

WATER AND SEWER EXTENSION

LONG GATE CENTER

A COMMERCIAL CENTER

PHASE I

CONTRACT NO. 24-3438-D

2nd ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

BENCHMARKS
 BM#1 STA 3043001
 ELEV. 437.919
 N 516,549.548 E 853,656.506
 32+/- NORTH OF BGE TOWER 276-A
 BEHIND SCHOOL GROUNDS

BM#2 STA 2943002
 N 513,205.902 E 857,478.687
 STATION IS LOCATED ON THE TRANSMISSION
 LINE 1700'+/- NORTH OF INTERSECTION
 OF ROUTE 103 AND NEW CUT ROAD AND
 1150'+/- EAST OF NEW CUT ROAD

MANHOLE LOCATION TABLE		
MANHOLE	NORTH	EAST
MH 1	516255.88	851064.94
MH 2	516280.51	851096.27
MH 3	SEE SHEET 3	
MH 4	SEE SHEET 3	
MH 5	515902.67	851393.32
MH 6	515779.33	851541.51
MH 7	515852.12	851846.37
MH 8	515834.39	851846.07
MH 9	516015.21	851996.55
MH 11	516313.42	851070.41
MH 12	516385.36	850985.59
MH 13	SEE SHEET 4	
MH 14	SEE SHEET 4	
MH 15	516590.03	850796.24
MH 16	516687.71	850735.92
MH 17	516940.90	850893.59
MH 18	517095.80	850901.84
MH 19	517080.10	850900.81
MH 20	517121.20	850900.51
MH 21	516109.75	852075.23

GENERAL NOTES

- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the Contractor's expense.
- All horizontal controls are based on Maryland State Coordinates.
- All vertical controls are based on U.S.G.S. data.
- All pipe elevations shown are invert elevations.
- Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum or funnel as required. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event the contractor's work requires the bracing of additional poles, any cost incurred by the owner for bracing of additional poles or damages shall be deducted from money owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
- For details not shown on the drawings, and for materials and construction methods use Howard County Design Manual, Volume IV, Standard Specifications and Detail for Construction (Latest Edition). The contractor shall have a copy of Volume IV on the job.
- Where test pits have been made on existing utilities, they are noted by the symbol at the location of the test pit. A note or notes containing the results of the test pit or pits is included on the drawings. Existing utilities in the vicinity of the proposed work for which test pits have not been dug shall be located by the contractor two weeks in advance of construction operations at his own expense.
- Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

State Highway Administration	531-5533
Baltimore Gas & Electric Co. Contractor Services	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Bureau of Utilities, Howard County Department of Public Works	313-4900
- Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the contractor.
- Contractor shall remove trees, stumps and roots along line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Tops of all water mains to have a minimum of 3'-1/2' cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
- Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with Standard Detail "S" around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
- The contractor shall not operate any water main valves on the existing water system.
- All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
- All sewer mains shall be D.I.P. and P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Force mains shall be D.I.P. only.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail 05.52. Where watertight manhole frame and cover is used, set top of frame 1"-6" above finished grade unless otherwise noted on the drawings.
- House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
- Manholes can be either brick or precast concrete structures.
- Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per standard detail W.1.11.
- Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.

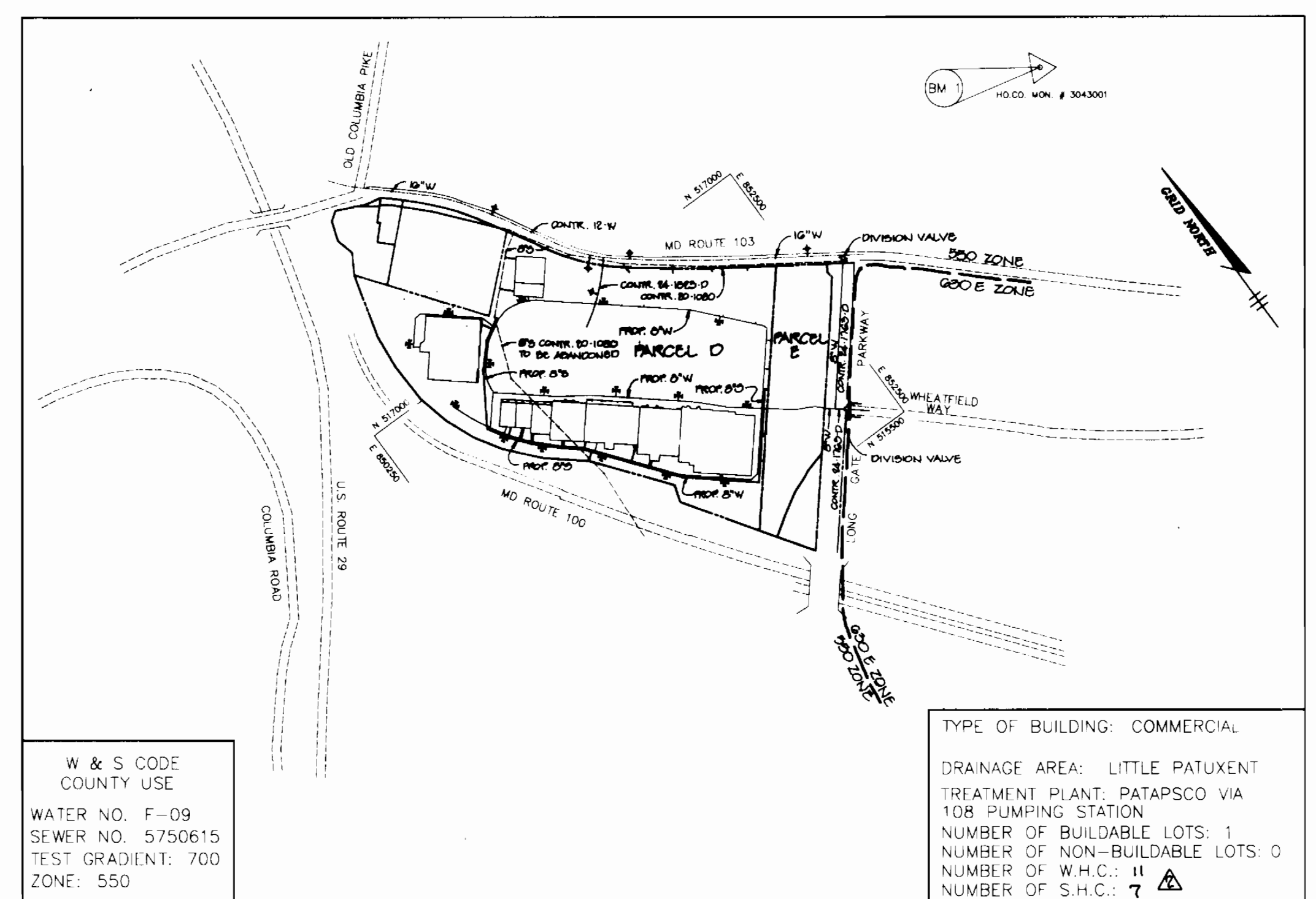
QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	5700 LF	5605	D.I.P.	ATLANTIC STATES
6" WATER	500 LF	342	D.I.P.	"
FIRE HYDRANTS	15 EA.	12	B&B	AMERICAN FLOW CONTROL
8" VALVES	20 EA.	20	A 2360-20	MUELLER
6" VALVES	25 EA.	19	"	"
8" D.P. CL 52	40 LF	40	D.I.P. CL 52	ATLANTIC STATES
8" SEWER	2207 LF	2615	SDR-35	J-M
SEWER MANHOLES STD	20 EA.	19	ASTM C 478	TERRE HILL
6" S-C	121 LF	90	SDR-35	J-M
SEWER MANHOLES	122.5 VP	1286	ASTM C 478	TERRE HILL
6" WHC	10 LF			

NAME OF UTILITY CONTRACTOR: **MAGNOLIA**

CHECKBOX

AS-BUILT DATE

SURVEY AND DRAFTING DIVISION



VICINITY MAP
SCALE: 1"=600'

THESE ORIGINAL WATER AND SEWER CONSTRUCTION PLAN SHEETS 1 THRU 10 WILL SUPERCEDE THE ORIGINAL WATER AND SEWER PLAN SHEETS 1 THRU 10 APPROVED AND SIGNED ON AUGUST 24, 1995 BY CHIEF DEVELOPMENT ENGINEERING DIVISION.

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-95-62

Review for Howard Soil Conservation District and meets technical requirements.
Peterson Engler / *12/14/95*
 NATURAL RESOURCES CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
John R. Robertson / *12/16/95*
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert Benjamin / *12-14-95*
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Howard Robertson / *12/16/95*
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

RIEMER MUEGGE & ASSOCIATES, INC.
 Planners Engineers Surveyors
 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
 410-997-0900 FAX: 410-997-9282
 800/10486 FRI. 982

J. Barell
 JAYKANT D. PAREKH #19148

DES: C.J.R.			
DRN: DAM	WAD	REV. QUANTITIES	10-17-92
	WAD	REV. QUANTITIES	8-7-90
CHK:	WAD	REV. QUANTITIES	7-14-90
	WAD	REV. QUANTITIES	1-25-90
DATE: 12-12-95	BY: NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. 24 & 30 BLOCK NO. 24 & 6

