RATIO - 24

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

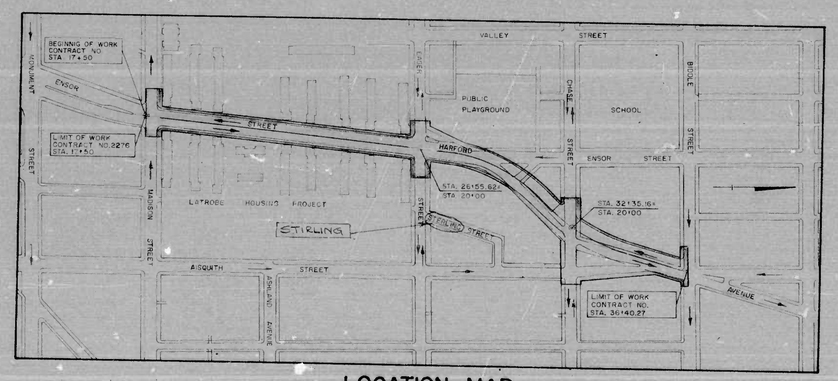
GRADING, CURBING, PAVING AND DRAINAGE

HARFORD AVENUE PROJECT
MADISON STREET TO BIDDLE STREET
STATION 17+50 TO STATION 36+40.27
CITY OF BALTIMORE BUREAU OF ENGINEERING

CONTRACT NO.

INDEX OF SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTION SHEET
3	DETAIL SHEET
4	PLAN & PROFILE - Sta. 17+50 to Sta. 22+00
5	PLAN & PROFILE - Sta. 22+00 to Sta. 31+19.33
6	PLAN & PROFILE - Sta. 31+19.33 to Sta. 36+40.27
7	INTERSECTION DETAIL - MADISON ST. & ENSOR ST.
8	INTERSECTION DETAIL - EAGER ST., ENSOR ST., & HARFORD AVE.
9	INTERSECTION DETAIL - CHASE ST. & HARFORD AVE.
10	INTERSECTION DETAIL - BIDDLE ST., HARFORD AVE., & AISQUITH ST.
11	UTILITY RELOCATION - Sta. 17+50 to Sta. 27+50
12	UTILITY RELOCATION - Sta. 27+50 to Sta. 36+40.27
13	CROSS STREET PROFILES - Sta. 17+64.89 to Sta. 36+40.27



LOCATION MAP
Scale: 1" = 200'
200 0 200

PRELIMINARY
SEP 2 1975

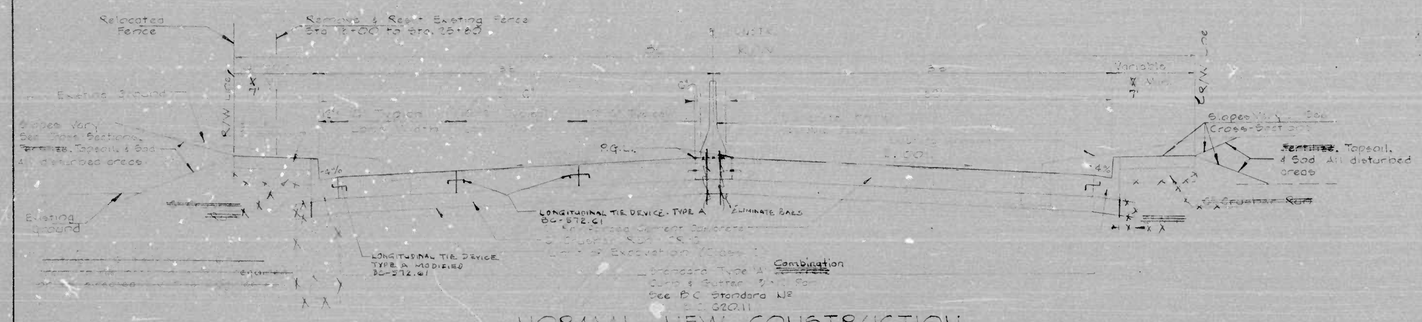
MARYLAND SURVEYING & ENGINEERING CO., Inc.
6707 WHITE MARSH RD.
BALTIMORE, MARYLAND 21207

RED-LINE REVISIONS from REVIEW of OCT. 6, 1975
MUST BE RETURNED TO:
Grade and Study Section
300 Municipal Building
Att: Mr. C.E. Carter

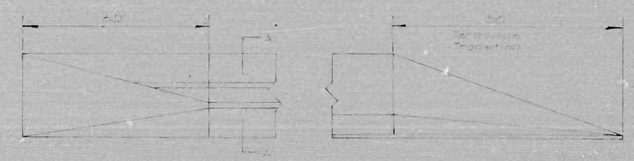
RATIO - 24

FILE REF.

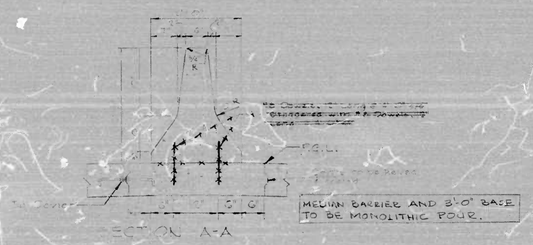
REVISIONS			
NO.	DESCRIPTION	DATE	BY



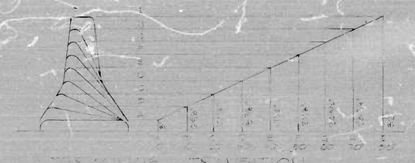
NORMAL - NEW CONSTRUCTION
(TYPICAL)
No Scale
STA. 17+50 to STA. 36+44



