

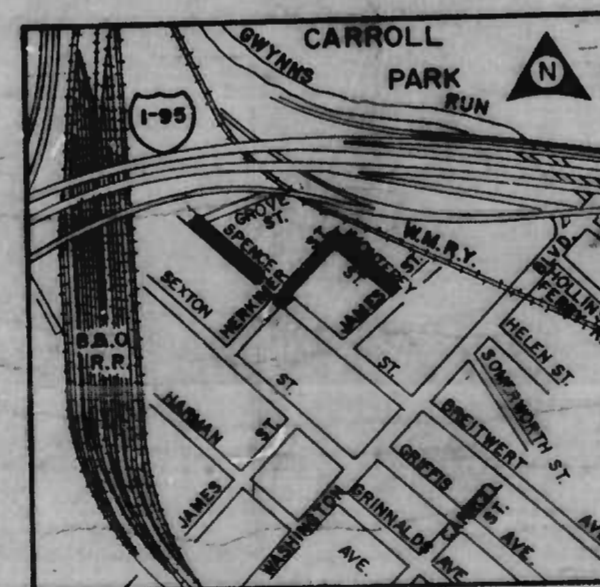
**CITY OF BALTIMORE**  
**DEPARTMENT OF PUBLIC WORKS**  
**BUREAU OF HIGHWAYS**  
 GRADING, CURBING, PAVING, DRAINAGE, AND UTILITY ADJUSTMENTS  
**STREETS AS LISTED**



SPENCE ST.: GROVE ST. TO HERKIMER ST.  
 HERKIMER ST.: SPENCE ST. TO MONTEREY ST.  
 MONTEREY ST.: HERKIMER ST. TO JAMES ST.

**CITY OF BALTIMORE BUREAU OF HIGHWAYS CONTRACT NO. 3039**

INDEX OF SHEETS	
NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS AND DETAILS
3	PLAN AND PROFILE-SPENCE ST.: GROVE ST. TO HERKIMER ST.
4	PLAN AND PROFILE-HERKIMER ST.: SPENCE ST. TO MONTEREY ST.
5	PLAN AND PROFILE-MONTEREY ST.: HERKIMER ST. TO JAMES ST.
6	TRUE LENGTH PROFILES
7	UTILITY PLAN- SPENCE ST.: GROVE ST. TO HERKIMER ST.
8	UTILITY PLAN-HERKIMER ST.: SPENCE ST. TO MONTEREY ST.
9	UTILITY PLAN-MONTEREY ST.: HERKIMER ST. TO JAMES ST.
10	STORM DRAIN PLAN, PROFILE, OUTFALL & DETAILS
11	SPENCE ST.: SOIL EROSION/SEDIMENT CONTROL PLAN
12	HERKIMER ST.: SOIL EROSION/SEDIMENT CONTROL PLAN
13	MONTEREY ST.: SOIL EROSION/SEDIMENT CONTROL PLAN
14	STORM DRAIN: SOIL EROSION/SEDIMENT CONTROL PLAN
15	SOIL EROSION/SEDIMENT CONTROL DETAILS AND LEGEND
16	SOIL EROSION/SEDIMENT CONTROL DETAILS
17	SOIL EROSION/SEDIMENT CONTROL NOTES



LOCATION PLAN  
SCALE: 1"=500'

FIELD BOOKS	
NO.	DESCRIPTIONS
X-887	LOCATIONS, CROSS SECTIONS

DEPARTMENT OF PUBLIC WORKS

BUREAU OF HIGHWAYS  
 APPROVED *[Signature]*  
 CHIEF, HIGHWAY ENGINEERING DIVISION

OFFICE OF TRANSPORTATION  
 APPROVED *[Signature]*  
 CHIEF, ENVIRONMENTAL SERVICES DIVISION

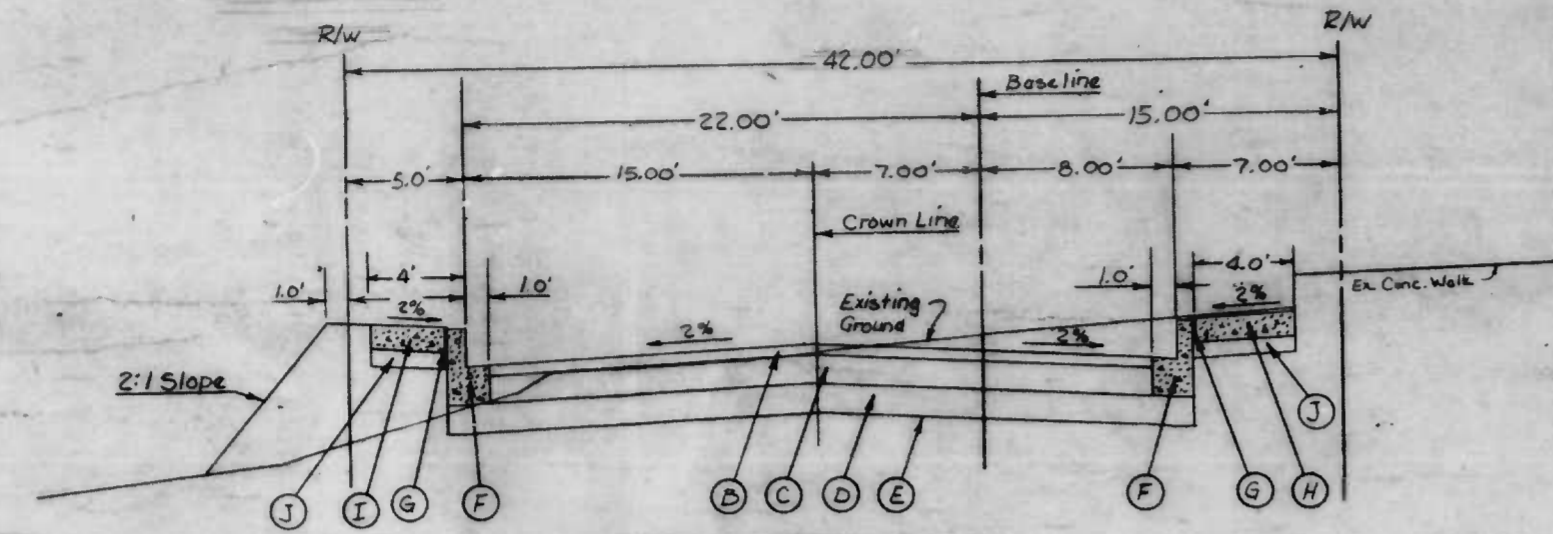
APPROVED  
*[Signature]*  
 DIRECTOR OF PUBLIC WORKS

APPROVED  
*[Signature]*  
 HEAD, BUREAU OF HIGHWAYS

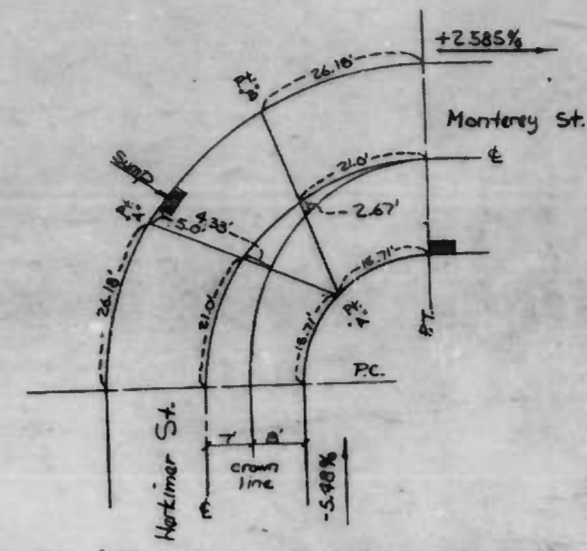
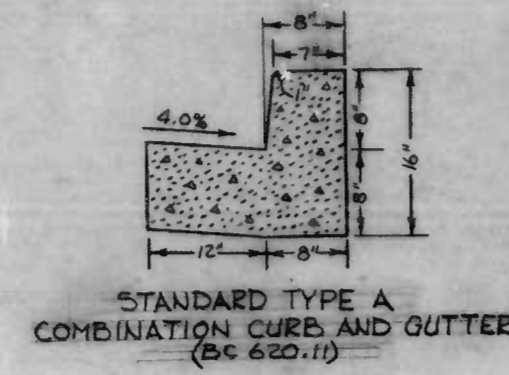
SPENCE ST./HERKIMER ST./MONTEREY ST.  
 CONT. No. # 3039

S OF R REVIEW	R/W RELEASE	GRADE ESTY	HIGHWAY DESIGN	STRUCTURAL	DRAINAGE	LIGHTING	CONDUIT	SEWER/STORM WATER ENGINEERING CONTROL	OFFICE OF TRANSPORTATION	WASTE WATER ENGINEERING	WATER ENGINEERING
BY	1/27		DATA		1/25/87	2/4/87	2/4/87	2/5/87	2/5/87	2/4/87	2/4/87
DATE	2/2/87	2/4/87	2/4/87		1/25/87	2/4/87	2/4/87	2/5/87	2/5/87	2/4/87	2/4/87

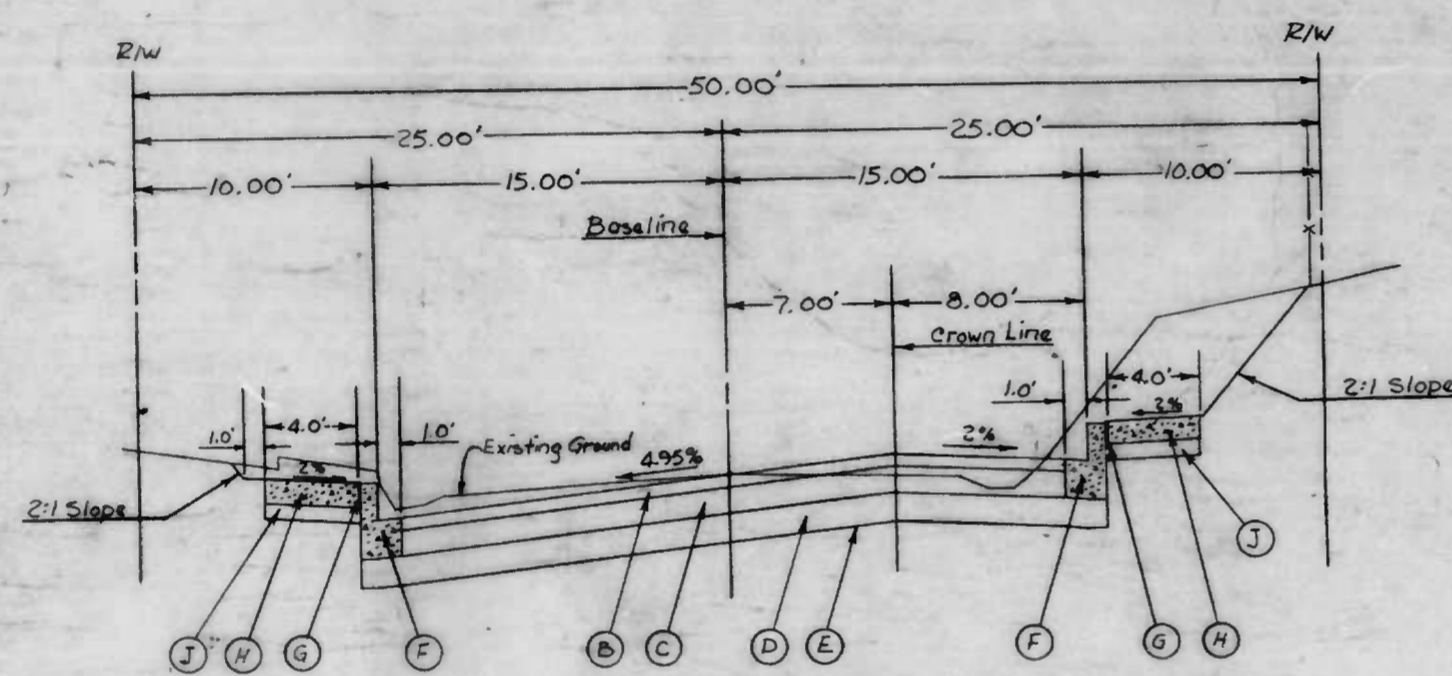
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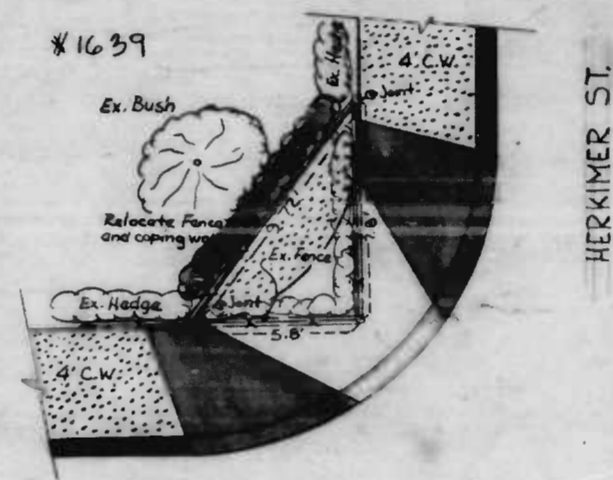
TYPICAL DETAIL SECTION  
MONTEREY ST.  
Herkimer St. to James St.



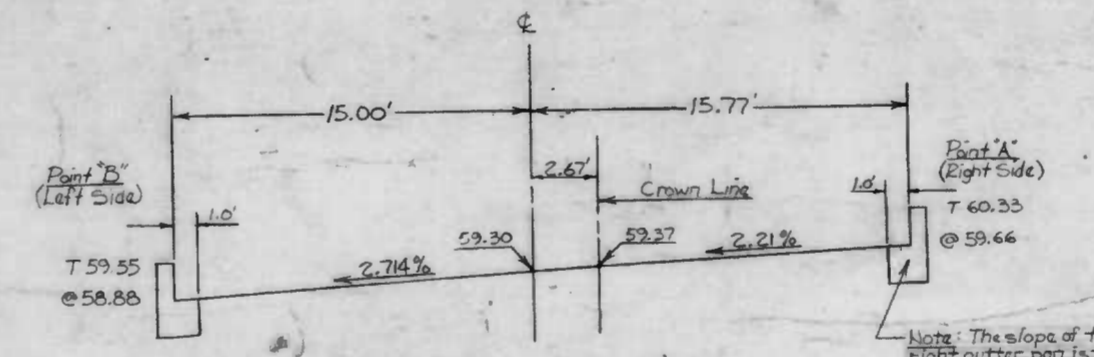
CROWN LINE TRANSITION AT THE INTERSECTION  
OF HERKIMER STREET AND MONTEREY STREET  
(SEE DETAILS BELOW FOR CROSS SLOPES)



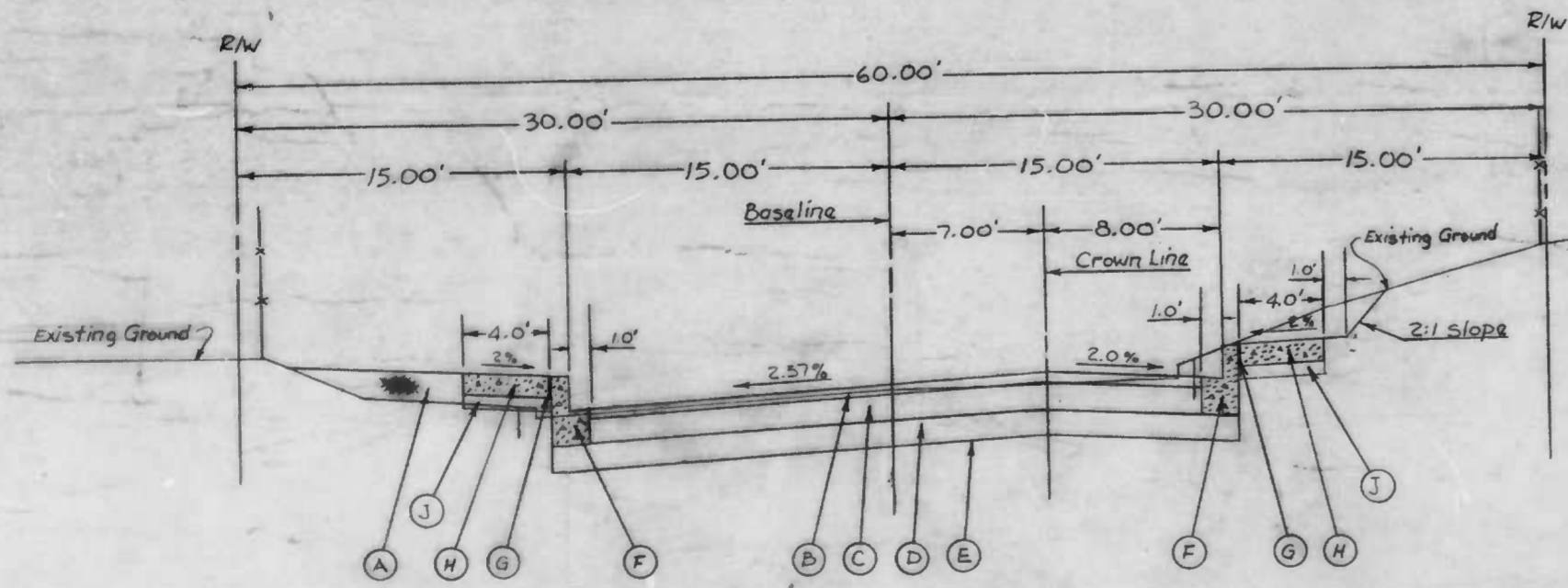
TYPICAL DETAIL SECTION  
HERKIMER ST.  
Spence St. to Monterey St.



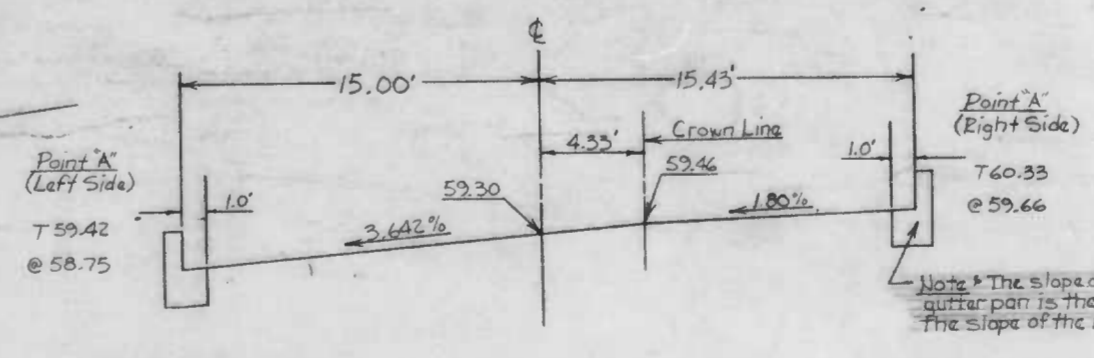
SPENCE ST.  
FENCE RELOCATION DETAIL



SECTION "B"-A



TYPICAL DETAIL SECTION  
SPENCE ST.  
Grove St. to Herkimer St.



SECTION "A"-A

CROSS SLOPE AT INTERSECTION OF  
HERKIMER ST. AND MONTEREY ST.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

SYMBOLS

- Denotes Approximate Limit of Proposed Cut Slope Covered with 2" of Topsoil and Sod
- Denotes Approximate Limit of Flat Fill Areas for Dressing Up (See Plans for Limits and Offsets) Covered with 2" of Topsoil and Sod.
- Denotes Approximate Limit of Proposed Concrete Walk (5" Thick) on 3" Sub-base, CE-6
- Denotes Proposed Concrete Driveway - 7" Cement Concrete (Mik No. 6) (B.C. 500.01) on 6" Sub-base, CE-6
- Denotes Approximate Limit of Proposed Fill Slope Covered with 2" Topsoil and Sod.
- Denotes Area to be excavated and re-graded with 3 inch Bituminous Concrete Binder Course (Band BI) on 6" Crusher Run Aggregate CE-6 to Adjust existing Conditions to Proposed Grade.
- Denotes Approximate Limit of Proposed Paving
- Denotes Pedestrian Ramp at Alleys (BC 655.23)
- Indicates Pedestrian Ramp at Corners (BC 655.20)
- Indicates Combination Curb and Gutter (BC 620.11)
- Indicates Special Pedestrian Ramp - Type 7 (BC 655.24)

LEGEND

- (A) - Denotes Flat Fill Area for Dressing up. (See Plans)
- (B) - Denotes Two (2) in. Bituminous Concrete Surface Course (Band SN)
- (C) - Denotes Six (6) in. Bituminous Concrete Base Course (Band BI) - in two 3" layers
- (D) - Denotes 6" Crusher Run Aggregate CR-6
- (E) - Denotes Limit of Class I Excavation
- (F) - Denotes Standard Type "A" Combination Curb and Gutter (BC 620.11)
- (G) - Denotes 1/2" Preformed Expansion Material
- (H) - Denotes Proposed 4' Concrete Walk - 5" Thick
- (I) - Denotes Proposed 3.33' Concrete Walk (4' from face of curb) - 5" Thick
- (J) - Denotes 3" Crusher Run Aggregate CR-6

CITY OF BALTIMORE  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF HIGHWAYS  
CONTRACT NO. 3039

MONTEREY ST., HERKIMER ST.,  
SPENCE ST.  
TYPICAL SECTIONS  
AND DETAILS

SCALE AS NOTED DATE 6-28-85  
HIGHWAY ENGINEERING DIVISION SHEET 2 OF 17

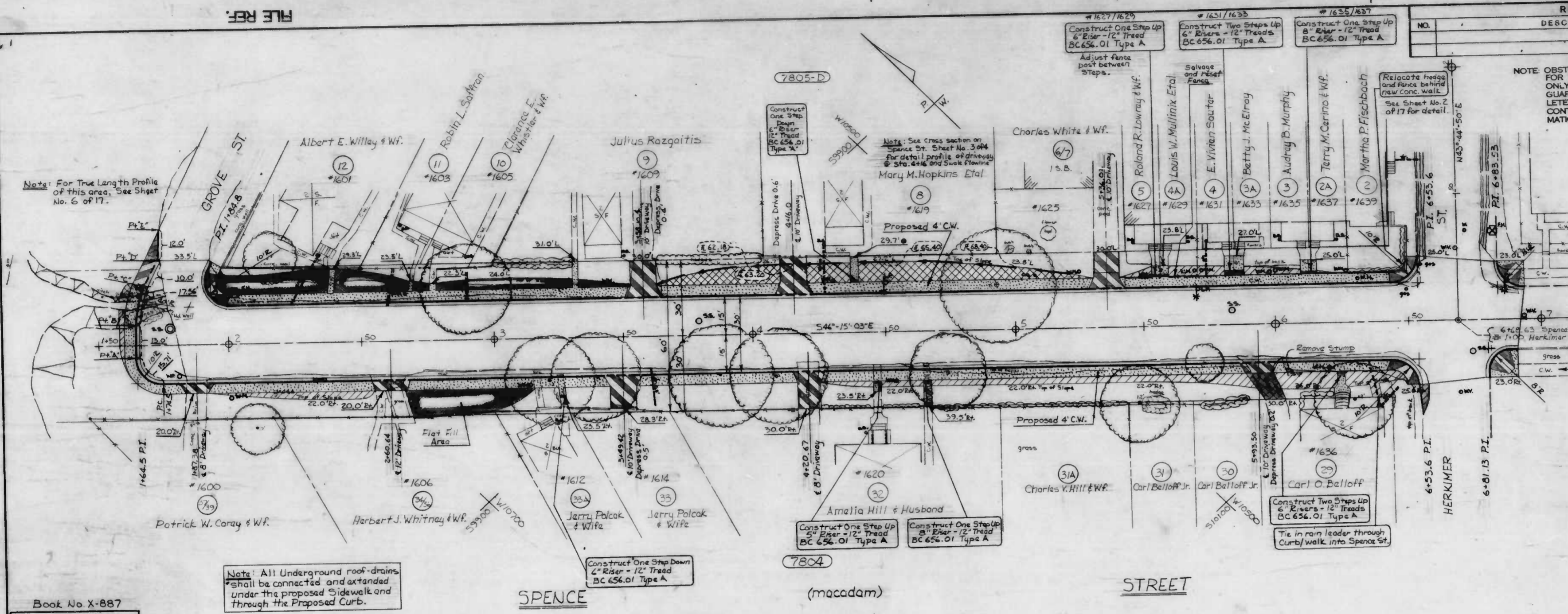
Book No. X-887  
DRAWN BY P. Markall  
EXAMINED BY W. F. Crompton

FILE REF.

FILE REF.

NO.	DESCRIPTION	DATE	BY

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.



Note: The gutter pan on south east corner of Spence St. and Herkimer St. shall be varied down to convey water down in Spence St.

Tree Removal Chart

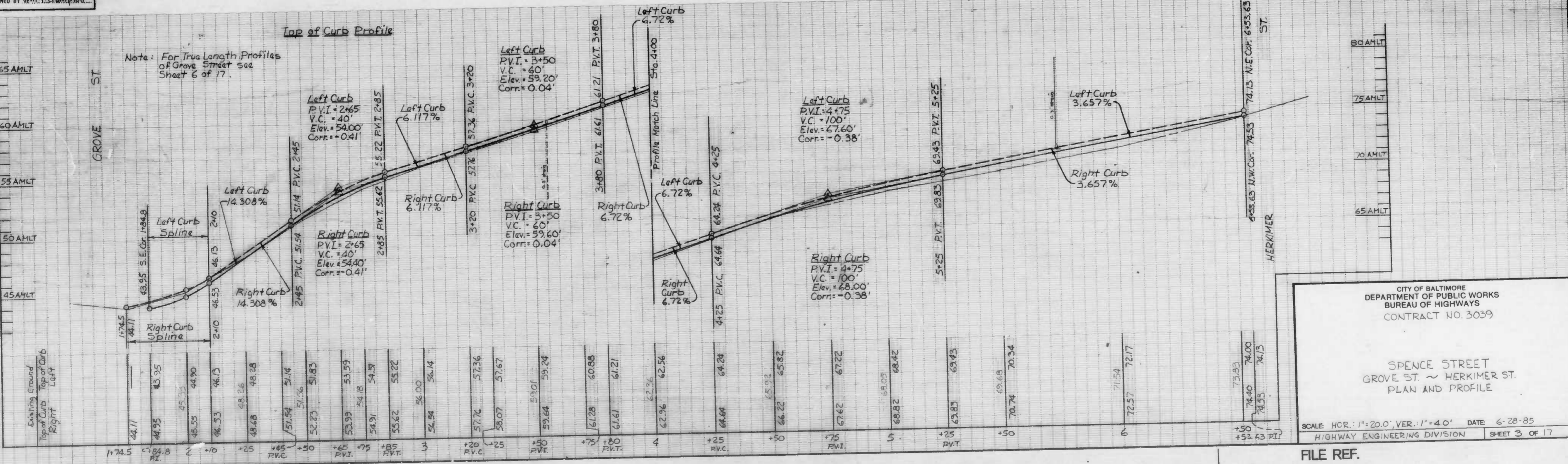
Sta.	Location	Trunk	Span
2+90.00	20.50' Left	1.2'	36'
3+20.55	16.73' Rt.	1.2'	36'
3+40.00	15.61' Rt.	0.9'	36'
4+08.53	16.42' Rt.	(0.3)	30'
3+86.25	15.89' Rt.	(0.3)	40'
4+73.37	16.67' Rt.	1.3'	30'
4+93.01	17.67' Left	2.0'	45'
5+72.70	14.61' Rt.	(0.3)	15'
6+04.00	18.50' Rt.	1.3'	Stump

Baseline Coordinates

Sta.	West	South
2+00	-10725.459	-9786.878
6+68.63	-10386.932	-10110.936

Book No. X-887  
 DRAWN BY P. Morkell  
 EXAMINED BY Wm. E. Crumpton

Note: All underground roof-drains shall be connected and extended under the proposed sidewalk and through the proposed curb.



CITY OF BALTIMORE  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF HIGHWAYS  
 CONTRACT NO. 3039

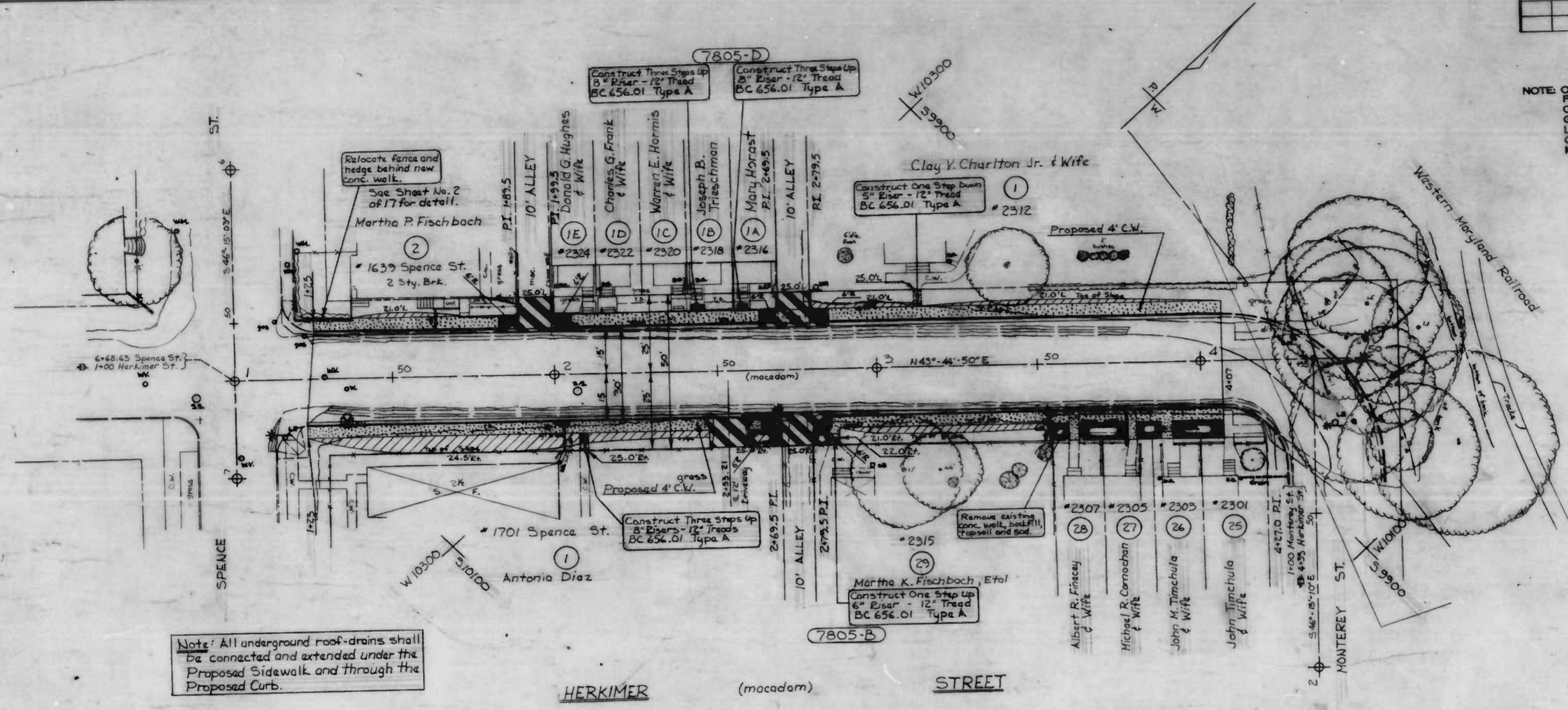
SPENCE STREET  
 GROVE ST ~ HERKIMER ST.  
 PLAN AND PROFILE

SCALE: H.C.R. 1"=20.0', V.E.R. 1"=4.0' DATE 6-28-85  
 HIGHWAY ENGINEERING DIVISION SHEET 3 OF 17

FILE REF.

