

# CITY OF JOLIET

ILLINOIS

DIVISION B

SEWAGE TREATMENT PLANT

INTERCEPTING SEWERS, SEWER EXTENSIONS

AND WATER MAIN EXTENSIONS

C O N T R A C T      N O . 9

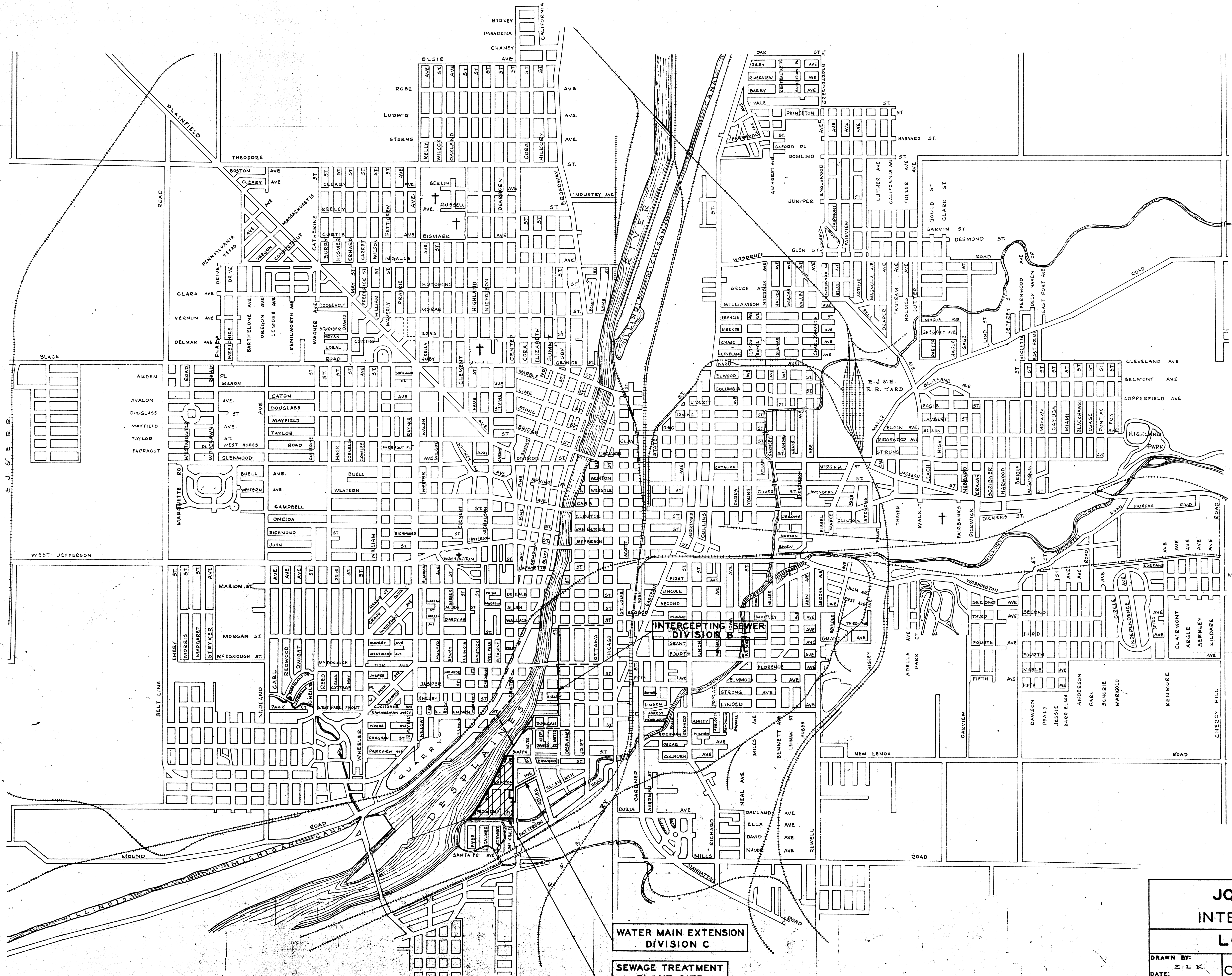
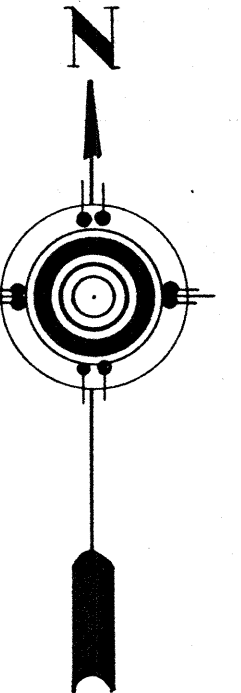
CONSOER TOWNSEND AND ASSOCIATES

CONSULTING ENGINEERS

351 E. OHIO ST.

CHICAGO II, ILL.





- LEGEND**
- - - Existing Sewer
  - Existing Manhole
  - - - Existing Water
  - + - Existing Water Valve
  - - - Existing Gas
  - E - Existing Underground Power
  - T - Existing Underground Telephone
  - ▣ Existing Inlet
  - Existing Catch Basin
  - Existing Power Telephone Pole
  - ⊕ Existing Hydrant
  - - - Proposed Sewer
  - Proposed Manhole

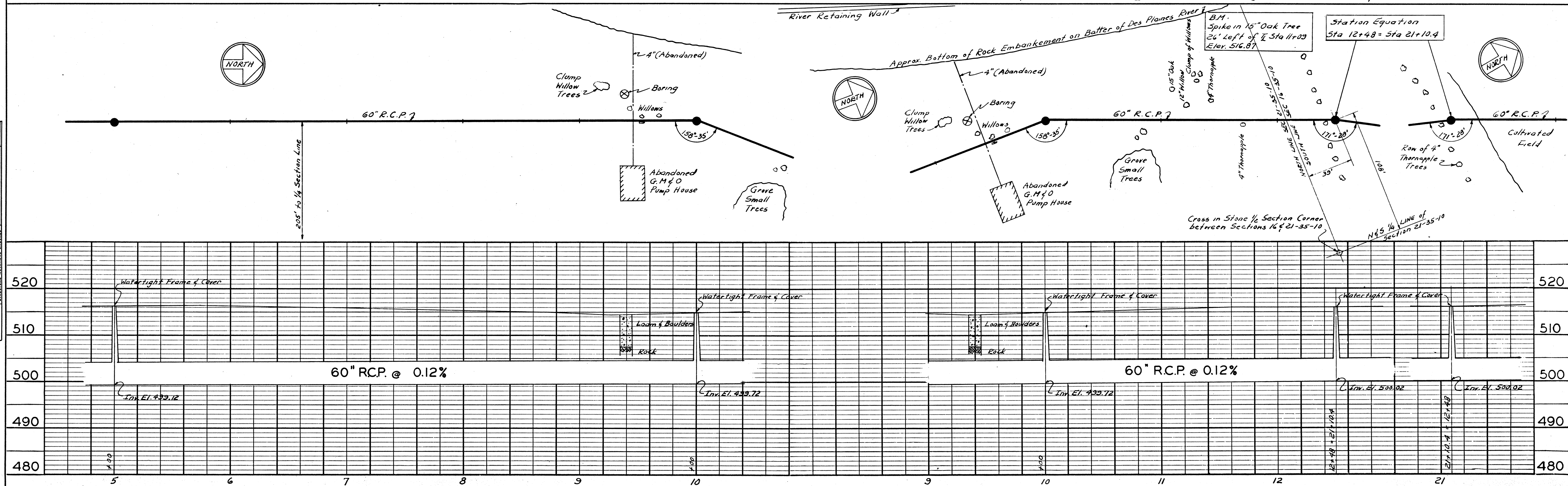
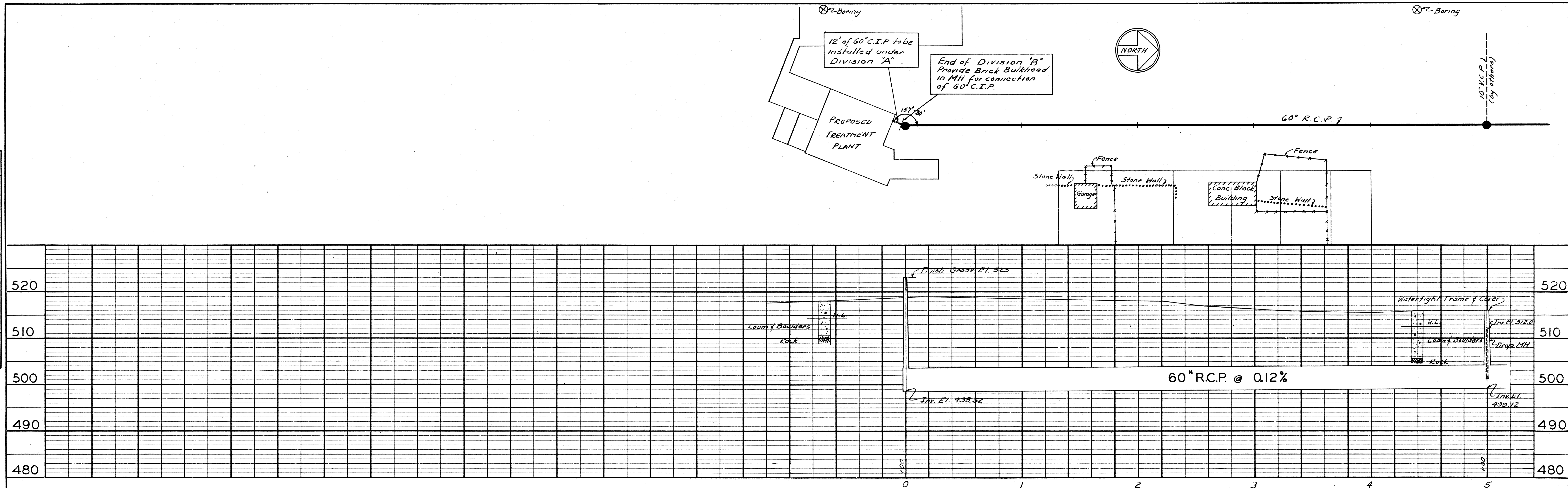
**JOLIET, ILLINOIS  
INTERCEPTING SEWERS  
LOCATION MAP**

DRAWN BY: E. L. K.	<b>CONSOER, TOWNSEND &amp; ASSOCIATES</b> CONSULTING ENGINEERS CHICAGO, ILL.	SCALE:
DATE:		REVISED:
CHECKED BY:		SHEET NO. 2 OF 3 SHEETS
APPROVED:		



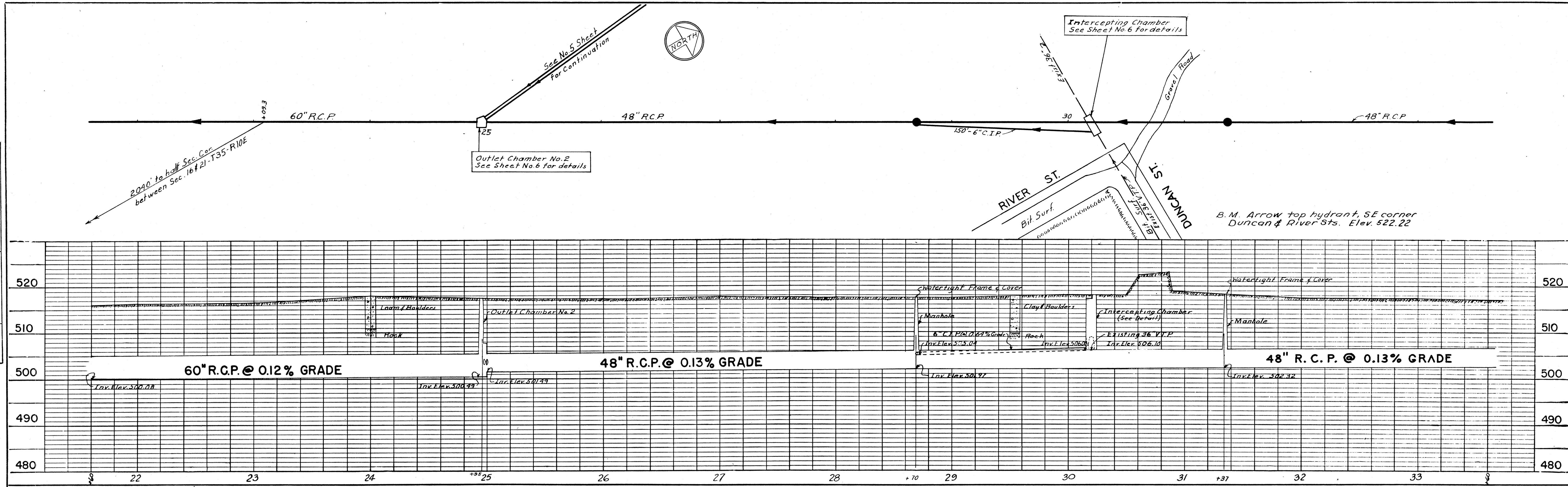
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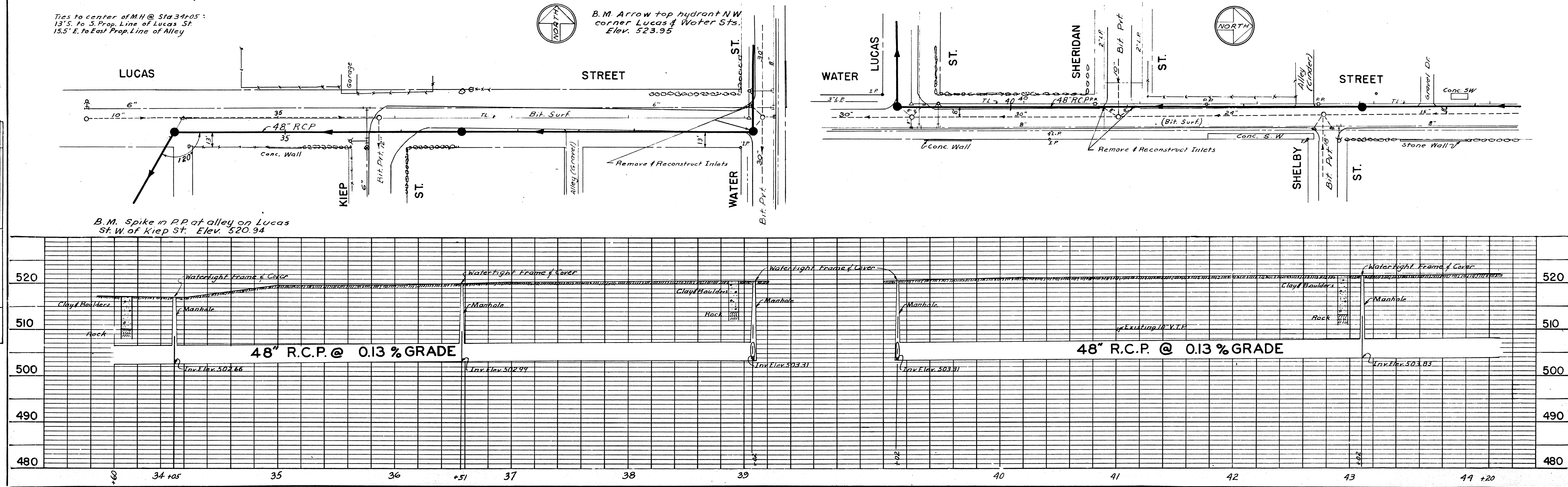




DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
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 PLAN NOTE BOOK ALIGNED CHECKED \_\_\_\_\_  
 RT. OF WAY CHECKED \_\_\_\_\_  
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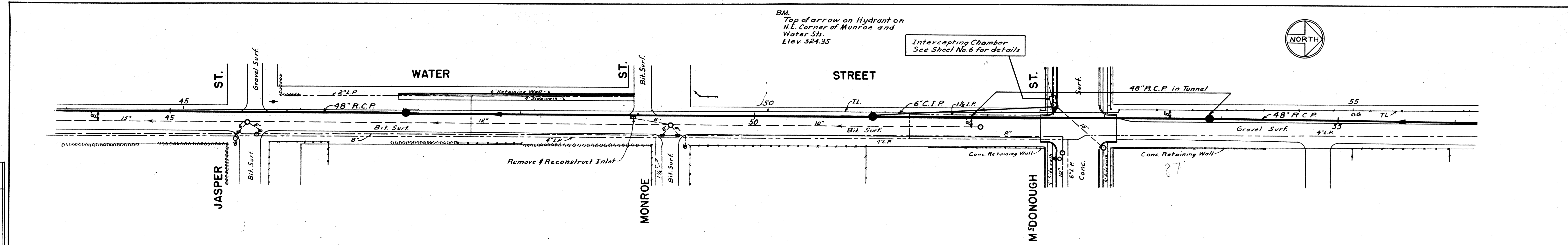


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 BY \_\_\_\_\_  
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 STRUCTURE NOTATIONS CHECKED \_\_\_\_\_  
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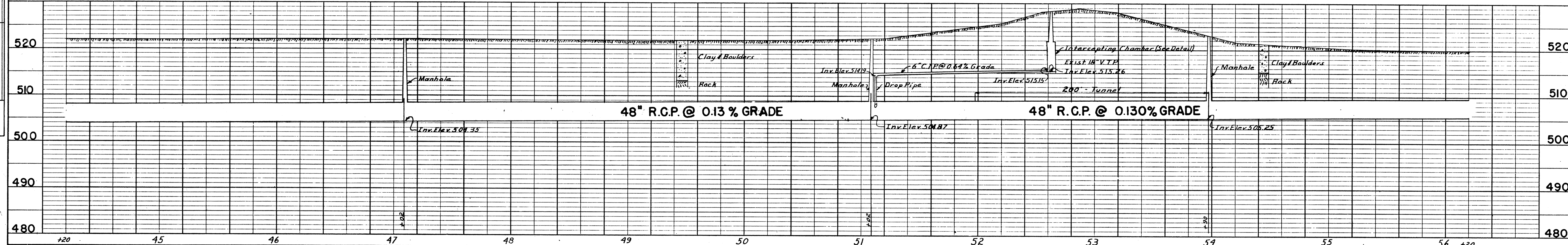




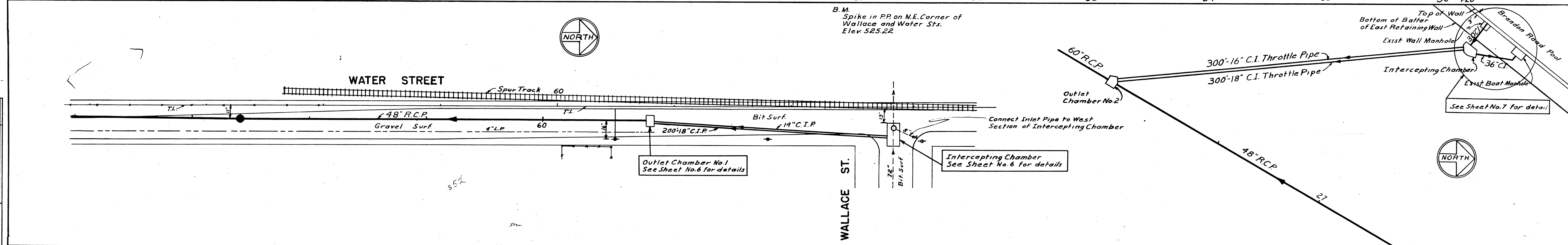
BM. Top of arrow on Hydrant on N.E. Corner of Munroe and Water Sts. Elev. 524.35



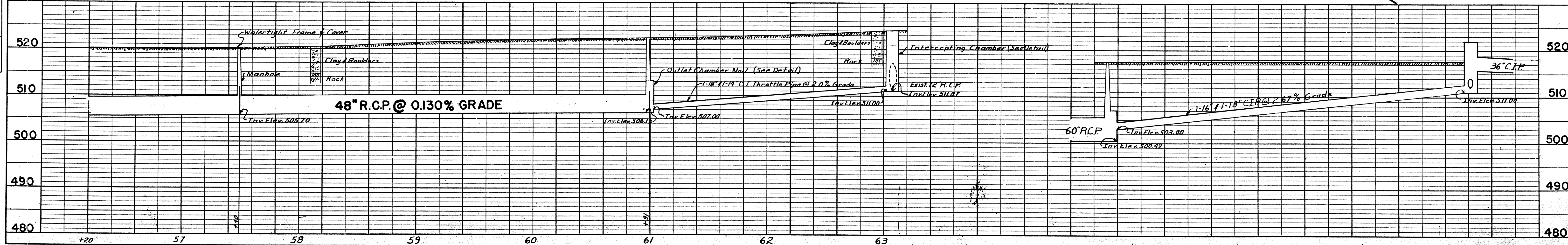
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	PLOTTED	BY
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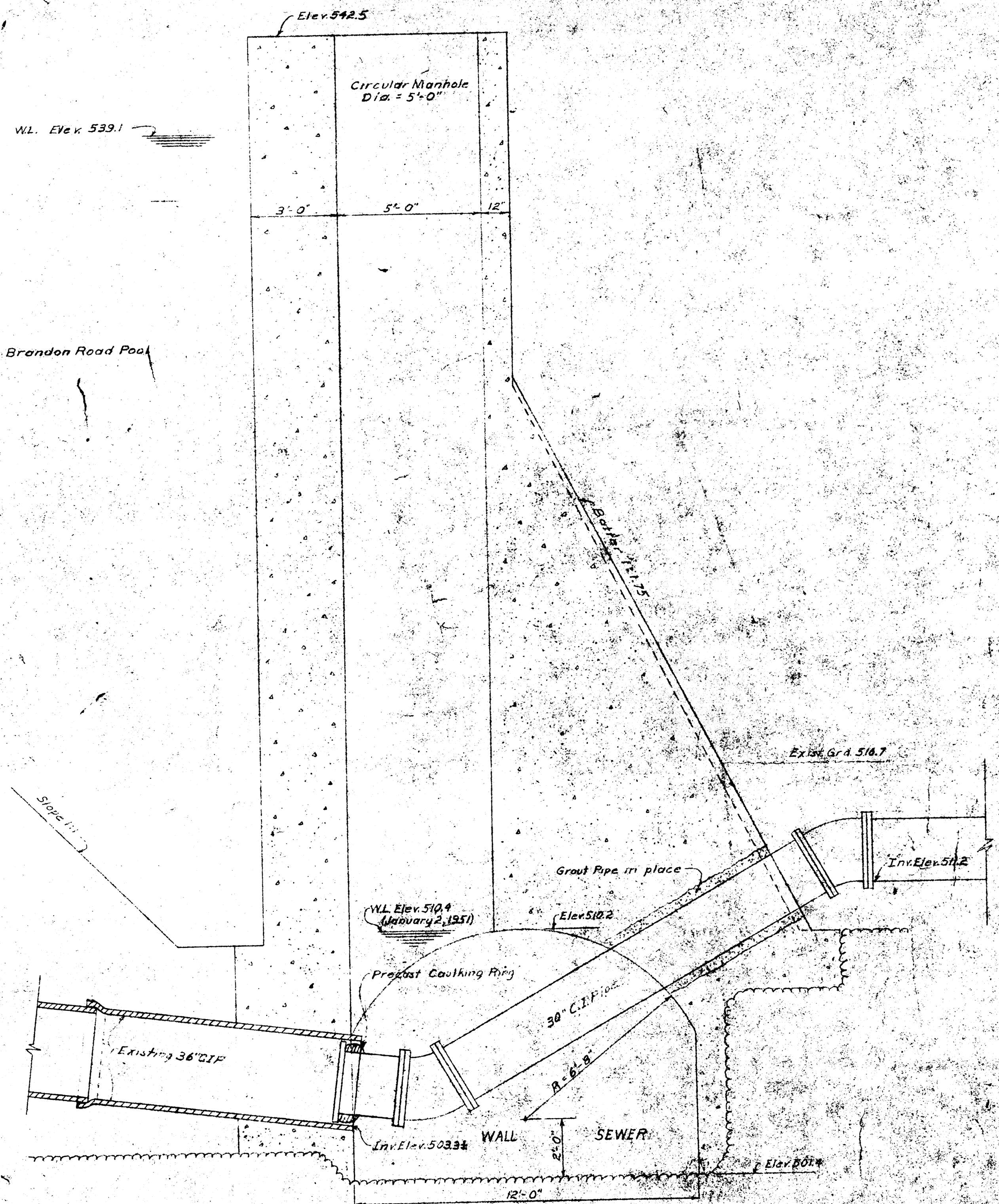
B.M. Spike in PP on N.E. Corner of Wallace and Water Sts. Elev. 525.22



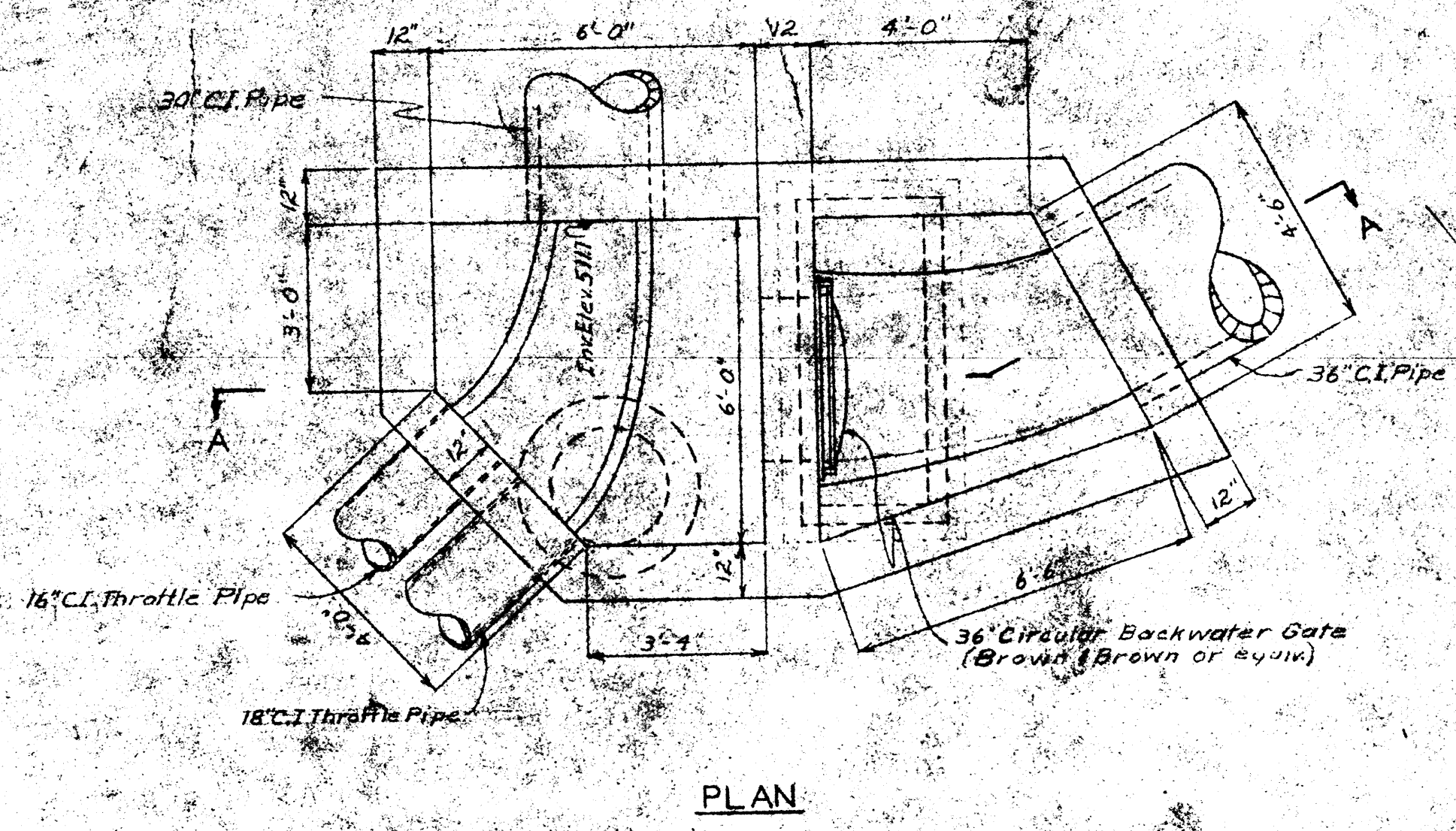
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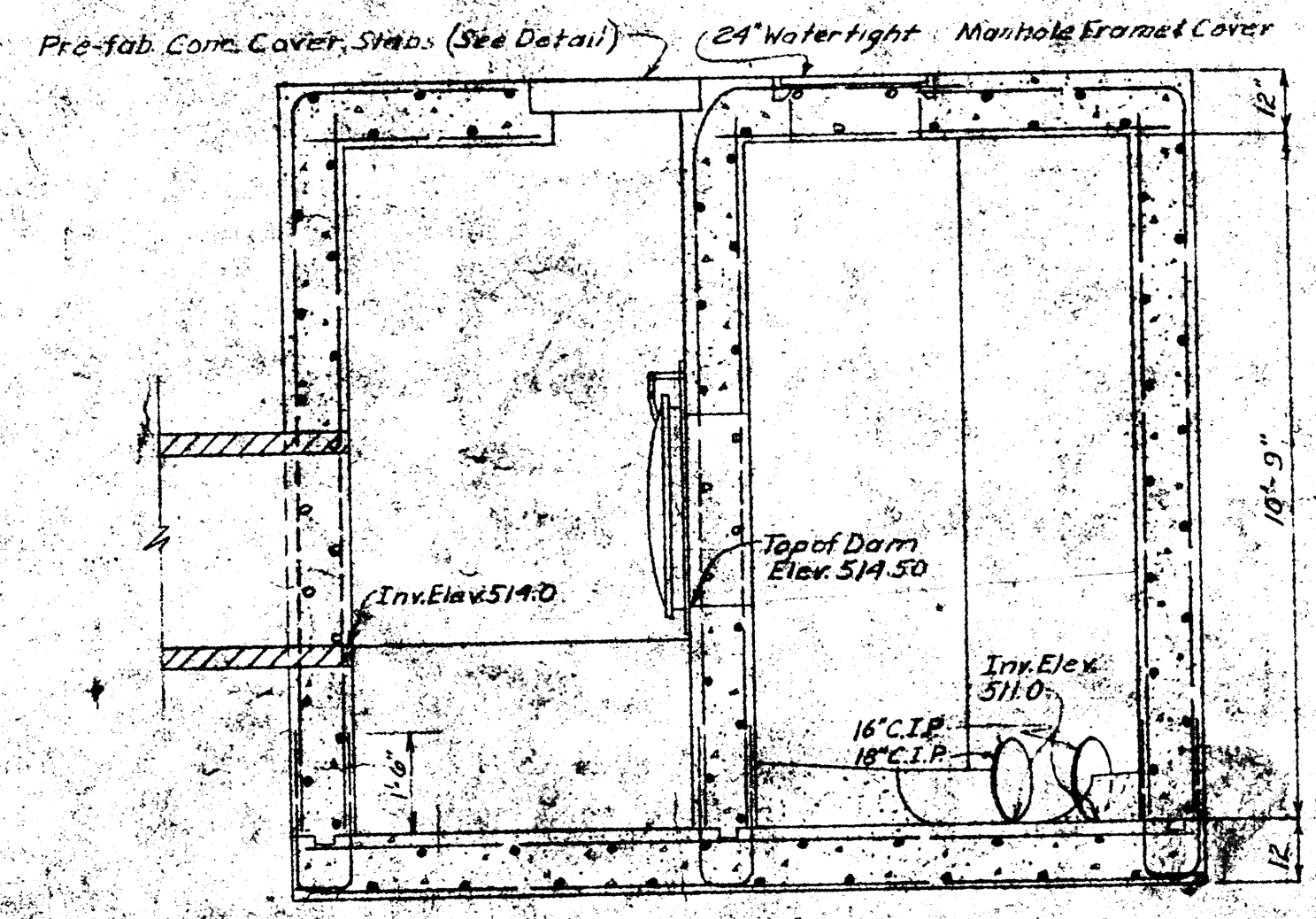




