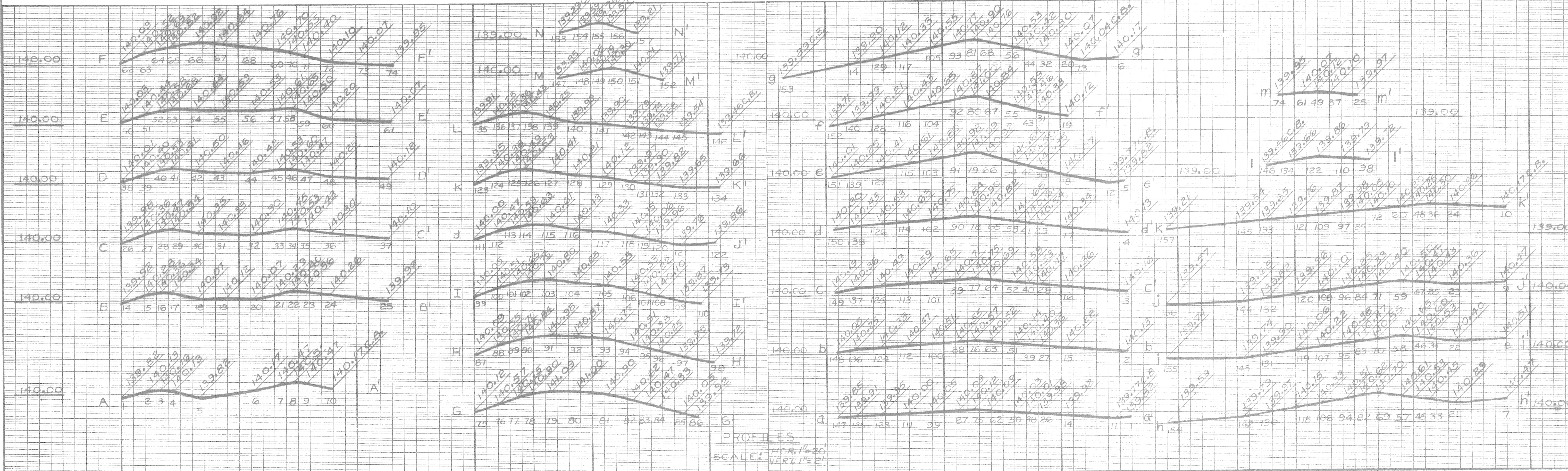


ITEM NO.	DESCRIPTION OF ITEM	UNIT	QUANTITY
1	TREE REMOVAL 4" DIA.	EACH	2
2	EXCAVATION	CYDS	339
3	TOP SOIL	CYDS	262
4	SODDING	SYDS	2097
5	SELECTED EXCAV. MATERIAL	CYDS	424
6	ALLEY PAVT. REMOVAL	SYDS	3

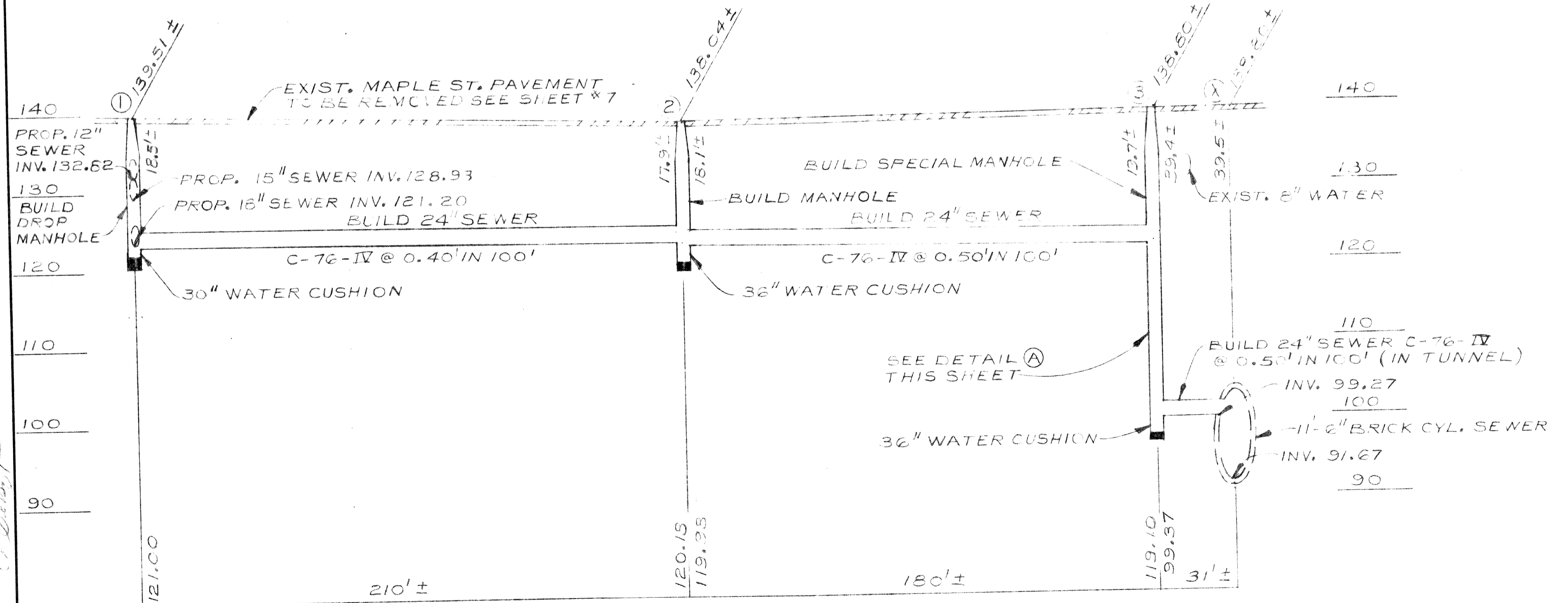
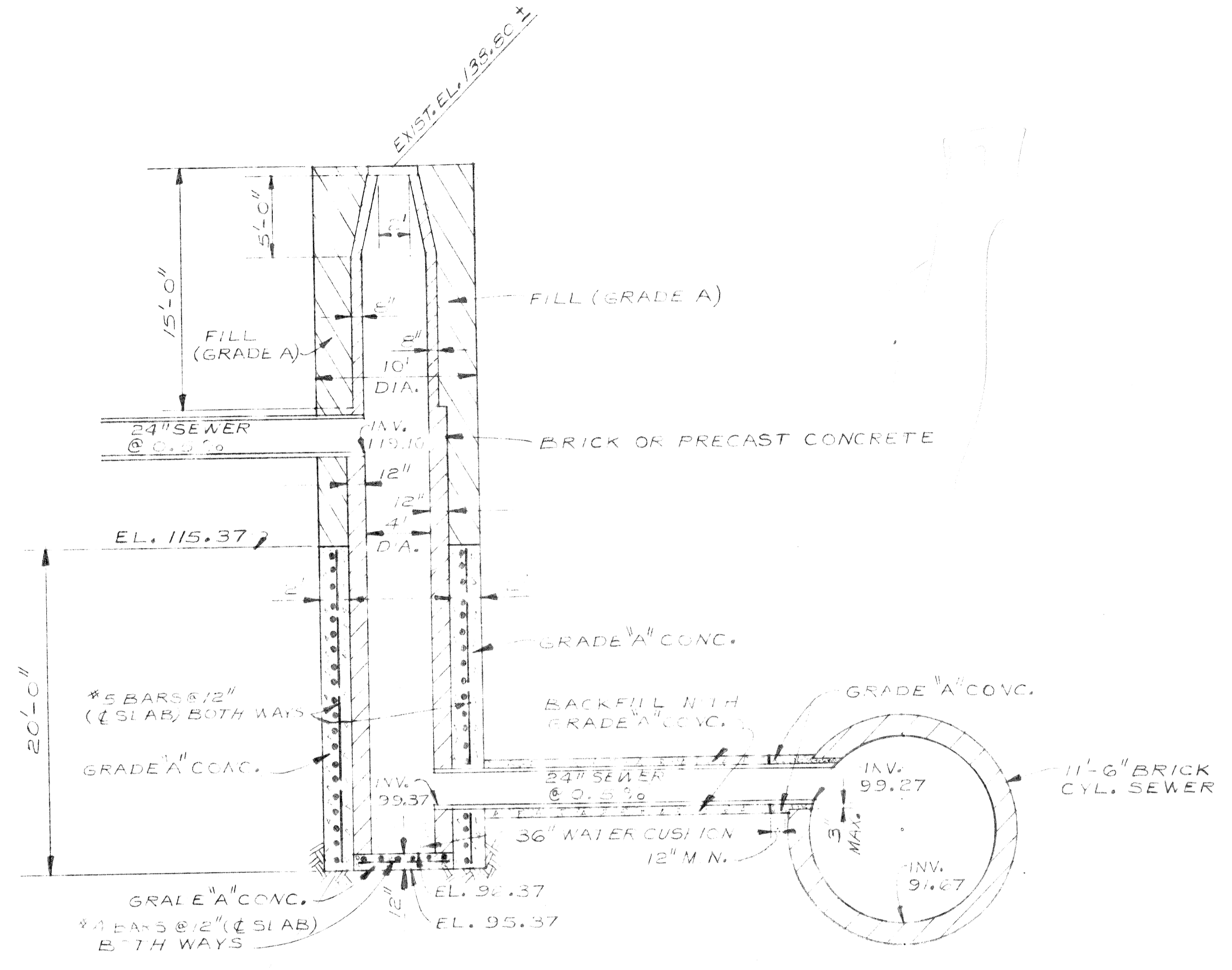
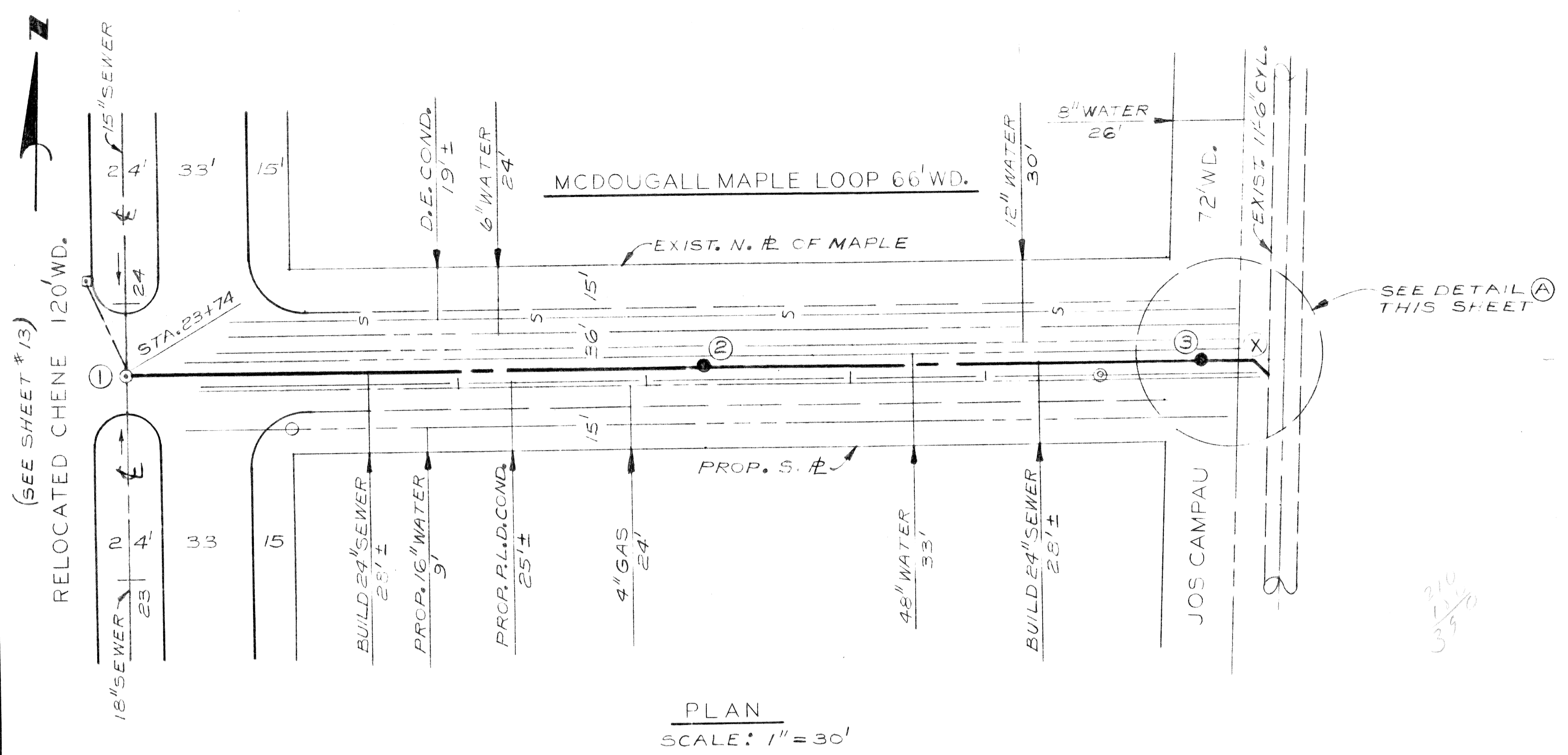


BY JONES	CHECKED BY [Signature]	APPROVED [Signature]
GRADE [Signature]	ESTIMATE [Signature]	FINAL [Signature]

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT
BUREAU OF STREETS AND HIGHWAYS
FOR
COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT

PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIETAM
PAVING OF MAPLE CIL-15-5-C FROM CHENE TO RELOCATED CHENE
AND MISCELLANEOUS CONSTRUCTION
ELMWOOD PARK REHABILITATION PROJECT NO. 3 MICH. R-123

INDEX NO. 12	SHEET 16 OF 51 SHEETS
CONTRACT NO. PW 6571	ASSIGNMENT NO. A0.2253



Sewer Approved
12/20/75
C. J. [Signature]

Jeff Sney

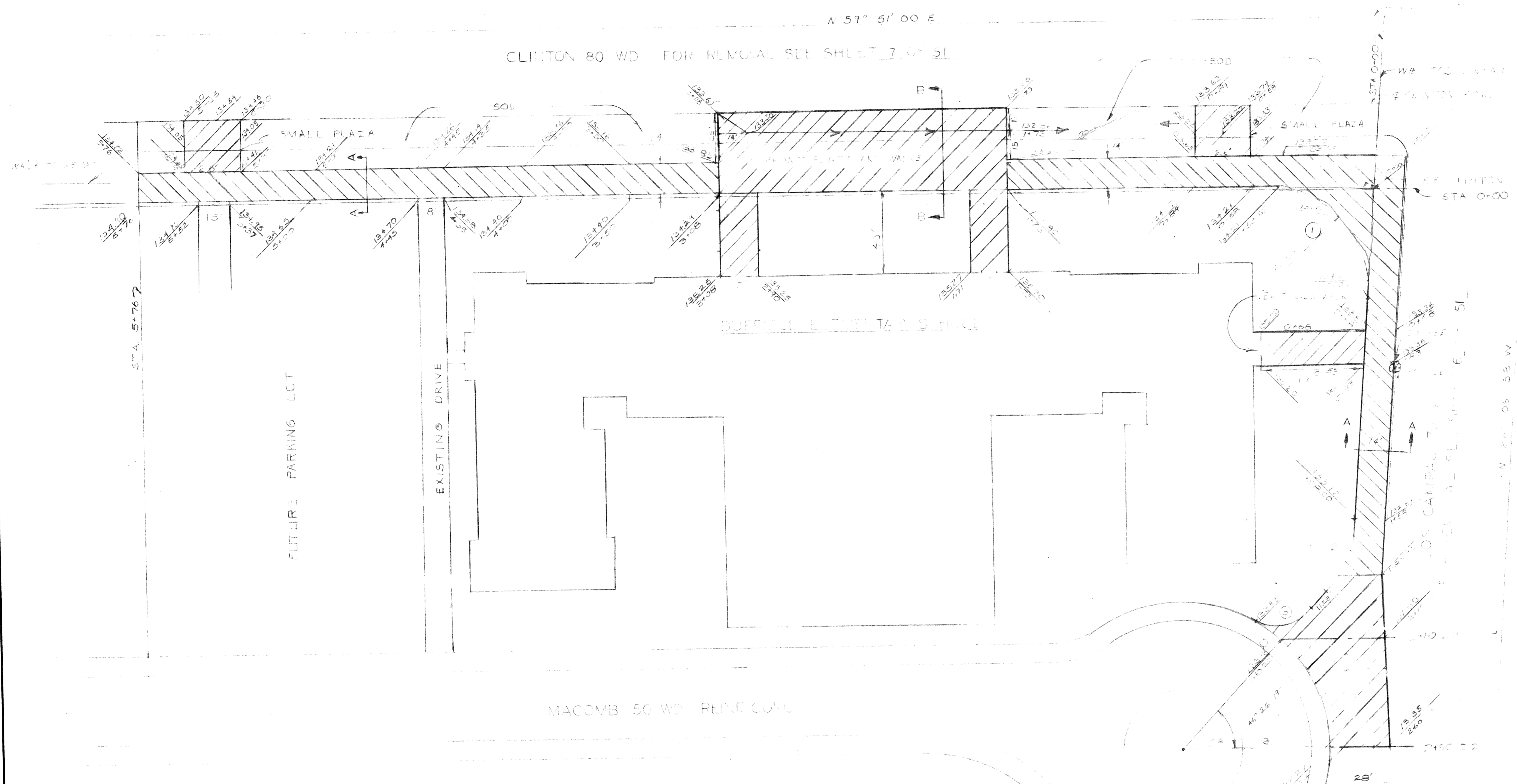
791-3900

<p>REVISIONS LOCATED BY COORDINATES ON SHEET</p>				<p>DESIGNED BY: <i>[Signature]</i></p> <p>DRAWN BY: JONES</p> <p>TRACED BY:</p> <p>CHECKED BY: <i>[Signature]</i></p>	<p>APPROVED: <i>[Signature]</i></p> <p>ENGINEER OF STREETS</p>	<p>CITY OF DETROIT</p> <p>CITY ENGINEERING DEPARTMENT</p> <p>FOR</p> <p>COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT</p>	<p>PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIE TAM</p> <p>PAVING OF MAPLE CUL-DE-SAC FROM CHENE TO RELOCATED CHENE</p> <p>AND MISCELLANEOUS CONSTRUCTION</p> <p>ELMWOOD PARK REHABILITATION PROJECT NO. 3 MICH. R-123</p> <p>DRAINAGE CONSTRUCTION</p>	<p>SHEET 17 OF 17 SHEETS</p> <p>CONTRACT NO. PW 6571</p> <p>ASSIGNMENT NO. AU 2253</p> <p>DATE 10-28-75</p>
--	--	--	--	---	--	--	--	---

SCALE 1"=30'

A 59° 51' 00" E

CLINTON 80 WD FOR REMOVAL SEE SHEET 17 OF 51



- LEGEND
- 6" STAIRCASE WALK WITH BRICK EDGING
 - 4" UNREINFORCED CONCRETE BASE PAVEMENT AND VITRIFIED BRICK SURFACE COURSE THEREON AS SHOWN

CURVE DATA

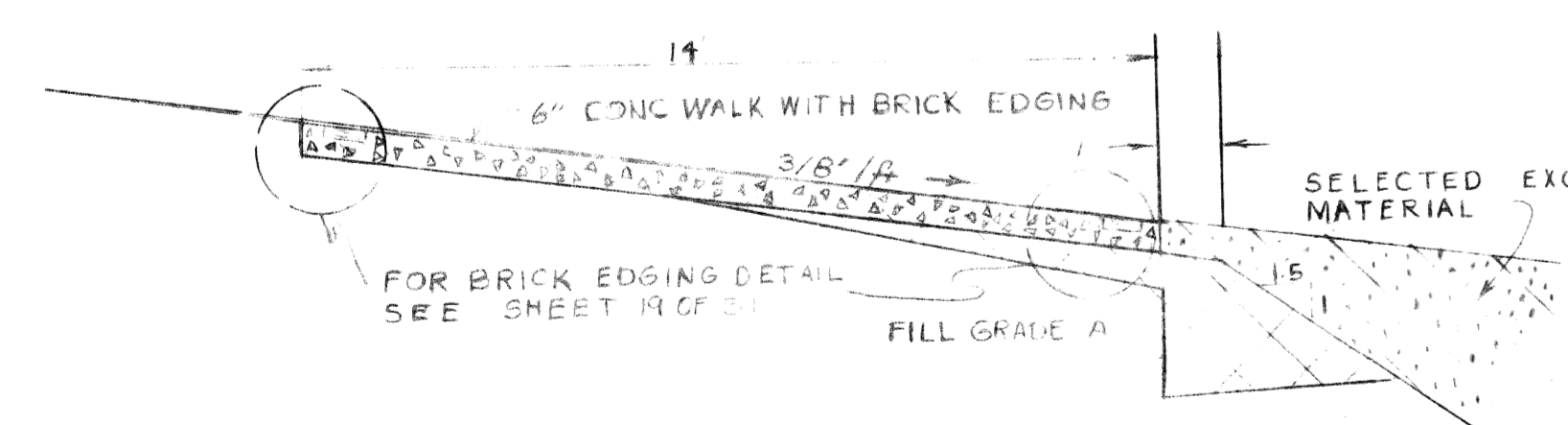
ANGLE	RADIUS	ARC	TANGENT	SECMENT
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113.50	100.00	30.81	28.17	1.651
113.50	100.00	30.81	28.17	1.651

BENCHMARKS

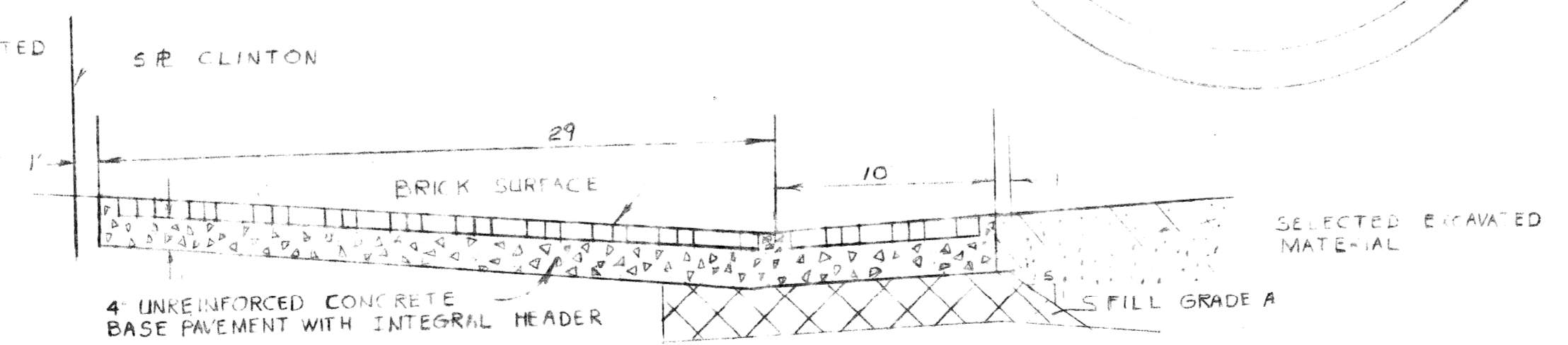
1. N. 1/4 CORNER OF INTERSECTION OF CLINTON AND JOS CAMPAU
 2. N. 1/4 CORNER OF INTERSECTION OF CLINTON AND MACOMB
 3. N. 1/4 CORNER OF INTERSECTION OF CLINTON AND JOS CAMPAU
 4. N. 1/4 CORNER OF INTERSECTION OF CLINTON AND JOS CAMPAU

259-0273

1. FOR INTEGRAL HEADER DETAILS OF BRICK SURFACED AREAS SEE SHEET 17 OF 51
 2. FOR BRICK SURFACE DETAILS SEE SHEET 17 OF 51
 3. REMOVE THE ENTIRE PAVEMENT ON JOS CAMPAU AND BACKFILL AS SHOWN ON THE PLAN
 4. IF THE ENTIRE PAVEMENT ON JOS CAMPAU IS NOT TO BE REMOVED REMOVE ONE LANE OF PAVEMENT AND BACKFILL AS SHOWN ON THE PLAN
- Transverse Joint in sidewalk
Every 15' no longer than 10'



SECTION A-A
NO SCALE



SECTION B-B
NO SCALE




<p>REVISIONS LOCATED BY COORDINATES ON SHEET</p>		<p>DESIGNED BY <i>L.B. Aston</i></p> <p>DRAWN BY <i>L.B. Aston</i></p> <p>TRACED BY</p> <p>CHECKED BY <i>W. J. ...</i></p>	<p>APPROVED: <i>Norm D. Kawona</i></p> <p>ENGINEER OF STREETS</p>	<p>CITY OF DETROIT</p> <p>CITY ENGINEER OF STREETS</p> <p>FOR</p> <p>COMMUNITY DEVELOPMENT DEPARTMENT</p>	<p>PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIETAN</p> <p>PAVING OF MAPLE CUL-DE-SAC FROM CHENE TO RELOCATED CHENE</p> <p>AND MISCELLANEOUS CONSTRUCTION</p> <p>ELM JOC PARK REHABILITATION PROJECT NO 3 MICH R 123</p> <p>WALKWAY REPAIR CONSTRUCTION</p>	<p>SHEET <u>1</u> OF <u>51</u> SHEETS</p> <p>CONTRACT NO. PW 6571</p> <p>ASSIGNMENT NO. 2253</p> <p>DATE 10-28-75</p>
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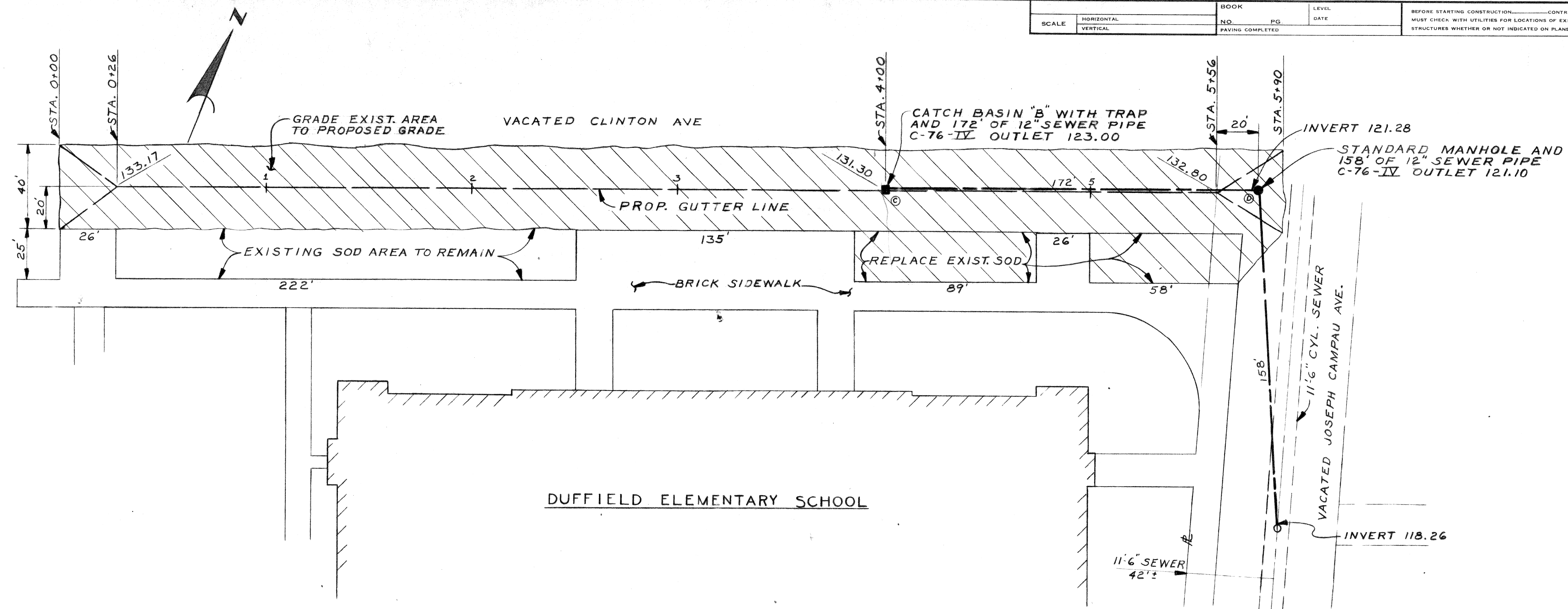
SCALE	HORIZONTAL	VERTICAL	BOOK NO.	PG.	LEVEL DATE

BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

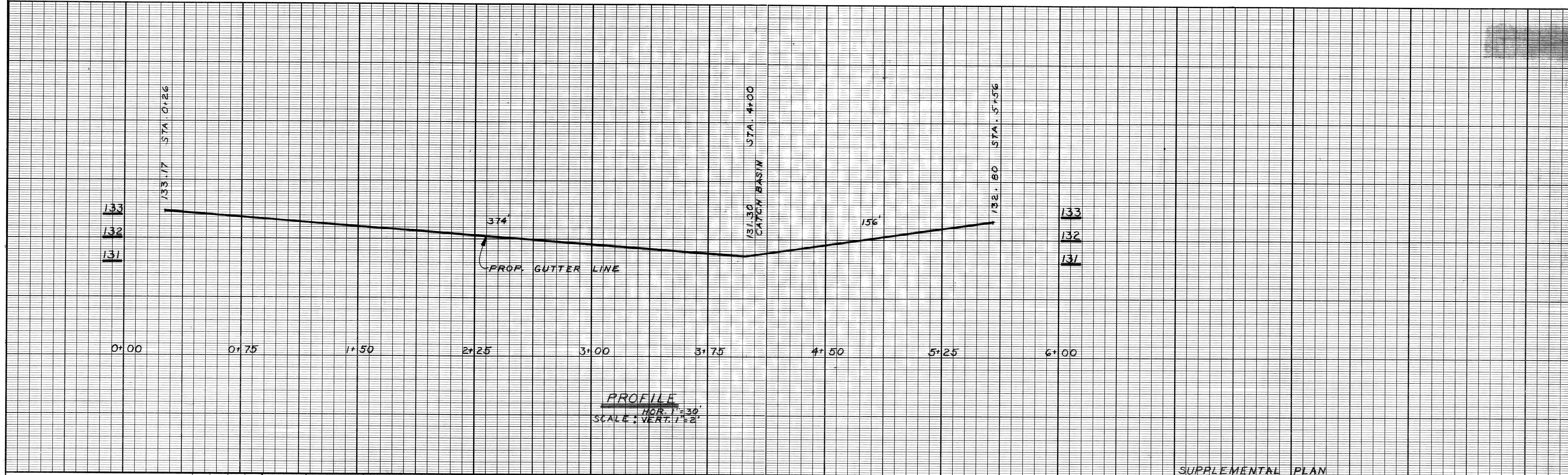
NOTE - FOR SYMBOLS (A) ETC. SEE STANDARD DETAIL DRAWING NO. C-4178

BENCH MARKS ELEV.
 P.B.M. #38-255 N.E. CORNER JOSEPH CAMPAU AND LAFAYETTE ELEV. 118.93
 C.B.M. - HYDRANT S.E. CORNER MACOMB AND JOSEPH CAMPAU ELEV. 133.44
 C.B.M. - HYDRANT N. SIDE OF CLINTON ± 110' WEST OF JOSEPH CAMPAU ELEV. 136.46

SYMBOLS
 AREA TO BE GRADED
 BUILD CATCH BASIN
 BUILD STANDARD MANHOLE



PLAN
 SCALE 1"=30'



PROFILE
 HORIZ. 1"=30'
 SCALE: VERT. 1"=2'