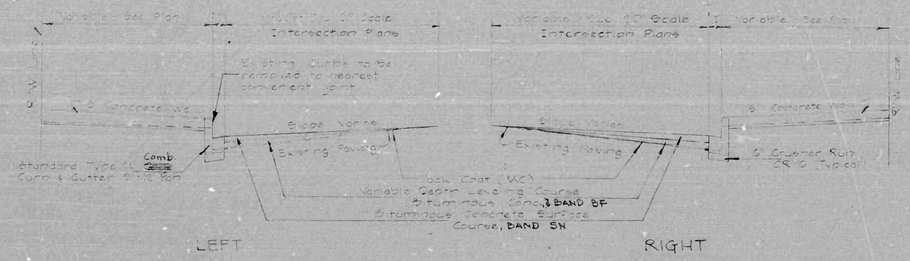
DOUBLE FACE CONCRETE MEDIAN BARRIER



TYPICAL - DETAIL 9" REINFORCED CONCRETE PAVEMENT
No Scale



TYPICAL - DETAIL CONCRETE MEDIAN BARRIER (DOUBLE FACE)
No Scale



TYPICAL: BUILD-UP SECTIONS
No Scale

SHOW DETAIL FOR RE-LOCATING FENCE ADJACENT TO LATROBE HOUSING PROJECT AS REFERRED TO ON SHEET NO. 25

PRELIMINARY

SEP 2 1975 MARYLAND SURVEYING & ENGINEERING CO., Inc.
6707 WHITESTONE ROAD
BALTIMORE, MARYLAND 21207

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

TYPICAL SECTION SHEET

SCALE NONE DATE

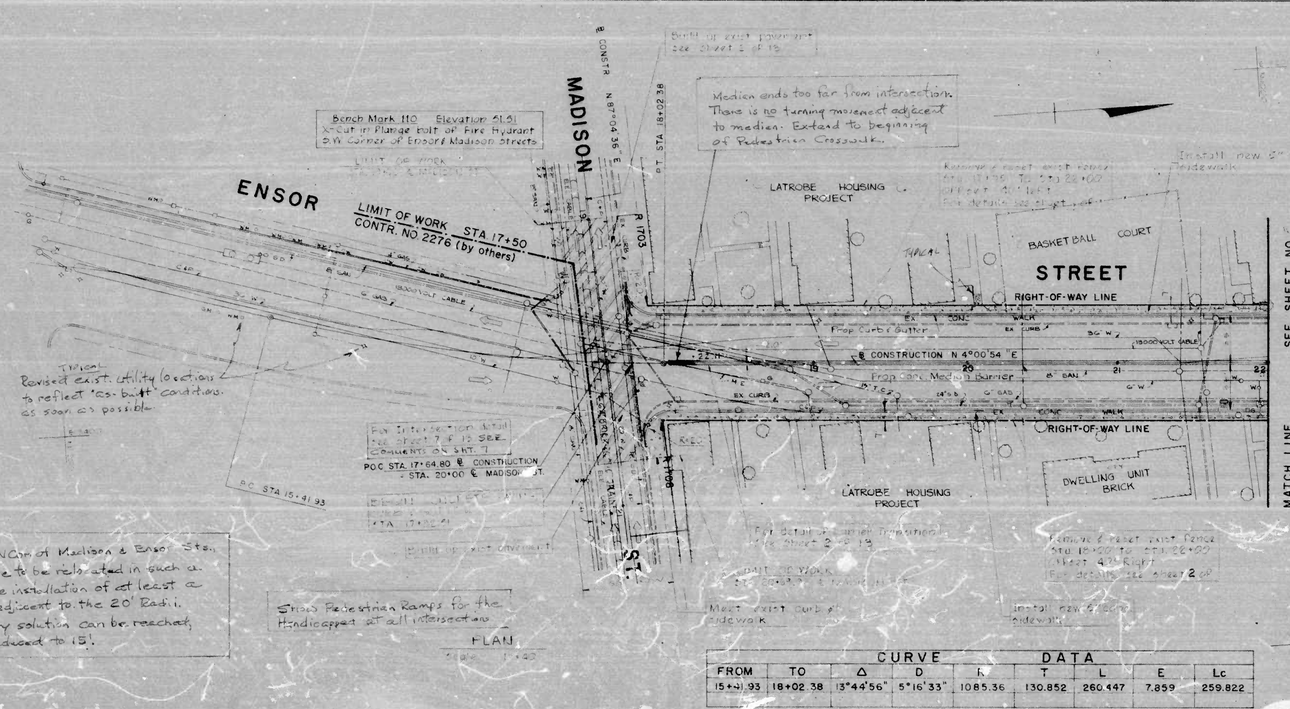
SHEET 2 OF 13

FILE REF.

RATIO - 24

FILE REF.

REVISIONS			
NO	DESCRIPTION	DATE	BY



NOTE:
At the NE cor. & NW cor. of Madison & Ensor Sts., the exist. fence will have to be relocated in such a manner to permit the installation of at least a minimum width C.W. adjacent to the 20' Radii.
If no satisfactory solution can be reached, the Radii must be reduced to 15'.

AREA OF LATROBE HOMES
1. Extent of adjustment to steps, lead walks, etc. - through housing project, must be shown.
2. According to cross-sections, some areas must be "re-shaped", covered with topsoil and sodded. Extent of this work must be shown on the plans.
3. Note: pertaining to existing trees (to be protected or removed).
4. Adjustment to Basketball Court

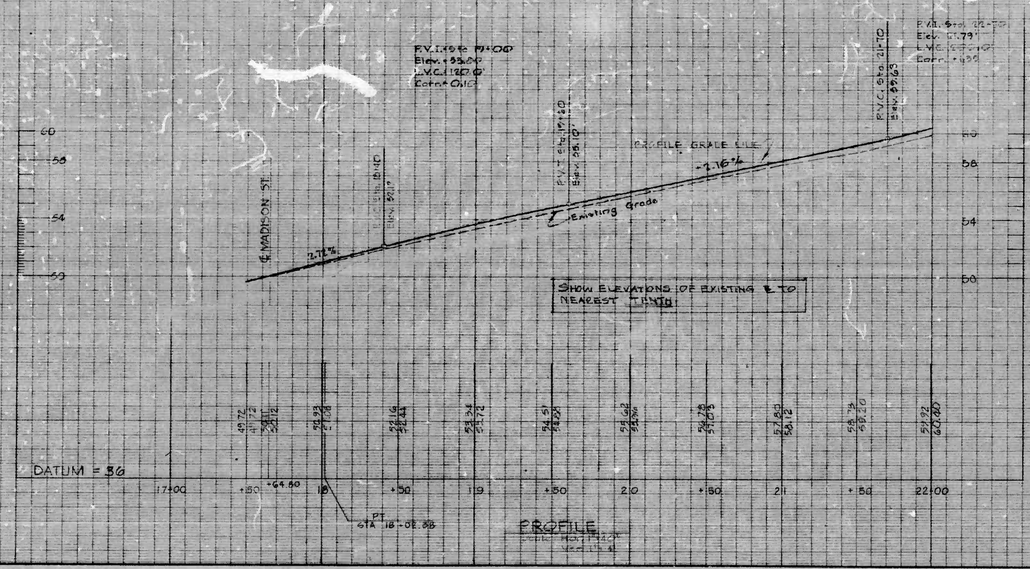
For utility relocation see sheet 11

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

COORDINATE DATA—BASELINE CONSTRUCTION		
DESCRIPTION	NORTH	EAST
P.C. STA. 15+41.93	340.982	3326.657
P.T. STA. 18+02.38	596.127	3375.742

