



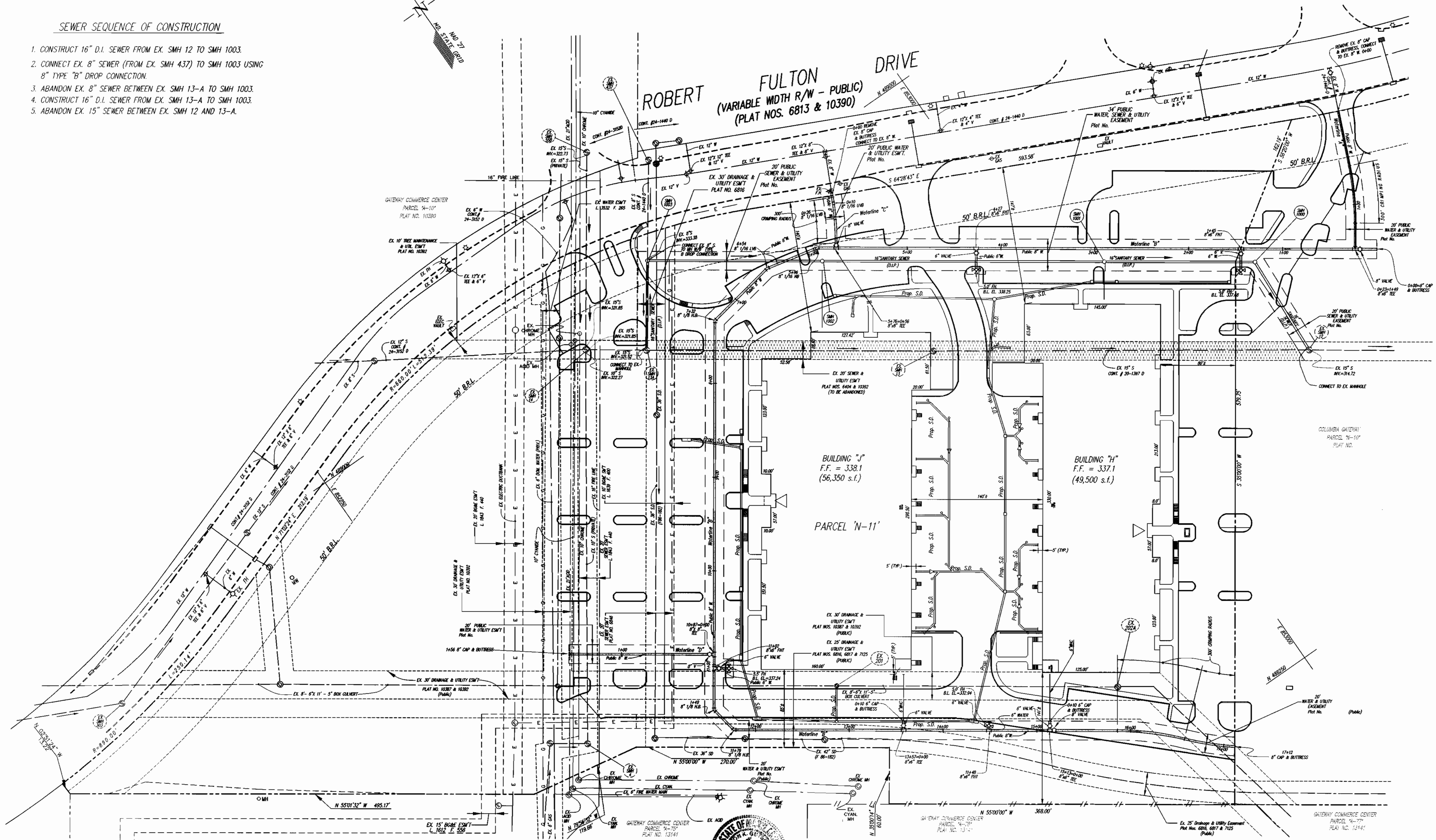
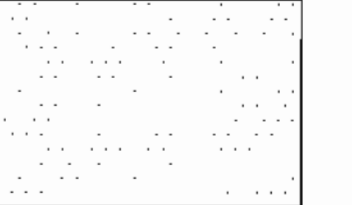
**NOTES**

1. CONTRACTOR WILL REMOVE PORTION OF PRIVATE 15" S FROM EX. MH 437 TO EX. MH 13A NOW FLOWING IN A SOUTHERLY DIRECTION AND IN STALL A 16" S TO FLOW IN NORTHERLY DIRECTION FROM EX. MH 13A TO PROPOSED MH 1002
2. PROPOSED STORM DRAIN SHOWN IS TO BE CONSTRUCTED UNDER SDP 00-149.

**SEWER SEQUENCE OF CONSTRUCTION**

1. CONSTRUCT 16" D.I. SEWER FROM EX. SMH 12 TO SMH 1003.
2. CONNECT EX. 8" SEWER (FROM EX. SMH 437) TO SMH 1003 USING 8" TYPE "B" DROP CONNECTION.
3. ABANDON EX. 8" SEWER BETWEEN EX. SMH 13-A TO SMH 1003.
4. CONSTRUCT 16" D.I. SEWER FROM EX. SMH 13-A TO SMH 1003.
5. ABANDON EX. 15" SEWER BETWEEN EX. SMH 12 AND 13-A.

