

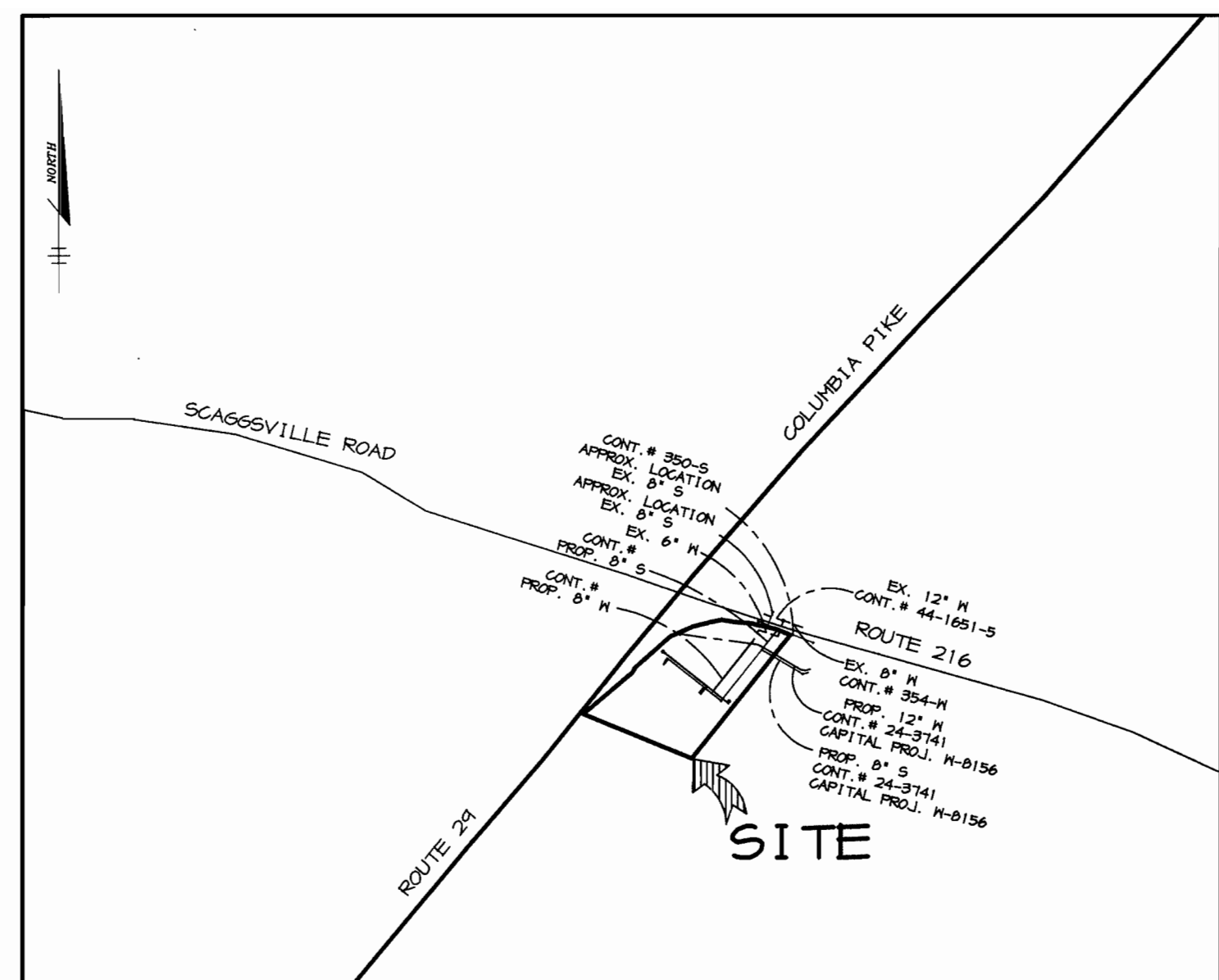
WATER & SEWER EXTENSIONS

FOOD LION P-3000

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-3758-D



BENCHMARKS

HO. CO. SURVEY CONTROL STATION: 46BA
N 537,546 E 1,339,849

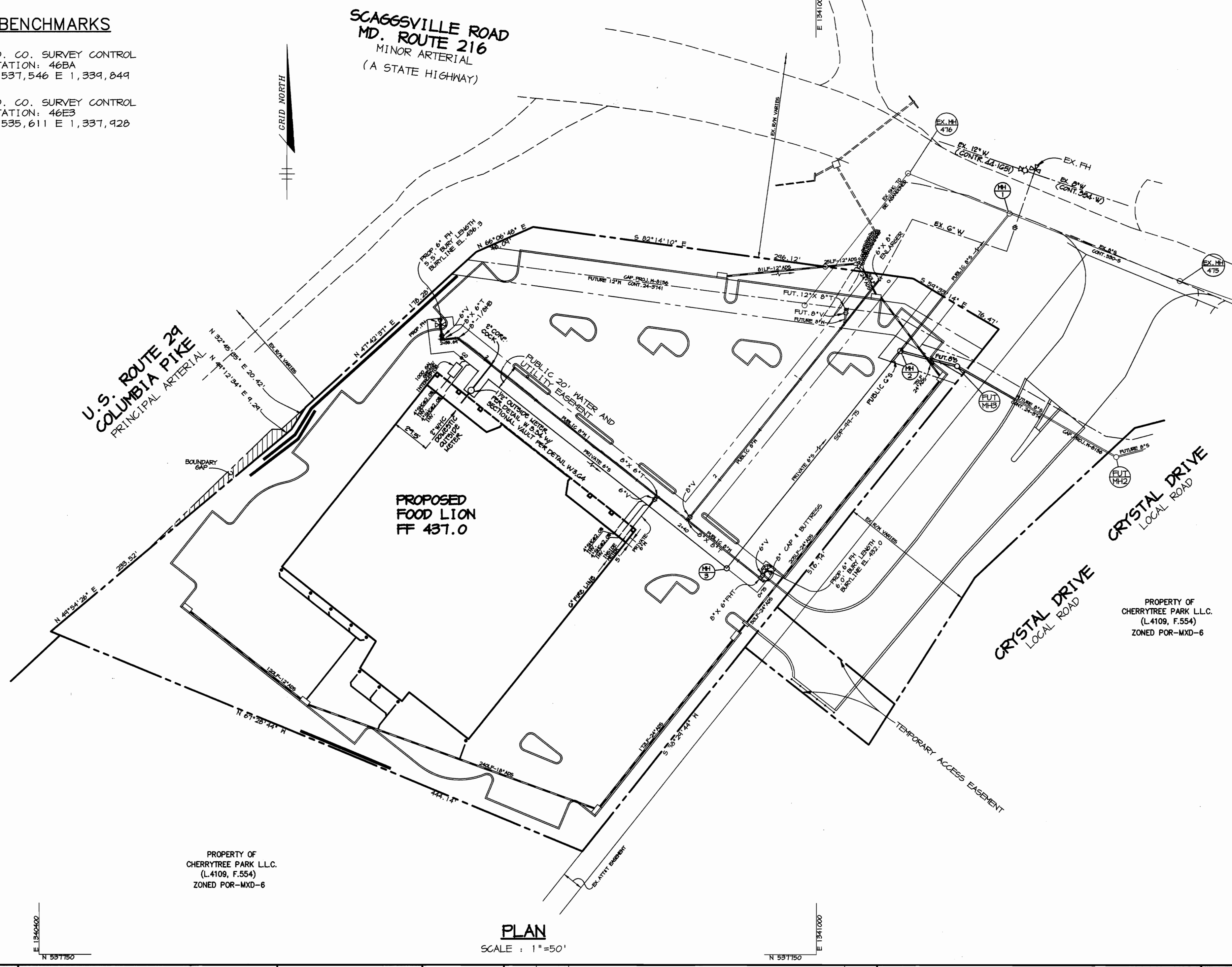
HO. CO. SURVEY CONTROL STATION: 46E3
N 535,611 E 1,337,928

