

CITY OF DETROIT
 DEPARTMENT OF PUBLIC WORKS
 CITY ENGINEERS OFFICE

PLANS FOR PROPOSED

WIDENING AND RESURFACING

OF

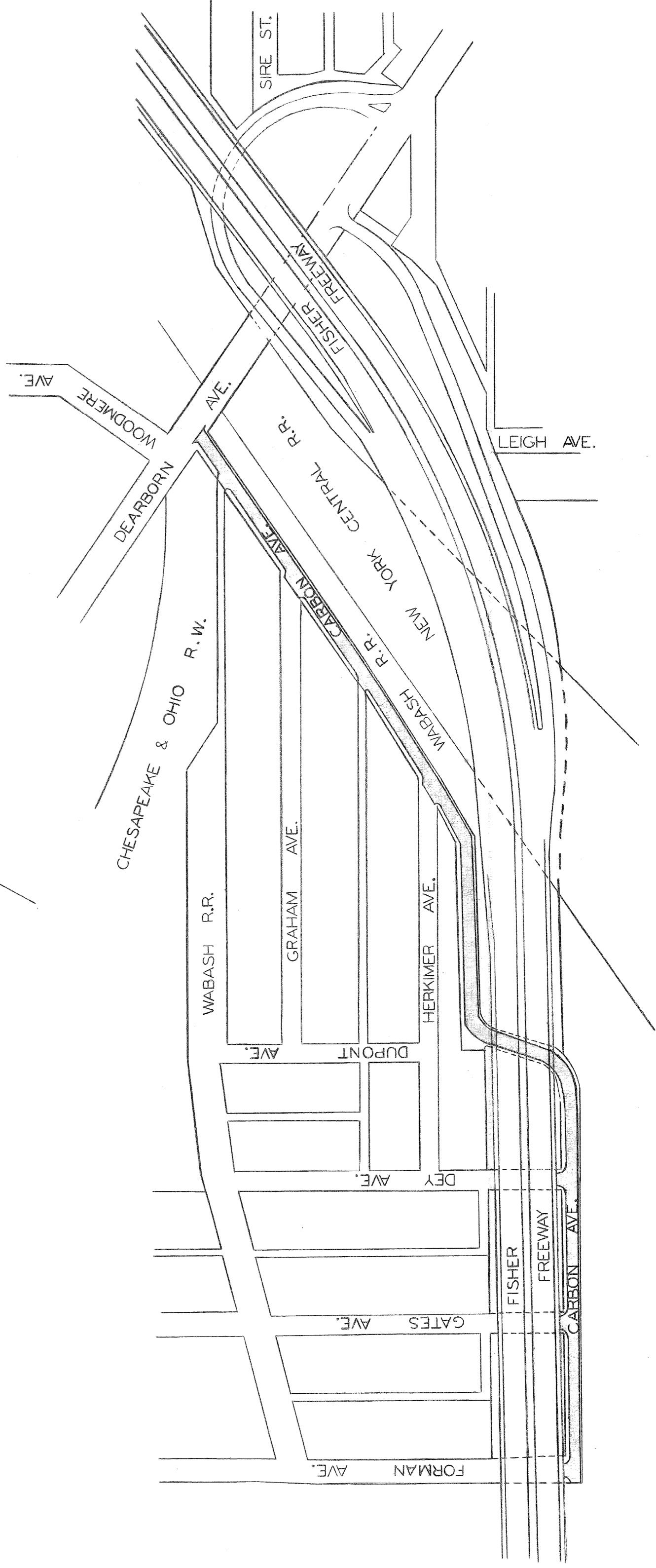
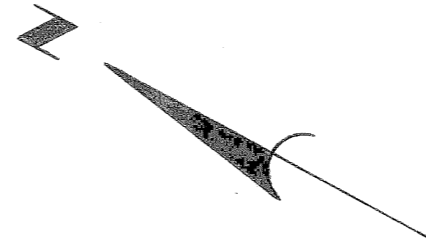
CARBON AVENUE
 FROM FORMAN AVE.
 TO DEARBORN AVE.

FOR

DEPARTMENT OF PUBLIC WORKS

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 TYPICAL CROSS-SECTIONS AND QUANTITIES
- 3 REMOVAL AND UTILITY PLAN
- 4-6 ALIGNMENT, PLAN AND PROFILE



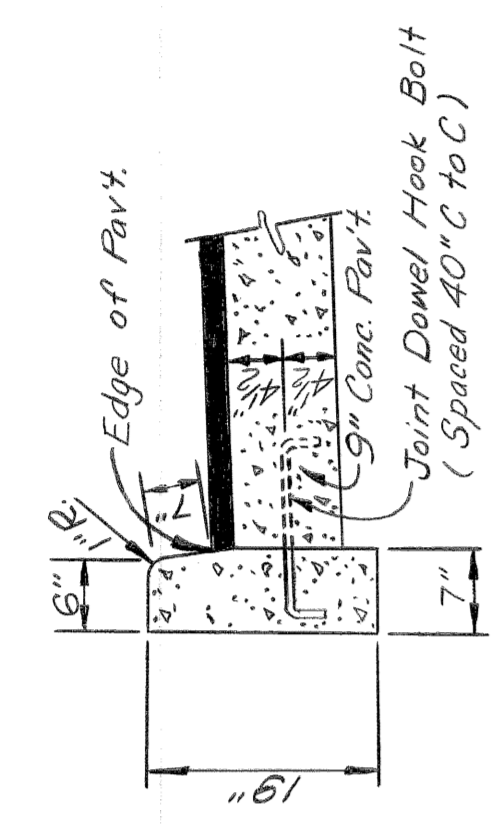
PROJECT: WIDENING AND RESURFACING OF CARBON AVENUE FROM FORMAN AVE. TO DEARBORN AVE.		CONTRACT NO. PW 5780 JOB NO AO-1921	
PLANS PREPARED BY DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE			
RECOMMENDED FOR APPROVAL	<i>R. C. Mowbray</i>	12-8-69	
RECOMMENDED FOR APPROVAL	<i>R. R. Hicks</i>	12-8-69	
APPROVED	<i>Edward Brarducci</i>	12-10-69	
APPROVED		12-10-69	
DATE	DECEMBER 8, 1969	DRWG. NO. 1	