DENOTES AREA TO BE ABANDONED



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

**GLW GUTSCHICK 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 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

PREPARED FOR:  
Gateway 67 L.L.P.  
7165 Columbia Gateway Dr.  
Columbia, Maryland 21046  
Attn: Cole Scarf  
Phone: (410) 290-1400

DES: SCC				
DRN: BB				
CHK: SCC				
DATE: 8/00	BY: NO	REVISION	DATE	

**PUBLIC WATER & SEWER PLAN**

**COLUMBIA GATEWAY**  
CONTRACT# 24-3893-D  
PART OF  
PARCEL "N-11"  
PLAT No.

GLW FILE No.  
00069

SCALE  
AS  
SHOWN

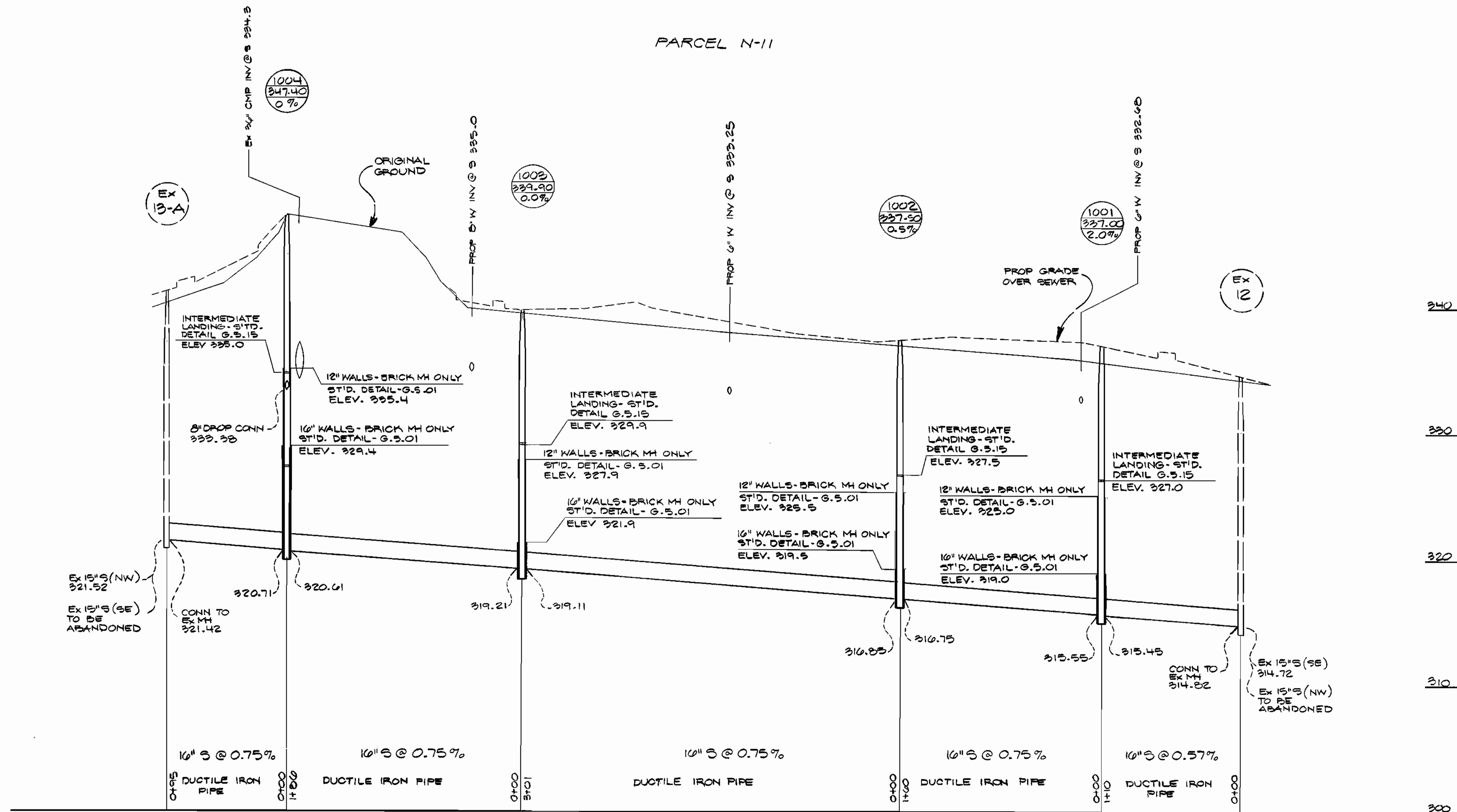
SHEET  
2 OF 4

600' SCALE MAP NO. 42 BLOCK NO. 12

GLFORD ELECTION DISTRICT No. 6


HOWARD COUNTY, MARYLAND





Capacity of 16" DIPS @ 0.57% = 3.7 MGD  
at 4.1 fps

PROFILE SCALE  
Hor. 1" = 50'  
Vert. 1" = 5'

Department of Public Works Howard County, Maryland  <i>Robert Deegan</i> Chief, Bureau of Utilities	Department of Planning & Zoning Howard County, Maryland  <i>John Dammann</i> Chief, Development Engineering Division	<b>GW GUTSCHICK LITTLE &amp; WEBER, P.A.</b> ENGINEERS, PLANNERS, SURVEYORS <small>3909 NATIONAL DRIVE SUITE 200 BURTONTOWNE OFFICE PARK BURTONTOWNE, MD. 20866 (301) 421-4024</small>		DES: RSP DRN: RSP CHK: DATE: 8-16-00	<b>SEWER MAIN PROFILES</b>	<b>COLUMBIA GATEWAY PARCEL "N-11" CONTRACT # 24-2893-D</b> HOWARD COUNTY, MARYLAND GUILFORD ELECTION DISTRICT #2 G	SCALE AS SHOWN  SHEET 4 OF 4
				BY: NO. REVISION DATE: 600' SCALE MAP NO. BLOCK NO.			



