

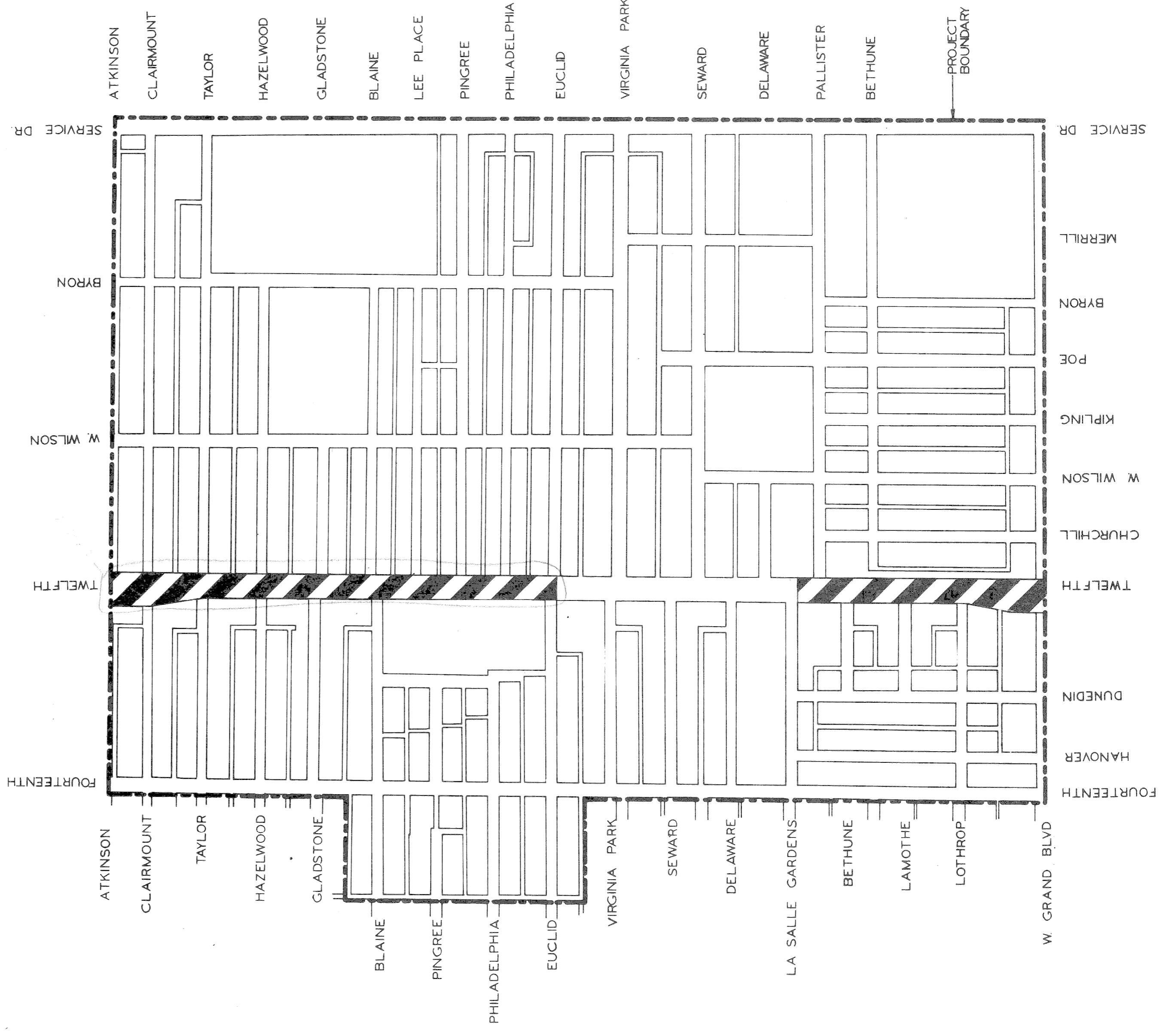
CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 CITY ENGINEERS OFFICE

PLANS FOR PROPOSED

TWELFTH STREET WIDENING
 W. GRAND BLVD. TO ATKINSON *LA SALLE GARDENS*

VIRGINIA PARK N.D.P. MICH. A-4-2
 FOR

COMMUNITY DEVELOPMENT COMMISSION

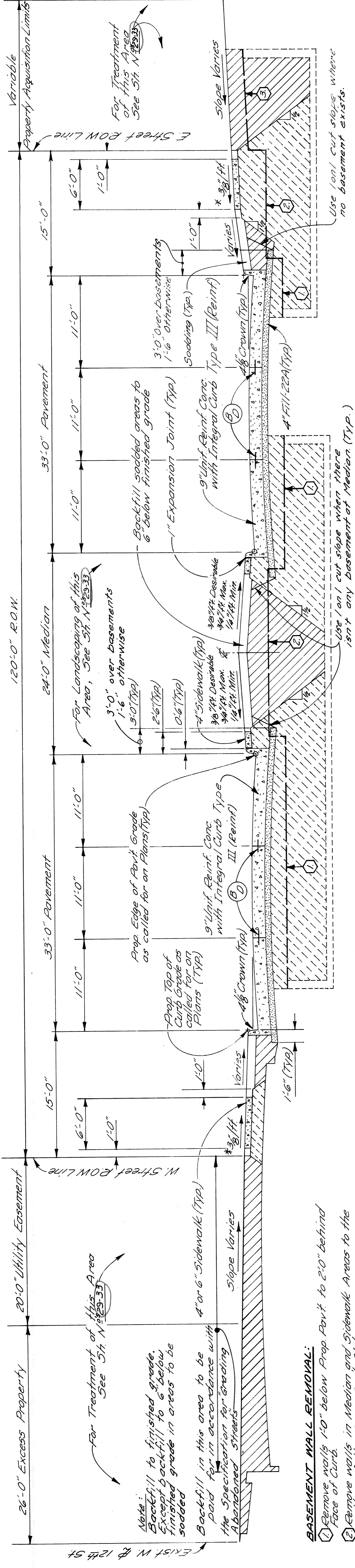


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4	ALIGNMENT
5-6	CONSTRUCTION SEQUENCE
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A.O. 2091

PROJECT	TWELFTH ST. WIDENING W. GRAND BLVD. TO ATKINSON	CONTRACT NO.	P.W. 6549
PLANS PREPARED BY DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE			
RECOMMENDED FOR APPROVAL	ENGINEER OF INSPECTION	DATE	DATE
RECOMMENDED FOR APPROVAL	HIGHWAY ENGINEER	DATE	DATE
APPROVED	ASSOCIATE CITY ENGINEER	DATE	DATE
APPROVED	CITY ENGINEER	DATE	DATE
DATE FEB. 18, 1974			SHEET NO. 1 OF 93



- BASEMENT WALL REMOVAL:**
- 1. Remove walls 1'-0" below Prop Pav't to 2'-0" behind Face of Curb.
 - 2. Remove walls in Median and Sidewalk Areas to the bottom of the Prop. Pav't Slab.
 - 3. Remove walls in areas outside the 120' R.O.W. to 1'-0" below the Prop. Surface Elevations.
- Notes:**
 Backfill to finished grade. Except backfill to 6" below finished grade in areas to be sodded.
 Backfill in this area to be paid for in accordance with the Specification for Graveling Abandoned Streets.
 For Treatment of this Area See 5th Notes.

