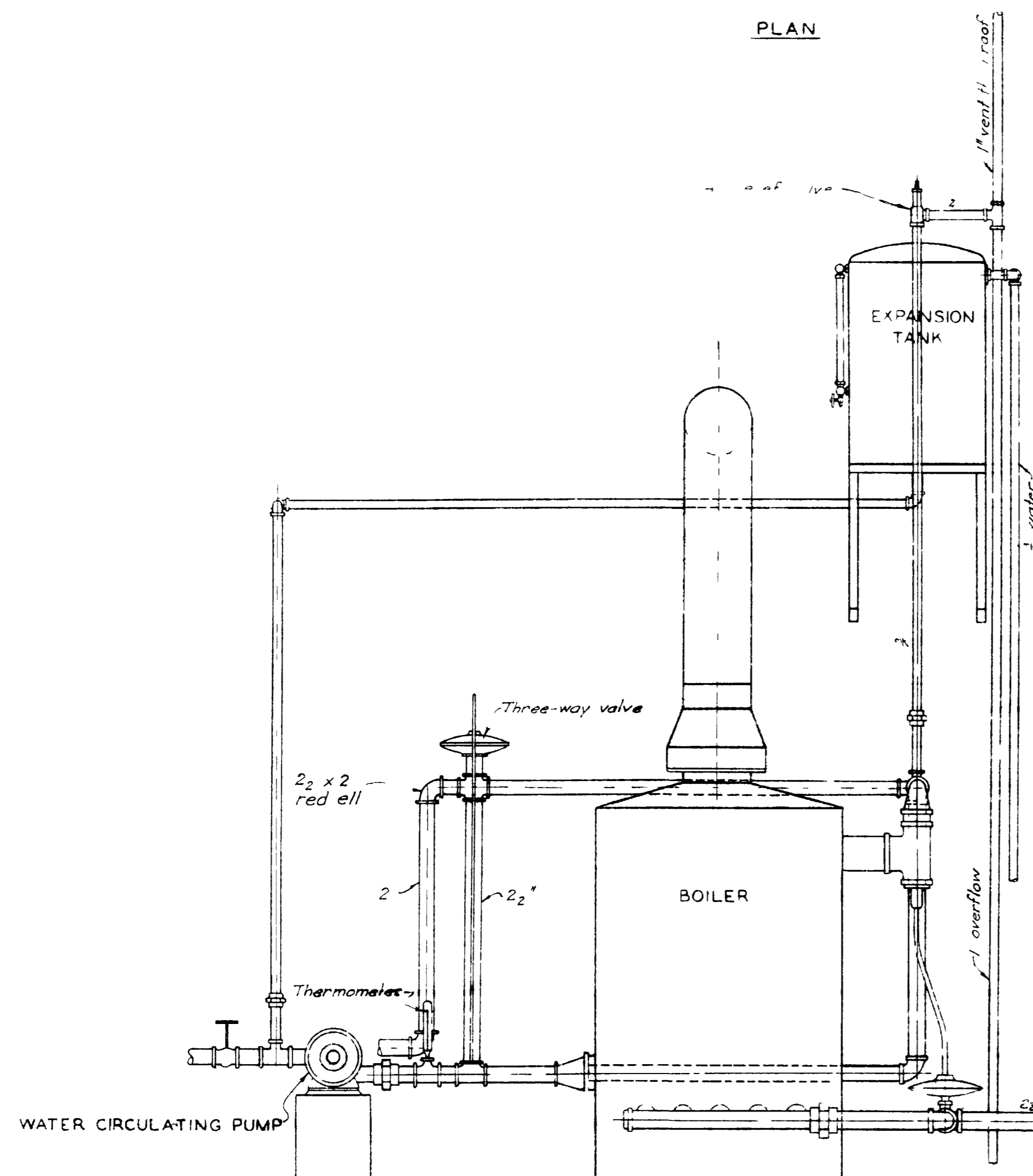
GRAND JUNCTION, COLORADO

BLACK & VEATCH  
CONSULTING ENGINEERS  
KANSAS CITY, MO  