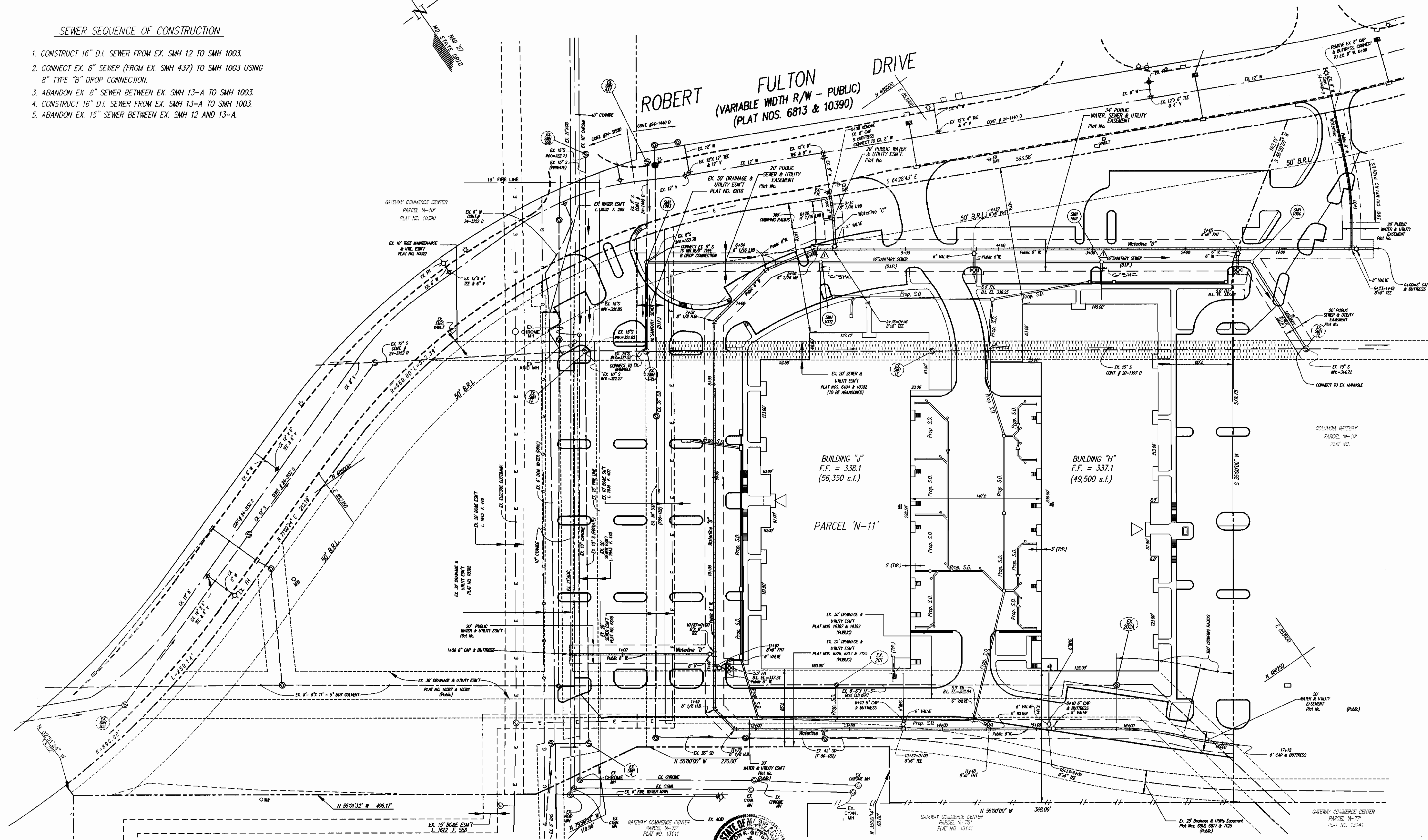
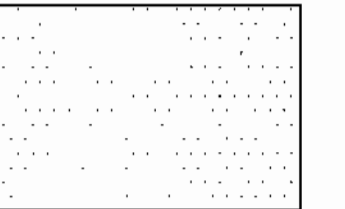
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DENOTES AREA TO BE ABANDONED



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*Robert M. Berger* 11-21-00  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
*John D. ...* 11/21/00  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**GLW** GUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTOWNSVILLE OFFICE PARK  
BURTOWNSVILLE, MARYLAND 20866  
TEL: 301-421-4024 FAX: 301-989-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

PREPARED FOR:  
Gateway 67 L.L.P.  
7165 Columbia Gateway Dr.  
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Attn: Cole Sanford  
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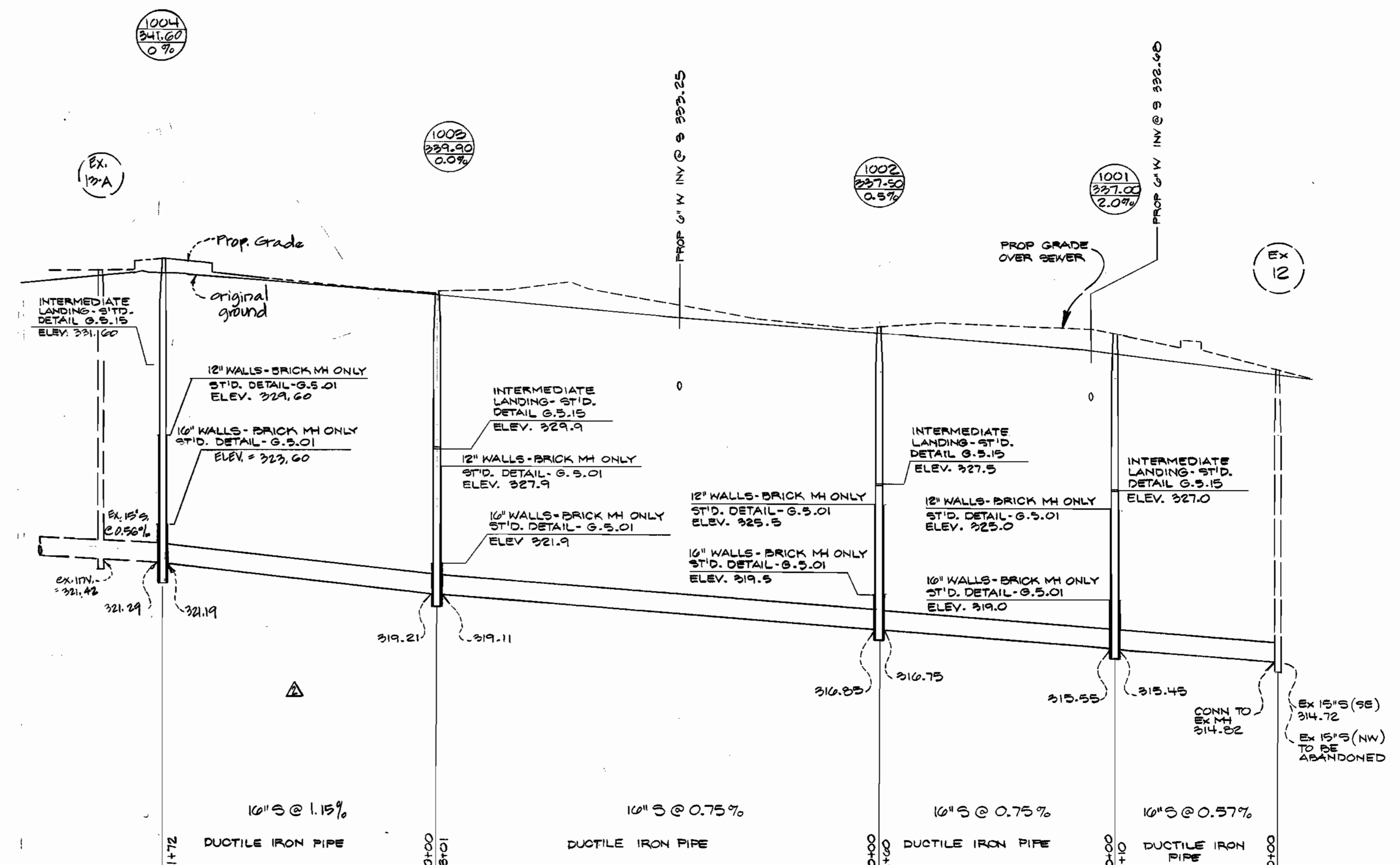
DES: SCC			
DRN: BB			
CHK: SCC			
DATE: 8/00	BY: NO	REVISION	DATE: 1/2/01