FILE REF.

REVISIONS		
NO.	DESCRIPTION	DATE BY



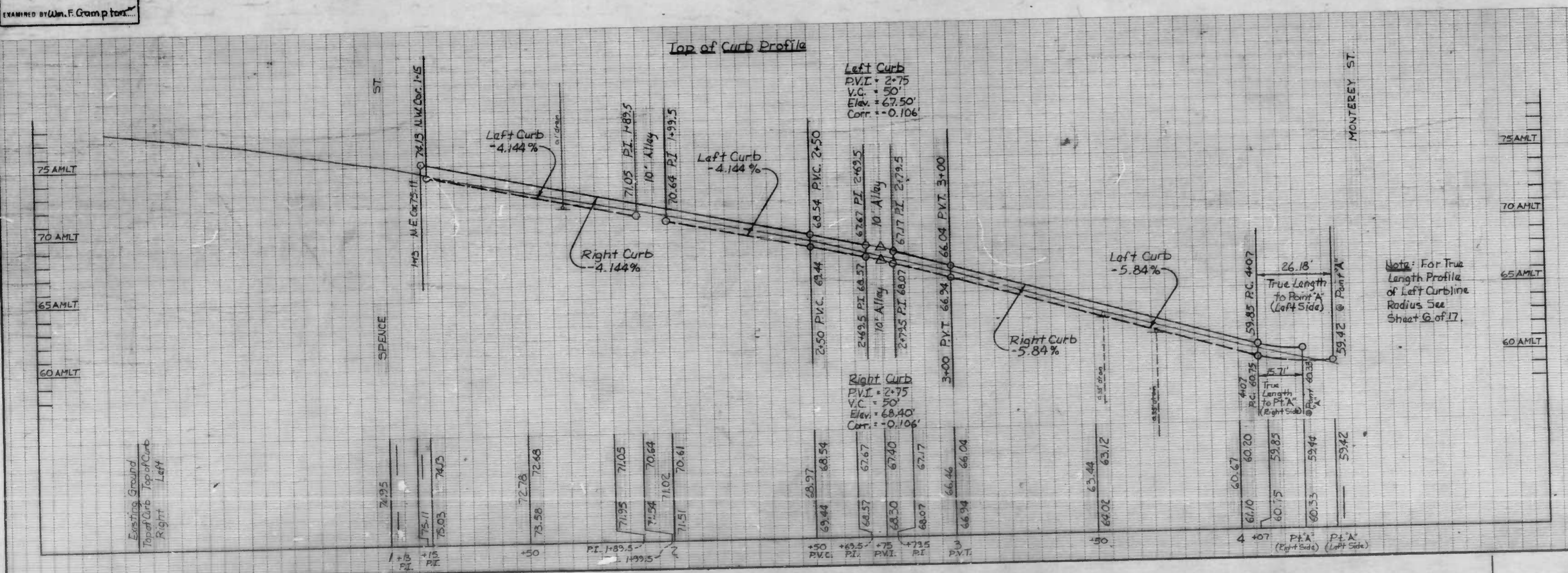
NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.

Note: All underground roof-drains shall be connected and extended under the Proposed Sidewalk and through the Proposed Curb.

Baseline Coordinates		
Sta.	West	South
1+00	-10384.93	-10110.94
4+35	-10155.27	-9868.93
4+50	-10144.92	-9856.10

Book No. X-887  
 DRAWN BY P.H. Markell  
 EXAMINED BY Wm. F. Cramp ton

HERKIMER STREET (macadam)



Note: For True Length Profile of Left Curbline Radius See Sheet 17.

CITY OF BALTIMORE  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF HIGHWAYS  
 CONTRACT NO. 3039

HERKIMER STREET  
 SPENCE ST. ~ MONTEREY ST.  
 PLAN AND PROFILE

SCALE HOR: 1"=20.0', VER: 1"=4.0' DATE 6-28-85  
 HIGHWAY ENGINEERING DIVISION SHEET 4 OF 17

FILE REF.

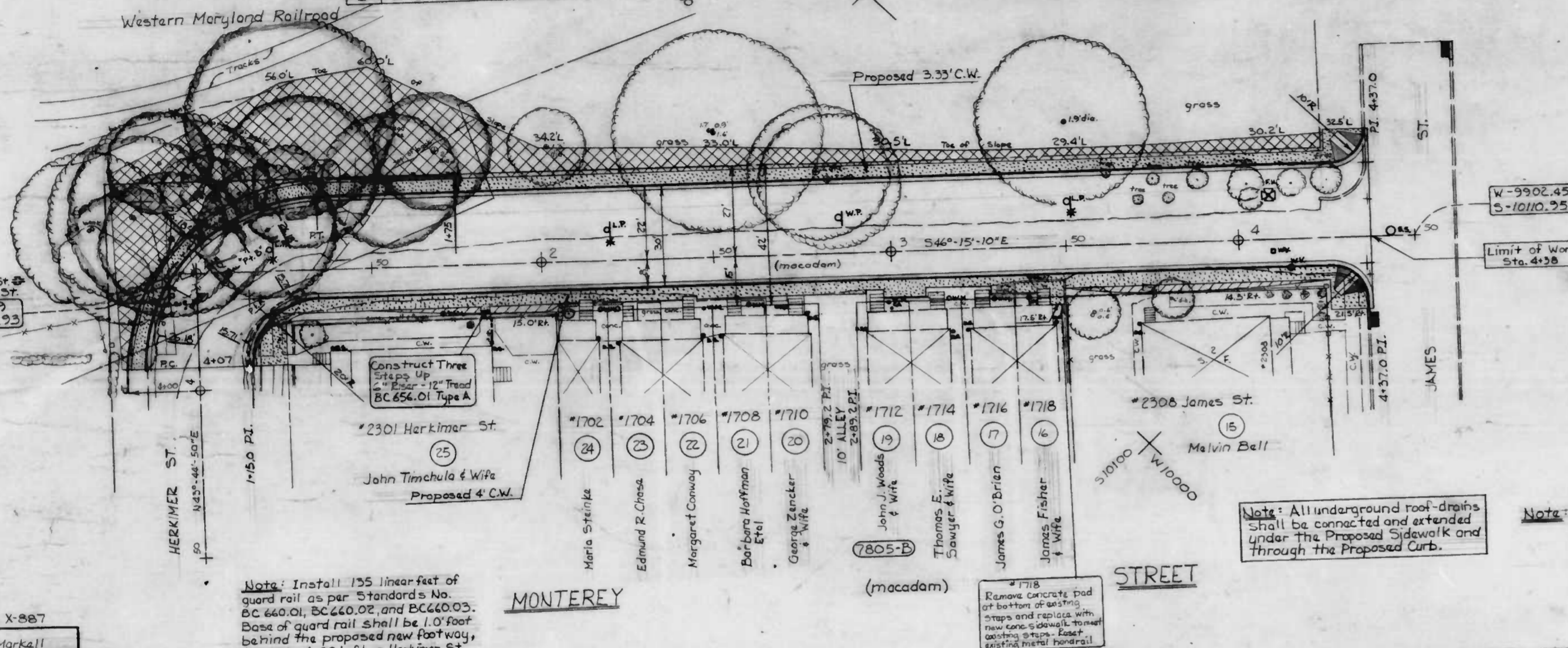
FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

Note: For True Length Profiles of this area, see Sheet No. 6 of 17.

Curblime Curve Data	
Dist.	Angle
North Curb	90°-00'-00"
South Curb	90°-00'-00"
Δ	45°-00'-00"
R	50.00'
C	70.71'
L	78.54'
T	50.00'
d	34.37746760' ± 85.9436690' ±

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.



Sta.	Location	Trunk	Span
1+57.79	26.80' Left	2.00'	40'
2+82.76	22.06' Left	2.00'	40'
2+79.22	24.33' Left	2.00'	40'
3+62.56	21.32' Left	0.10'	2'
3+71.07	17.04' Left	0.10'	3'
3+75.55	19.65' Left	0.15'	4'
3+80.30	13.55' Left	0.10'	3'
3+88.82	18.80' Left	0.20'	6'
4+02.99	17.03' Left	0.20'	10'
4+03.56	12.16' Left	0.20'	7'
4+15.18	17.58' Left	0.20'	8'
4+25.78	17.71' Left	0.20'	9'

Note: Install 135 linear feet of guard rail as per Standards No. BC 660.01, BC 660.02, and BC 660.03. Base of guard rail shall be 1.0' behind the proposed new footway, from Sta. 4+00 Left on Herkimer St. to Sta. 1+75 Left on Monterey St.

Note: All underground roof drains shall be connected and extended under the Proposed Sidewalk and through the Proposed Curb.

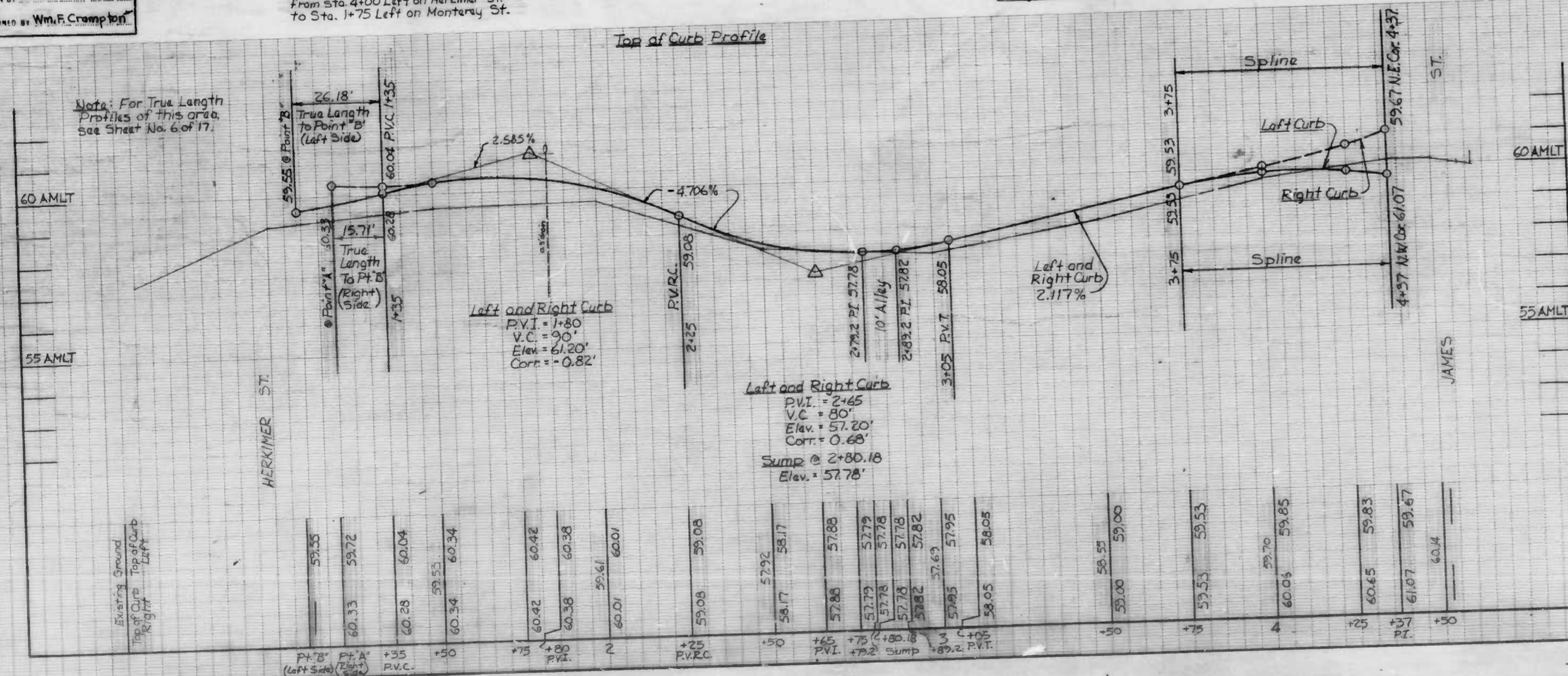
Note: The Contractor shall use extreme caution during the installation of the proposed footway along the South side and vary the width, when necessary, to avoid any damage to the existing conditions.

Book No. X-887

DRAWN BY P.H. Markall

EXAMINED BY Wm.F. Crump ton

Top of Curb Profile



CITY OF BALTIMORE  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF HIGHWAYS  
CONTRACT NO. 3039

MONTEREY STREET  
HERKIMER ST. ~ JAMES ST.  
PLAN AND PROFILE

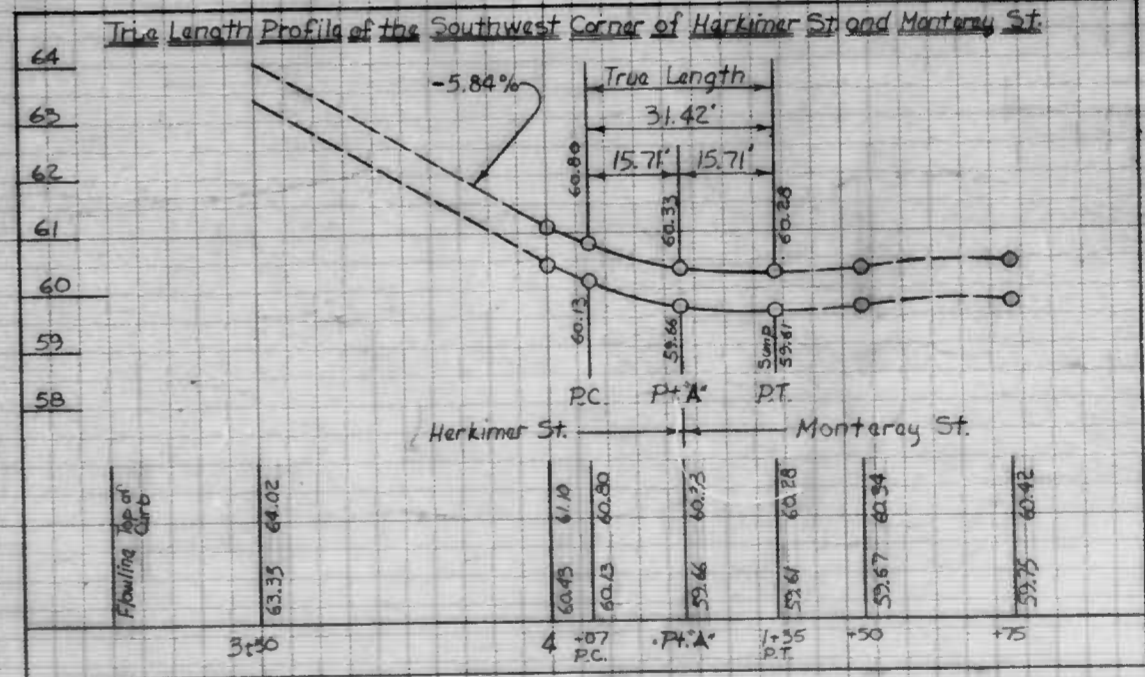
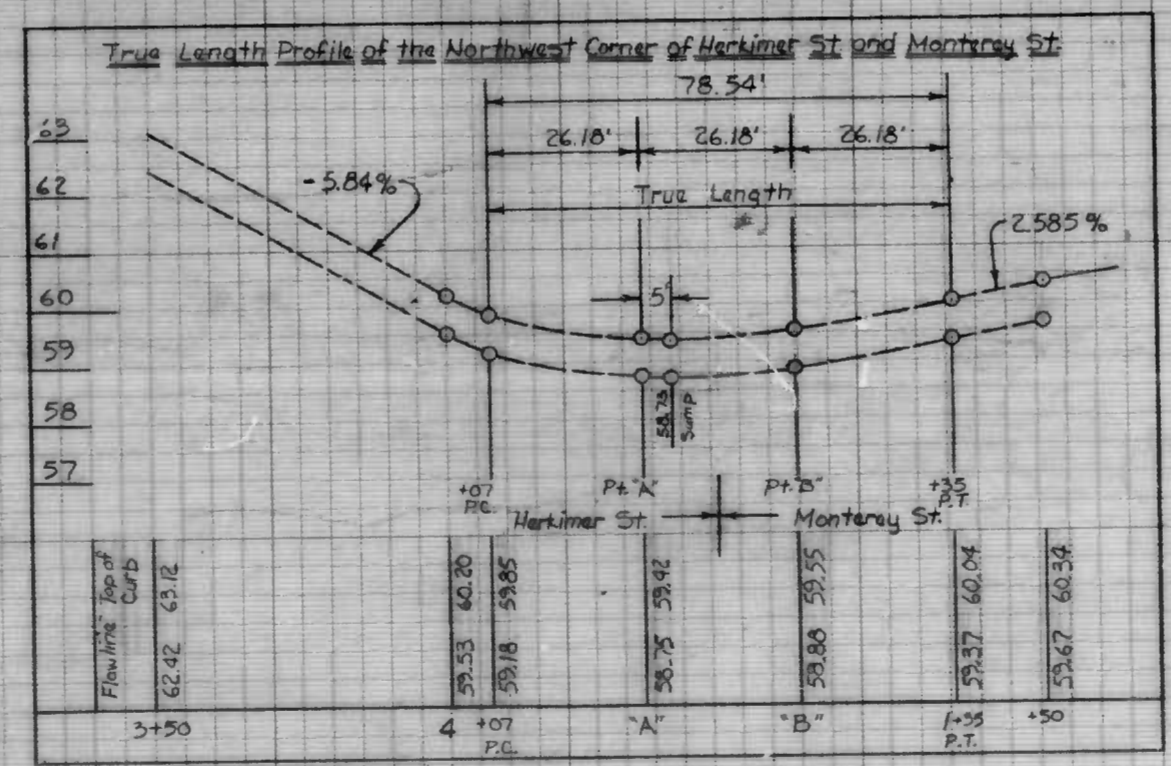
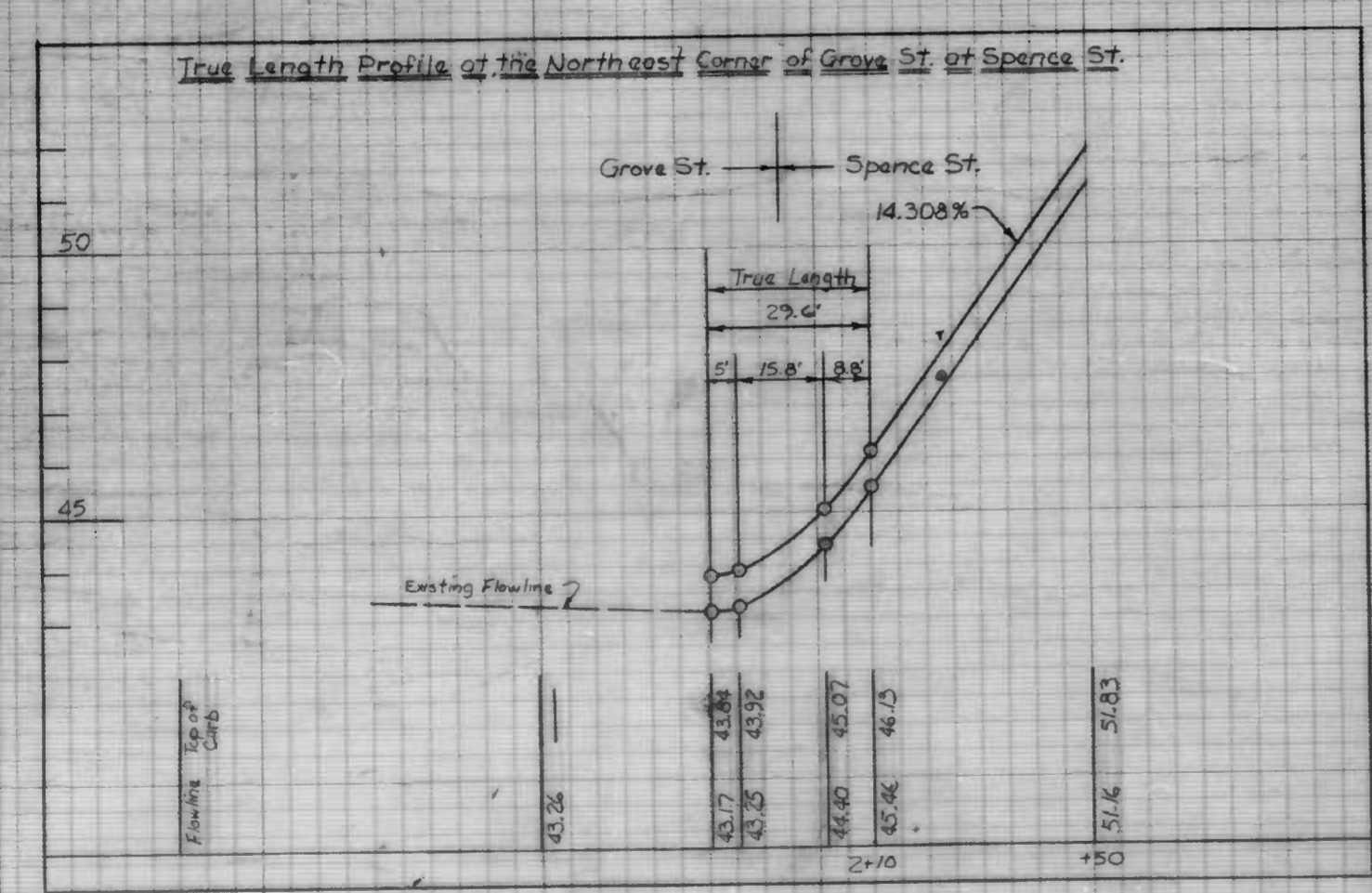
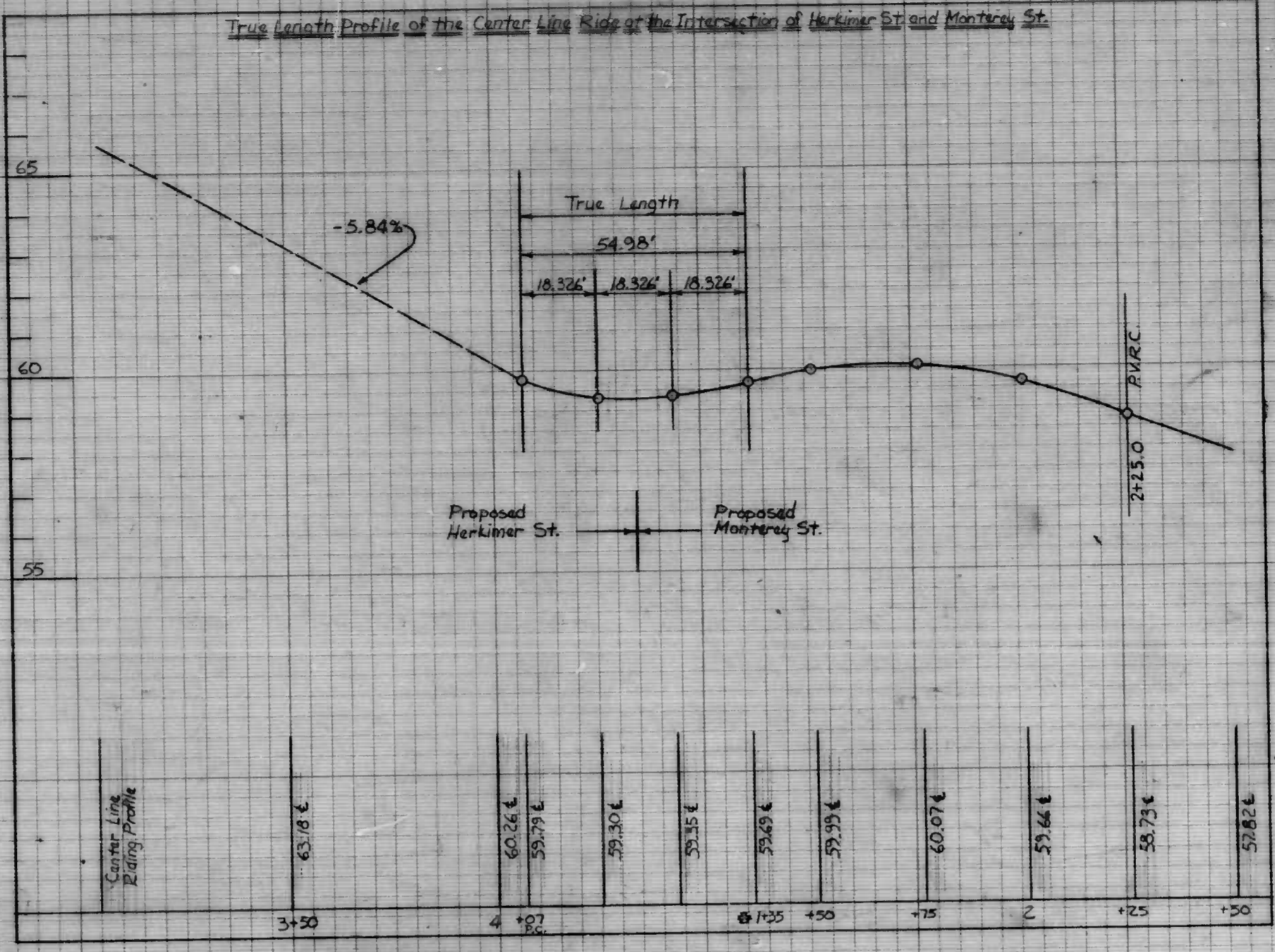
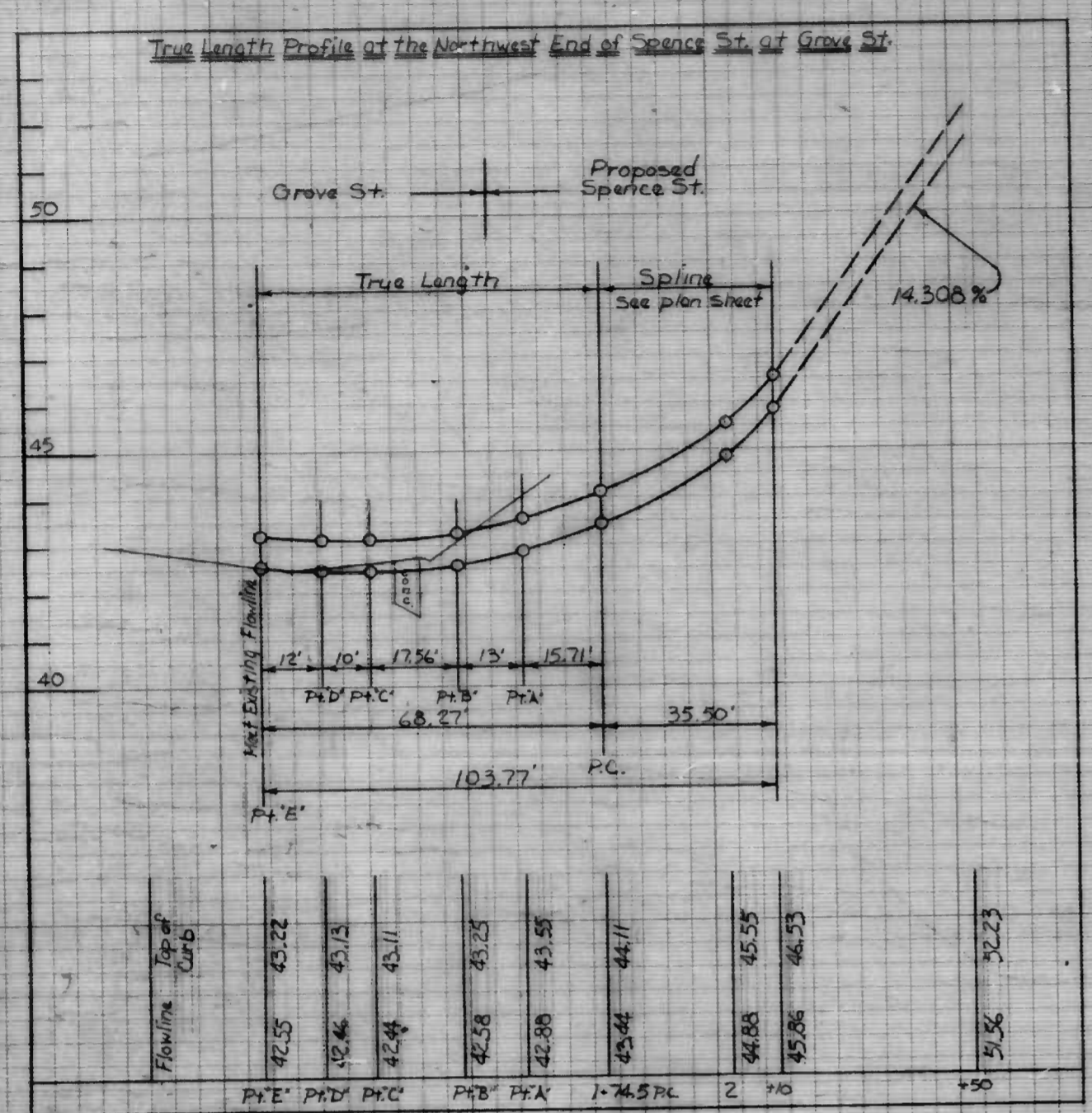
SCALE: HOR: 1" = 20.0', VER: 1" = 2.0' DATE: 6-28-85  
HIGHWAY ENGINEERING DIVISION SHEET 5 OF 17

FILE REF.

