

# CITY OF DETROIT CITY ENGINEERING DEPARTMENT

IN CO-OPERATION WITH

## MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

AND

## FEDERAL HIGHWAY ADMINISTRATION

PLAN AND PROFILE OF PROPOSED

# FEDERAL AID URBAN PROJECT NO. MICHIGAN M 2000 (017)

CONTROL SECTION MU 82400

JOB NO. 09937A

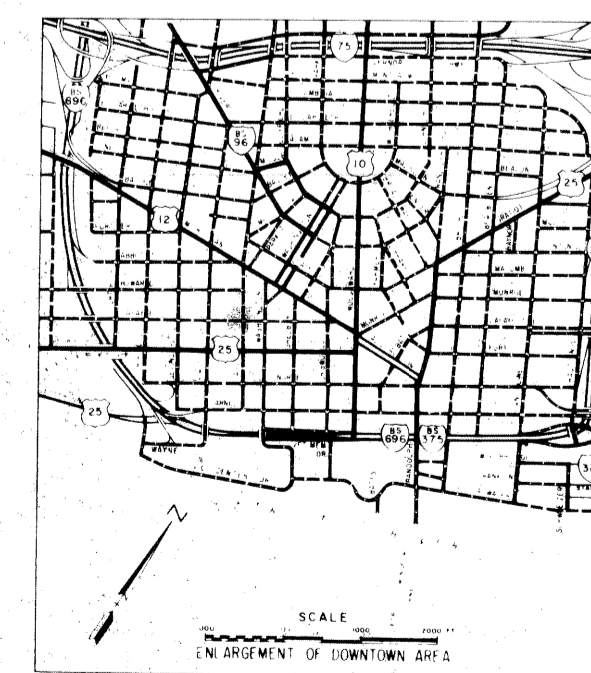
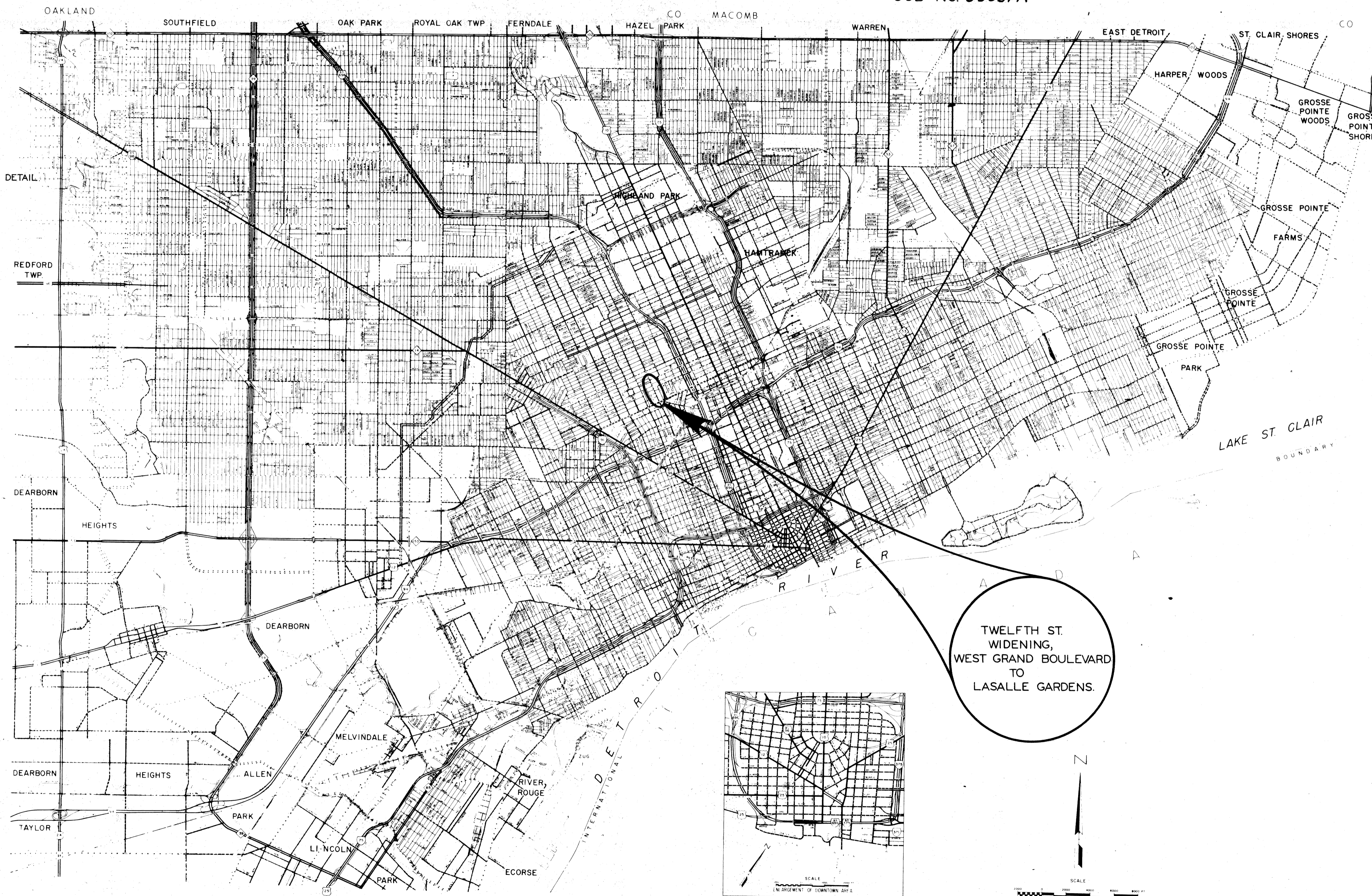
B.P.R. DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			1	59
STREET	CITY	COUNTY	TWP.	SHEET NO.	TOTAL SHEETS
	DETROIT	WAYNE		1	59

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF STATE HIGHWAYS CURRENT STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS.

TRAFFIC COUNT (FUTURE)	
A.D.T.	37,440
D.H.V.	1,850 (1-WAY ONLY)

### INDEX TO SHEETS

1. TITLE SHEET
2. GENERAL PLAN
3. TYPICAL CROSS-SECTIONS
4. ALIGNMENT
- 5-6. CONSTRUCTION SEQUENCE
7. REMOVALS
- 8-11. PLAN AND PROFILES
12. DETAILED GRADES
13. UTILITIES
- 14A-14F. SPECIAL AND MISCELLANEOUS DETAIL
15. LAWN WATERING SYSTEM
- 16-17. LANDSCAPE CONSTRUCTION
- 18-50. P.L.C. ALTERATIONS
51. P.L.C. QUANTITIES
- 52-58. WATER ALTERATIONS
59. QUANTITY SHEET



### ITEM 192

CONTRACT FOR G&DS 33' DUAL ROADWAY AND UTILITIES	
LOCAL AUTHORITY APPROVAL CITY OF DETROIT CITY ENGINEERING DEPARTMENT GOVERNMENTAL AGENCY	
APPROVED BY <u>W.P. Barrow</u>	5/14/75 DATE
APPROVED BY <u>H.T. Sudley</u>	5/15/75 DATE
RECOMMENDED FOR APPROVAL	
BY <u>John Smith</u> 9-24-75 F.A. ENGINEER DATE	
PLANS CHECKED BY <u>E.E. Morrison</u> 9-29-75 DATE	
DEPARTMENT OF STATE HIGHWAYS APPROVAL APPROVED FOR COMMISSION	
BY <u>[Signature]</u> 9/1/75 DEPUTY DIRECTOR - HIGHWAYS DATE	
PREPARED UNDER SUPERVISION OF	
<u>Allen E. Proyer</u> 9261 REGISTERED PROFESSIONAL ENGINEER REGISTRATION NO.	
CITY OF DETROIT ORGANIZATION	
DETROIT MICHIGAN ADDRESS	
( SEAL )	
U. S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	
[Signature]	DATE
DISTRICT ENGINEER	

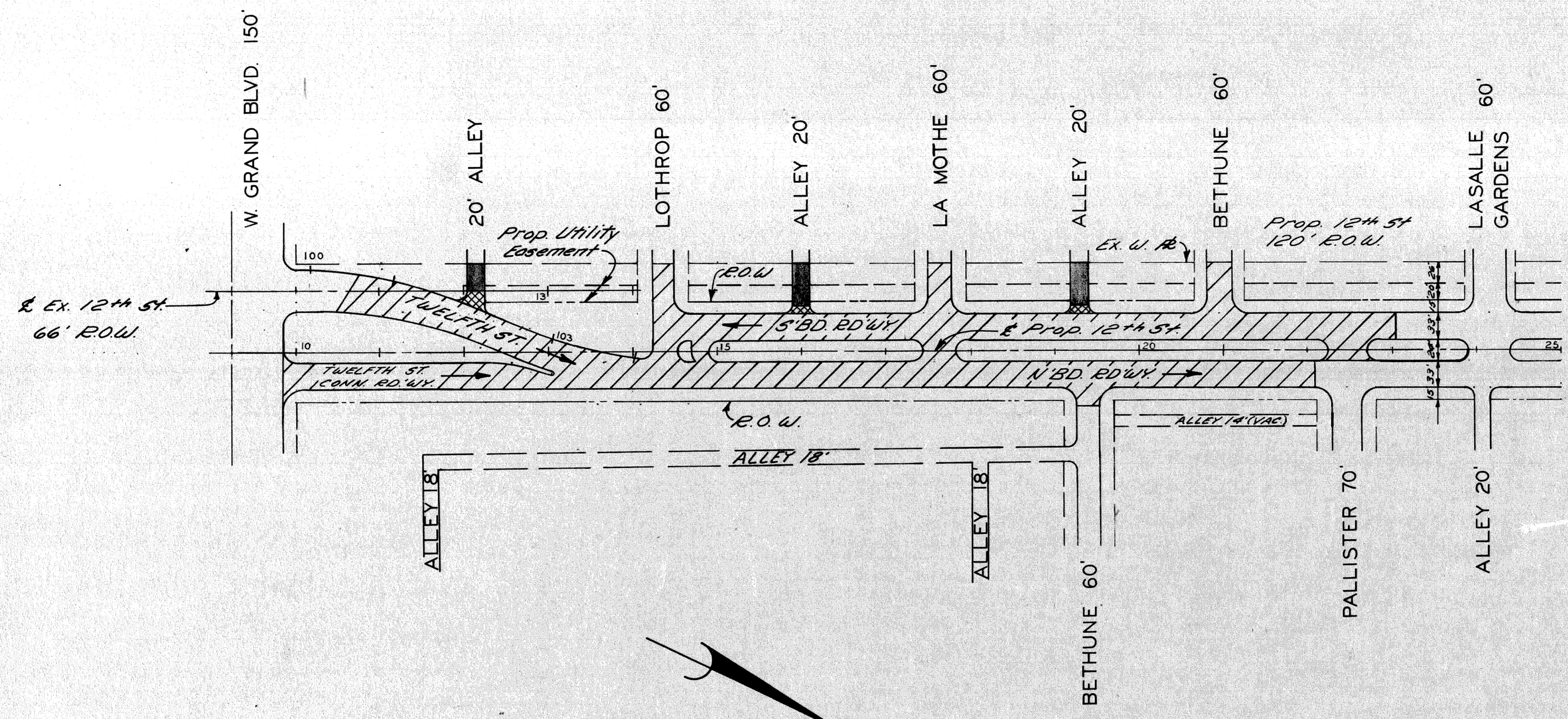
DATE: MAY 18, 1975

FILE NO.	STATE	PROJECT	FEDERAL PROJECT	SHEET
NO. 250	MICH.			1
STENCIL				

Original

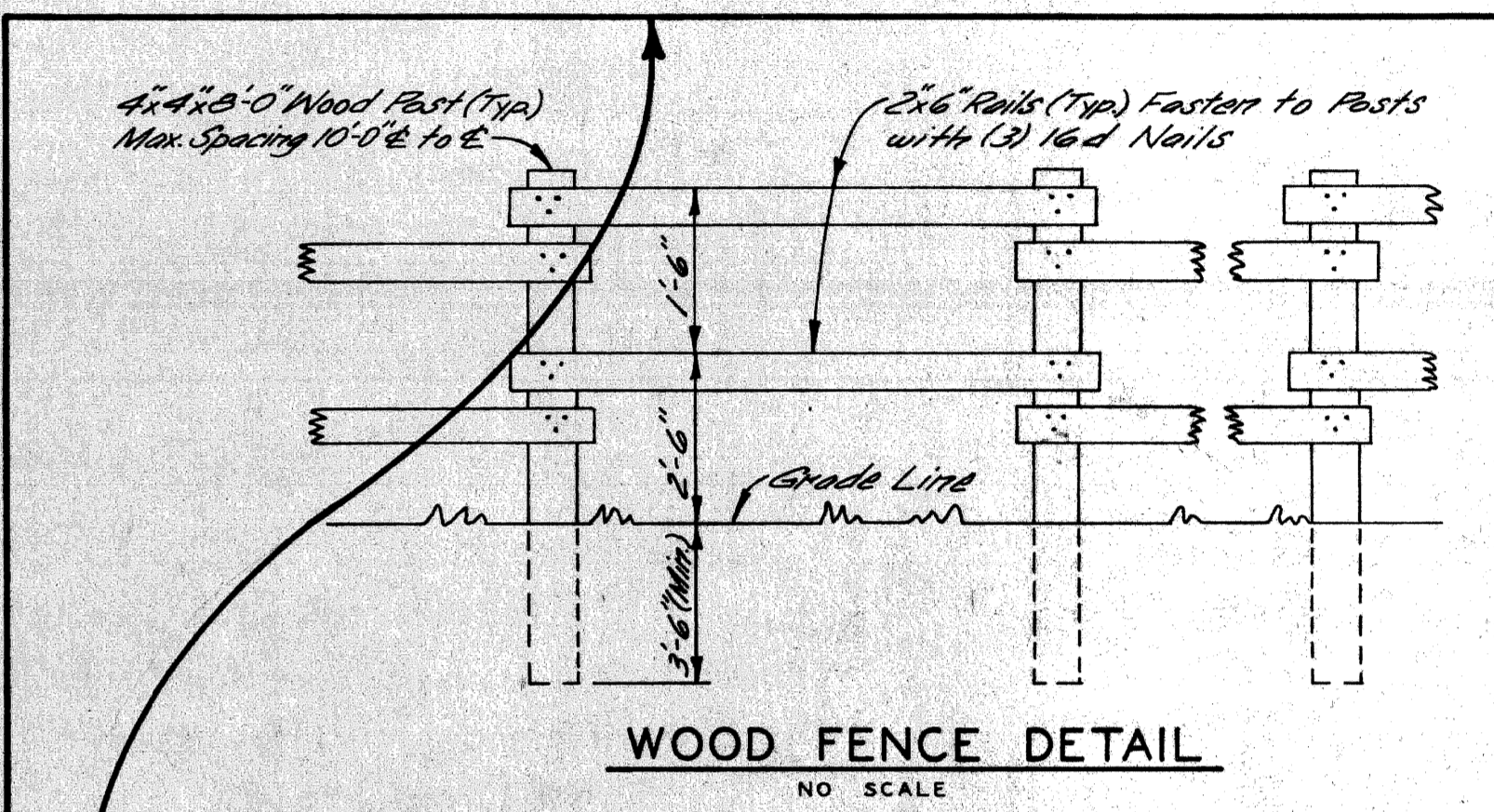
M 2000 (017)  
JOB # 09937A  
C.S. MU 82400





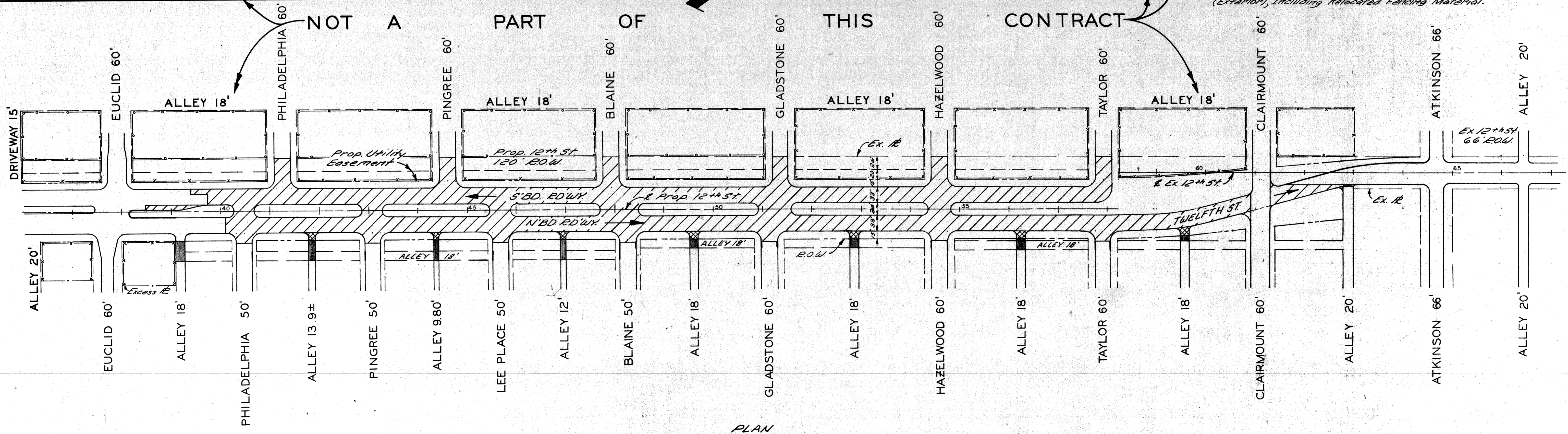
**LEGEND**

- Concrete Pav't 9" Uniform (Reinf.) [Hatched pattern]
- Concrete Pav't 9" Uniform (Non Reinf.) [Cross-hatched pattern]
- Prop. Concrete Curb [Solid black line]
- Concrete Pav't 8" Uniform [Dotted pattern]
- Prop. "Wood Fence" [Line with 'x' marks]
- Exist. "Wood Fence" [Line with 'o' marks]



- Wood Fence Notes:**
- Wood Rails and Posts to be either New No. 2 Grade Lumber, or Relocated Existing Fencing in good condition.
  - All Fence Material to be Painted one coat Latex White Paint (Exterior), Including Relocated Fencing Material.

NOT A PART OF THIS CONTRACT



PLAN  
Scale: 1" = 100'

DESIGNED BY	17. Suroch
DRAWN BY	
TRACED BY	
CHECKED BY	R.B.P.