SUPPLEMENTAL PLAN

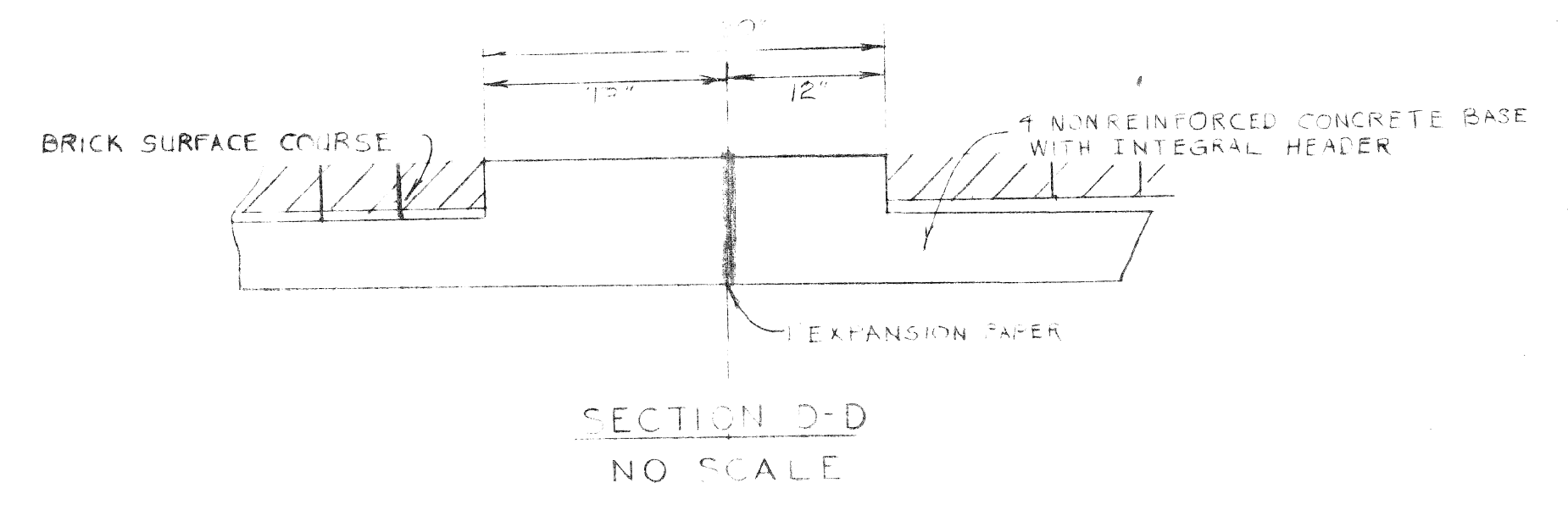
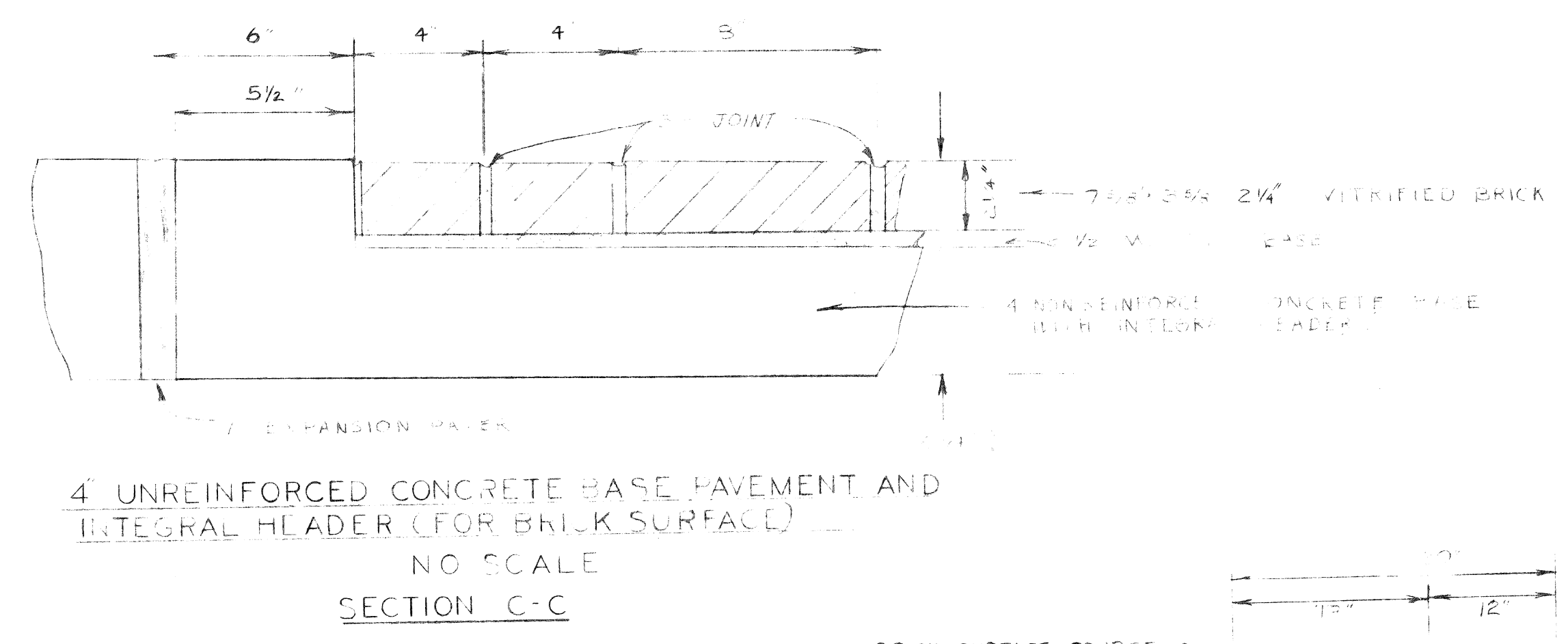
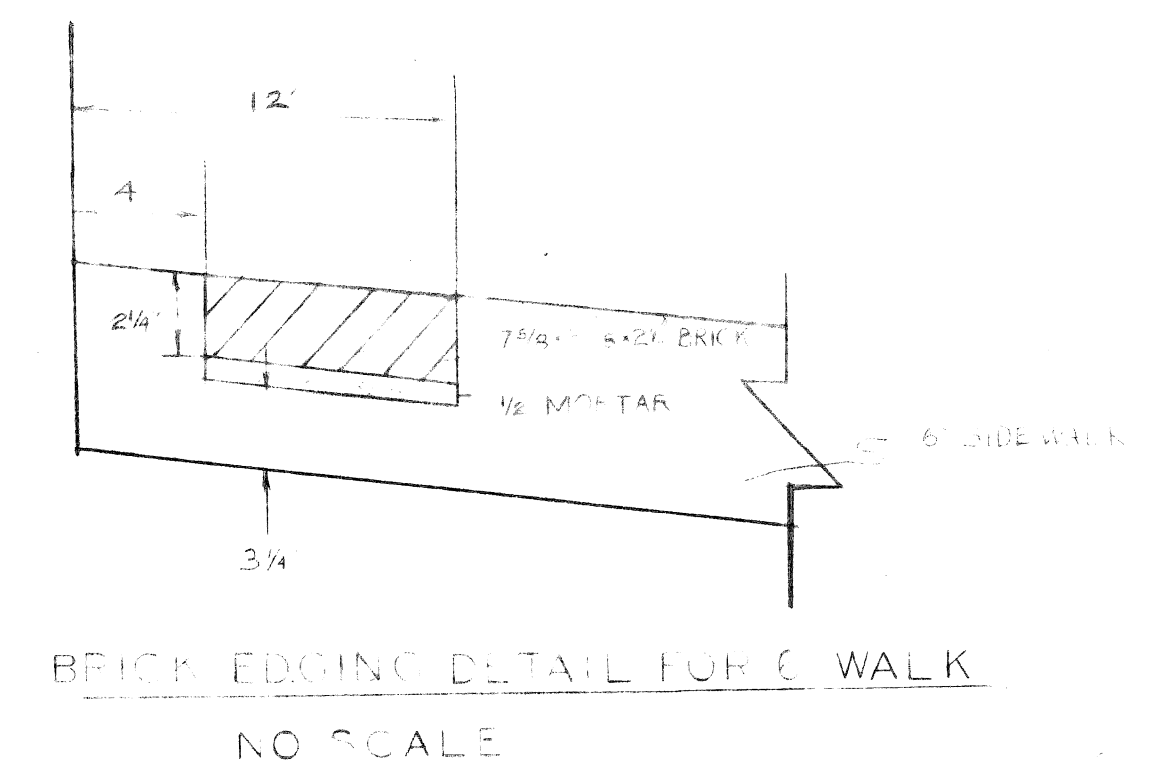
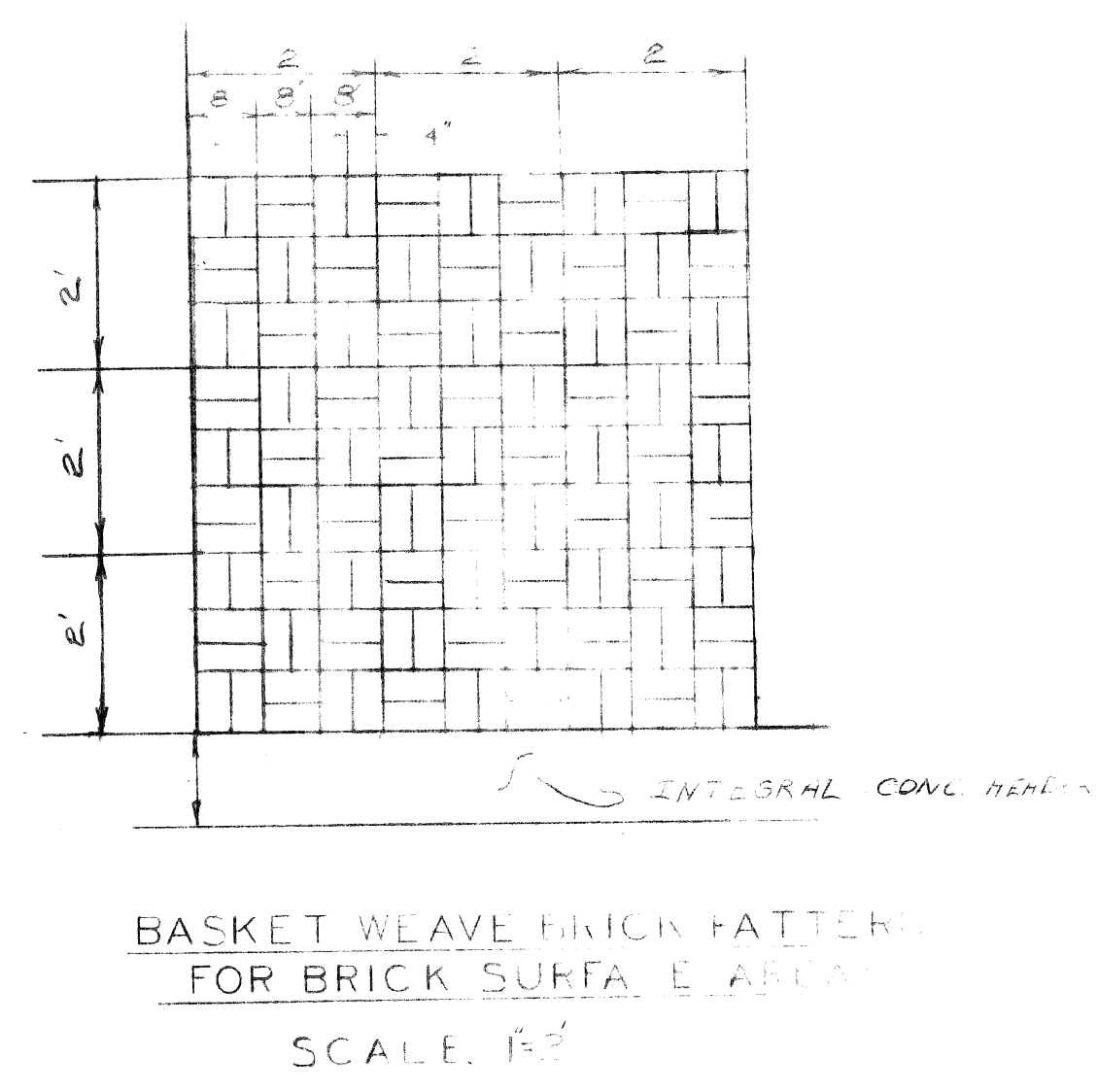
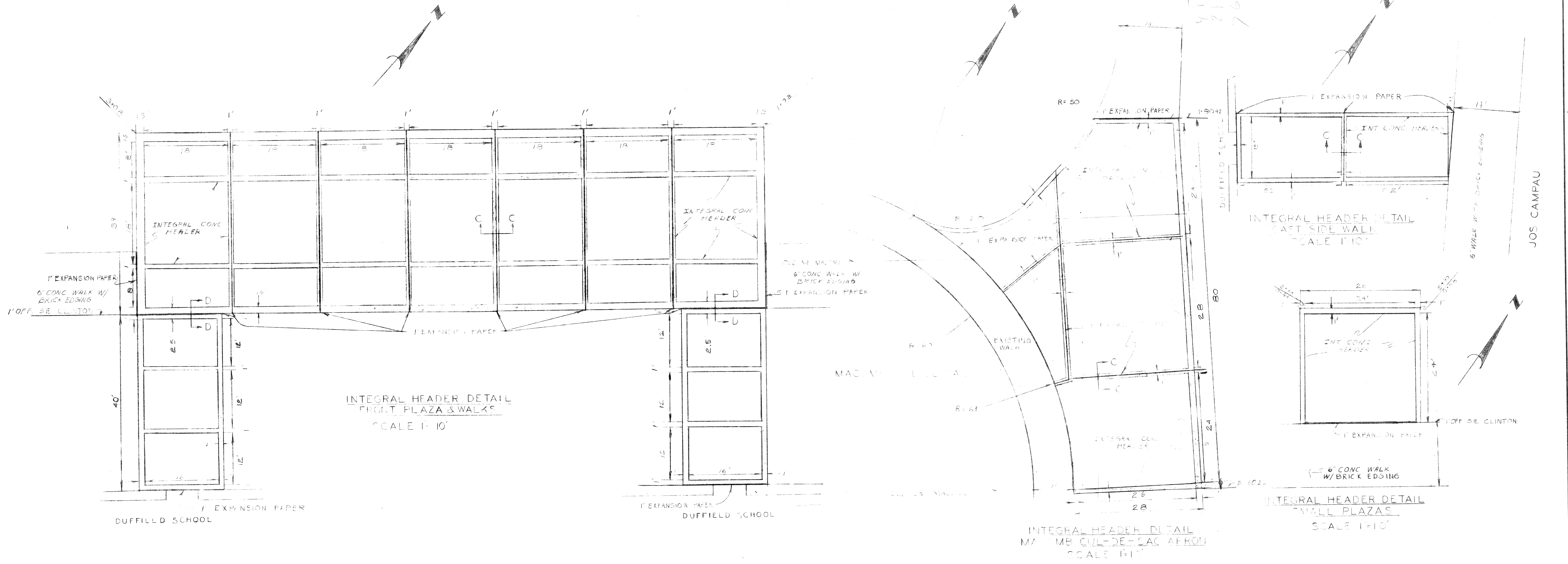
Sewer Approved
 10/26/77
 [Signature]

PLAN	BY R Rosik	CHECKED BY [Signature]	APPROVED: [Signature] ENGINEER OF STREETS
GRADE	[Signature]	[Signature]	
ESTIMATE	[Signature]	[Signature]	
FINAL	[Signature]	[Signature]	

CITY OF DETROIT
 CITY ENGINEERING DIVISION EPMD
 FOR
 COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT

PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIETAM
 PAVING OF MAPLE CUL-DE-SAC FROM CHENE TO RELOCATED CHENE
 AND MISCELLANEOUS CONSTRUCTION
 ELMWOOD PARK REHABILITATION PROJECT NO. 3 MICH. R-123
 DRAINAGE CONSTRUCTION

INDEX NO.	SHEET 18 OF 51 SHEETS
CONTRACT NO.	PW 6571
ASSIGNMENT NO.	AO 2253
DATE	10-26-77

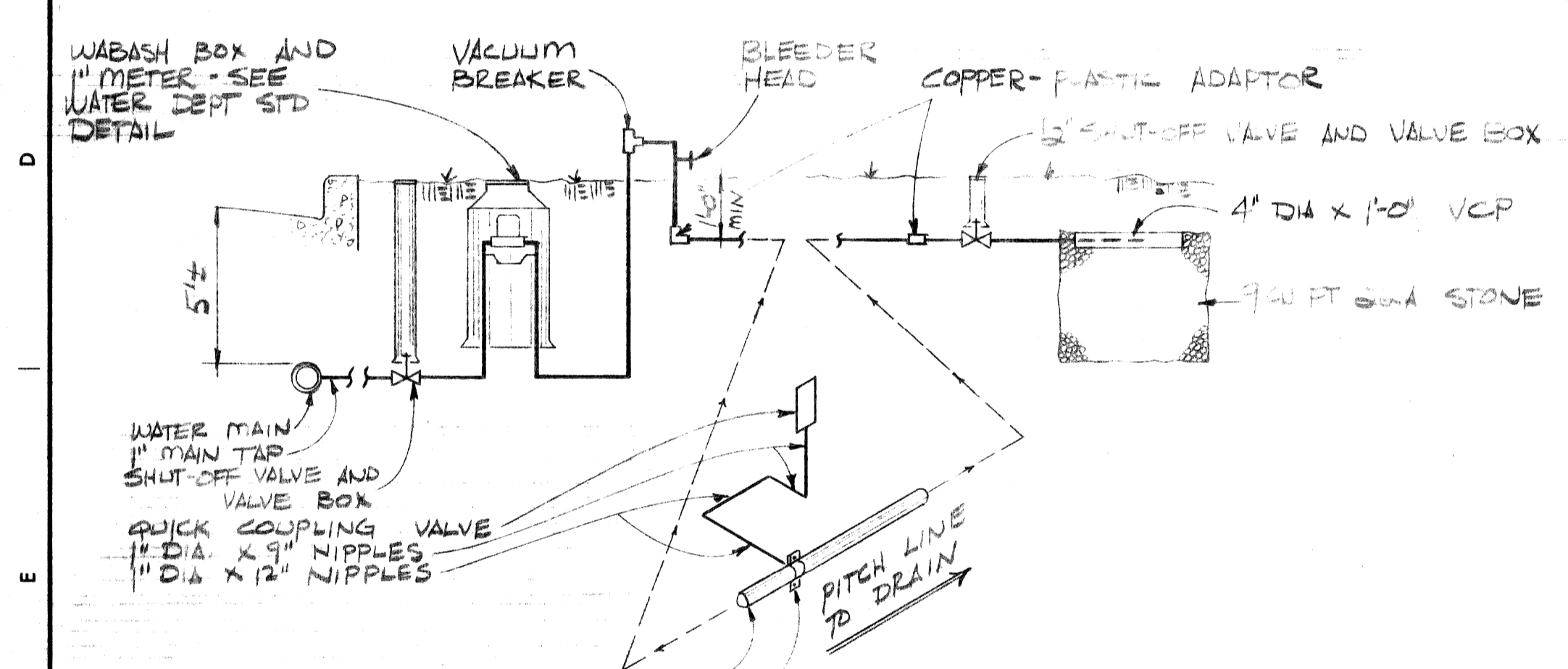
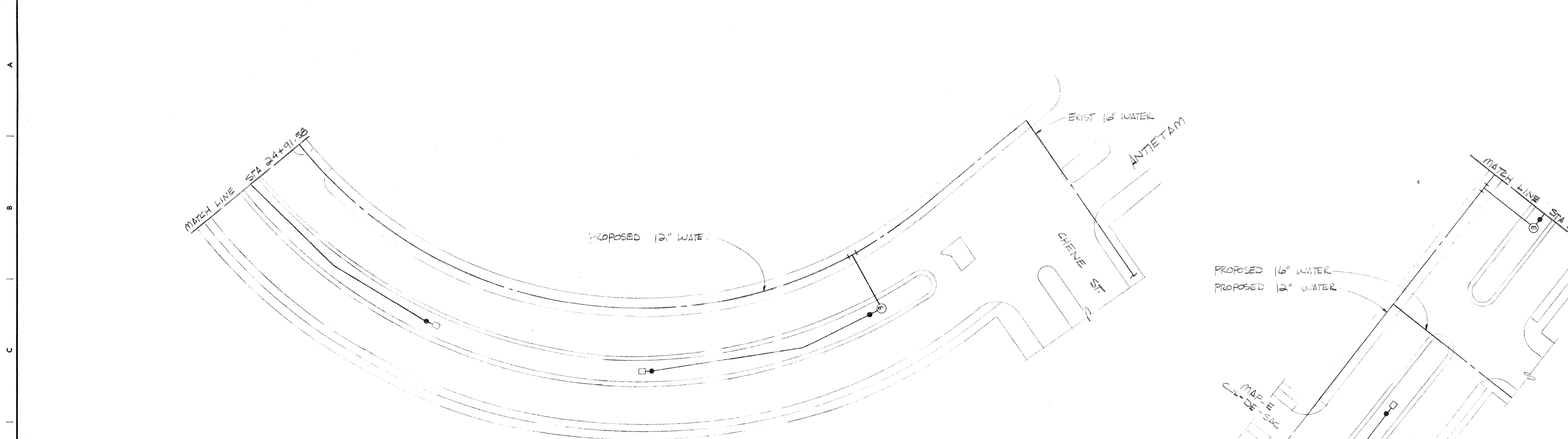


DESIGNED BY	<i>R.B. L...</i>	APPROVED:	<i>Haim B. Kawes</i>
DRAWN BY	<i>R.B. L...</i>	ENGINEER OF STREETS	
TRACED BY			
CHECKED BY	<i>[Signature]</i>		

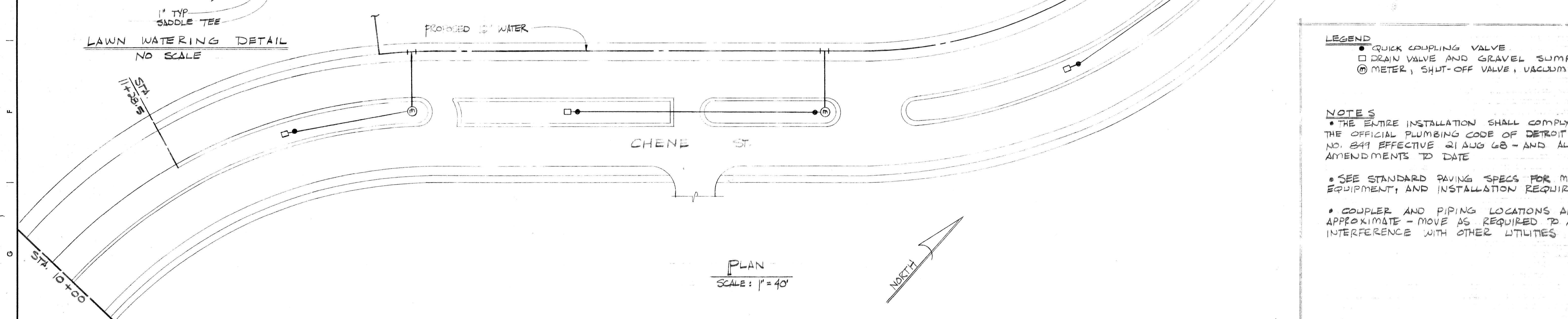
CITY OF DETROIT
 CITY ENGINEER'S OFFICE
 FOR
 COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT

PAVING OF REPLICATED BRICK PAVEMENT FROM THE EAST TO THE DESIGNATED CHENE
 WALK WITH VARIOUS JOINT PATTERN
 ELMWOOD REHABILITATION PROJECT, 4200 ELMWOOD AVE., MICH. R-123
 WALKWAY AND PLAZA DETAILS

SHEET	11	OF	51	SHEETS
CONTRACT NO.	PW 6571			
ACCOMPLISHMENT	53			
DATE	10-28-75			



PLAN
SCALE: 1" = 40'



PLAN
SCALE: 1" = 40'

- LEGEND**
- QUICK COUPLING VALVE
 - DRAIN VALVE AND GRAVEL SUMP
 - ⊙ METER, SHUT-OFF VALVE, VACUUM BREAKER

- NOTES**
- THE ENTIRE INSTALLATION SHALL COMPLY WITH THE OFFICIAL PLUMBING CODE OF DETROIT - ORDINANCE NO. 849 EFFECTIVE 21 AUG 68 - AND ALL AMENDMENTS TO DATE
 - SEE STANDARD PAVING SPECS FOR MATERIALS, EQUIPMENT, AND INSTALLATION REQUIREMENTS
 - COUPLER AND PIPING LOCATIONS ARE APPROXIMATE - MOVE AS REQUIRED TO AVOID INTERFERENCE WITH OTHER UTILITIES

DWG M-1 OF 1

DESIGNED BY: Richard Tassie DRAWN BY: RST TRACED BY: CHECKED BY: J. May		APPROVED: <i>[Signature]</i> MECHANICAL ENGINEER		CITY OF DETROIT CITY ENGINEERING DEPARTMENT FOR COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT			PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIETAM - PAVING OF MAPLE CUL-DE-SAC FROM CHENE TO RELOCATED CHENE - MISCELLANEOUS CONSTRUCTION - ELMWOOD PARK REHABILITATION PROJECT NO. 3 MICH R-123 LAWN WATERING SYSTEM PLAN AND DETAIL			SHEET 20 OF 51 SHEETS CONTRACT NO. PW-6571 ASSIGNMENT NO. AO 2253 DATE 10-28-75	
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ITEM NO.	DESCRIPTION OF ITEM	UNIT	SHEET #6	SHEET #7	SHEET #8	SHEET #9	SHEET #10	SHEET #11	SHEET #12	SHEET #13	SHEET #14	SHEET #15	SHEET #17	SHEET #18	TOTAL
1	EXCAVATION	CYDS							5091	5617	5484	2468		340	19,600
2	STREET PAVEMENT REMOVAL - UNREINF.	SYDS	4148	23,530	13,893	4547	1540	1180							48,838
3	STREETCAR RAIL REMOVAL	LFT	140	10,008	5570	1500									17,278
4	STREETCAR TRACK BASE REMOVAL	SYDS	55	4677	2554	611									7957
5	ALLEY PAVEMENT REMOVAL	SYDS		6587	4509	4436									15,532
6	NON-REINFORCED CONCRETE REMOVAL	CYDS													614
7	CONCRETE POST REMOVAL - 2.5' HEIGHT	EACH	23												23
8	STEEL BEAM GUARD RAIL REMOVAL	EACH		2											2
9	SINGLE BEAM BARREL BARRICADE REMOVAL	LFT		190											190
10	GRADING ABANDONED STREETS	SYDS	6615	35,376	21,819	8491									78,301
11	GRADING ABANDONED ALLEYS	SYDS		4722	3664	4436									18,822
12	TREE REMOVAL (4" - 12" DIA.)	EACH		34	26										60
13	TREE REMOVAL (13" - 18" DIA.)	EACH		12	7										19
14	TREE REMOVAL - 24" DIA.	EACH		8	8										8
15	TREE REMOVAL - 30" DIA.	EACH		8	8										17
16	TREE REMOVAL - 36" DIA.	EACH		3	1										4
17	DRIVEWAY REMOVAL	SFT		3769	386										4155
18	SIDEWALK REMOVAL	SFT	12,159	69,763	42,258	11,618	5084	3024							145,310
19	FILL (GRADE A)	CYDS	16												3883
20	FILL (22A)	CYDS													2315
21	MANHOLE ADJUSTMENT	EACH	2	18	3	3									27
22	MANHOLE ABANDONMENT	EACH		11	7	3									21
23	MANHOLE-RECONSTRUCT CONE	EACH													1
24	MANHOLE - STANDARD, NEW	EACH													10
25	MANHOLE - STANDARD WITH SUMP	EACH													1
26	MANHOLE - DROP, NEW	EACH													1
27	MANHOLE - SPECIAL TYPE	EACH													1
28	CATCH BASIN - ABANDONMENT	EACH	5	62	33	8									109
29	CATCH BASIN - SPECIAL ABANDONMENT	EACH													1
30	CATCH BASIN "A"	EACH													16
31	CATCH BASIN "B"	EACH													2
32	CATCH BASIN "E" WITH TRAP	EACH													15
33	CATCH BASIN 18" X 12" SPECIAL Y	EACH													1
34	SEWERS - 12" PIPE C-76-III	LFT													1633
35	SEWERS - 12" PIPE C-76-IV	LFT													348
36	SEWERS UNDER PAV'T, 12" PIPE C-76-III	LFT													55
37	SEWERS - 15" PIPE C-76-IV	LFT													650
38	SEWERS - 18" PIPE C-76-IV	LFT													246
39	SEWERS - 24" PIPE C-76-IV	LFT													410
40	PAVEMENT - 9" UNF. REINF. CONC. **	SYDS													19,747
41	SEPARATE TYPE CURB NON-REINF.	LFT		75											175
42	TEST CORES	EACH													19
43	SIDEWALK, STANDARD 4" *	SFT		450											25,692
44	SIDEWALK, STANDARD 6" *	SFT													2627
45	SIDEWALK RAMP, 6"	EACH													10
46	DRIVEWAY, STANDARD 6"	SFT													2946
47	LAWN MOWER RAMPS	EACH													6
48	4" CONC. BASE PAV'T INCLUDING INTEGRAL HEADER	SYDS													1266
49	2" CONC. WALK INCLUDING BRICK EDGING	SFT													9455
50	BRICK SURFACE COURSE	SFT													9749
51	LAWN WATERING SYSTEM	LS													LUMPSUM
52	MAINTAINING TRAFFIC	LS													LUMPSUM
57-67	WATER ALTERATIONS	LS													LUMPSUM
68	SEWER ALTERATIONS	LS													LUMPSUM
69-72	LANDSCAPE DEVELOPMENT														LUMPSUM
73-75	ELECTRICAL ITEMS														LUMPSUM

FOR QUANTITIES SEE SHEET #25 OF #51
 SEE SHEETS #23 AND #24
 FOR QUANTITIES SEE SHEET #22 OF #51
 FOR QUANTITIES SEE SHEET #51 OF #51

NOTES:
 * CONSTRUCTION ONLY
 ** INCLUDES REINFORCED INTEGRAL CURBS,
 SEE STANDARD DRAWING C-4943

COORD	DESCRIPTION	DATE

DESIGNED BY	JONES
DRAWN BY	JONES
TRACED BY	
CHECKED BY	

APPROVED:
W. R. ...
 ENGINEER OF STREETS

CITY OF DETROIT
 CITY ENGINEERING DEPARTMENT
 FOR
 COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT

PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIETAM
 PAVING OF MAPLE CURB CUT IN C-40 FROM CHENE TO RELOCATED CHENE
 AND MISCELLANEOUS CONSTRUCTION
 ELMWOOD PARK REHABILITATION PROJECT NO 3 MICH RH23
 QUANTITY SHEET

SHEET	21	OF	51
CONTRACT NO.	PW 65		
DATE	6-28-75		

PLANT LIST

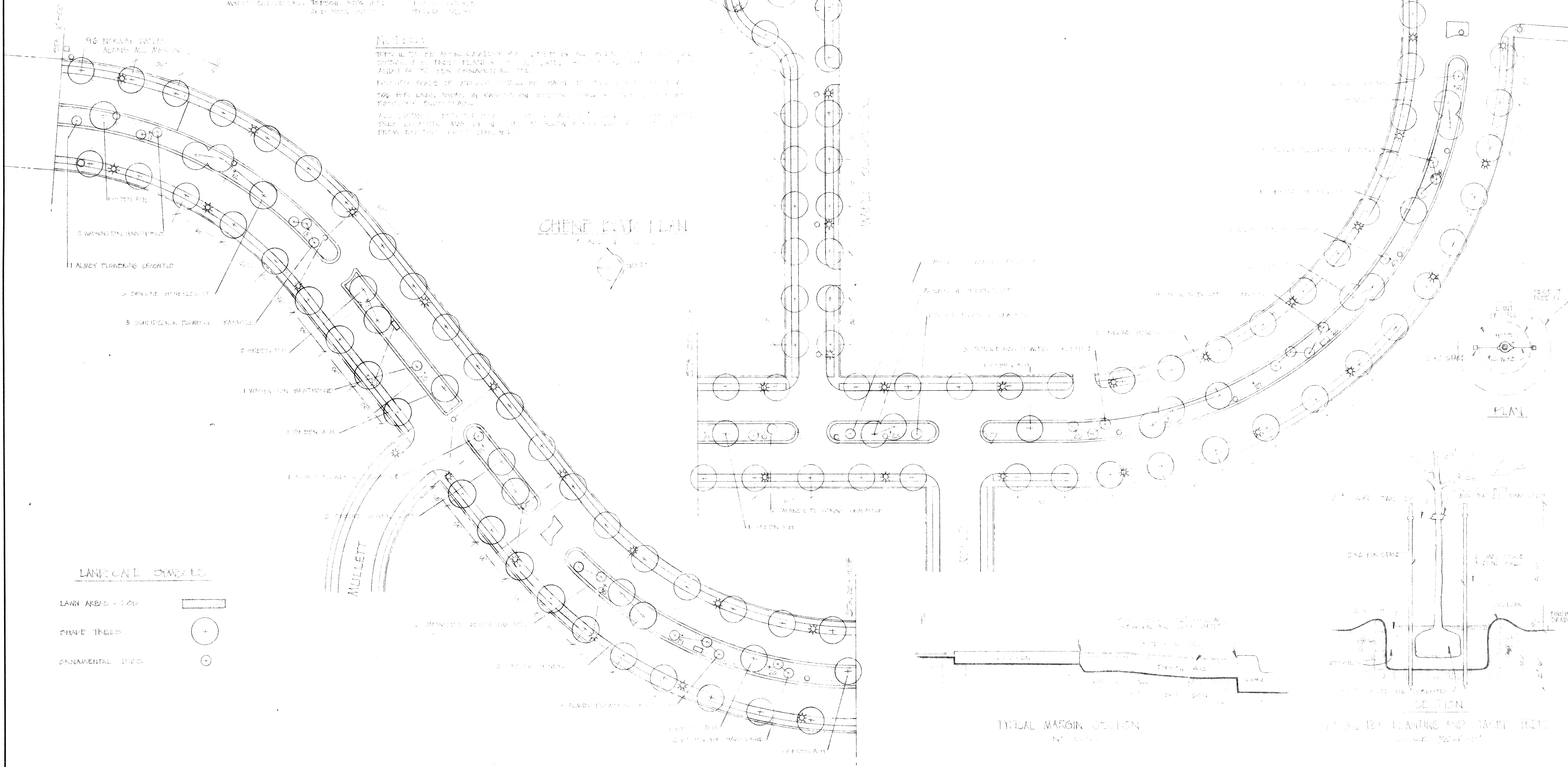
QUANTITY	NAME	SIZE	ROOT
96	ACER PLATANIFOLIUS - NORWAY VALLEY	3" DIA	B17
10	CRATAEGUS PHAEOGYNIA - WASHINGTON HAWTHORNE	2" DIA	B17
10	FRAXINUS FRAXINIFOLIA - GREEN ASH	2" DIA	B17
10	QUERCUS TRILOBATA - SKYLINE SKYLINE	2" DIA	B17
10	WALNUT ALABAMA - ALABAMA FLOWERING	2" DIA	B17
10	WALNUT JAPANESE - JAPANESE FL. CRANFILL	2" DIA	B17
10	WALNUT SCANDINAVIAN - SCANDINAVIAN FL. CRANFILL	2" DIA	B17

CHENE: 100% NORWAY VALLEY - 100% GREEN ASH
 100% WASHINGTON HAWTHORNE - 100% SKYLINE
 100% ALABAMA FLOWERING - 100% JAPANESE FL. CRANFILL
 100% SCANDINAVIAN FL. CRANFILL - 100% SKYLINE

NOTES

1. PLANTING TO BE ACCORDING TO THE PLAN AND THE NOTES HEREON.
 2. PLANTING TO BE ACCORDING TO THE PLAN AND THE NOTES HEREON.
 3. PLANTING TO BE ACCORDING TO THE PLAN AND THE NOTES HEREON.
 4. PLANTING TO BE ACCORDING TO THE PLAN AND THE NOTES HEREON.
 5. PLANTING TO BE ACCORDING TO THE PLAN AND THE NOTES HEREON.

