### **GENERAL NOTES**

- 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.
- 2. All horizontal controls are based on Maryland State Coordinates, NAD 83/91.
- 3. All vertical controls are based on NAVD 88.
- 4. All pipe elevations shown are invert elevations unless otherwise noted on the plans.
- 5. 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 the 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.
- 6. 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.
- 7. 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.
- 8. The contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

BGE (Contractor Services) BGE (Underground Damage Control) Bureau of Utilities Colonial Pipeline Co. Miss Utility State Highway Administration

410-850-4620 410-787-9068 410-313-4900 410-795-1390 1-800-257-7777 410-531-5533

1-800-743-0033 / 410-224-9210

- 9. Trees and shrubs are to be protected from damage to the maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the contractor.
- 10. 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.
- 11. The contractor shall notify the Bureau of Highways, Howard County, at 410-313-7450 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 DPW requirements per Section 18.114(a) of the Howard County Code.

#### WATER NOTES

- 1. All water mains shall be D.I.P. Class 52 unless otherwise noted.
- 2. Tops of all water mains shall have a minimum of 3'-6" of cover unless otherwise noted.
- 3. Valves adjacent to tees shall be strapped to tees
- 4. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.

5. 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 1005 of the Standard Specifications.

6. The contractor shall not operate any water main valves on the existing water system.

#### SEWER NOTES

- 1. All sewer mains shall be D.I.P. and P.V.C. unless otherwise noted.
- 2. All manholes shall be 4'-0" inside diameter unless otherwise noted
- Force mains shall be D.I.P. only.
- 4. Manholes shown with 12" and 16" walls are for brick manholes only.

5. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight manhole frames and covers is used, set top of frame 1"-6" above finished grade

6. House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

### **QUANTITIES**

	QUANTITIES	AS-BUILT		
ITEMS	ESTIMATED	QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	171 LF			
6" WATER	21 LF			
6" SEWER	14 LF			
8"X6" T	2 EA.			
6" VALVES	2 EA.			-
FIRE HYDRANTS	1 EA.			
12"X8" TS&V	1 EA.		-	
4' DIA. MANHOLES	1 EA.			
8" PLUG & BUTTRESS	1 EA.			
			_	

#### NAME OF UTILITY CONTRACTOR

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-03-045

CHECKBOX AS-BUILT DATE SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

NATURAL RESOURCES CONSERVATION SERVICE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

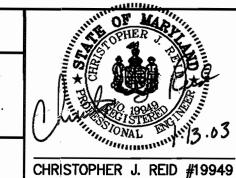
HOWARD COUNTY, MARYLAND

HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PLANNING & ZONING



Patton Harris Rust & Associates,pc Engineers. Surveyors. Planners. Landscape Architects.



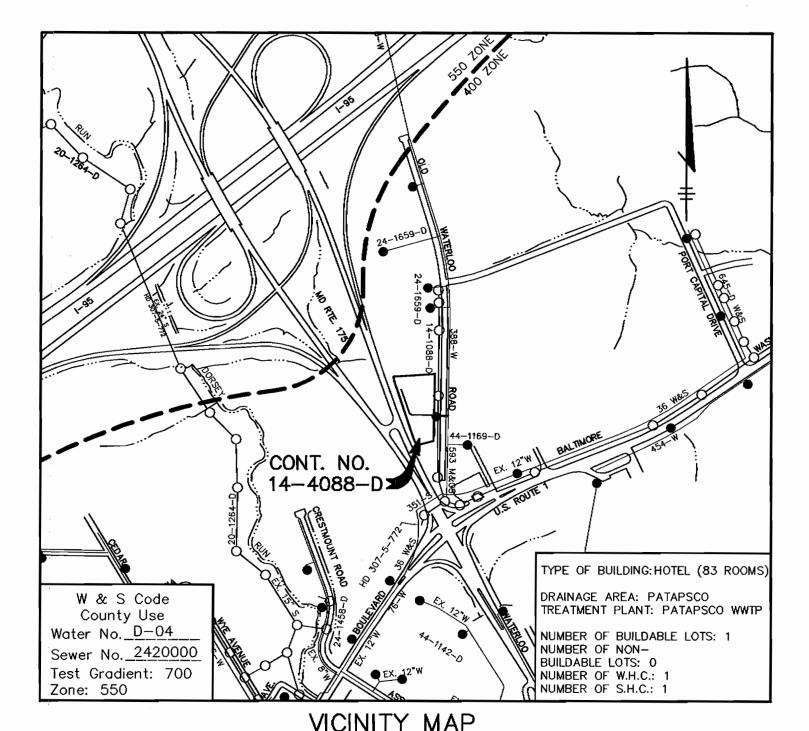
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9	DATE: 01/13/03	BY	NO.	REVISION	DATE	
	DATE 04 /47 /07			·		
3	CHK: CJR		,			_
	DRN: DRH					
	DES: DAM					