**PUBLIC WATER & SEWER PLAN**  
600' SCALE MAP NO. 42 BLOCK NO. 12  
GILFORD ELECTION DISTRICT No. 6

**COLUMBIA GATEWAY**  
CONTRACT# 24-3893-D  
PART OF PARCEL 'N-11'  
PLAT No.  
HOWARD COUNTY, MARYLAND

GLW FILE No. 00069  
SCALE AS SHOWN  
SHEET 2 OF 4

PARCEL N-11



Capacity of 16" DIPS @ 0.57% = 3.7 MGD at 4.1 fps

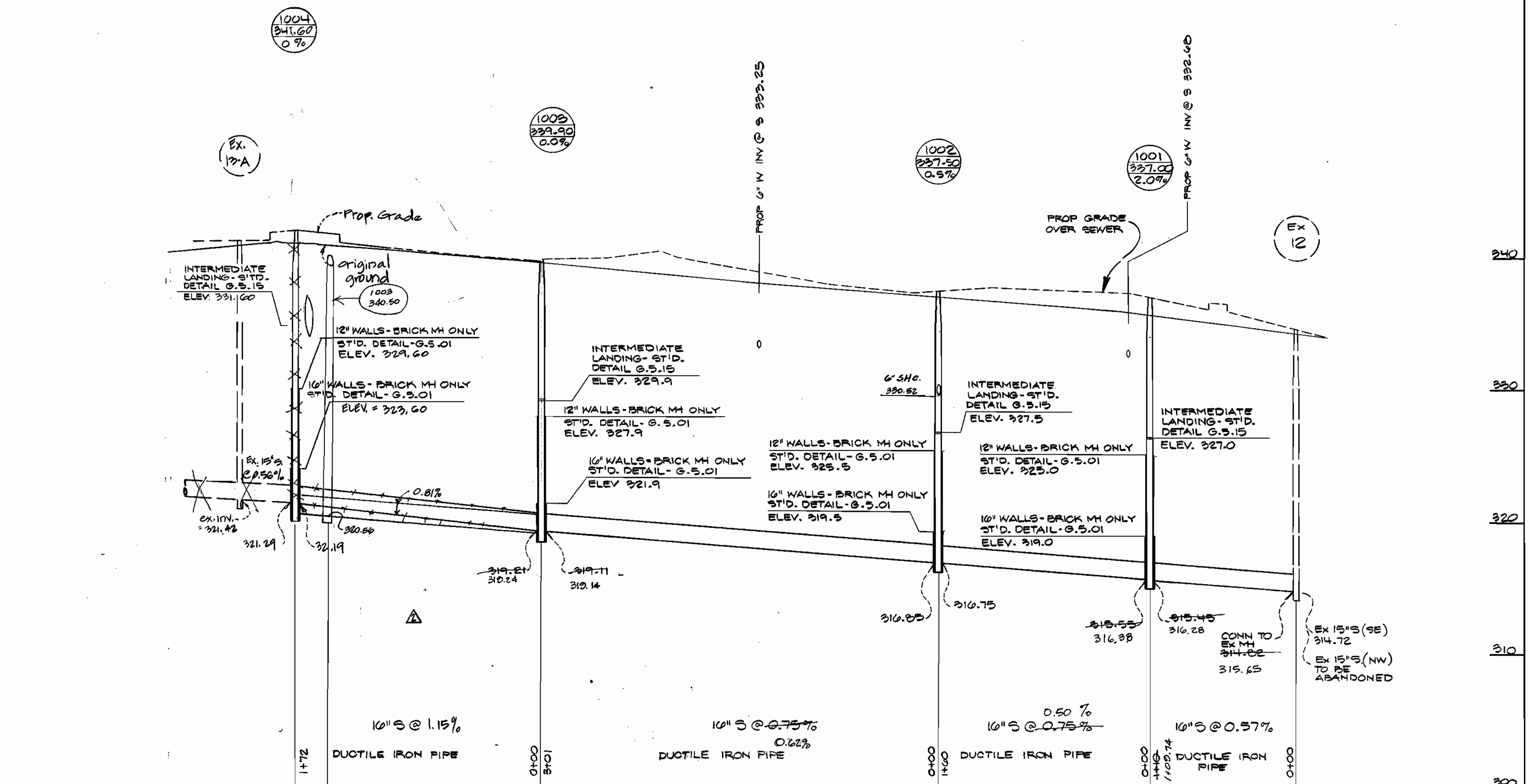
PROFILE SCALE  
Hor. 1" = 50'  
Vert. 1" = 5'