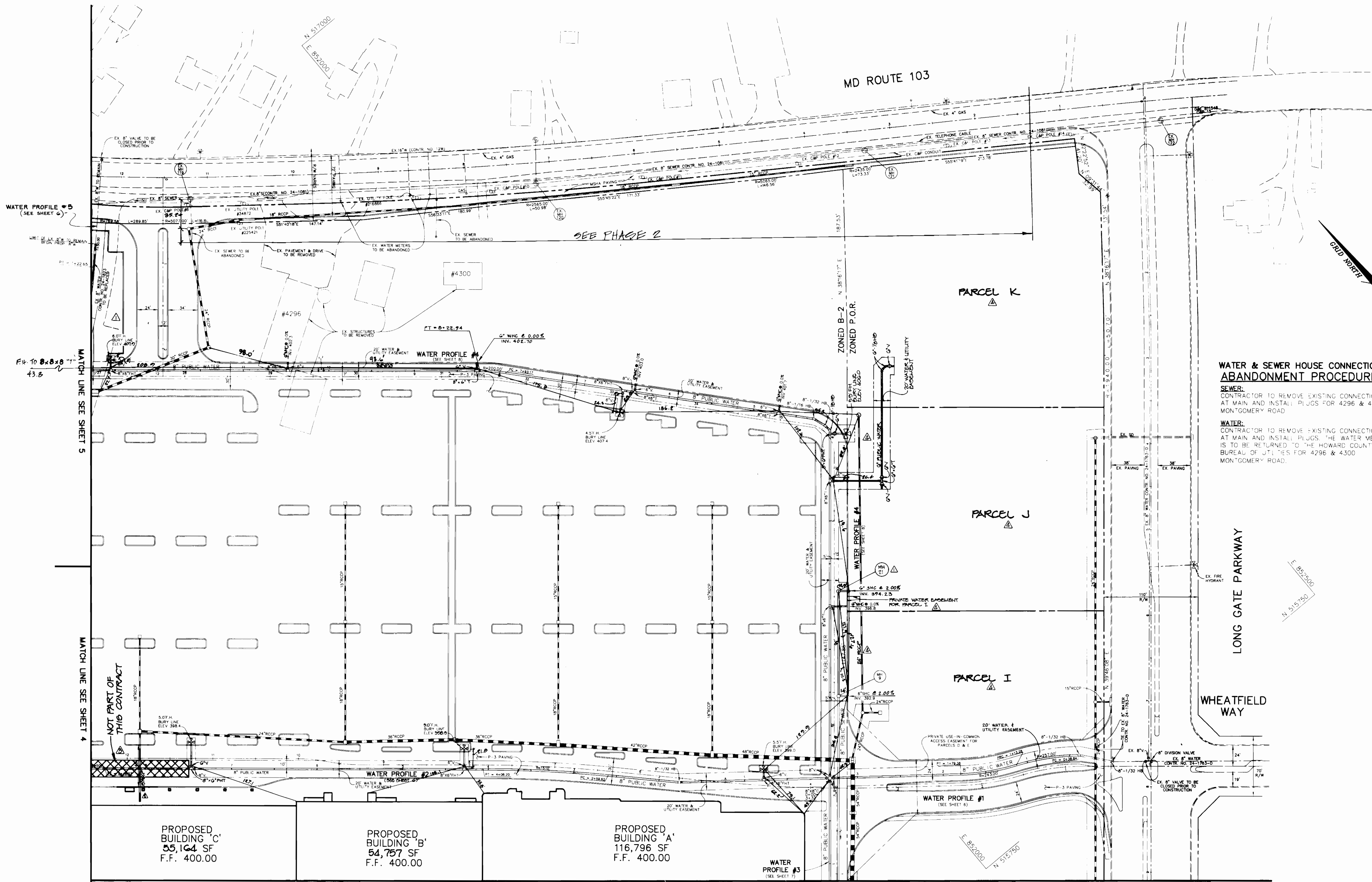
LONG GATE CENTER
A COMMERCIAL CENTER PHASE I
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3438-D

SCALE AS SHOWN
SHEET 1 OF 10

3438 WS/1 Long Gate Center

A.S-BUILTS 4/4/97

3438 WS/2 Long Gate Center



WATER & SEWER HOUSE CONNECTION ABANDONMENT PROCEDURE
SEWER:
 CONTRACTOR TO REMOVE EXISTING CONNECTIONS AT MAIN AND INSTALL PLUGS FOR 4296 & 4300 MONTGOMERY ROAD.
WATER:
 CONTRACTOR TO REMOVE EXISTING CONNECTIONS AT MAIN AND INSTALL PLUGS. THE WATER METER IS TO BE RETURNED TO THE HOWARD COUNTY BUREAU OF UTILITIES FOR 4296 & 4300 MONTGOMERY ROAD.

PROPOSED BUILDING 'C'
 55,164 SF
 F.F. 400.00

PROPOSED BUILDING 'B'
 54,757 SF
 F.F. 400.00

PROPOSED BUILDING 'A'
 116,796 SF
 F.F. 400.00

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 12-14-95

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 12/14/95

RIEMER MUEGGE & ASSOCIATES, INC.
 Engineers & Surveyors
 8818 Centre Park Drive Suite 200 • Columbia, MD 21045
 410-997-8900 FAX: 410-997-9282
 HOCV104296 032-LWC

JAYKANT D. PAREKH # 19148

DES.	CHK.	DATE	BY	NO.	REVISION	DATE
C.J.R.		12 12 00				
	WAD				ADDED WATER LINE, FH, 24" RCC, BENT FOR PARCEL I & NEW PARCEL LINES FOR PARCELS I, J & K	10/17/00
	WAD				REMOVED WATER & SEWER ALONG MD 103 FROM CONTRACT	7/14/99
	WAD				ADDED 15" ROOF DRAIN TO BLDG. C	4/10/00
	WAD				REV PARKING LAYOUT @ MD RT. 103 ENTRANCE	1/20/99

PLAN OF WATER AND SEWER MAINS
 600' SCALE MAP NO. 24 & 30 BLOCK NO. 24 & 6

LONG GATE CENTER
 A COMMERCIAL CENTER PHASE I
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 CONTRACT NO. 24-3438-D
 SCALE 1" = 50'
 SHEET 2 OF 10

ADD-BUILTS 4, 4, 5, 7

3438 ws/3 Long Gate Center

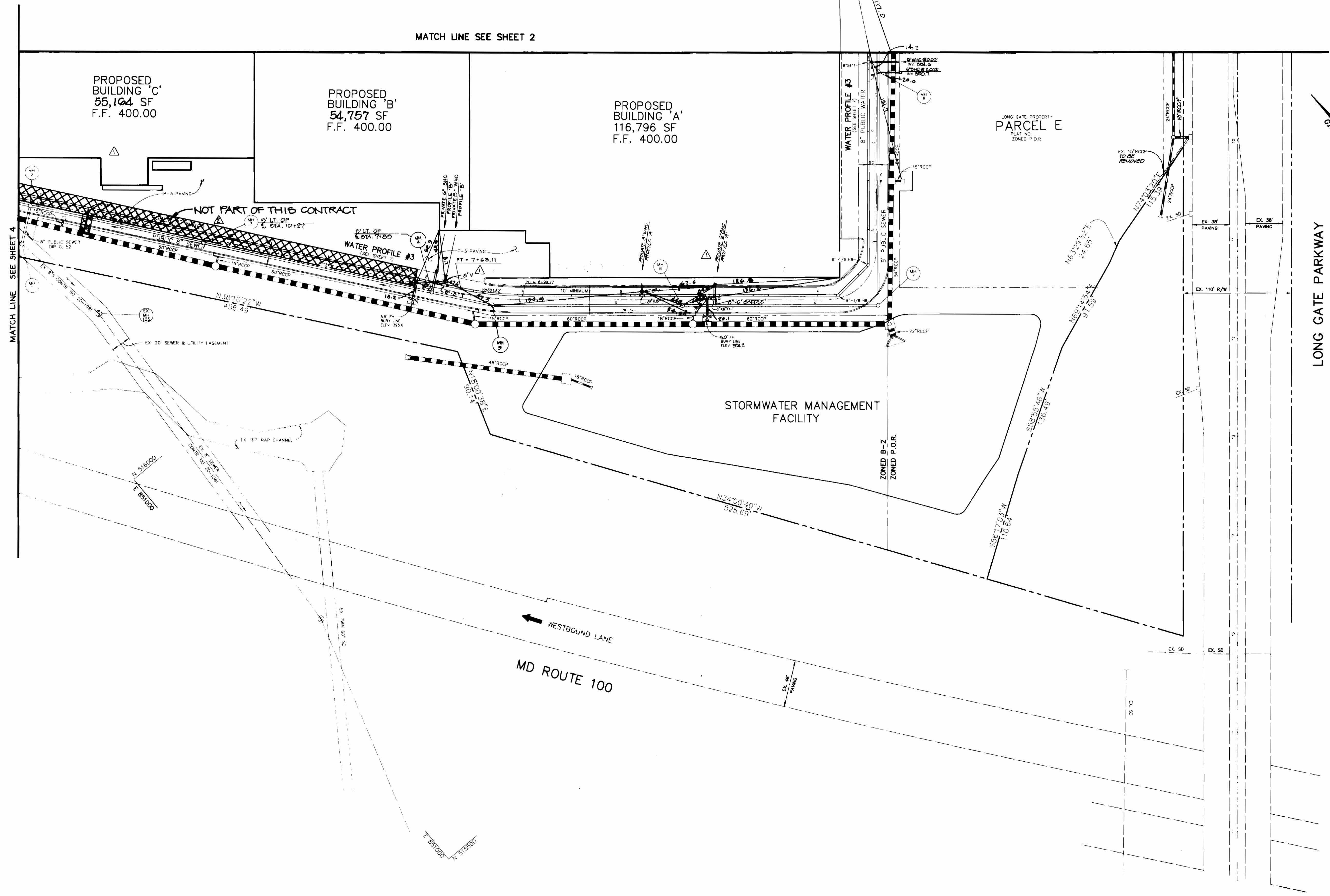
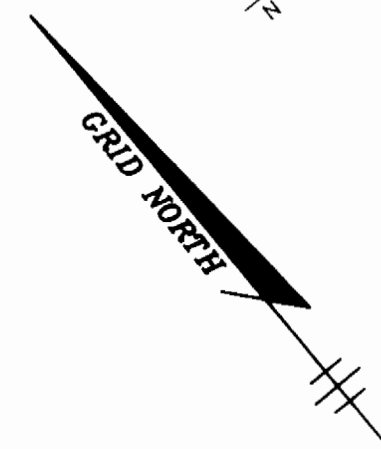
MATCH LINE SEE SHEET 2

PROPOSED BUILDING 'C'
55,104 SF
F.F. 400.00

PROPOSED BUILDING 'B'
54,757 SF
F.F. 400.00

PROPOSED BUILDING 'A'
116,796 SF
F.F. 400.00

LONG GATE PROPERTY
PARCEL E
PLAT NO. 24-3438
ZONED P.O.R.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

RIEMER MUEGGE & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Centre Park Drive • Suite 200 • Columbia, MD 21046
410-997-8900 FAX: 410-997-9282
HOCO 104202 W53.DWG



DES: C.J.R.

DRN: DAM

CHK:

DATE: 12-12-95

WAD

BY NO.

REVISION
1- REMOVE WATER LINE & WHC PILING FOR BLDG. C FROM THIS CONTRACT
2- REV. LOCATION OF WHC PILING FOR BLDG. A
3- WAD ALL WHC'S B

PLAN OF
WATER AND SEWER MAINS

600' SCALE MAP NO. 24 & 30 BLOCK NO. 24 & 6

LONG GATE CENTER
A COMMERCIAL CENTER PHASE I
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3438-D

SCALE
1" = 50'

SHEET
3 OF 10

Robert B...
CHIEF, BUREAU OF...

