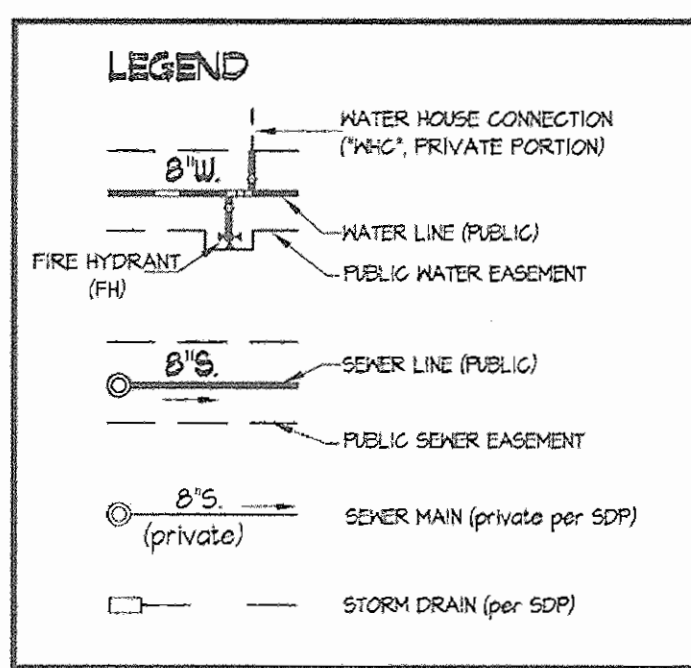


QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
4" SEWER MANHOLE	4 EA.	4 EA.	PRECAST	CONTRACTOR PRECAST CORP.
8" SEWER MAIN P.V.C.	446 LF.	433 LF.	SDR-35	J.M. MGF.
8" WATER	1301 LF.	1,281	CL-52 DIP	GRIFFIN PIPE
6" WATER	84 LF.	80	CL-52 DIP	GRIFFIN PIPE
8" VALVE	6 EA.	6	RS OR GATE	VALVE/MUELLER CO.
8" 1/16 HD	5 EA.	5	M.J. BEND	SIGMA CORP.
12"x8" T.S.V.	1 EA.	1	S. TRAP	MUELLER CO.
8"x6" FHT AND VALVE	4 EA.	4	TEE	SIGMA CORP.
8"x8" TEE	3 EA.	3	M. J.	SIGMA CORP.

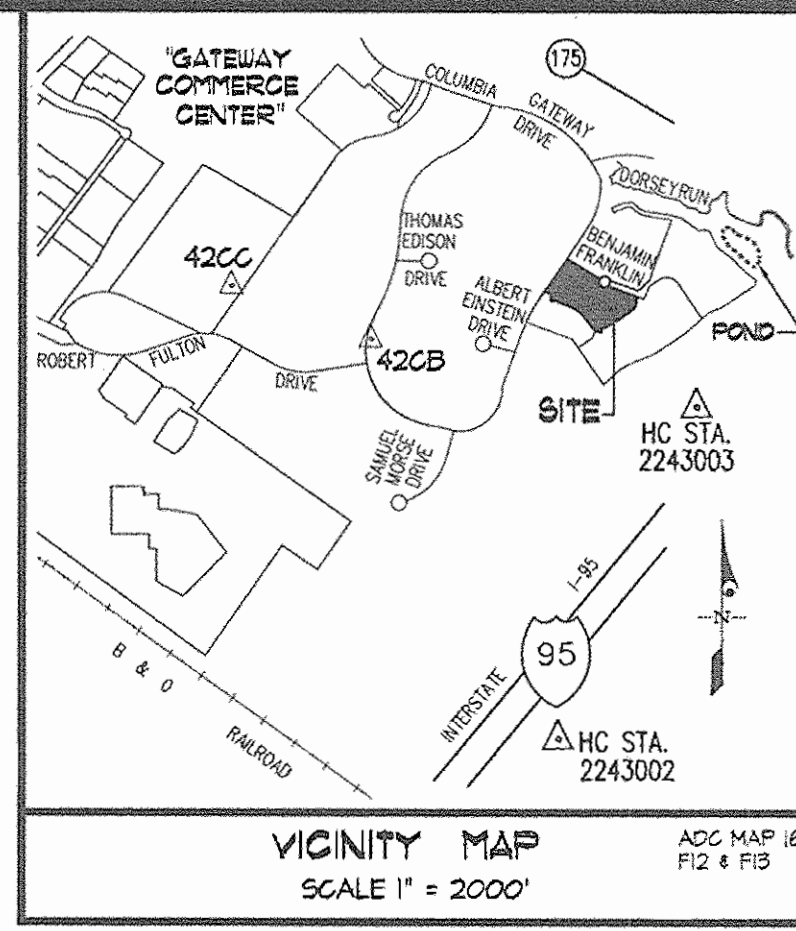
NAME OF UTILITY CONTRACTOR: C.J. MILLER

SURVEY AND DRAFTING DIV. CHECKBOX: AS-BUILT DATE:



- SHEET INDEX**
- TITLE SHEET
  - WATER & SEWER EXTENSION PLAN
  - WATER & SEWER EXTENSION PROFILES

TYPE OF BUILDING	GENERAL OFFICE
NUMBER OF UNITS	1
NUMBER OF S.H.C.'s	1
NUMBER OF W.H.C.'s	1
AREA OF COMMERCIAL LOT/PARCEL	1.68± AC.
SEWER SHED	LITTLE PATUXENT / DORSEY RUN
PUMPING STATION	N/A



**HOWARD COUNTY CONTROL**

NAD21 HORIZONTAL DATA  
4 NSVD29 VERTICAL DATA

42CB N 480512.0  
E 853408.4  
ELV.=536.23

42CC N 489121.3  
E 852454.6  
ELV.=546.72

**GENERAL NOTES**

- PART I**
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
  - TOPOGRAPHY FIELD SURVEYS WERE PERFORMED IN FEB/07 BY GLW AND IN JUL/06 & FEB/07 BY SHANENBERGE-LANE.
  - HORIZONTAL AND VERTICAL SURVEY CONTROLS:  
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 21 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS No. 42CB AND 42CC.
  - ALL VERTICAL CONTROLS ARE BASED ON NSVD 29. VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE STATIONS No. 42CB AND 42CC.
  - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
  - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
  - FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS 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  $\Phi$  AT THE LOCATIONS OF THE TEST PITS. 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.
  - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK ON THESE PLANS.  

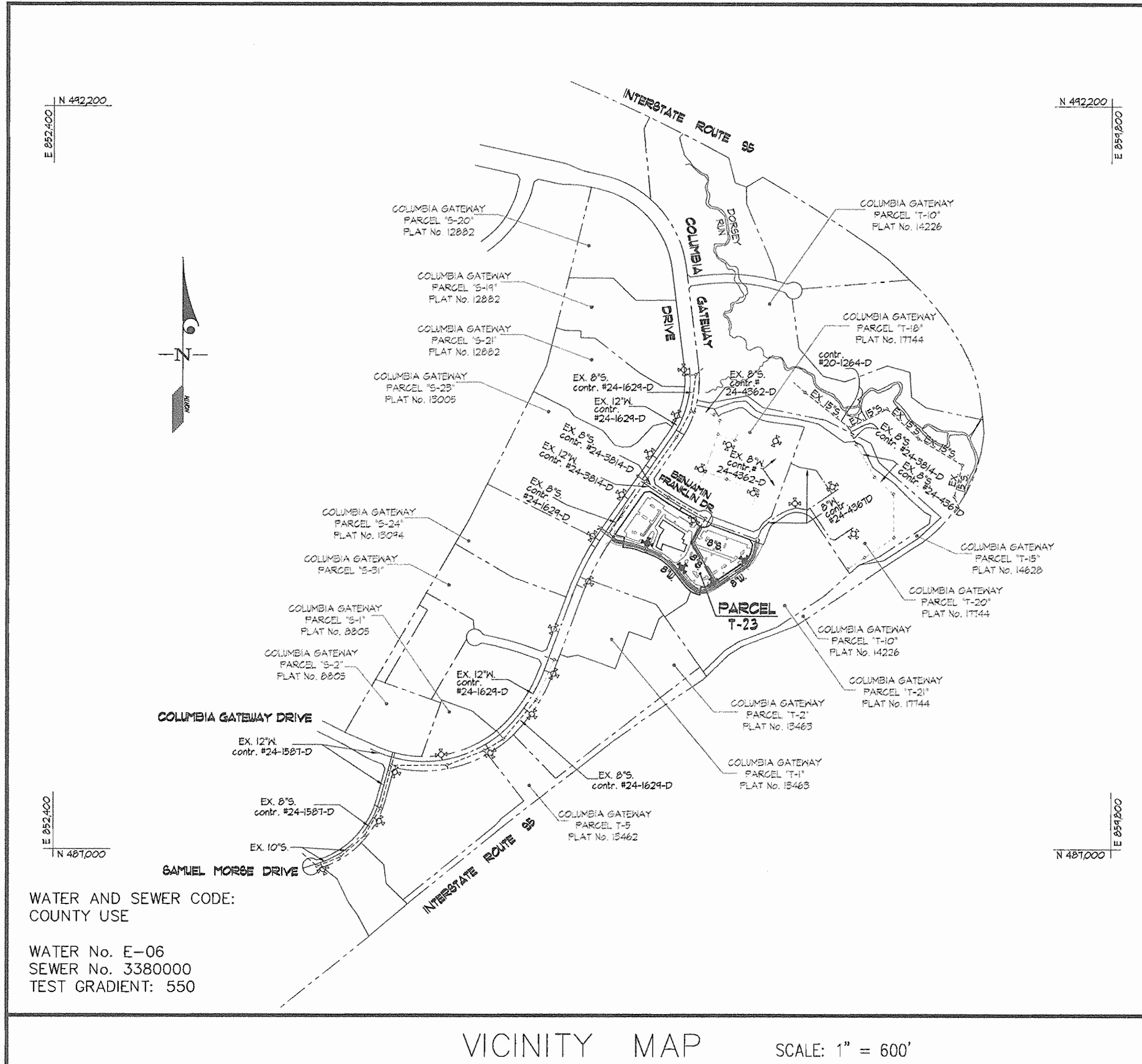
AT&T	1-800-252-1133
BGE (CONTRACTOR SERVICES)	410-850-4620
BGE (UNDER GROUND DAMAGE CONTROL)	410-685-1400
BUREAU OF UTILITIES	410-315-4400
COLONIAL PIPELINE CO.	410-195-1990
MISS UTILITY	1-800-251-TTTT
STATE HIGHWAY ADMINISTRATION	410-531-5533
VERIZON	1-800-743-0033 / 410-224-4210
  - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION AREA STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
  - THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
  - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-315-1450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPA REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