**CITY OF DETROIT**  
DEPARTMENT OF PUBLIC WORKS  
CITY ENGINEERS OFFICE  
FOR  
COMMUNITY DEVELOPMENT COMMISSION

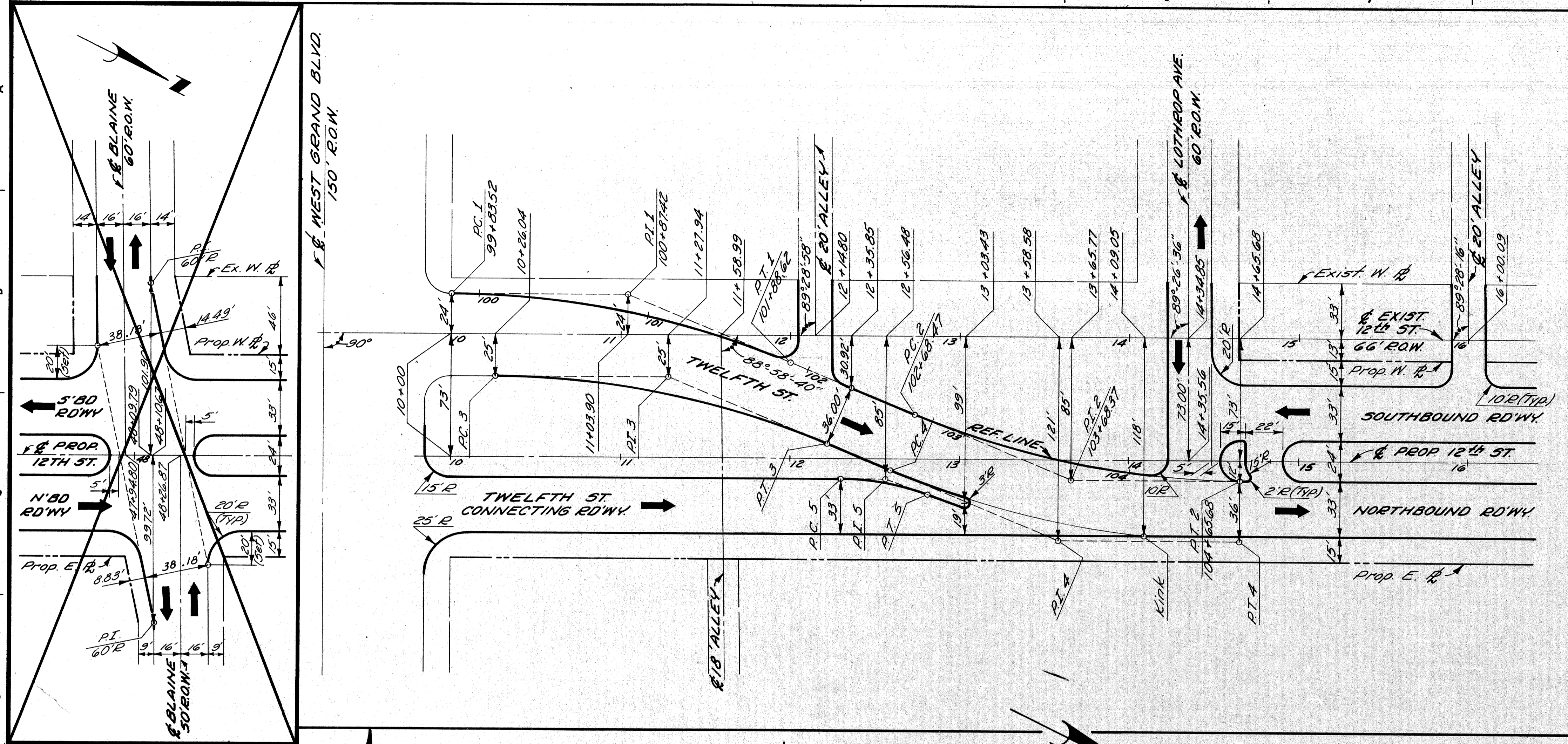
TWELFTH STREET WIDENING  
WEST GRAND BLVD TO LASALLE GARDENS  
GENERAL PLAN

SHEET 2 OF 59 SHEETS
CONTRACT No. M 2000 (017)
ASSIGNMENT No. A.O. 2091
DATE 5-18-75





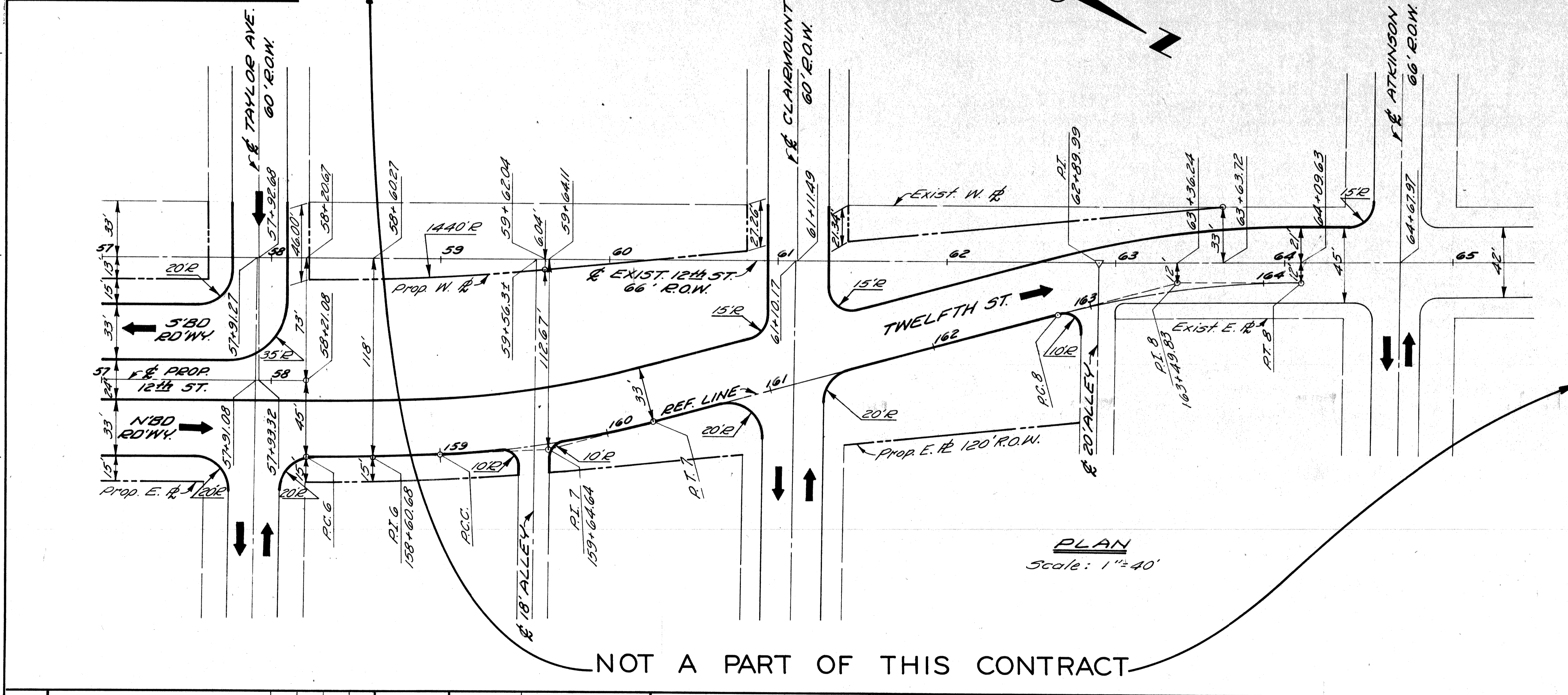




TWELFTH ST. CURVE DATA

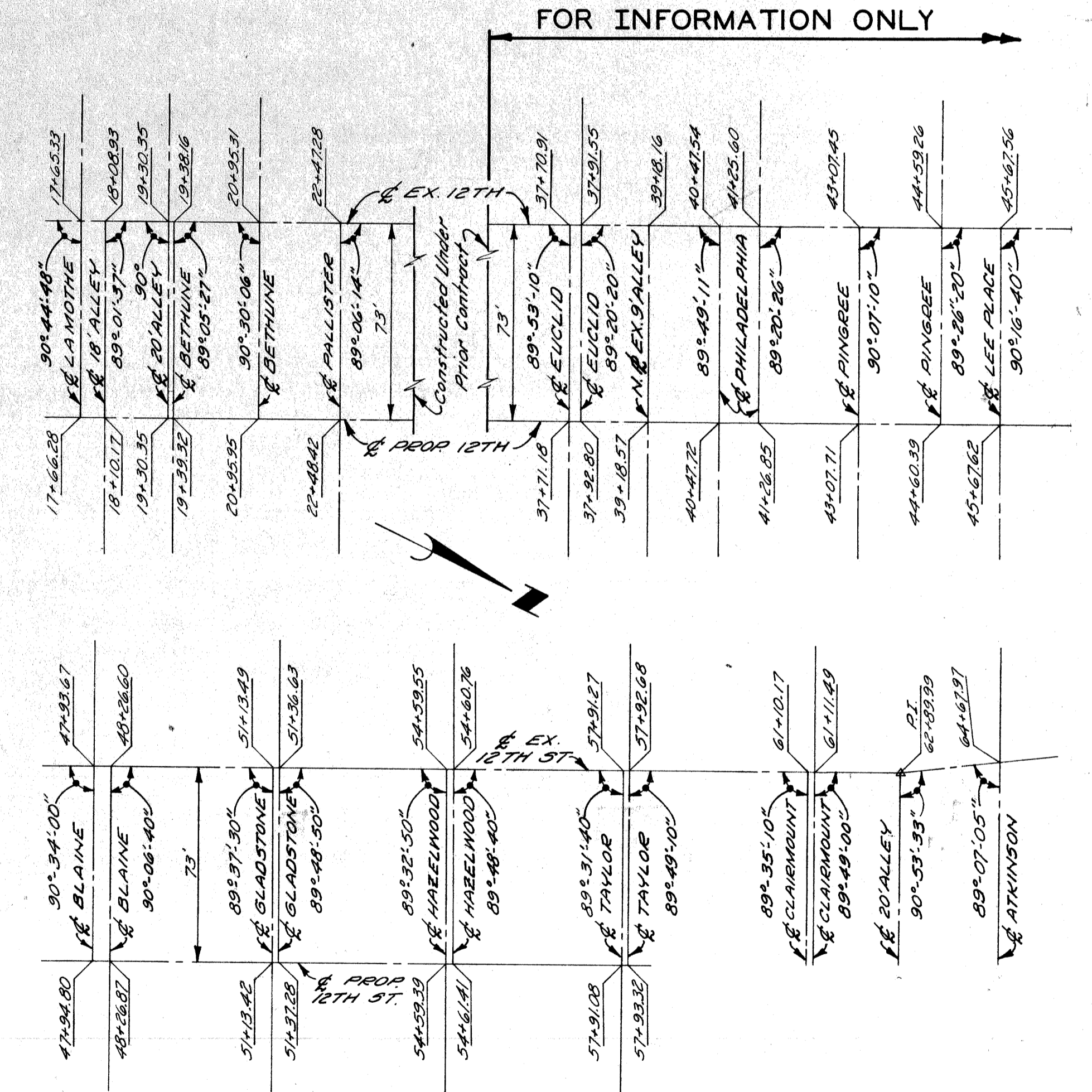
Curve 1	Curve 2	Curve 3	Curve 4	Curve 5	Curve 6	Curve 7	Curve 8
$\Delta = 22^\circ 35' 54.4''$	$\Delta = 22^\circ 35' 54.4''$	$\Delta = 22^\circ 35' 54.4''$	$\Delta = 22^\circ 35' 54.4''$	$\Delta = 20^\circ 06' 41.4''$	$\Delta = 2^\circ 56' 11.3''$	$\Delta = 12^\circ 14' 55.3''$	$\Delta = 14^\circ 45' 01.6''$
$D = 11^\circ 01' 06.3''$	$D = 11^\circ 27' 32.9''$	$D = 11^\circ 41' 04.1''$	$D = 10^\circ 41' 22.2''$	$D = 38^\circ 11' 49.8''$	$D = 9^\circ 42' 30.5''$	$D = 9^\circ 32' 57.5''$	$D = 10^\circ 06' 18.3''$
$R = 520'$	$R = 500'$	$R = 510'$	$R = 536'$	$R = 150'$	$R = 1545'$	$R = 600'$	$R = 567'$
$T = 103.90'$	$T = 99.90'$	$T = 101.90'$	$T = 107.10'$	$T = 26.60'$	$T = 39.60'$	$T = 64.38'$	$T = 73.39'$
$L = 205.10'$	$L = 197.21'$	$L = 201.15'$	$L = 211.41'$	$L = 52.65'$	$L = 79.18'$	$L = 128.27'$	$L = 145.97'$
$E = 10.28'$	$E = 9.88'$	$E = 10.08'$	$E = 10.59'$	$E = 2.34'$	$E = 0.51'$	$E = 3.44'$	$E = 4.73'$
$PC = 99+83.52$	$PC = 102+68.47$	$PC = 158+21.08$	$PC = 159+00.26$	$PC = 162+76.44$	$PC = 158+21.08$	$PCC = 159+00.26$	$PC = 162+76.44$
$PI = 100+87.42$	$PI = 103+68.37$	$PI = 158+60.68$	$PI = 159+64.64$	$PI = 163+49.83$	$PI = 158+60.68$	$PI = 159+64.64$	$PI = 163+49.83$
$PT = 101+88.62$	$PT = 104+65.68$	$PT = 159+00.26$	$PT = 160+28.53$	$PT = 164+22.41$	$PT = 159+00.26$	$PT = 160+28.53$	$PT = 164+22.41$

NOT A PART OF THIS CONTRACT



PLAN Scale: 1"=40'

NOT A PART OF THIS CONTRACT



ALIGNMENT DIAGRAM No Scale

DESIGNED BY	M. A. P.	APPROVED:	ENGINEER OF EXPRESSWAYS
DRAWN BY			
TRACED BY			
CHECKED BY	R. A. C.		

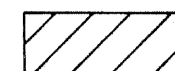



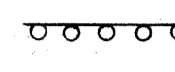

CITY OF DETROIT  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 FOR  
 COMMUNITY DEVELOPMENT COMMISSION

TWELFTH STREET WIDENING  
 WEST GRAND BLVD. TO LASALLE GARDENS  
 ALIGNMENT

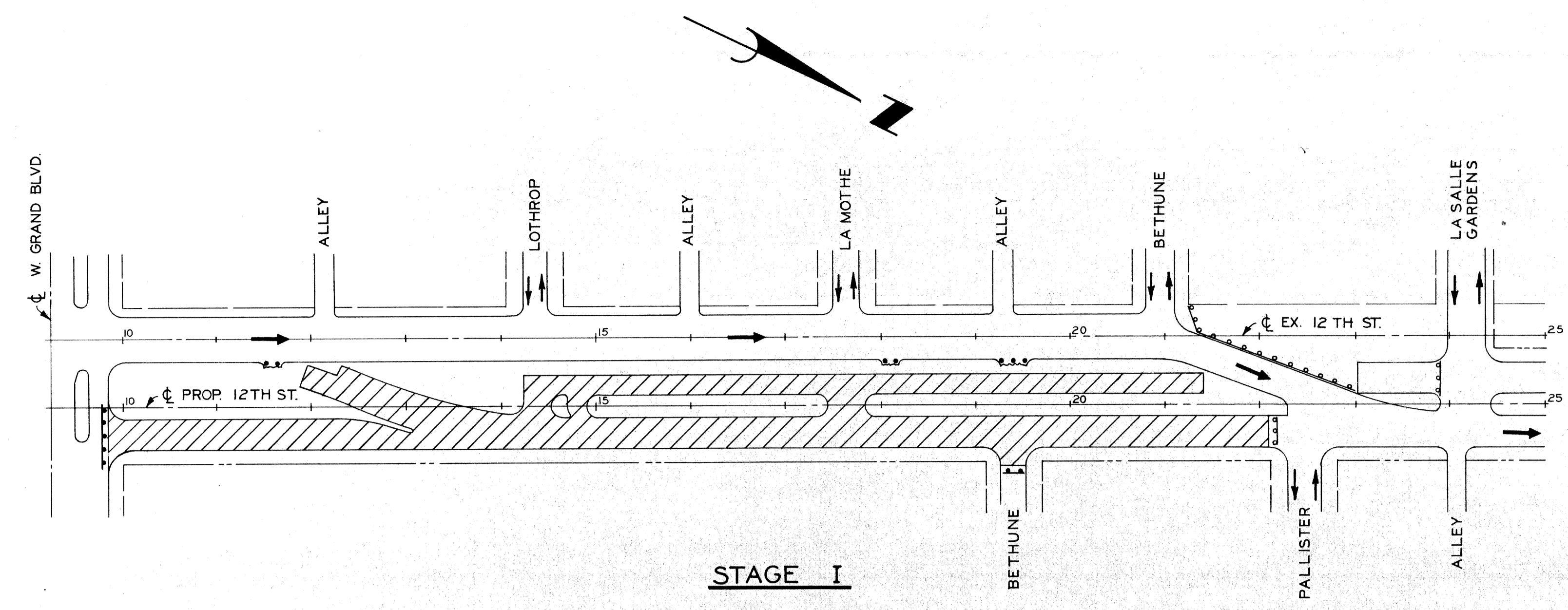
SHEET	4	OF	59	SHEETS
CONTRACT NO.	M 2000 (017)			
ASSIGNMENT NO.	A.O.2091			
DATE	5-18-75			



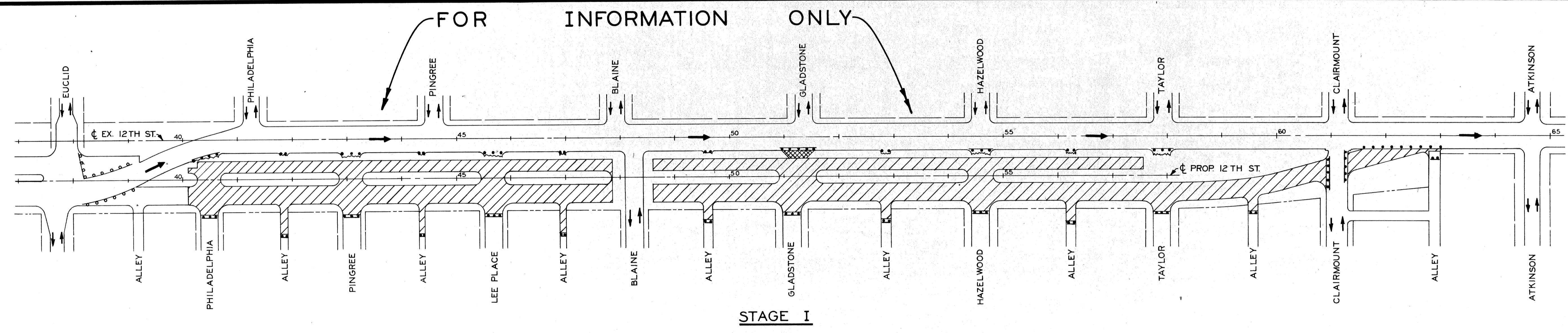
**LEGEND**

-  PERMANENT PAVEMENT
-  TEMPORARY PAVEMENT (8" UNIF. - NON REINF.)
-  TEMP SINGLE BEAM BARREL BARRICADE (INCIDENTAL)
-  BARREL BARRICADE (INCIDENTAL)
-  SINGLE BEAM BARREL BARRICADE (EXISTING)
-  PROPOSED CONCRETE CURB

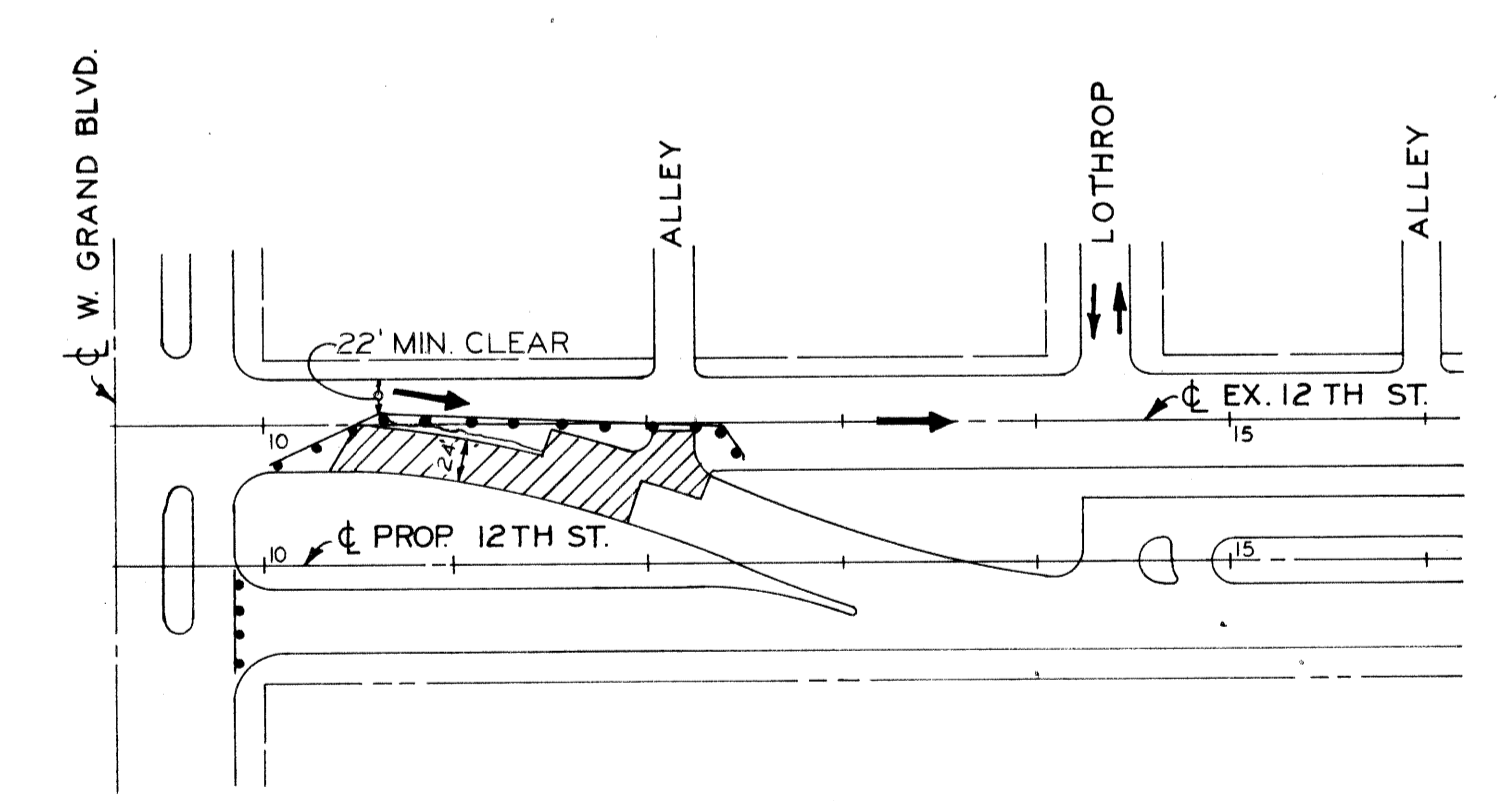
**NOTE:**  
 1. Approximately 10 Test Cores will be needed for this contract.  
 2. Drop end of beam to bottom of barrel on traffic approach end of beam barrel barricade.



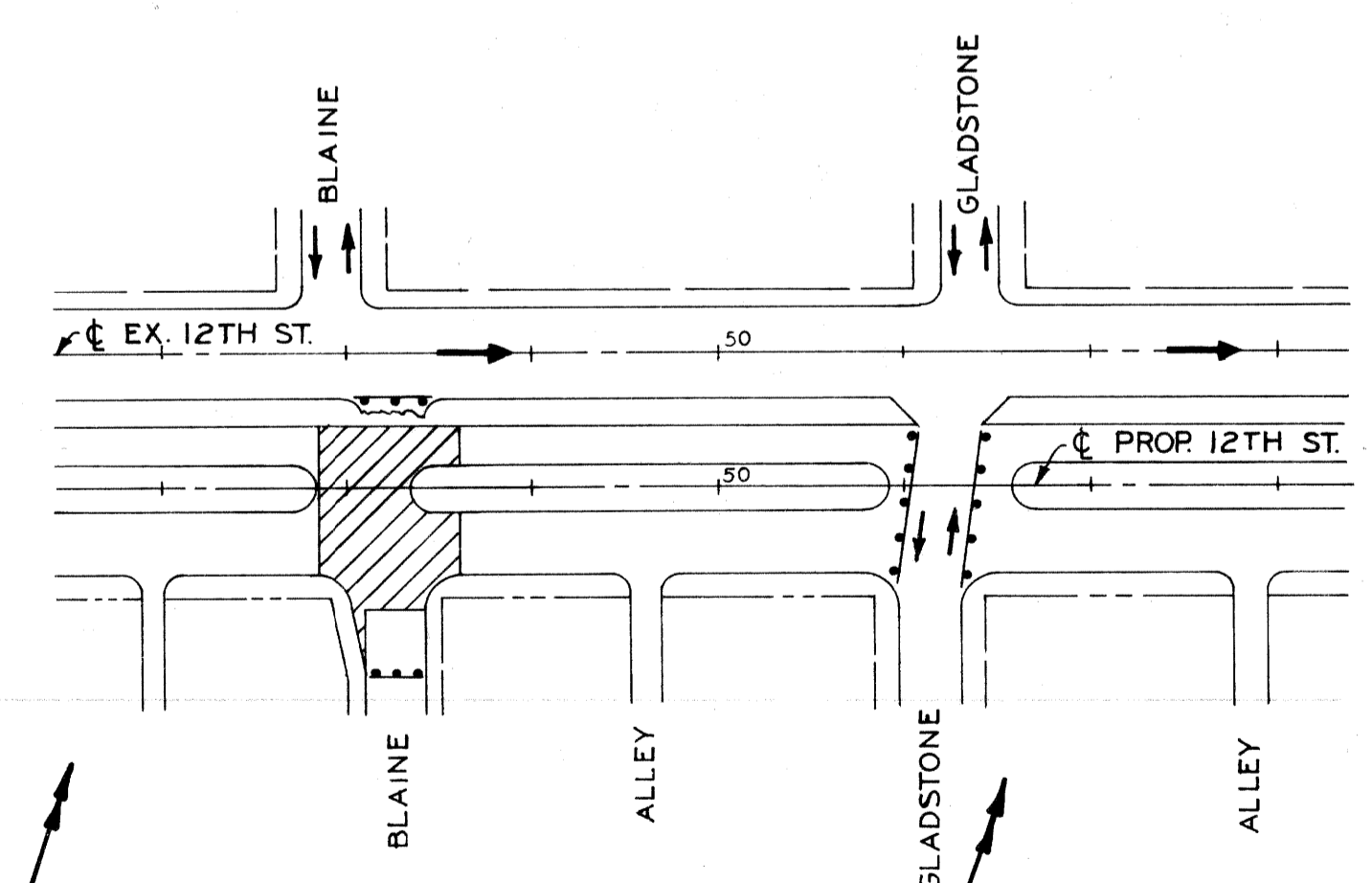
**STAGE I**



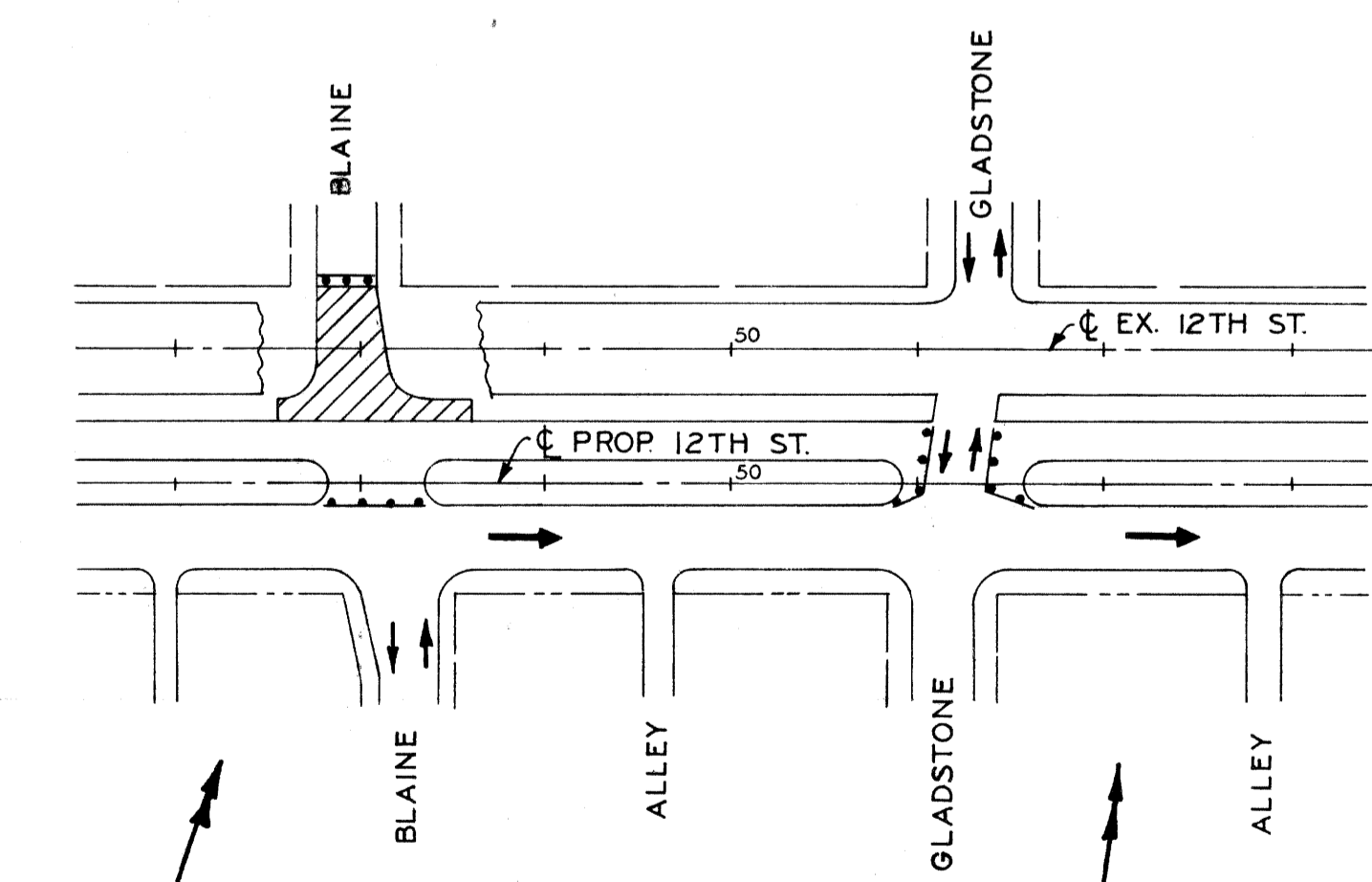
**STAGE I**



**STAGE II**



**STAGE II**



**STAGE III**

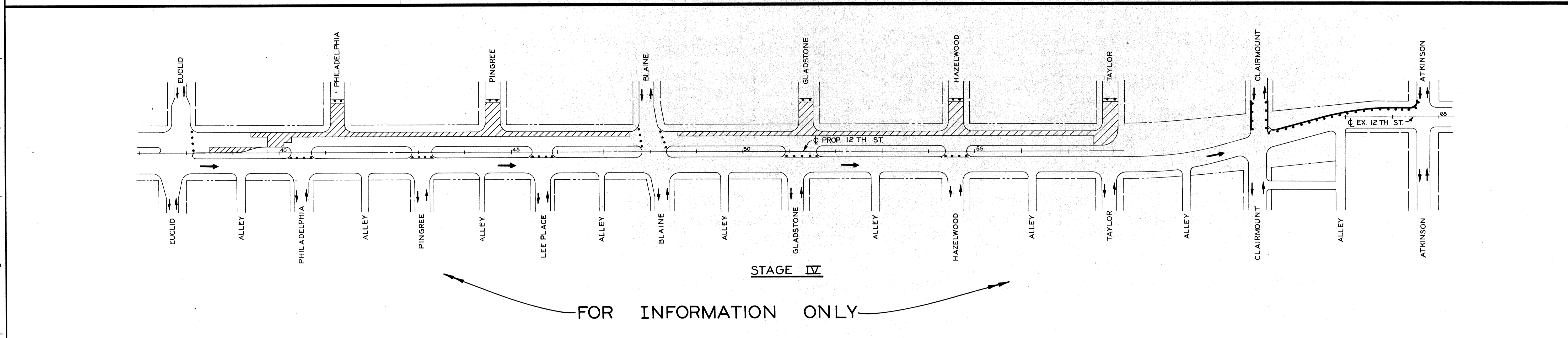
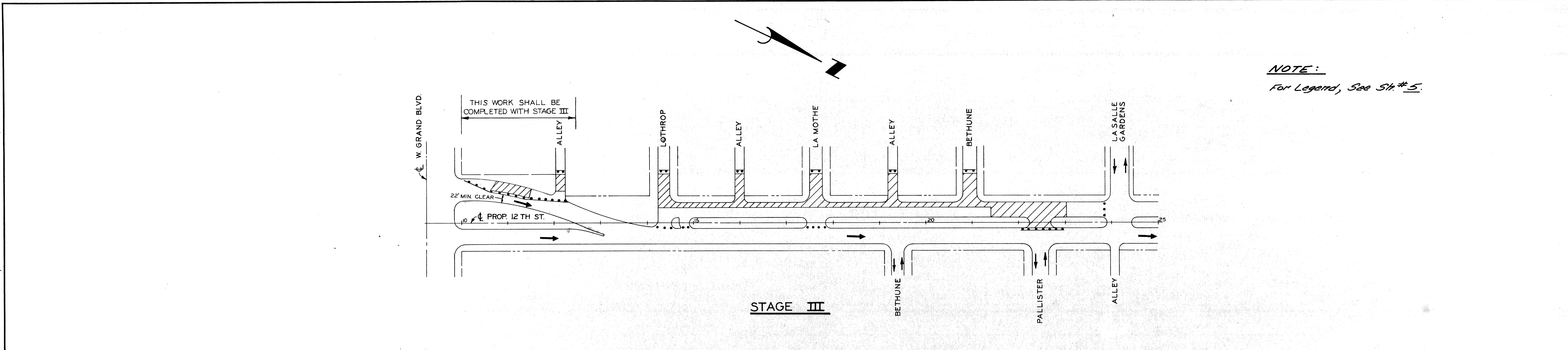
DESIGNED BY	M. A. P.
DRAWN BY	
TRACED BY	
CHECKED BY	R. A. C.
APPROVED:	ENGINEER OF EXPRESSWAYS