TYPICAL CROSS-SECTION OF TWELFTH ST. RELOCATION WEST GRAND BLVD. TO ATKINSON LASALLE GARAGES

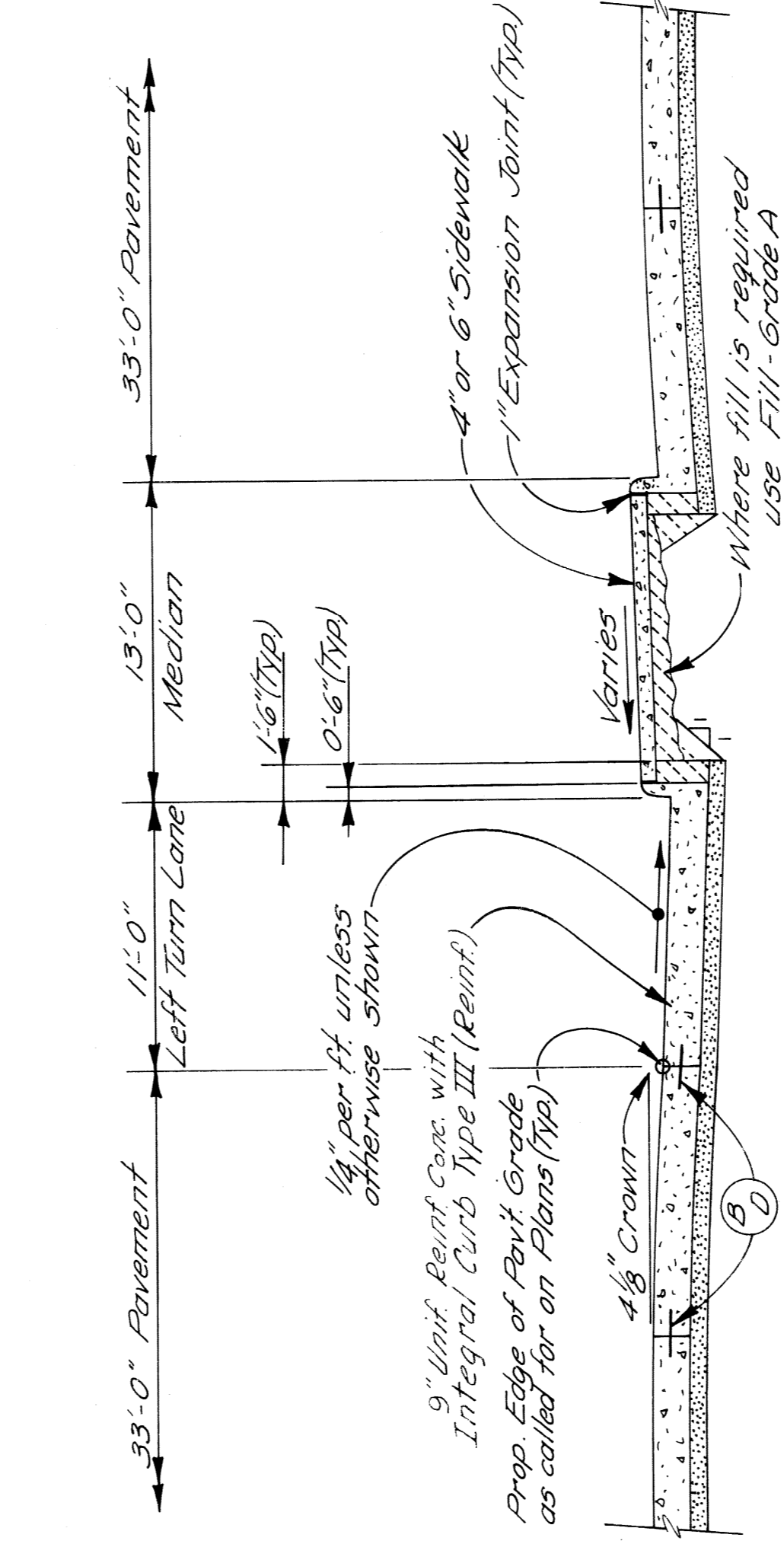
NO SCALE

- EARTHWORK LEGEND**
- Fill - Grade A
 - Fill - 22A
 - Selected Excavated Materials (See Note Below)

- JOINT LEGEND**
- B - Longitudinal Bulkhead Construction Joint
 - D - Longitudinal Lane Tie Joint

PAV'T WIDTH	CURB HEIGHT	X	T	A	B	C	D	E	F	G
33'	7"	4 1/2"	00	5 1/8"	3 3/8"	3 3/8"	2 7/8"	3 3/8"	3 3/8"	5 1/4"

ELEMENTS OF 33' PAVEMENT



TYPICAL CROSS-SECTION OF LEFT TURN LANE

NO SCALE

- NOTES:**
- If the excavated material is in insufficient quantities for backfilling basements, or does not meet the specified requirements, suitable fill material shall be furnished at no additional cost. 2.00
 - Approximately 2500 cu. yds. of Selected Excavated Material will be required for this contract.

APPROVED: *[Signature]*
 ENGINEER OF EXPRESSWAYS

DESIGNED BY: M. P.
 DRAWN BY: R. B. P.
 CHECKED BY:
 FINAL REVIEW:

NO.	DESCRIPTION	DATE

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

TWELFTH STREET WIDENING
 WEST GRAND BLVD. TO ATKINSON LASALLE GARAGES
 TYPICAL CROSS - SECTIONS

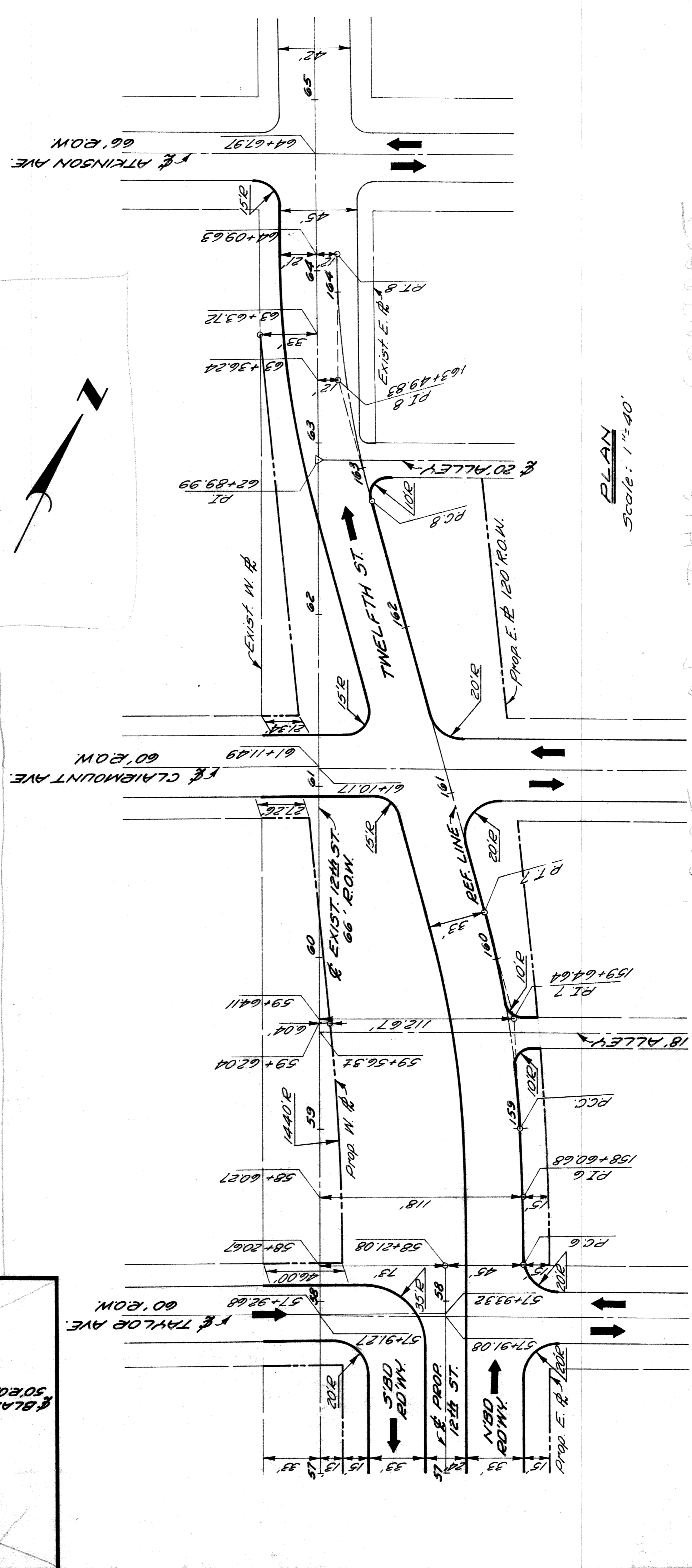
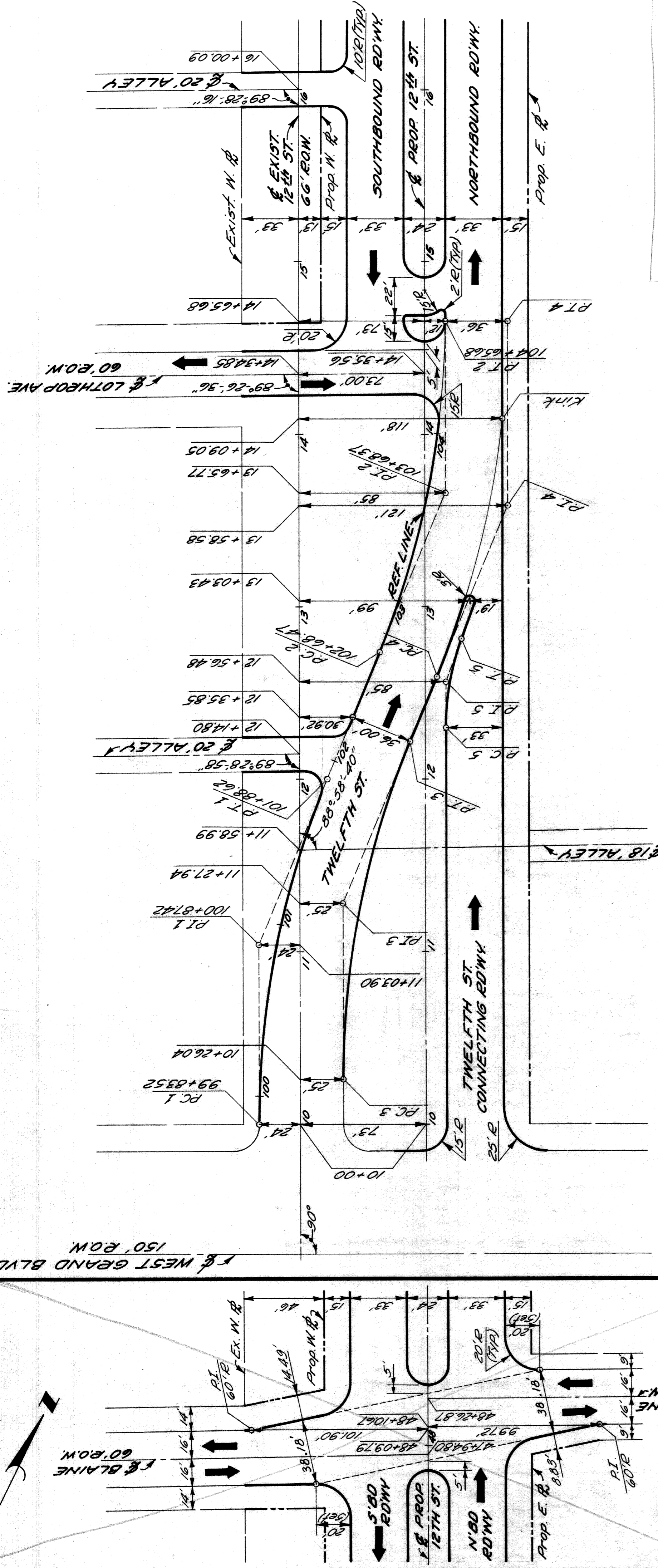
SHEET 3 OF 93 SHEETS
 CONTRACT No. PW 6549
 ASSIGNMENT No. A.O.2091
 DATE 2-18-74