FILE REF.

REVISIONS		
NO.	DESCRIPTION	DATE BY

**Bench Marks**  
 B.M. #848 - Brass Screw in the East Corner of the concrete Culvert on the Northwest side of Spence St. 450 Feet Northwest of Herkimer St. ----- Elev. 47.645'  
 B.M. #8167 - Brass Screw in the Southeast corner of the Concrete Base for a Column supporting signals on the East Side of the Western Maryland Railroad approximately 750 Feet North of Grove St. ----- Elev. 42.827'



CITY OF BALTIMORE  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF ENGINEERING  
 CONTRACT NO. 3039  
 MONTEREY ST., HERKIMER ST.  
 SPENCE ST.  
 TRUE LENGTH PROFILES  
 LOCATIONS AS NOTED

SCALE: AS NOTED DATE: 6-28-85  
 HIGHWAY ENGINEERING DIVISION SHEET 6 OF 17

Book No. X-897  
 DRAWN BY P. Morkell  
 EXAMINED BY W. F. Crompton

FILE REF.

FILE REF.

Note: For True Length Profile of this area, see Sheet No. 6 of 77.

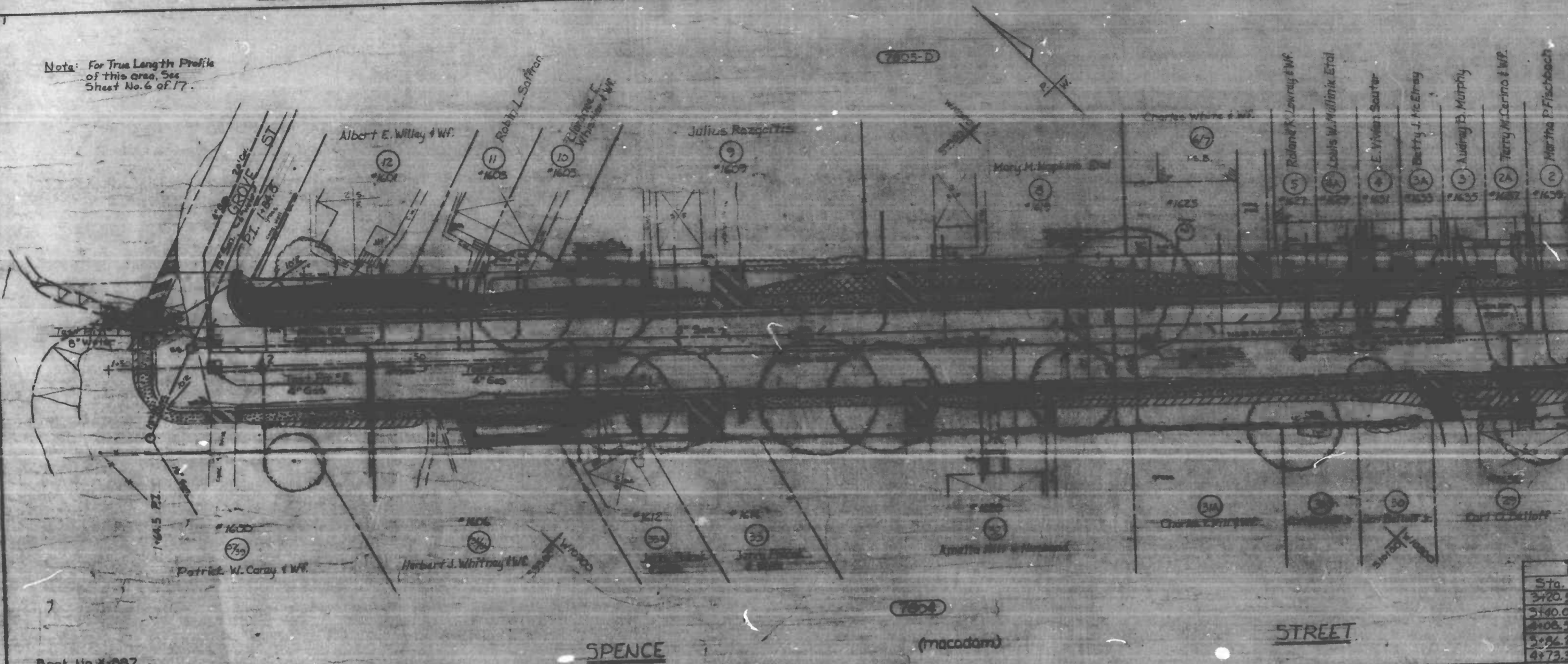
REVISIONS	
NO.	DESCRIPTION

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVEYANCE OF THE CONTRACTOR ONLY, AND THE CONTRACTOR SHALL GUARANTEE THE ACCURACY OF THE CONVEYANCE OF THE INFORMATION SHOWN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION BY HIS OWN INVESTIGATION.

NOTE: Baltimore Gas & Electric Co., C & P Telephone Co. Contact "Miss Utility" at area 257-7772 at least 3 working days prior to starting work so that they can arrange to mark the location of their facilities.

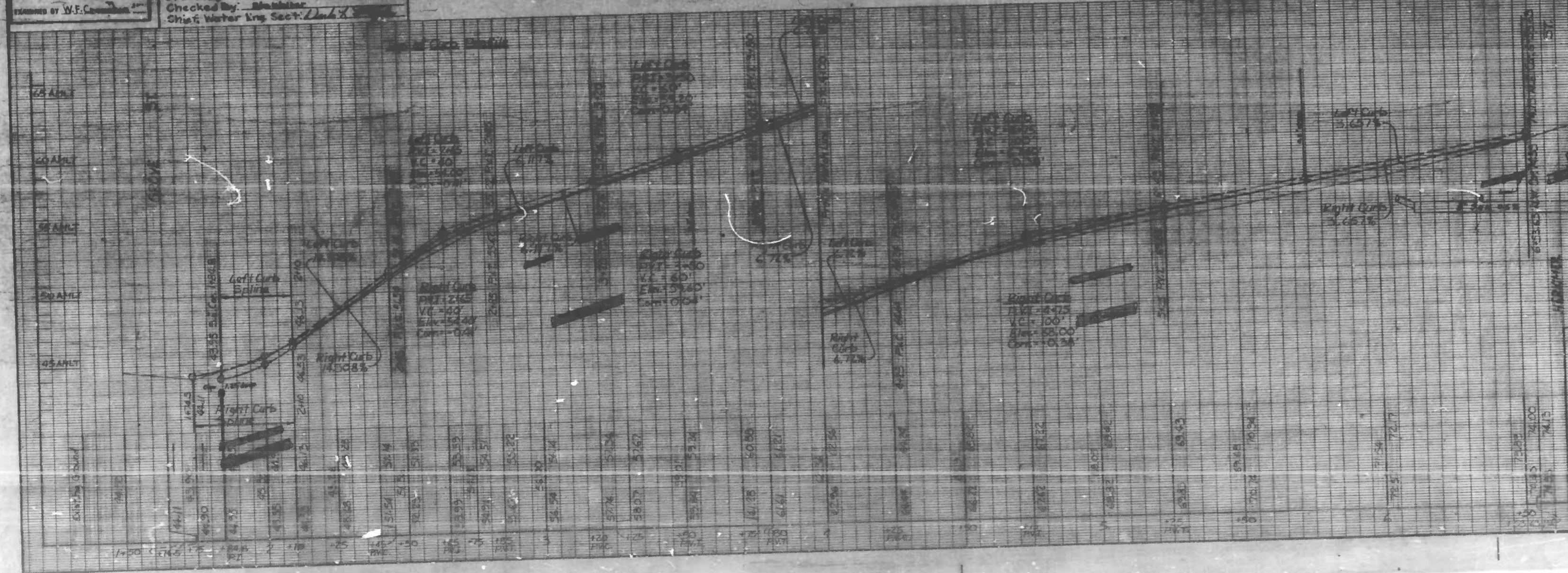
Tree Pile Locations		
Station	Offset	Height
5+00.00	10.00' R	12.00'
5+10.00	15.00' R	15.00'
5+20.00	20.00' R	18.00'
5+30.00	25.00' R	21.00'
5+40.00	30.00' R	24.00'
5+50.00	35.00' R	27.00'
5+60.00	40.00' R	30.00'
5+70.00	45.00' R	33.00'
5+80.00	50.00' R	36.00'
5+90.00	55.00' R	39.00'

Tree Removal Chart		
Sta.	Location	Spec.
5+20.00	15.00' R	12" x 12"
5+40.00	25.00' R	18" x 18"
5+60.00	35.00' R	24" x 24"
5+80.00	45.00' R	30" x 30"
5+95.00	55.00' R	36" x 36"
6+00.00	60.00' R	42" x 42"



Book No. K-007  
 Drawn by P. Mackall  
 Checked by W.F. Condon  
 WATER ENGINEERING DIVISION  
 Drawn by P. Curtis  
 Checked by [Signature]  
 Chief, Water Eng. Sect. D. L. [Signature]

Station	Offset	Grade	Notes
2+90.00	20.50' R	1.2'	36"
4+04.00	18.50' R	1.3'	Swamp
5+72.70	14.67' R	1.3'	15'



CITY OF BALTIMORE  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF HIGHWAYS  
 CONTRACT NO. 3039  
  
 SPENCE STREET  
 GROVE ST. ~ HERKIMER ST.  
 UTILITY PLAN  
 SCALE HOR.: 1"=20.0', VER.: 1"=4.0' DATE: 6-28-85  
 HIGHWAY ENGINEERING DIVISION SHEET 7 OF 17

FILE REF.

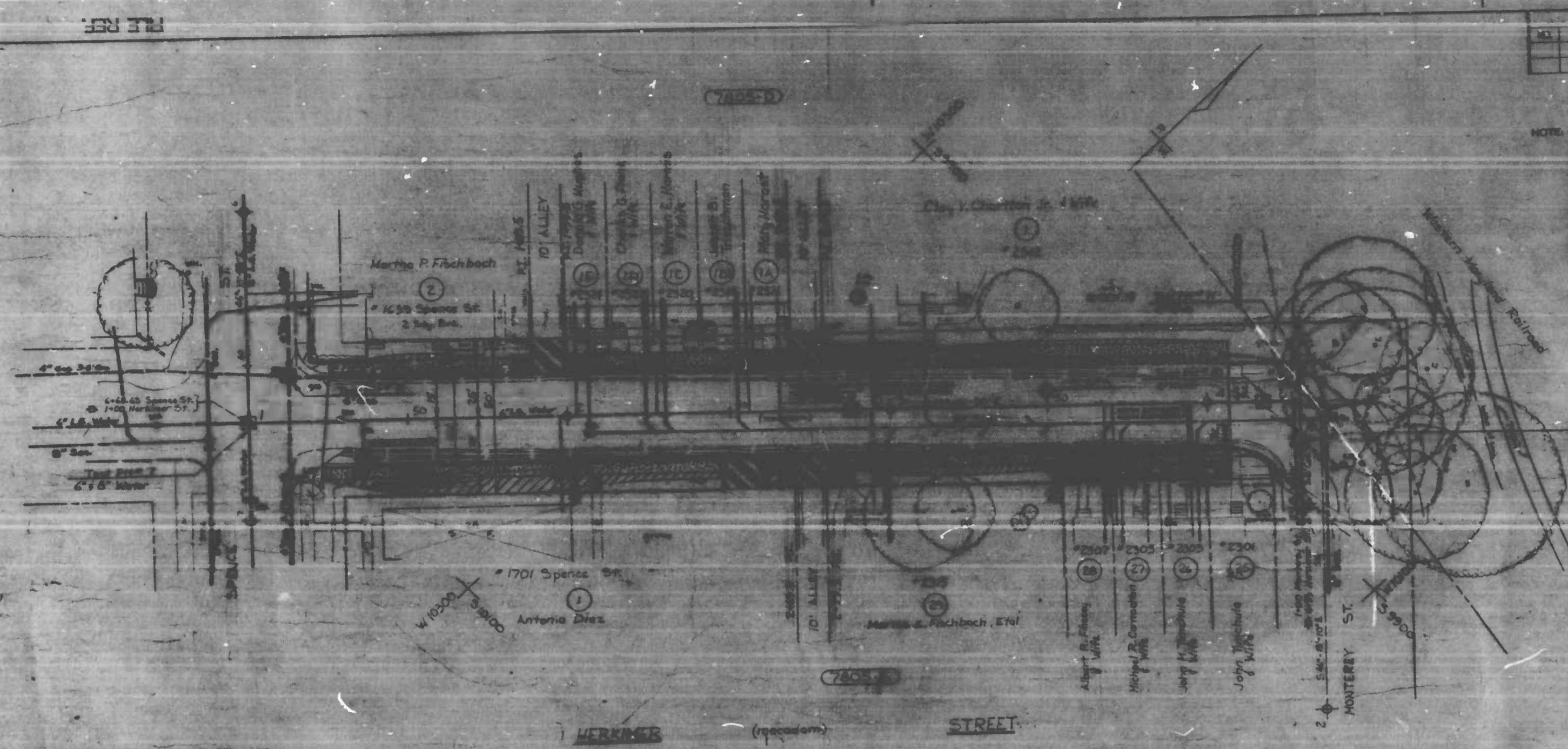
REVISIONS	
NO.	DESCRIPTION

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OF THE CONSTRUCTION INFORMATION WHICH THE CONTRACTOR MUST VERIFY ALL DATA BEFORE BEGINNING HIS OWN SURVEYING.

NOTE: Telephone, Gas & Electric Co. - C & P Telephone Co. Contact "Miss Miller" at 1-800-287-7777 at least 5 working days prior to starting work so that they can arrange to mark the location of their facilities.

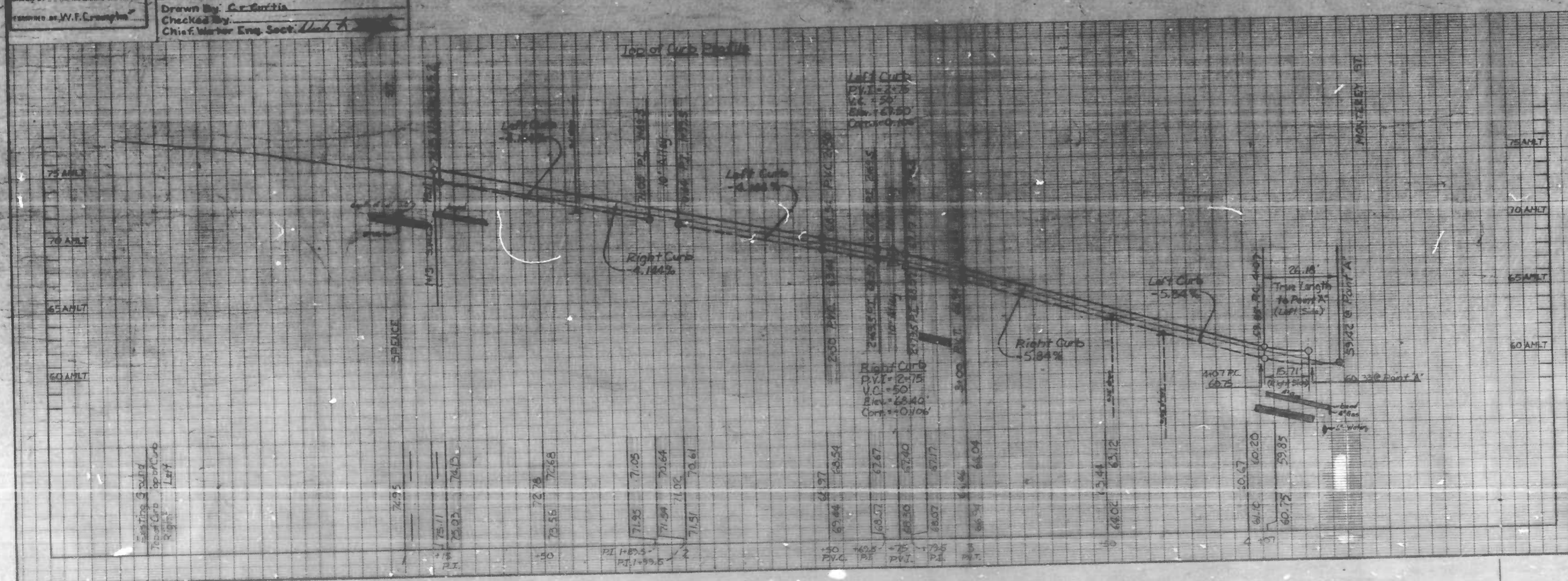
Test Pit Locations		
No.	Station & Offset	Utility
1	1+00 on R.	6" Gas Main
2	1+15 @ 15' on Left	6" Gas Main
3	2+88.4 on R.	6" Water
4	3+25 on R.	6" Water
5	4+75 @ 15' on Left	4" Gas Main
6	4+75 @ 15' on Left	6" Water (Main)
7	4+75 @ 15' on Left	6" Gas
8	5+50	5" Water

Elevation Coordinates		
Sta.	West	South
1+00	-1058.54	-1040.94
4+50	-1055.27	-1038.95
4+50	-1044.52	-1038.70



Book No. X-887  
 Drawn by P. H. Markell  
 Checked by W. F. Coughlin  
 Chief Water Eng. Sect.

WATER ENGINEERING DIVISION  
 Drawn by C. C. Garcia  
 Checked by  
 Chief Water Eng. Sect.



CITY OF BALTIMORE  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF HIGHWAYS  
 CONTRACT NO. 3039

HERKIMER STREET  
 SPENCE ST. ~ MONTEREY ST.  
 UTILITY PLAN

SCALE HORIZ. 1" = 20.0', VERT. 1" = 4.0' DATE 6-28-85  
 HIGHWAY ENGINEERING DIVISION SHEET 8 OF 17

FILE REF.



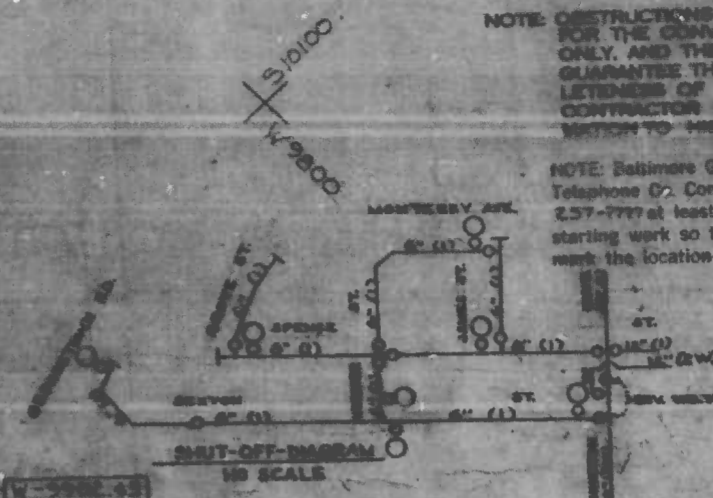
Note: The Fill Slope on the north side of Monterey St. between Herkimer St. and James St. shall be covered with 2" of topsoil, seed and mulch.

Curbing Curve Data		
Sta.	North Curve	South Curve
Δ	90°-00'-00"	90°-00'-00"
Δ/2	45°-00'-00"	45°-00'-00"
R	55.00	30.00
C	70.71	28.28
L	70.54	31.42
T	50.00	20.00
Δ	34.5744-60.77	88.7333-60.00

REVISIONS		
NO.	DESCRIPTION	DATE BY

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.

NOTE: Baltimore Gas & Electric Co. C & P Telephone Co. Contact "Miss Utility" at 1-800-257-7777 at least 3 working days prior to starting work so that they can arrange to mark the location of their facilities.



- WATER NOTES**
- Notify The Bureau Of Water And Waste Water Maintenance Division At 536-8263 One (1) Week Before Starting Work.
  - Adjusting Water Valves Shall Be Operated By The Bureau Of Water And Waste Water Maintenance Division Forces Only.
  - All Water Supply Services And/Or Meter And Fire Hydrant Relocations Shall Be Done In Accordance With The Contract Documents And The Book Of Standards.
  - Contractor Shall Observe Extreme Caution When Working Near Or Over Existing Water Facilities.
  - Existing Water Supply Services And/Or Meters To Be Relocated In MONTELEY PARK STREETS: Relocation Of Two (2) Single Setting 5/8" Meter From -801.

Test Pit Locations		
No.	Station	Utility
15	2+50.85's Right	3" Gas
16	4+00.85's Right	4" Gas
		4" Water

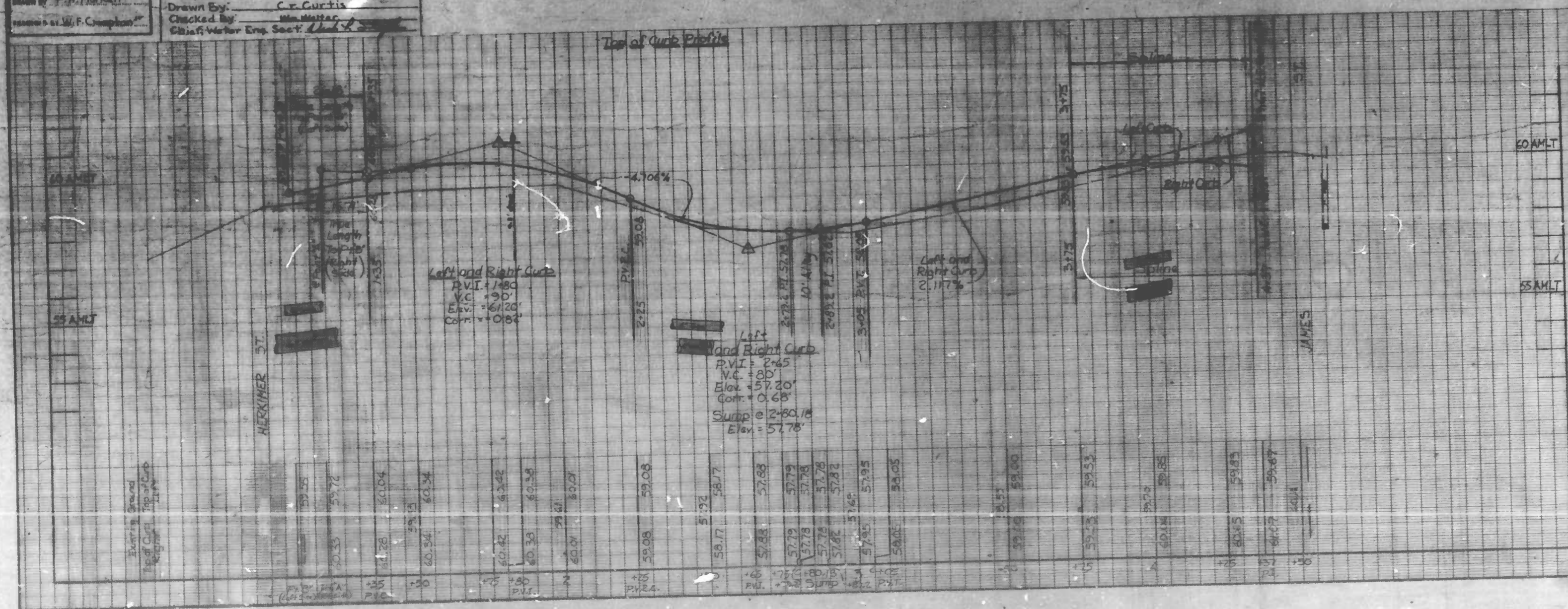
Spot Boring Location	
No.	Location
1	3+00
2	7' Left

Tree Removal Chart			
Sta.	Location	Trunk	Span
1+57.79	28.00' Left	2.0'	25'
2+82.72	22.00' Left	3.0'	20'
2+79.22	24.00' Left	2.0'	20'
3+42.54	0.00' Left	0.1'	2'
3+71.07	18.00' Left	0.1'	3'
3+75.52	19.00' Left	0.15'	4'
3+20.90	13.50' Left	0.10'	3'
3+88.82	16.00' Left	0.20'	6'
4+02.79	17.00' Left	0.20'	10'
4+03.52	12.16' Left	0.20'	7'
4+35.10	17.58' Left	0.20'	8'
4+25.38	17.70' Left	0.20'	9'

WORKING PRESSURE..... 72 P.S.I.  
TEST PRESSURE..... 150 P.S.I.

Book No. X-887  
DESIGNED BY: P.H. Mackall  
CHECKED BY: W.F. Chapman

WATER ENGINEERING DIVISION  
DRAWN BY: C.T. Curtis  
CHECKED BY: M. Walter  
CHIEF WATER ENG. SECT. *[Signature]*



CITY OF BALTIMORE  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF HIGHWAYS  
CONTRACT NO. 3039

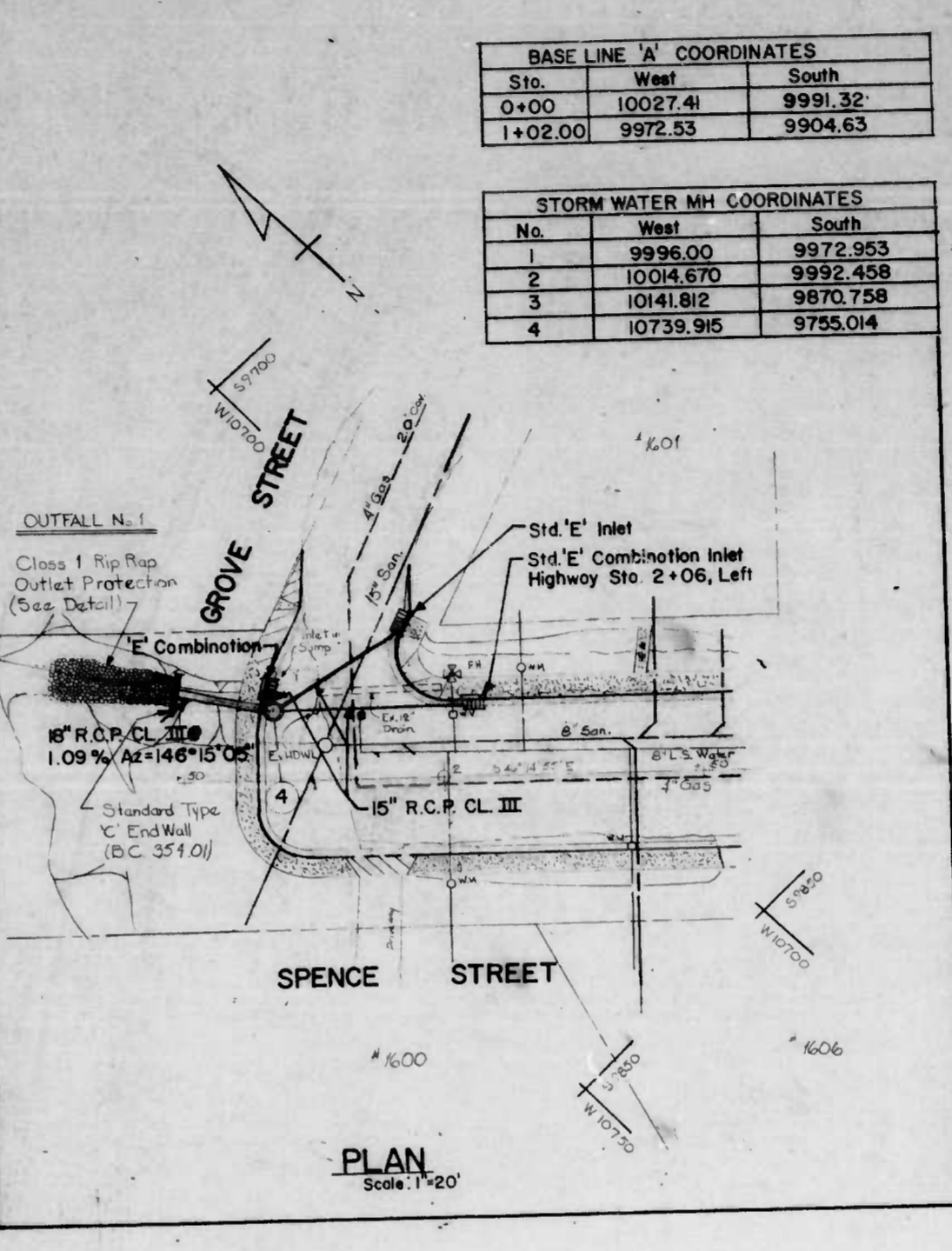
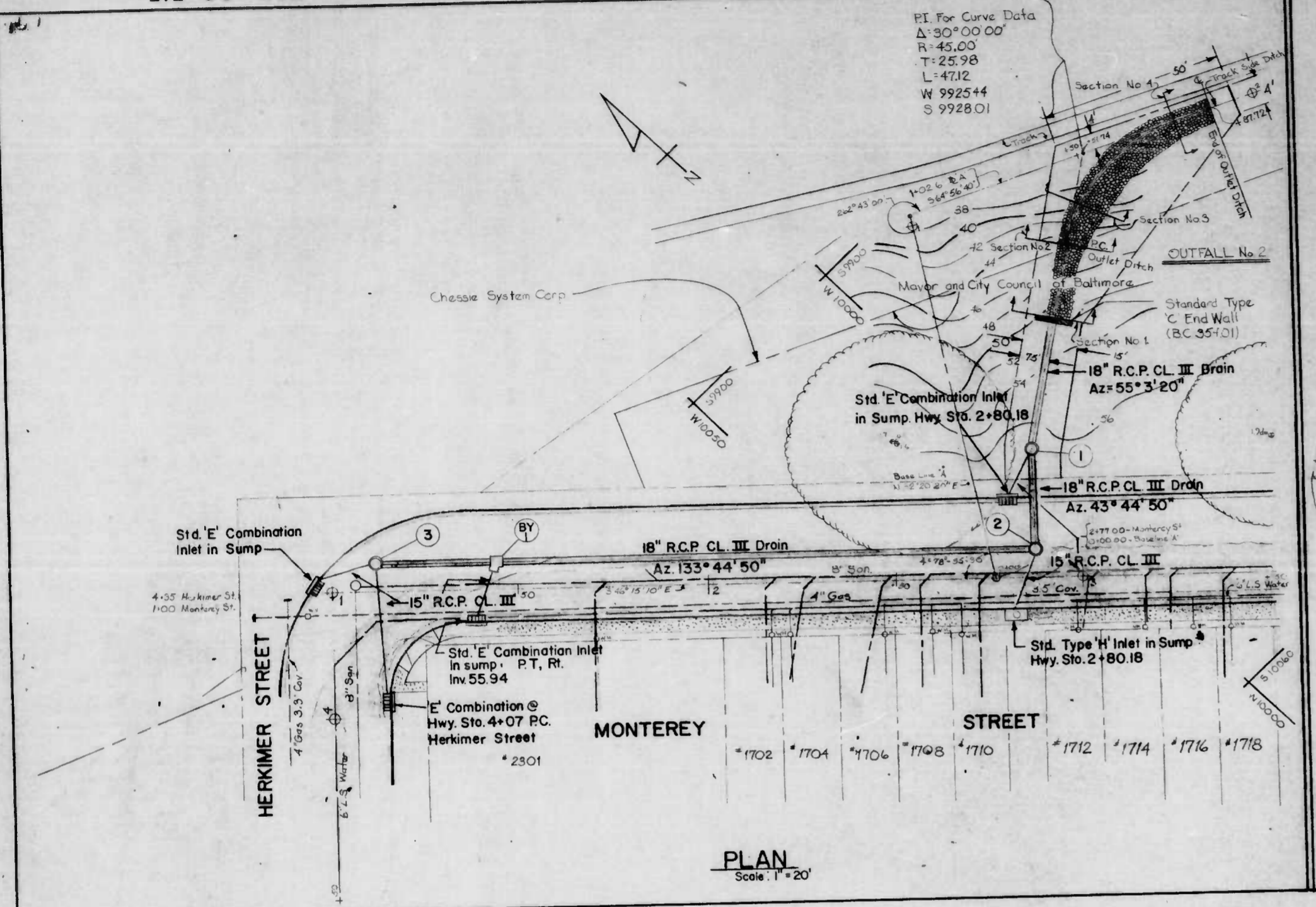
MONTELEY STREET  
HERKIMER ST. ~ JAMES ST.  
UTILITY PLAN

SCALE: Hor. 1" = 20.0', Ver. 1" = 2.0' DATE: 6-28-85  
HIGHWAY ENGINEERING DIVISION SHEET 9 OF 17

FILE REF.