TYPE OF BUILDING: GROCERY STORE
DRAINAGE AREA: PATUXENT TREATMENT PLANT
LITTLE PATUXENT WWTP
NUMBER OF BUILDABLE LOTS: N/A
NUMBER OF NON-BUILDABLE LOTS: N/A
NUMBER OF H.C.G.: 1
NUMBER OF S.H.C.: 1

VICINITY MAP
SCALE: 1"=600'

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	554 LF			
6" WATER	21 LF			
FIRE HYDRANTS	2 EA.			
6" VALVES	3 EA.			
8" VALVES	1 EA.			
8" X 6" T	2 EA.			
8" X 8" T	1 EA.			
6" X 8" ENLARGER	1 EA.			
8" 1/8 HB	1 EA.			
2" WATER	26 LF			
8" SEWER	135 LF			
TYPE "B" DROP MH	1 EA.			
4" SEWER	11 LF			
4" DIA MANHOLE	1 EA.			



- GENERAL NOTES**
- 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.
 - 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 five working days before starting work shown on these plans:
 - State Highway Administration 531-5533
 - Baltimore Gas & Electric Co. Contractor Services 850-4620
 - Baltimore Gas & Electric Co. Underground Damage Control 787-9068
 - Miss Utility 1-800-257-7177
 - Colonial Pipeline Co. 785-1390
 - Bureau of Utilities, Howard County Department of Public Works 313-4400
 - 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.
 - All water mains to be D.I.P. Glass 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 Standard Detail 65.52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
 - 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.
 - All sewer mains shall be D.I.P. 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 M.T. in plan and profile shall have watertight frame and cover is 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 that cellar cannot be served.
 - Manholes can be either brick or precast concrete structures.
 - Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
 - The fire hydrant shall be installed as per standard detail M.1.11.
 - Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
 - For sprinkler systems, all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter.
 - The contractor shall notify the Bureau of Highways, Howard County, at (410) 315-7450 at least five (5) 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 DPN requirements per Section 18.114(a) of the Howard County Code.
 - Howard County DPN is hereby granted permission to access private lots shown on these plans in order to maintain public water and sewer house connections at the curb stops and/or cleanouts.

NAME OF UTILITY CONTRACTOR:

Sediment control measures for this contract will be implemented in accordance with Section 214 of the Specifications and as shown on SDP-99-75

Review for Howard Soil Conservation District and meets technical requirements.

Cheryl Simmons 6/16/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John K. Brantley 6/16/99
HOWARD SOIL CONSERVATION DISTRICT DATE

CHECKBOX

AS-BUILT DATE

SURVEY AND DRAFTING DIVISION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282
98372 WSL.DWG

Arthur E. Muegge # 8707

DATE: 5/21/99

BY NO. REVISION DATE

PLAN
SCALE: 1"=50'