TWELFTH ST. CURVE DATA

Curve 1	Curve 2	Curve 3	Curve 4	Curve 5
$\Delta = 22^{\circ} 35' 54.4''$	$\Delta = 22^{\circ} 35' 54.4''$	$\Delta = 22^{\circ} 35' 54.4''$	$\Delta = 22^{\circ} 35' 54.4''$	$\Delta = 20^{\circ} 06' 41.4''$
$D = 11^{\circ} 01' 06.3''$	$D = 11^{\circ} 01' 06.3''$	$D = 11^{\circ} 01' 06.3''$	$D = 11^{\circ} 01' 06.3''$	$D = 38^{\circ} 11' 49.8''$
$R = 500'$	$R = 500'$	$R = 500'$	$R = 500'$	$R = 150'$
$T = 89.90'$	$T = 89.90'$	$T = 89.90'$	$T = 89.90'$	$T = 26.60'$
$L = 197.21'$	$L = 197.21'$	$L = 197.21'$	$L = 197.21'$	$L = 52.65'$
$E = 9.88'$	$E = 9.88'$	$E = 9.88'$	$E = 9.88'$	$E = 2.34'$
$PC = 102+68.47$	$PC = 102+68.47$	$PC = 102+68.47$	$PC = 102+68.47$	$PC = 102+68.47$
$PT = 103+68.37$	$PT = 103+68.37$	$PT = 103+68.37$	$PT = 103+68.37$	$PT = 103+68.37$
$PI = 104+65.68$	$PI = 104+65.68$	$PI = 104+65.68$	$PI = 104+65.68$	$PI = 104+65.68$

Curve 6	Curve 7	Curve 8
$\Delta = 5^{\circ} 56' 11.3''$	$\Delta = 12^{\circ} 14' 55.3''$	$\Delta = 14^{\circ} 45' 01.6''$
$D = 9^{\circ} 42' 30.5''$	$D = 9^{\circ} 42' 30.5''$	$D = 10^{\circ} 06' 18.3''$
$R = 1545'$	$R = 600'$	$R = 567'$
$T = 39.60'$	$T = 64.39'$	$T = 73.39'$
$L = 79.81'$	$L = 128.27'$	$L = 145.97'$
$E = 0.97'$	$E = 9.44'$	$E = 4.73'$
$PC = 159+210.8$	$PC = 159+210.8$	$PC = 162+76.44$
$PT = 159+64.04$	$PT = 159+64.04$	$PT = 163+69.83$
$PI = 160+28.53$	$PI = 160+28.53$	$PI = 164+22.41$

NOT A PART OF THIS CONTRACT

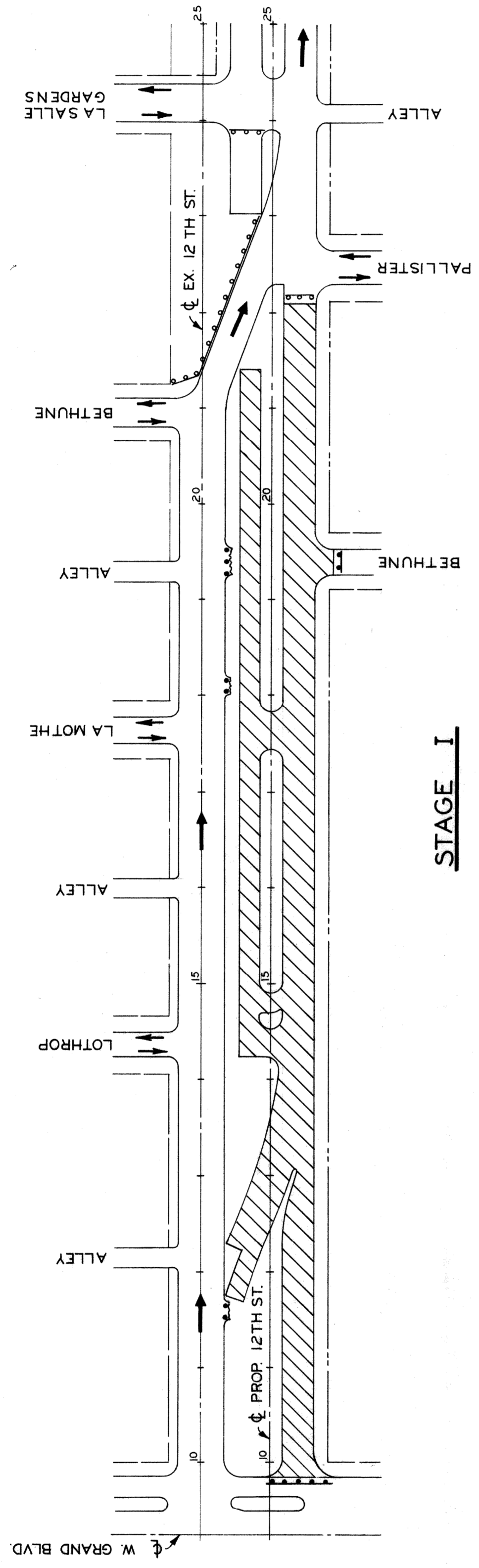


DESIGNED BY	ENGINEER OF EXPRESSWAYS	APPROVED	CITY OF DETROIT
DRAWN BY	M.A.P.	ENGINEER OF PUBLIC WORKS	DEPARTMENT OF PUBLIC WORKS
TRACED BY		CITY ENGINEERS OFFICE	
CHECKED BY	R.A.C.	FOR	COMMUNITY DEVELOPMENT COMMISSION
DESCRIPTION	TWELFTH STREET WIDENING WEST GRAND BLVD. TO ATKINSON		
DATE	2-18-74		
REVISIONS LOCATED BY COORDINATES ON SHEET			
CONTRACT NO.	P.W.6549		
ASSIGNMENT NO.	A.O.2091		
SHEET NO.	4 OF 93		

LEGEND

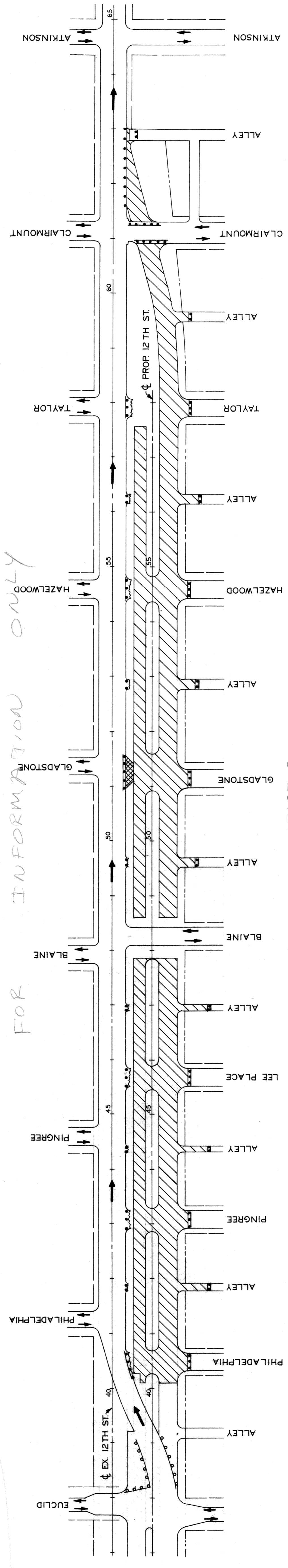
- PERMANENT PAVEMENT
- TEMPORARY PAVEMENT (8" UNIF. - NON REINF.)
- TEMP. SINGLE BEAM BARRI. BARRICADE (INCIDENTAL)
- BARRI. BARRICADE (INCIDENTAL)
- SINGLE BEAM BARRI. BARRICADE (EXISTING)
- PROPOSED CONCRETE CURB

