

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER	385			
6" WATER	10			
1/16 BEND				
1/32 BEND				
8" x 8" TEE	2			
8" x 6" TEE				
8" CAP & BUTTRESS	3			
6" FIRE HYDRANT				
8" VALVE	4			
6" VALVE				
NAME OF UTILITY CONTRACTOR :				
		CHECKBOX		
		AS-BUILT DATE		
		SURVEY AND DRAFTING DIVISION		

TYPE OF BUILDING	APARTMENT BUILDING (ELDERLY HOUSING)
NUMBER OF UNITS	100
NUMBER OF S.H.C.'s	0
NUMBER OF W.H.C.'s	
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLANT	LITTLE PATUXENT WATER RECLAMATION PLANT

GENERAL NOTES

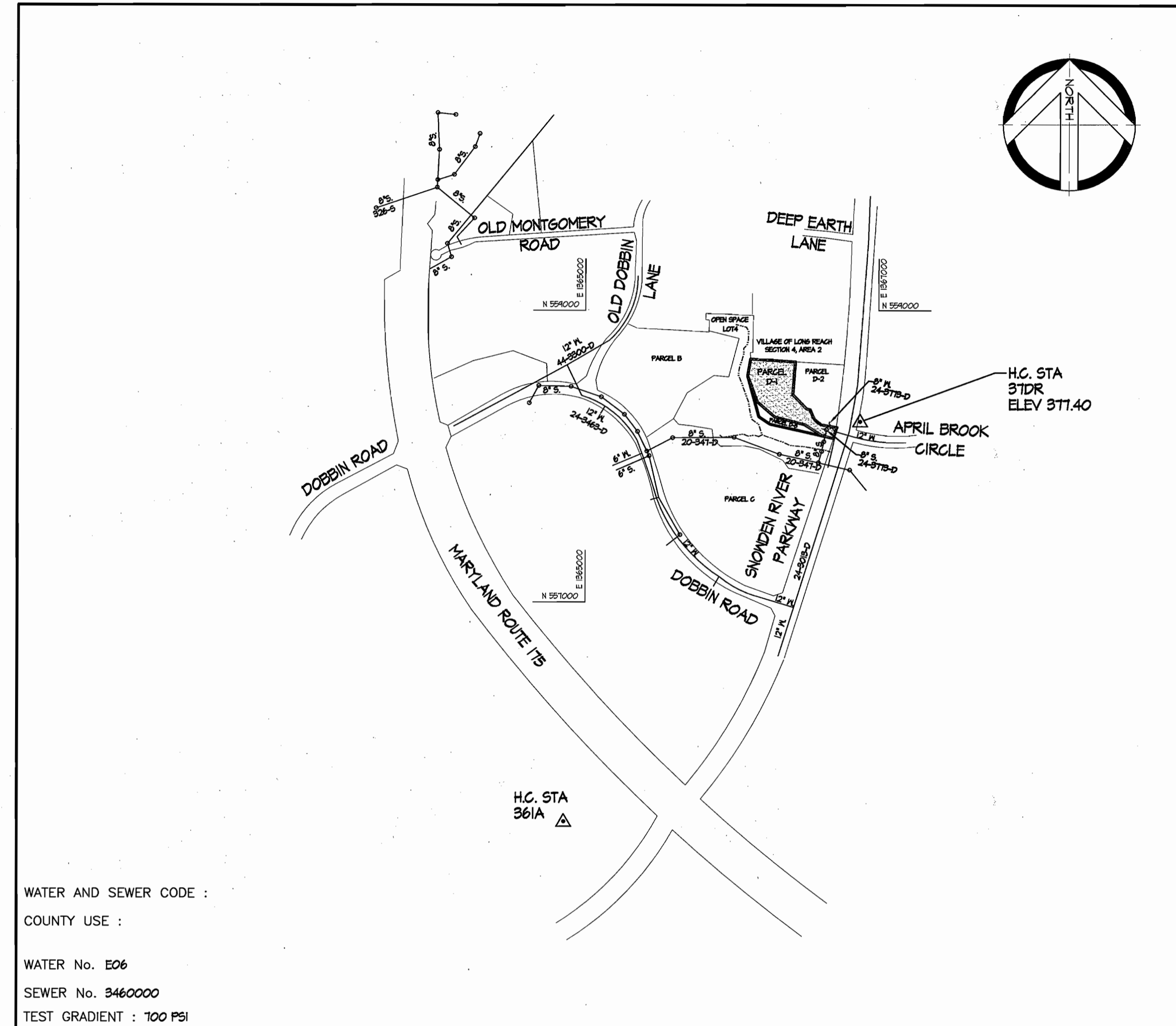
- PART 1
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted service. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the contractor's expense.
 - All horizontal controls are based on the Maryland State Coordinates NAD 83/11 as projected by Howard County Horizontal and Vertical GEODETIC CONTROL NOS. 361A and 370R. These water drawings are based on a field run topographic survey performed by Schmid, Feltz & McDonald Inc. on 9/14/01 and by Shonberger And Lane dated 1/29/03.
 - All vertical controls are based on NAVD data.
 - All pipe elevations shown are invert elevations unless otherwise noted on the plans.
 - Clear all utilities by a minimum of 12". 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 the bracing of additional poles, any cost incurred by the owner for 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 drawings, 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 at the locations of the test pits. A note or notes containing the results of the test pits 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 (5) working days before starting work shown on these plans:

AT&T	1-800-252-1133
B&E (Contractor Services)	410-850-4260
B&E (Underground Damage Control)	410-781-4068
Bureau of Utilities	410-313-4400
Colonial Pipeline Co.	410-785-1340
Miss Utilities	1-800-251-TTTT
State Highway Administration	410-531-5533
Verizon	1-800-743-0233 / 410-224-4210

- 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 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) 313-7450 at least five (5) working days before any open cutting or boring/jacking operation on County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPM requirement per section 18.11.4(a) of the Howard County Code.

PART 2 - 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 trees shall be strapped to trees.
- 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 at the bury line elevations shown on the drawings. All fire hydrants shall be installed in accordance with the 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.



WATER AND SEWER CODE :
 COUNTY USE :
 WATER No. E06
 SEWER No. 3460000
 TEST GRADIENT : 700 PSI

VICINITY MAP
 SCALE : 1"=600'

Contract No. # 44-4113-D
 Route 175 Commercial
 Section 1 Area 2
 Parcel D-1
 Howard County, Maryland
 Department of Public Works

Sediment control measures for this contract will be implemented in accordance with section 219 of the Specifications and as shown on SDP-03-142 Drawings 2 through 4.

Reviewed for Howard Soil Conservation District and meets technical requirements
John Robertson 7/17/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

SDP-03-142
 This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
 APPROVED
Jim Mize 7/17/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
R. J. ... 7-8-03
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
Chad ... 7/21/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SITE RESOURCES
 incorporated
 Comprehensive Land Planning & Site Design Services
 14307 Jarrettsville Pike, Phoenix Maryland 21131
 (410) 683-3388 • fax (410) 683-3389