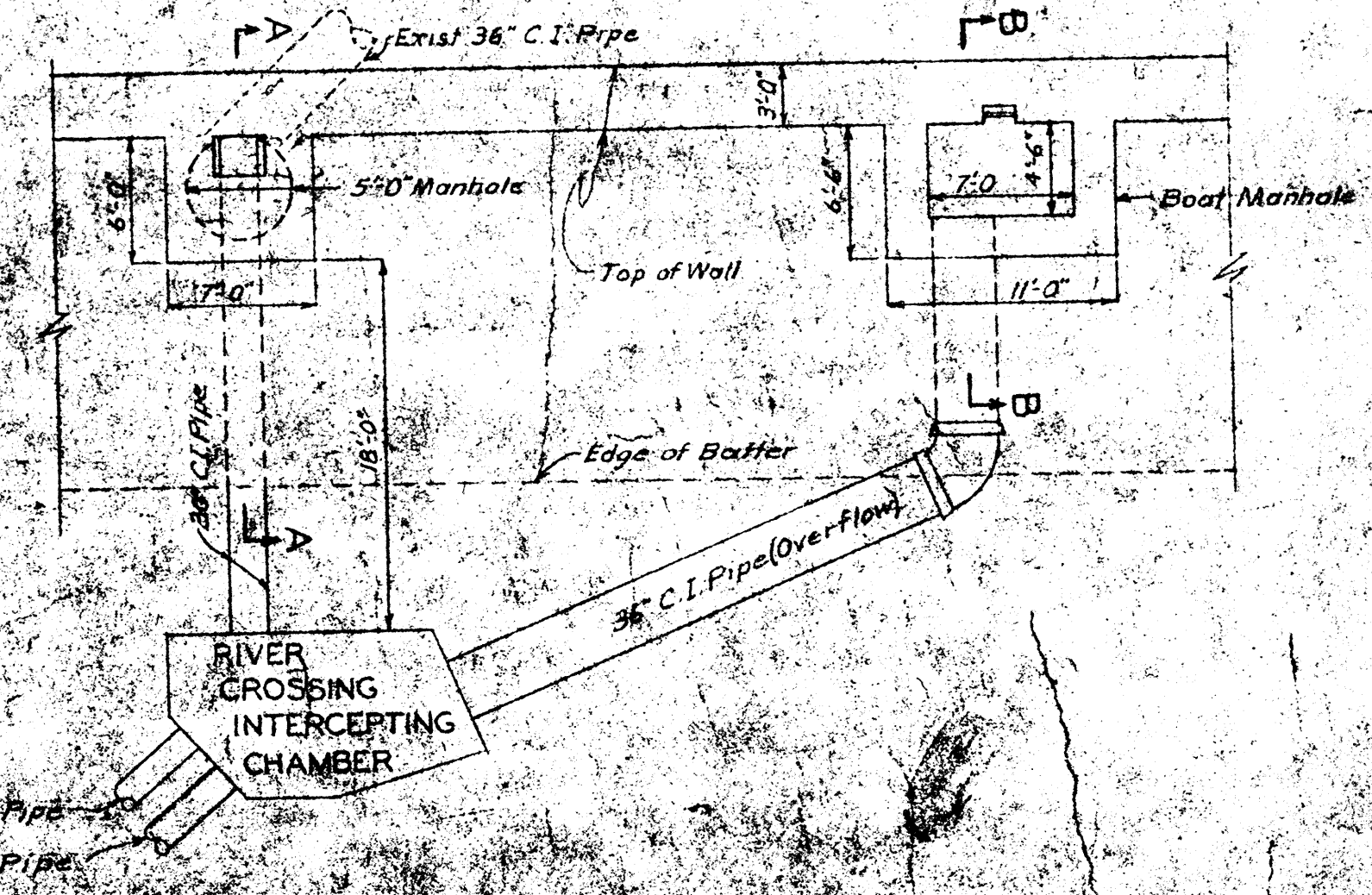
SECTION A-A  
TENTATIVE DETAILS OF CONNECTION TO 36" RIVER CROSSING PIPE  
AT JUNCTION WITH EAST WALL SEWER  
Scale: 3/8" = 1'-0"



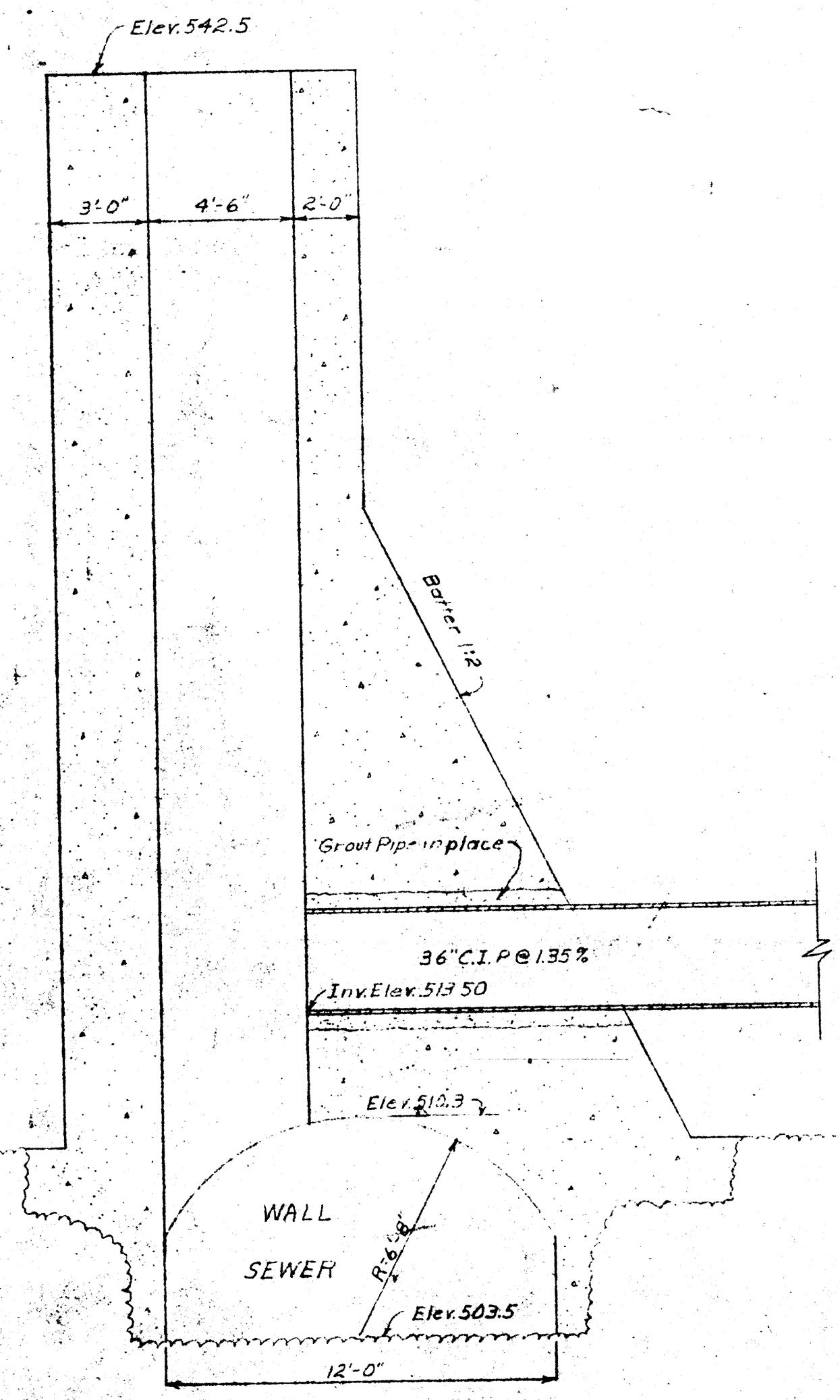
PLAN



SECTION A-A  
RIVER CROSSING INTERCEPTING CHAMBER  
Scale: 3/8" = 1'-0"



LAYOUT PLAN OF EAST RETAINING WALL  
AND RIVER CROSSING INTERCEPTING CHAMBER  
Scale: 1/4" = 1'-0"



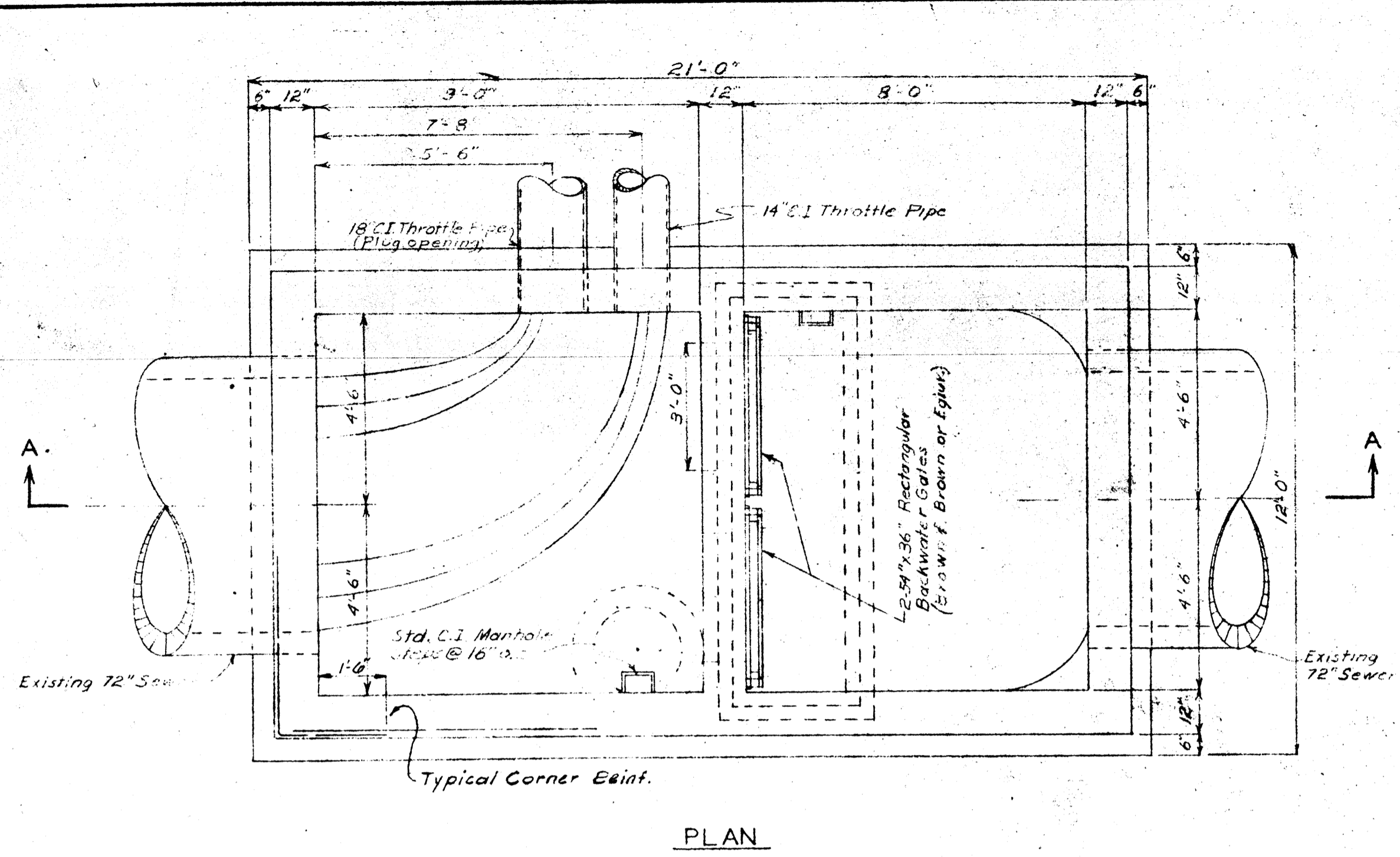
SECTION B-B  
CONNECTION OF OVERFLOW PIPE TO WALL SEWER  
Scale: 1/4" = 1'-0"

JOLIET ILLINOIS  
INTERCEPTING SEWER  
DETAILS

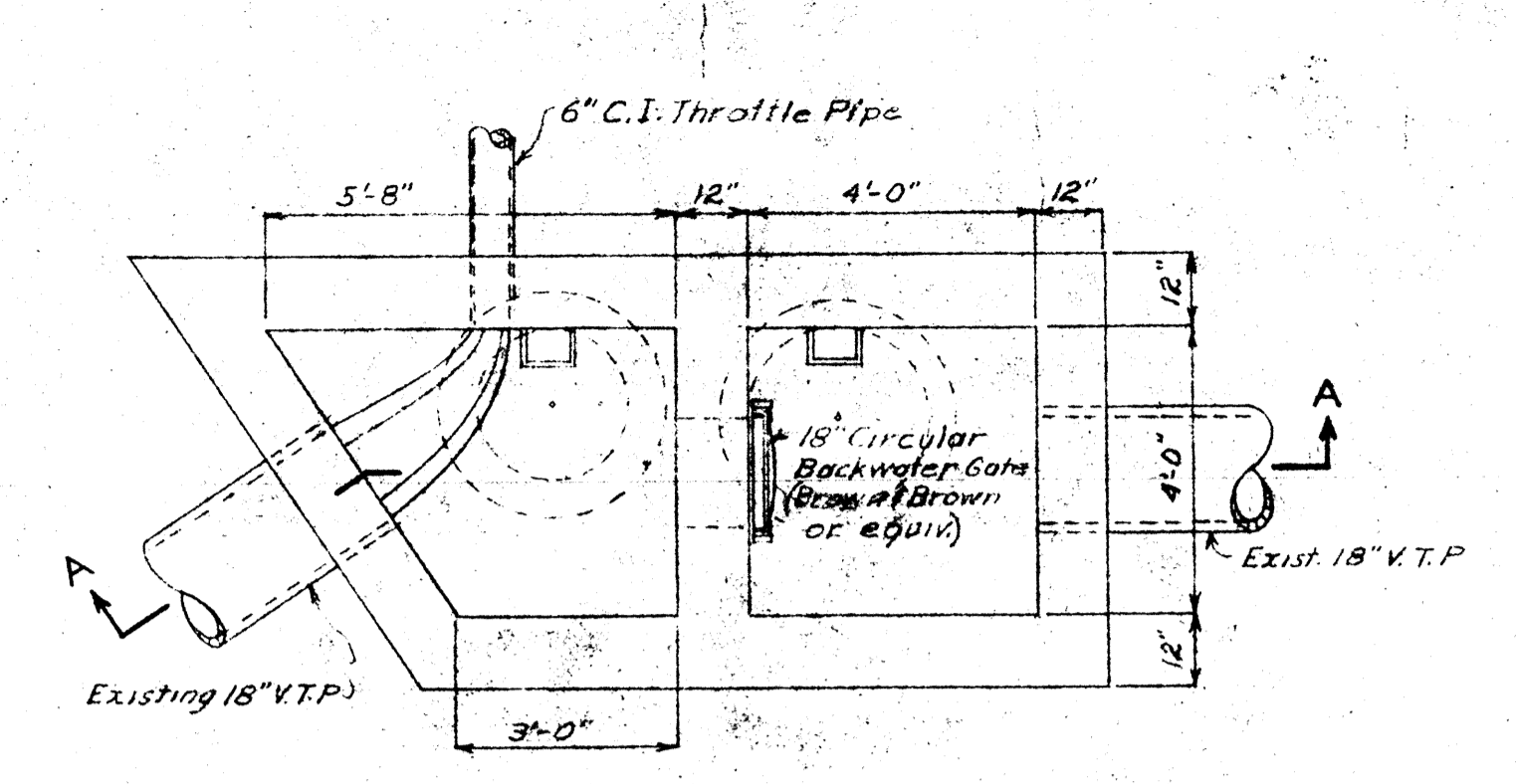
DRAWN BY: V.B.S.	<b>CONSOER, TOWNSEND &amp; ASSOCIATES</b> CONSULTING ENGINEERS CHICAGO, ILL.	SCALE: As Shown
DATE CHECKED BY: R.A.S.		REVISED: APRIL 1954
APPROVED BY:		SHEET NO. 7 OF 8 SHEETS