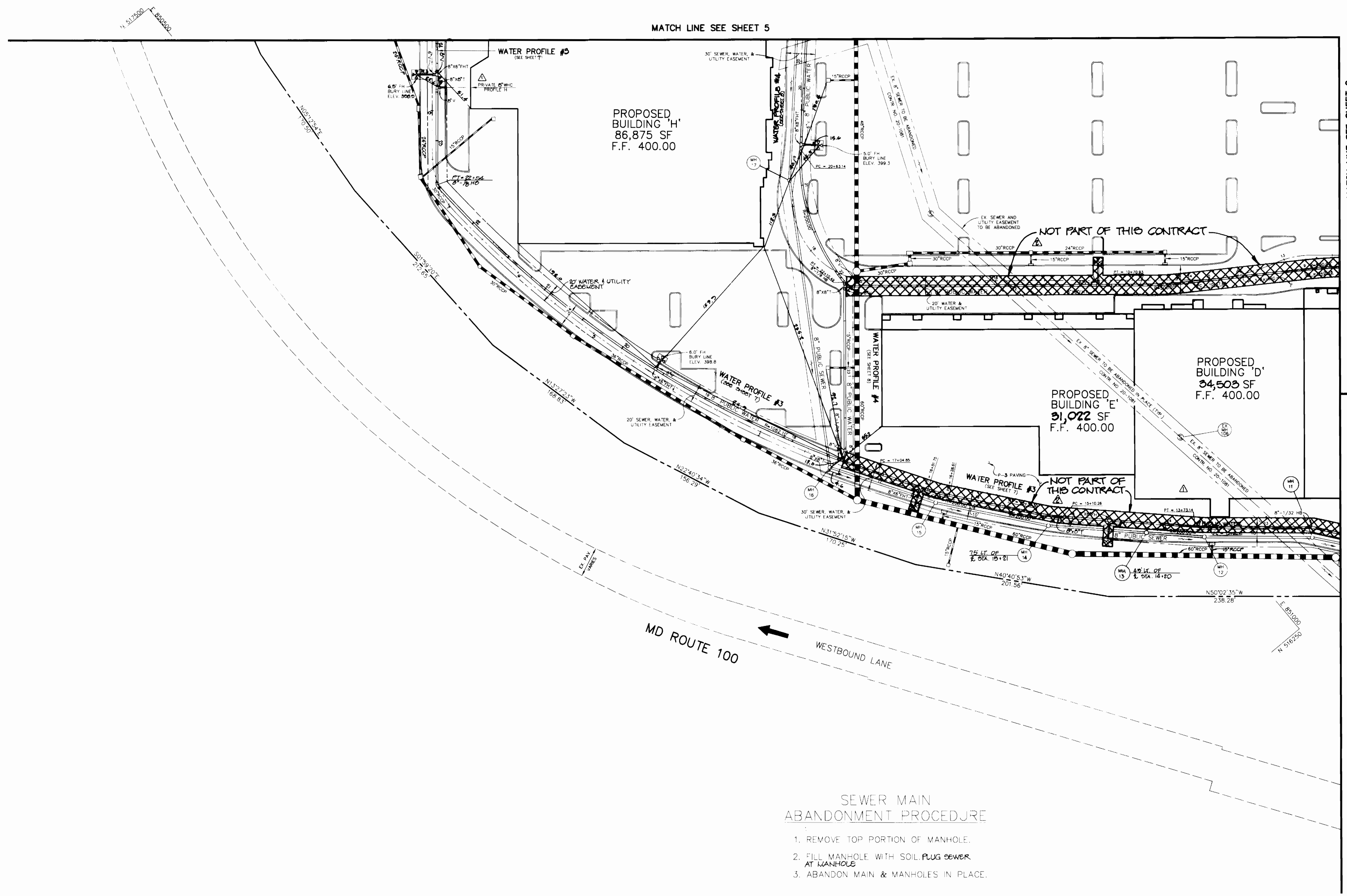
12-14-95
DATE

...
CHIEF, DEVELOPMENT & PROJECTS DIVISION

JAYKANT D. PARIKH # 19148

RE-BUILD...

3438 ws/4 Long Gate Center



MATCH LINE SEE SHEET 5

MATCH LINE SEE SHEET 2

MATCH LINE SEE SHEET 3

PROPOSED BUILDING 'H'
86,875 SF
F.F. 400.00

PROPOSED BUILDING 'D'
34,503 SF
F.F. 400.00

PROPOSED BUILDING 'E'
31,022 SF
F.F. 400.00

MD ROUTE 100
WESTBOUND LANE

SEWER MAIN
ABANDONMENT PROCEDURE

1. REMOVE TOP PORTION OF MANHOLE.
2. FILL MANHOLE WITH SOIL PLUG SEWER AT MANHOLE
3. ABANDON MAIN & MANHOLES IN PLACE.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

RIEMER MUEGGE & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Centre Park Drive • Suite 300 • Columbia, MD 21046
410-997-8900 FAX: 410-997-9282
HDCO# 104202 W54.DWG



DFS: CJR			
DRN: DAM			
CHK:	WAD	REMOVED WATER LINE & WHC FROM THIS CONTRACT	7-14-96
	WAD	MAKE ALL WHC'S B'	1-25-96
DATE: 12-12-95	BY: NO.	REVISION	DATE

PLAN OF
WATER AND SEWER MAINS

LONG GATE CENTER
A COMMERCIAL CENTER PHASE 1
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3438-D

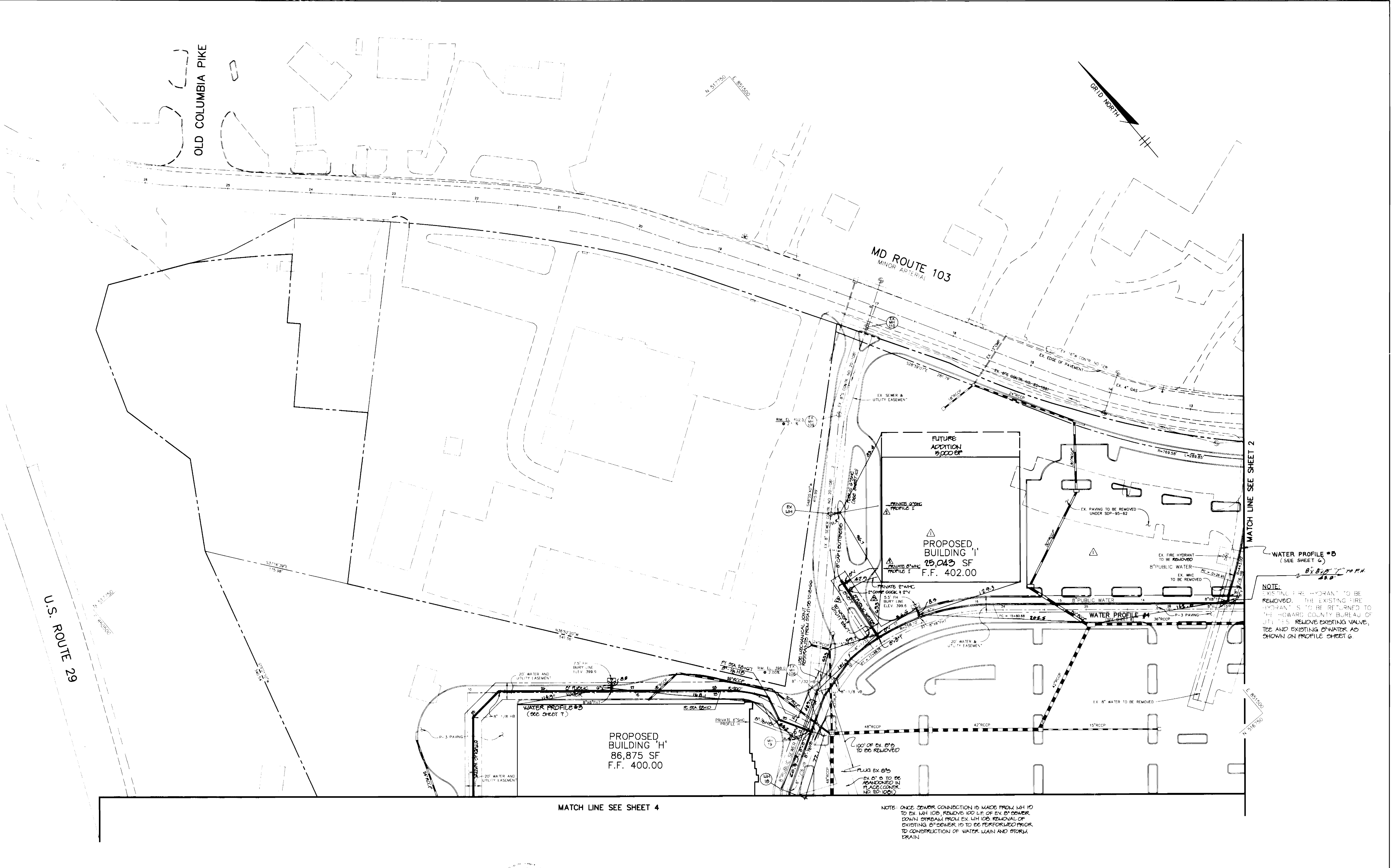
SCALE
1" = 50'

SHEET
4 OF 10

600' SCALE MAP NO. 24 & 30 BLOCK NO. 24 & 6

AS-BUILT

3438 WS/5 Long Gate Center



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

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HOWARD COUNTY, MARYLAND

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Planners • Engineers • Surveyors
8818 Center Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
HOCO 104202 WSS.DWC

T. Farrell
JAYKANT D. PAREKH # 19148

DFS: C.J.R.			
DRN: DAM			
CHK:	WAD	REV. B' PRIVATE WATER TO BE PUBLIC, ADDED 2"WHC	5-7-03
	WAD	REV. WHC TO 2"WHC TO BLDG I	4-10-03
	WAD	REMOVED BLDG J, REV. BLDG I, PARKING 1.3D LAYOUT	1-25-04
DATE: 12-12-05	BY: NO.	REVISION	DATE