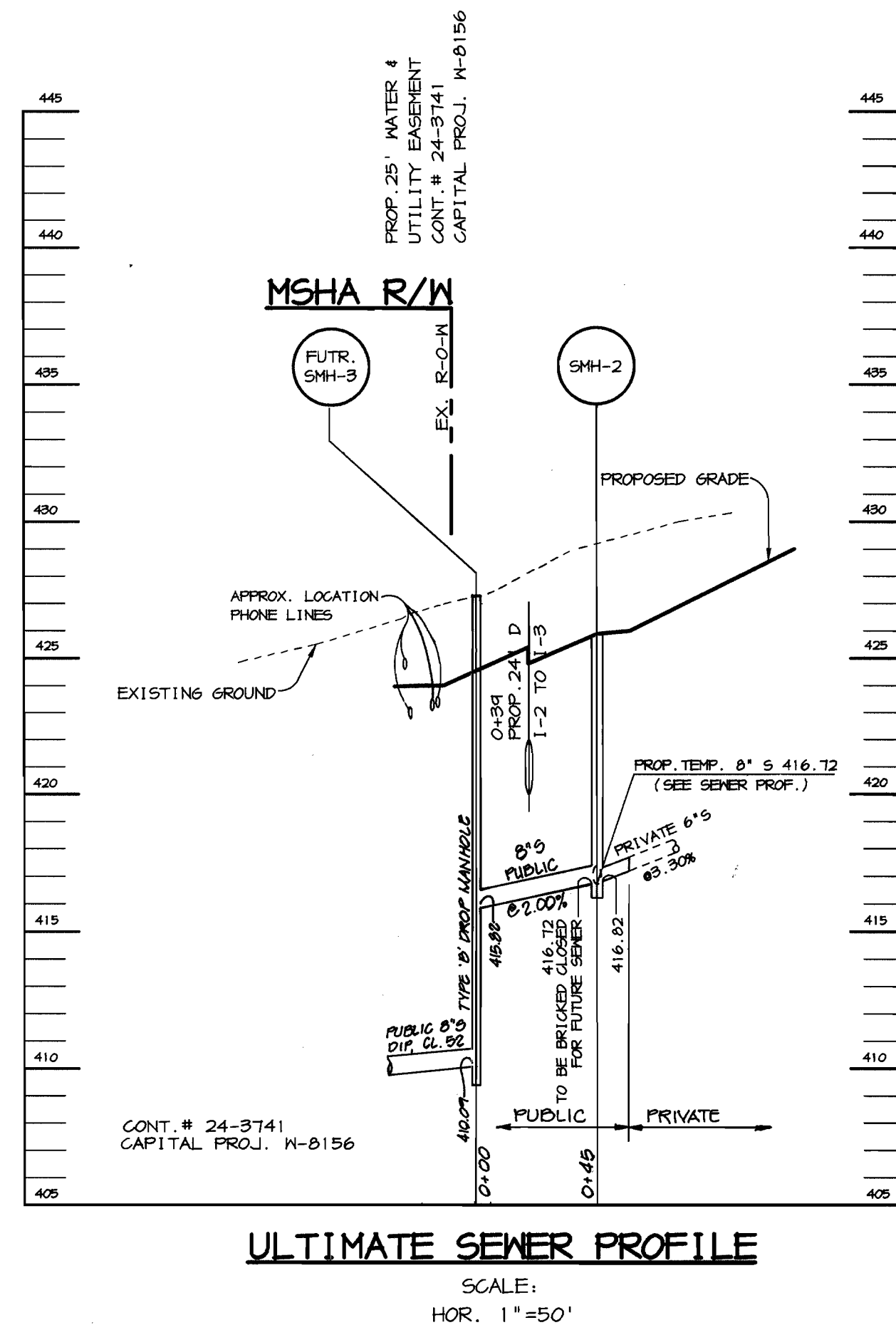
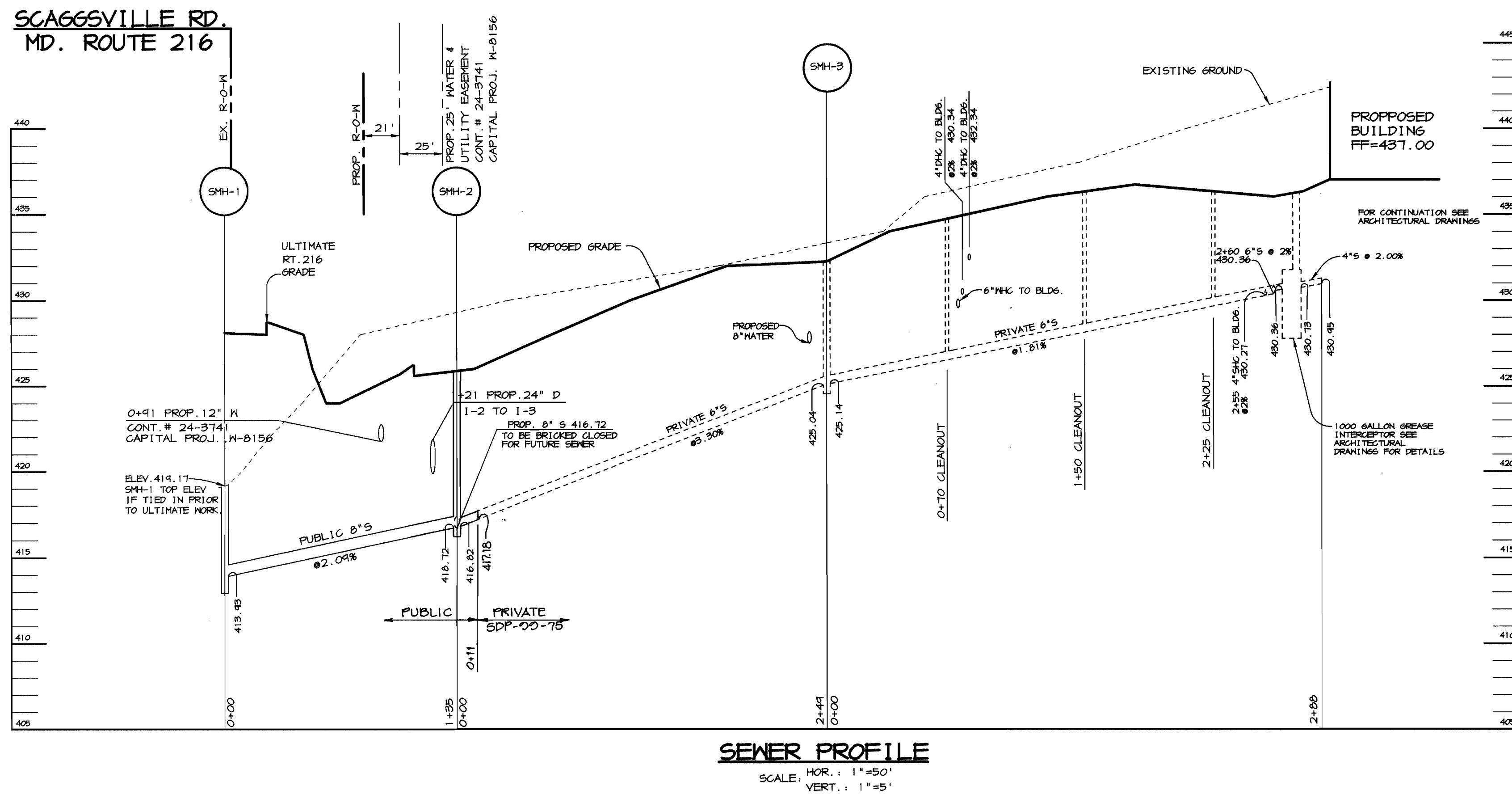
