#### **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 supply. 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.
- 3. All vertical controls are based on U.S.G.S. data.
- 4. All pipe elevations shown are invert elevations.
- 5. 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.
- 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. Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

State Highway Administration Baltimore Gas & Electric Co. Contractor Services Baltimore Gas & Electric Co. Underground Damage Control Miss Utiltity

787-9068 1-800-257-7777

531-5533 850-4620

Colonial Pipeline Co. Bureau of Utilities, Howard County Department of Public Works 313-4900

- 9. 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.
- 10. All fill areas within future roadway and under structures to be compacted to a minimum of 95% compaction as determined by AASHTO T-180.
- 11. Valves adjacent to tees shall be strapped to tees.
- 12. All water mains to be D.I.P. Class 52 unless otherwise noted.
- 13. Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise
- 14. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
- 15. 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 Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
- 16. The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five working days before any open cut of any County road or boring/jacking operation in County roads 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.
- 17. The contractor shall not operate any water main valves on the existing
- 18. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
- 19. All water mains shall be D.I.P. and P.V.C. unless otherwise noted.
- 20. All manholes shall be 4'-0" inside diameter unless otherwise noted. 21. Manholes must be precast concrete structure.
- 22. Manholes shown with 12" and 16" area are for brick manholes only.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 98-51 AND FDP-117A-1

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

CHIEF. BUREAU OF UTILITIES

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT

ENGINEERING DIVISION

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND



# AND ASSOCIATES, INC.

Civil Engineers and Land Surveyors 658 Kenilworth Drive, Suite 100 Towson Maryland 21204 (410) 825-8120



#### DESIGNED : K.E. DRAFTED : K.E CHECKED : P.R.C.

(Cont. #24-3498-D)

TYPE OF BLDGS : NO. OF LOTS:

DRAINAGE AREA:

WATER CODE :

NO. OF WATER H.C.: NO. OF SEWER H.C.:

SEWER CODE : TEST GRADIENT ELEV.: TREATMENT PLANT :