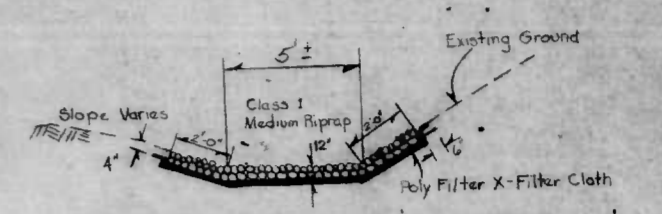
FILE REF. ESD-80-515

REVISIONS			
NO.	DESCRIPTION	DATE	BY



BASE LINE 'A' COORDINATES		
Sto.	West	South
0+00	10027.41	9991.32
1+02.00	9972.53	9904.63

STORM WATER MH COORDINATES		
No.	West	South
1	9996.00	9972.953
2	10014.670	9992.458
3	10141.812	9870.758
4	10739.915	9755.014



**NOTES:**

- Standard Type No. 1 "E" Frame and Grates (B.C. 376.01) shall be used for all New "E" Inlets.
- All inlet ore to be depressed 2-1/2".
- BEFORE DOING ANY DIGGING NOTIFY THE FOLLOWING: (Miss Utility) 559-0100
- Bureau of Highways, Street Lighting Section 396-1311; Conduit Section 396-3658.
- All channels in manholes must be constructed to conform as close as possible to the standard channel called for on the profiles. Gravel Cradle is required under all pipe except inlet connections. All backfill shall be mechanically tamped. For standard details see Baltimore City Book of Standards.
- Obstructions shown on these drawings are for the convenience of the contractor only, and the City does not warrant or guarantee the correctness or the completeness of the information given. The contractor must verify all such information to his own satisfaction.

TYPE OF JOINT FOR PIPE	
TYPE PIPE	TYPE JOINT
Reinforced Concrete Pipe Drain.	"O" Ring Rubber Gasket
Reinforced Concrete Pipe Inlet Conn.	Cement Mortar or "O" Ring Rubber Gasket.

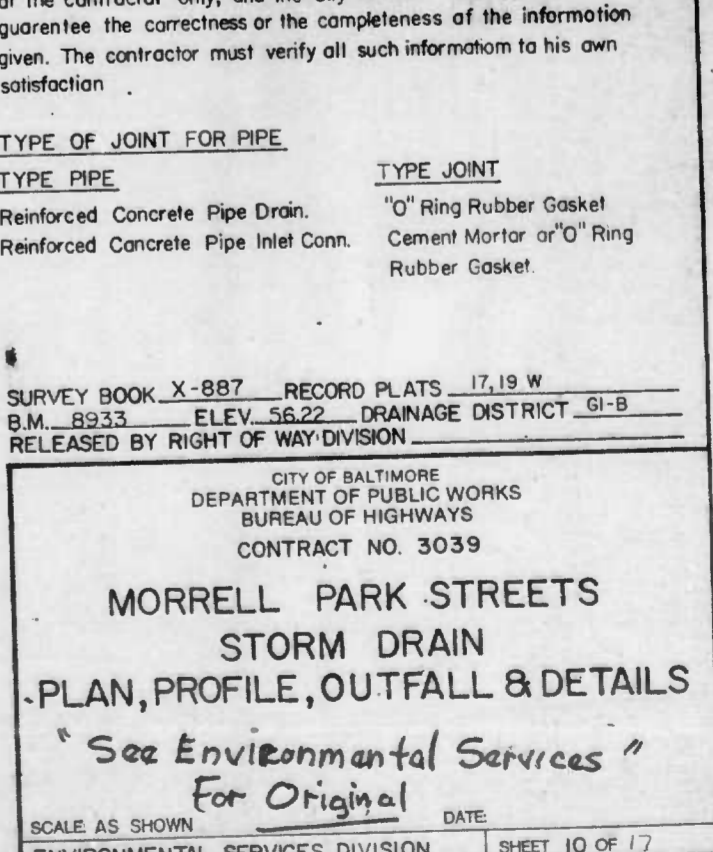
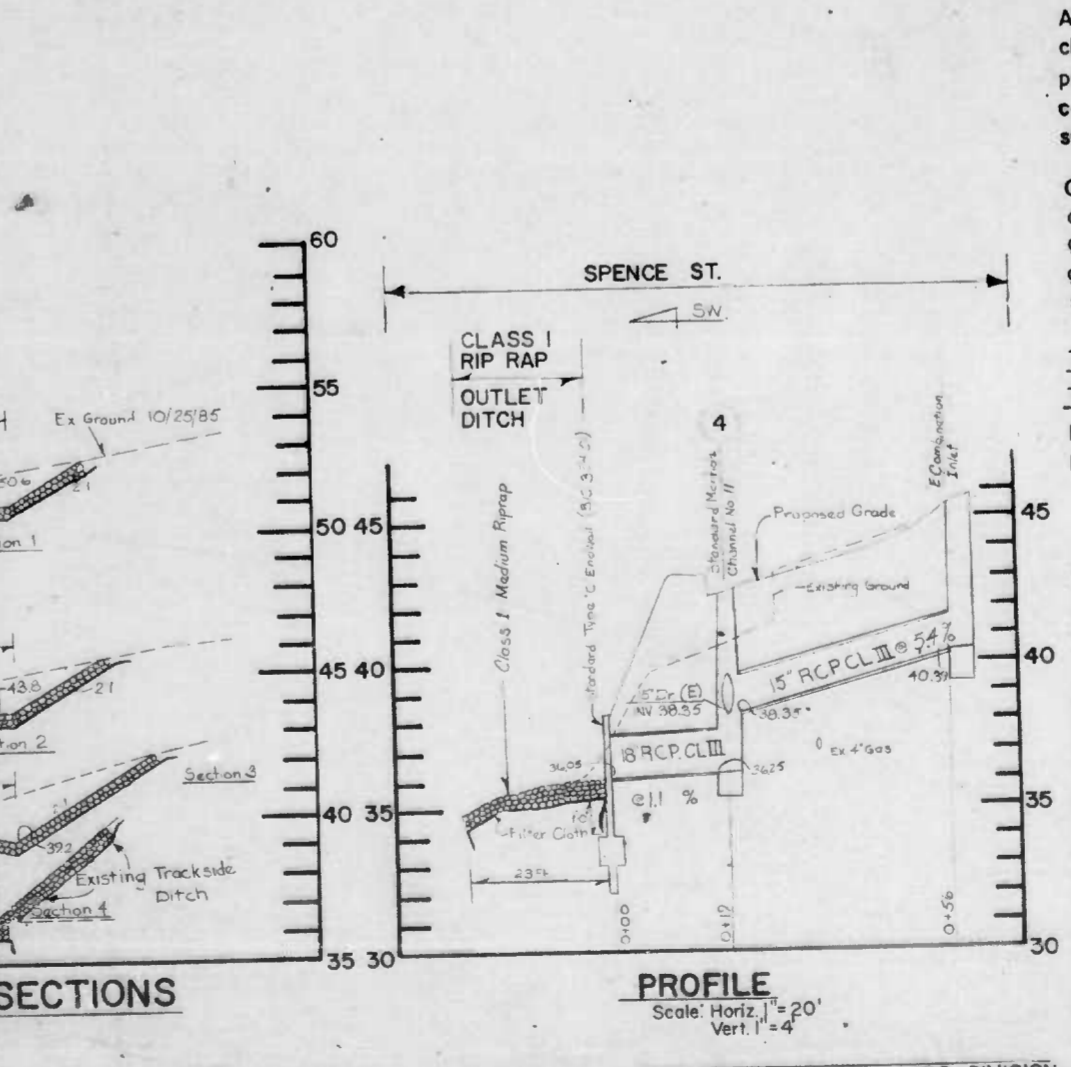
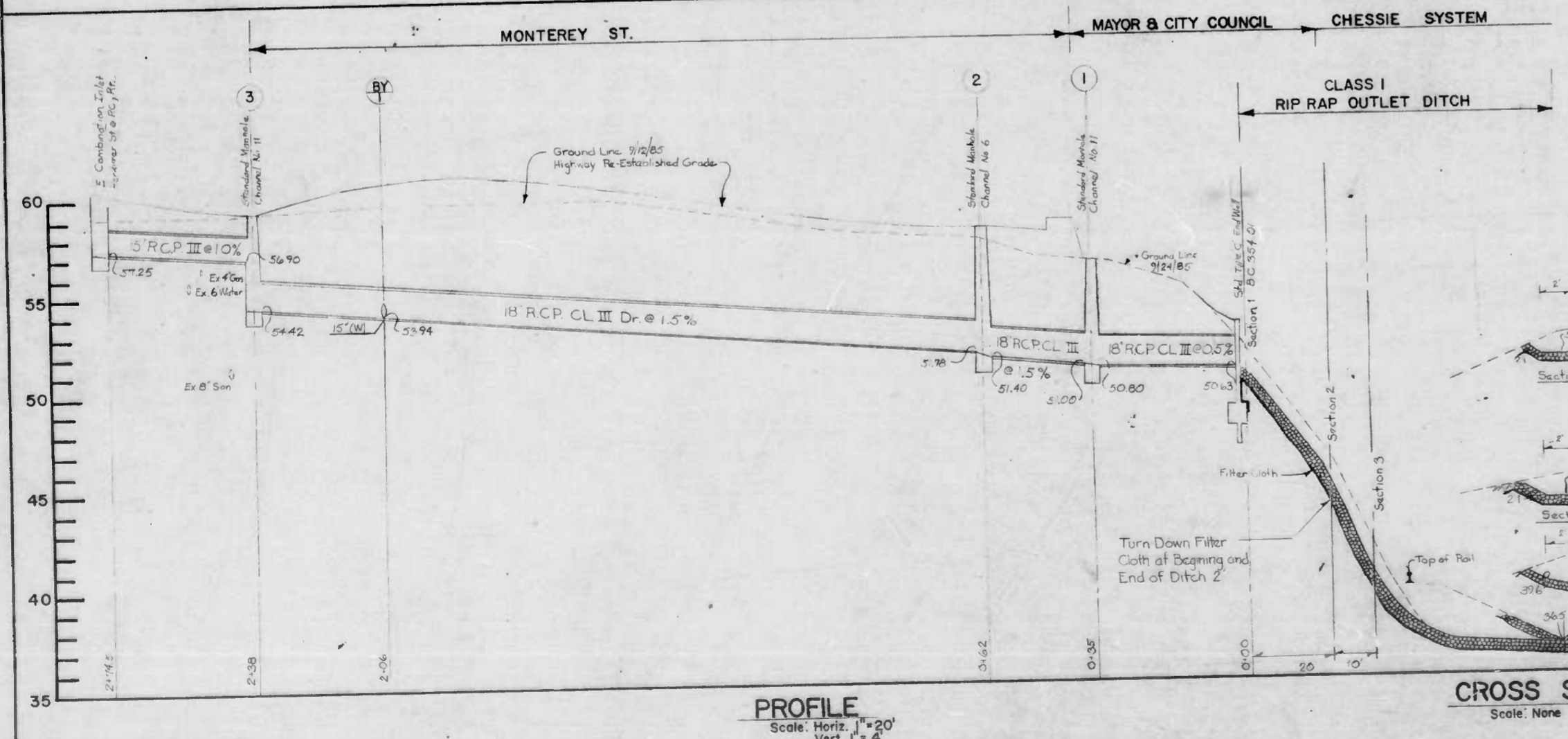
SURVEY BOOK X-887 RECORD PLATS 17, 19 W  
B.M. 8933 ELEV. 56.22 DRAINAGE DISTRICT GI-B  
RELEASED BY RIGHT OF WAY DIVISION

CITY OF BALTIMORE  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF HIGHWAYS  
CONTRACT NO. 3039

**MORRELL PARK STREETS  
STORM DRAIN  
PLAN, PROFILE, OUTFALL & DETAILS**

"See Environmental Services" For Original

SCALE AS SHOWN DATE  
ENVIRONMENTAL SERVICES DIVISION SHEET 10 OF 17



DRAWN BY D.B. McLean  
EXAMINED BY W. P. ...

FILE REF. ESD-80-515

FILE REF.

Note: For True Length Profile of this area, see Sheet No. 6 of 17.

NO INGRESS OR EGRESS VIA GROVE STREET

SEE SHEET NO. 14 FOR CONT'D PLAN

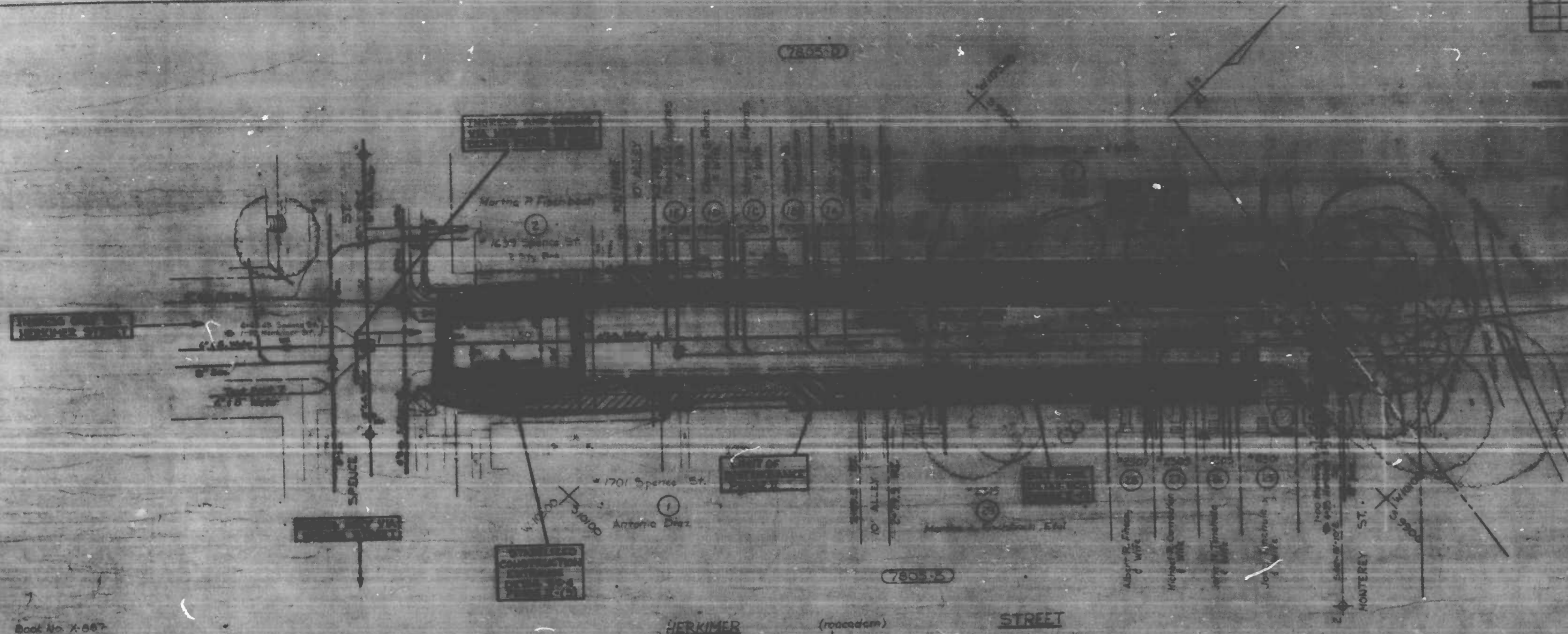


WATER ENGINEERING DIVISION  
 Proposed by: C. C. C...  
 Approved by: Chief Water Eng. Sec'y: D...  
 Date: 4/28/85

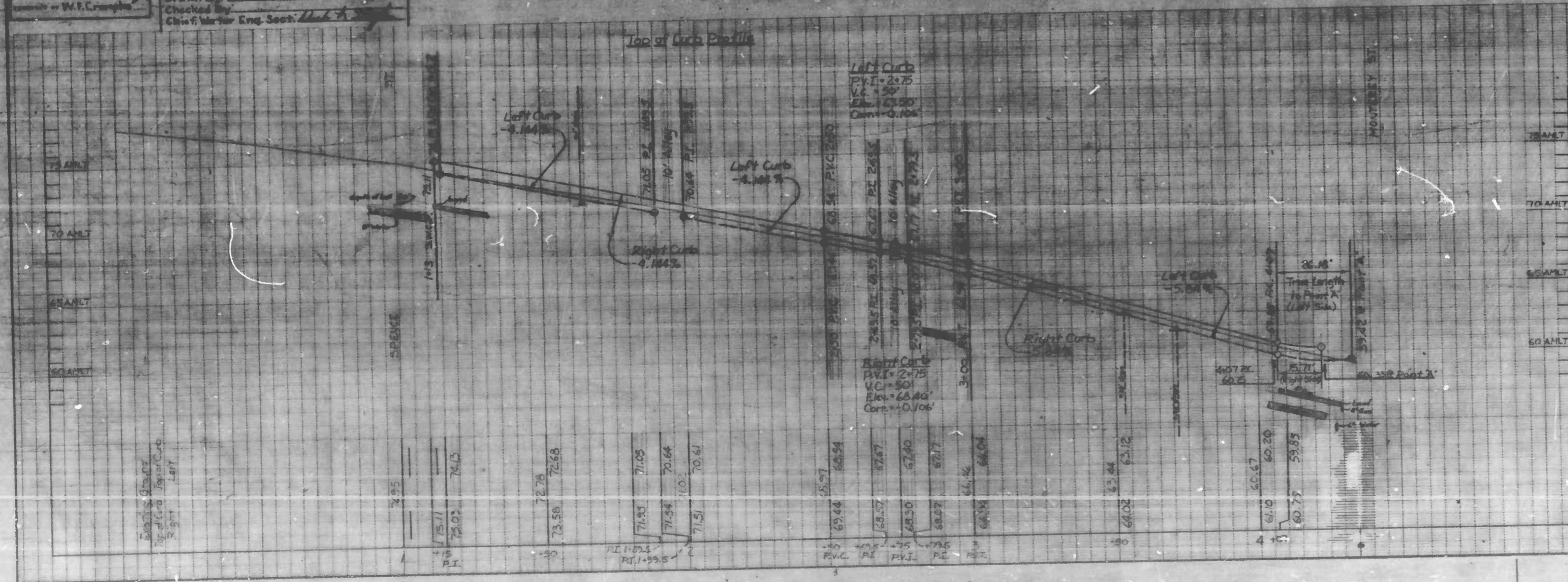


FILE REF.

NO.	DESCRIPTION



Book No. X-887  
 Drawn by P.H. McKell  
 Checked by W.F. Campbell  
**WATER ENGINEERING DIVISION**  
 Chief Water Eng. Sect. Mark A. [unclear]



CITY OF BALTIMORE  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF HIGHWAYS  
 CONTRACT NO. 3039

**HERKIMER STREET**  
 SPENCE ST. ~ MONTEREY ST.  
 SOIL EROSION/SEDIMENT CONTROL PLAN

SCALE: HORIZ. 1"=20.0', VERT. 1"=4.0' DATE: 6-28-85  
 HIGHWAY ENGINEERING DIVISION SHEET 12 OF 17

FILE REF.

Note: The fill shown on the right side of Monterey Street between Herkimer and James Streets shall be covered with 12" of gravel, sand and match.

Sta.	North Curve	South Curve
50+00	50+00	50+00
50+10	50+10	50+10
50+20	50+20	50+20
50+30	50+30	50+30
50+40	50+40	50+40
50+50	50+50	50+50
50+60	50+60	50+60
50+70	50+70	50+70
50+80	50+80	50+80
50+90	50+90	50+90
51+00	51+00	51+00

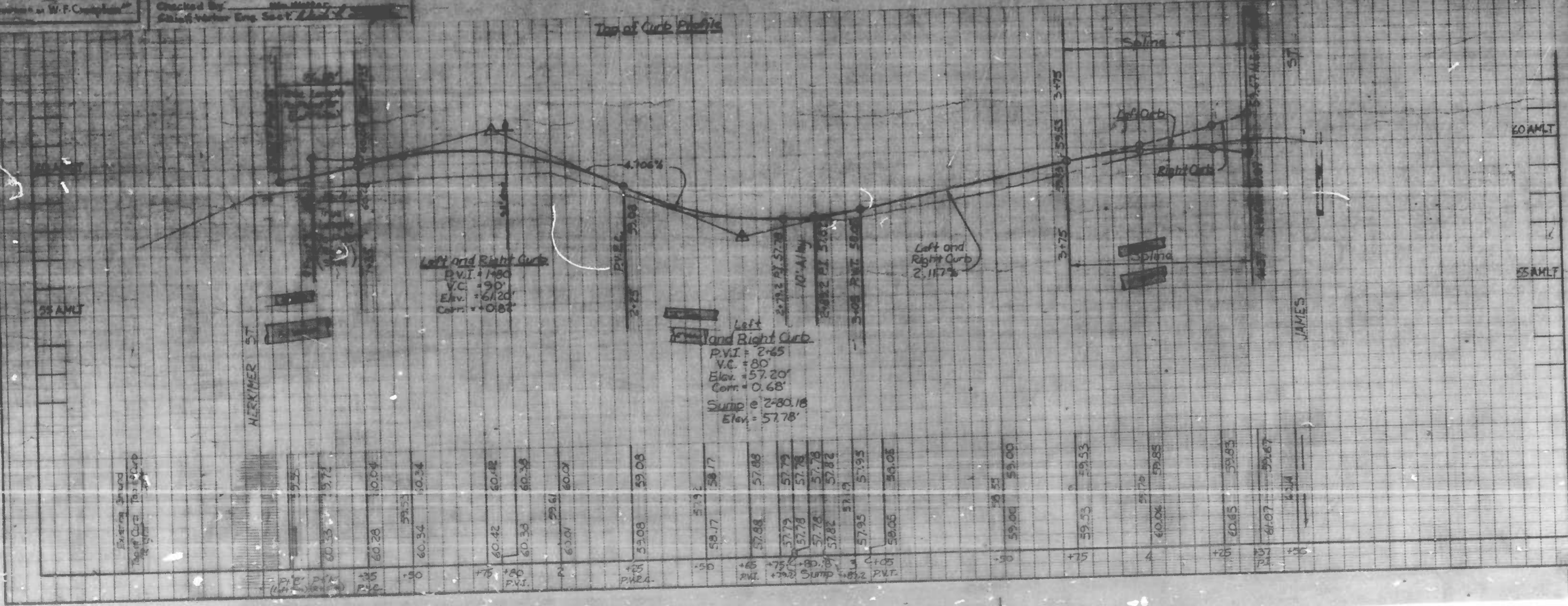
NOTE: STRUCTURES ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND THE CITY DOES NOT GUARANTEE THE ACCURACY OF THE DIMENSIONS OF THE STRUCTURES SHOWN ON THIS DRAWING.

NOTE: ELEVATIONS ARE IN FEET ON A 1985 MEAN SEA LEVEL DATUM. TELEPHONE CO. ELEVATION: 77.00' ON 1985 MEAN SEA LEVEL DATUM. ELEVATION OF THE CITY OF BALTIMORE: 77.00' ON 1985 MEAN SEA LEVEL DATUM.

- NOTES:**
1. The Bureau of Highway Engineering is responsible for the design and construction of the structures shown on this drawing.
  2. The contractor shall be responsible for the construction of the structures shown on this drawing.
  3. The contractor shall be responsible for the construction of the structures shown on this drawing.
  4. The contractor shall be responsible for the construction of the structures shown on this drawing.
  5. The contractor shall be responsible for the construction of the structures shown on this drawing.

Station	Structure	Material	Quantity
50+00	Manhole	Concrete	1.00
50+10	Manhole	Concrete	1.00
50+20	Manhole	Concrete	1.00
50+30	Manhole	Concrete	1.00
50+40	Manhole	Concrete	1.00
50+50	Manhole	Concrete	1.00
50+60	Manhole	Concrete	1.00
50+70	Manhole	Concrete	1.00
50+80	Manhole	Concrete	1.00
50+90	Manhole	Concrete	1.00
51+00	Manhole	Concrete	1.00

Drawn by: F.M. Markell  
Checked by: W.P. Campbell  
WATER ENGINEERING DIVISION  
Checked by: C.T. Curtis  
Checked by: M. Mather  
Checked by: J. M. Mather



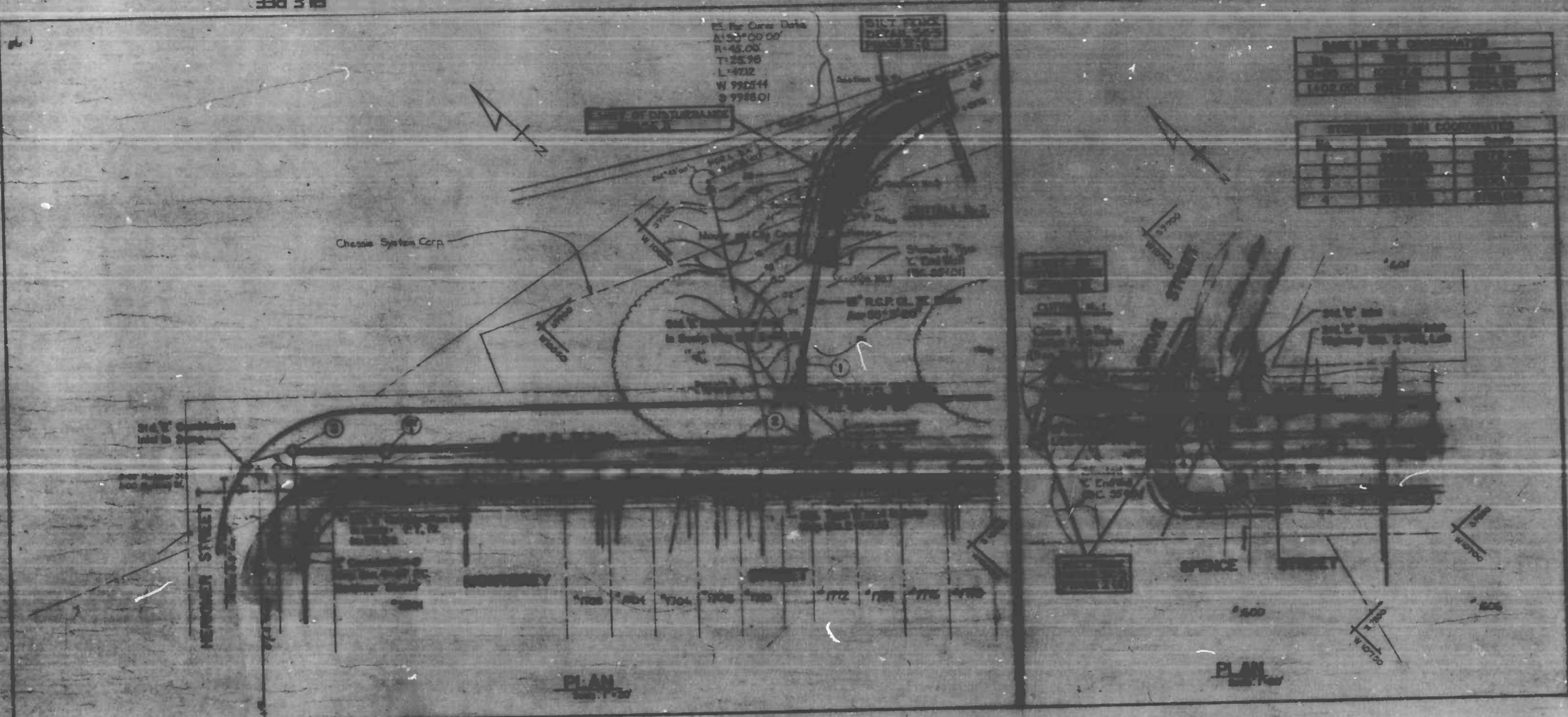
CITY OF BALTIMORE  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF HIGHWAYS  
CONTRACT NO. 3039

MONTEREY STREET  
HERKIMER ST. ~ JAMES ST.  
SOIL EROSION/SEDIMENT CONTROL PLAN

SCALE: Hor: 1" = 20.0', Ver: 1" = 2.0' DATE: 6-20-85  
HIGHWAY ENGINEERING DIVISION SHEET 13 OF 17

FILE REF.