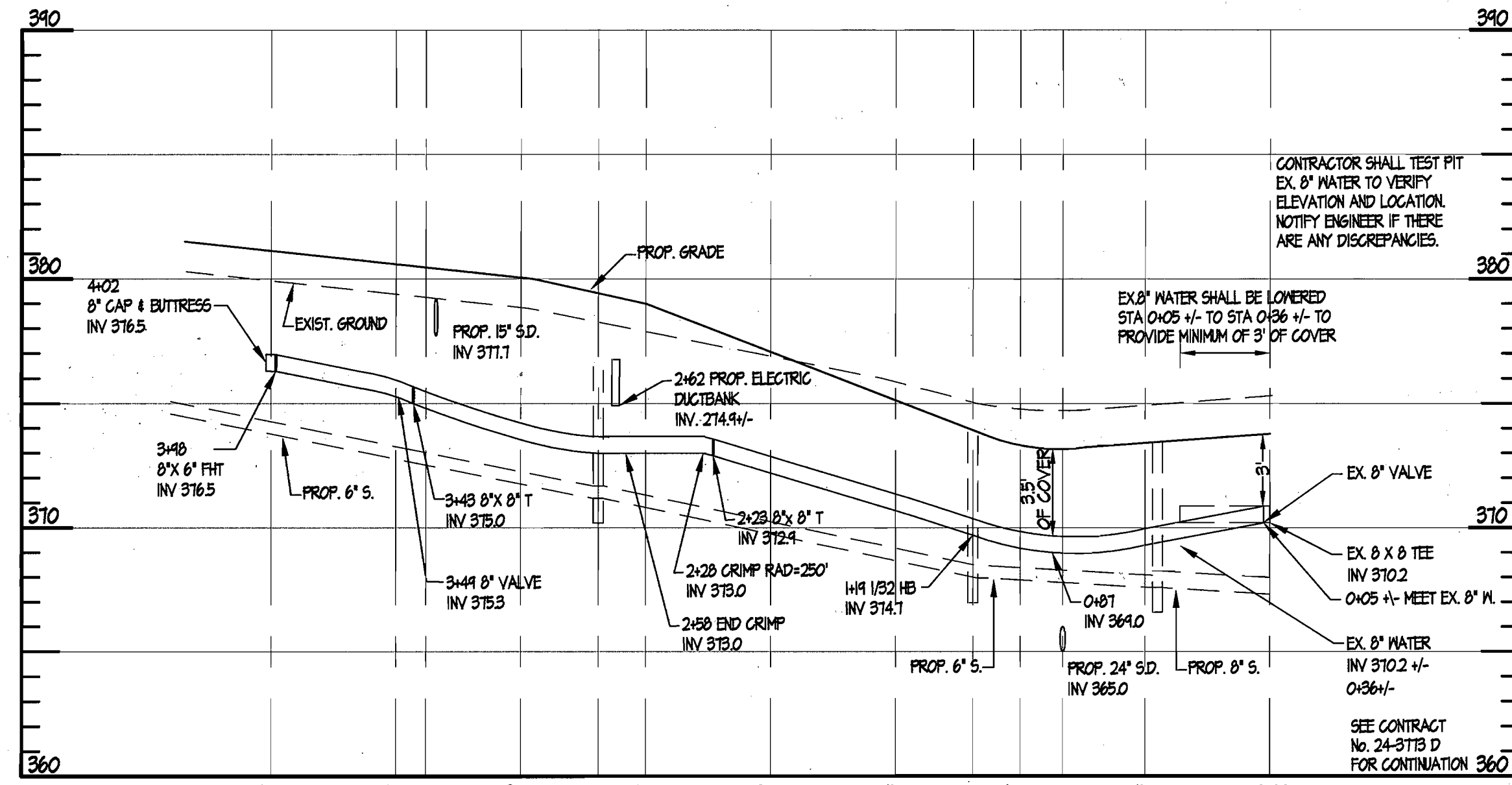
DES:	JLS				
DRN:	CGS				
CHK:	JLS				
DATE:	1/20/03	BY	NO.	REVISION	DATE

WATER PLAN	
600 SCALE MAP NO. 36	BLOCK NO. 18

ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2
 PARCEL D-1
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 CONTRACT No. 44-4113-D