COORDINATE DATA RIGHT-OF-WAY LINES		
DESCRIPTION	NORTH	EAST
R 1703 WEST R/W	589.220	3335.160
R 1708 EAST R/W	593.330	3415.640

CURVE DATA								
FROM	TO	Δ	D	R	T	L	E	Lc
15+41.93	18+02.38	13°44'56"	5°16'33"	1085.36	130.852	260.447	7.859	259.822



PRELIMINARY
SEP 2 1975

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
MARYLAND SURVEYING & ENGINEERING CO. Inc.
6701 WHITE STAR RD.
BALTIMORE, MARYLAND 21207

CONTRACT NO

ENSOR STREET

PLAN AND PROFILE
STA. 17+50 TO STA. 22+00

SCALE: AS SHOWN DATE:

SHEET 4 OF 13

FILE REF.

RATIO - 24

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

1. Remove exist. curbs, paving etc. Area to be filled, covered with Topsoil, Seeded & Mulched.
2. Investigate exist. utilities re: abandonment, Relocation and/or adjustment.
3. Check drainage in this area.

UNIT 22 - W.E.K.
STA 10+ - E EAGER ST

Remove & reset exist. fence and gate to new place. Obtain author. For detail see sheet 5

Install new 5" conc. side walk

End conc. pavement. Build curb & gutter. See sheet 5

Build up exist. pavement

Sidewalk may be necessary to provide access to Trap Doors via Rager Streets

STA 26+55.62 ℄ CONSTRUCTION
STA. 20+00 ℄ EAGER ST

STA 28+25.60 ℄ CONSTRUCTION =
STA 0+00 ℄ ENSOR ST

SEE Drainage on SHEET 9

Approx. Keyed in existing fold

Ret. Wall

Conc.

Exist. Asphalt Playground

CHASE ST.

ENSOR ST.

ALONG THE SOUTH CURB OF CHASE STREET BETWEEN ENSOR ST. & HARFORD AVE. REMAINS ON A HILL. IT MAY TO BE REVIEWED

NOTE: FOR UTILITY RELOCATIONS SEE SHEET 11

EAGER

HARFORD

AVENUE

ENSOR

STREET

LATROBE HOUSING PROJECT

DWELLING UNIT

Playground

Additional Curb

W 1799

W 1798

W 477

W 476

W 481

W 480

W 482

W 483

RIGHT — OF — WAY LINE

EX. CONC. WALK

N 06°36'49" E
26+22.11

N 04°20'20" E

3000 VOLT CABLE

26+89.06

CURVE # 11 CH N 24°05'10" E

CURVE # 12

℄ CONSTRUCTION N 4°00'54" E

Prop. Curb & gutter

EX. CURB

EX. SIDW.

Install new 5" conc side walk

NECESSARY

PROP. EAST MORE UTILITY CLINIC

Replace exist. curb with new 6" Curb & Cone

End conc. pavement and Curb & gutter

Build up exist. pavement

P.C. STA. 27+34.70

P.R.C. STA. 31+19.33

MATCH LINE

SEE SHEET NO.

Fill area between new curb and reset curb. Cover with Topsoil & Sod.

PEDESTRIAN RAMPS FOR THE HANDICAPPED MUST BE PROVIDED AT ALL CURB CROSSES

AREA OF LATROBE HOMES

1. Extent of adjustments to steps, earthwork, etc. throughout project must be shown.
2. According to cross-sections, some areas must be tree-shaped, covered with Topsoil and sodded. Extent of this work must be shown.
3. Notes pertaining to existing trees (to be protected, removed, etc.)

At the SE Cor. & SW Cor. of Madison & Ensor sts, the exist. fence will have to be relocated in such a manner to permit the installation of at least a minimum 20' adjacent to the 20' Radii. If a satisfactory solution can be reached, the Radii must be reduced to 15'.

NOTE:
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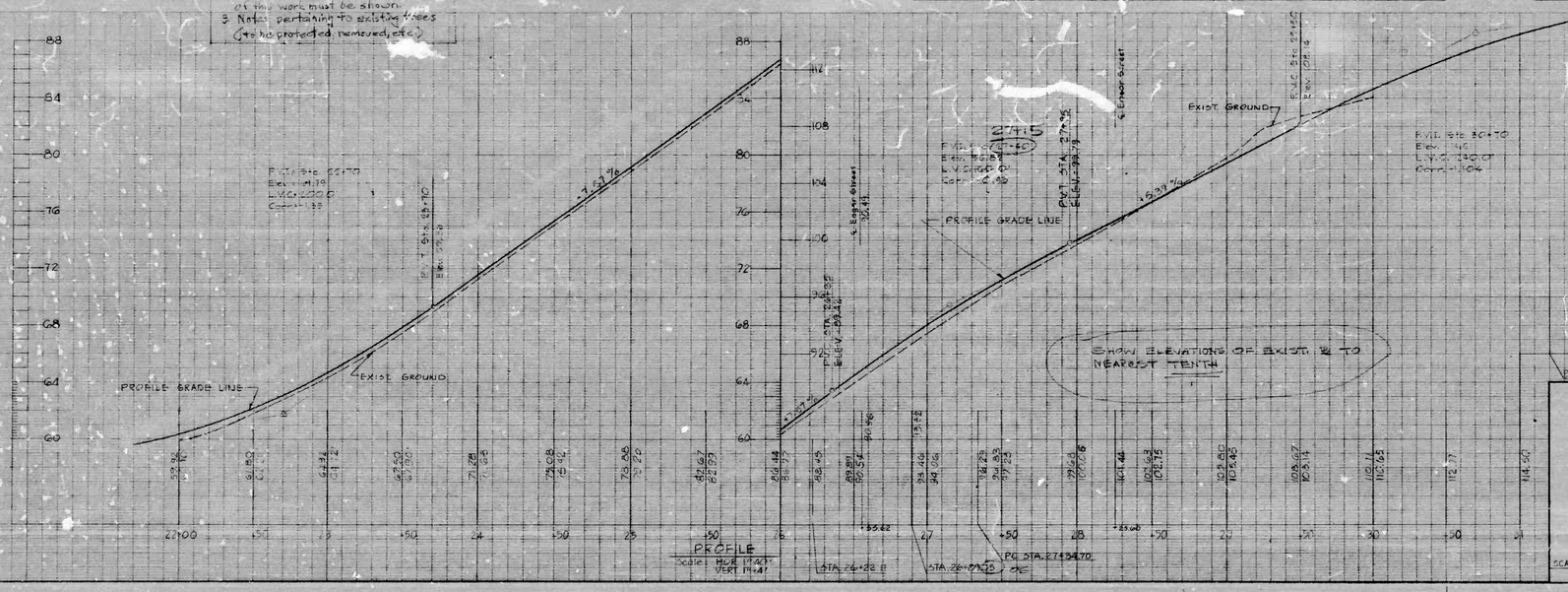
ENSOR STREET