CHENE DIVISION PLAN



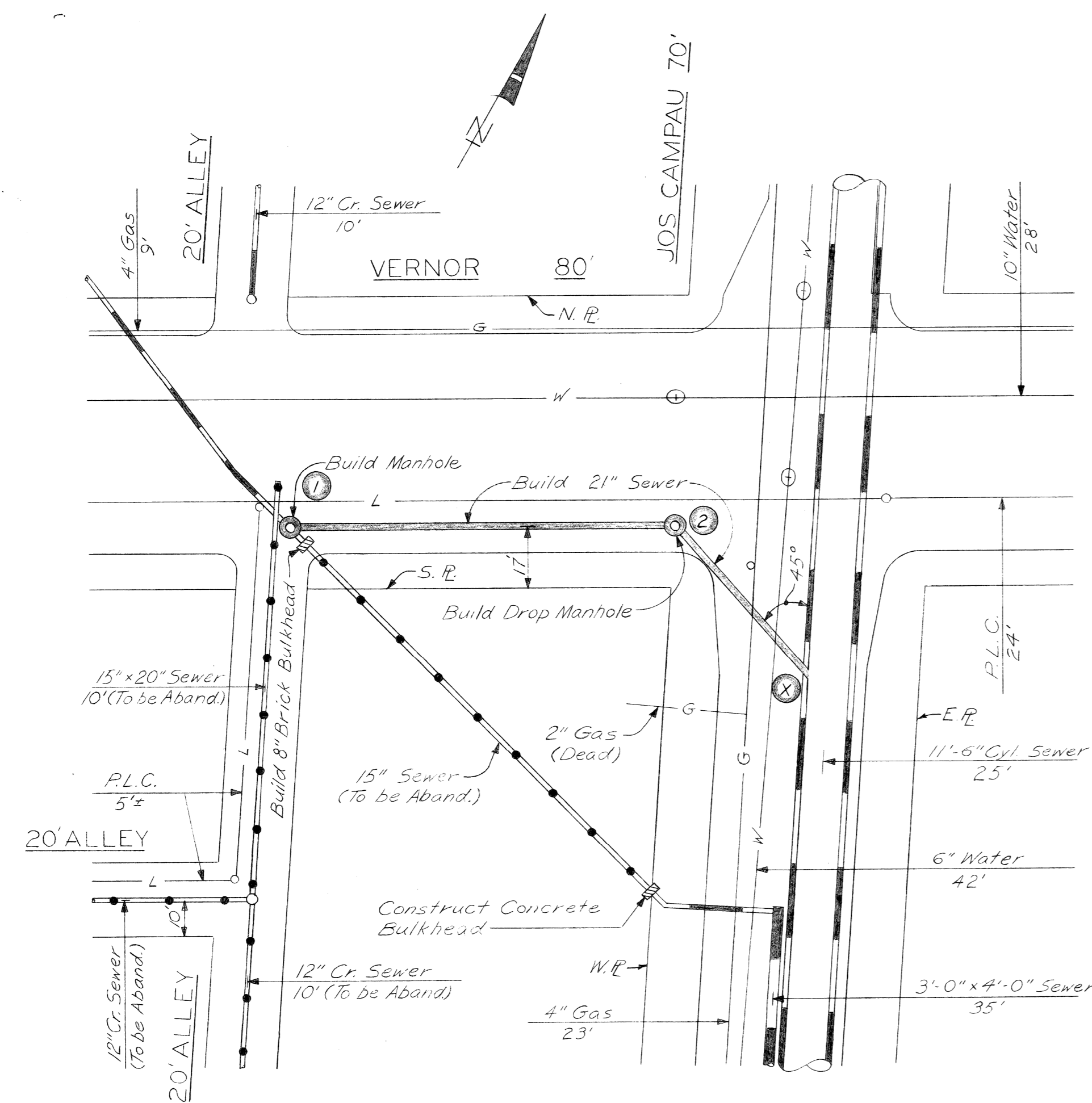
LANDSCAPE SYMBOLS

- LAWN AREAS - 100
- CHANE TREES - (+)
- ORNAMENTAL TREES - (o)

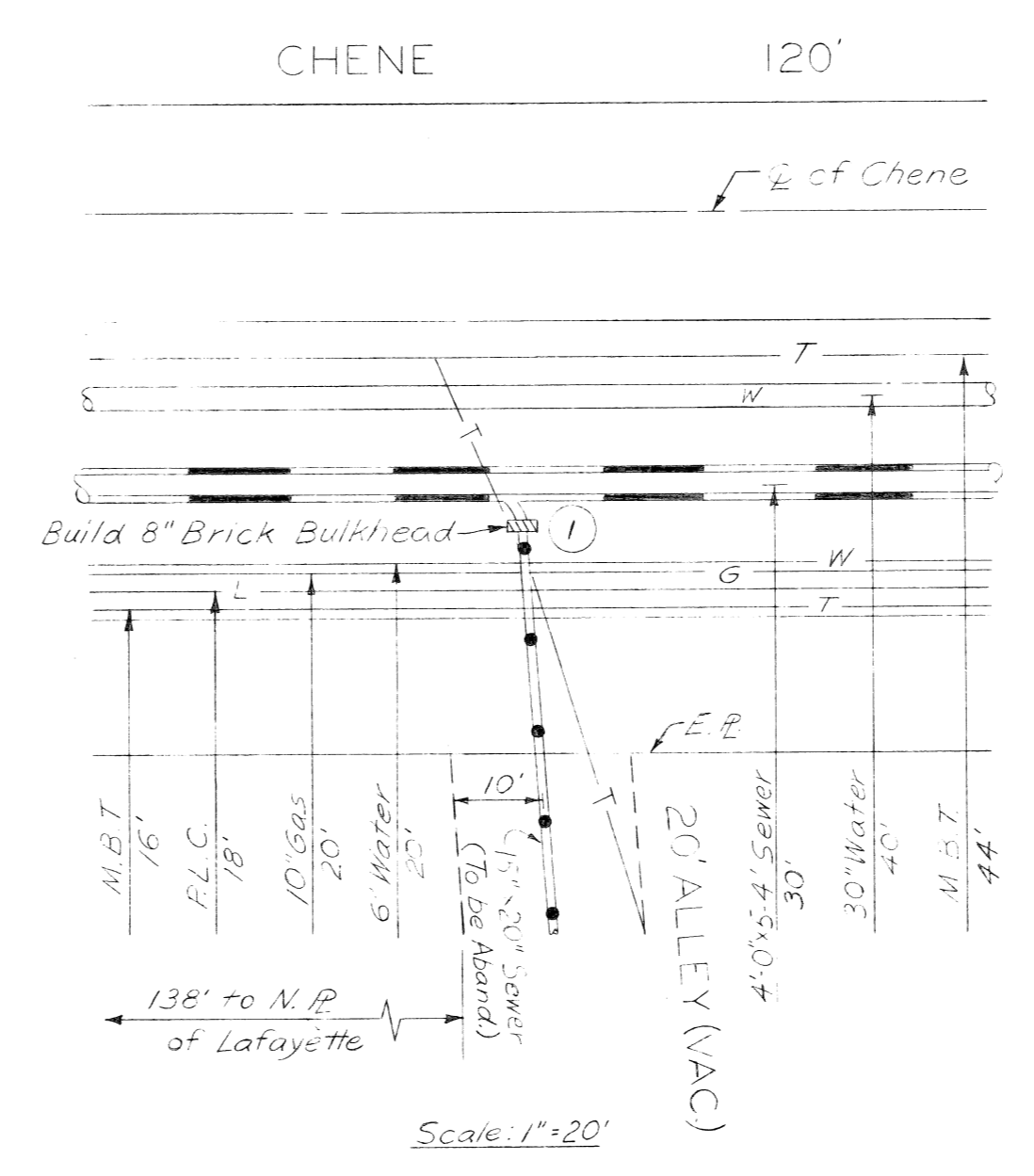
TYPICAL MARGIN SECTION

TYPICAL PLANTING AND GRADING SECTION

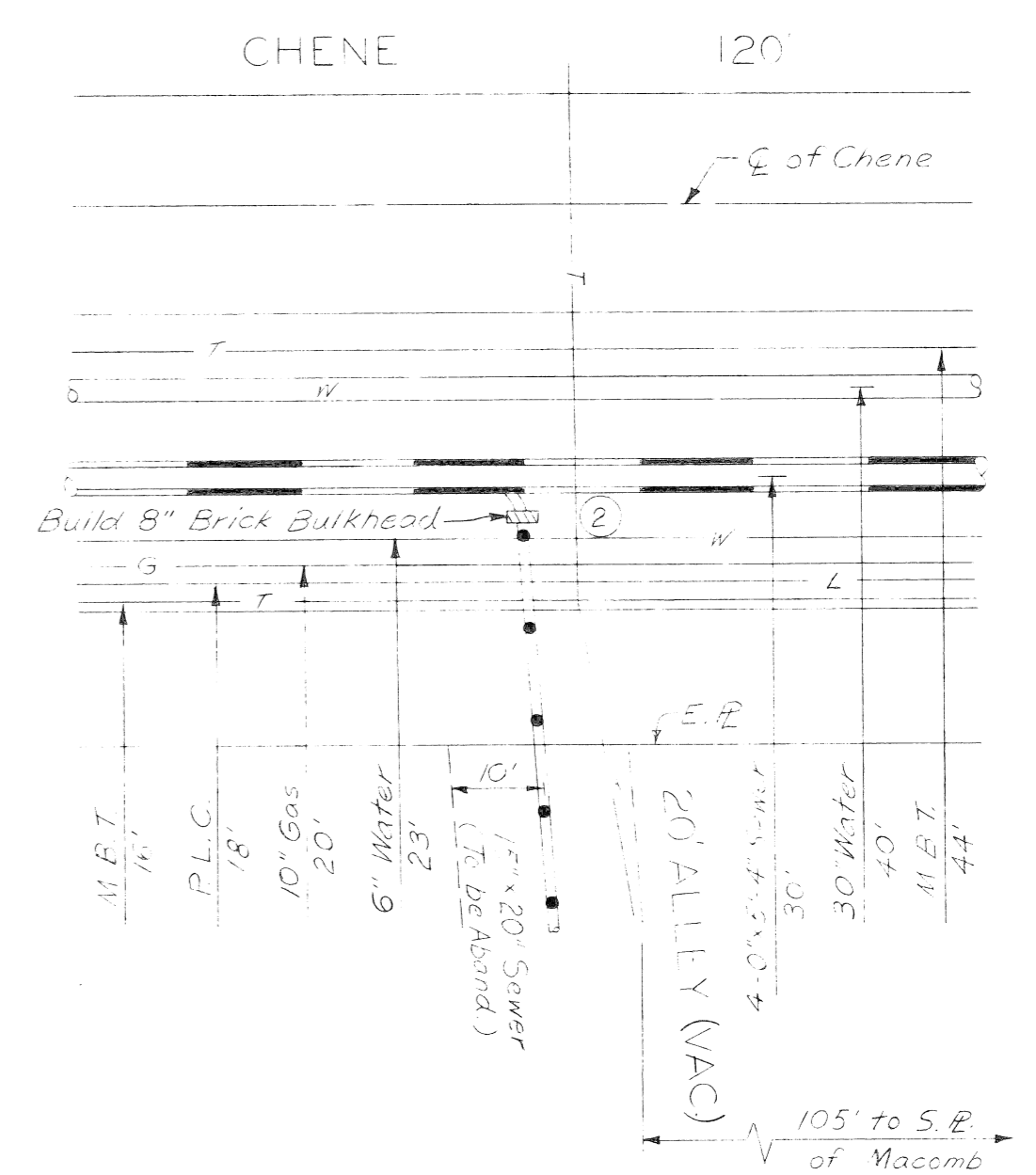
DESIGNED BY: T. VIALL DRAWN BY: D. KEMPA TRACED BY: CHECKED BY: D. HAUTAU		APPROVED: <i>W. Emory Wellman</i> CHIEF OF LANDSCAPE ARCHITECTURE		CITY OF DETROIT DEPARTMENT OF FOR COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT			LANDSCAPE DEVELOPMENT PLAN PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIETAM AND PAVING OF MAPLE CUL-DE-SAC FROM CHENE TO RELOCATED CHENE AND MISCELLANEOUS CONSTRUCTION ELMWOOD PARK REHABILITATION PROJECT IN 5 VIGNETTES			SHEET 2 OF 51 SHEETS CONTRACT No. PW 6571 DATE: 02-28-1973	
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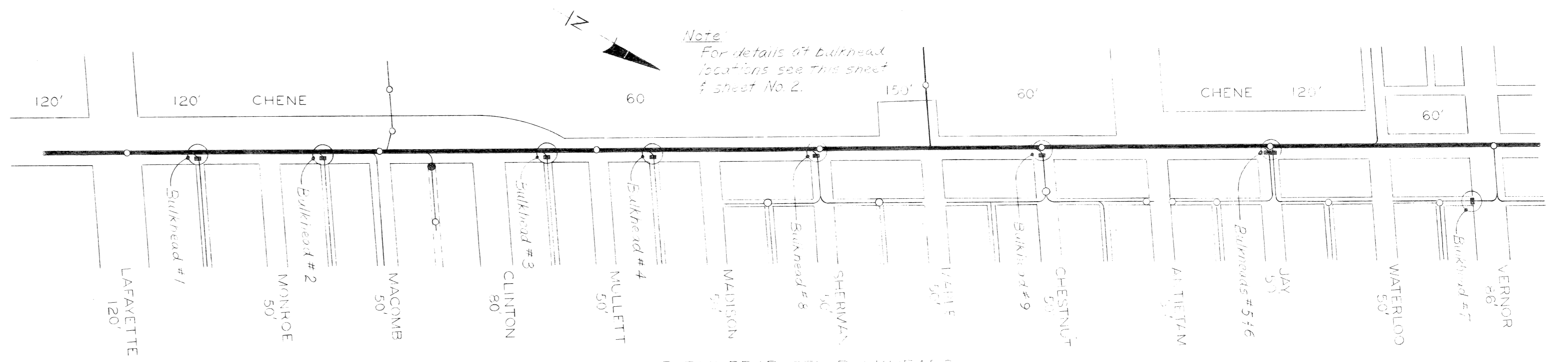
PLAN
Scale: 1"=30'



Scale: 1"=20'

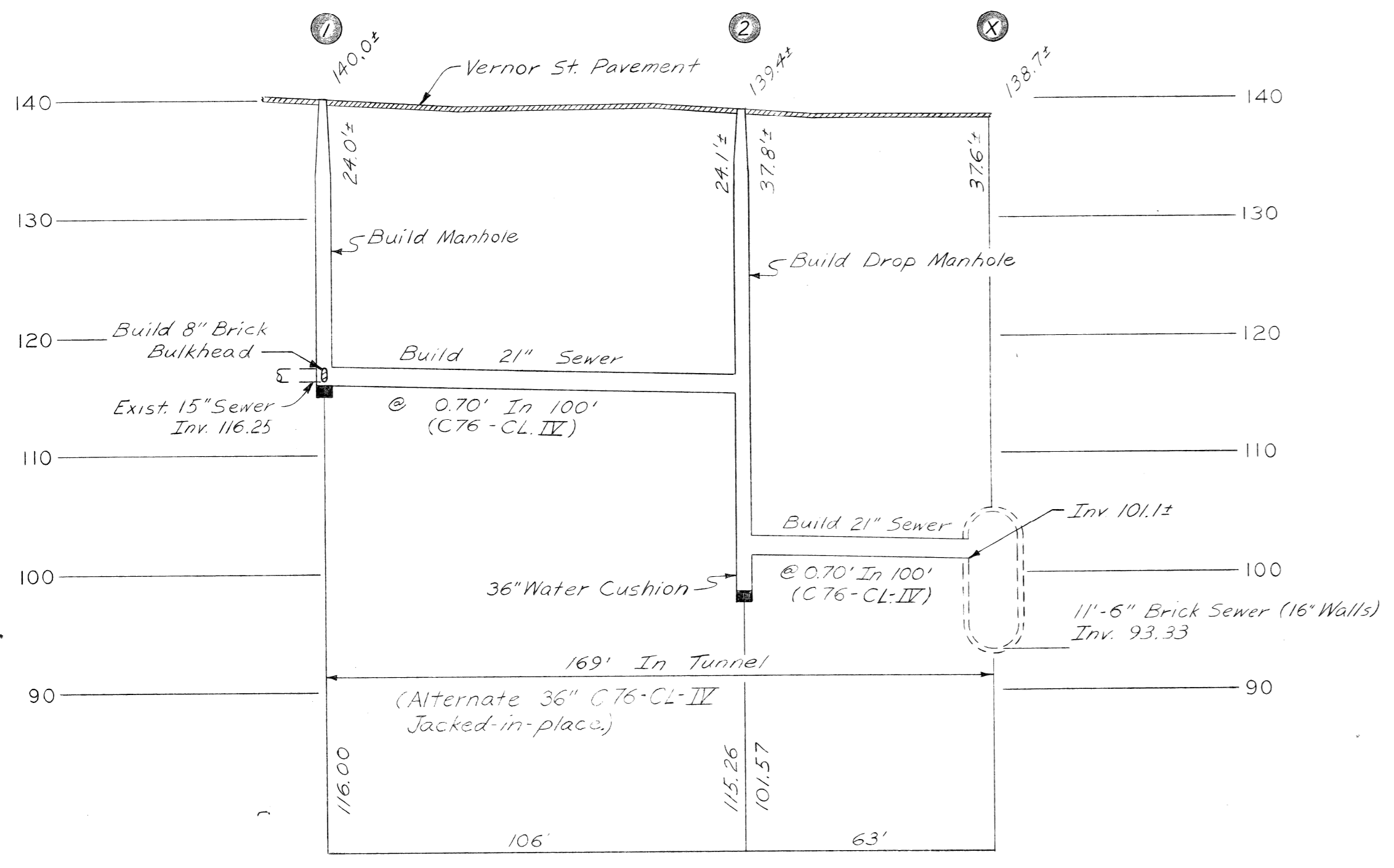


Scale: 1"=20'



LOCATION MAP FOR PROPOSED BULKHEADS
Scale: 1"=200'

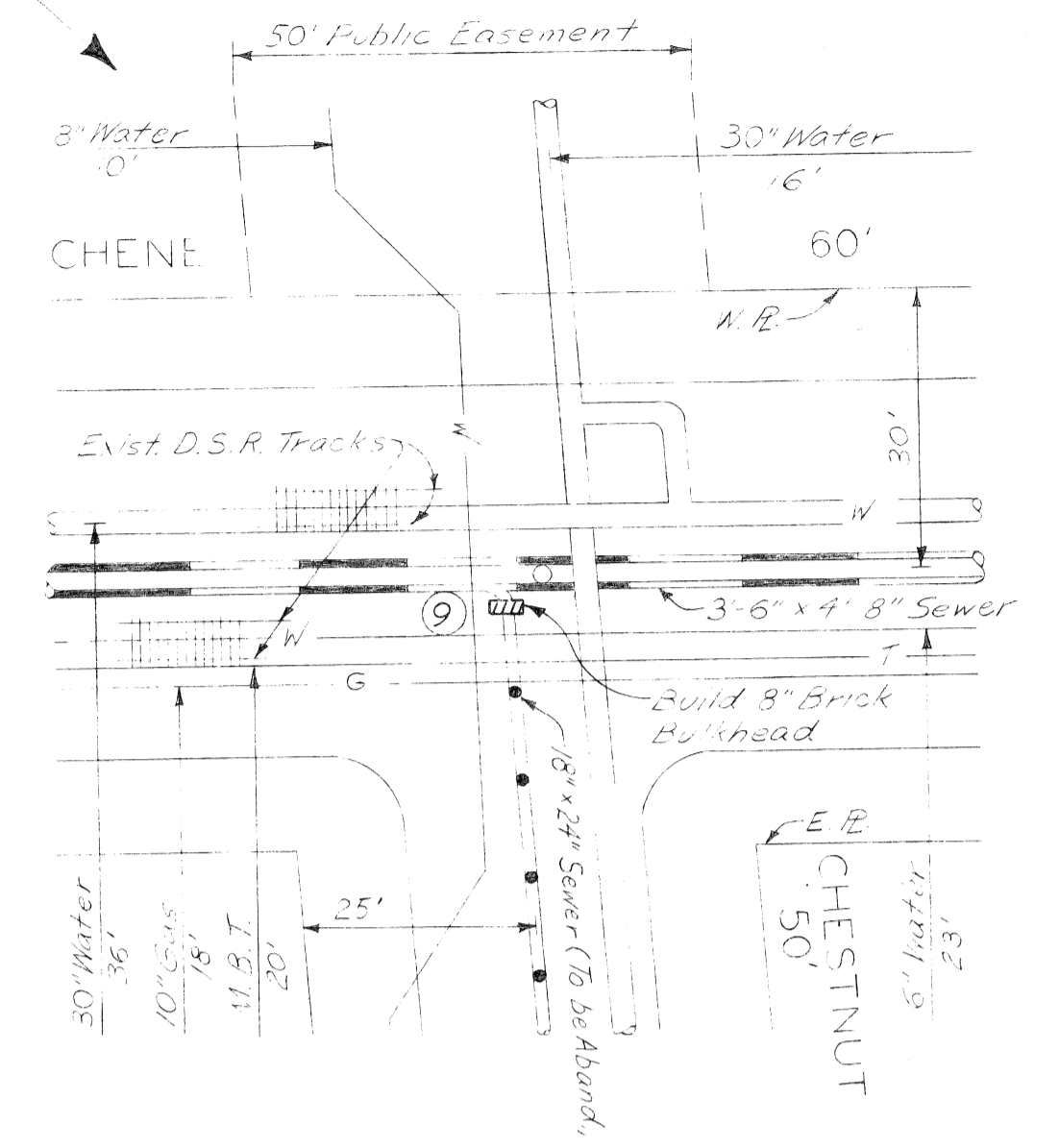
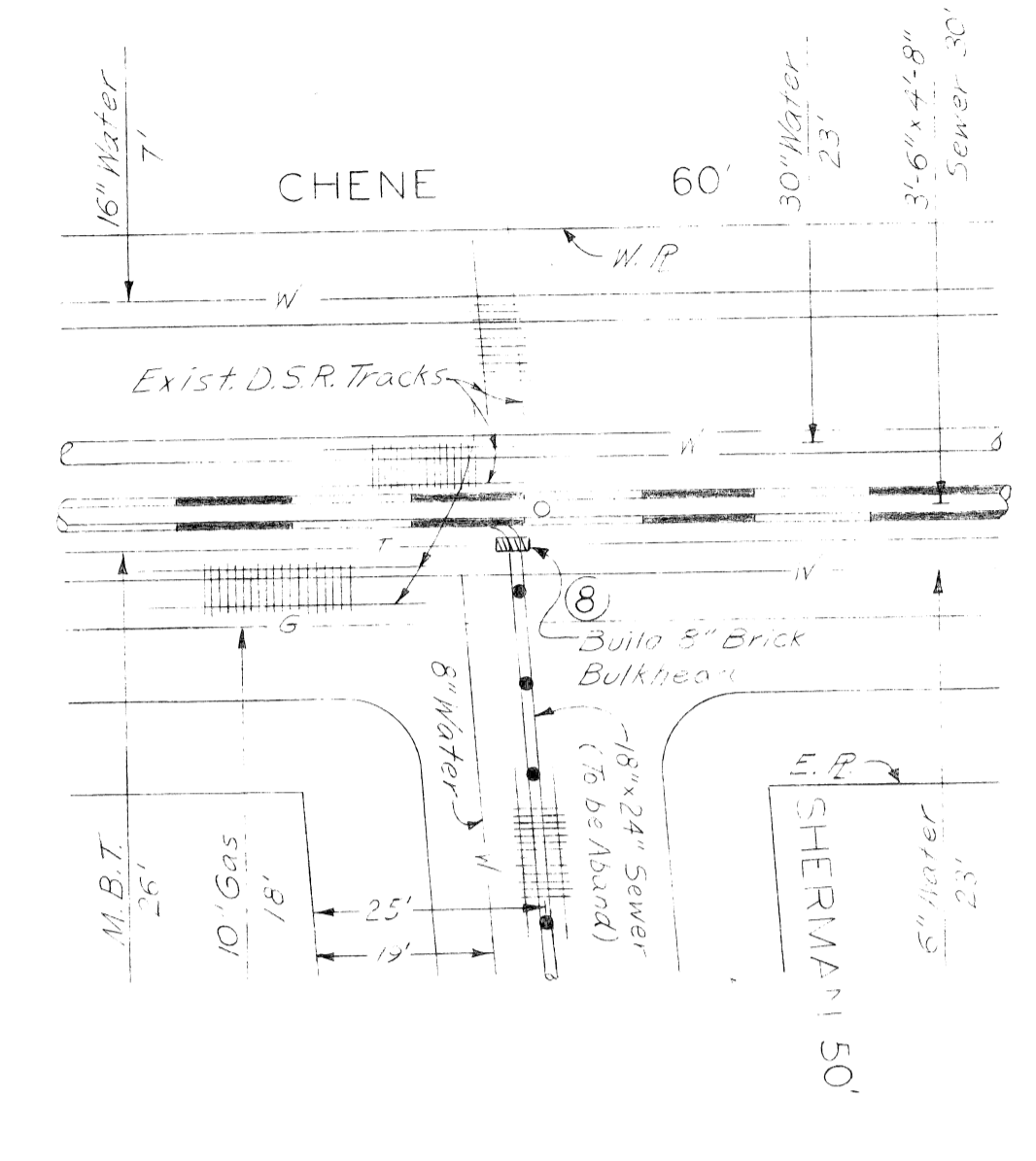
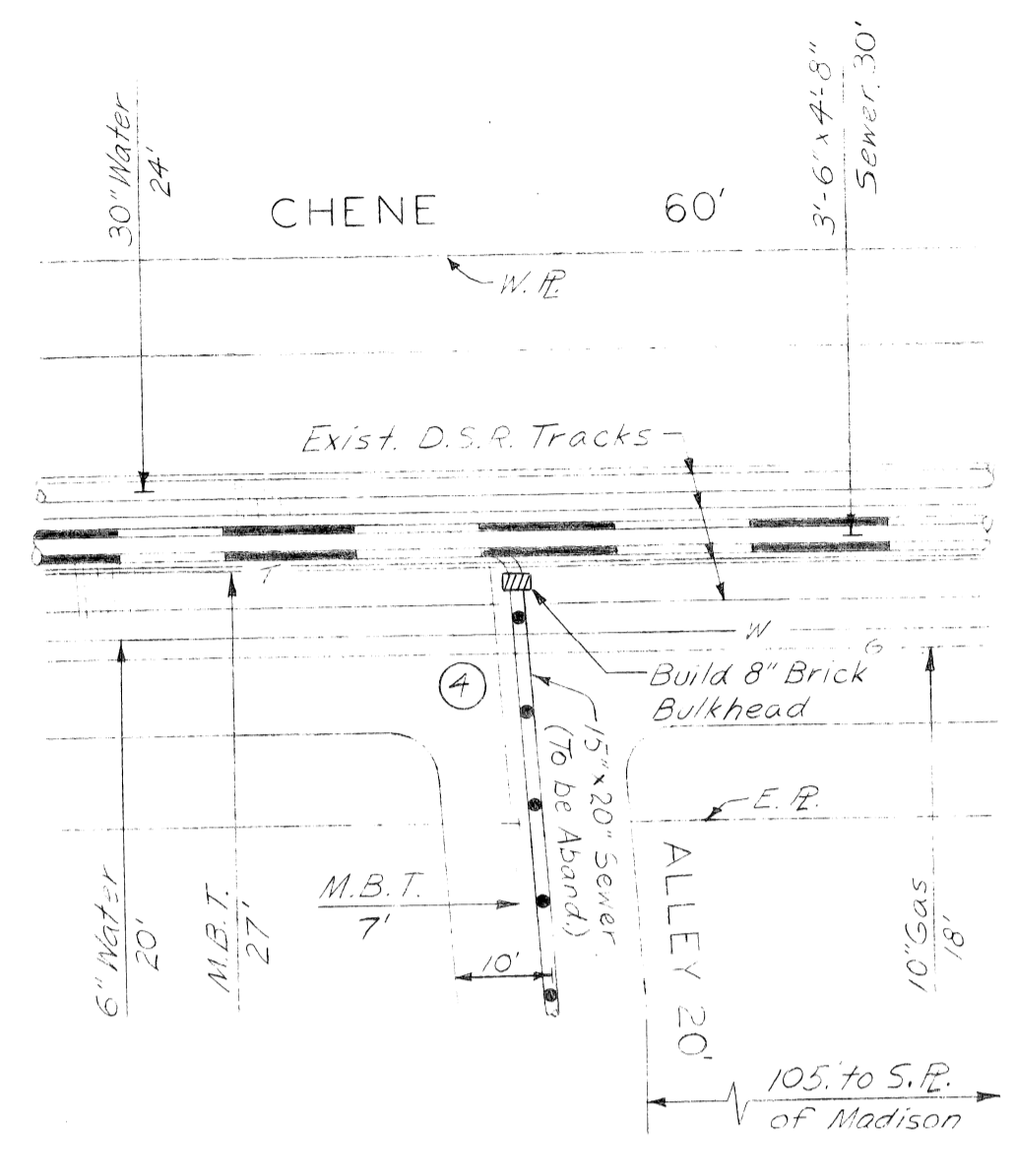
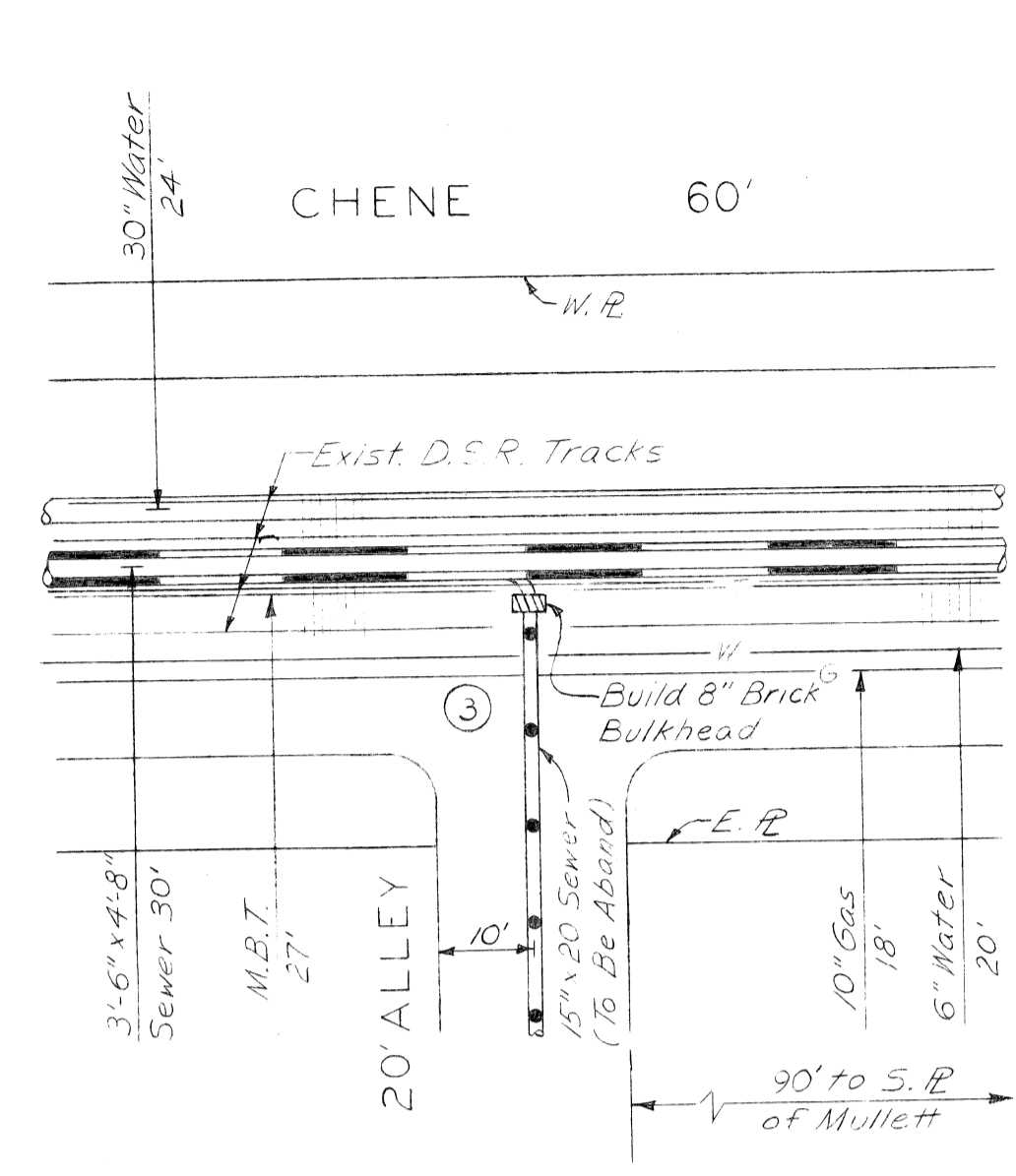
- Notes:
- 1) The utilities and their locations are shown in accordance with the best available records. No guarantee is made as to completeness or accuracy.
 - 2) All sewer work on these drawings shall be constructed in accordance with Detroit Metro Water Department lateral sewer construction specifications, permit and inspection.
 - 3) Verify invert elevations prior to start of construction.