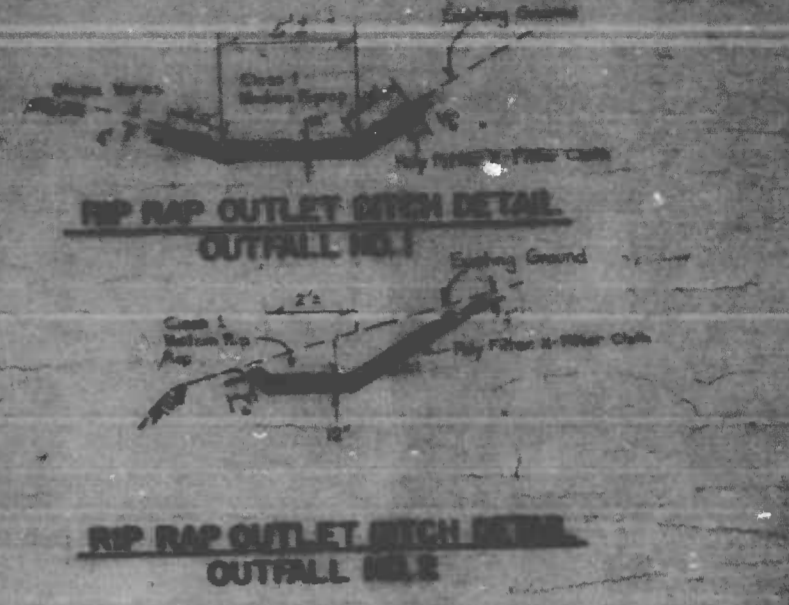
FILE REF.



NO.	REVISIONS	DATE

NO.	DESCRIPTION	DATE

NO.	DESCRIPTION	DATE



**NOTES:**

Standard Type No. 12 Form and Scales etc. shall be used for all 12" pipe.

All inlet are to be depressed 3'-0".

BEFORE DOING ANY WORK, CHECK THE FOLLOWING (City Utility) 220-2200

Series of Highway Street Lighting Section 220-220; Conduit Section 220-2200.

All channels in manholes must be constructed to conform as close as possible to the standard channel called for on the profiles. Gravel Grate is required under all pipe except inlet connections. All details shall be meticulously prepared. For standard details see Baltimore City Book of Standards.

Obstructions shown on these drawings are for the convenience of the contractor only, and the City does not warrant or guarantee the correctness or the completeness of the information given. The contractor must verify all such information to his own satisfaction.

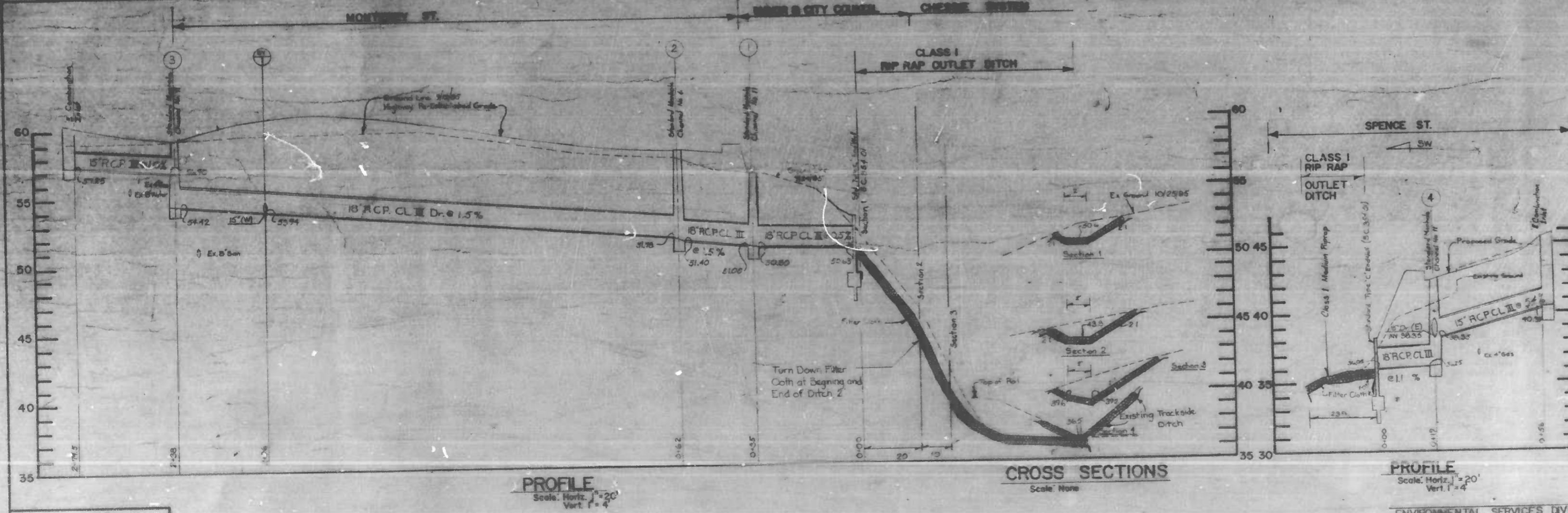
TYPE PIPE	TYPE JOINT
Reinforced Concrete Pipe Drain.	"O" Ring Rubber Gasket
Reinforced Concrete Pipe Inlet Com.	Cement Mortar or "O" Ring Rubber Gasket.

SURVEY BOOK X-887 RECORD PLATS 17, 19 W  
 B.M. 8933 ELEV. 56.22 DRAINAGE DISTRICT 61-B  
 RELEASED BY RIGHT OF WAY DIVISION

CITY OF BALTIMORE  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF HIGHWAYS  
 CONTRACT NO. 3039

**MORRELL PARK STREETS  
 STORM DRAIN  
 PLAN, PROFILE, OUTFALL & DETAILS  
 AND  
 SOIL EROSION / SEDIMENT CONTROL PLAN**

SCALE AS SHOWN DATE: \_\_\_\_\_  
 ENVIRONMENTAL SERVICES DIVISION SHEET 14 OF 17



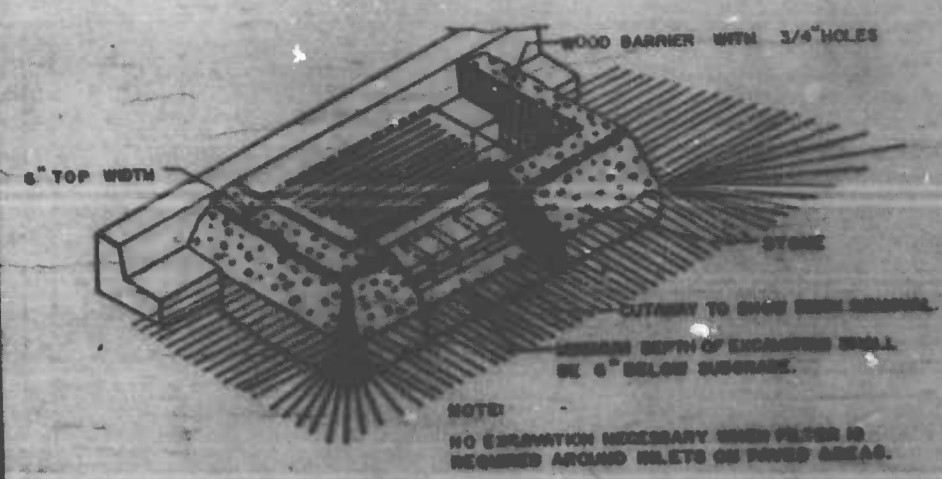
DRAWN BY: D.B. Mc...  
 EXAMINED BY: W. PHILIPS

PLATE 14 OF 17

FILE REF. ESD-80-

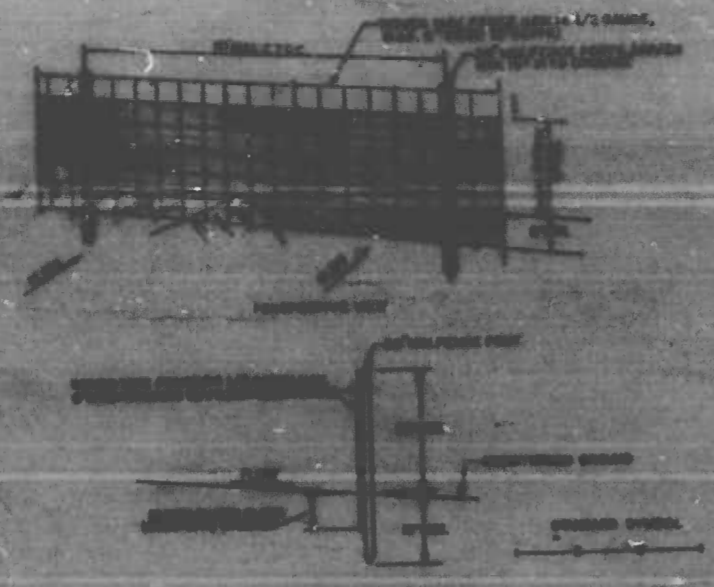
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REVISIONS		DATE	BY
NO.	DESCRIPTION		



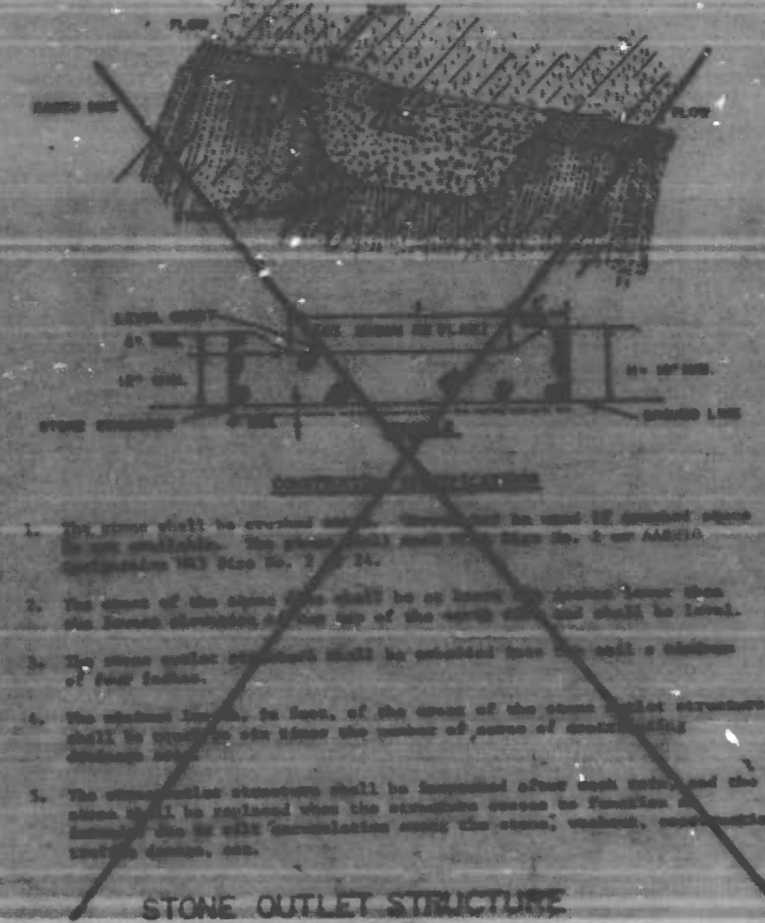
- CONSTRUCTION SPECIFICATIONS**
1. Excavation shall be inspected after each season and repairs made as needed.
  2. Construction operations shall be carried out to such a manner that erosion and silt pollution is minimized.
  3. The structure shall be covered when damage due to rain has properly occurred.
  4. The finished stone used in the catch shall meet ASTM D 121-60 Specification for Rip-Rap No. 2 or 2 1/2 or the equivalent from an approved source. Crushed stone may be used if approved stone is not available. Crushed has to meet equivalent.

**INLET PROTECTION  
DETAIL SC-1**



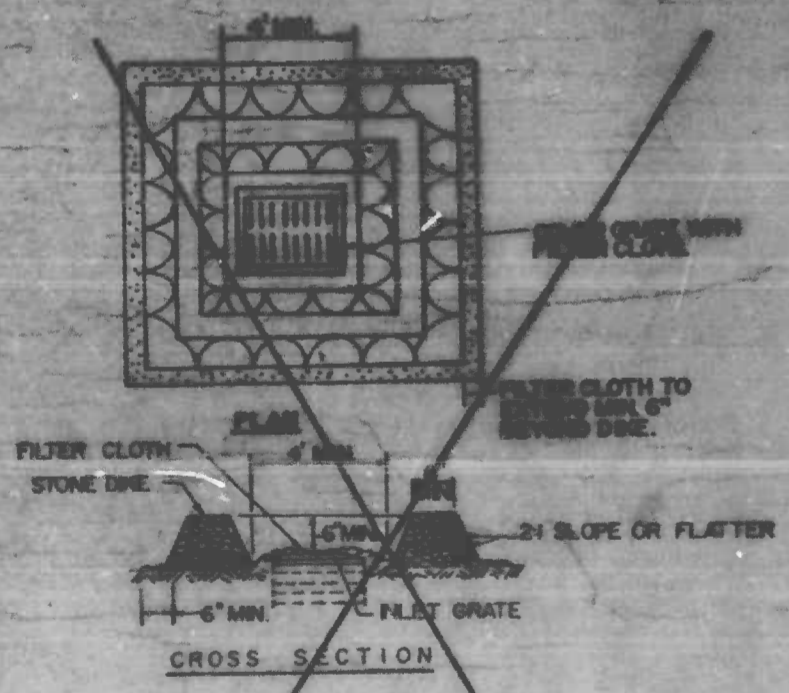
- CONSTRUCTION SPECIFICATIONS**
1. Stone shall be placed to be finished correctly to these points with wire cloth or similar.
  2. Filter cloth to be placed centrally to Stone Dike. Stone shall cover spread evenly 24" on the top and sides.
  3. The top surface of Filter Cloth shall be flush with the top of the dike and shall be supported by the stakes and fabric.
  4. Maintenance shall be performed as needed and material removed when "filter" clogging in the site drain.
- PORTY:** Steel plates 1/2" or 1" type or 2" equivalent  
**FENCE:** Screen Mesh, 36 Ga. 4" Mesh  
**FILTER CLOTH:** FARMASIX, MANTON, TRACK or approved equal  
**PERMEABLE INLET:** SPECIAL HYDROTECT, or French

**SILT FENCE  
DETAIL SC-3**



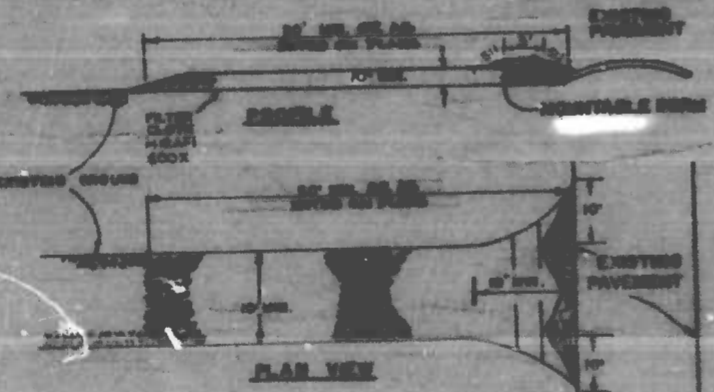
1. The stone shall be crushed stone. It shall be used in amount equal to the amount of stone used in the 2' x 2' x 2' structure.
2. The stone of the outlet shall be at least 2 inches larger than the largest aggregate size of the soil to be treated.
3. The stone outlet structure shall be installed with a minimum of four inches.
4. The structure shall be located to the east of the stone outlet structure shall be located to the west of the stone outlet structure.
5. The structure shall be inspected after each rain and the stone shall be replaced when the structure shows a function of erosion.

**STONE OUTLET STRUCTURE  
DETAIL SC-5**



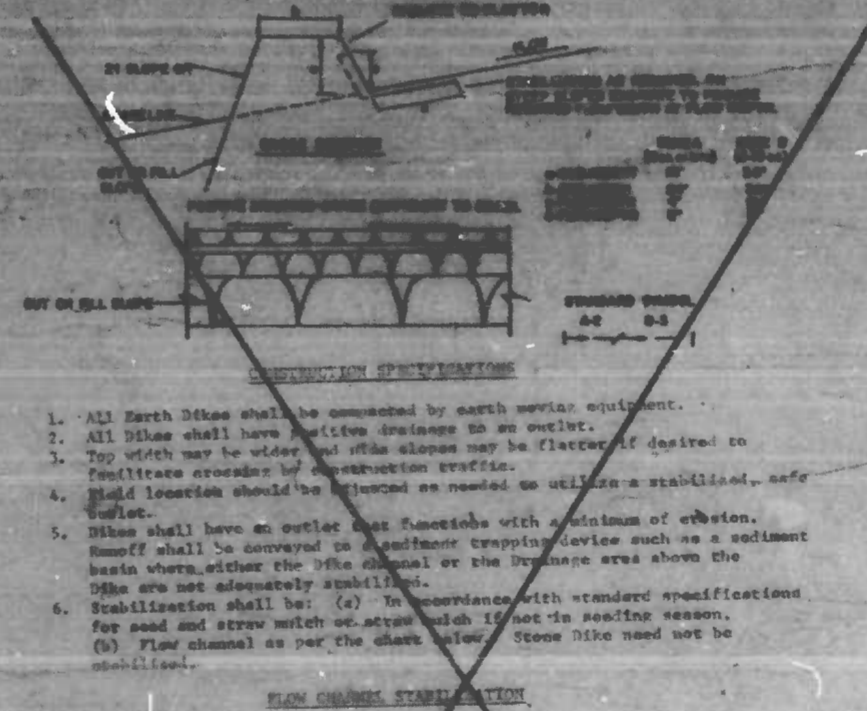
- CONSTRUCTION SPECIFICATIONS**
1. Stone for the Dike shall be crushed stone. Gravel may be used if crushed stone is not available. The stone shall meet ASTM D 121-60 or ASTM D 121-60 No. 2 or 2 1/2. Crusher run is not acceptable.
  2. Filter Cloth shall be Poly-Filter 1 or approved equal.
  3. The structure shall be inspected after each rain and repairs made as needed.

**INLET PROTECTION  
DETAIL SC-2**



- CONSTRUCTION SPECIFICATIONS**
1. Stone Size - Top 2" area, or equivalent or crushed concrete equivalent.
  2. Length - As required, but not less than 50 feet (except on a single residential lot where a 30 foot minimum length would apply).
  3. Thickness - Not less than 18" (6) inches.
  4. Width - Top 10" feet minimum, but not less than the full width at outside slope bottom or across course.
  5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be covered on a stable facility residence lot.
  6. Surface Water - All surface water flowing or diverted toward construction entrance shall be piped across the entrance. If piping is impractical, a portable pump with 5/8" diameter will be permitted.
  7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and timely and/or clearing of any obstructions used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
  8. Washing - Stone shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
  9. Traffic Inspection and needed maintenance shall be provided after each rain.

**STABILIZED CONSTRUCTION ENTRANCE  
DETAIL SC-4  
HEAVY DUTY ENTRANCE**



- CONSTRUCTION SPECIFICATIONS**
1. All Earth Dikes shall be constructed by earth moving equipment.
  2. All Dikes shall have positive drainage on an outlet.
  3. Top width may be wider and while slopes may be flatter if desired to facilitate crossing by construction traffic.
  4. Field location should be selected as needed to utilize a stabilized, safe outlet.
  5. Dikes shall have an outlet that functions with a minimum of erosion. Dikes shall be covered on a sediment trapping device such as a sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
  6. Stabilization shall be: (a) In accordance with standard specifications for sand and straw mulch or straw which is not in seeding season. (b) Flow channel as per the chart below. Stone Dike need not be stabilized.

TYPE OF DRAINAGE	FLOW CHANNEL STABILIZATION	
	CHANNEL SHAPE	DEPTH
1	0.5-3.0'	Seed and Straw Mulch
2	3.0-5.0'	Seed and Straw Mulch
3	5.1-9.0'	Seed with Jute, or Straw, 2" Stone
4	9.1-20'	Lined Rip-Rap 4-8" Engineering Design

A. Stone to be 1/2 inch stone, or crushed concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.  
B. Rip-Rap to be 4-8 inches in a layer at least 8 inches thickness and crushed into the soil.  
C. Approved equivalent can be substituted for any of the above materials.  
Traffic inspection and required maintenance must be provided after each rain event.

**EARTH / STONE DIKE  
DETAIL SC-6/DETAIL SC-7**

**LEGEND**

- LIMITS OF DISTURBANCE
- INLET PROTECTION (SC-1)
- SILTY FENCE (SC-3)
- STABILIZED CONSTRUCTION ENTRANCE (SC-4)
- STONE OUTLET STRUCTURE (SC-5)
- EARTH / STONE DIKE (SC-6/SC-7)
- SEDIMENT TRAP (ST-2)
- CHECK DAM (SC-8)
- CONSTRUCTION ENTRANCE (SC-9)
- INSTREAM SEDIMENT TRAP (SC-10)

N.I.C. (Not In Contract)

**NO STOCKPILE OR STAGING AREAS WILL BE PERMITTED ON THIS PROJECT.**

CITY OF BALTIMORE  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF HIGHWAYS  
CONTRACT NO. 3039

**MORRELL PARK STREETS**

SOIL EROSION / SEDIMENT CONTROL DETAILS

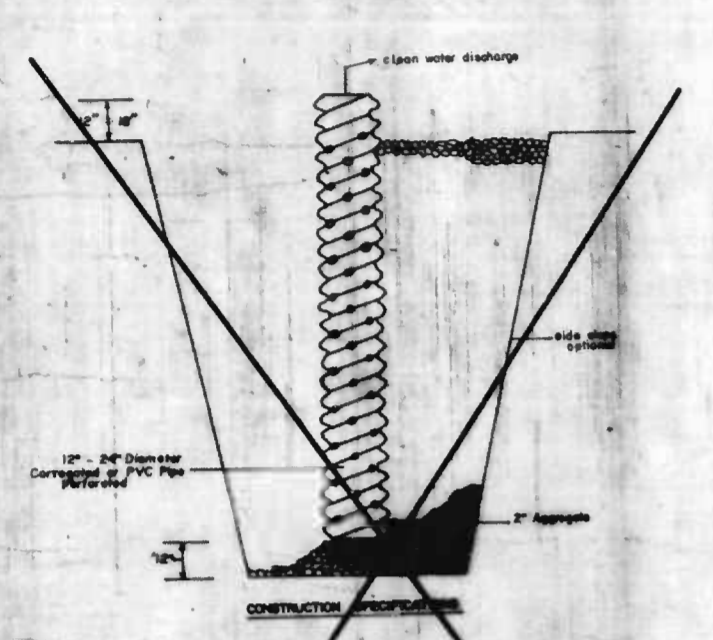
SCALE: NO SCALE  
HIGHWAY ENGINEERING DIVISION  
DATE: \_\_\_\_\_  
SHEET 15 OF 17

DRAWN BY A. MOSCATO  
EXAMINED BY \_\_\_\_\_

FILE REF.

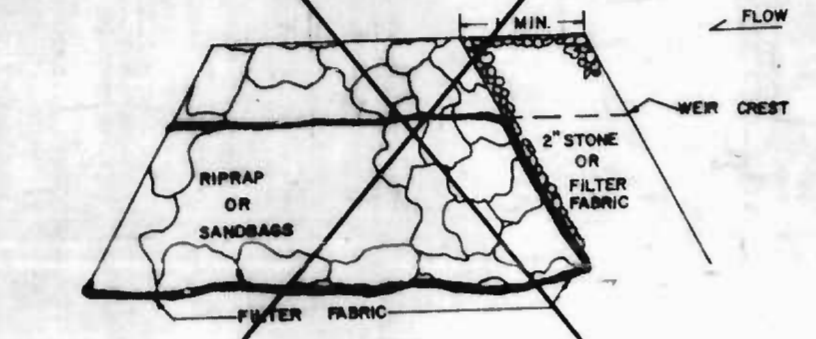
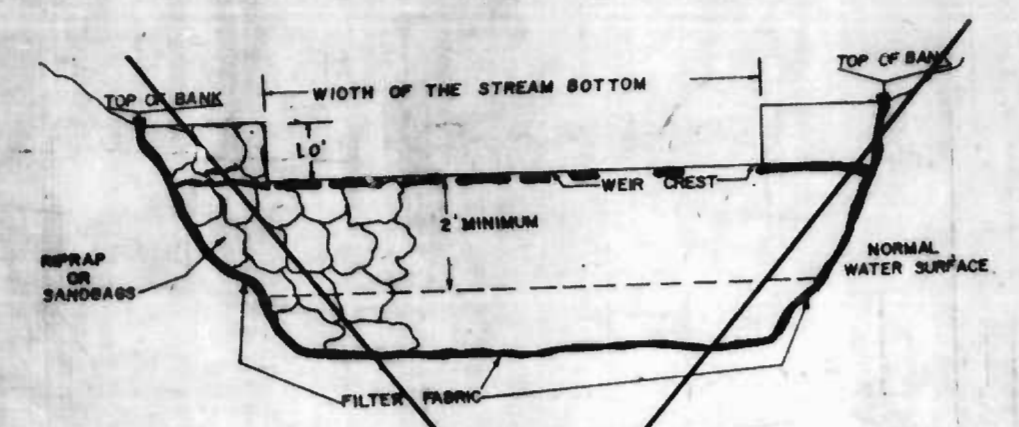
FILE REF.

REVISIONS		
NO.	DESCRIPTION	DATE BY



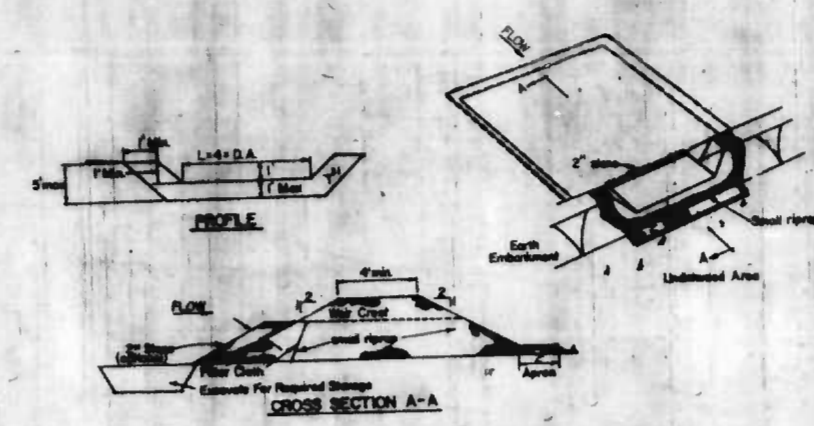
- CONSTRUCTION SPECIFICATIONS**
1. Pit diameter shall be 18" minimum.
  2. The structure shall be constructed by perforating a 12"-24" diameter corrugated PVC pipe.
  3. A layer of 2" aggregate shall be placed in the pipe to a depth of 12" after installing the structure. The aggregate shall be compacted with a 2" aggregate.
  4. The structure shall extend 12" above the top of aggregate.
  5. If discharge will be pumped directly to a storm drainage system, the discharge shall be equipped with a check valve before being placed. A 1/2" x 1/2" check valve shall be placed around the pipe, prior to attaching the other side. This will ensure the water does not siphon into the pipe.

SUMP PIT DETAIL SP-1



1. Riprap shall be sufficient size to withstand calculated bank fail velocities.
2. Device shall be constructed from top of stream bank to top of stream bank.

INSTREAM SEDIMENT TRAP DETAIL SC-8

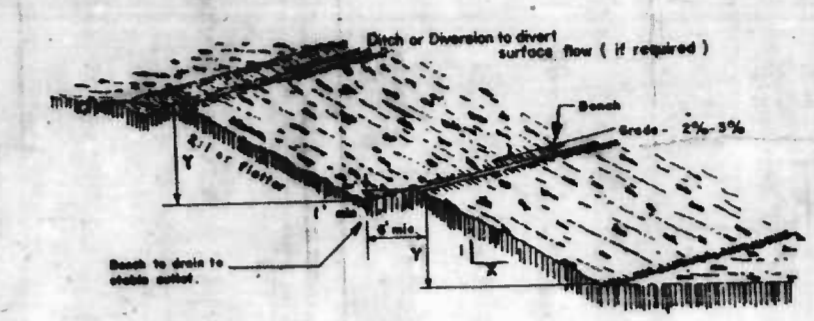


Option 1: A one-foot layer of 2" stone may be placed on the upstream side of the riprap to block of the embedded filter cloth.

