

WHITMAN, REOUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
CHIEF ENGINEER
DATE: March 15, 1964

CONTRACT NO. 235

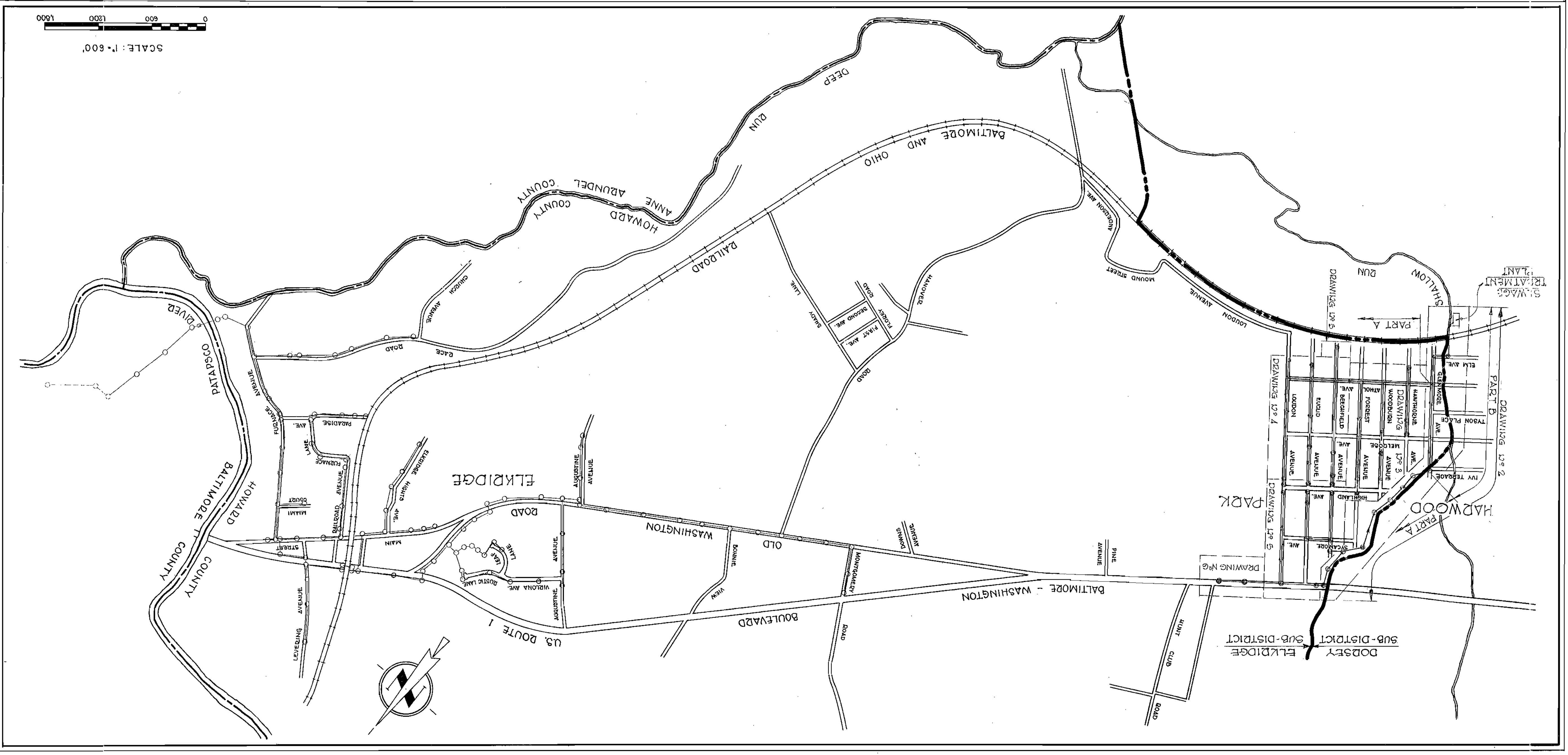
LOCATION MAP

ELKRIDGE SUB - DISTRICT

DRAWING NO. 12
OF 12
SCALE AS SHOWN

Contract No 23-5

HOWARD COUNTY METROPOLITAN COMMISSION SEWER MAIN EXTENSIONS CONTRACT 235 ELKRIDGE SUB - DISTRICT



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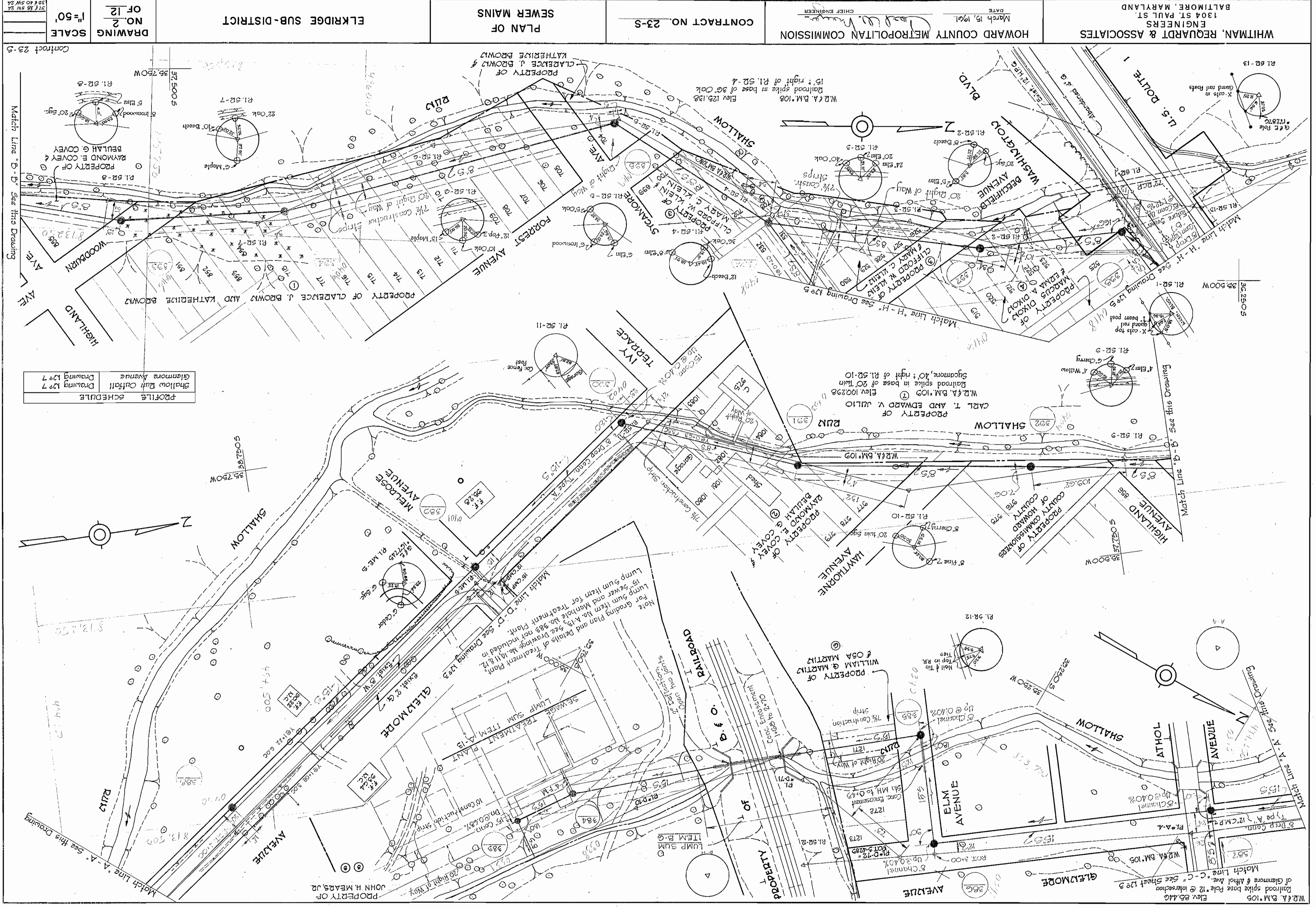
CONTRACT NO. 23-5

PLAN OF
SEWER MAINS

ELKRIDGE SUB-DISTRICT

DRAWING NO. 2
SCALE 1"=50'

30 JUL 1964
AS BUILT



PROFILE SCHEDULE
Shallow Bath Cutoff
Drawing No. 7

Match Line "A-A" See this Drawing
Match Line "B-B" See this Drawing
Match Line "C-C" See Sheet 123
W.D. & A. B.M. 105
Elev. 85.410
Railroad spike base Pole 12 @ intersection
of Glendome & Athol Ave.
Match Line "C-C" See Sheet 123

Match Line "D-D" See this Drawing
Match Line "E-E" See this Drawing
Match Line "F-F" See this Drawing
Match Line "G-G" See this Drawing
Match Line "H-H" See Drawing 123
Match Line "I-I" See Drawing 123
Match Line "J-J" See Drawing 123
Match Line "K-K" See Drawing 123
Match Line "L-L" See Drawing 123
Match Line "M-M" See Drawing 123
Match Line "N-N" See Drawing 123
Match Line "O-O" See Drawing 123
Match Line "P-P" See Drawing 123
Match Line "Q-Q" See Drawing 123
Match Line "R-R" See Drawing 123
Match Line "S-S" See Drawing 123
Match Line "T-T" See Drawing 123
Match Line "U-U" See Drawing 123
Match Line "V-V" See Drawing 123
Match Line "W-W" See Drawing 123
Match Line "X-X" See Drawing 123
Match Line "Y-Y" See Drawing 123
Match Line "Z-Z" See Drawing 123

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BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
DATE: March 15, 1961
CHIEF ENGINEER: *[Signature]*

CONTRACT NO. 23-5
PLAN OF SEWER MAINS

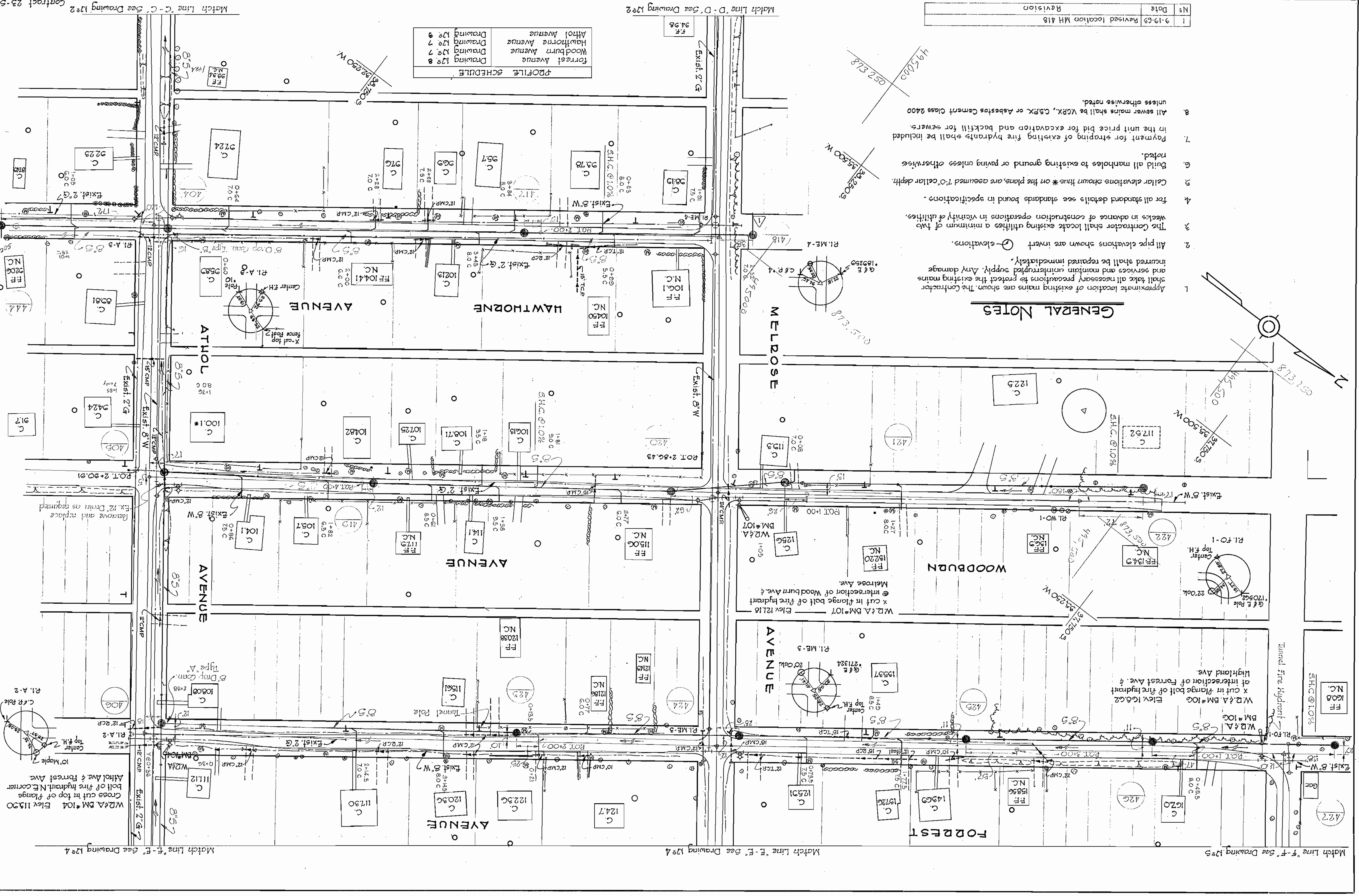
ELKRIDGE SUB-DISTRICT

DRAWING SCALE: 1"=50'
NO. 3 OF 12

30 JUL 1964
FB 251C
AS BUILT

No	Date	Revision
1	3-13-63	Revised location MH 418

- GENERAL NOTES**
1. Approximate location of existing mains are shown. The Contractor shall take all necessary precautions to protect the existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately.
 2. All pipe elevations shown are invert elevations.
 3. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
 4. For all standard details see standards bound in specifications.
 5. Cellar elevations shown thus * on the plans, are assumed 1'-0" cellar depth.
 6. Build all manholes to existing ground or paving unless otherwise noted.
 7. Payment for strapping of existing fire hydrants shall be included in the unit price bid for excavation and backfill for sewers.
 8. All sewer mains shall be VCP, C.S.P. or Asbestos Cement Class 2400 unless otherwise noted.