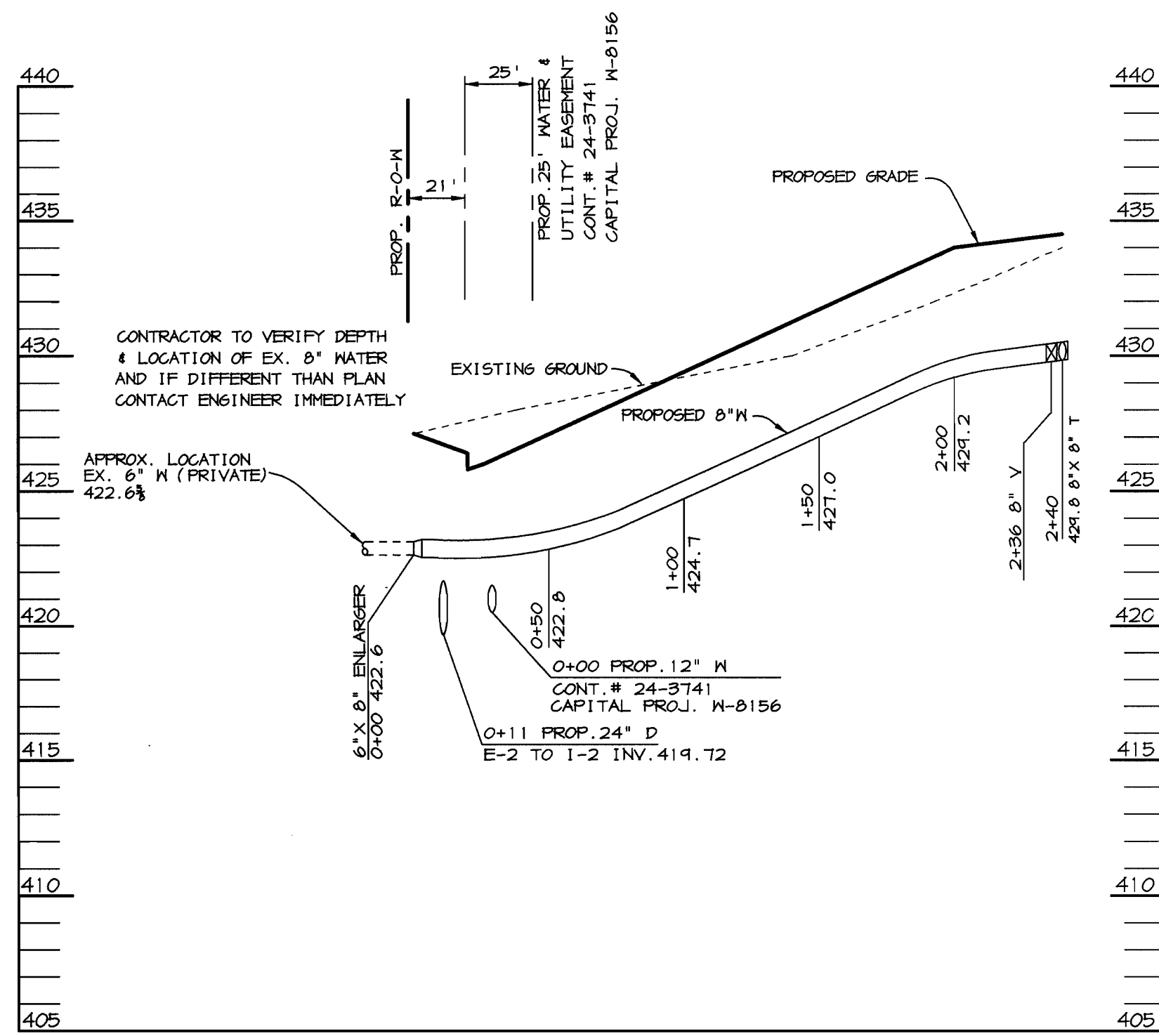
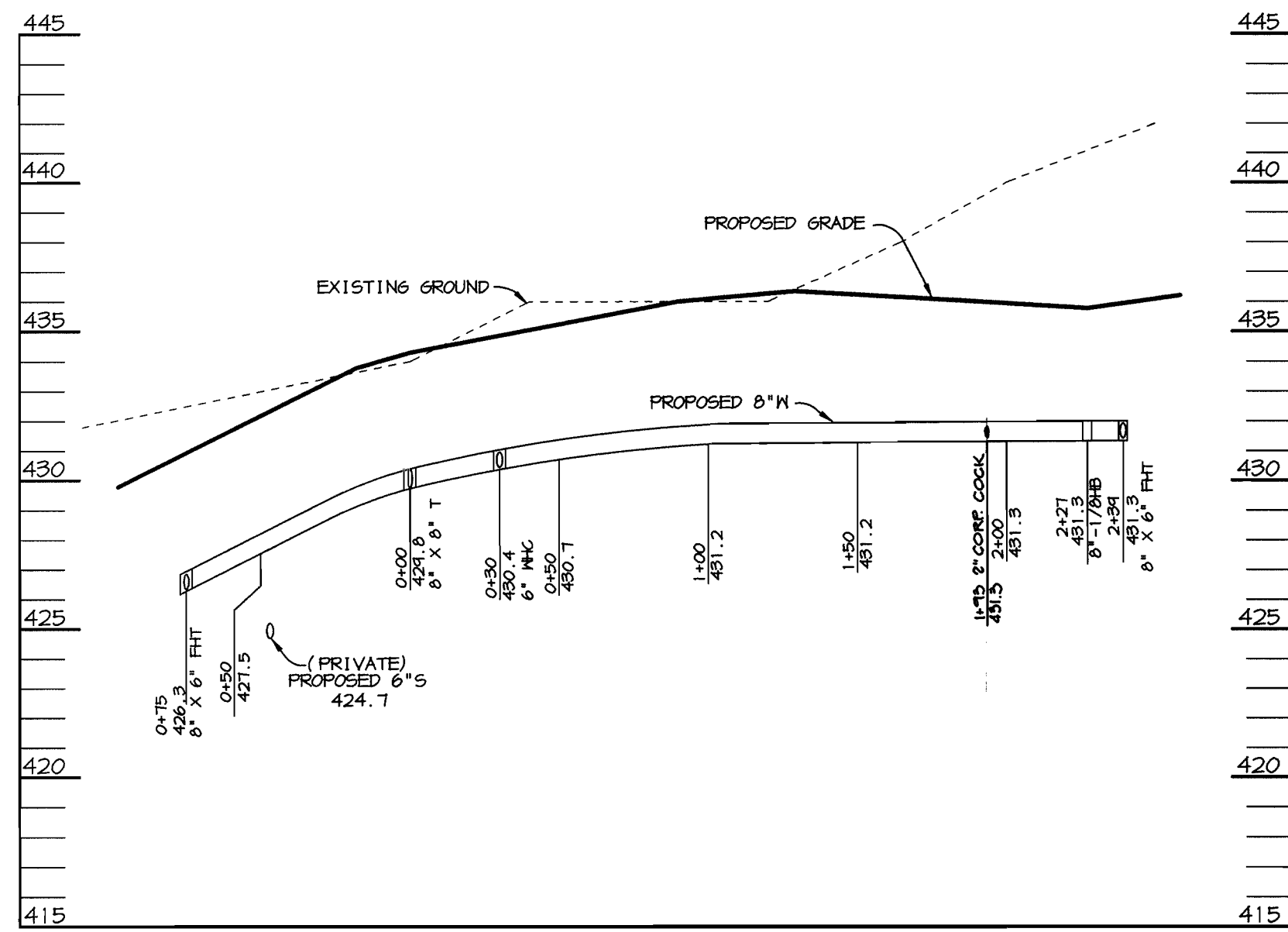
PLAN OF WATER MAIN & SEWER MAINS