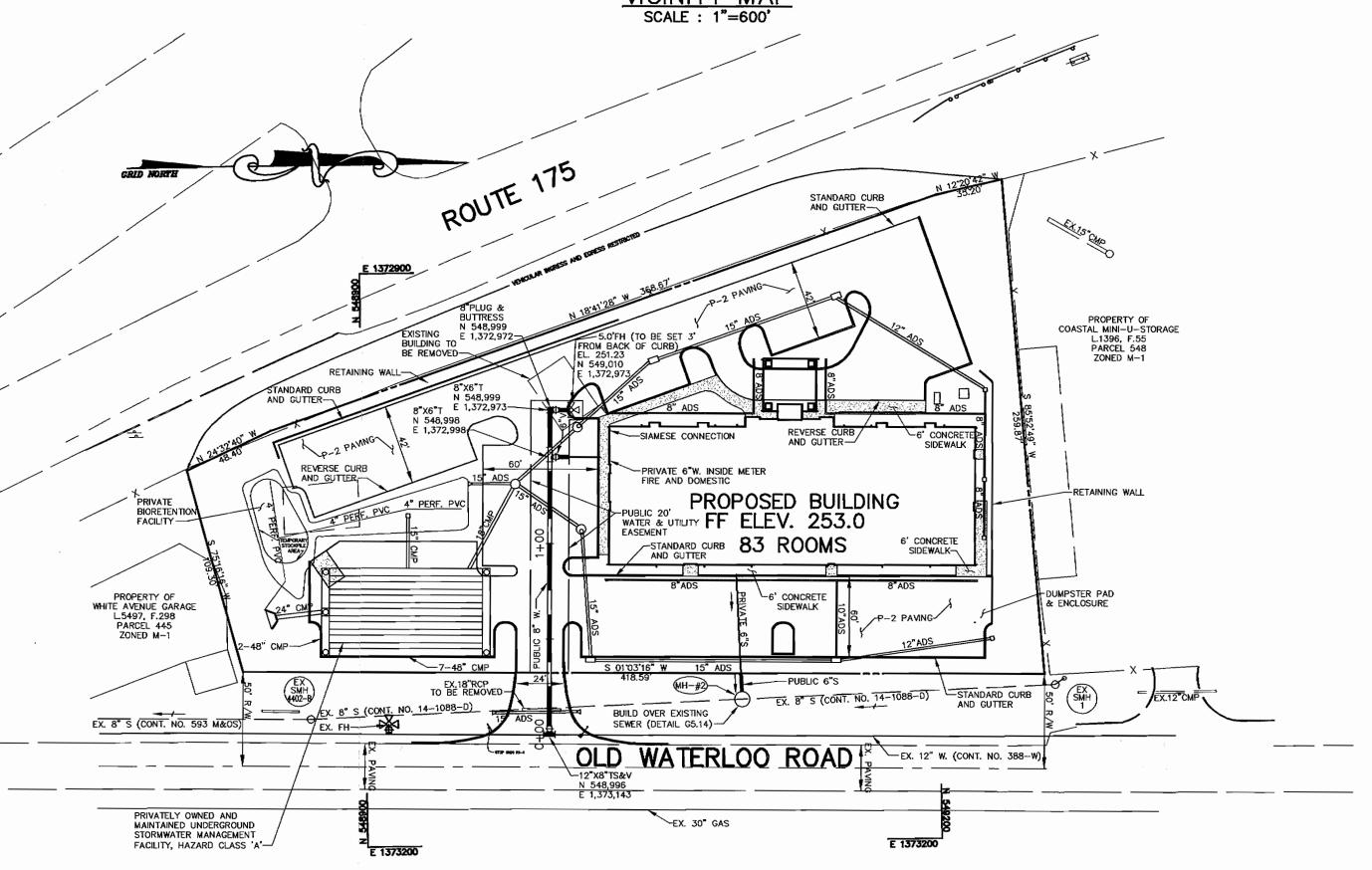
PLAN AND PROFILE OF WATER AND SEWER MAINS

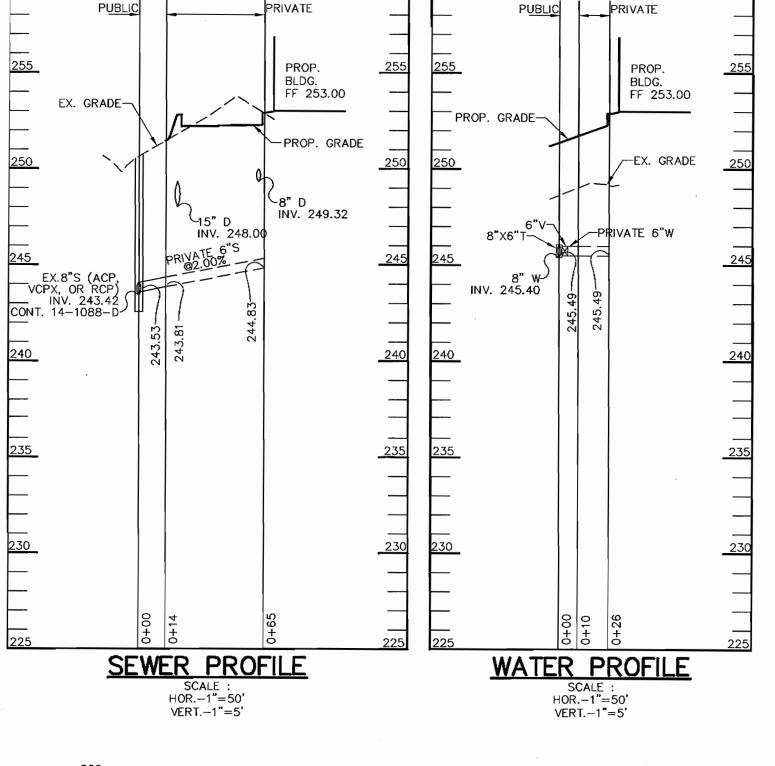
600' SCALE MAP NO. <u>43</u> BLOCK NO. <u>9</u>

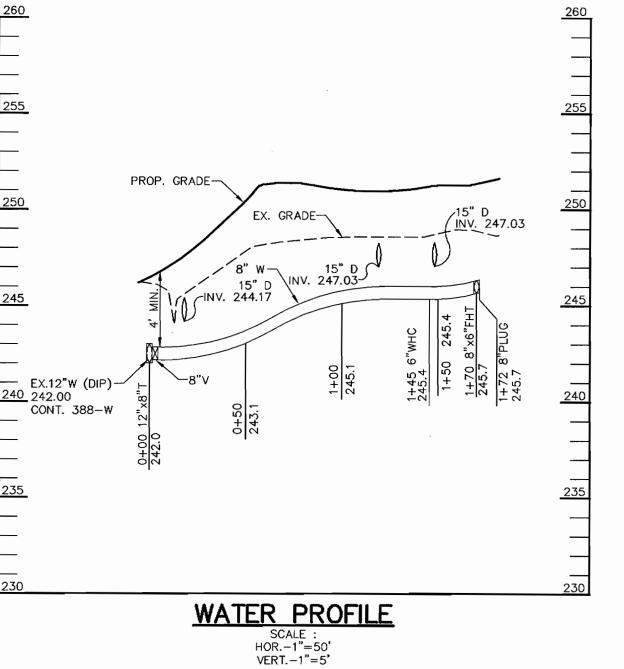
COMFORT SUITES 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 14-4088-D

# WATER AND SEWER EXTENSIONS COMFORT SUITES









SEWER STRUCTURE SCHEDULE				
NO.	NORTHING	EASTING	RIM ELEV.	
2	549096.66	1373125.75	±250.6	

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND

8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900

SCALE AS SHOWN

SHEET \_1\_0F\_1\_

#### GENERAL NOTES

- 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.
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18.114(a) of the Howard County Code.

1-800-252-1133 410-850-4620 410-787-9068 410-313-4900 410-795-1390 1-800-257-7777

410-531-5533 State Highway Administration 1-800-743-0033 / 410-224-9210 Verizon 9. Trees and shrubs are to be protected from damage to the maximum extent. Trees and shrubs located

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#### QUANTITIES

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ITEMS		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER	
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6" WATER	II LF				
6" SEWER	14 LF				
8"X6" T	ι EA.				
6" VALVES	I EA.				
FIRE HYDRANTS	1 EA.				
12"X8" TS&V	1 EA.				
4' DIA. MANHOLES	1 EA.				
8" PLUG & BUTTRESS	1 EA.				
8"×8"T	1 EA				
8" VALVE A	154				

#### NAME OF UTILITY CONTRACTOR

District.