Note: #5 Reinf. Bars are 5/8"

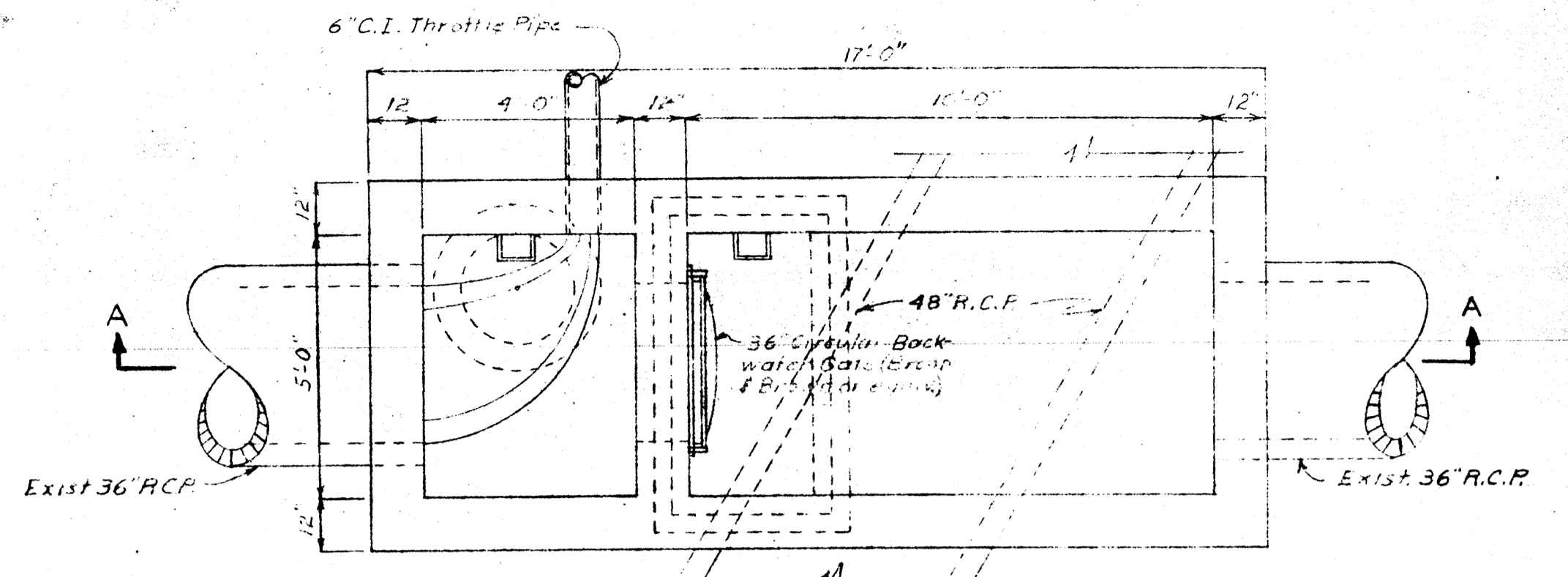




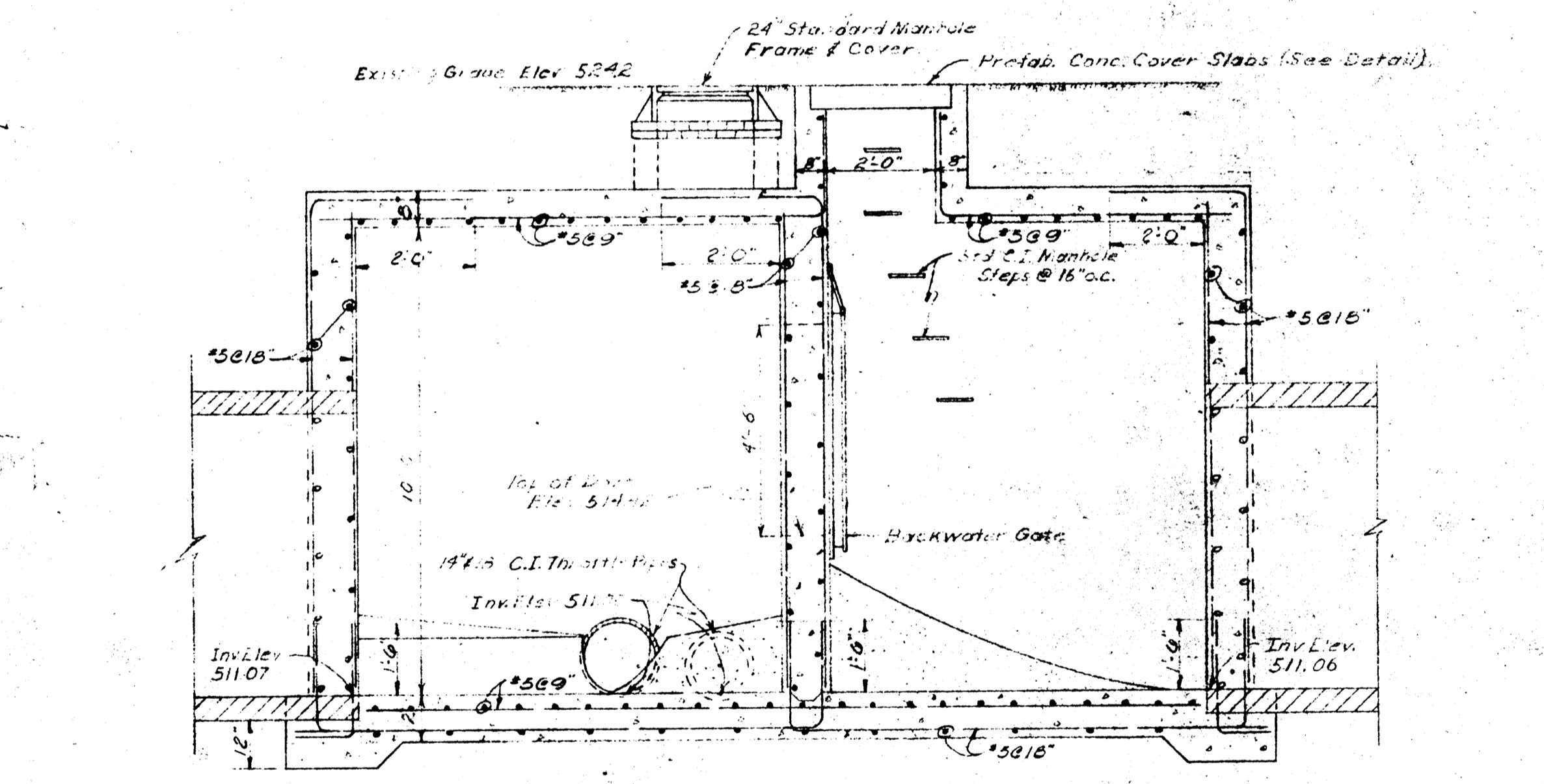
PLAN



PLAN



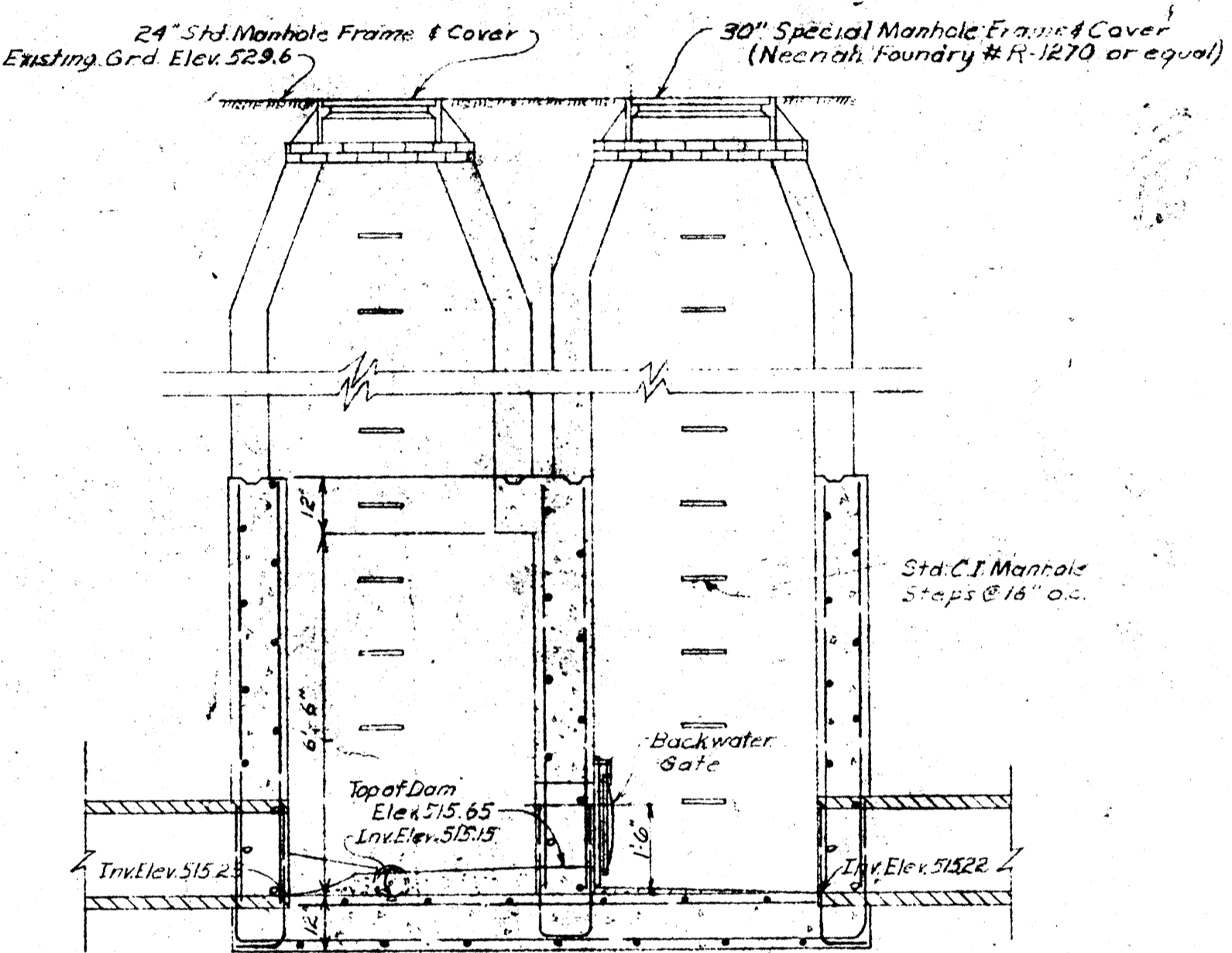
PLAN



SECTION A-A

WALLACE STREET INTERCEPTING CHAMBER

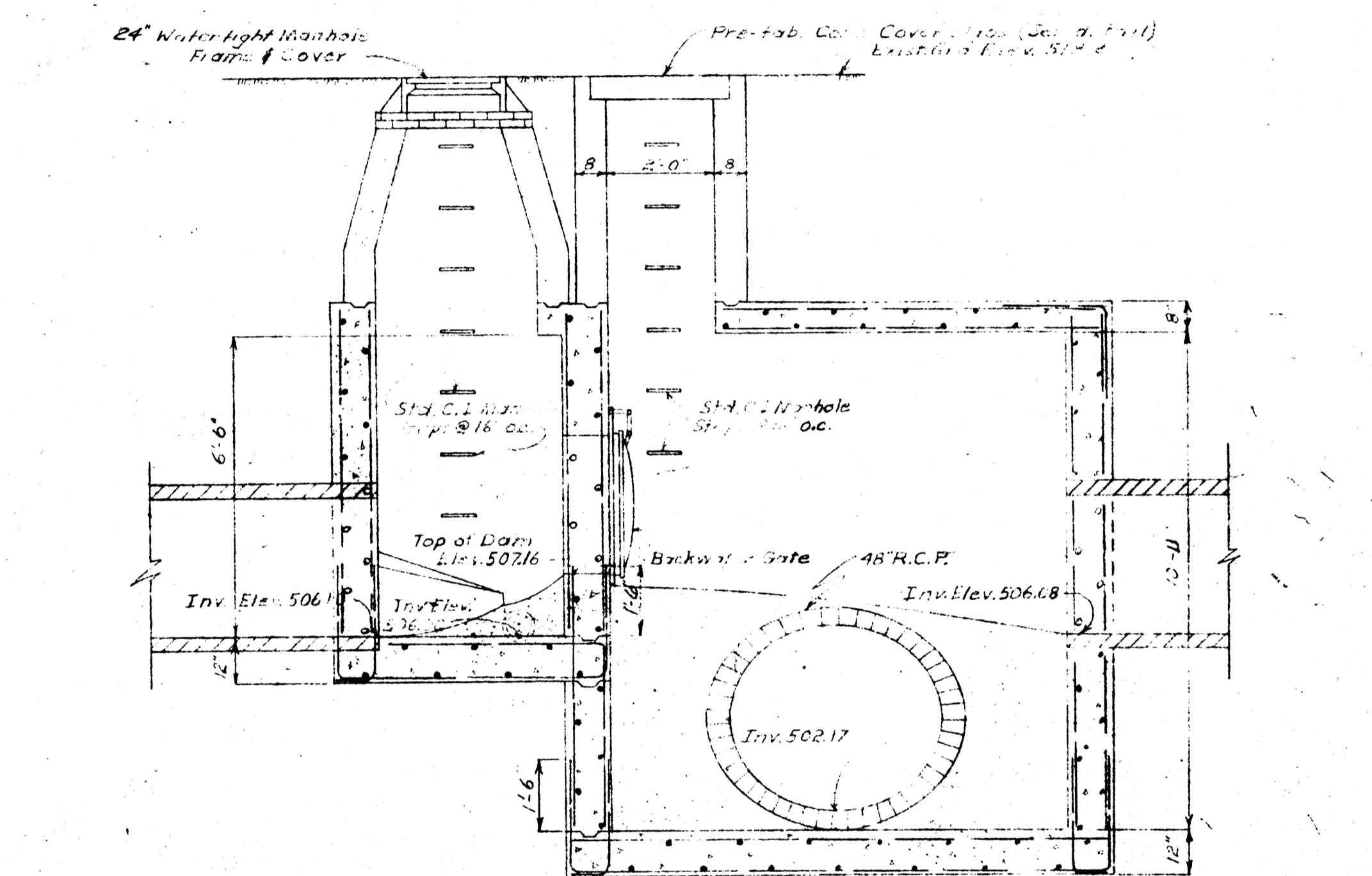
Scale: 3/8" = 1'-0"