1. Extend driveway to intersect Chase St. and take cross-sections.
2. Exist. grade and sections should be used to determine whether exist. paving can be utilized.
3. Exist. curbs, paving etc. to be removed, area filled, covered with topsoil, seeded & mulched.
4. Investigate utilities to determine which may be abandoned and what adjustments and relocations are necessary.
5. Provide detailed plan, profile and paving template.
6. Determine drainage pattern and provide pick-up to drain.

COORDINATE DATA		RIGHT-OF-WAY		
DESCRIPTION			NORTH	EAST
W1799	WEST	R/W	1410.730	3392.840
W1798	EAST	R/W	1416.950	3473.470
W 477	WEST	R/W	1477.200	3400.490
W 471	EAST	R/W	1483.480	3481.200
W 476	WEST	R/W	1528.880	3404.420
W 480	EAST	R/W	1522.820	3484.190
W 482	WEST	R/W	1897.790	3519.330
W 483	EAST	R/W	1842.480	3627.040

COORDINATE DATA-BASELINE CONSTRUCT.			
DESCRIPTION		NORTH	EAST
POL STA 26+22.11	– W 598	1413.840	3433.150
POL STA 26+89.06	– W 584	1480.340	3440.850
P.C. STA. 27+34.70	– W 585	1525.850	3444.300
P.R.C. STA. 31+19.33	– W 586	1870.130	3598.180

CURVE DATA							
CURVE NUMBER	Δ	Dc	R	T	L	E	LC
10	39° 29' 40"	09° 34' 53"	598.00	214.67	412.20	37.36	404.09
11	39° 29' 40"	10° 16' 05"	558.00	200.[illegible]	384.63	34.86	377.06
12	39° 29' 40"	11° 03' 38"	518.00	185.95	357.06	32.36	350.03



PRELIMINARY
SEP 2 1975

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

MARYLAND SURVEYING & ENGINEERING CO., Inc.
6707 WHITESTONE RD.
BALTIMORE, MARYLAND 21207

CONTRACT NO.

ENSOR STREET
HARFORD AVE. & EAGER ST.

PLAN AND PROFILE
STA. 22+00 TO STA. 31+19.33

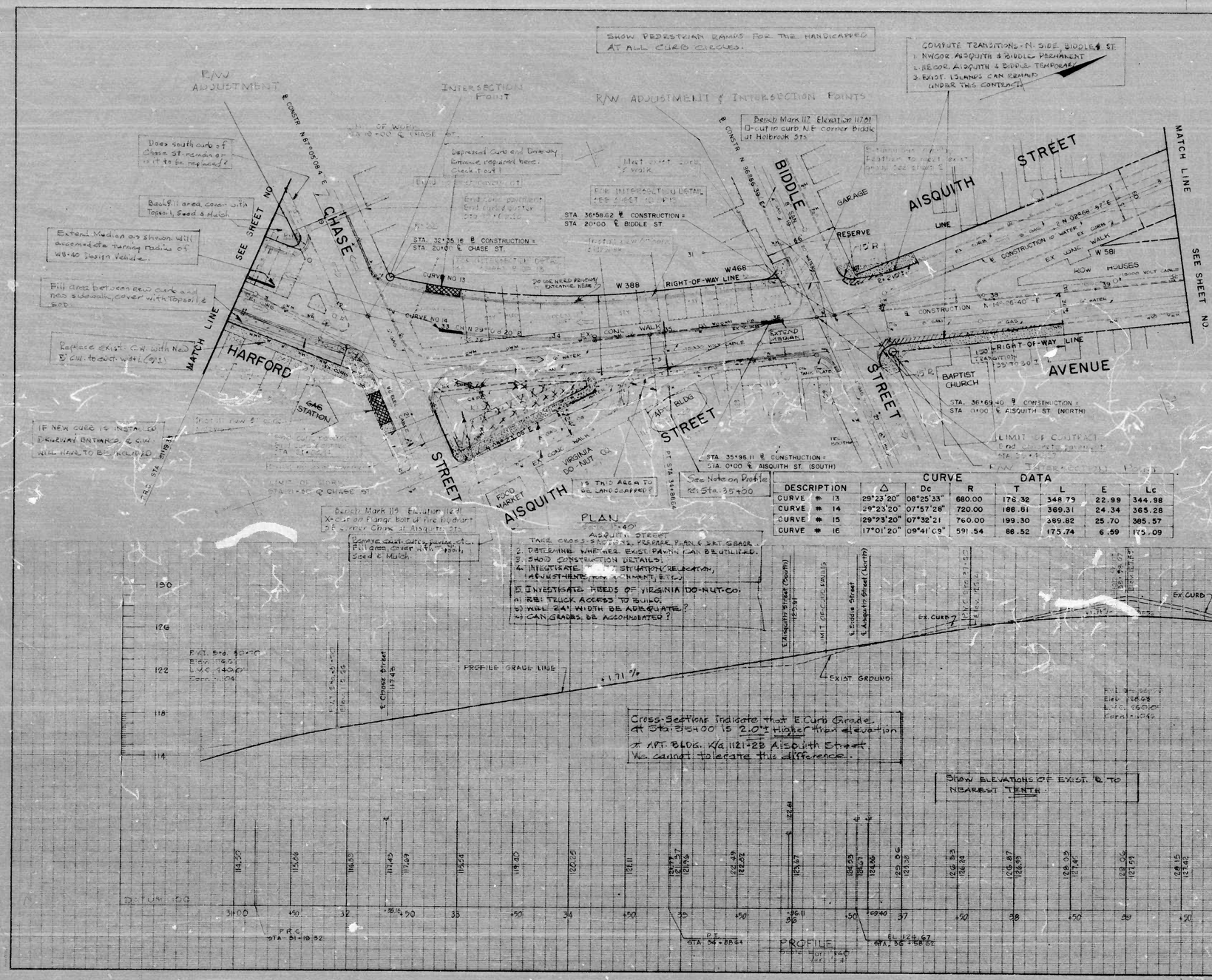
SCALE: AS SHOWN
DATE:
SHEET 5 OF 15

FILE REF.