1938

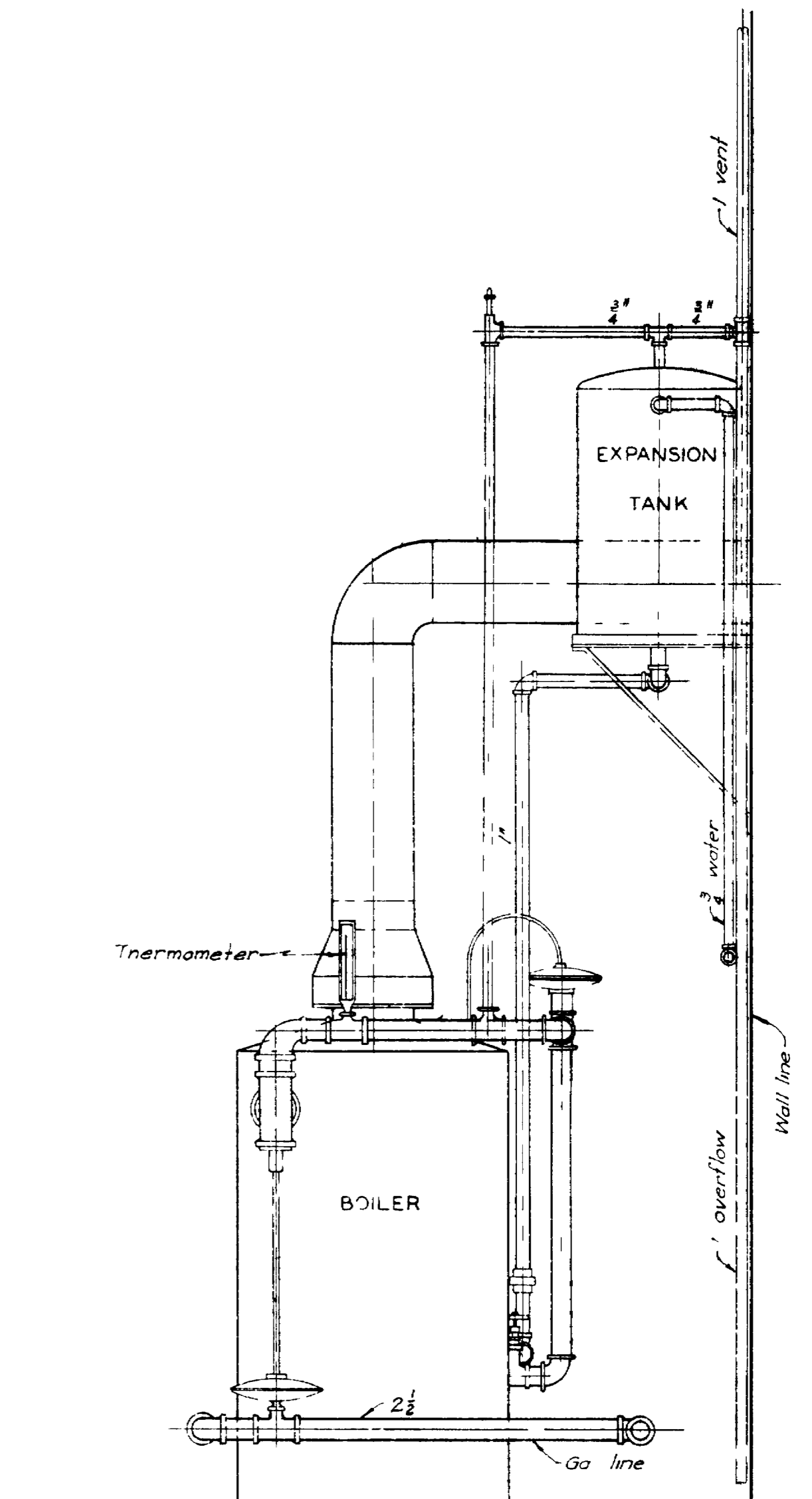
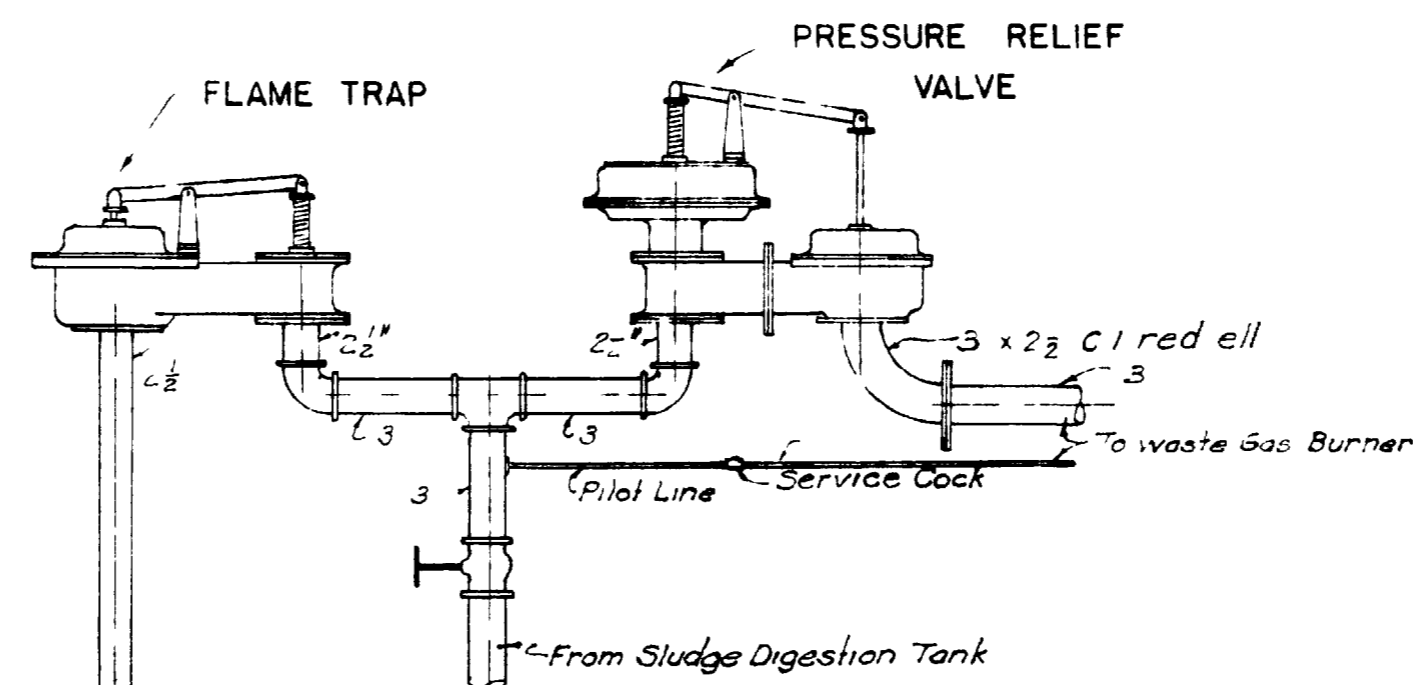
Revised 10-15-38