LONG REACH

LITTLE PATUXENT WATER RECLAMATION PLANT

SAVAGE, HOWARD COUNTY

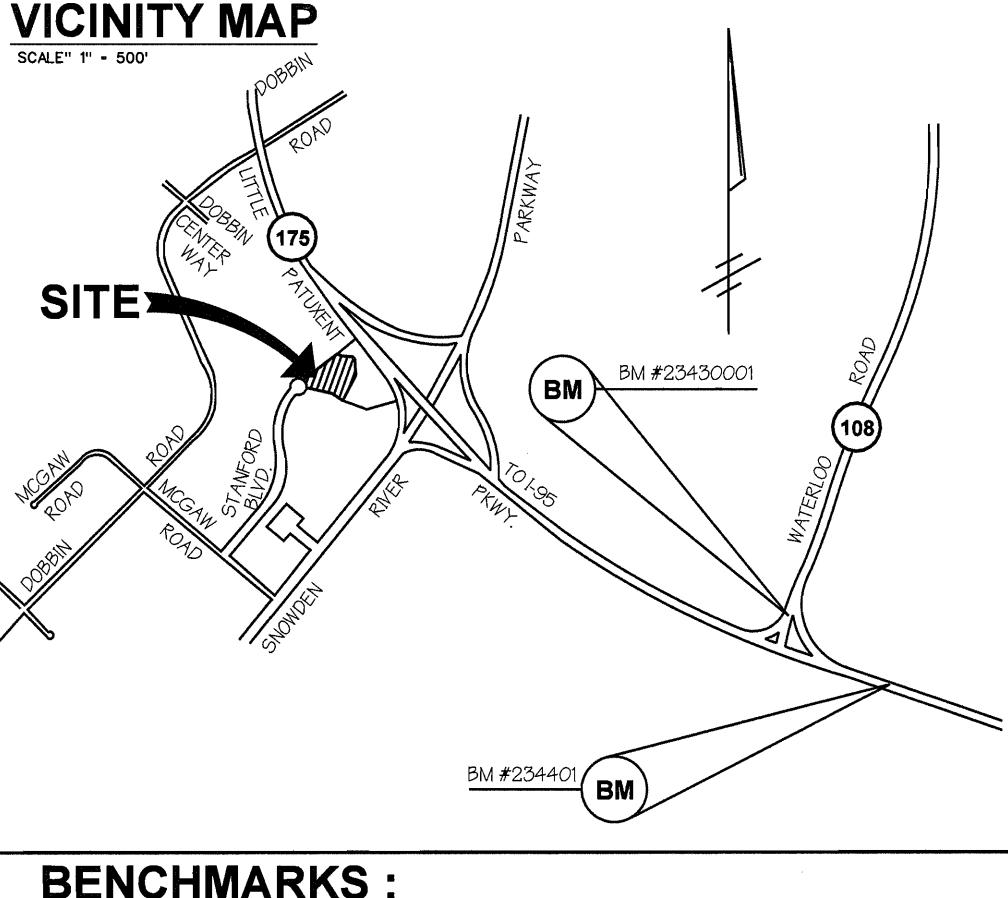
5333000

#### **COVER SHEET, GENERAL NOTES & LOCATION MAP**

CONTRACT NO. 44-3663-D

600 SCALE MAP NO. 36

BLOCK NO. 23 &24



## **BENCHMARKS:**

BM +234401 ELEVATION : 309.49' STANDARD CONCRETE MONUMENT SET FLUSH SURFACE N 491333.018, E 858206.723

BM •23430001 ELEVATION : 288.24' 3/4 " REBAR SET 0.3" BELOW THE SURFACE N 492140.801, E 857226.671

	QUANTITIES ESTIMATED	NTITIES  AS-BUILT		
ITEMS				
		QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER
8" D.I.P. Water Main	562L.F.			
6" D.I.P. Water Main	30 L.F.			
4" D.I.P. Water Main	10 L.F.			
6" Fire Hydrants	2 EACH			
8" PV.C. SANITARY	5 L.F.			
4 MANHOLE PRECAST	! EACH			
DROP CONNECTION 'A'	1 EACH			

NAME OF UTILITY CONTRACTOR : SURVEY AND DRAFTING DIVISION AS-BUILT DATE

ELECTION DISTRICT \*6

BY	NO.	REVISION	DATE

**PUBLIC WATER & SEWER MAIN** HOMEGATE STUDIOS AND SUITES

**COLUMBIA CORPORATE PARK PARCEL A-27** HOWARD COUNTY, MARYLAND

> SHEET 1 OF 2 P/N 8552- 8552publicwater.s01

INDEX OF SHEETS

LOCATION MAP

SCALE: 1" = 600'

WATER & SEWER CONSTRUCTION PLANS

COLUMBIA CORPORATE PARK

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PARCEL A-27

**CONTRACT NO. 44-3663-D** 

SHEET NO. TITLES COVER SHEET, GENERAL NOTES & LOCATION MAP PLAN VIEW & WATER MAIN PROFILES

GEORGE W. STEPHENS, JR.

(Cont. #24-1882-D)