RATIO - 24

FILE REF.

REVISIONS			
NO	DESCRIPTION	DATE	BY



NOTE:
For utility relocation see sheet 12 of 13

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

COORDINATE DATA—BASELINE CONSTRUCTION			
DESCRIPTION		NORTH	EAST
PRC STA 31+19.33	W 586	1870.13	3598.18
PT STA 34+88.64	W 587	2189.[illegible]	3776.05
PI CURVE NO 4			

COORDINATE DATA RIGHT-OF-WAY LINES				
DESCRIPTION			NORTH	EAST
PT. 31 RESERVE		LINE	2260.091	3721.052
W-388	WEST	R/W	2199.110	3737.310
W-379	EAST	R/W	2179.150	3814.780
W-468	WEST	R/W	2317.710	3767.860
47	WEST	R/W	2384.880	3790.000
W-581	WEST	R/W	2599.360	3840.410
W-339	EAST	R/W	2321.886	3852.395

CURVE DATA								
DESCRIPTION	Δ	Dc	R	T	L	E	Lc
CURVE # 13	29°23'20"	08°25'33"	680.00	176.32	348.79	22.99	344.98
CURVE # 14	29°23'20"	07°57'28"	720.00	186.81	369.31	24.34	365.28
CURVE # 15	29°23'20"	07°32'21	760.00	199.30	389.82	25.70	385.57
CURVE # 16	17°01'20"	09°41'09"	591.54	88.52	175.74	6.59	175.09

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
MARYLAND SURVEYING & ENGINEERING CO. Inc.
6767 Wisc[illegible]
BALTIMORE, MARYLAND 21207

CONTRACT NO.

HARFORD AVE.

CHASE ST. - BIDDLE ST.

PLAN AND PROFILE

STA. 31+19.32 TO STA. 39+72

SCALE: AS SHOWN DATE:

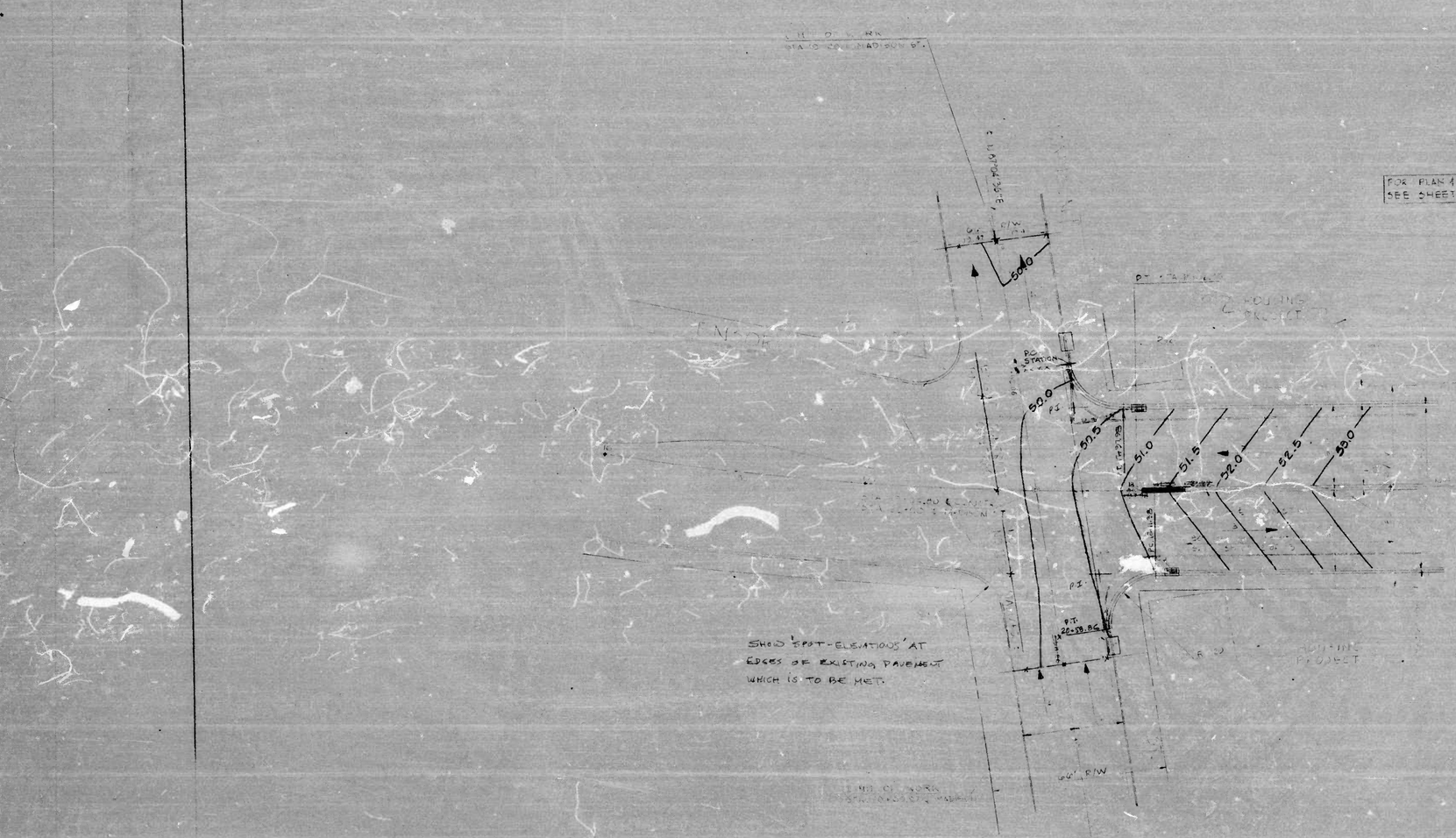
SHEET 6 OF 13

FILE REF.