*NOTE: 10
Approximately 20 Best Cures will be needed for this contract.*

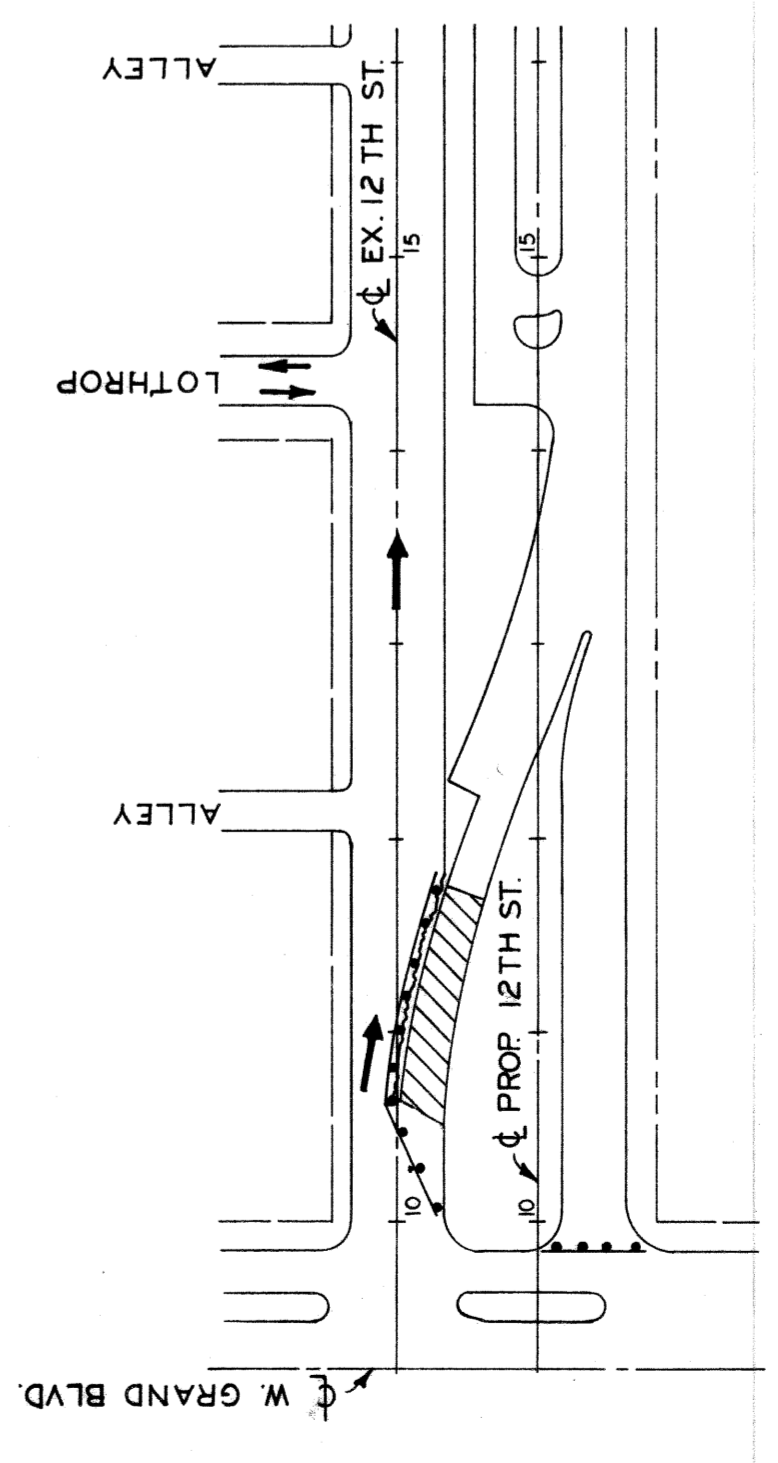


STAGE I

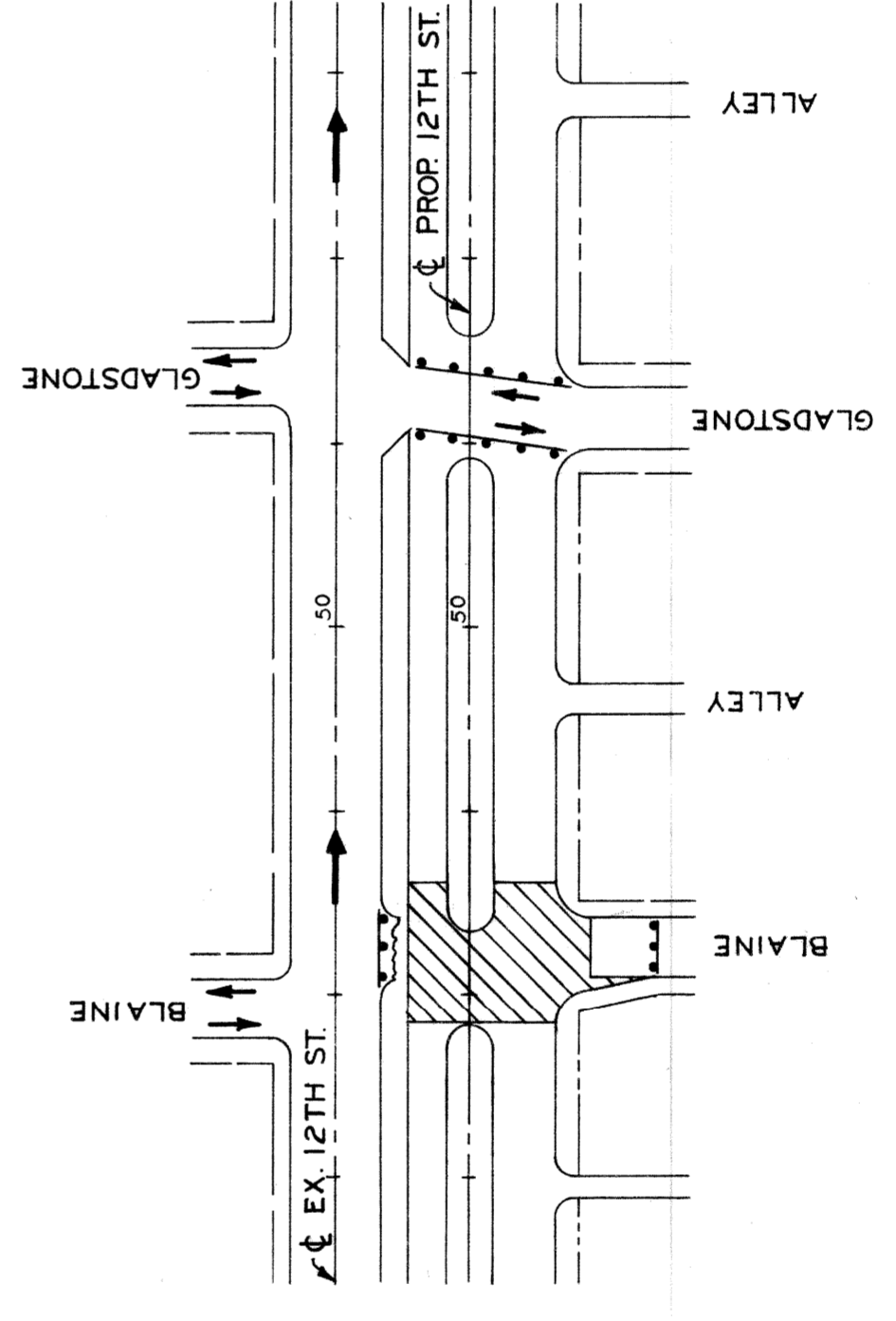
FOR INFORMATION ONLY



STAGE I

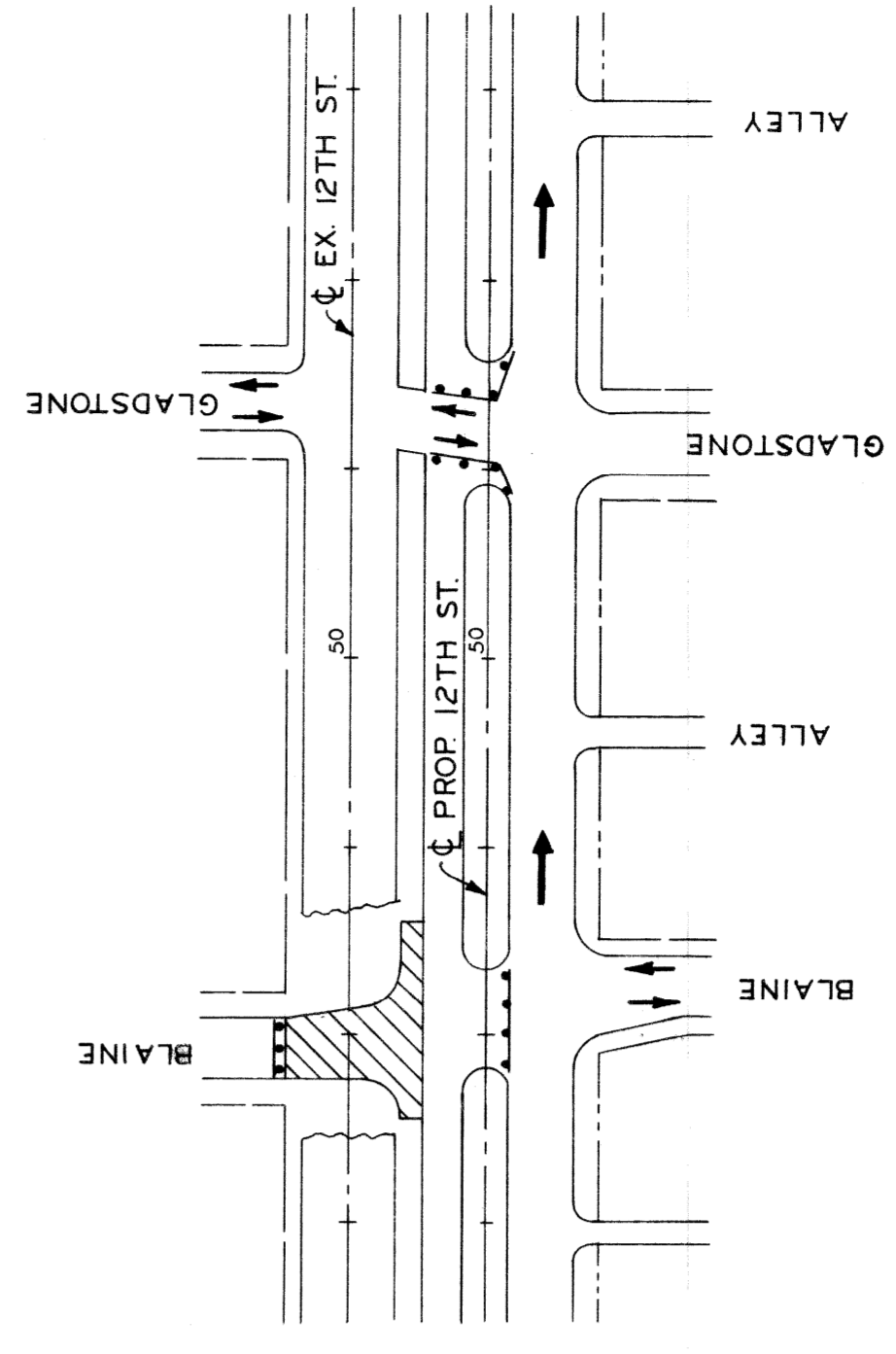


STAGE II



STAGE II

FOR INFORMATION ONLY

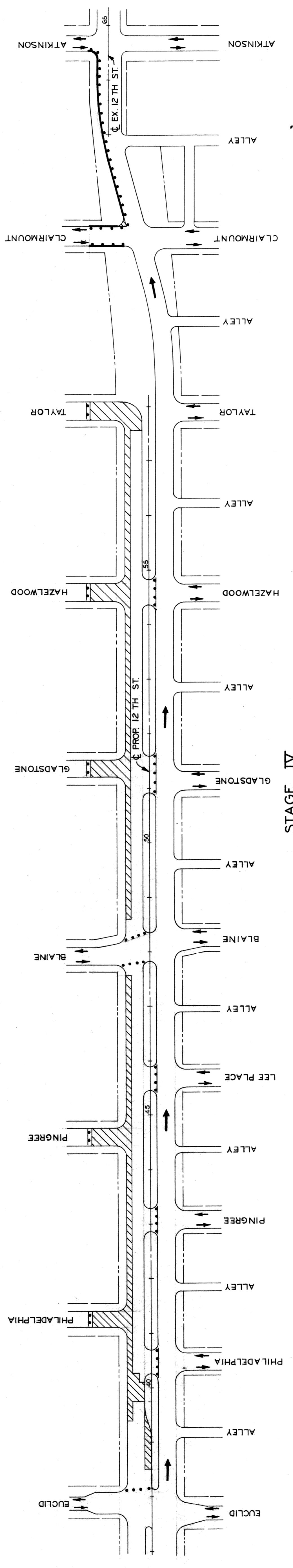
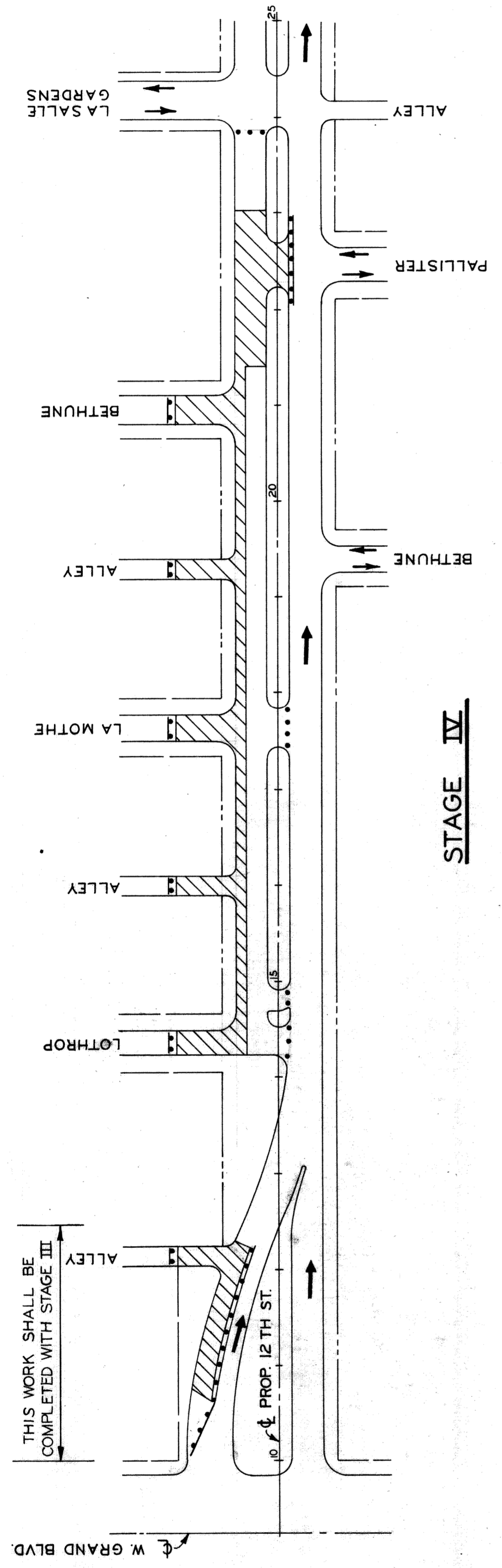
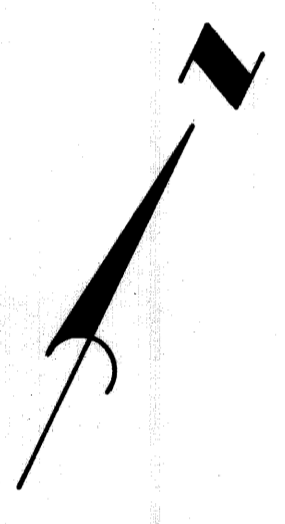


STAGE III

FOR INFORMATION ONLY