600' SCALE MAP NO. 46 BLOCK NO. 4

FOOD LION P-3000
TAX MAP 46, BLOCK 4, PARCEL 240
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3758-D

SCALE AS SHOWN

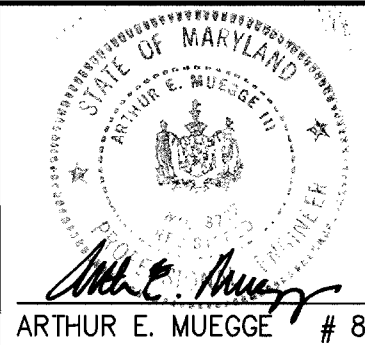
SHEET 1 OF 2



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

RIEMER MUEGGE & ASSOCIATES, INC.
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tel 410.997.8900 fax 410.997.9282
98872 WS2.DWG



DES: CJR					
DRN: DRD					
CHK:					
DATE: 5/21/99					
BY	NO.	REVISION	DATE		

WATER & SEWER PROFILES

600' SCALE MAP NO. 46 BLOCK NO. 4

FOOD LION P-3000
TAX MAP 45, BLOCK 4, PARCEL 240
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3758-D

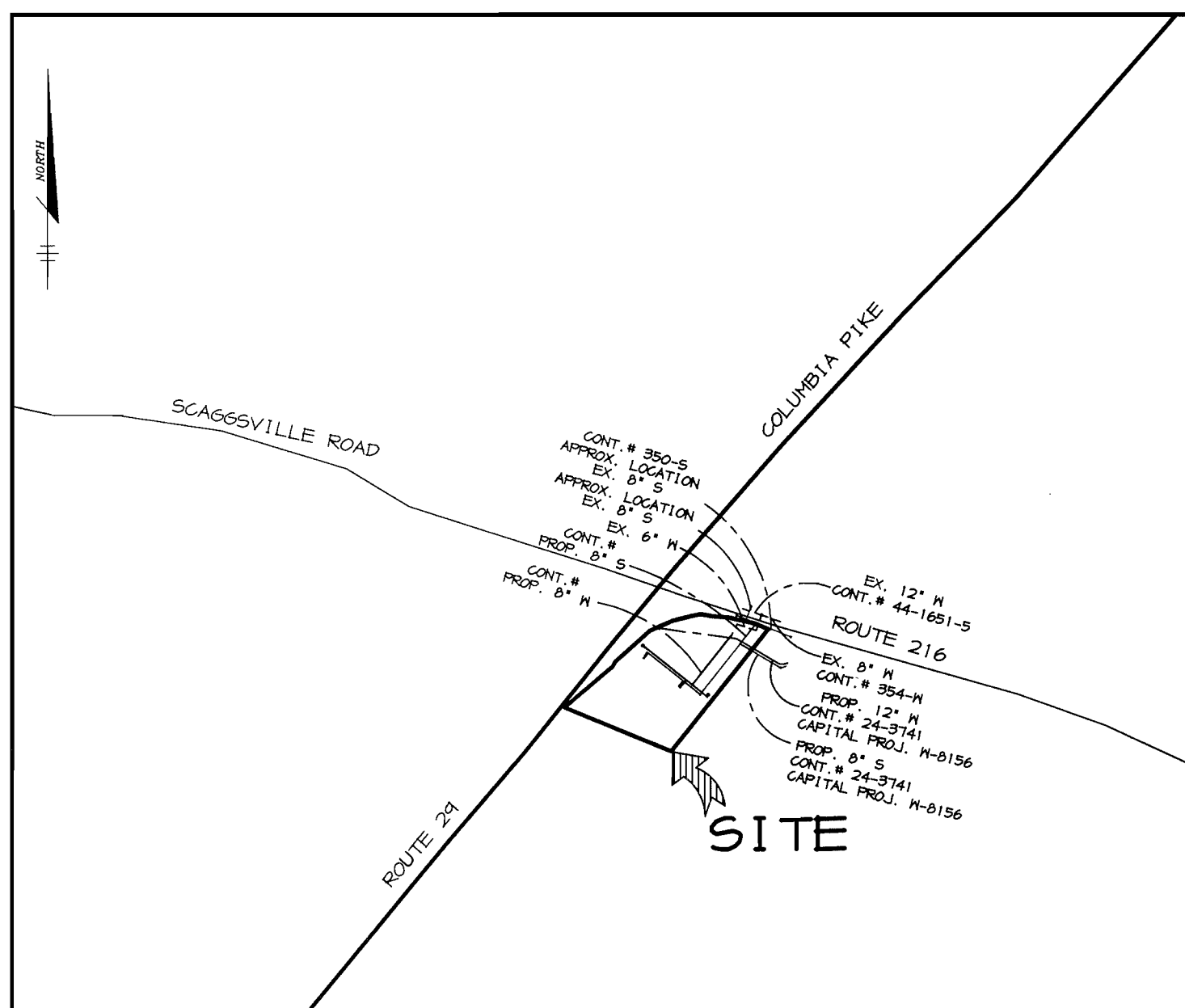
SCALE
AS
SHOWN

SHEET
2 OF 2

WATER & SEWER EXTENSIONS

FOOD LION P-3000

6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3758-D



N & S Code
County Use
Water No. E-10
Sewer No. 1602000
Test Gradient: 700
Zone: 550

TYPE OF BUILDING: GROCERY STORE
DRAINAGE AREA: PATUXENT TREATMENT PLANT
LITTLE PATUXENT WWTP
NUMBER OF BUILDABLE LOTS: N/A
NUMBER OF NON-BUILDABLE LOTS: N/A
NUMBER OF M.H.C.: 1
NUMBER OF S.H.C.: 1

BENCHMARKS

HO. CO. SURVEY CONTROL STATION: 46BA
N 537,546 E 1,334,849

HO. CO. SURVEY CONTROL STATION: 46E3
N 535,611 E 1,337,928

VICINITY MAP

SCALE: 1"=600'

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	554 LF	560 LF	D.I.P. CL52	M&C SALES GRIFFIN
6" WATER	21 LF	27 LF	D.I.P. CL52	M&C SALES GRIFFIN
FIRE HYDRANTS	2 EA.	2 EA.		M&C SALES KENNEDY
6" VALVES	3 EA.	3 EA.	TEE O.I.	M&C SALES KENNEDY TYLER
8" VALVES	1 EA.	2 EA.	D.I.P.	M&C SALES TYLER
8" X 6" T	2 EA.	2 EA.		M&C SALES TYLER
8" X 8" ENLARGER	1 EA.	2 EA.		M&C SALES TYLER
8" 1/8 HB	1 EA.	2 EA.	D.I.P.	M&C TYLER
2" WATER	28 LF	24 LF	K TYPE COPPER	M&C
8" SEWER	135 LF	46 LF	P.V.C.	M&C WARGO
TYPE "B" DROP MH	1 EA.	0		
6" SEWER	11 LF	101 LF	P.V.C.	M&C WARGO CONTRACTORS PRECAST COPP.
4" DIA. MANHOLE	1 EA.	1 EA.	PRECAST	M&C TYLER
8" X 6" FIRE HYDRANT TEE	1 EA.	1 EA.	D.I.P.	M&C TYLER
8" X 8" SLEEVE	1 EA.	1 EA.	D.I.P.	M&C TYLER

NAME OF UTILITY CONTRACTOR: WHITWORTH

Sediment control measures for this contract will be implemented in accordance with Section 214 of the Specifications and as shown on SDP-94-75