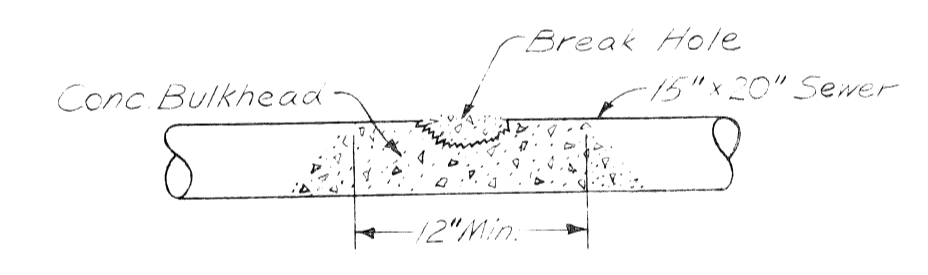
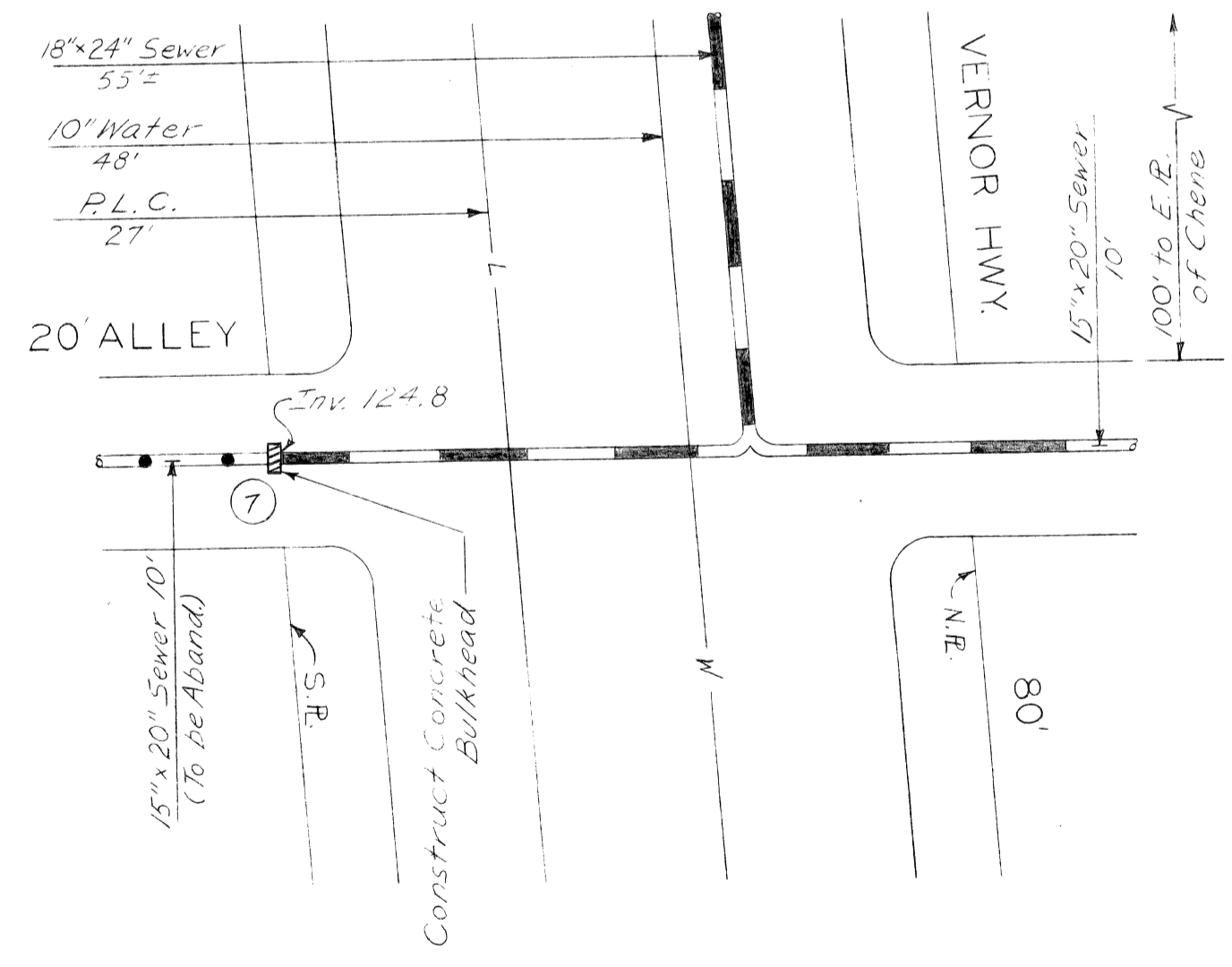
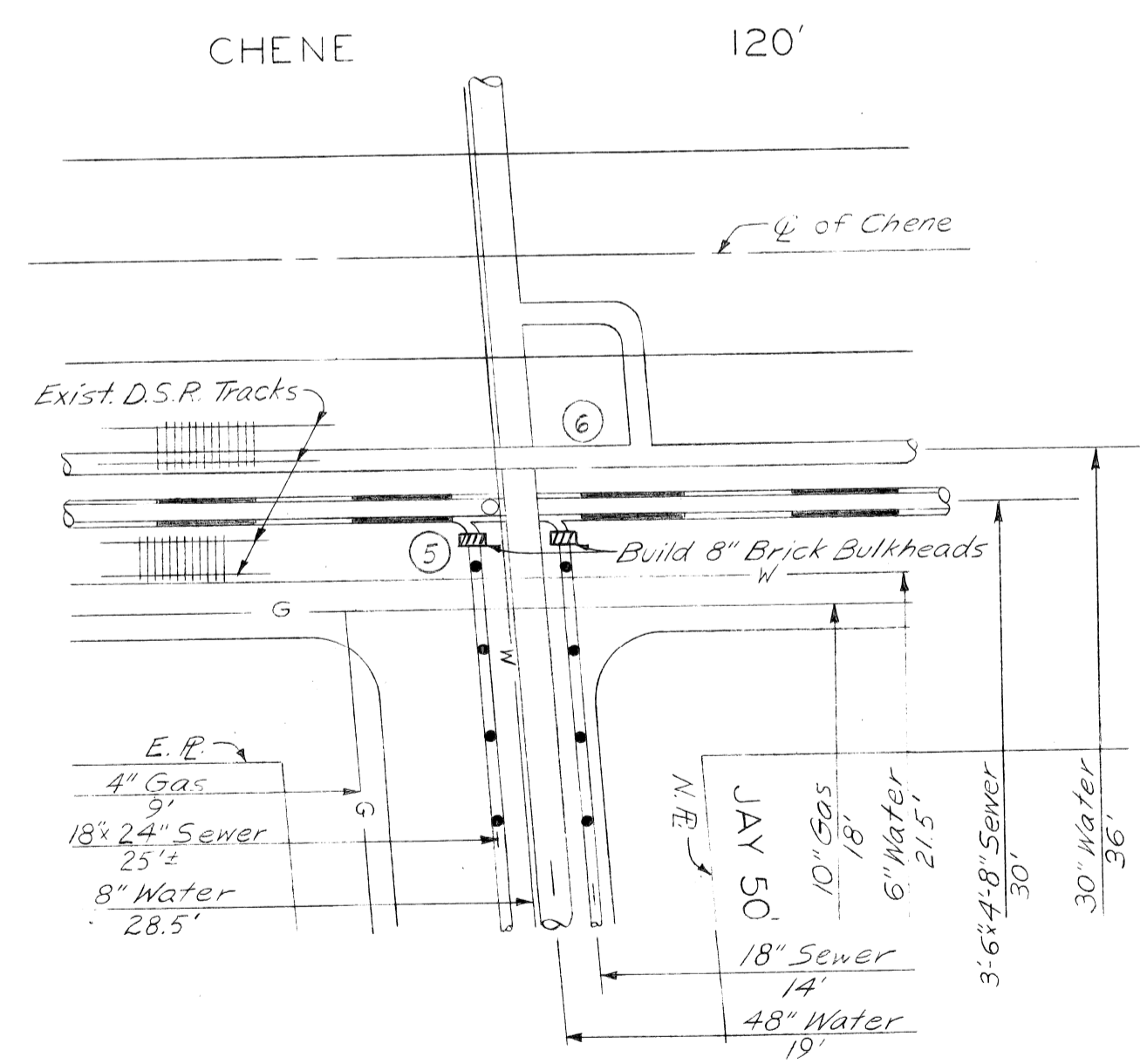
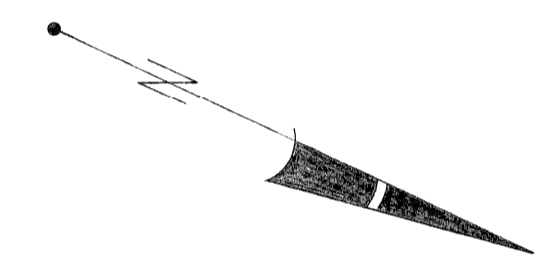
PROFILE
Scales: Hor. 1"=30'
Vert. 1"=10'

DESIGNED BY		APPROVED		PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIETAM AND CUL-DE-SAC FROM CHENE TO RELOCATED CHENE AND MISCELLANEOUS CONSTRUCTION ELMWOOD PARK REHABILITATION PROJECT NO.3 MICH.R-123				DETROIT METRO WATER DEPARTMENT ENGINEERING DIVISION POLLUTION CONTROL PROGRAM CENTRAL DISTRICT				M.D.P.H. PERMIT NO.									
DRAWN BY <i>William Baker Jr.</i>		HEAD ENGINEER-WATER SYSTEM										CONTRACT NO. PW-6571									
CHECKED BY <i>D.P. [Signature]</i>		DIRECTOR OF ENGINEERING		SEWER ALTERATIONS				SECTION MAP		TOWN		RANGE		SECTION		PORTION CODE		WORK ORDER NO.		D-7501458	
CHECKED BY <i>H. Wilson</i>		ENGINEER-WATER SYSTEM						SCALE AS SHOWN		DATE		S-136-7274									

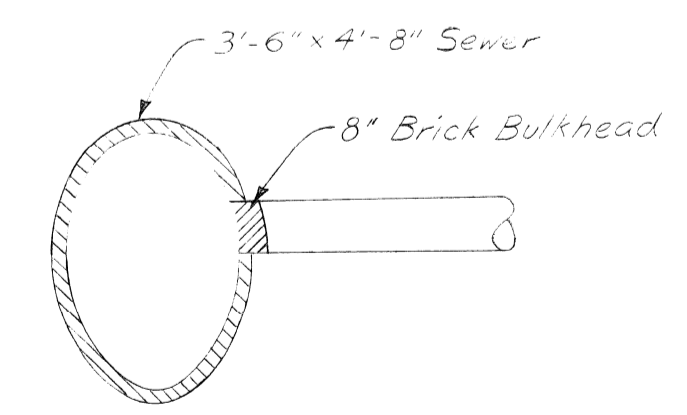
Note:
Install a bulkhead as shown at the intersections of Chene and Chestnut and Chene and Sherman only if the Antietam and Cul-de-sac segments between Chene and Joseph Campau are removed.



Note:
All bulkheads in Chene shall be constructed flush with the wall of the 3'-6" x 4'-8" Sewer.



TYPICAL DETAIL OF BULKHEAD
CONSTRUCTED & Poured FROM
OUTSIDE THE SEWER AFTER
EXCAVATING TO THE SEWER DEPTH
NO SCALE



TYPICAL CROSS-SECTION OF BULKHEAD
CONSTRUCTED FROM WITHIN THE SEWER
NO SCALE

Sewer Bulkheads
Sewer bulkheads shall be constructed of brick or concrete to the specified thickness as shown on the plans or as indicated by the Engineer.

Brick Bulkheads
The surface of contact of the sewer wall with the bulkhead shall be roughened by rust-hammering or chiseling and then cleaned just prior to the bulkhead construction.

Such bulkheads shall be vertical, having every seventh course laid as stretchers with interspersed courses laid as headers. Vertical joints in adjacent courses shall be staggered.

Brick shall be laid with full mortar joints. All available bearing areas shall be covered with mortar, spread in an even layer without splitting or furrowing, and all vertical and exterior joints shall also be solidly filled with mortar. The course shall be laid even. Bulkheads shall be constructed to be as plumb as is practical.

Concrete Bulkheads
All bulkheads shall be constructed with Grad. "A" Concrete to a thickness of at least or 2 1/2" (1) the diameter of the pipe, but in no case less than twelve inches.

F				DESIGNED BY	
E				DRAWN BY	<i>William B...</i>
D				CHECKED BY	<i>D.D. 115</i>
C				CHECKED BY	<i>H. Wilson</i>
B				APRVD.	
A				DATE	
CO-OR.				DESCRIPTION	
				REVISIONS	

APPROVED	
HEAD ENGINEER OF WATER SYSTEM	<i>D. Subreza</i>
DIRECTOR OF ENGINEERING	
CHIEF ENGINEER	

PAVING OF RELOCATED CHENE FROM CLINTON TO ANTIETAM AND CUL-DE-SAC FROM CHENE TO RELOCATED CHENE AND MISCELLANEOUS CONSTRUCTION
ELMWOOD PARK REHABILITATION PROJECT NO. 3 MICH. R-123

SEWER ALTERATIONS

SCALE 1"=20'

DETROIT METRO WATER DEPARTMENT					
ENGINEERING DIVISION					
POLLUTION CONTROL PROGRAM					
CENTRAL DISTRICT					
SECTION MAP	TOWN	RANGE	SECTION	PORTION CODE	WORK ORDER NO.
					S-136-14

SHEET 24 OF 51 SHEETS
M.D.P.H. PERMIT NO.
FED. REF. NO.
CONTRACT NO.
PW-6571
D-7501459

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GENERAL NOTES

All Water Main construction shall be performed with materials and workmanship of the highest quality for the particular purpose and shall strictly conform to the current standards and specifications of the Detroit Metro Water Department.

Pavement removal and replacement, excavation and backfill for the entire work, including that for work to be done by the D.M.W.D., shall be done by the contractor.

The contractor shall furnish all waterworks material required for the entire work, including materials for work indicated on the drawings to be done by the D.M.W.D., except for materials for services 2-inch in diameter or smaller.

After the newly constructed Water Mains have been satisfactorily pressure tested, flushed and chlorinated, the contractor shall make all connections to existing Water Mains, unless otherwise noted or shown on the drawings.

Service connections, 2-inch in diameter or smaller, and their relocations will be made by D.M.W.D. Abandoned water services 2-inch in diameter or smaller on Existing Water Mains to remain in service will be abandoned at the Existing Water Mains by D.M.W.D. Services to be abandoned at the Existing Water Main or to be reconnected to the New Water Mains are not all shown on the plans.

Existing Water Mains, as shown, indicate approximate locations only as shown by D.M.W.D. records and no guarantee is made as to completeness or accuracy.

Exact elevations of Existing Water Mains are not known. Approximate elevations shown on the profiles are based on the assumption of 5 feet average depth. The grades of the Proposed Water Mains are subject to change to suit actual elevations of Existing Water Mains.

The locations and elevations of existing utilities are shown in accordance with available data received from utility companies. The Contractor shall expose these utilities, where required to determine actual locations.

Other utilities may be making alterations to their existing systems in the vicinity of the Water Main construction shown on the plans. These utilities should be consulted for the latest information regarding the location of their facilities.

A minimum clearance of one foot vertically and three and one half feet horizontally shall be maintained between the Water Main and other utilities, unless otherwise shown on the plans or approved by the Engineer. If a conflict is indicated between the Water Main and any other utility, that utility should be consulted.

The location of Fire Hydrants, as shown, are approximate. D.F.D. will give exact location of New or Relocated Fire Hydrants prior to installation.

Elevation Datum is City of Detroit Datum.

Pipe shall have Bell and Spigot Joints designed for sealing with a Rubber Gasket such as "Tyton" "Super Bell Tight" or approved equal except that Line Valves, Hydrant Connections and Hydrant Valves shall have leaded joints in accordance with D.M.W.D. Specifications.

The Drawings indicate the arrangement, general design and extent of the Water Main alterations. The Mains and connections are shown, more or less, in diagram and in their general locations, except where in certain cases the Drawings may include details giving the exact location and arrangement. Due to the small scale of the Drawings, it is not possible to indicate all offsets, fittings, valves and accessories that are required. The Contractor shall carefully investigate the structural and other conditions affecting all the work and shall arrange and perform his work under this Contract accordingly, furnishing and installing such items of material as may be required to meet such conditions.

In compliance with Public Act 53 of the State of Michigan (Effective Aug. 1, 1974), the Contractor shall notify in advance of construction all public and private owners having existing facilities in or near the immediate working area. For convenience the known utility owners are listed on this sheet. This listing does not, however, relieve the Contractor of the responsibility of verifying utility locations and notifying all utility owners and Miss Dig (Phone 6477-344 in Area Code 313).

The Detroit Edison Co. 2000 Second Avenue Detroit, Michigan 48226 Overhead 644-3040 Underground 462-2100

Mich. Consolidated Gas Co. One Woodward Avenue Street Department 10th. Fl. Detroit, Michigan 48226 Phone 965-2430

Mich. Bell Telephone Co. 29350 Southfield Rd., Rm. 25 Southfield, Michigan 48076 Phone 353-9942

Public Lighting Comm. 7500 Joseph Campau Detroit, Michigan 48211 Phone 875-0972

CONSTRUCTION NOTES

All Water Main work performed by the Contractor must be inspected by the D.M.W.D. during construction.

Encasements and Thrust Blocks shall be poured against undisturbed earth. Bottom 3" of Encasement may be poured separate from Encasement and used as a sub-footing.

All Encasements and Thrust Blocks shall terminate at the face of pipe bells.

Removal of abandoned Water Mains as required for clearance to construct the proposed Water Mains shall be done by the contractor.

The Contractor shall expose existing Water Mains at points of connection and verify their location prior to pipe laying, so that minimum work will be required.

Thrust Blocks will be required at all bends greater than 11 1/2° for C.I. or D.I. Water Mains. Vertical Thrust Blocks for all top bends will require reinforcing steel.

Contractor shall construct all Concrete Thrust Blocks and Gate Wells.

The Contractor shall perform the work required to connect or disconnect water mains at junctions with the existing system which is to remain in service, except as otherwise shown. Valve operations, installation of Hydrants connecting to existing, or new Water Mains, shall be included in the Contractors Work. Flushing and chlorination will be included in D.M.W.D. work. The Contractor shall perform all other work in conjunction with D.M.W.D. work. Contractor's work includes Earth Excavation, Disposal, Backfill, Sheet piling, Bracing, Pumping and Drainage required for maintenance of trench and for disposal of waste water; Barricades, Traffic Control, Material handling and Standby assistance (including crane work required), Pavement Removal and Replacement, Thrust Blocks Encasements and Gate Wells.

The Contractor shall cut and cap or plug existing Water Mains to remain in service where required.

All 4" C.I. Blow-off Assemblies, C.I. Plugs and Caps to be installed and/or removed by Contractor have not been shown on the drawings.

The Contractor shall remove all temporary C.I. Plugs, Tees and Blow-off Assemblies at points of water main connections unless otherwise specified.

The Contractor shall install all Pipe and Fittings necessary to complete the connections required on this Contract.

Proposed construction work by other Utility Companies as shown on these drawings, is in accordance with information supplied by the Utility Company. The D.M.W.D. does not guarantee the completeness or accuracy of locations of Proposed Utility Work by others. The Contractor shall make his own investigation regarding such work.

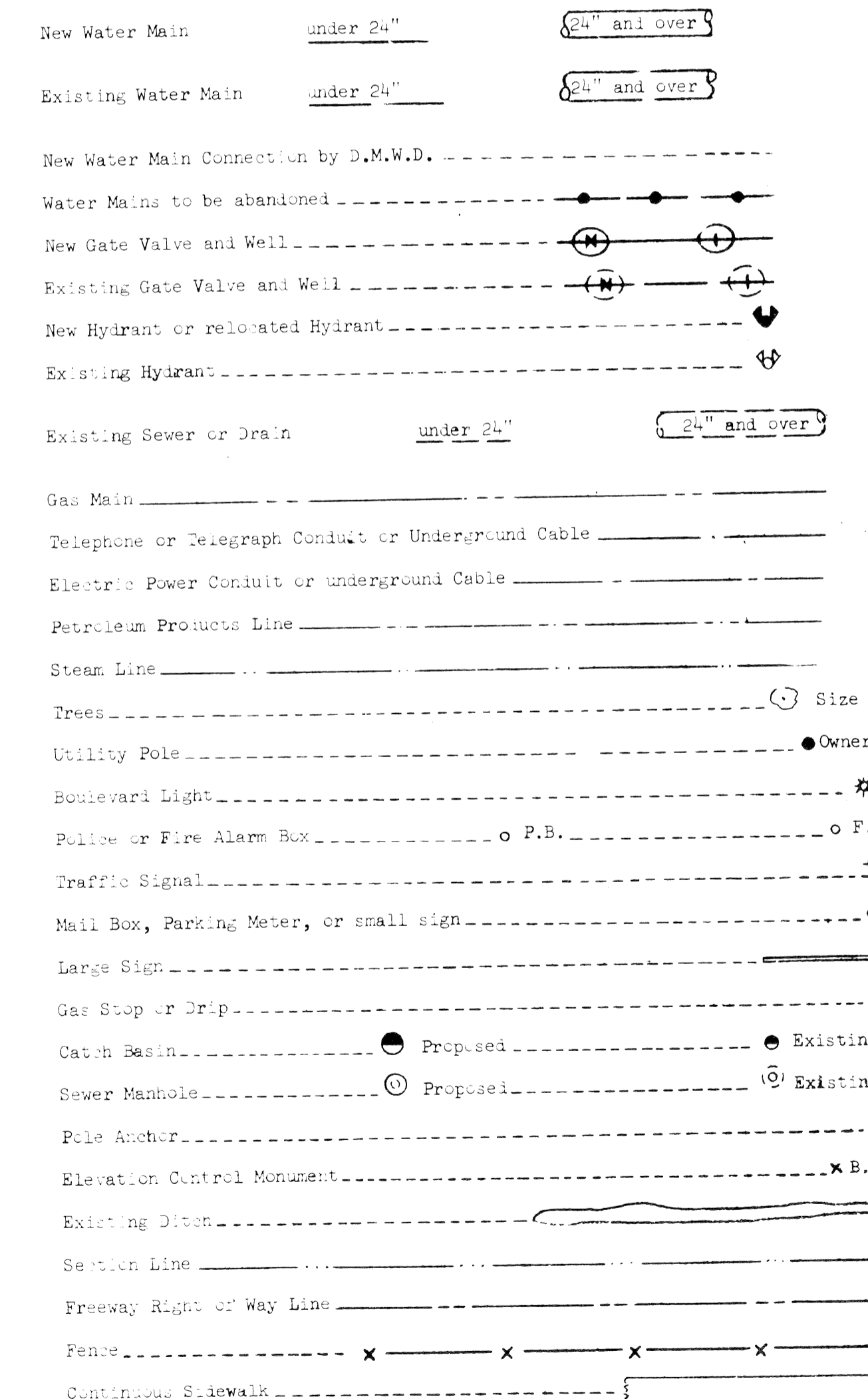
Outline of demolished building substructures as shown on the drawings are based on the best available information. We do not guarantee that these or other underground substructures are or are not present.

Existing Water Mains to be cut and abandoned for new Water Main construction shall be bulkheaded with a minimum 8" thickness of concrete or brick, mortared in place.

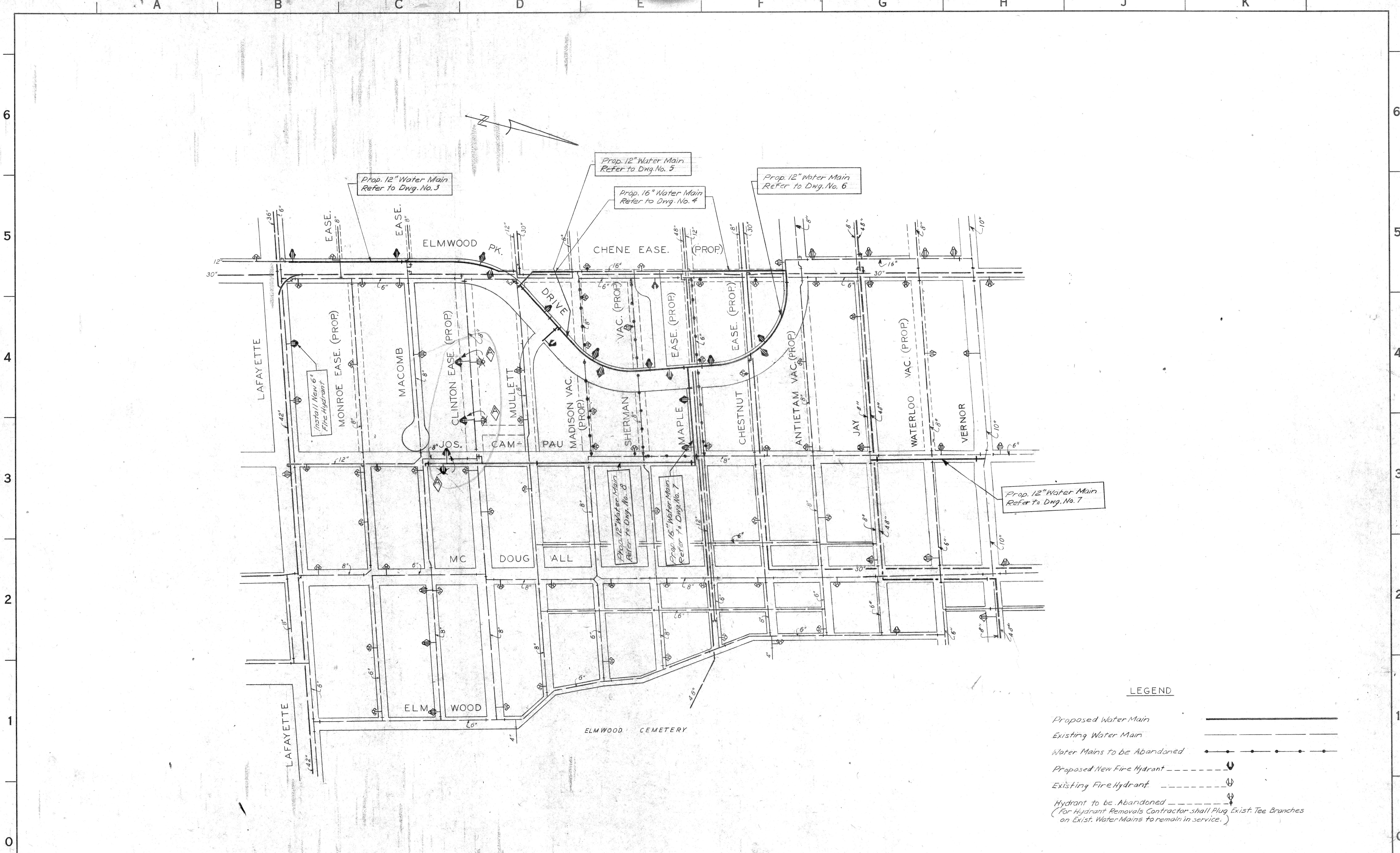
WATER SYSTEM ALTERATION QUANTITIES

DESCRIPTION OF ITEM	QUANTITIES AND PAY UNIT
16-inch Ductile Iron Water Main	1267 lin. ft.
16-inch Gate Valve	2 each
16-inch Gate Valve Well	2 each
12-inch Ductile Iron Water Main	4955 lin. ft.
12-inch Gate Valve	14 each
12-inch Gate Valve Well	14 each
8-inch Ductile Iron Water Main	63 lin. ft.
8-inch Gate Valve	5 each
8-inch Gate Valve Well	5 each
6-inch Fire Hydrant (including 6-inch Gate Valve, Gate Box & Related Piping)	18 each

LEGEND



DESIGNED BY				APPROVED				ELMWOOD PARK PROJECT NO. 3 WATER SYSTEM ALTERATIONS GENERAL NOTES				DETROIT METRO WATER DEPARTMENT ENGINEERING DIVISION				M.D.P.H. PERMIT NO.	
DRAWN BY W.J.H.				<i>[Signature]</i>												FED. REF. NO.	
CHECKED BY J.W.				DIRECTOR OF ENGINEERING								CONTRACT NO. PW 6571					
CO-OR.				CHIEF ENGINEER				SECTION MAP 21J 21K 22J 22K				WORK ORDER NO. D-107		DRAWING NO. SHEET 25 OF 5			
DESCRIPTION REVISIONS				DATE				SCALE				DATE SEPTEMBER, 1975					



LEGEND

- Proposed Water Main
 - Existing Water Main
 - Water Mains to be Abandoned
 - Proposed New Fire Hydrant ⊕
 - Existing Fire Hydrant ⊕
 - Hydrant to be Abandoned ⊕
- (For Hydrant Removals Contractor shall Plug Exist. Tee Branches on Exist. Water Mains to remain in service.)

F			
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A	344 CD, Relocate Three Hydrants Per D.F.D. Reg. #55	8-3-77	
CO-OR.	DESCRIPTION	APPRVD.	DATE
	REVISIONS		

DESIGNED BY	
DRAWN BY	R.D. R.A.C.
CHECKED BY	J.W.
APPROVED	<i>H. Nelson Ernst</i>
	<i>D. S. ...</i>
	DIRECTOR OF ENGINEERING
	CHIEF ENGINEER

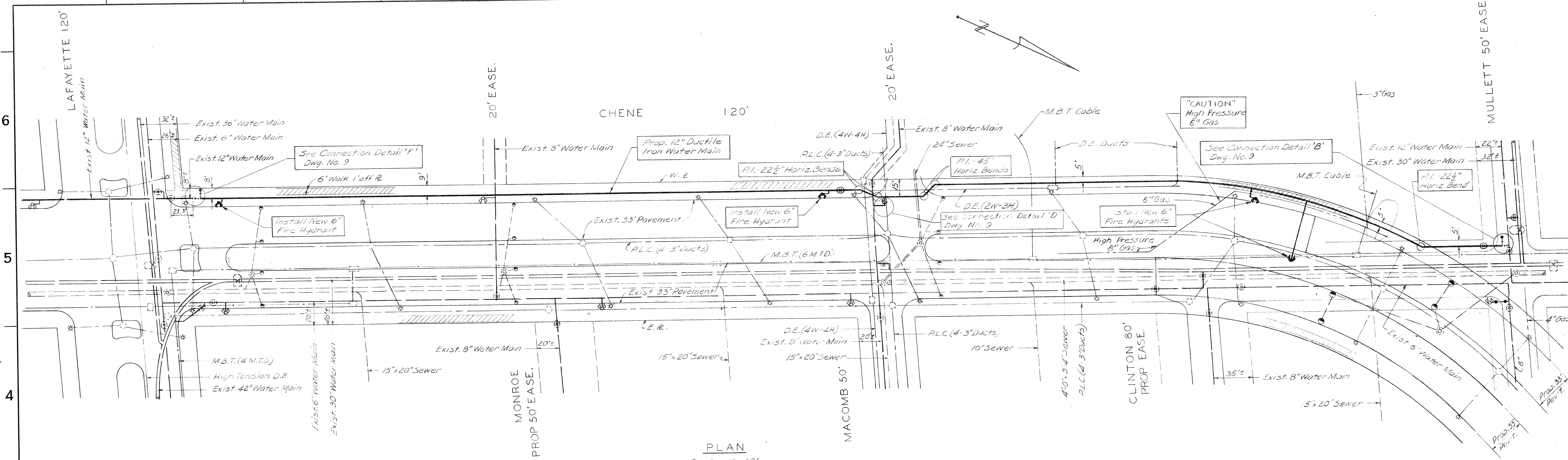
ELMWOOD PARK PROJECT NO. 3
WATER SYSTEM ALTERATIONS
GENERAL PLAN

SCALE 1" = 200'

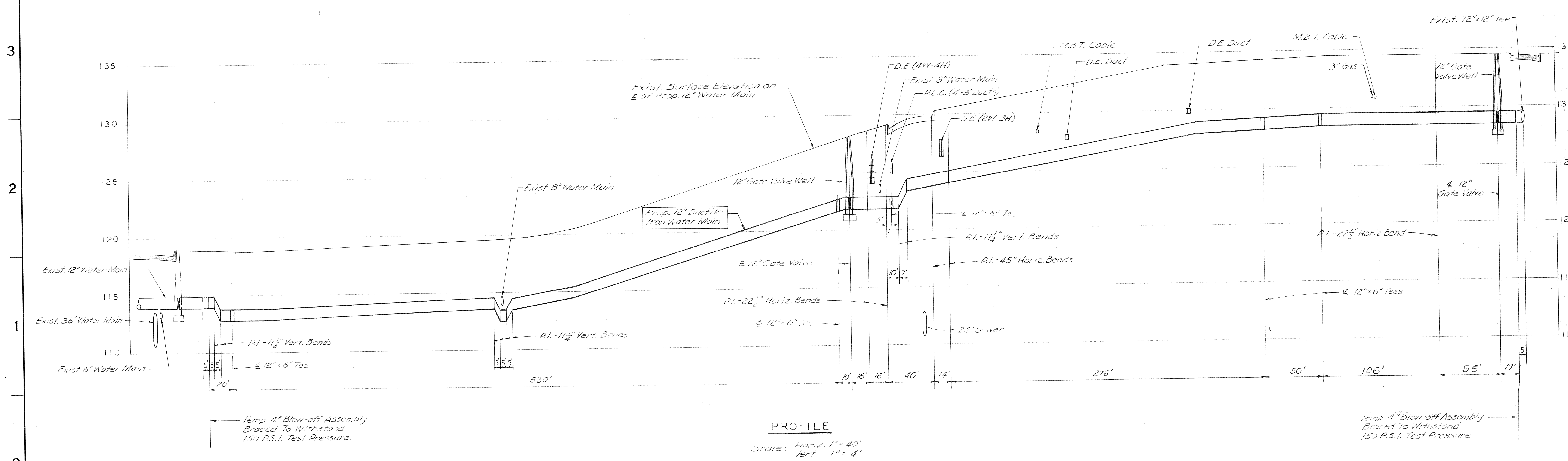
DATE SEPTEMBER, 1975

DETROIT METRO WATER DEPARTMENT					
ENGINEERING DIVISION					
SECTION MAP	TOWN	RANGE	SECTION	PORTION CODE	WORK ORDER NO.
21-K	23-K	21-J	22-J		D-107