<p>Department of Public Works Howard County, Maryland</p> <p><i>Robert Deegan</i> 11-21-00 Chief, Bureau of Utilities Date</p>	<p>Department of Planning &amp; Zoning Howard County, Maryland</p> <p><i>John Dammann</i> 11/21/00 Chief, Development Engineering Division Date</p>	<p><b>GW GUTSCHICK LITTLE &amp; WEBER, P.A.</b> ENGINEERS, PLANNERS, SURVEYORS</p> <p>3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MD. 20866 (301) 421-4024</p>		<p>DES: RSP DRN: RSP CHK: DATE: 3-16-00</p> <p>MCF &amp; eliminate connection to Ex. 13-A and revise sewer profile MH 1004 - MH 1003 1/25/01 BY NO. REVISION DATE</p>	<p>600' SCALE MAP NO. _____ BLOCK NO. _____</p>	<p><b>COLUMBIA GATEWAY</b> PARCEL "N-11" CONTRACT # 24-2893-D</p> <p>HOWARD COUNTY, MARYLAND GUILFORD ELECTION DISTRICT N# 6</p>	<p>SCALE AS SHOWN SHEET 4 OF 4</p>
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PARCEL N-11



Capacity of 16" DIPS @ 0.57% = 2.7 MGD at 4.1 fps

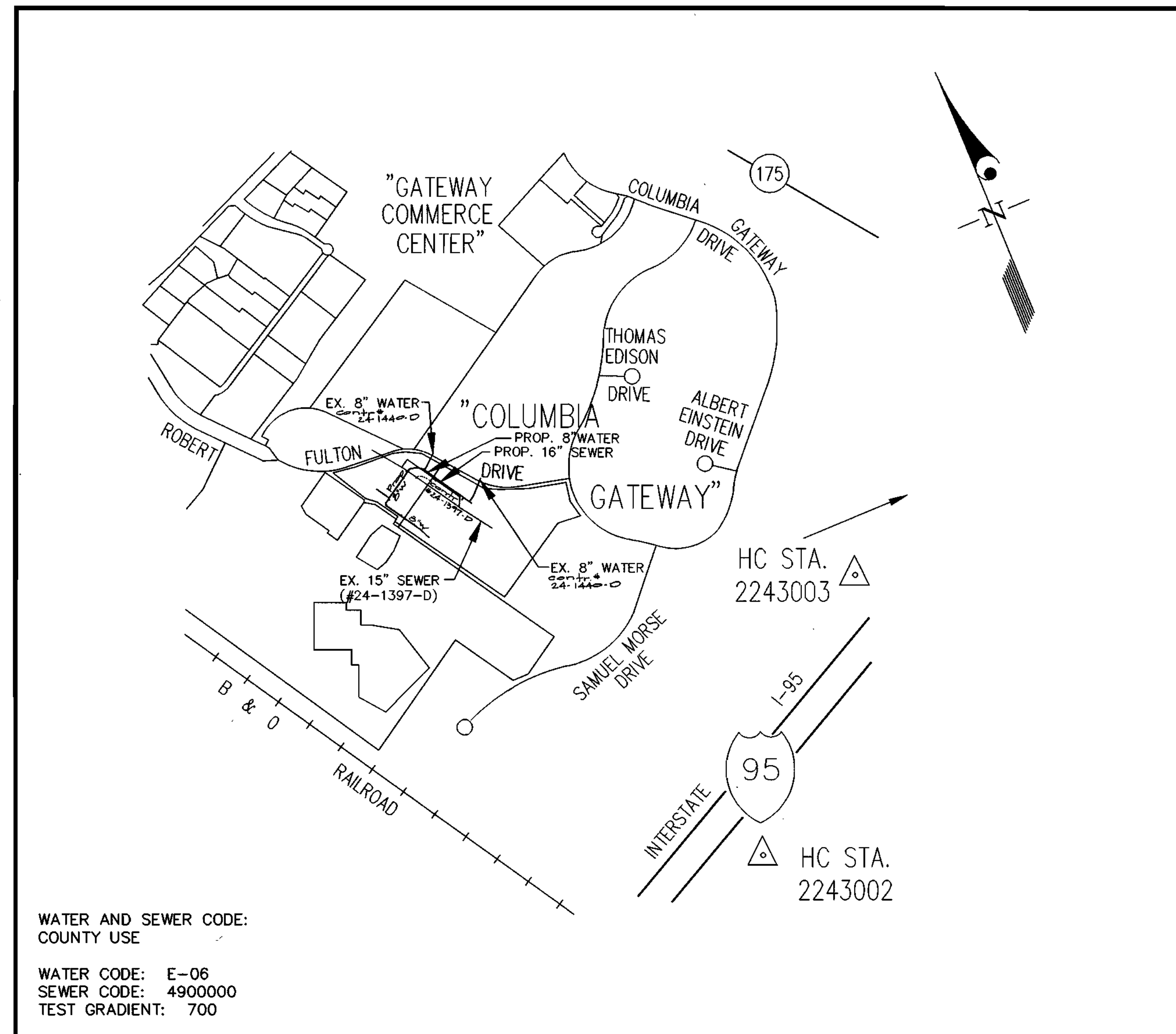
PROFILE SCALE  
Hor. 1"=50'  
Vert. 1"=5'