Match Line F-F - See Drawing 125
Match Line E-E - See Drawing 124
Match Line D-D - See Drawing 122
Match Line C-C - See Drawing 123

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HOWARD COUNTY METROPOLITAN COMMISSION
DATE March 15, 1961
CHIEF ENGINEER

CONTRACT NO. 23-5

PLAN OF
SEWER MAINS

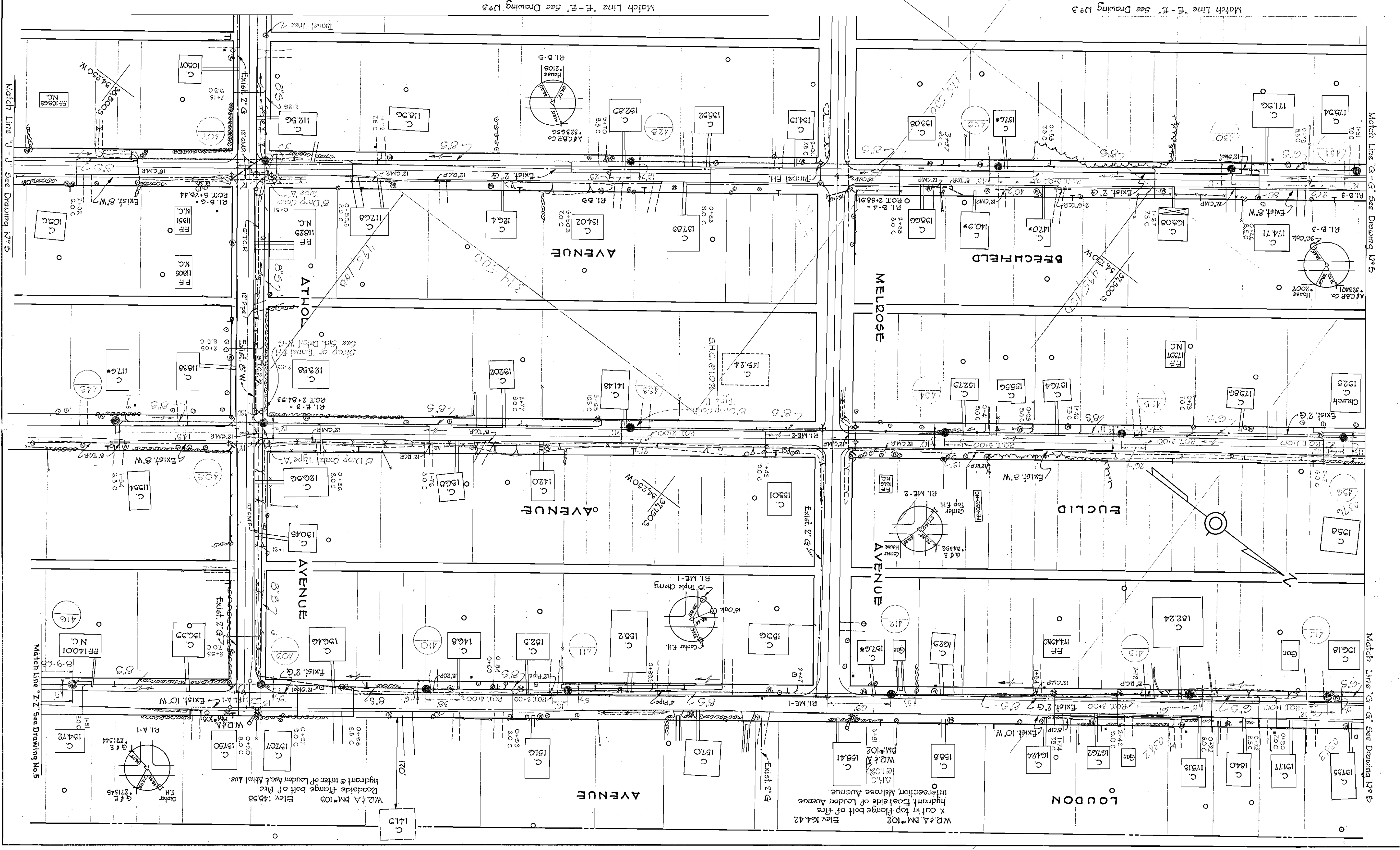
ELKRIDGE SUB-DISTRICT

DRAWING NO. 4
OF 12
SCALE 1"=50'

AS BUILT
30 JULY 1964
FB 2529, 2538
19 SW 23, 24

PROFILE SCHEDULE

London Avenue	Drawing No. 8
Euclid Avenue	Drawing No. 8
Beechfield Avenue	Drawing No. 9
Athol Avenue	Drawing No. 9



Match Line "J" - "J" See Drawing No. 5

Match Line "Z-Z" See Drawing No. 5

Match Line "G-G" See Drawing No. 3

Match Line "G-G" See Drawing No. 5

Match Line "E-E" See Drawing No. 3

Match Line "E-E" See Drawing No. 3

W.R. & A. BM #102
Elev. 164.42
X cut in top flange bolt of fire hydrant, East side of London Avenue.
Intersection, Melrose Avenue.

W.R. & A. BM #103
Elev. 145.58
Hydrant @ Inter. of London Ave. & Athol Ave.
Roadside flange bolt of fire hydrant

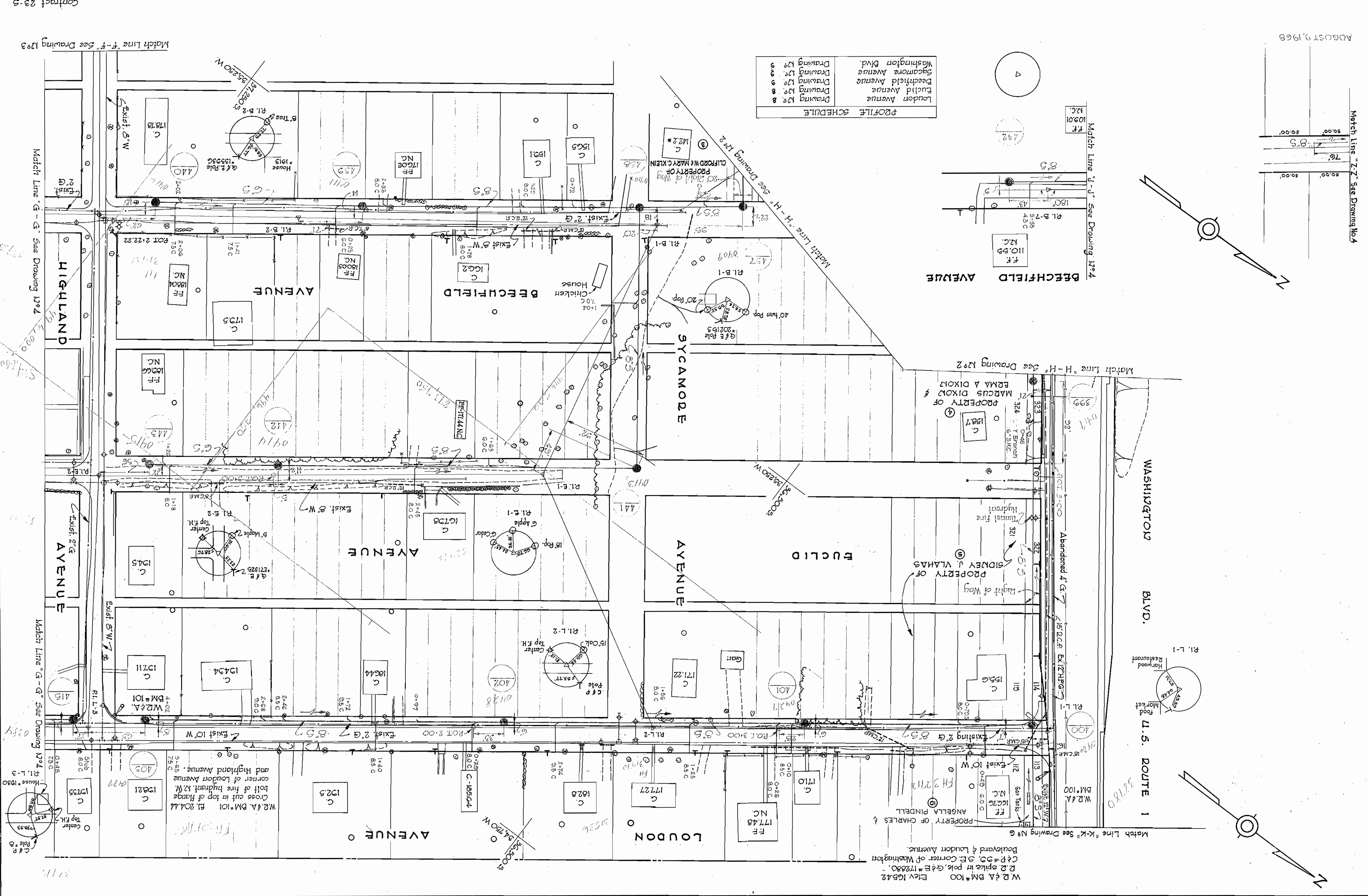
WHITMAN, REOUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
DATE: March 15, 1961
CHIEF ENGINEER: *[Signature]*

CONTRACT NO. 23-S
PLAN OF
SEWER MAINS

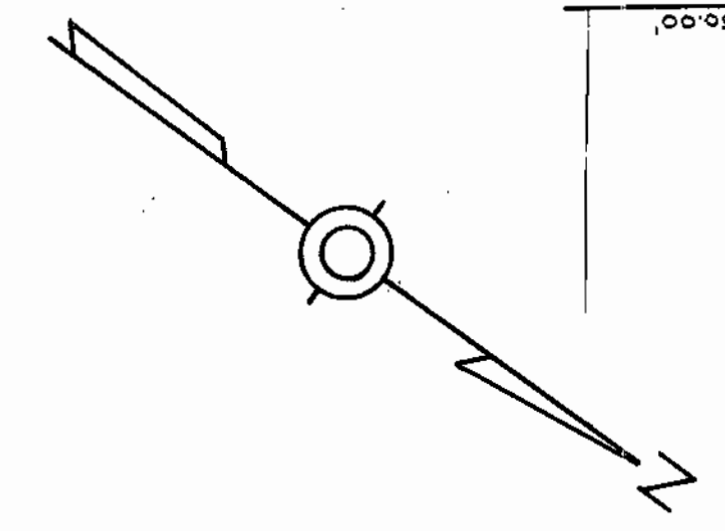
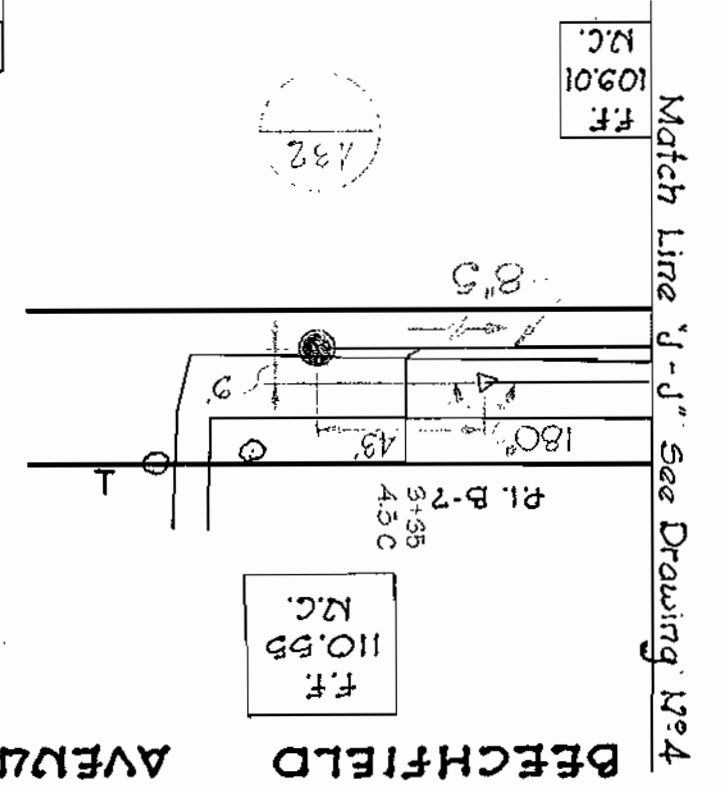
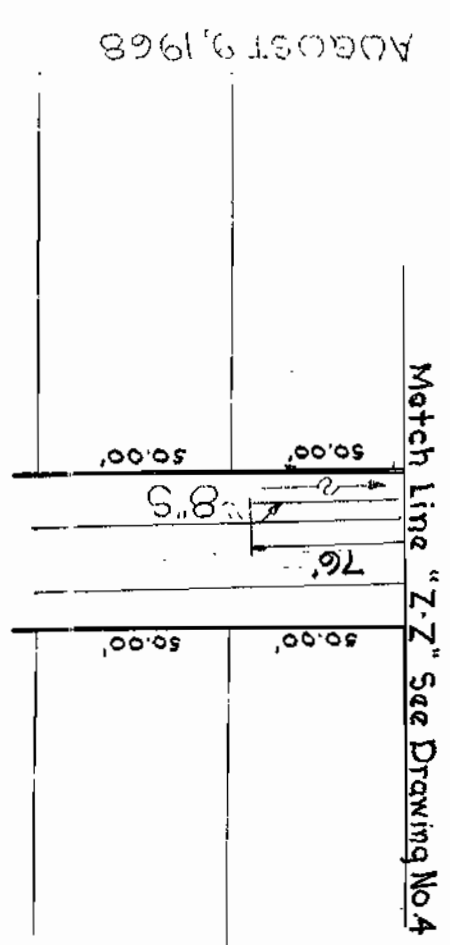
ELKRIDGE SUB-DISTRICT
NO. 5
OF 12
DRAWING SCALE
1"=50'

AS BUILT
30 JUL 1964
F.B. 2529, 2536, 2540, 2552
31 FW 24



PROFILE SCHEDULE

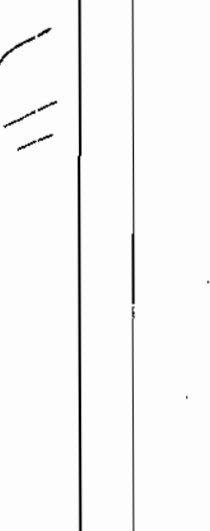
London Avenue	Drawing No. 8
Euclid Avenue	Drawing No. 8
Beechfield Avenue	Drawing No. 8
Sacamore Avenue	Drawing No. 8
Washington Blvd.	Drawing No. 9
	Drawing No. 9



W.D. & A. BM#100 Elev 165.42
 E.P.#20, 3E Corner of Washington
 Boulevard & Loudon Avenue.

W.D. & A. BM#101 El. 204.44
 Cross cut in top of flange
 bolt of fire hydrant, NW
 corner of Loudon Avenue
 and Highland Avenue.

W.D. & A. BM#101
 El. 204.44
 Cross cut in top of flange
 bolt of fire hydrant, NW
 corner of Loudon Avenue
 and Highland Avenue.



W.D. & A. BM#101
 El. 204.44
 Cross cut in top of flange
 bolt of fire hydrant, NW
 corner of Loudon Avenue
 and Highland Avenue.