SRI FILE 0180

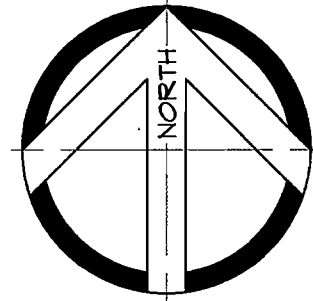
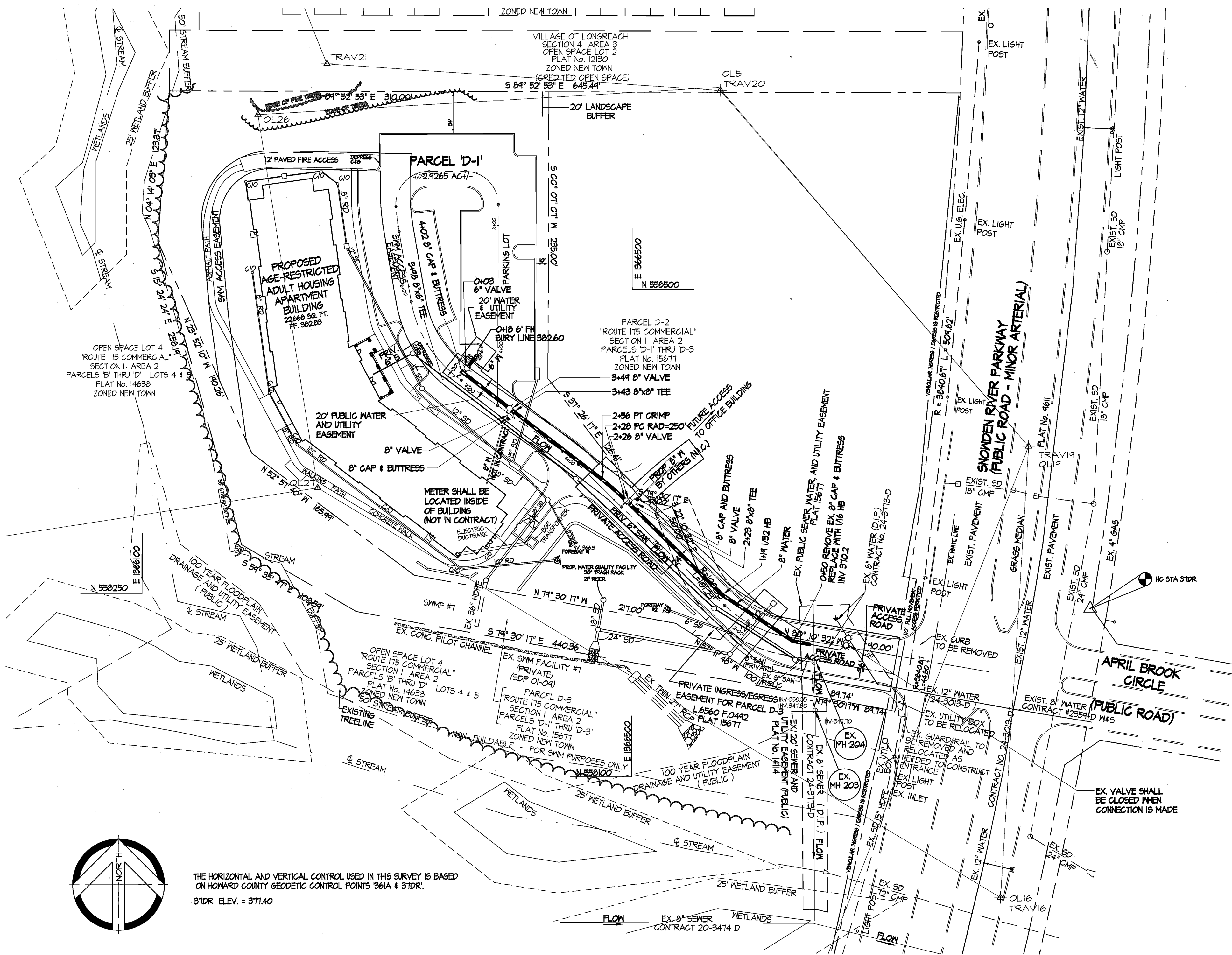
SCALE: 1"=50'
 SHEET 1 OF 2



8" WATER PROFILE

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

WATER STA.	CL ROAD STA.
4+02 CAP	⊕ 5.83 RT STA 5+15.46
3+48 TEE	⊕ 5.80 RT STA 5+11.21
3+46 VALVE	⊕ 3.66 RT STA 4+62.11
3+43 TEE	⊕ 3.53 RT STA 4+59.26
2+56 END CRIMP	⊕ 4.48 RT STA 3+71.43
2+28 BEGIN CRIMP	⊕ 6.37 RT STA 3+41
2+26 VALVE	⊕ 6.36 RT STA 3+39.54
2+23 TEE	⊕ 6.35 RT STA 3+36.54
1+19 1/2 BEND	⊕ 5.01 RT STA 2+32.06
0+50 1/16 BEND	⊕ 2.64 LT STA 1+61.37
0+00 EX. VALVE	⊕ 2.75 LT STA 1+14



THE HORIZONTAL AND VERTICAL CONTROL USED IN THIS SURVEY IS BASED ON HOWARD COUNTY GEODETIC CONTROL POINTS 261A & 31DR.
31DR ELEV. = 371.40

Sediment control measures for this contract will be implemented in accordance with section 219 of the Specifications and as shown on SDP-03-142 Drawings 2 through 4.

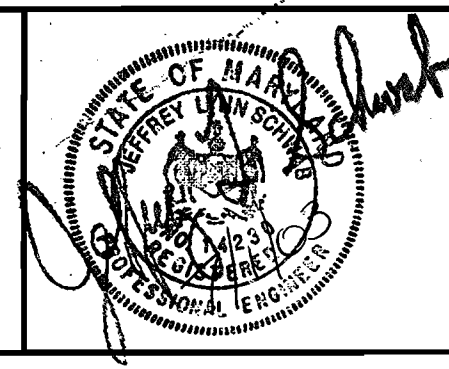
Reviewed for Howard Soil Conservation District and meets technical requirements
John K. Roberts 7/17/03
HOWARD SOIL CONSERVATION DISTRICT DATE

SDP-03-142
This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
APPROVED
Jim Myers 7/17/03
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Ruth Benjamin 7-8-03
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
Chris Damann 7/21/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SITE RESOURCES
incorporated
Comprehensive Land Planning & Site Design Services
14307 Jarrettsville Pike, Phoenix, Maryland 21131
(410) 683-3388 • fax (410) 683-3389