<p>Department of Public Works Howard County, Maryland</p> <p><i>Robert Dennis</i> 11-21-00 Chief, Bureau of Utilities Date</p>	<p>Department of Planning &amp; Zoning Howard County, Maryland</p> <p><i>John DeMunn</i> 11/21/00 Chief Development Engineering Division Date</p>	<p><b>GLW</b> GUTSCHICK LITTLE &amp; WEBER, P.A. ENGINEERS, PLANNERS, SURVEYORS</p> <p>3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MD. 20866 (301) 421-4024</p>		<table border="1"> <tr> <td>DES:</td> <td>RSP</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRN:</td> <td>RSP</td> <td></td> <td></td> <td></td> </tr> <tr> <td>CHK:</td> <td>KCI</td> <td>2</td> <td>AS-BUILT CONDITIONS ADDED TO PLANS eliminate connection to Ex. 15-A and revise sewer profile. MH 1004 - MH 1003</td> <td>12/19/01</td> </tr> <tr> <td>DATE:</td> <td>0-16-00</td> <td>BY</td> <td>NO.</td> <td>REVISION</td> </tr> </table>	DES:	RSP				DRN:	RSP				CHK:	KCI	2	AS-BUILT CONDITIONS ADDED TO PLANS eliminate connection to Ex. 15-A and revise sewer profile. MH 1004 - MH 1003	12/19/01	DATE:	0-16-00	BY	NO.	REVISION	<p>SEWER MAIN PROFILES</p> <p>600' SCALE MAP NO. _____ BLOCK NO. _____</p>	<p>"SEWER AS-BUILT" <b>COLUMBIA GATEWAY</b> PARCEL "N-11" CONTRACT # 24-3893-D</p> <p>HOWARD COUNTY, MARYLAND GUILFORD ELECTION DISTRICT N# 6</p>	<p>SCALE AS SHOWN</p> <p>SHEET 4 OF 4</p>
DES:	RSP																										
DRN:	RSP																										
CHK:	KCI	2	AS-BUILT CONDITIONS ADDED TO PLANS eliminate connection to Ex. 15-A and revise sewer profile. MH 1004 - MH 1003	12/19/01																							
DATE:	0-16-00	BY	NO.	REVISION																							

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" 1/8 BEND	3 EA.	3 EA.	M.J. DIP	U.S. PIPE FOUNDRY
8"x6" FHT	4 EA.	4 EA.	M.J. DIP	U.S. PIPE FOUNDRY
6" S.H.C.	20 L.F.			
8" D.I.P. (WATER)	2073 L.F.	2077 L.F.	24-52 DIP	CRIPPA PIPE PRODUCTS
6" D.I.P. (WATER)	88 L.F.	106.7 L.F.	"	"
16" D.I.P. (SEWER)	74.3 L.F.	73.5 L.F.	"	"
Std Manholes	4 EA.	4 EA.	PROBAB	ATLANTA CONCRETE PRODUCTS
8" CAP	3 EA.	3 EA.	M.J. DIP	U.S. PIPE FOUNDRY
8" VALVE	4 EA.	4 EA.	KEQUENT	MUELLER CO.
6" VALVE	6 EA.	6 EA.	RESIDENT	"
8" 1/16 BEND	4 EA.	3 EA.	M.J. DIP	U.S. PIPE FOUNDRY
8" x 6" TEE	2 EA.	2 EA.	M.J. DIP	U.S. PIPE FOUNDRY
FIRE HYDRANT (5.0)	3 EA.	3 EA.	SOVER	MUELLER CO.
FIRE HYDRANT (5.5)	1 EA.	1 EA.	SOVER	MUELLER CO.
6" CAP	2 EA.	2 EA.		

NAME OF UTILITY CONTRACTOR: HIGHLAND TOWNSHIP, INC.

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



VICINITY MAP  
SCALE: 1"=600'

CONTRACT No. 24-3893-D

HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS



Sediment Control Measures will be implemented in accordance with SDP 00-14.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

*[Signature]* 4/21/00  
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: *[Signature]* 4/21/00  
HOWARD S.C.D.

DRAWINGS/00069/00069WS-COV.DWG

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*[Signature]* 11-21-00  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

*[Signature]* 11/21/00  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

GLW GUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
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BURTONSVILLE, MARYLAND 20886  
TEL: 301-421-4024 FAX: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186  
Attn: Cole Scharf  
Phone: (410) 290-1400

PREPARED FOR:  
Gateway 67 L.L.P.  
7165 Columbia Gateway Dr.  
Columbia, Maryland 21046  
Attn: Cole Scharf  
Phone: (410) 290-1400

DES: SOC			
DRN: BB			
CHK: SOC	KCI 3	AS-BUILT CONDITIONS ADDED TO PLAN	12/18/01
	JAU 2	REV. QUANTITIES FOR 16" D.I.P. SEWER	1/25/01
	MCF 1	REV. QUANTITIES & NO. OF UNITS	1/25/01
DATE: 8/00	BY: NO	REVISION	DATE

WATER & SEWER COVER SHEET

600' SCALE MAP NO. 42 BLOCK NO. 12

COLUMBIA GATEWAY  
CONTRACT# 24-3893-D  
PART OF  
PARCEL "N-11"  
PLAT No.

GLW FILE No. 00069

SCALE AS SHOWN

SHEET 1 OF 4

GILFORD ELECTION DISTRICT No. 6 HOWARD COUNTY, MARYLAND

TYPE OF BUILDING	OFFICE
NUMBER OF UNITS	2
NUMBER OF S.H.C.'s	2
NUMBER OF W.H.C.'s	2
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLANT	LITTLE PATUXENT

- GENERAL NOTES
- PART I
- 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 [North American Datum 1983 (NAD '83)].
  - 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 tunnel 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 (5) working days before starting work shown on these plans:
    - State Highway Administration 531-5533
    - BGE Contractor Services 850-4620
    - BGE Under Ground Damage Control 787-9068
    - Miss Utility 1-800-257-7777
    - Colonial Pipeline Co. 795-1390
    - Howard County Department of Public Works Bureau of Utilities 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.
  - The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five (5) working days before any open cut of any County road or boring/jacking operation on County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirement per Section 18.114(a) of the Howard County Code.
- PART II - WATER
- 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 the Standard Details. Soil 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.
  - For sprinkler system for all townhomes 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 DIP 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 G5.52. Where watertight frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on drawings.
  - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