PLAN



ELEVATION



SECTION

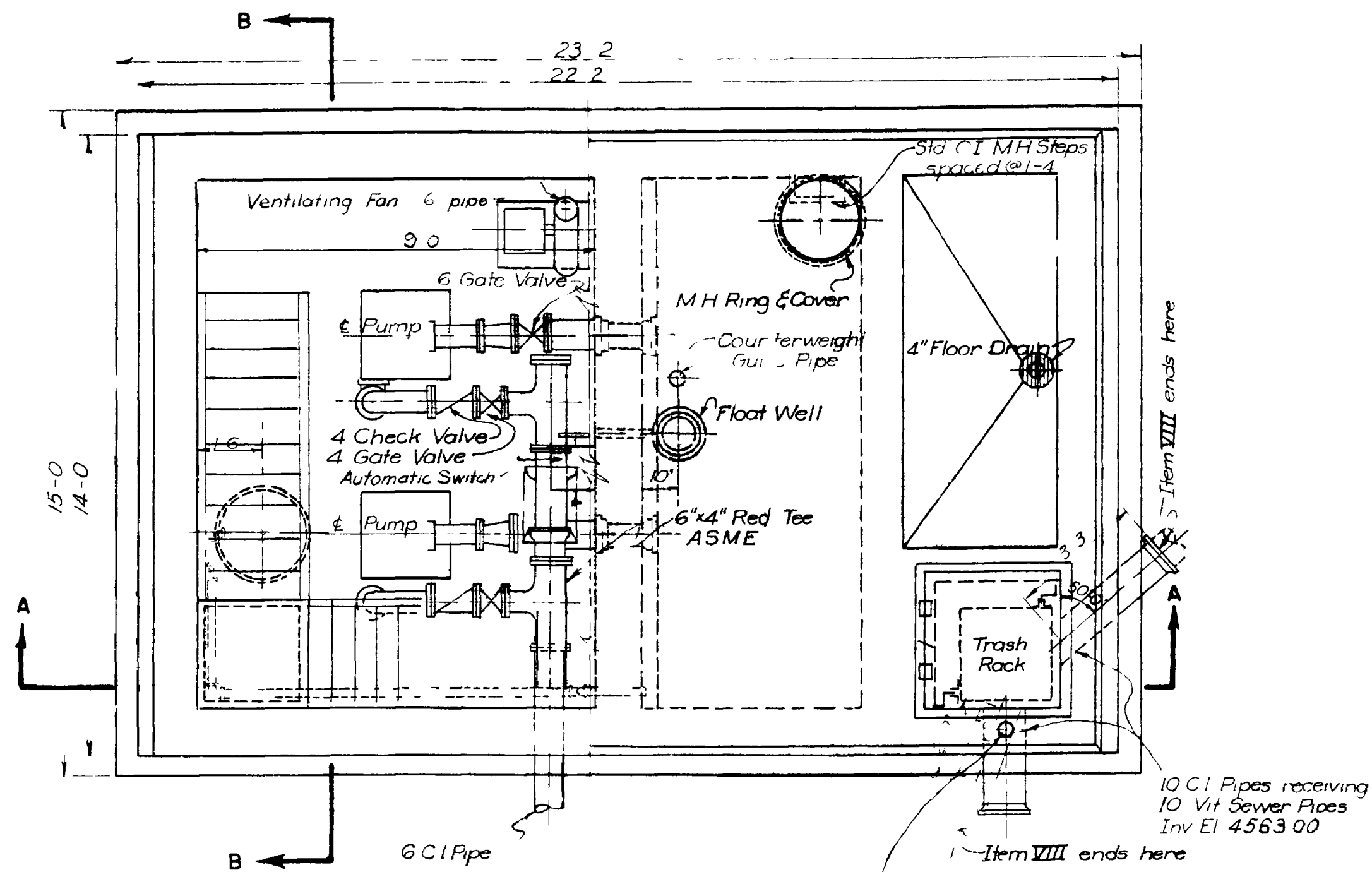
Note: This drawing is diagrammatic only. See detail plans for location of units.