WS 235/6

W. O. 5108-2

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BALTIMORE, MARYLAND

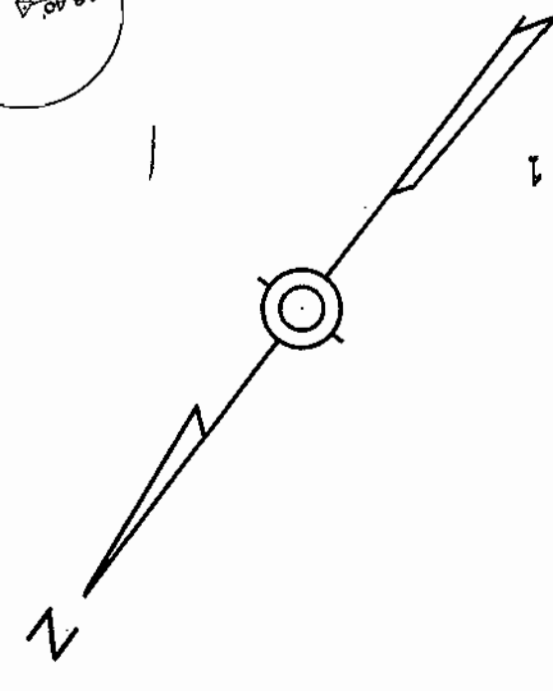
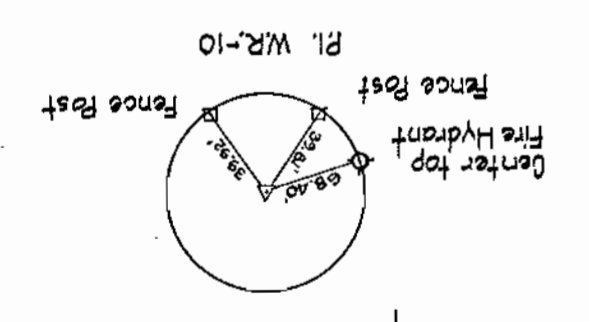
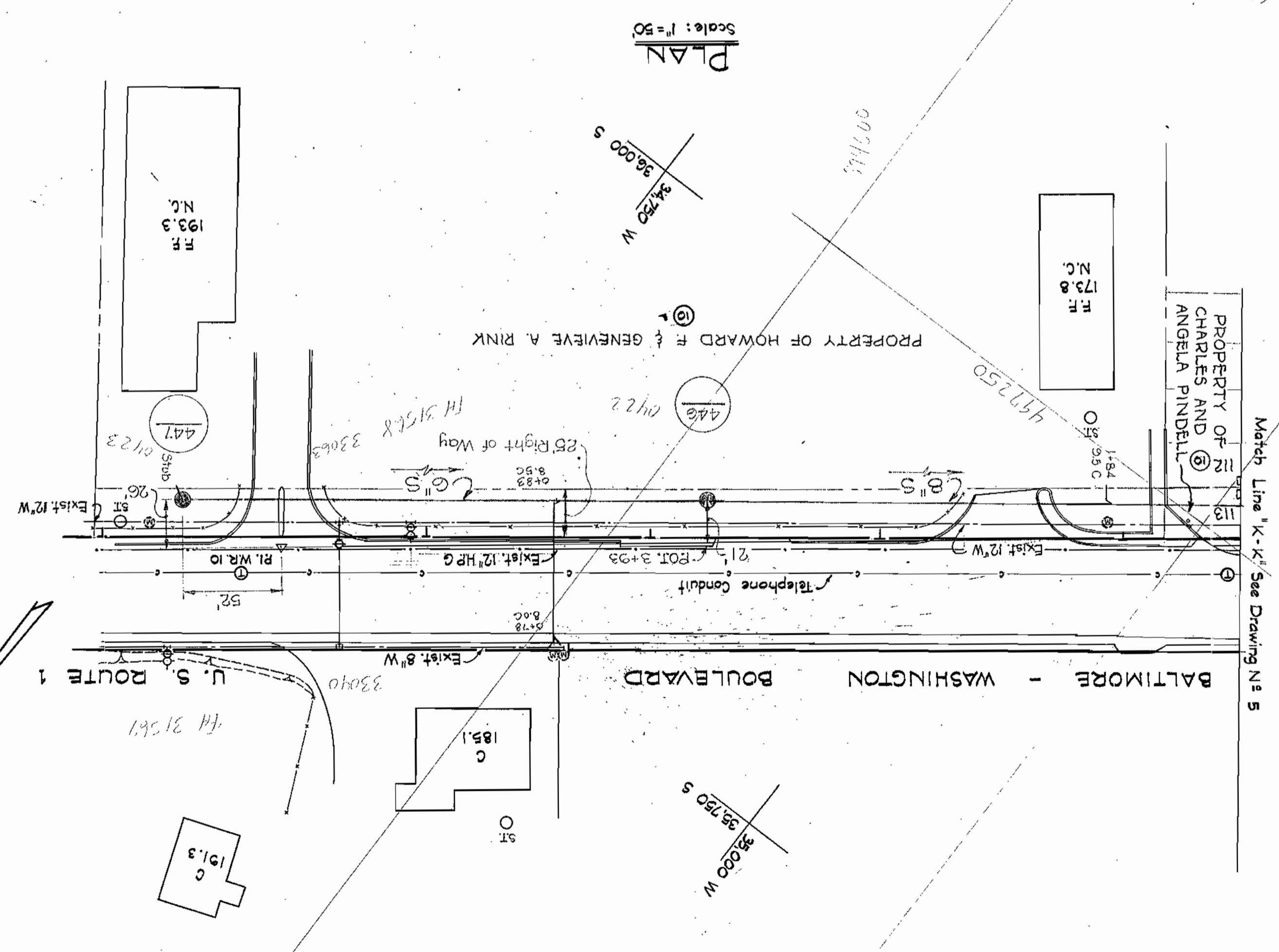
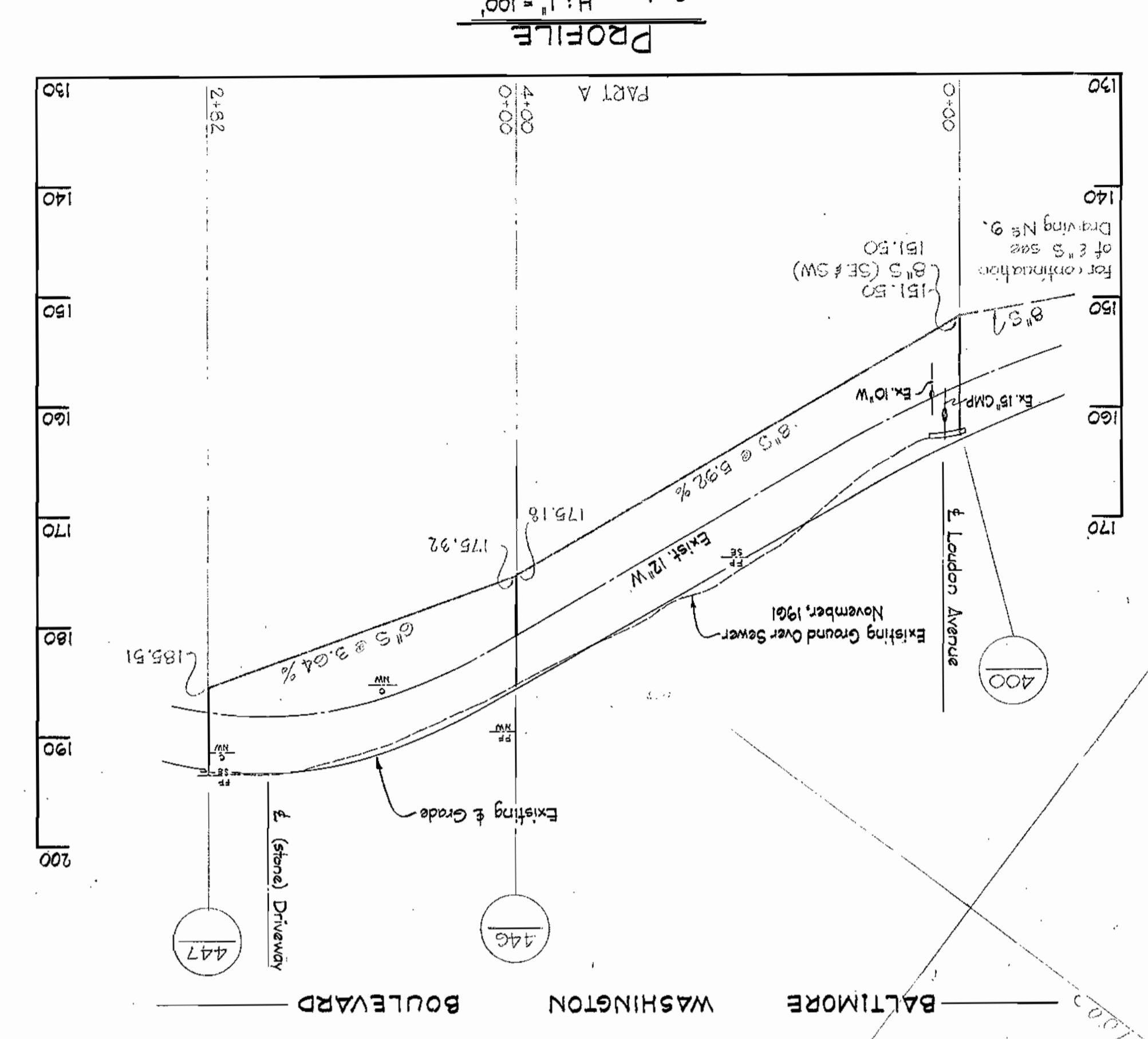
HOWARD COUNTY METROPOLITAN COMMISSION
DATE: Jan. 21, 1963
CHIEF ENGINEER

CONTRACT NO. 23-5
PLAN AND PROFILE
OF SEWER MAINS

ELKRIDGE SUB-DISTRICT

DRAWING NO. 6 OF 12
AS SHOWN
FB 2736
30 JUL 1964
AS BUILT

Contract No. 23-5



WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL ST.
 BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
 DATE: March 19, 1961
 CHIEF ENGINEER: *[Signature]*