DES:	JLS			
DRN:	CGS			
CHK:	JLS			
DATE:	1/20/03	BY	NO.	REVISION

WATER PLAN
600 SCALE MAP NO. 36/37 BLOCK NO. 13

ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PARCELS D-1
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
CONTRACT No. 44-4113-D

SRI FILE 0180
SCALE: 1"=50'
SHEET 2 OF 2

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QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER	385	385	DIP-52	US PIPE
6" WATER	18	18	"	"
1/16 BEND	1	1	TYLER UNION	HUGHES
1/32 BEND	1	1	"	"
8" x 8" TEE	2	2	"	"
8" x 6" TEE	1	1	"	"
8" CAP & BUTTRESS	3	3	"	"
6" FIRE HYDRANT	1	1	KENNEDY	KENNEDY
8" VALVE	4	4	"	"
6" VALVE	1	1	"	"
NAME OF UTILITY CONTRACTOR :				
CHECKBOX				
AS-BUILT DATE		3-9-04		
SURVEY AND DRAFTING DIVISION				

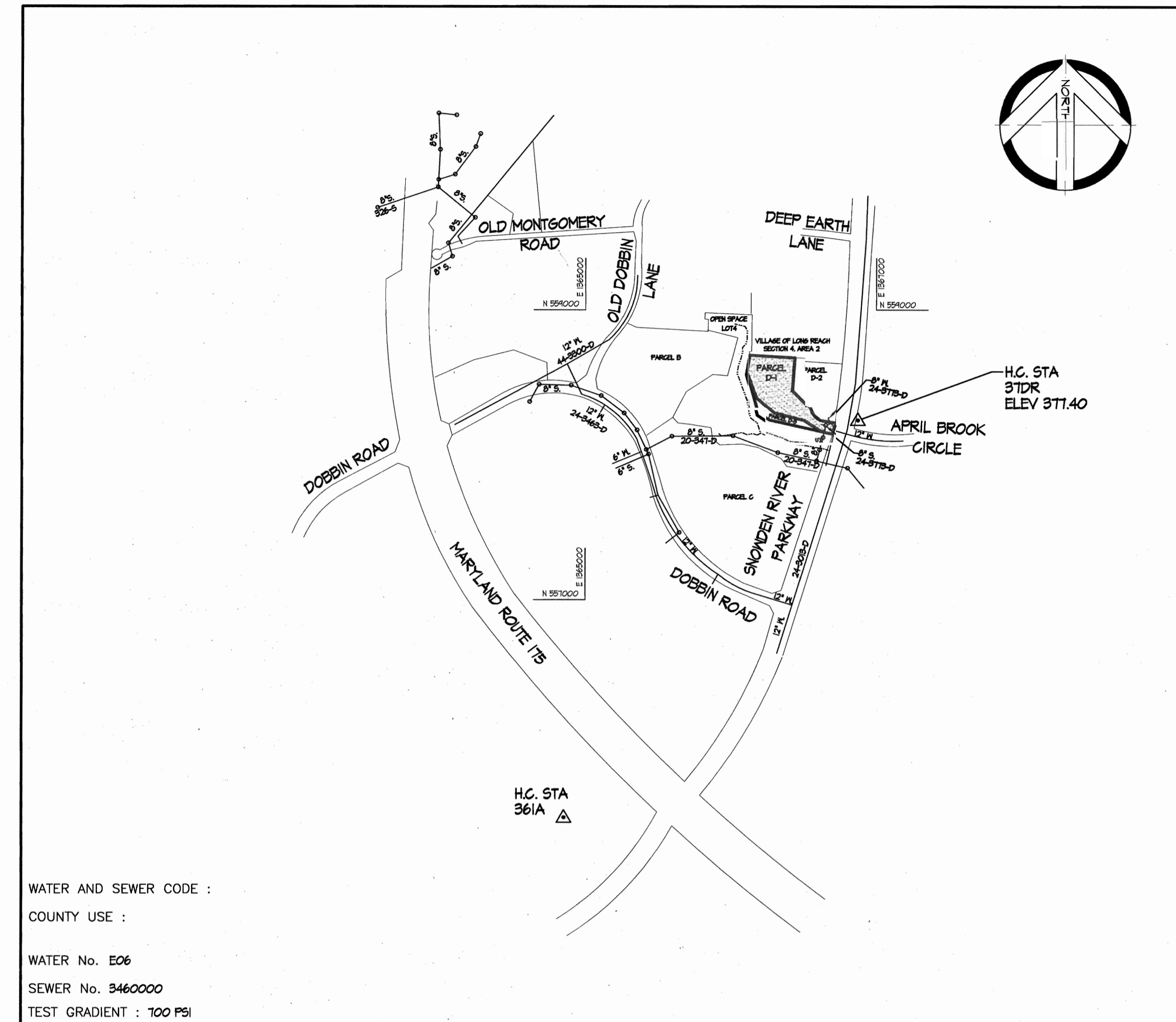
TYPE OF BUILDING	APARTMENT BUILDING (ELDERLY HOUSING)
NUMBER OF UNITS	100
NUMBER OF S.H.C.'s	0
NUMBER OF W.H.C.'s	1
DRAINAGE AREA	LITTLE PATUXENT
TREATMENT PLANT	LITTLE PATUXENT WATER RECLAMATION PLANT