SECTION A-A

MCDONOUGH STREET INTERCEPTING CHAMBER

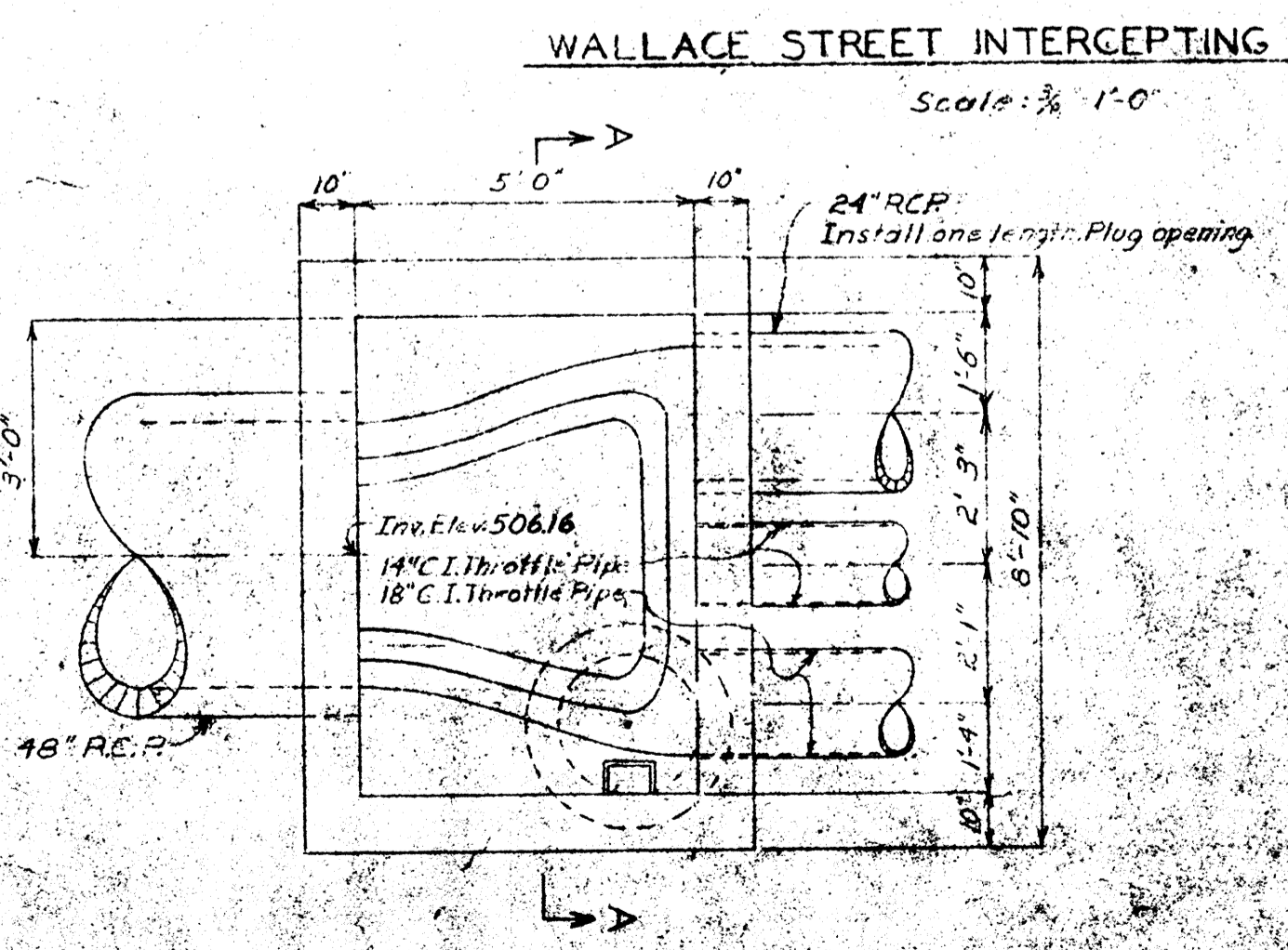
Scale: 3/8" = 1'-0"



SECTION A-A

DUNCAN STREET INTERCEPTING CHAMBER

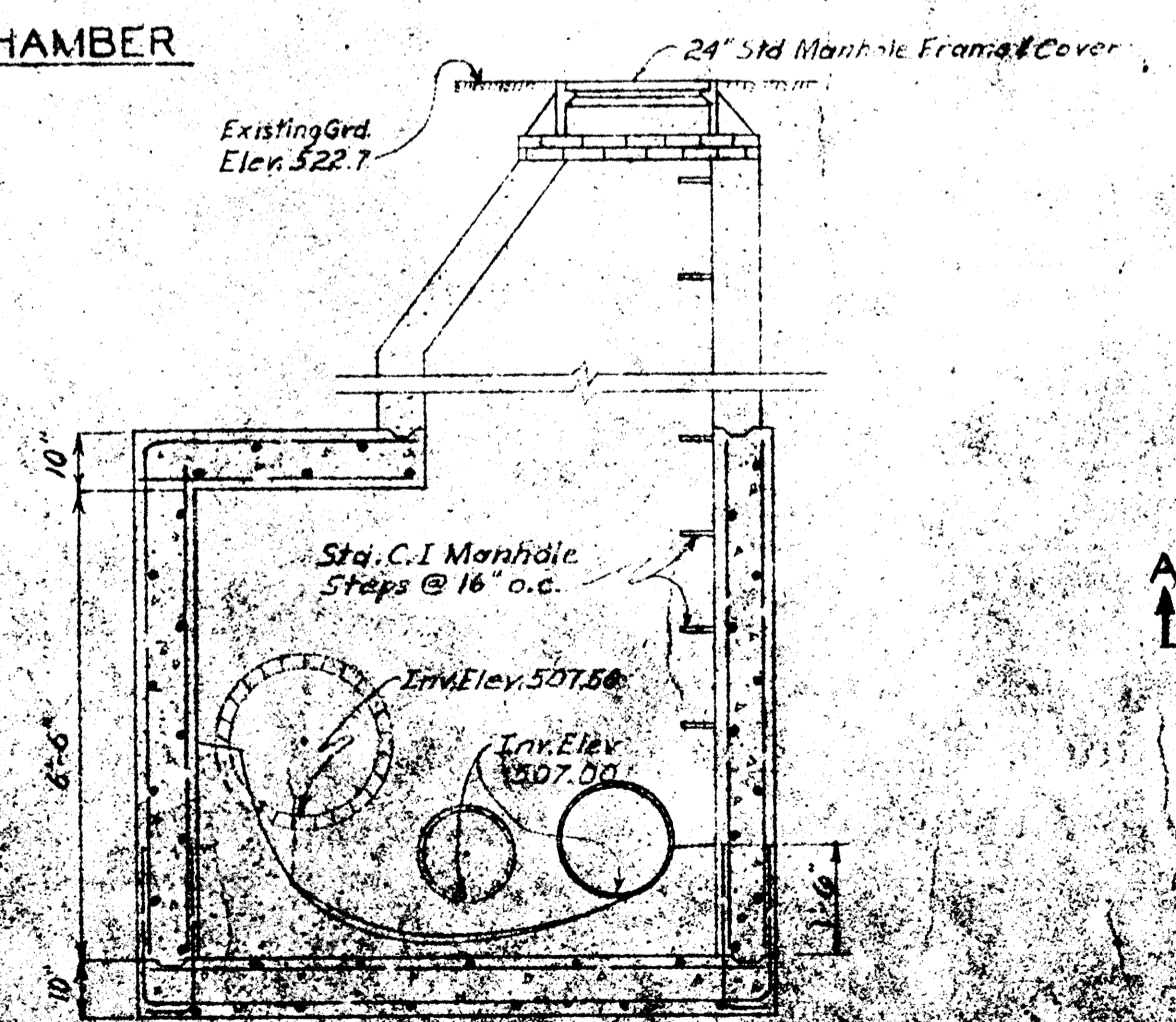
Scale: 3/8" = 1'-0"