**PART II - WATER**

- ALL MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 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 INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 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.
- FOR SPRINKLER SYSTEM FOR ALL TOWN HOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1' CONNECTION WITH A 3/4" METER.

**PART III - SEWER**

- ALL SEWER MAINS SHALL BE D.I.P. OR 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 THE 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL 05.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE 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 THE CELLAR CANNOT BE SERVED.



**CONTRACT No. 24-4474-D**

**COLUMBIA GATEWAY**

**PARCEL T-23**

**HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS**

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Site Development Plan SDP-07-083; Drawings for Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

*Jim Myron* 4/20/07  
SIGNATURE DATE

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

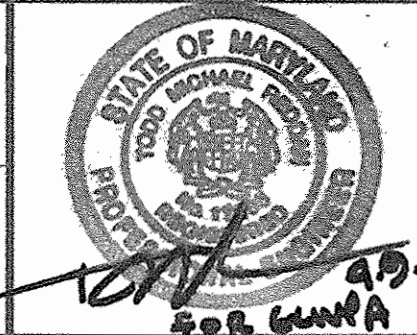
APPROVED:  
*John K. Robertson* 4/20/07  
HOWARD S.C.D. DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Ruth B.* 4-18-07  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
*Shad Chambers* 4-24-07  
CHIEF, DEVELOPMENT ENGINEERING DIVISION & DATE

**GLW** GUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20886  
TEL: 301-421-4024 FAX: 301-421-4186

OWNER:  
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD 21044  
Phone: 410-592-6027  
Attn: PAUL CAVANAUGH