CONTRACT NO. 23-S

PROFILES OF
 SEWER MAINS

ELKRIDGE SUB-DISTRICT

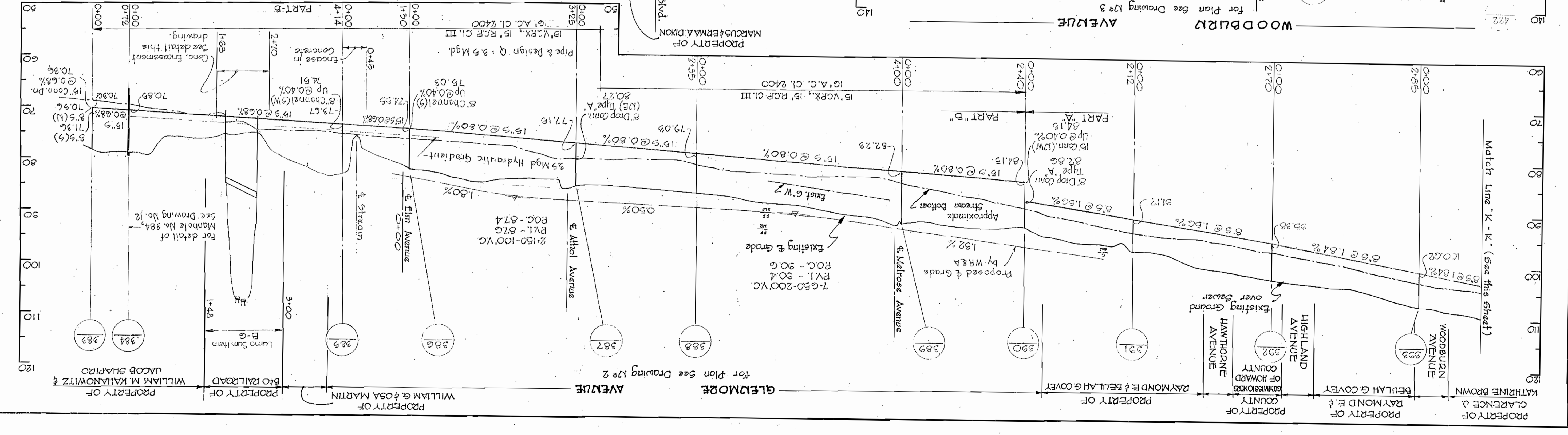
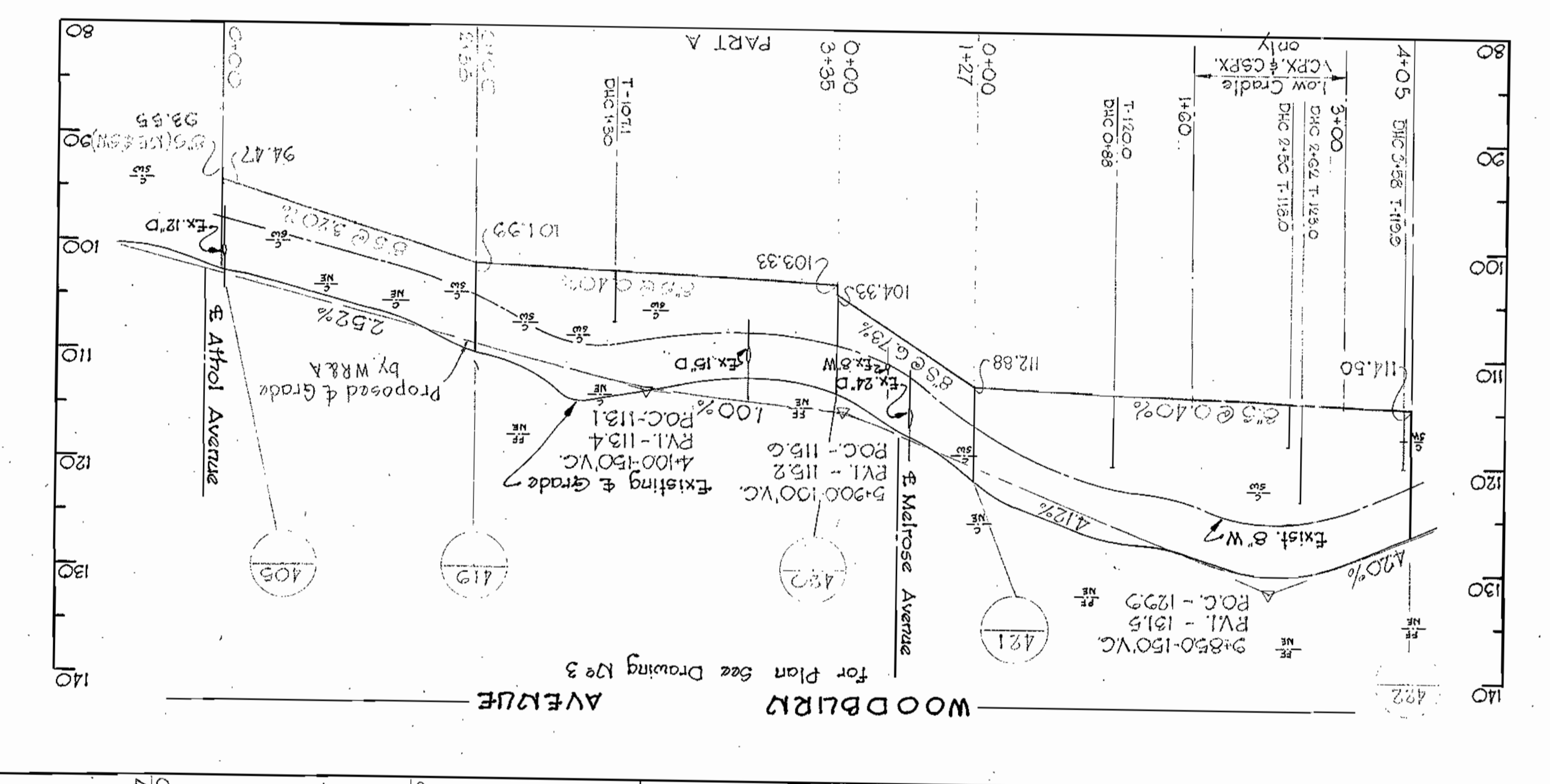
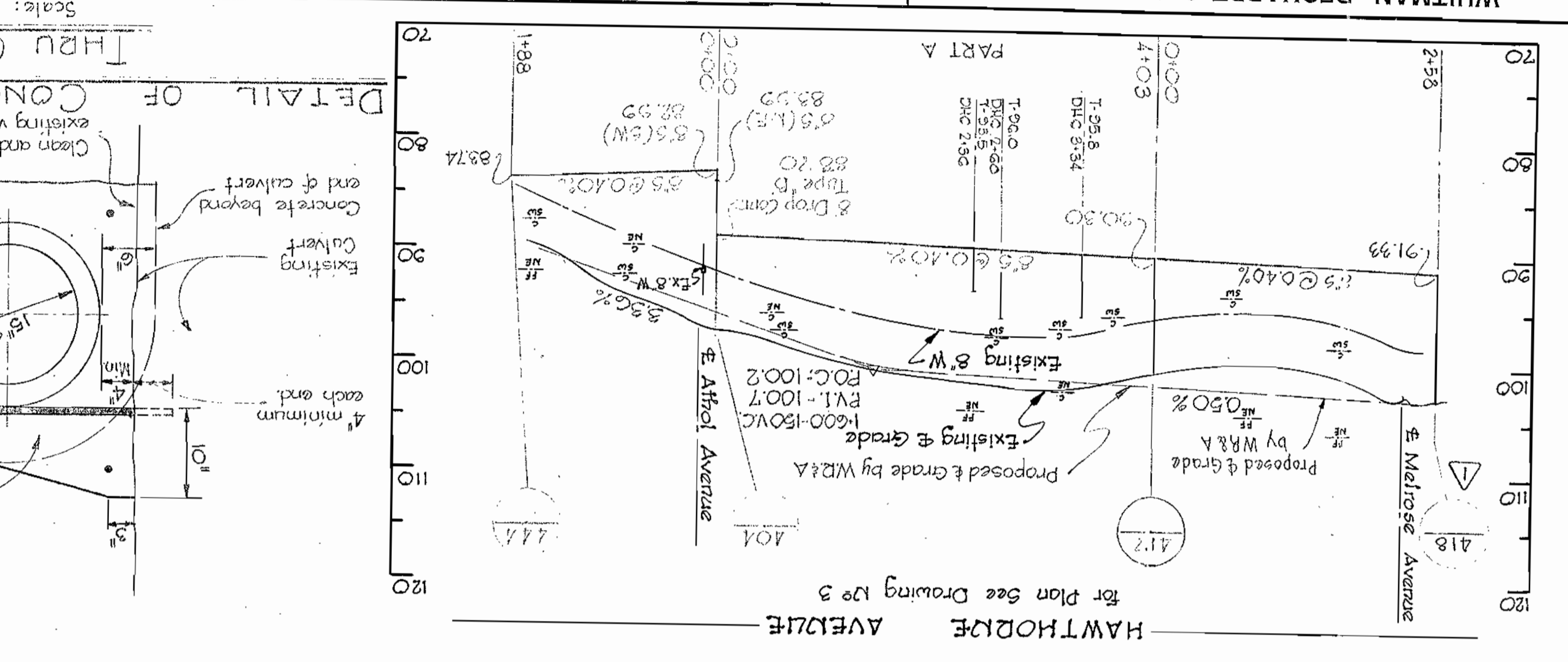
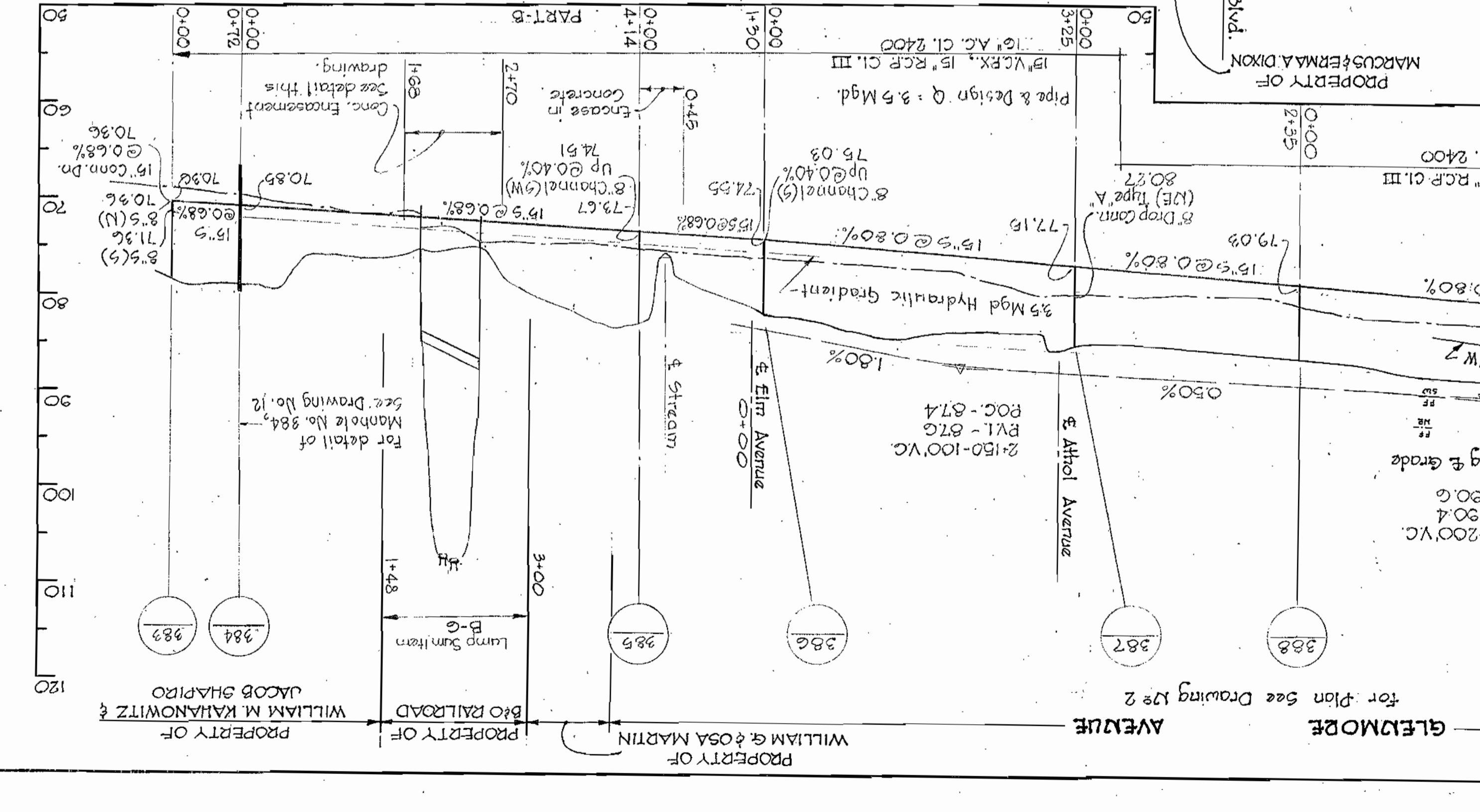
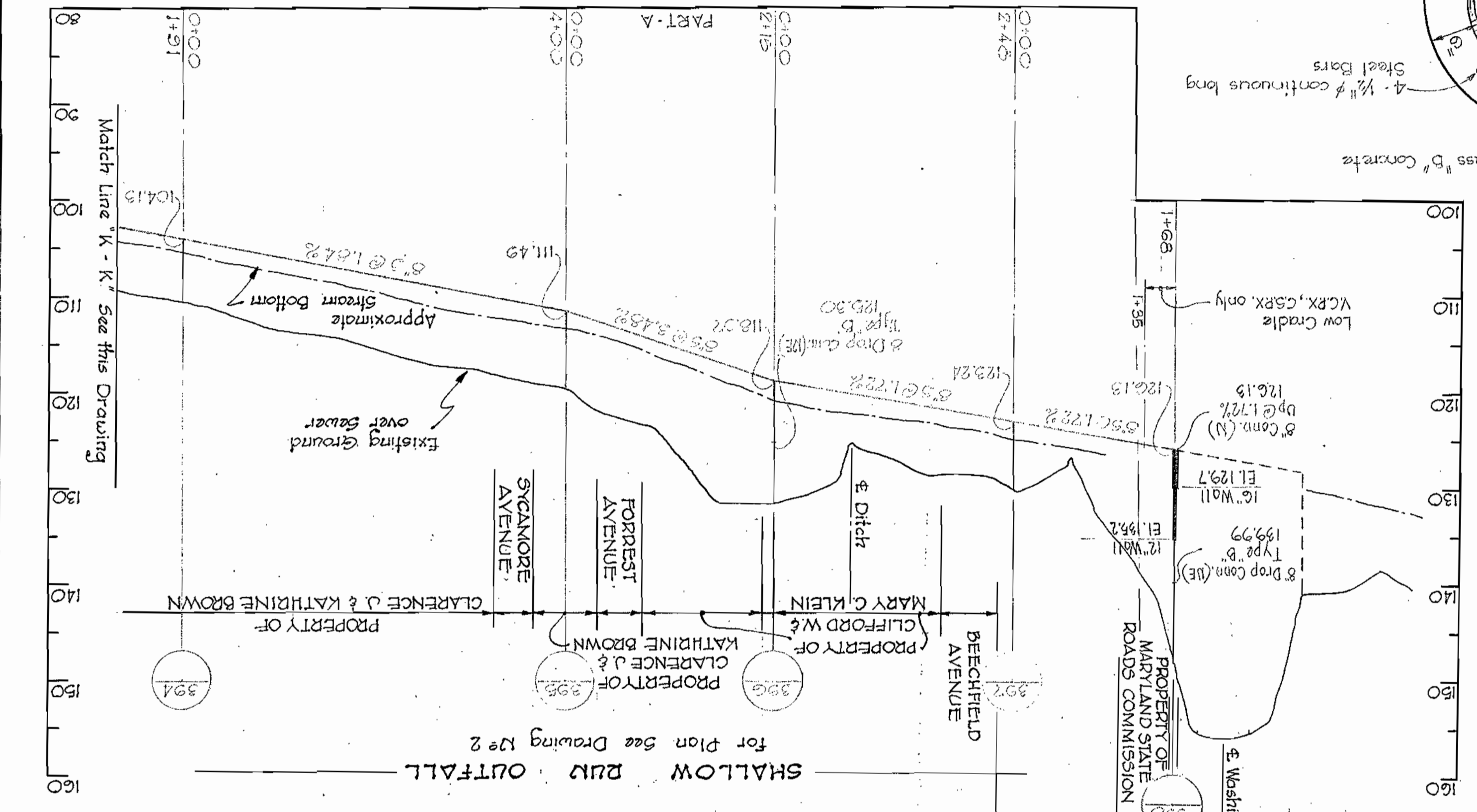
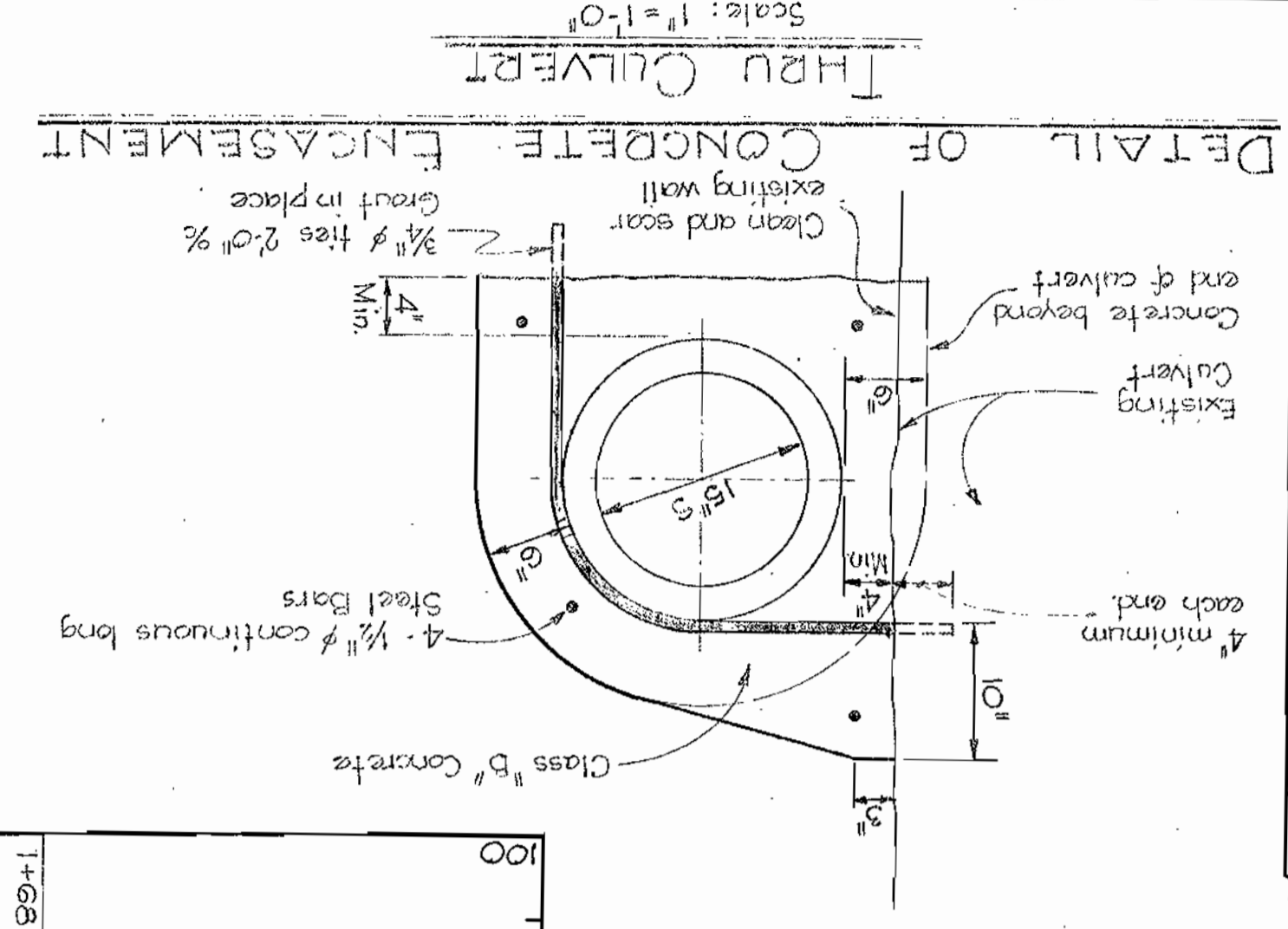
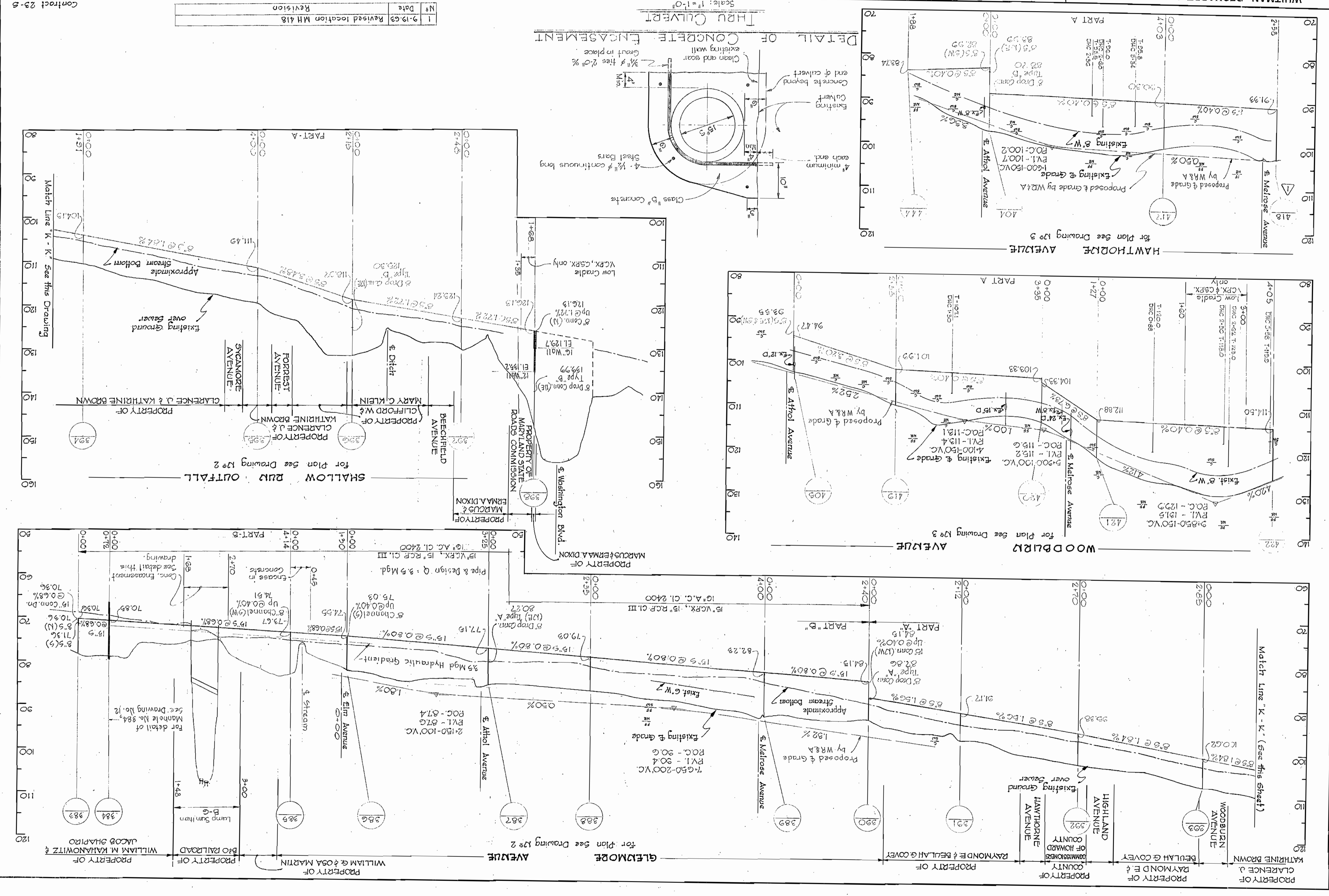
DRAWING NO. 7
 SCALE H:V = 1":100
 V: H = 1":100