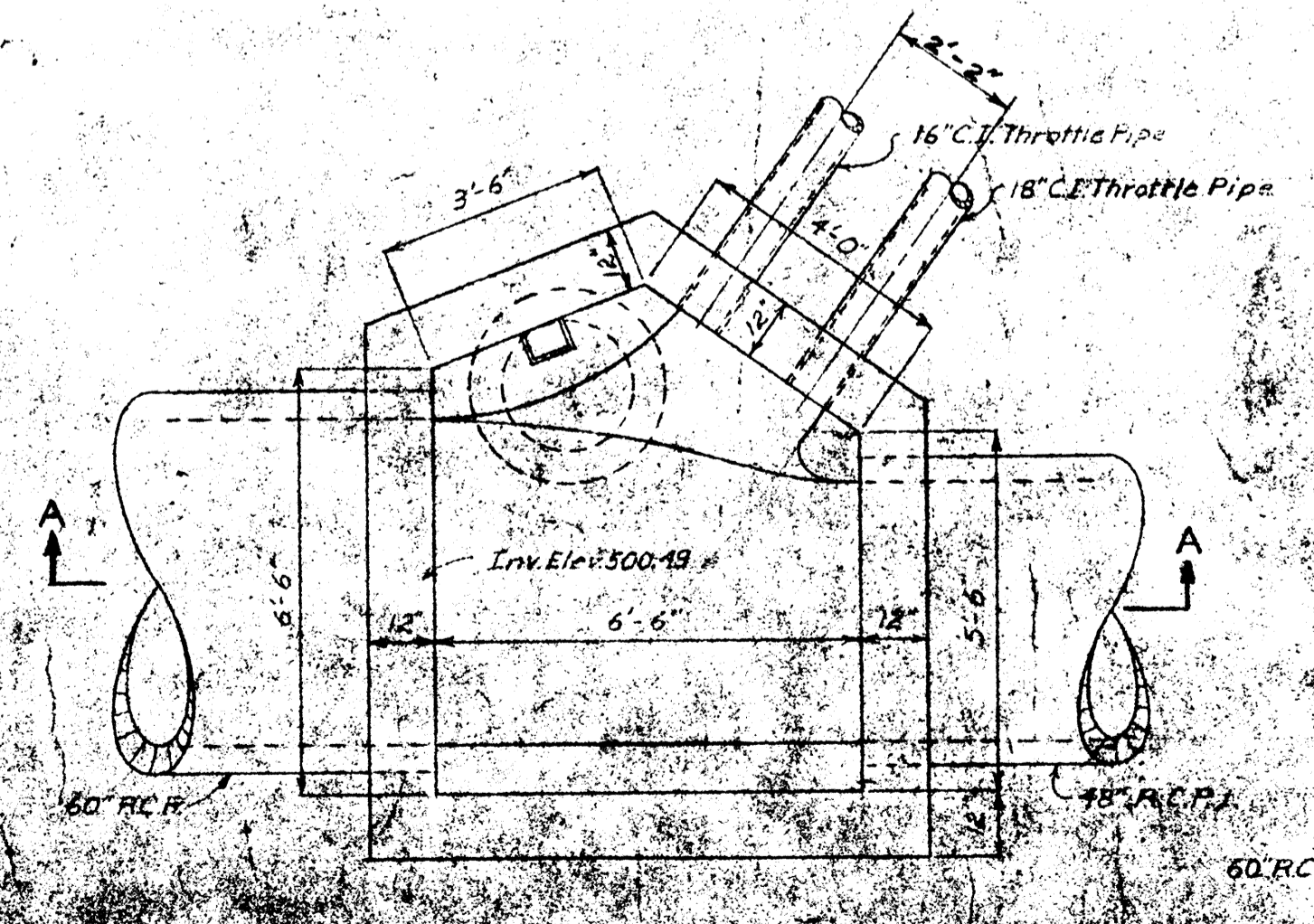
PLAN

OUTLET CHAMBER NO. 1

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

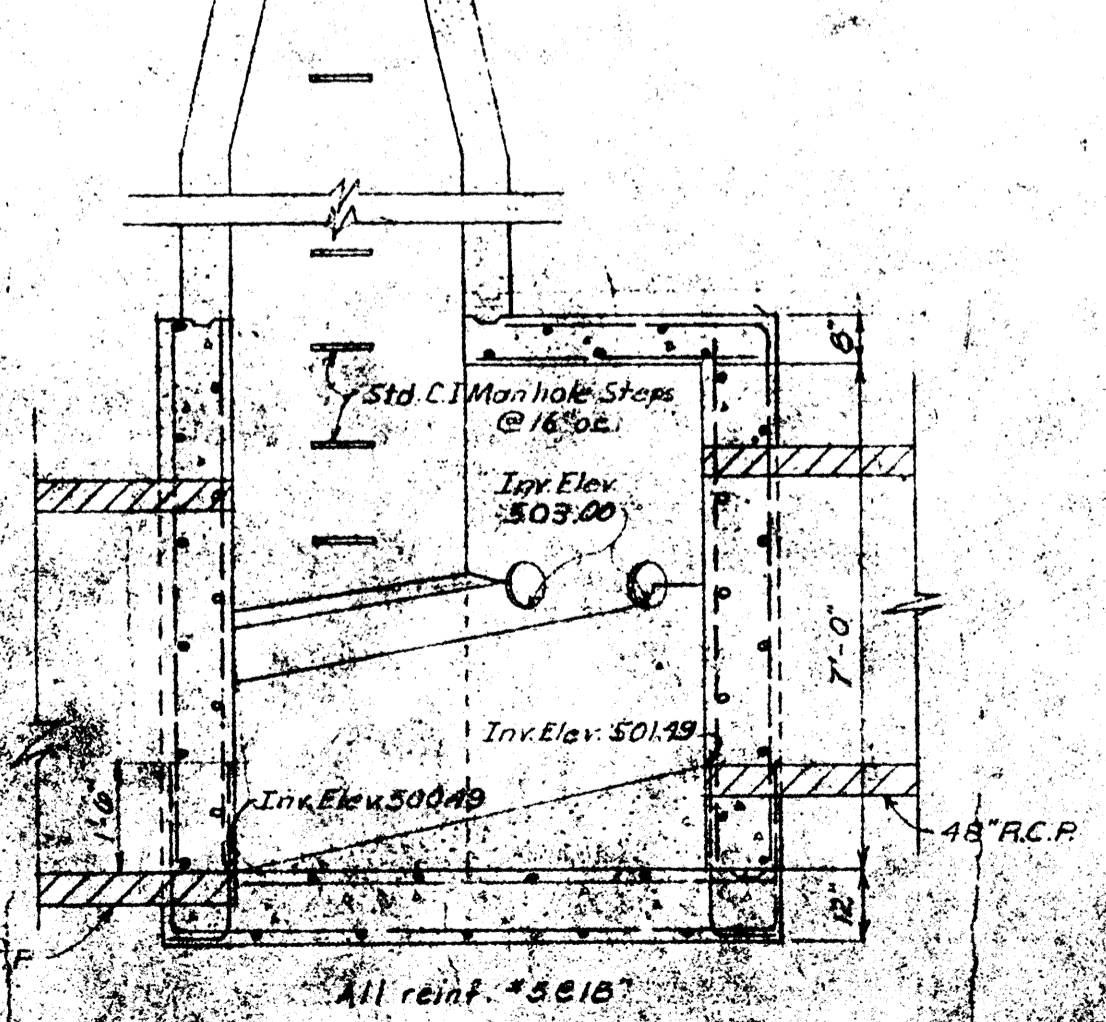


SECTION A-A

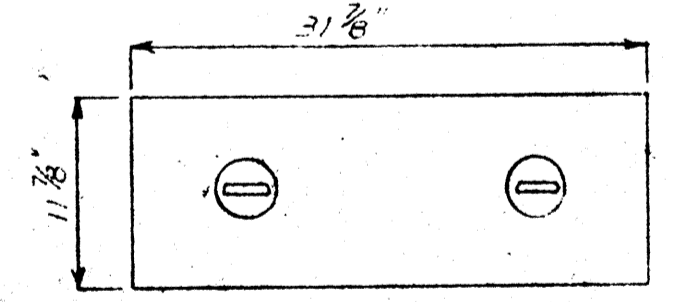


PLAN

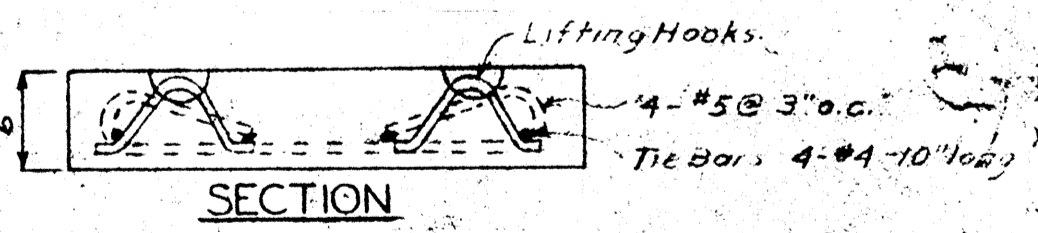
OUTLET CHAMBER NO. 2



SECTION A-A



PLAN



SECTION

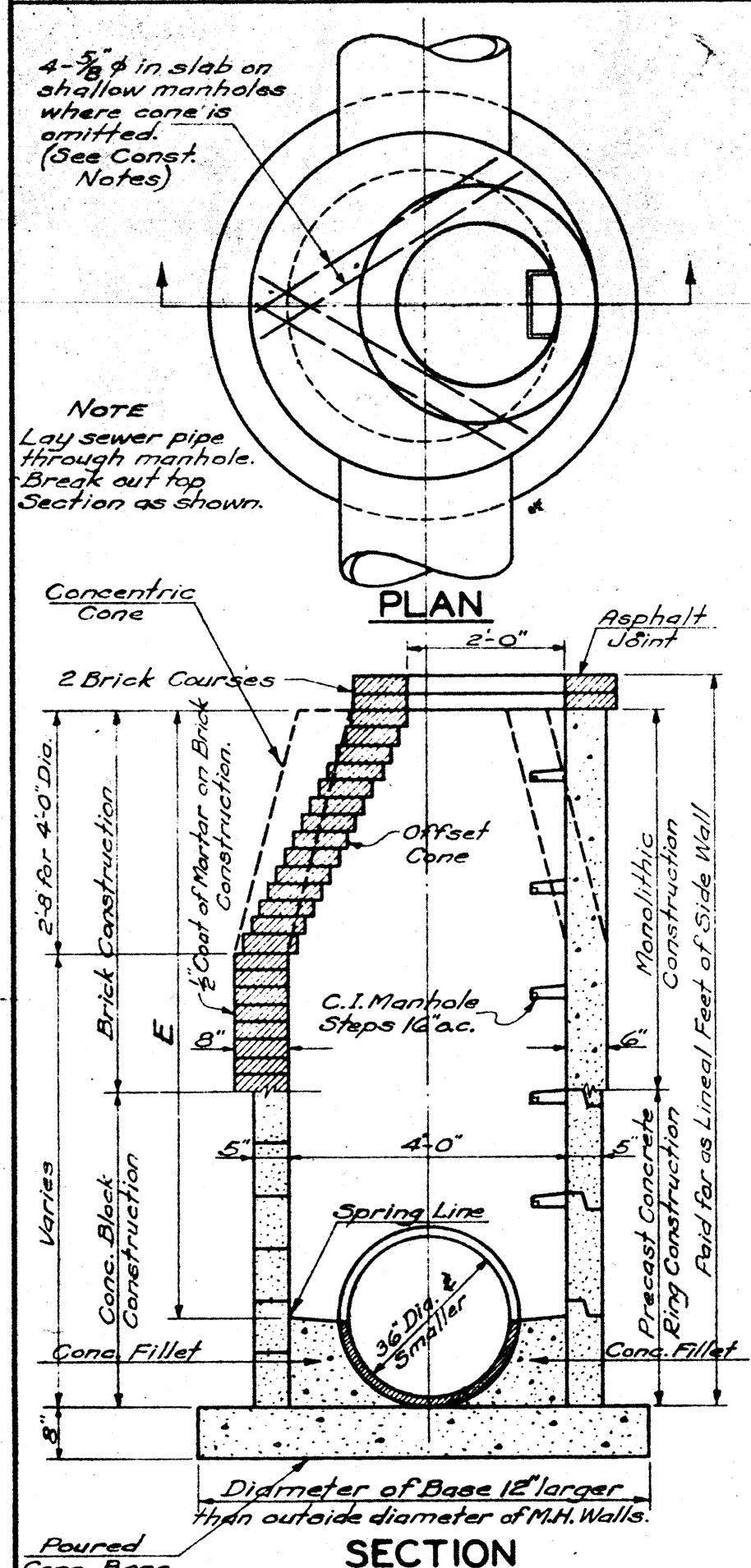
DETAIL OF PRE-FAB. CONC. COVER SLAB

<p><b>JOLIET, ILLINOIS</b>  <b>INTERCEPTING SEWER</b>  <b>DETAILS</b></p>		
<p>DRAWN BY: VB.S.</p>	<p><b>CONSER, TOWNSEND &amp; ASSOCIATES</b>  <b>CONSULTING ENGINEERS</b>          CHICAGO, ILL.</p>	<p>SCALE: As Shown</p>
<p>CHECKED BY: R.A.C.</p>		<p>REVISED: APRIL 1954</p>
<p>APPROVED BY:</p>		<p>SHEET NO. 6</p>
<p>DATE:</p>		<p>OF 6 SHEETS</p>

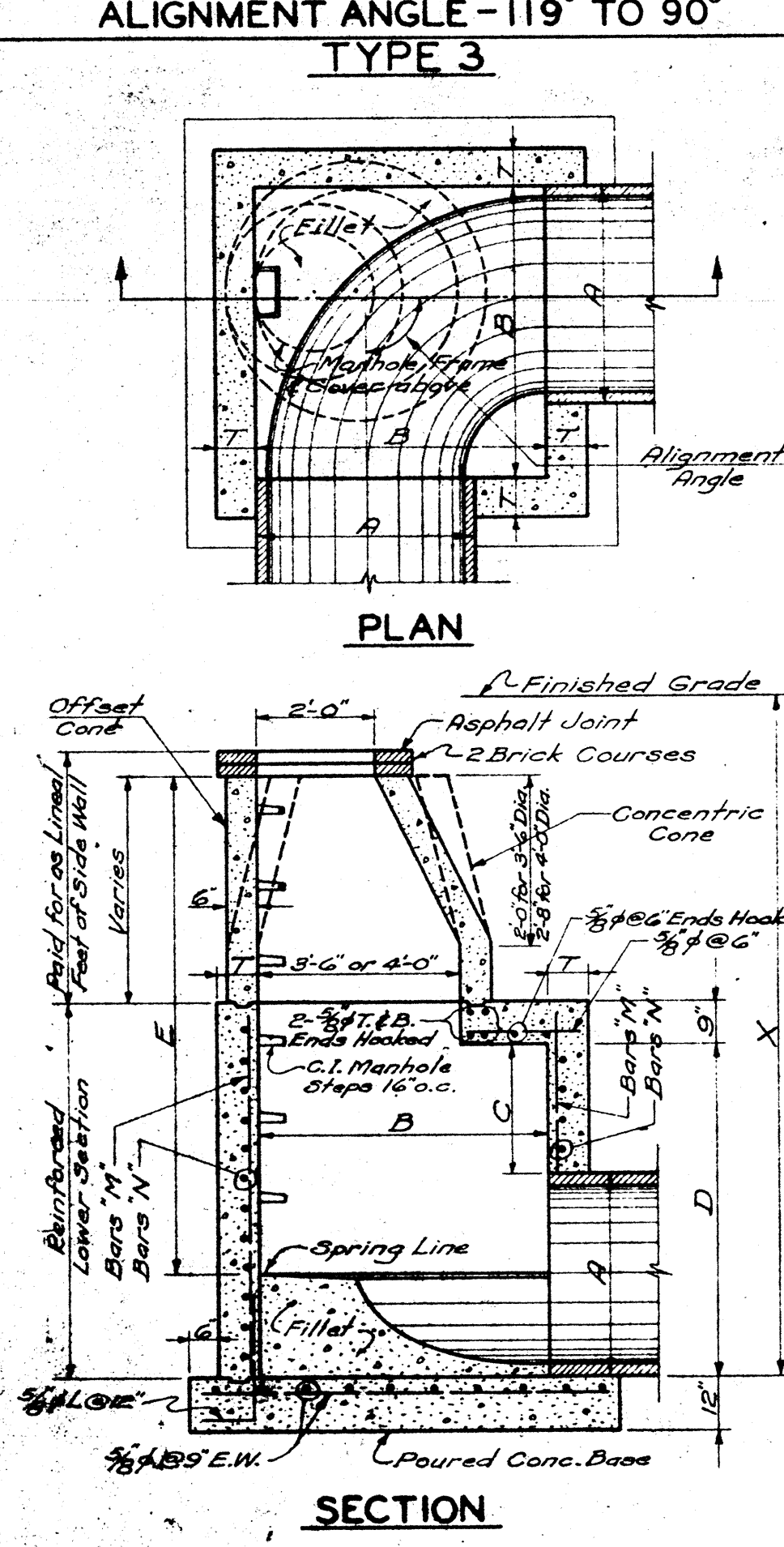
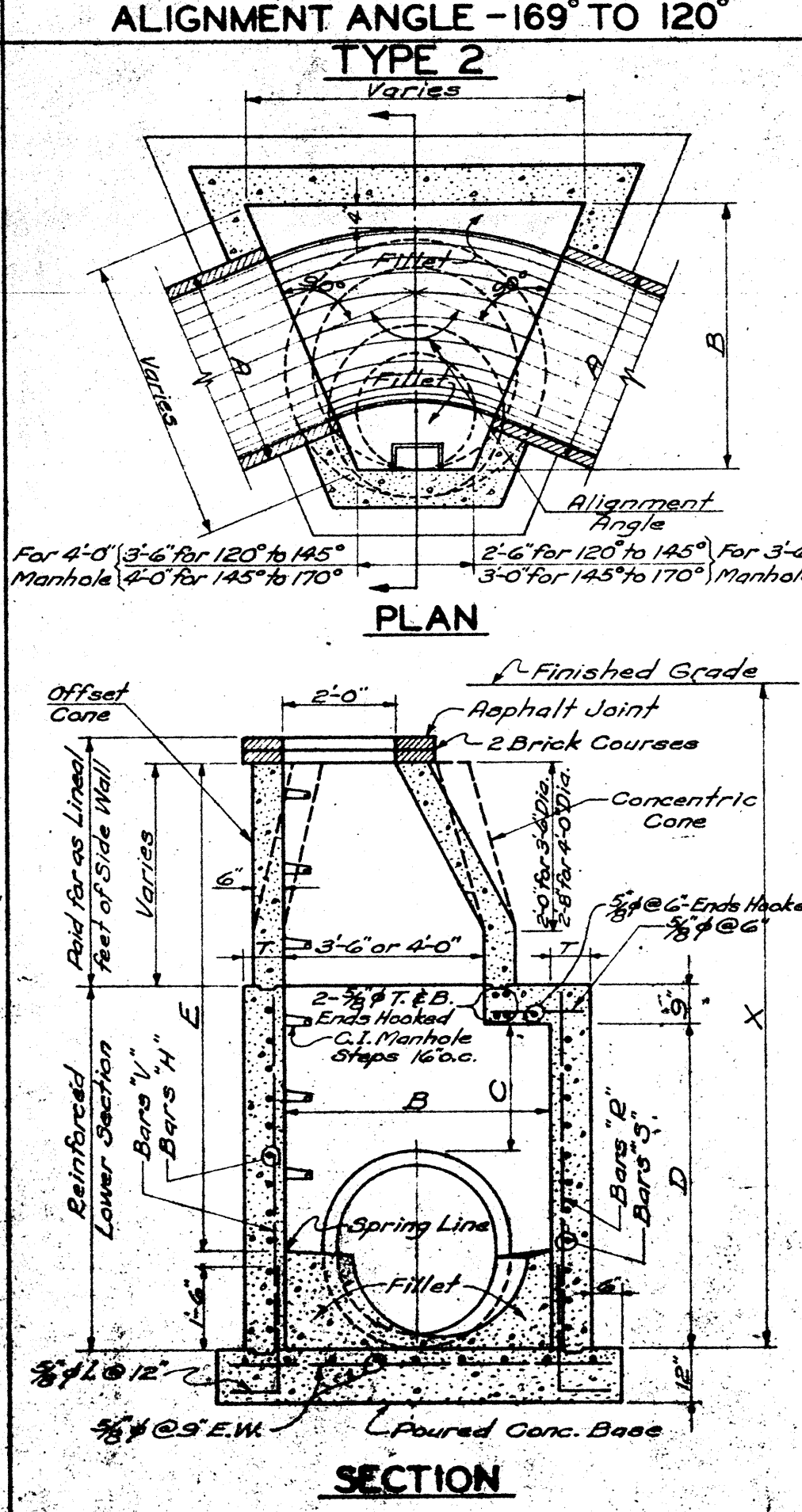
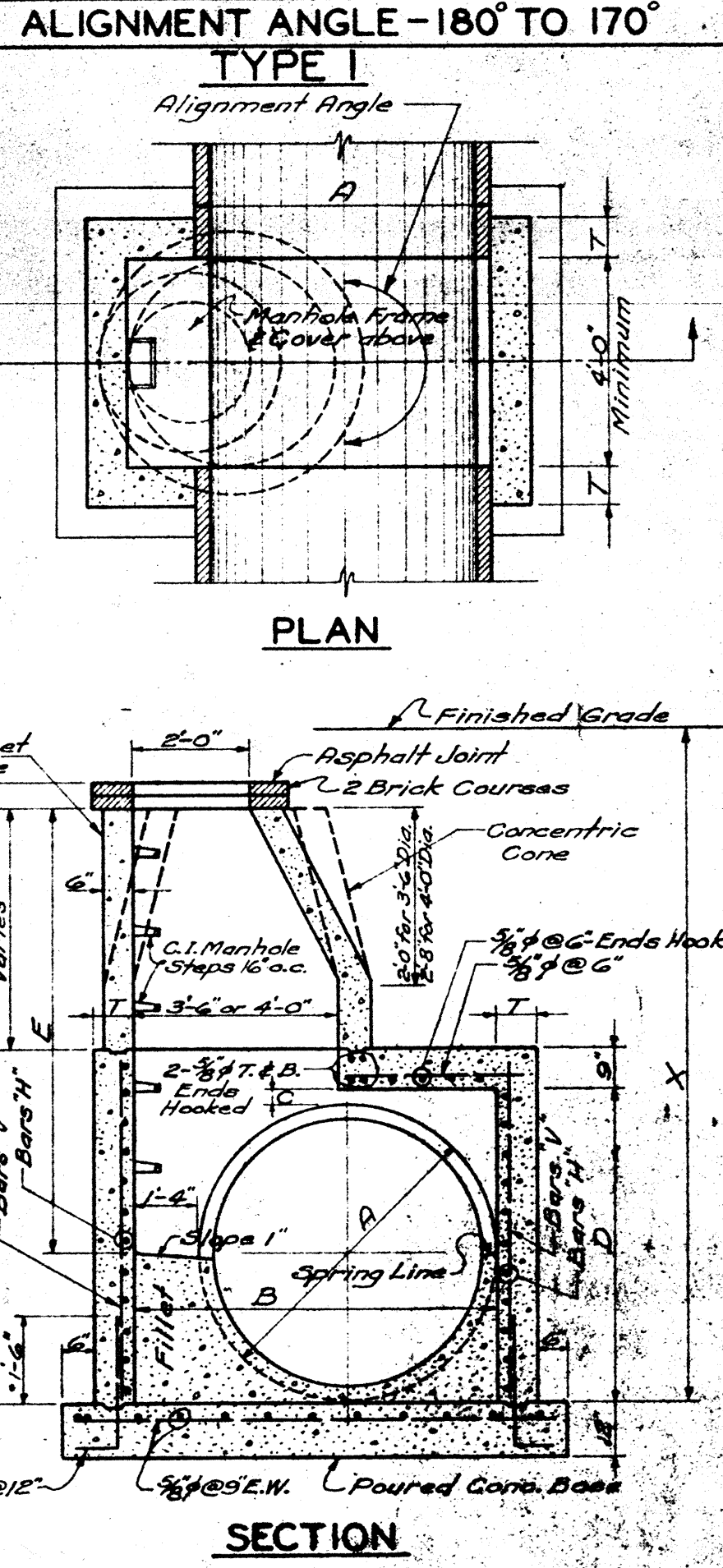