ITEMS	Quantity & Pay Unit
Excavation	1,033 Cu. Yds.
Berm Grading	203 Sq. Yds.
Relocate 4' Chain Link Fence	318 Lin. Ft.
Sidewalk Removal	1,625 Sq. Ft.
Separate Type Curb Removal - Reinforced	908 Lin. Ft.
Separate Type Curb Removal - Unreinforced	1,750 Lin. Ft.
Reinforced Concrete Removal	7 Cu. Yds.
Resetting Manholes	17 Each
Manhole Adapters	8 Each
Resetting Stop Boxes	4 Each
Resetting Catch Basins - All Types	9 Each
Rebuilding Catch Basins	1 Each
Semi-Rebuild Catch Basin	1 Each
Manhole - Adjustment	2 Each
Catch Basin - New	7 Each
Catch Basin - Special Abandonment	7 Each
Sewers Under Pavement - 12" Extra Strength Clay Pipe or Reinforced Conc. Pipe, C-76-IV	50 Lin. Ft.
9" concrete Base Pavement (Unreinforced)	1,182 Sq. Yds.
Remove Existing Concrete Base	10 Sq. Yds.
Replacement Conc. Base with Grade 4" Conc.	10 Sq. Yds.
Clean and Condition Existing Surface	5,741 Sq. Yds.
Stripping	112 Sq. Yds.
Strip Existing Brick	9 Sq. Yds.
Separate Curb - Type II (Modified)	2,788 Lin. Ft.
4" Sidewalk	1,594 Sq. Ft.
Top Soil	28 Cu. Yds.
Sodding	203 Sq. Yds.
Maintaining Traffic	Lump Sum
Bituminous Bond Coat	1,057 Gals.
Resurfacing Mixtures in Place (All Natural Aggregates)	518 Tons
a) Binder Course Mixture - 25A (Mod.)	388 Tons
b) Wearing Surface Mixture - 31A	
OR	
Resurfacing Mixtures in Place (All Slag Aggregates)	475 Tons
a) Binder Course Mixture - 25A (Mod.)	
b) Wearing Surface Mixture - 31A	366 Tons

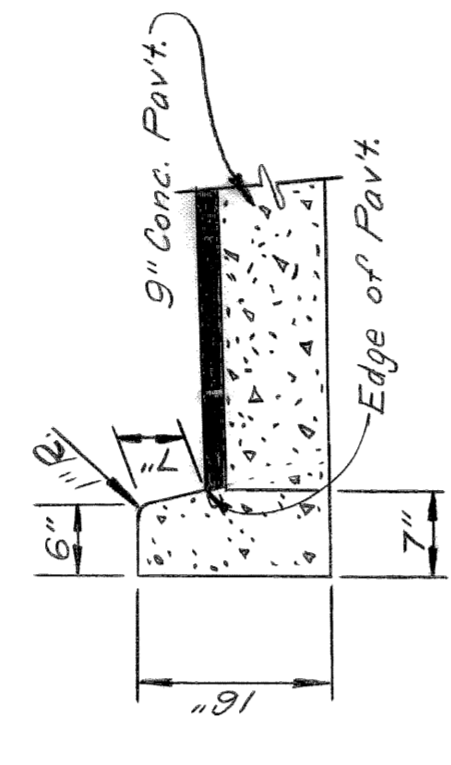
* An additional 50 Lin. Ft. has been included in each of these quantities to repair existing curb on the north side of Carbon Ave. where directed by the Engineer.

NOTES:

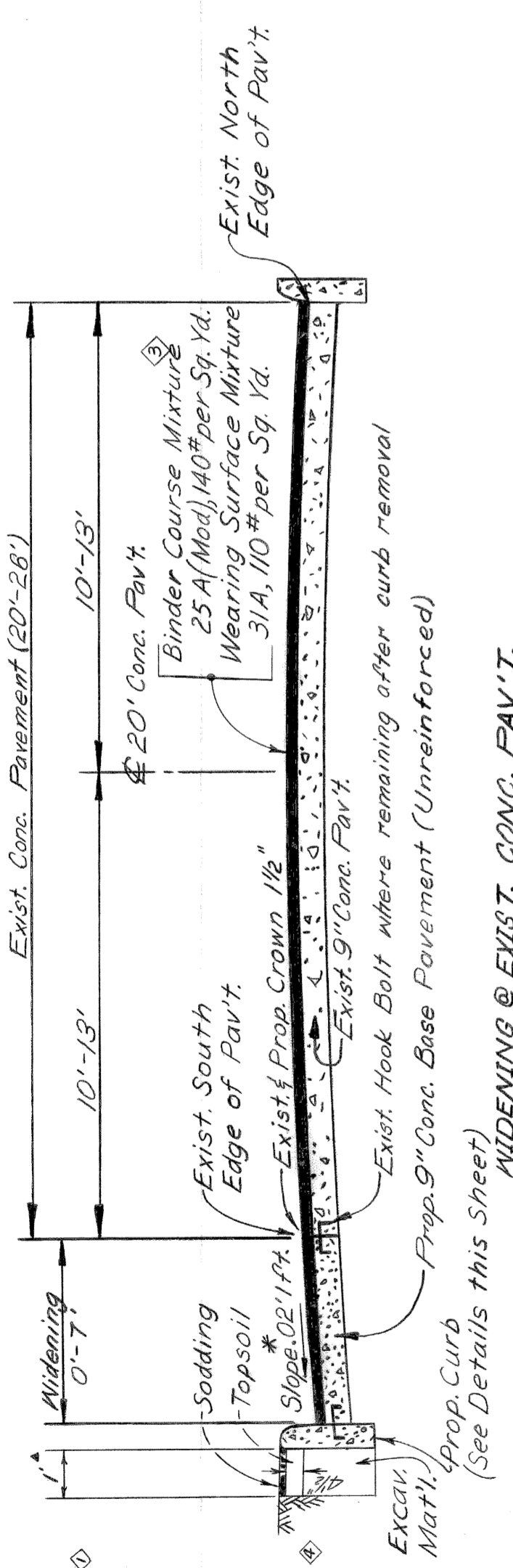
- For the proposed widening of the existing concrete pavement, transverse joints in the widening shall be placed in line with like joints in the existing pavement. Spacing between contraction joints, however, shall not exceed 20' for natural aggregate mixtures and 15' for slag aggregate mixtures.
- For the proposed widening of the existing brick pavement, transverse joints in the widening shall be placed in line with like joints in the existing pavement. However, spacing between expansion joints shall not exceed 600' and spacing between contraction joints shall not exceed 20' for natural aggregate mixtures and 15' for slag aggregate mixtures.
- Maintain a minimum crown of 1/2" by using additional Binder Course Mixture where necessary.
- Regardless of the option selected by the Contractor the pay item shall remain the same as if a separate TYPE II CURB-MODIFIED were constructed.