RATIO - 24

FILE REF

REVISIONS			
NO.	DESCRIPTION	DATE	BY



SHOW 'SPOT-ELEVATIONS' AT EDGES OF EXISTING PAVEMENT WHICH IS TO BE MET.

COMMENTS TYPICAL FOR ALL SHEETS OF INTERSECTION DETAILS

1. SHOW CURB CIRCLE STATIONS SO [illegible] THEY ARE CLEAR.
2. INDICATE P.C. STATIONS AT ALL CURB CIRCLES.
3. SHOW PEDESTRIAN RAMPS AT PROPER LOCATIONS.
4. INDICATE LIMIT OF NEW CURB CONSTRUCTION AT EACH INTERSECTION.
5. INTERSECTION PROFILES SHOULD BE SHOWN ON EACH SHEET. PROFILES (WE PREFER FLOWLINE) SHALL BE SHOWN FOR EACH CORNER WITH SUFFICIENT LENGTH TO INDICATE 'TIE-IN' TO EXISTING CURBLINE.
6. DETAILS OF SIDEWALK CONSTRUCTION ADJACENT TO EXIST. BLDGS AT THE CORNERS MUST BE SHOWN.
7. ALL CONSTRUCTION DETAILS NOT SHOWN ON PLAN & PROFILE MUST BE CLEARLY SHOWN ON THESE SHEETS. THIS IS THE PURPOSE OF DETAIL SHEETS.

PRELIMINARY

SEP 2 1975

MARYLAND SURVEYING & ENGINEERING CO. Inc.
6707 WHITES NECK RD.
BALTIMORE, MARYLAND 21207

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

INTERSECTION DETAIL
[illegible]

FILE REF

RATIO - 24

FILE REF

REVISIONS			
NO.	DESCRIPTION	DATE	BY

PRELIMINARY

SEP 2 1975

MARYLAND SURVEYING & ENGINEERING CO.
6707 WHITESTONE
BALTIMORE, MARYLAND

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

INTERSECTION DETAIL
EAGER ST
ENSOR ST & HARFORD AVE.

SCALE: 1" = 20' DATE:

SHEET 8 OF 12

FILE REF

RATIO - 24

FILE REF

REVISIONS			
NO.	DESCRIPTION	DATE	BY

FOR PLA
SEE

SEE SHEET NO. 7 FOR COMMENTS

PRELIMINARY

SEP 2 1975

MARYLAND SURVEYING & ENGINEERING CO., Inc.
6707 WHITESTONE RD.
BALTIMORE, MARYLAND 21207

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

INTERSECTION DETAIL

CHASE ST. & HARFORD AVE.

SCALE: 1" = 20'

DATE

SHEET 2 OF 12

FILE REF.

RATIO - 24

FILE REF

REVISIONS			
NO.	DESCRIPTION	DATE	BY

PRELIMINARY

SEP 2 1975

MARYLAND SURVEYING & ENGINEERING CO., Inc.
6707 WHITESTONE RD.
BALTIMORE, MARYLAND 21207

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

INTERSECTION DETAIL

BIDDLE ST.

HARFORD AVE. & ALISQUITH ST.

SCALE: 1" = 20'

DATE:

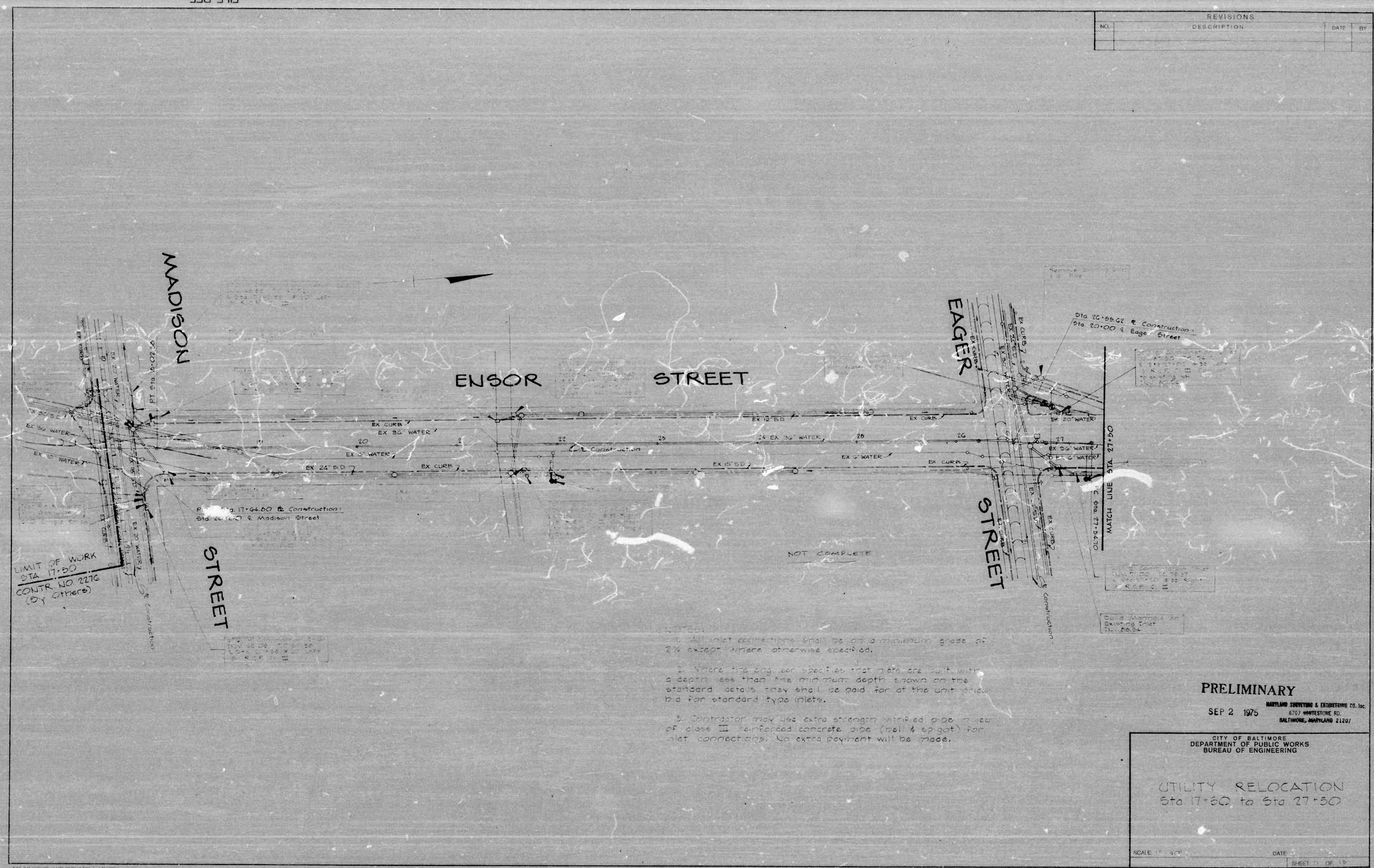
SHEET 11 OF 14

FILE REF

RATIO - 24

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY



NOTES:

1. All inlet connections shall be at a minimum grade of 2% except where otherwise specified.

2. Where the engineer specifies inlets are built with a depth less than the minimum depth shown on the standard details, they shall be paid for at the unit price bid for standard type inlets.