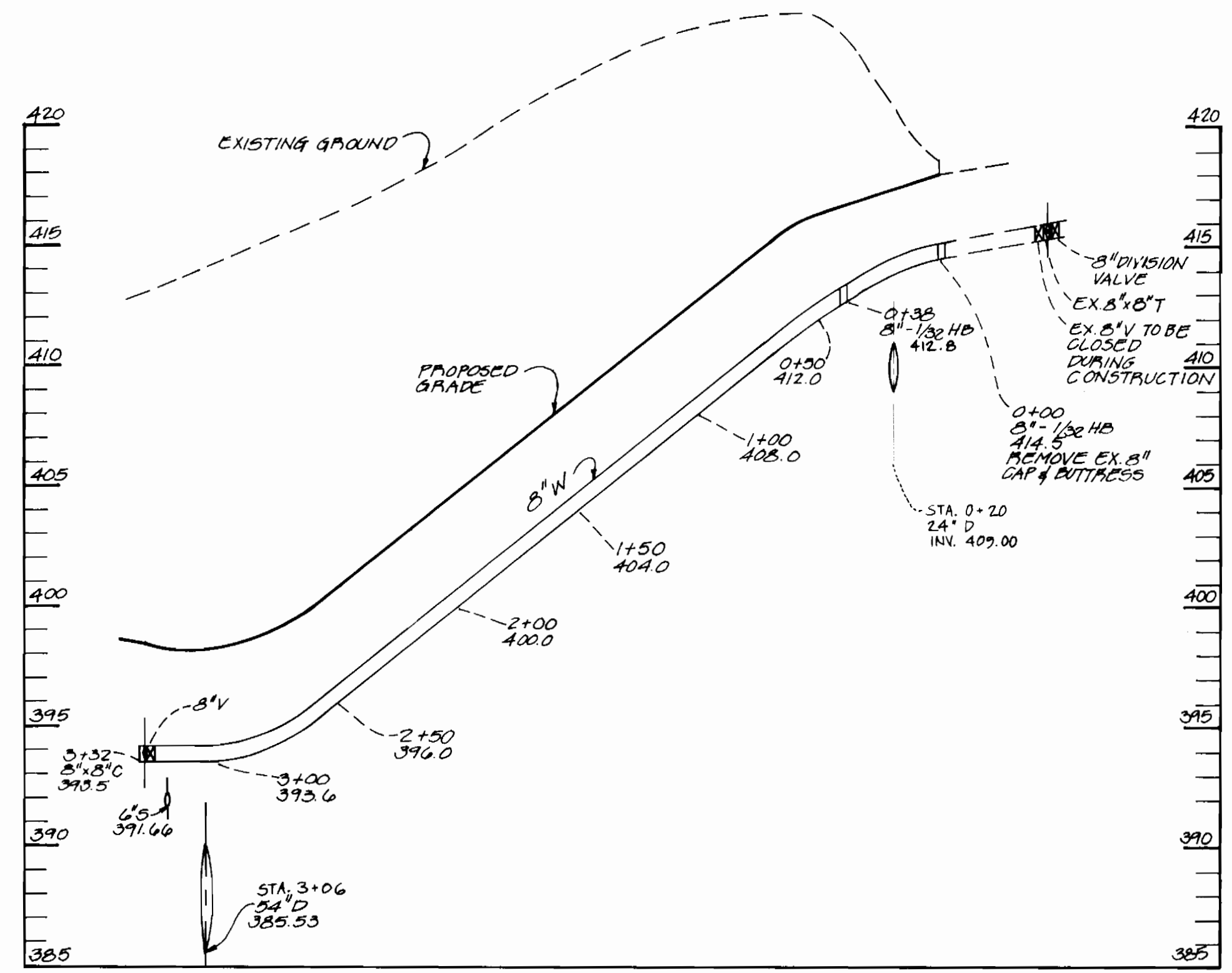
PLAN OF
WATER AND SEWER MAINS

LONG GATE CENTER
A COMMERCIAL CENTER
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3438-D

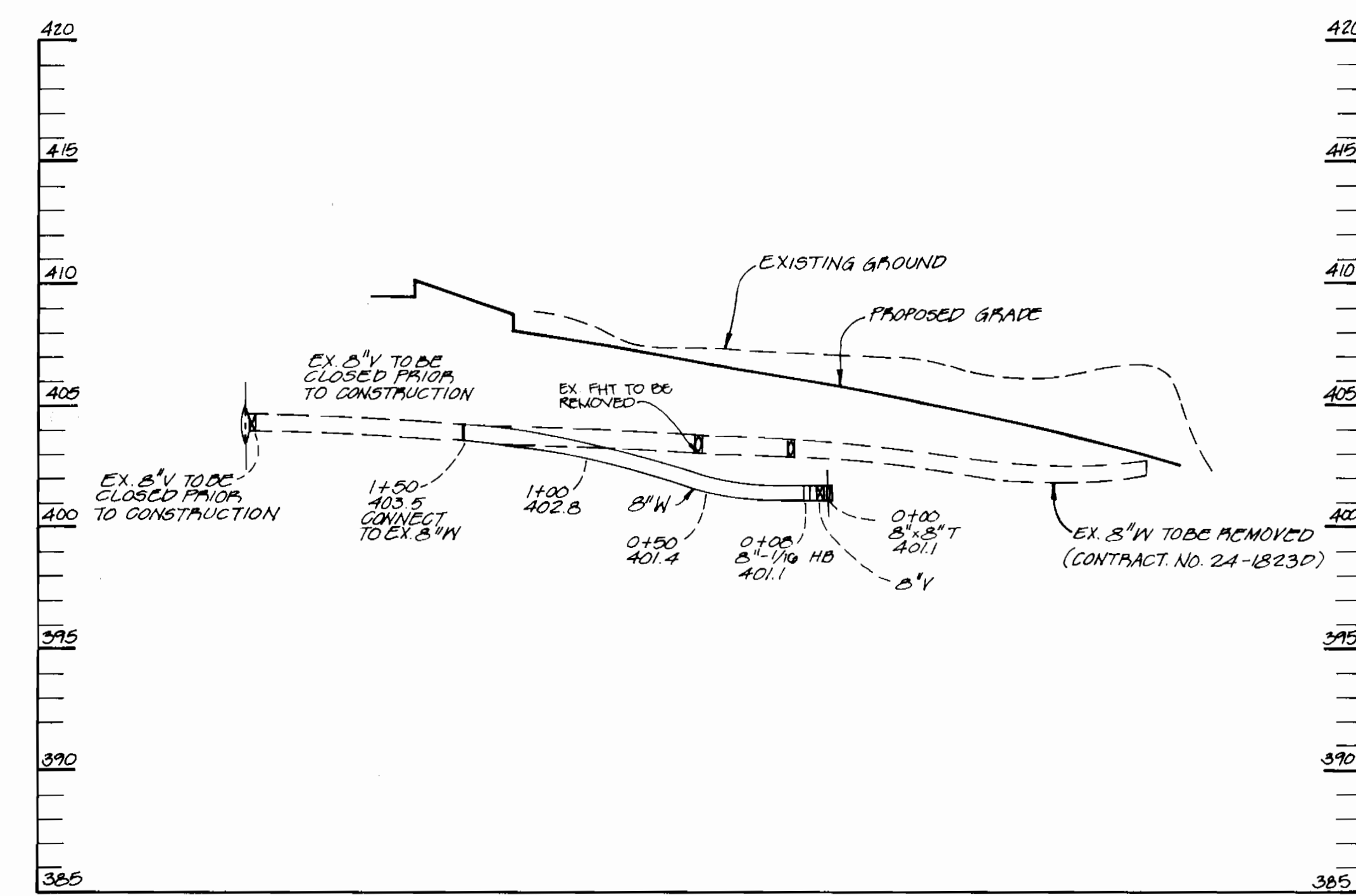
SCALE
1"=50'
SHEET
5 OF 10

AS-BUILT

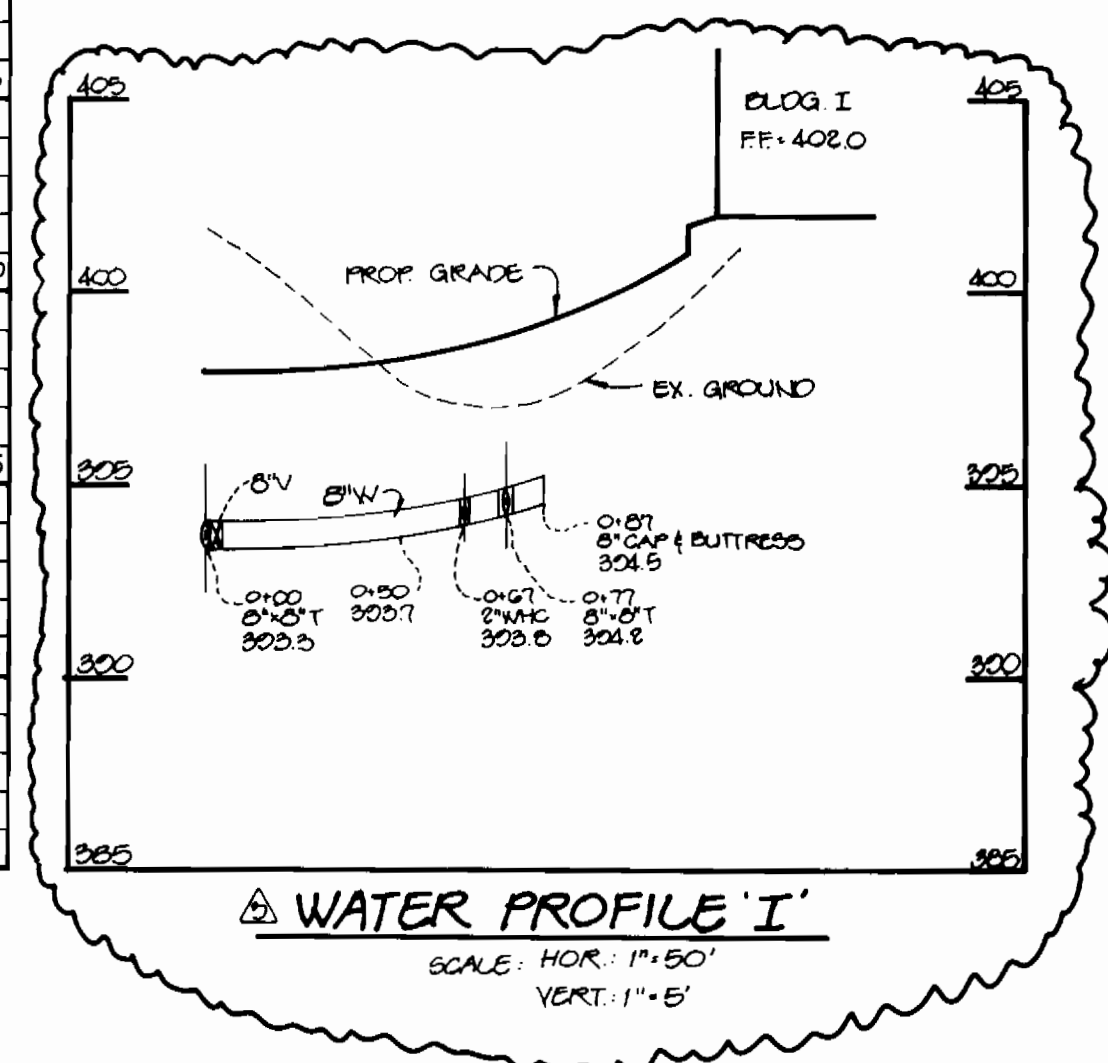
3438 WS/6 Long Gate Center



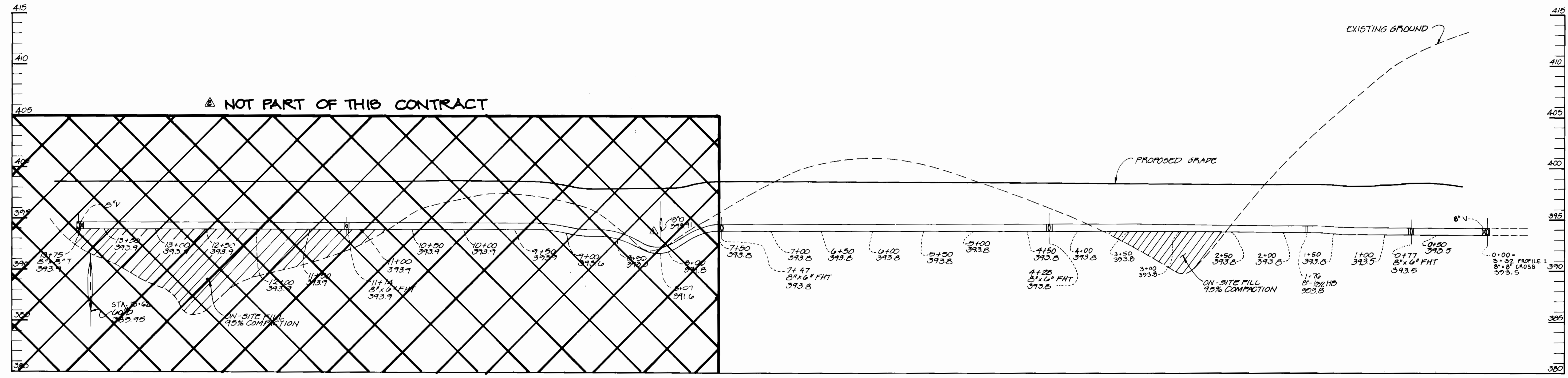
WATER PROFILE #1
SCALE: HOR. 1"=50'
VERT. 1"=5'