TYPE II CURB-MODIFIED
No Scale

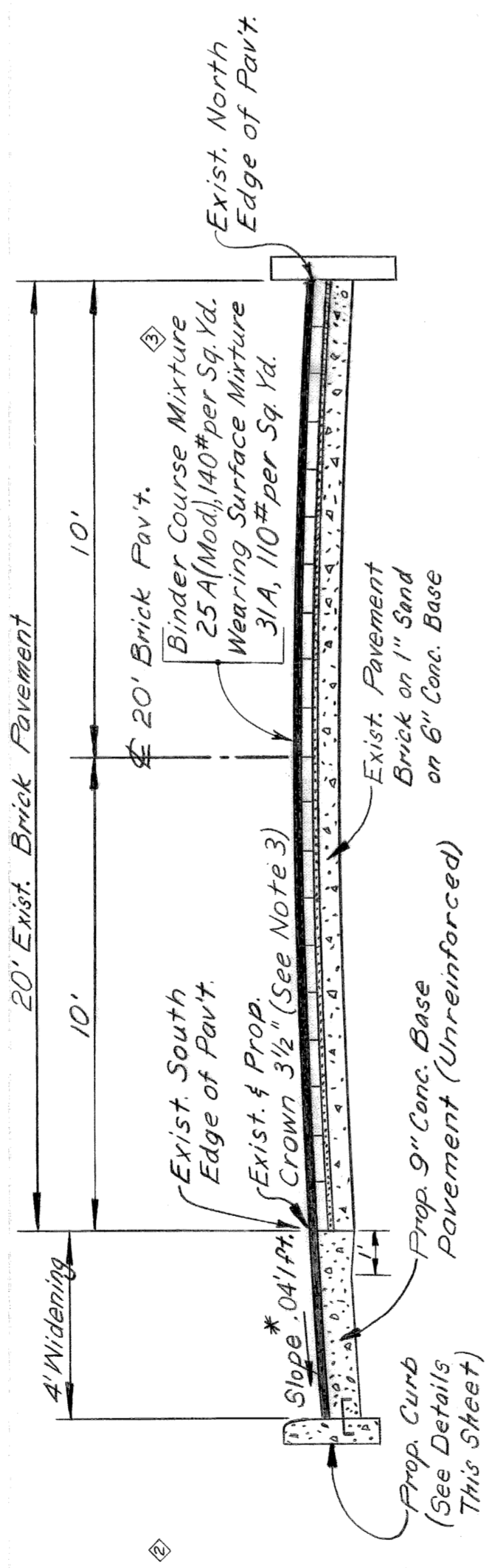


INTEGRAL CURB ALTERNATE
No Scale
See Note #4



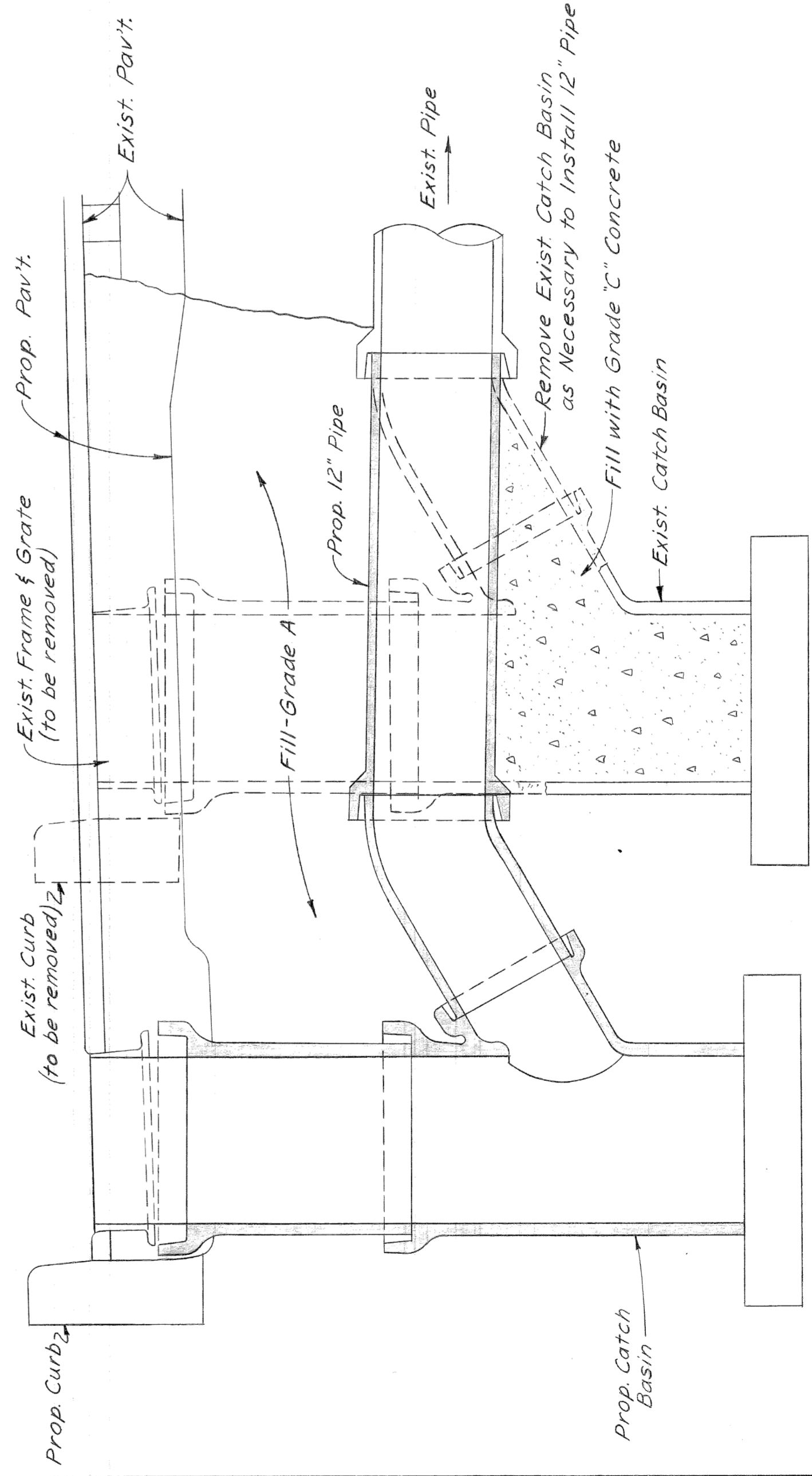
WIDENING @ EXIST. CONC. PAVT.
Scale: 1"=3'

* Berm Grading will be required for this 1' width.