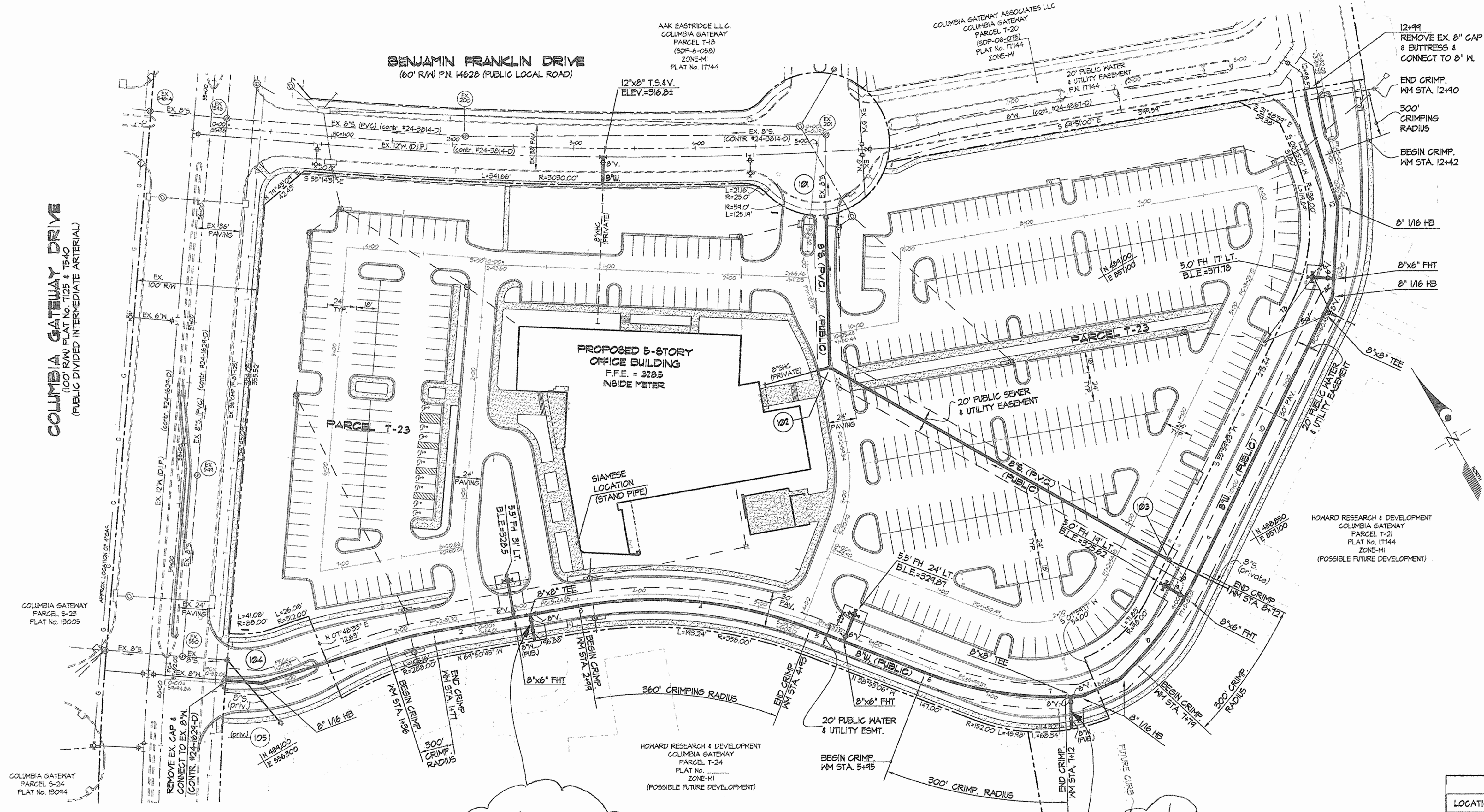


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DRN: klp					
CHK: ckg/tmr					
DATE: 2007	BY	NO	REVISION	DATE	

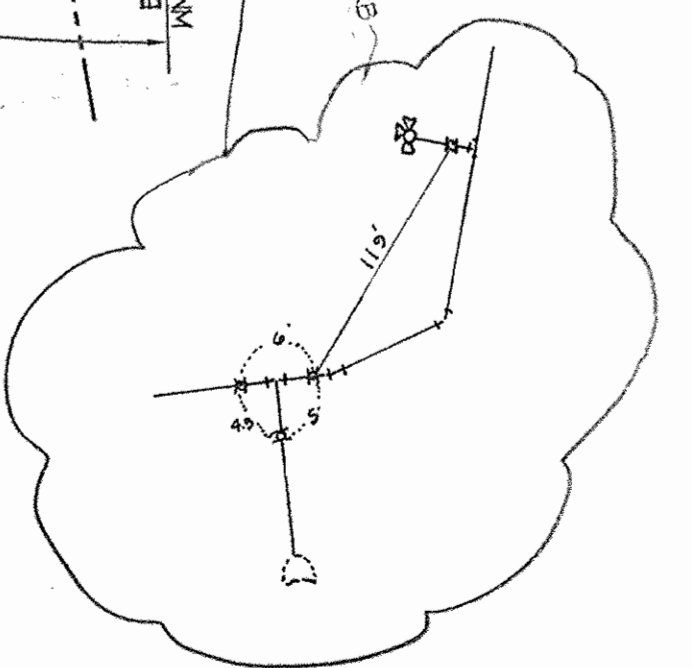
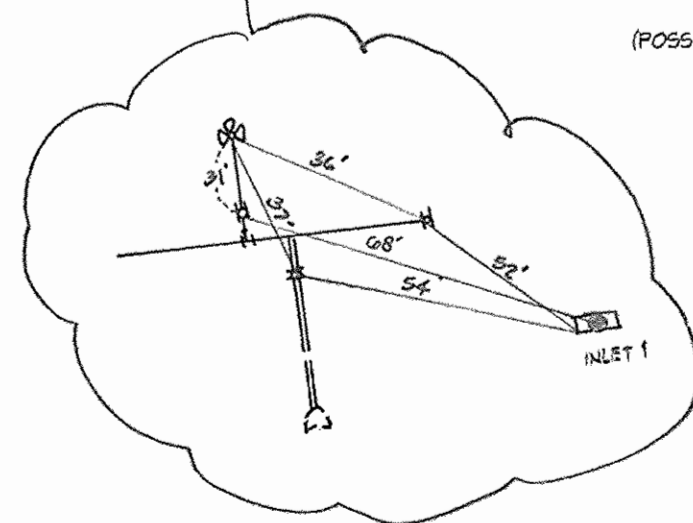
TITLE SHEET  
SCALE: AS SHOWN  
600' SCALE MAP NO. 43 BLOCK NO. 2