W. O. 4929-2

AS BUILT 30 JUL 1964

N#	Date	Revision
1	9-19-63	Revised location MH 418

Contract 23-S



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1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
DATE: March 15, 1961
CHIEF ENGINEER

CONTRACT NO. 23-S

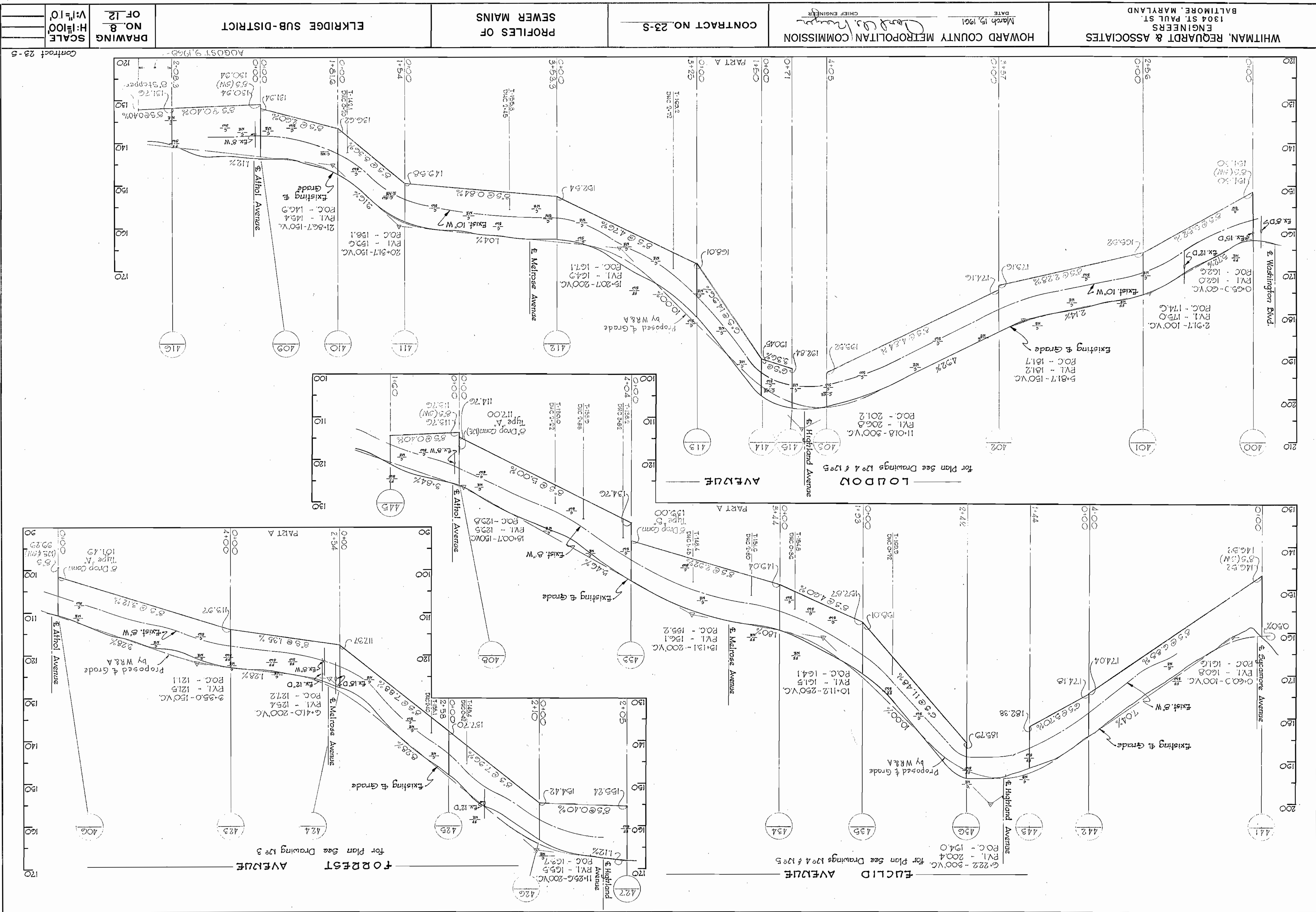
PROFILES OF
SEWER MAINS

ELKRIDGE SUB-DISTRICT

DRAWING NO. 8
SCALE H:V=10:1

W. O. 4929-2

AS BUILT
30 APR 1964



WHITMAN, REQUARDT & ASSOCIATES
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BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
DATE March 15, 1961
CHIEF ENGINEER

CONTRACT NO. 23-S

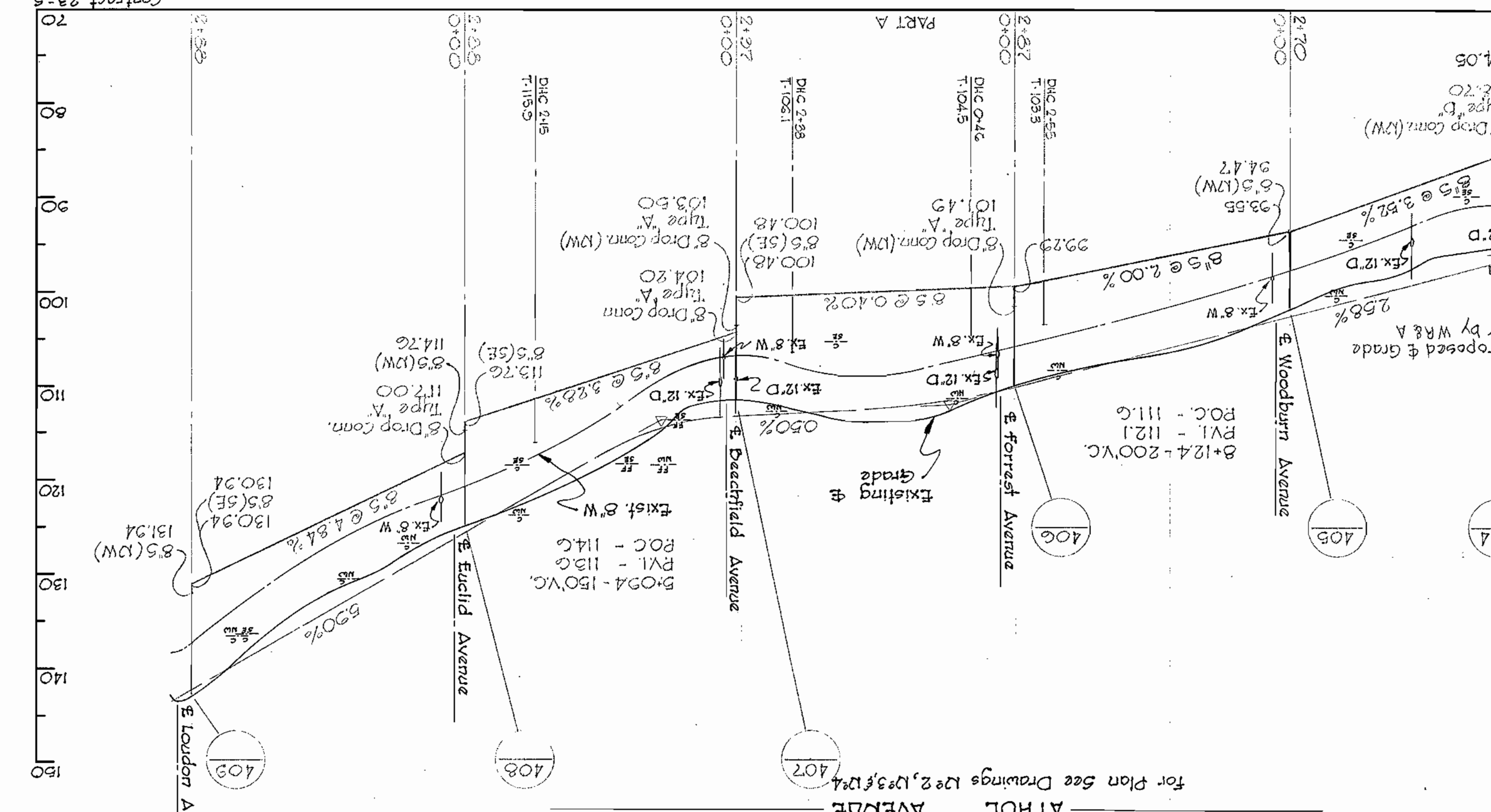
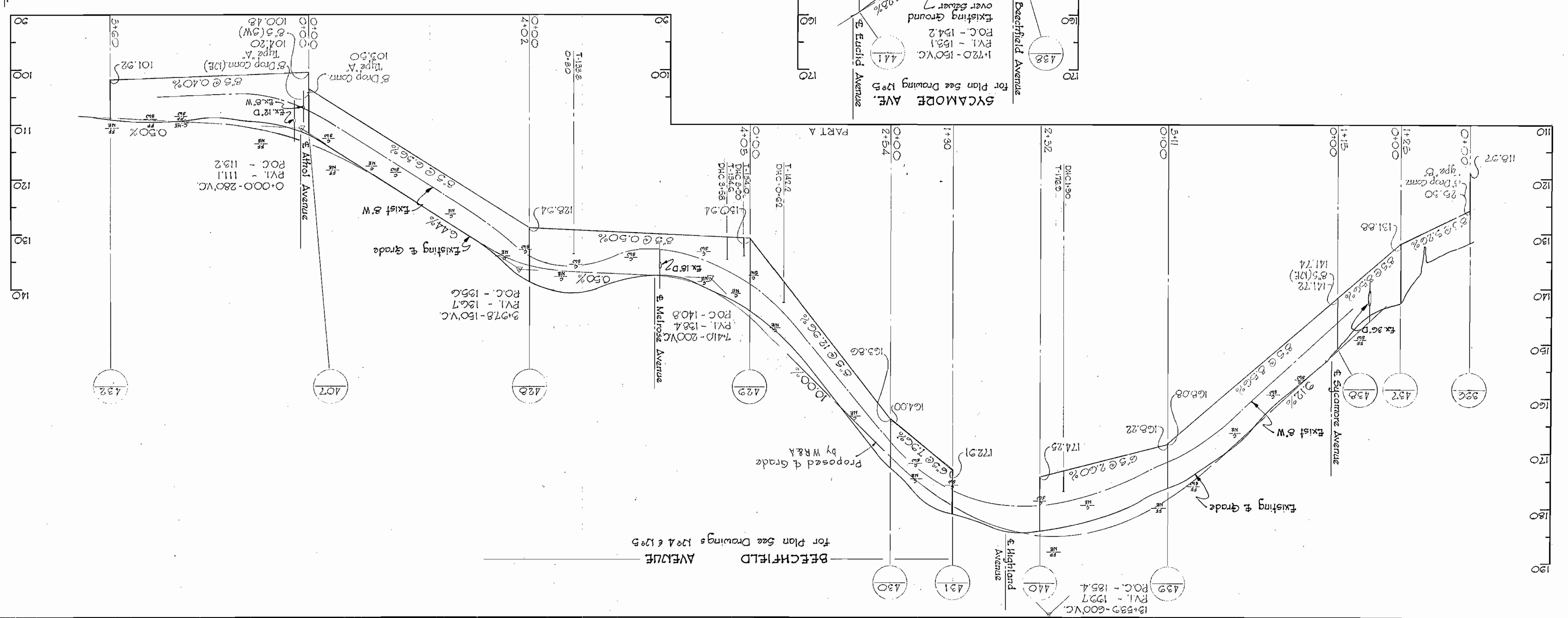
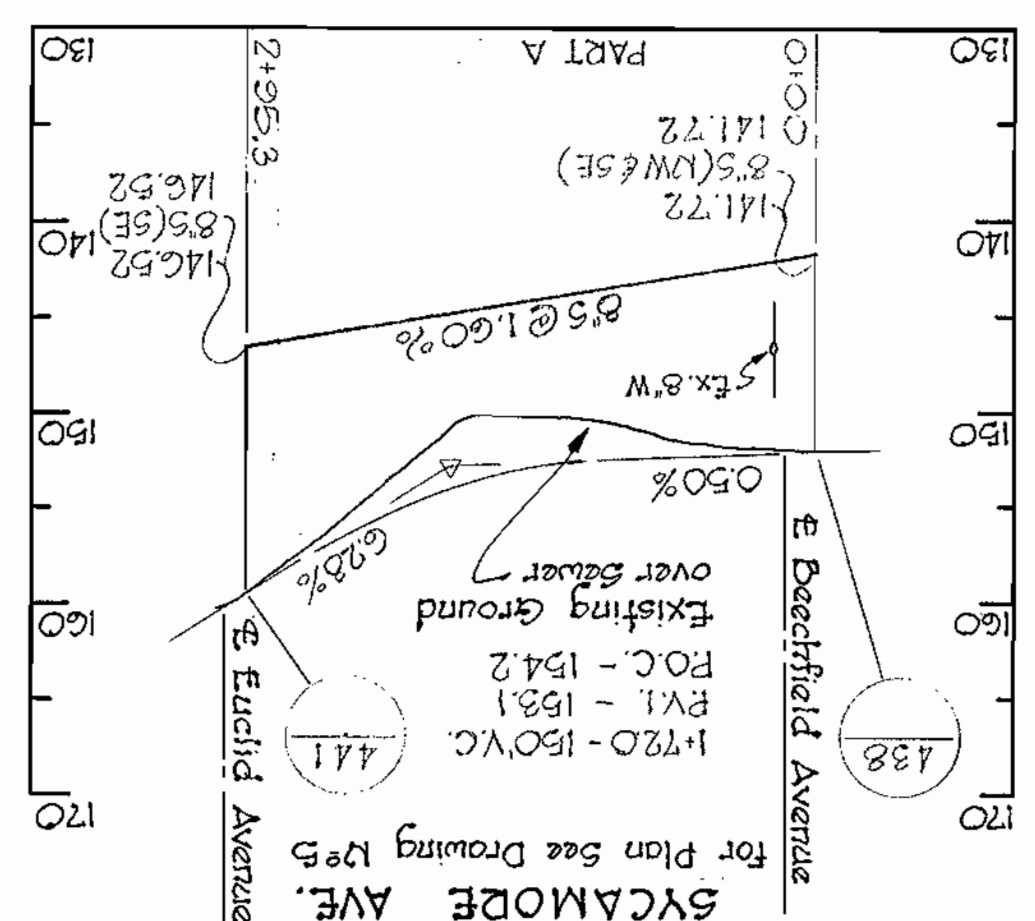
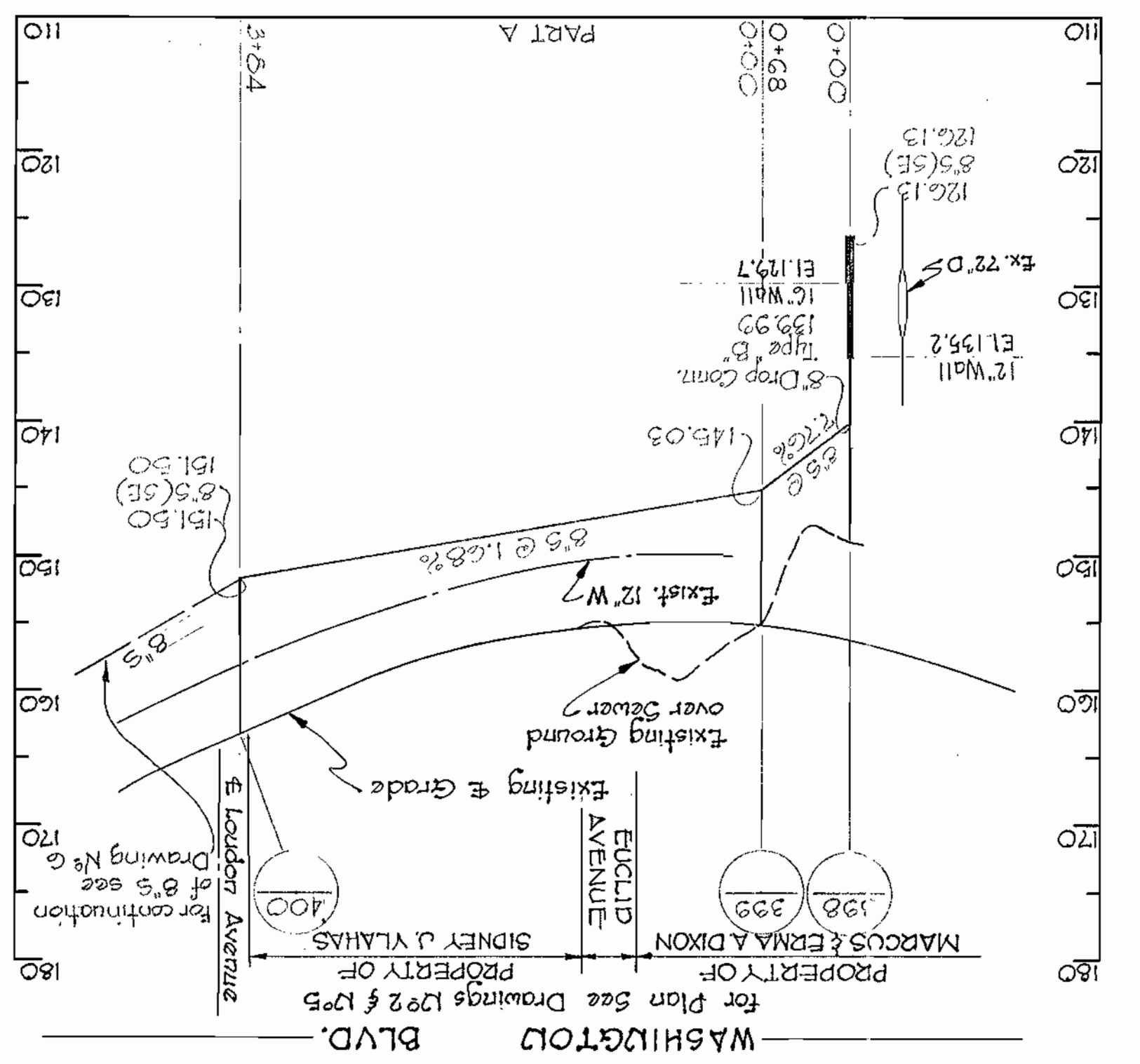
PROFILES OF
SEWER MAINS