**CITY OF DETROIT**  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 FOR  
**COMMUNITY DEVELOPMENT COMMISSION**

**TWELFTH STREET WIDENING**  
 WEST GRAND BLVD. TO LASALLE GARDENS  
**CONSTRUCTION SEQUENCE**

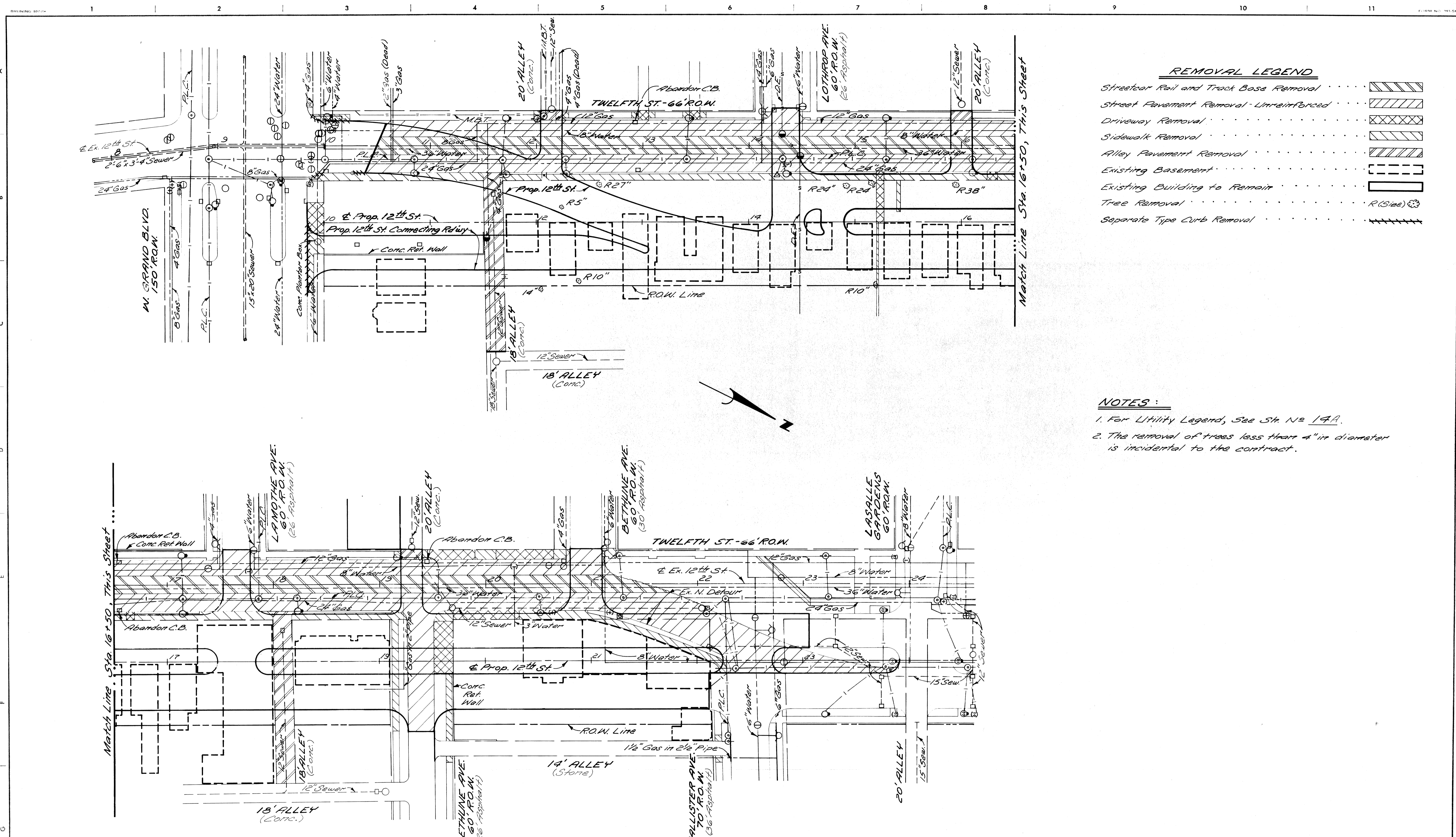
SHEET <b>5</b> OF <b>59</b> SHEETS
CONTRACT No. M 2000 (017)
ASSIGNMENT No. A.O. 2091
DATE 5-18-75





COORD. DESCRIPTION REVISIONS LOCATED BY COORDINATES ON SHEET		REFERENCE DRAWINGS	DESIGNED BY M.A.P.	APPROVED: ENGINEER OF EXPRESSWAYS	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION	TWELFTH STREET WIDENING WEST GRAND BLVD. TO LASALLE GARDENS CONSTRUCTION SEQUENCE	SHEET 6 OF 59 SHEETS
			DRAWN BY M.A.P.				CONTRACT No. M 2000 (017)
			TRACED BY R.A.C.			ASSIGNMENT No. A.O.2091	DATE 5-18-75





**REMOVAL LEGEND**

Streetcar Rail and Track Base Removal	
Street Pavement Removal - Unreinforced	
Driveway Removal	
Sidewalk Removal	
Alley Pavement Removal	
Existing Basement	
Existing Building to Remain	
Tree Removal	
Separate Type Curb Removal	

- NOTES:**
1. For Utility Legend, See St. No. 14A.
  2. The removal of trees less than 4" in diameter is incidental to the contract.

**PLAN**  
Scale: 1" = 40'

REVISIONS LOCATED BY COORDINATES ON SHEET NO.    DESCRIPTION    DATE	DESIGNED BY J.R.D.	APPROVED: ENGINEER OF EXPRESSWAYS	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION	TWELFTH STREET WIDENING WEST GRAND BLVD. TO LASALLE GARDENS REMOVALS, WEST GRAND BLVD. TO LASALLE GARDENS	SHEET 7 OF 59 SHEETS
	DRAWN BY J.R.D.	CHECKED BY I.H.K.			CONTRACT No. M 2000 (017)
					DATE 5-18-75

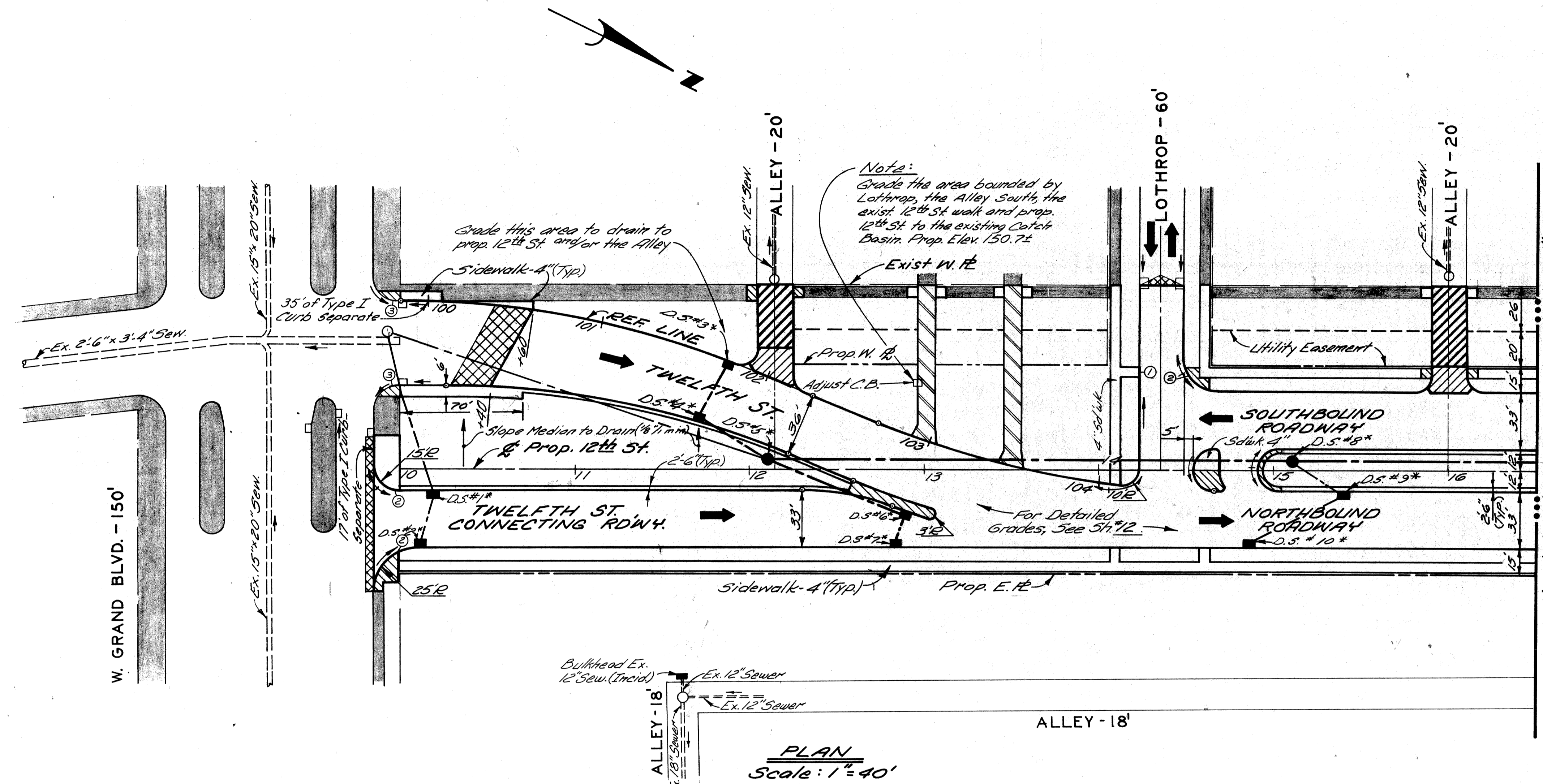


P.B.M. #31-251B, Elev. 151.069 N.E.  
Corner W. Grand Blvd. & Twelfth St.

C.B.M. Elev. 155.32 Arrow on Hydrant  
S.W. Corner Twelfth & Lothrop.

**LEGEND**

- Strip and Adjust Asphalt Surface
- Concrete Pavement, 9" Uniform (Non-Reinforced)
- Sidewalk - 6" (Sloik Ramp areas are paid for Separately)
- Existing Sidewalk or Driveway to Remain
- Concrete Pavement, 9" Uniform (Reinforced) with Type III Curb Integral (Reinforced)
- Concrete Pavement, 8" Uniform (Non-Reinforced)
- Driveway, 6" Uniform (Residential)
- ① ② ③ Sidewalk Ramps (4' or 6") - Types 1, 2 or 3



- NOTES:**
- All proposed street return radii are 20' unless otherwise noted.
  - For utility adjustments or reconstructions, see Sh. # 13.
  - For Alignment, see Sh. # 4.

\* D.S. refers to Drainage Structure with Sewer as shown in the table below.

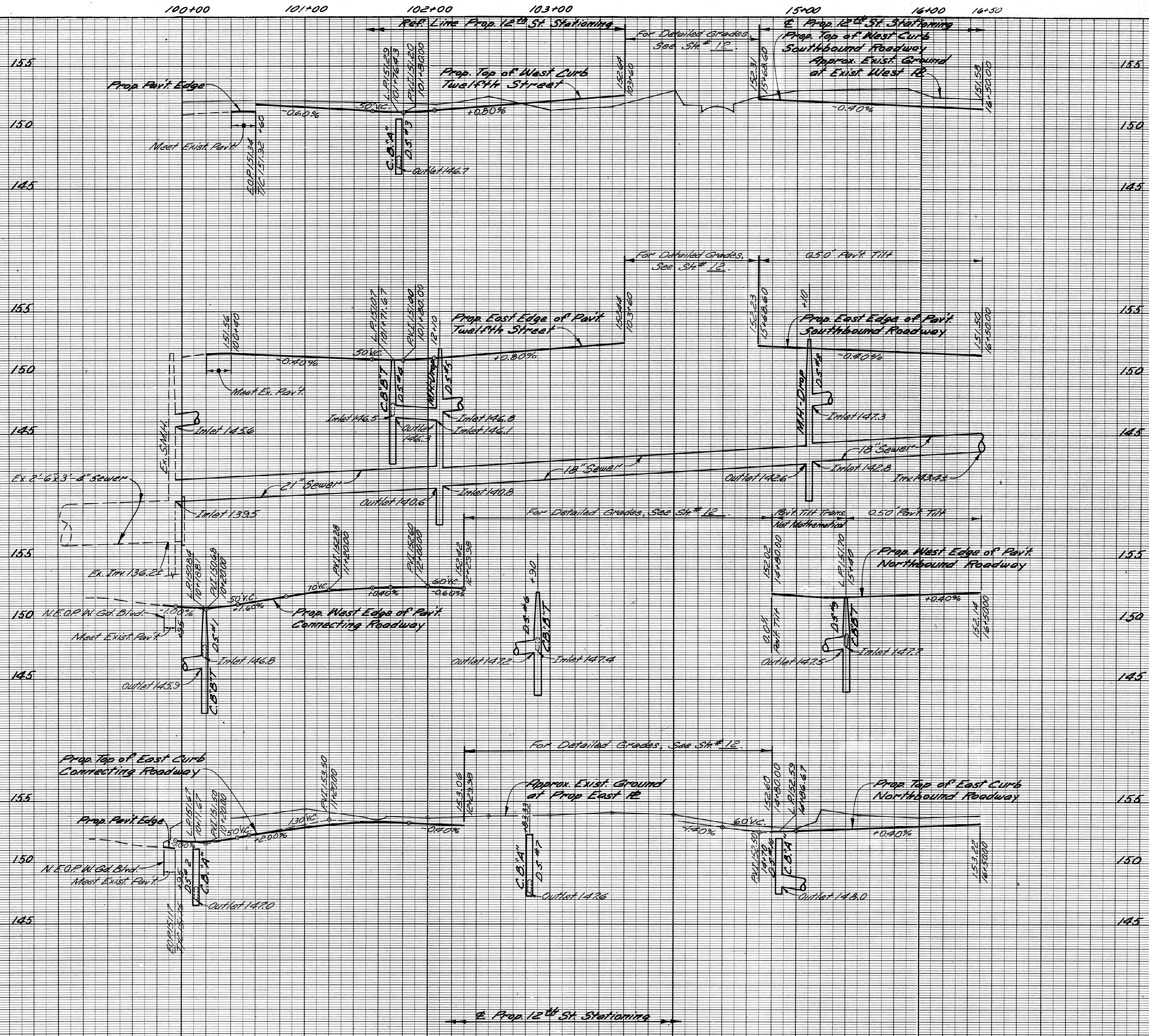
DRAINAGE STRUCTURE NUMBER	TYPE OF STRUCTURE	WITH OR WITHOUT TRAP	SEW. LENGTH & TYPE LEAVING D.S.			COMMENTS
			LENGTH (FT.)	SIZE (IN.)	CLASS	
1.	C.B. B	With	92	12	C-76-III	Sew. length includes 30' of Sewer under Pav't.
2.	C.B. A	Without	28	12	"	
3.	C.B. A	"	35	12	"	
4.	C.B. B	With	42	12	"	
5.	M.H. Drop	Without	226	21	"	Sew. length includes 66' of Sewer under Pav't.
6.	C.B. B	With	82	12	"	
7.	C.B. A	Without	17	12	"	
8.	M.H. Drop	Without	226/1380	18/18	"	
9.	C.B. B	With	31	12	"	
10.	C.B. A	Without	58	12	"	

⑥ Consists of 18" Sewer (Entering) From Match Line.

	DESIGNED BY <b>J.R.D.</b>	APPROVED: ENGINEER OF EXPRESSWAYS	<b>CITY OF DETROIT</b> DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION	TWELFTH STREET WIDENING WEST GRAND BLVD. TO LASALLE GARDENS PLAN, WEST GRAND BLVD. TO STA. 16 + 50	SHEET <b>8</b> OF <b>59</b> SHEETS CONTRACT No. M 2000 (017) ASSIGNMENT No. <b>A.O. 2091</b> DATE 5-18-75
DRAWN BY	TRACED BY	CHECKED BY <b>R.A.C.</b>			



FINAL R.O.W.



DESIGNED BY		APPROVED:	
DRAWN BY	M.S.	ENGINEER OF EXPRESSWAYS	
TRACED BY			
CHECKED BY	R.B.P.		

**CITY OF DETROIT**  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 FOR  
 COMMUNITY DEVELOPMENT COMMISSION

TWELETH STREET WIDENING  
 WEST GRAND BLVD TO LASALLE GARDENS  
 PROFILES WEST GRAND BLVD. TO STA. 16+ 50

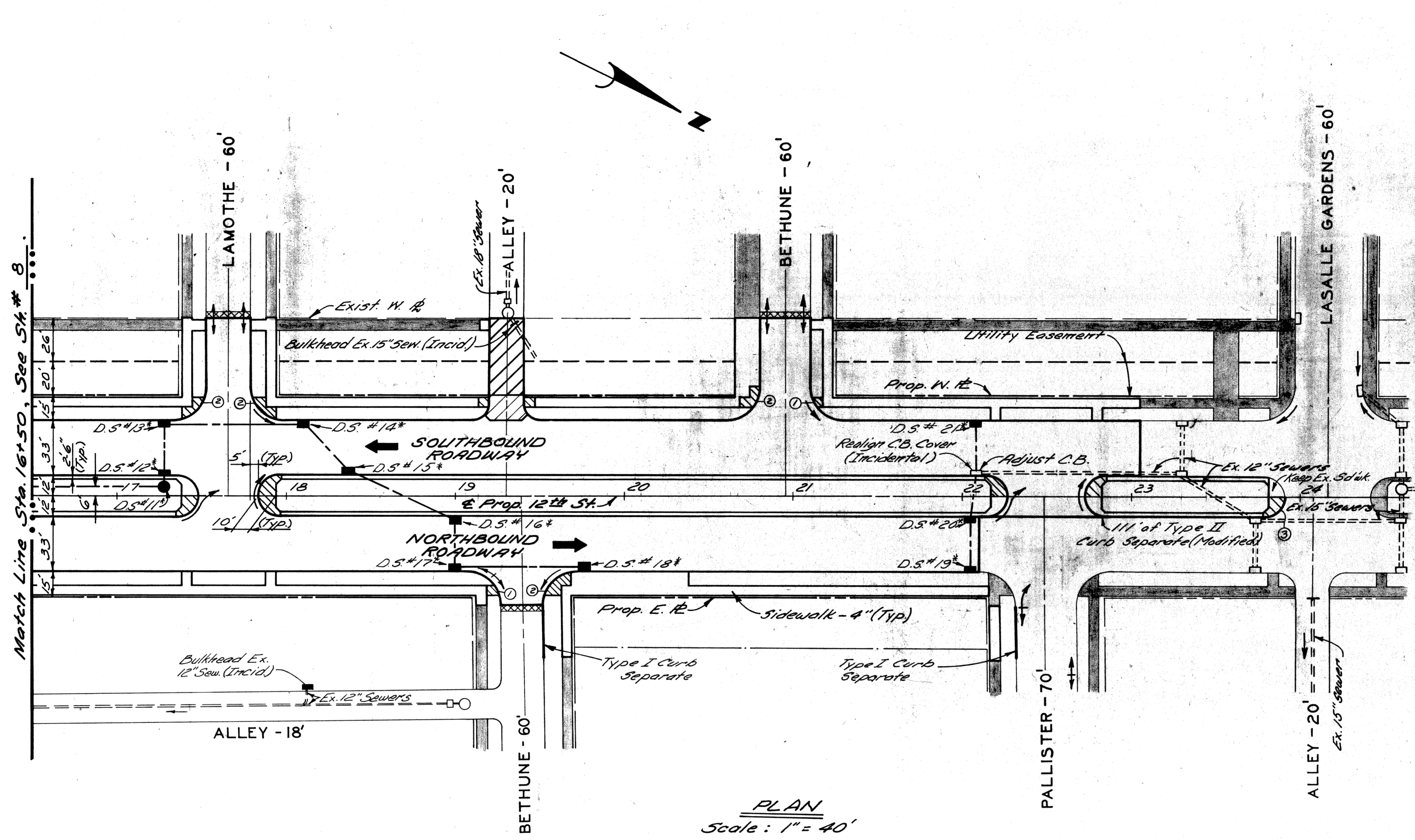
SHEET 9 OF 59 SHEETS  
 CONTRACT NO. M 2000 (017)  
 ASSIGNMENT NO. AD 2091  
 DATE 5-18-75



C.B.M. Elev. 155.00 Arrow on Hydrant  
S.W. Corner Twelfth & LaMothe.

C.B.M. Elev. 156.26 Arrow on Hydrant  
N.W. Corner Twelfth & Bethune.

C.B.M. Elev. 155.97 Arrow on Hydrant  
S.W. Corner Twelfth & LaSalle Gardens.



**LEGEND**

Strip & Adjust Asphalt Surface	
Conc. Pavt. - 9" Uniform (Non-Reinft.)	
Sidewalk - 6" (Sloot Ramp areas are paid for Separately)	
Exist. Sidewalk or Driveway to Remain	
Conc. Pavt. - 9" Uni-Form (Reinft.) with Type III Curb Integral (Reinft.)	
Conc. Pavt. - 8" Uni-Form (Non-Reinft.)	
Driveway - 8" Uniform (Commercial)	
Sidewalk Ramps - 6", Types 1, 2 or 3	

- NOTES:**
1. All proposed street return radii are 20' unless otherwise noted.
  2. For utility adjustments or reconstructions, See Sh.# 13.
  3. For Alignment, See Sh.# 4.
  4. For Driveway Details, See Sh.# 14A.