WATER PROFILE #5
SCALE: HOR. 1"=50'
VERT. 1"=5'



WATER PROFILE 'I'
SCALE: HOR. 1"=50'
VERT. 1"=5'

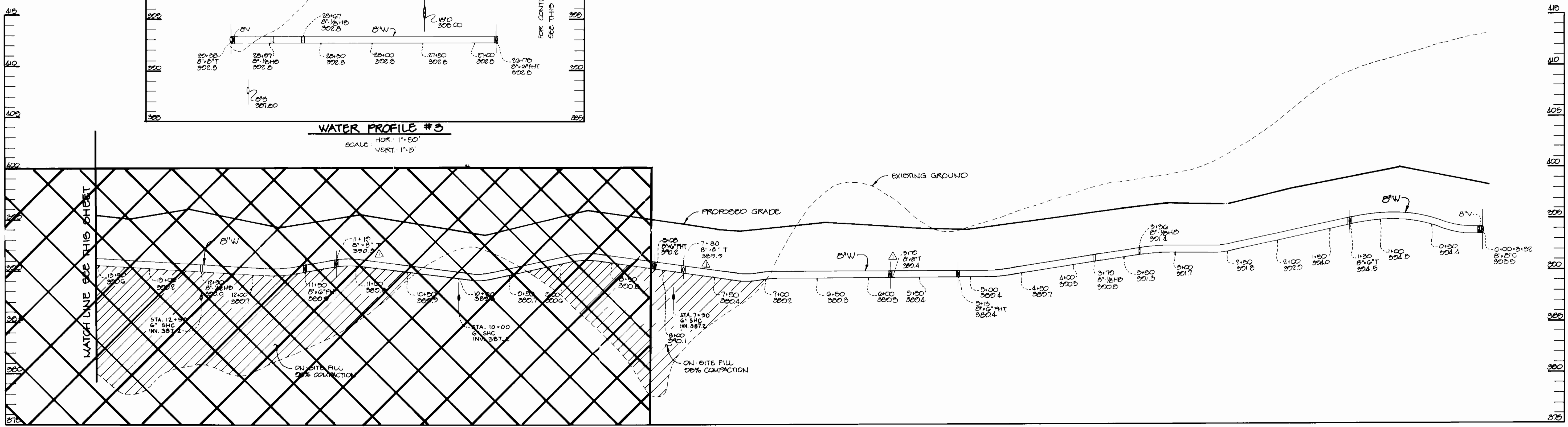
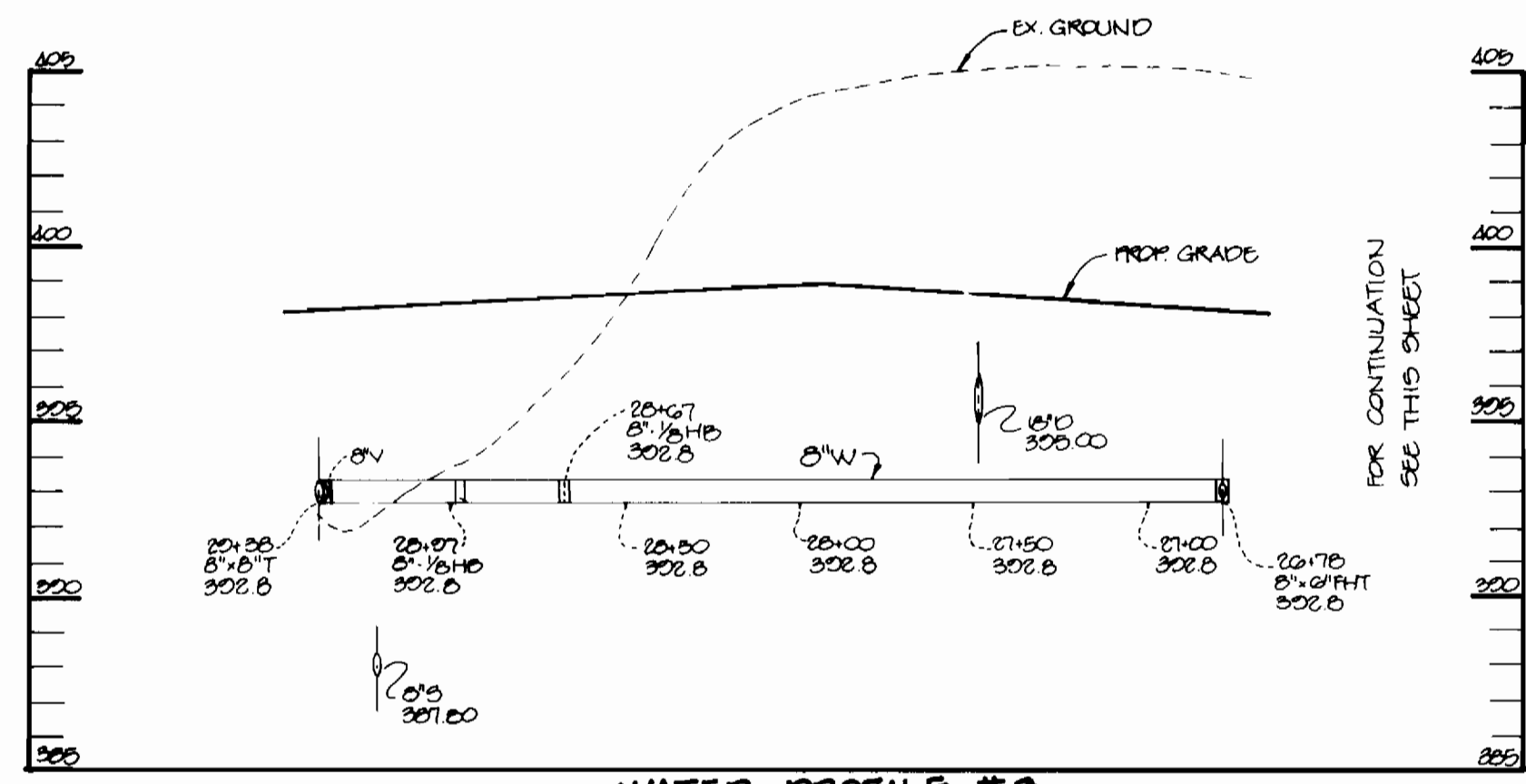
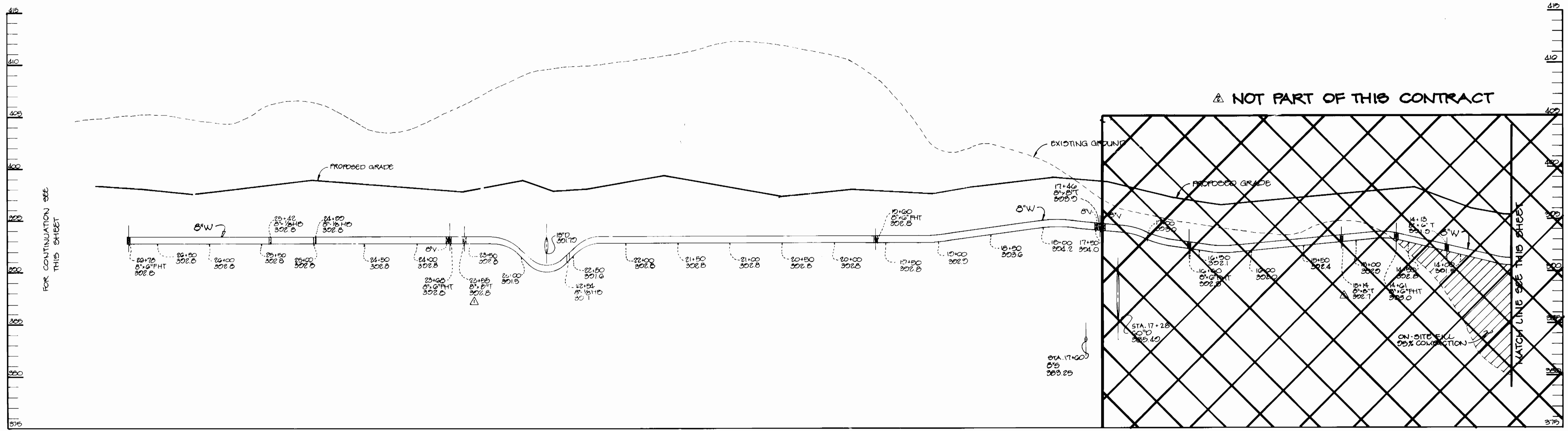


WATER PROFILE #2
SCALE: HOR. 1"=50'
VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND	RIEMER MUEGGE & ASSOCIATES, INC. Planners • Engineers • Surveyors 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 FAX: 410-997-9282 HOCO: 104202 WSSHT.DWG	DES. C.J.R. DRN: DAM CHK: WAD DATE: 12-12-05	WAD WAD WAD BY NO.	ADDED WATER PROFILE I REMOVED WATER PROF #2 FROM STA. 7+50 TO 10+75 ADDED 8\"/>
R. B. B... 12-14-95 CHIEF, BUREAU OF UTILITIES DATE		J. G... 12/15/95 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	J. G... JAYKANT S. PAREKH # 19148	5-7-96 7-14-96 4-18-96	300' SCALE MAP NO. 24 & 20 BLOCK NO. 24 & G