**CONSTRUCTION SPECIFICATIONS FOR ST-X**

1. Area under outletbank shall be cleared, graded, and stripped of any vegetation and root mat. The soil shall be stabilized.
2. The fill material for the outletbank shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The outletbank shall be constructed by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-6" along with a 1" thickness of 2" aggregate placed on the up-slope side on the small riprap or embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the outletbank has accumulated to 1/2 the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP DETAIL ST-X

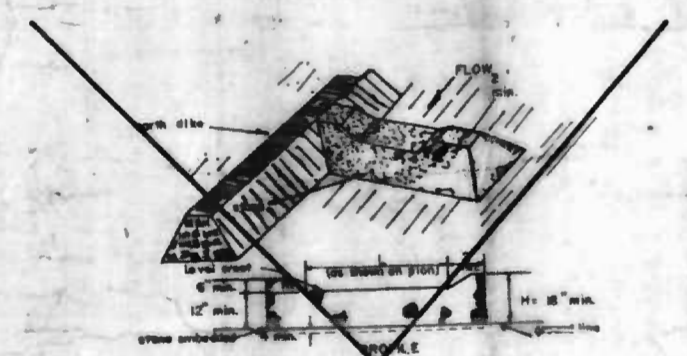


X	Y (MAX)
2	20'
3	30'
4	40'

**CONSTRUCTION SPECIFICATIONS**

1. All graded or disturbed areas including slopes shall be protected during clearing and construction in accordance with the approved sediment control plan with they are permanently stabilized.
2. All sediment control practices and measures shall be constructed, applied and maintained in accordance with the approved sediment control plan and the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas".
3. Topsoil required for the establishment of vegetation shall be applied in an amount necessary to complete finished grading of all exposed areas.
4. Areas to be filled shall be cleared, grubbed and stripped of topsoil to remove trees, vegetation, roots or other objectionable material.
5. Areas which are to be respiped shall be scarified to a minimum depth of three inches prior to placement of topsoil.
6. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and pavements, etc., shall be compacted in accordance with local requirements or codes.
7. All fill to be placed and compacted in layers not to exceed 8 inches in thickness.
8. Except for approved landfills, fill materials shall be free of trash, rubble, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory fills.
9. Fines materials or soft, moist or highly compressible materials shall not be incorporated into fills.
10. Fill shall not be placed on a frozen foundation.
11. All benches shall be kept free of sediment during all phases of development.
12. Benches or aprons uncovered during construction shall be seeded in accordance with the Standards and Specifications for Subsurface Drain or other approved method.
13. All graded areas shall be permanently stabilized immediately following final grading.
14. Ditches, borrow areas and spill areas shall be shown on the plans and shall be subject to the provisions of this Standard and Specifications.

LAND GRADING DETAIL LG-1



- CONSTRUCTION SPECIFICATIONS**
1. The stone shall be crushed stone. Other stone may be used if crushed stone is not available. The stone shall meet MSHA and No. 2 or ASTM No. 24 specifications.
  2. The crest of the structure shall be at least 12" higher than the lowest elevation of the top of the earth on the up-slope.
  3. The stone outlet structure shall be embedded into the earth a minimum of four inches.
  4. The minimum height of the crest of the stone outlet structure shall be equal to six times the number of courses of riprap or stone used.
  5. The structure shall be inspected after each rain and repairs made as needed. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

CHECK DAM DETAIL

CITY OF BALTIMORE  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF HIGHWAYS  
CONTRACT NO 3039

**MORRELL PARK STREETS**

SOIL EROSION / SEDIMENT CONTROL DETAILS

SCALE: NO SCALE DATE: \_\_\_\_\_  
HIGHWAY ENGINEERING DIVISION SHEET 16 OF 17

DRAWN BY A. MOSCATO  
EXAMINED BY \_\_\_\_\_

FILE REF.



FILE REF.

REVISIONS		
NO.	DESCRIPTION	DATE BY

**STABILIZATION SPECIFICATIONS**

**TEMPORARY STABILIZATION - ARTICLE 36.12**

**Planting Season:** Temporary seeding can be done anytime of the year except when the ground is frozen. This item shall consist of furnishing and placing all fertilizer, temporary seed and mulch on areas disturbed for more than fourteen (14) days.

**Schedule of Procedure:** The contractor shall provide temporary stabilization as specified in the approved sediment control plan.

**Seedbed Preparation:** When the area to be seeded is packed and hard, the top layer of topsoil shall be loosened by raking or other means before seed is applied.

**Lime:** No lime shall be required for temporary seeding.

**Fertilizer:** Commercial fertilizer of an analysis 5-10-5 applied at a rate of 35 pounds per 1000 square feet.

**Seeding:** (Section 20.28-1) Seed mixture, Annual Ryegrass applied at the rate of 3 pounds per 1000 square feet.

**Mulching:** Applied at the rate of 100 pounds per 1000 square feet. Mulch anchoring - asphalt mix at the rate of 10 gallons per 1000 square feet. The mulch shall be applied by blowing and the asphalt binder material shall be sprayed into the mulch.

**PERMANENT STABILIZATION - ARTICLE 36.06**

**Planting Season:** No sod shall be placed between the dates of June 1 and August 15 inclusive nor at anytime when the temperature is below thirty-two (32) degrees Fahrenheit. No frozen sod shall be used and no sod shall be placed upon frozen soil.

**Sodbed Preparation:** Before placing or depositing sod upon any surfaces, all shaping and dressing of such surfaces shall have been completed. The completed areas to be seeded shall present a smooth, uniform, well-titled surface true to line and cross section and any raking required to accomplish this will be done prior to the placing of the sod.

**Fertilizers:** All areas to be seeded shall be fertilized with a commercial fertilizer of an analysis 10-10-10 and Ureaform fertilizer 38-0-0 applied at the rate of 20 and 5 pounds respectively per 1000 square feet.

**NOTE:** After sod is in place, topdress the sod with Ureaform fertilizer 38-0-0 at the rate of 5 pounds per 1000 sq. ft.

**Lime:** Limed at the rate of 100 pounds of ground limestone per 1000 square feet. The lime and the 10-10-10 and 38-0-0 fertilizers shall be worked into the top two (2) inches of soil prior to placing sod.

**Seedmixture Grass Sod (Section 20.28-3)**

**TYPE A - Bluegrass Sod**  
 not less than 60% Kentucky Bluegrass  
 not more than 35% Creeping Red Fescue  
 not more than 10% other grasses and legumes

**TYPE B - Tall Fescue Sod**  
 not less than 80% Tall Fescue  
 not more than 20% other grasses and legumes

DESIGNATED AREA	ACTIVE	IN-ACTIVE	TYPE OF STABILIZATION	SEQUENCE NO.		
				PHASE I	PHASE II	PHASE III
NEW	X		6" SUB-BASE, CR-6	(6)	(4)	
CONSTR. CONC.		X	6" BIT. CONC., BAND BI	(7)	(5)	
CONC.	X		3" SUB-BASE, CR-6	(6)	(4)	
CONC.		X	5" CEM. CONCRETE	(7)	(5)	
CONC.	X		6" SUB-BASE, CR-6	(6)	(4)	
CONC.		X	7" CEM. CONCRETE	(7)	(5)	
BIT.	X		6" SUB-BASE, CR-6	(6)	(4)	
BIT.		X	3" BIT. CONC., BAND BF	(7)	(5)	
ELEVATING SLOPES	X		TEMP. STAB., RYEGRASS	(6)	(4)	
CUT SLOPES	X		2" TOPSOIL AND SOD			(1)
FILL SLOPES	X		TEMP. STAB., RYEGRASS	(6)	(4)	
FLAT SLOPES	X		2" TOPSOIL AND SOD			(1)
FLAT SLOPES	X		TEMP. STAB., RYEGRASS	(6)	(4)	
FLAT SLOPES	X		2" TOPSOIL AND SOD			(1)

**DISTURBED AREA**

SPENCE STREET	28,476	S.F.
HERKIMER STREET	13,608	S.F.
MONTEREY STREET	23,084	S.F.
<b>TOTAL</b>	<b>65,168</b>	<b>S.F.</b>

**SITE DATA**

	EARTHWORK		
	CUT	FILL	EXCESS
SPENCE STREET	828 C.Y.	43 C.Y.	785 C.Y.
HERKIMER STREET	476 C.Y.	3 C.Y.	473 C.Y.
MONTEREY STREET	526 C.Y.	440 C.Y.	86 C.Y.
<b>TOTAL CUT</b>	<b>1,830 C.Y.</b>		
<b>TOTAL FILL</b>		<b>486 C.Y.</b>	
<b>TOTAL EXCESS</b>			<b>1,344 C.Y.</b>

NOTE: QUANTITIES LISTED HEREIN ARE TO BE USED ONLY TO ASSIST IN DEVELOPING THE SOIL EROSION / SEDIMENT CONTROL PLANS. THERE IS NO GUARANTEE THAT THESE QUANTITIES ARE COMPLETE AND THE CONTRACTOR SHOULD NOT RELY ON THE ACCURACY OF THESE FIGURES IN PREPARING AND SUBMITTING HIS BID.

**BALTIMORE CITY SEDIMENT CONTROL**

This B, Subtitle II, Natural Resources, Annotated Code of Maryland and Baltimore City Ordinance 1013, requires that provisions to control erosion and sediment shall be included for all City land disturbance. As required by State Law, construction cannot be started until such erosion and sediment control provisions are approved.

The Contractor must filter all run-off and control all sediment within the project. All work must comply with all requirements of the "Baltimore City Erosion and Sediment Control Manual" and the "1983 Maryland Standards And Specifications For Soil Erosion And Sediment Control", as distributed and modified by the Baltimore City Sediment Control Section.

Nothing herein relieves the Contractor from complying with any and all other Federal, State or Municipal Regulations.

**EROSION AND SEDIMENT CONTROL NOTE**

- All utilities to be constructed first, prior to any construction on the site.
- No pumping from foundation excavations will be allowed directly into City system unless it is filtered by way of Sediment Traps or Filter.
- All excavation material shall be placed on the high side whenever possible and confined to an area where it will not obstruct the normal flow of drainage courses.
- Continuous inspection and maintenance of all Sediment Control devices will be required.

**INSTRUCTIONS**

- For land disturbing activities it is understood that the following conditions will be met:
- A. Grading**
- All disturbed areas shall be protected to control erosion and to prevent sedimentation of adjacent properties, storm sewers and/or streams.
  - Sediment control devices such as, diversion berms, sediment traps, silt fences, vegetative stabilization, etc., shall be used to prevent off-site sedimentation at all times, at every location throughout the site where natural or existing conditions would cause sediment to normally wash off the site.
  - No proposed cut or fill will exceed three feet in depth (cut) or height (fill) without erosion and sediment controls. Excessive excavation for foundations.
  - No fill will be placed on any existing slope steeper than 5:1 without erosion and sediment controls.
  - There will be no final graded slope steeper than 2:1.
  - Borrow and/or spoil material shall not be stockpiled within the limits of this project.
  - All fills will be free of any organic or other deleterious materials and will be compacted. All areas to receive fill will have the ground surface prepared by removing all existing vegetation and root mat.
  - The proposed grading will not impair existing surface drainage, constitute a potential erosion hazard, or source of sedimentation to any adjacent property, drainage way or right-of-way.
  - All points of ingress and egress shall be protected to prevent tracking of mud onto public ways.
- B. Stabilization**
- As soon as final grading is completed, all disturbed areas will be stabilized with temporary or permanent mulch, including stone, blacktop, conc. surfacing, etc.
  - For vegetating areas steeper than three horizontal units to one vertical unit, adequate mulch, fertilizer and type of seed will be placed to ensure a vigorous ground cover and such application will be repeated, if necessary, until such growth is established.
  - Timing - Following initial solid disturbances or redisturbances, permanent or temporary stabilization shall be completed within:
    - Seven calendar days for the surface of all perimeter dikes, swales, ditches, perimeter slopes, and all slopes greater than three horizontal to one vertical (3:1) and,
    - Twenty-four (24) hours for disturbed areas such as base repairs, alley returns, curb repairs, bus pads, pedestrian ramps, sidewalks and backfilled utility trenches. Stabilization shall consist of a minimum of 4-inch Graded Aggregate Sub-base and,
    - Fourteen calendar days for all other disturbed or graded areas.
  - For Details regarding temporary and permanent stabilization practices, reference the "1983 Maryland Standards And Specifications For Soil Erosion And Sediment Control", or contact the Baltimore City Sediment Control Representative.
  - Sediment control devices are to be removed only after all disturbed areas have been stabilized.

**CONDITIONS**

- The Contractor will submit written notification to the Baltimore City Sediment Control Representative at least three working days before starting any grading activities, stating the following:
- The day he intends to start work
  - The source of all borrow material
  - The designated stockpile area N.I.C.
  - The Contractor's staging area N.I.C.
  - The disposal site for all excess material
  - The construction sequence
  - The completion day of the work

**Owners/Developers Certification**

I/We hereby certify that any clearing, grading, construction and/or development will be done pursuant to this plan and that all responsible personnel involved in the construction project will have a certification of attendance of a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

James A. Zito  
 Signature Owner/Developer  
 204 Municipal Bldg  
 Address

James A. Zito 2-5-87  
 Print Name Date  
 396-4600  
 Phone

**Engineer's Certification**

I certify that this plan for Erosion and Sediment Control represents a practical, workable plan based on personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Baltimore City Erosion and Sediment Control Section.

Donald A. Addison 2/5/87  
 Signature Date  
 Leonard Addison  
 Print Name  
 300 Municipal Bldg  
 Address  
 396-4707  
 Phone

**APPROVED BY:**

Frank Marcano  
 EROSION & SEDIMENT CONTROL REPRESENTATIVE

Department of Public Works, Bureau of Highways  
 Environmental Services Division, Erosion and Sediment Control Section  
 309 Municipal Building, Baltimore, MD 21202  
 Phone - (301) 396-3693

CITY OF BALTIMORE  
 DEPARTMENT OF PUBLIC WORKS  
 BUREAU OF HIGHWAYS  
 CONTRACT NO 3039

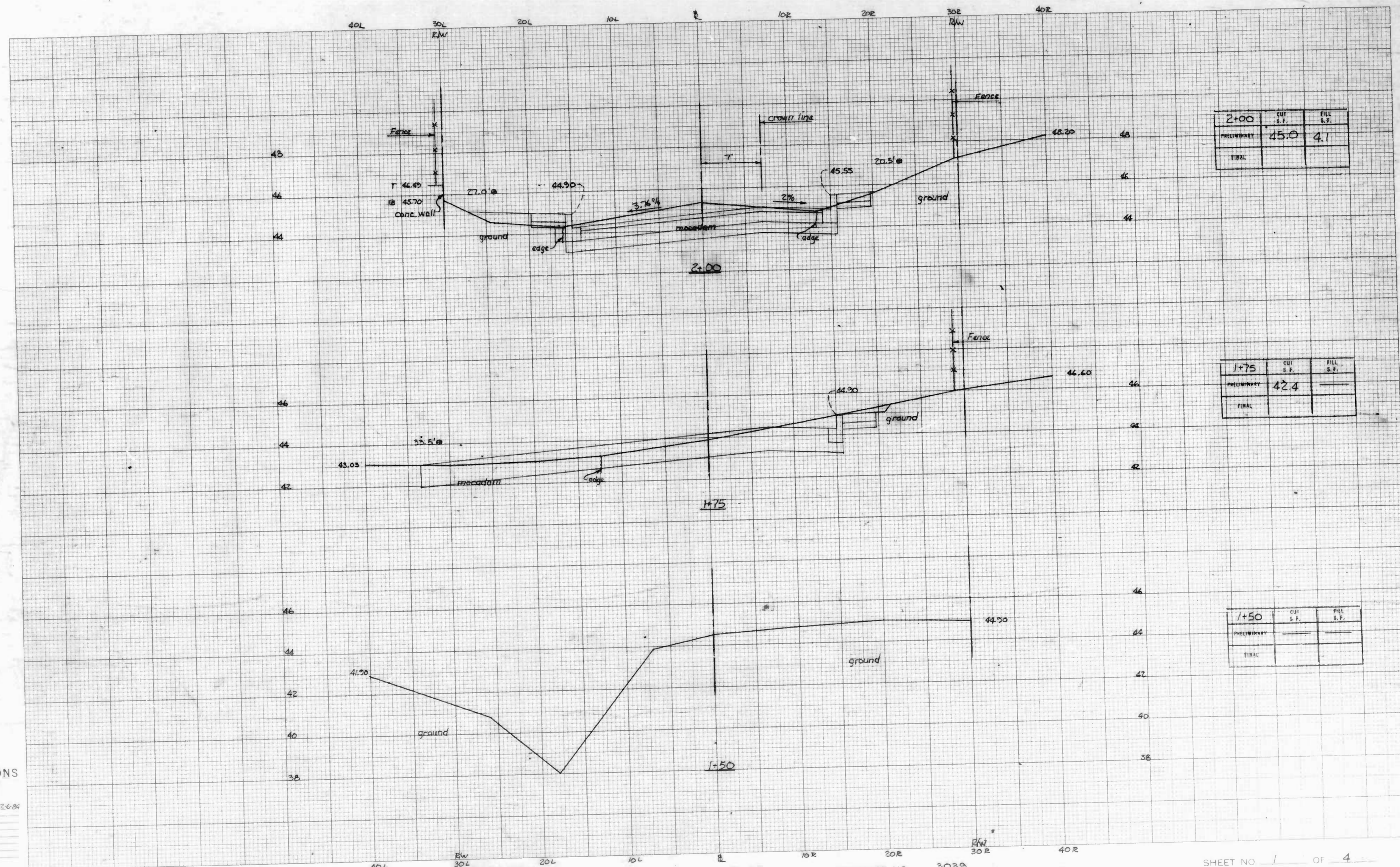
**MORRELL PARK STREETS**

SOIL EROSION / SEDIMENT CONTROL NOTES

SCALE NONE DATE SEPT 27, 1985  
 HIGHWAY ENGINEERING DIVISION SHEET 17 OF 17

DRAWN BY  
 EXAMINED BY

FILE REF.



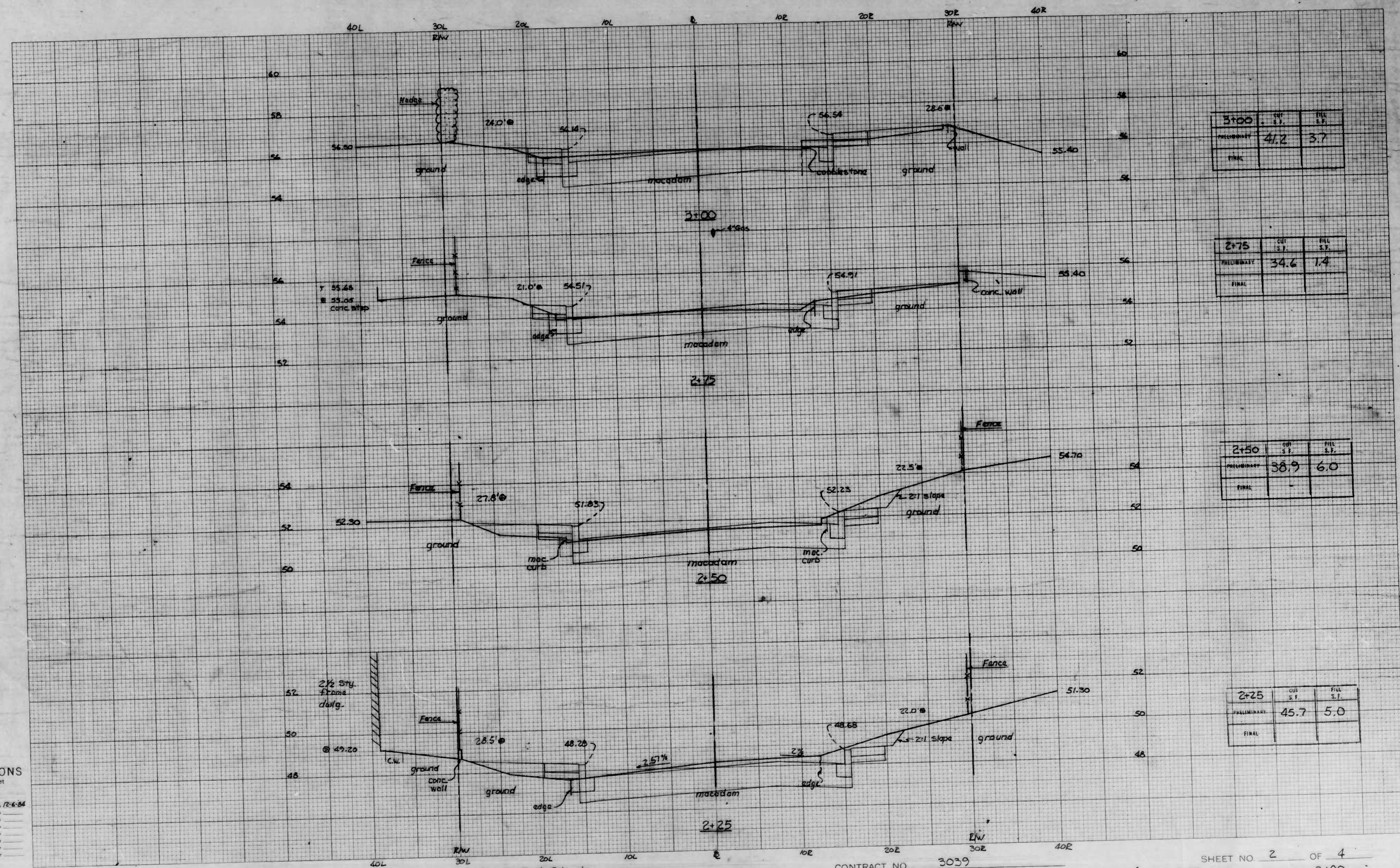
2+00	CUT S.F.	FILL S.F.
PRELIMINARY	45.0	4.1
FINAL		

1+75	CUT S.F.	FILL S.F.
PRELIMINARY	42.4	
FINAL		

1+50	CUT S.F.	FILL S.F.
PRELIMINARY		
FINAL		

**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. 1" = 50'  
 Ver. 1" = 2'

Original Plotted by P.N.M. Date 12-6-84  
 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_



**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. : 1" = 5'  
 Ver. : 1" = 2'

Original Plotted by P.H.M. Date 12-6-24  
 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
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 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

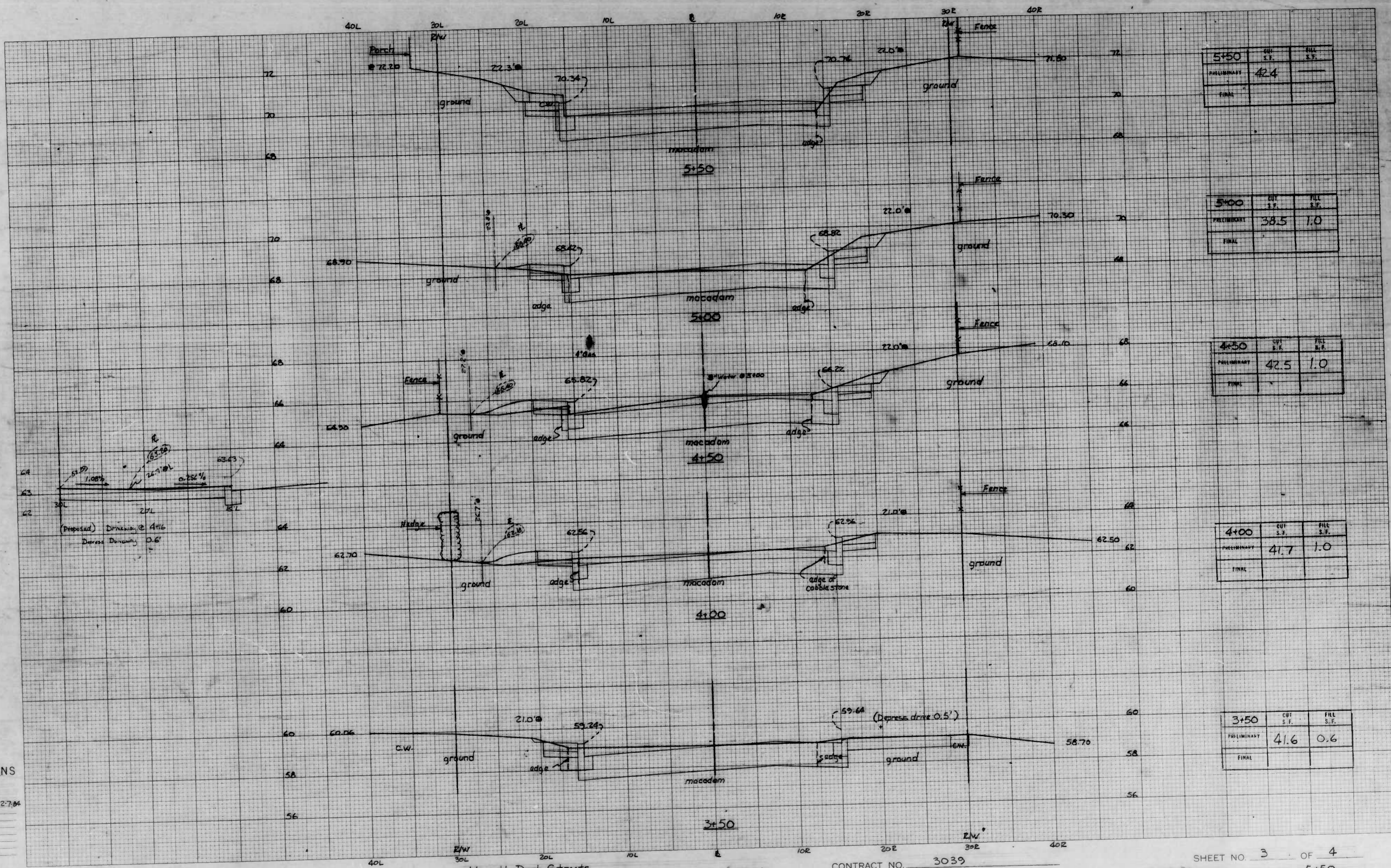
BOOK NO. X-887

PROJECT Morrell Park Streets

CONTRACT NO. 3039

DESCRIPTION Spence St.: Grove St. to Herkimer St.

SHEET NO. 2 OF 4  
 STATION 2+25 TO STATION 3+00



**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. 1" = 5'  
 Ver. 1" = 2'

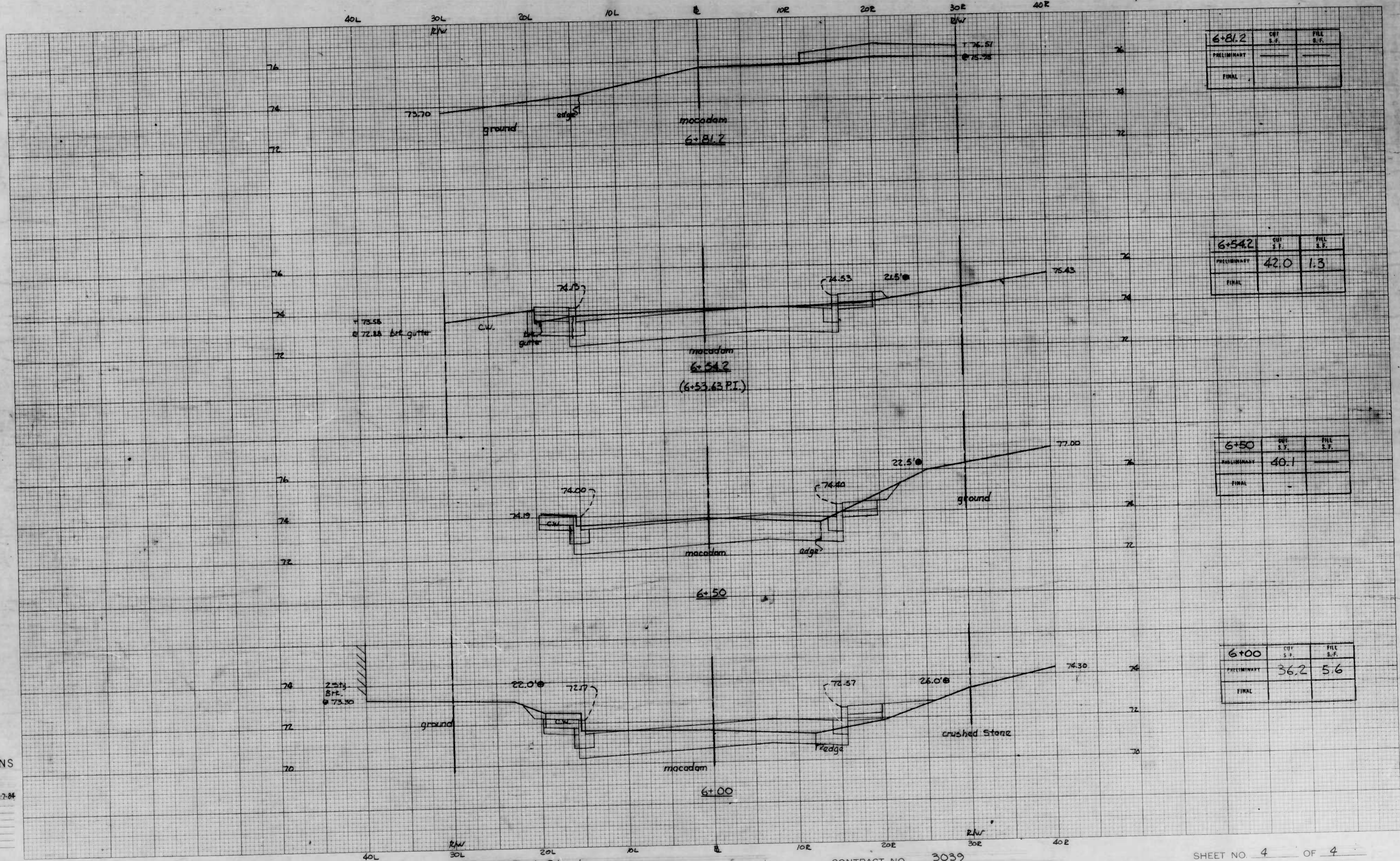
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 Plots Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

BOOK NO. X-887

PROJECT Morrell Park Streets  
 DESCRIPTION Spence St. : Grove St. to Herkimer St.