(Cont. #483-D W & S) \

(Cont. #24-1882-D) -

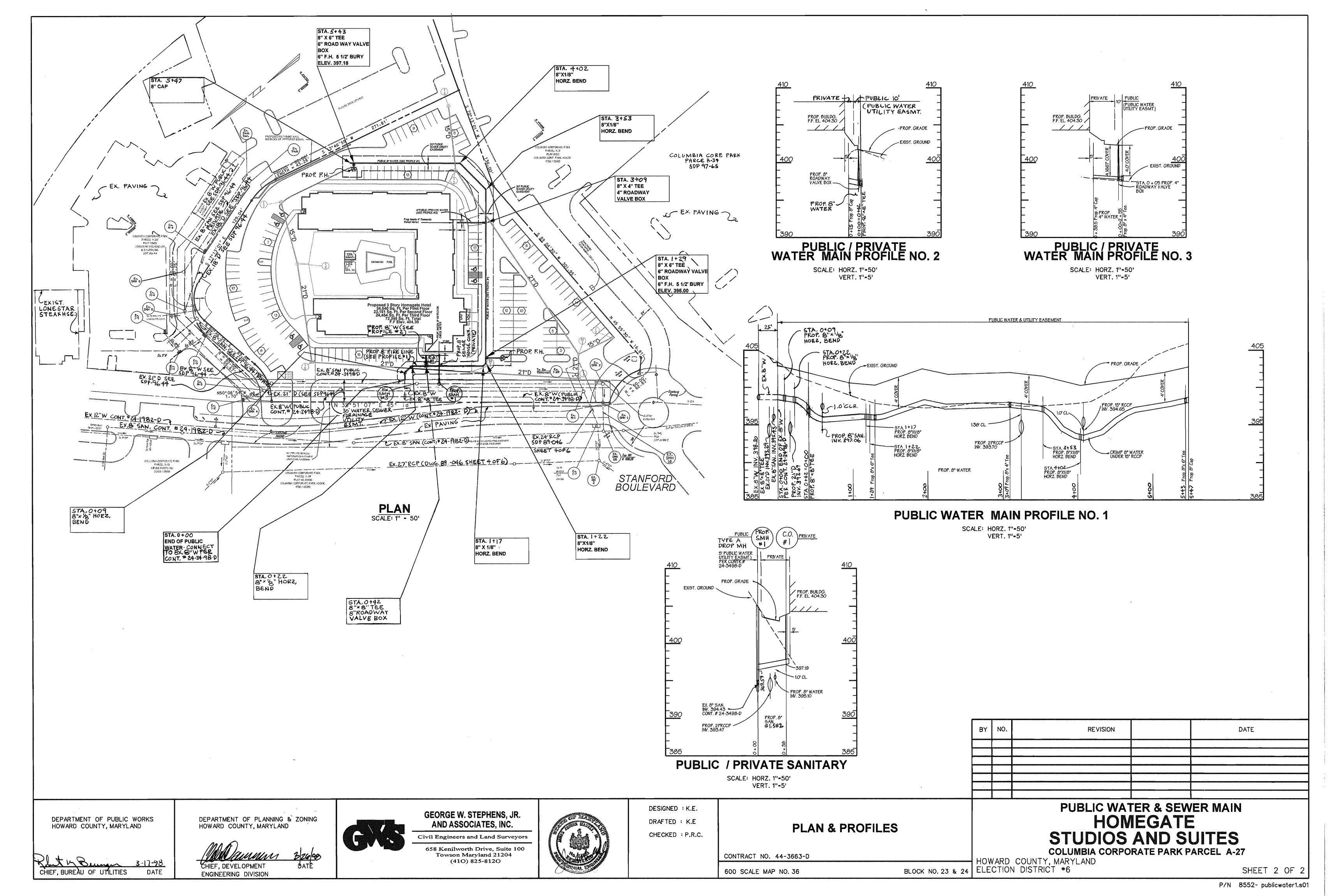
(Cont. #483-D)

(Cont. #483-D)

EX. 12" Wat.

EX. 16" Wat. (Cont. #483-D)

EX. 8" San.



## 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 supply. 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.
- 3. All vertical controls are based on U.S.G.S. data.
- 4. All pipe elevations shown are invert elevations.
- 5. 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.
- 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. Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

State Highway Administration
Baltimore Gas & Electric Co. Contractor Services Baltimore Gas & Electric Co. Underground Damage Control Miss Utiltity

850-4620 787-9068 1-800-257-7777

Colonial Pipeline Co. Bureau of Utilities, Howard County Department of Public Works 313-4900

- 9. 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.
- 10. All fill areas within future roadway and under structures to be compacted to a minimum of 95% compaction as determined by AASHTO T-180.
- 11. Valves adjacent to tees shall be strapped to tees.
- 12. All water mains to be D.I.P. Class 52 unless otherwise noted.
- 13. Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise
- 14. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
- 15. 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 Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
- 16. The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five working days before any open cut of any County road or boring/jacking operation in County roads for laying water/sewer mains or house connections. The approval of these drawings of the Howard County Code.
- 17. The contractor shall not operate any water main valves on the existing
- 18. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
- 19. All water mains shall be D.I.P. and P.V.C. unless otherwise noted. 20. All manholes shall be 4'-0" inside diameter unless otherwise noted.
- 21. Manholes must be precast concrete structure.
- 22. Manholes shown with 12" and 16" area are for brick manholes only.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 98-51 AND FDP-117A-1