M.D.P.H. PERMIT NO.	
FED. REF. NO.	
CONTRACT NO.	PW 6571
DRAWING NO.	SHEET 26 OF 51

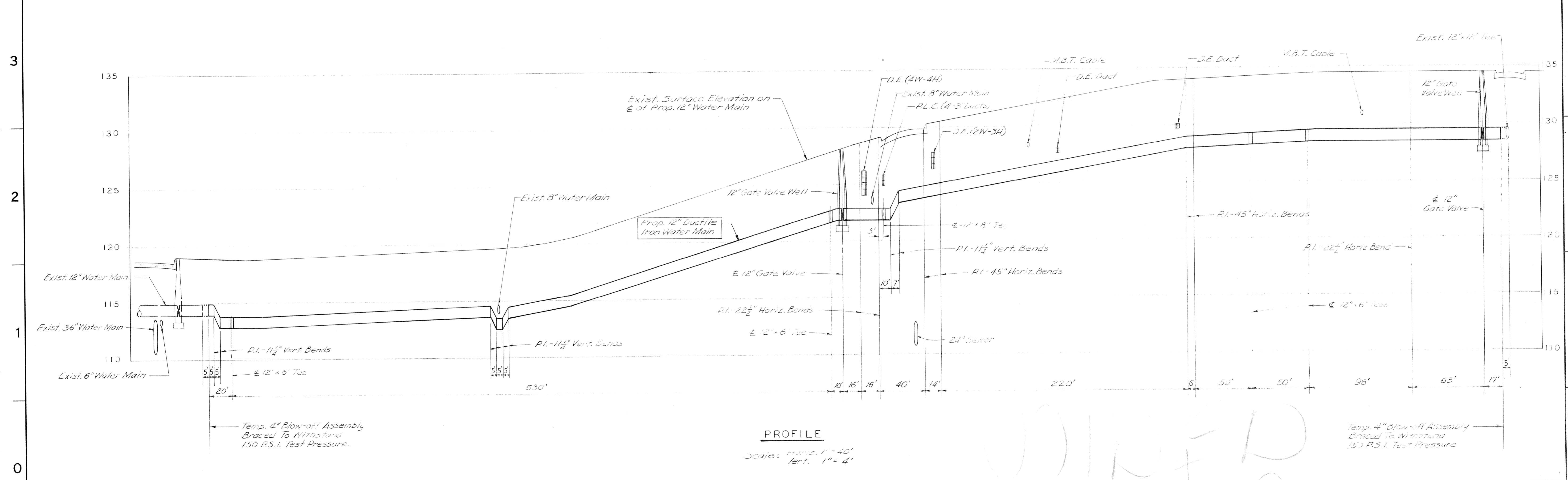
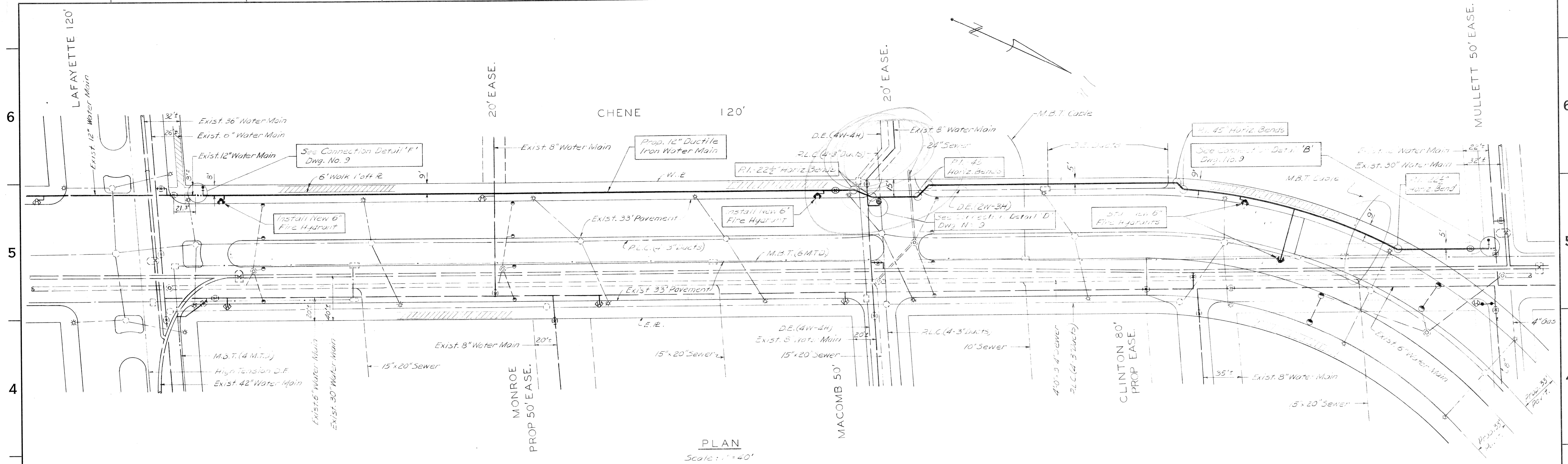


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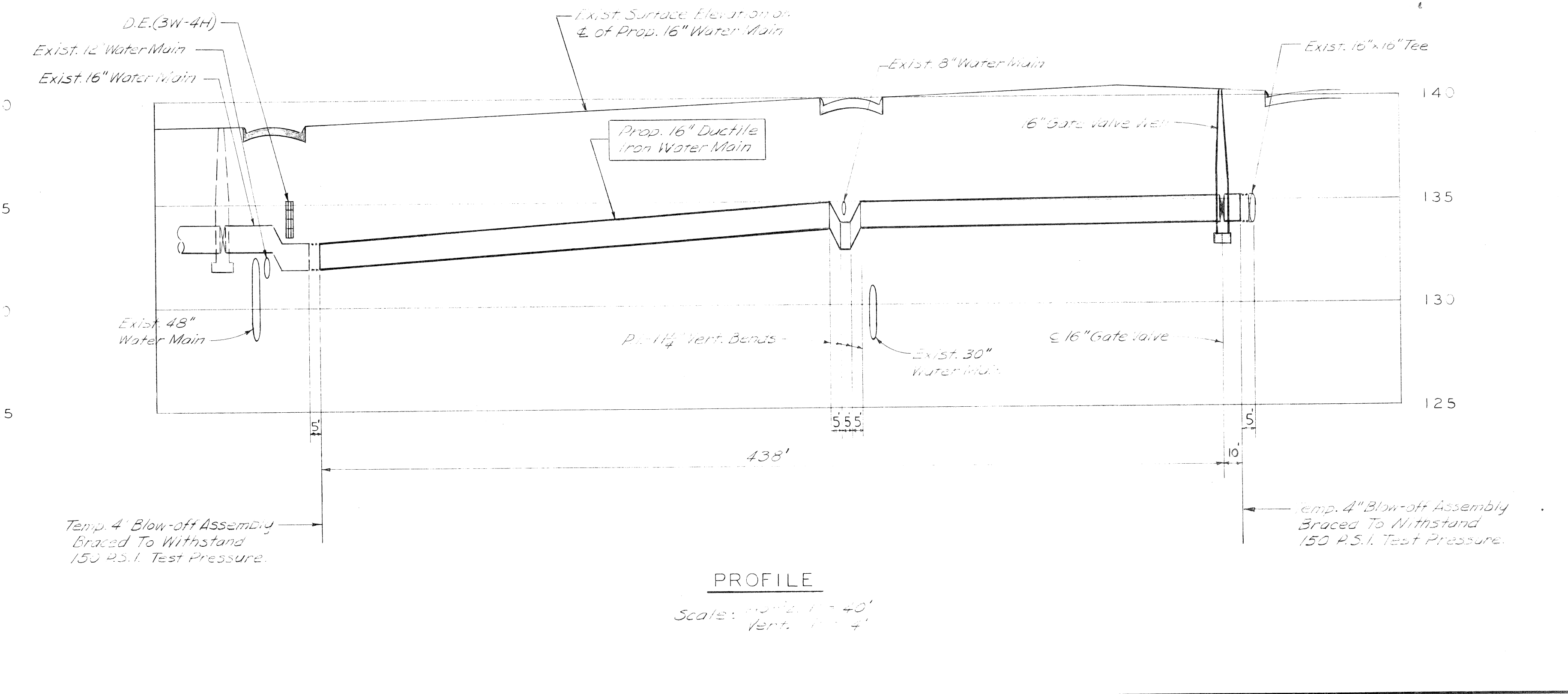
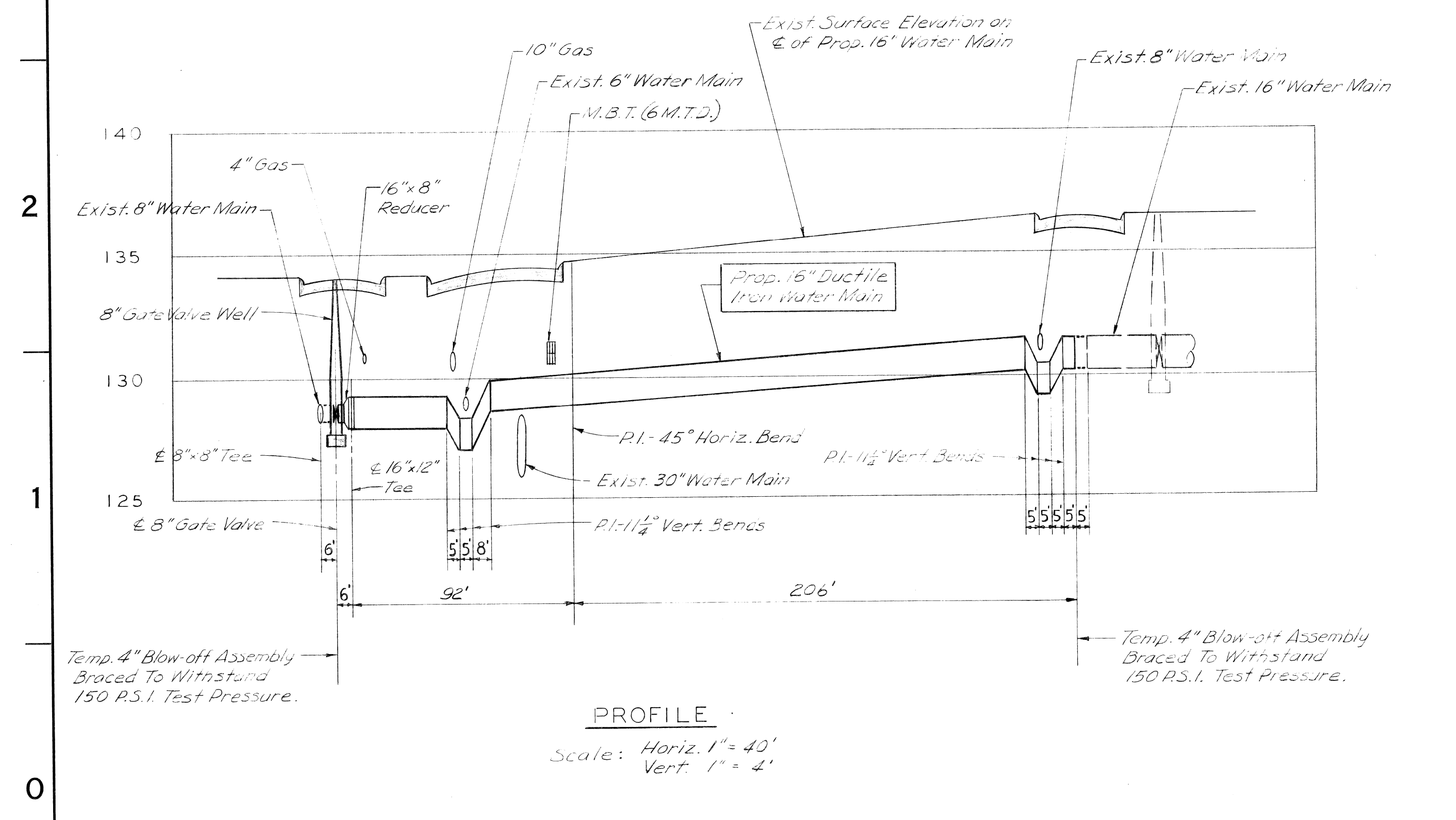
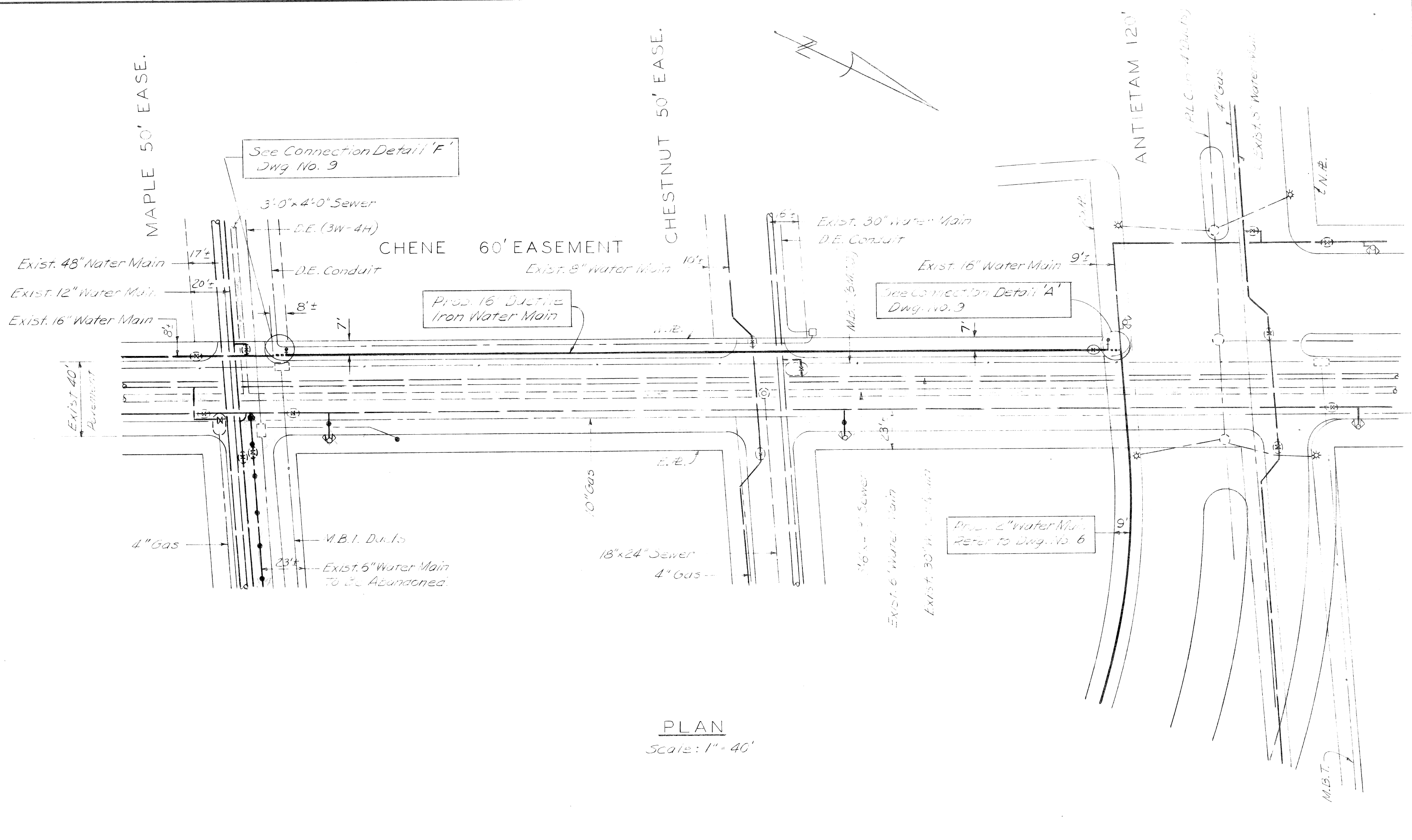
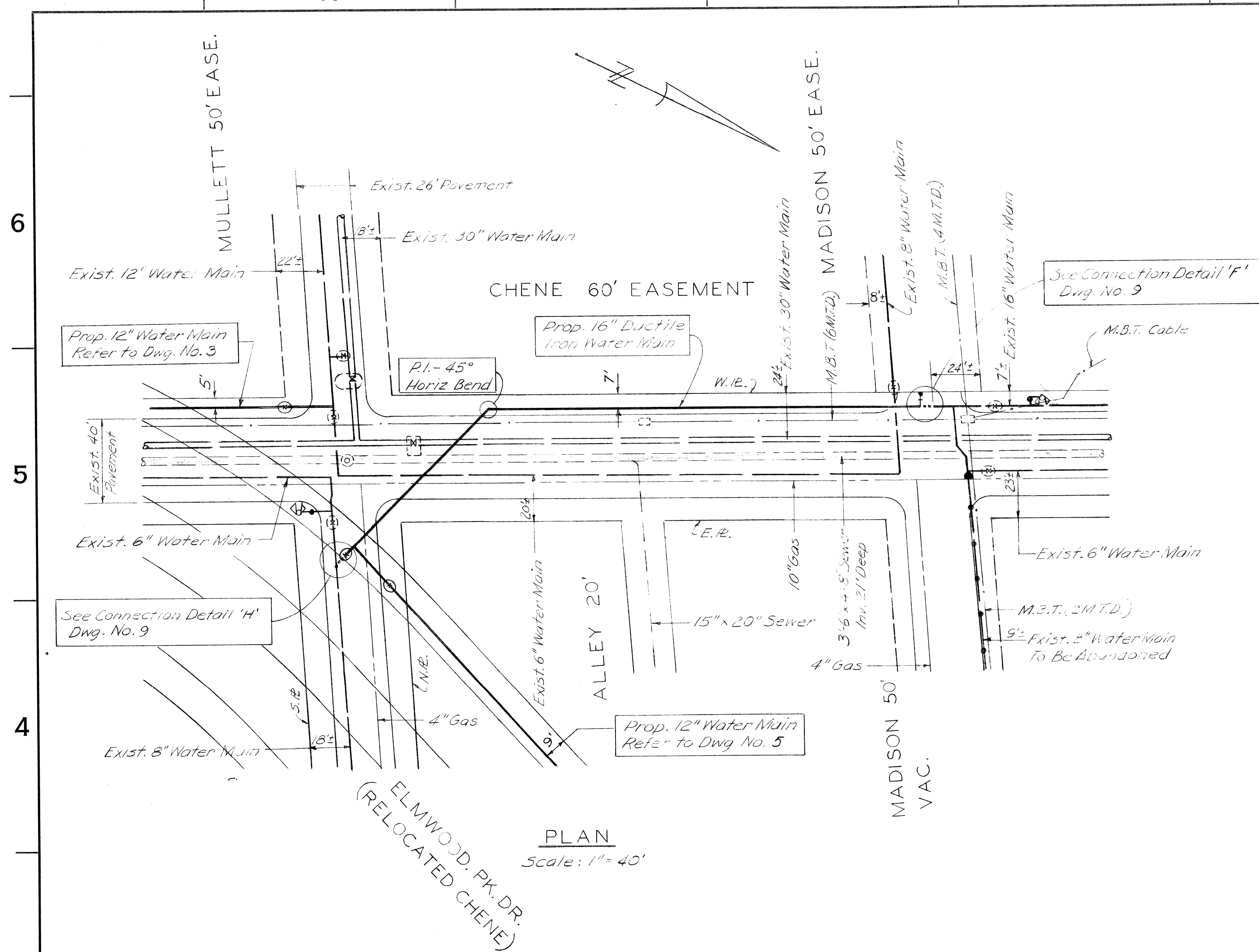


PROFILE
Scale: Horiz. 1" = 40'
Vert. 1" = 4'

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<table border="1"> <thead> <tr> <th>COOR.</th> <th>DESCRIPTION</th> <th>APPRD.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td></td> <td>Revisions</td> <td></td> <td></td> </tr> </tbody> </table>		COOR.	DESCRIPTION	APPRD.	DATE		Revisions			SCALE AS SHOWN		SECTION MAP TOWN RANGE SECTION PORTION CODE WORK ORDER NO. D-107						
COOR.	DESCRIPTION	APPRD.	DATE															
	Revisions																	



DESIGNED BY		APPROVED		ELMWOOD PARK PROJECT NO. 3 WATER SYSTEM ALTERATIONS PROP 12-INCH WATER MAIN CHENE - LAFAYETTE TO MULLETT				DETROIT METRO WATER DEPARTMENT ENGINEERING DIVISION				M.D.P.H. PERMIT NO.	
DRAWN BY R.T.D.		[Signature]										FED. REF. NO.	
CHECKED BY J.W.		DIRECTOR OF ENGINEERING		SCALE AS SHOWN				SECTION MAP TOWN RANGE SECTION PORTION CODE WORK ORDER NO. D-107				CONTRACT NO. PW 6571	
CO-OR.		CHIEF ENGINEER										DATE SEPTEMBER, 1975	
DESCRIPTION		APRVD.		DATE									

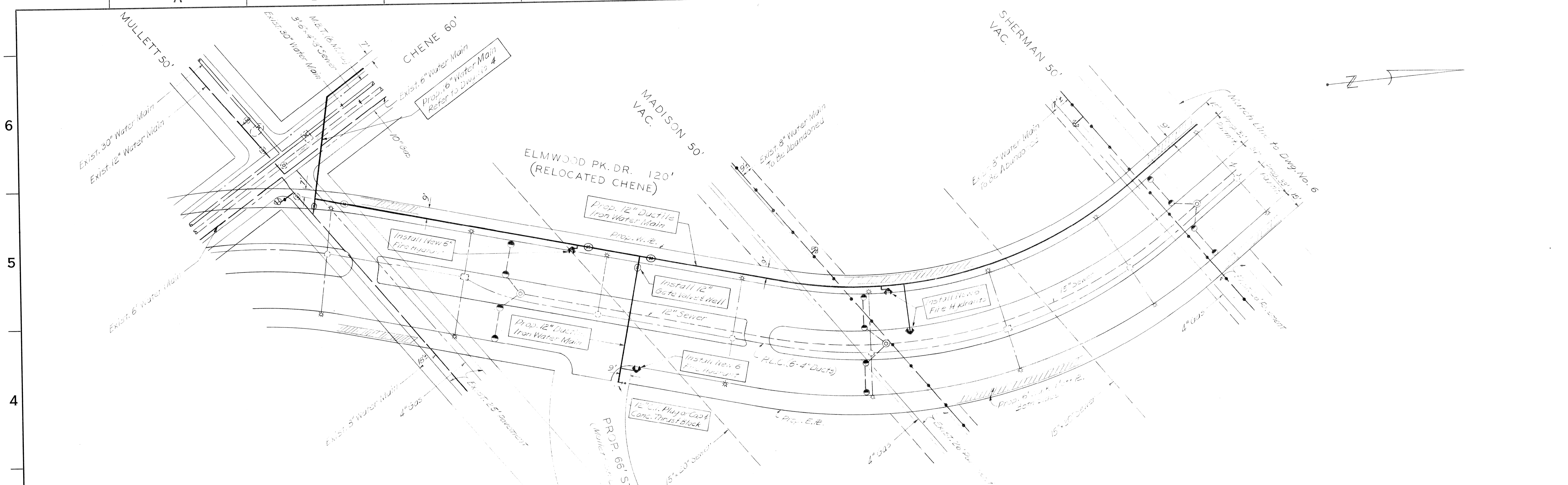


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		REVISIONS			

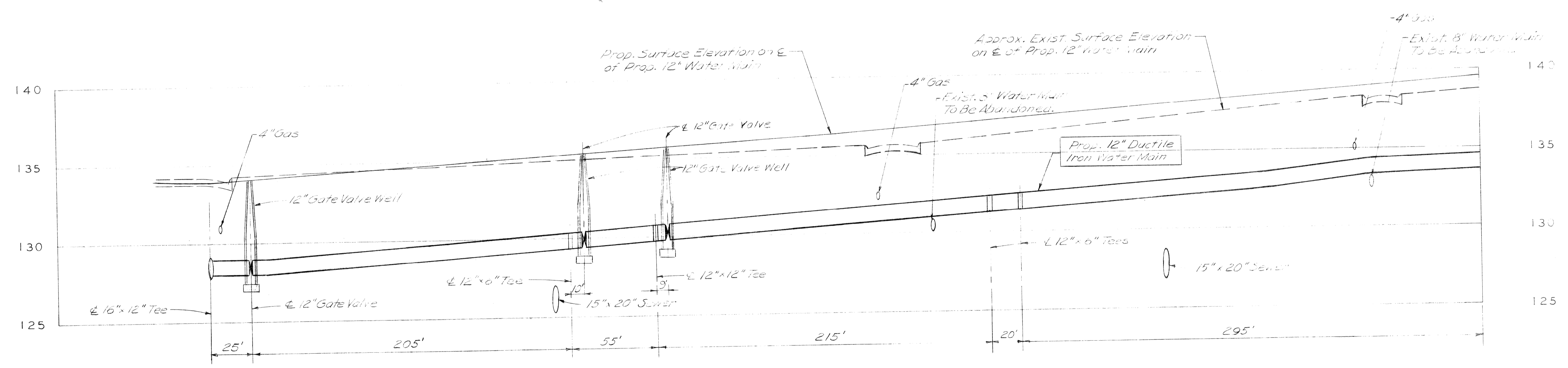
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DRAWN BY	R.T.D.
CHECKED BY	J.W.
DIRECTOR OF ENGINEERING	
CHIEF ENGINEER	

ELMWOOD PARK PROJECT NO. 3
 WATER SYSTEM ALTERATIONS
 PROP. 16 - INCH WATER MAIN
 CHENE - MULLETT TO MADISON AND
 - MAPLE TO ANTIETAM
 DATE SEPTEMBER, 1975
 SCALE AS SHOWN

DETROIT METRO WATER DEPARTMENT					M.D.P.H. PERMIT NO.
ENGINEERING DIVISION					FED. REF. NO.
					CONTRACT NO.
					PW 6571
					DRAWING NO.
					SHEET 2 OF 51
SECTION MAP	TOWN	RANGE	SECTION	PORTION CODE	WORK ORDER NO.
21	J				D-107



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Scale: 1" = 40'



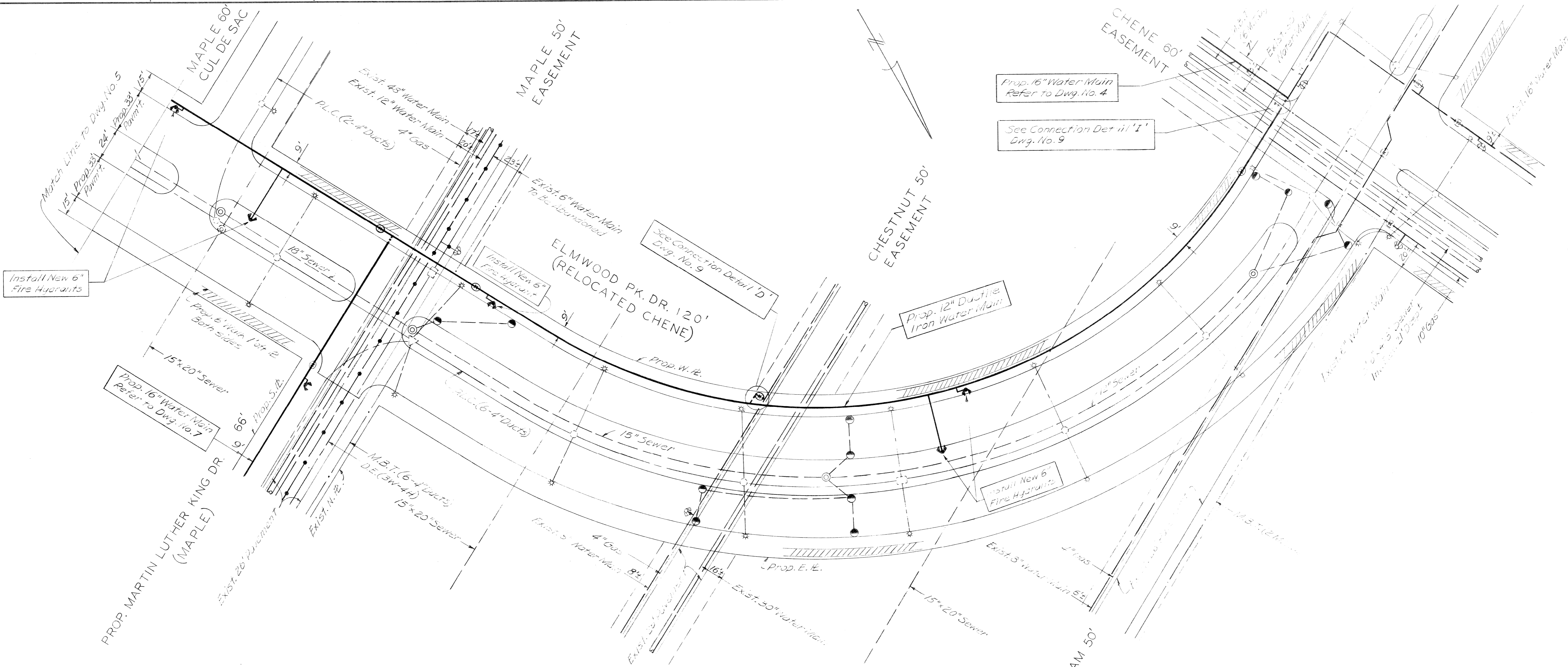
PROFILE
Scale: Horiz. 1" = 40'
Vert. 1" = 4'

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	CO-OR.	DESCRIPTION	APRVD.	DATE
		REVISIONS		

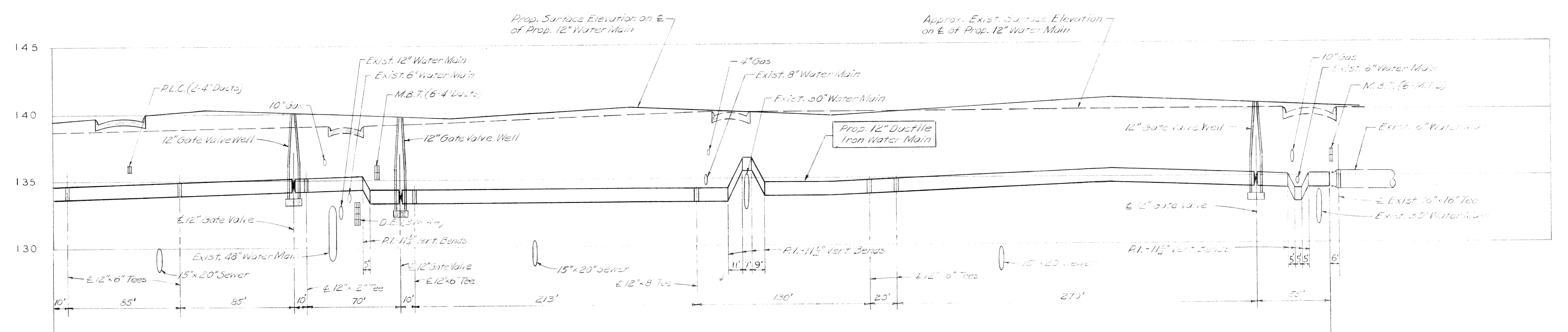
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DRAWN BY	R.T.D.
CHECKED BY	J.W.
APPROVED	<i>[Signature]</i>
DIRECTOR OF ENGINEERING	<i>[Signature]</i>
CHIEF ENGINEER	

ELMWOOD PARK PROJECT NO. 3
WATER SYSTEM ALTERATIONS
PROP. 12-INCH WATER MAIN
ELMWOOD PK. DR. (RELOCATED CHENE)
- MULLETT TO NORTH OF SHERMAN
SCALE AS SHOWN
DATE SEPTEMBER 1975

DETROIT METRO WATER DEPARTMENT						M.D.P.H. PERMIT NO.
ENGINEERING DIVISION						FED. REF. NO.
CONTRACT NO. PW 6571						DRAWING NO. SHEET 19 OF 51
SECTION MAP	TOWN	RANGE	SECTION	PORTION CODE	WORK ORDER NO.	
21J	H		J	D-107		



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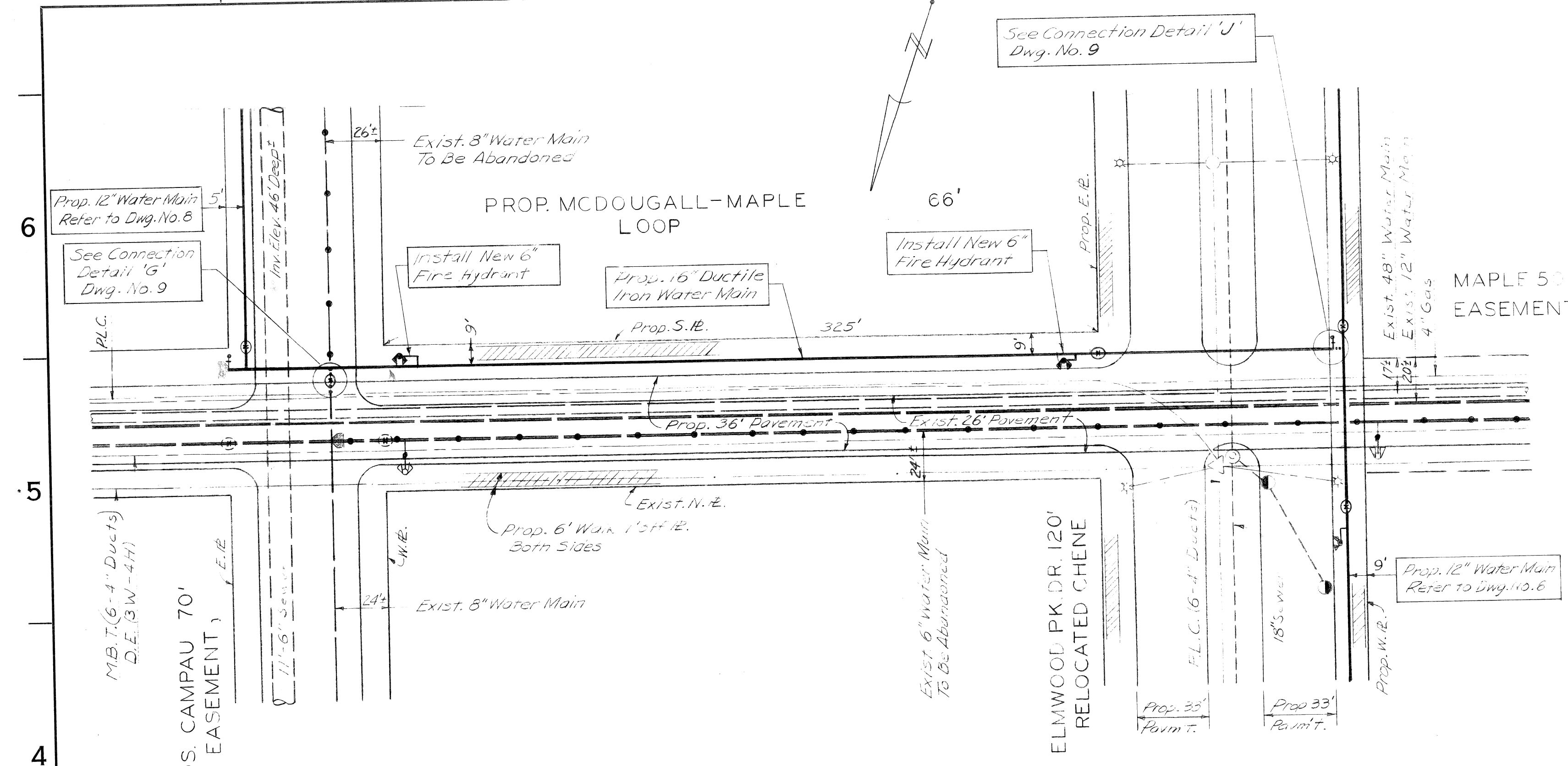