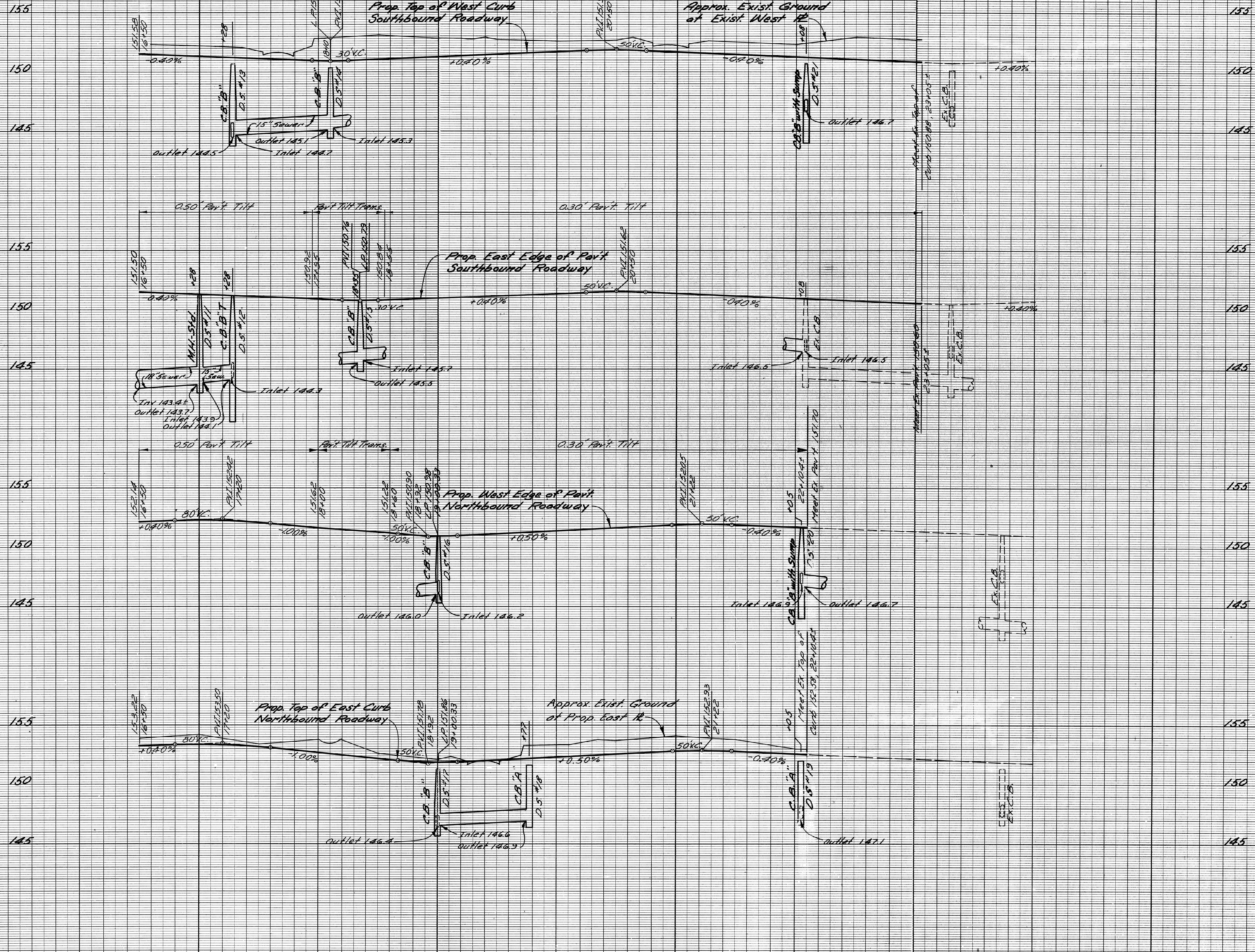
\* D.S. refers to Drainage Structure with Sewer as shown in the table below.

DRAINAGE STRUCTURE NUMBER	TYPE OF STRUCTURE	WITH OR WITHOUT TRAP	SEW. LENGTH & TYPE LEAVING D.S.			COMMENTS
			LENGTH (FT.)	SIZE (IN.)	CLASS	
11	M.H. STA.	Without	76	18	C-76-III	
12	C.B. B	With	3	15	"	
13	C.B. B	Without	27	15	"	
14	C.B. B	"	78	15	"	
15	C.B. B	"	36	12	"	
16	C.B. B	"	66	12	"	
17	C.B. B	"	27	12	"	
18	C.B. A	"	74	12	"	
19	C.B. A	"	27	12	"	
20	C.B. B	"	22	12	"	Place 2'-0" Sump
21	C.B. B	"	27	12	"	Place 2'-0" Sump

REFERENCE DRAWINGS	DESIGNED BY	APPROVED:		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION			TWELFTH STREET WIDENING WEST GRAND BLVD. TO LASALLE GARDENS		SHEET 10 OF 59 SHEETS
	DRAWN BY	ENGINEER OF EXPRESSWAYS							CONTRACT No. M 2000 (017)
	TRACED BY						ASSIGNMENT No. A.O. 2091		
	CHECKED BY						DATE 5-18-75		
COORD	DESCRIPTION	DRN	CK'D	APVD	DATE				
REVISIONS LOCATED BY COORDINATES ON SHEET									



FINAL R.O.W.



DESIGNED BY  
DRAWN BY J.R.D.  
TRACED BY  
CHECKED BY R.A.C.

APPROVED:  
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT  
DEPARTMENT OF PUBLIC WORKS  
CITY ENGINEERS OFFICE  
FOR  
COMMUNITY DEVELOPMENT COMMISSION

TWELETH STREET WIDENING  
WEST GRAND BLVD. TO LASALLE GARDENS  
PROFILES STA 16+50 TO LASALLE GARDENS

SHEET 11 OF 59 SHEETS  
CONTRACT No. M 2000 (017)  
ASSIGNMENT No. AD 2091  
DATE 5-18-75

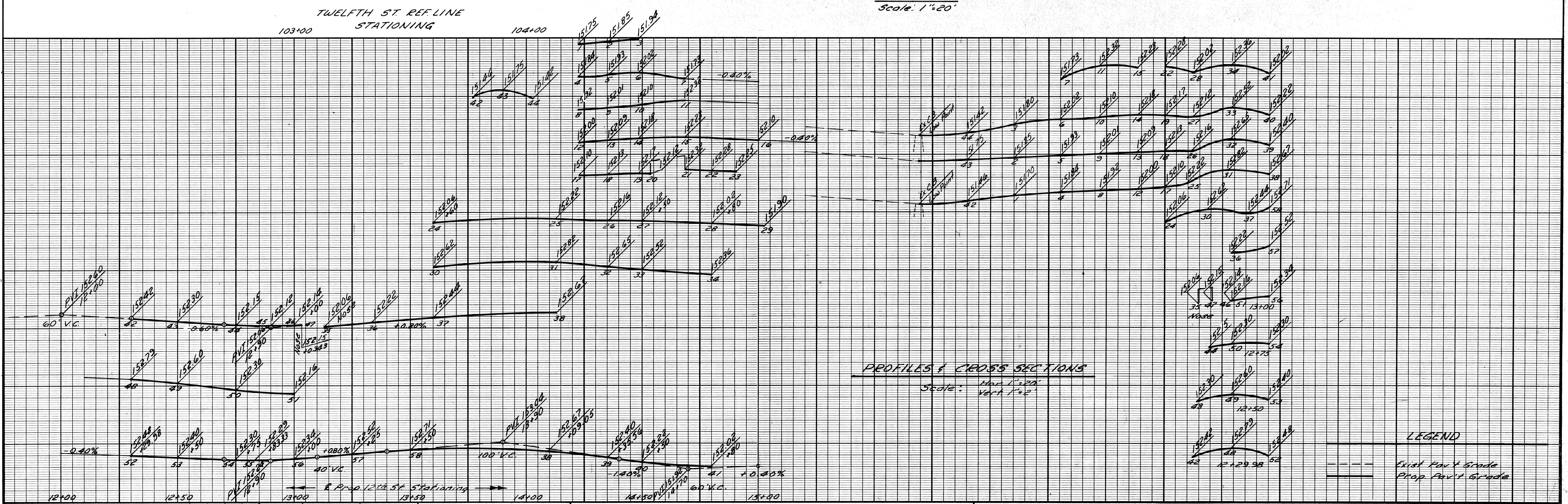
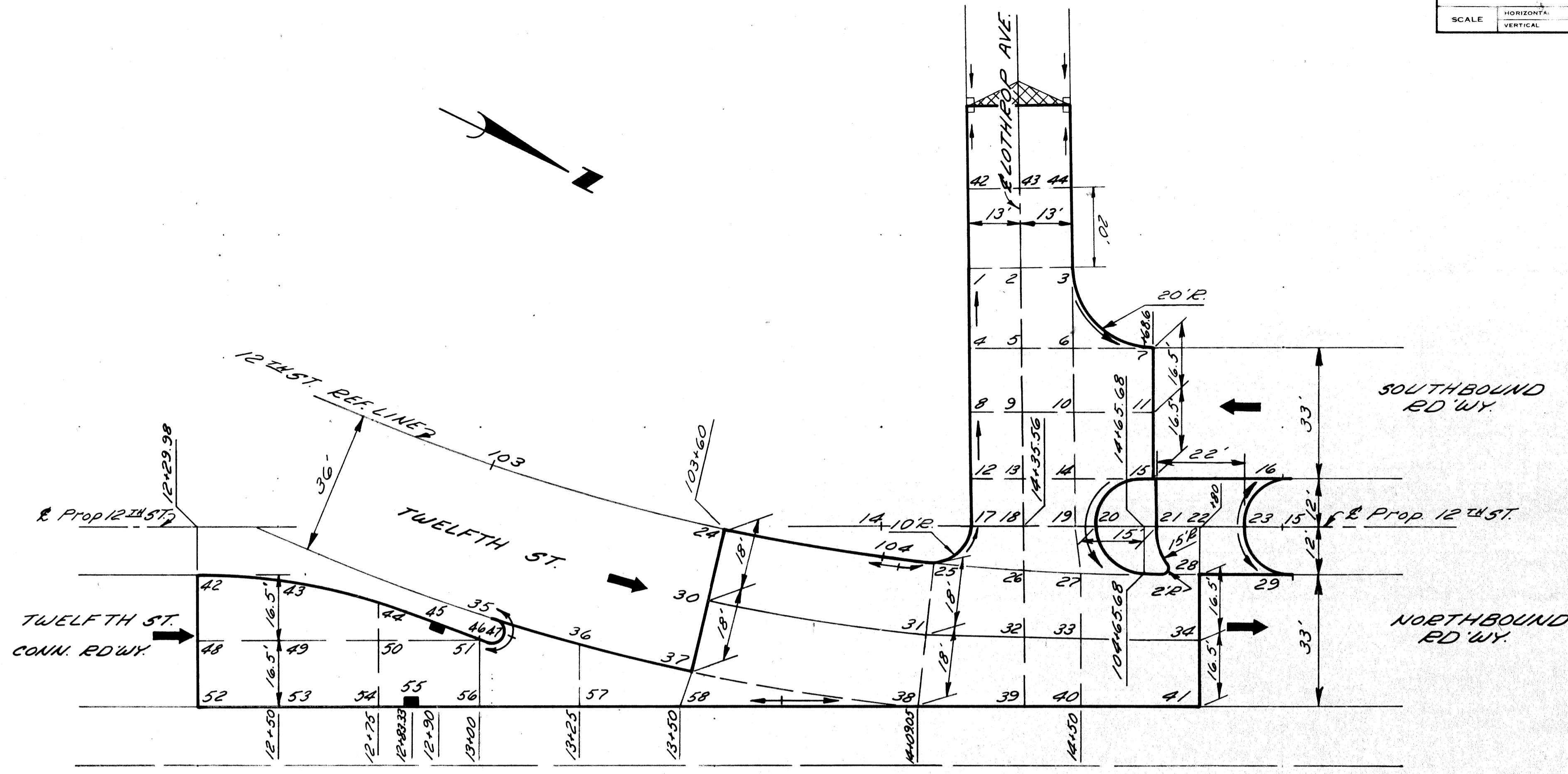


SCALE	HORIZONTAL	VERTICAL	BOOK	NO.	PG.	LEVEL	DATE

NOTE - FOR SYMBOLS (A) ETC. SEE STANDARD DETAIL DRAWING NO. C-417

BENCH MARKS ELEV.

**LEGEND**  
 Strip & Adjust Asphalt Surface:



**LEGEND**  
 --- Exist Pav't Grade  
 ——— Prop Pav't Grade

PLAN	BY	M.S.	R.A.C.	CHECKED BY	R.A.C.	APPROVED:
GRADE	BY	M.S.	R.A.C.	CHECKED BY	R.A.C.	ENGINEER OF EXPRESSWAYS
ESTIMATE	BY			CHECKED BY		
FINAL	CHECK			REVIEW		

CITY OF DETROIT  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 FOR  
 COMMUNITY DEVELOPMENT COMMISSION

TWELFTH STREET WIDENING  
 WEST GRAND BLVD TO LASALLE GARDENS  
 DETAILED GRADES FOR TWELFTH ST. AT LOTHROP AVE.

INDEX NO.	12.59
SHEET	OF 5 SHEETS
CONTRACT NO.	M 2000 (017)
ASSIGNMENT NO.	A.O. 2091
DATE	5-18-75

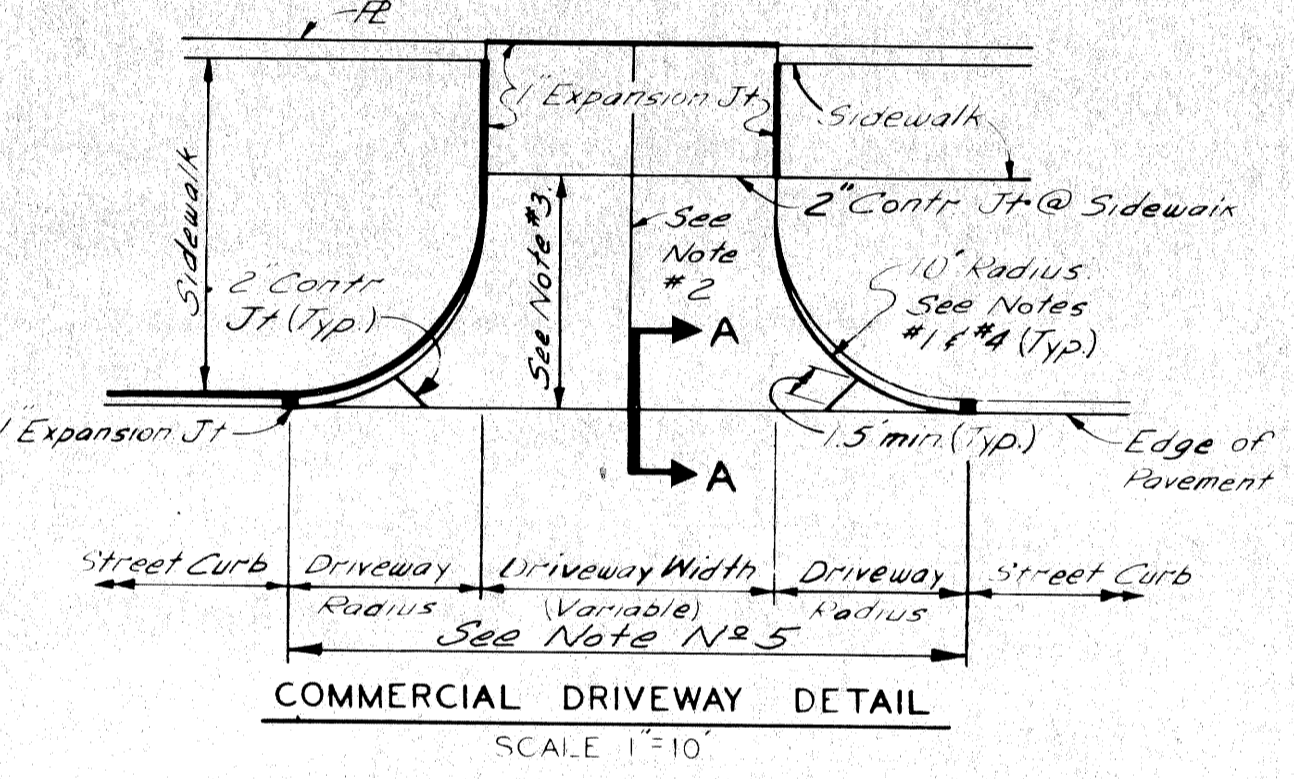
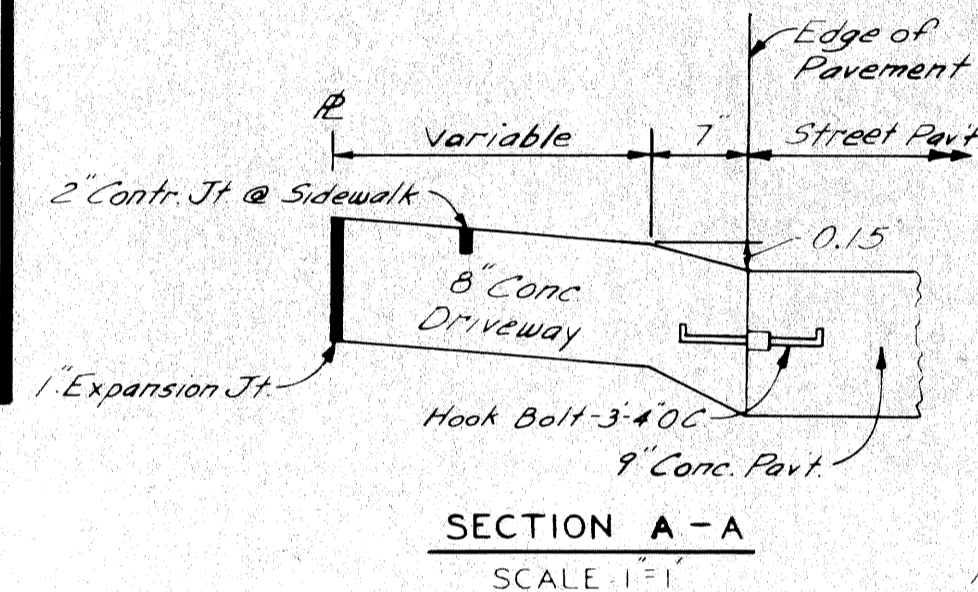




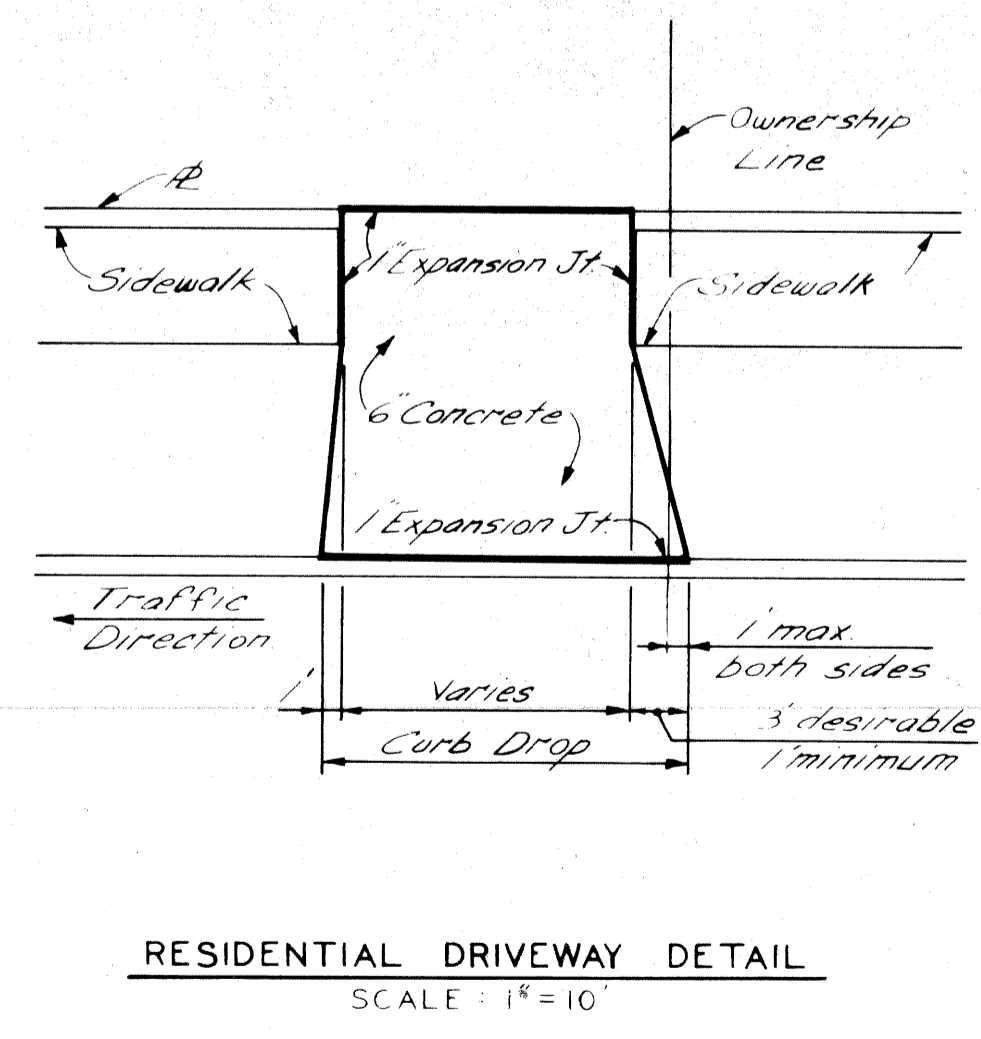


COLOR	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
BLACK	---	PROPERTY AND LOT LINES	○	SEWER MANHOLE	#	STREET SIGN POST
"	---	PROPOSED CURB LINES AND HEADERS AT RETURNS	⊙	P.L.C. HANDHOLE	□	CATCH BASIN
"	---	EXISTING CURB LINES OR EDGE OF PAVEMENT	⊕	WATER MANHOLE OR GRATE	(W)	WATER METER
"	---	PROPOSED CURB OR PAVING ON INTERSECTING STREET	⊗	GAS MANHOLE OR GRATE	(-)	WATER STOP BOX
"	---	PROPOSED SEWER TO CATCH BASINS	⊖	WESTERN UNION MANHOLE	(+)	GAS SHUT-OFF
"	---	EXISTING LATERAL SEWERS	⊙	MICHIGAN BELL MANHOLE	⊠	GAS DRIP
"	---	EXISTING PUBLIC SEWERS	⊕	EDISON STEAM MANHOLE	□	DRAIN OR VENT
"	---	EXISTING GAS LINES	⊖	EDISON ELECTRIC MANHOLE	⊥	GUY POLE
"	---	EXISTING WATER LINES	⊙	FIRE DEPT MANHOLE	+	MAIL BOX
"	---	EXISTING C.B. M.H. & INLET SEWERS	⊕	POLICE DEPT MANHOLE	⊠	AREAWAY OR COAL CHUTE
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊖	D.S.R. MANHOLE	⊙	FLAG POLE
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊕	FIRE DEPT STANDARD HYDRANT	⊠	SPRINKLER BOX
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊖	FIRE DEPT HIGH PRESSURE HYDRANT	⊠	DEAD MANHOLE
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊕	FIRE DEPT CALL BOX	⊙	TREE
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊖	FIRE DEPT HIGH PRESSURE MANHOLE	⊠	PLC & FD MANHOLE FILLED WITH SAND
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊕	POLICE DEPT CALL BOX	⊥	TRACK DRAIN
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊖	P.L.C. LIGHT POLE	+	TRAFFIC SIGN POST
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊕	P.L.C. POLE	(2)	TRAFFIC SIGNAL LIGHT
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊖	TELEPHONE POLE	⊙	TRAFFIC SIGNAL ON LIGHT POST
"	---	EXISTING C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS	⊕	EDISON POLE	⊥	D.S.R. DANGER PLATE

CITY OF DETROIT		DEPARTMENT OF PUBLIC WORKS		STANDARD SYMBOLS FOR UTILITIES	
CITY ENGINEER'S OFFICE		BUREAU OF DESIGN		PAVING	
DETAIL NO. 25		BOOK NO.		SCALE NO. SCALE	
DESIGNED BY		DRAWN BY		PAGE NO.	
DRAWN BY T. KANDON		DRAWN BY T. KANDON		DATE 10 11 54	
TRACED BY T.K.		TRACED BY T.K.		DWG. NO. C-902-A	
CHECKED BY J. KAWAUSKI		CHECKED BY J. KAWAUSKI			