ELKRIDGE SUB-DISTRICT

DRAWING
NO. 9
OF 12

SCALE
H: 1"=100'
V: 1"=50'

AS BUILT



Contract 23-S
70
80
90
100
110
120
130
140
150

110
120
130
140
150
160
170
180
190

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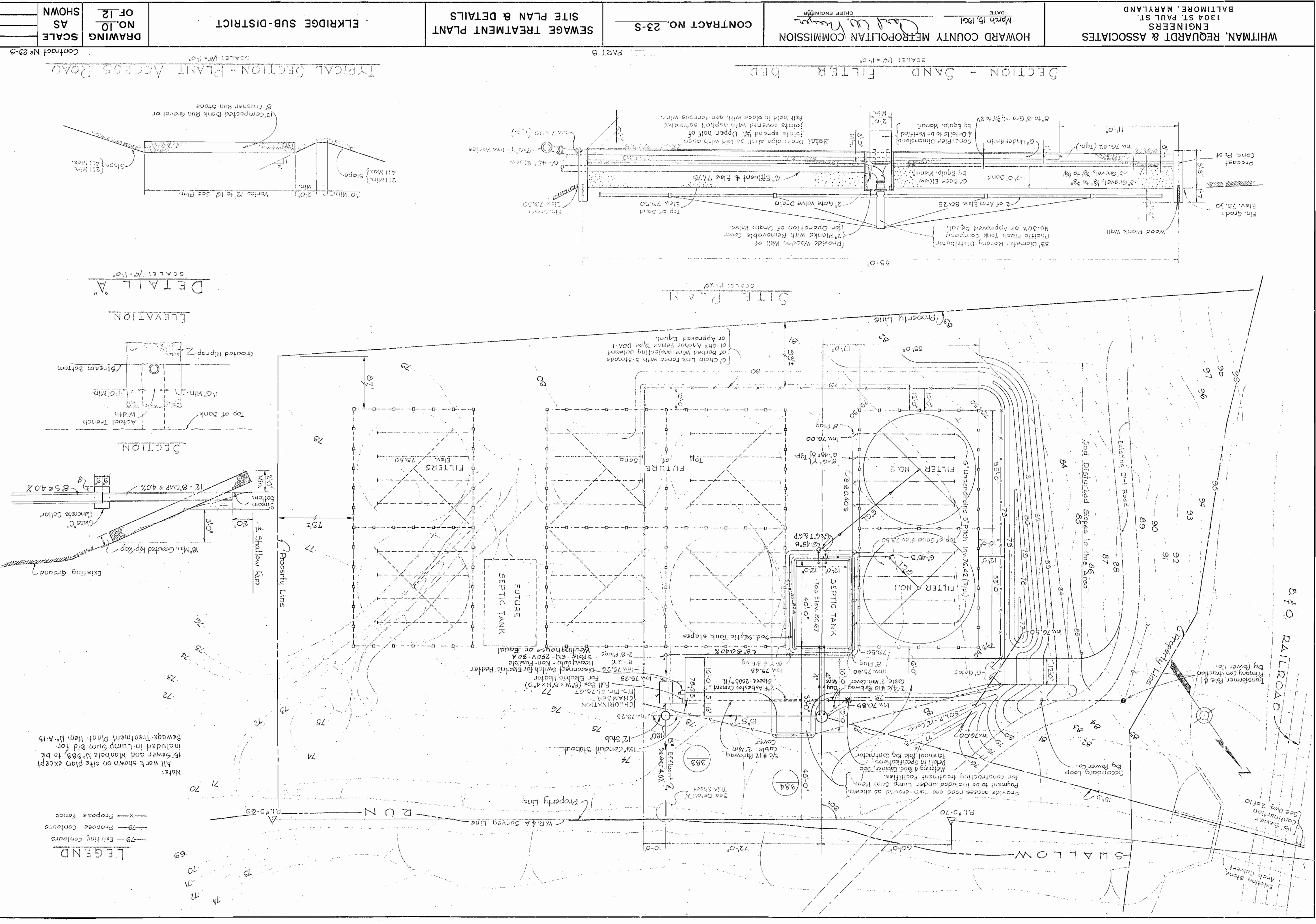
HOWARD COUNTY METROPOLITAN COMMISSION
DATE: March 15, 1961
CHIEF ENGINEER: *Carl W. Reardon*

CONTRACT NO. 23-5

SEWAGE TREATMENT PLANT
SITE PLAN & DETAILS

ELK RIDGE SUB-DISTRICT

DRAWING NO. 10 OF 12
SCALE AS SHOWN



Note: All work shown on site plan except sewer and manhole No. 88, to be included in Lump Sum Bid for Sewage Treatment Plant Item No. A-19

LEGEND
 - - - Existing contours
 - - - Proposed contours
 - - - Proposed fence

DETAIL A
SCALE: 1/4" = 1'-0"

SECTION
SCALE: 1/4" = 1'-0"

SITE PLAN
SCALE: 1/4" = 1'-0"

SECTION - SAND FILTER BED
SCALE: 1/4" = 1'-0"

TYPICAL SECTION - PLANT ACCESS ROAD
SCALE: 1/4" = 1'-0"

PART B

Contract No. 23-5

WHITMAN, REOURD & ASSOCIATES
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BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
DATE: March 15, 1964
CHIEF ENGINEER

CONTRACT NO. 23-5
SEWAGE TREATMENT PLANT

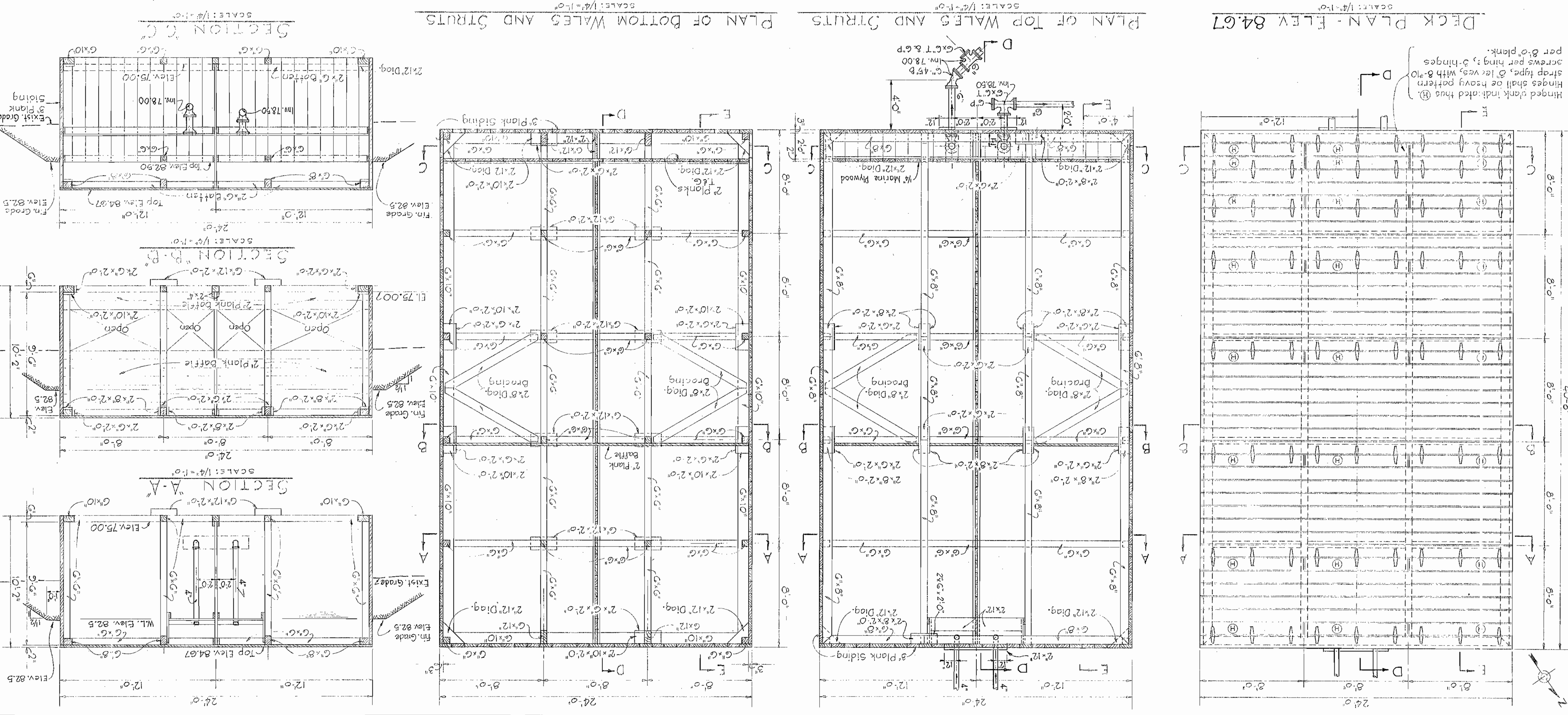
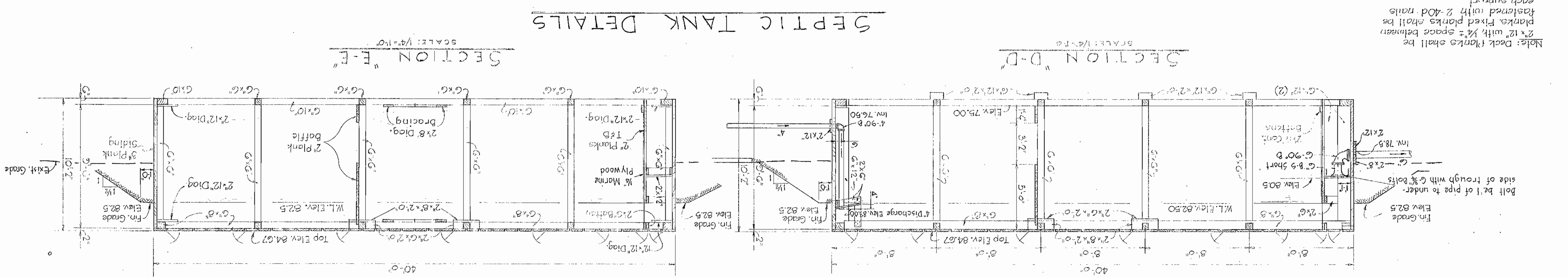
ELKRIDGE SUB-DISTRICT

DRAWING NO. 11
OF 12
SCALE AS SHOWN

AS BUILT 30 JUL 1964

W. O. #229-2

Note: Deck Planks shall be 2" x 12" with 1/4" space between planks. Fixed planks shall be fastened with 2" x 4od nails each support.