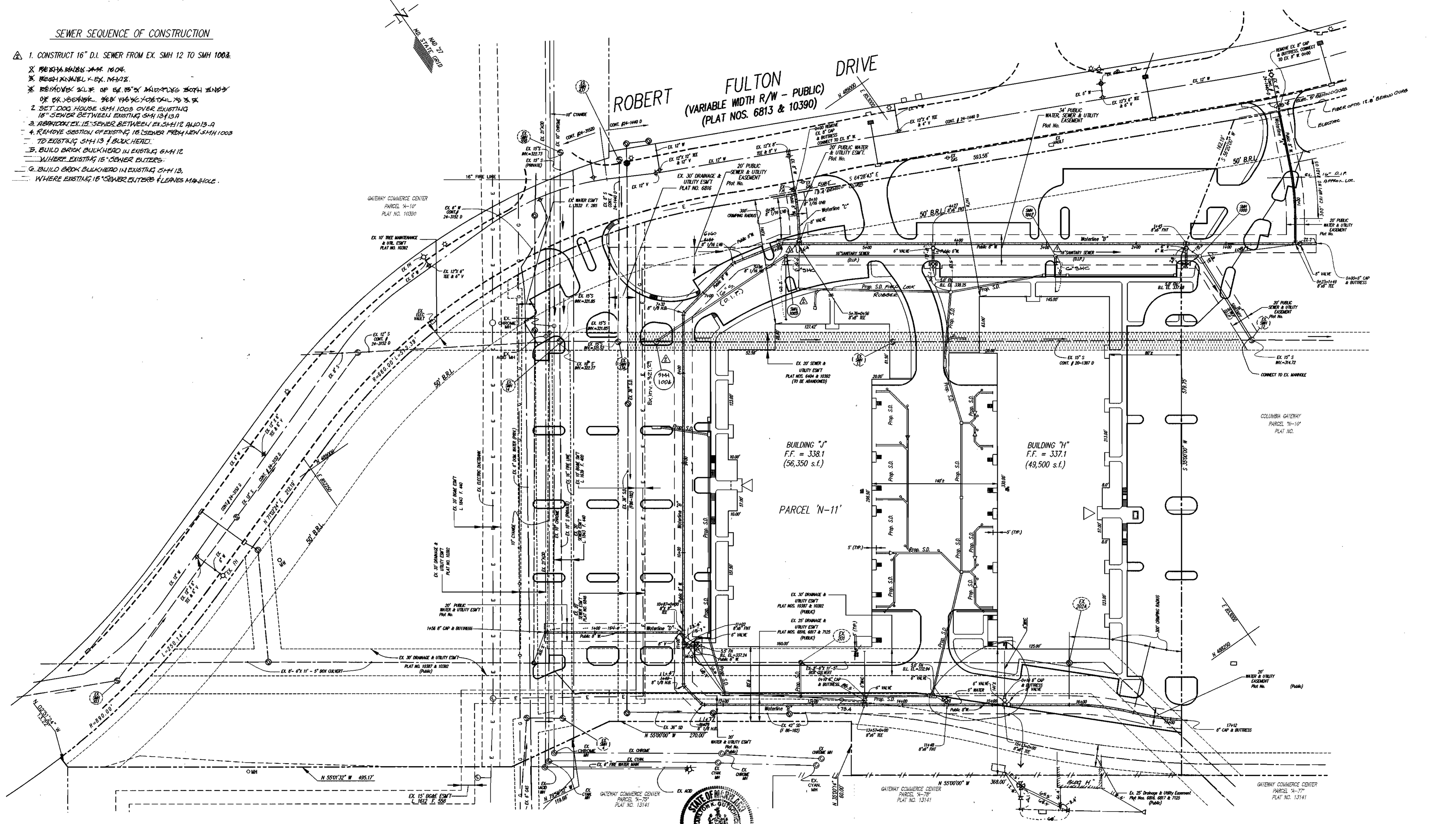
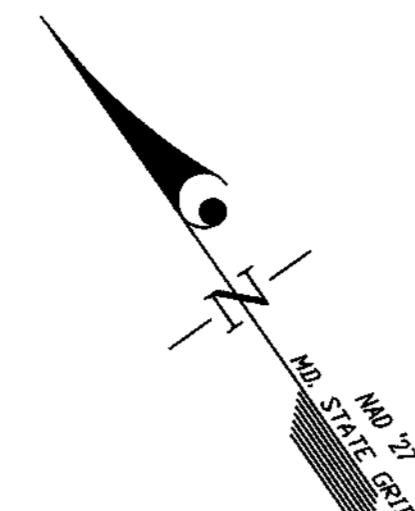
**NOTES**

1. PROPOSED STORM DRAIN SHOWN IS TO BE CONSTRUCTED UNDER SPP-00-147.

DO NOTES AREA TO BE ABANDONED

**SEWER SEQUENCE OF CONSTRUCTION**

1. CONSTRUCT 16" D.I. SEWER FROM EX. SMH 12 TO SMH 1003.
2. SET DOG HOUSE SMH 1003 OVER EXISTING 18" SEWER BETWEEN EX. SMH 12 AND 13-A.
3. ABANDON EX. 15" SEWER BETWEEN EX. SMH 12 AND 13-A.
4. REMOVE SECTION OF EXISTING 18" SEWER FROM EX. SMH 1003 TO EXISTING SMH 13 & BULK HEAD.
5. BUILD BRICK BULKHEAD IN EXISTING 6" H. 12.
6. WHERE EXISTING 15" SEWER ENTERS:
7. BUILD BRICK BULKHEAD IN EXISTING SMH 13.
8. WHERE EXISTING 16" SEWER ENTERS LEAVES MANHOLE.