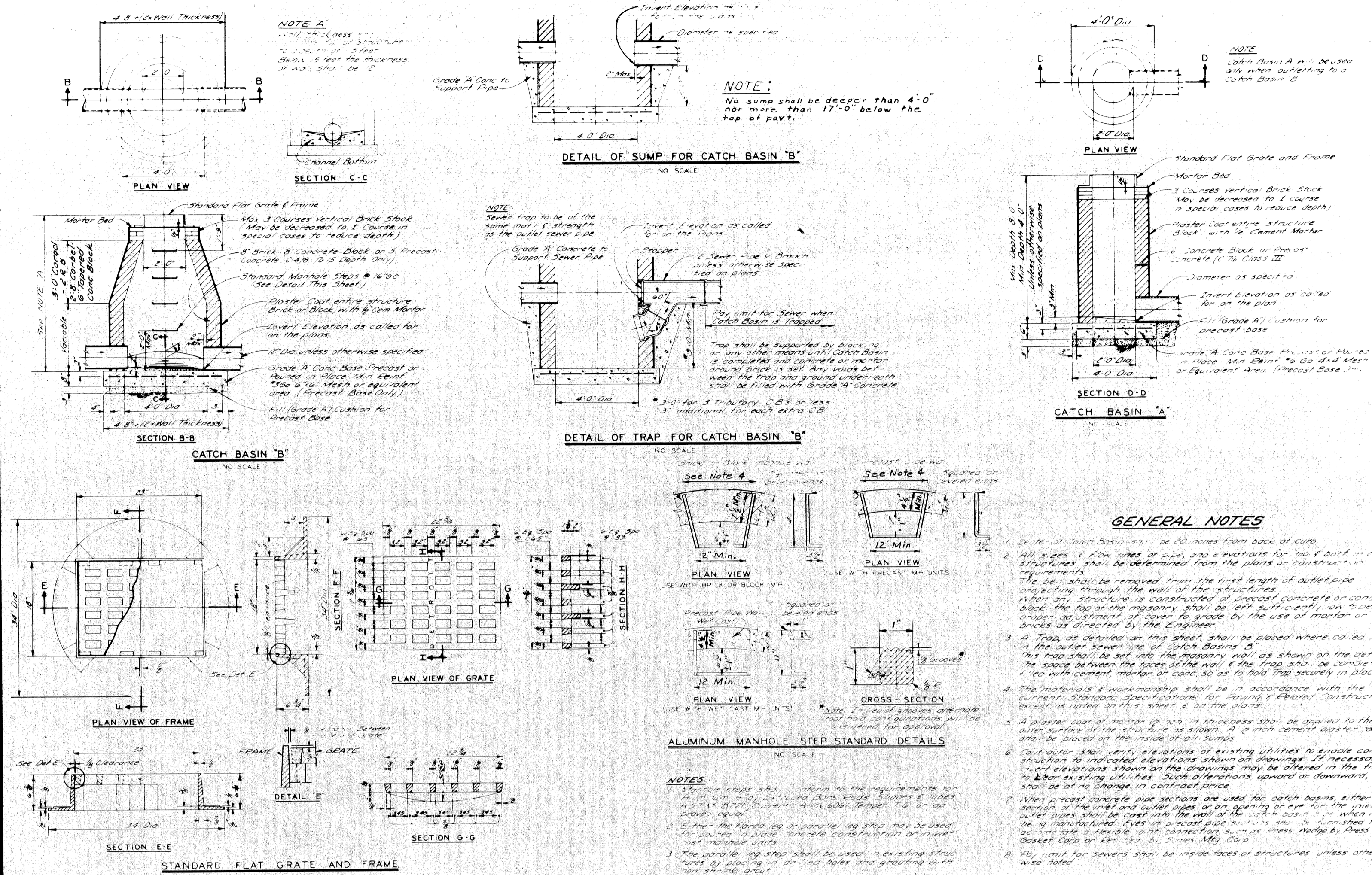
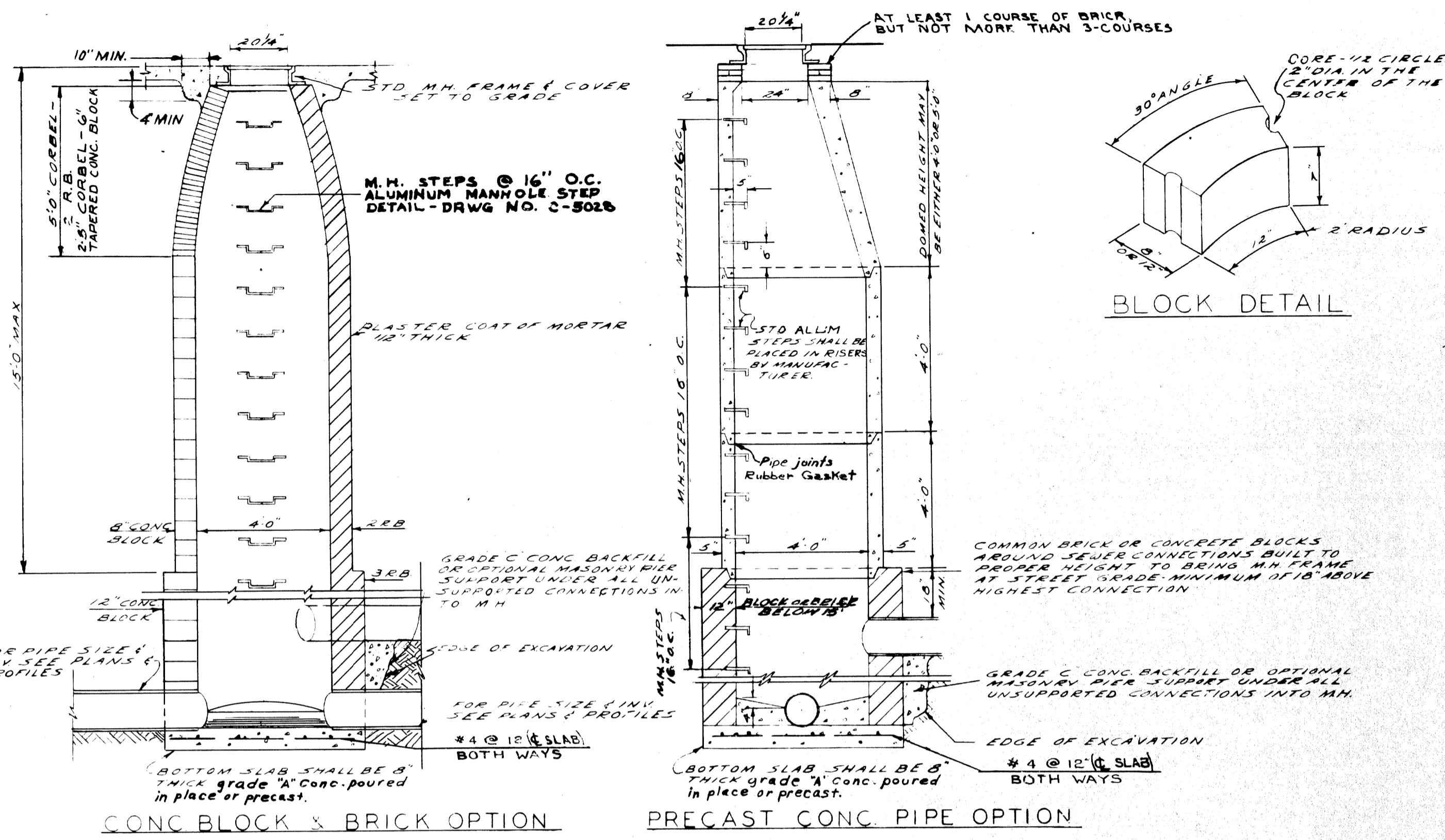
- NOTES - COMMERCIAL DRIVEWAY**
1. Transition edge of driveway from curb at the street to no curb at the end of the driveway radius.
  2. Where driveway exceeds 15' in width, a contraction joint shall be placed longitudinally along  $\mathcal{C}$ .
  3. When distance exceeds 15', a transverse contraction joint will be required.
  4. Radius 10' unless otherwise directed by the Engineer or as shown on plans.
  5. All work and materials required to construct the driveway between the end of returns will be paid for as "Driveway" of the specified thickness.



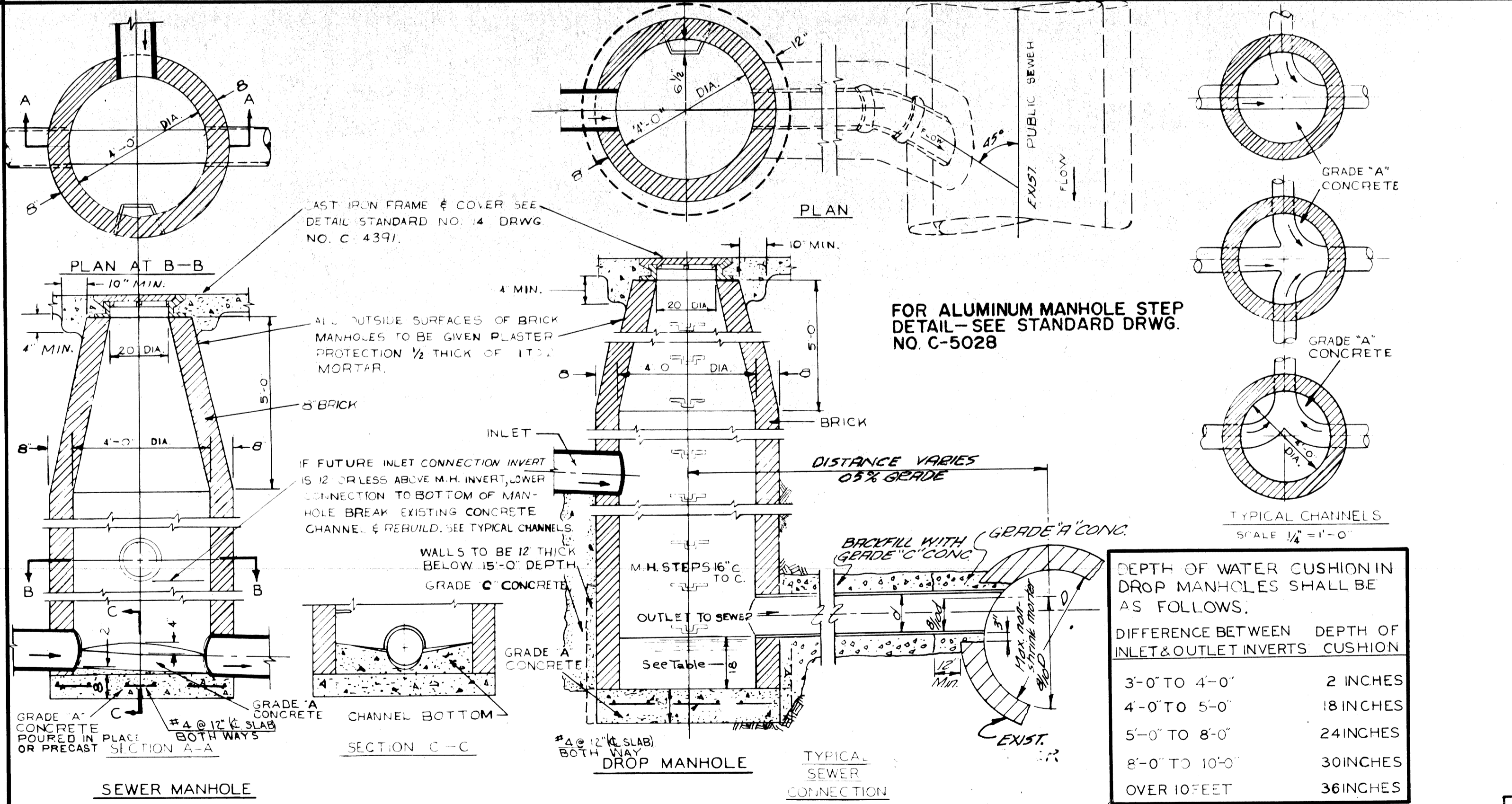
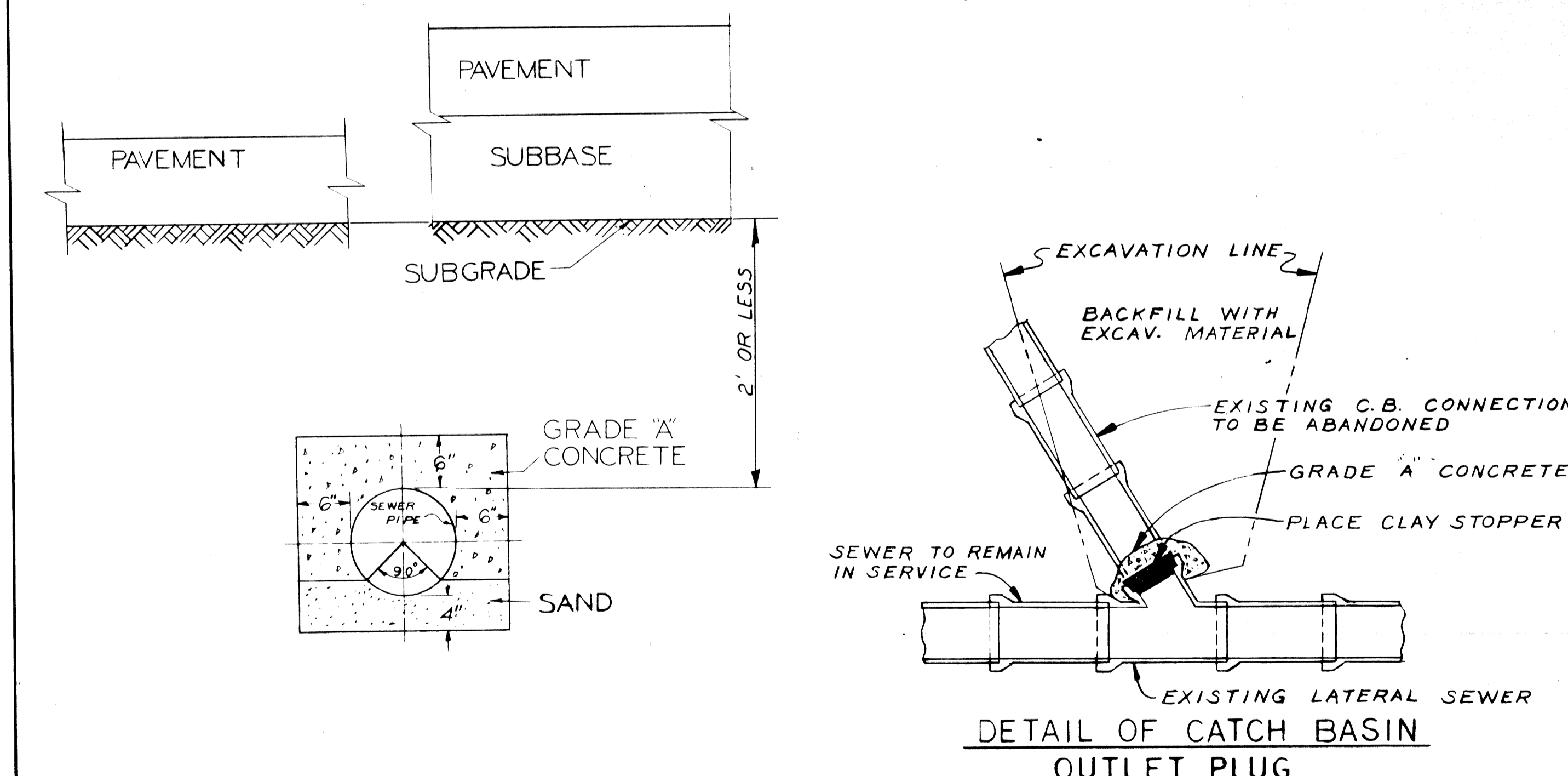
NO.	DESCRIPTION	DATE

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION	TWELFTH STREET WIDENING WEST GRAND BLVD. TO LASALLE GARDENS	SHEET 14A OF 59 SHEETS CONTRACT No. M 2000 (017) ASSIGNMENT No. A.O. 2091 DATE 5-18-75
	SPECIAL STANDARDS & SPECIAL DETAILS	





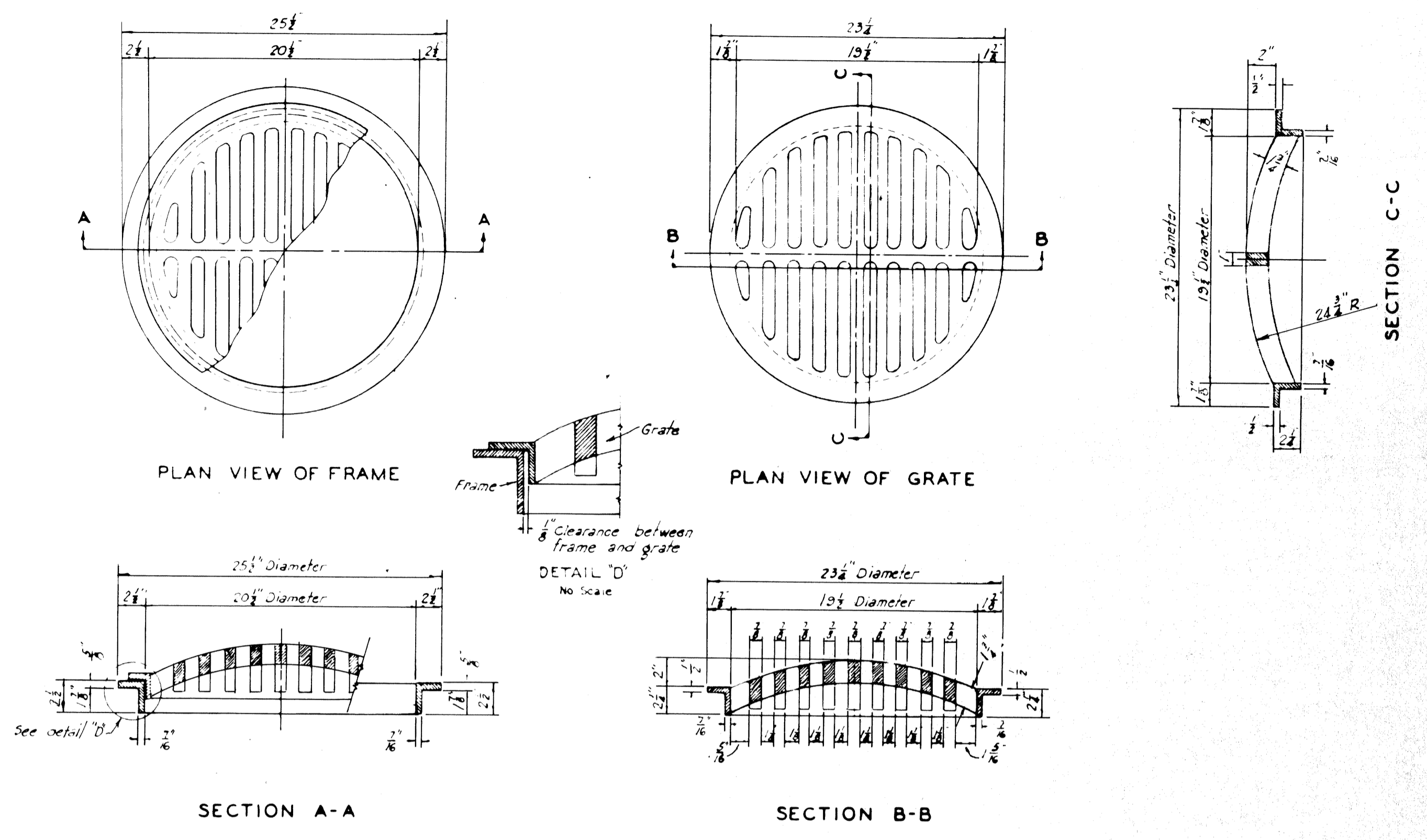
DESIGNED BY: [Signature] DRAWN BY: [Signature] TRACED BY: [Signature] CHECKED BY: [Signature]		APPROVED BY: [Signature] CITY ENGINEER OF STREETS		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN		STD SEWER MANHOLES CONSTRUCTION ALTERNATES SCALE: NONE DRG NO: C-4395 A		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE		DETAILS OF STANDARD CATCH BASINS "A" & "B" AND FLAT GRATE & FRAME SHEET NO. C-5028 DATE: 1975-1974-1973	
--	--	--	--	---	--	--	--	---	--	---	--



DESIGNED BY: [Signature] DRAWN BY: [Signature] TRACED BY: [Signature] CHECKED BY: [Signature]		APPROVED BY: [Signature] ASST. CITY ENGINEER		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN		SEWER PIPE PARTIAL ENCASUREMENT AND CATCH BASIN OUTLET PLUG SCALE: 1" = 1' DATE: 12-19-67 DRG NO: C-4990		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN		DETAILS OF STANDARD SEWER & DROP MANHOLES SHEET NO. C-4990 DATE: 1975-1974-1973-1972-1971-1969-1968	
--	--	---	--	---	--	--	--	---	--	--	--

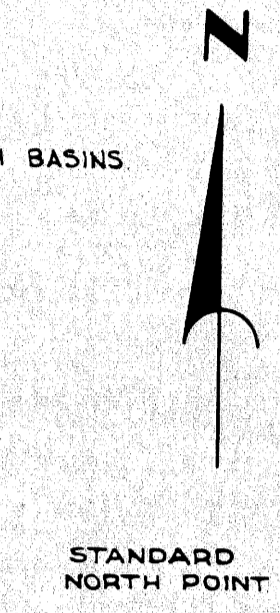
DESIGNED BY: [Signature] DRAWN BY: [Signature] TRACED BY: [Signature] CHECKED BY: [Signature]		APPROVED BY: [Signature] CITY ENGINEER OF STREETS		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN		DETAILS OF STANDARD SEWER & DROP MANHOLES SCALE: 1/2" = 1'-0" DATE: 12-19-67 DRG NO: C-5028		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN		DETAILS OF STANDARD CATCH BASINS "A" & "B" AND FLAT GRATE & FRAME SHEET NO. C-5028 DATE: 1975-1974-1973	
--	--	--	--	---	--	---	--	---	--	---	--





COLOR	SYMBOL	DESCRIPTION
BLACK	---	PROPERTY AND LOT LINES
---	---	PROPOSED CURB LINES AND HEADERS AT RETURNS.
---	---	EXISTING CURB LINES OR EDGE OF PAVEMENT.
---	---	PROPOSED CURB OR PAVING ON INTERSECTING STREET.
---	---	PROPOSED SEWER TO CATCH BASINS.
---	---	EXISTING LATERAL SEWERS.
---	---	EXISTING PUBLIC SEWERS.
---	---	EXISTING GAS LINES.
---	---	EXISTING WATER LINES.
BLACK	---	ELEV. OF SEWER INVERT.
---	---	PROPOSED C.B. M.H. & INLET SEWER.
---	---	ELEV.
---	---	EXISTING C.B. M.H. & INLET SEWERS.
---	---	PROPOSED C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS.