STANDARD HEATING  
SEWAGE DISPOSAL WORKS  
GRAND JUNCTION, COLORADO

BLACK & VEATCH  
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1938

Revised 10-15-38





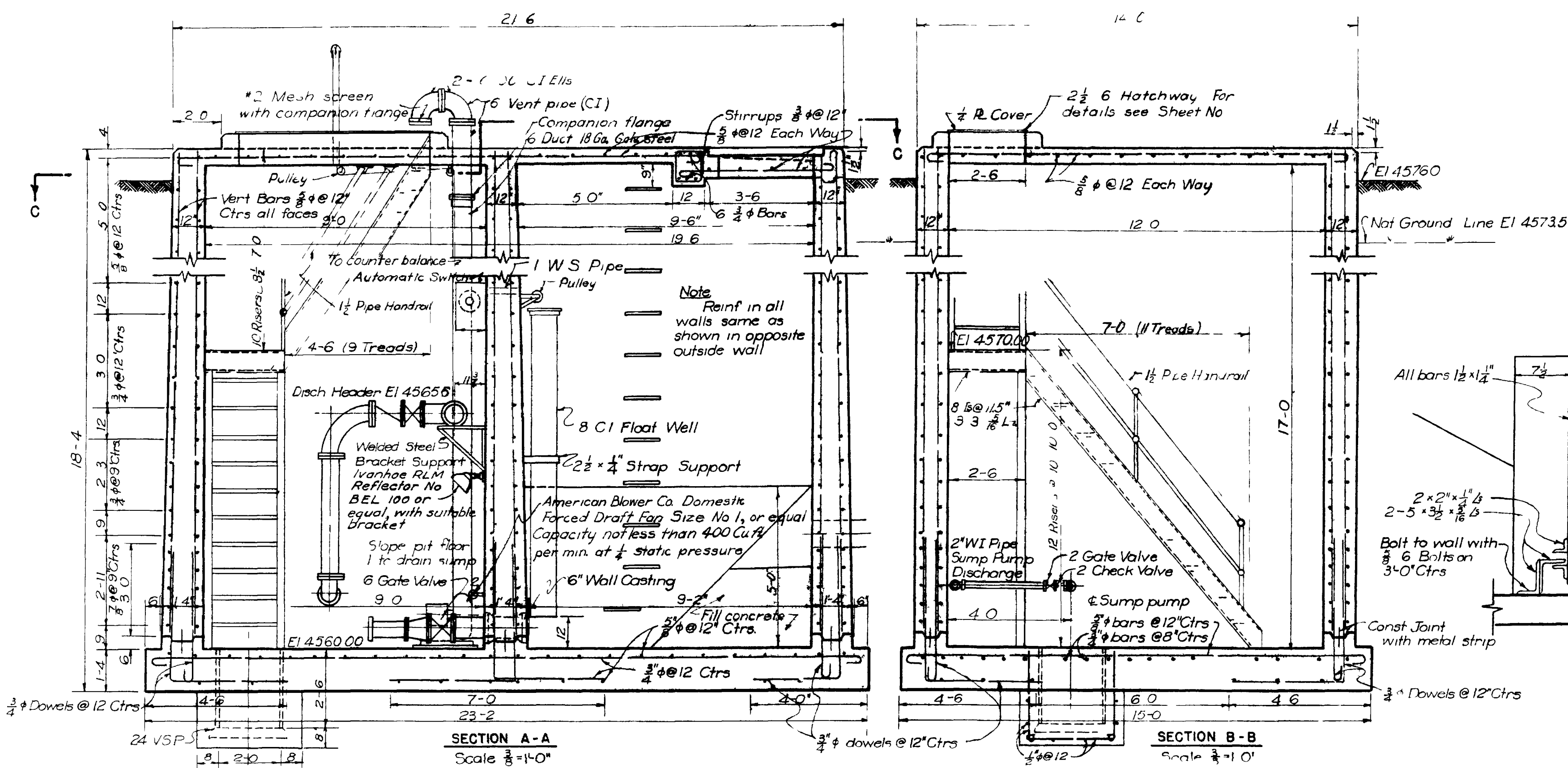
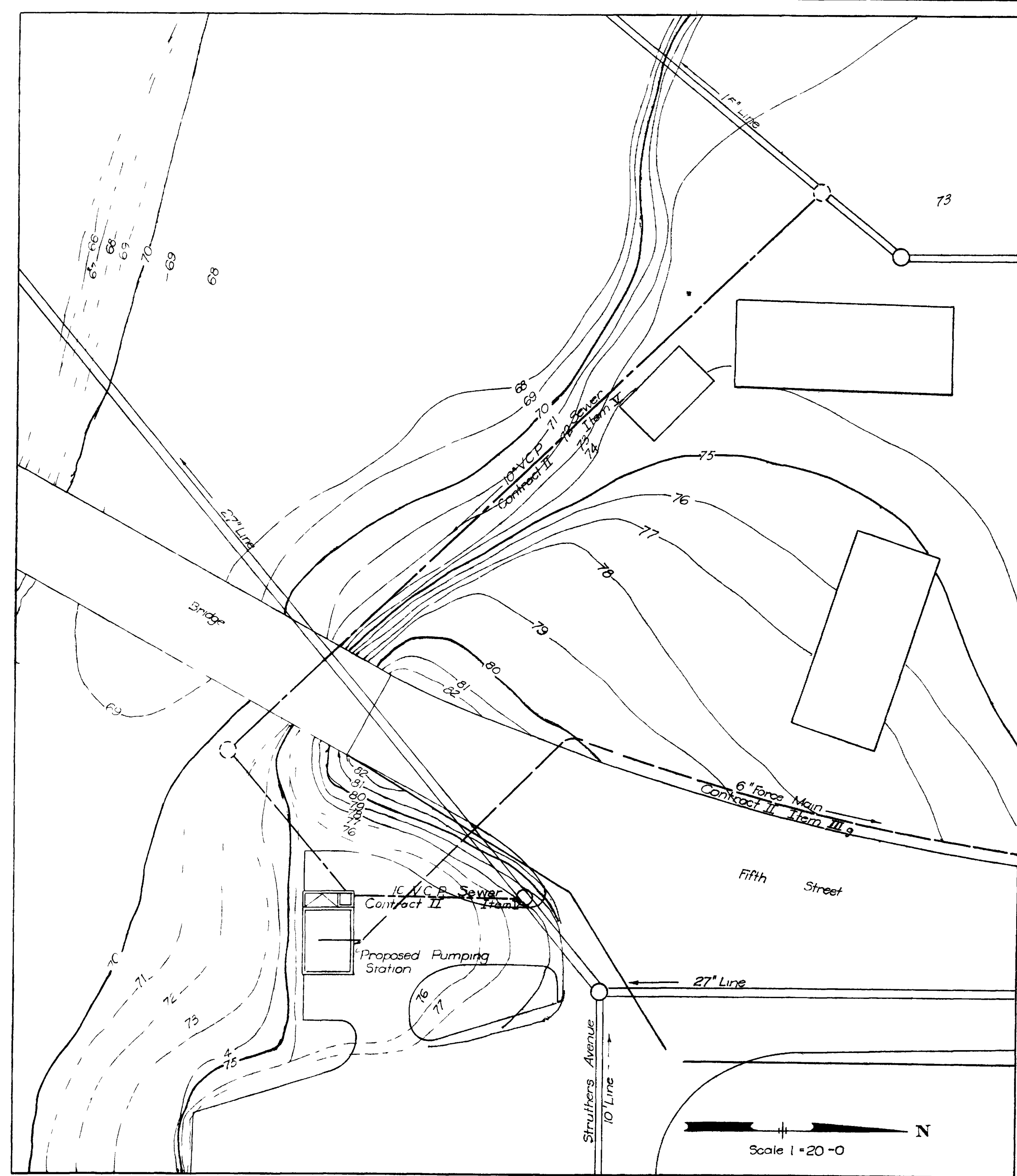
SECTIONAL PLAN C-C