3. Contractor may use extra strength vitrified pipe in lieu of class III reinforced concrete pipe (roll & ep gat) for inlet connections. No extra payment will be made.

PRELIMINARY

SEP 2 1975

MARYLAND SURVEYING & ENGINEERING CO., Inc.
6707 WHITESTONE RD.
BALTIMORE, MARYLAND 21207

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

UTILITY RELOCATION
Sta 17+50 to Sta 27+50

SCALE 1" = 40'

DATE

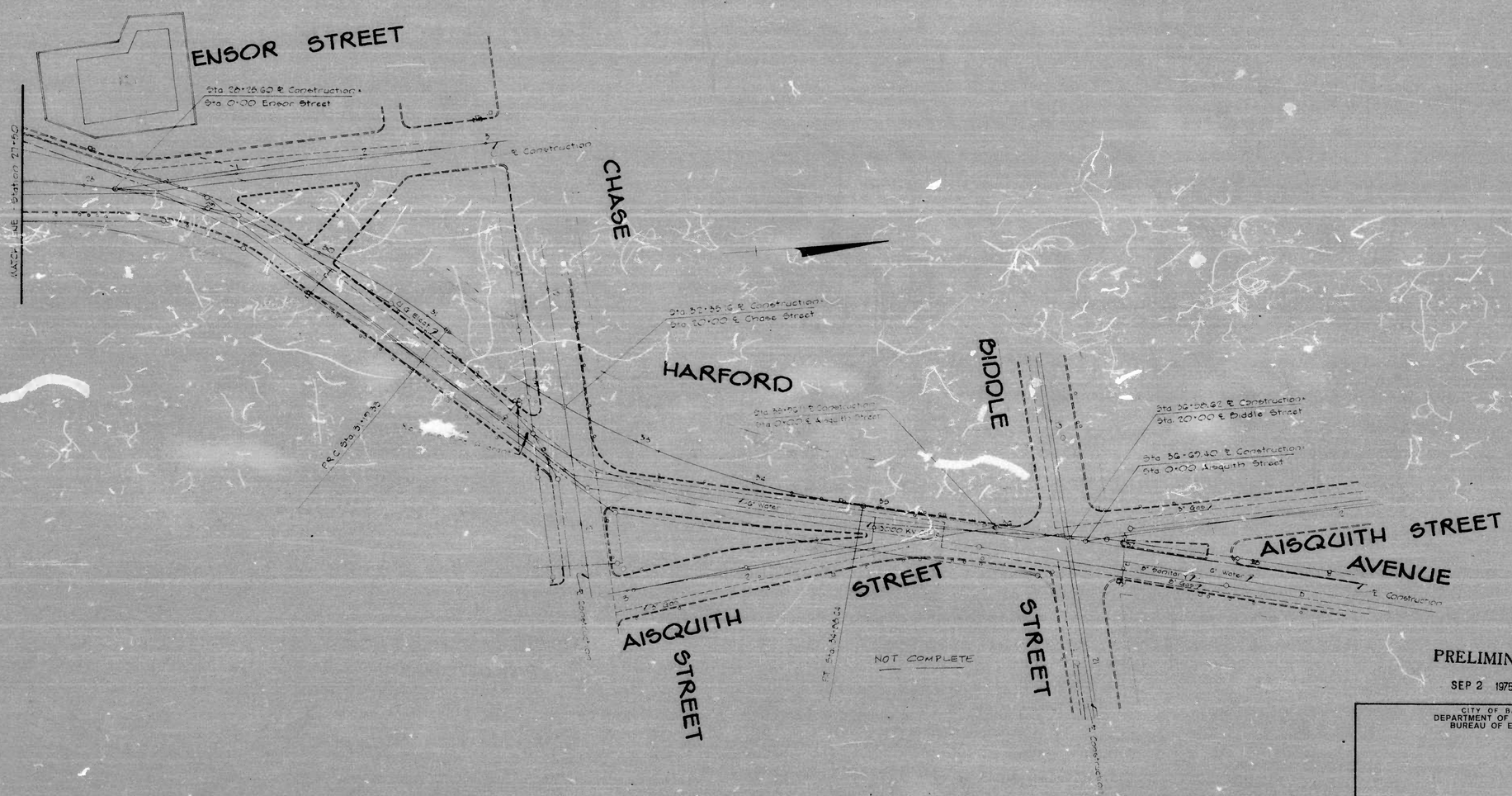
SHEET 11 OF 15

FILE REF.

RATIO - 24

FILE REF.

REVISIONS			
No	DESCRIPTION	DATE	BY



PRELIMINARY

SEP 2 1975

MARYLAND SURVEYORS & ENGINEERING CO., Inc.
6707 WHITESTONE RD.
BALTIMORE, MARYLAND 21207

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

SCALE 1" = 40'

DATE

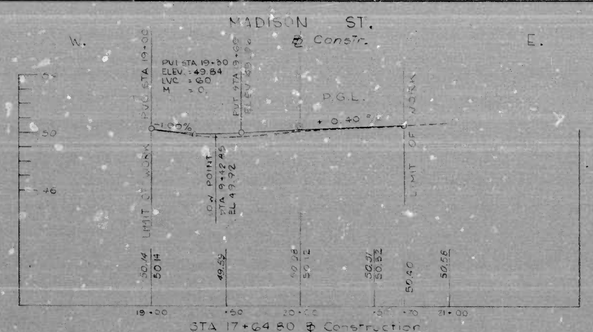
SHEET 2 OF 2

FILE REF.