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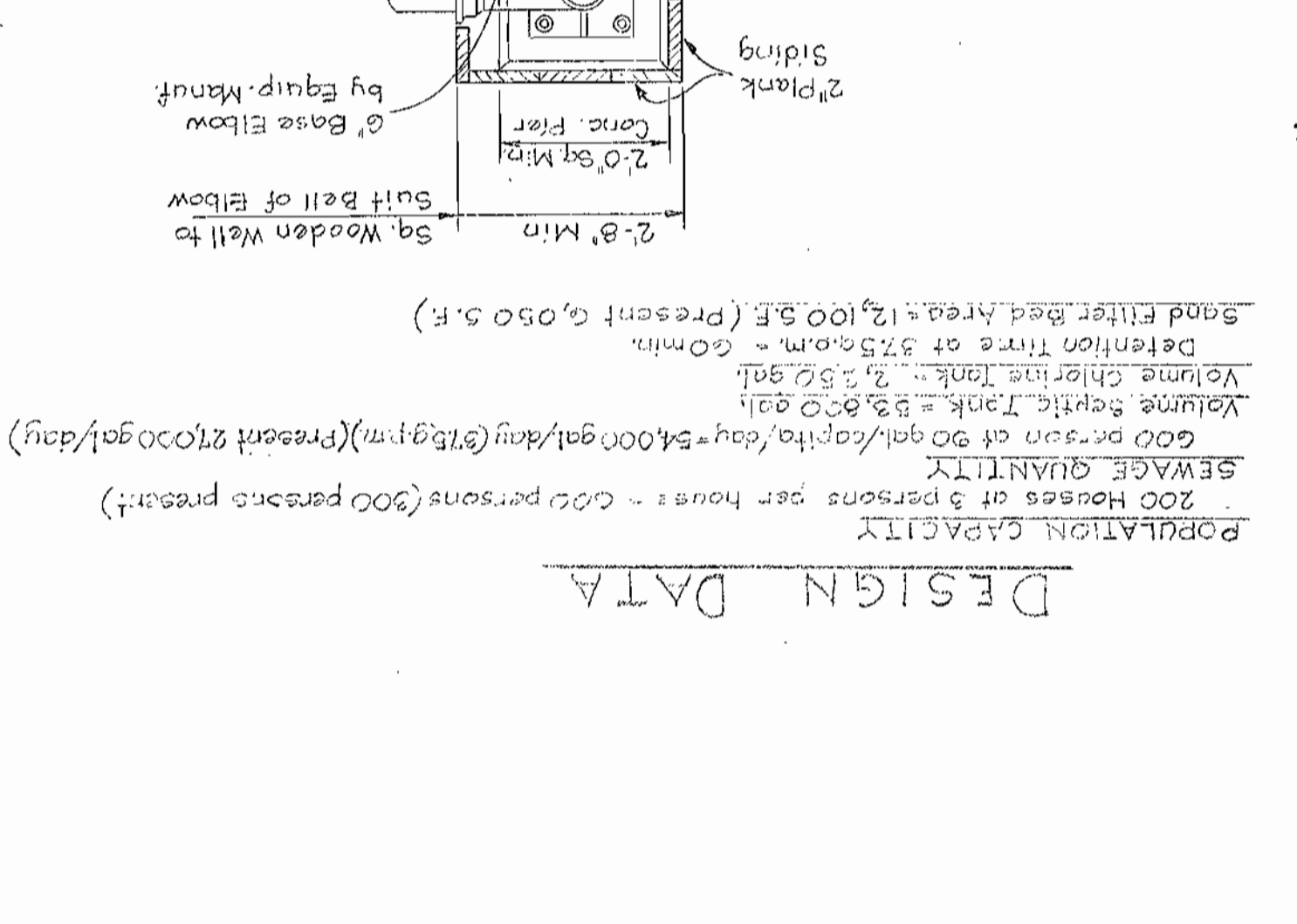
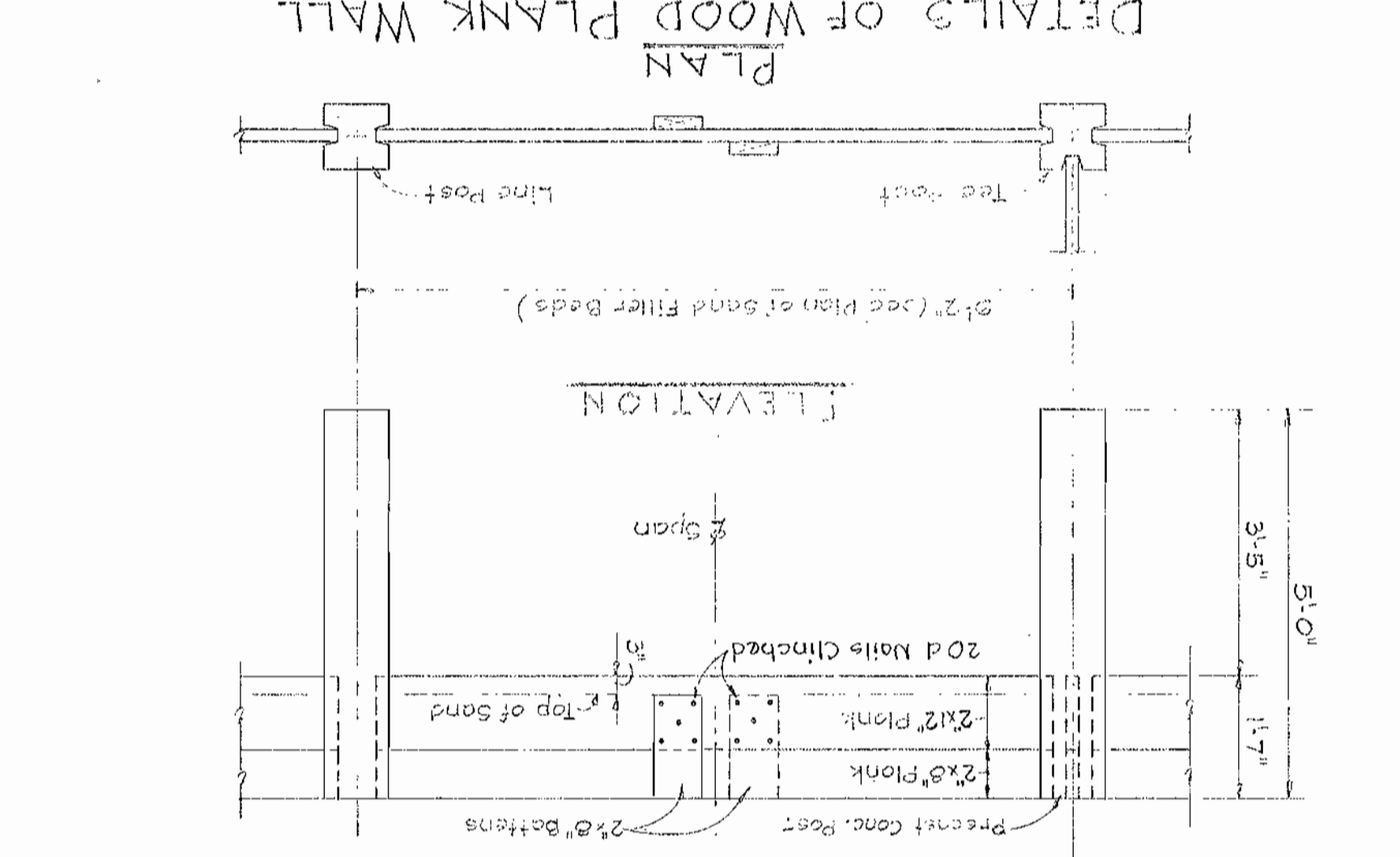
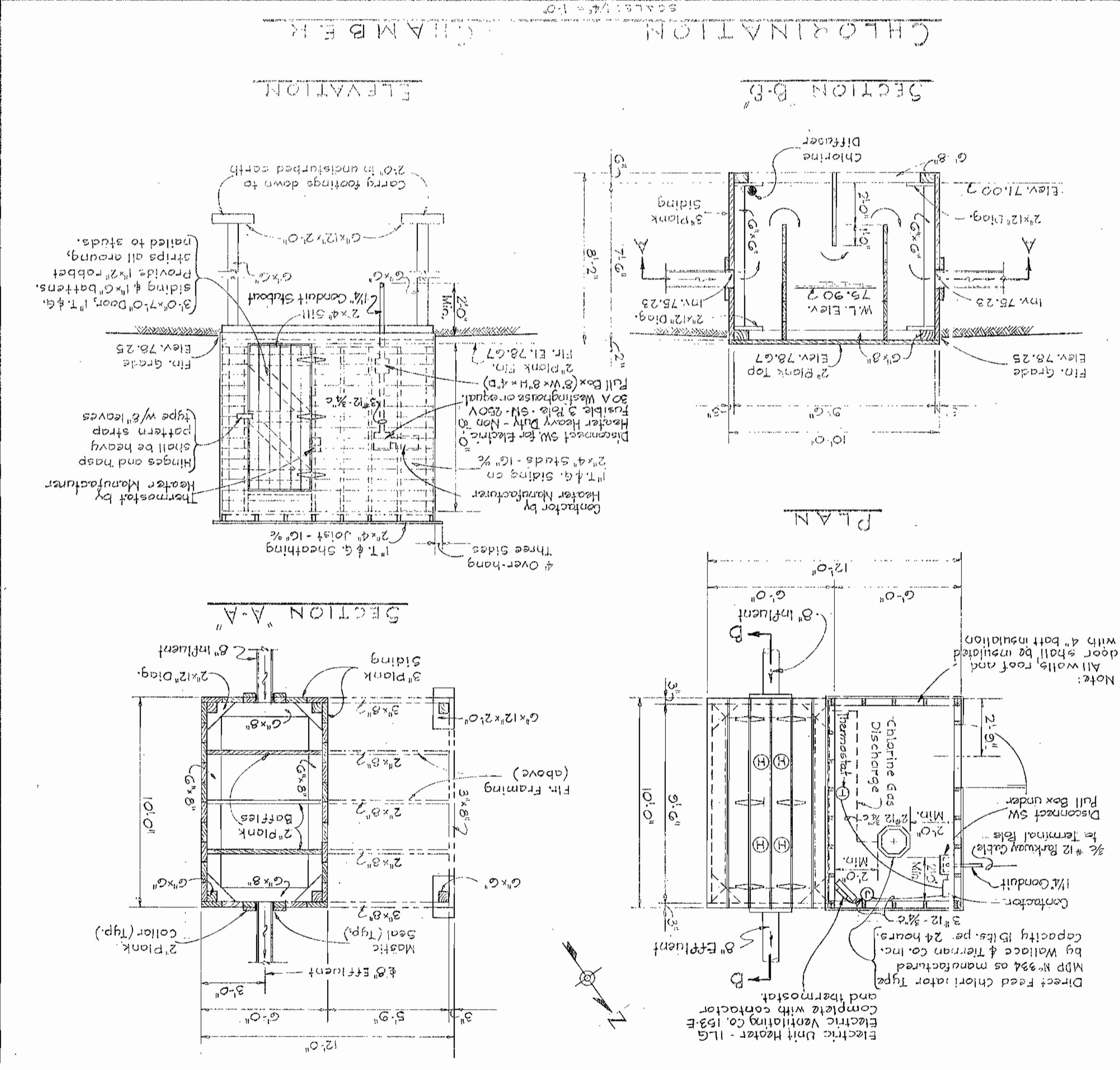
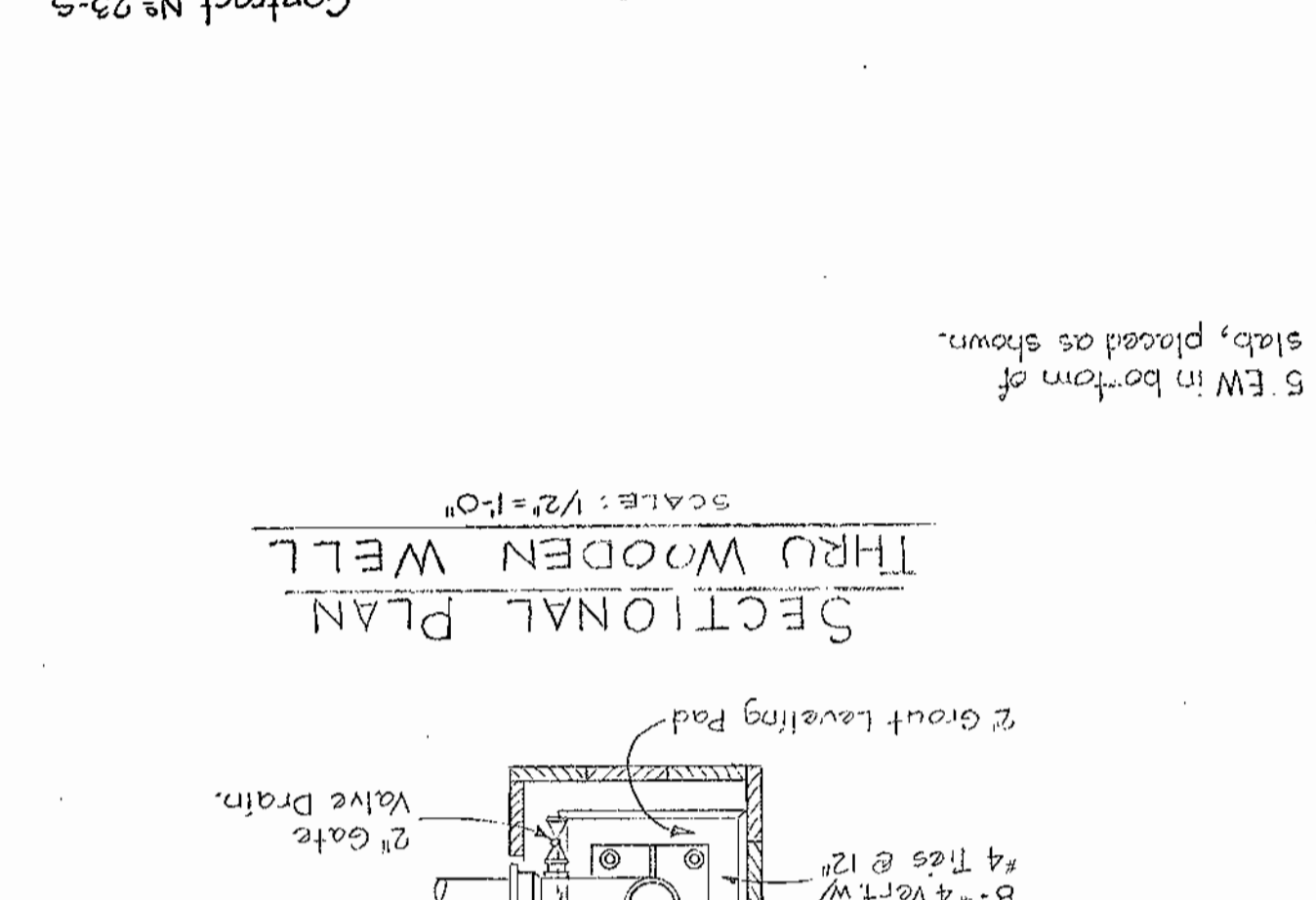
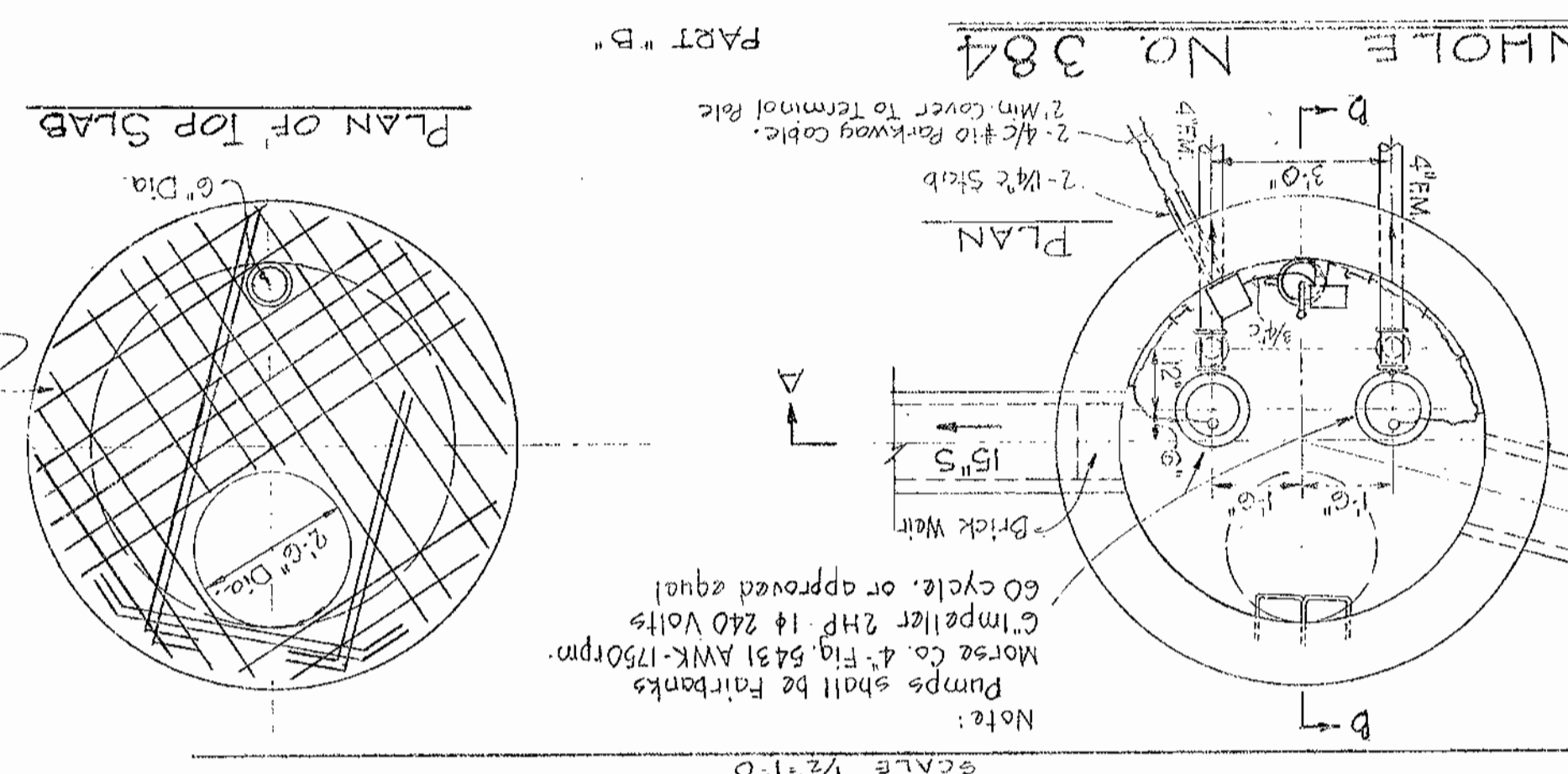
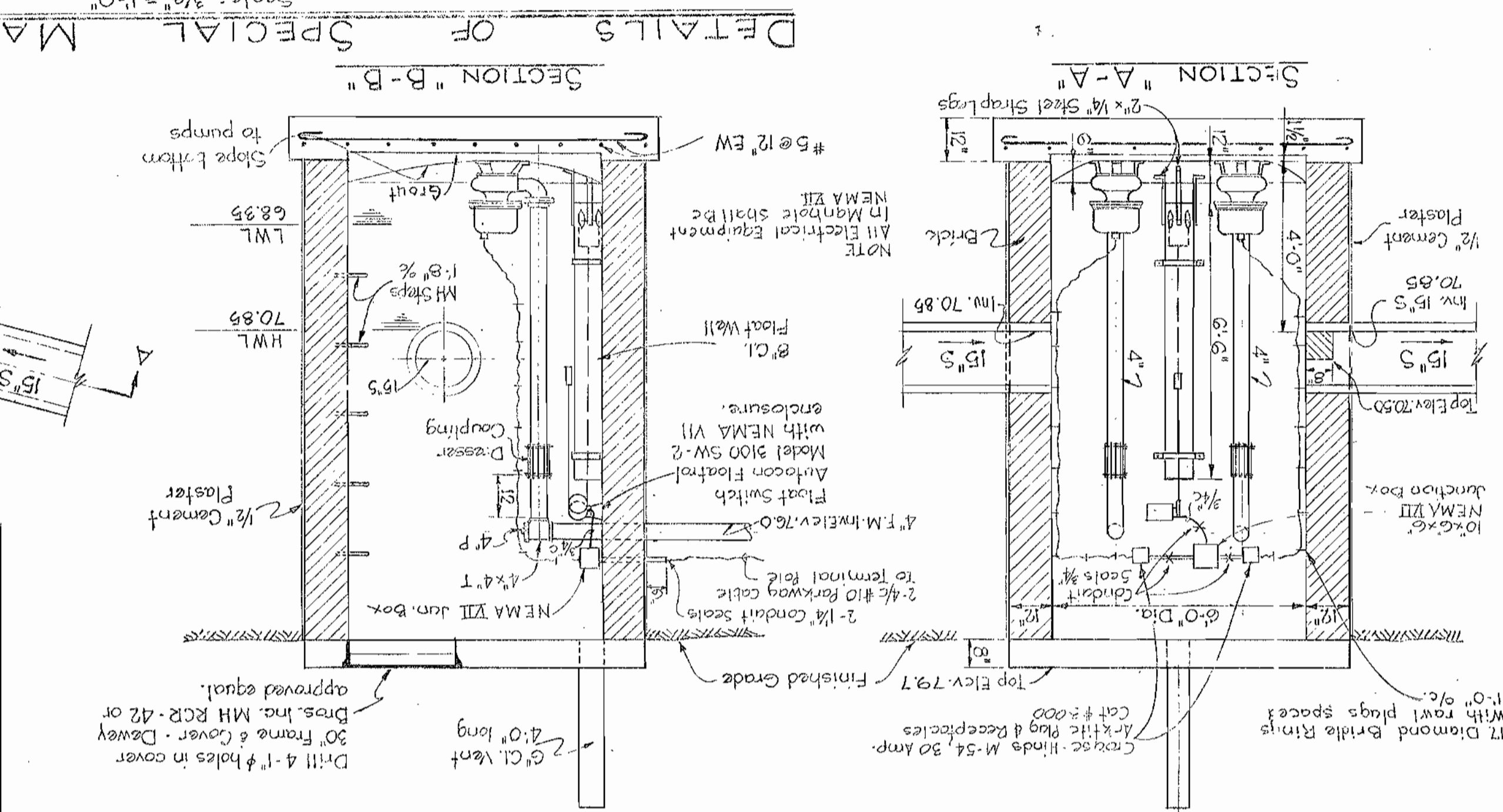
HOWARD COUNTY METROPOLITAN COMMISSION
March 19, 1961
DATE
CHIEF ENGINEER