SHEET 5 OF 93 SHEETS CONTRACT NO. PW.6549 ASSIGNMENT No. AO.2091 DATE 2-18-74		CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION		TWELFTH STREET WIDENING WEST GRAND BLVD. TO ATKINSON KASALE GARDENS CONSTRUCTION SEQUENCE	
DESIGNED BY	M.A.P.	APPROVED	ENGINEER OF EXPRESSWAYS		
DRAWN BY					
TRACED BY					
CHECKED BY	R.A.C.				
DESCRIPTION					
REVISIONS LOCATED BY COORDINATES ON SHEET					

BRUNING 88714

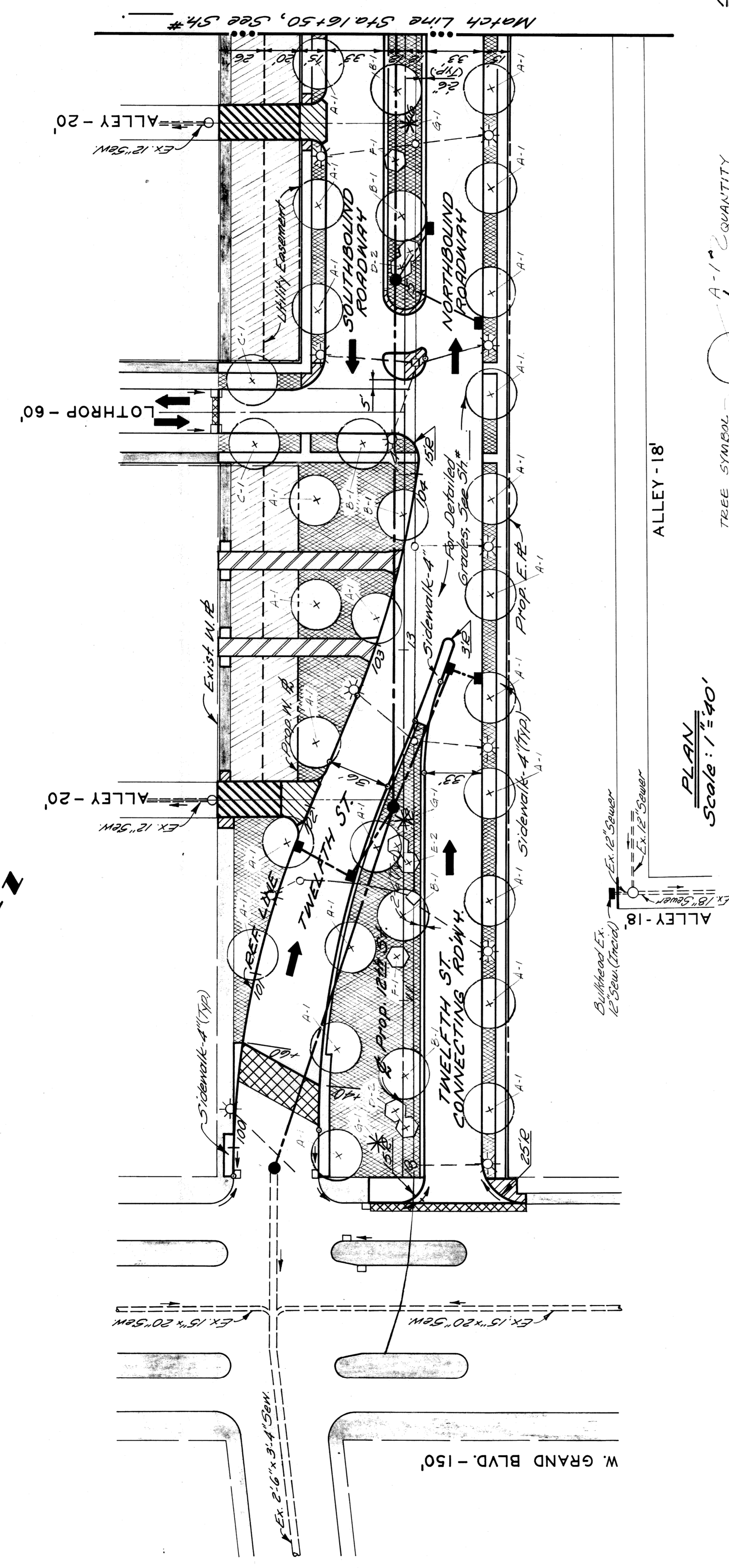
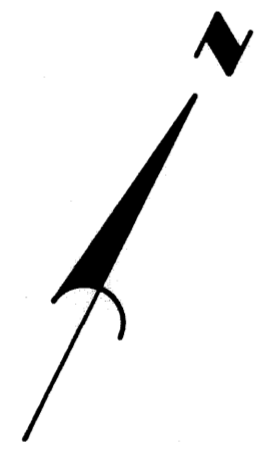


FOR INFORMATION ONLY

NOTE:
 For Legend, See Sh #5.