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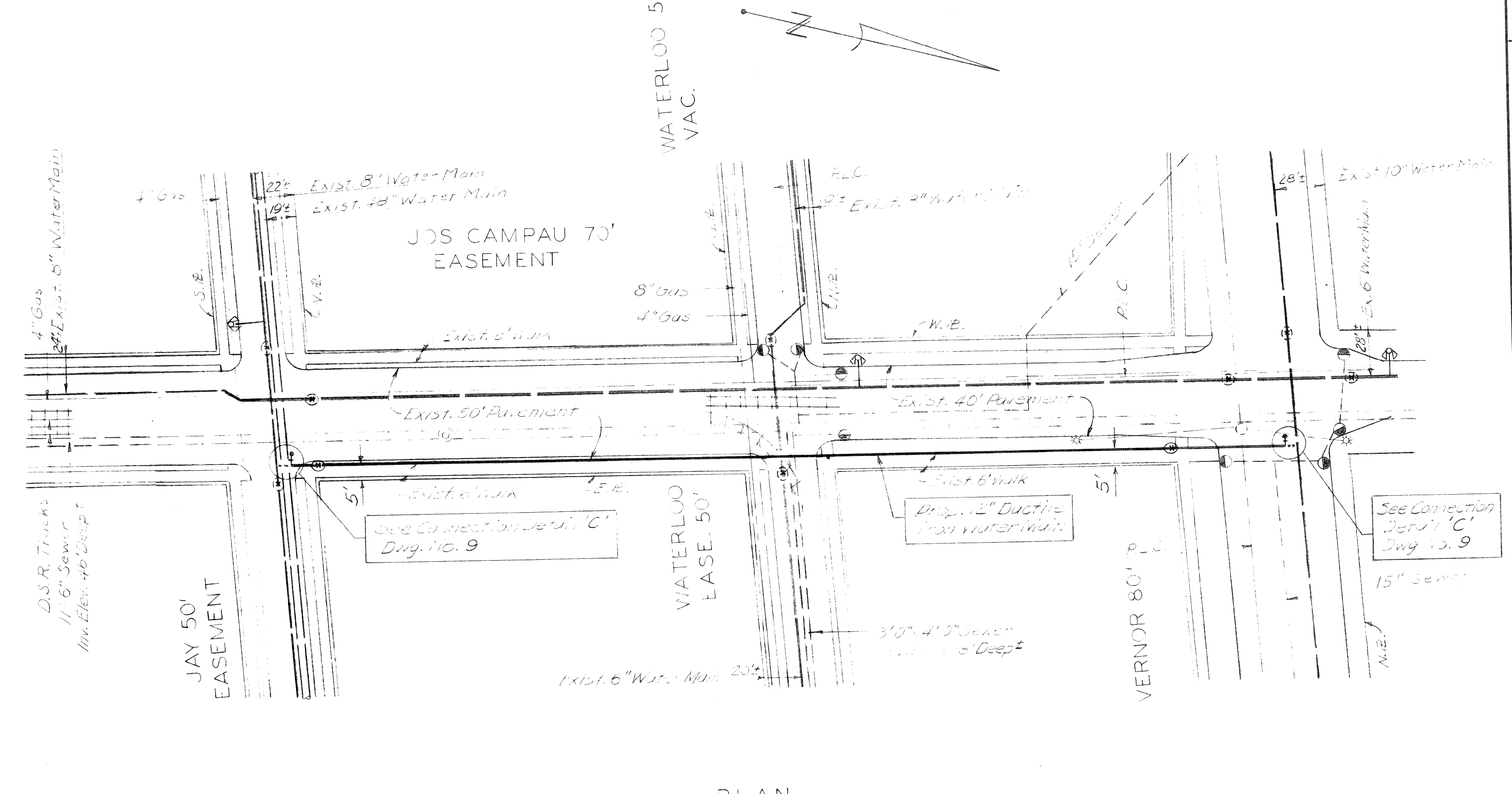
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CHECKED BY J.W.				<i>[Signature]</i>				CONTRACT NO. PW 6571			
CHIEF ENGINEER				DIRECTOR OF ENGINEERING				DRAWING NO. SHEET 3 OF 51			
SCALE AS SHOWN				DATE SEPTEMBER 1975				SECTION MAP			
DESCRIPTION REVISIONS				TOWN				RANGE			
APRVD. DATE				SECTION				PORTION CODE			
				WORK ORDER NO. D-107							

DETROIT METRO WATER DEPARTMENT
ENGINEERING DIVISION

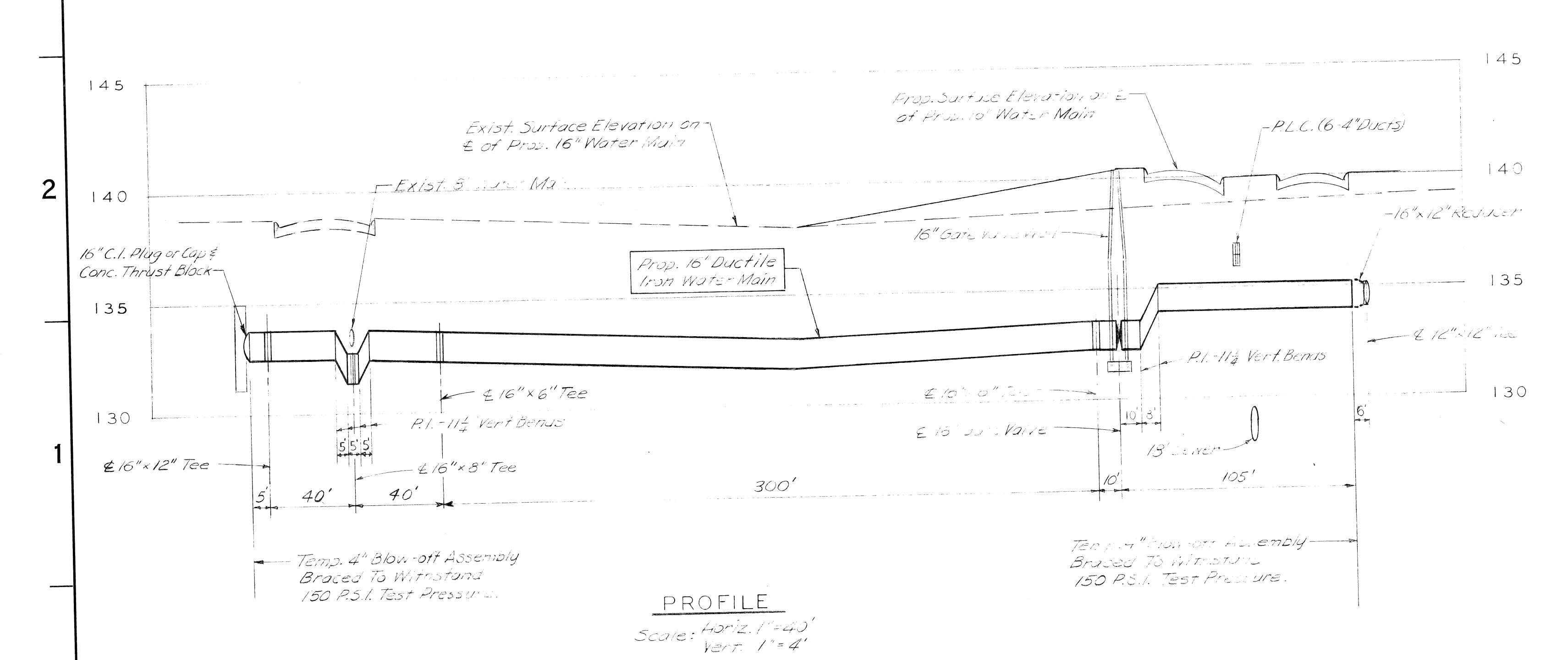
ELMWOOD PARK PROJECT NO. 3
WATER SYSTEM ALTERATIONS
PROPOSED 12-INCH WATER MAIN
ELMWOOD PARK DR. (RELOCATED CHENE)
NORTH OF SHERMAN TO ANTIETAM



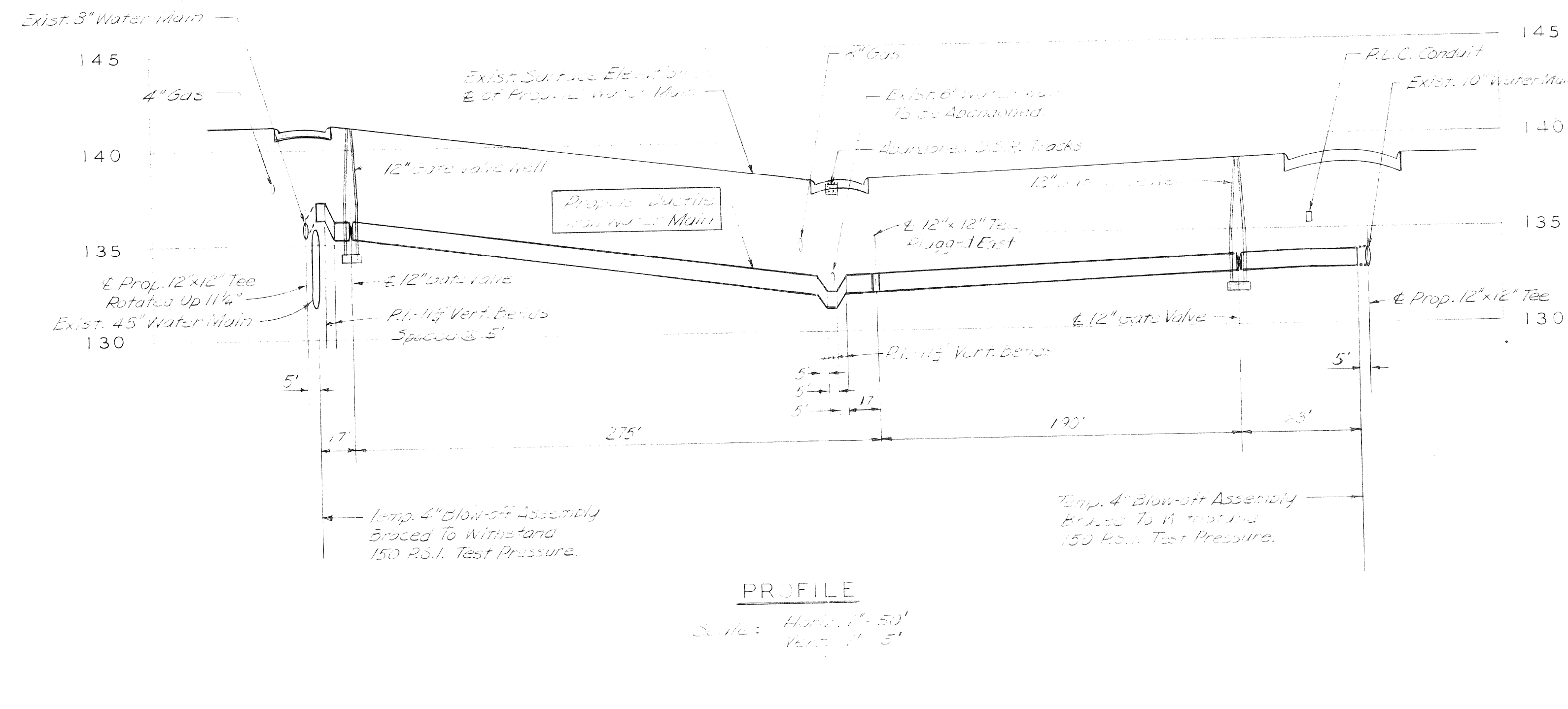
PLAN
Scale: 1" = 40'



PLAN
Scale: 1" = 50'



PROFILE
Scale: Horiz. 1" = 40'
Vert. 1" = 4'



PROFILE
Scale: Horiz. 1" = 50'
Vert. 1" = 5'

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CO-OR.	DESCRIPTION	APPRD.	DATE	
	REVISIONS			

DESIGNED BY	
DRAWN BY	R.T.D.
CHECKED BY	J.W.
DIRECTOR OF ENGINEERING	<i>[Signature]</i>
CHIEF ENGINEER	

APPROVED

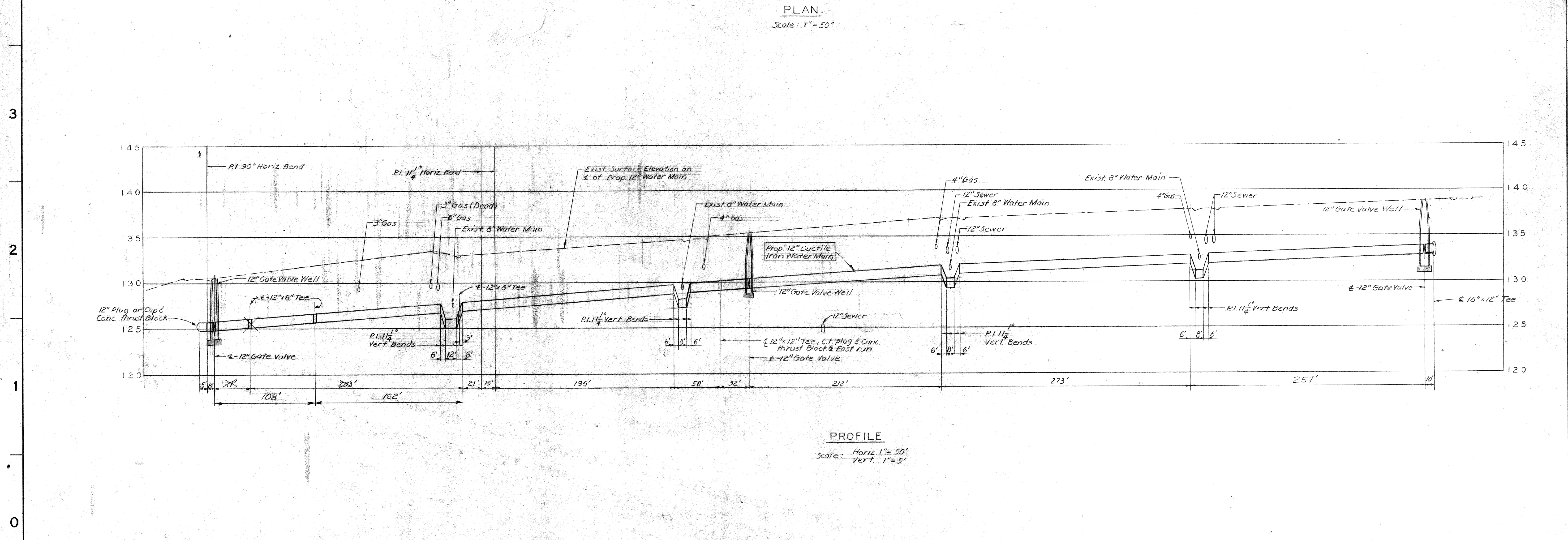
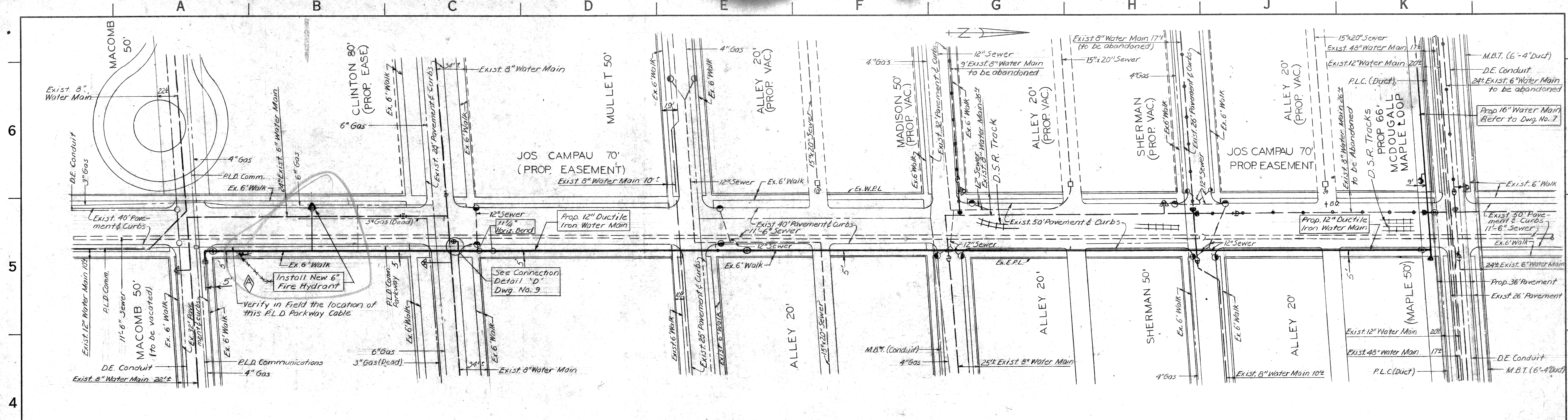
ELMWOOD PARK PROJECT NO. 3
WATER SYSTEM ALTERATIONS

PROPOSED 16-INCH & 12-INCH WATER MAINS
M.L.KING DR.(MAPLE) - JOS CAMPAU TO ELMWOOD PK.DR.(RELOCATED CHENE) & JOS CAMPAU - JAY TO VERNOR

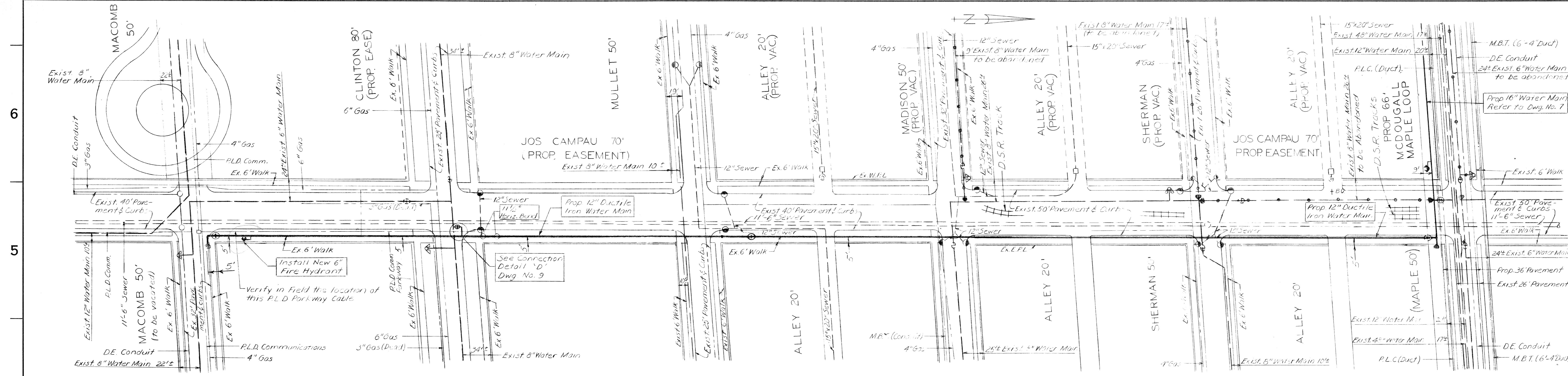
SCALE AS SHOWN

DATE SEPTEMBER, 1975

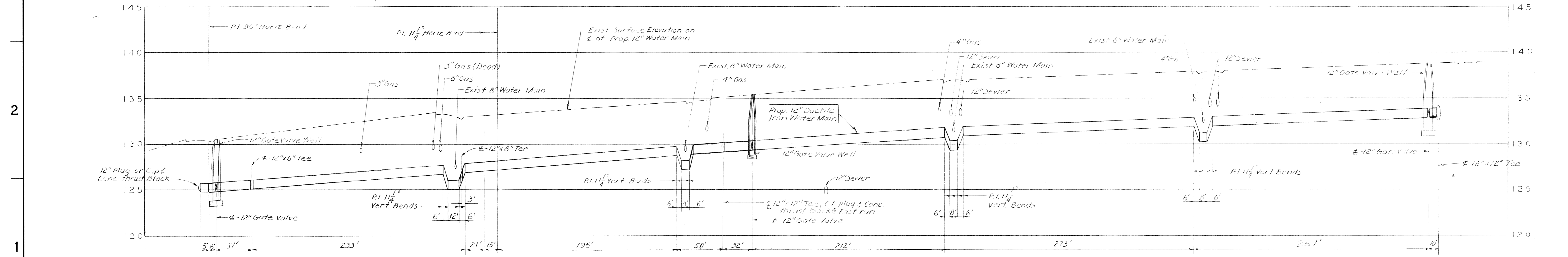
DETROIT METRO WATER DEPARTMENT ENGINEERING DIVISION						M.D.P.H. PERMIT NO.
						FED. REF. NO.
SECTION MAP: 21J, 21K						CONTRACT NO. PW 6571
						DRAWING NO. SHEET 31 OF 41
TOWN	RANGE	SECTION	PORTION CODE	WORK ORDER NO. D-157		



F		DESIGNED BY		APPROVED		ELMWOOD PARK PROJECT NO. 3		DETROIT METRO WATER DEPARTMENT		M.D.P.H. PERMIT NO.	
E		DRAWN BY W.J.H.		<i>W. Wilson</i>		WATER SYSTEM ALTERATIONS		ENGINEERING DIVISION		FED. REF. NO.	
D		CHECKED BY J.W.		<i>D. S. ...</i>		PROP. 12 - INCH WATER MAIN				CONTRACT NO.	
C				DIRECTOR OF ENGINEERING		JOS CAMPAU - MACOMB TO MAPLE				PW 6571	
B		5A Relocate Hydrant Per D.F.D. Req. JLD R-3-77		SCALE AS SHOWN		DATE SEPTEMBER, 1975		SECTION MAP		DRAWING NO.	
A		CO-OR.		REVISIONS				TOWN		SHEET 32 OF 51	

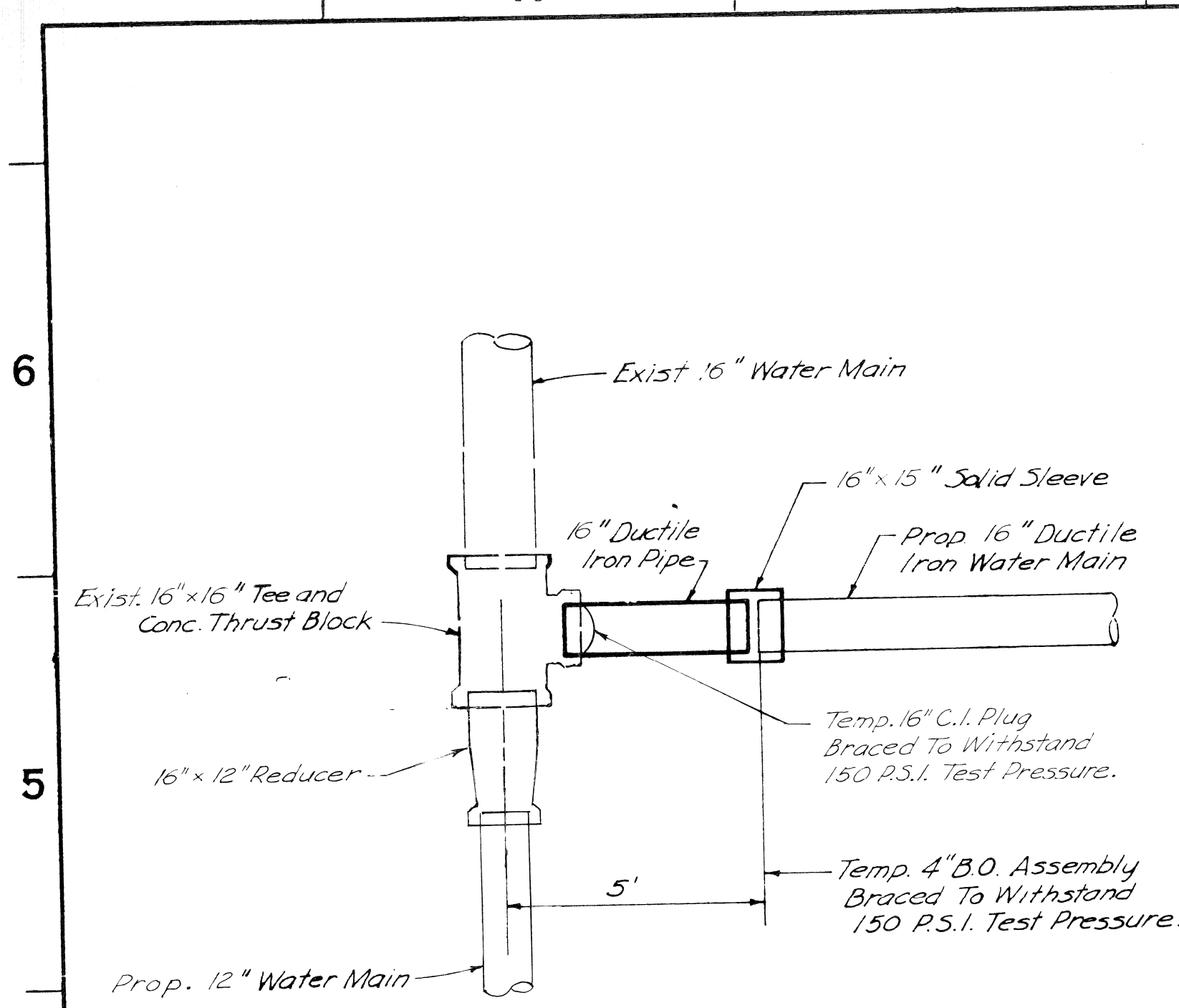


PLAN
Scale: 1" = 50'

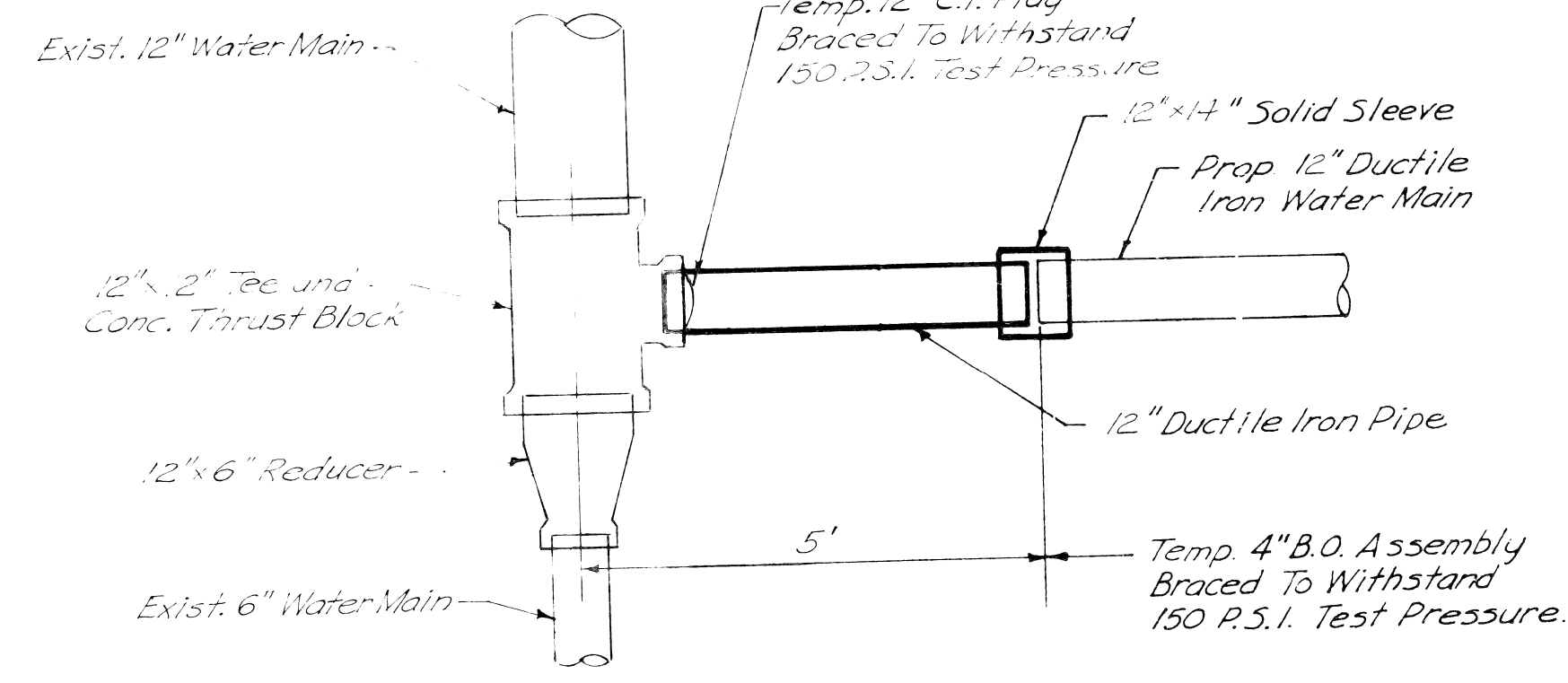


PROFILE
Scale: Horiz 1" = 50'
Vert. 1" = 5'

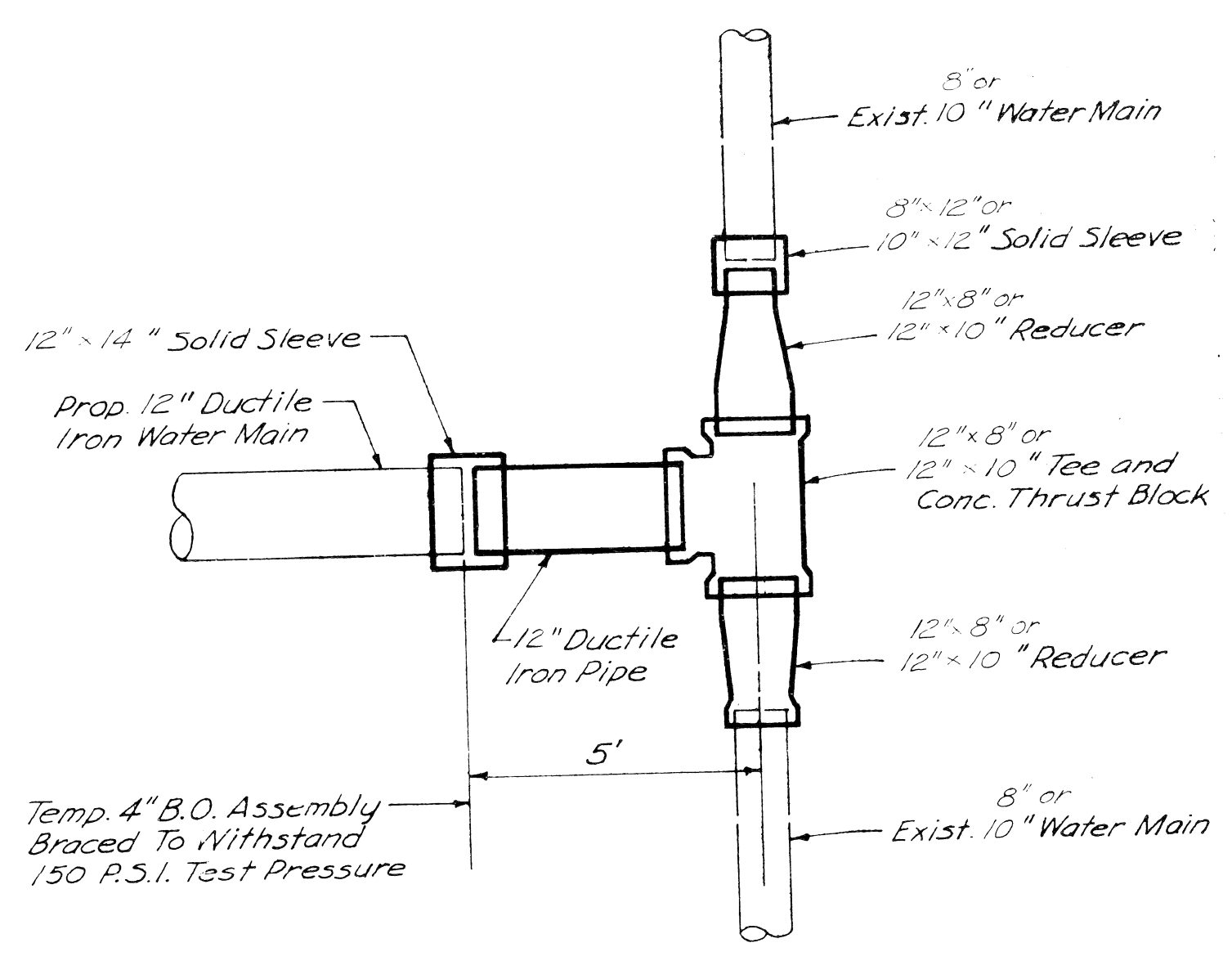
DESIGNED BY		APPROVED		DETROIT METRO WATER DEPARTMENT ENGINEERING DIVISION 				M.D.P.H. PERMIT NO.			
DRAWN BY W.J.H.								ELMWOOD PARK PROJECT NO. 3		FED. REF. NO.	
CHECKED BY J.W.								WATER SYSTEM ALTERATIONS		CONTRACT NO.	
		DIRECTOR OF ENGINEERING		PROP. 12-INCH WATER MAIN		PW 6571		DRAWING NO.			
CO-OR.		DESCRIPTION		SCALE AS SHOWN		SECTION MAP		SHEET 2 OF 5			
APRVD.		DATE		DATE		SECTION					
REVISIONS		CHIEF ENGINEER		SEPTEMBER, 1975		PORTION CODE					