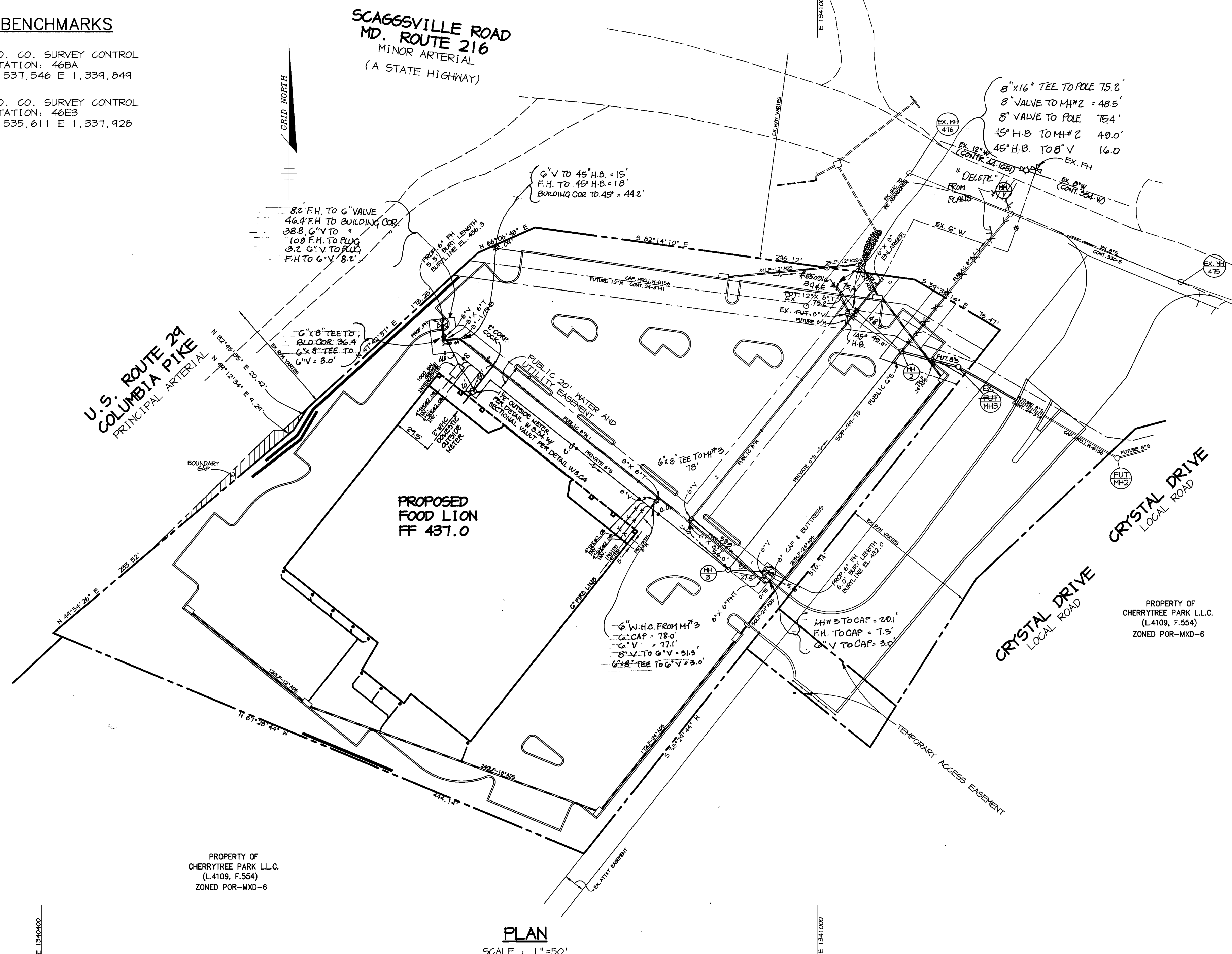
CHECKBOX
AS-BUILT DATE: MAY 25, 2000
SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

Chris Summers 6/16/99 DATE
NATURAL RESOURCES CONSERVATION SERVICE

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

John K. Blanton 6/16/99 DATE
HOWARD SOIL CONSERVATION DISTRICT



PLAN
SCALE: 1"=50'

GENERAL NOTES

- 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.
- 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 five working days before starting work shown on these plans:
State Highway Administration 531-5533
Baltimore Gas & Electric Co. Contractor Services 850-4620
Baltimore Gas & Electric Co. Underground Damage Control 787-4068
Miss Utility 1-800-257-7777
Colonial Pipeline Co. 785-1350
Bureau of Utilities, Howard County Department of Public Works 313-4400
- 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.
- 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 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.
- All sewer mains shall be D.I.P. 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 M.T. in plan and profile shall have watertight frame and covers, Standard Detail 65.52. Where watertight manhole frame and cover is 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 that cellar cannot be served.
- Manholes can be either brick or precast concrete structures.
- Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
- The fire hydrant shall be installed as per standard detail M.I.11.
- Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
- For sprinkler systems, all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter.
- The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-7450 at least five (5) 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.
- Howard County DPW is hereby granted permission to access private lots shown on these plans in order to maintain public water and sewer house connections at the curb stops and/or cleanouts.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert Raimon 6-10-99 DATE
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John Summers 6/17/99 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282
98372 WSI.DWG