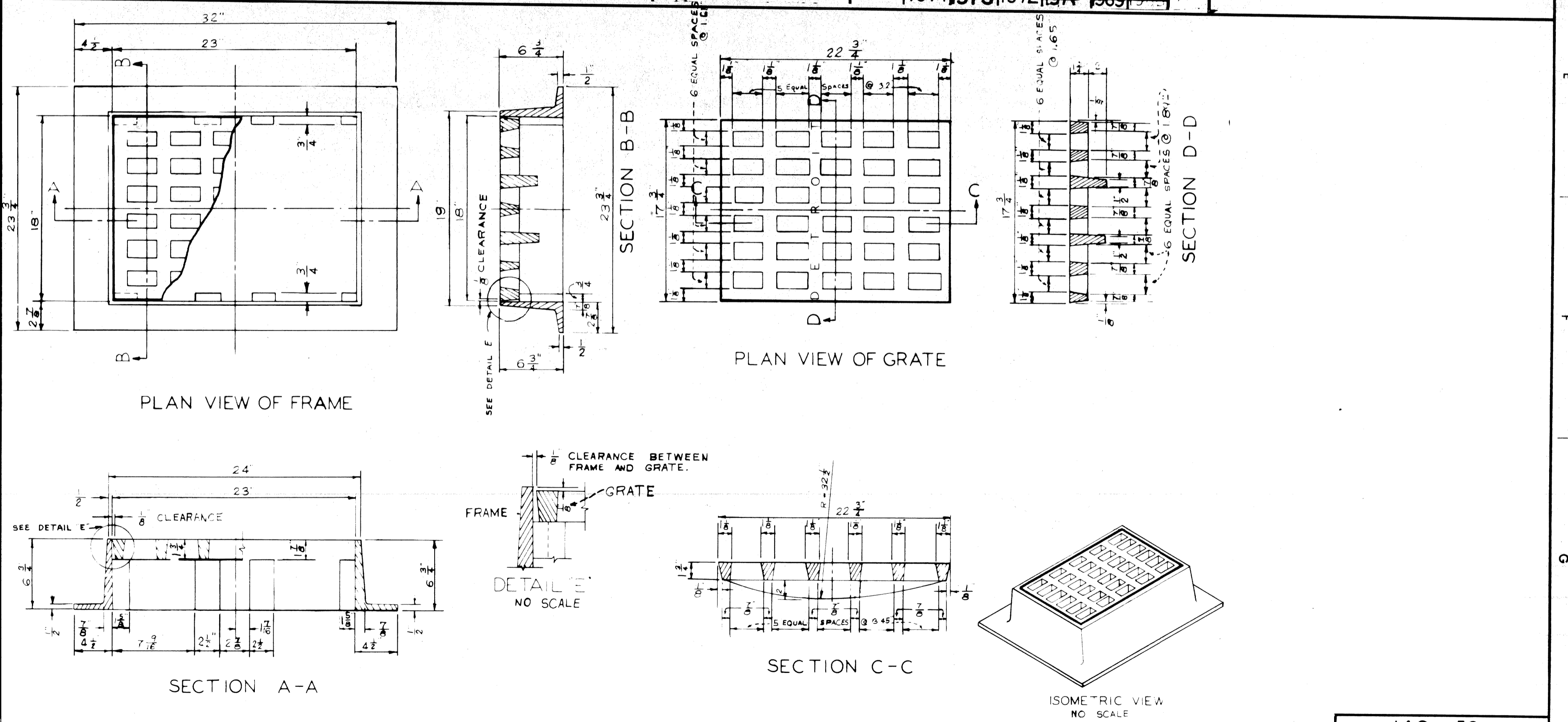
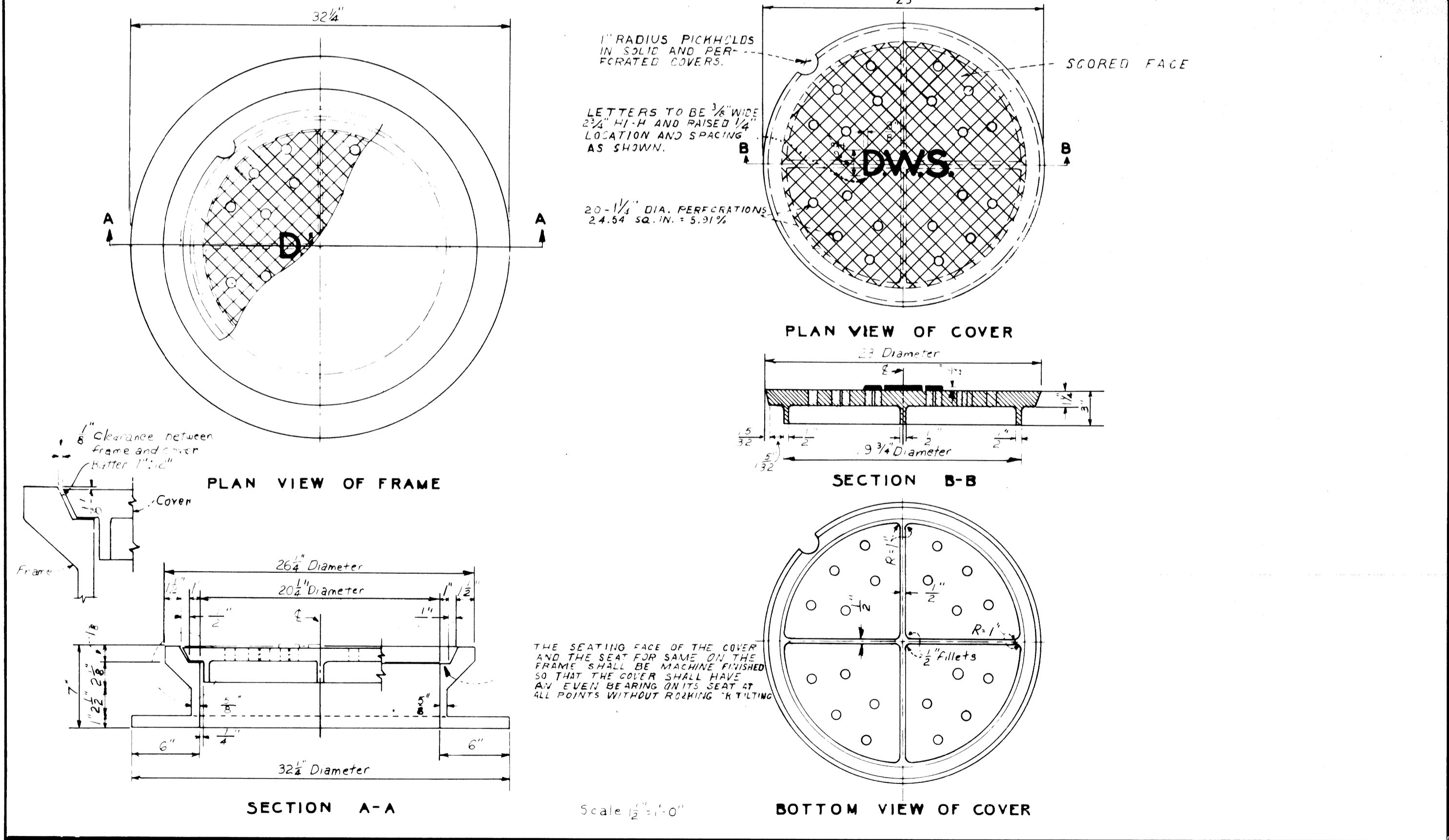
SYMBOL	DESCRIPTION
○	SEWER MANHOLE.
⊙	P.L.C. MANHOLE.
⊕	WATER MANHOLE OR GRATE.
⊗	GAS MANHOLE OR GRATE.
⊖	WESTERN UNION MANHOLE.
⊙	MICHIGAN BELL MANHOLE.
⊕	EDISON STEAM MANHOLE.
⊖	EDISON ELECTRIC MANHOLE.
⊙	FIRE DEPT. MANHOLE.
⊕	POLICE DEPT. MANHOLE.
⊖	D.S.R. MANHOLE.
○	FIRE DEPT. STANDARD HYDRANT.
⊕	FIRE DEPT. HIGH PRESSURE HYDRANT.
⊗	FIRE DEPT. CALL BOX.
⊖	FIRE DEPT. HIGH PRESSURE MANHOLE.
⊙	POLICE DEPT. CALL BOX.
⊕	P.L.C. LIGHT POLE.
⊖	P.L.C. POLE.
⊙	TELEPHONE POLE.
⊕	EDISON POLE.
#	STREET SIGN POST.
□	CATCH BASIN.
(W)	WATER METER.
(-)	WATER SHUT-OFF.
(+)	GAS SHUT-OFF.
⊕	GAS DRIP.
⊖	DRAIN OR VENT.
	GUY POLE.
+	MAIL BOX.
⊖	AREAWAY OR COAL CHUTE.
⊙	FLAG POLE.
⊕	SPRINKLER BOX.
⊖	DEAD MANHOLE.
⊙	TREE.
⊕	PLC & F.D. MANHOLE FILLED WITH SAND.
⊖	TRACK DRAIN.
+	TRAFFIC SIGN POST.
(2)	TRAFFIC SIGNAL LIGHT.
⊙	TRAFFIC SIGNAL ON LIGHT POST.
II	D.S.R. DANGER PLATE.



DESIGNED BY: <i>T. Kanow</i>	APPROVED: <i>T. Kanow</i>	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN DWG. NO. C-4394
DRAWN BY: <i>T. Kanow</i>	ENGINEER OF STREETS	
TRACED BY: <i>T. Kanow</i>	ASST. CITY ENGINEER	
CHECKED BY: <i>T. Kanow</i>	CITY ENGINEER	

DESIGNED BY: <i>T. Kanow</i>	APPROVED: <i>T. Kanow</i>	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN DWG. NO. C-4394
DRAWN BY: <i>T. Kanow</i>	ENGINEER OF STREETS	
TRACED BY: <i>T. Kanow</i>	ASST. CITY ENGINEER	
CHECKED BY: <i>T. Kanow</i>	CITY ENGINEER	

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN PAVING DETAIL NO. 25		STANDARD SYMBOLS FOR UTILITIES
BOOK NO. _____	SCALE NO. SCALE _____	DWG. NO. C-902-A
PAGE NO. _____	DATE 10-11-54	



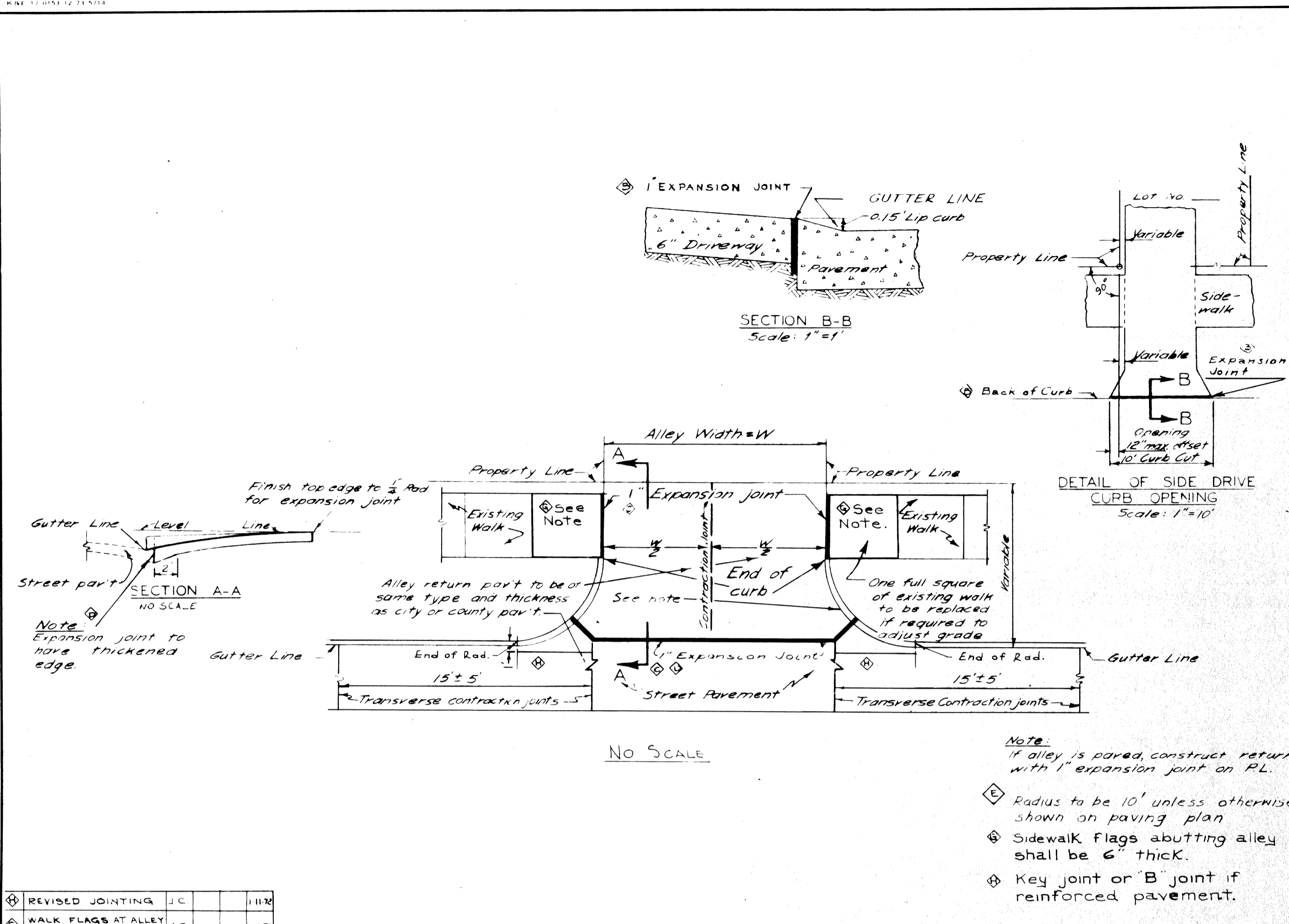
DESIGNED BY: <i>T. Kanow</i>	APPROVED: <i>T. Kanow</i>	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN DWG. NO. C-4391
DRAWN BY: <i>T. Kanow</i>	ENGINEER OF STREETS	
TRACED BY: <i>T. Kanow</i>	ASST. CITY ENGINEER	
CHECKED BY: <i>T. Kanow</i>	CITY ENGINEER	

DESIGNED BY: <i>T. Kanow</i>	APPROVED: <i>T. Kanow</i>	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN DWG. NO. C-4391
DRAWN BY: <i>T. Kanow</i>	ENGINEER OF STREETS	
TRACED BY: <i>T. Kanow</i>	ASST. CITY ENGINEER	
CHECKED BY: <i>T. Kanow</i>	CITY ENGINEER	

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN PAVING DETAIL NO. 25		STANDARD SYMBOLS FOR UTILITIES
BOOK NO. _____	SCALE NO. SCALE _____	DWG. NO. C-902-A
PAGE NO. _____	DATE 10-11-54	

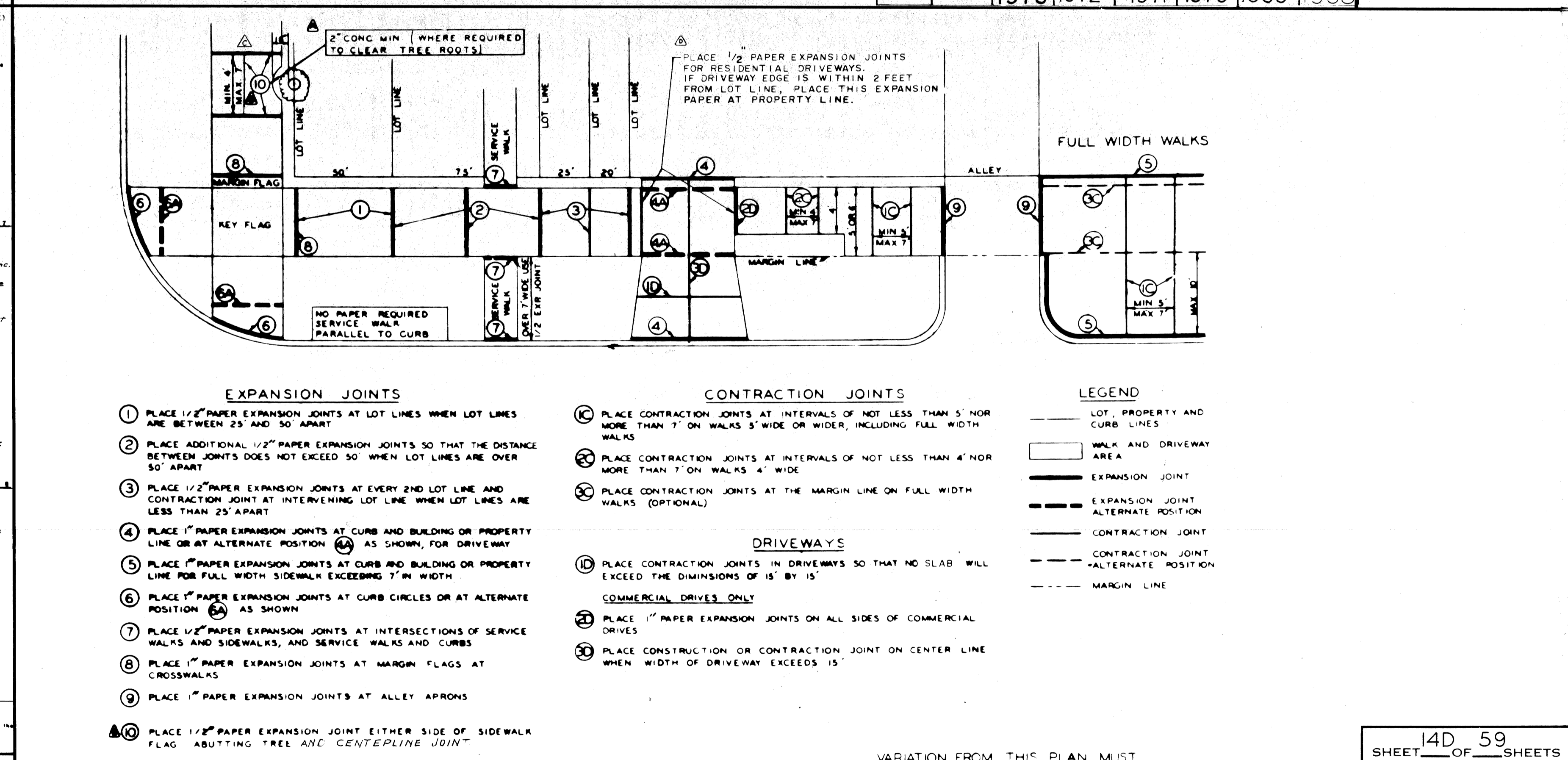
14C 59  
SHEET OF SHEETS  
CONTRACT NO. M 2000 (017)  
ASSIGN NO. A.O. 2091  
DATE 5-18-75



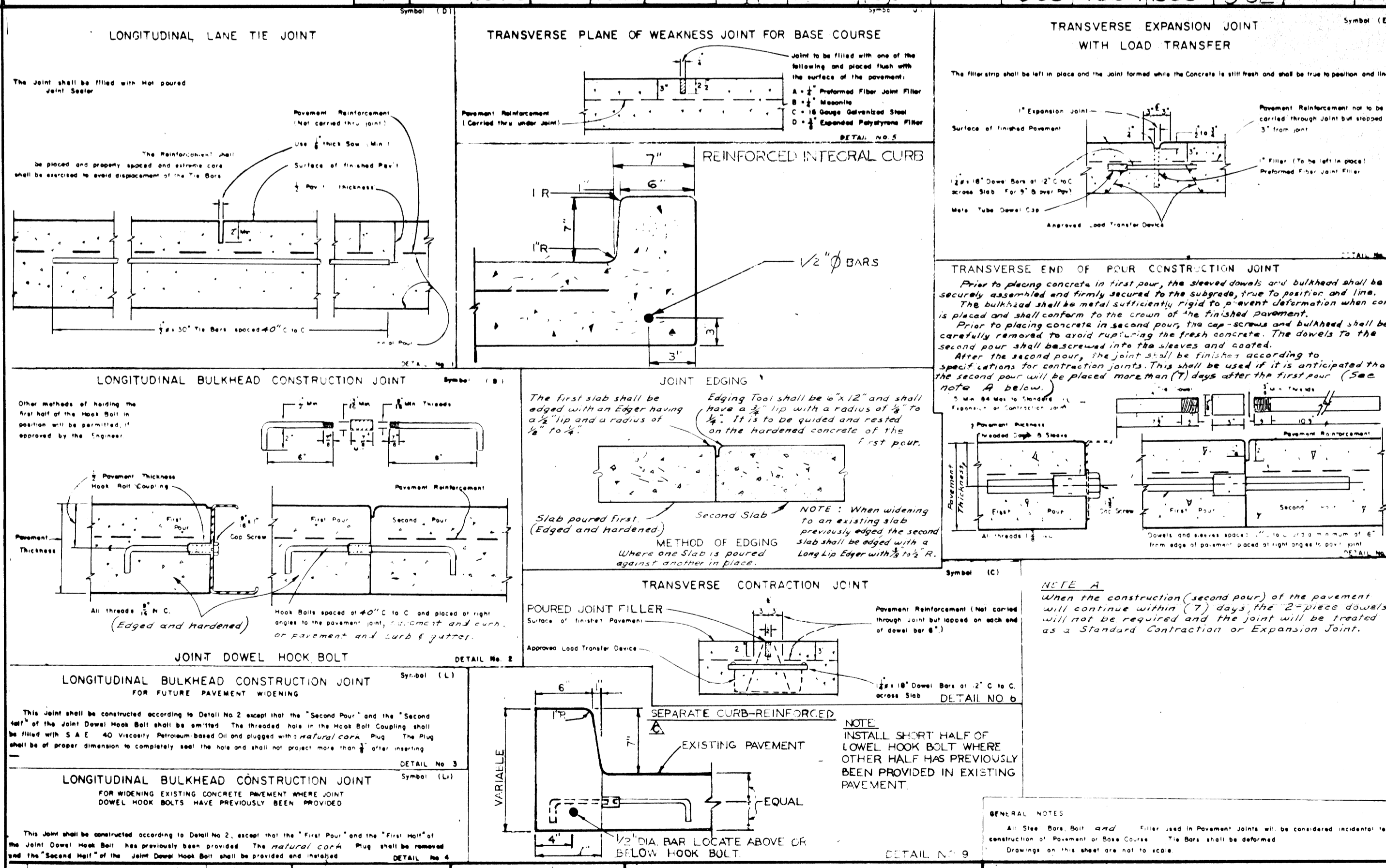


REVISED JOINTING	J.C.	11/20
WALK FLAGS AT ALLEY CHANGED TO 6" THICK	J.C.	11/70
CHANGED ALLEY RETURN TO 4" WIDE	J.C.	4/40
CHANGED DRIVEWAY TO 4" WIDE	J.C.	4/40
CHANGED DRIVEWAY TO 4" WIDE	J.C.	12/40
CHANGED DRIVEWAY TO 4" WIDE	J.C.	12/40
CHANGED DRIVEWAY TO 4" WIDE	J.C.	12/40
CHANGED DRIVEWAY TO 4" WIDE	J.C.	12/40
CHANGED DRIVEWAY TO 4" WIDE	J.C.	12/40
CHANGED DRIVEWAY TO 4" WIDE	J.C.	12/40

DESIGNED BY E. J. Jackson	APPROVED BY C. J. Jackson	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN	STEEL BEAM GUARD RAIL
DRAWN BY J. A. N. C. H. C.	ENGINEER OF STREETS	CITY ENGINEER'S OFFICE BUREAU OF DESIGN	SCALE DATE 12, 22, 67
TRACED BY K. J. J.	ASST. CITY ENGINEER	DETAIL NO. 20	DWG. NO. C-4585
CHECKED BY K. J. J.	CITY ENGINEER		PAGE NO. DATE 12, 22, 67

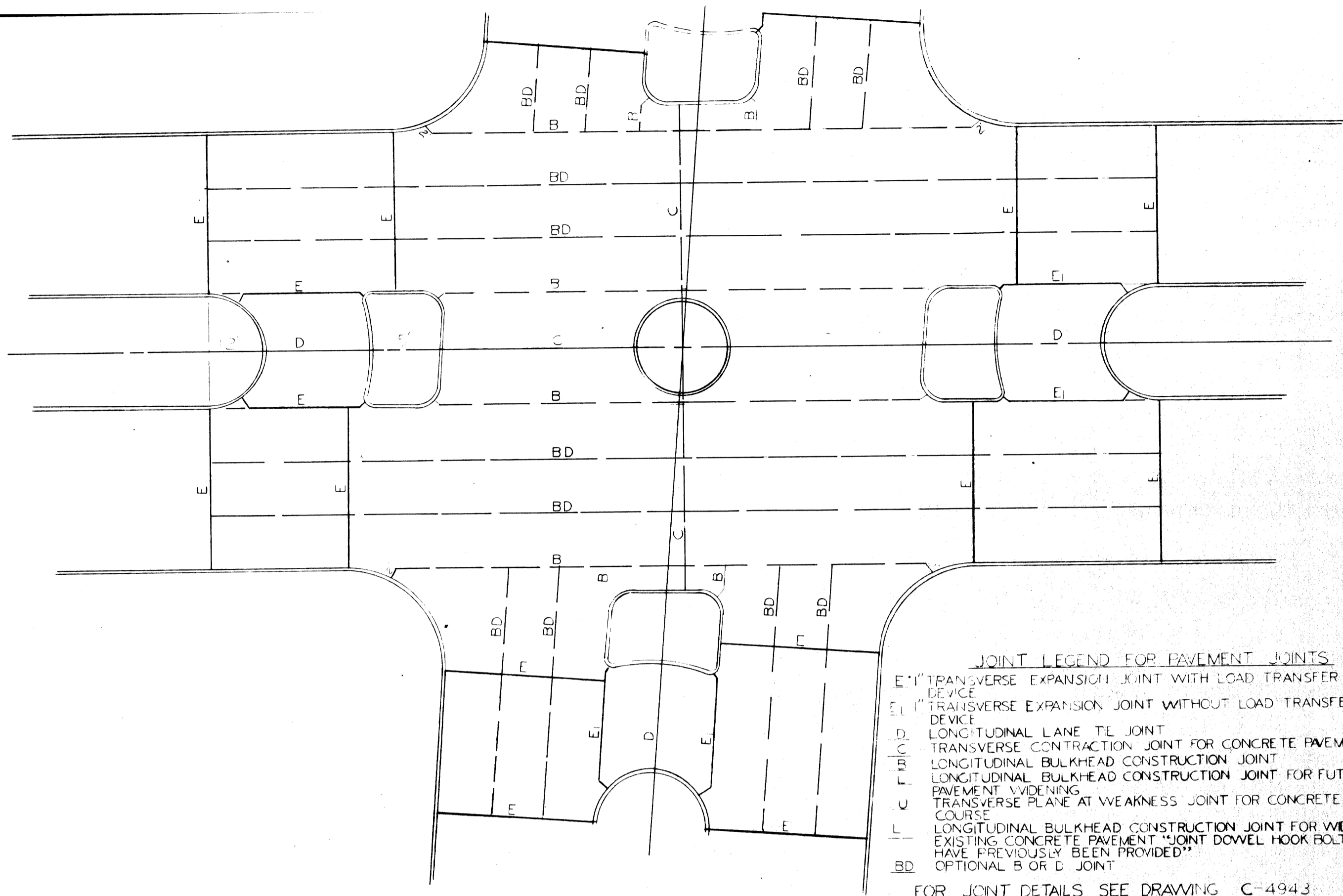


REVISED	10/63	10/64	10/65	10/66	10/67	10/68	10/69	10/70	10/71	10/72	10/73	10/74	10/75
DESCRIPTION	REVISION	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE

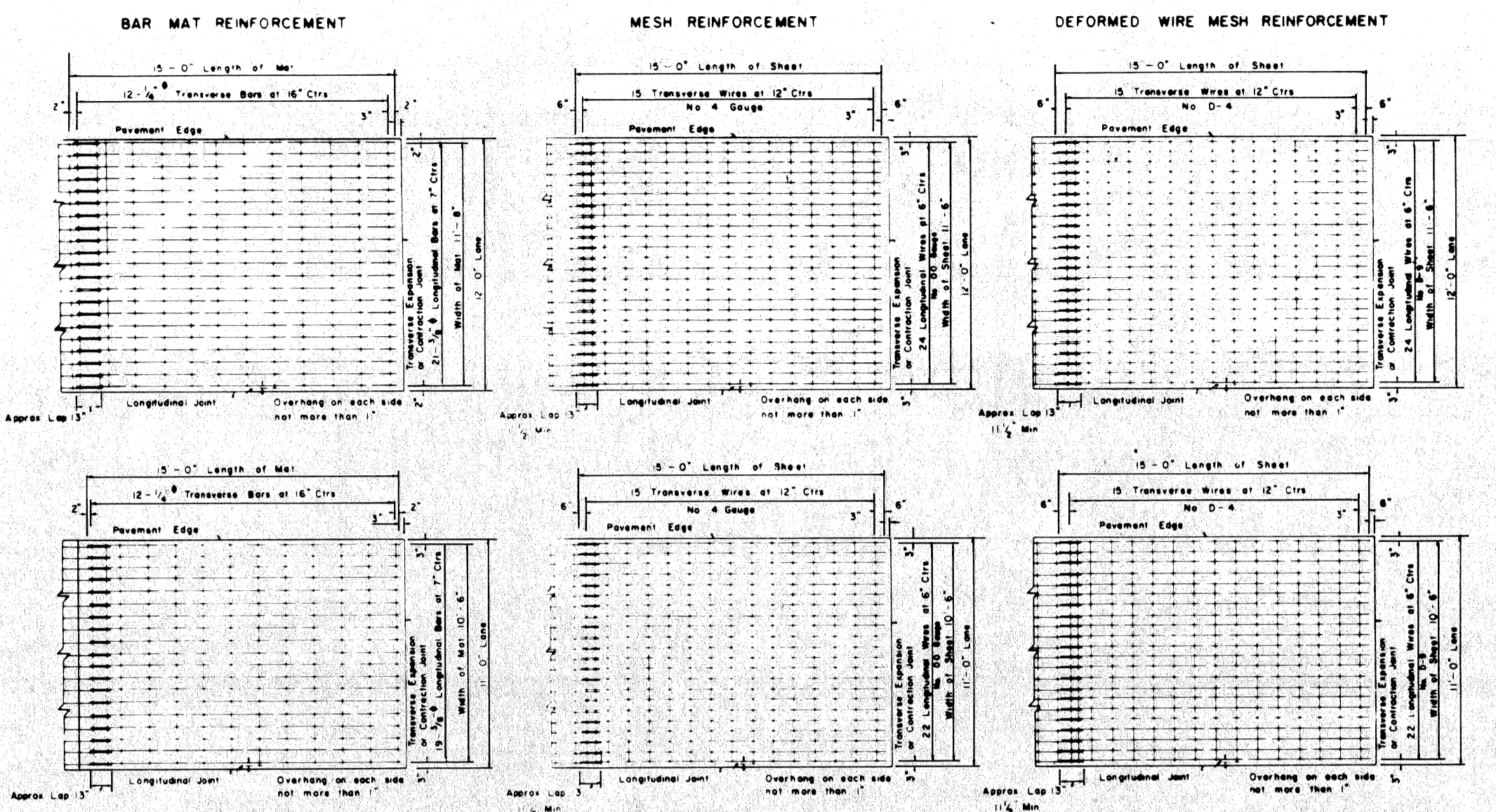


DESIGNED BY E. J. Jackson	APPROVED BY C. J. Jackson	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN	REINFORCED CONCRETE PAVEMENT JOINTS AND CURB
DRAWN BY J. A. N. C. H. C.	ENGINEER OF STREETS	CITY ENGINEER'S OFFICE BUREAU OF DESIGN	SCALE DATE 4-21-66
TRACED BY K. J. J.	ASST. CITY ENGINEER	DETAIL NO. 24	DWG. NO. C-4943
CHECKED BY K. J. J.	CITY ENGINEER		PAGE NO. DATE 4-21-66





**JOINT LEGEND FOR PAVEMENT JOINTS**  
 E-1" TRANSVERSE EXPANSION JOINT WITH LOAD TRANSFER DEVICE  
 E-1" TRANSVERSE EXPANSION JOINT WITHOUT LOAD TRANSFER DEVICE  
 L-1" LONGITUDINAL LANE TIE JOINT  
 C-1" TRANSVERSE CONTRACTION JOINT FOR CONCRETE PAVEMENT  
 C-1" LONGITUDINAL BULKHEAD CONSTRUCTION JOINT FOR FUTURE PAVEMENT WIDENING  
 U-1" TRANSVERSE CONTRACTION JOINT FOR WEAKNESS BASE COURSE  
 U-1" LONGITUDINAL BULKHEAD CONSTRUCTION JOINT FOR WIDENING EXISTING CONCRETE PAVEMENT JOINT DOWEL HOOK BOLTS HAVE PREVIOUSLY BEEN PROVIDED  
 BD-1" OPTIONAL B OR D JOINT  
 FOR JOINT DETAILS SEE DRAWING C-4943



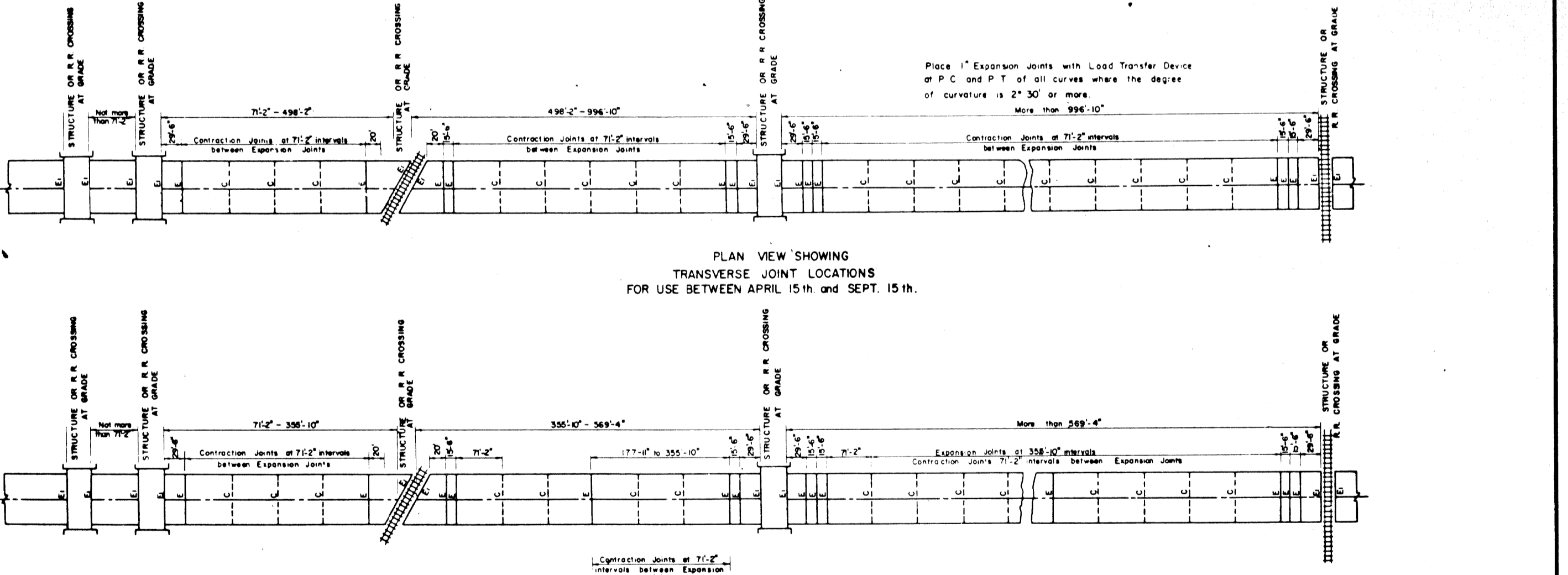
**GENERAL NOTES**

Where the joint width of pavement is other than shown the center line requirements shall be the same as shown on this standard plan. Section sheets of the required width may be used on standard sheets may be cut to the required size or split sheets may be added to standard sheets to obtain the required size. Side cuts shall be addressed from the spacing of longitudinal wires for wire mesh or deformed wire or of longitudinal bars for bar mat.  
 Size of wire is based on U.S. Steel Wire Gauge and weight for Mesh and Deformed Wire Reinforcement is according to the Wire Reinforcement Institute Tables.

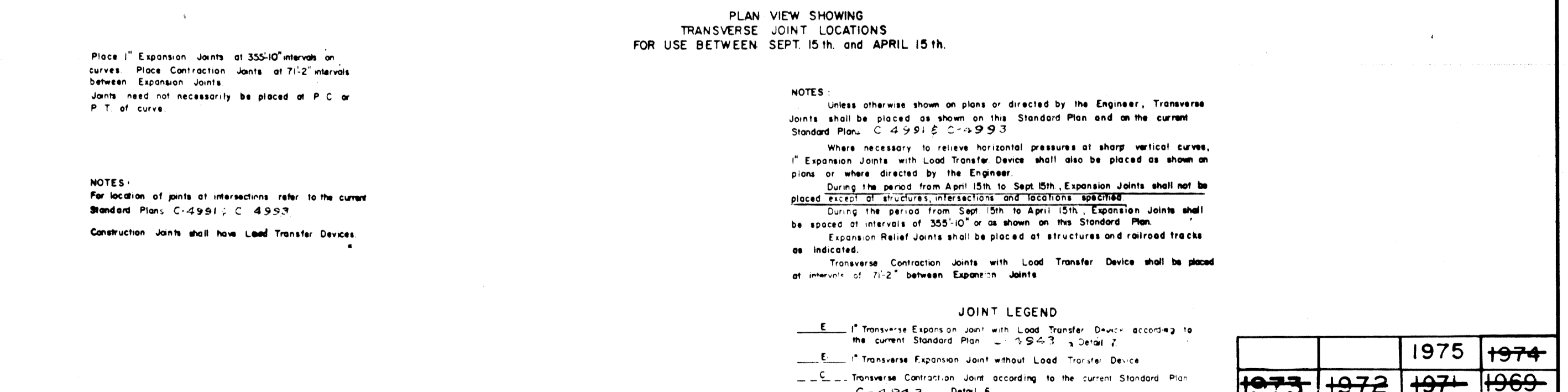
COMPUTED WEIGHTS OF STEEL					
Type of Reinforcement	Area Weight (sq. ft. of Mesh or Sheet)	Area Weight (sq. ft. of Mesh or Sheet)	Area Weight (sq. ft. of Mesh or Sheet)	Area Weight (sq. ft. of Mesh or Sheet)	Area Weight (sq. ft. of Mesh or Sheet)
DEFORMED WIRE	18.4	18.4	7.1	7.1	134.0
MESH	15.4	16.5	6.8	6.8	121.9
BAR MAT	12	13.2	7.4	7.5	128.5

DESIGNED BY <i>Jackson</i>	APPROVED <i>Prichard</i> ENGINEER OF STREETS	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN Form C of D-346 SH A DETAIL NO. 26	TYPICAL JOINT LAYOUT FOR REINFORCED CONCRETE PAVEMENT, DIVIDED ROADWAYS INTERSECTION BOOK NO. _____ SCALE _____ DATE 1-19-68 DRG NO. C-4993
DRAWN BY <i>Jackson</i>	TRACED BY <i>Kawados</i>		
DESCRIPTION REVISIONS	CHECKED BY <i>Kawados</i>	1975 1974 1973 1972 1971 1969	

DESIGNED BY <i>Jackson</i>	APPROVED <i>Prichard</i> ENGINEER OF STREETS	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN DETAIL NO. 23 Form C of D-346 SH A	PAVEMENT REINFORCEMENT BOOK NO. _____ SCALE _____ DATE 4-21-66 DRG NO. C-4942
DRAWN BY <i>Jackson</i>	TRACED BY <i>Kawados</i>		
DESCRIPTION REVISIONS	CHECKED BY <i>Kawados</i>	1975 1974 1973 1972 1971 1970 1969 1968	



PLAN VIEW SHOWING TRANSVERSE JOINT LOCATIONS FOR USE BETWEEN APRIL 15th and SEPT. 15th.

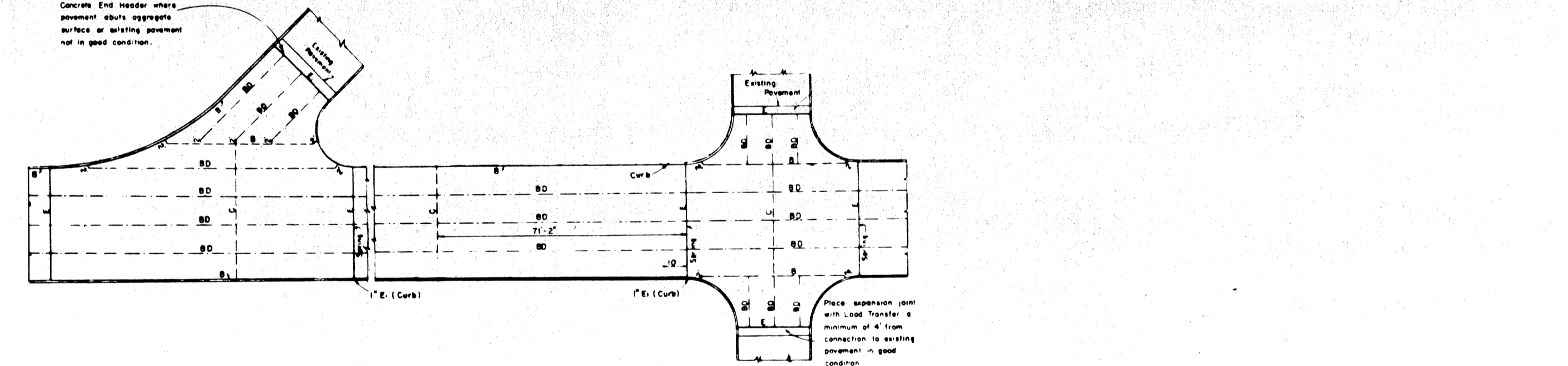


PLAN VIEW SHOWING TRANSVERSE JOINT LOCATIONS FOR USE BETWEEN SEPT. 15th and APRIL 15th.

**NOTES:**  
 Unless otherwise shown on plans or directed by the Engineer, Transverse joints shall be placed as shown on the Standard Plan and on the current Standard Plan C-4951 & C-4953.  
 Where necessary to relieve horizontal pressure at sharp vertical curves, Expansion Joints with Load Transfer Device shall also be placed as shown on plans or where directed by the Engineer.  
 During the period from April 15th to Sept 15th, Expansion joints shall not be placed except at structures and reinforced tracks as indicated.  
 Expansion joints shall be placed at structures and reinforced tracks as indicated.  
 Transverse contraction joints with Load Transfer Device shall be placed at intervals of 7'-2" between Expansion joints.

**JOINT LEGEND**  
 E-1" Transverse Expansion joint with Load Transfer Device according to the current Standard Plan C-4951 & C-4953  
 E-1" Transverse Expansion joint without Load Transfer Device  
 C-1" Transverse Contraction joint according to the current Standard Plan C-4943 Detail 6

DESIGNED BY <i>Jackson</i>	APPROVED <i>Prichard</i> ENGINEER OF STREETS	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN Form C of D-346 SH A DETAIL NO. 28	LOCATION OF TRANSVERSE EXPANSION & CONTRACTION JOINTS IN CONCRETE PAVEMENT (REINFORCED) BOOK NO. _____ SCALE _____ DATE 3-66 DRG NO. C-4992
DRAWN BY <i>Jackson</i>	TRACED BY <i>Kawados</i>		
DESCRIPTION REVISIONS	CHECKED BY <i>Kawados</i>	1975 1974 1973 1972 1971 1969	



**TRANSVERSE JOINTS IN CONCRETE PAVEMENT**

TRANSVERSE JOINTS IN CURB, GUTTER, CURB AND GUTTER AND DRIVEWAY RETURNS AND OPENINGS ABUTTING A CONCRETE PAVEMENT  
 Unless otherwise shown on plans, place transverse joints as follows:  
 One inch expansion joints in line with all transverse expansion joints in concrete pavement.  
 Contraction joints in line with all transverse contraction joints in concrete pavement. Place joints at each end of driveway returns and openings.  
 For road openings, place intermediate joints at 10' intervals between the above joints.

TRANSVERSE JOINTS IN CONCRETE PAVEMENT  
 Unless otherwise shown on plans, place transverse joints as follows:  
 One inch expansion joints with load transfer device at the opening of returns and openings as shown on special sheets or on the current Standard Plan C-4952.  
 Contraction joints with load transfer device placed at 7'-2" intervals between expansion joints, and elsewhere at uniform intervals of 7'-2".

**JOINT LEGEND FOR PAVEMENT JOINTS**  
 E-1" Transverse Expansion joint with Load Transfer Device  
 E-1" Transverse Expansion joint without Load Transfer Device  
 L-1" Longitudinal Lane Tie joint  
 C-1" Transverse Contraction joint for concrete pavement  
 C-1" Longitudinal Bulkhead Construction joint  
 U-1" Transverse Contraction joint for weakness base course  
 U-1" Longitudinal Bulkhead Construction joint for widening existing concrete pavement  
 BD-1" Optional B or D joint

**JOINT LEGEND FOR CURB STRUCTURE AND SIDEWALK**

E-1" Expansion joint with Load Transfer Device  
 E-1" Expansion joint without Load Transfer Device  
 For details of all joints in concrete structure refer to the Standard Specifications.

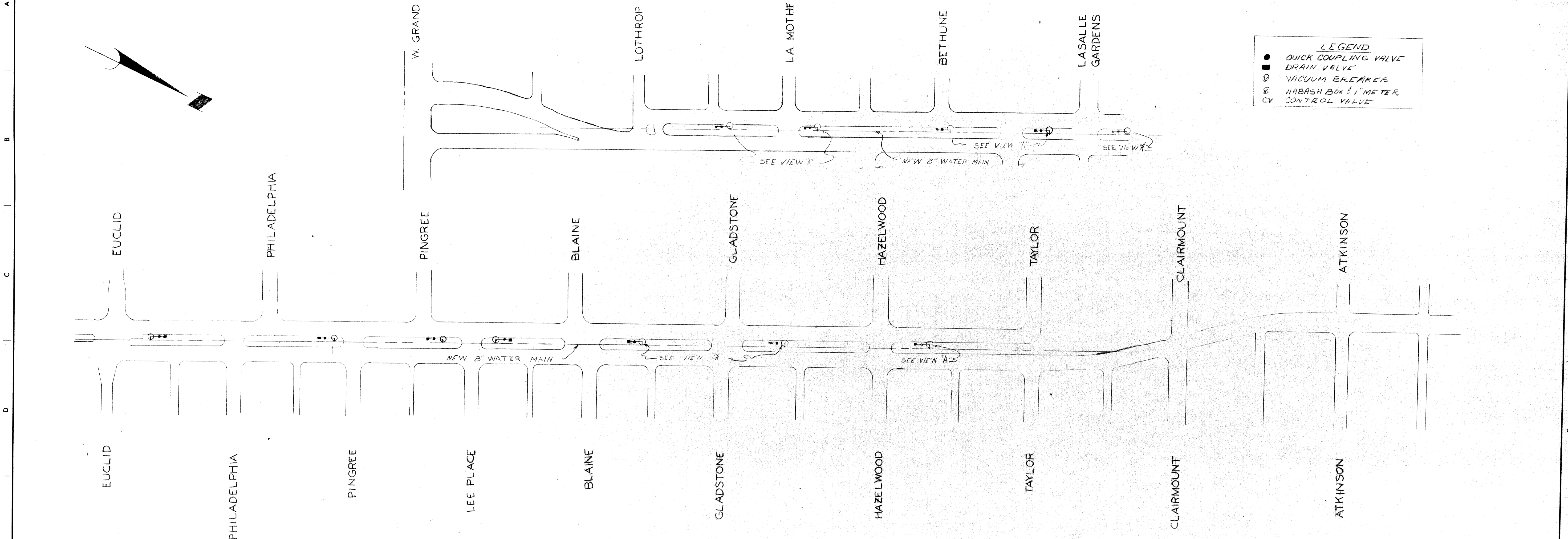
DESIGNED BY <i>Jackson</i>	APPROVED <i>Prichard</i> ENGINEER OF STREETS	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN DETAIL NO. 27 Form C of D-346 SH A	TYPICAL JOINT LAYOUT FOR REINFORCED CONCRETE PAVEMENT BOOK NO. _____ SCALE _____ DATE 1-2-66 DRG NO. C-4991
DRAWN BY <i>Jackson</i>	TRACED BY <i>Kawados</i>		
DESCRIPTION REVISIONS	CHECKED BY <i>Kawados</i>	1975 1974 1973 1972 1971 1969	