# STANDARD MANHOLES

FOR SEWERS 36" DIAMETER & SMALLER



FOR SEWERS 42" INTERNAL DIAMETER AND LARGER



CONSTRUCTION DATA ALL MANHOLES

**DIMENSIONS**

A = Outside Diameter of Largest Pipe  
 B = A + 1'-4" (Minimum = 4'-0")  
 C = Not less than 6" above highest entering pipe.  
 D = Minimum 5'-0"  
 E = Varies (See Note below)

**CONSTRUCTION NOTES**

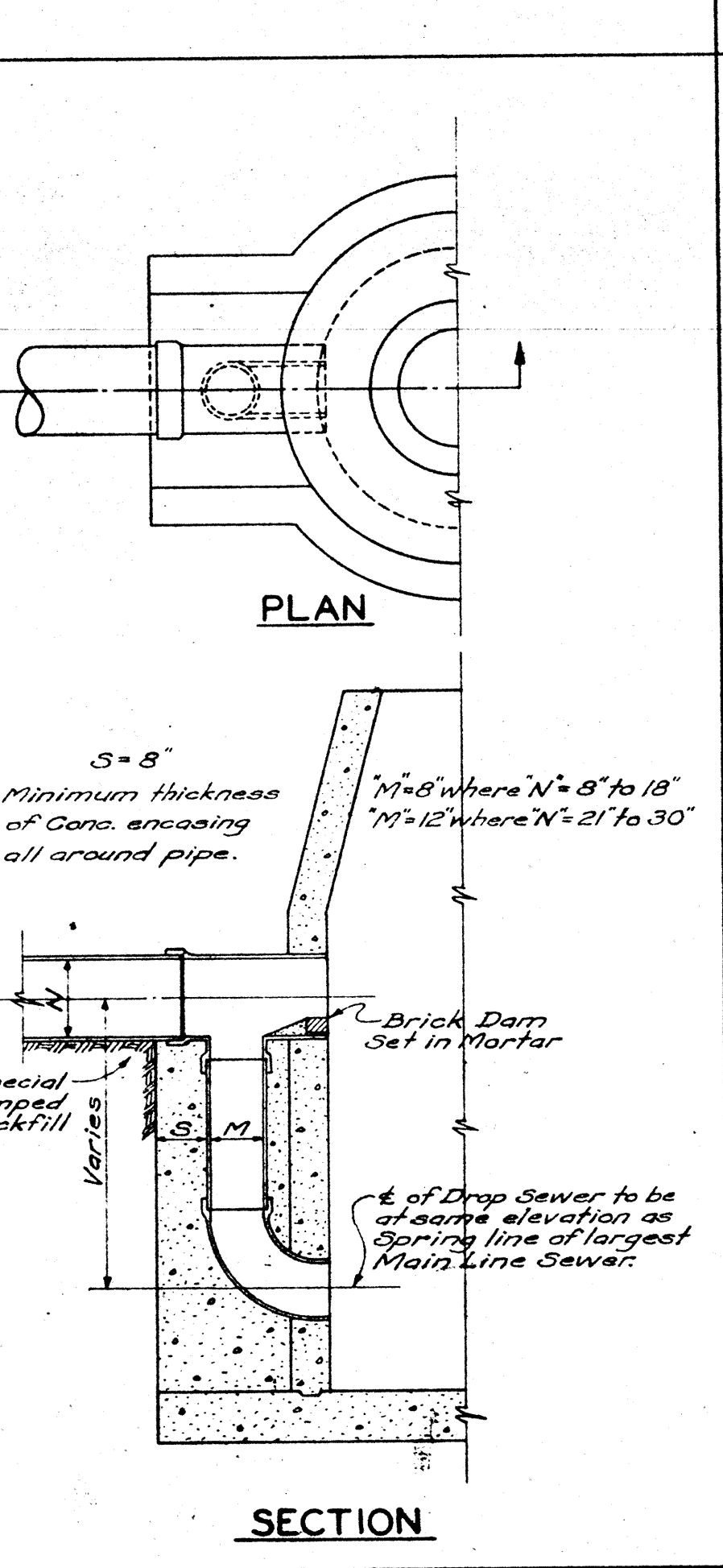
Cylindrical and Conical Sections of all Manholes shall be constructed of either monolithic concrete, precast concrete rings, concrete blocks, or sewer brick as designated in the Project Specifications of the Contract Document.

Concentric cones may be used on Precast Concrete and Concrete Block Units. Offset cones shall be used on Brick and Monolithic Concrete Units. Cylindrical section may be either 3'-6" or 4'-0" diameter at Contractor's Option on 42" Dia. Sewers or larger.

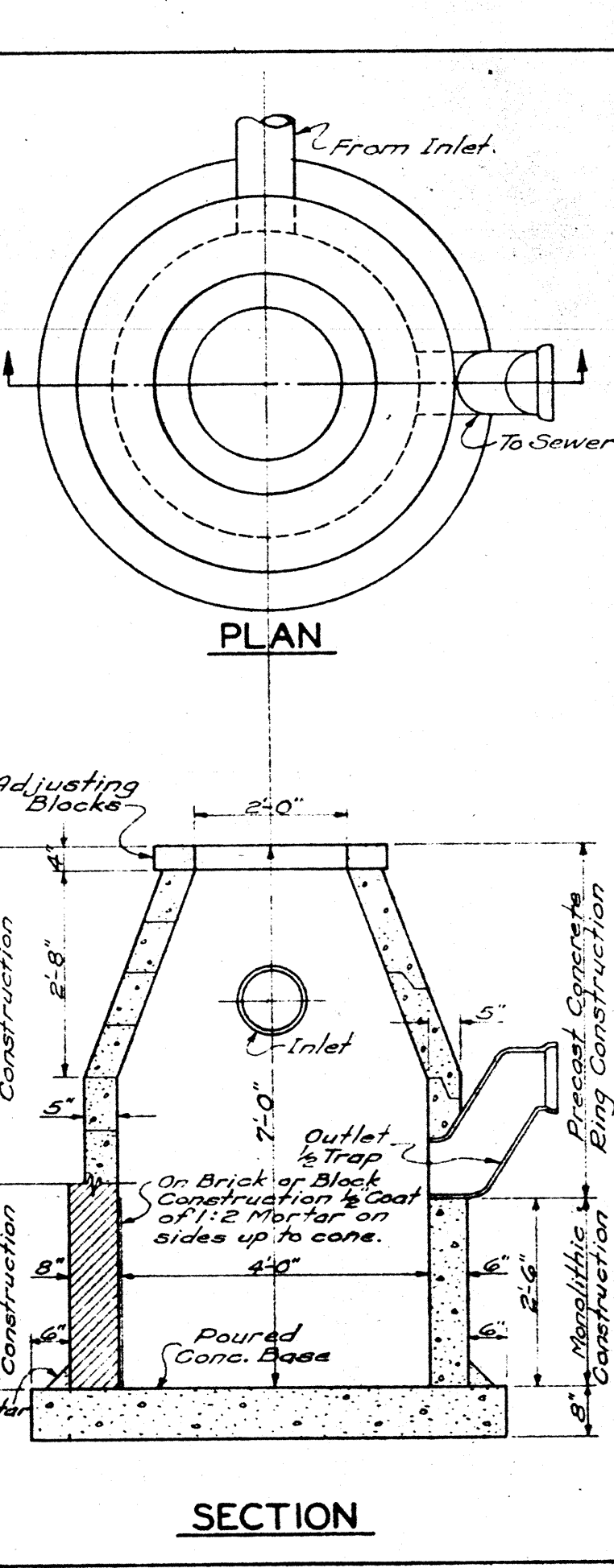
Dimension "E" varies. When less than 5 feet omit cone and extend cylindrical manhole sidewall section to an elevation 8 inches below bottom of adjusting Brick Construct 8 inch thick concrete slab on top of cylindrical section reinforced with #4 bars as shown. Provide 24" inch diameter opening in slab for manhole frame and brick adjustment rings as on coned manholes.

Item	For "X" Greater Than 15 Feet	For "X" Less Than 15 Feet
Dimension "T"	10"	8"
Bars "H"	#4 @ 8" Hooked	#4 @ 8" Hooked
Bars "V"	#4 @ 6" Hooked	#4 @ 6" Hooked
Bars "E"	#4 @ 8" Hooked	#4 @ 8" Hooked
Bars "S"	#4 @ 8" Hooked	#4 @ 8" Hooked
Bars "M"	#4 @ 8" Hooked	#4 @ 8" Hooked
Bars "N"	#4 @ 8" Hooked	#4 @ 8" Hooked

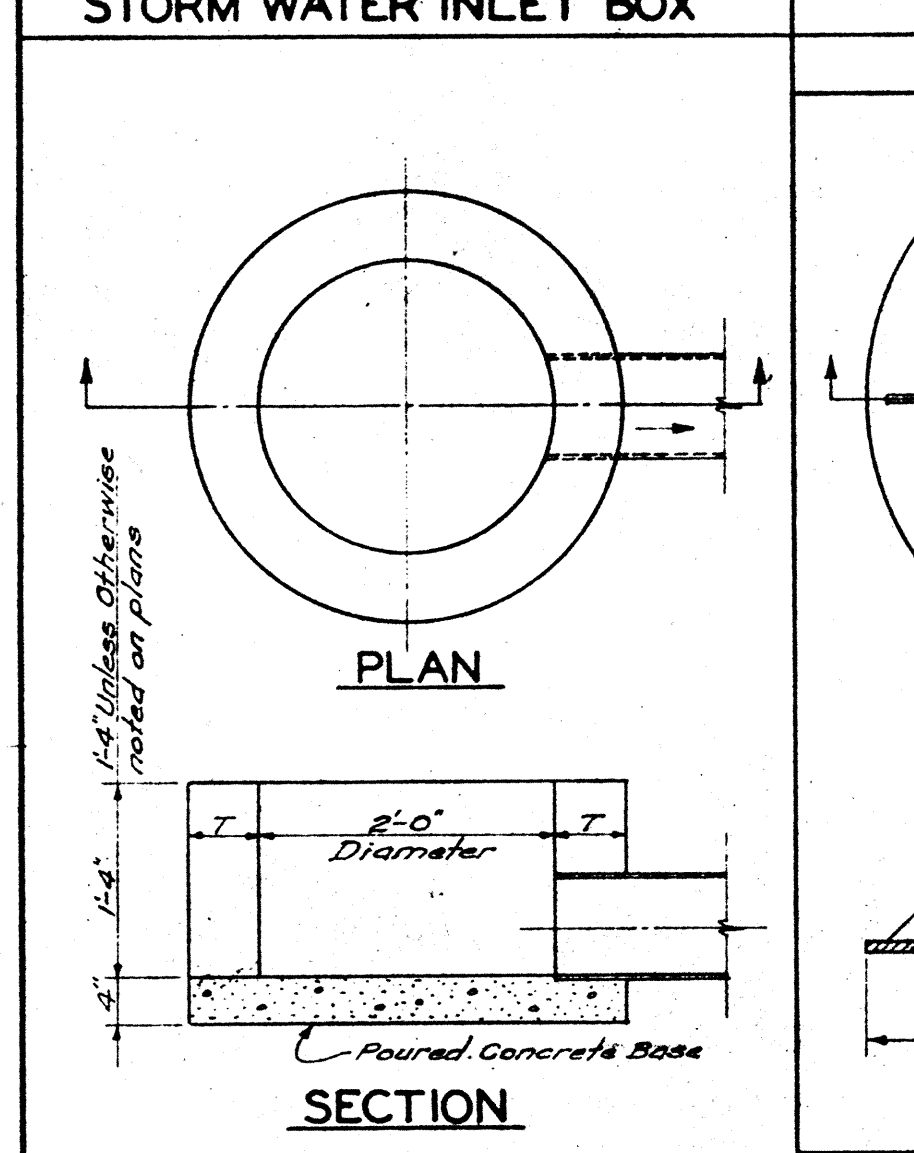
DROP PIPE FOR STANDARD MANHOLES



STANDARD CATCHBASIN

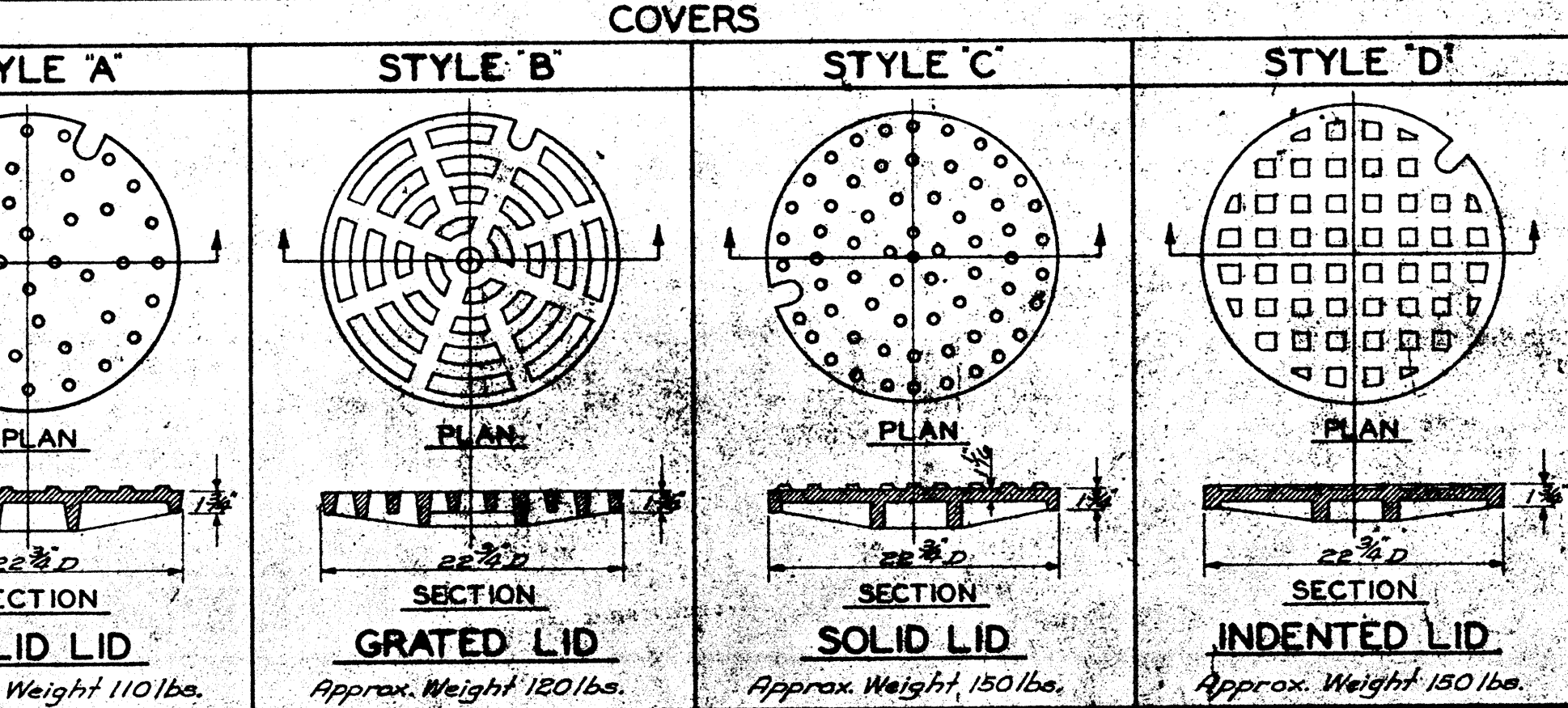
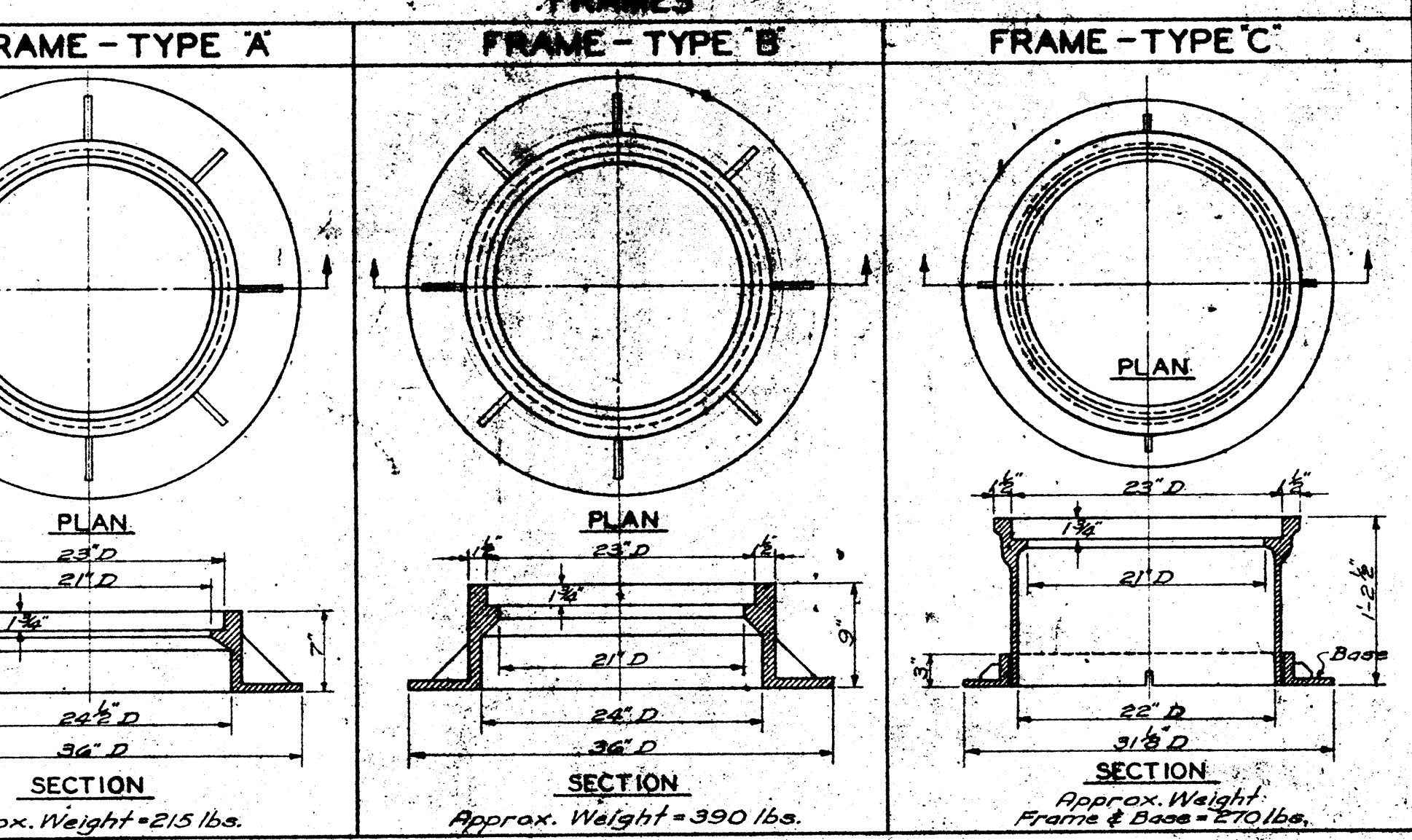