Arthur E. Muegge # 8707

DES: CJR
DRN: DRD
CHK:
DATE: 5/21/99

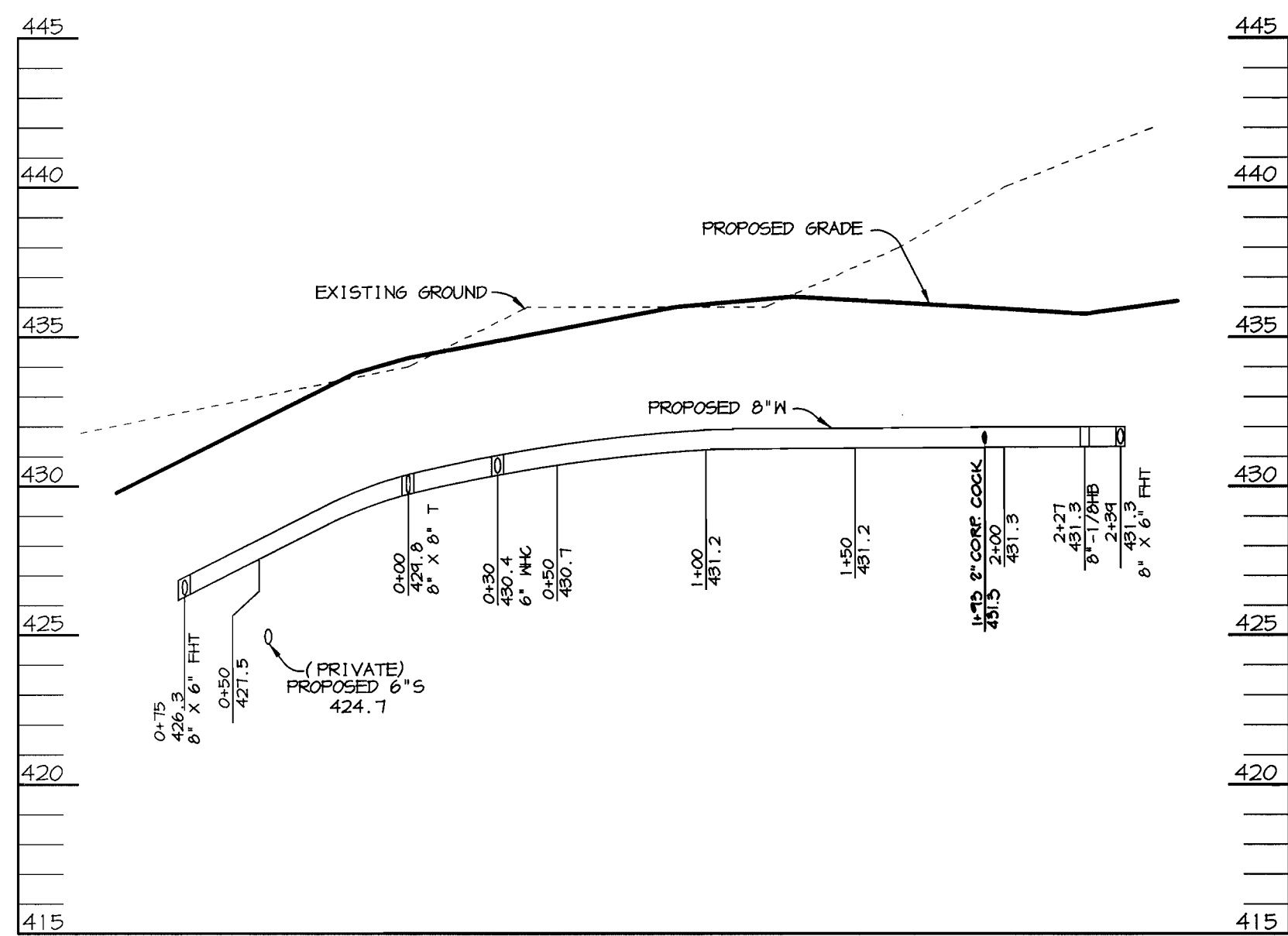
K.C.I. 1 AS BUILT CONDITIONS ADDED TO PLAN
BY NO. REVISION DATE

PLAN OF WATER MAIN & SEWER MAINS

600' SCALE MAP NO. 46 BLOCK NO. 4

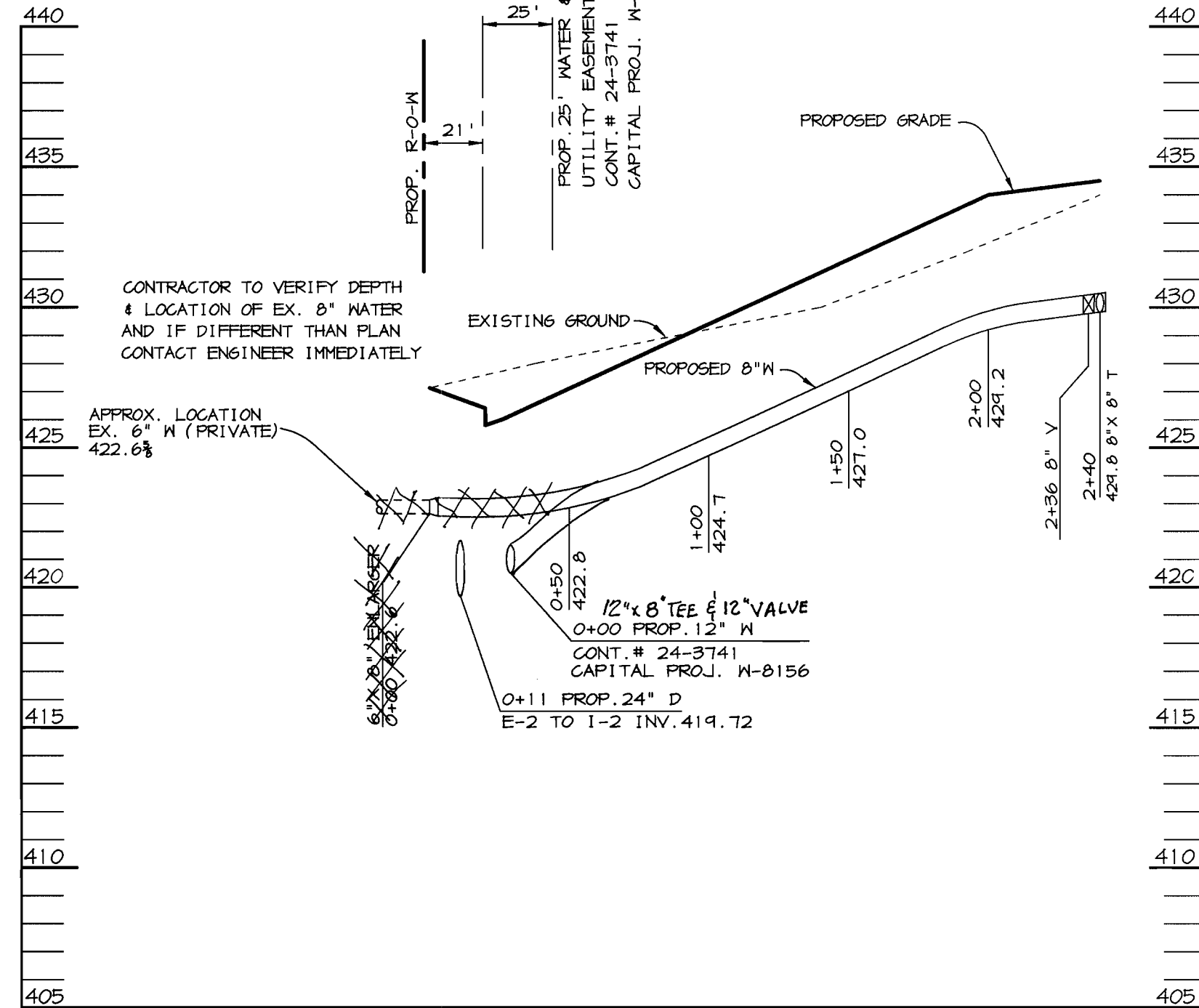
FOOD LION P-3000
TAX MAP 46, BLOCK 4, PARCEL 240
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3758-D