AS BUILT 4-4-97

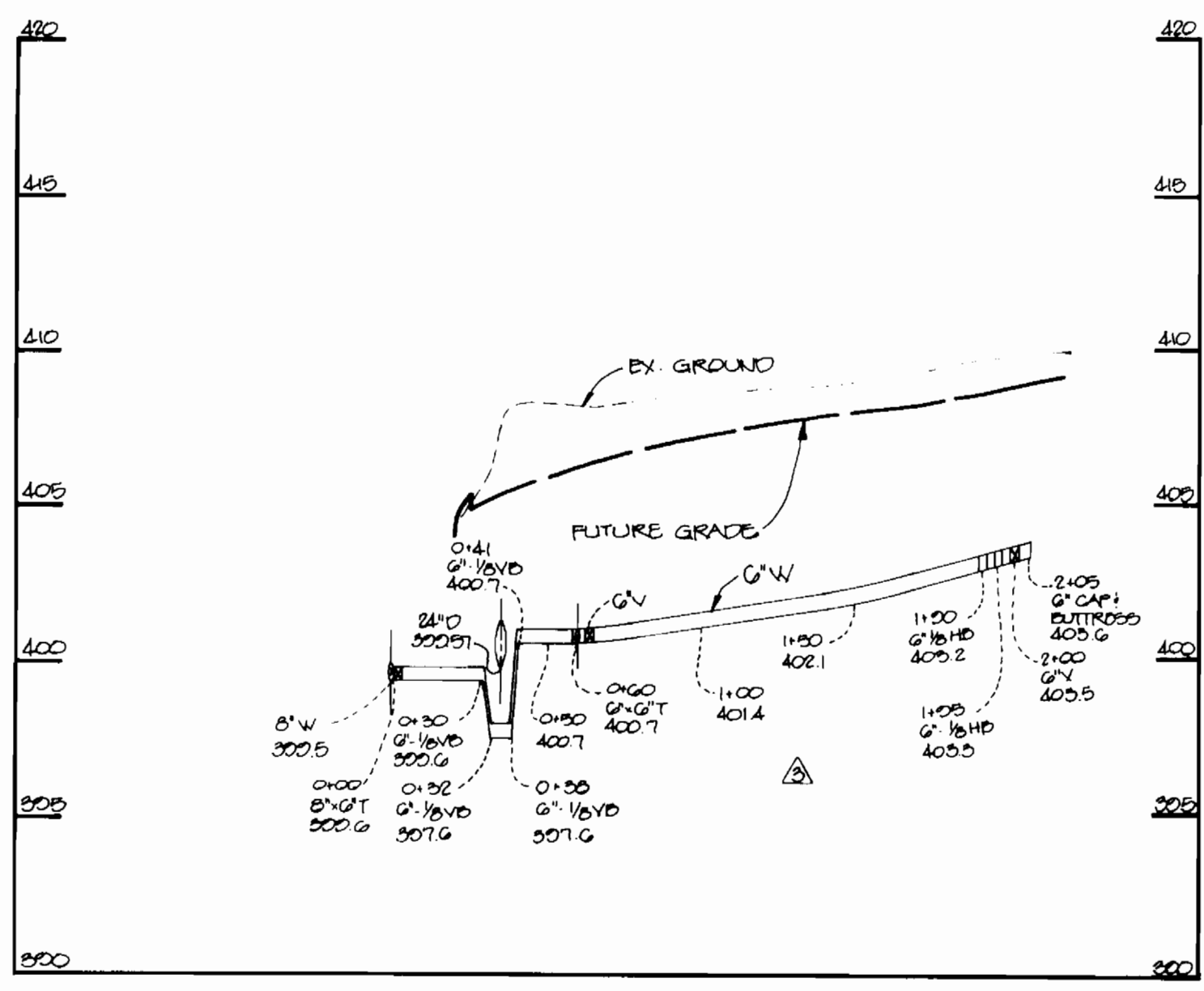
3438 ws/7 Long Gate Center



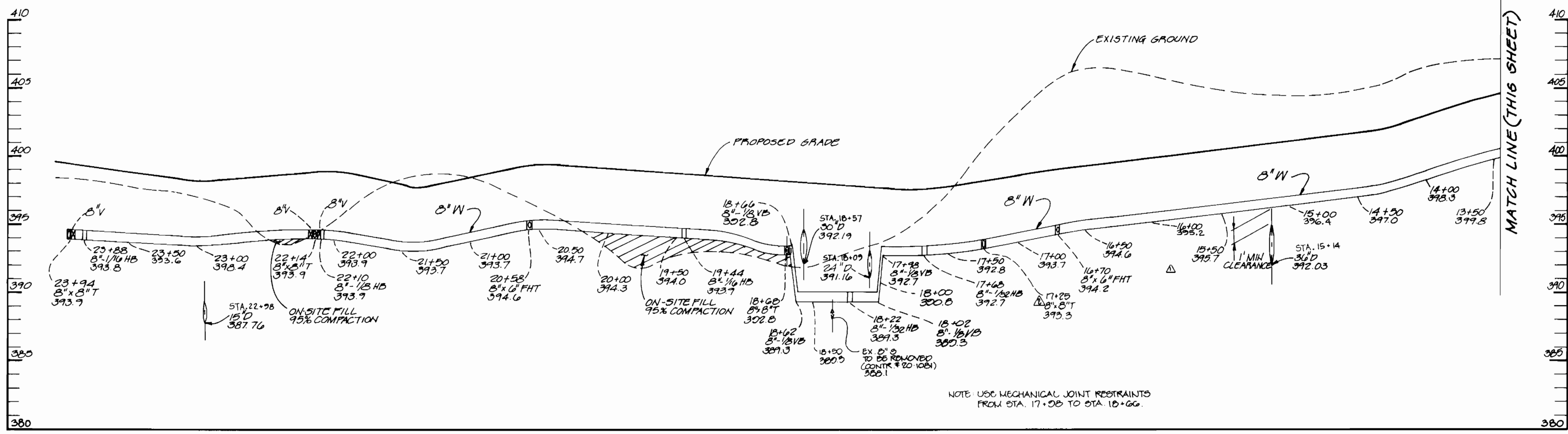
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of... 12-15-95	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division 12/15/95	RIEMER MUEGGE & ASSOCIATES, INC. Planners • Engineers • Surveyors 8818 Centre Park Drive • Suite 200 • Columbia, MD 21046 410-997-8900 FAX: 410-997-9282 HOCO: 104202 WSSHT.DWG J. Larell JAYKANT D. PARKH # 19148	DES: C.J.R. DRN: DAM CHK: DATE: 12.12.95	WAD: REMOVED WATER PROFILE #3 FROM STA. 0+00 TO 17+40 WAD: MOVED THE TO STA 5779 MAKE ALL WAD'S 2" BY: NO. REVISION DATE: 1.29.96	PROFILES OF WATER MAINS 600' SCALE MAP NO. 24-1-20 BLOCK NO. 24-1-6	LONG GATE CENTER A COMMERCIAL CENTER PHASE I 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-3438-D SCALE: 1"=50' SHEET 7 OF 10
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AS BUILT

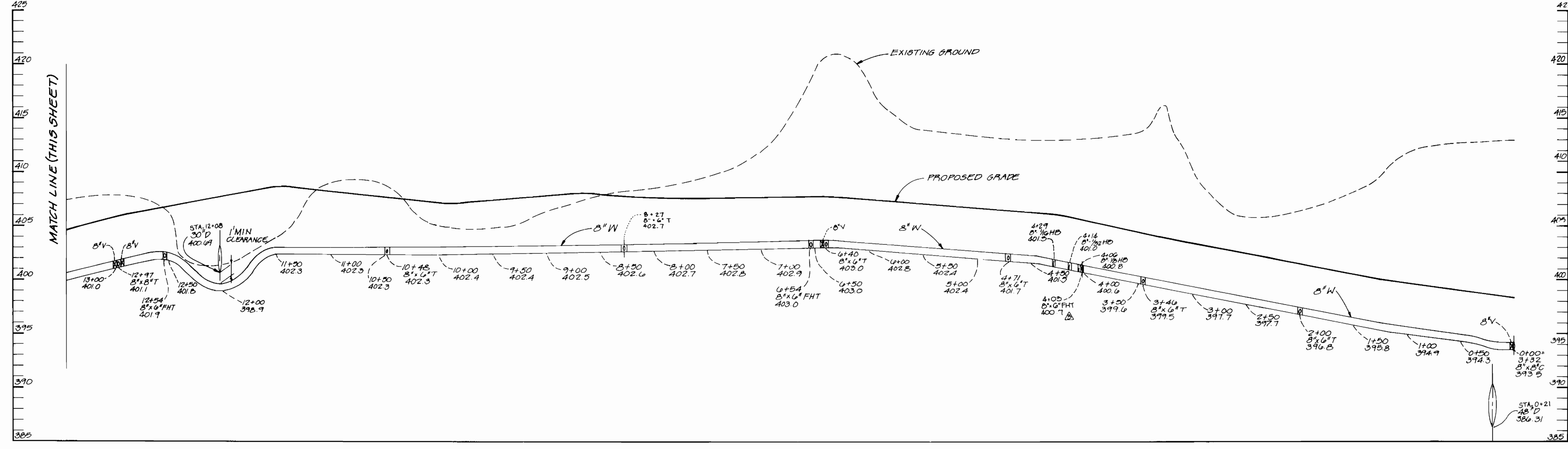
3438 ws/8 Long Gate Center



WATER PROFILE
SCALE: HOR. 1"=50'
VERT. 1"=5'



WATER PROFILE #4
SCALE: HOR. 1"=50'
VERT. 1"=5'