CONTRACT NO. 3039

SHEET NO. 3 OF 4  
 STATION 3+50 TO STATION 5+50



6+81.2	CUT S.F.	FILL S.F.
PRELIMINARY		
FINAL		

6+54.2	CUT S.F.	FILL S.F.
PRELIMINARY	42.0	1.3
FINAL		

6+50	CUT S.F.	FILL S.F.
PRELIMINARY	40.1	
FINAL		

6+00	CUT S.F.	FILL S.F.
PRELIMINARY	36.2	5.6
FINAL		

**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. 1" = 50'  
 Ver. 1" = 2'  
 Original Plotted by: R.H.M. Date: 12-7-84  
 Original Checked by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Template by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Area by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Notes Plotted by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Final Checked by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Area by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Area Checked by: \_\_\_\_\_ Date: \_\_\_\_\_

BOOK NO. X-887

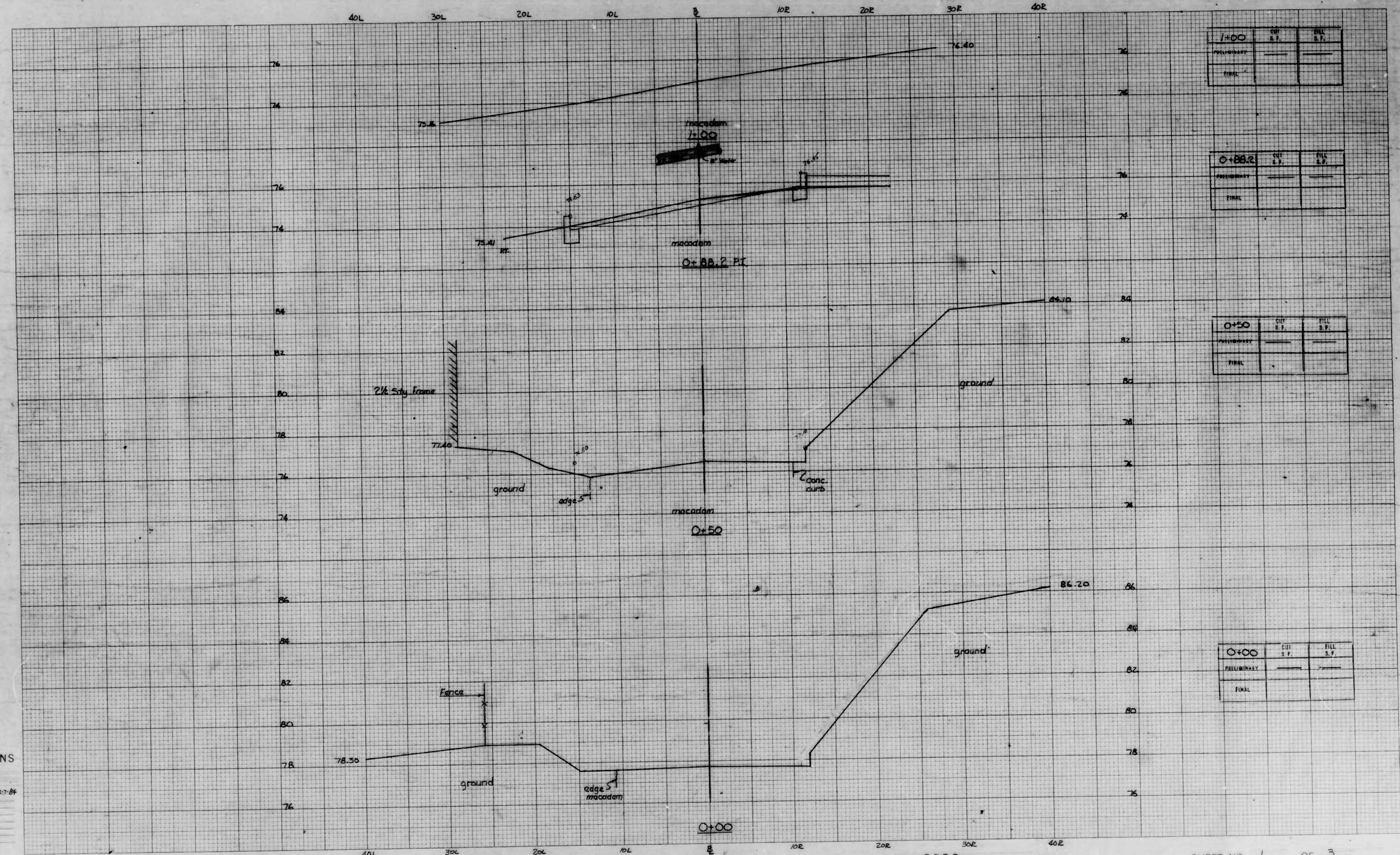
PROJECT Morrell Park Streets  
 DESCRIPTION Spence St. to Grove St. to Herkimer St.

CONTRACT NO. 3039

SHEET NO. 4 OF 4  
 STATION 6+00 TO STATION 6+81.2

4





**CROSS SECTIONS**  
 Scale: 1 inch = 10 feet  
 Hor. : 1" = 5'  
 Ver. : 1" = 2'

Original Plotted by: P.N.H. Date: 12-7-84  
 Original Checked by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Template by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Area by: \_\_\_\_\_ Date: \_\_\_\_\_  
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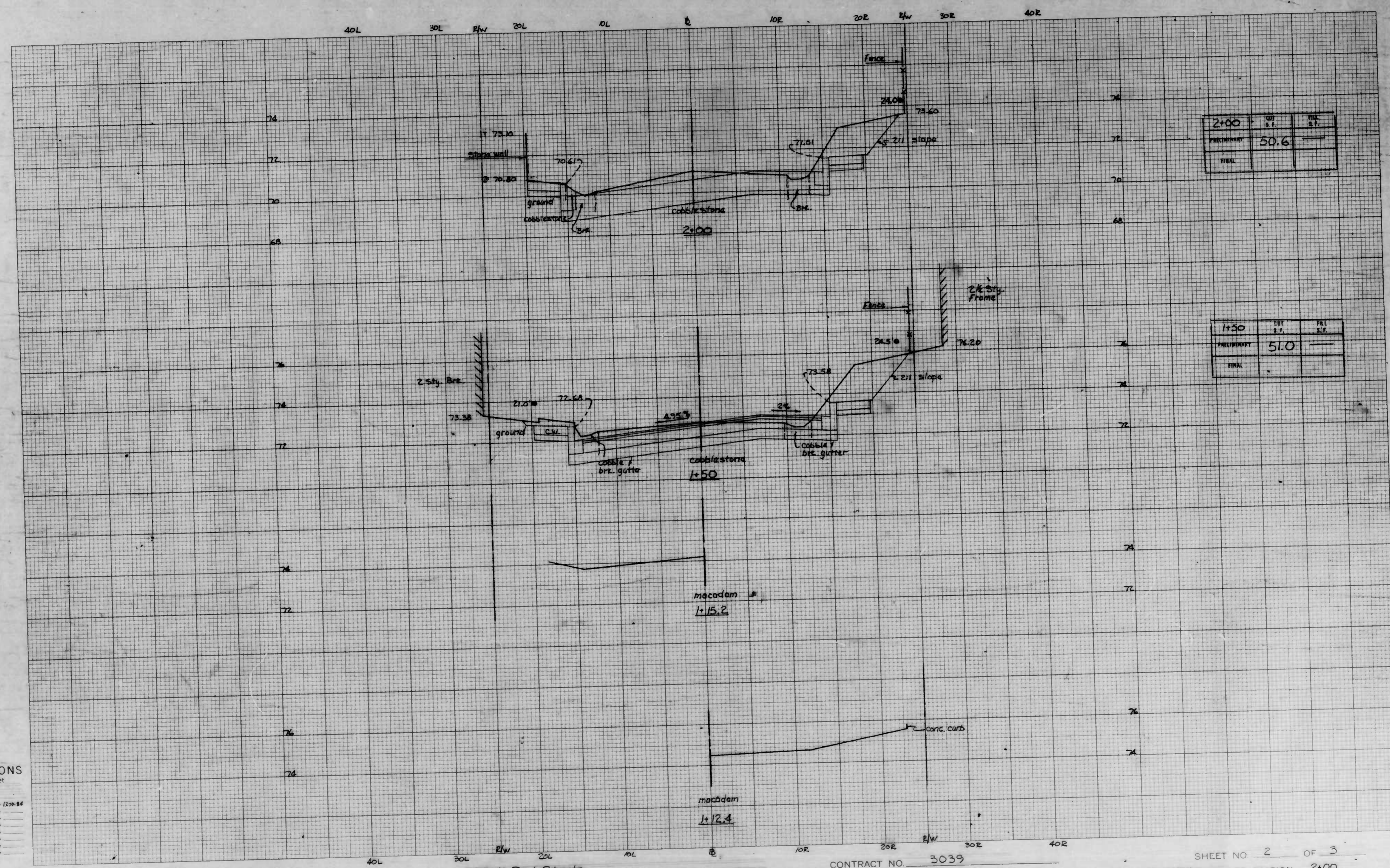
BOOK NO. X-887

PROJECT Marrell Park Streets  
 DESCRIPTION Herkimer St. : Spence St. to Monterey St.

CONTRACT NO. 3039

SHEET NO. 1 OF 3  
 STATION 0+00 TO STATION 1+00

6



2+00	CUY S.F.	FINL S.F.
	50.6	

1+50	CUY S.F.	FINL S.F.
	51.0	

**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. 1" = 5'  
 Ver. 1" = 2'

Original Plotted by P.W.M. Date 12-19-54  
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 Area by \_\_\_\_\_ Date \_\_\_\_\_  
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 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

BOOK NO. X-887

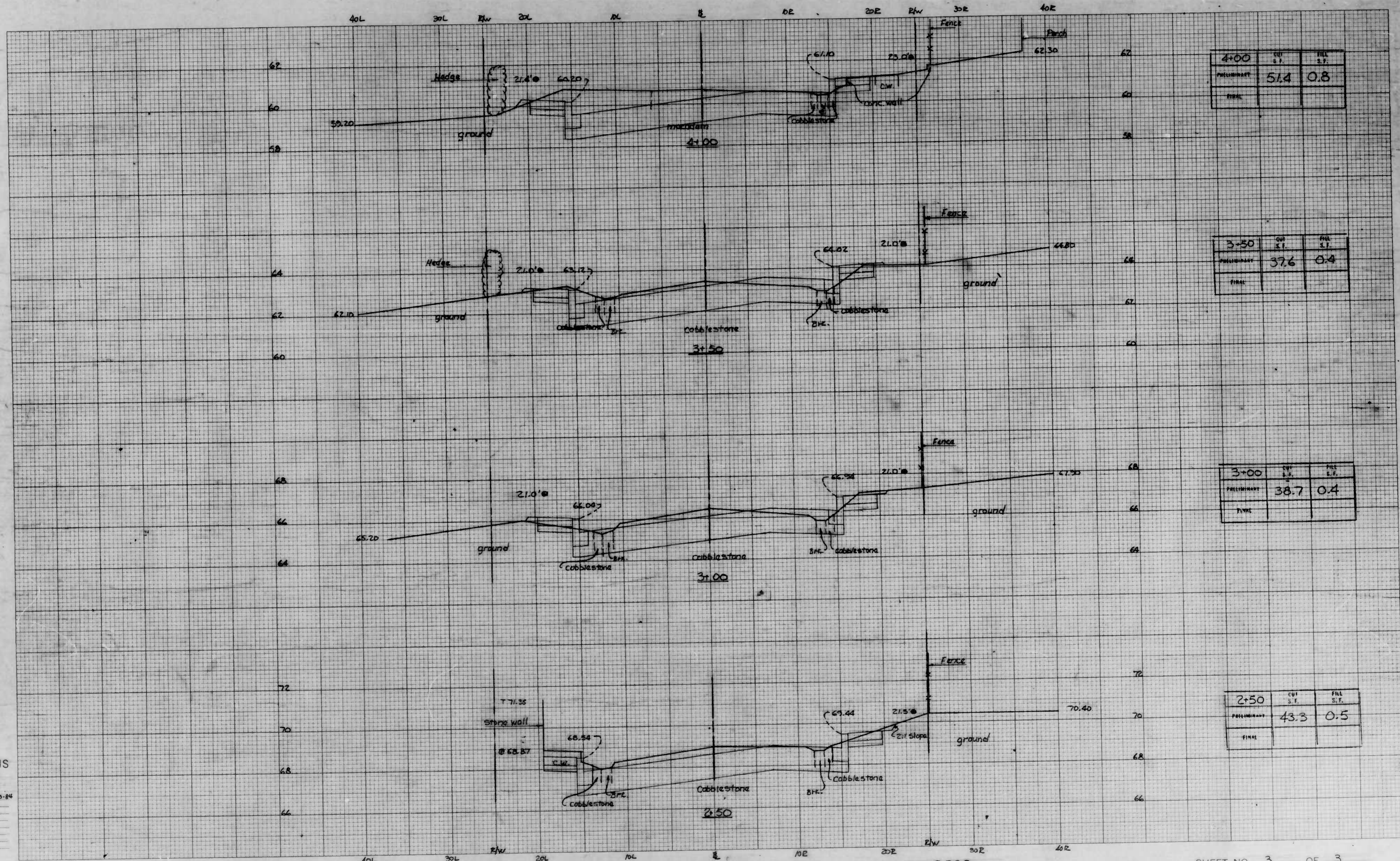
PROJECT Morrell Park Streets  
 DESCRIPTION Herkimer St. Spence St. to Montgrey St.

CONTRACT NO. 3039

SHEET NO. 2 OF 3  
 STATION 1+12.4 TO STATION 2+00

7





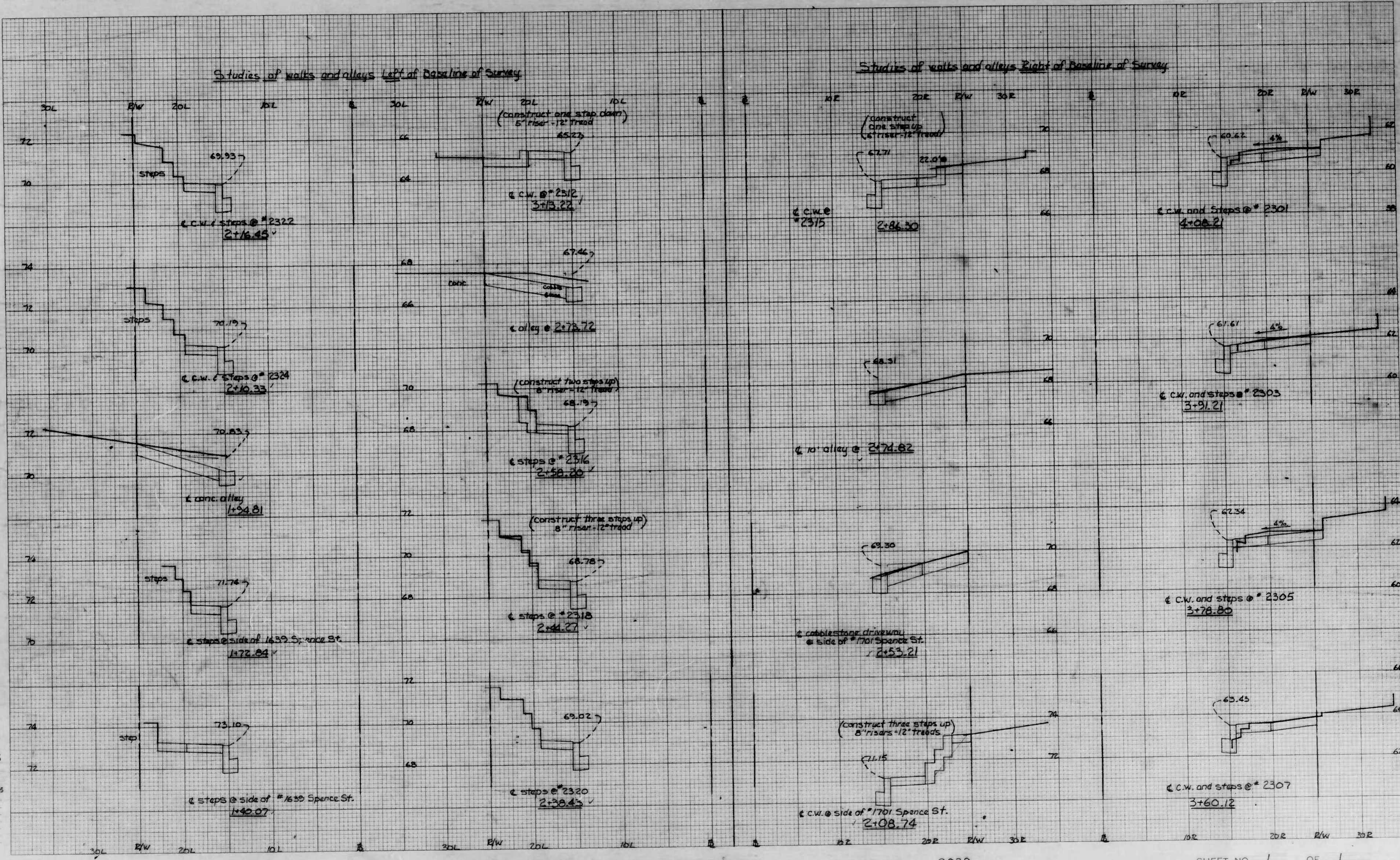
4+00	CUT S.F.	FILL S.F.
PRELIMINARY	51.4	0.8
FINAL		

3+50	CUT S.F.	FILL S.F.
PRELIMINARY	37.6	0.4
FINAL		

3+00	CUT S.F.	FILL S.F.
PRELIMINARY	38.7	0.4
FINAL		

2+50	CUT S.F.	FILL S.F.
PRELIMINARY	43.3	0.5
FINAL		

**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. - 1" = 5'  
 Ver. - 1" = 2'  
 Original Plotted by: R.H.M. Date: 12-19-84  
 Original Checked by: \_\_\_\_\_ Date: \_\_\_\_\_  
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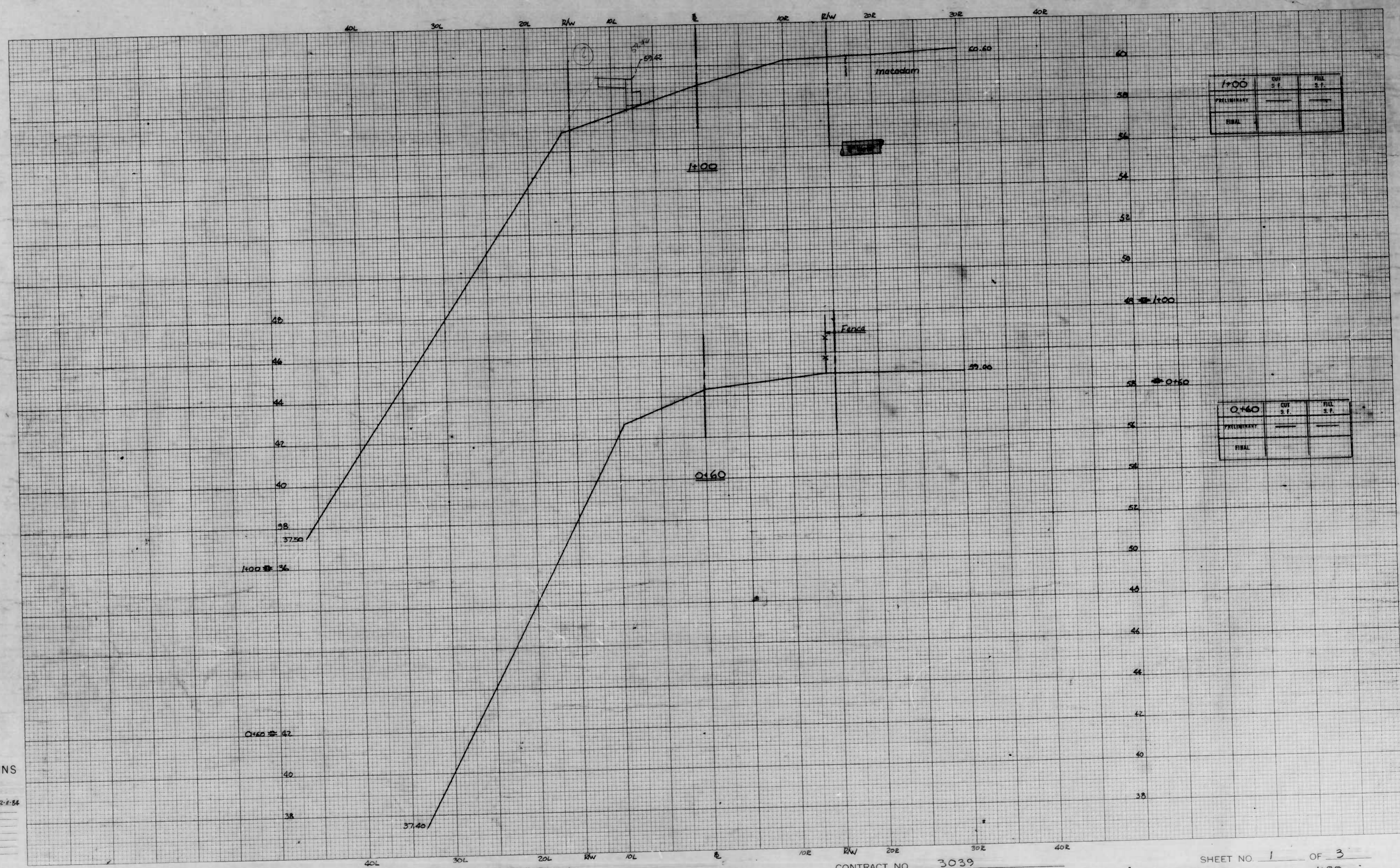


CROSS SECTIONS  
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 Hor. : 1" = 5.0'  
 Ver. : 1" = 2.0'  
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 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Plots Printed by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

BOOK NO. X-887.

PROJECT Morrell Park Streets CONTRACT NO. 3039  
 DESCRIPTION Studies: Herkimer St. from Spence St. to Monterey St.

SHEET NO. 1 OF 1  
 STATION Spence St. TO STATION Monterey St.



**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. : 1" = 5'  
 Ver. : 1" = 2'

Original Plotted by: R.H.E. Date: 12-1-54  
 Original Checked by: \_\_\_\_\_ Date: \_\_\_\_\_  
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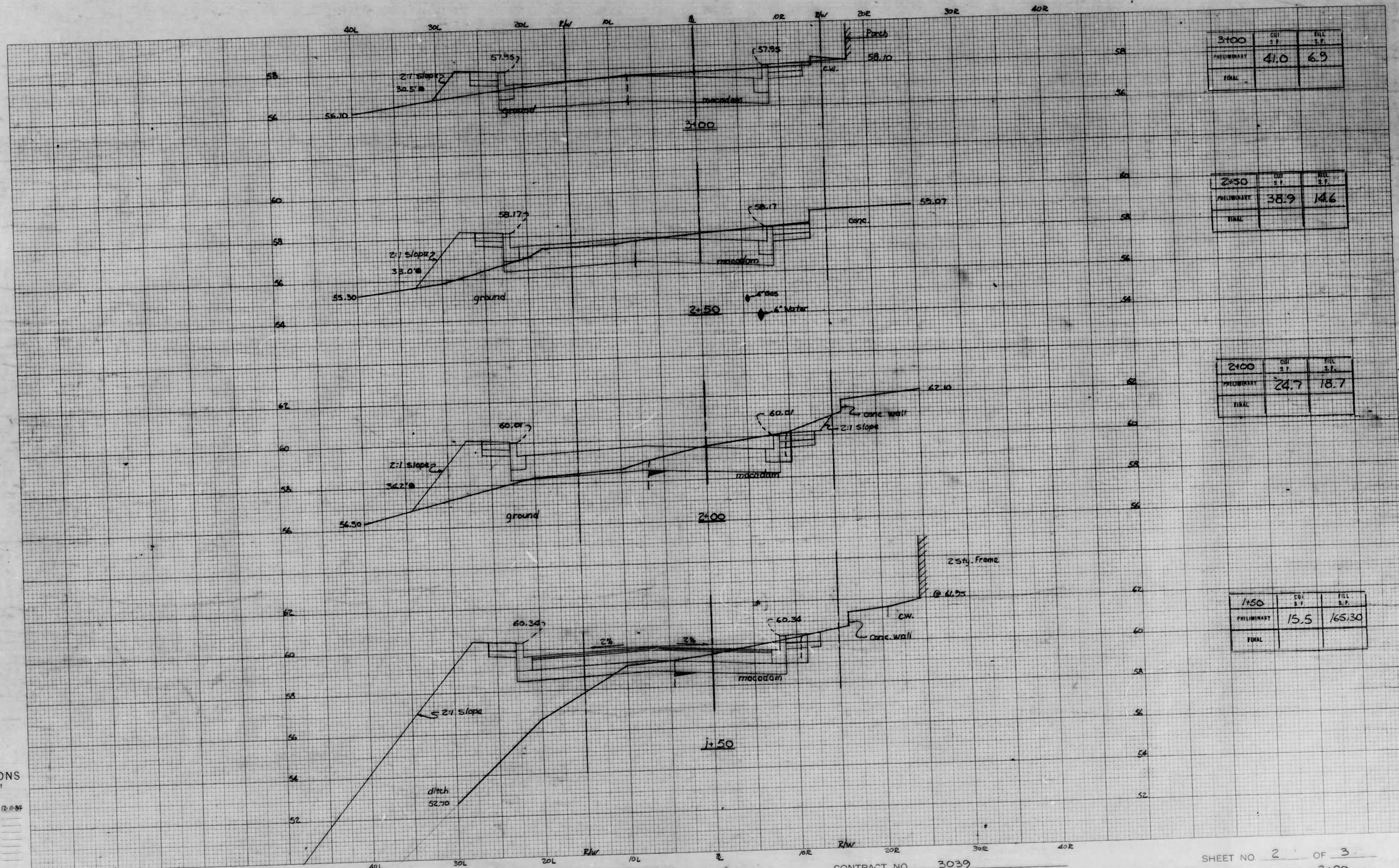
BOOK NO. X-887

PROJECT Marrell Park Streets  
 DESCRIPTION Monterey St. Herkimer St. to James St.

CONTRACT NO. 3039

SHEET NO. 1 OF 3  
 STATION 0+60 TO STATION 1+00

10



STATION	CUT S.F.	FILL S.F.
3+00	41.0	6.9
PRELIMINARY		
FINAL		

STATION	CUT S.F.	FILL S.F.
2+50	38.9	14.6
PRELIMINARY		
FINAL		

STATION	CUT S.F.	FILL S.F.
2+00	24.7	18.7
PRELIMINARY		
FINAL		

STATION	CUT S.F.	FILL S.F.
1+50	15.5	165.30
PRELIMINARY		
FINAL		

**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. 1" = 5'  
 Ver. 1" = 2'

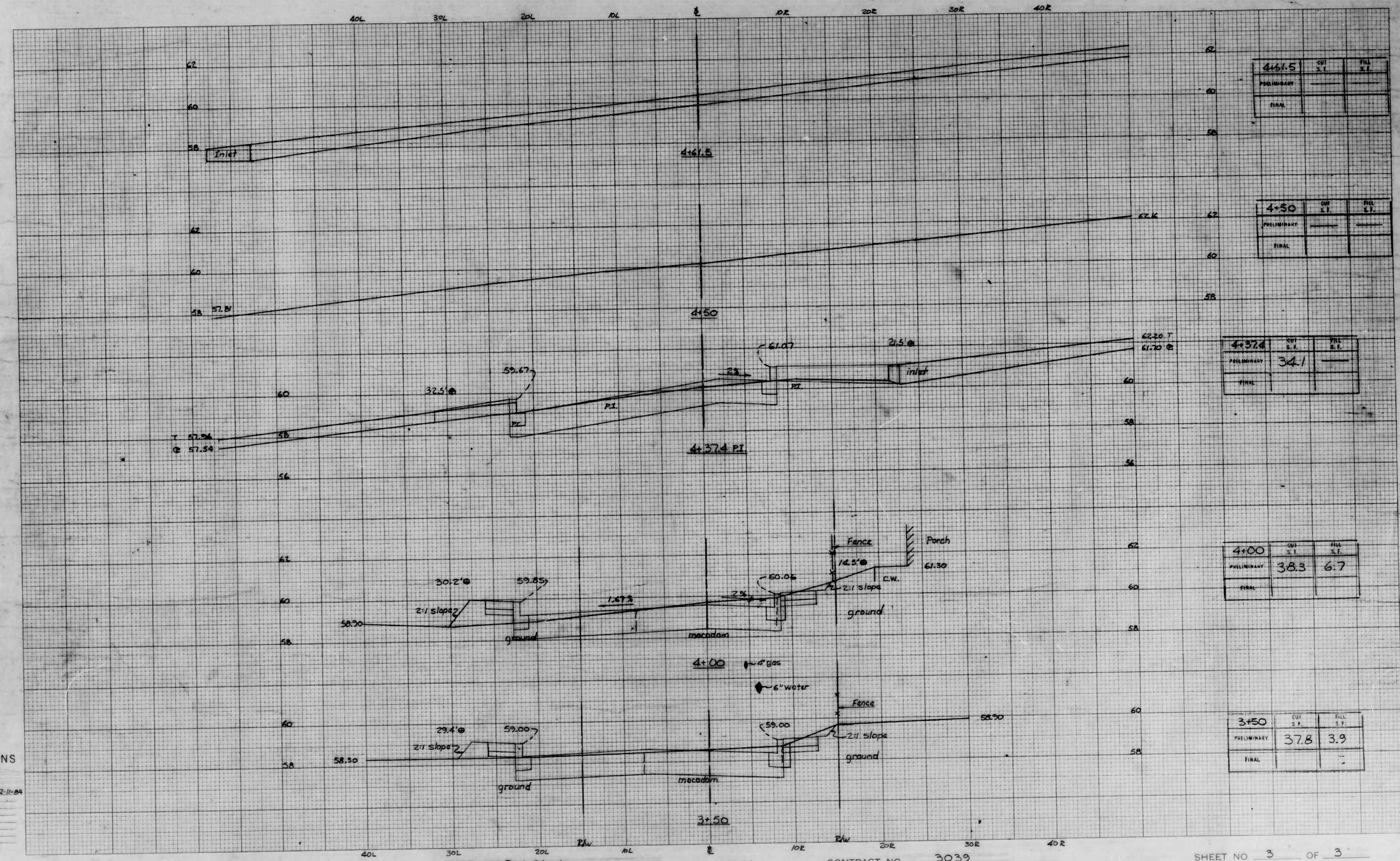
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 Final Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

BOOK NO. X-887

PROJECT Morrell Park Streets  
 DESCRIPTION Monterey St. : Harkimer St. to James St.