SHEET 6 OF 93 SHEETS		CONTRACT No. P.W. 6549		ASSIGNMENT No. A.O. 2091		DATE 2-18-74	
CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION				TWELFTH STREET WIDENING WEST GRAND BLVD. TO ATKINSON			
DESIGNED BY M.A.P.				APPROVED: ENGINEER OF EXPRESSWAYS			
DRAWN BY				TRACED BY			
CHECKED BY R.A.C.				CONSTRUCTION SEQUENCE			
DESCRIPTION	DATE	BY	NO.	NO.	DATE	NO.	NO.
REVISIONS LOCATED BY COORDINATES ON SHEET							

RBM #31-251B ELEV. 151.069 N.E. Corner W. Grand Blvd. & Twelfth St.
 C.B.M. Elev. 155.32 Arrow of Highway at Highway S.W. Corner Twelfth & Lothrop.



LEGEND FOR LANDSCAPE IMPROVEMENTS

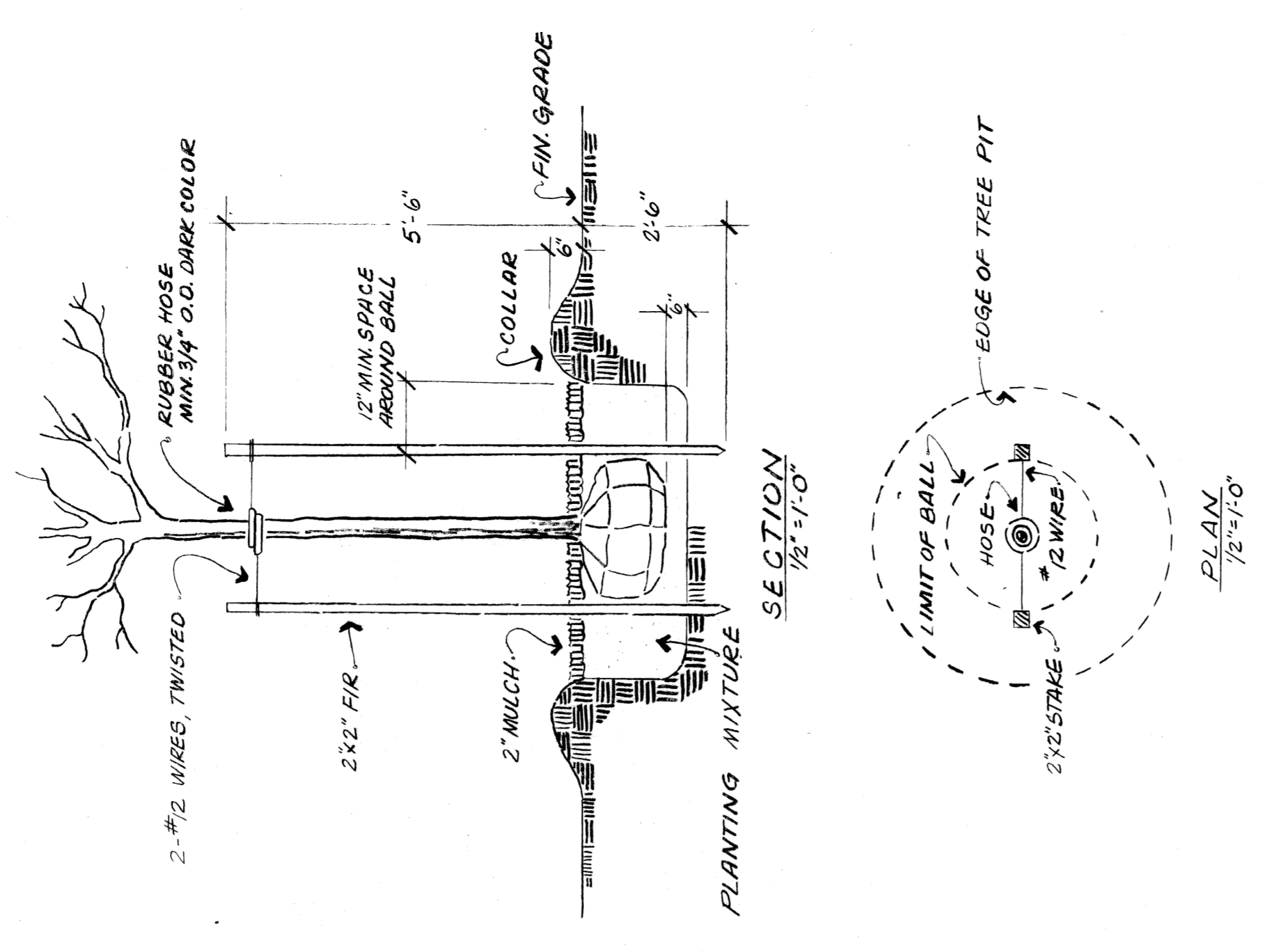
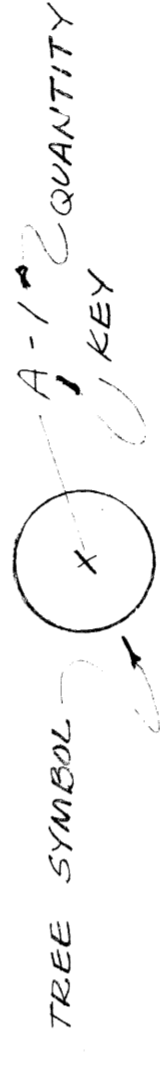
SYMBOL	DESCRIPTION
[Square]	CONCRETE PLANTER BOX (13)
[Hatched Box]	SEEDED LAWN
[Dotted Box]	SODDED LAWN
[Circle with 'x']	SHADE TREE (141)
[Circle with 'o']	ORNAMENTAL TREE (63)
[Star]	EVERGREEN TREE (18)

PLANT MATERIALS LIST

KEY	QUANT.	PLANT NAME	MIN. SIZE	ROOT
A	108	TILIA CORDATA GREENSPIRE	3-3 1/2" CAL.	84B
B	37	GYMNOCEDRUS DIGNUS	3-3 1/2" CAL.	84B
C	4	KENTUCKY COFFEE TREE	3-3 1/2" CAL.	84B
D	29	ACER PLATANOIDES	2-2 1/2" CAL.	84B
E	24	MALUS FLORIBUNDA	2-2 1/2" CAL.	84B
F	16	MALUS SCHIEDECKERI	2-2 1/2" CAL.	84B
G	13	CRATAEGUS PHAENOPYRUM	2-2 1/2" CAL.	84B
		WASHINGTON HAWTHORN		
		PICEA PUNGENS		
		COLORADO SPRUCE		

PLAN Scale: 1" = 40'

ALLEY - 18'



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

NOTES:

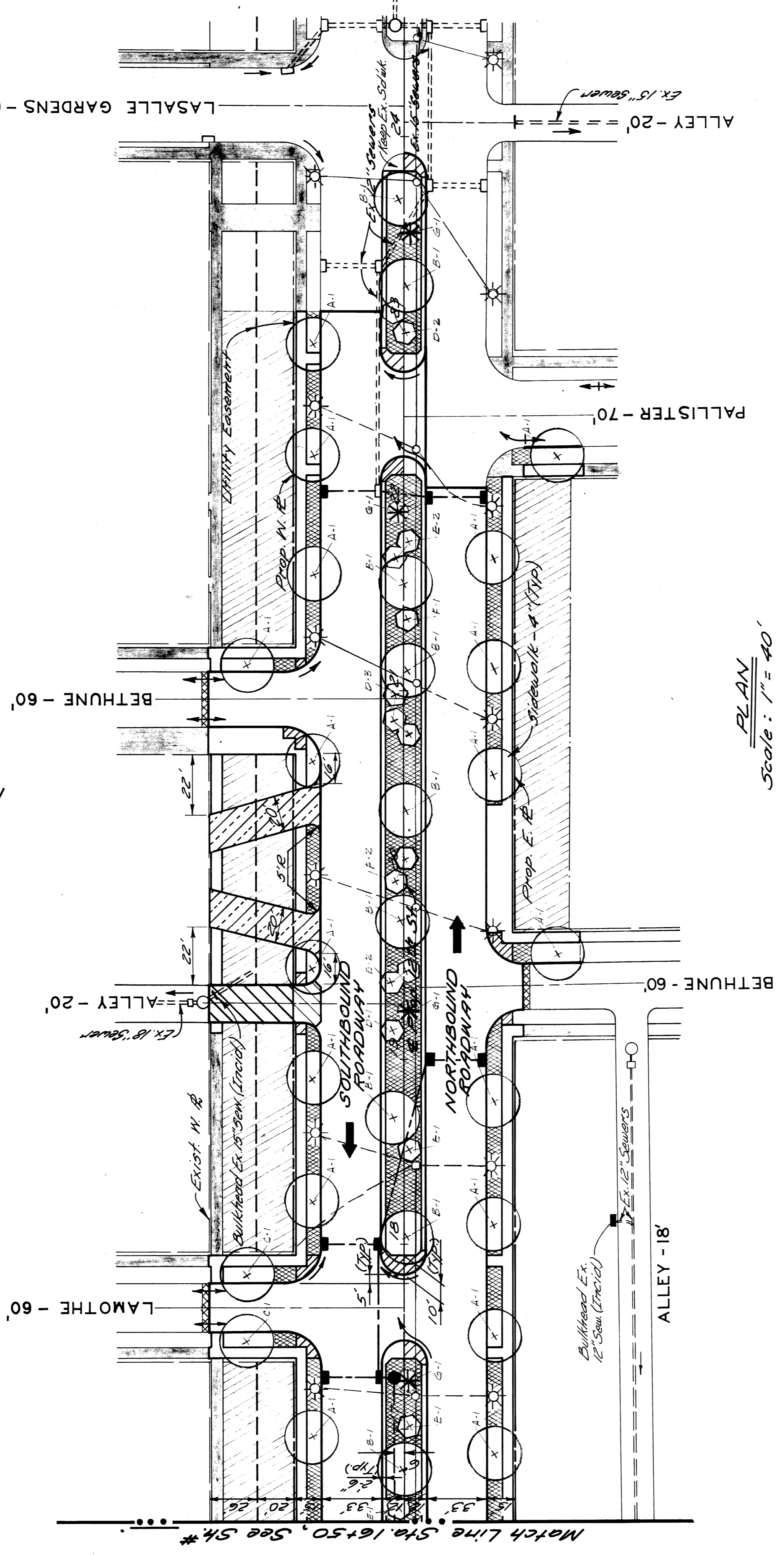
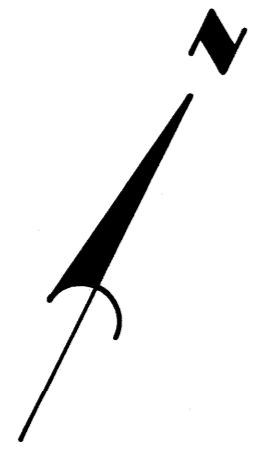
1. All proposed street return radii are 20' unless otherwise noted.
2. For utility adjustments or reconstructions, see 5th #
3. For alignment, see 5th #