**COLUMBIA GATEWAY**  
PARCEL T-23  
HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 6  
CONTRACT No. 24-4474-D

GLW FILE No. 06077  
SCALE AS SHOWN  
SHEET 1 OF 3



FITTING INFORMATION		
LOCATION	FITTING	NAD '21 COORDINATES
KM STA. 0+30	8" 1/16 HB	N 489156.64 E 856331.10
KM STA. 2+45	8"x6" FHT	N 489094.34 E 856337.81
KM STA. 2+54	8"x8" TEE	N 489094.70 E 856350.58
KM STA. 5+23	8"x6" FHT	N 488446.06 E 856763.12
KM STA. 1+17	8"x8" TEE	N 488813.00 E 856402.12
KM STA. 1+26	8" 1/16 HB	N 488808.70 E 856410.01
KM STA. 1+61	8" 1/16 HB	N 488805.01 E 856444.65
KM STA. 8+47	8"x6" FHT	N 488836.46 E 857024.50
KM STA. 11+10	8"x8" TEE	N 488833.35 E 857243.46
KM STA. 11+23	8" 1/16 HB	N 488840.61 E 857254.20
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KM STA. 11+49	8" 1/16 HB	N 488803.63 E 857285.90

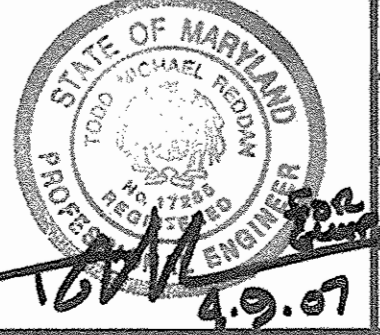


DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
4-18-07  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
4/24/07  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**GLW** GUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3939 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK  
BURTNSVILLE, MARYLAND 20866  
TEL: 301-421-4024 FAX: 410-880-1820 DC/VA: 301-989-2534 FAX: 301-421-6186