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

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

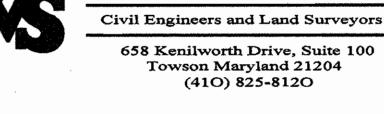
DATE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND





**GEORGE W. STEPHENS, JR.** 

AND ASSOCIATES, INC.

SHEET NO.

EX. 8º San.

EX. 12" Wat.

EX. 16° Wat. (Cont. #483-D)~

EX. 8° San.

(Cont. #24-1882-D) ~

(Cont. #483-D)/

(Cont. #24-1882-D)

(Cont. #483-D W & S)\_



DESIGNED : K.E. DRAFTED : K.E CHECKED : P.R.C.

(Cont. #24-3498-D)

(Cont. #24-3498-D)

TYPE OF BLDGS : NO. OF LOTS :

DRAINAGE AREA :

WATER CODE :

**LOCATION MAP** 

SCALE: 1" = 600'

**WATER & SEWER CONSTRUCTION PLANS** 

COLUMBIA CORPORATE PARK

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

PARCEL A-27

CONTRACT NO. 44-3663-D

INDEX OF SHEETS

PLAN VIEW & WATER MAIN PROFILES

TITLES

COVER SHEET, GENERAL NOTES & LOCATION MAP

SEWER CODE :

NO. OF WATER H.C.: NO. OF SEWER H.C.:

TEST GRADIENT ELEV .:

TREATMENT PLANT :

LONG REACH

LITTLE PATUXENT WATER RECLAMATION PLANT SAVAGE, HOWARD COUNTY

5333000 700

COVER SHEET, **GENERAL NOTES & LOCATION MAP** 

CONTRACT NO. 44-3663-D ~ 600 SCALE MAP NO. 36 BLOCK NO. 23 &24

SITE BM #2343000° **BENCHMARKS:** BM \*234401 ELEVATION : 309.49' STANDARD CONCRETE MONUMENT SET FLUSH SURFACE

N 491333.018, E 858206.723

BM \*23430001 ELEVATION : 288.24' 3/4 " REBAR SET 0.3" BELOW THE SURFACE N 492140.801, E 857226.671

#### **QUANTITIES** AS-BUILT **QUANTITIES ITEMS** ESTIMATED MANUFACTURER/ SUPPLIER **QUANTITIES** TYPE 8" D.I.P. Water Main 562L.F. D.I.C. U.S. PIPE &FOUNDRY 574 L.F. 30 L.F. 6" D.I.P. Water Main D. I.C. 26 L.F. U.S. PIPE & FOUNDRY 4" D.I.P. Water Main 10 L.F. O. I.C. U.S. PIPE & FOUNDRY 10 L.F. MUELLER CO./BELAIR RDS 2 EACH 6" Fire Hydrants ZEA 5:6" BURY F.H 8" P.V.C. SANITARY J-M MANUFACTURING 5 L.F. 5 L.F. P.V.C. S.D.R.-35 4 MANHOLE PRECAST ATLANTIC CONCRETE PRODU I EACH PRE-CAST I EA J.M. MANUFACTURING DROP CONNECTION 'A' 1 EACH LEA P.V.C.

BY **REVISION** DATE AS-BUILT CONDITIONS ADDED TO PLAN 5 99

> **PUBLIC WATER & SEWER MAIN** HOMEGATE STUDIOS AND SUITES

COLUMBIA CORPORATE PARK PARCEL A-27 HOWARD COUNTY, MARYLAND

NAME OF UTILITY CONTRACTOR : W.F. WILSON

**VICINITY MAP** 

SCALE" 1" - 500'

SURVEY AND DRAFTING DIVISION AS-BUILT DATE 5 99

ELECTION DISTRICT #6

SHEET 1 OF 2