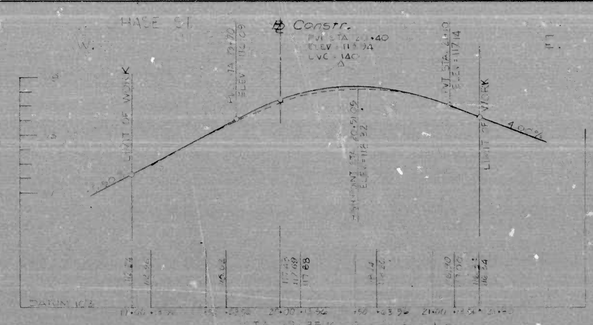
RATIO - 24

FILE REF

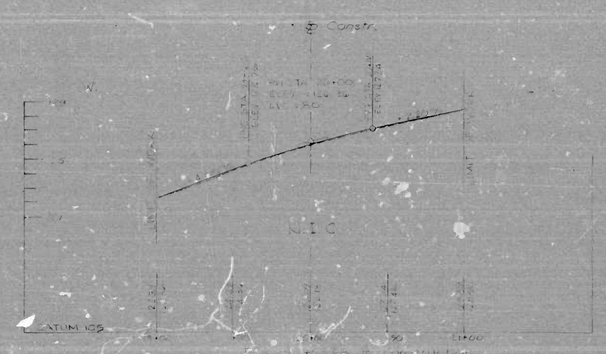
REVISIONS			
NO.	DESCRIPTION	DATE	BY



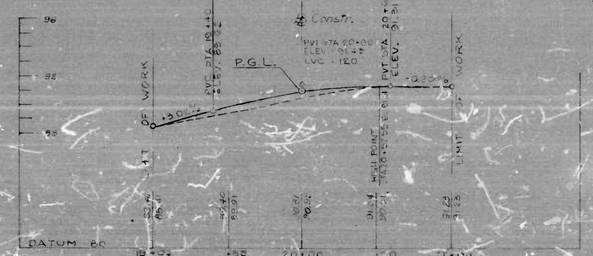
STA 17+24.50 ℄ Construction
STA 20+00 MADISON ST.



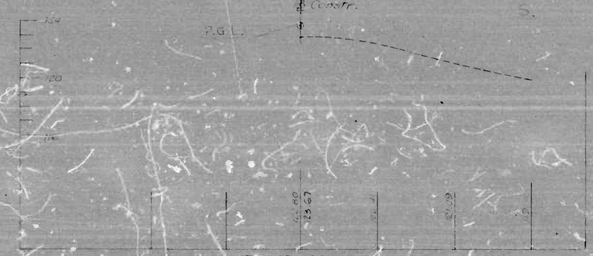
STA 32+35.16 ℄ Construction
STA 20+00 ℄ CHASE ST.



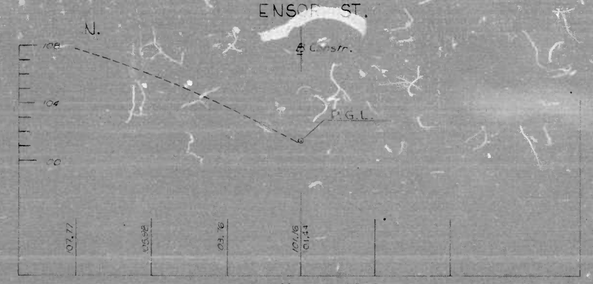
STA 20+00 ℄ PRESTON ST.



STA. 26+55.58 ℄ Construction
= STA. 20+00 ℄ EAGER ST.

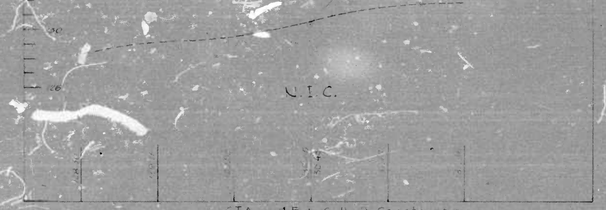


STA. 35+26.11 ℄ Construction
STA. 0+00 ℄ AISQUITH ST.

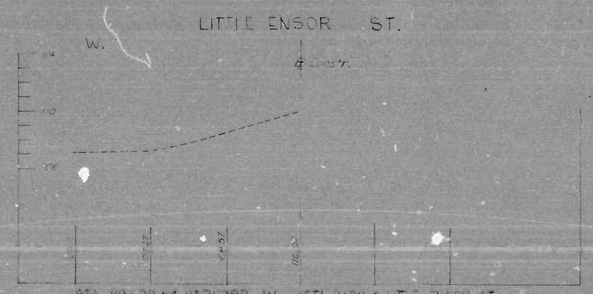


STA. 28+25.60 ℄ Construction
= STA. 0+00 ℄ ENSOR ST.

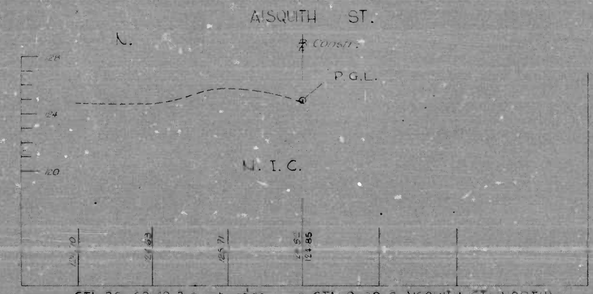
STA. 36+58.62 ℄ Construction
= STA. 20+00 ℄ BIDDLE ST.



STA. 45+0.11 ℄ Construction
= STA. 20+00 ℄ HOFFMAN ST.



STA. 29+90.64 HARFORD AV. = STA 0+00 ℄ LITTLE ENSOR ST.



STA. 36+69.40 ℄ Construction = STA. 0+00 ℄ AISQUITH ST. NORTH

PROFILES SHOULD BE SHOWN ON "INTERSECTION DETAIL" SHEETS.

SEE COMMENTS ON SHEET NO. 7

PRELIMINARY

SEP 2 1975

MARYLAND SURVEYING & ENGINEERING CO., Inc.
6707 WHITE STONE RD.
BALTIMORE, MARYLAND 21207

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

PROFILES

MADISON ST. TO HOFFMAN ST.

STA. 17+24.50 TO STA. 45+0.11

SCALE 1"=20' DATE

SHEET 13 OF 19

FILE REF.