GENERAL NOTES

- PART 1
- Approximate location 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 contractors expense.
 - All horizontal controls are based on the Maryland State Coordinates NAD 83/11 as projected by Howard County Horizontal and Vertical GEODETIC CONTROL NOS. 361A and 312B. These water drawings are based on a field run topographic survey performed by Schmida, Peltz & McDonald Inc. on 9/14/01 and by Shandberger And Lane dated 1/24/03.
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 - Contractor shall notify the following utility companies or agencies at least five (5) working days before starting work shown on these plans:

- | | |
|----------------------------------|-------------------------------|
| AT&T | 1-800-252-1133 |
| B&E (Contractor Services) | 410-850-4260 |
| B&E (Underground Damage Control) | 410-781-4068 |
| Bureau of Utilities | 410-313-4400 |
| Colonial Pipeline Co. | 410-745-1940 |
| Misc Utility | 1-800-251-7777 |
| State Highway Administration | 410-581-5533 |
| Verizon | 1-800-743-0033 / 410-224-4210 |
- 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 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) 313-7450 at least five (5) working days before any open cutting or boring/lacking operation on County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DFN requirement per section 18.114(a) of the Howard County Code.

- PART 2 - 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.
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 - The contractor shall not operate any water main valves on the existing water system.



WATER AND SEWER CODE :
 COUNTY USE :
 WATER No. E06
 SEWER No. 3460000
 TEST GRADIENT : 100 PSI

VICINITY MAP
 SCALE : 1"=600'

Contract No. # 44-4113-D
 Route 175 Commercial
 Section 1 Area 2
 Parcel D-1
 Howard County, Maryland
 Department of Public Works

Sediment control measures for this contract will be implemented in accordance with section 219 of the Specifications and as shown on SDP-03-142 Drawings 2 through 4.

Reviewed for Howard Soil Conservation District and meets technical requirements
[Signature] 7/17/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

SDP-03-142
 This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
 APPROVED
[Signature] 7/17/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
[Signature] 7-8-03
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
[Signature] 7/21/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SITE RESOURCES
 incorporated
 Comprehensive Land Planning & Site Design Services
 14307 Jarrettsville Pike, Phoenix Maryland 21131
 (410) 683-3388 • fax (410) 683-3389