STANDARD STORM WATER INLET BOX

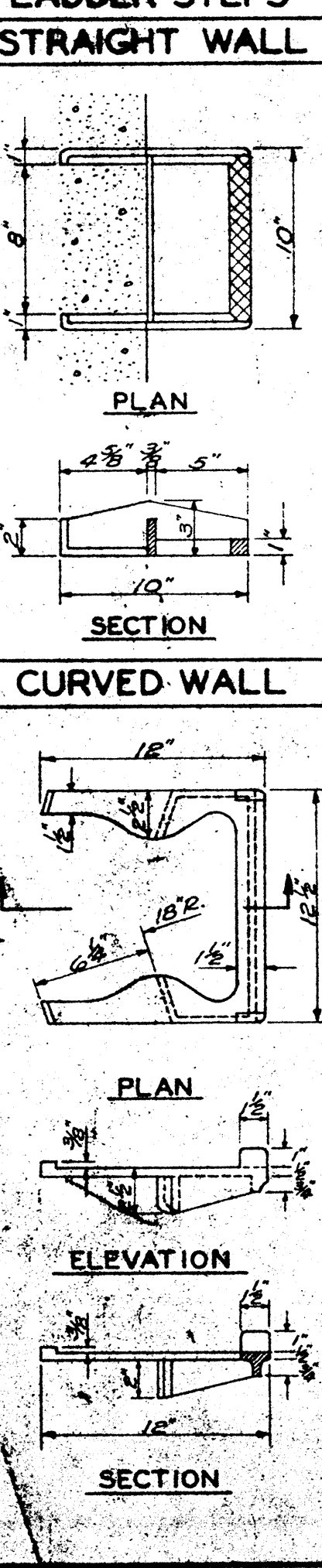


ALTERNATE MATERIALS FOR WALLS	T
Precast Reinforced Concrete Rings	5"
Precast Segmental Concrete Blocks	5"
Monolithic Concrete	6"
Common Brick, Grade "A"	6"

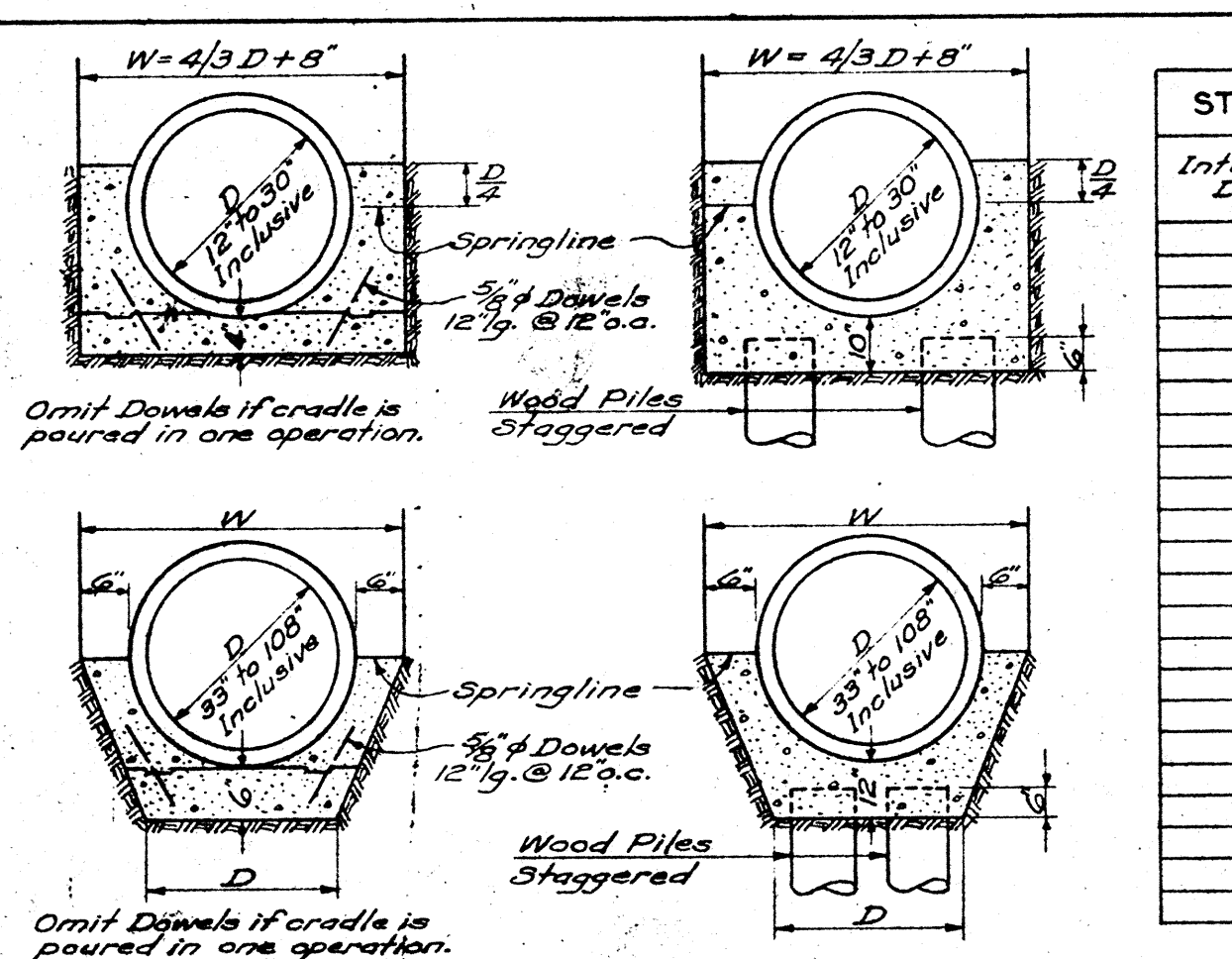
STANDARD MANHOLE & CATCHBASIN FRAMES & COVERS



STANDARD LADDER STEPS



CONCRETE CRADLES



STANDARD CRADLE DIMENSIONS & PAYMENT VOLUMES

Internal Pipe Diameter	Width as shown	Payment Volumes of Concrete Cradle in Cubic Yards per Linear Feet of Pipe	
		Without Piling	With Piling
12"	24"	.053	.089
15"	28"	.065	.108
18"	32"	.078	.127
21"	36"	.092	.147
24"	40"	.107	.169
27"	44"	.122	.189
30"	48"	.142	.216
33"	52"	.159	.239
36"	56"	.178	.264
42"	68"	.207	.304
48"	80"	.242	.352
54"	92"	.282	.409
60"	104"	.324	.455
66"	116"	.362	.503
72"	128"	.401	.553
78"	140"	.443	.604
84"	152"	.487	.657
90"	164"	.539	.719
96"	176"	.579	.769
102"	188"	.629	.829
108"	200"	.679	.889

CONCRETE CRADLES

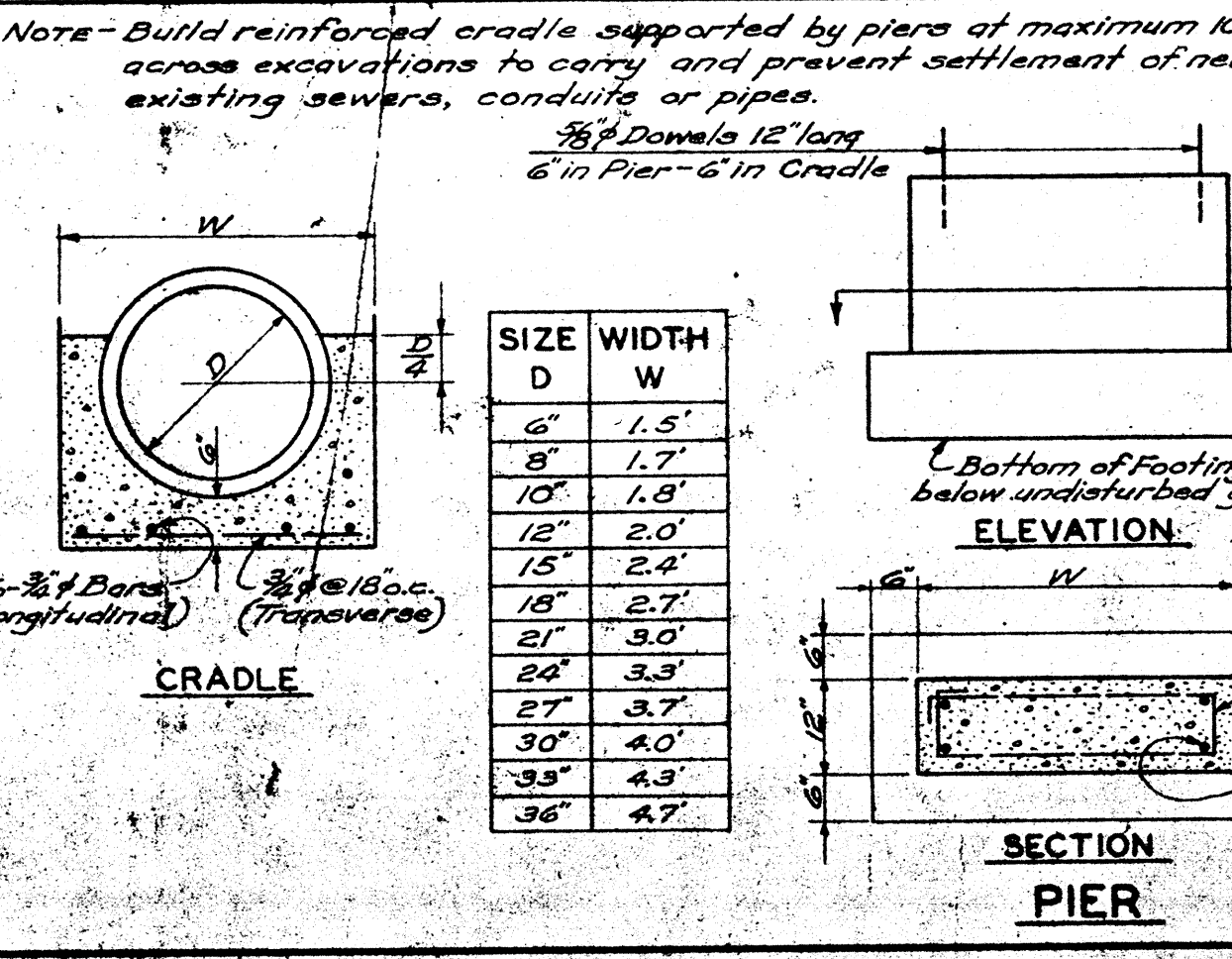
**NOTES**

Concrete cradles shall be furnished and placed at locations shown on the contract drawings or at locations ordered by the Engineer. Concrete cradles shall be placed from the outside surface of the pipe to the undisturbed sides of the trench with the minimum cross section as shown in Sections and dimensions for each pipe size as shown in table.

When a contract provides for payment for concrete cradles at a unit price per cubic yard, allowance for payment will be made on the basis of the installed linear feet of each pipe size cradled multiplied by the volume in cubic yards per linear foot as shown in the table regardless of the concrete volume actually placed.

When a contract provides for payment for the installation of a sewer including cradles, the complete cost of cradles shall be included in the unit bid and contract price for the sewer and no extra allowance will be made for furnishing and placing concrete cradles.

SPECIAL REINFORCED CRADLE



THIS CONTRACT INCLUDES ITEMS CHECKED IN FOLLOWING TABULATIONS

Item	Quantity	Notes
1	Manhole for Sewers 36" Dia. & Smaller	✓
2	Manhole for Sewers 42" Dia. & Larger 180° to 170°	✓
3	Manhole for Sewers 42" Dia. & Larger 169° to 120°	✓
4	Manhole for Sewers 42" Dia. & Larger 119° to 90°	✓
5	Drop Pipe for Standard Manholes	✓
6	Standard Catchbasin	✓
7	Standard Storm Water Inlet Box	✓
8	Manhole Frame - Type 'A'	✓
9	Manhole Frame - Type 'B'	✓
10	Manhole Frame - Type 'C'	✓
11	Manhole Covers - Style 'A'	✓
12	Manhole Covers - Style 'B'	✓
13	Manhole Covers - Style 'C'	✓
14	Manhole Covers - Style 'D'	✓
15	Standard Ladder Steps - Straight Wall	✓
16	Standard Ladder Steps - Curved Wall	✓
17	Concrete Cradle - Standard Cradle	✓
18	Concrete Cradle - Special Reinforced Cradle	✓

**JOLIET, ILLINOIS  
INTERCEPTING SEWER**

**SEWER CONSTRUCTION DETAILS**

DRAWN BY: A.W.H.	<b>CONSOER, TOWNSEND &amp; ASSOCIATES</b>	SCALE:
DATE: CHECKED BY:	CONSULTING ENGINEERS CHICAGO, ILL.	REVISED:
APPROVED BY:		SHEET NO. 8 OF 8 SHEETS