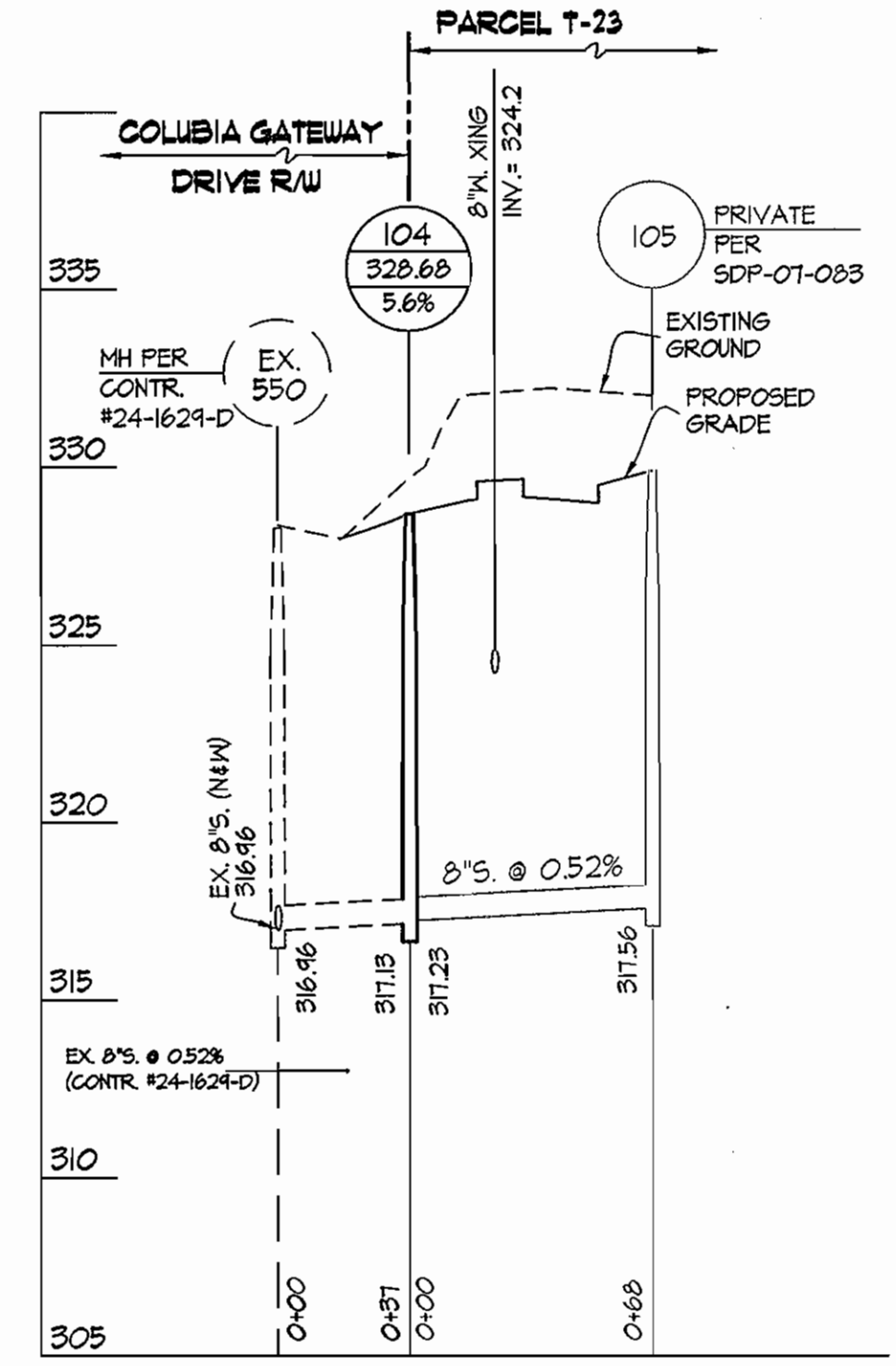
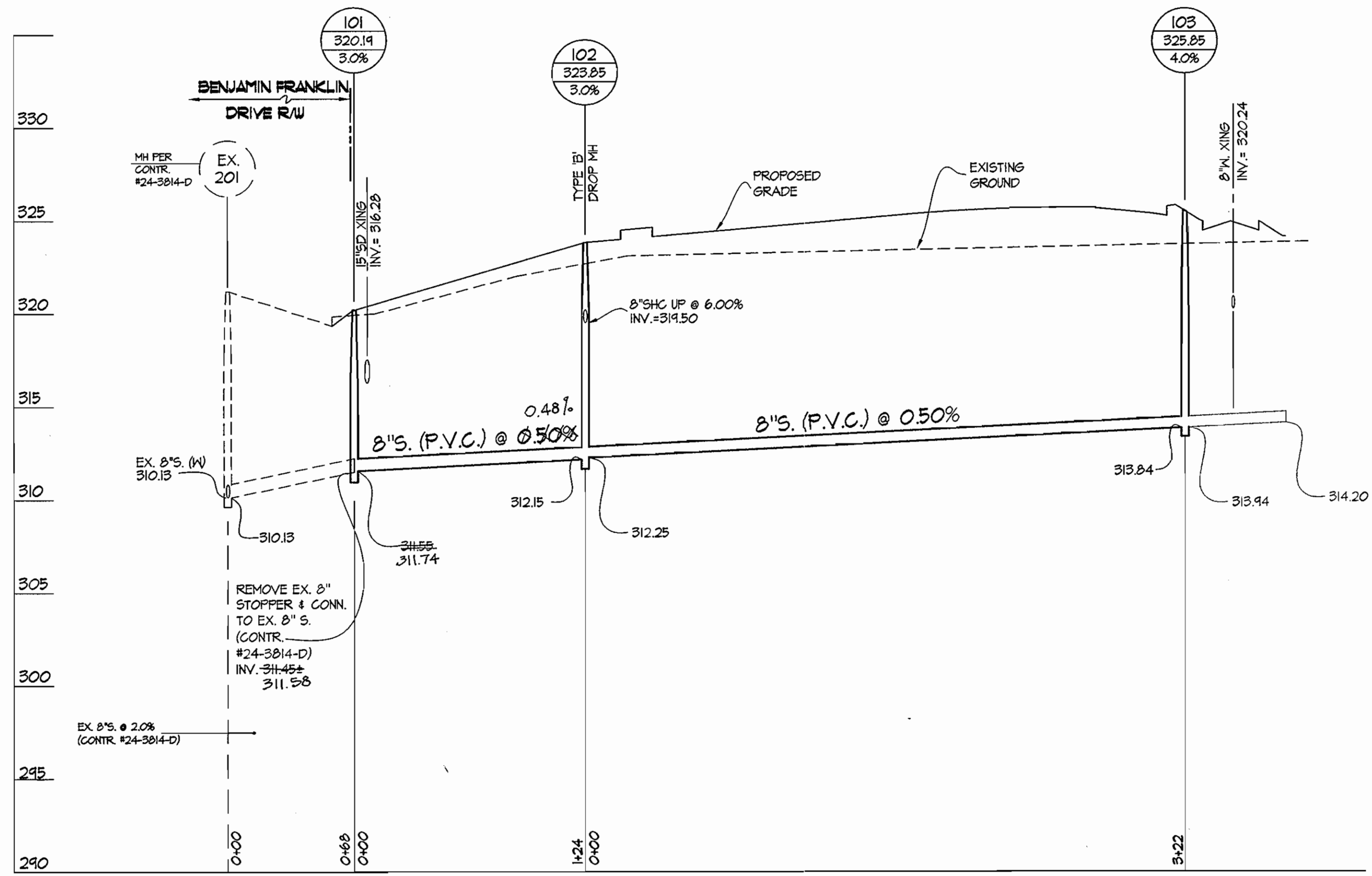
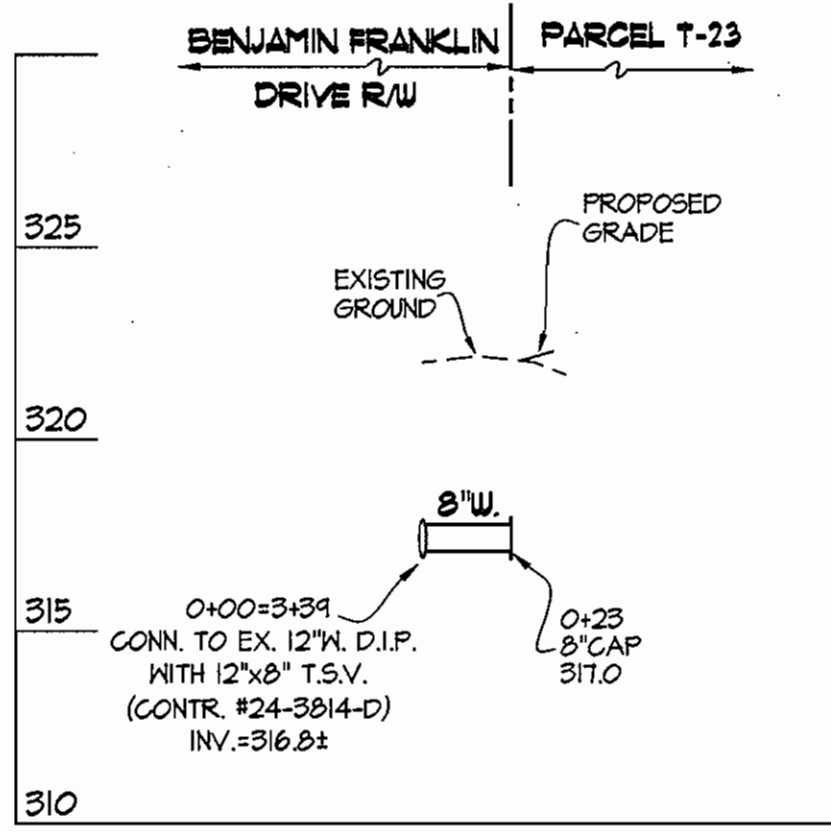
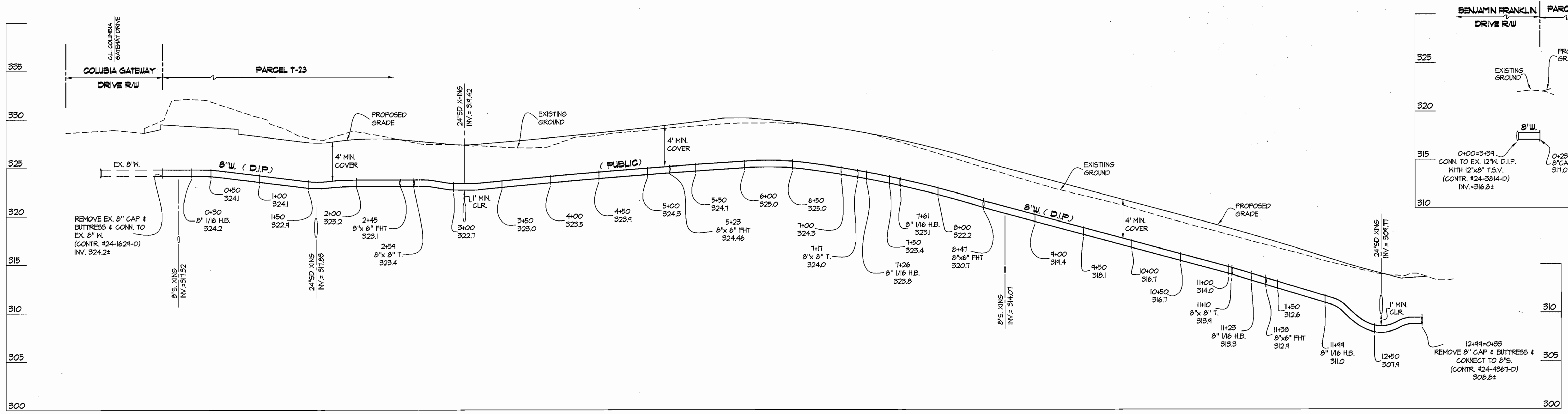
OWNER:  
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATENT PARKWAY  
COLUMBIA, MD 21044  
Phone: 410-892-5027  
Attn: PAUL CAVANAUGH  
CONTRACT PURCHASER/DEVELOPER:  
COLUMBIA GATEWAY T23 LLC  
c/o MANOR INC.  
9501 ROBERT FULTON DRIVE, SUITE 200  
COLUMBIA, MD 21046-2278  
Phone: 410-423-2302  
Attn: ALEX KOPICH