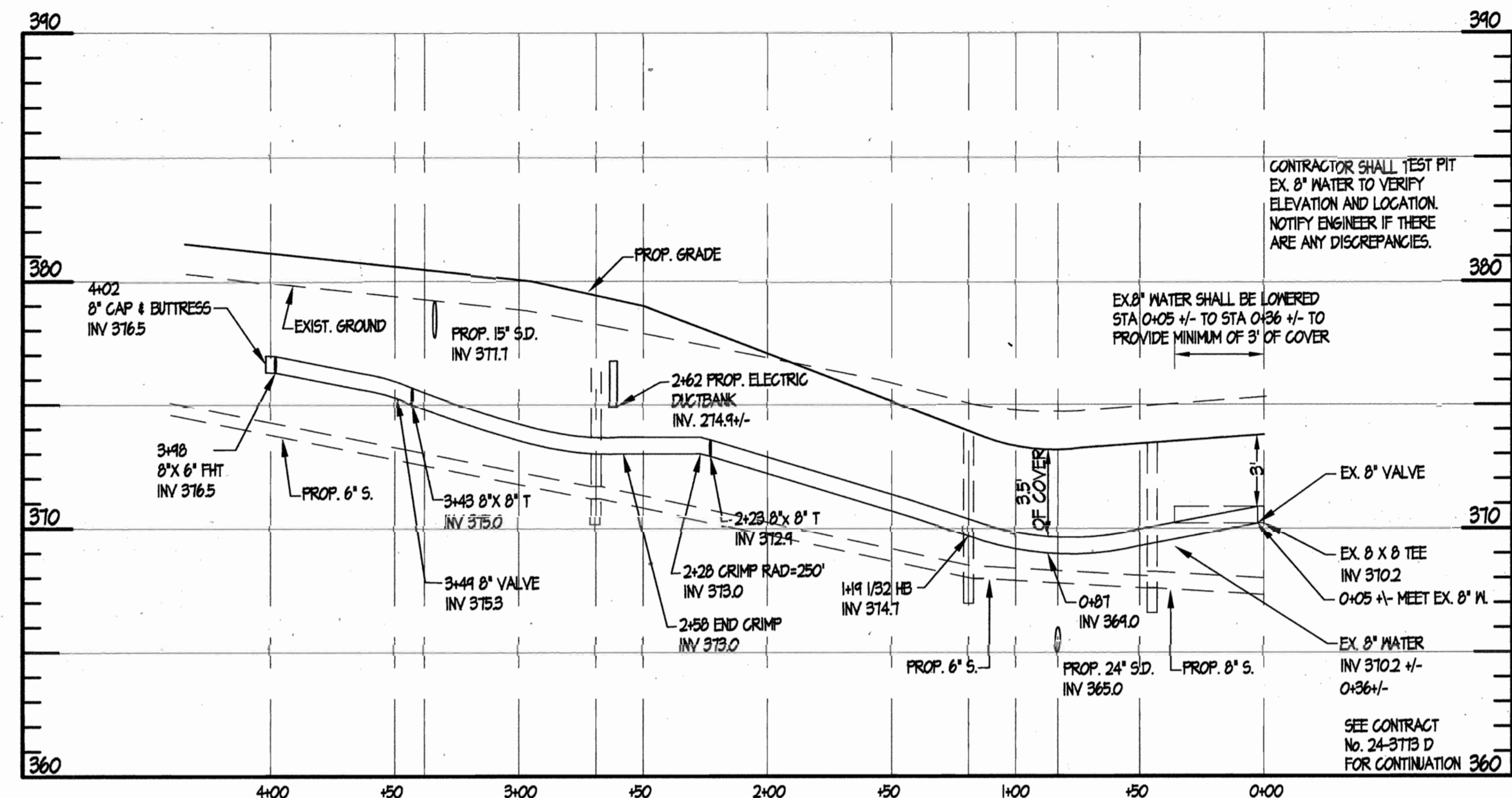


DES:	JLS			
DRN:	CGS			
CHK:	JLS			
DATE:	1/20/03	BY:	NO.	
		REVIS:	1	AS BUILT DATA SHOWN ON PLAN

WATER PLAN
 600 SCALE MAP NO. 36/37 BLOCK NO. 18

ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2
 PARCEL D-1
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 CONTRACT No. 44-4113-D