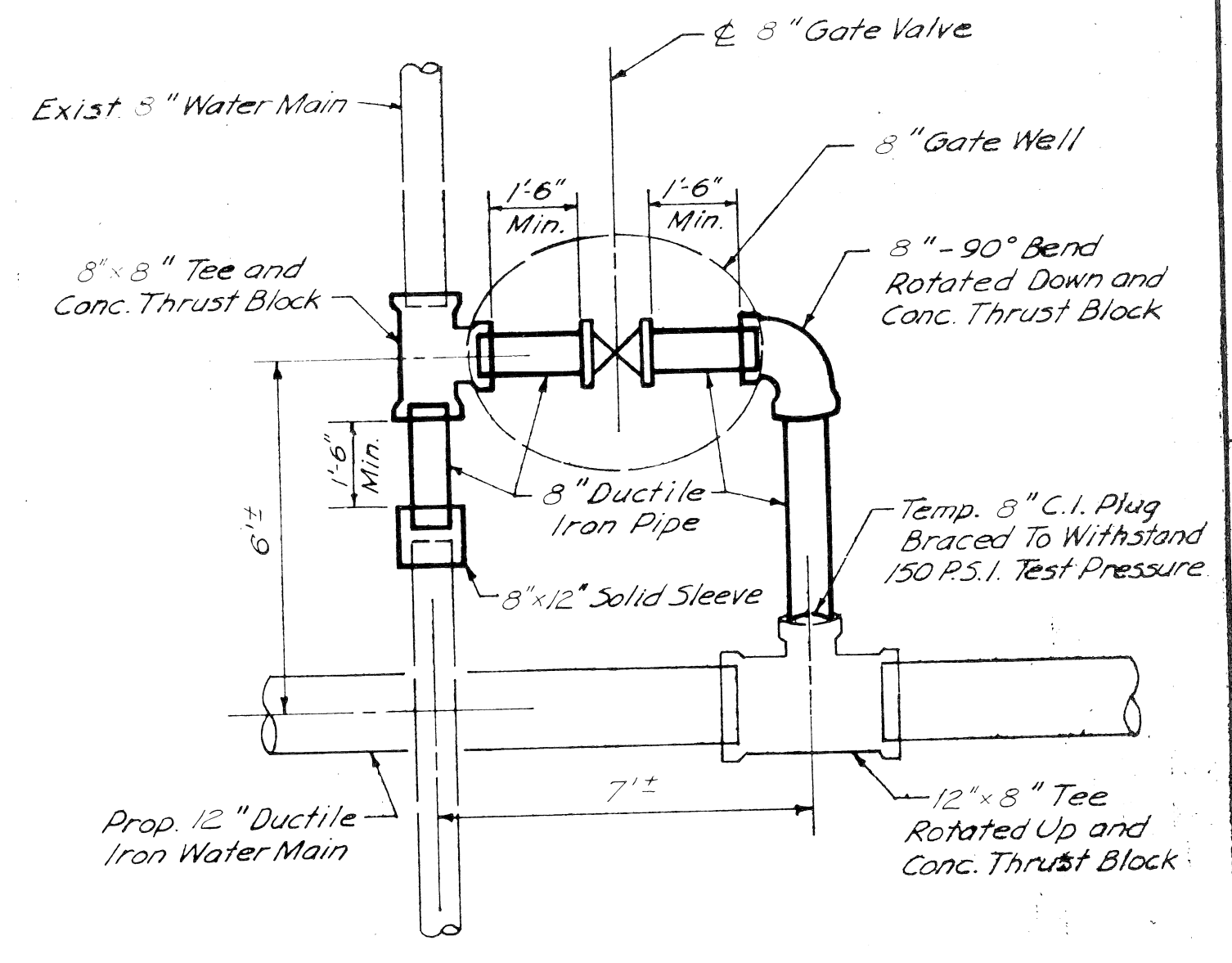
PLAN
DETAIL 'A'
(Dwg. No. 4)



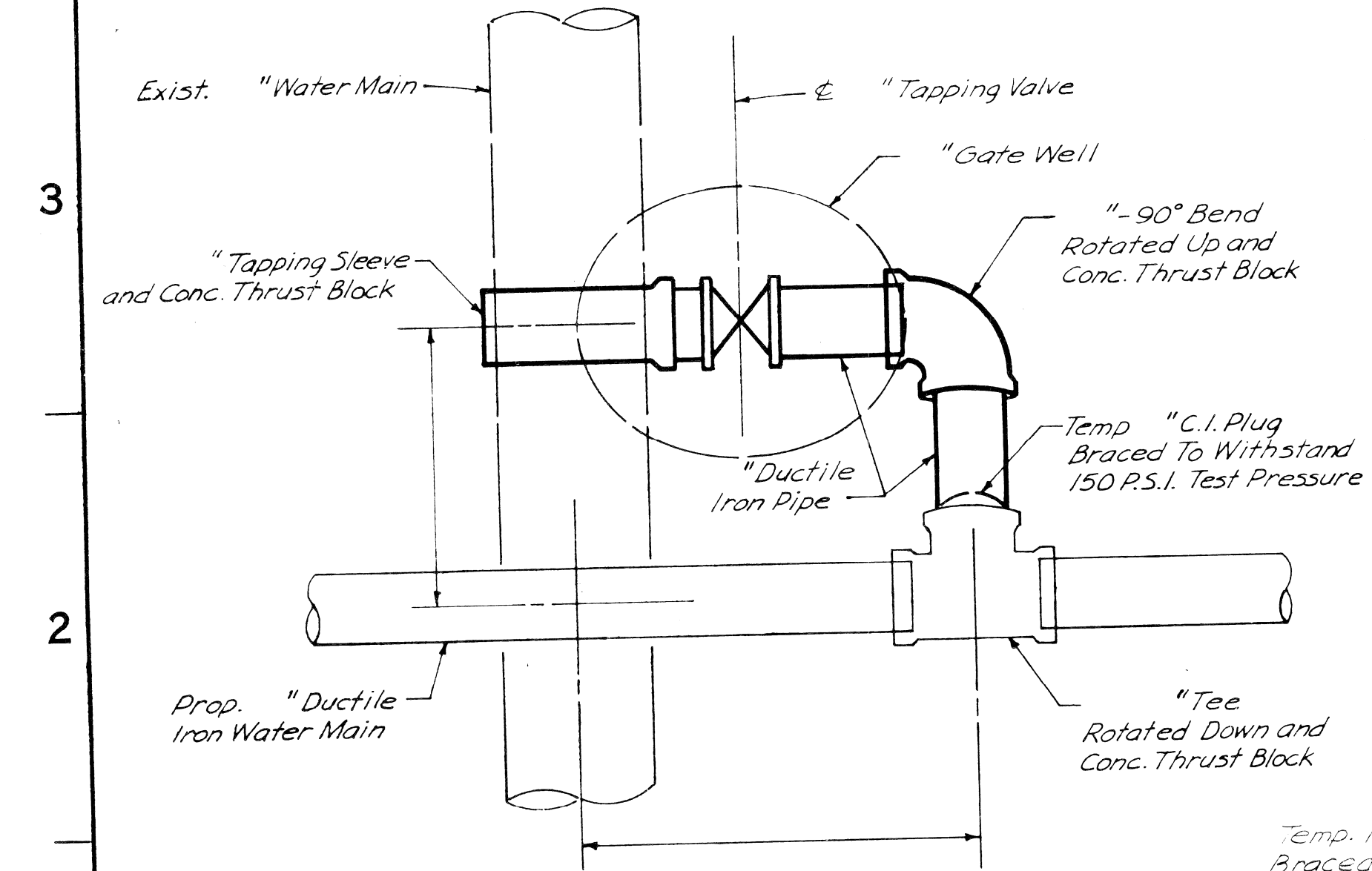
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(Dwg. No. 3)



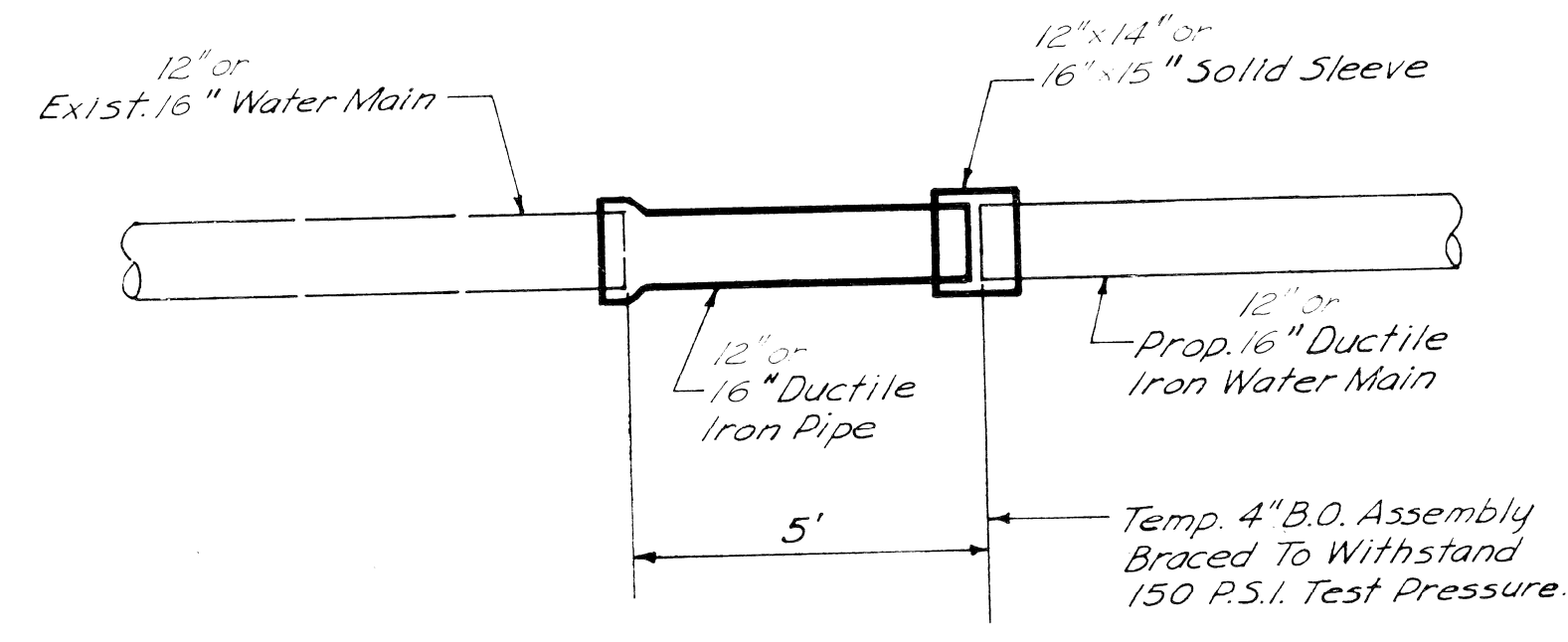
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DETAIL 'C'
(Dwg. No. 7)



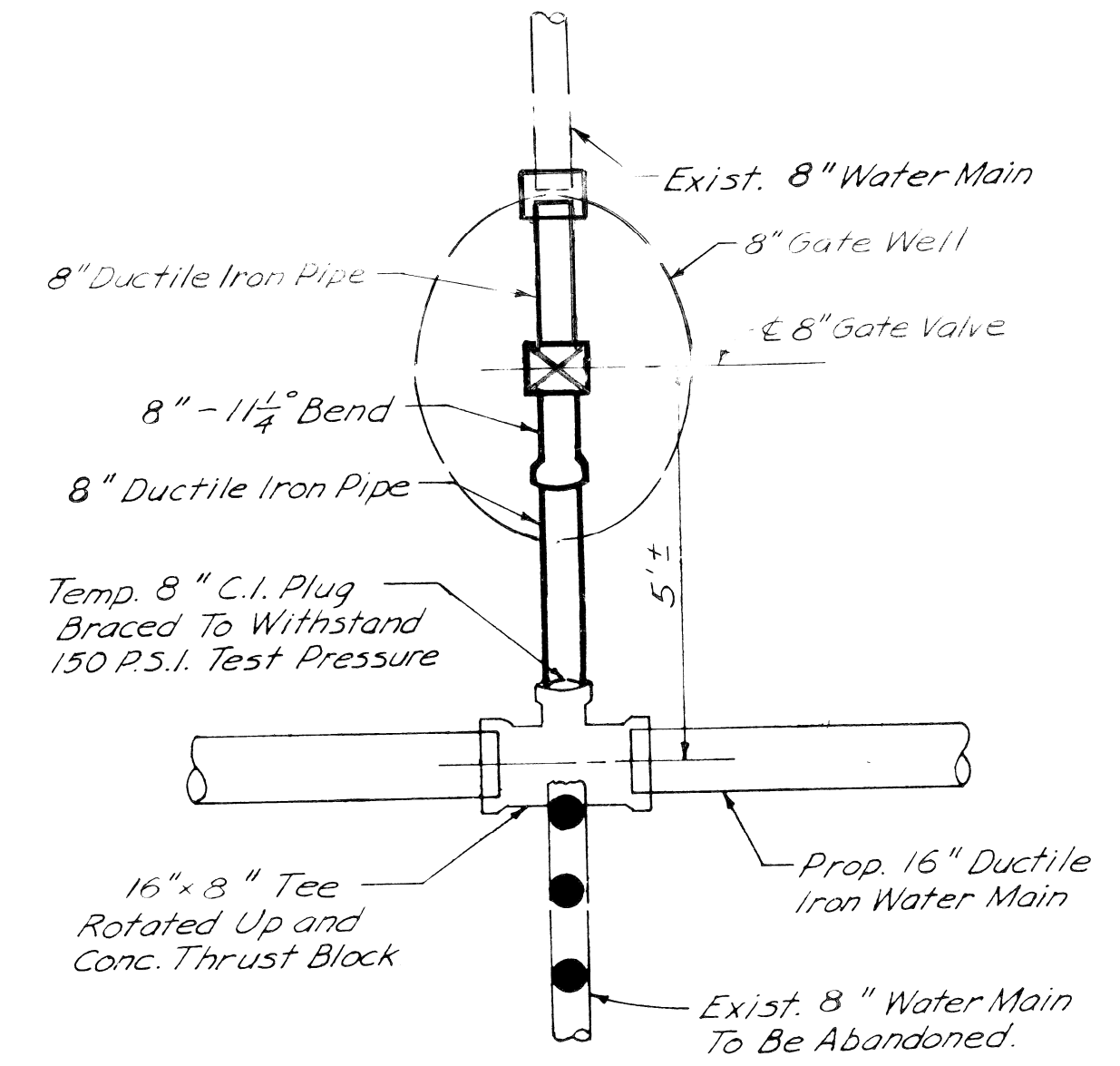
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DETAIL 'D'
(Dwgs. No. 3, 6 & 8)



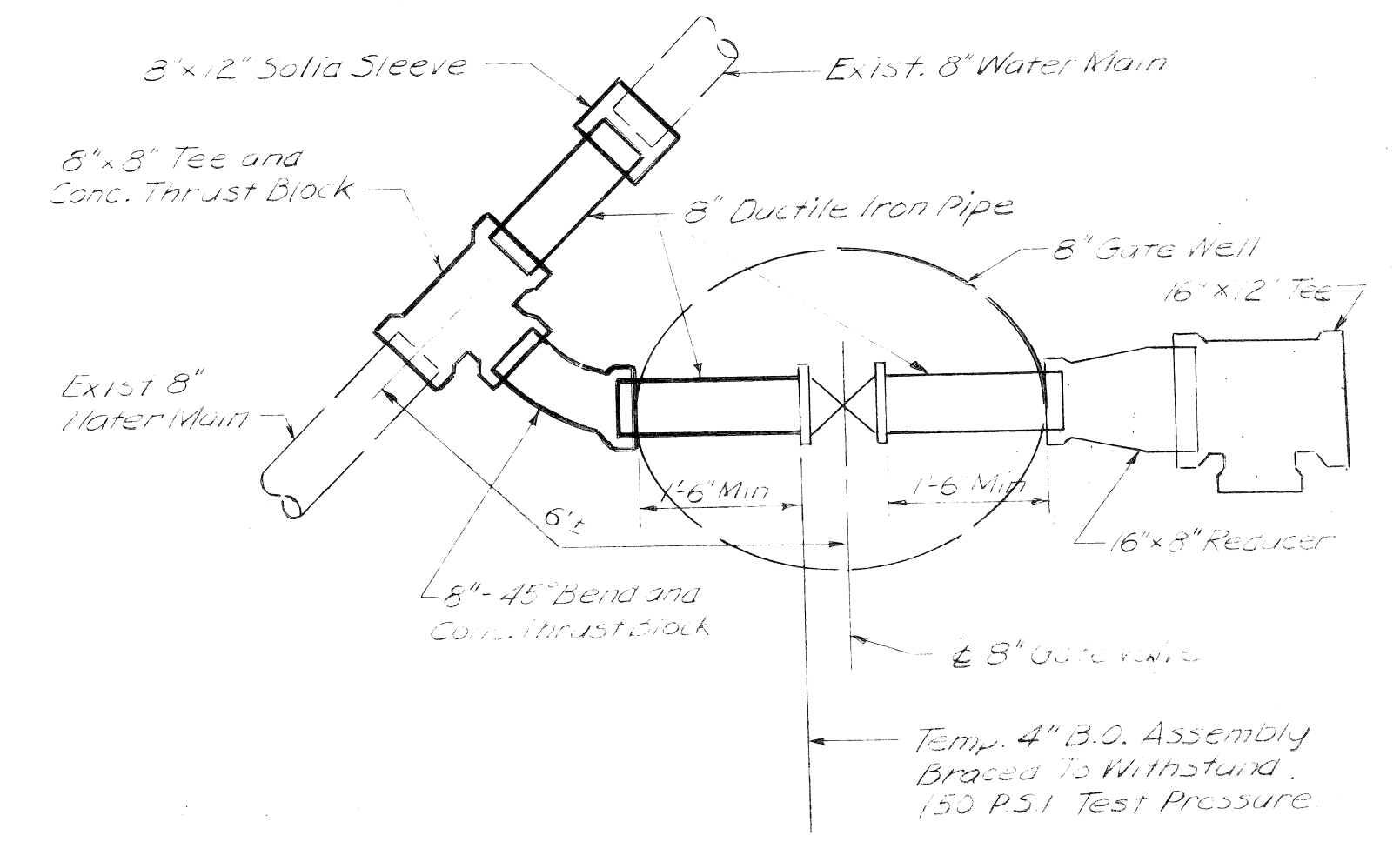
PLAN
DETAIL 'E'
(Not Used in This Contract)



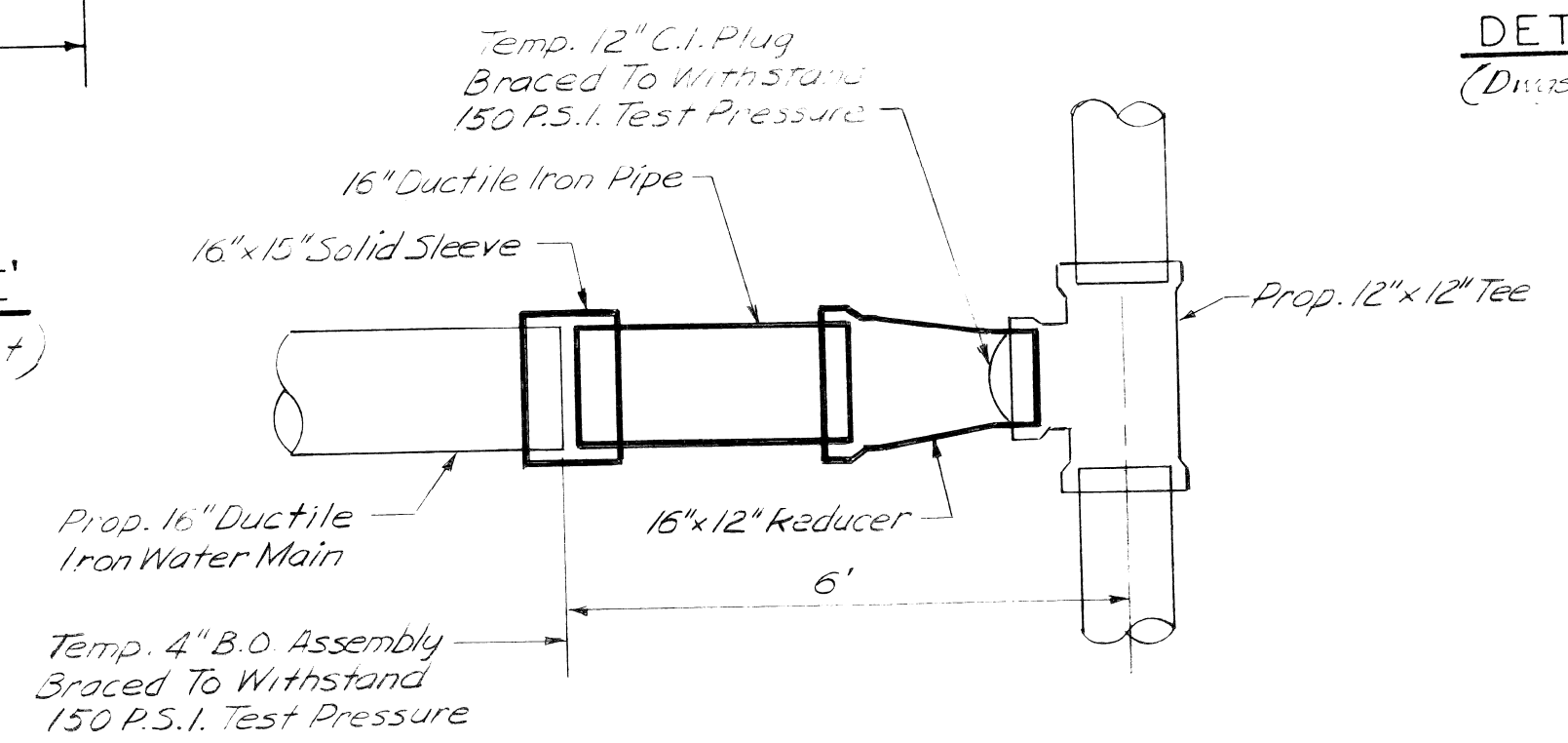
PLAN
DETAIL 'F'
(Dwgs. No. 3 & 4)



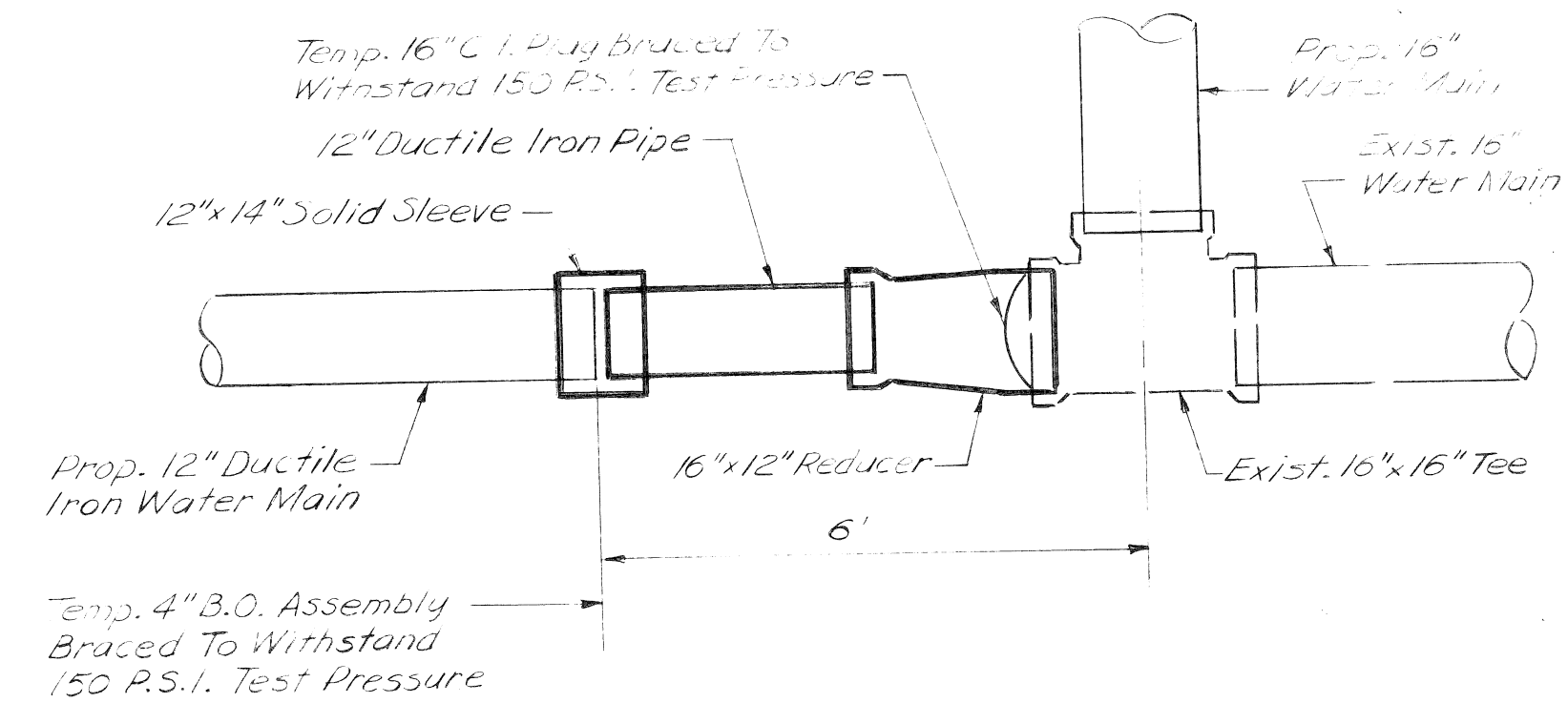
PLAN
DETAIL 'G'
(Dwg. No. 7)



PLAN
DETAIL 'H'
(Dwg. No. 4)



PLAN
DETAIL 'J'
(Dwg. No. 7)



PLAN
DETAIL 'I'
(Dwg. No. 6)

NOTE
Connection Details are typical and may require adaptation to fit a particular connection

F				
E				
D				
C				
B				
A				
CO-OR.	DESCRIPTION	APRVD.	DATE	
	REVISIONS			

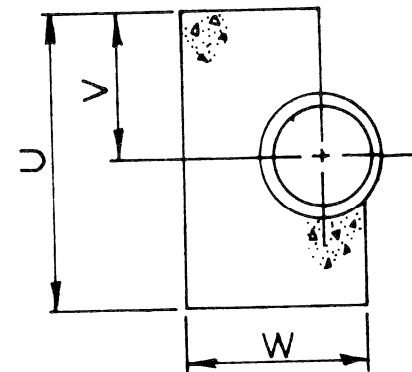
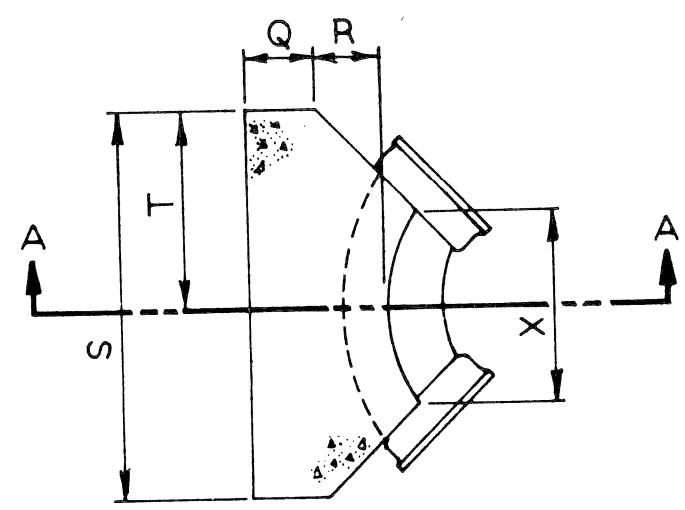
DESIGNED BY
DRAWN BY R.T.D.
CHECKED BY J.W.
CHIEF ENGINEER

APPROVED
[Signature]
DIRECTOR OF ENGINEERING

ELMWOOD PARK PROJECT NO. 3
WATER SYSTEM ALTERATIONS
CONNECTION DETAILS
SCALE NONE
DATE SEPT. 1975

DETROIT METRO WATER DEPARTMENT
ENGINEERING DIVISION
SECTION MAP TOWN RANGE SECTION PORTION CODE WORK ORDER NO. D-107

M.D.P.H. PERMIT NO.
FED. REF. NO.
CONTRACT NO. PW 6571
DRAWING NO. SHEET 33 OF 51

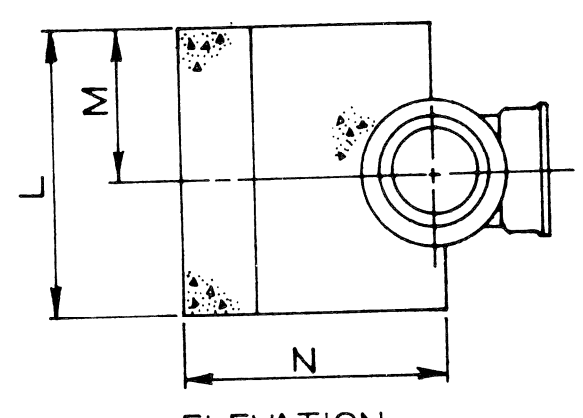
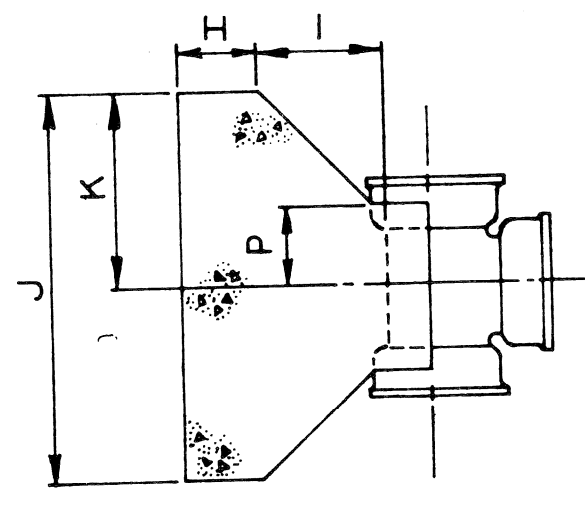


SCHEDULE OF THRUST BLOCK DIMENSIONS

BEND SIZE	Q	R	S	T	U	V	W	X
6"-22½" 45°	0'-9"	1'-0"	2'-0"	1'-0"	1'-6"	0'-9"	1'-11"	1'-4"
6"-90°	0'-9"	1'-0"	3'-0"	1'-6"	2'-0"	1'-0"	1'-11"	1'-2"
8"-22½" 45°	0'-9"	1'-0"	2'-4"	1'-2"	2'-0"	1'-0"	1'-11"	1'-4"
8"-90°	0'-9"	1'-0"	3'-4"	1'-8"	2'-6"	1'-3"	1'-11"	1'-2"
12"-22½"	0'-9"	1'-0"	2'-6"	1'-3"	2'-0"	1'-0"	2'-0"	1'-4"
12"-45°	0'-9"	1'-4"	3'-6"	1'-9"	2'-6"	1'-3"	2'-4"	1'-4"
12"-90°	0'-9"	1'-4"	5'-6"	2'-9"	3'-0"	1'-6"	2'-4"	1'-8"
16"-22½"	1'-0"	1'-8"	3'-4"	1'-8"	2'-6"	1'-3"	3'-0"	1'-2"
16"-45°	1'-0"	1'-8"	5'-4"	2'-8"	3'-0"	1'-6"	3'-0"	2'-6"
16"-90°	1'-0"	1'-8"	6'-0"	3'-0"	5'-0"	2'-6"	3'-0"	2'-8"

DETAIL OF STANDARD THRUST BLOCKS FOR BENDS
Not to Scale

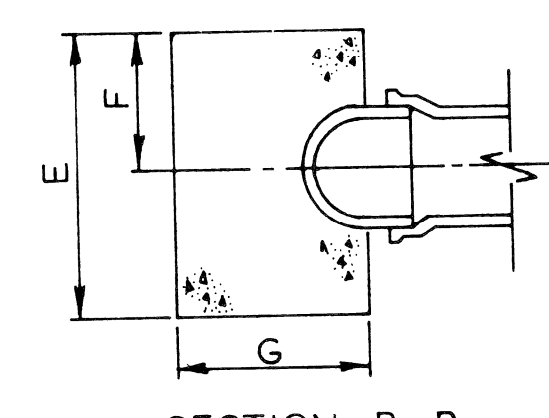
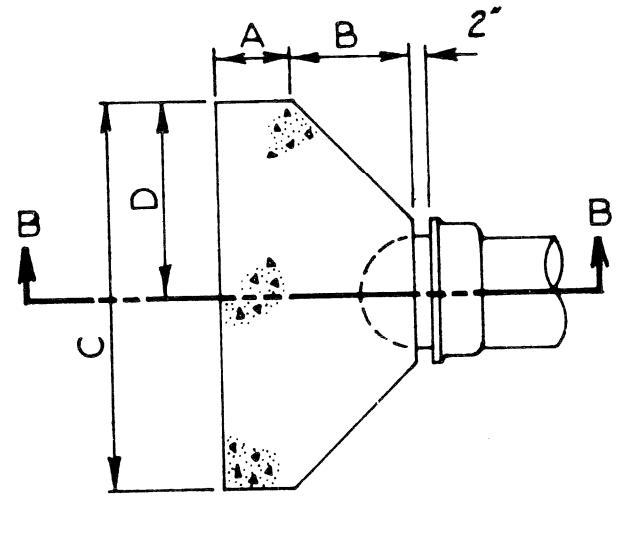
NOTES
The bearing face of all Thrust Blocks shall be poured against undisturbed earth. Thrust Blocks when required for vertical bends are shown by special details.