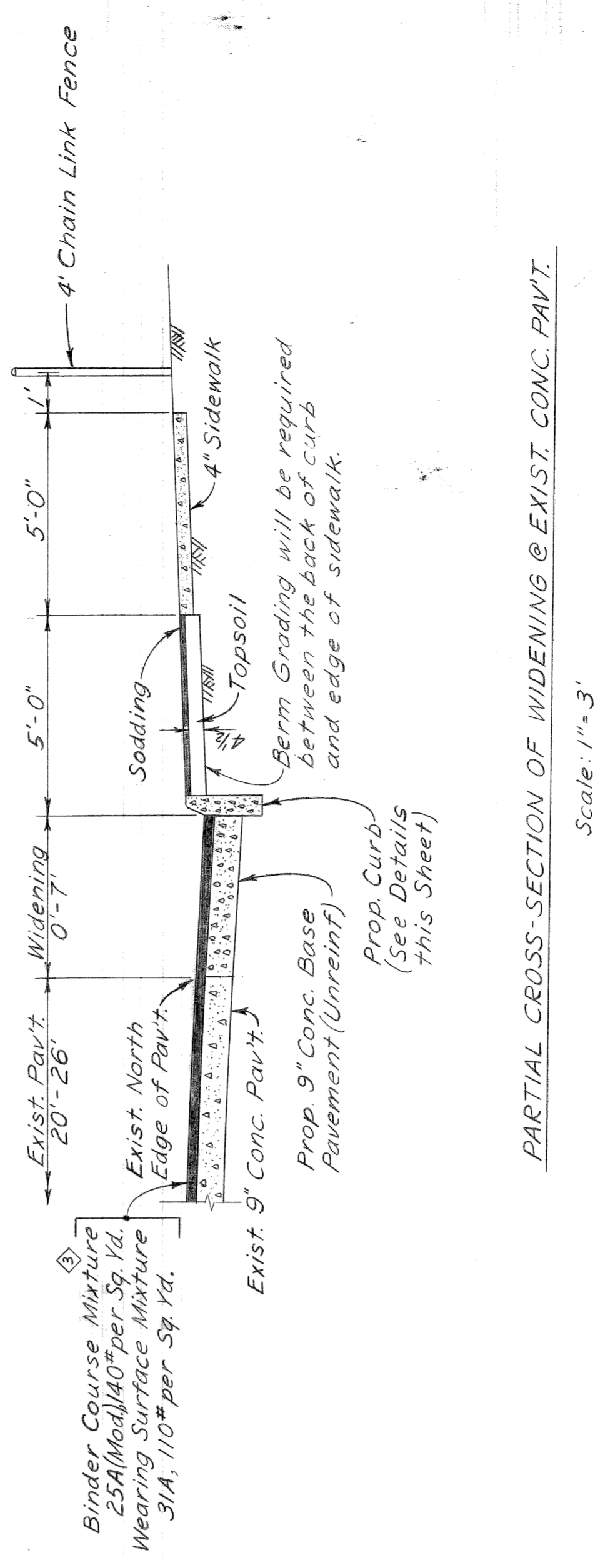


4' WIDENING @ EXIST. BRICK PAVT.
Scale: 1"=3'

* Slope may vary as required to obtain a uniform gutter grade and smooth crown.

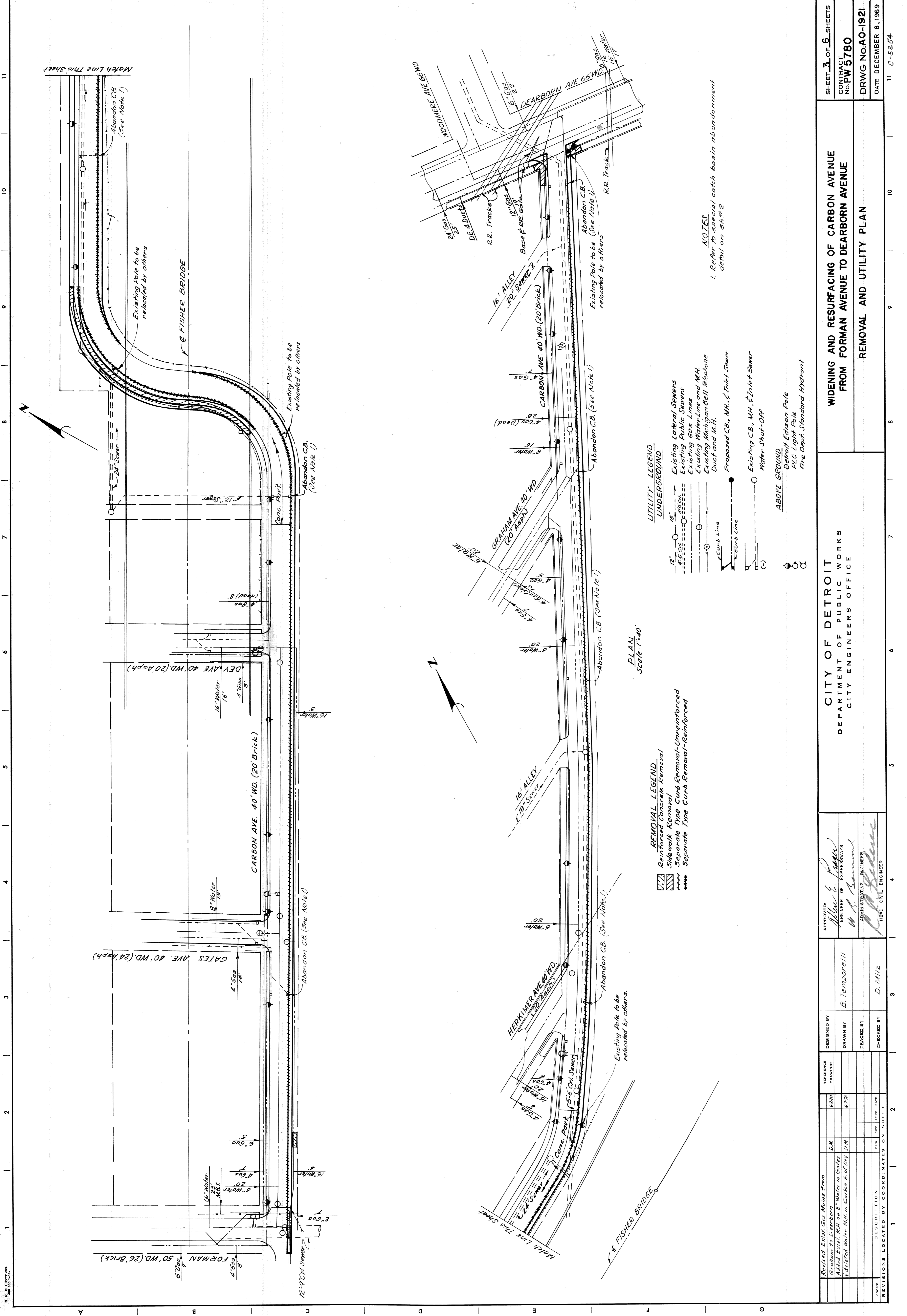


SPECIAL CATCH BASIN ABANDONMENT
No Scale



PARTIAL CROSS-SECTION OF WIDENING @ EXIST. CONC. PAVT.
Scale: 1"=3'

DESIGNED BY J. Guzik & D. Milz	APPROVED: M. L. Papp ENGINEER OF EXPRESSWAYS	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE	SHEET 2 OF 6 SHEETS CONTRACT NO. PW 5780 JOB NO. AO-1921 DATE DECEMBER 8, 1969
DRAWN BY	W. R. Bennett ADMINISTRATIVE ENGINEER		WIDENING AND RESURFACING OF CARBON AVENUE FROM FORMAN AVENUE TO DEARBORN AVENUE
TRACED BY	B. Temporelli LEAD CIVIL ENGINEER		TYPICAL CROSS-SECTIONS AND QUANTITIES
CHECKED BY			