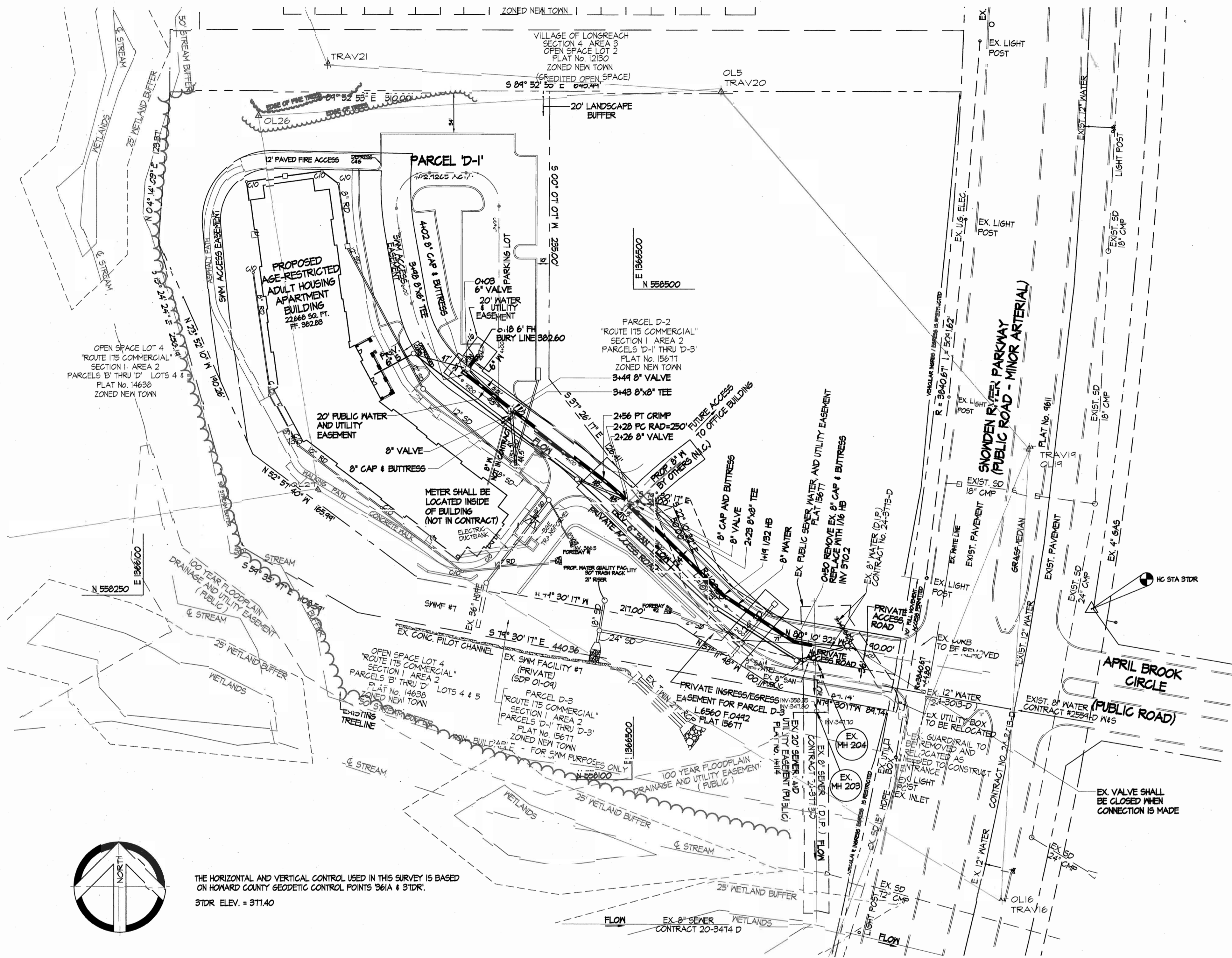
SRI FILE 0130
 SCALE: 1"=50'
 SHEET 1 OF 2



8" WATER PROFILE

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

WATER STA.	± ROAD STA.
4+02 CAP	± 5.83 RT STA 5+15.46
3+48 TEE	± 5.00 RT STA 5+11.21
3+46 VALVE	± 3.66 RT STA 4+62.11
3+43 TEE	± 3.53 RT STA 4+59.26
2+56 END CRIMP	± 4.48 RT STA 3+71.43
2+28 BEGIN CRIMP	± 6.37 RT STA 3+41
2+26 VALVE	± 6.36 RT STA 3+39.54
2+23 TEE	± 6.35 RT STA 3+36.54
1+19 1/32 BEND	± 5.01 RT STA 2+32.06
0+50 1/16 BEND	± 2.64 LT STA 1+61.37
0+00 EX. VALVE	± 2.75 LT STA 1+4



THE HORIZONTAL AND VERTICAL CONTROL USED IN THIS SURVEY IS BASED ON HOWARD COUNTY GEODETIC CONTROL POINTS 361A & 31DR.

Sediment control measures for this contract will be implemented in accordance with section 219 of the Specifications and as shown on SDP-03-142 Drawings 2 through 4.

Reviewed for Howard Soil Conservation District and meets technical requirements
John K. Roberts 7/17/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

SDP-03-142
 This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
 APPROVED
Tom Myer 7/17/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
R. H. Berman 7-8-03
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
Chris Dammer 7/21/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SITE RESOURCES
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 Comprehensive Land Planning & Site Design Services
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 (410) 683-3388 • fax (410) 683-3389



DES:	JLS				
DRN:	CGS				
CHK:	JLS				
DATE:	1/20/03	BY:	NO.	REVISION	DATE

WATER PLAN

600 SCALE MAP NO. 36/37 BLOCK NO. 13

ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2
 PARCELS D-1
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 CONTRACT No. 44-4113-D

SRI FILE 0180
 SCALE: 1"=50'
 SHEET 2 OF 2

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