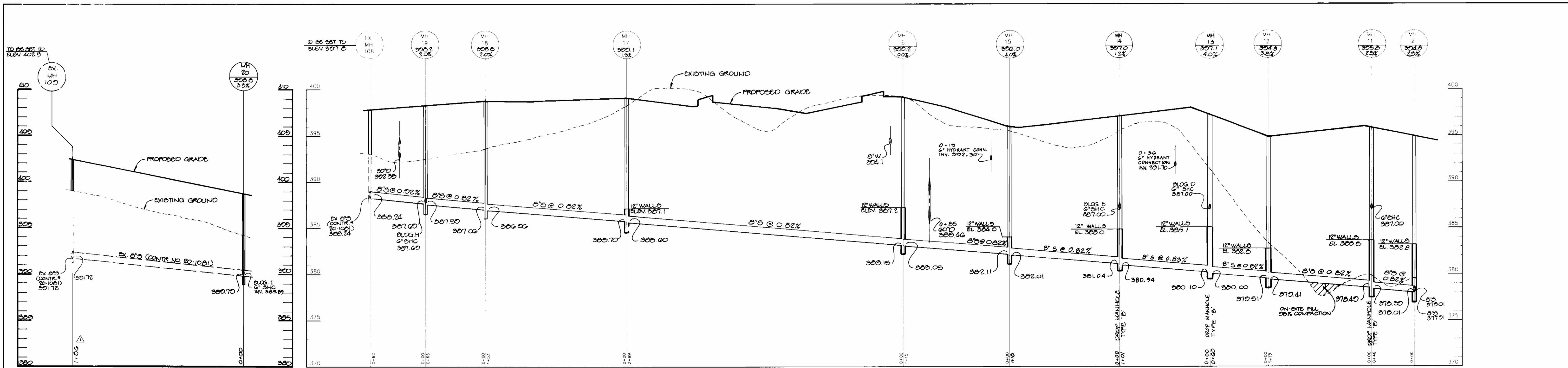


WATER PROFILE #4
SCALE: HOR. 1"=50'
VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 12-14-95	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND 12/15/95	RIEMER MUEGGE & ASSOCIATES, INC. Planners • Engineers • Surveyors 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 • FAX: 410-997-9282 HOCO\104202 WSSHT.DWG	DIS. C.J.R. DRN: DAM CHK: DATE: 12-12-95	<table border="1"> <tr> <th>BY</th> <th>NO.</th> <th>REVISION</th> <th>DATE</th> </tr> <tr> <td>WAD</td> <td>1</td> <td>ADDED WATER PROFILE, 8" DIA. FHT</td> <td>10-12-95</td> </tr> <tr> <td>WAD</td> <td>2</td> <td>REV. LOCATION OF 8" DIA. FHT</td> <td>4-10-95</td> </tr> <tr> <td>WAD</td> <td>3</td> <td>MADE WMC 8"</td> <td>1-25-96</td> </tr> </table>	BY	NO.	REVISION	DATE	WAD	1	ADDED WATER PROFILE, 8" DIA. FHT	10-12-95	WAD	2	REV. LOCATION OF 8" DIA. FHT	4-10-95	WAD	3	MADE WMC 8"	1-25-96	PROFILES OF A WATER MAIN 600' SCALE MAP NO. 24130 BLOCK NO. 2416	LONG GATE CENTER A COMMERCIAL CENTER 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-3438-D	SCALE: 1"=50' SHEET 8 OF 10
BY	NO.	REVISION	DATE																				
WAD	1	ADDED WATER PROFILE, 8" DIA. FHT	10-12-95																				
WAD	2	REV. LOCATION OF 8" DIA. FHT	4-10-95																				
WAD	3	MADE WMC 8"	1-25-96																				

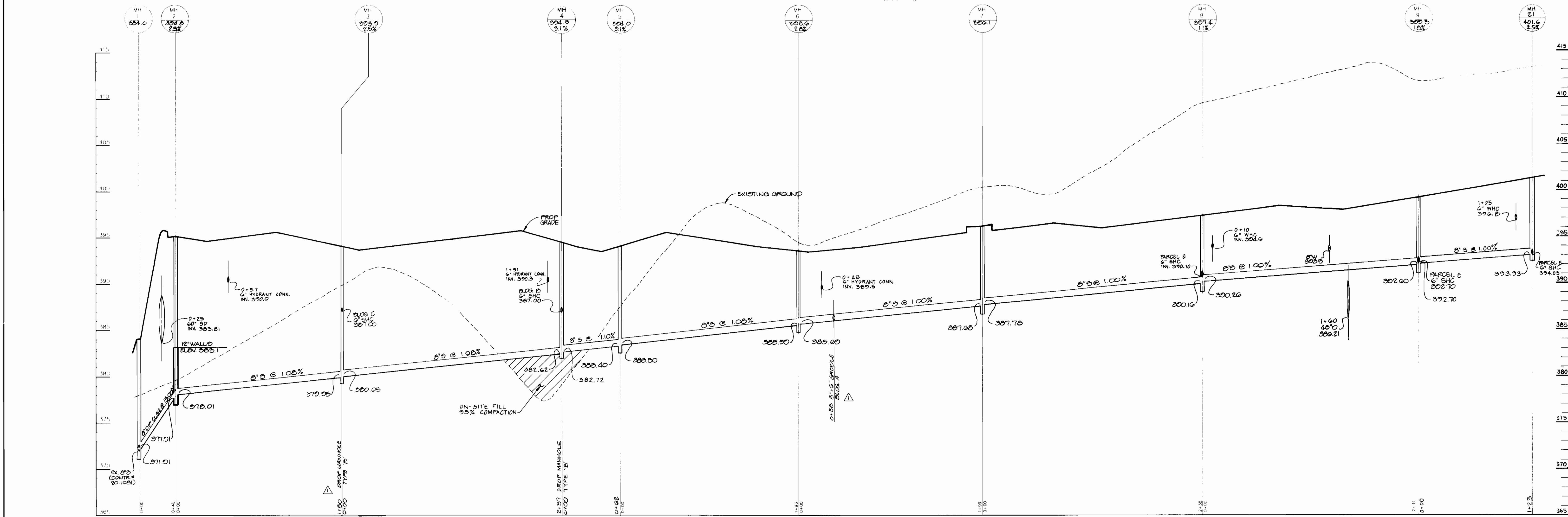
AS-BUILT

3438 ws/9 Long Gate Center



PROFILE
SCALE
HOR. = 1" = 50'
VERT. = 1" = 5'

PROFILE
SCALE
HOR. = 1" = 50'
VERT. = 1" = 5'