REMOVAL LEGEND
 Reinforced Concrete Removal
 Sidewalk Removal
 Separate Type Curb Removal-Unreinforced
 *** Separate Type Curb Removal-Reinforced

UTILITY LEGEND
 UNDERGROUND
 12" Existing Lateral Sewers
 Existing Public Sewers
 Existing Gas Lines
 Existing Water Line and M.H.
 Existing Michigan Bell Telephone Duct and M.H.
 Proposed C.B., M.H., & Inlet Sewer
 Existing C.B., M.H., & Inlet Sewer
 Water Shut-Off

ABOVE GROUND
 Detroit Edison Pole
 PLC Light Pole
 Fire Dept. Standard Hydrant

PLAN
Scale: 1"=40'

NOTES
 1. Refer to special catch basin abandonment detail on 5A.#2

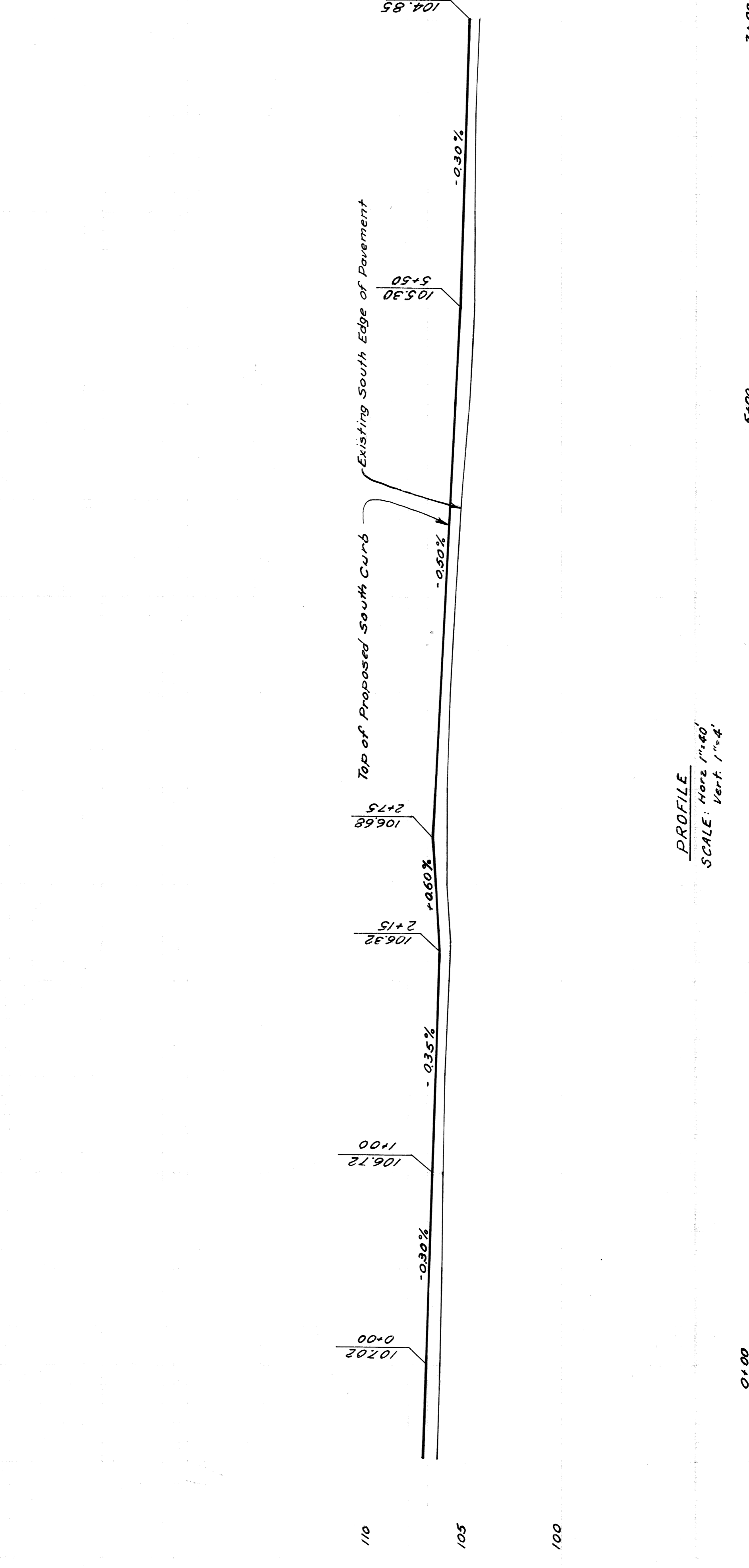
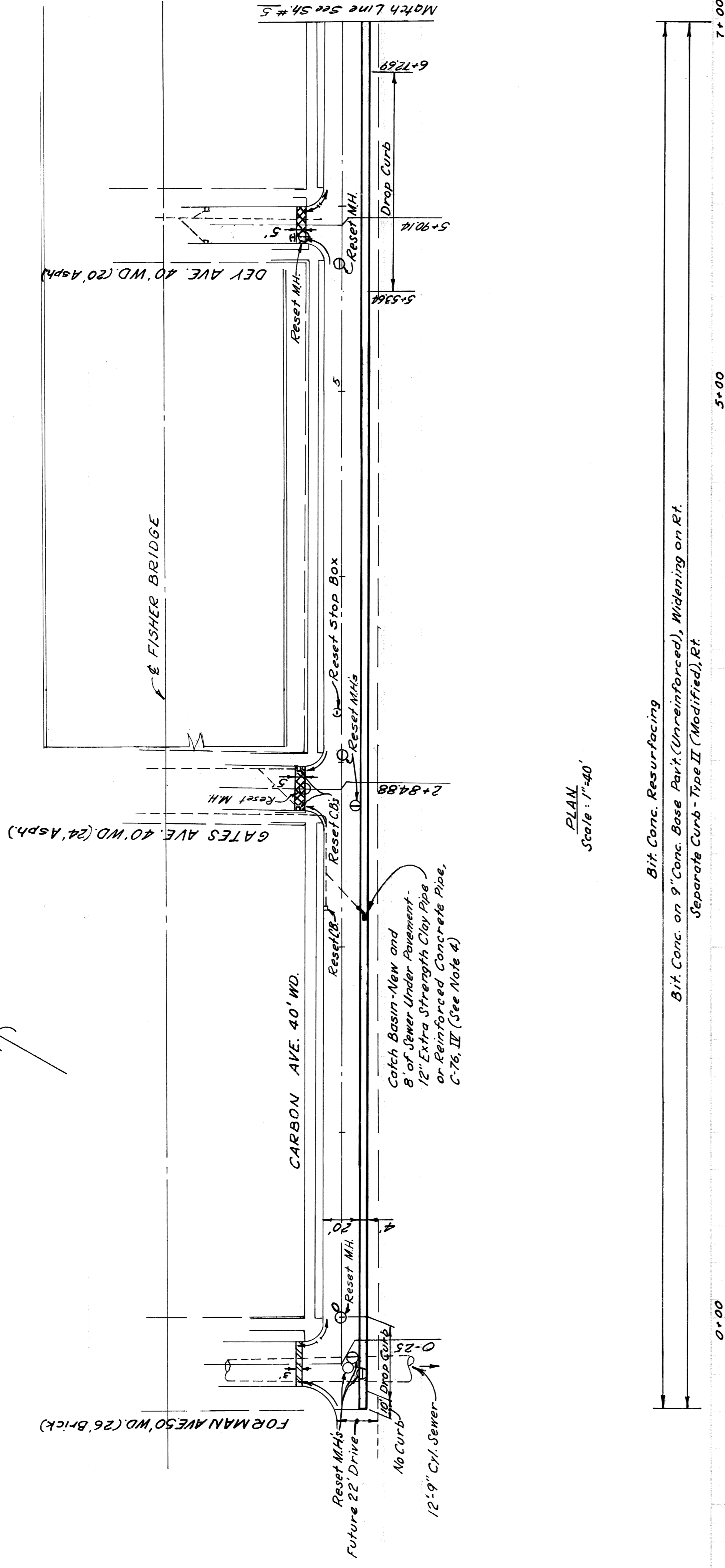
Revised Exist. Gas Mains from Graham to Dearborn Added Exist. M.H. on 8" Water in Gates Deleted Water M.H. in Carbon E. of Day		D.M. 6/2/30 6/2/30	REFERENCE DRAWINGS 6/2/30 6/2/30	DESIGNED BY B. Temporelli	APPROVED: <i>W. S. Gamm</i> ENGINEER OF EXPERIENCES ADMINISTRATIVE ENGINEER HEAD CIVIL ENGINEER	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE	WIDENING AND RESURFACING OF CARBON AVENUE FROM FORMAN AVENUE TO DEARBORN AVENUE REMOVAL AND UTILITY PLAN	SHEET 3 OF 6 SHEETS CONTRACT No. PW 5780 DRWG NO. AO-1921 DATE DECEMBER 8, 1969				
REVISIONS LOCATED BY COORDINATES ON SHEET	DESCRIPTION DATE DRAWN BY TRACED BY CHECKED BY	D. Mi/z	D. Mi/z	3	4	5	6	7	8	9	10	11