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-03-045

CHECKBOX AS-BUILT DATE SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

NATURAL RESOURCES CONSERVATION SERVICE This plan is approved for soil erosion and sediment control by the Howard Soil Conservation

HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PLANNING & ZONING DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND HOWARD COUNTY, MARYLAND

Patton Harris Rust & Associates,pc 8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900

M. S.	DES: DAI
	DRN: DR
11/3.03	CHK: CJ
many 12	DATE: 01

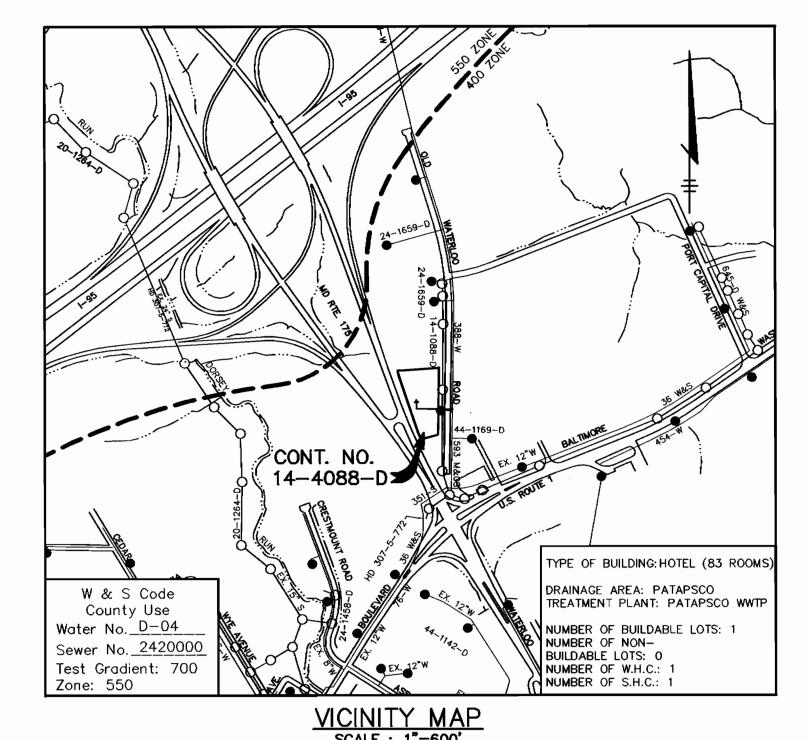
DA IE: 01/13/03	BY	NO.	REVISION	DATE	
DATE: 01/13/03	MAD	$\triangle$	REY. WHC FRON 6" TO 8"		4.23.03
CHK: CJR					
DRN: DRH					
JES. DAW					
DES: DAM					

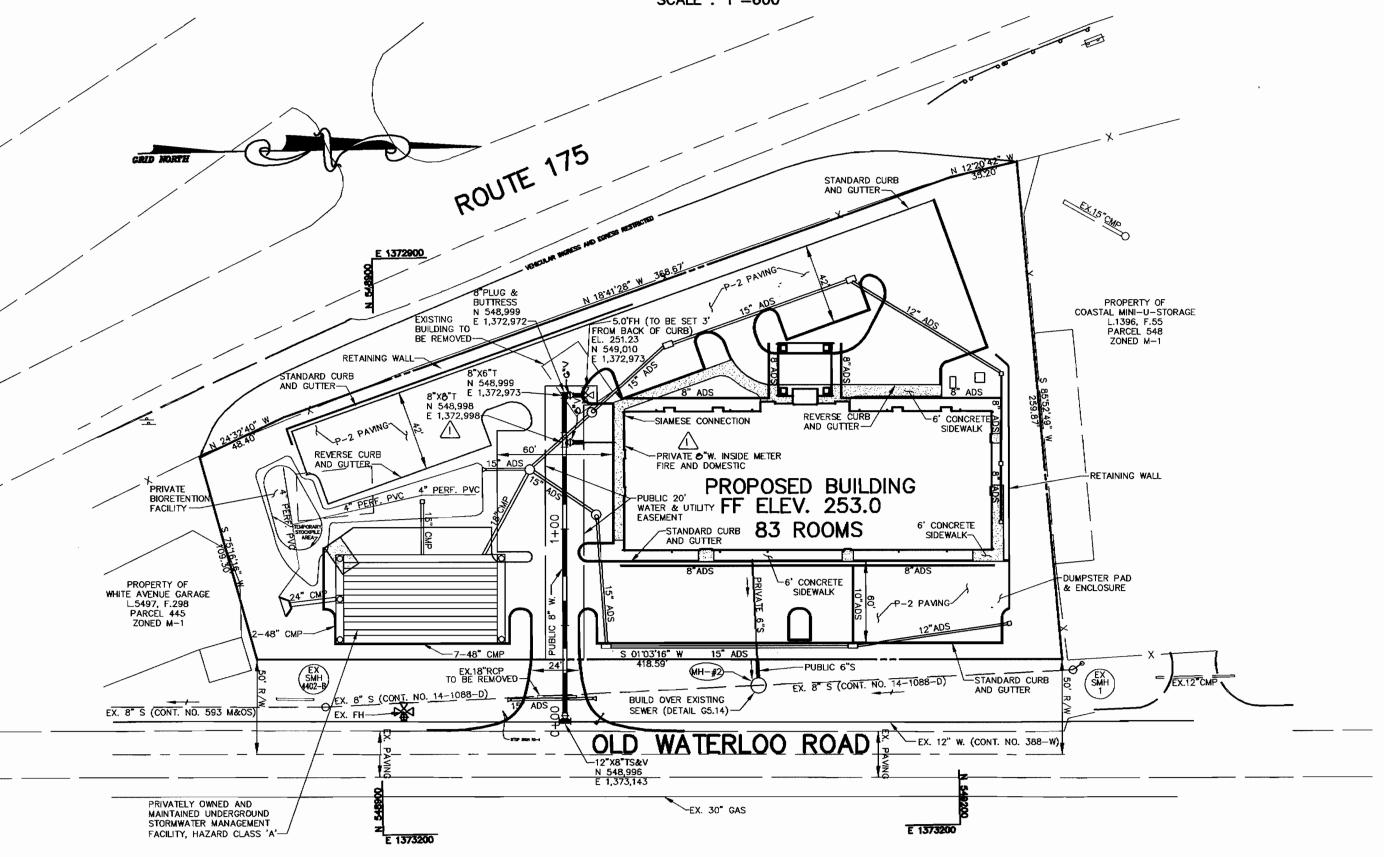
## PLAN AND PROFILE OF WATER AND SEWER MAINS