SCALE AS SHOWN
SHEET 1 OF 2



WATER PROFILE

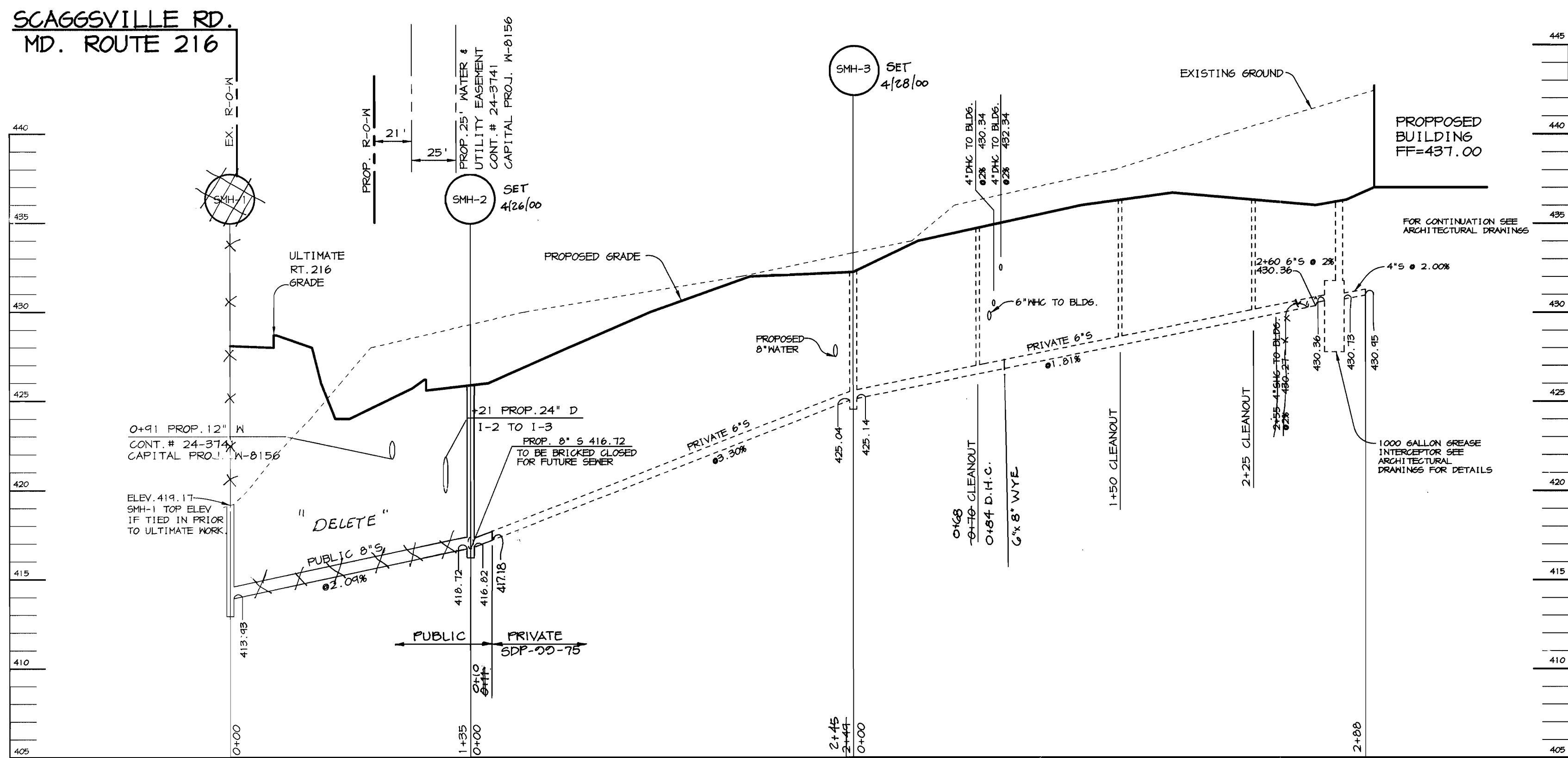
SCALE:
HOR. 1"=50'
VERT. 1"=5'



WATER PROFILE

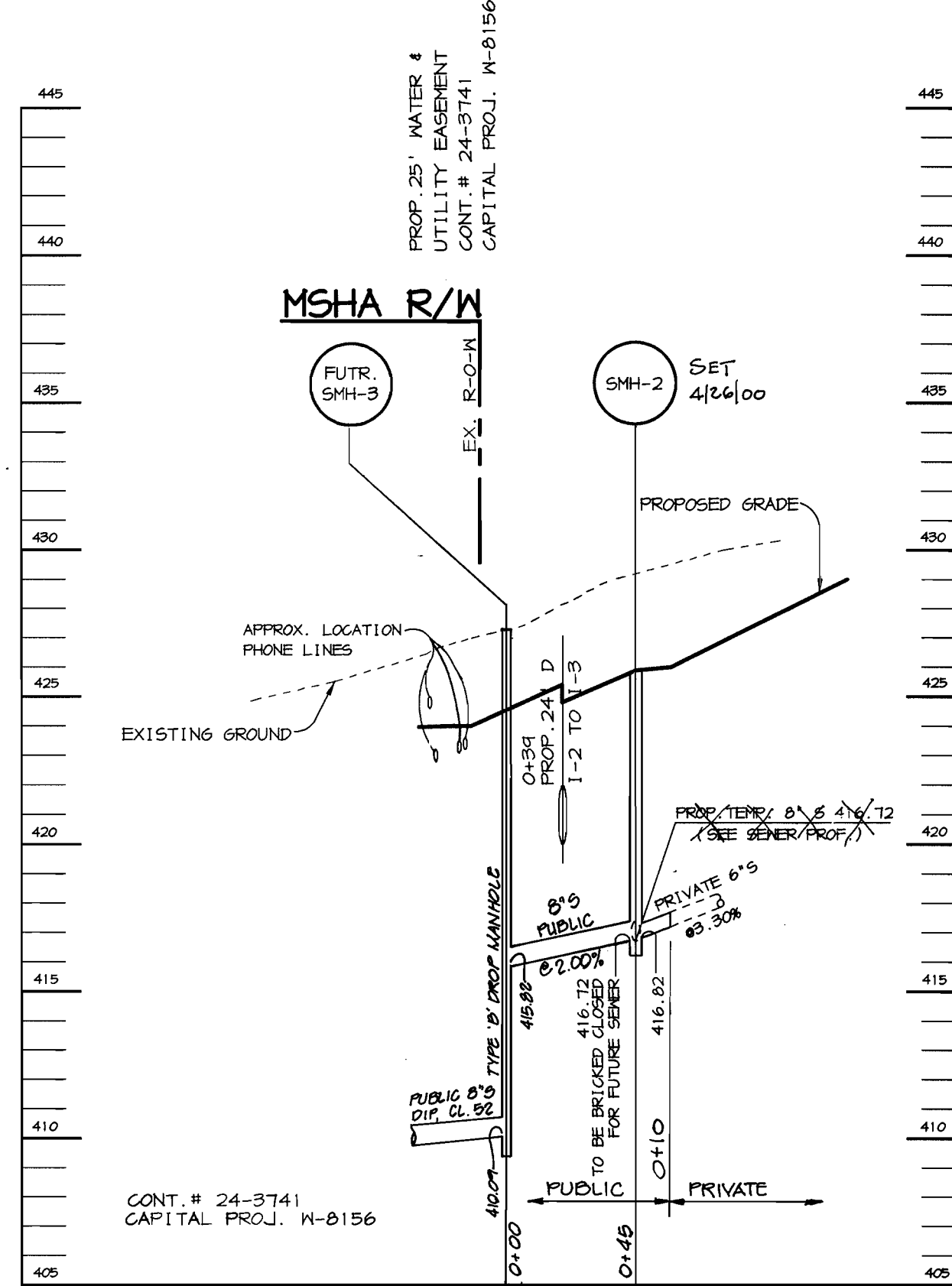
SCALE:
HOR. 1"=50'
VERT. 1"=5'

**SCAGGSVILLE RD.
MD. ROUTE 216**



SEWER PROFILE

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



ULTIMATE SEWER PROFILE

SCALE:
HOR. 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

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ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
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tel 410.997.8900 fax 410.997.9282
98372 WS2.DWG

ARTHUR E. MUEGGE # 8707

DES:	CJR		
DRN:	DRD		
CHK:			
DATE:	5/21/99		
BY:	K.O.I.	1	AS BUILT CONDITIONS ADDED TO PLAN
NO.:			
REVISION:			
DATE:			

WATER & SEWER PROFILES

600' SCALE MAP NO. 46 BLOCK NO. 4

FOOD LION P-3000/
TAX MAP 45, BLOCK 4, PARCEL 240
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3758-D

SCALE
AS
SHOWN

SHEET
2 OF 2