<p>CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION</p>	<p>TWELFTH STREET WIDENING WEST GRAND BLVD. TO ATKINSON PLAN, LANDSCAPE CONSTRUCTION</p>
<p>DESIGNED BY: wpe DRAWN BY: TRACED BY: CHECKED BY:</p>	<p>APPROVED: ENGINEER OF EXPRESSWAYS</p>
<p>REVISIONS LOCATED BY COORDINATES ON SHEET</p>	<p>REFERENCE DRAWINGS</p>
<p>SHEET _____ OF _____ SHEETS</p>	<p>CONTRACT NO. P.W.6549</p>
<p>ASSIGNMENT NO. AO.2091</p>	<p>DATE</p>

C.B.M. Elev. 15500 Borrow on Hydrant
S.W. Corner Twelfth & Lamotte.

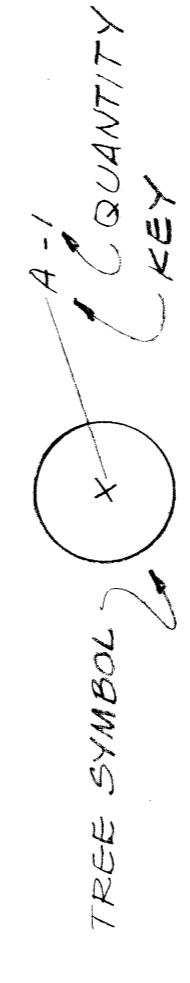
C.B.M. Elev. 15626 Borrow on Hydrant
N.W. Corner Twelfth & Bethune.

C.B.M. Elev. 15597 Borrow on Hydrant
S.W. Corner Twelfth & Lasalle Gardens.



NOTES:

PLAN
Scale: 1" = 40'



PLANT MATERIALS LEGEND

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

SHEET _____ OF _____ SHEETS CONTRACT No. P.W. 6549 ASSIGNMENT No. A.O. 2091 DATE _____	TWELFTH STREET WIDENING WEST GRAND BLVD. TO ATKINSON PLAN, LANDSCAPE CONSTRUCTION
APPROVED: ENGINEER OF EXPRESSWAYS	DESIGNED BY: WJB DRAWN BY: TRACED BY: CHECKED BY:
REFERENCE DRAWINGS:	REVISIONS LOCATED BY COORDINATES ON SHEET:

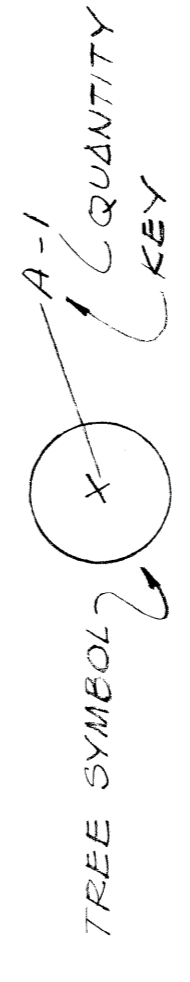
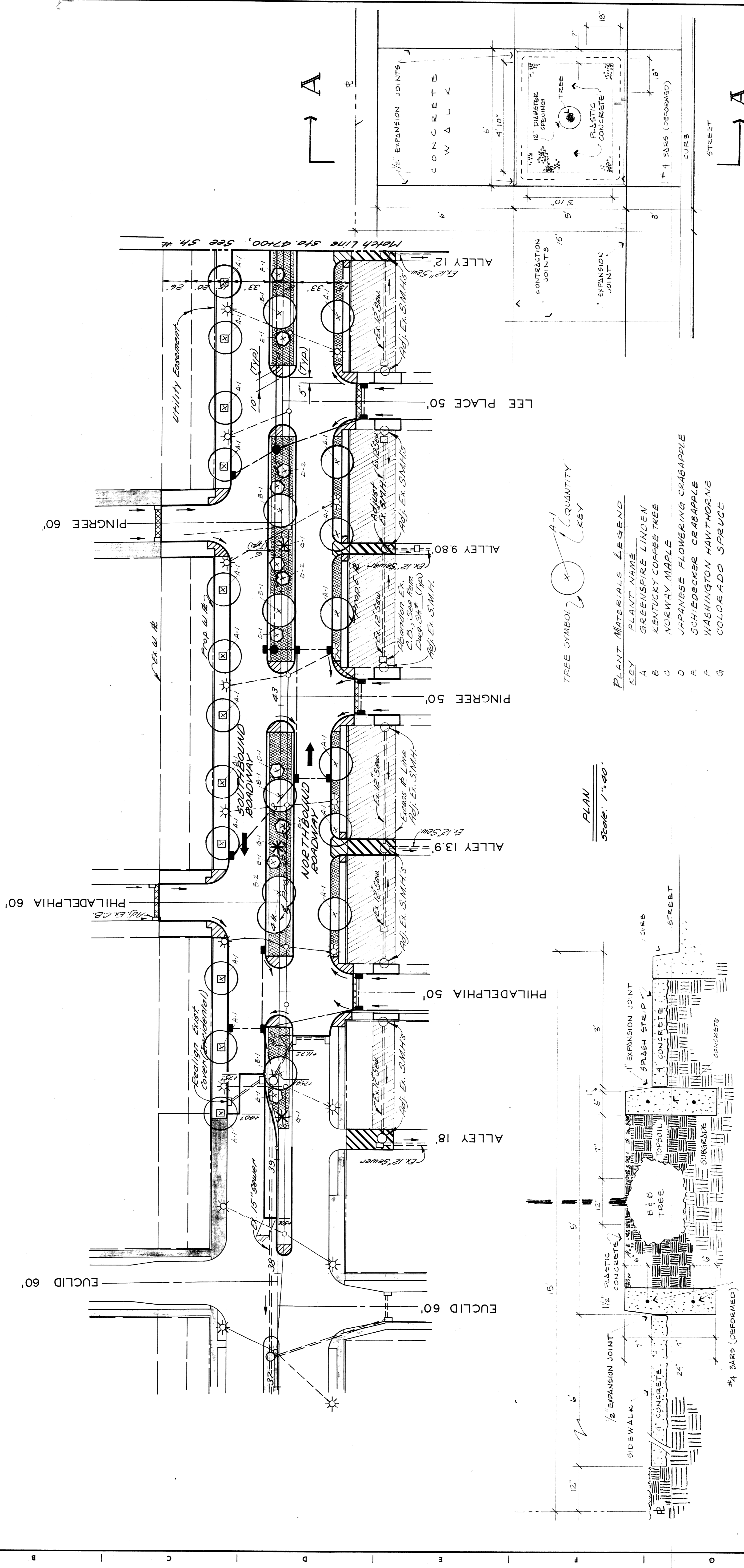
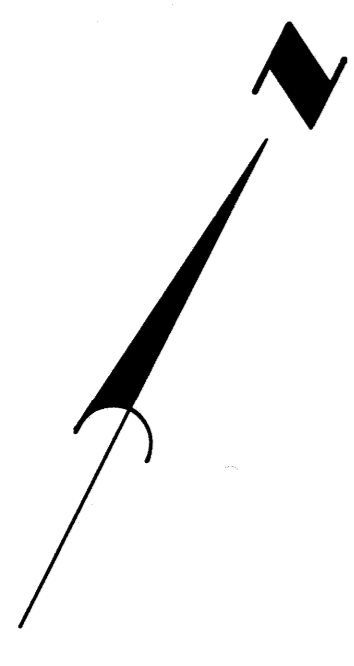
P.B.M. # 32,250 Elev. 152.80 N.E. Corner 12th St at Euclid Ave.