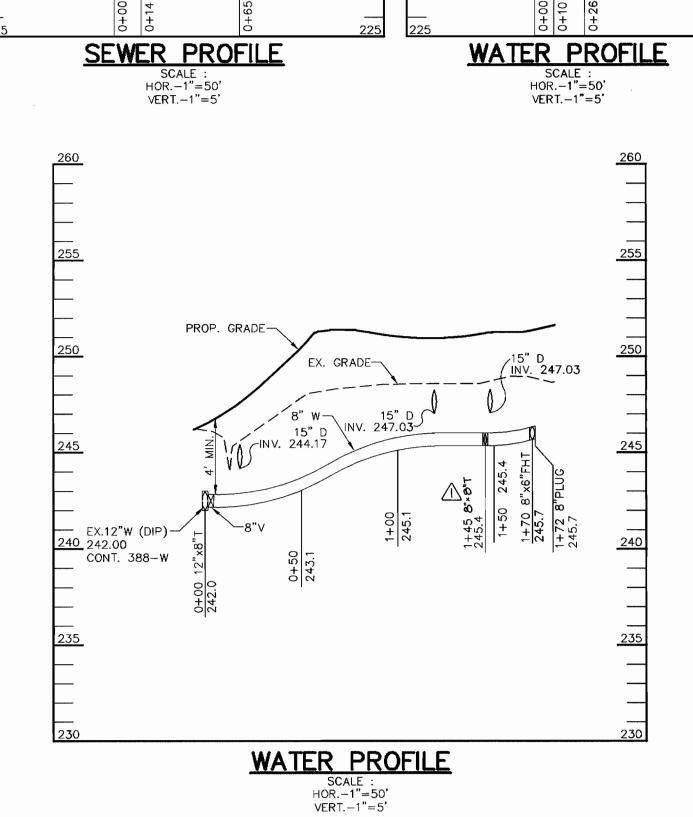
COMFORT SUITES 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 14-4088-D

SCALE AS SHOWN SHEET \_1\_ OF \_1\_

# WATER AND SEWER EXTENSIONS COMFORT SUITES







F 253.00

-PROP. GRADE

INV. 249.32

EX. GRADE-

EX.8"S (ACP, VCPX, OR RCP) INV. 243.42 CONT. 14-1088-D-

FF 253.00

EX. GRADE

PROP. GRADE-

SEWER STRUCTURE SCHEDULE				
NO.	NORTHING	EASTING	RIM ELEV.	
2	549096.66	1373125.75	±250.6	

CHRISTOPHER J. REID #19949

600' SCALE MAP NO. 43 BLOCK NO.