CONTRACT NO. 3039

SHEET NO. 2 OF 3  
 STATION 1+50 TO STATION 3+00



4+61.5	CUT S.F.	FILL S.F.
PRELIMINARY		
FINAL		

4+50	CUT S.F.	FILL S.F.
PRELIMINARY		
FINAL		

4+374	CUT S.F.	FILL S.F.
PRELIMINARY	34.1	
FINAL		

4+00	CUT S.F.	FILL S.F.
PRELIMINARY	38.3	6.7
FINAL		

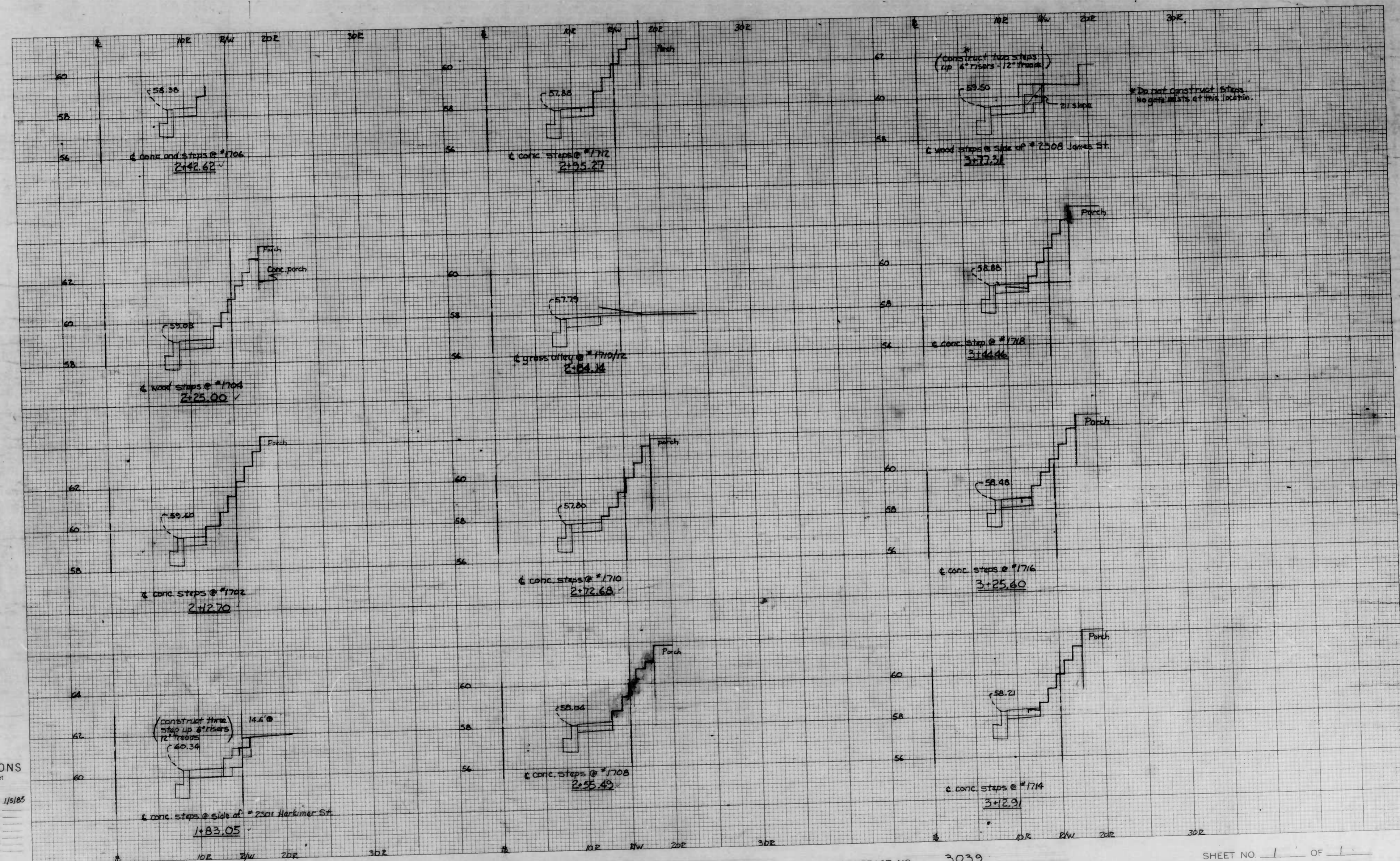
3+50	CUT S.F.	FILL S.F.
PRELIMINARY	37.8	3.9
FINAL		

**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor.: 1" = 5'  
 Ver.: 1" = 2'

Original Plotted by: P.H.H. Date: 12-11-04  
 Original Checked by: D.H. Date: \_\_\_\_\_  
 Template by: \_\_\_\_\_ Date: \_\_\_\_\_  
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 Final Checked by: \_\_\_\_\_ Date: \_\_\_\_\_  
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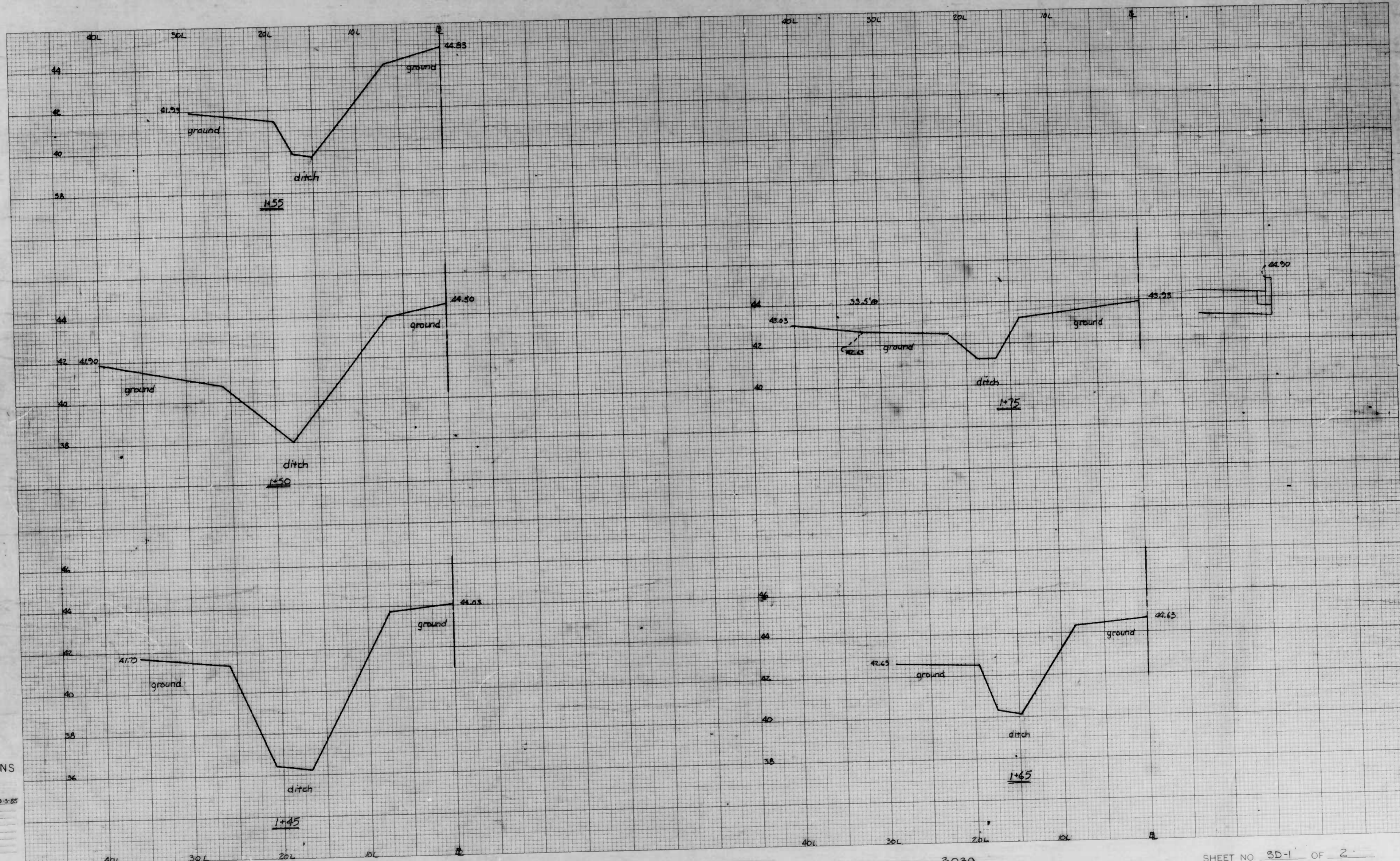
12

**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. 1" = 5.0'  
 Ver. 1" = 2.0'  
 Original Plotted by P.H.M. Date 1/5/85  
 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_



BOOK NO. X-887. PROJECT Morrell Park Streets CONTRACT NO. 3039 SHEET NO. 1 OF 1  
 DESCRIPTION Studies: Monterey St. from Herkimer St. to James St. (Right of Baseline of Survey) STATION Herkimer St. TO STATION James St.

13



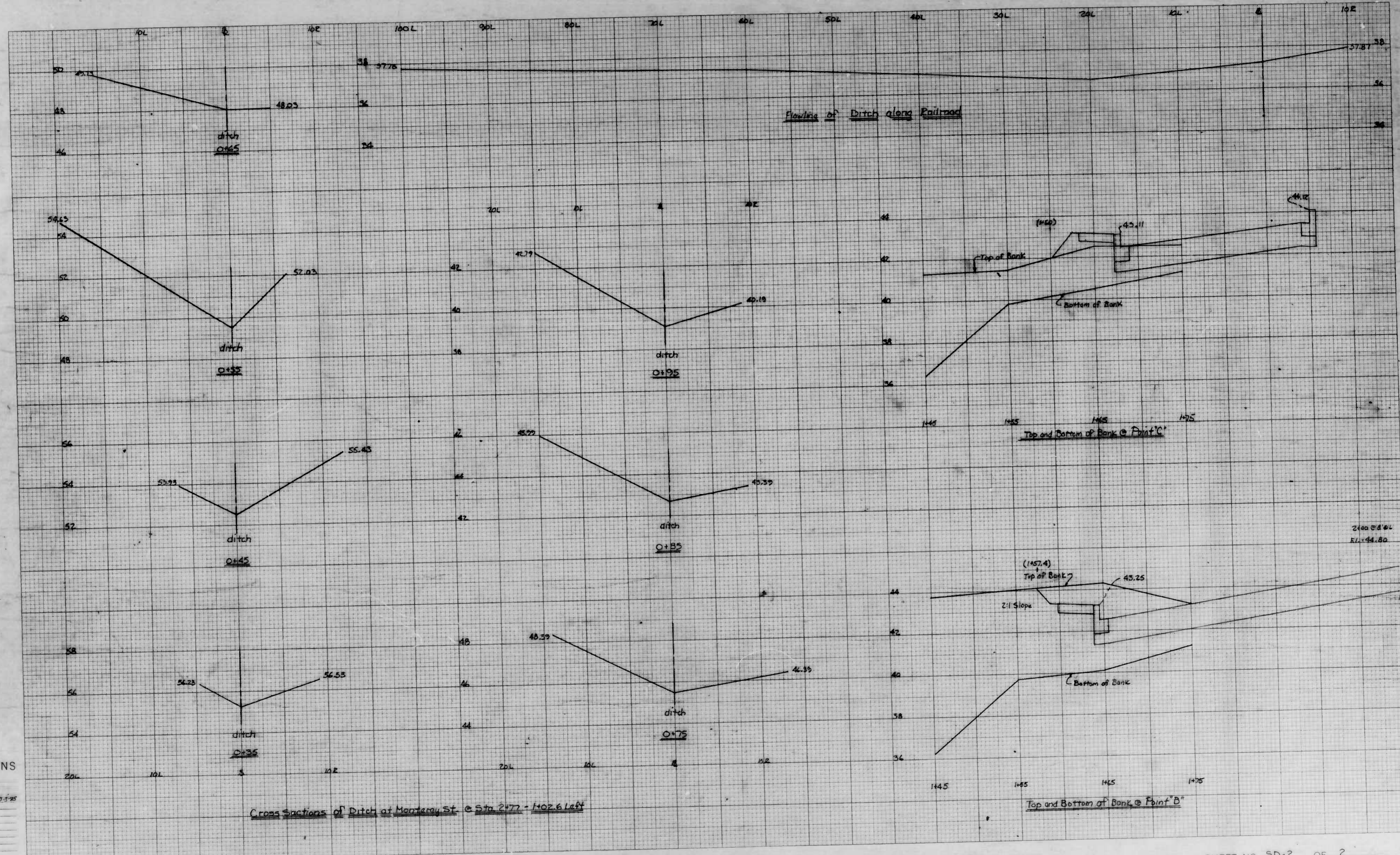
**CROSS SECTIONS**

Scale 1 inch = 10 feet  
 Hor. 1" = 50'  
 Ver. 1" = 2.0'

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 Template by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Fixing Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Fixing Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

BOOK NO. 2059 PROJECT Morrell Park Streets CONTRACT NO. 3039 SHEET NO. 3D-1 OF 2  
 DESCRIPTION Additional Sections For Drainage at Spence St. and Grove Street STATION 1+45 TO STATION 1+75

14



**CROSS SECTIONS**  
 Scale 1 inch = 10 feet  
 Hor. 1" = 50'  
 Ver. 1" = 2.0'  
 Original Plotted by P.H.M. - Date 10-3-28  
 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
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 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

Cross Sections of Ditch at Monterey St @ Sta 2+77 - 1+02.6 Left

BOOK NO. 2059

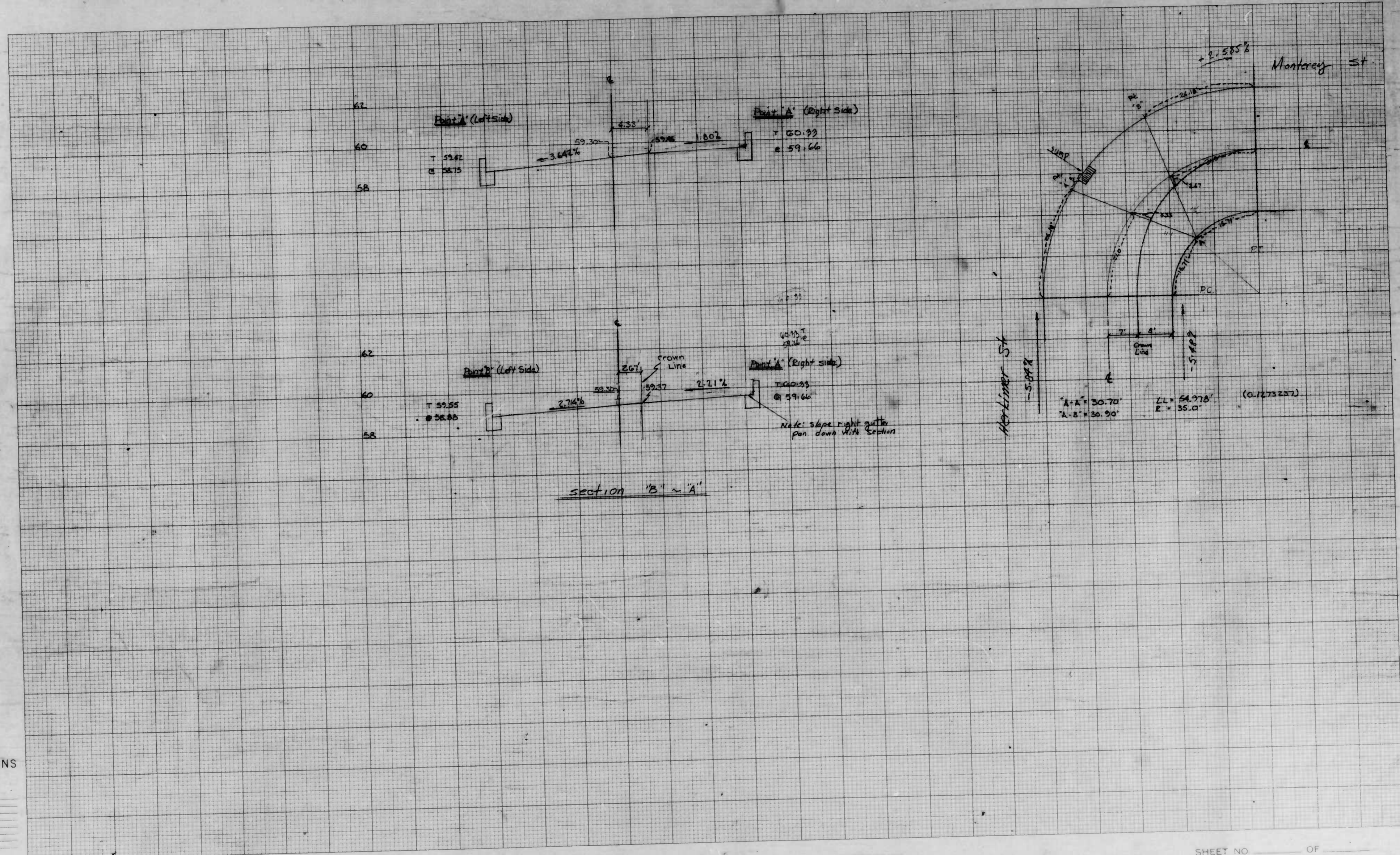
PROJECT Morrell Park Streets

CONTRACT NO. 3039

DESCRIPTION Spence Street of Grove Street / Ditch at Monterey Street Sta. 2+77 - 1+02.6 Left

SHEET NO. SD-2 OF 2  
 STATION \_\_\_\_\_ TO STATION \_\_\_\_\_



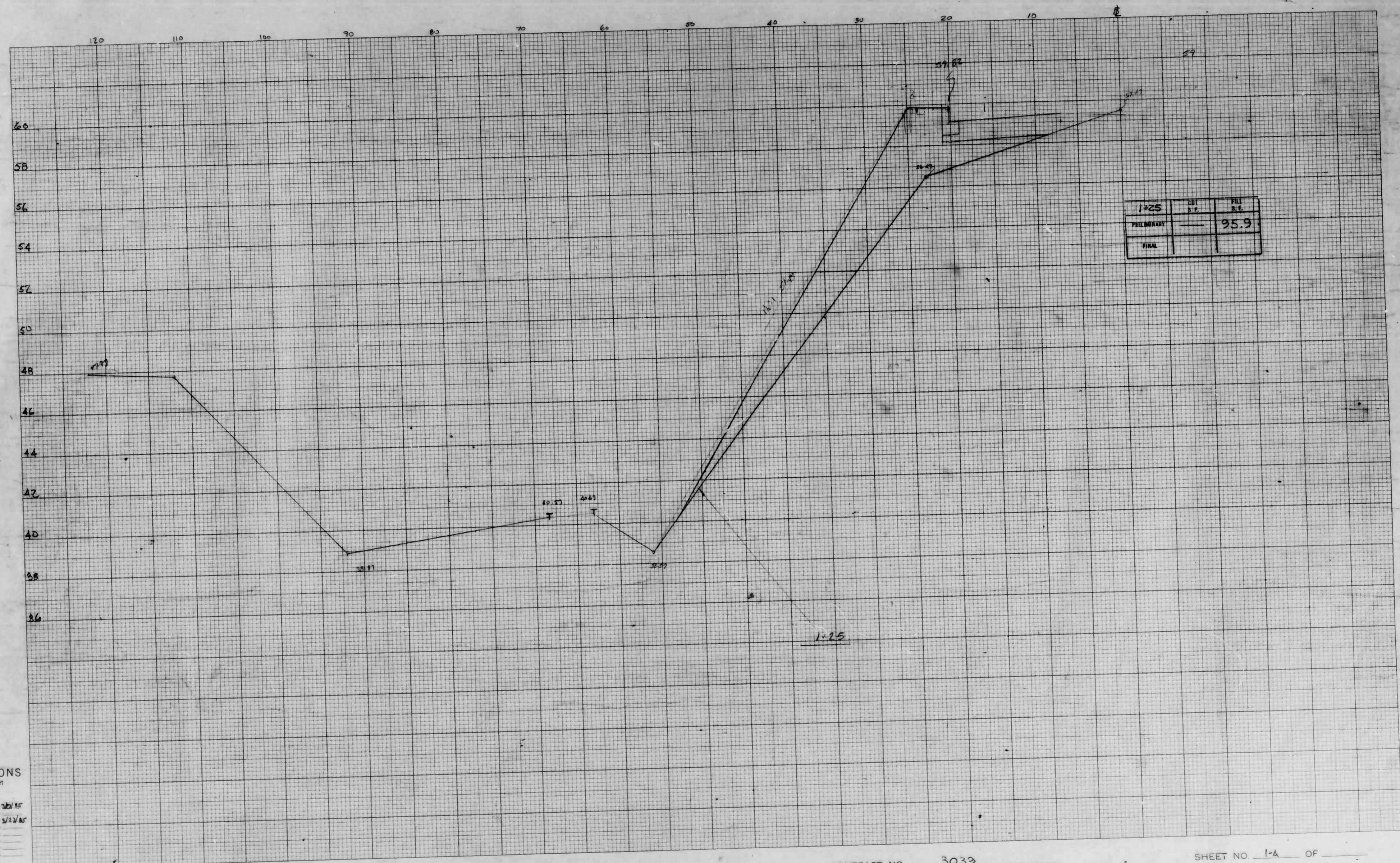


CROSS SECTIONS  
Scale 1 inch = 10 feet

Original Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

BOOK NO. \_\_\_\_\_ PROJECT \_\_\_\_\_ CONTRACT NO. \_\_\_\_\_ SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 DESCRIPTION \_\_\_\_\_ STATION TO STATION \_\_\_\_\_

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CROSS SECTIONS  
Scale 1 inch = 10 feet

Original Plotted by W.P.C. Date 5/1/55  
 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by W.P.C. Date 5/1/55  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

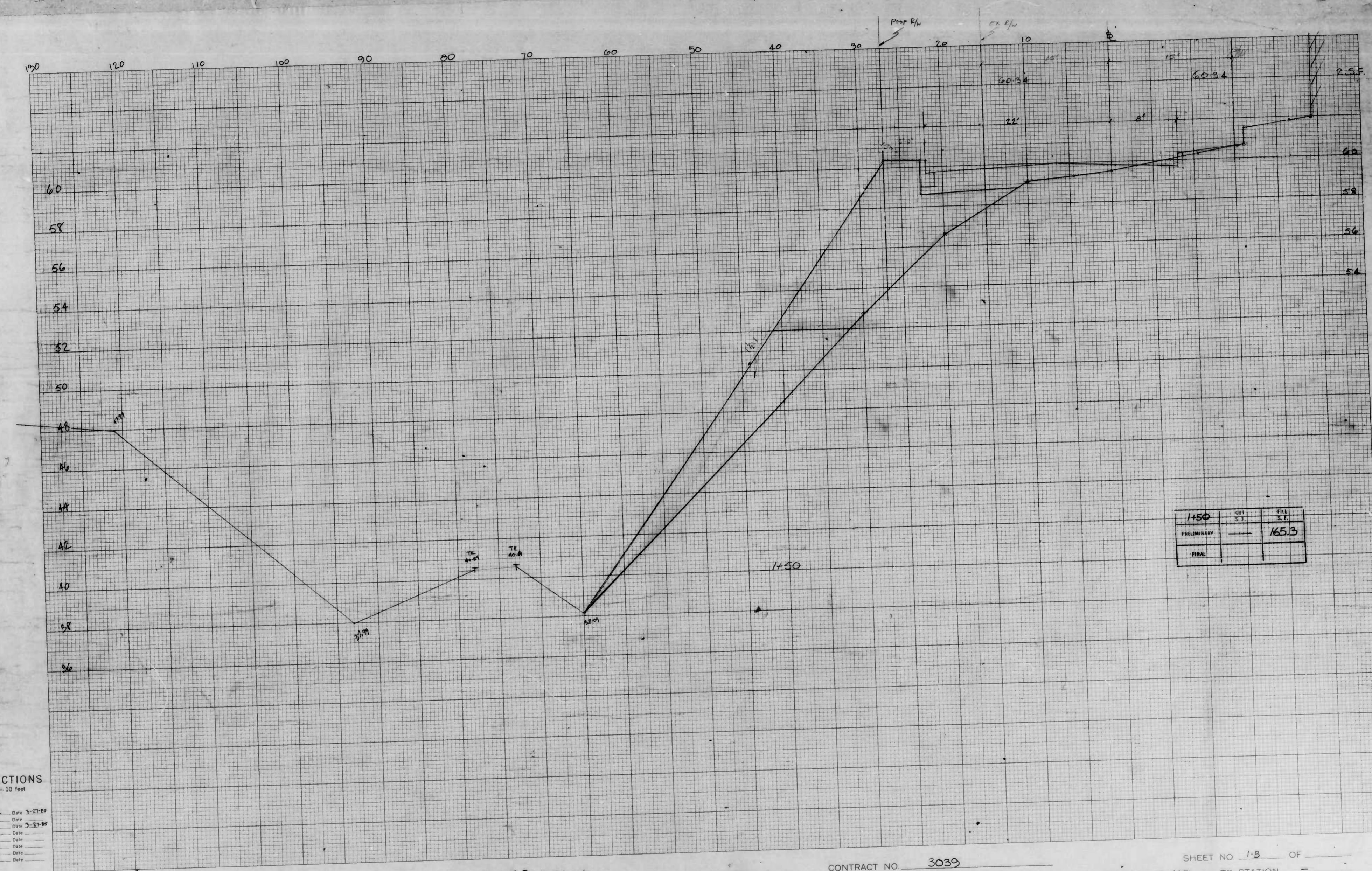
BOOK NO. X-887, pg 68

PROJECT Morrell Park Streets  
 DESCRIPTION Monterey Street

CONTRACT NO. 3039

SHEET NO. 1-A OF \_\_\_\_\_  
 STATION Sta 1+25 TO STATION \_\_\_\_\_

17

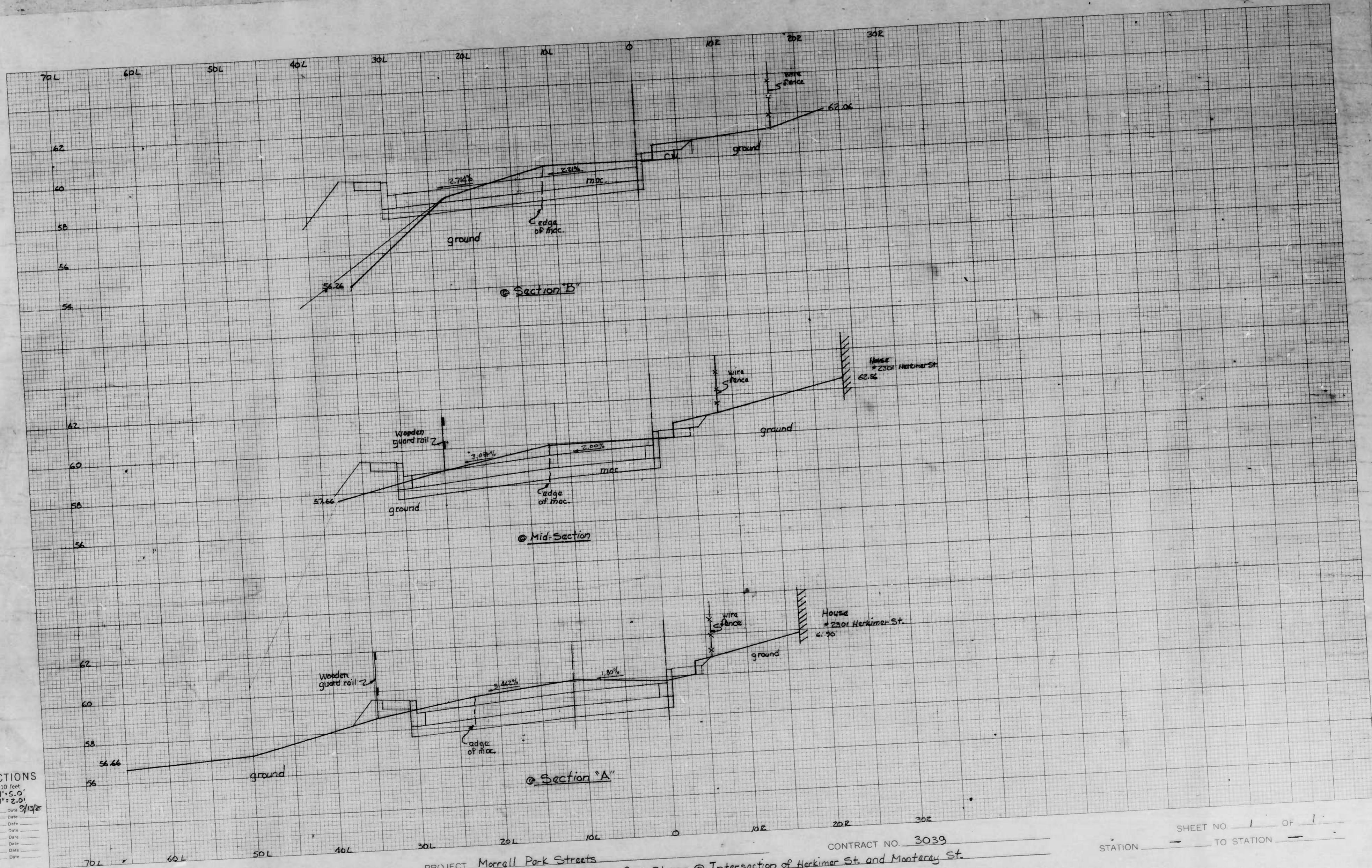


1150	CU	FILL
	S.F.	S.F.
PRELIMINARY	---	1653
FINAL		

**CROSS SECTIONS**  
Scale 1 inch = 10 feet

Original Plotted by W.E.C. Date 9-17-85  
 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by W.E.C. Date 9-23-85  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

BOOK NO. X-887 PROJECT Marcell Park Streets CONTRACT NO. 3039 SHEET NO. 18 OF \_\_\_\_\_  
 DESCRIPTION MONTEREY STREET STATION 1150 TO STATION \_\_\_\_\_



CROSS SECTIONS

Scale 1 inch = 10 feet  
 Hor. 1" = 50'  
 Ver. 1" = 2.0'  
 Original Plotted by F.M. Date 9/12/28  
 Original Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Template by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Plotted by \_\_\_\_\_ Date \_\_\_\_\_  
 Final Checked by \_\_\_\_\_ Date \_\_\_\_\_  
 Area by \_\_\_\_\_ Date \_\_\_\_\_  
 Area Checked by \_\_\_\_\_ Date \_\_\_\_\_

BOOK NO. X-887

PROJECT Morrill Park Streets  
 DESCRIPTION Cross Slopes @ Intersection of Herkimer St. and Monterey St.

CONTRACT NO. 3039

SHEET NO. 1 OF 1  
 STATION \_\_\_\_\_ TO STATION \_\_\_\_\_