C.B.M. Elev. 156.14 Arrow on Hydrant N.W. Corner 12th St at Philadelphia.

C.B.M. Elev. 157.65 Arrow on Hydrant S.W. Corner 12th St at Pingree.

NOTES

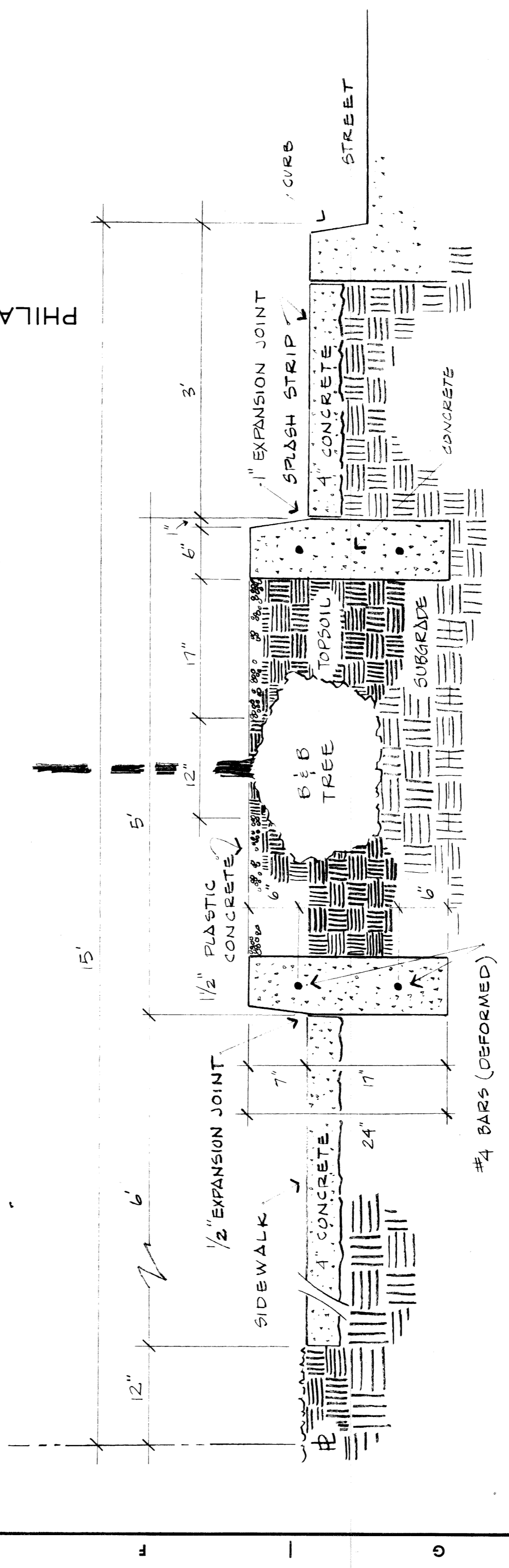
1. All street return radii are 20'.
2. For utility adjustments or reconstruction, See 5th #
3. For Alignment, See 5th #



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

PLAN
Scale: 1" = 40'



PLANTER BOX - SECTION AA
SCALE 1/8" = 1'-0"

PLANTER BOX PLAN
SCALE 1/8" = 1'-0"

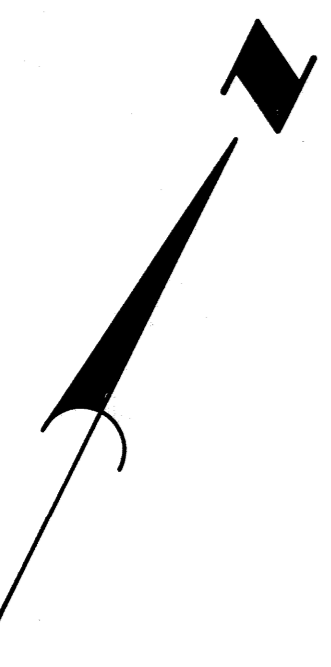
DESIGNED BY	698	APPROVED:	
DRAWN BY		ENGINEER OF EXPRESSWAYS	
TRACED BY			
CHECKED BY			
DESCRIPTION			
REVISIONS LOCATED BY COORDINATES ON SHEET			

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 OF SHEETS CONTRACT No. P.W. 6549 ASSIGNMENT No. A.O. 2091 DATE
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C.B.M. #15 Elev 158.48 Arrow on Hydrant
N.W. Corner Twelfth St. at Taylor Ave.

C.B.M. #16 Elev 157.50 Arrow on Hydrant
S.W. Corner Twelfth St. at Clairmount Ave.

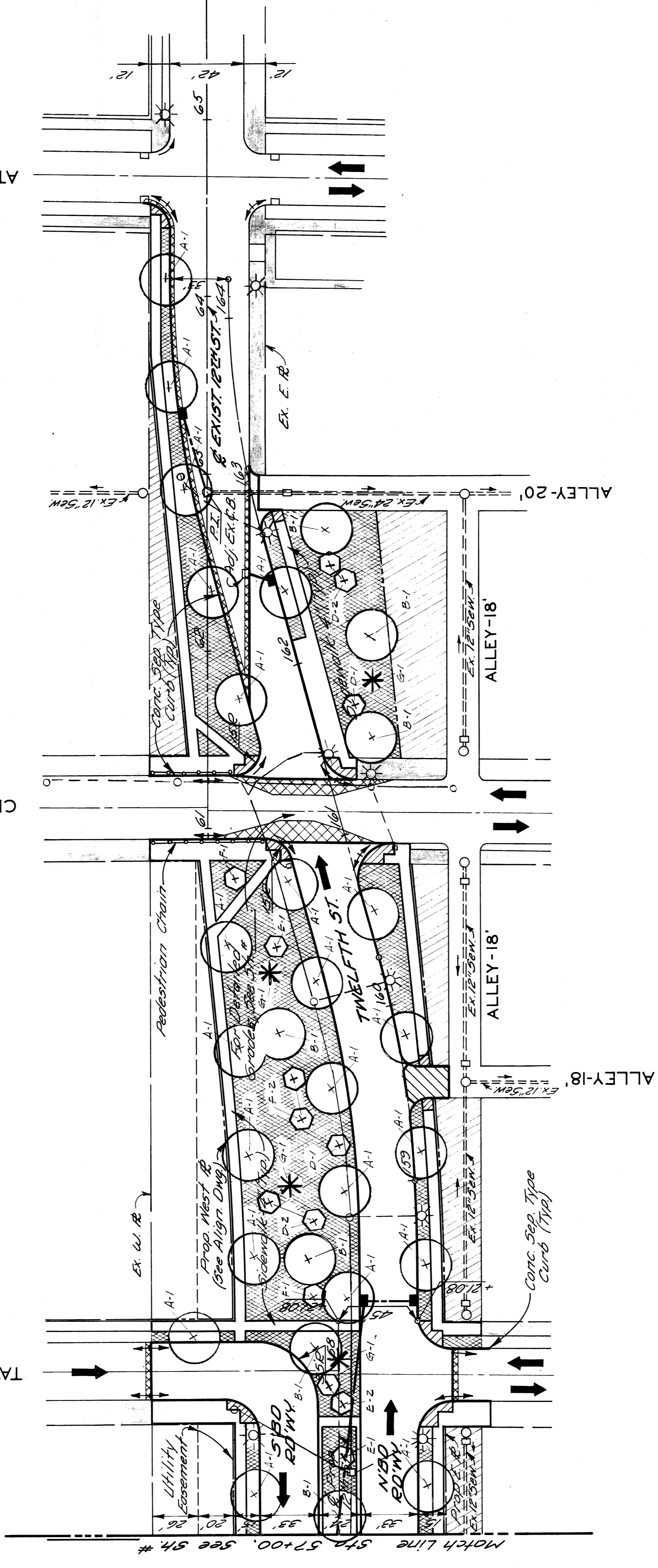
P.B.M. #32-251 Elev 154.99 N.E.
Corner Twelfth St. at Atkinson Ave.



TAYLOR AVE 60'

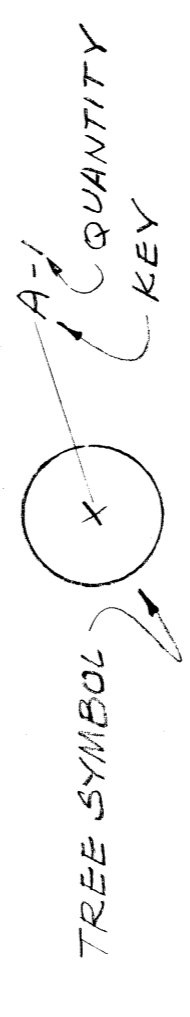
CLAIRMOUNT AVE 60'

ATKINSON AVE 66'



NOTES:

1. All proposed street return radii are 20' unless otherwise noted.
2. For utility adjustments or reconstruction, see Sht. #
3. For Alignment, see Sht. #



PLAN
Scale 1"=40'

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

SHEET ___ OF ___ SHEETS CONTRACT NO. P.W.6549 ASSIGNMENT No. A.O.2091 DATE		TWELFTH STREET WIDENING WEST GRAND BLVD. TO ATKINSON PLAN, LANDSCAPE CONSTRUCTION	
CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE FOR COMMUNITY DEVELOPMENT COMMISSION		APPROVED: ENGINEER OF EXPRESHWAYS DESIGNED BY: WJB DRAWN BY: TRACED BY: CHECKED BY:	
REFERENCE DRAWINGS	REVISIONS LOCATED BY COORDINATES ON SHEET	1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10 11