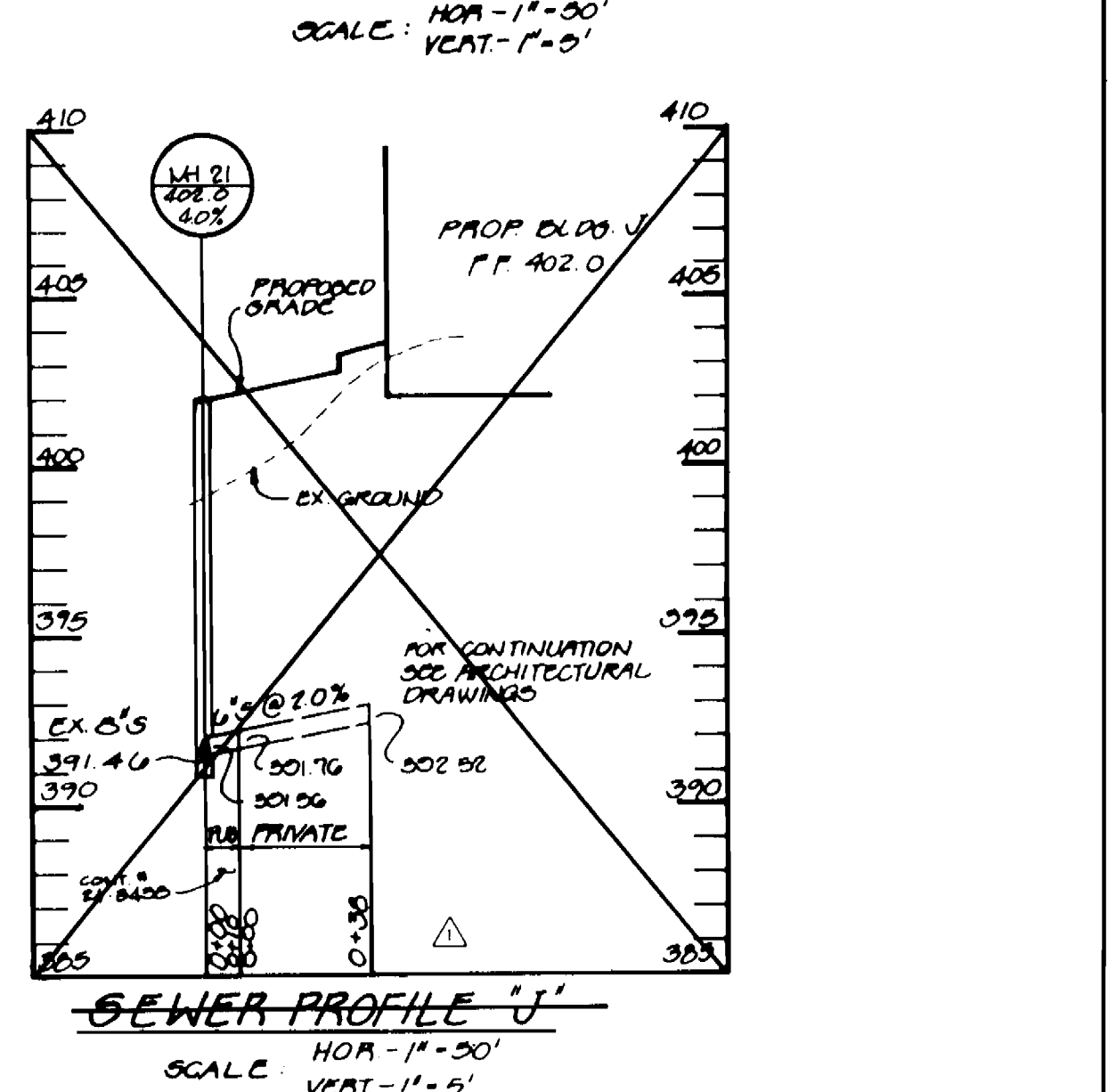
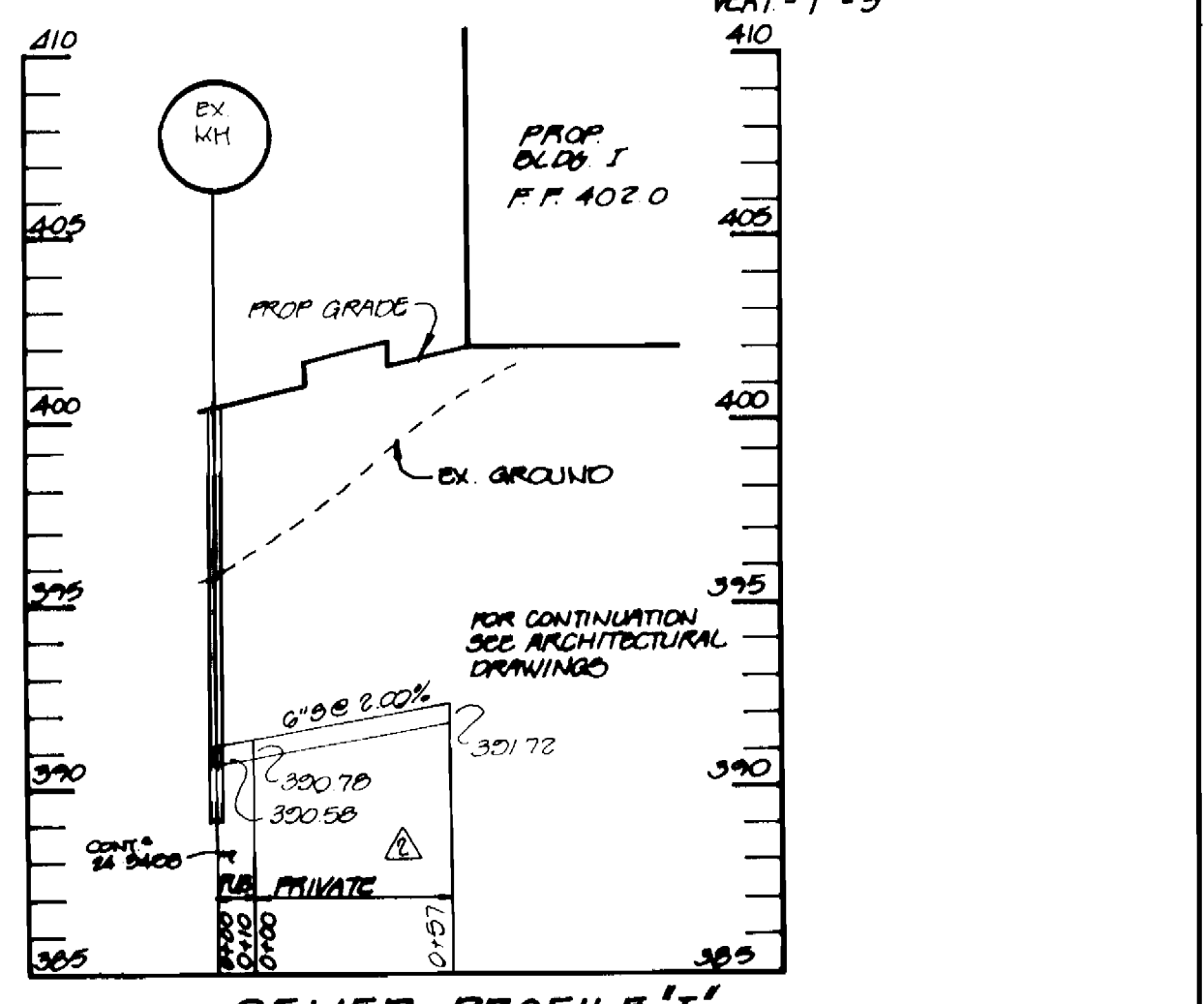
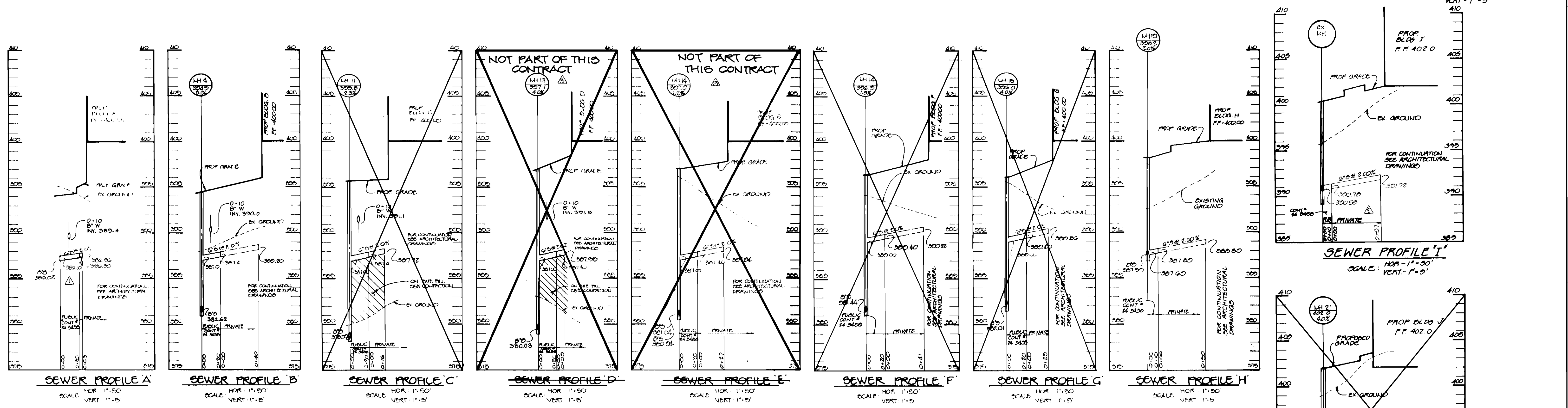
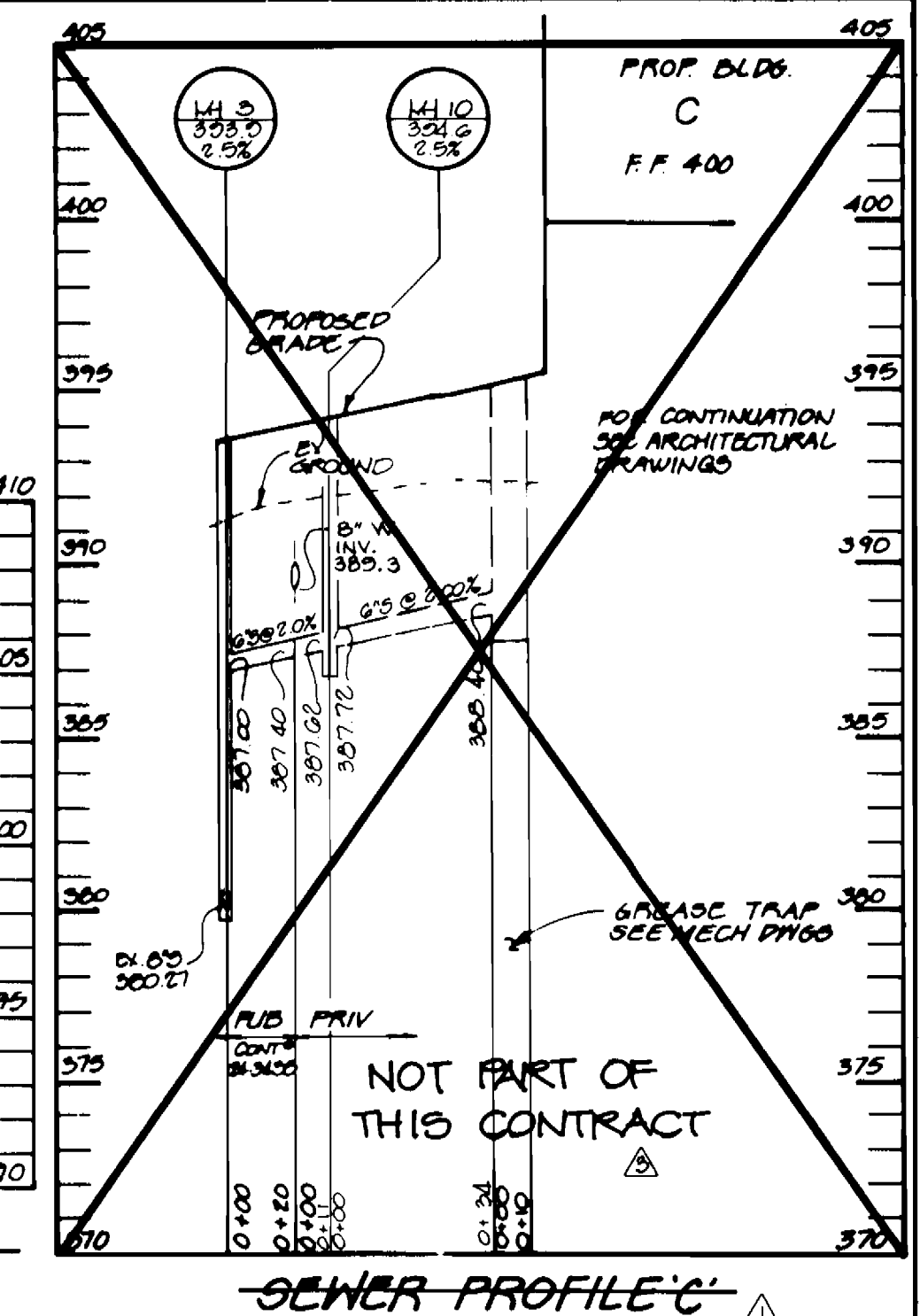
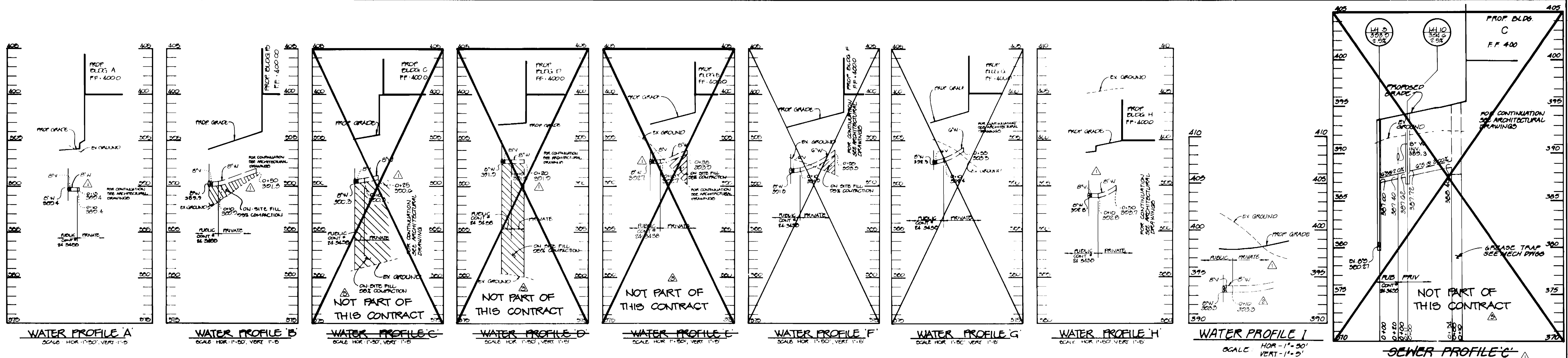
PROFILE
SCALE
HOR. = 1" = 50'
VERT. = 1" = 5'

PROFILE
SCALE
HOR. = 1" = 50'
VERT. = 1" = 5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert Bump</i> CHIEF, BUREAU OF PUBLIC WORKS DATE: 12-14-95	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>John J. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 12/15/95	RIEMER MUEGGE & ASSOCIATES, INC. Planners • Engineers • Surveyors 8818 Centre Park Drive • Suite 200 • Columbia, MD 21045 410-997-8900 FAX: 410-997-9282 <i>J. Farikh</i> JAYKANT D. FARIKH #19148	DES: C.J.R. DRN: DAL CHK: DATE: 12.12.95 BY: NO.	600' SCALE MAP NO. 24 & 30 BLOCK NO. 24 & 6 12/15/95 H.V.S. ON	LONG GATE CENTER A COMMERCIAL CENTER 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-3438-D SCALE AS SHOWN SHEET 2 OF 10
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NOT BUILT

3438 ws/10 Long Gate Center



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division	RIEMER MUEGGE & ASSOCIATES, INC. Planners - Engineers - Surveyors 8018 Centre Park Drive • Suite 200 • Columbia, MD 21040 410-997-8900 FAX 410-997-9282 800.104.0282 RSMIT, INC.	DES: C.J.R. DRN: DAM CHK: DATE: 12.12.05 BY: NO.	REVISION 1. REVISED WATER PROFILES FOR BLDGS. C, D & E 2. REV. SEW & WATER PROF. I 3. REV. SEW PROF. J; REMOVED SEW PROF. J 4. MAKE ALL WXYZ'S B	7-14-94 4-8-03 1-25-94	PROFILE OF WATER AND SEWER MAINS 600' SCALE MAP NO. 24 & 30, BLOCK NO. 24 & 6	LONG GATE CENTER A COMMERCIAL CENTER PHASE I 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-3438-D	SCALE 1"= 50' SHEET 10 OF 10
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