DES: tnr					
DRN: klp					
CHK: ckg/tmr					
DATE: MARCH 2007	KCI 1	"AS-BUILT" DATA SHOWN	01/14/08		
	BY NO	REVISION	DATE		

WATER and SEWER EXTENSION PLAN  
600' SCALE MAP NO. 43 BLOCK NO. 2

**COLUMBIA GATEWAY**  
PARCEL T-23  
HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 6  
CONTRACT No. 24-4474-D  
SCALE: 1" = 50'  
SHEET 2 OF 3



**PROFILES**  
 SCALES: 1" = 50' VERT.  
 1" = 5' HORIZ.

GLW FILE #06077  
 06077-FWS.dwg

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
*Robert W. Bair* 4-18-07  
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
*Michael A. Clark* 4-24-07  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 FAX: 301-989-2524 FAX: 301-421-4186

OWNER:  
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
 10275 LITTLE PATENT PARKWAY  
 COLUMBIA, MD 21044  
 Phone: 410-592-5027  
 Attn: PAUL CAVANAUGH  
 CONTRACT PURCHASER/DEVELOPER:  
 GATEWAY 123 LLC  
 c/o MANORON LLC  
 9601 ROBERT FULTON DRIVE, SUITE 200  
 COLUMBIA, MD 21046-2278  
 Phone: 410-423-2002  
 Attn: ALEX KOPIC



DES:	tmr				
DRN:	klp/wsj				
CHK:	ckg/tmr				
DATE:	MARCH 2007	K.C.I.	1	AS-BUILT DATA SHOWN	a/11/08
BY:	NO	REVISION			

WATER and SEWER EXTENSION PROFILES  
 600' SCALE MAP NO. 43 BLOCK NO. 2

**COLUMBIA GATEWAY**  
 PARCEL T-23  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 6  
 CONTRACT No. 24-4474-D

SCALE: AS SHOWN  
 SHEET 3 OF 3