SCALE	INDUSTRIAL	BOOK	LEVEL
			DATE
			DATE
			DATE

NOTE - FOR SYMBOLS (C) ETC., SEE STANDARD DETAIL DRAWING NO. C-4175

BENCH	MARKS	ELEV.
P.B.M. 1-251 N.E. Cor. Carbon and Forman		106.710
C.B.M. Hyd. Sta. 3+26		109.36
P.B.M. 1-251A N.E. Cor. Carbon and Day		104.79

NOTES
 1. For Legend of Utility Symbols, see sh # 3
 2. Strip bit surface shown cross-hatched to provide for a smooth connection and to adjust crown. Replace with Bit Conc. Pavement.
 3. Strip brick shown hatched to provide for a smooth connection and to adjust crown. Replace with Bit Conc. Pavement.
 4. When constructing Catch Basin-New, refer to special catch basin abandonment detail on sh # 2.



BEFORE STARTING CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AND STRUCTURES WHETHER OR NOT INDICATED ON PLANS.	INDEX NO. SHEET 4 OF 6 SHEETS
SCALE INDUSTRIAL	CONTRACT NO. PW 5780
BOOK NO. PAVING COMPLETED	ASSIGNMENT NO. AO-1921
LEVEL DATE	DATE DECEMBER 8, 1969
WIDENING AND RESURFACING OF CARBON AVENUE FROM FORMAN AVENUE TO DEARBORN AVENUE	
PLAN AND PROFILE	
CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE	
APPROVED: [Signature] ENGINEER OF EXPENSES	CHECKED BY D. MILZ
BY B. TEMPORELLI D. MILZ	PLAN GRADE ESTIMATE FINAL
W. A. [Signature] ADMINISTRATIVE ENGINEER	REVIEW D. MILZ
[Signature] HEAD CIVIL ENGINEER	DR. N. CK. D. APPROV. DATE
ADDITIONAL NOTES: (1) Reset M.H.'s on E Carbon at Forman and the other on E Gates at Carbon also deleted. (2) Reset M.H. in Carbon E. of Day	REVISIONS DESCRIPTION