CONTRACT NO. 23-S
SEWAGE TREATMENT PLANT
DETAILS

ELKRIDGE SUB-DISTRICT
NO. 12
OF 12
DRAWING SCALE

SHOWN	AS	SCALE

Contract No 23-S



GENERAL NOTES

- Contractor shall strip and store the top soil from all disturbed areas within the fence area. Upon completion of construction, the contractor shall distribute uniformly the top soil and seed all disturbed areas within the fence area and all disturbed slopes where noted.
- Pump discharge piping shall be galvanized steel ASTM A 120 schedule 40 galvanized pipe. All galvanized pipe shall be installed in a trench. The trench shall be backfilled with sand.
- Septic tank effluent piping shall be cast iron mechanical joint. Class 22.

TREATMENT FACILITIES:

- Wood plank for deck, sides, baffles, troughs, etc., may be rough sawn dressed oak, pine or fir. Woles, struts, posts, beams, etc., may be rough sawn or dressed oak, pine or fir. Woles, struts, posts, beams, etc., may be rough sawn or dressed oak, pine or fir. Woles, struts, posts, beams, etc., may be rough sawn or dressed oak, pine or fir. Woles, struts, posts, beams, etc., may be rough sawn or dressed oak, pine or fir.

CHLORINATION CHAMBER:

- All wood planking shall be as specified under septic tank notes.
- Roof to chlorine shed shall be covered with 2-ply tar paper laid in hot tar. All ops shall be nailed and a hot tar mop coat applied over the covering.
- Sides and roof of chlorine shed shall be of No. 2 common dressed pine or fir.

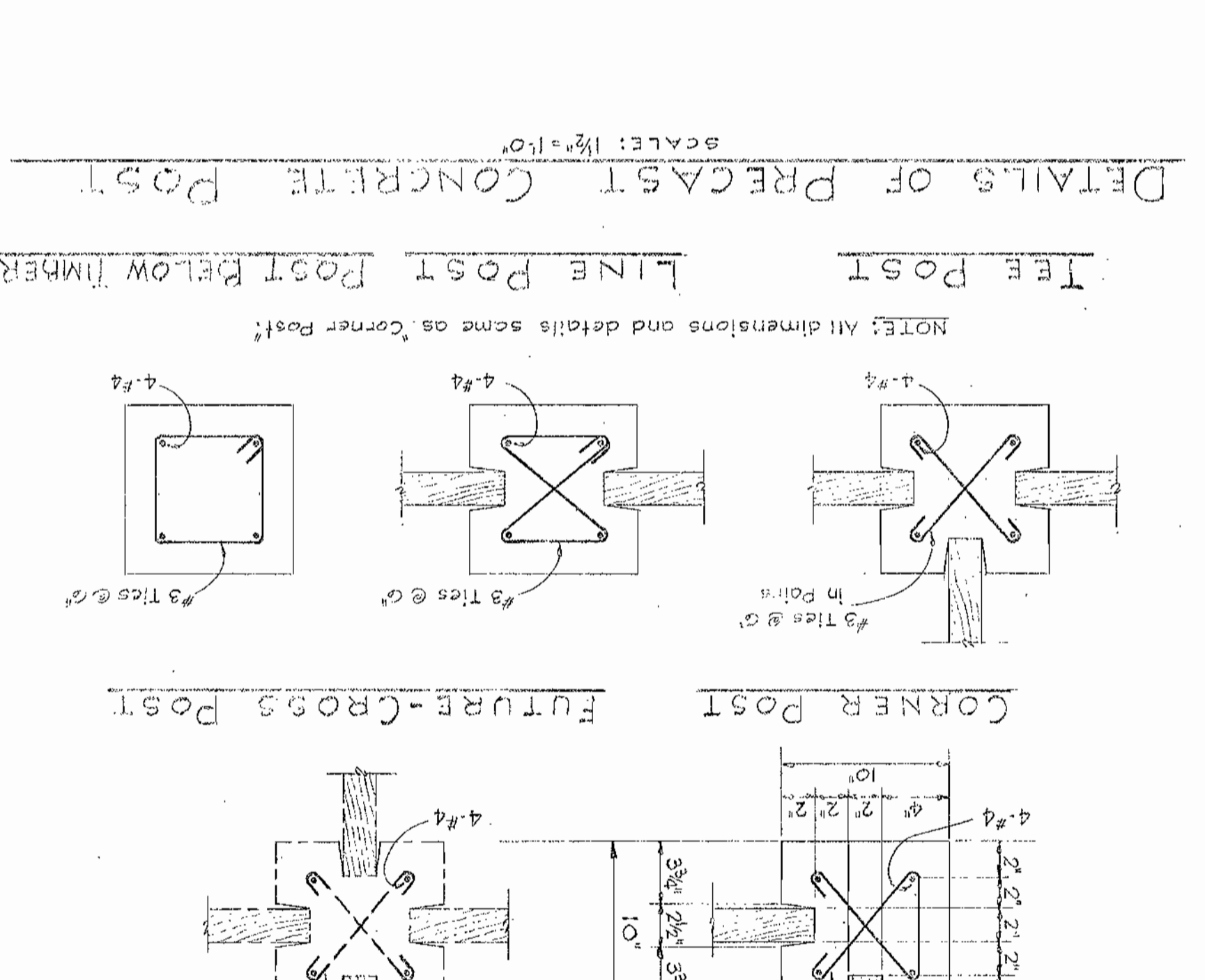
SAND FILTER BED:

- Wood plank walls shall be as specified under septic tank notes.
- Sand for filter bed shall have an effective size of 0.5 - 0.75 mm. and a uniformity coefficient of 1.75 max.

DESIGN DATA

SEWAGE QUANTITY: 600 gal./min. at 90 gal./capita/day (54,000 gal./day) (Present 27,000 gal./day)

POPULATION CAPACITY: 200 Houses of 3 persons per house - 600 persons (300 persons present)



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