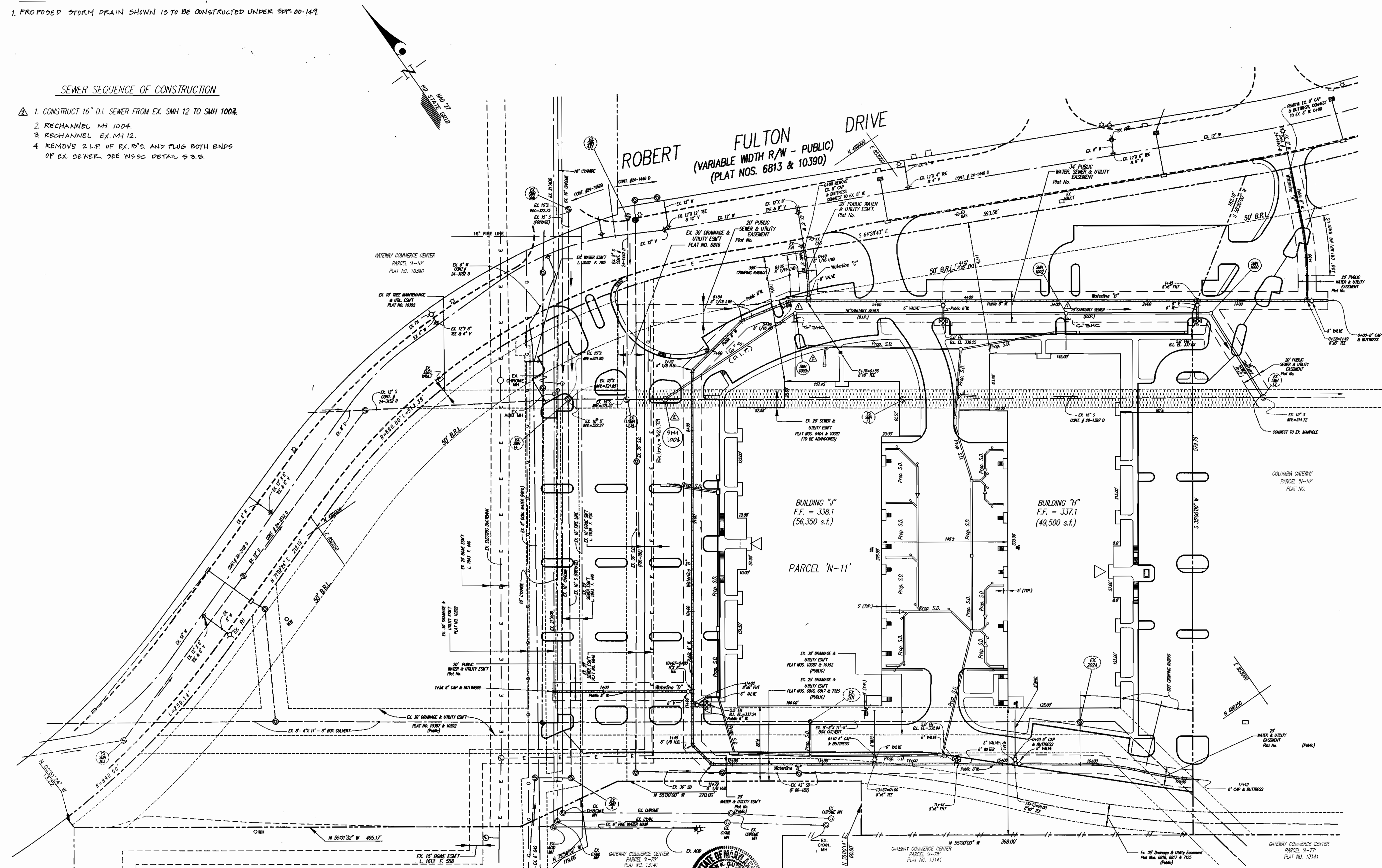
**NOTES**

1. PROPOSED STORM DRAIN SHOWN IS TO BE CONSTRUCTED UNDER SPP-00-149.

**SEWER SEQUENCE OF CONSTRUCTION**

1. CONSTRUCT 16" D.I. SEWER FROM EX. SMH 12 TO SMH 1004.
2. RECHANNEL MH 1004.
3. RECHANNEL EX. MH 12.
4. REMOVE 2 LF OF EX. 15" S. AND PLUG BOTH ENDS OF EX. SEWER. SEE WSSC DETAIL S 3.5.

INDICATES AREA TO BE ABANDONED



<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>Robert M. Benjamin</i> 11-21-00 CHIEF, BUREAU OF UTILITIES DATE</p>	<p>DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND</p> <p><i>John Dammann</i> 11/21/00 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE</p>	<p><b>GLW GUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20886 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186</p>	<p>PREPARED FOR: Gateway 67 L.L.P. 7165 Columbia Gateway Dr. Columbia, Maryland 21046 Attn: Cole Sanford Phone: (410) 290-1400</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>DES: SCC</td><td></td><td></td><td></td></tr> <tr><td>DRN: BB</td><td></td><td></td><td></td></tr> <tr><td>CHK: SCC</td><td>JAU</td><td>2</td><td>revise SMH Numbers and revise sequence of construction eliminate 16" S. PUTT # FROM EX. 15" S. TO 12" S. AND RELOCATE SMH 1004 OVER EX. 15" S.</td></tr> <tr><td>DATE: 8/00</td><td>MEP</td><td>1</td><td>Add c'SMC</td></tr> <tr><td></td><td>BY</td><td>NO</td><td>REVISION</td></tr> <tr><td></td><td></td><td></td><td>DATE</td></tr> </table>	DES: SCC				DRN: BB				CHK: SCC	JAU	2	revise SMH Numbers and revise sequence of construction eliminate 16" S. PUTT # FROM EX. 15" S. TO 12" S. AND RELOCATE SMH 1004 OVER EX. 15" S.	DATE: 8/00	MEP	1	Add c'SMC		BY	NO	REVISION				DATE	<p style="text-align: center;"><b>PUBLIC WATER &amp; SEWER PLAN</b></p> <p>600' SCALE MAP NO. 42 BLOCK NO. 12</p>	<p style="text-align: center;"><b>COLUMBIA GATEWAY</b> CONTRACT# 24-3893-D PART OF PARCEL "N-11" PLAT No.</p> <p style="text-align: right;">GILFORD ELECTION DISTRICT No. 6 HOWARD COUNTY, MARYLAND</p>	<p>GLW FILE No. <b>00069</b></p> <p>SCALE AS SHOWN</p> <p>SHEET 2 OF 4</p>
DES: SCC																															
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