SCALE	INSTRUMENTAL	BOOK	NO.	DATE	CONTRACTOR

NOTE: * FOR SYMBOLS & ETC. SEE STANDARD DETAIL DRAWING NO. C-173

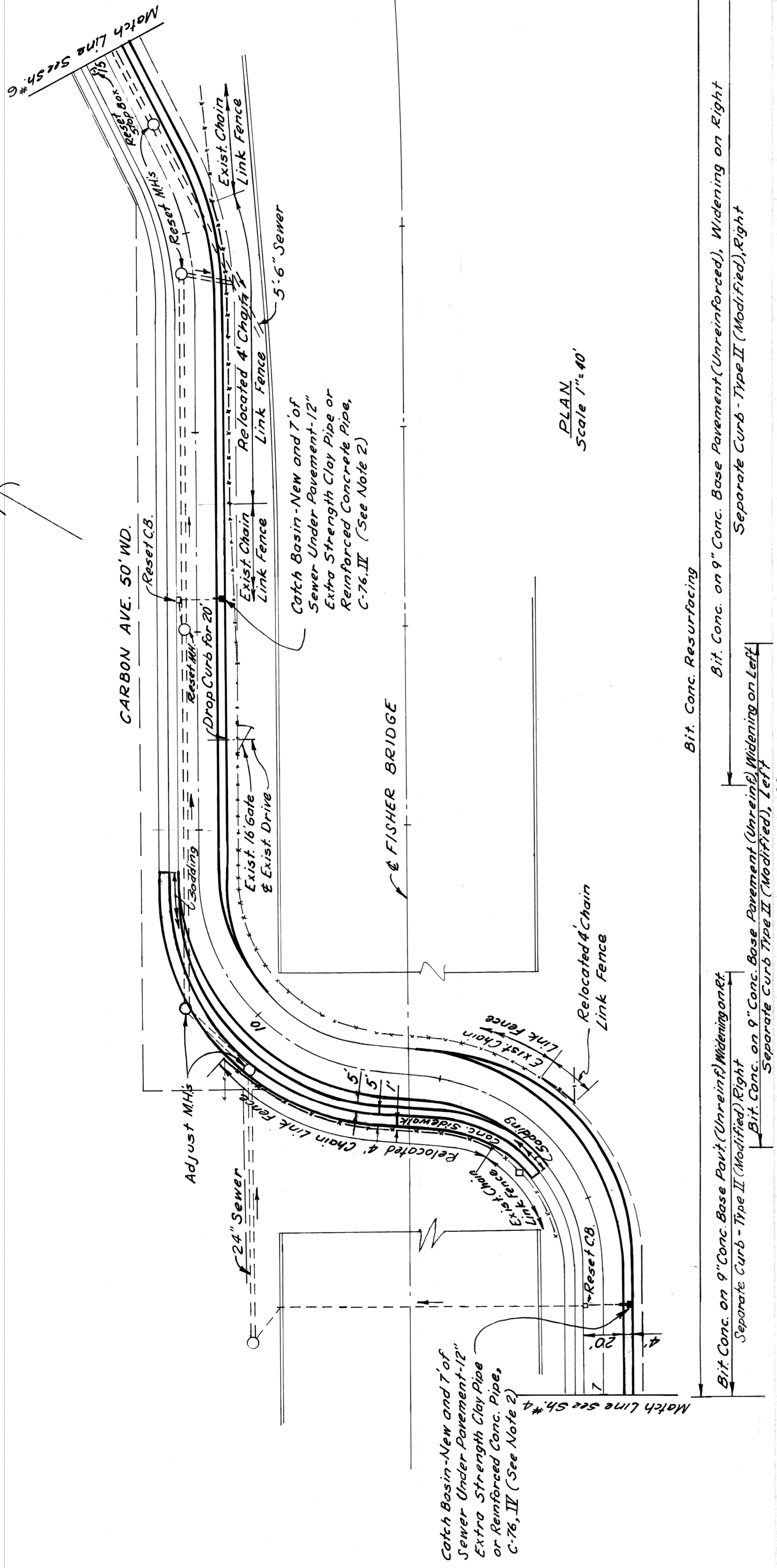
BENCH MARKS

C.B.M. R.R. Spike D.E. Pole at Sta. 8+13
 C.B.M. R.R. Spike D.E. Pole at Sta. 9+89
 C.B.M. Hyd. Sta. 14+96

ELEV.

103.62
 107.08
 107.56

- NOTES**
1. For Legend of Utility Symbols, see sh #3
 2. When constructing Catch Basin-New, refer to special catch basin abandonment detail on sh #1.
 3. A 1' wide strip of sodding shall be placed adjacent to the new curb construction on the south side of Carbon Ave. between Sta. 7+15 and Sta. 14+36

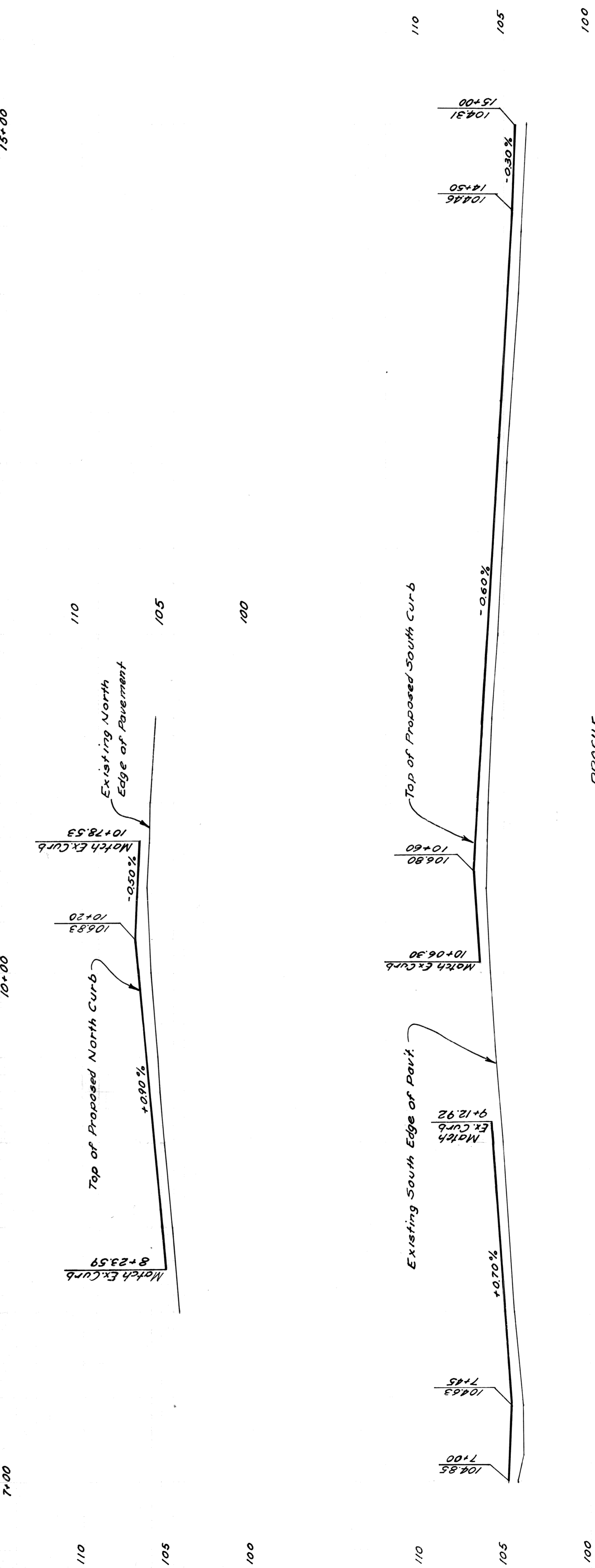


PLAN Scale 1"=40'

ALIGNMENT

CURVE DATA

Station	Δ	D	R	T	L
(A) 4+85:00:00"	42° 50' 00"	0: 565' 00" 20.4"	79' 34" 38.9"	72'	28.24'
(B) 4+42° 50' 00"	42° 50' 00"	0: 565' 00" 20.4"	79' 34" 38.9"	72'	28.24'
(C) 4+48° 11' 23"	84° 19' 43"	0: 542' 03" 09.4"	79' 106'	7' 96.00'	7' 96.00'
(D) 4+76° 23' 39.7"	76° 23' 39.7"	0: 542' 03" 09.4"	79' 106'	7' 96.00'	7' 96.00'



PROFILE Scale 1"=4' Vert 1"=4'

DESCRIPTION	REVISIONS	DATE	BY	CHECKED BY	APPROVED BY
CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE					
WIDENING AND RESURFACING OF CARBON AVENUE FROM FORMAN AVENUE TO DEARBORN AVENUE					
PLAN AND PROFILE					
SHEET 5 OF 6 SHEETS CONTRACT NO. PW 5780 ASSIGNMENT NO. A0-1921			DATE: DECEMBER 8, 1969		