Scale  $\frac{3}{8} = 1-0$

10 CI Pipes receiving  
10 Vit Sewer Pipes  
Inv El 4563 00

Item VIII ends here

Provide Hand Operated Hoist  
4" WI Pipe set in concrete, 2' 0"  
long, to support Hoist  
Hoist to be equipped with ratchet  
and have capacity of 500 lb

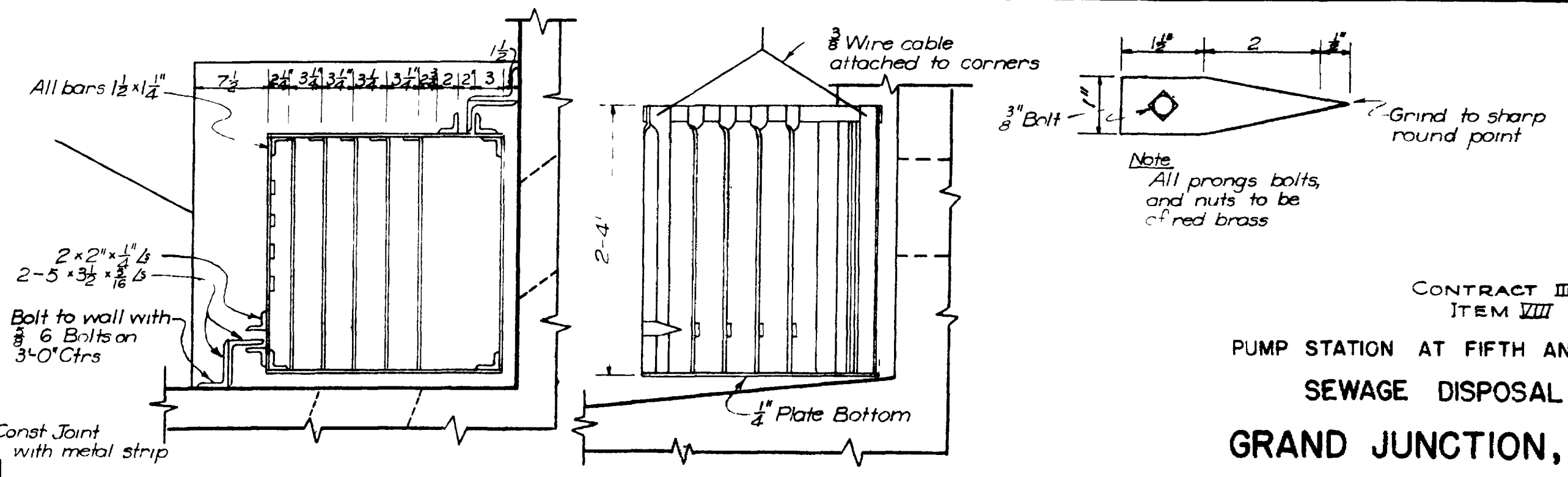


SECTION A-A

Scale  $\frac{3}{8} = 1-0$

SECTION B-B

Scale  $\frac{3}{8} = 1-0$



TRASH SCREEN DETAILS

Scale 1 = 1-0

CONTRACT III  
ITEM VIII  
PUMP STATION AT FIFTH AND STRUTHERS  
SEWAGE DISPOSAL WORKS  
GRAND JUNCTION, COLORADO

BLACK & VEATCH  
CONSULTING ENGINEERS  
KANSAS CITY, MO  
1938

Revised 10-15-88