14E 59	SHEET OF SHEETS
CONTRACT NO. M 2000 (017)	ASSIGN NO. A0 2091
DATE 5-18-75	

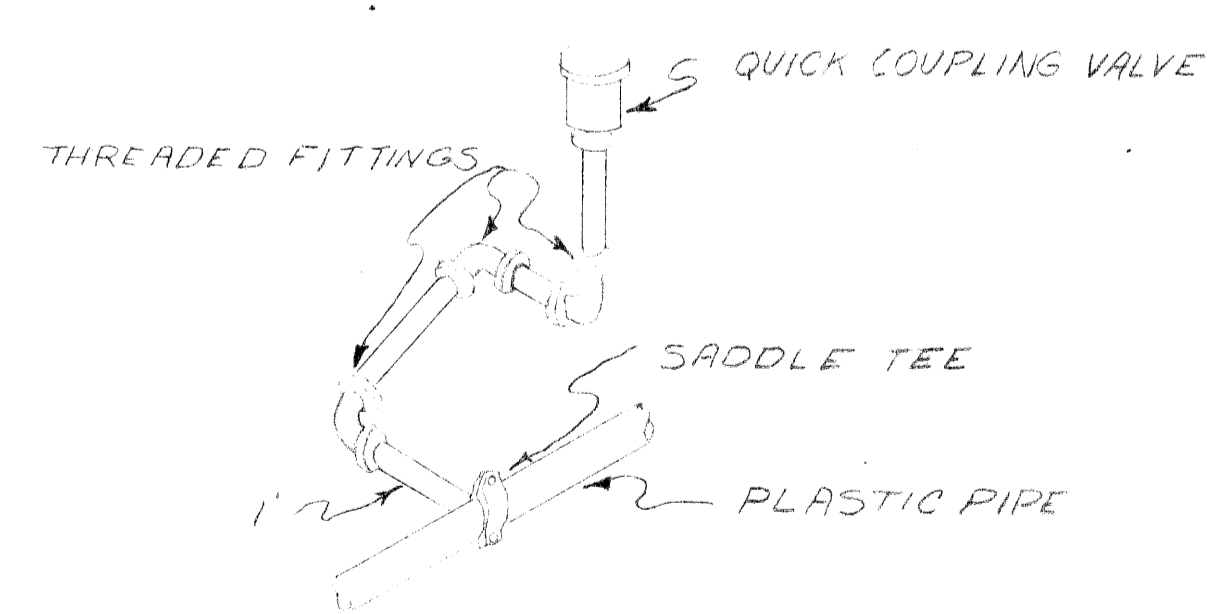




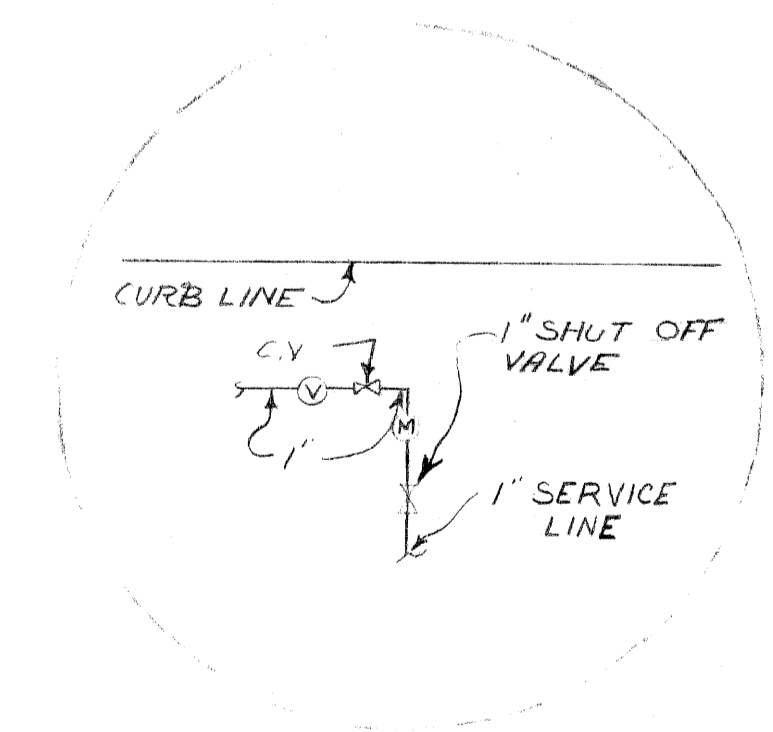




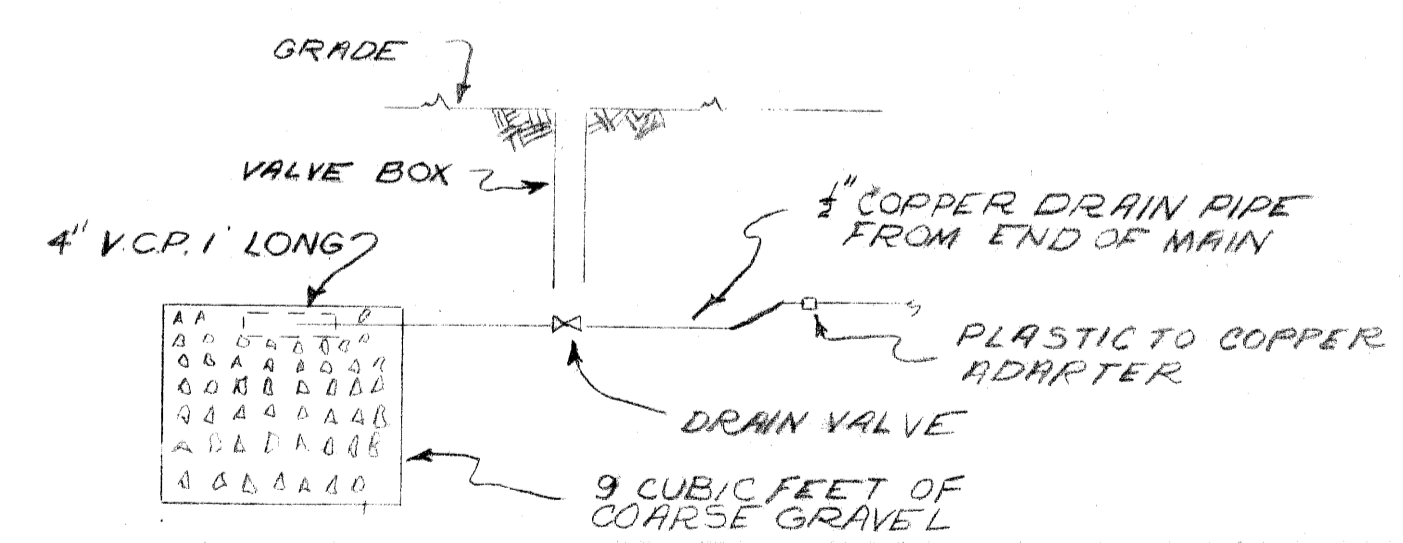
**PLAN**  
SCALE: 1" = 100'



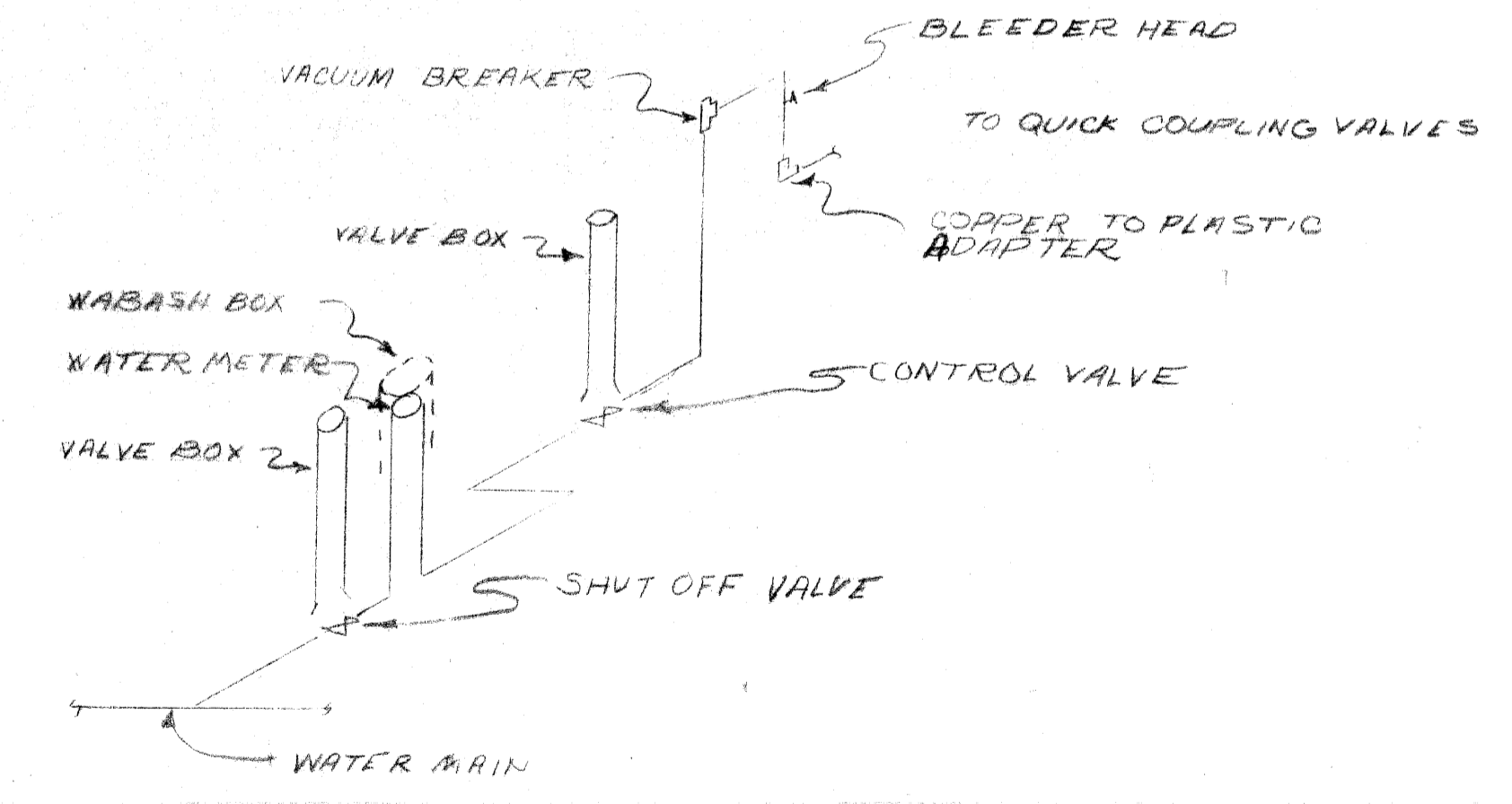
TYPICAL QUICK COUPLING VALVE  
NO SCALE



VIEW "A"  
NO SCALE



TYPICAL DRAIN DETAIL  
NO SCALE



TYPICAL WATER SUPPLY PIPING  
NO SCALE

**NOTE:**  
EUCLID to ATKINSON is not part of this contract.

DESIGNED BY <i>J. Mayer</i>	APPROVED: <i>A.J. Staane P.E.</i> MECHANICAL ENGINEER
DRAWN BY <i>M. JACKSON</i>	
TRACED BY <i>M. JACKSON</i>	
CHECKED BY <i>J. Mayer</i>	CITY ENGINEER

**CITY OF DETROIT**  
DEPARTMENT OF PUBLIC WORKS  
CITY ENGINEERS OFFICE  
FOR  
COMMUNITY DEVELOPMENT COMMISSION

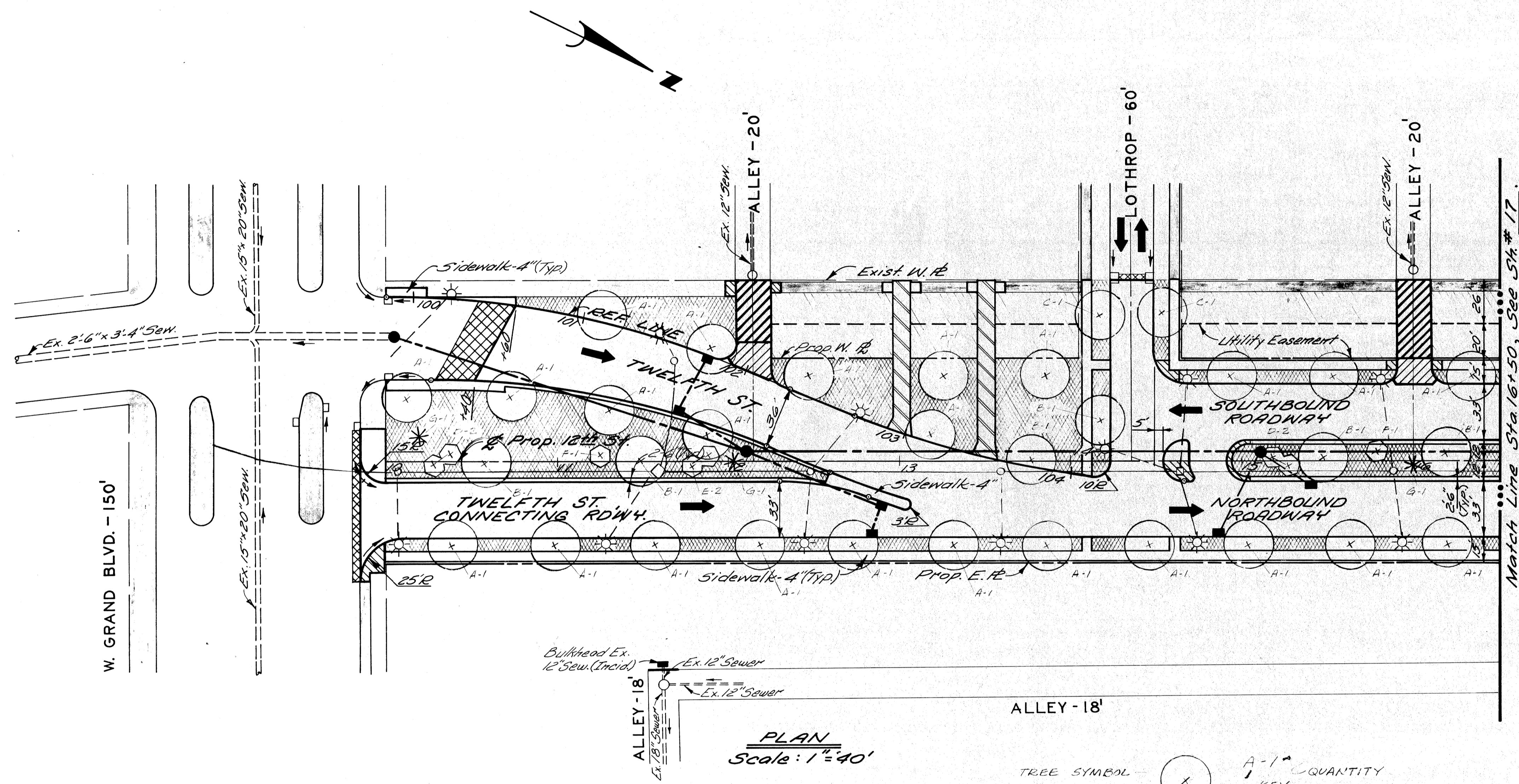
TWELFTH STREET WIDENING  
WEST GRAND BLVD TO LASALLE GARDENS  
LAWN WATERING SYSTEM

SHEET <u>15</u> OF <u>59</u> SHEETS
CONTRACT NO. M 2000 (017)
ASSIG. NO. A.O. 2091
DATE 5-18-75

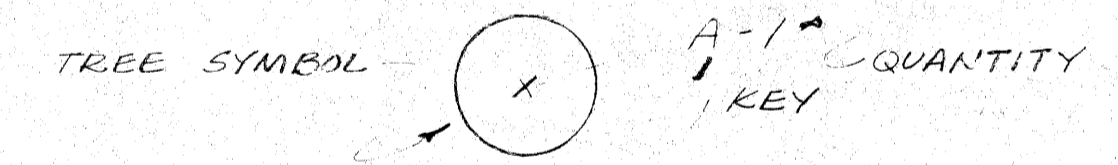


P.B.M. #31-251B Elev. 151.069 N.E.  
Corner W. Grand Blvd. & Twelfth St.

C.B.M. Elev. 155.32 Arrow on Hydrant  
S.W. Corner Twelfth St & Lothrop.



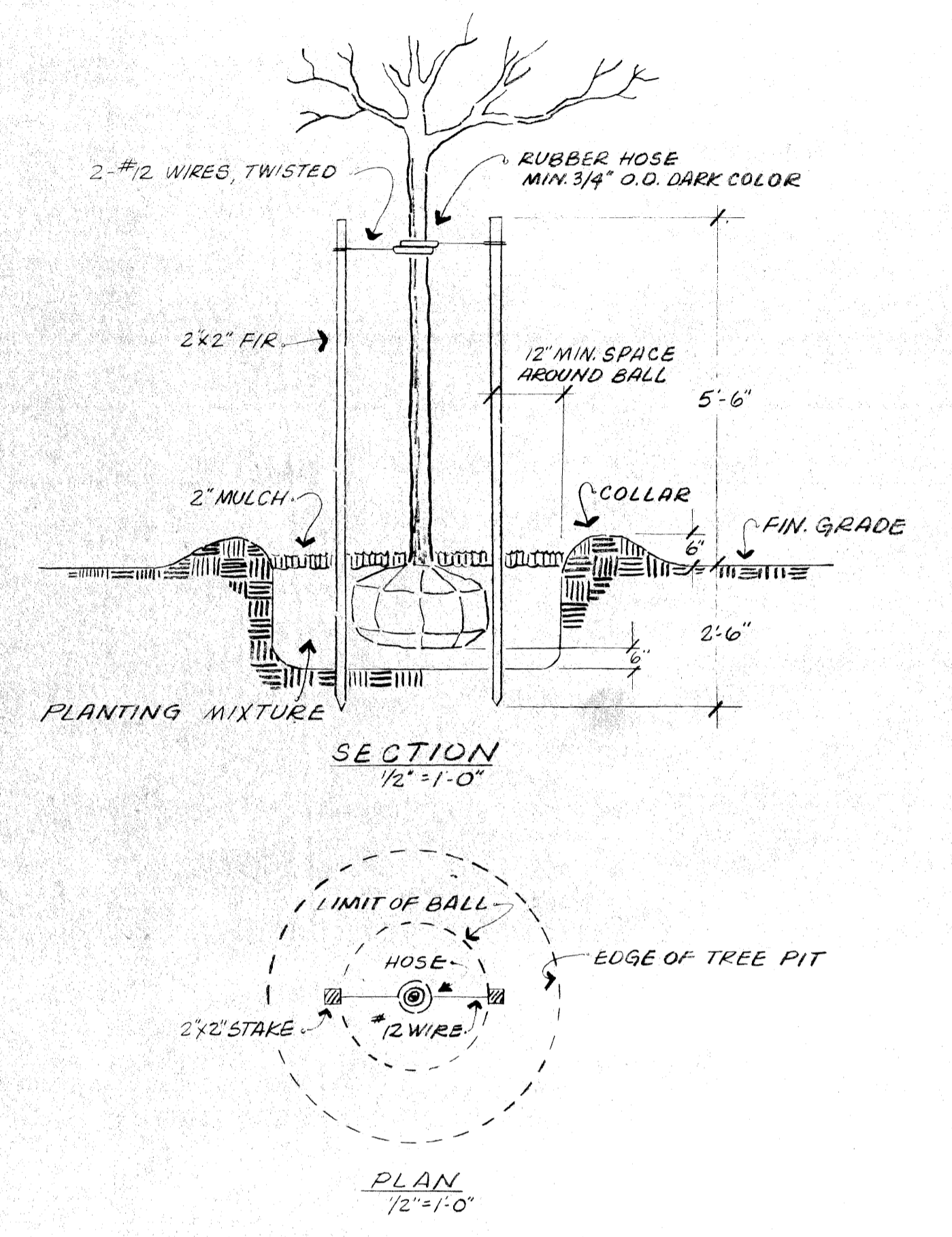
PLAN  
Scale: 1"=40'



KEY	QUANT	PLANT NAME	MIN. SIZE	ROOT
A	40	TILIA CORDATA 'GREENSPIRE' GREENSPIRE LINDEN	3-3 1/2" CAL.	B+B
B	5	GYMNOCALADUS DIGITATA KENTUCKY COFFEE TREE	3-3 1/2" CAL.	B+B
C	4	ASER PLATANOIDES NORWAY MAPLE	3-3 1/2" CAL.	B+B
D	10	MALUS FLORIBUNDA JAPANESE FLOWERING CRABAPPLE	2-2 1/2" CAL.	B+B
E	4	MALUS SCHIEDECKERI SCHIEDECKER CRABAPPLE	2-2 1/2" CAL.	B+B
F	5	CRATAEGUS PHAENOPYRUM WASHINGTON HAWTHORN	2-2 1/2" CAL.	B+B
G	7	PICEA PUNGENS COLORADO SPRUCE	6-7 FT.	B+B

LEGEND FOR LANDSCAPE IMPROVEMENTS

- | SYMBOL | DESCRIPTION             |
|--------|-------------------------|
|        | = SEEDED LAWN           |
|        | = SODDED LAWN           |
|        | = SHADE TREE (A-1)      |
|        | = ORNAMENTAL TREE (B-A) |
|        | = EVERGREEN TREE (C)    |



DETAIL FOR PLANTING AND STAKING TREES 1 1/2" TO 3 1/2" CAL.

NOTES:

- All proposed street return radii are 20' unless otherwise noted.
- For utility adjustments or reconstructions, see 54#13.
- For Alignment, see 54#4.

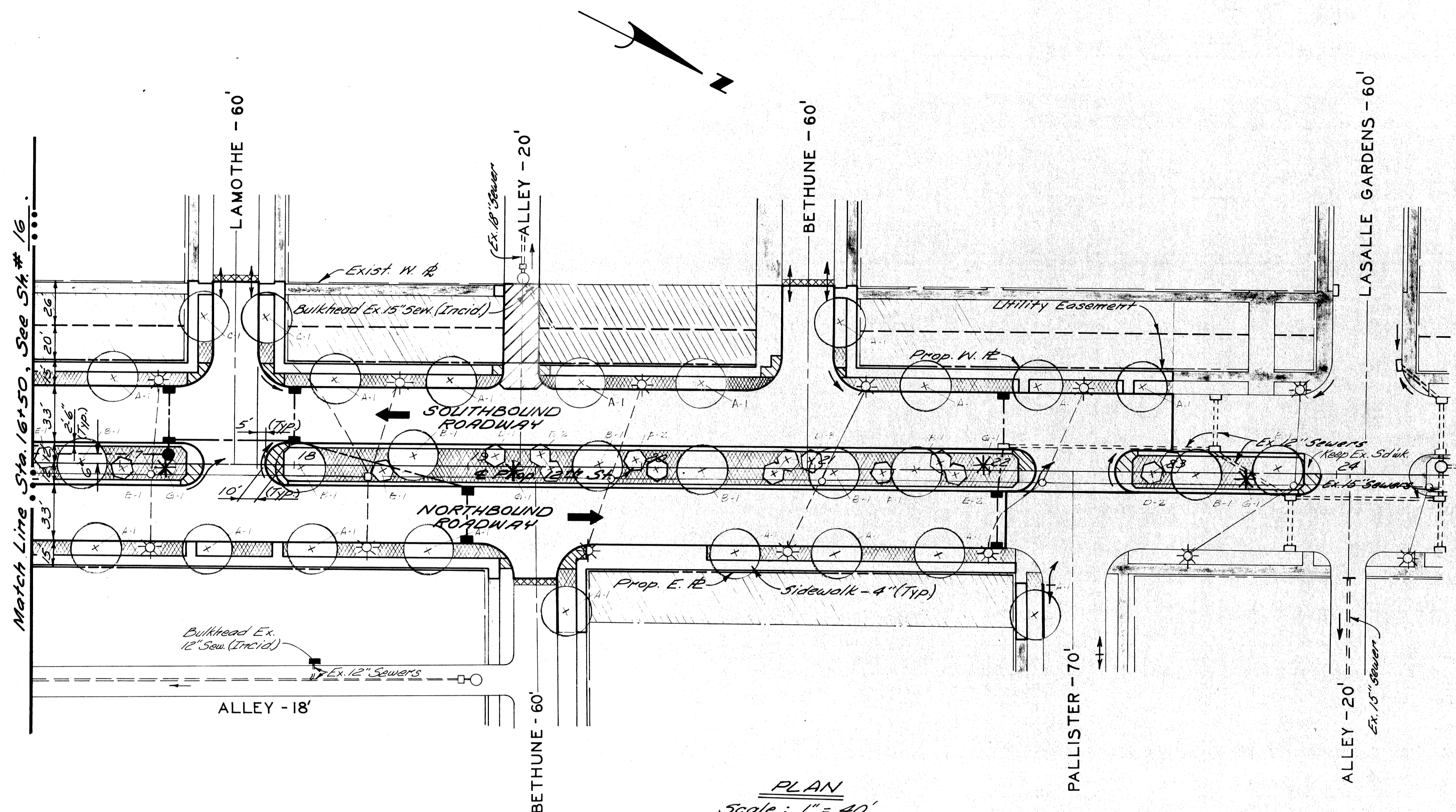
CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION		TWELFTH STREET WIDENING WEST GRAND BLVD. TO ATKINSON PLAN, LANDSCAPE CONSTRUCTION		SHEET 16 OF 59 SHEETS CONTRACT No. M 2000(017) ASSIGNMENT No. A.O. 2091 DATE 5-18-75
DESIGNED BY: WJB DRAWN BY: TRACED BY: CHECKED BY: EHVALL	APPROVED: ENGINEER OF EXPRESSWAYS			
CODES REVISIONS LOCATED BY COORDINATES ON SHEET				



C.B.M. Elev. 155.00 Arrow on Hydrant  
S.W. Corner Twelfth & LaMothe.

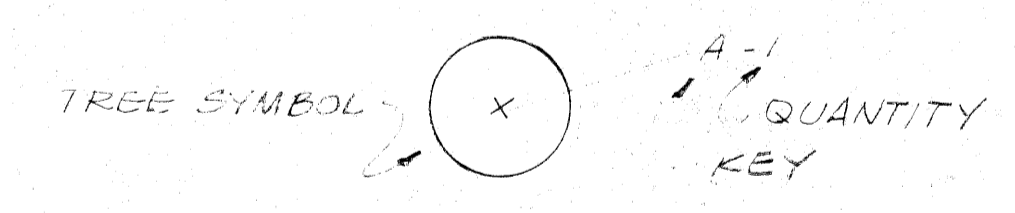
C.B.M. Elev. 156.26 Arrow on Hydrant  
N.W. Corner Twelfth & Bethune.

C.B.M. Elev. 155.47 Arrow on Hydrant  
S.W. Corner Twelfth & LaSalle Gardens.



PLAN  
Scale: 1" = 40'

NOTES:



PLANT MATERIALS LEGEND

KEY	PLANT NAME
A	GREENSPIRE LINDEN
B	KENTUCKY COFFEE TREE
C	NORWAY MAPLE
D	JAPANESE FLOWERING CRABAPPLE
E	SCHIEDECKER CRABAPPLE
F	WASHINGTON HAWTHORNE
G	COLORADO SPRUCE

DESIGNED BY wgc	APPROVED:
DRAWN BY	ENGINEER OF EXPRESSWAYS
TRACED BY	
CHECKED BY E.P.V.	

CITY OF DETROIT  
DEPARTMENT OF PUBLIC WORKS  
CITY ENGINEERS OFFICE  
FOR  
COMMUNITY DEVELOPMENT COMMISSION

TWELFTH STREET WIDENING  
WEST GRAND BLVD. TO ATKINSON  
PLAN, LANDSCAPE CONSTRUCTION

SHEET 17 OF 59 SHEETS
CONTRACT No. M 2000 (017)
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