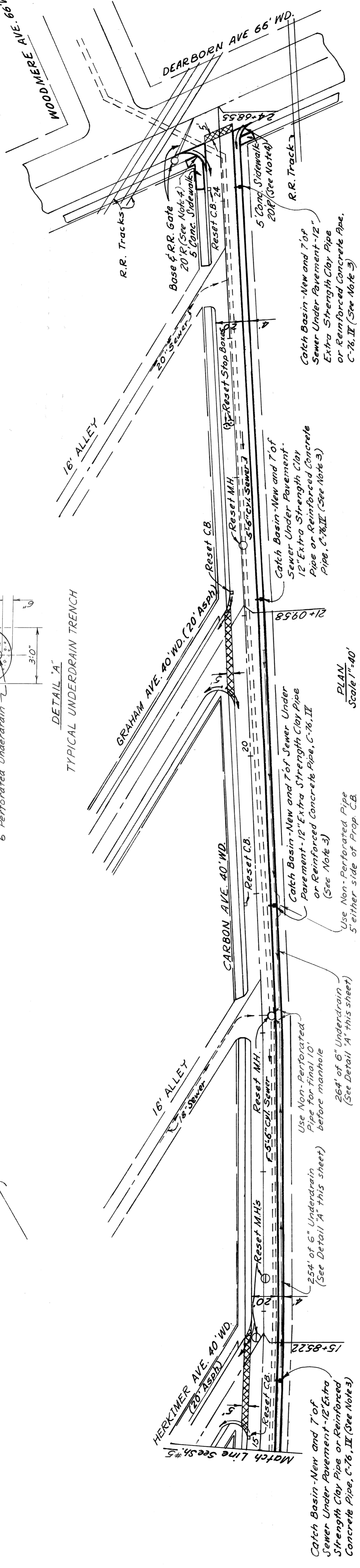
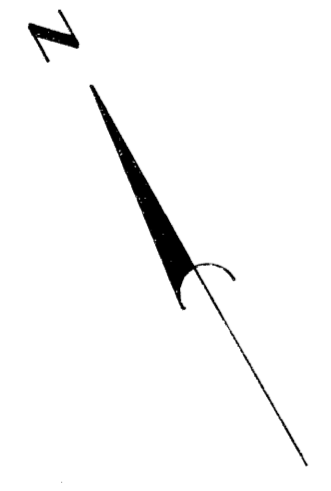
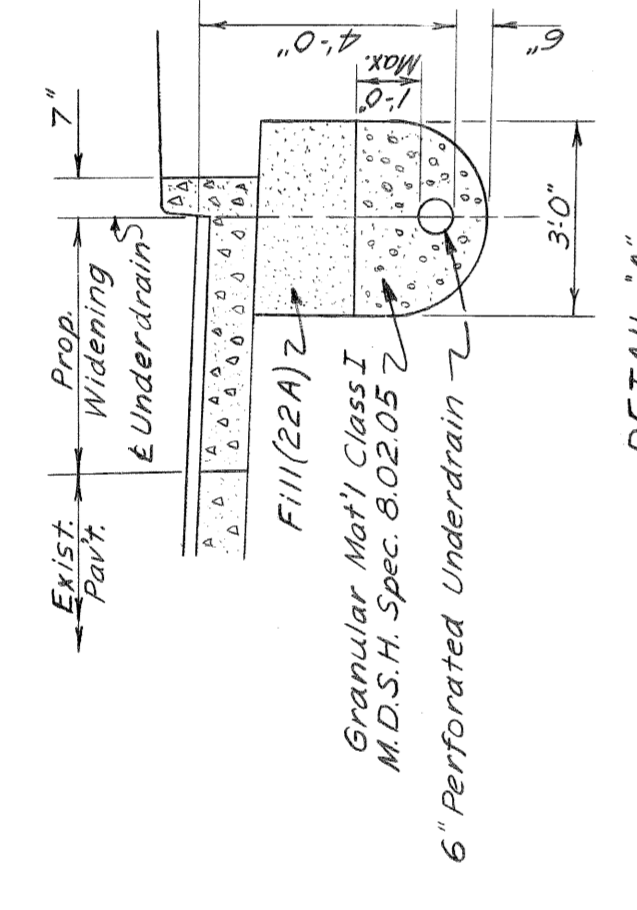
SCALE	VERTICAL	BOOK	NO.	DATE

NOTE - FOR SYMBOLS (A) ETC. SEE STANDARD DETAIL DRAWING NO. C-173

BENCH MARKS	ELEV.
C.B.M. R.R. Spike DE. Pole at Sta. 17+94	103.95
C.B.M. R.R. Spike DE. Pole at Sta. 21+43	104.68
C.B.M. R.R. Spike DE. Pole at Sta. 24+44	108.72

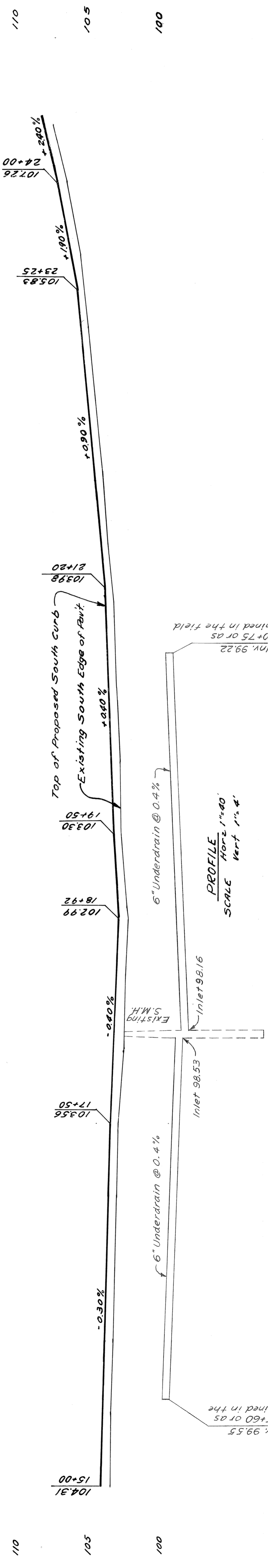
NOTES

- For Legend of Utility Symbols, see Sh. 3.
- Strip bit surface shown cross-hatched to provide for a smooth connection and to adjust crown. Replace with Bit Conc. Pavement.
- When constructing Catch Basin-New refer to special catch basin abandonment detail on Sh. 4.
- Transition curb face from 7" to 0" between north edge of walk and south edge of Dearborn pavement.



15+00 20+00 24+00

Bit Conc. on 9" Conc. Base Pavement (Unreinforced), Widening on Rt. on Left of Dearborn Ave. Separate Curb-Type II (Modified), Right on Left of Dearborn Ave.



WIDENING AND RESURFACING OF CARBON AVENUE FROM FORMAN AVENUE TO DEARBORN AVENUE		INDEX	SHEET 6 OF 6 SHEETS
CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE		CONTRACT NO. PW 5780	ASSIGNMENT NO. AO-1921
APPROVED: <i>Allen S. Pagan</i> ENGINEER OF EXPRESSES		DATE	DECEMBER 8, 1969
CHECKED BY: D. MILLZ		DESCRIPTION	REVISIONS
BY: B. TEMPORRELLI	PLAN	8-70	
BY: B. TEMPORRELLI	GRADE		
BY: B. TEMPORRELLI	ESTIMATE		
BY: B. TEMPORRELLI	FINAL		
BY: D. MILLZ	REVIEW		