SCHEDULE OF THRUST BLOCK DIMENSIONS FOR TEES

TEE SIZE	H	I	J	K	L	M	N	P
6" x 6"	0'-9"	1'-0"	2'-6"	1'-3"	1'-6"	0'-9"	2'-3"	0'-6"
8" x 8"	0'-9"	1'-0"	3'-0"	1'-6"	2'-0"	1'-0"	2'-3"	0'-6"
10" x 10"	0'-9"	1'-2"	3'-6"	1'-9"	2'-6"	1'-3"	2'-7"	0'-7"
12" x 8"	0'-9"	1'-0"	3'-0"	1'-6"	2'-0"	1'-0"	2'-5"	0'-6"
12" x 12"	0'-9"	1'-4"	4'-0"	2'-6"	3'-0"	1'-6"	2'-9"	0'-8"
16" x 8"	0'-9"	1'-0"	3'-0"	1'-6"	2'-0"	1'-0"	2'-9"	0'-6"
16" x 12"	0'-9"	1'-4"	4'-0"	2'-0"	3'-0"	1'-6"	3'-1"	0'-8"
16" x 16"	1'-0"	1'-8"	5'-0"	2'-6"	4'-0"	2'-0"	3'-8"	0'-11"

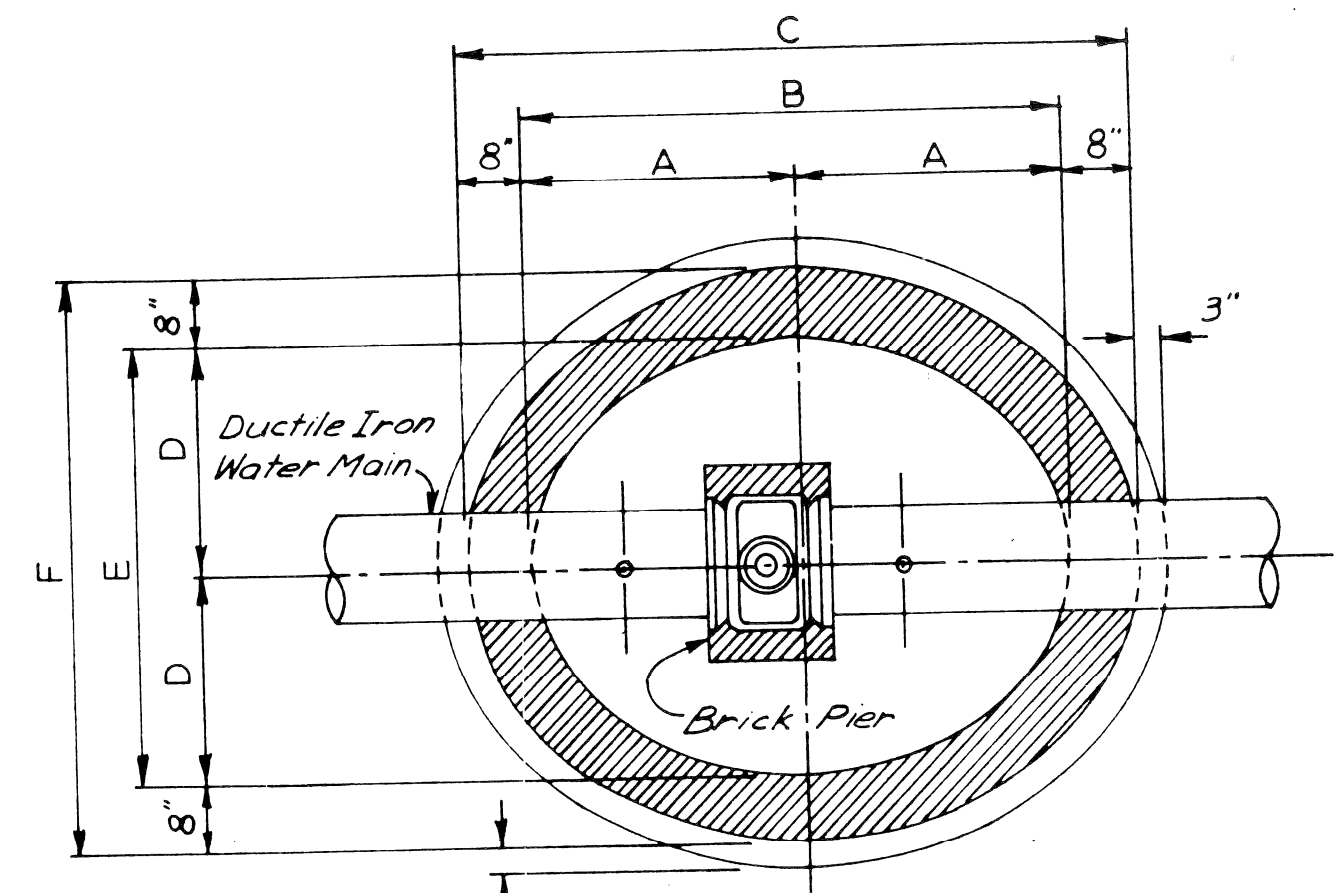
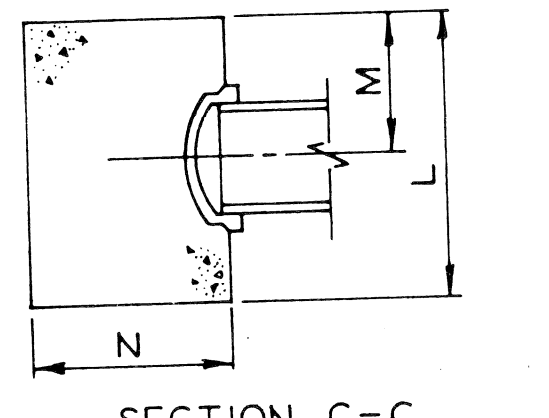
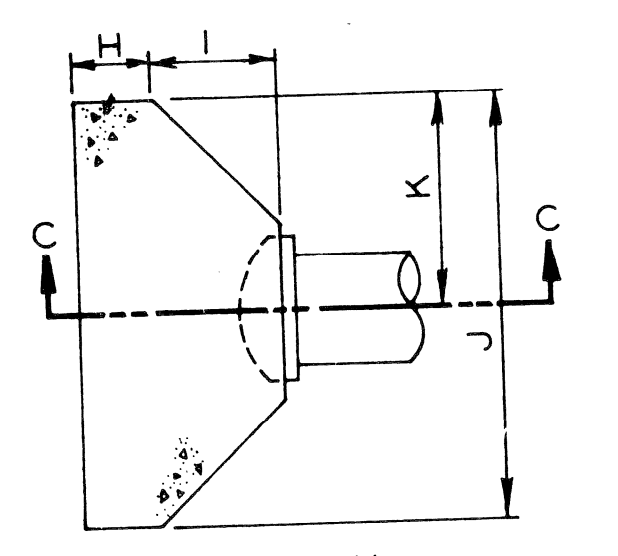
DETAIL OF STANDARD THRUST BLOCKS FOR TEES
Not to Scale



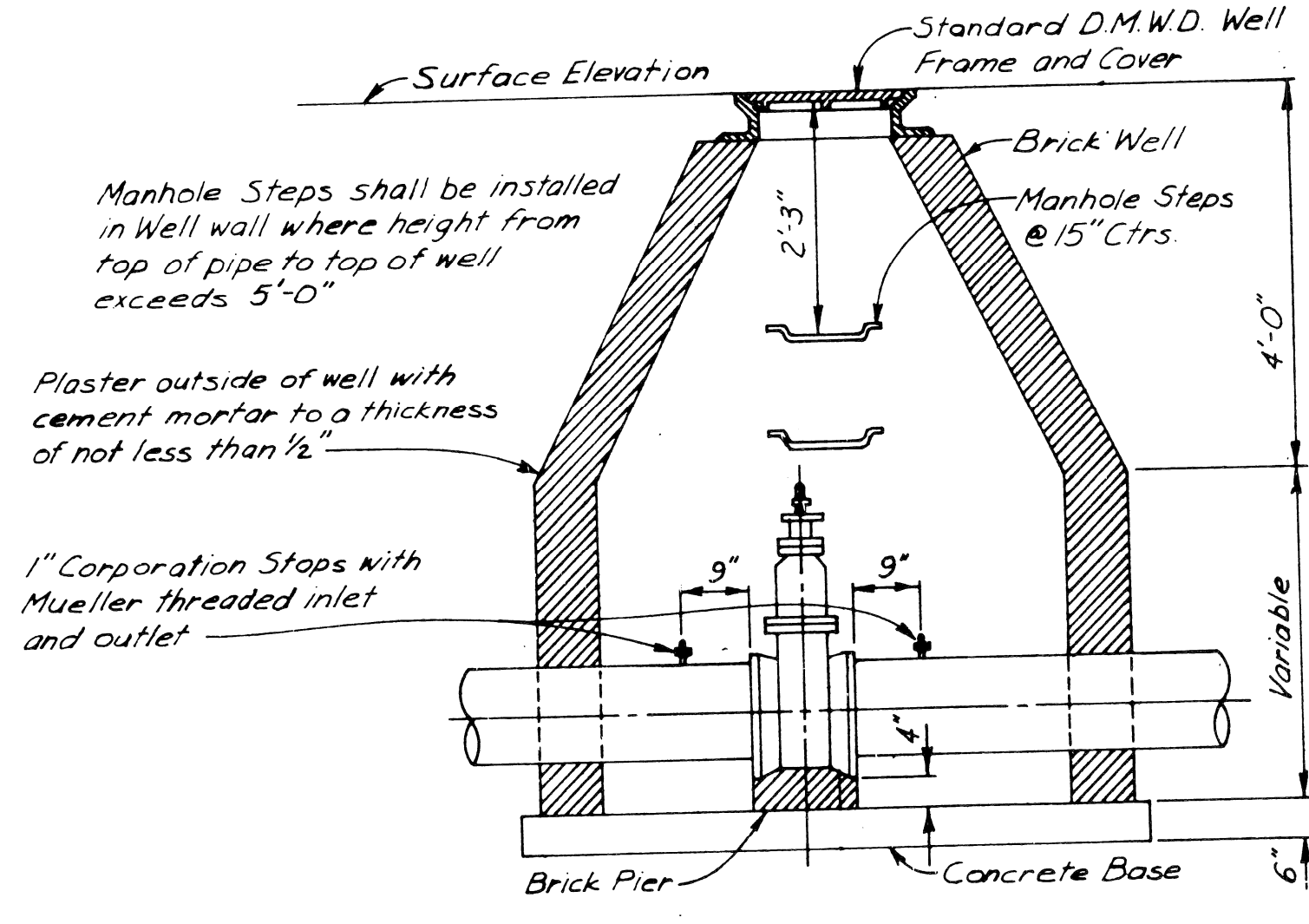
SCHEDULE OF THRUST BLOCK DIMENSIONS FOR PLUGS AND CAPS

PLUG SIZE	A	B	C	D	E	F	G
6"	0'-9"	1'-2"	3'-0"	1'-6"	2'-0"	1'-0"	1'-11"
8"	0'-9"	1'-2"	3'-0"	1'-6"	2'-0"	1'-0"	1'-11"
12"	0'-9"	1'-4"	4'-0"	2'-0"	3'-0"	1'-6"	2'-1"
16"	1'-0"	1'-8"	5'-0"	2'-6"	4'-0"	2'-0"	2'-8"

DETAIL OF STANDARD THRUST BLOCKS FOR PLUGS AND CAPS
Not to Scale



PLAN SECTION

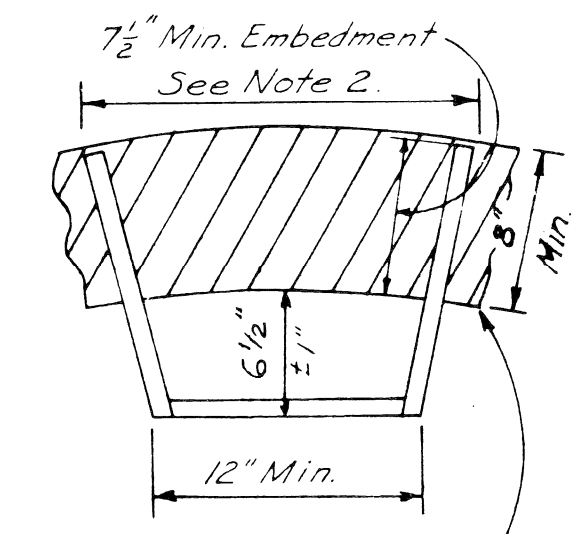


SECTION THROUGH GATE WELL

SCHEDULE OF GATE WELL DIMENSIONS

SIZE	A	B	C	D	E	F
6"	2'-6"	5'-0"	6'-4"	2'-0"	4'-0"	5'-4"
8"	2'-6"	5'-0"	6'-4"	2'-0"	4'-0"	5'-4"
12"	2'-9"	5'-6"	6'-10"	2'-3"	4'-6"	5'-10"
16"	3'-0"	6'-0"	7'-4"	2'-9"	5'-6"	6'-10"

DETAIL OF STANDARD GATE WELLS
Not to Scale



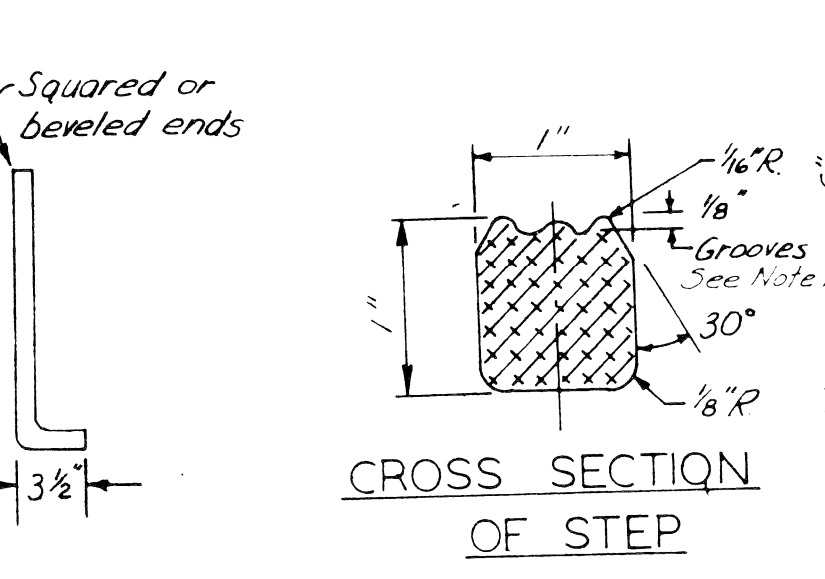
ALUMINUM MANHOLE STEP
Not to Scale

NOTE
Manhole steps shall conform to the requirements for "Aluminum Alloy Extruded Bars, Rods, Shapes and Tubes", A.S.T.M. B 221 (current), Alloy 6061, Temper T-6, or approved equal.

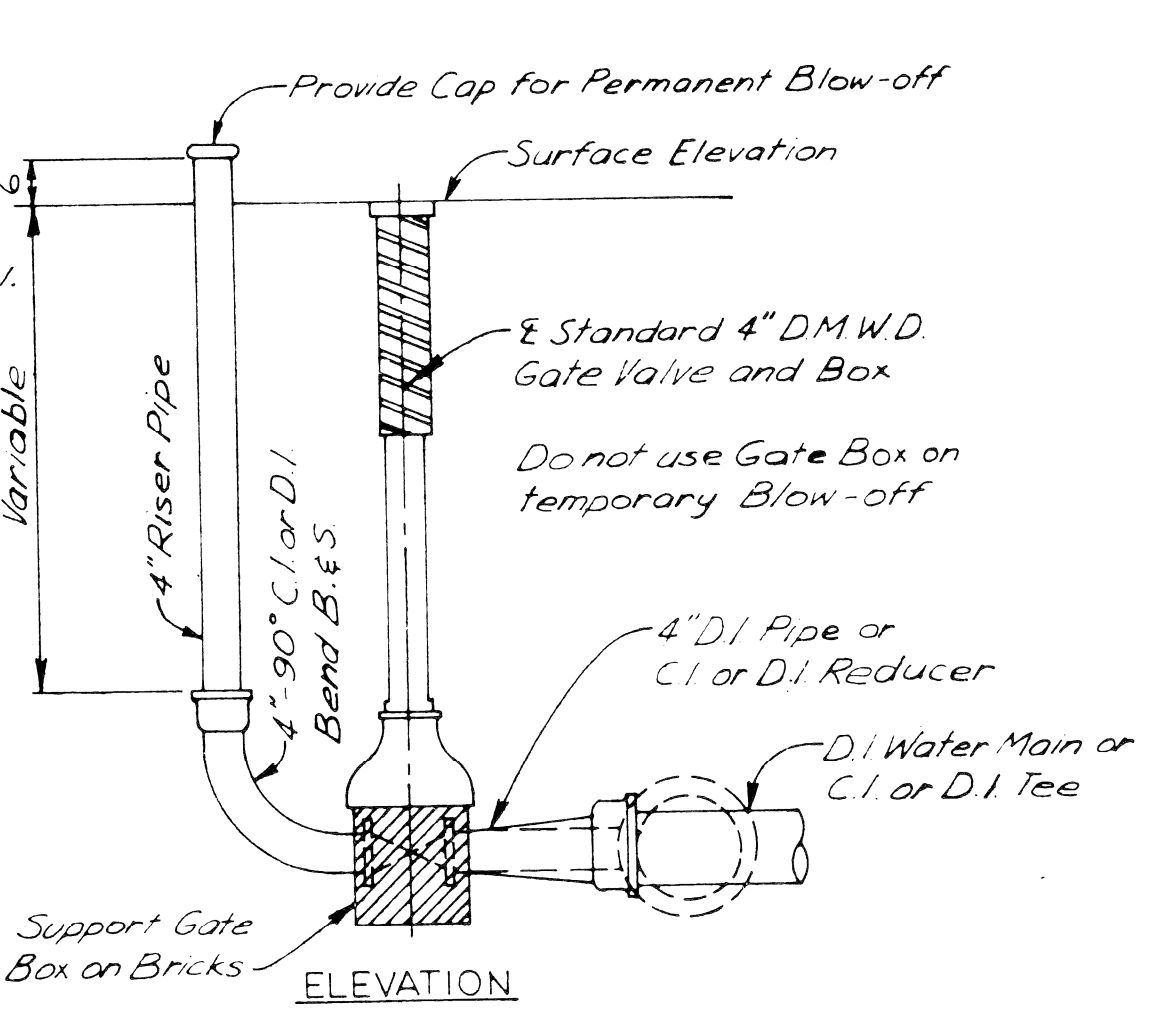
SCHEDULE OF STANDARD THRUST BLOCK DIMENSIONS FOR TAPPING VALVE

SIZE	A	B	C	D	E	F	G	H	J
8" x 8"	1'-6 1/4"				0'-7"				
12" x 8"	1'-9"				0'-7"				
16" x 8"	1'-11 1/2"				0'-7 1/2"				
12" x 12"	1'-8 1/2"	1'-6"	0'-9"	2'-3"	0'-7"	1'-9"	3'-6"	1'-6"	3'-0"
16" x 12"	1'-11 1/2"	1'-6"	0'-9"	2'-3"	0'-10 1/2"	1'-9"	3'-6"	1'-6"	3'-0"
16" x 16"	2'-2"	2'-7"	1'-0"	3'-7"	0'-10 1/2"	2'-11"	5'-10"	1'-8"	3'-4"

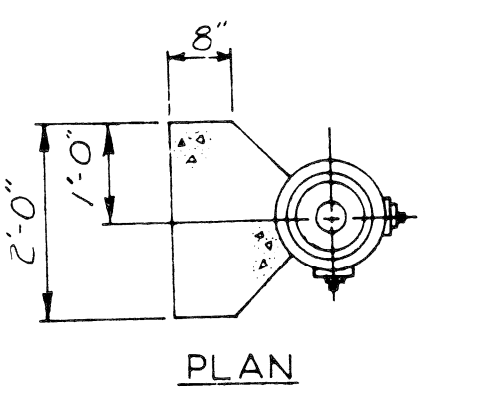
DETAIL OF STANDARD THRUST BLOCKS FOR TAPPING VALVES
Not to Scale



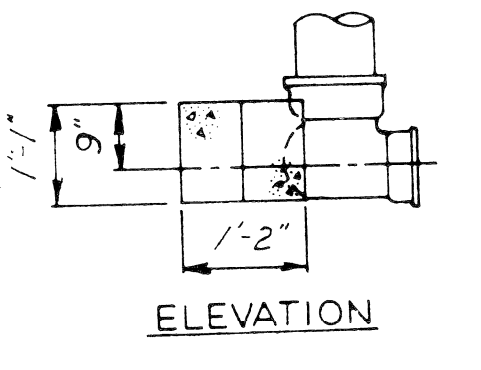
CROSS SECTION OF STEP



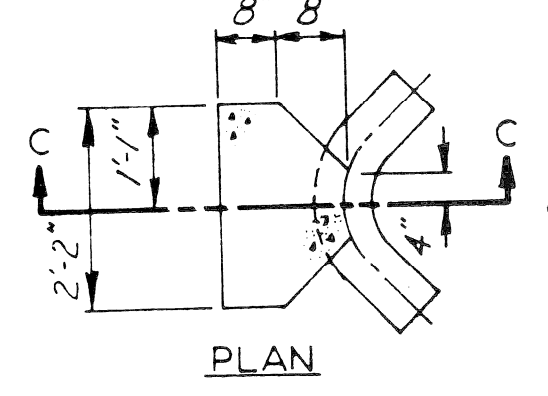
DETAIL OF 4" BLOW-OFF
Not to Scale



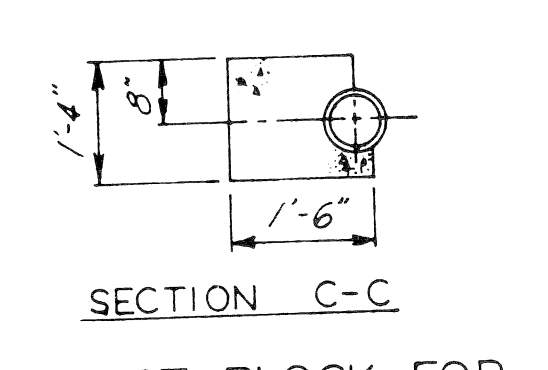
THRUST BLOCK FOR 6" HYDRANT BEND
Not to Scale



THRUST BLOCK FOR 6" HYDRANT BEND
Not to Scale



THRUST BLOCK FOR 6" HYDRANT STRAIGHT AWAY
Not to Scale

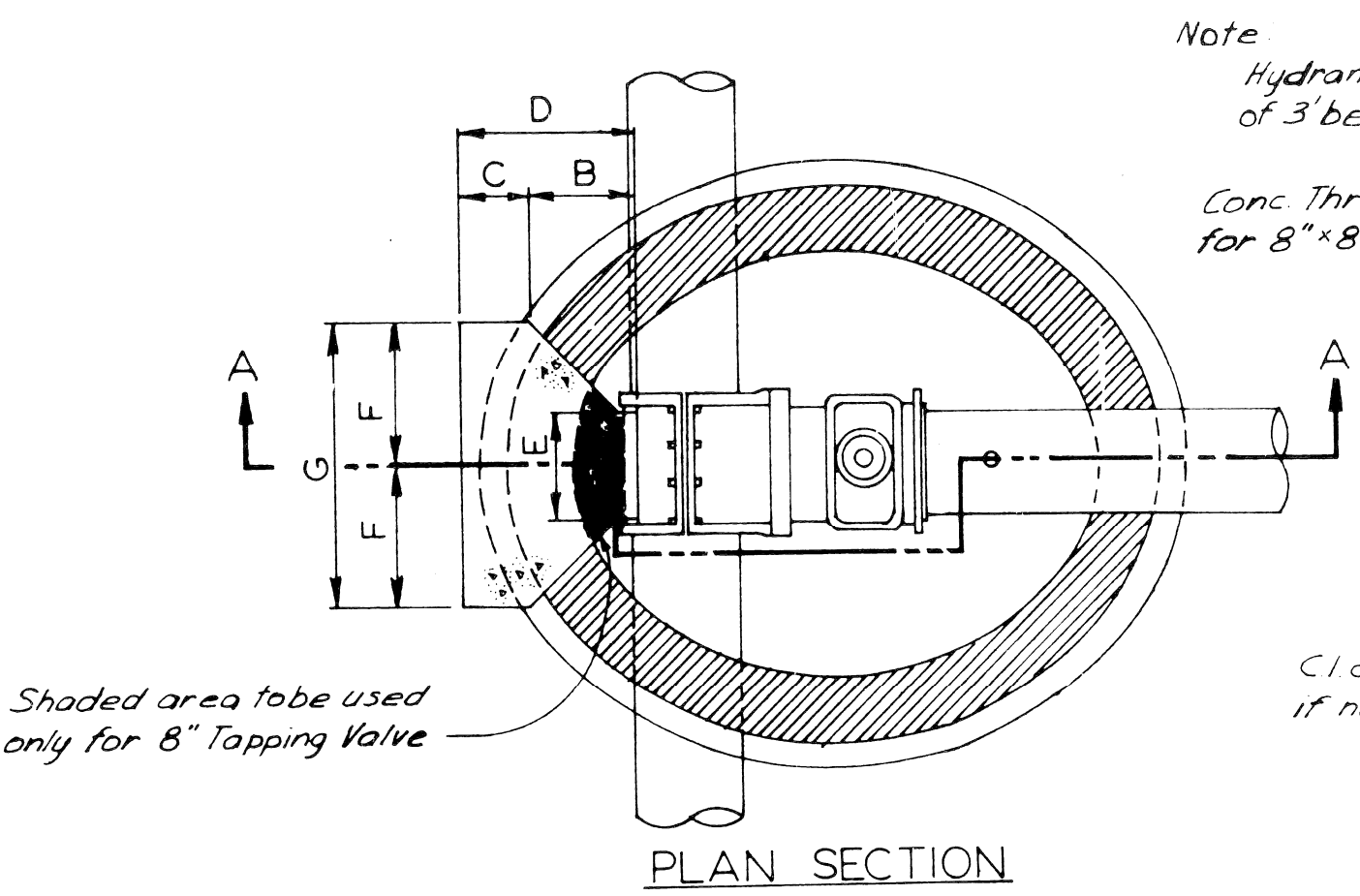


THRUST BLOCK FOR 6" HYDRANT STRAIGHT AWAY
Not to Scale

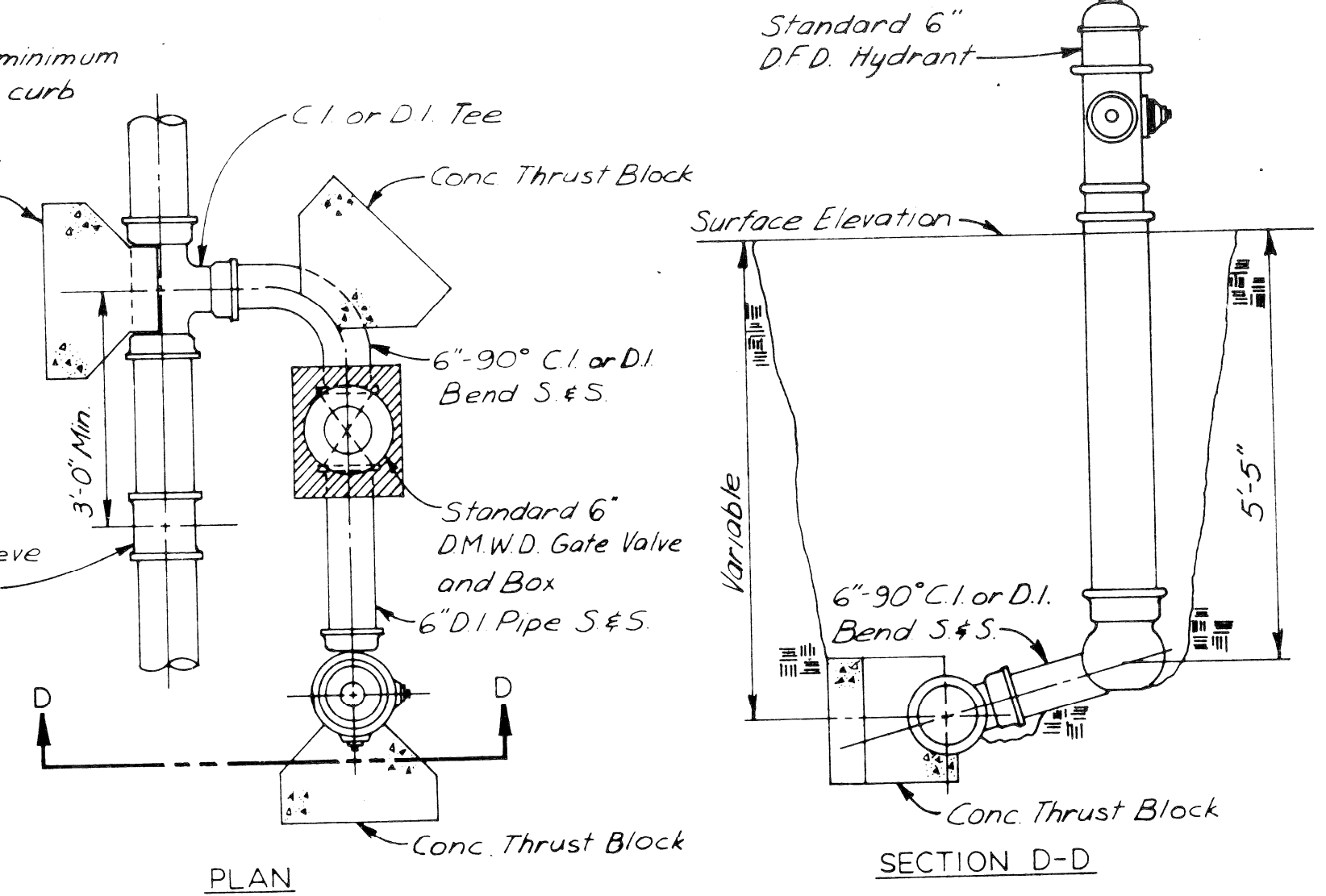
Manhole Steps shall be installed in Well wall where height from top of pipe to top of well exceeds 5'-0"

Plaster outside of well with cement mortar to a thickness of not less than 1/2"

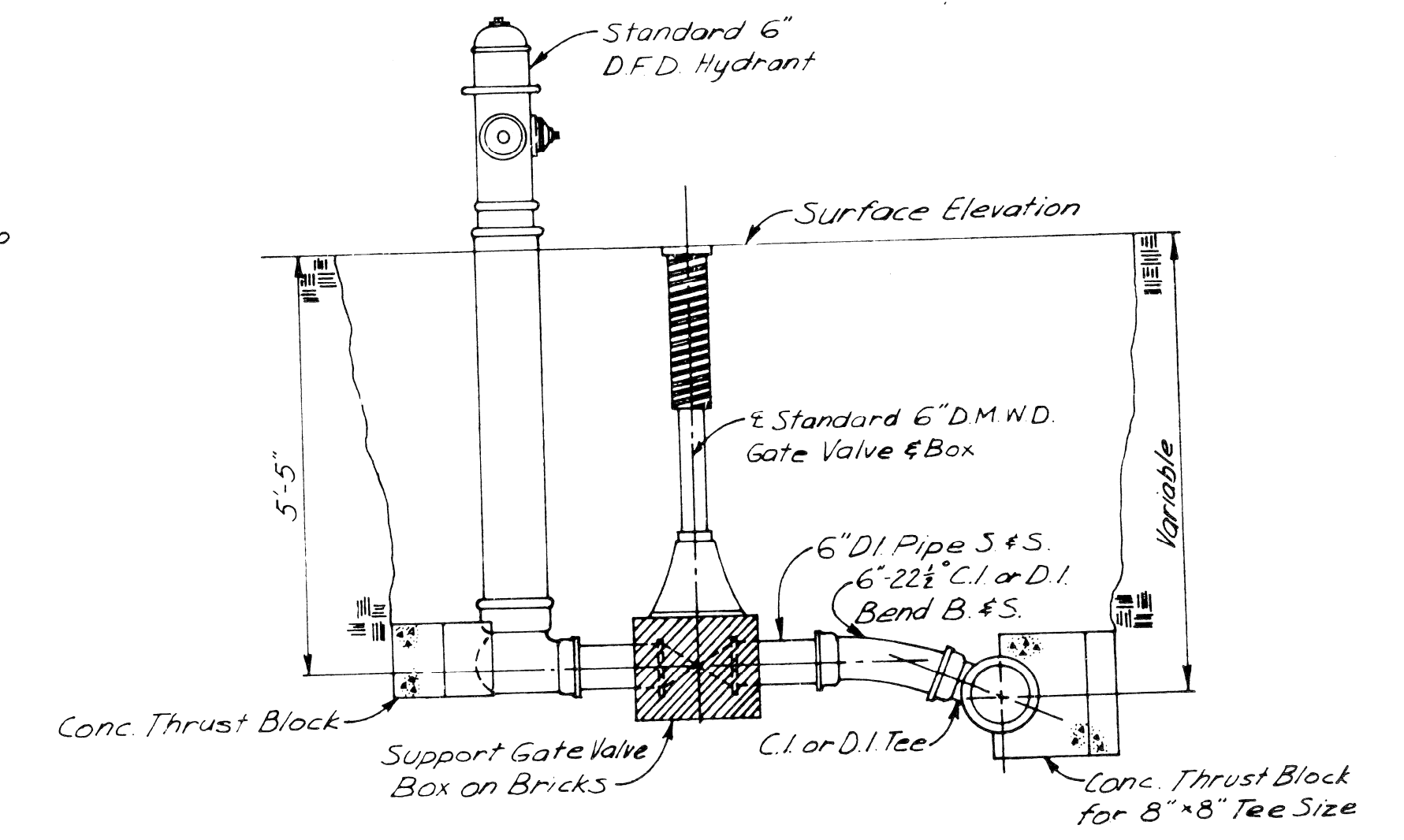
1" Corporation Stops with Mueller threaded inlet and outlet



PLAN SECTION



DETAIL OF 6" HYDRANT INSTALLATION OFF SET
Not to Scale



DETAIL OF 6" HYDRANT INSTALLATION STRAIGHT AWAY
Not to Scale

COOR	DESCRIPTION	REVISED	DATE
F			
E			
D			
C			
B			
A			

DESIGNED BY
DRAWN BY R.A.C.
CHECKED BY R.T.D. J.W.

APPROVED
[Signature]
DIRECTOR OF ENGINEERING

ELMWOOD PARK PROJECT NO. 3
WATER SYSTEM ALTERATIONS
MISCELLANEOUS DETAILS
SCALE AS SHOWN
SEPT. 1975 DATE

DETROIT METRO WATER DEPARTMENT
ENGINEERING DIVISION

M.D.P.H. PERMIT NO.
FED. REF. NO.
CONTRACT NO. PW 6571
DRAWING NO. SHEET 3 OF 31

SECTION MAP TOWN RANGE SECTION PORTION CODE WORK ORDER NO. D-07